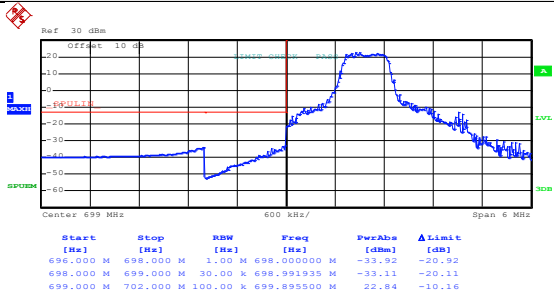
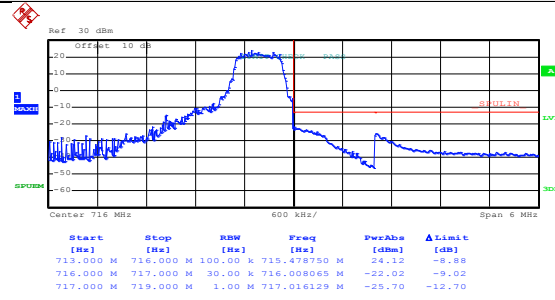


Test Mode: LTE band 12 (16QAM RB Size 3 &RB Offset 2)



Date: 31.OCT.2016 18:11:03

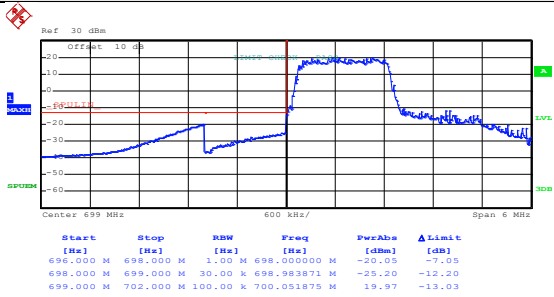
Lowest channel



Date: 31.OCT.2016 18:13:55

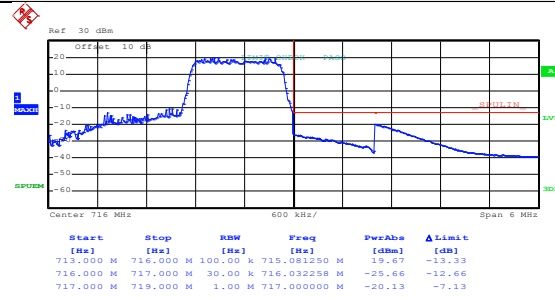
Highest channel

Test Mode: LTE band 12 (16QAM RB Size 6 &RB Offset 0)



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

Lowest channel

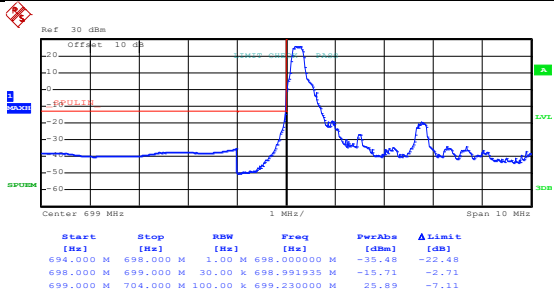


Date: 31.OCT.2016 18:14:15

Highest channel

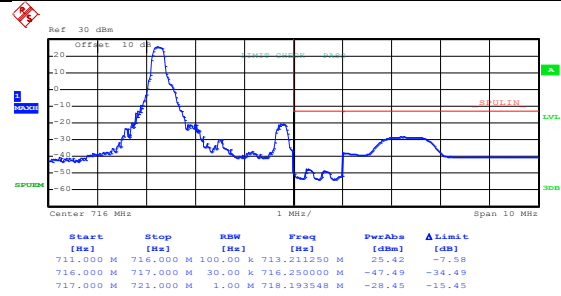
3MHz:

Test Mode: LTE band 12 (QPSK RB Size 1 &RB Offset 0)



Date: 31.OCT.2016 18:15:36

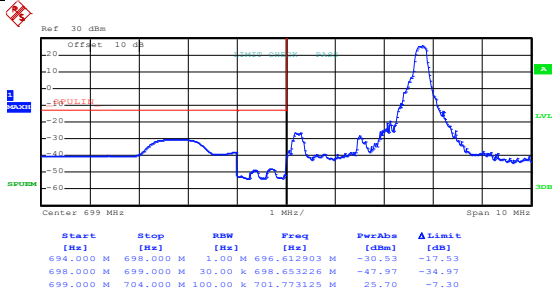
Lowest channel



Date: 31.OCT.2016 18:18:35

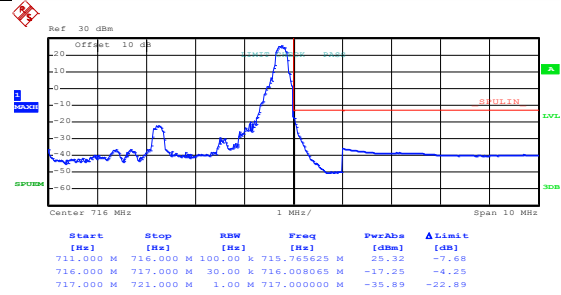
Highest channel

Test Mode: LTE band 12 (QPSK RB Size 1 &RB Offset 14)



Date: 31.OCT.2016 18:15:58

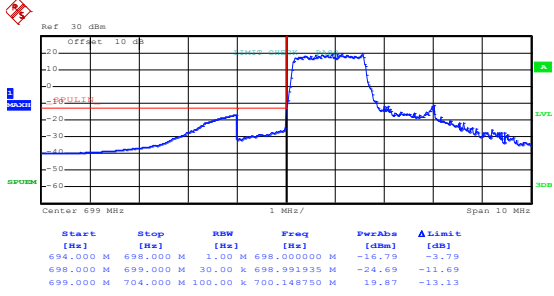
Lowest channel



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

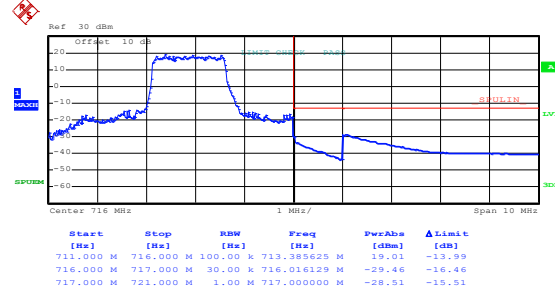
Highest channel

Test Mode: LTE band 12 (QPSK RB Size 8 &RB Offset 0)



Date: 31.OCT.2016 18:16:28

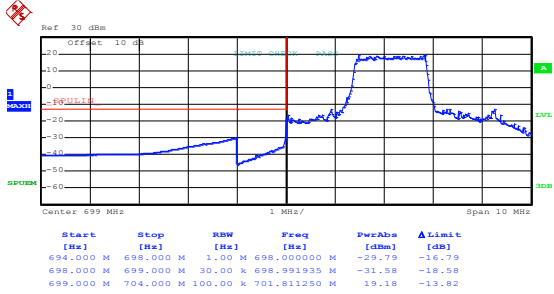
Lowest channel



Date: 31.OCT.2016 18:19:14

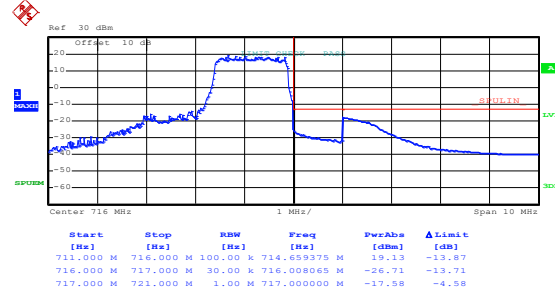
Highest channel

Test Mode: LTE band 12 (QPSK RB Size 8 &RB Offset 7)



Date: 31.OCT.2016 18:16:51

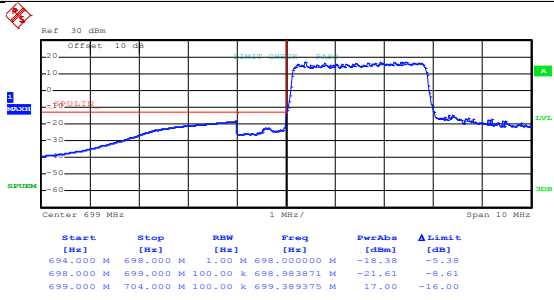
Lowest channel



Date: 31.OCT.2016 18:19:35

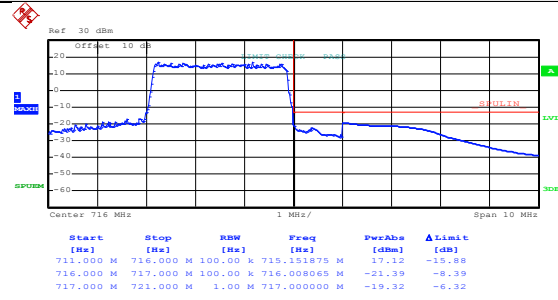
Highest channel

Test Mode: LTE band 12 (QPSK RB Size 15 &RB Offset 0)



Date: 31.OCT.2016 18:17:20

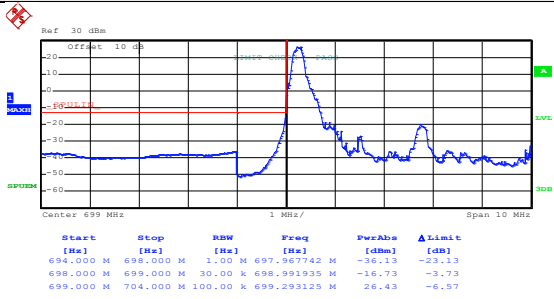
Lowest channel



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

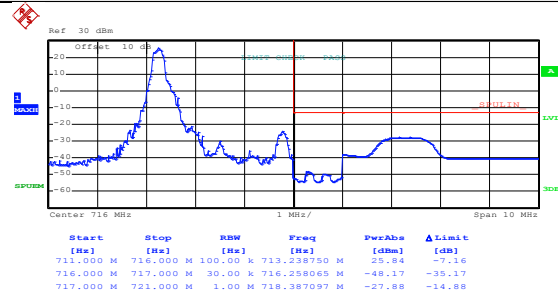
Highest channel

Test Mode: LTE band 12(16QAM RB Size 1 &RB Offset 0)



Date: 31.OCT.2016 18:15:45

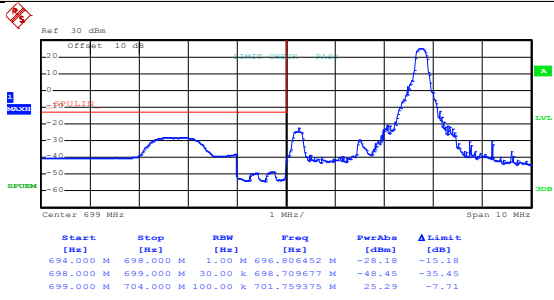
Lowest channel



Date: 31.OCT.2016 18:18:43

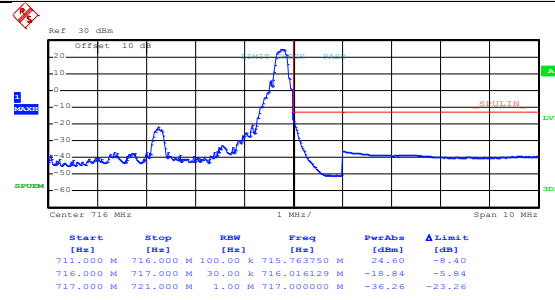
Highest channel

Test Mode: LTE band 12(16QAM RB Size 1 &RB Offset 14)



Date: 31.OCT.2016 18:16:13

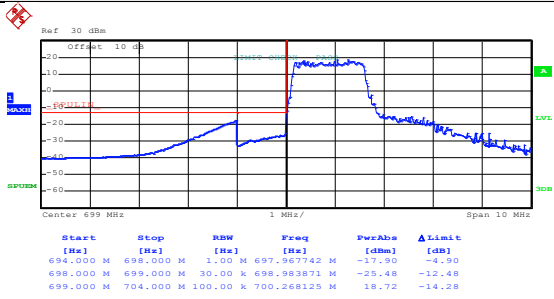
Lowest channel



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

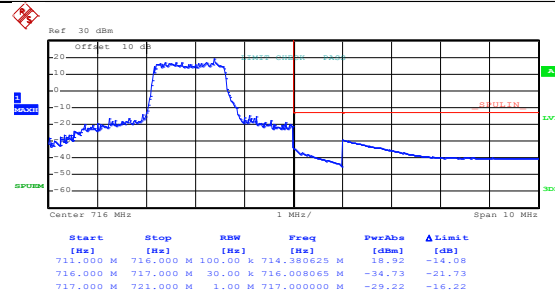
Highest channel

Test Mode: LTE band 12(16QAM RB Size 8 &RB Offset 0)



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

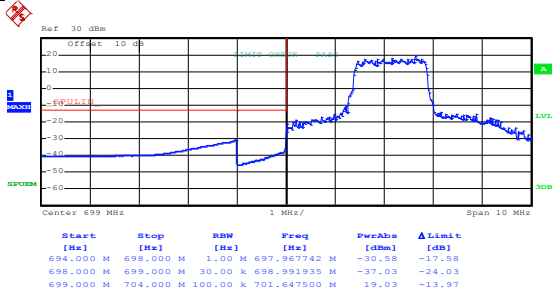
Lowest channel



Date: 31.OCT.2016 18:19:24

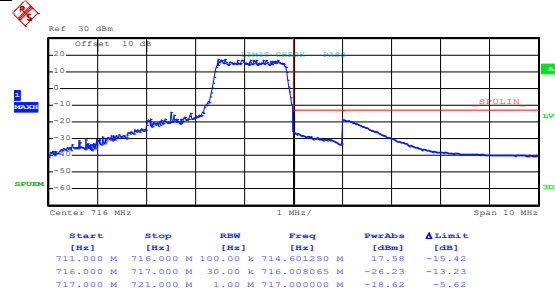
Highest channel

Test Mode: LTE band 12(16QAM RB Size 8 &RB Offset 7)



Date: 31.OCT.2016 18:17:00

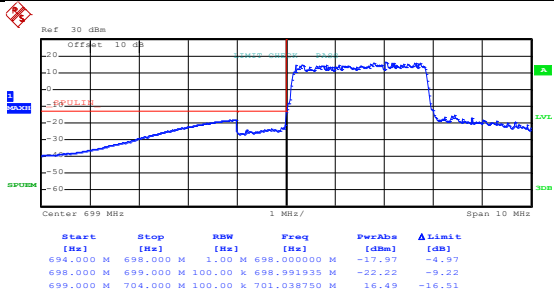
Lowest channel



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

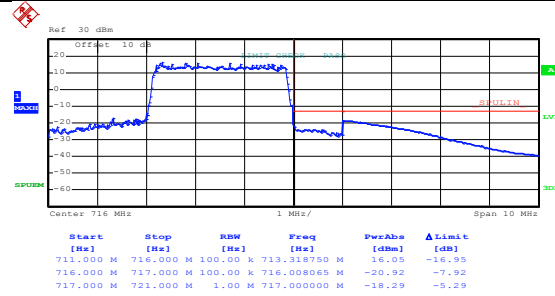
Highest channel

Test Mode: LTE band 12(16QAM RB Size 15 &RB Offset 0)



Date: 31.OCT.2016 18:17:27

Lowest channel

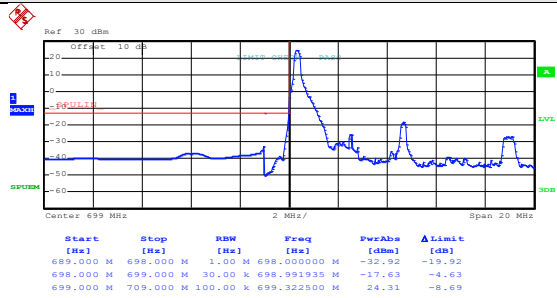


Date: 31.OCT.2016 18:20:10

Highest channel

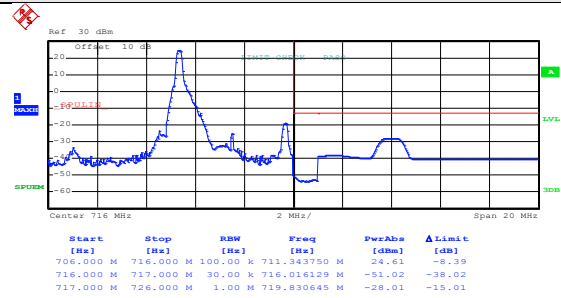
5MHz:

Test Mode: LTE band 12(QPSK RB Size 1 &RB Offset 0)



Date: 31.OCT.2016 18:21:10

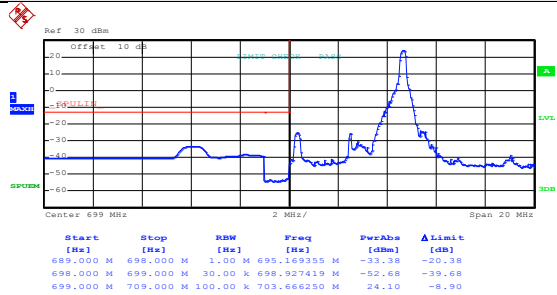
Lowest channel



Date: 31.OCT.2016 18:24:02

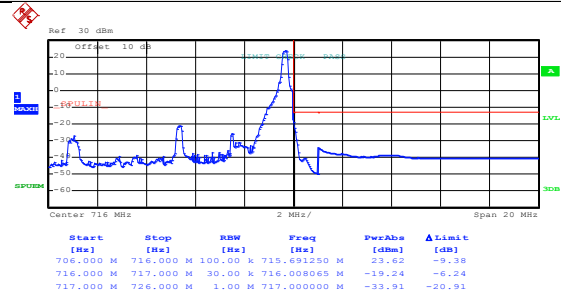
Highest channel

Test Mode: LTE band 12(QPSK RB Size 1 &RB Offset 24)



Date: 31.OCT.2016 18:21:28

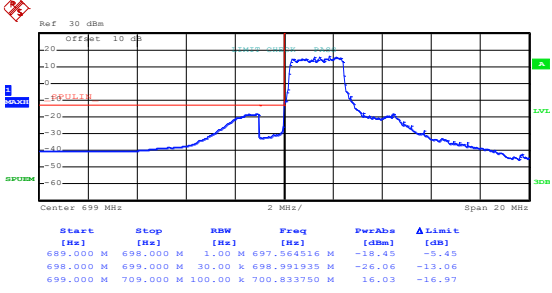
Lowest channel



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

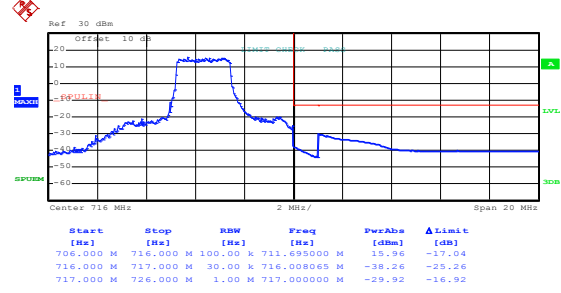
Highest channel

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



Date: 31.OCT.2016 18:22:00

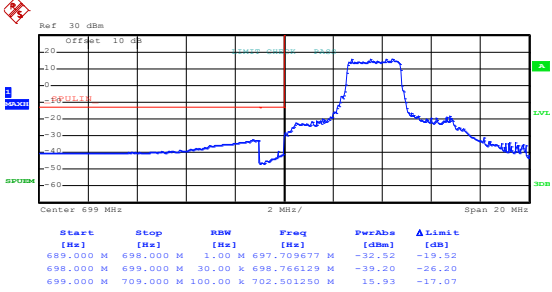
Lowest channel



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

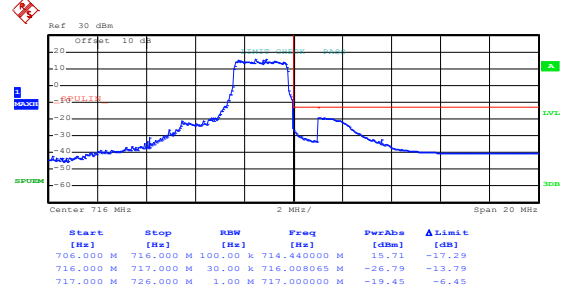
Highest channel

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



Date: 31.OCT.2016 18:22:32

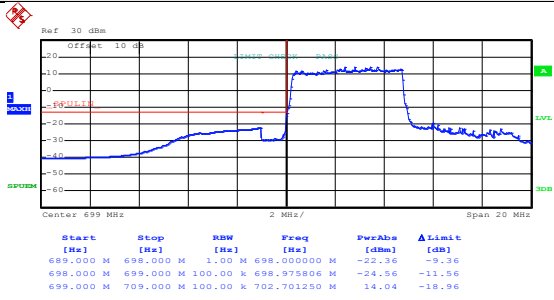
Lowest channel



Date: 31.OCT.2016 18:25:04

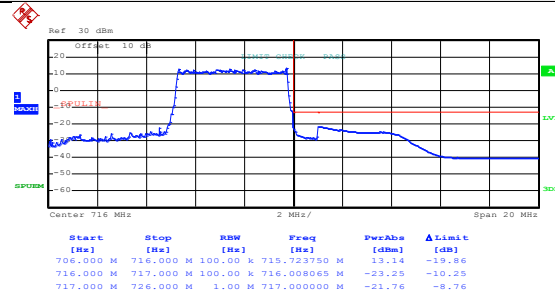
Highest channel

Test Mode: LTE band 12(QPSK RB Size 25 &RB Offset 0)



Date: 31.OCT.2016 18:23:25

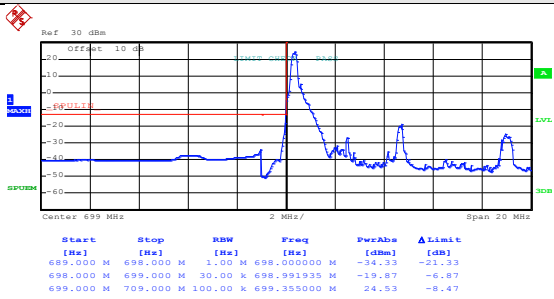
Lowest channel



Date: 31.OCT.2016 18:25:34

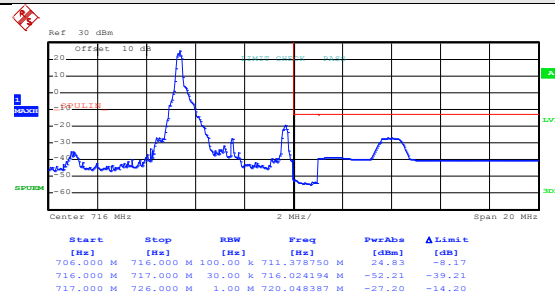
Highest channel

Test Mode: LTE band 12(16QAM RB Size 1 &RB Offset 0)



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

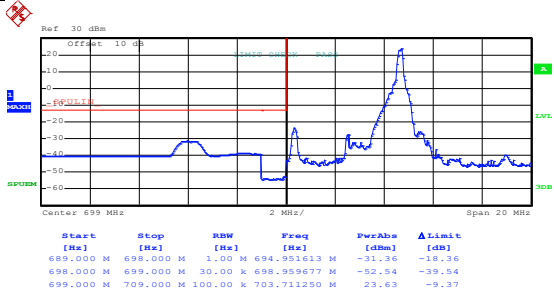
Lowest channel



Date: 31.OCT.2016 18:24:11

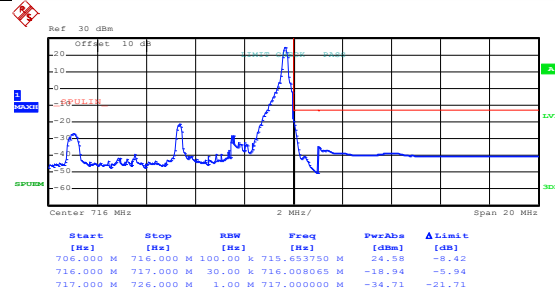
Highest channel

Test Mode: LTE band 12(16QAM RB Size 1 &RB Offset 24)



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

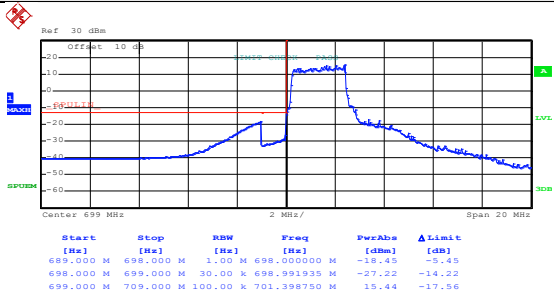
Lowest channel



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

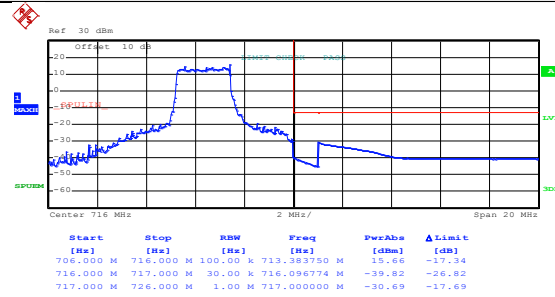
Highest channel

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



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

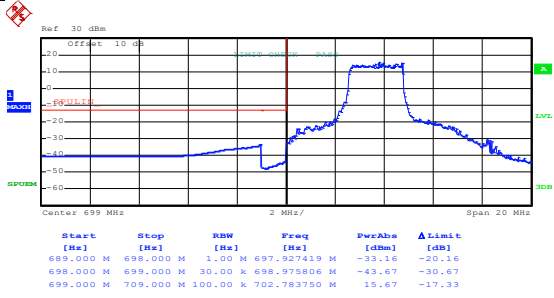
Lowest channel



Date: 31.OCT.2016 18:24:52

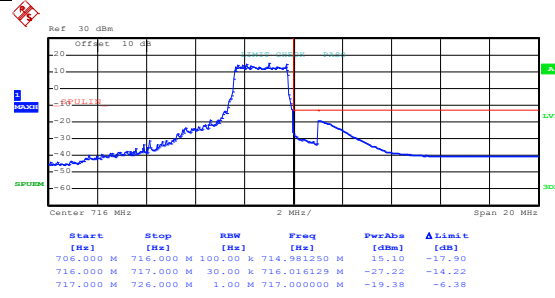
Highest channel

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



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

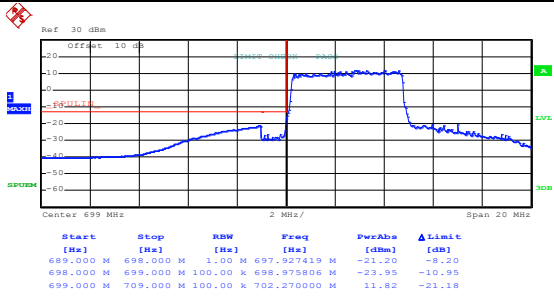
Lowest channel



Date: 31.OCT.2016 18:25:15

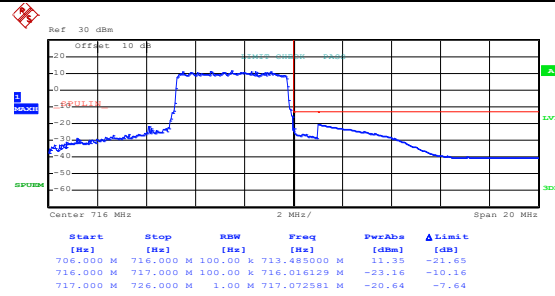
Highest channel

Test Mode: LTE band 12(16QAM RB Size 25 &RB Offset 0)



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

Lowest channel

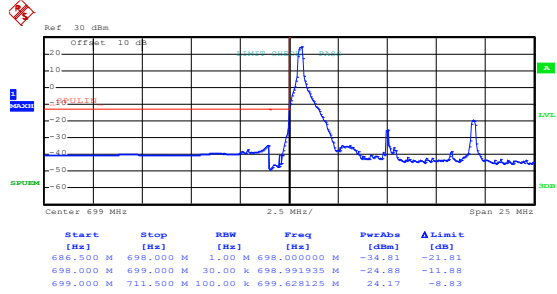


Date: 31.OCT.2016 18:25:41

Highest channel

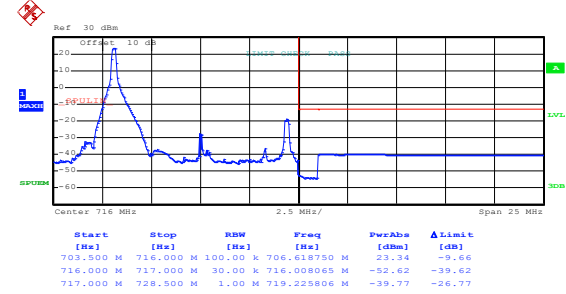
10MHz:

Test Mode: LTE band 12(QPSK RB Size 1 &RB Offset 0)



Date: 31.OCT.2016 18:27:23

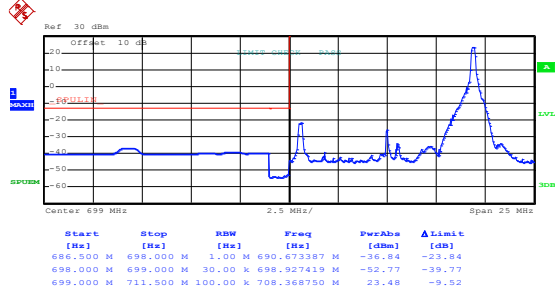
Lowest channel



Date: 31.OCT.2016 18:29:52

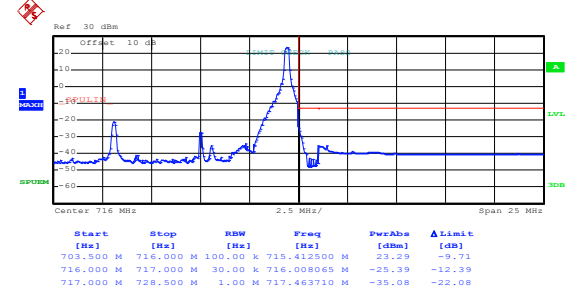
Highest channel

Test Mode: LTE band 12(QPSK RB Size 1 &RB Offset 49)



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

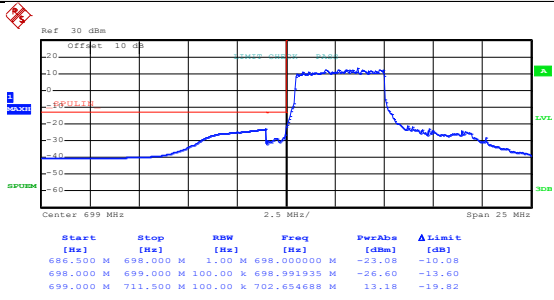
Lowest channel



Date: 31.OCT.2016 18:30:11

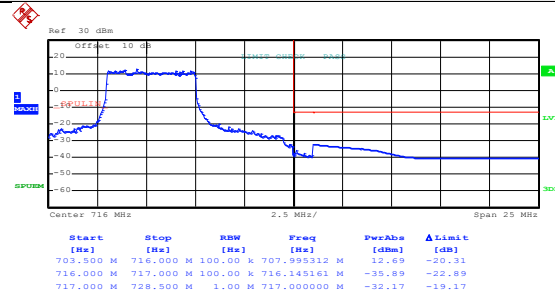
Highest channel

Test Mode: LTE band 12(QPSK RB Size 25 &RB Offset 0)



Date: 31.OCT.2016 18:28:12

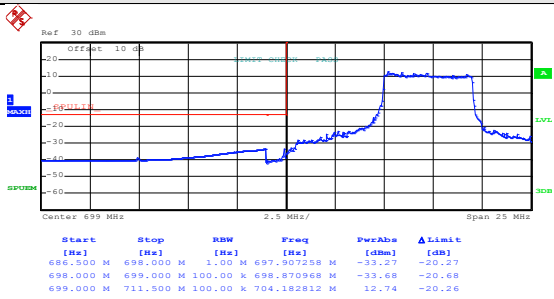
Lowest channel



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

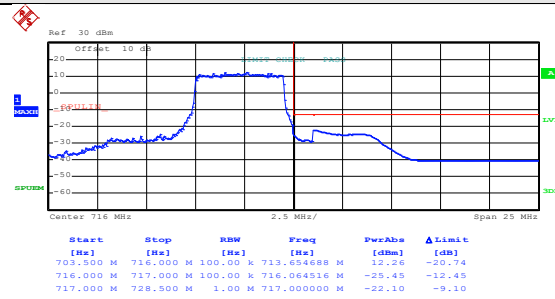
Highest channel

Test Mode: LTE band 12(QPSK RB Size 25 &RB Offset 24)



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

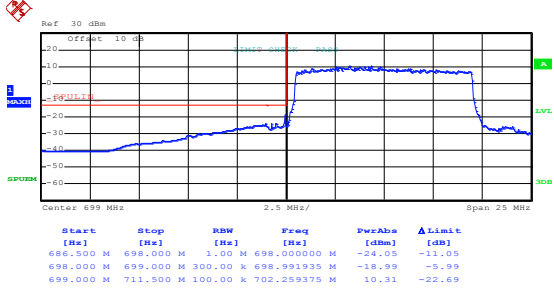
Lowest channel



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

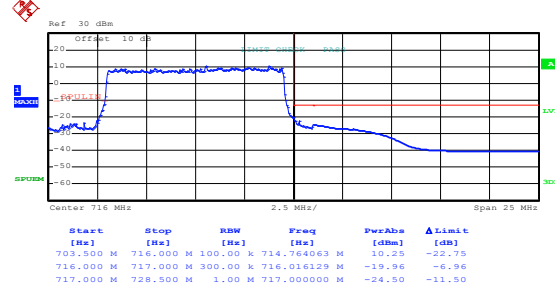
Highest channel

Test Mode: LTE band 12(QPSK RB Size 50 &RB Offset 0)



Date: 31.OCT.2016 18:29:02

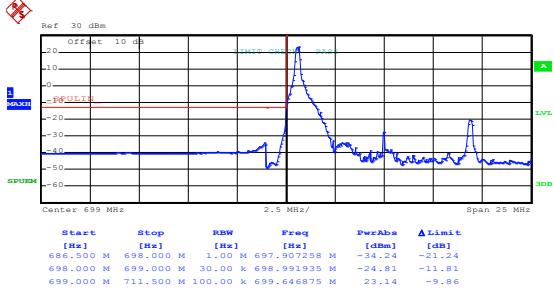
Lowest channel



Date: 31.OCT.2016 18:31:33

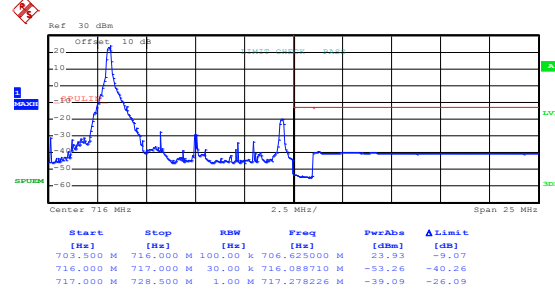
Highest channel

Test Mode: LTE band 12(16QAM RB Size 1 &RB Offset 0)



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

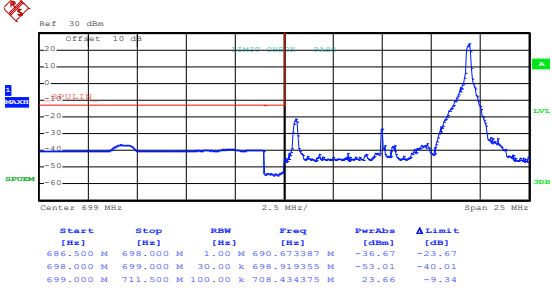
Lowest channel



Date: 31.OCT.2016 18:30:00

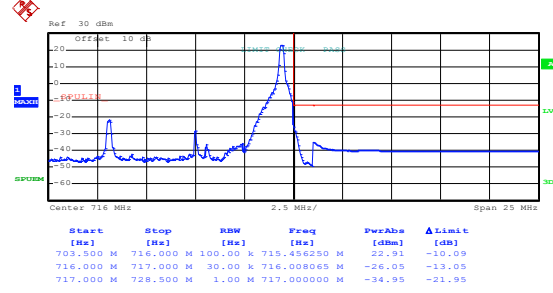
Highest channel

Test Mode: LTE band 12(16QAM RB Size 1 &RB Offset 49)



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

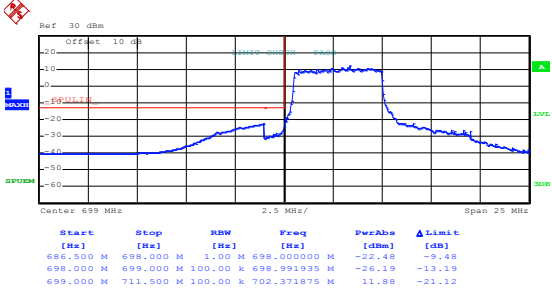
Lowest channel



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

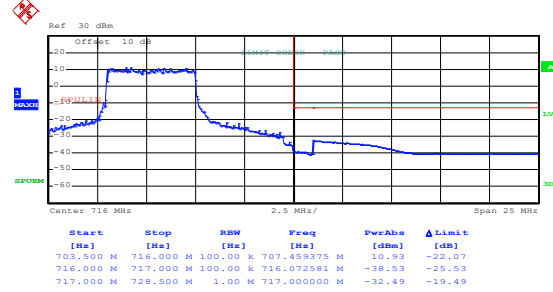
Highest channel

Test Mode: LTE band 12(16QAM RB Size 25 &RB Offset 0)



Date: 31.OCT.2016 18:28:21

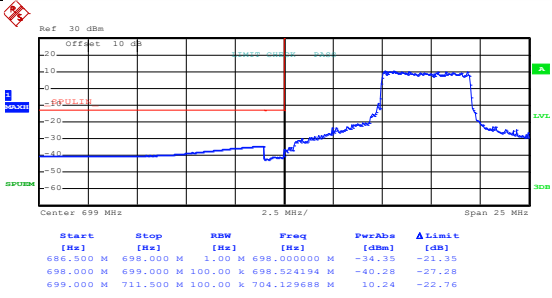
Lowest channel



Date: 31.OCT.2016 18:30:50

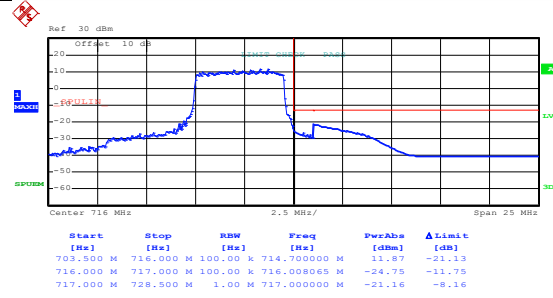
Highest channel

Test Mode: LTE band 12(16QAM RB Size 25 &RB Offset 24)



Date: 31.OCT.2016 18:28:44

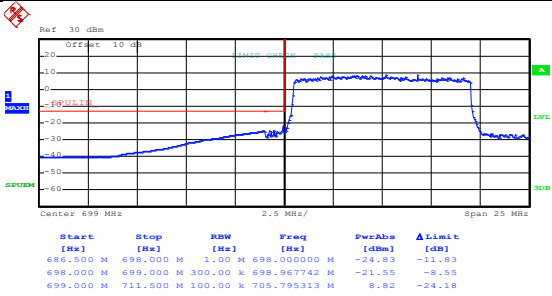
Lowest channel



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

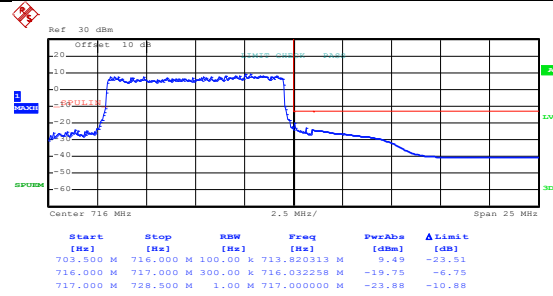
Highest channel

Test Mode: LTE band 12 (16QAM RB Size 50 &RB Offset 0)



Date: 31.OCT.2016 18:29:10

Lowest channel

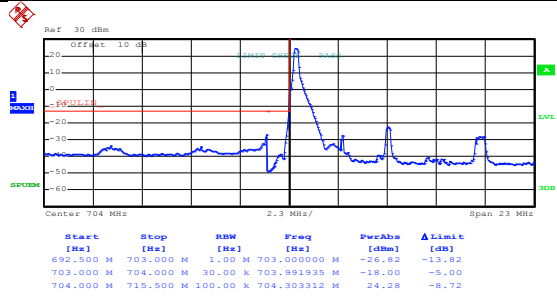


Date: 31.OCT.2016 18:31:40

Highest channel

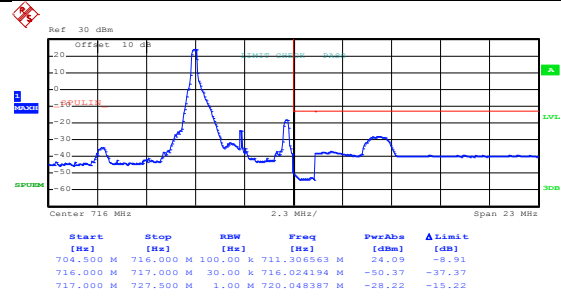
LTE band 17 part:5MHz:

Test Mode:	LTE band 17(QPSK RB Size 1 & RB Offset 0)
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Date: 31.OCT.2016 17:52:48

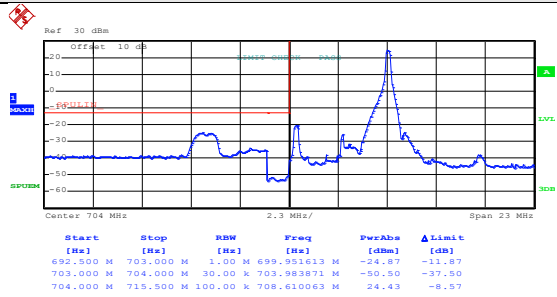
Lowest channel



Date: 31.OCT.2016 17:55:08

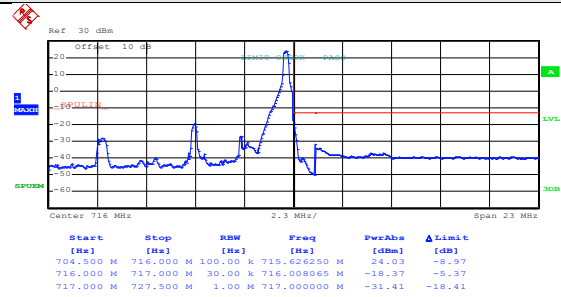
Highest channel

Test Mode:	LTE band 17(QPSK RB Size 1 & RB Offset 24)
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Date: 31.OCT.2016 17:53:13

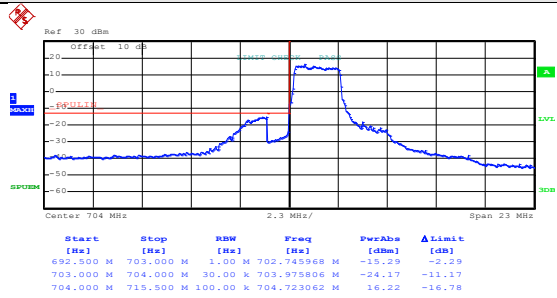
Lowest channel



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

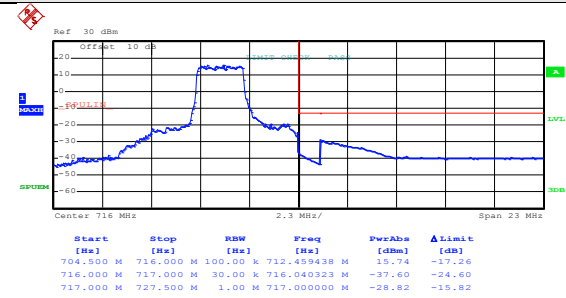
Highest channel

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



Date: 31.OCT.2016 17:53:36

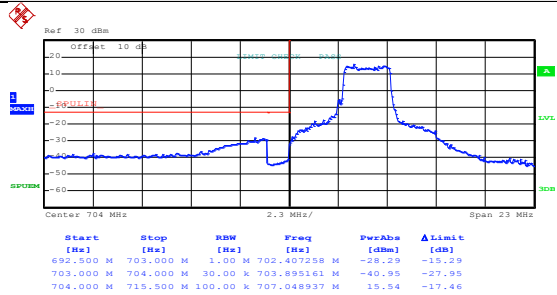
Lowest channel



Date: 31.OCT.2016 17:55:54

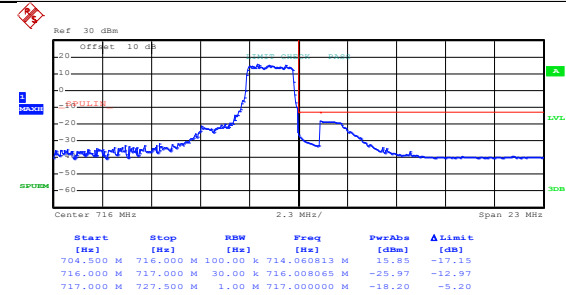
Highest channel

Test Mode: LTE band 17(QPSK RB Size 12 & RB Offset 11)



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

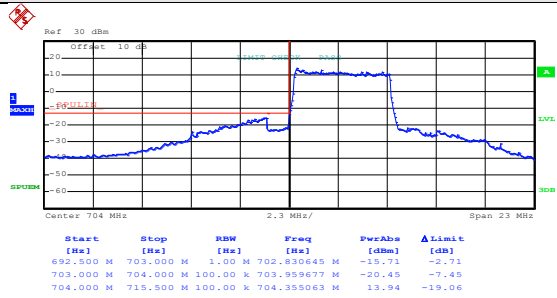
Lowest channel



Date: 31.OCT.2016 17:56:14

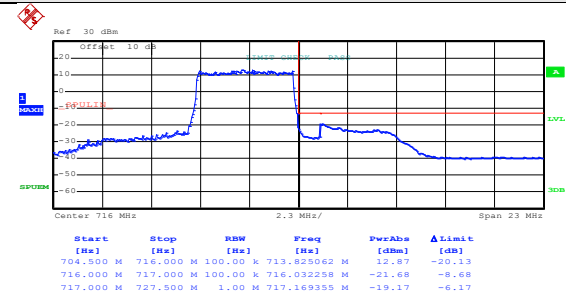
Highest channel

Test Mode: LTE band 17(QPSK RB Size 25 & RB Offset 0)



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

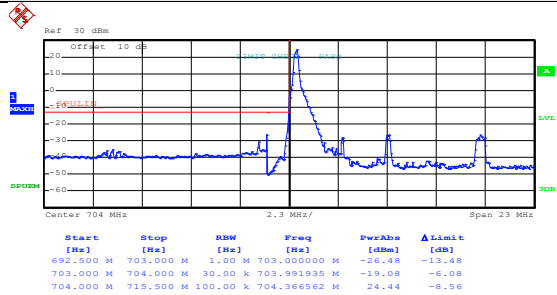
Lowest channel



Date: 31.OCT.2016 17:56:42

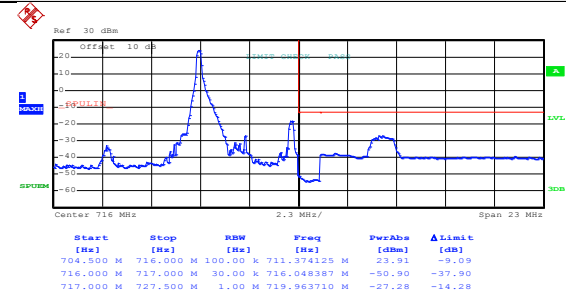
Highest channel

Test Mode: LTE band 17(16QAM RB Size 1 & RB Offset 0)



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

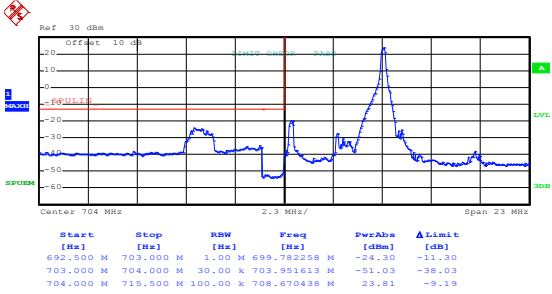
Lowest channel



Date: 31.OCT.2016 17:55:15

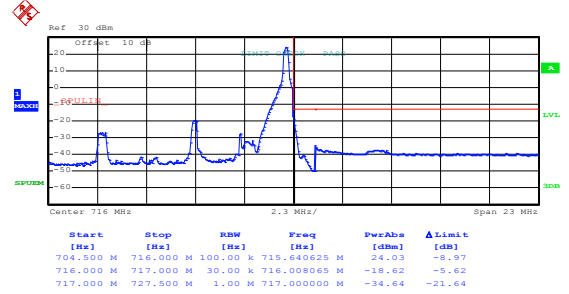
Highest channel

Test Mode: LTE band 17(16QAM RB Size 1 & RB Offset 24)



Date: 31.OCT.2016 17:53:22

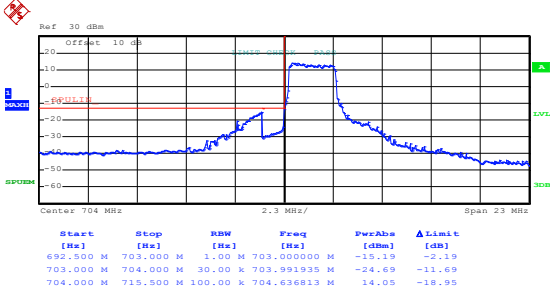
Lowest channel



Date: 31.OCT.2016 17:55:37

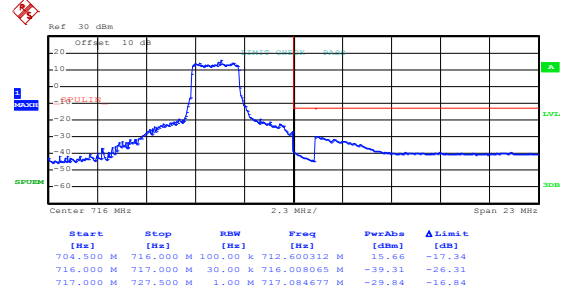
Highest channel

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



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

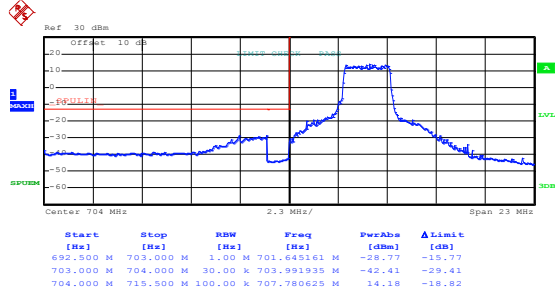
Lowest channel



Date: 31.OCT.2016 17:56:02

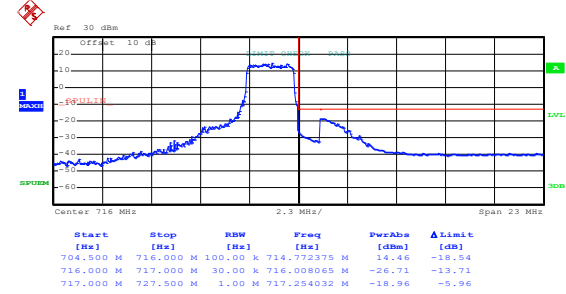
Highest channel

Test Mode: LTE band 17(16QAM RB Size 12 & RB Offset 11)



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

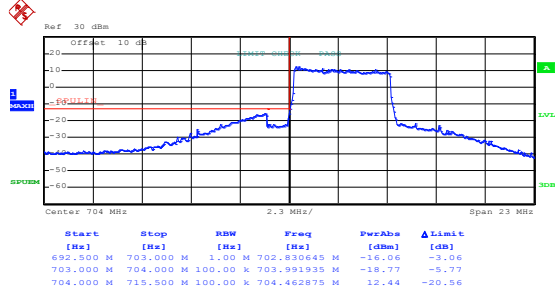
Lowest channel



Date: 31.OCT.2016 17:56:25

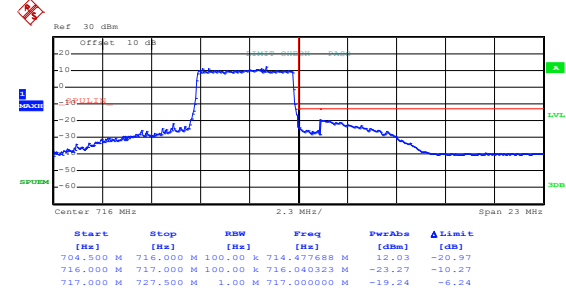
Highest channel

Test Mode: LTE band 17(16QAM RB Size 25 & RB Offset 0)



Date: 31.OCT.2016 17:54:35

Lowest channel

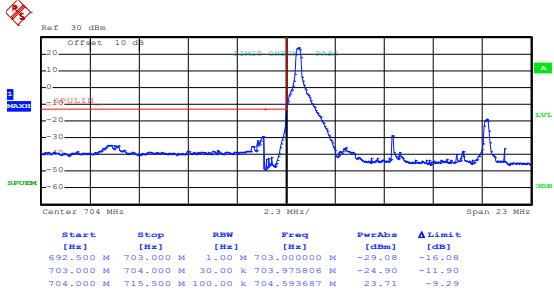


Date: 31.OCT.2016 17:56:49

Highest channel

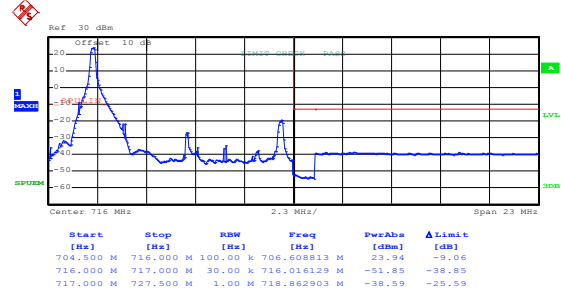
10MHz:

Test Mode: LTE band 17(QPSK RB Size 1 & RB Offset 0)



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

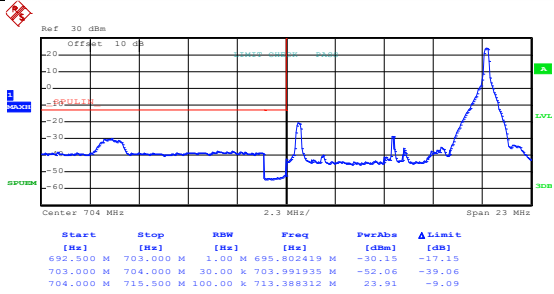
Lowest channel



Date: 31.OCT.2016 18:02:43

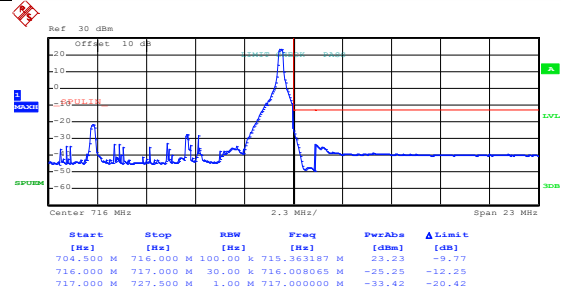
Highest channel

Test Mode: LTE band 17(QPSK RB Size 1 & RB Offset 49)



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

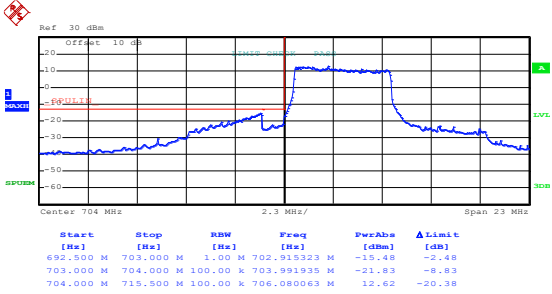
Lowest channel



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

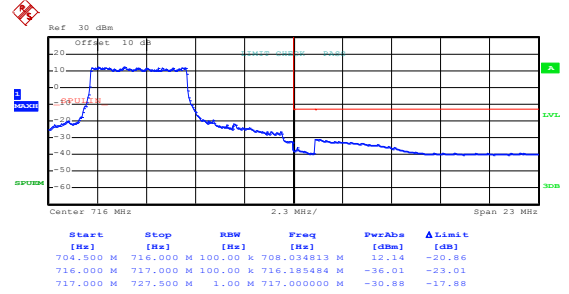
Highest channel

Test Mode: LTE band 17(QPSK RB Size 25 & RB Offset 0)



Date: 31.OCT.2016 18:01:16

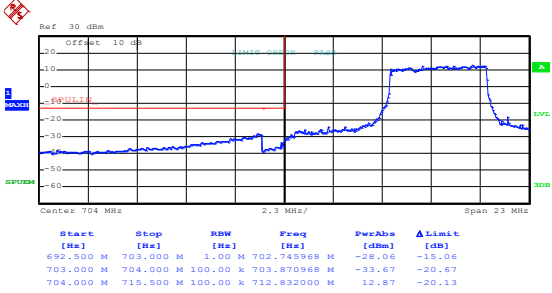
Lowest channel



Date: 31.OCT.2016 18:03:32

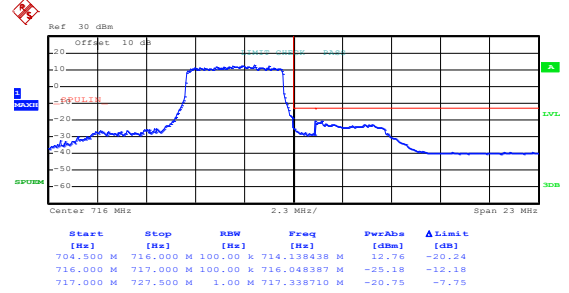
Highest channel

Test Mode: LTE band 17(QPSK RB Size 25 & RB Offset 24)



Date: 31.OCT.2016 18:01:36

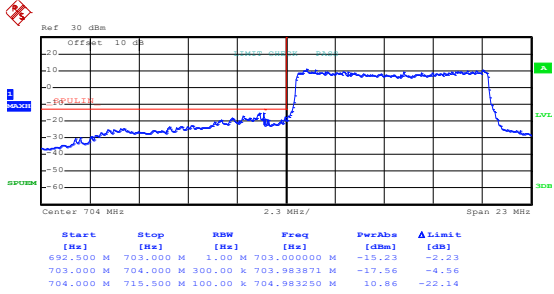
Lowest channel



Date: 31.OCT.2016 18:03:53

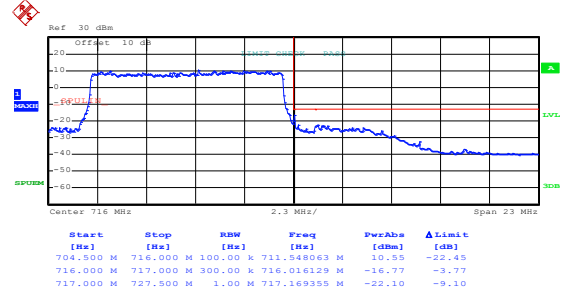
Highest channel

Test Mode: LTE band 17(QPSK RB Size 50 & RB Offset 0)



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

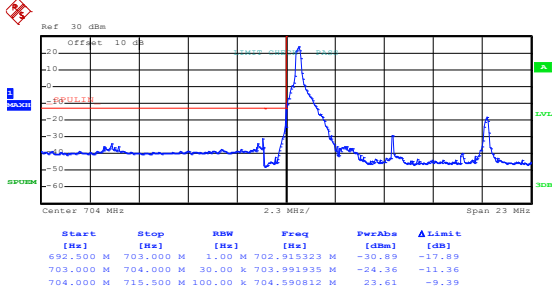
Lowest channel



Date: 31.OCT.2016 18:04:21

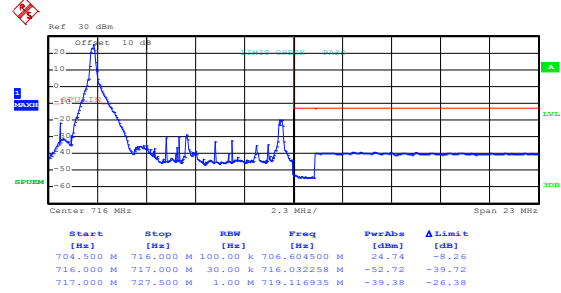
Highest channel

Test Mode: LTE band 17(16QAM RB Size 1 & RB Offset 0)



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

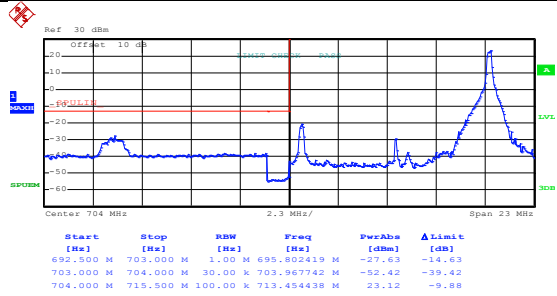
Lowest channel



Date: 31.OCT.2016 18:02:51

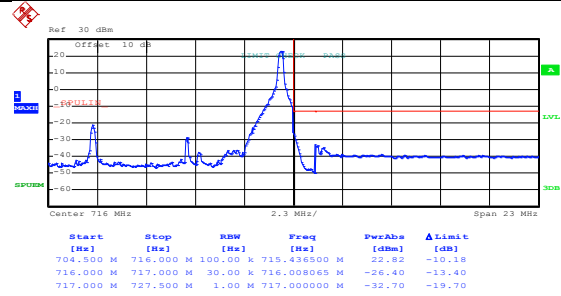
Highest channel

Test Mode: LTE band 17(16QAM RB Size 1 & RB Offset 49)



Date: 31.OCT.2016 18:00:56

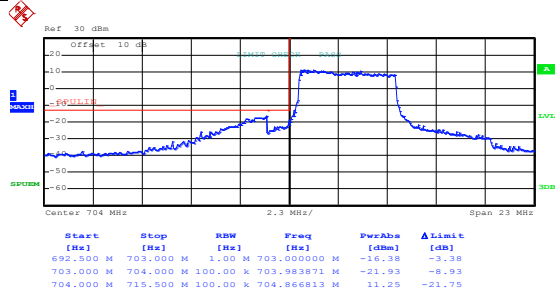
Lowest channel



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

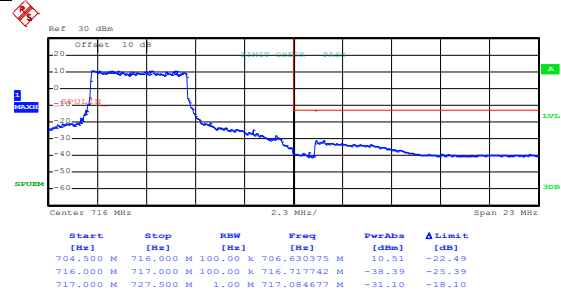
Highest channel

Test Mode: LTE band 17(16QAM RB Size 25 & RB Offset 0)



Date: 31.OCT.2016 18:01:25

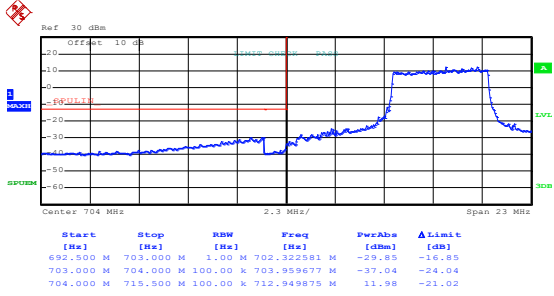
Lowest channel



Date: 31.OCT.2016 18:03:40

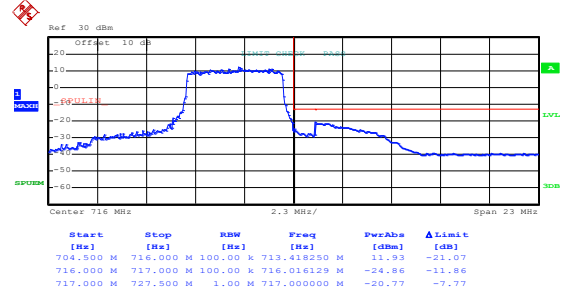
Highest channel

Test Mode: LTE band 17(16QAM RB Size 25 & RB Offset 24)



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

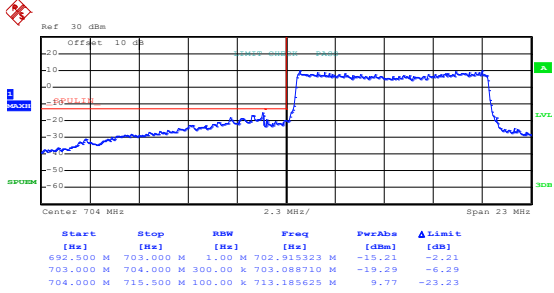
Lowest channel



Date: 31.OCT.2016 18:04:04

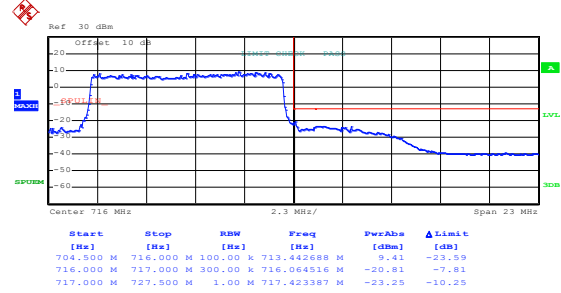
Highest channel

Test Mode: LTE band 17(16QAM RB Size 50 & RB Offset 0)



Date: 31.OCT.2016 18:02:09

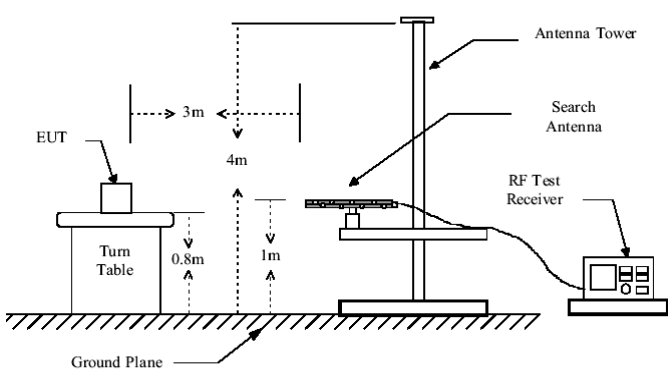
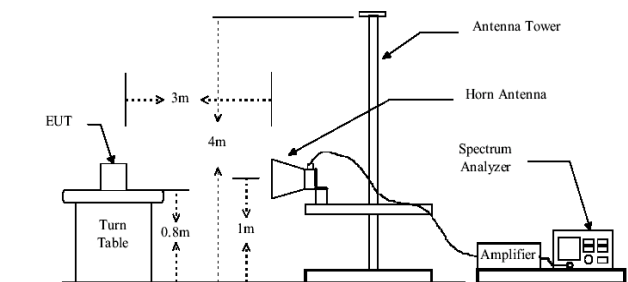
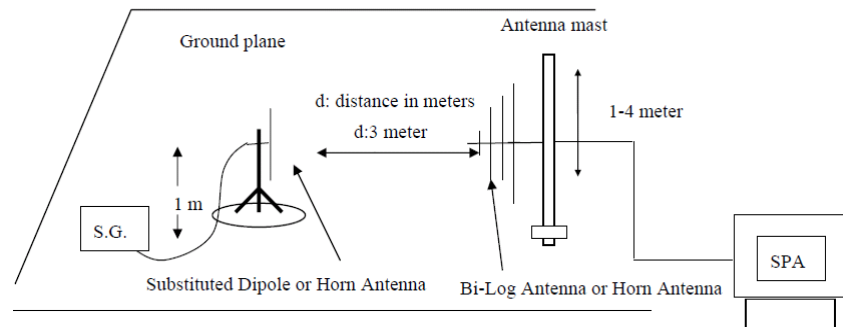
Lowest channel



Date: 31.OCT.2016 18:04:28

Highest channel

6.10 ERP, EIRP Measurement

Test Requirement:	FCC part 22.913 (a), 24.232 (c), part 27.50(c), part 27.50(d), part 27.50 (h)
Test Method:	FCC 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:	<p>Below 1GHz</p>  <p>Above 1GHz</p>  <p>Substituted method:</p> 

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

Measurement Data (worst case):

LTE band 2 part

Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	25.97	33.00	Pass
					H	24.49		
1850.70	18607	16QAM	1.4	H	V	27.73		
					H	21.06		
1.4MHz(RB size 3 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	27.91	33.00	Pass
					H	22.57		
1850.70	18607	16QAM	1.4	H	V	28.06		
					H	22.51		
1.4MHz(RB size 6 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	26.49	33.00	Pass
					H	22.67		
1850.70	18607	16QAM	1.4	H	V	27.12		
					H	21.84		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1880.00	18900	QPSK	1.4	H	V	24.62	33.00	Pass
					H	23.39		
1880.00	18900	16QAM	1.4	H	V	27.21		
					H	22.46		
1.4MHz(RB size 3 & RB offset 0)								
1880.00	18900	QPSK	1.4	H	V	26.75	33.00	Pass
					H	23.34		
1880.00	18900	16QAM	1.4	H	V	27.16		
					H	22.36		
1.4MHz(RB size 6 & RB offset 0)								
1880.00	18900	QPSK	1.40	H	V	26.34	33.00	Pass
					H	22.47		
1880.00	18900	16QAM	1.40	H	V	26.87		
					H	22.03		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	24.78	33.00	Pass
					H	23.31		
1909.30	19193	16QAM	1.4	H	V	26.64		
					H	23.24		
1.4MHz(RB size 3 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	25.79	33.00	Pass
					H	22.41		
1909.30	19193	16QAM	1.4	H	V	26.31		
					H	23.36		
1.4MHz(RB size 6 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	25.69	33.00	Pass
					H	22.04		
1909.30	19193	16QAM	1.4	H	V	26.39		
					H	22.14		

Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	27.78	33.00	Pass
					H	22.04		
1860.00	18700	16QAM	20	H	V	27.61		
					H	21.94		
20MHz(RB size 50 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	26.58	33.00	Pass
					H	21.28		
1860.00	18700	16QAM	20	H	V	27.10		
					H	21.39		
20MHz(RB size 100 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	24.44	33.00	Pass
					H	18.84		
1860.00	18700	16QAM	20	H	V	25.43		
					H	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	H	V	26.32	33.00	Pass
					H	22.15		
1880.00	18900	16QAM	20	H	V	27.84		
					H	21.36		
20MHz(RB size 50 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	26.32	33.00	Pass
					H	21.47		
1880.00	18900	16QAM	20	H	V	26.32		
					H	22.02		
20MHz(RB size 100 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	24.75	33.00	Pass
					H	19.78		
1880.00	18900	16QAM	20	H	V	25.21		
					H	20.47		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	26.78	33.00	Pass
					H	21.49		
1900.00	19100	16QAM	20	H	V	26.65		
					H	22.41		
20MHz(RB size 50 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	26.32	33.00	Pass
					H	22.04		
1900.00	19100	16QAM	20	H	V	26.31		
					H	22.47		
20MHz(RB size 100 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	24.71	33.00	Pass
					H	20.05		
1900.00	19100	16QAM	20	H	V	25.97		
					H	20.41		

LTE band 4 part

Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1710.70	19957	QPSK	1.4	H	V	26.26	30.00	Pass
					H	21.18		
1710.70	19957	16QAM	1.4	H	V	26.64		
					H	18.65		
1.4MHz(RB size 3 & RB offset 0)								
1710.70	19957	QPSK	1.4	H	V	26.41	30.00	Pass
					H	19.31		
1710.70	19957	16QAM	1.4	H	V	26.53		
					H	19.10		
1.4MHz(RB size 6 & RB offset 0)								
1710.70	19957	QPSK	1.4	H	V	25.23	30.00	Pass
					H	19.18		
1710.70	19957	16QAM	1.4	H	V	24.49		
					H	19.49		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1732.50	20175	QPSK	1.4	H	V	25.21	30.00	Pass
					H	22.03		
1732.50	20175	16QAM	1.4	H	V	25.97		
					H	18.45		
1.4MHz(RB size 3 & RB offset 0)								
1732.50	20175	QPSK	1.4	H	V	26.32	30.00	Pass
					H	20.01		
1732.50	20175	16QAM	1.4	H	V	26.95		
					H	19.74		
1.4MHz(RB size 6 & RB offset 0)								
1732.50	20175	QPSK	1.4	H	V	25.47	30.00	Pass
					H	20.03		
1732.50	20175	16QAM	1.4	H	V	24.16		
					H	20.47		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1754.30	20393	QPSK	1.4	H	V	26.34	30.00	Pass
					H	22.04		
1754.30	20393	16QAM	1.4	H	V	25.14		
					H	20.01		
1.4MHz(RB size 3 & RB offset 0)								
1754.30	20393	QPSK	1.4	H	V	26.31	30.00	Pass
					H	20.58		
1754.30	20393	16QAM	1.4	H	V	26.35		
					H	20.41		
1.4MHz(RB size 6 & RB offset 0)								
1754.30	20393	QPSK	1.4	H	V	25.14	30.00	Pass
					H	20.31		
1754.30	20393	16QAM	1.4	H	V	24.79		
					H	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	QPSK	20	H	V	21.35	30.00	Pass
					H	19.74		
1720.00	20050	16QAM	20	H	V	21.93		
					H	19.62		
20MHz(RB size 50 & RB offset 0)								
1720.00	20050	QPSK	20	H	V	23.52	30.00	Pass
					H	18.29		
1720.00	20050	16QAM	20	H	V	22.03		
					H	18.43		
20MHz(RB size 100 & RB offset 0)								
1720.00	20050	QPSK	20	H	V	18.50	30.00	Pass
					H	19.57		
1720.00	20050	16QAM	20	H	V	19.70		
					H	18.62		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1732.50	20175	QPSK	20	H	V	21.24	30.00	Pass
					H	20.01		
1732.50	20175	16QAM	20	H	V	21.36		
					H	19.41		
20MHz(RB size 50 & RB offset 0)								
1732.50	20175	QPSK	20	H	V	23.71	30.00	Pass
					H	19.36		
1732.50	20175	16QAM	20	H	V	22.45		
					H	19.43		
20MHz(RB size 100 & RB offset 0)								
1732.50	20175	QPSK	20	H	V	19.41	30.00	Pass
					H	20.03		
1732.50	20175	16QAM	20	H	V	19.46		
					H	18.34		

High channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1745.00	20300	QPSK	20	H	V	21.34	30.00	Pass
					H	20.49		
1745.00	20300	16QAM	20	H	V	21.78		
					H	19.34		
20MHz(RB size 50 & RB offset 0)								
1745.00	20300	QPSK	20	H	V	23.46	30.00	Pass
					H	19.78		
1745.00	20300	16QAM	20	H	V	22.46		
					H	20.45		
20MHz(RB size 100 & RB offset 0)								
1745.00	20300	QPSK	20	H	V	20.47	30.00	Pass
					H	20.36		
1745.00	20300	16QAM	20	H	V	19.78		
					H	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	20407	QPSK	1.4	H	V	22.49	38.45	Pass
					H	23.14		
824.70	20407	16QAM	1.4	H	V	21.91		
					H	22.80		
1.4MHz(RB size 3& RB offset 0)								
824.70	20407	QPSK	1.4	H	V	22.82	38.45	Pass
					H	23.22		
824.70	20407	16QAM	1.4	H	V	22.35		
					H	22.01		
1.4MHz(RB size 6& RB offset 0)								
824.70	20407	QPSK	1.4	H	V	22.68	38.45	Pass
					H	22.14		
824.70	20407	16QAM	1.4	H	V	21.54		
					H	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	H	V	22.36	38.45	Pass
					H	23.46		
836.50	20525	16QAM	1.4	H	V	21.45		
					H	22.19		
1.4MHz(RB size 3& RB offset 0)								
836.50	20525	QPSK	1.4	H	V	22.75	38.45	Pass
					H	23.64		
836.50	20525	16QAM	1.4	H	V	22.15		
					H	22.46		
1.4MHz(RB size 6& RB offset 0)								
836.50	20525	QPSK	1.4	H	V	22.15	38.45	Pass
					H	22.49		
836.50	20525	16QAM	1.4	H	V	21.34		
					H	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	H	V	22.41	38.45	Pass
					H	23.45		
848.30	20643	16QAM	1.4	H	V	21.78		
					H	22.16		
1.4MHz(RB size 3& RB offset 0)								
848.30	20643	QPSK	1.4	H	V	22.46	38.45	Pass
					H	23.61		
848.30	20643	16QAM	1.4	H	V	22.74		
					H	22.02		
1.4MHz(RB size 6& RB offset 0)								
848.30	20643	QPSK	1.4	H	V	22.46	38.45	Pass
					H	22.13		
848.30	20643	16QAM	1.4	H	V	21.47		
					H	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)								
829.00	20450	QPSK	10	H	V	22.81	38.45	Pass
					H	21.03		
829.00	20450	16QAM	10	H	V	22.11		
					H	21.99		
10MHz(RB size 25& RB offset 0)								
829.00	20450	QPSK	10	H	V	22.76	38.45	Pass
					H	21.13		
829.00	20450	16QAM	10	H	V	22.34		
					H	21.16		
10MHz(RB size 50& RB offset 0)								
829.00	20450	QPSK	10	H	V	23.48	38.45	Pass
					H	21.67		
829.00	20450	16QAM	10	H	V	21.20		
					H	21.95		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
836.50	20525	QPSK	10	H	V	22.34	38.45	Pass
					H	21.64		
836.50	20525	16QAM	10	H	V	22.76		
					H	22.04		
10MHz(RB size 25& RB offset 0)								
836.50	20525	QPSK	10	H	V	22.46	38.45	Pass
					H	21.34		
836.50	20525	16QAM	10	H	V	22.25		
					H	21.78		
10MHz(RB size 50 & RB offset 0)								
836.50	20525	QPSK	10	H	V	23.36	38.45	Pass
					H	21.41		
836.50	20525	16QAM	10	H	V	21.02		
					H	21.58		

High channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
844.00	20600	QPSK	10	H	V	22.51	38.45	Pass
					H	21.34		
844.00	20600	16QAM	10	H	V	22.67		
					H	22.58		
10MHz(RB size 25& RB offset 0)								
844.00	20600	QPSK	10	H	V	22.64	38.45	Pass
					H	21.37		
844.00	20600	16QAM	10	H	V	22.49		
					H	21.94		
10MHz(RB size 50 & RB offset 0)								
844.00	20600	QPSK	10	H	V	23.34	38.45	Pass
					H	21.45		
844.00	20600	16QAM	10	H	V	21.06		
					H	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 & RB offset 0)								
2502.50	20775	QPSK	5	H	V	24.40	33.00	Pass
					H	20.33		
2502.50	20775	16QAM	5	H	V	21.98		
					H	20.87		
5MHz(RB size 12& RB offset 0)								
2502.50	20775	QPSK	5	H	V	20.65	33.00	Pass
					H	21.72		
2502.50	20775	16QAM	5	H	V	21.59		
					H	20.57		
5MHz(RB size 25& RB offset 0)								
2502.50	20775	QPSK	5	H	V	23.19	33.00	Pass
					H	20.44		
2502.50	20775	16QAM	5	H	V	22.69		
					H	20.71		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
5MHz(RB size 1 & RB offset 0)								
2535.00	21100	QPSK	5	H	V	24.15	33.00	Pass
					H	20.36		
2535.00	21100	16QAM	5	H	V	21.64		
					H	20.71		
5MHz(RB size 12& RB offset 0)								
2535.00	21100	QPSK	5	H	V	20.45	33.00	Pass
					H	21.34		
2535.00	21100	16QAM	5	H	V	21.67		
					H	20.41		
5MHz(RB size 25& RB offset 0)								
2535.00	21100	QPSK	5	H	V	23.36	33.00	Pass
					H	20.48		
2535.00	21100	16QAM	5	H	V	22.48		
					H	20.16		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
5MHz(RB size 1 & RB offset 0)								
2567.50	21425	QPSK	5	H	V	21.45	33.00	Pass
					H	20.12		
2567.50	21425	16QAM	5	H	V	21.41		
					H	20.13		
5MHz(RB size 12& RB offset 0)								
2567.50	21425	QPSK	5	H	V	20.64	33.00	Pass
					H	21.87		
2567.50	21425	16QAM	5	H	V	21.30		
					H	20.61		
5MHz(RB size 25& RB offset 0)								
2567.50	21425	QPSK	5	H	V	23.31	33.00	Pass
					H	21.04		
2567.50	21425	16QAM	5	H	V	22.68		
					H	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	H	V	23.70	33.00	Pass
					H	19.92		
2510.00	20850	16QAM	20	H	V	21.59		
					H	20.82		
20MHz(RB size 50 & RB offset 0)								
2510.00	20850	QPSK	20	H	V	23.07	33.00	Pass
					H	20.67		
2510.00	20850	16QAM	20	H	V	23.55		
					H	21.82		
20MHz(RB size 100 & RB offset 0)								
2510.00	20850	QPSK	20	H	V	21.84	33.00	Pass
					H	21.00		
2510.00	20850	16QAM	20	H	V	21.38		
					H	20.24		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
2535.00	21100	QPSK	20	H	V	23.15	33.00	Pass
					H	20.03		
2535.00	21100	16QAM	20	H	V	21.45		
					H	20.78		
20MHz(RB size 50 & RB offset 0)								
2535.00	21100	QPSK	20	H	V	23.36	33.00	Pass
					H	20.41		
2535.00	21100	16QAM	20	H	V	23.36		
					H	21.78		
20MHz(RB size 100 & RB offset 0)								
2535.00	21100	QPSK	20	H	V	21.02	33.00	Pass
					H	22.46		
2535.00	21100	16QAM	20	H	V	21.34		
					H	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	21350	QPSK	20	H	V	22.78	33.00	Pass
					H	21.45		
2560.00	21350	16QAM	20	H	V	21.34		
					H	20.69		
20MHz(RB size 50 & RB offset 0)								
2560.00	21350	QPSK	20	H	V	23.21	33.00	Pass
					H	20.42		
2560.00	21350	16QAM	20	H	V	23.25		
					H	21.49		
20MHz(RB size 100 & RB offset 0)								
2560.00	21350	QPSK	20	H	V	21.41	33.00	Pass
					H	22.16		
2560.00	21350	16QAM	20	H	V	21.24		
					H	22.06		

LTE band 12 part

Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
699.70	23017	QPSK	1.4	H	V	24.58	34.77	Pass
					H	22.18		
699.70	23017	16QAM	1.4	H	V	24.04		
					H	23.00		
1.4MHz(RB size 3& RB offset 0)								
699.70	23017	QPSK	1.4	H	V	24.70	34.77	Pass
					H	22.45		
699.70	23017	16QAM	1.4	H	V	24.55		
					H	23.33		
1.4MHz(RB size 6& RB offset 0)								
699.70	23017	QPSK	1.4	H	V	24.51	34.77	Pass
					H	22.53		
699.70	23017	16QAM	1.4	H	V	24.48		
					H	22.66		

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	23095	QPSK	1.4	H	V	24.46	34.77	Pass
					H	22.31		
707.50	23095	16QAM	1.4	H	V	24.67		
					H	23.15		
1.4MHz(RB size 3& RB offset 0)								
707.50	23095	QPSK	1.4	H	V	24.15	34.77	Pass
					H	22.67		
707.50	23095	16QAM	1.4	H	V	24.31		
					H	23.58		
1.4MHz(RB size 6& RB offset 0)								
707.50	23095	QPSK	1.4	H	V	24.67	34.77	Pass
					H	22.31		
707.50	23095	16QAM	1.4	H	V	24.67		
					H	22.48		

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)								
715.30	23173	QPSK	1.4	H	V	24.67	34.77	Pass
					H	23.02		
715.30	23173	16QAM	1.4	H	V	24.63		
					H	23.37		
1.4MHz(RB size 3& RB offset 0)								
715.30	23173	QPSK	1.4	H	V	24.45	34.77	Pass
					H	22.64		
715.30	23173	16QAM	1.4	H	V	24.15		
					H	23.34		
1.4MHz(RB size 6& RB offset 0)								
715.30	23173	QPSK	1.4	H	V	24.79	34.77	Pass
					H	22.46		
715.30	23173	16QAM	1.4	H	V	24.31		
					H	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	23060	QPSK	10	H	V	24.27	34.77	Pass
					H	22.44		
704.00	23060	16QAM	10	H	V	24.04		
					H	22.77		
10MHz(RB size 25& RB offset 0)								
704.00	23060	QPSK	10	H	V	24.39	34.77	Pass
					H	22.57		
704.00	23060	16QAM	10	H	V	24.59		
					H	23.72		
10MHz(RB size 50& RB offset 0)								
704.00	23060	QPSK	10	H	V	22.67	34.77	Pass
					H	22.69		
704.00	23060	16QAM	10	H	V	23.17		
					H	22.31		

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	H	V	24.16	34.77	Pass
					H	22.34		
707.50	23095	16QAM	10	H	V	24.79		
					H	22.06		
10MHz(RB size 25& RB offset 0)								
707.50	23095	QPSK	10	H	V	24.16	34.77	Pass
					H	22.76		
707.50	23095	16QAM	10	H	V	24.13		
					H	23.64		
10MHz(RB size 50 & RB offset 0)								
707.50	23095	QPSK	10	H	V	22.12	34.77	Pass
					H	22.47		
707.50	23095	16QAM	10	H	V	23.16		
					H	23.36		

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	H	V	24.16	34.77	Pass
					H	22.34		
711.00	23130	16QAM	10	H	V	24.78		
					H	22.36		
10MHz(RB size 25& RB offset 0)								
711.00	23130	QPSK	10	H	V	24.12	34.77	Pass
					H	22.32		
711.00	23130	16QAM	10	H	V	24.63		
					H	22.67		
10MHz(RB size 50 & RB offset 0)								
711.00	23130	QPSK	10	H	V	22.46	34.77	Pass
					H	21.85		
711.00	23130	16QAM	10	H	V	23.03		
					H	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	H	V	24.95	34.77	Pass
					H	24.16		
706.50	23755	16QAM	5	H	V	24.78		
					H	21.81		
5MHz(RB size 12 & RB offset 0)								
706.50	23755	QPSK	5	H	V	21.84	34.77	Pass
					H	20.04		
706.50	23755	16QAM	5	H	V	22.13		
					H	25.21		
5MHz(RB size 25 & RB offset 0)								
706.50	23755	QPSK	5	H	V	24.55	34.77	Pass
					H	23.02		
706.50	23755	16QAM	5	H	V	25.07		
					H	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	H	V	23.62	34.77	Pass
					H	22.45		
710.00	23790	16QAM	5	H	V	24.97		
					H	21.71		
5MHz(RB size 12 & RB offset 0)								
710.00	23790	QPSK	5	H	V	21.64	34.77	Pass
					H	20.58		
710.00	23790	16QAM	5	H	V	22.42		
					H	25.36		
5MHz(RB size 25 & RB offset 0)								
710.00	23790	QPSK	5	H	V	24.15	34.77	Pass
					H	23.67		
710.00	23790	16QAM	5	H	V	25.46		
					H	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)								
713.50	23825	QPSK	5	H	V	23.34	34.77	Pass
					H	22.15		
713.50	23825	16QAM	5	H	V	24.79		
					H	21.54		
5MHz(RB size 12 & RB offset 0)								
713.50	23825	QPSK	5	H	V	21.64	34.77	Pass
					H	20.03		
713.50	23825	16QAM	5	H	V	22.41		
					H	25.47		
5MHz(RB size 25 & RB offset 0)								
713.50	23825	QPSK	5	H	V	24.19	34.77	Pass
					H	23.47		
713.50	23825	16QAM	5	H	V	25.49		
					H	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	H	V	25.12	34.77	Pass
					H	23.52		
709.00	23780	16QAM	10	H	V	25.03		
					H	24.29		
10MHz(RB size 25& RB offset 0)								
709.00	23780	QPSK	10	H	V	24.66	34.77	Pass
					H	23.10		
709.00	23780	16QAM	10	H	V	26.60		
					H	24.28		
10MHz(RB size 50& RB offset 0)								
709.00	23780	QPSK	10	H	V	24.68	34.77	Pass
					H	23.02		
709.00	23780	16QAM	10	H	V	24.89		
					H	23.82		

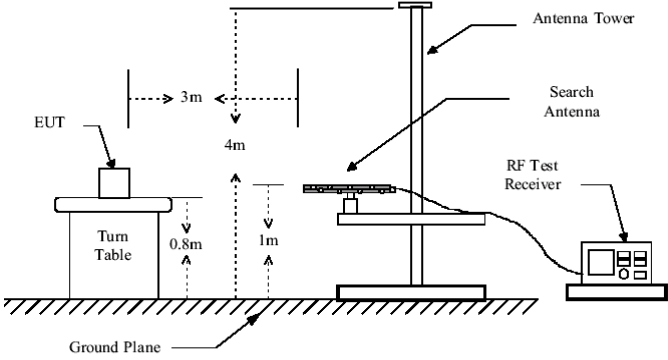
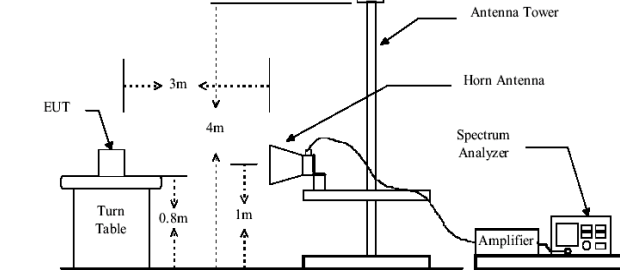
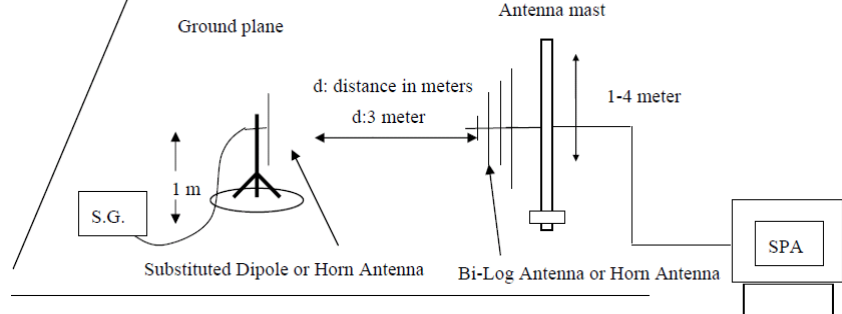
Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
710.00	23790	QPSK	10	H	V	25.13	34.77	Pass
					H	23.34		
710.00	23790	16QAM	10	H	V	25.69		
					H	24.12		
10MHz(RB size 25& RB offset 0)								
710.00	23790	QPSK	10	H	V	24.31	34.77	Pass
					H	23.41		
710.00	23790	16QAM	10	H	V	25.79		
					H	23.34		
10MHz(RB size 50& RB offset 0)								
710.00	23790	QPSK	10	H	V	23.47	34.77	Pass
					H	23.16		
710.00	23790	16QAM	10	H	V	24.15		
					H	23.71		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
711.00	23800	QPSK	10	H	V	25.78	34.77	Pass
					H	23.31		
711.00	23800	16QAM	10	H	V	25.16		
					H	24.78		
10MHz(RB size 25& RB offset 0)								
711.00	23800	QPSK	10	H	V	24.13	34.77	Pass
					H	23.32		
711.00	23800	16QAM	10	H	V	25.46		
					H	23.30		
10MHz(RB size 50& RB offset 0)								
711.00	23800	QPSK	10	H	V	23.49	34.77	Pass
					H	23.15		
711.00	23800	16QAM	10	H	V	24.71		
					H	23.46		

6.11 Field strength of spurious radiation measurement

Test Requirement:	FCC Part 22.917(a), Part 24.238 (a), Part 27.53(g), Part 27.53(m), Part 27.53(h)
Test Method:	FCC part2.1053
Limit:	LTE Band 2, LTE Band 4, LTE Band 5, LTE Band 12 and LTE Band 17: -13dBm, LTE Band 7: -25dBm
Test setup:	<p>Below 1GHz</p>  <p>Above 1GHz</p>  <p>Substituted method:</p> 
Test Procedure:	<ol style="list-style-type: none"> 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 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. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels).

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

Measurement Data (worst case):

Below 1GHz:

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

Above 1GHz

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

LTE band 2 part:

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

Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3701.40	Vertical	-34.17	-13.00	Pass
5552.10	V	-39.68		
7402.00	V	-36.95		
3701.40	Horizontal	-39.13		
5552.10	H	-38.95		
7402.00	H	-38.11		
Middle				
3760.00	Vertical	-35.27	-13.00	Pass
5640.00	V	-39.48		
7520.00	V	-40.57		
3760.00	Horizontal	-37.06		
5640.00	H	-41.58		
7520.00	H	-39.72		
Highest				
3816.60	Vertical	-39.56	-13.00	Pass
5724.90	V	-45.45		
7633.20	V	-39.79		
3816.60	Horizontal	-41.62		
5724.90	H	-43.69		
7633.20	H	-41.55		

3MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3703.00	Vertical	-45.87	-13.00	Pass
5554.50	V	-46.31		
7406.00	V	-40.02		
3703.00	Horizontal	-46.32		
5554.50	H	-43.15		
7406.00	H	-40.78		
Middle				
3760.00	Vertical	-36.65	-13.00	Pass
5640.00	V	-45.87		
7520.00	V	-40.15		
3760.00	Horizontal	-38.94		
5640.00	H	-42.25		
7520.00	H	-40.78		
Highest				
3817.00	Vertical	-40.78	-13.00	Pass
5725.50	V	-42.36		
7634.00	V	-41.27		
3817.00	Horizontal	-42.69		
5725.50	H	-42.18		
7634.00	H	-37.49		

5MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3705.00	Vertical	-35.64	-13.00	Pass
5557.50	V	-40.15		
7410.00	V	-36.32		
3705.00	Horizontal	-39.75		
5557.50	H	-37.41		
7410.00	H	-38.58		
Middle				
3760.00	Vertical	-35.61	-13.00	Pass
5640.00	V	-39.46		
7520.00	V	-40.15		
3760.00	Horizontal	-37.16		
5640.00	H	-41.02		
7520.00	H	-39.76		
Highest				
3815.00	Vertical	-39.54	-13.00	Pass
5722.50	V	-45.16		
7630.00	V	-39.74		
3815.00	Horizontal	-42.15		
5722.50	H	-43.36		
7630.00	H	-41.79		

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

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

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

LTE Band 4 Part:

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

Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3421.40	Vertical	-39.02	-13.00	Pass
5132.10	V	-34.21		
6842.80	V	-37.65		
3421.40	Horizontal	-41.61		
5132.10	H	-38.15		
6842.80	H	-36.19		
Middle				
3465.00	Vertical	-40.51	-13.00	Pass
5197.50	V	-30.40		
6930.00	V	-36.87		
3465.00	Horizontal	-38.53		
5197.50	H	-33.60		
6930.00	H	-36.55		
Highest				
3508.60	Vertical	-43.89	-13.00	Pass
5262.90	V	-34.69		
7017.20	V	-38.15		
3508.60	Horizontal	-39.27		
5262.90	H	-27.62		
7017.20	H	-38.73		

3MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3423.00	Vertical	-42.16	-13.00	Pass
5134.50	V	-36.45		
6846.00	V	-42.78		
3423.00	Horizontal	-43.36		
5134.50	H	-34.67		
6846.00	H	-38.61		
Middle				
3465.00	Vertical	-42.78	-13.00	Pass
5197.50	V	-30.05		
6930.00	V	-40.78		
3465.00	Horizontal	-37.61		
5197.50	H	-33.36		
6930.00	H	-36.46		
Highest				
3507.00	Vertical	-38.79	-13.00	Pass
5260.50	V	-34.16		
7014.00	V	-40.25		
3507.00	Horizontal	-42.36		
5260.50	H	-34.78		
7014.00	H	-41.74		

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

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3430.00	Vertical	-41.27	-13.00	Pass
5145.00	V	-34.62		
6860.00	V	-42.21		
3430.00	Horizontal	-43.67		
5145.00	H	-34.67		
6860.00	H	-38.51		
Middle				
3465.00	Vertical	-41.24	-13.00	Pass
5197.50	V	-29.87		
6930.00	V	-40.34		
3465.00	Horizontal	-37.85		
5197.50	H	-32.65		
6930.00	H	-36.48		
Highest				
3500.00	Vertical	-39.74	-13.00	Pass
5250.00	V	-34.25		
7000.00	V	-42.13		
3500.00	Horizontal	-41.70		
5250.00	H	-34.61		
7000.00	H	-40.05		

15MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3435.00	Vertical	-40.15	-13.00	Pass
5152.50	V	-34.67		
6870.00	V	-37.69		
3435.00	Horizontal	-42.16		
5152.50	H	-38.79		
6870.00	H	-35.78		
Middle				
3465.00	Vertical	-42.16	-13.00	Pass
5197.50	V	-31.45		
6930.00	V	-36.57		
3465.00	Horizontal	-38.64		
5197.50	H	-34.61		
6930.00	H	-36.78		
Highest				
3495.00	Vertical	-42.18	-13.00	Pass
5242.50	V	-36.32		
6990.00	V	-38.57		
3495.00	Horizontal	-39.54		
5242.50	H	-29.67		
6990.00	H	-38.21		

20MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3440.00	Vertical	-40.04	-13.00	Pass
5160.00	V	-33.17		
6880.00	V	-40.20		
3440.00	Horizontal	-43.89		
5160.00	H	-34.69		
6880.00	H	-38.15		
Middle				
3465.00	Vertical	-42.21	-13.00	Pass
5197.50	V	-27.86		
6930.00	V	-40.18		
3465.00	Horizontal	-39.60		
5197.50	H	-31.07		
6930.00	H	-36.46		
Highest				
3490.00	Vertical	-39.33	-13.00	Pass
5235.00	V	-34.78		
6980.00	V	-41.37		
3490.00	Horizontal	-41.89		
5235.00	H	-34.30		
6980.00	H	-40.08		

LTE Band 5 Part:

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

Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1649.40	Vertical	-50.82	-13	Pass
2474.10	V	-47.56		
3298.80	V	-44.45		
1649.40	Horizontal	-57.08		
2474.10	H	-44.91		
3298.80	H	-42.88		
Middle				
1673.00	Vertical	-53.14	-13	Pass
2509.50	V	-42.87		
3346.00	V	-44.43		
1673.00	Horizontal	-60.82		
2509.50	H	-45.76		
3346.00	H	-47.94		
Highest				
1696.60	Vertical	-50.90	-13	Pass
2544.90	V	-41.72		
3393.20	V	-39.71		
1696.60	Horizontal	-57.70		
2544.90	H	-39.42		
3393.20	H	-45.46		

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

5MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1653.00	Vertical	-49.23	-13	Pass
2479.50	V	-46.32		
3306.00	V	-44.12		
1653.00	Horizontal	-58.27		
2479.50	H	-45.31		
3306.00	H	-42.36		
Middle				
1673.00	Vertical	-53.34	-13	Pass
2509.50	V	-42.12		
3346.00	V	-44.76		
1673.00	Horizontal	-60.25		
2509.50	H	-45.79		
3346.00	H	-47.31		
Highest				
1693.00	Vertical	-50.48	-13	Pass
2539.50	V	-41.34		
3386.00	V	-40.03		
1693.00	Horizontal	-58.64		
2539.50	H	-40.16		
3386.00	H	-45.79		

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

LTE Band 7 Part:

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

Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
5005.00	Vertical	-36.35	-25.00	Pass
7507.50	V	-32.20		
10010.00	V	-38.99		
5005.00	Horizontal	-40.95		
7507.50	H	-35.47		
10010.00	H	-39.48		
Middle				
5070.00	Vertical	-36.62	-25.00	Pass
7605.00	V	-39.40		
10140.00	V	-38.27		
5070.00	Horizontal	-44.03		
7605.00	H	-27.56		
10140.00	H	-39.10		
Highest				
5135.00	Vertical	-38.74	-25.00	Pass
7702.50	V	-34.47		
10270.00	V	-35.33		
5135.00	Horizontal	-40.97		
7702.50	H	-28.15		
10270.00	H	-38.53		

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

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

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

LTE Band 12 Part:

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

Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1399.40	Vertical	-37.66	-13	Pass
2099.10	V	-37.91		
2798.80	V	-41.31		
1399.40	Horizontal	-43.33		
2099.10	H	-36.87		
2798.80	H	-45.22		
Middle				
1415.00	Vertical	-40.10	-13	Pass
2122.50	V	-44.05		
2830.00	V	-41.25		
1415.00	Horizontal	-46.71		
2122.50	H	-40.71		
2830.00	H	-42.62		
Highest				
1430.60	Vertical	-41.39	-13	Pass
2145.90	V	-48.71		
2861.20	V	-41.19		
1430.60	Horizontal	-44.53		
2145.90	H	-45.29		
2861.20	H	-41.93		

3MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1401.00	Vertical	-36.64	-13	Pass
2101.50	V	-42.15		
2802.00	V	-42.78		
1401.00	Horizontal	-42.19		
2101.50	H	-46.78		
2802.00	H	-43.31		
Middle				
1415.00	Vertical	-40.78	-13	Pass
2122.50	V	-45.63		
2830.00	V	-42.16		
1415.00	Horizontal	-45.97		
2122.50	H	-50.43		
2830.00	H	-41.25		
Highest				
1429.00	Vertical	-37.65	-13	Pass
2143.50	V	-47.21		
2858.00	V	-44.21		
1429.00	Horizontal	-41.92		
2143.50	H	-51.63		
2858.00	H	-46.97		

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

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1408.00	Vertical	-35.05	-13	Pass
2112.00	V	-41.89		
2816.00	V	-41.76		
1408.00	Horizontal	-41.70		
2112.00	H	-47.85		
2816.00	H	-43.19		
Middle				
1415.00	Vertical	-39.61	-13	Pass
2122.50	V	-45.02		
2830.00	V	-41.25		
1415.00	Horizontal	-44.64		
2122.50	H	-49.93		
2830.00	H	-41.92		
Highest				
1422.00	Vertical	-37.14	-13	Pass
2133.00	V	-47.47		
2844.00	V	-44.24		
1422.00	Horizontal	-41.19		
2133.00	H	-51.47		
2844.00	H	-45.30		

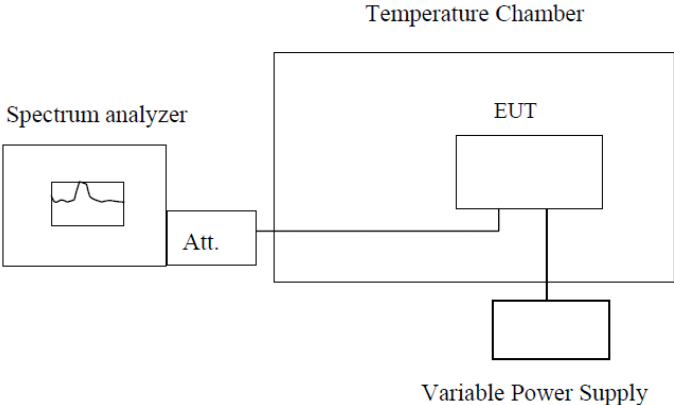
LTE Band 17 Part:

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

Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1413.00	Vertical	-35.86	-13.00	Pass
2119.50	V	-39.81		
2826.00	V	-42.24		
1413.00	Horizontal	-41.52		
2119.50	H	-41.01		
2826.00	H	-43.32		
Middle				
1420.00	Vertical	-39.45	-13.00	Pass
2130.00	V	-38.74		
2840.00	V	-42.00		
1420.00	Horizontal	-44.80		
2130.00	H	-39.87		
2840.00	H	-43.59		
Highest				
1427.00	Vertical	-36.11	-13.00	Pass
2140.50	V	-42.97		
2854.00	V	-44.36		
1427.00	Horizontal	-41.19		
2140.50	H	-41.58		
2854.00	H	-45.41		

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1418.00	Vertical	-37.73	-13.00	Pass
2127.00	V	-39.93		
2836.00	V	-41.87		
1418.00	Horizontal	-38.64		
2127.00	H	-40.15		
2836.00	H	-42.31		
Middle				
1420.00	Vertical	-37.43	-13.00	Pass
2130.00	V	-42.80		
2840.00	V	-40.53		
1420.00	Horizontal	-42.34		
2130.00	H	-42.58		
2840.00	H	-42.84		
Highest				
1422.00	Vertical	-39.53	-13.00	Pass
2133.00	V	-41.42		
2844.00	V	-41.54		
1422.00	Horizontal	-44.11		
2133.00	H	-42.37		
2844.00	H	-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:	 <p>Note : Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> 1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	All three channels of all modulations have been tested, but only the worst channel and the worst modulation show in this test item.

Measurement Data (the worst channel):

LTE Band 2(QPSK):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	196	0.104255	±2.5	Pass
	-20	123	0.065426		
	-10	165	0.087766		
	0	144	0.076596		
	10	122	0.064894		
	20	132	0.070213		
	30	101	0.053723		
	40	184	0.097872		
	50	171	0.090957		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	152	0.080851	±2.5	Pass
	-20	123	0.065426		
	-10	136	0.072340		
	0	120	0.063830		
	10	144	0.076596		
	20	107	0.056915		
	30	165	0.087766		
	40	108	0.057447		
	50	174	0.092553		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	156	0.082979	±2.5	Pass
	-20	123	0.065426		
	-10	177	0.094149		
	0	144	0.076596		
	10	160	0.085106		
	20	155	0.082447		
	30	150	0.079787		
	40	104	0.055319		
	50	132	0.070213		

Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	181	0.096277	±2.5	Pass
	-20	123	0.065426		
	-10	165	0.087766		
	0	104	0.055319		
	10	171	0.090957		
	20	146	0.077660		
	30	100	0.053191		
	40	118	0.062766		
	50	148	0.078723		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	155	0.082447	±2.5	Pass
	-20	165	0.087766		
	-10	171	0.090957		
	0	144	0.076596		
	10	120	0.063830		
	20	133	0.070745		
	30	138	0.073404		
	40	104	0.055319		
	50	118	0.062766		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	199	0.105851	±2.5	Pass
	-20	123	0.065426		
	-10	132	0.070213		
	0	166	0.088298		
	10	181	0.096277		
	20	175	0.093085		
	30	148	0.078723		
	40	123	0.065426		
	50	107	0.056915		

LTE Band 2(16QAM):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	156	0.082979	±2.5	Pass
	-20	181	0.096277		
	-10	144	0.076596		
	0	171	0.090957		
	10	141	0.075000		
	20	133	0.070745		
	30	136	0.072340		
	40	108	0.057447		
	50	102	0.054255		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.088298	±2.5	Pass
	-20	160	0.085106		
	-10	155	0.082447		
	0	123	0.065426		
	10	133	0.070745		
	20	126	0.067021		
	30	138	0.073404		
	40	144	0.076596		
	50	140	0.074468		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	177	0.094149	±2.5	Pass
	-20	123	0.065426		
	-10	132	0.070213		
	0	133	0.070745		
	10	126	0.067021		
	20	144	0.076596		
	30	148	0.078723		
	40	166	0.088298		
	50	160	0.085106		

Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	181	0.096277	±2.5	Pass
	-20	121	0.064362		
	-10	144	0.076596		
	0	155	0.082447		
	10	160	0.085106		
	20	140	0.074468		
	30	108	0.057447		
	40	117	0.062234		
	50	103	0.054787		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.088298	±2.5	Pass
	-20	160	0.085106		
	-10	112	0.059574		
	0	110	0.058511		
	10	123	0.065426		
	20	125	0.066489		
	30	133	0.070745		
	40	136	0.072340		
	50	107	0.056915		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	155	0.082447	±2.5	Pass
	-20	161	0.085638		
	-10	123	0.065426		
	0	133	0.070745		
	10	125	0.066489		
	20	136	0.072340		
	30	166	0.088298		
	40	171	0.090957		
	50	104	0.055319		

LTE Band 4(QPSK):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	199	0.114863	±2.5	Pass
	-20	123	0.070996		
	-10	131	0.075613		
	0	166	0.095815		
	10	181	0.104473		
	20	171	0.098701		
	30	188	0.108514		
	40	175	0.101010		
	50	144	0.083117		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	188	0.108514	±2.5	Pass
	-20	123	0.070996		
	-10	132	0.076190		
	0	166	0.095815		
	10	171	0.098701		
	20	141	0.081385		
	30	105	0.060606		
	40	108	0.062338		
	50	155	0.089466		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	164	0.094661	±2.5	Pass
	-20	132	0.076190		
	-10	136	0.078499		
	0	168	0.096970		
	10	144	0.083117		
	20	148	0.085426		
	30	101	0.058297		
	40	108	0.062338		
	50	128	0.073882		

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.095815	±2.5	Pass
	-20	123	0.070996		
	-10	133	0.076768		
	0	128	0.073882		
	10	161	0.092929		
	20	144	0.083117		
	30	140	0.080808		
	40	171	0.098701		
	50	170	0.098124		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	155	0.089466	±2.5	Pass
	-20	123	0.070996		
	-10	150	0.086580		
	0	126	0.072727		
	10	144	0.083117		
	20	148	0.085426		
	30	133	0.076768		
	40	130	0.075036		
	50	114	0.065801		
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	191	0.110245	±2.5	Pass
	-20	171	0.098701		
	-10	175	0.101010		
	0	161	0.092929		
	10	133	0.076768		
	20	148	0.085426		
	30	138	0.079654		
	40	140	0.080808		
	50	108	0.062338		

LTE Band 4(16QAM):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.095815	±2.5	Pass
	-20	152	0.087734		
	-10	121	0.069841		
	0	153	0.088312		
	10	160	0.092352		
	20	144	0.083117		
	30	148	0.085426		
	40	107	0.061760		
	50	109	0.062915		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	165	0.095238	±2.5	Pass
	-20	142	0.081962		
	-10	148	0.085426		
	0	160	0.092352		
	10	132	0.076190		
	20	136	0.078499		
	30	126	0.072727		
	40	128	0.073882		
	50	107	0.061760		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	154	0.088889	±2.5	Pass
	-20	164	0.094661		
	-10	158	0.091198		
	0	160	0.092352		
	10	123	0.070996		
	20	131	0.075613		
	30	126	0.072727		
	40	130	0.075036		
	50	144	0.083117		

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	165	0.095238	±2.5	Pass
	-20	123	0.070996		
	-10	131	0.075613		
	0	144	0.083117		
	10	128	0.073882		
	20	136	0.078499		
	30	148	0.085426		
	40	107	0.061760		
	50	109	0.062915		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	177	0.102165	±2.5	Pass
	-20	141	0.081385		
	-10	162	0.093506		
	0	123	0.070996		
	10	132	0.076190		
	20	146	0.084271		
	30	160	0.092352		
	40	151	0.087157		
	50	158	0.091198		
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.095815	±2.5	Pass
	-20	162	0.093506		
	-10	132	0.076190		
	0	135	0.077922		
	10	144	0.083117		
	20	140	0.080808		
	30	155	0.089466		
	40	150	0.086580		
	50	121	0.069841		

LTE Band 5(QPSK):

Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	199	0.237896	±2.5	Pass
	-20	123	0.147041		
	-10	144	0.172146		
	0	155	0.185296		
	10	160	0.191273		
	20	150	0.179319		
	30	143	0.170950		
	40	171	0.204423		
	50	180	0.215182		
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.198446	±2.5	Pass
	-20	123	0.147041		
	-10	130	0.155409		
	0	125	0.149432		
	10	136	0.162582		
	20	161	0.192469		
	30	144	0.172146		
	40	148	0.176928		
	50	150	0.179319		
Reference Frequency: LTE Band 5(5MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	123	0.147041	±2.5	Pass
	-20	132	0.157800		
	-10	133	0.158996		
	0	162	0.193664		
	10	128	0.153019		
	20	144	0.172146		
	30	148	0.176928		
	40	171	0.204423		
	50	160	0.191273		
Reference Frequency: LTE Band 5(10MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	155	0.185296	±2.5	Pass
	-20	123	0.147041		
	-10	130	0.155409		
	0	151	0.180514		
	10	141	0.168559		
	20	161	0.192469		
	30	107	0.127914		
	40	144	0.172146		
	50	109	0.130305		

LTE Band 5(16QAM):

Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	165	0.197250	±2.5	Pass
	-20	123	0.147041		
	-10	131	0.156605		
	0	126	0.150628		
	10	160	0.191273		
	20	144	0.172146		
	30	148	0.176928		
	40	171	0.204423		
	50	101	0.120741		
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	168	0.200837	±2.5	Pass
	-20	162	0.193664		
	-10	132	0.157800		
	0	136	0.162582		
	10	144	0.172146		
	20	145	0.173341		
	30	123	0.147041		
	40	126	0.150628		
	50	107	0.127914		
Reference Frequency: LTE Band 5(5MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	171	0.204423	2.5	Pass
	-20	141	0.168559		
	-10	146	0.174537		
	0	178	0.212791		
	10	161	0.192469		
	20	133	0.158996		
	30	131	0.156605		
	40	123	0.147041		
	50	114	0.136282		
Reference Frequency: LTE Band 5(10MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	156	0.186491	2.5	Pass
	-20	123	0.147041		
	-10	132	0.157800		
	0	126	0.150628		
	10	131	0.156605		
	20	144	0.172146		
	30	147	0.175732		
	40	160	0.191273		
	50	169	0.202032		

LTE Band 7(QPSK):

Reference Frequency: LTE Band 7(5MHz) Middle channel=21100Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	199	0.078501	±2.5	Pass
	-20	123	0.048521		
	-10	161	0.063511		
	0	193	0.076134		
	10	144	0.056805		
	20	171	0.067456		
	30	180	0.071006		
	40	110	0.043393		
	50	131	0.051677		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	155	0.061144	±2.5	Pass
	-20	161	0.063511		
	-10	123	0.048521		
	0	136	0.053649		
	10	166	0.065483		
	20	171	0.067456		
	30	180	0.071006		
	40	153	0.060355		
	50	177	0.069822		
Reference Frequency: LTE Band 7(15MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	123	0.048521	±2.5	Pass
	-20	166	0.065483		
	-10	168	0.066272		
	0	122	0.048126		
	10	144	0.056805		
	20	147	0.057988		
	30	101	0.039842		
	40	155	0.061144		
	50	150	0.059172		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	196	0.077318	±2.5	Pass
	-20	123	0.048521		
	-10	171	0.067456		
	0	182	0.071795		
	10	161	0.063511		
	20	144	0.056805		
	30	150	0.059172		
	40	155	0.061144		
	50	108	0.042604		

LTE Band 7(16QAM):

Reference Frequency: LTE Band 7(5MHz) Middle channel=21100Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	123	0.048521	±2.5	Pass
	-20	155	0.061144		
	-10	166	0.065483		
	0	161	0.063511		
	10	150	0.059172		
	20	134	0.052860		
	30	145	0.057199		
	40	114	0.044970		
	50	107	0.042209		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	181	0.071400	±2.5	Pass
	-20	123	0.048521		
	-10	136	0.053649		
	0	124	0.048915		
	10	138	0.054438		
	20	104	0.041026		
	30	177	0.069822		
	40	160	0.063116		
	50	166	0.065483		
Reference Frequency: LTE Band 7(15MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	158	0.062327	2.5	Pass
	-20	121	0.047732		
	-10	169	0.066667		
	0	171	0.067456		
	10	178	0.070217		
	20	151	0.059566		
	30	145	0.057199		
	40	146	0.057594		
	50	108	0.042604		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	144	0.056805	2.5	Pass
	-20	151	0.059566		
	-10	146	0.057594		
	0	158	0.062327		
	10	123	0.048521		
	20	136	0.053649		
	30	104	0.041026		
	40	171	0.067456		
	50	141	0.05621		

LTE Band 12(QPSK):

Reference Frequency: LTE Band 12(1.4MHz) Middle channel=23095Frequency=707.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	197	0.278445	±2.5	Pass
	-20	141	0.199293		
	-10	151	0.213428		
	0	164	0.231802		
	10	158	0.223322		
	20	148	0.209187		
	30	166	0.234629		
	40	171	0.241696		
	50	189	0.267138		
Reference Frequency: LTE Band 12(3MHz) Middle channel=23095Frequency=707.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	155	0.219081	±2.5	Pass
	-20	184	0.260071		
	-10	174	0.245936		
	0	176	0.248763		
	10	180	0.254417		
	20	161	0.227562		
	30	169	0.238869		
	40	104	0.146996		
	50	125	0.176678		
Reference Frequency: LTE Band 12(5MHz) Middle channel=23095Frequency=707.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	169	0.238869	±2.5	Pass
	-20	123	0.173852		
	-10	138	0.195053		
	0	129	0.182332		
	10	144	0.203534		
	20	150	0.212014		
	30	156	0.220495		
	40	101	0.142756		
	50	108	0.152650		
Reference Frequency: LTE Band 12(10MHz) Middle channel=23095Frequency=707.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	194	0.274205	±2.5	Pass
	-20	123	0.173852		
	-10	135	0.190813		
	0	126	0.178092		
	10	138	0.195053		
	20	144	0.203534		
	30	180	0.254417		
	40	171	0.241696		
	50	168	0.237456		

LTE Band 12(16QAM):

Reference Frequency: LTE Band 12(1.4MHz) Middle channel=23095Frequency=707.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	155	0.219081	±2.5	Pass
	-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		
Reference Frequency: LTE Band 12(3MHz) Middle channel=23095Frequency=707.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	148	0.209187	±2.5	Pass
	-20	151	0.213428		
	-10	123	0.173852		
	0	136	0.192226		
	10	155	0.219081		
	20	141	0.199293		
	30	101	0.142756		
	40	105	0.148410		
	50	118	0.166784		
Reference Frequency: LTE Band 12(5MHz) Middle channel=23095Frequency=707.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	123	0.173852	2.5	Pass
	-20	131	0.185159		
	-10	147	0.207774		
	0	150	0.212014		
	10	155	0.219081		
	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					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	166	0.234629	2.5	Pass
	-20	169	0.238869		
	-10	144	0.203534		
	0	151	0.213428		
	10	158	0.223322		
	20	171	0.241696		
	30	176	0.248763		
	40	101	0.142756		
	50	108	0.152650		

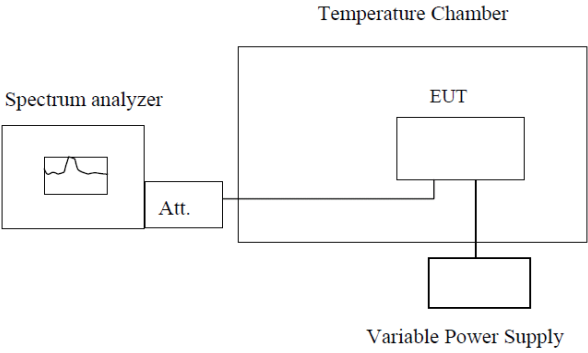
LTE Band 17(QPSK):

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

LTE Band 17(16QAM):

Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	165	0.232394	±2.5	Pass
	-20	141	0.198592		
	-10	181	0.254930		
	0	123	0.173239		
	10	138	0.194366		
	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=710.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	107	0.150704	±2.5	Pass
	-20	181	0.254930		
	-10	141	0.198592		
	0	156	0.219718		
	10	158	0.222535		
	20	123	0.173239		
	30	168	0.236620		
	40	118	0.166197		
	50	172	0.242254		

6.13 Frequency stability V.S. Voltage measurement

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

Measurement Data (the worst channel):

LTE Band 2(QPSK):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	99	0.052660	±2.5	Pass
	3.80	87	0.046277		
	3.23	68	0.036170		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	75	0.039894	±2.5	Pass
	3.80	84	0.044681		
	3.23	64	0.034043		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	82	0.043617	±2.5	Pass
	3.80	90	0.047872		
	3.23	74	0.039362		
Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	77	0.040957	±2.5	Pass
	3.80	84	0.044681		
	3.23	96	0.051064		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	92	0.048936	±2.5	Pass
	3.80	96	0.051064		
	3.23	76	0.040426		
Reference Frequency: LTE Band 2(20MHz) Middle channel=20175 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	88	0.046809	±2.5	Pass
	3.80	64	0.034043		
	3.23	71	0.037766		

LTE Band 2(16QAM):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	90	0.047872	±2.5	Pass
	3.80	81	0.043085		
	3.23	76	0.040426		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	99	0.052660	±2.5	Pass
	3.80	84	0.044681		
	3.23	75	0.039894		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	93	0.049468	±2.5	Pass
	3.80	75	0.039894		
	3.23	81	0.043085		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	78	0.041489	±2.5	Pass
	3.80	81	0.043085		
	3.23	74	0.039362		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	99	0.052660	±2.5	Pass
	3.80	82	0.043617		
	3.23	76	0.040426		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	93	0.049468	±2.5	Pass
	3.80	82	0.043617		
	3.23	64	0.034043		

LTE Band 4(QPSK):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	98	0.056566	±2.5	Pass
	3.80	75	0.043290		
	3.23	64	0.036941		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	90	0.051948	±2.5	Pass
	3.80	99	0.057143		
	3.23	85	0.049062		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	86	0.049639	±2.5	Pass
	3.80	74	0.042713		
	3.23	92	0.053102		
Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	95	0.054834	±2.5	Pass
	3.80	91	0.052525		
	3.23	81	0.046753		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	77	0.044444	±2.5	Pass
	3.80	84	0.048485		
	3.23	68	0.039250		
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	90	0.051948	±2.5	Pass
	3.80	87	0.050216		
	3.23	64	0.036941		

LTE Band 4(16QAM):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	88	0.050794	±2.5	Pass
	3.80	75	0.043290		
	3.23	71	0.040981		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	66	0.038095	±2.5	Pass
	3.80	84	0.048485		
	3.23	52	0.030014		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	55	0.031746	±2.5	Pass
	3.80	87	0.050216		
	3.23	48	0.027706		
Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	99	0.057143	±2.5	Pass
	3.80	65	0.037518		
	3.23	87	0.050216		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	68	0.039250	±2.5	Pass
	3.80	75	0.043290		
	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
		Hz	ppm		
25	4.37	86	0.049639	±2.5	Pass
	3.80	94	0.054257		
	3.23	71	0.040981		

LTE Band 5(QPSK):

Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	99	0.118350	±2.5	Pass
	3.80	85	0.101614		
	3.23	64	0.076509		
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	88	0.105200	±2.5	Pass
	3.80	74	0.088464		
	3.23	90	0.107591		
Reference Frequency: LTE Band 5(5MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	84	0.100418	±2.5	Pass
	3.80	74	0.088464		
	3.23	90	0.107591		
Reference Frequency: LTE Band5(10MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	96	0.114764	±2.5	Pass
	3.80	45	0.053796		
	3.23	80	0.095637		

LTE Band 5(16QAM):

Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	84	0.100418	±2.5	Pass
	3.80	64	0.076509		
	3.23	70	0.083682		
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	99	0.118350	±2.5	Pass
	3.80	78	0.093246		
	3.23	80	0.095637		
Reference Frequency: LTE Band 5(5MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	93	0.111178	±2.5	Pass
	3.80	64	0.076509		
	3.23	82	0.098027		
Reference Frequency: LTE Band 5(10MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	84	0.100418	±2.5	Pass
	3.80	75	0.089659		
	3.23	90	0.107591		

LTE Band 7(QPSK):

Reference Frequency: LTE Band 7(5MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	90	0.035503	±2.5	Pass
	3.80	81	0.031953		
	3.23	65	0.025641		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.029191	±2.5	Pass
	3.80	81	0.031953		
	3.23	96	0.037870		
Reference Frequency: LTE Band 7(15MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	88	0.034714	±2.5	Pass
	3.80	75	0.029586		
	3.23	64	0.025247		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	84	0.033136	±2.5	Pass
	3.80	97	0.038264		
	3.23	40	0.015779		

LTE Band 7(16QAM):

Reference Frequency: LTE Band 7(5MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.029191	±2.5	Pass
	3.80	84	0.033136		
	3.23	96	0.037870		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	99	0.039053	±2.5	Pass
	3.80	85	0.033531		
	3.23	64	0.025247		
Reference Frequency: LTE Band 7(15MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	58	0.022880	±2.5	Pass
	3.80	74	0.029191		
	3.23	90	0.035503		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	65	0.025641	±2.5	Pass
	3.80	81	0.031953		
	3.23	74	0.029191		

LTE Band 12(QPSK):

Reference Frequency: LTE Band 12(1.4MHz) Middle channel=23095Frequency=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	78	0.110247	±2.5	Pass
	3.80	94	0.132862		
	3.23	80	0.113074		
Reference Frequency: LTE Band 12(3MHz) Middle channel=23095Frequency=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	88	0.124382	±2.5	Pass
	3.80	86	0.121555		
	3.23	91	0.128622		
Reference Frequency: LTE Band 12(5MHz) Middle channel=23095Frequency=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	95	0.134276	±2.5	Pass
	3.80	64	0.090459		
	3.23	72	0.101767		
Reference Frequency: LTE Band 12(10MHz) Middle channel=23095Frequency=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	84	0.118728	±2.5	Pass
	3.80	67	0.094700		
	3.23	47	0.066431		

LTE Band 12(16QAM):

Reference Frequency: LTE Band 12(1.4MHz) Middle channel=23095Frequency=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	90	0.127208	±2.5	Pass
	3.80	81	0.114488		
	3.23	74	0.104594		
Reference Frequency: LTE Band 12(3MHz) Middle channel=23095Frequency=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	88	0.124382	±2.5	Pass
	3.80	64	0.090459		
	3.23	71	0.100353		
Reference Frequency: LTE Band 12(5MHz) Middle channel=23095Frequency=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	56	0.079152	±2.5	Pass
	3.80	64	0.090459		
	3.23	71	0.100353		
Reference Frequency: LTE Band 12(10MHz) Middle channel=23095Frequency=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	81	0.114488	±2.5	Pass
	3.80	93	0.131449		
	3.23	37	0.052297		

LTE Band 17(QPSK):

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

LTE Band 17(16QAM):

Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	66	0.092958	±2.5	Pass
	3.80	85	0.119718		
	3.23	74	0.104225		
Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	63	0.088732	±2.5	Pass
	3.80	52	0.073239		
	3.23	48	0.067606		