3.4 Conducted Band Edge Measurement

3.4.1 Description of Conducted Band Edge Measurement

22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53 (g)

For operations in the 698 -746 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

27.53 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

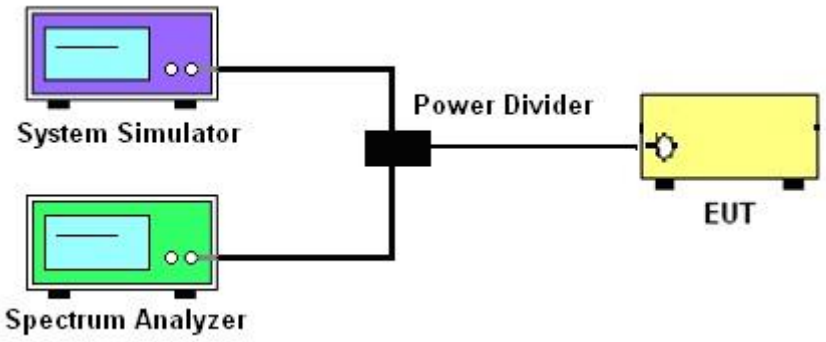
3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The band edges of low and high channels for the highest RF powers were measured. Setting RBW ≥ 1% EBW, and measuring bandwidth = 1MHz.
3. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
4. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

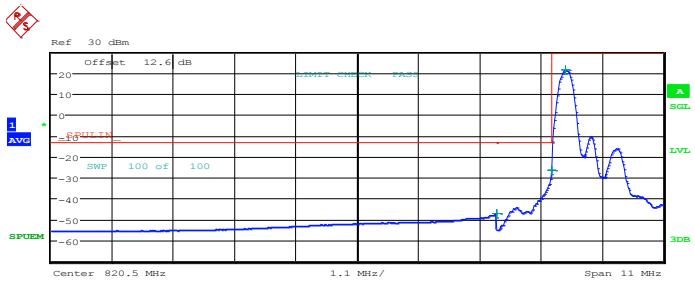
3.4.4 Test Setup



3.4.5 Test Result (Plots) of Conducted Band Edge

Band :	LTE Band 5	Band Width :	1.4MHz / QPSK

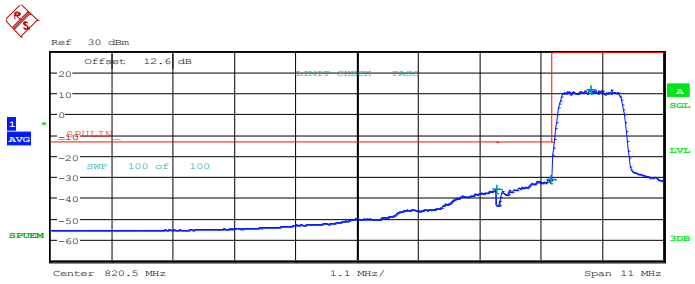
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	823.000000 M	-47.13	-34.13
823.000 M	824.000 M	20.00 k	823.994000 M	-26.80	-13.80
824.000 M	826.000 M	100.00 k	824.238000 M	21.17	-8.83

Date: 13.DEC.2013 10:37:17

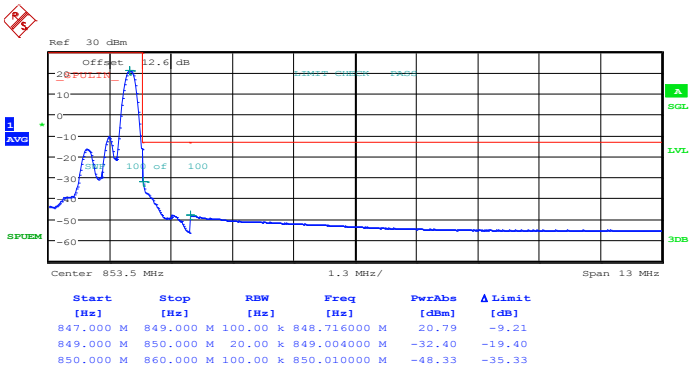
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	823.000000 M	-36.13	-23.13
823.000 M	824.000 M	20.00 k	823.965000 M	-31.27	-18.27
824.000 M	826.000 M	100.00 k	824.694000 M	11.57	-18.43

Date: 13.DEC.2013 10:38:47

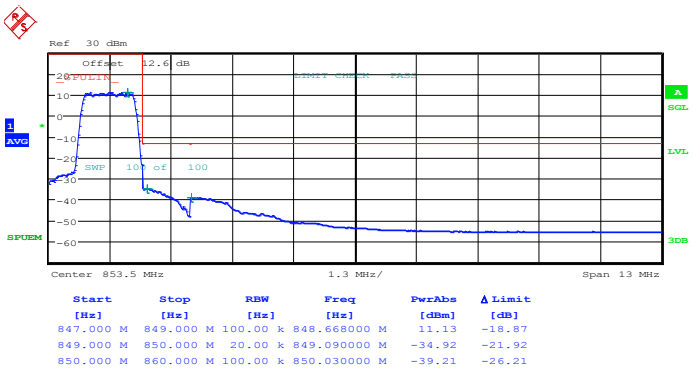
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
847.000 M	849.000 M	100.00 k	848.716000 M	20.79	-9.21
849.000 M	850.000 M	20.00 k	849.004000 M	-32.40	-19.40
850.000 M	860.000 M	100.00 k	850.010000 M	-48.33	-35.33

Date: 13.DEC.2013 10:48:19

Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

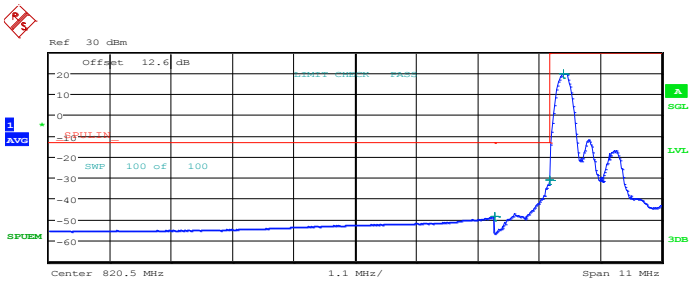


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
847.000 M	849.000 M	100.00 k	848.668000 M	11.13	-18.87
849.000 M	850.000 M	20.00 k	849.090000 M	-34.92	-21.92
850.000 M	860.000 M	100.00 k	850.030000 M	-39.21	-26.21

Date: 13.DEC.2013 10:46:44

Band :	LTE Band 5	Band Width :	1.4MHz / 16QAM

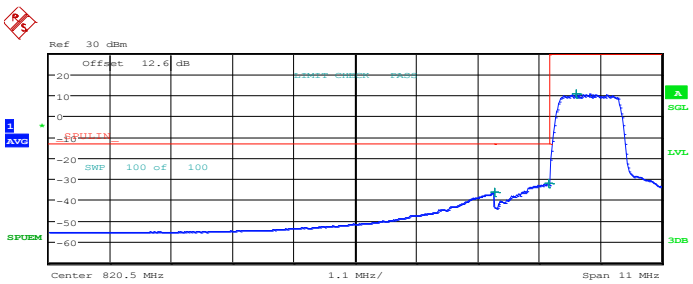
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	823.000000 M	-48.48	-35.48
823.000 M	824.000 M	20.00 k	823.999000 M	-31.28	-18.28
824.000 M	826.000 M	100.00 k	824.244000 M	19.64	-10.36

Date: 13.DEC.2013 10:37:59

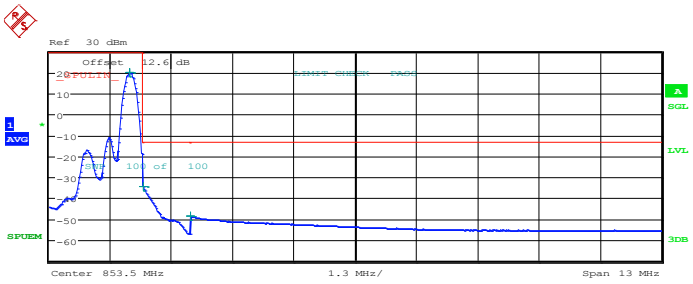
Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	823.000000 M	-36.53	-23.53
823.000 M	824.000 M	20.00 k	823.964000 M	-32.17	-19.17
824.000 M	826.000 M	100.00 k	824.462000 M	10.70	-19.30

Date: 13.DEC.2013 10:39:27

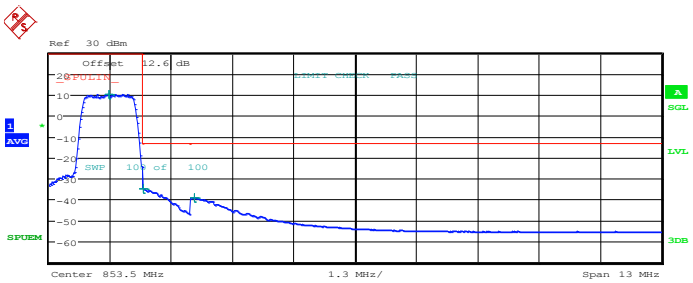
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
847.000 M	849.000 M	100.00 k	848.716000 M	19.83	-10.17
849.000 M	850.000 M	20.00 k	849.003000 M	-34.35	-21.35
850.000 M	860.000 M	100.00 k	850.000000 M	-48.87	-35.87

Date: 13.DEC.2013 10:49:02

Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

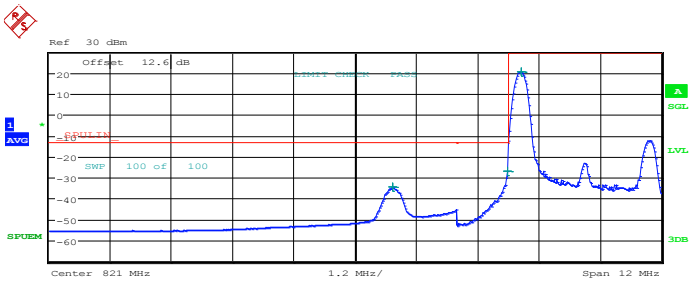


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
847.000 M	849.000 M	100.00 k	848.274000 M	10.06	-19.94
849.000 M	850.000 M	20.00 k	849.003000 M	-35.25	-22.25
850.000 M	860.000 M	100.00 k	850.080000 M	-39.20	-26.20

Date: 13.DEC.2013 10:47:29

Band :	LTE Band 5	Band Width :	3MHz / QPSK

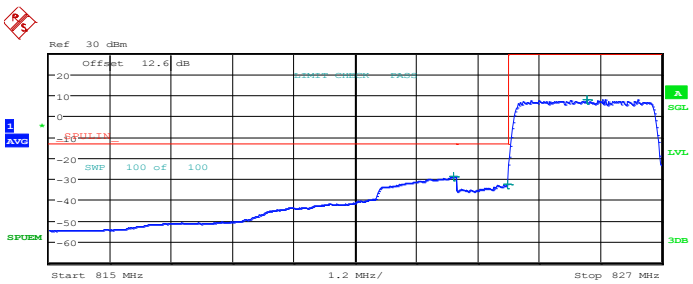
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	821.736000 M	-34.75	-21.75
823.000 M	824.000 M	30.00 k	823.984000 M	-27.06	-14.06
824.000 M	827.000 M	100.00 k	824.243000 M	20.24	-9.76

Date: 13.DEC.2013 12:49:48

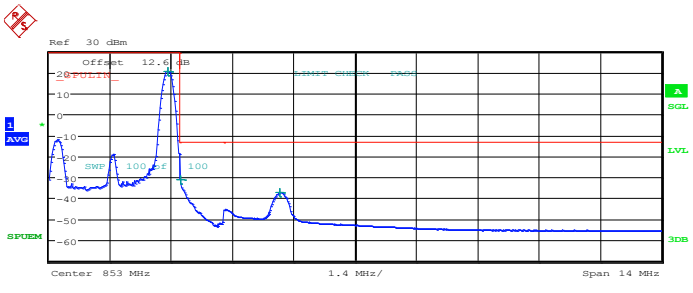
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	822.928000 M	-29.10	-16.10
823.000 M	824.000 M	30.00 k	823.973000 M	-32.80	-19.80
824.000 M	827.000 M	100.00 k	825.542000 M	7.86	-22.14

Date: 13.DEC.2013 13:11:04

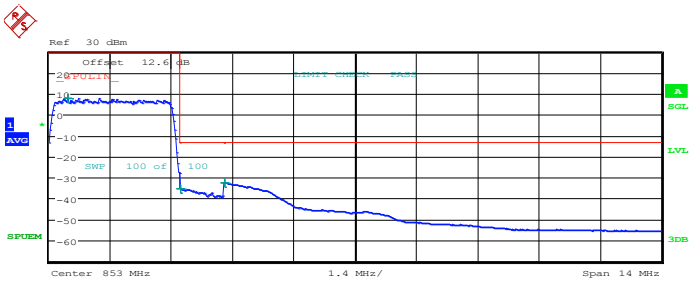
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
846.000 M	849.000 M	100.00 k	848.706000 M	20.60	-9.40
849.000 M	850.000 M	30.00 k	849.002000 M	-31.20	-18.20
850.000 M	860.000 M	100.00 k	851.280000 M	-37.32	-24.32

Date: 13.DEC.2013 12:59:02

Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

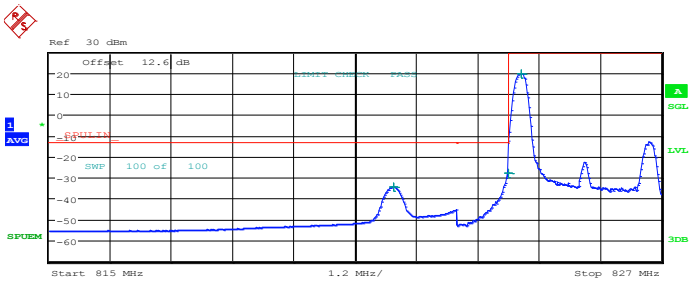


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
846.000 M	849.000 M	100.00 k	846.432000 M	7.76	-22.24
849.000 M	850.000 M	30.00 k	849.011000 M	-35.37	-22.37
850.000 M	860.000 M	100.00 k	850.010000 M	-32.63	-19.63

Date: 13.DEC.2013 13:05:06

Band :	LTE Band 5	Band Width :	3MHz / 16QAM

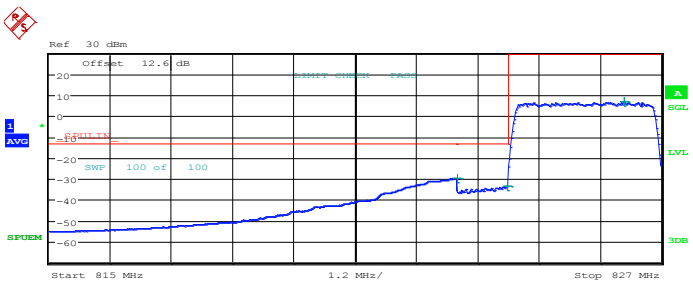
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	821.752000 M	-34.65	-21.65
823.000 M	824.000 M	30.00 k	823.999000 M	-27.77	-14.77
824.000 M	827.000 M	100.00 k	824.255000 M	19.52	-10.48

Date: 13.DEC.2013 13:09:20

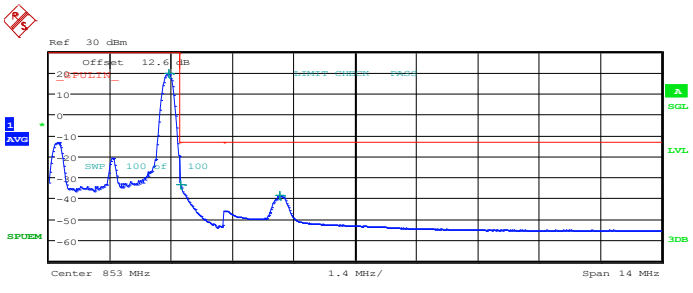
Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	822.992000 M	-29.69	-16.69
823.000 M	824.000 M	30.00 k	823.978000 M	-33.45	-20.45
824.000 M	827.000 M	100.00 k	826.271000 M	6.58	-23.42

Date: 13.DEC.2013 13:10:16

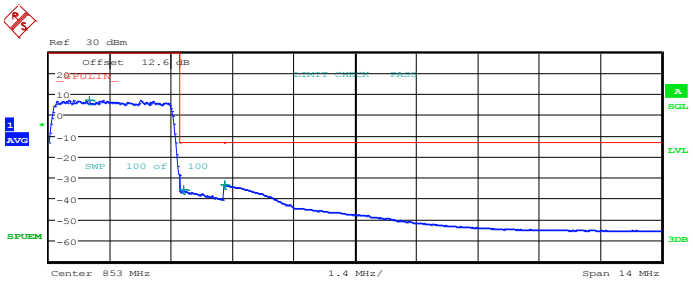
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
846.000 M	849.000 M	100.00 k	848.736000 M	19.56	-10.44
849.000 M	850.000 M	30.00 k	849.006000 M	-33.39	-20.39
850.000 M	860.000 M	100.00 k	851.270000 M	-38.84	-25.84

Date: 13.DEC.2013 13:04:03

Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

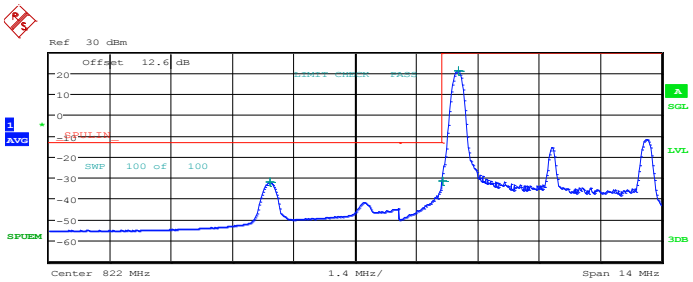


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
846.000 M	849.000 M	100.00 k	846.927000 M	6.89	-23.11
849.000 M	850.000 M	30.00 k	849.065000 M	-36.16	-23.16
850.000 M	860.000 M	100.00 k	850.020000 M	-33.76	-20.76

Date: 13.DEC.2013 13:05:56

Band :	LTE Band 5	Band Width :	5MHz / QPSK

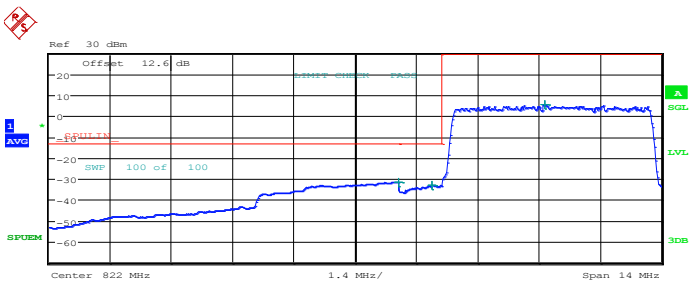
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	820.040000 M	-32.31	-19.31
823.000 M	824.000 M	50.00 k	823.998000 M	-31.87	-18.87
824.000 M	829.000 M	100.00 k	824.355000 M	20.89	-9.11

Date: 13.DEC.2013 13:14:06

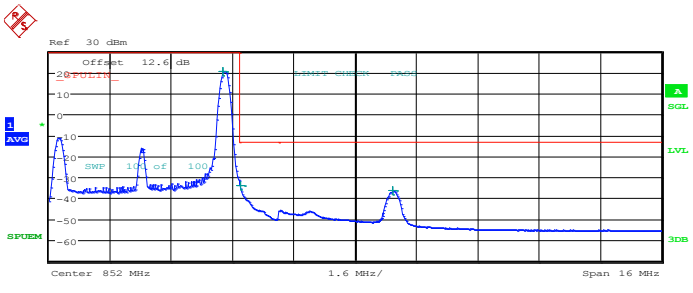
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	822.992000 M	-31.60	-18.60
823.000 M	824.000 M	50.00 k	823.744000 M	-32.96	-19.96
824.000 M	829.000 M	100.00 k	826.330000 M	5.38	-24.62

Date: 13.DEC.2013 13:18:53

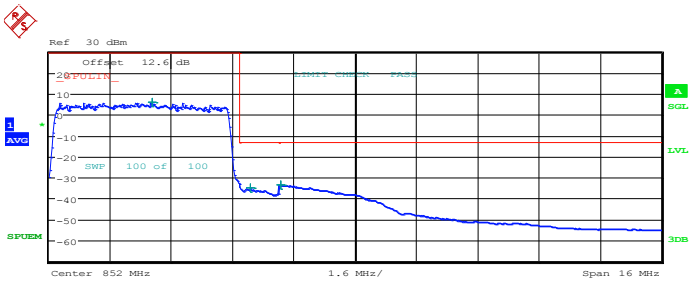
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
844.000 M	849.000 M	100.00 k	848.550000 M	20.23	-9.77
849.000 M	850.000 M	50.00 k	849.004000 M	-33.96	-20.96
850.000 M	860.000 M	100.00 k	852.980000 M	-36.63	-23.63

Date: 13.DEC.2013 13:26:18

Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

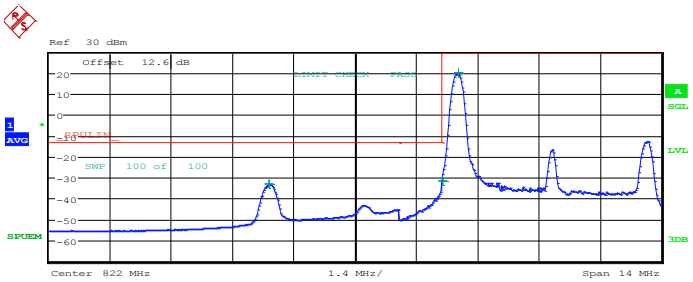


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
844.000 M	849.000 M	100.00 k	846.680000 M	5.87	-24.13
849.000 M	850.000 M	50.00 k	849.246000 M	-35.16	-22.16
850.000 M	860.000 M	100.00 k	850.050000 M	-33.64	-20.64

Date: 13.DEC.2013 13:28:44

Band :	LTE Band 5	Band Width :	5MHz / 16QAM

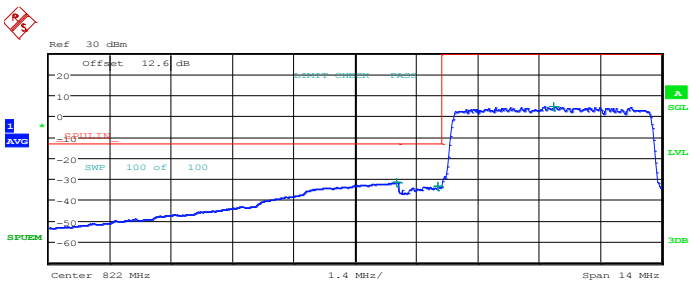
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	820.032000 M	-33.34	-20.34
823.000 M	824.000 M	50.00 k	823.998000 M	-31.96	-18.96
824.000 M	829.000 M	100.00 k	824.350000 M	19.81	-10.19

Date: 13.DEC.2013 13:14:45

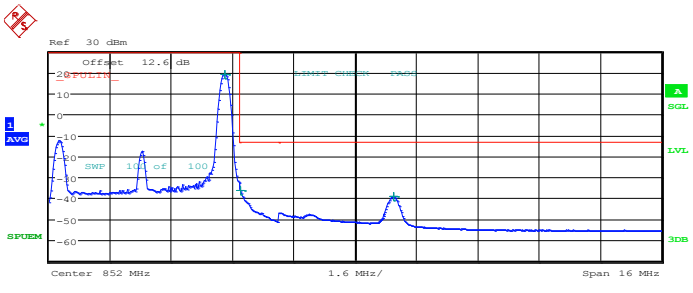
Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	822.944000 M	-31.88	-18.88
823.000 M	824.000 M	50.00 k	823.889000 M	-33.77	-20.77
824.000 M	829.000 M	100.00 k	826.540000 M	4.40	-25.60

Date: 13.DEC.2013 13:19:33

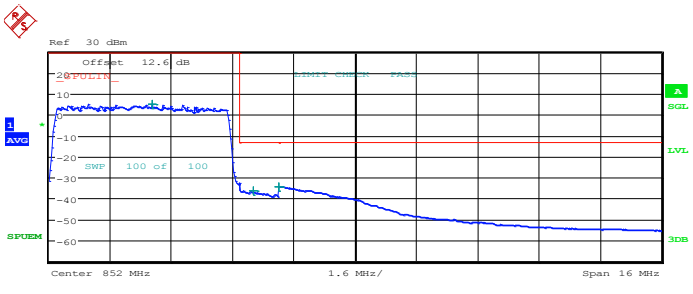
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
844.000 M	849.000 M	100.00 k	848.580000 M	19.10	-10.90
849.000 M	850.000 M	50.00 k	849.004000 M	-36.43	-23.43
850.000 M	860.000 M	100.00 k	852.990000 M	-39.42	-26.42

Date: 13.DEC.2013 13:27:02

Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

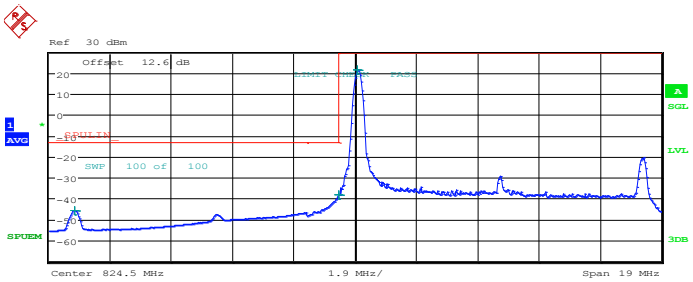


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
844.000 M	849.000 M	100.00 k	846.680000 M	4.93	-25.07
849.000 M	850.000 M	50.00 k	849.327000 M	-36.33	-23.33
850.000 M	860.000 M	100.00 k	850.000000 M	-34.44	-21.44

Date: 13.DEC.2013 13:31:54

Band :	LTE Band 5	Band Width :	10MHz / QPSK

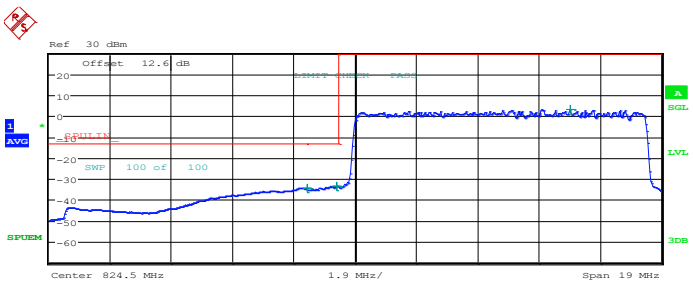
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	815.784000 M	-45.74	-32.74
823.000 M	824.000 M	100.00 k	823.995000 M	-38.36	-25.36
824.000 M	834.000 M	100.00 k	824.570000 M	21.21	-8.79

Date: 16.DEC.2013 09:29:07

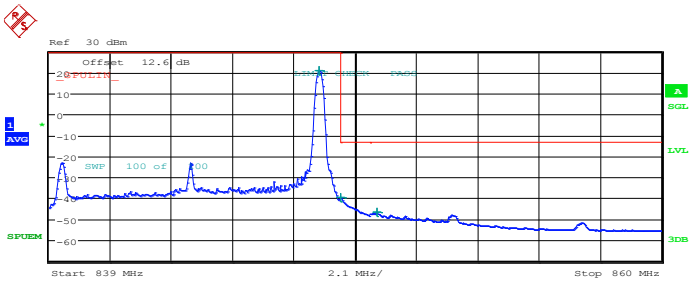
Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	823.000000 M	-34.60	-21.60
823.000 M	824.000 M	100.00 k	823.909000 M	-33.53	-20.53
824.000 M	834.000 M	100.00 k	831.160000 M	2.94	-27.06

Date: 16.DEC.2013 09:30:31

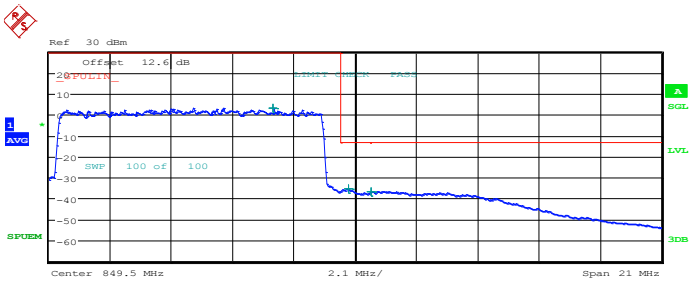
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
839.000 M	849.000 M	100.00 k	848.240000 M	20.81	-9.19
849.000 M	850.000 M	100.00 k	849.002000 M	-39.53	-26.53
850.000 M	860.000 M	100.00 k	850.230000 M	-46.87	-33.87

Date: 16.DEC.2013 09:47:52

Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

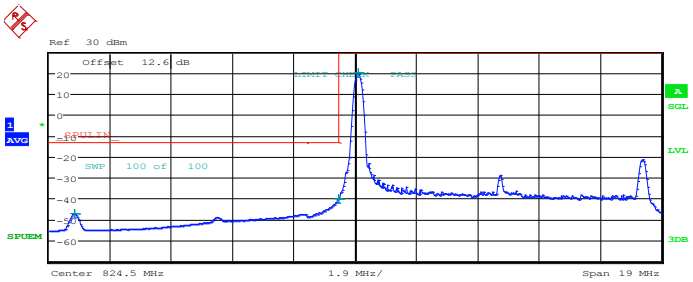


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
839.000 M	849.000 M	100.00 k	846.680000 M	3.17	-26.83
849.000 M	850.000 M	100.00 k	849.264000 M	-35.42	-22.42
850.000 M	860.000 M	100.00 k	850.040000 M	-36.77	-23.77

Date: 16.DEC.2013 09:43:41

Band :	LTE Band 5	Band Width :	10MHz / 16QAM

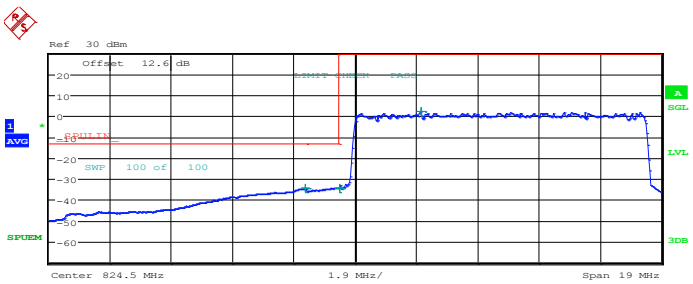
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	815.800000 M	-47.43	-34.43
823.000 M	824.000 M	100.00 k	823.992000 M	-40.05	-27.05
824.000 M	834.000 M	100.00 k	824.590000 M	19.83	-10.17

Date: 16.DEC.2013 09:29:48

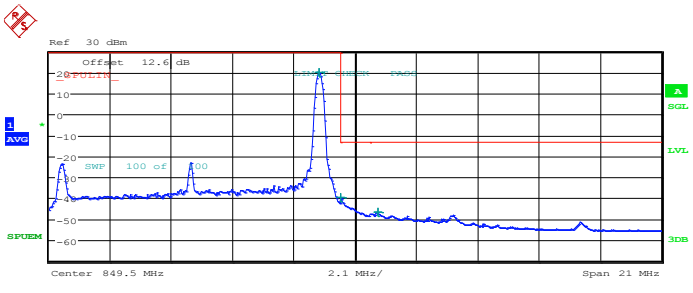
Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
815.000 M	823.000 M	100.00 k	822.952000 M	-34.68	-21.68
823.000 M	824.000 M	100.00 k	823.998000 M	-34.51	-21.51
824.000 M	834.000 M	100.00 k	826.540000 M	1.90	-28.10

Date: 16.DEC.2013 09:31:14

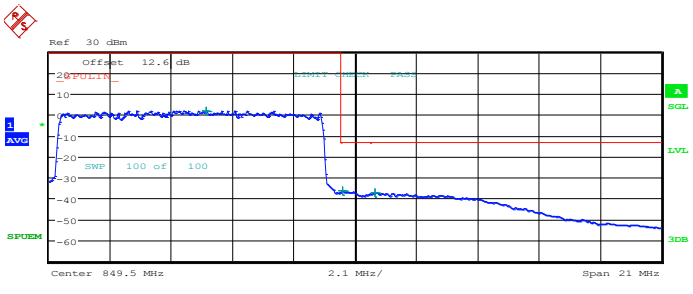
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
839.000 M	849.000 M	100.00 k	848.270000 M	19.97	-10.03
849.000 M	850.000 M	100.00 k	849.011000 M	-39.94	-26.94
850.000 M	860.000 M	100.00 k	850.280000 M	-46.60	-33.60

Date: 16.DEC.2013 09:42:45

Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0

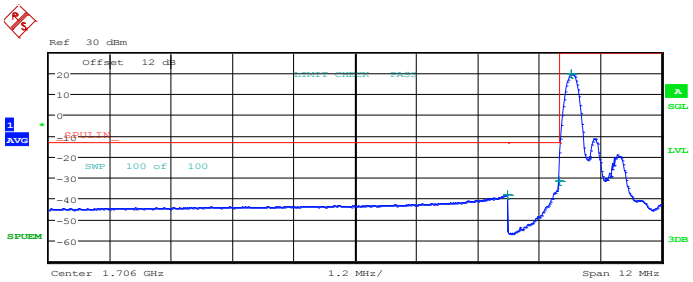


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
839.000 M	849.000 M	100.00 k	844.390000 M	1.79	-28.21
849.000 M	850.000 M	100.00 k	849.057000 M	-36.38	-23.38
850.000 M	860.000 M	100.00 k	850.180000 M	-37.27	-24.27

Date: 16.DEC.2013 09:44:26

Band :	LTE Band 4	Band Width :	1.4MHz / QPSK

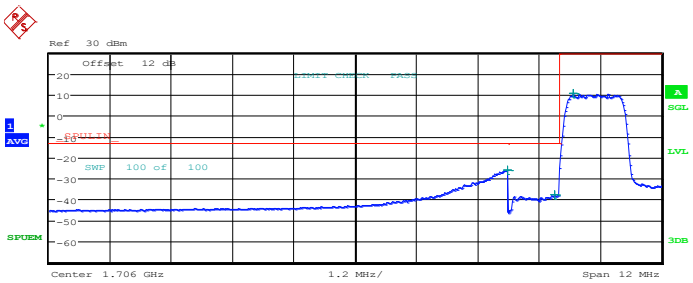
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708973 G	-38.26	-25.26
1.709 G	1.710 G	20.00 k	1.709994 G	-31.95	-18.95
1.710 G	1.712 G	100.00 k	1.710238 G	19.25	-10.75

Date: 11.DEC.2013 21:21:43

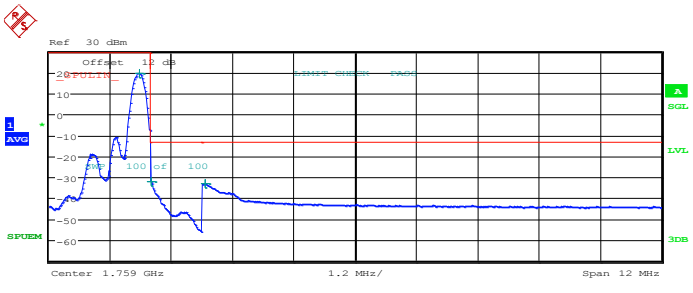
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708973 G	-26.18	-13.18
1.709 G	1.710 G	20.00 k	1.709909 G	-38.04	-25.04
1.710 G	1.712 G	100.00 k	1.710268 G	10.36	-19.64

Date: 11.DEC.2013 21:19:45

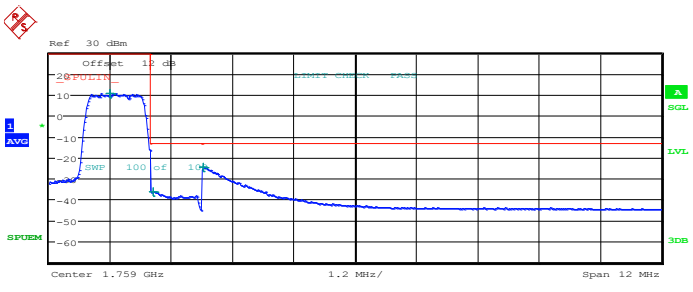
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.753 G	1.755 G	100.00 k	1.754776 G	19.49	-10.51
1.755 G	1.756 G	20.00 k	1.755004 G	-32.18	-19.18
1.756 G	1.765 G	1.00 M	1.756063 G	-33.23	-20.23

Date: 11.DEC.2013 21:32:44

Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

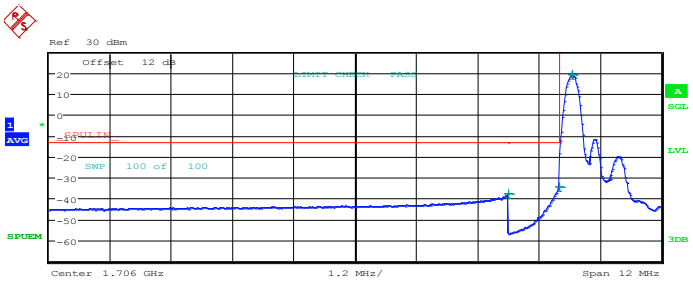


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.753 G	1.755 G	100.00 k	1.754184 G	10.58	-19.42
1.755 G	1.756 G	20.00 k	1.755048 G	-36.27	-23.27
1.756 G	1.765 G	1.00 M	1.756027 G	-24.82	-11.82

Date: 11.DEC.2013 21:30:43

Band :	LTE Band 4	Band Width :	1.4MHz / 16QAM

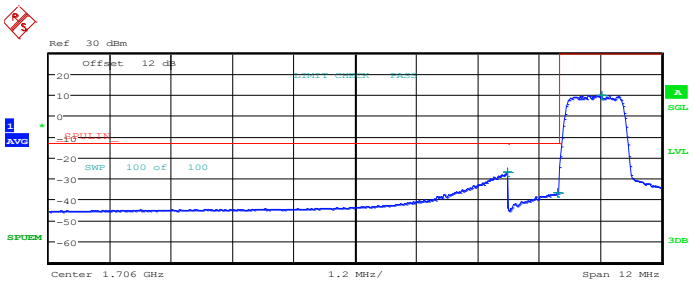
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.709000 G	-37.87	-24.87
1.709 G	1.710 G	20.00 k	1.709991 G	-34.57	-21.57
1.710 G	1.712 G	100.00 k	1.710242 G	18.76	-11.24

Date: 11.DEC.2013 21:21:14

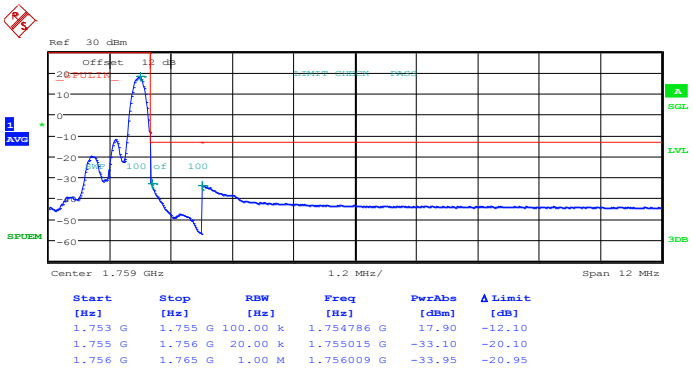
Lower Band Edge Plot for 16QAM-RB Size 6, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708973 G	-27.18	-14.18
1.709 G	1.710 G	20.00 k	1.709955 G	-37.13	-24.13
1.710 G	1.712 G	100.00 k	1.710826 G	9.80	-20.20

Date: 11.DEC.2013 21:20:13

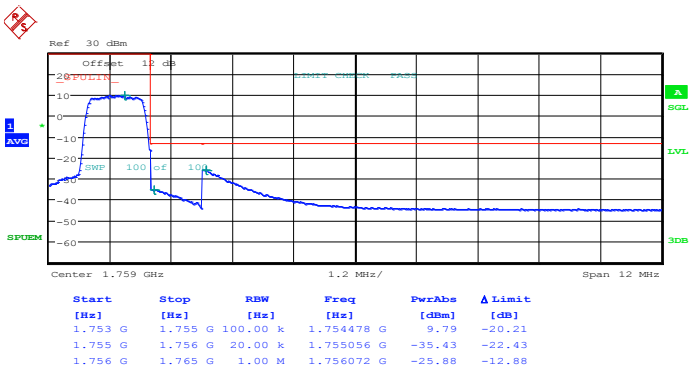
Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 5



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.753 G	1.755 G	100.00 k	1.754786 G	17.90	-12.10
1.755 G	1.756 G	20.00 k	1.755015 G	-33.10	-20.10
1.756 G	1.765 G	1.00 M	1.756009 G	-33.95	-20.95

Date: 11.DEC.2013 21:32:14

Higher Band Edge Plot for 16QAM-RB Size 6, RB Offset 0

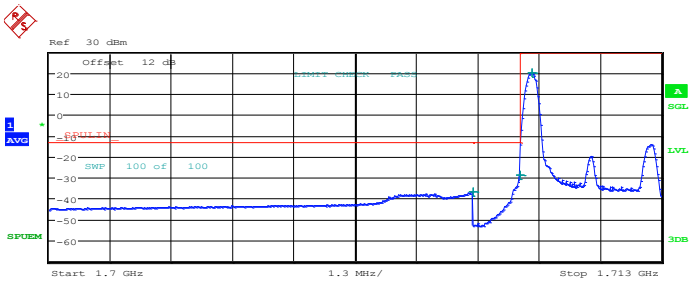


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.753 G	1.755 G	100.00 k	1.754478 G	9.79	-20.21
1.755 G	1.756 G	20.00 k	1.755056 G	-35.43	-22.43
1.756 G	1.765 G	1.00 M	1.756072 G	-25.88	-12.88

Date: 11.DEC.2013 21:31:09

Band :	LTE Band 4	Band Width :	3MHz / QPSK

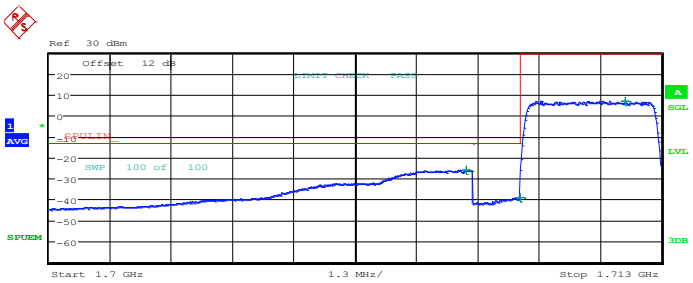
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.709000 G	-36.86	-23.86
1.709 G	1.710 G	30.00 k	1.709999 G	-29.07	-16.07
1.710 G	1.713 G	100.00 k	1.710252 G	19.86	-10.14

Date: 11.DEC.2013 21:39:12

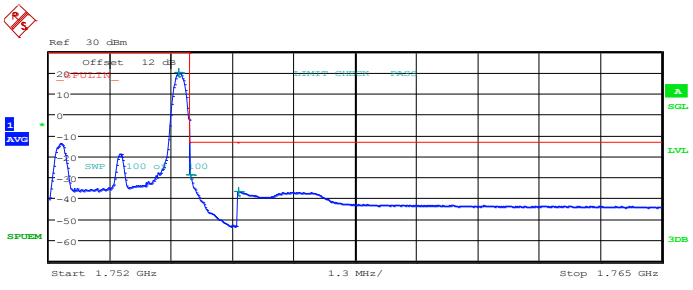
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708847 G	-26.14	-13.14
1.709 G	1.710 G	30.00 k	1.709990 G	-39.15	-26.15
1.710 G	1.713 G	100.00 k	1.712223 G	6.98	-23.02

Date: 11.DEC.2013 21:39:42

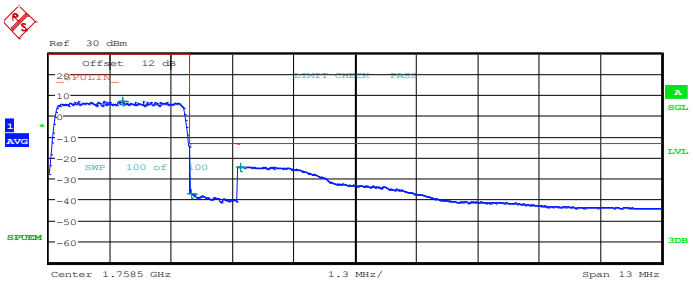
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.752 G	1.755 G	100.00 k	1.754754 G	19.87	-10.13
1.755 G	1.756 G	30.00 k	1.755004 G	-28.79	-15.79
1.756 G	1.765 G	1.00 M	1.756027 G	-36.71	-23.71

Date: 11.DEC.2013 21:45:52

Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

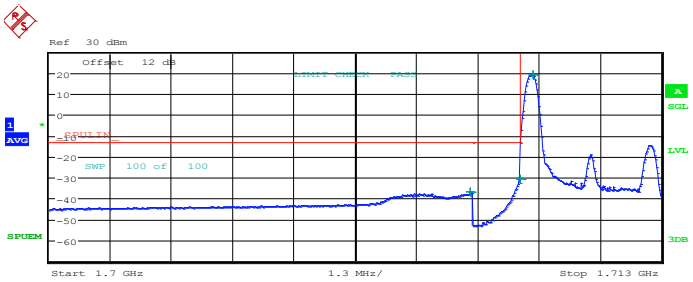


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.752 G	1.755 G	100.00 k	1.753572 G	6.76	-23.24
1.755 G	1.756 G	30.00 k	1.755012 G	-37.51	-24.51
1.756 G	1.765 G	1.00 M	1.756063 G	-24.48	-11.48

Date: 11.DEC.2013 21:42:14

Band :	LTE Band 4	Band Width :	3MHz / 16QAM

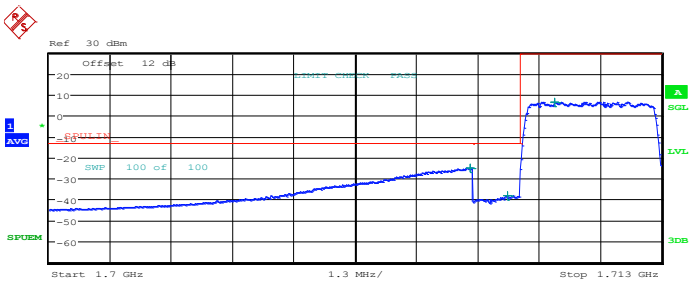
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708937 G	-37.04	-24.04
1.709 G	1.710 G	30.00 k	1.709992 G	-30.59	-17.59
1.710 G	1.713 G	100.00 k	1.710261 G	19.15	-10.85

Date: 11.DEC.2013 21:38:44

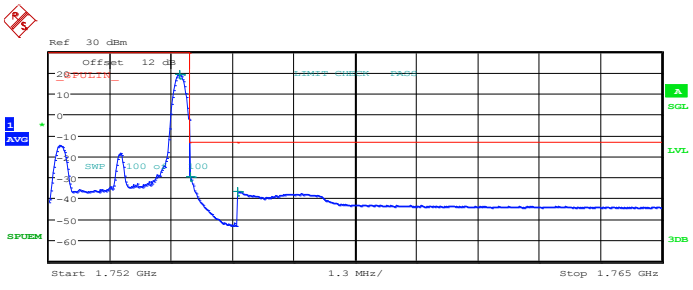
Lower Band Edge Plot for 16QAM-RB Size 15, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708946 G	-25.07	-12.07
1.709 G	1.710 G	30.00 k	1.709719 G	-38.42	-25.42
1.710 G	1.713 G	100.00 k	1.710735 G	6.43	-23.57

Date: 11.DEC.2013 21:40:09

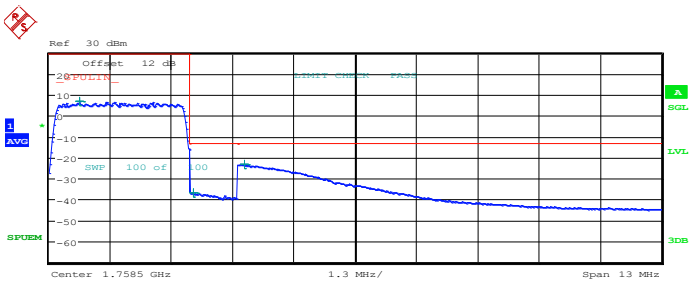
Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 14



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.752 G	1.755 G	100.00 k	1.754766 G	18.87	-11.13
1.755 G	1.756 G	30.00 k	1.755003 G	-29.69	-16.69
1.756 G	1.765 G	1.00 M	1.756009 G	-36.98	-23.98

Date: 11.DEC.2013 21:46:22

Higher Band Edge Plot for 16QAM-RB Size 15, RB Offset 0

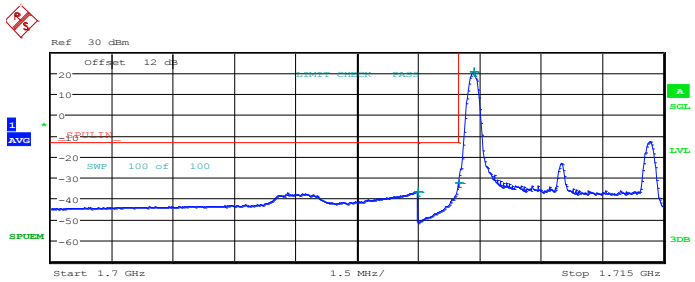


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.752 G	1.755 G	100.00 k	1.752636 G	6.74	-23.26
1.755 G	1.756 G	30.00 k	1.755053 G	-36.77	-23.77
1.756 G	1.765 G	1.00 M	1.756144 G	-23.37	-10.37

Date: 11.DEC.2013 21:42:39

Band :	LTE Band 4	Band Width :	5MHz / QPSK

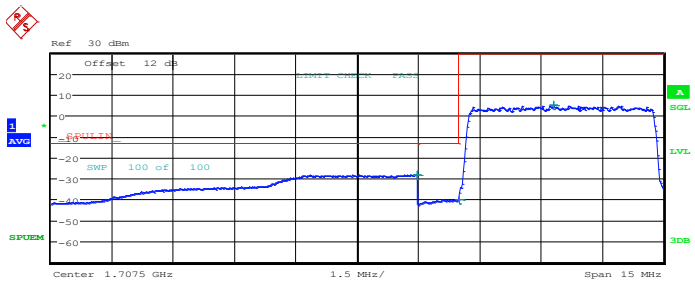
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708982 G	-36.71	-23.71
1.709 G	1.710 G	50.00 k	1.709998 G	-32.83	-19.83
1.710 G	1.715 G	100.00 k	1.710350 G	20.30	-9.70

Date: 11.DEC.2013 21:52:13

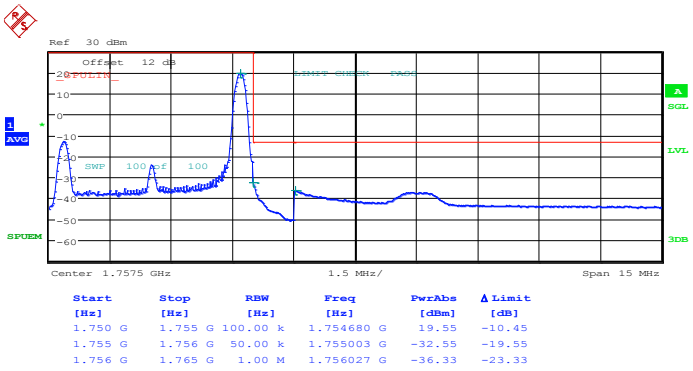
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708955 G	-28.28	-15.28
1.709 G	1.710 G	50.00 k	1.709991 G	-40.17	-27.17
1.710 G	1.715 G	100.00 k	1.712300 G	4.68	-25.32

Date: 11.DEC.2013 21:55:23

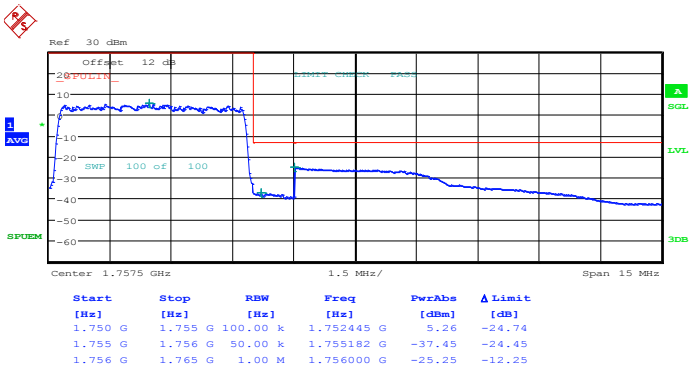
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.750 G	1.755 G	100.00 k	1.754680 G	19.55	-10.45
1.755 G	1.756 G	50.00 k	1.755003 G	-32.55	-19.55
1.756 G	1.765 G	1.00 M	1.756027 G	-36.33	-23.33

Date: 11.DEC.2013 21:58:17

Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

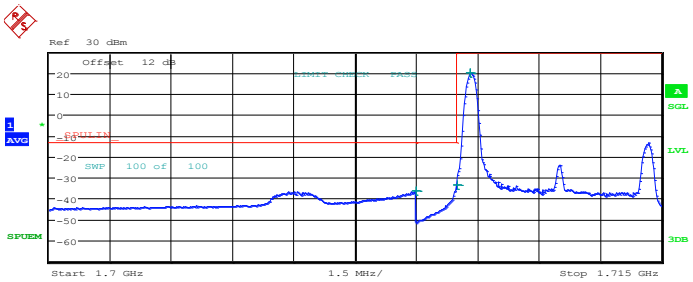


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.750 G	1.755 G	100.00 k	1.752445 G	5.26	-24.74
1.755 G	1.756 G	50.00 k	1.755182 G	-37.45	-24.45
1.756 G	1.765 G	1.00 M	1.756000 G	-25.25	-12.25

Date: 11.DEC.2013 21:56:23

Band :	LTE Band 4	Band Width :	5MHz / 16QAM

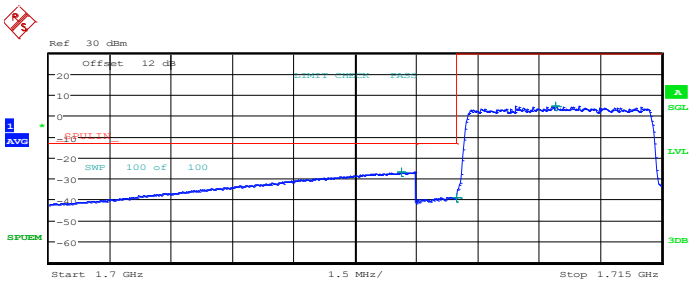
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.709000 G	-36.66	-23.66
1.709 G	1.710 G	50.00 k	1.709996 G	-33.39	-20.39
1.710 G	1.715 G	100.00 k	1.710310 G	20.07	-9.93

Date: 11.DEC.2013 21:52:42

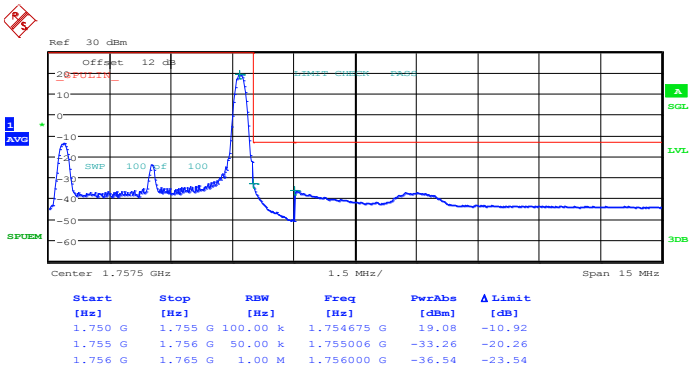
Lower Band Edge Plot for 16QAM-RB Size 25, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708622 G	-26.93	-13.93
1.709 G	1.710 G	50.00 k	1.709985 G	-39.02	-26.02
1.710 G	1.715 G	100.00 k	1.712415 G	4.44	-25.56

Date: 11.DEC.2013 21:54:10

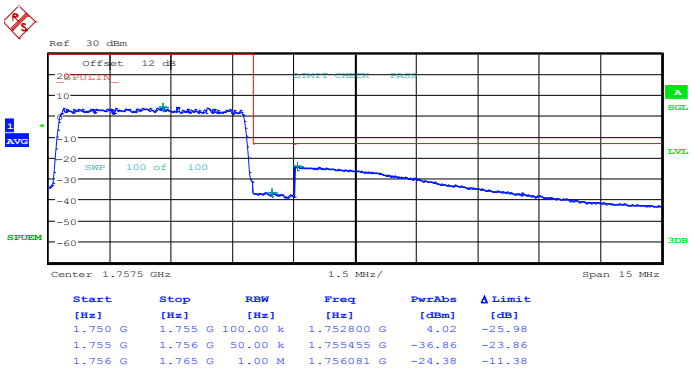
Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 24



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.750 G	1.755 G	100.00 k	1.754675 G	19.08	-10.92
1.755 G	1.756 G	50.00 k	1.755006 G	-33.26	-20.26
1.756 G	1.765 G	1.00 M	1.756000 G	-36.54	-23.54

Date: 11.DEC.2013 21:57:49

Higher Band Edge Plot for 16QAM-RB Size 25, RB Offset 0

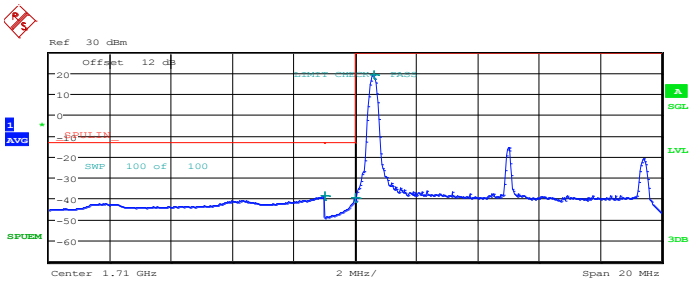


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.750 G	1.755 G	100.00 k	1.752800 G	4.02	-25.98
1.755 G	1.756 G	50.00 k	1.755455 G	-36.86	-23.86
1.756 G	1.765 G	1.00 M	1.756081 G	-24.38	-11.38

Date: 11.DEC.2013 21:57:15

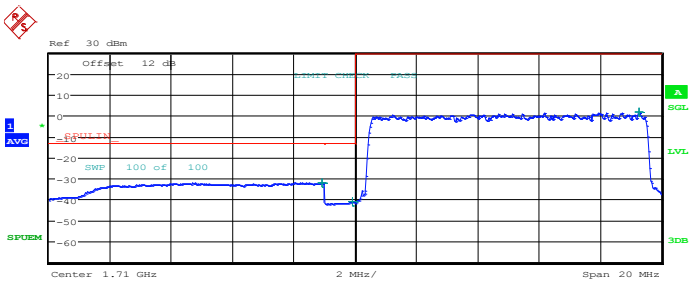
Band :	LTE Band 4	Band Width :	10MHz / QPSK

Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



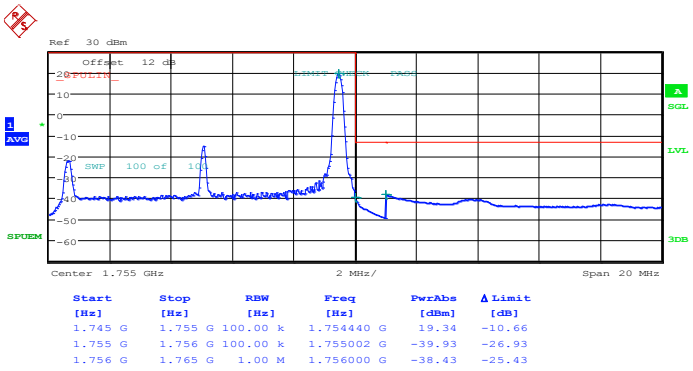
Date: 11.DEC.2013 21:04:20

Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



Date: 11.DEC.2013 21:04:53

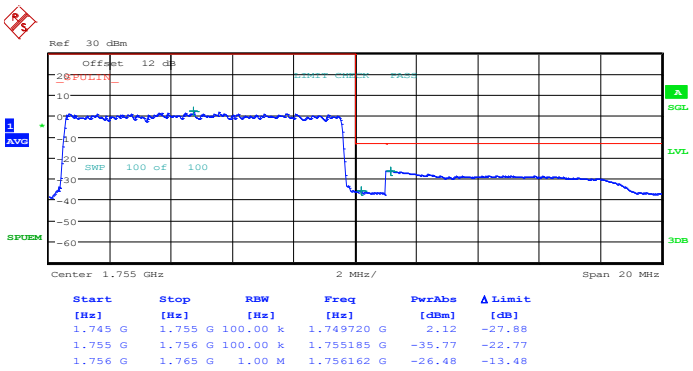
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.745 G	1.755 G	100.00 k	1.754440 G	19.34	-10.66
1.755 G	1.756 G	100.00 k	1.755002 G	-39.93	-26.93
1.756 G	1.765 G	1.00 M	1.756000 G	-38.43	-25.43

Date: 11.DEC.2013 21:02:34

Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

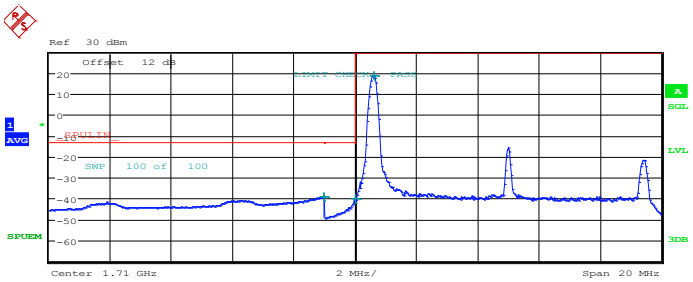


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.745 G	1.755 G	100.00 k	1.749720 G	2.12	-27.88
1.755 G	1.756 G	100.00 k	1.755185 G	-35.77	-22.77
1.756 G	1.765 G	1.00 M	1.756162 G	-26.48	-13.48

Date: 11.DEC.2013 21:01:51

Band :	LTE Band 4	Band Width :	10MHz / 16QAM

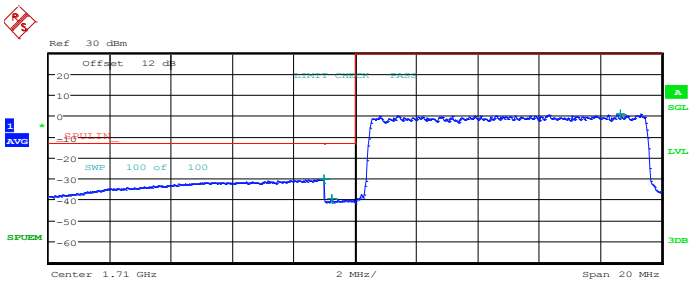
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708982 G	-39.18	-26.18
1.709 G	1.710 G	100.00 k	1.709994 G	-40.42	-27.42
1.710 G	1.720 G	100.00 k	1.710610 G	18.62	-11.38

Date: 11.DEC.2013 21:03:49

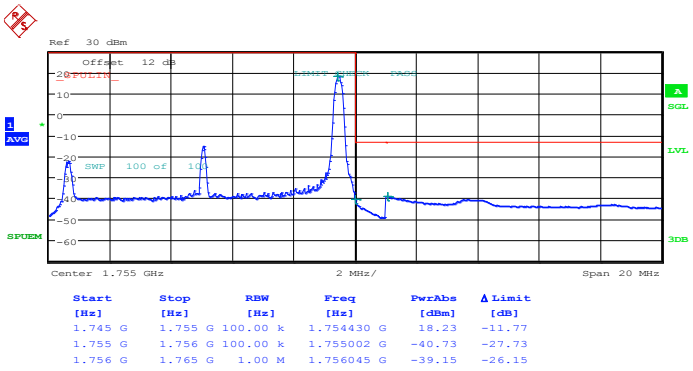
Lower Band Edge Plot for 16QAM-RB Size 50, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708982 G	-30.48	-17.48
1.709 G	1.710 G	100.00 k	1.709221 G	-39.89	-26.89
1.710 G	1.720 G	100.00 k	1.718640 G	0.48	-29.52

Date: 11.DEC.2013 21:05:26

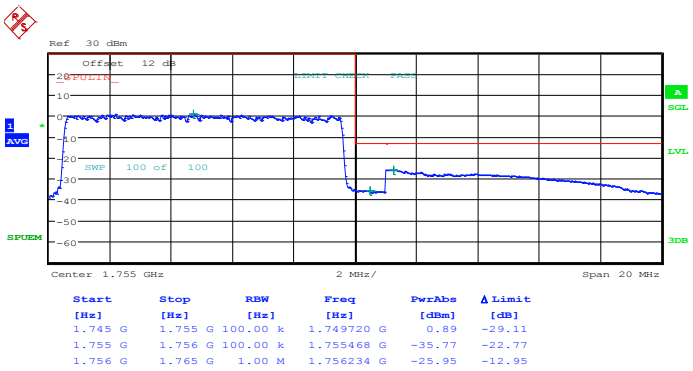
Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 49



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.745 G	1.755 G	100.00 k	1.754430 G	18.23	-11.77
1.755 G	1.756 G	100.00 k	1.755002 G	-40.73	-27.73
1.756 G	1.765 G	1.00 M	1.756045 G	-39.15	-26.15

Date: 11.DEC.2013 21:03:03

Higher Band Edge Plot for 16QAM-RB Size 50, RB Offset 0

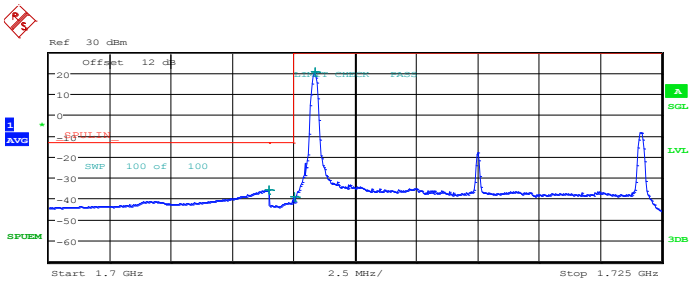


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.745 G	1.755 G	100.00 k	1.749720 G	0.89	-29.11
1.755 G	1.756 G	100.00 k	1.755468 G	-35.77	-22.77
1.756 G	1.765 G	1.00 M	1.756234 G	-25.95	-12.95

Date: 11.DEC.2013 21:01:04

Band :	LTE Band 4	Band Width :	15MHz / QPSK

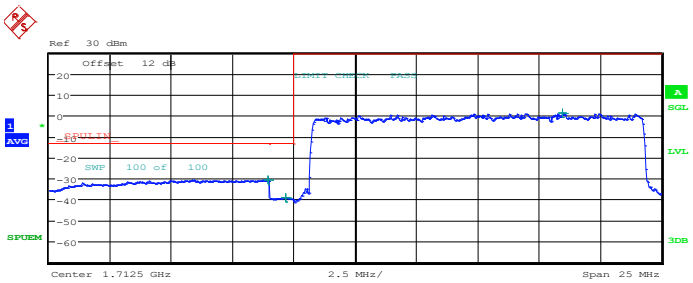
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708982 G	-36.03	-23.03
1.709 G	1.710 G	150.00 k	1.709997 G	-39.22	-26.22
1.710 G	1.725 G	100.00 k	1.710855 G	20.20	-9.80

Date: 11.DEC.2013 22:11:18

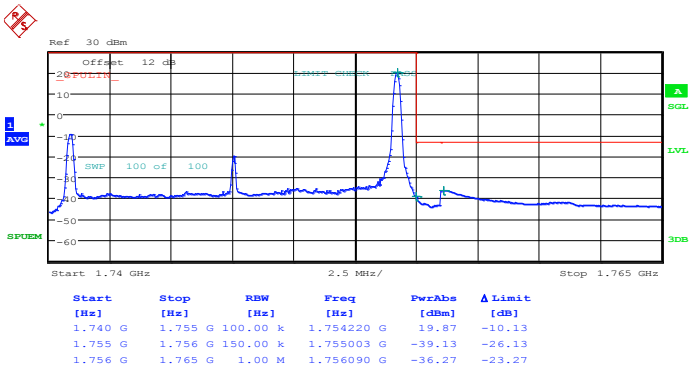
Lower Band Edge Plot for QPSK-RB Size 75, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708928 G	-30.86	-17.86
1.709 G	1.710 G	150.00 k	1.709659 G	-39.21	-26.21
1.710 G	1.725 G	100.00 k	1.720935 G	1.00	-29.00

Date: 11.DEC.2013 22:15:07

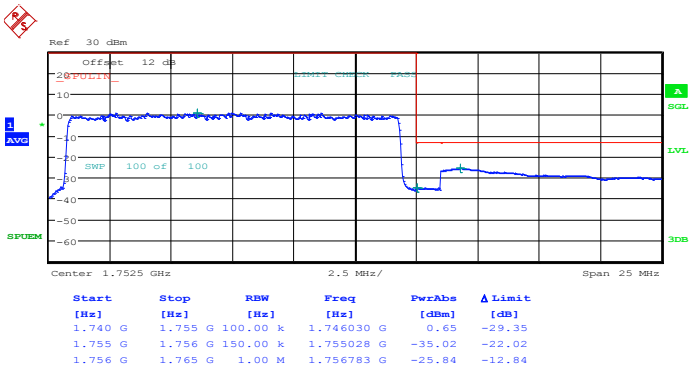
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 74



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.740 G	1.755 G	100.00 k	1.754220 G	19.87	-10.13
1.755 G	1.756 G	150.00 k	1.755003 G	-39.13	-26.13
1.756 G	1.765 G	1.00 M	1.756090 G	-36.27	-23.27

Date: 11.DEC.2013 22:19:59

Higher Band Edge Plot for QPSK-RB Size 75, RB Offset 0

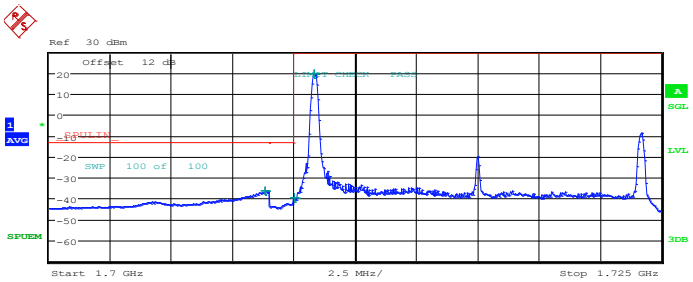


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.740 G	1.755 G	100.00 k	1.746030 G	0.65	-29.35
1.755 G	1.756 G	150.00 k	1.755028 G	-35.02	-22.02
1.756 G	1.765 G	1.00 M	1.756783 G	-25.84	-12.84

Date: 11.DEC.2013 22:16:33

Band :	LTE Band 4	Band Width :	15MHz / 16QAM

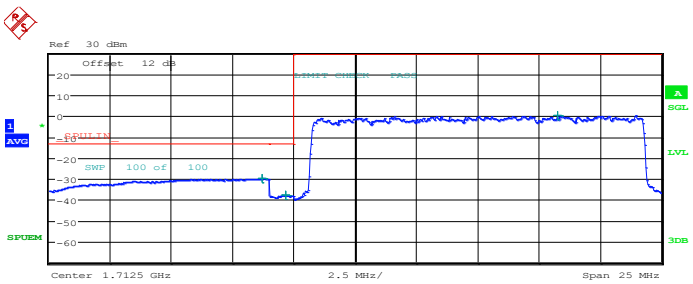
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708829 G	-36.33	-23.33
1.709 G	1.710 G	150.00 k	1.709999 G	-39.95	-26.95
1.710 G	1.725 G	100.00 k	1.710810 G	19.25	-10.75

Date: 11.DEC.2013 22:13:38

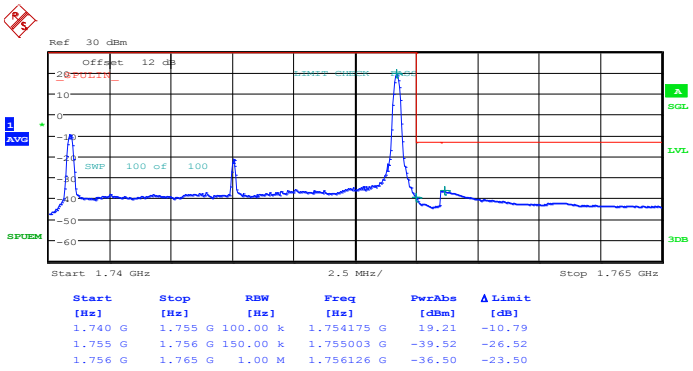
Lower Band Edge Plot for 16QAM-RB Size 75, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708712 G	-29.99	-16.99
1.709 G	1.710 G	150.00 k	1.709637 G	-38.02	-25.02
1.710 G	1.725 G	100.00 k	1.720740 G	0.28	-29.72

Date: 11.DEC.2013 22:14:38

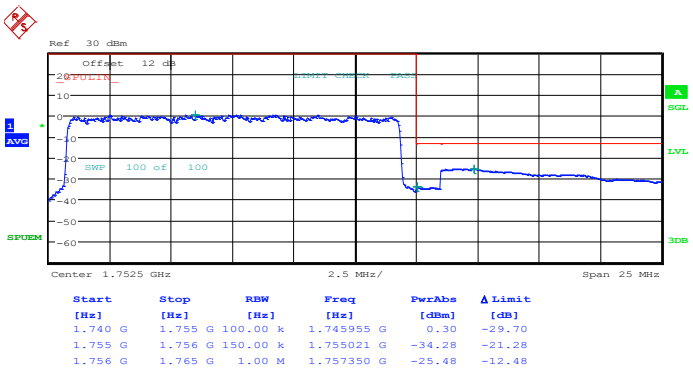
Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 74



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.740 G	1.755 G	100.00 k	1.754175 G	19.21	-10.79
1.755 G	1.756 G	150.00 k	1.755003 G	-39.52	-26.52
1.756 G	1.765 G	1.00 M	1.756126 G	-36.50	-23.50

Date: 11.DEC.2013 22:20:27

Higher Band Edge Plot for 16QAM-RB Size 75, RB Offset 0

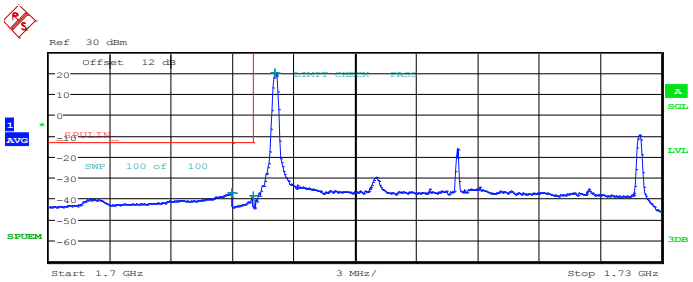


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.740 G	1.755 G	100.00 k	1.745955 G	0.30	-29.70
1.755 G	1.756 G	150.00 k	1.755021 G	-34.28	-21.28
1.756 G	1.765 G	1.00 M	1.757350 G	-25.48	-12.48

Date: 11.DEC.2013 22:17:01

Band :	LTE Band 4	Band Width :	20MHz / QPSK

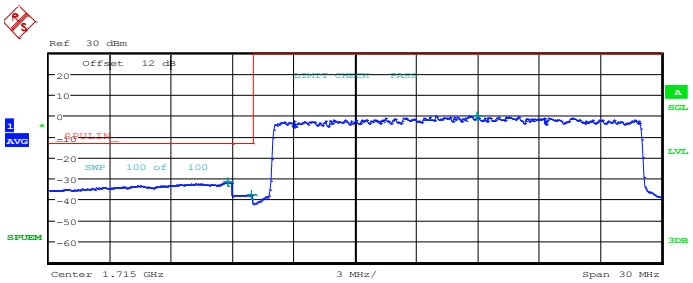
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708955 G	-37.46	-24.46
1.709 G	1.710 G	200.00 k	1.709997 G	-38.92	-25.92
1.710 G	1.730 G	100.00 k	1.711080 G	20.13	-9.87

Date: 11.DEC.2013 22:24:50

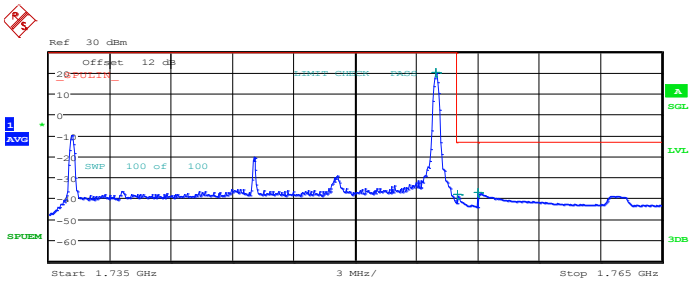
Lower Band Edge Plot for QPSK-RB Size 100, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708757 G	-31.92	-18.92
1.709 G	1.710 G	200.00 k	1.709884 G	-37.86	-24.86
1.710 G	1.730 G	100.00 k	1.720980 G	-0.17	-30.17

Date: 11.DEC.2013 22:29:11

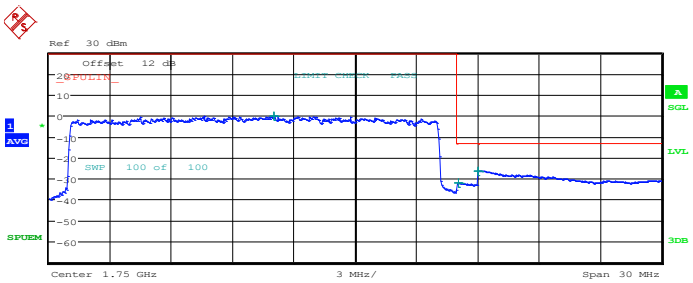
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 99



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.735 G	1.755 G	100.00 k	1.753960 G	19.87	-10.13
1.755 G	1.756 G	200.00 k	1.755009 G	-38.52	-25.52
1.756 G	1.765 G	1.00 M	1.756000 G	-37.55	-24.55

Date: 11.DEC.2013 22:34:12

Higher Band Edge Plot for QPSK-RB Size 100, RB Offset 0

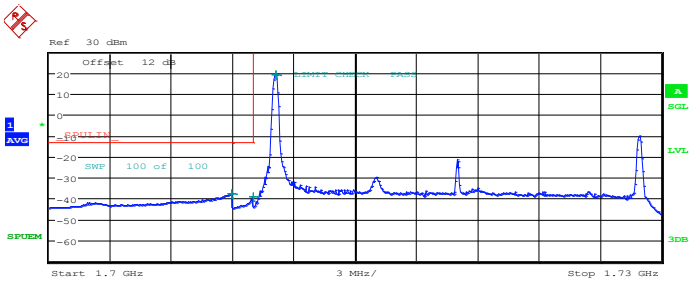


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.735 G	1.755 G	100.00 k	1.746020 G	-0.43	-30.43
1.755 G	1.756 G	200.00 k	1.755052 G	-32.24	-19.24
1.756 G	1.765 G	1.00 M	1.756009 G	-26.39	-13.39

Date: 11.DEC.2013 22:30:18

Band :	LTE Band 4	Band Width :	20MHz / 16QAM

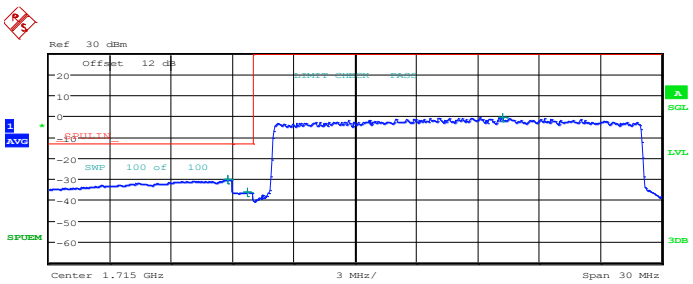
Lower Band Edge Plot for 16QAM-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708955 G	-37.85	-24.85
1.709 G	1.710 G	200.00 k	1.709993 G	-39.18	-26.18
1.710 G	1.730 G	100.00 k	1.711120 G	19.04	-10.96

Date: 11.DEC.2013 22:26:15

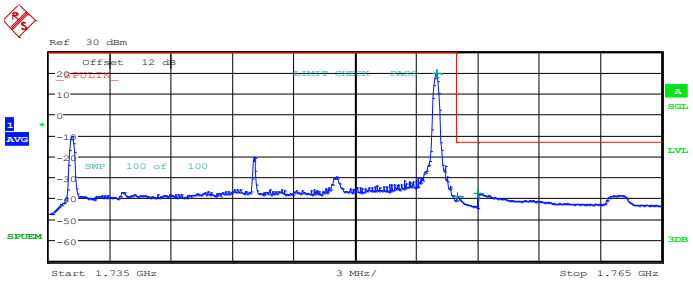
Lower Band Edge Plot for 16QAM-RB Size 100, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.700 G	1.709 G	1.00 M	1.708766 G	-30.49	-17.49
1.709 G	1.710 G	200.00 k	1.709724 G	-36.49	-23.49
1.710 G	1.730 G	100.00 k	1.722200 G	-0.70	-30.70

Date: 11.DEC.2013 22:28:16

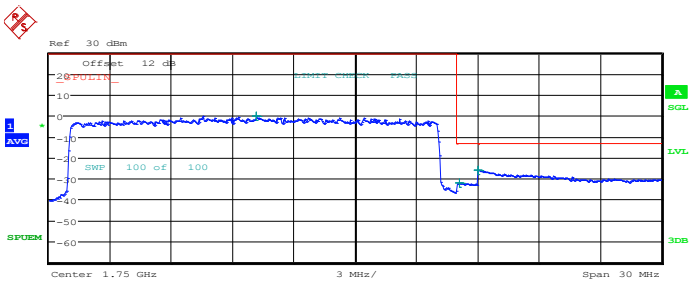
Higher Band Edge Plot for 16QAM-RB Size 1, RB Offset 99



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.735 G	1.755 G	100.00 k	1.753980 G	19.44	-10.56
1.755 G	1.756 G	200.00 k	1.755002 G	-39.06	-26.06
1.756 G	1.765 G	1.00 M	1.756009 G	-37.80	-24.80

Date: 11.DEC.2013 22:34:45

Higher Band Edge Plot for 16QAM-RB Size 100, RB Offset 0

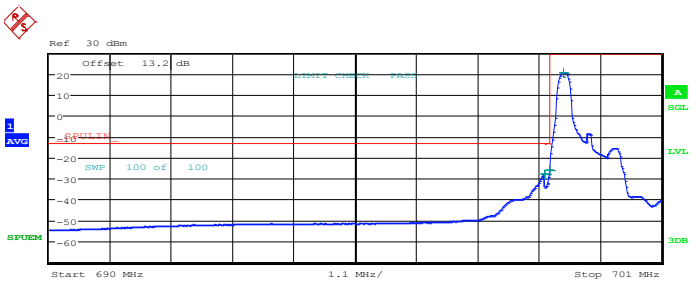


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.735 G	1.755 G	100.00 k	1.745160 G	-0.31	-30.31
1.755 G	1.756 G	200.00 k	1.755091 G	-32.35	-19.35
1.756 G	1.765 G	1.00 M	1.756000 G	-26.12	-13.12

Date: 11.DEC.2013 22:31:16

Band :	LTE Band 12	Band Width :	1.4MHz / QPSK

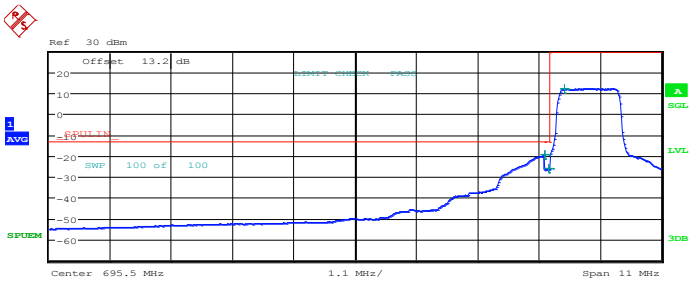
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-27.76	-14.76
698.900 M	699.000 M	20.00 k	698.997600 M	-26.22	-13.22
699.000 M	701.000 M	100.00 k	699.238000 M	20.52	-9.48

Date: 16.DEC.2013 10:32:13

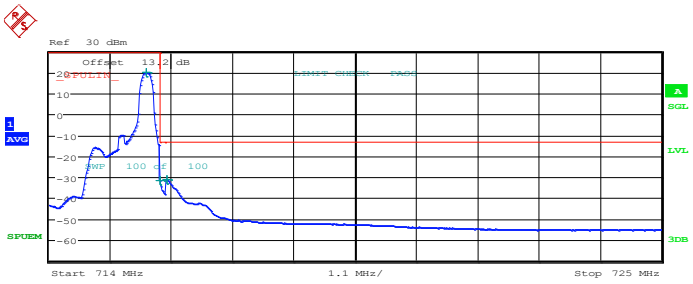
Lower Band Edge Plot for QPSK-RB Size 6, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-19.74	-6.74
698.900 M	699.000 M	20.00 k	698.976102 M	-26.17	-13.17
699.000 M	701.000 M	100.00 k	699.246000 M	12.15	-17.85

Date: 16.DEC.2013 10:22:56

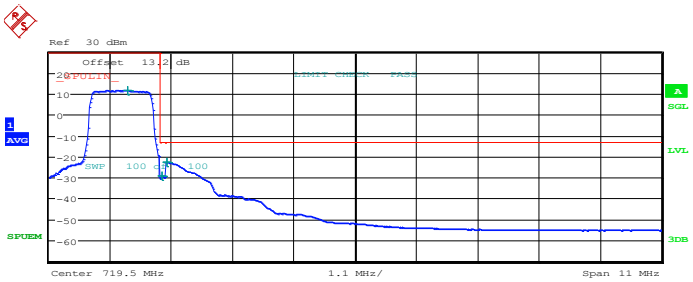
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 5



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
714.000 M	716.000 M	100.00 k	715.742000 M	19.71	-10.29
716.000 M	716.100 M	20.00 k	716.000300 M	-31.90	-18.90
716.100 M	725.000 M	100.00 k	716.108900 M	-31.36	-18.36

Date: 16.DEC.2013 10:46:37

Higher Band Edge Plot for QPSK-RB Size 6, RB Offset 0

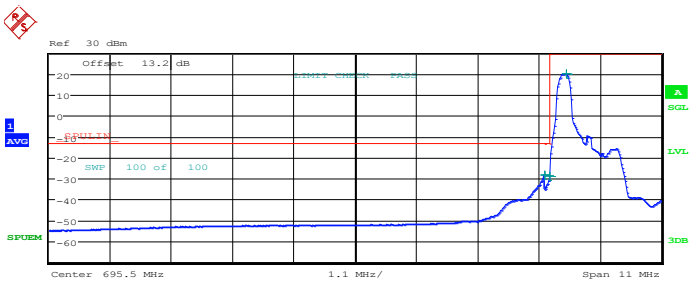


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
714.000 M	716.000 M	100.00 k	715.408000 M	11.68	-18.32
716.000 M	716.100 M	20.00 k	716.024100 M	-29.58	-16.58
716.100 M	725.000 M	100.00 k	716.108900 M	-23.01	-10.01

Date: 16.DEC.2013 10:40:35

Band :	LTE Band 12	Band Width :	1.4MHz / 16QAM

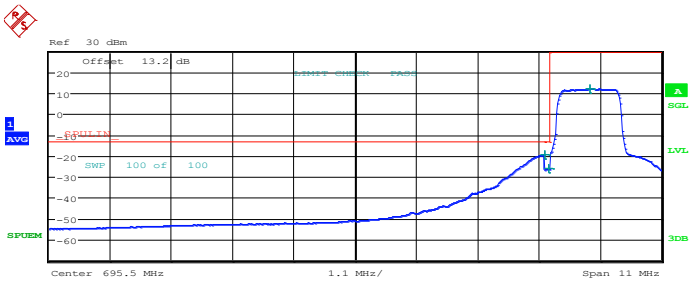
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-28.35	-15.35
698.900 M	699.000 M	20.00 k	698.996100 M	-28.75	-15.75
699.000 M	701.000 M	100.00 k	699.288000 M	19.94	-10.06

Date: 16.DEC.2013 10:26:27

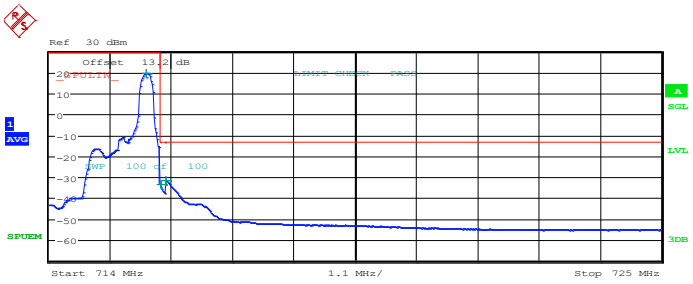
Lower Band Edge Plot for 16QAM -RB Size 6, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-19.60	-6.60
698.900 M	699.000 M	20.00 k	698.968503 M	-26.20	-13.20
699.000 M	701.000 M	100.00 k	699.716000 M	12.01	-17.99

Date: 16.DEC.2013 10:24:54

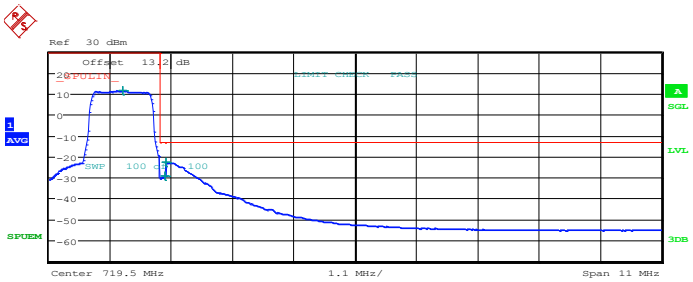
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 5



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
714.000 M	716.000 M	100.00 k	715.740000 M	19.33	-10.67
716.000 M	716.100 M	20.00 k	716.001300 M	-33.55	-20.55
716.100 M	725.000 M	100.00 k	716.100000 M	-31.89	-18.89

Date: 16.DEC.2013 10:47:26

Higher Band Edge Plot for 16QAM -RB Size 6, RB Offset 0

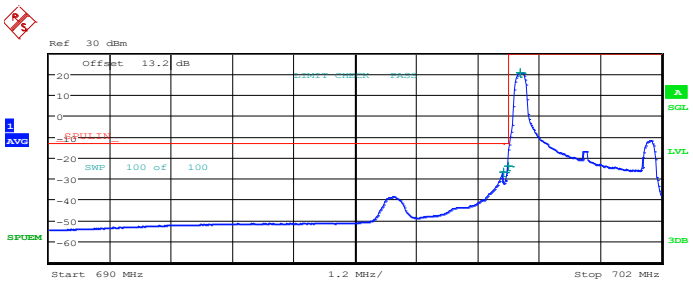


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
714.000 M	716.000 M	100.00 k	715.314000 M	11.42	-18.58
716.000 M	716.100 M	20.00 k	716.076800 M	-29.61	-16.61
716.100 M	725.000 M	100.00 k	716.100000 M	-22.78	-9.78

Date: 16.DEC.2013 10:43:12

Band :	LTE Band 12	Band Width :	3MHz / QPSK

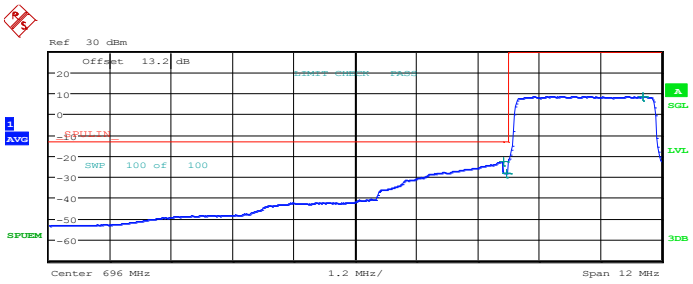
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-26.96	-13.96
698.900 M	699.000 M	30.00 k	698.999600 M	-24.03	-11.03
699.000 M	702.000 M	100.00 k	699.228000 M	20.59	-9.41

Date: 16.DEC.2013 10:54:37

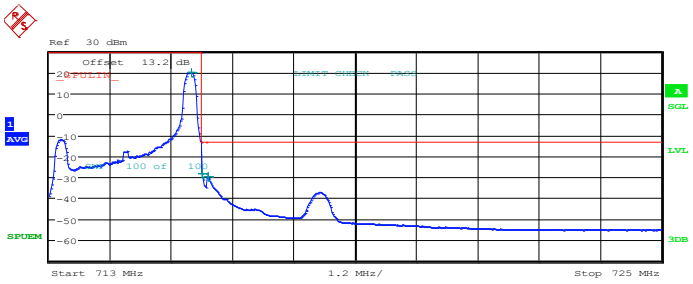
Lower Band Edge Plot for QPSK-RB Size 15, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-22.65	-9.65
698.900 M	699.000 M	30.00 k	698.968403 M	-28.23	-15.23
699.000 M	702.000 M	100.00 k	701.643000 M	8.33	-21.67

Date: 16.DEC.2013 10:49:24

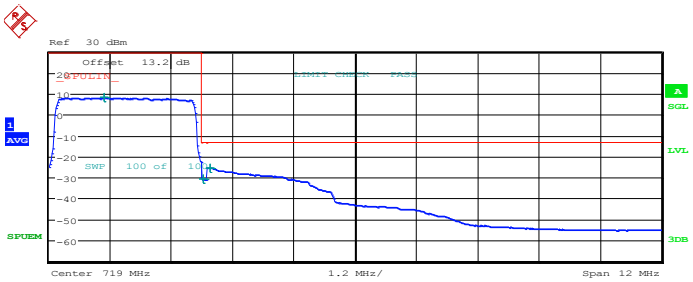
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 14



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
713.000 M	716.000 M	100.00 k	715.796000 M	19.87	-10.13
716.000 M	716.100 M	30.00 k	716.002200 M	-28.64	-15.64
716.100 M	725.000 M	100.00 k	716.108900 M	-29.96	-16.96

Date: 16.DEC.2013 11:08:11

Higher Band Edge Plot for QPSK-RB Size 15, RB Offset 0

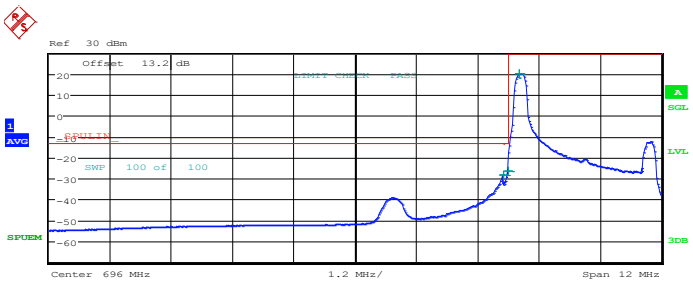


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
713.000 M	716.000 M	100.00 k	714.086000 M	8.11	-21.89
716.000 M	716.100 M	30.00 k	716.023100 M	-30.86	-17.86
716.100 M	725.000 M	100.00 k	716.153400 M	-25.40	-12.40

Date: 16.DEC.2013 11:04:08

Band :	LTE Band 12	Band Width :	3MHz / 16QAM

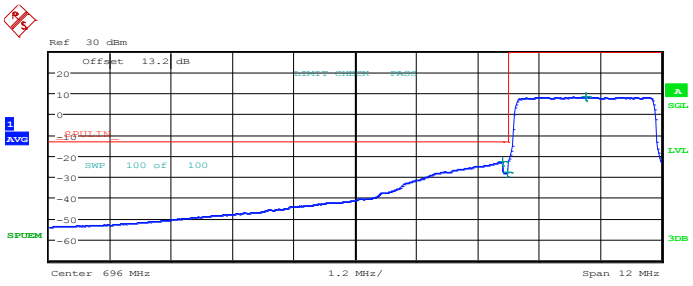
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-28.23	-15.23
698.900 M	699.000 M	30.00 k	698.999100 M	-26.62	-13.62
699.000 M	702.000 M	100.00 k	699.216000 M	19.99	-10.01

Date: 16.DEC.2013 10:51:40

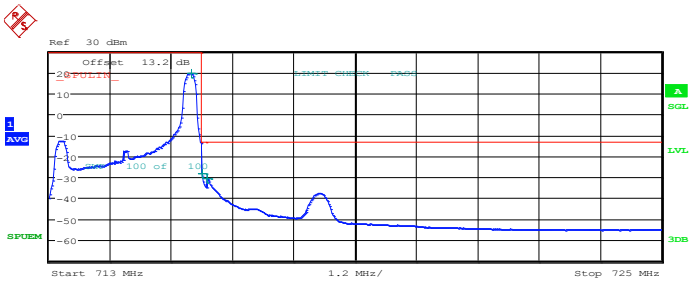
Lower Band Edge Plot for 16QAM -RB Size 15, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.891110 M	-23.01	-10.01
698.900 M	699.000 M	30.00 k	698.980802 M	-28.15	-15.15
699.000 M	702.000 M	100.00 k	700.515000 M	7.98	-22.02

Date: 16.DEC.2013 10:50:36

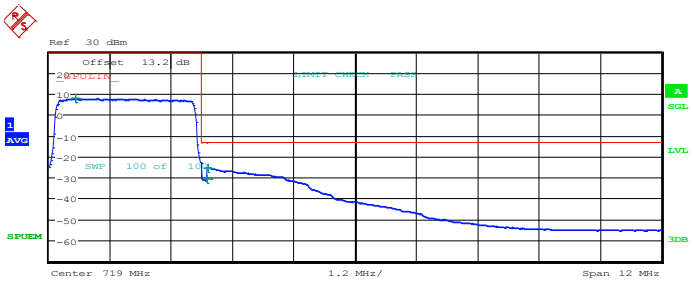
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 14



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
713.000 M	716.000 M	100.00 k	715.784000 M	19.57	-10.43
716.000 M	716.100 M	30.00 k	716.001300 M	-28.67	-15.67
716.100 M	725.000 M	100.00 k	716.100000 M	-30.94	-17.94

Date: 16.DEC.2013 11:09:17

Higher Band Edge Plot for 16QAM -RB Size 15, RB Offset 0

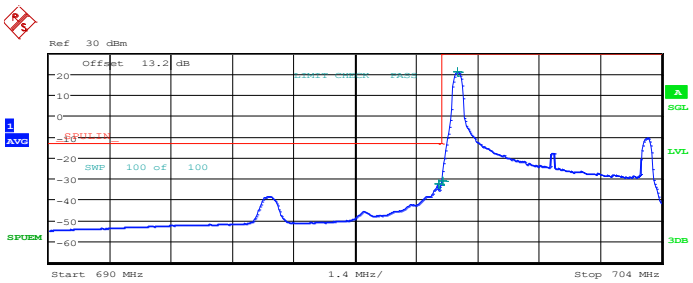


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
713.000 M	716.000 M	100.00 k	713.519000 M	7.63	-22.37
716.000 M	716.100 M	30.00 k	716.088900 M	-30.88	-17.88
716.100 M	725.000 M	100.00 k	716.108900 M	-25.60	-12.60

Date: 16.DEC.2013 11:05:18

Band :	LTE Band 12	Band Width :	5MHz / QPSK

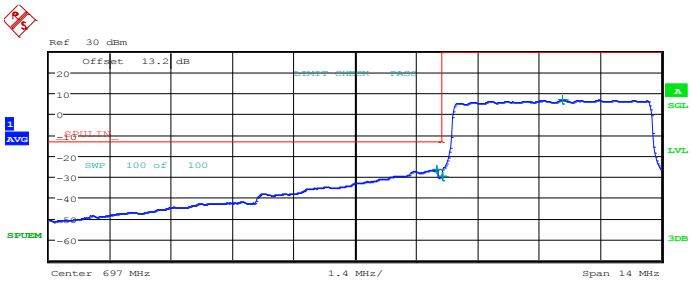
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-32.70	-19.70
698.900 M	699.000 M	50.00 k	698.998500 M	-31.42	-18.42
699.000 M	704.000 M	100.00 k	699.325000 M	20.61	-9.39

Date: 16.DEC.2013 12:56:56

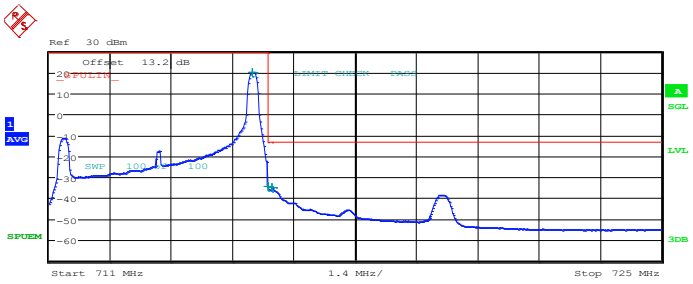
Lower Band Edge Plot for QPSK-RB Size 25, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.873310 M	-26.54	-13.54
698.900 M	699.000 M	50.00 k	698.994401 M	-29.74	-16.74
699.000 M	704.000 M	100.00 k	701.730000 M	6.53	-23.47

Date: 16.DEC.2013 12:51:25

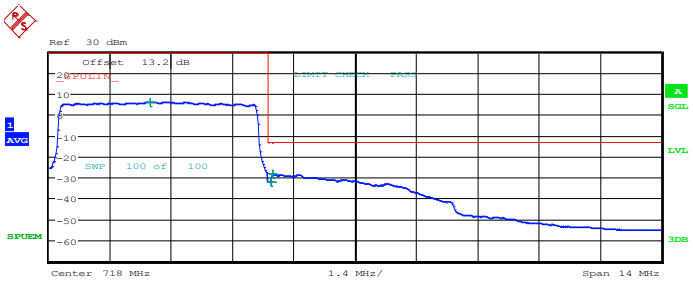
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 24



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
711.000 M	716.000 M	100.00 k	715.650000 M	19.77	-10.23
716.000 M	716.100 M	50.00 k	716.000500 M	-34.64	-21.64
716.100 M	725.000 M	100.00 k	716.100000 M	-35.13	-22.13

Date: 16.DEC.2013 13:08:09

Higher Band Edge Plot for QPSK-RB Size 25, RB Offset 0

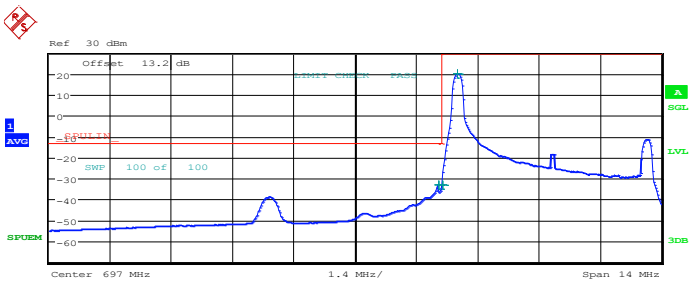


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
711.000 M	716.000 M	100.00 k	713.305000 M	5.91	-24.09
716.000 M	716.100 M	50.00 k	716.073300 M	-32.13	-19.13
716.100 M	725.000 M	100.00 k	716.117800 M	-28.49	-15.49

Date: 16.DEC.2013 13:02:10

Band :	LTE Band 12	Band Width :	5MHz / 16QAM

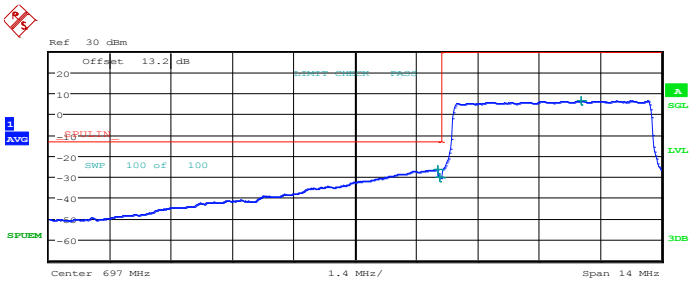
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-33.07	-20.07
698.900 M	699.000 M	50.00 k	698.992501 M	-33.06	-20.06
699.000 M	704.000 M	100.00 k	699.330000 M	20.08	-9.92

Date: 16.DEC.2013 12:54:05

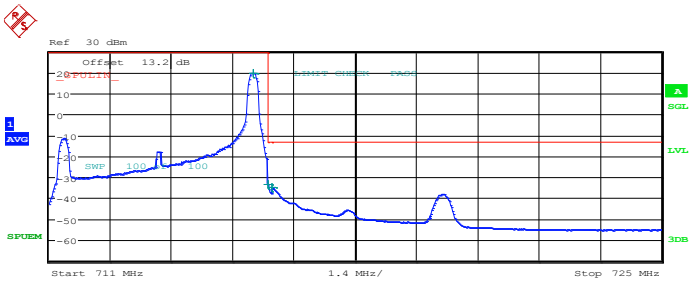
Lower Band Edge Plot for 16QAM -RB Size 25, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.882210 M	-26.51	-13.51
698.900 M	699.000 M	50.00 k	698.934707 M	-30.24	-17.24
699.000 M	704.000 M	100.00 k	702.170000 M	6.21	-23.79

Date: 16.DEC.2013 12:52:57

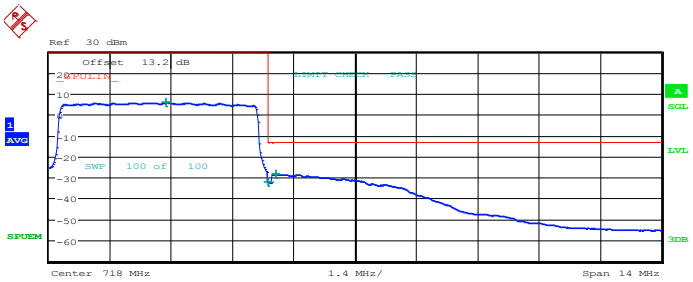
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 24



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
711.000 M	716.000 M	100.00 k	715.675000 M	19.67	-10.33
716.000 M	716.100 M	50.00 k	716.001100 M	-33.47	-20.47
716.100 M	725.000 M	100.00 k	716.100000 M	-35.11	-22.11

Date: 16.DEC.2013 13:09:06

Higher Band Edge Plot for 16QAM -RB Size 25, RB Offset 0

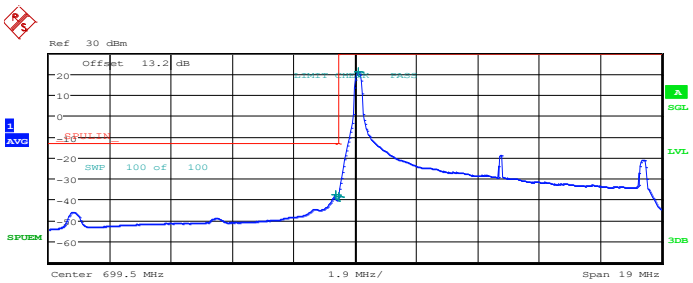


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
711.000 M	716.000 M	100.00 k	713.675000 M	5.65	-24.35
716.000 M	716.100 M	50.00 k	716.004800 M	-32.41	-19.41
716.100 M	725.000 M	100.00 k	716.180100 M	-28.65	-15.65

Date: 16.DEC.2013 13:03:26

Band :	LTE Band 12	Band Width :	10MHz / QPSK

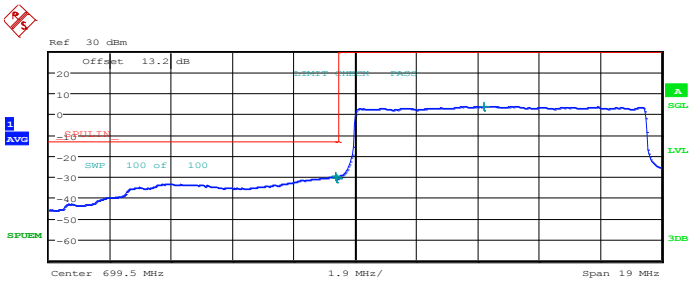
Lower Band Edge Plot for QPSK-RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-38.06	-25.06
698.900 M	699.000 M	100.00 k	698.997300 M	-38.57	-25.57
699.000 M	709.000 M	100.00 k	699.600000 M	20.65	-9.35

Date: 16.DEC.2013 13:19:06

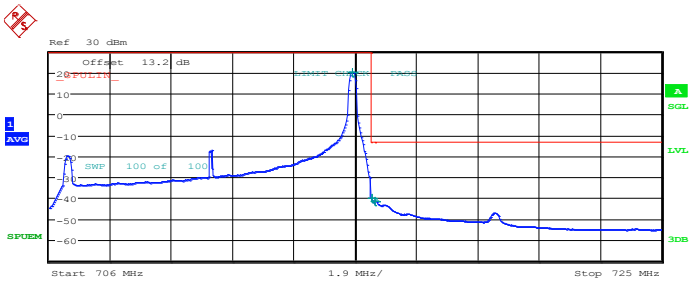
Lower Band Edge Plot for QPSK-RB Size 50, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-29.80	-16.80
698.900 M	699.000 M	100.00 k	698.925907 M	-30.86	-17.86
699.000 M	709.000 M	100.00 k	703.480000 M	3.68	-26.32

Date: 16.DEC.2013 13:13:37

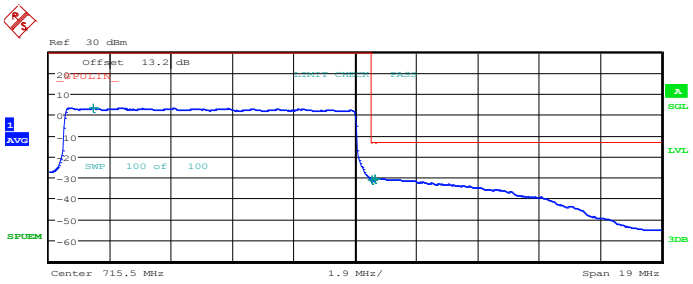
Higher Band Edge Plot for QPSK-RB Size 1, RB Offset 49



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
706.000 M	716.000 M	100.00 k	715.410000 M	19.92	-10.08
716.000 M	716.100 M	100.00 k	716.007800 M	-40.02	-27.02
716.100 M	725.000 M	100.00 k	716.108900 M	-41.48	-28.48

Date: 16.DEC.2013 13:31:07

Higher Band Edge Plot for QPSK-RB Size 50, RB Offset 0

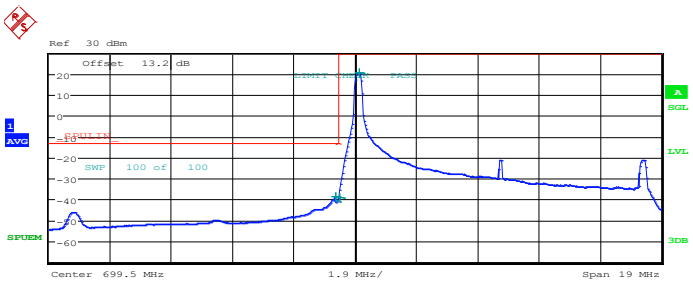


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
706.000 M	716.000 M	100.00 k	707.370000 M	3.22	-26.78
716.000 M	716.100 M	100.00 k	716.007300 M	-31.39	-18.39
716.100 M	725.000 M	100.00 k	716.108900 M	-30.69	-17.69

Date: 16.DEC.2013 13:38:09

Band :	LTE Band 12	Band Width :	10MHz / 16QAM

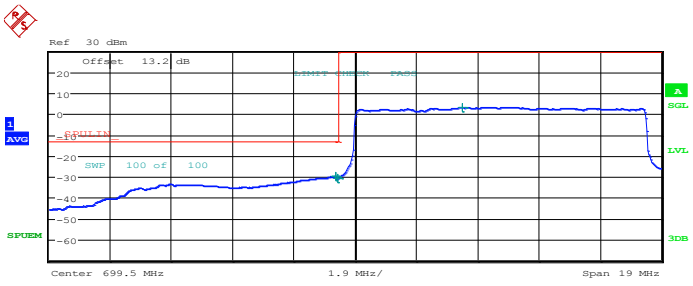
Lower Band Edge Plot for 16QAM -RB Size 1, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.882210 M	-38.82	-25.82
698.900 M	699.000 M	100.00 k	698.998900 M	-39.39	-26.39
699.000 M	709.000 M	100.00 k	699.620000 M	20.54	-9.46

Date: 16.DEC.2013 13:16:26

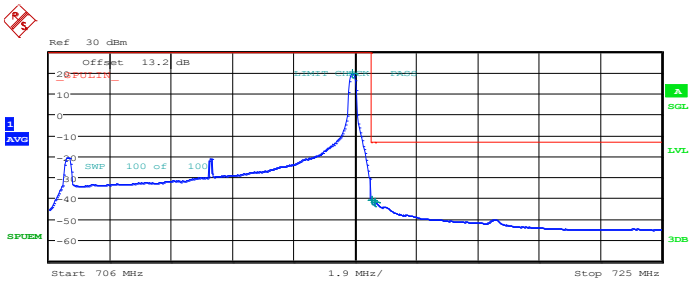
Lower Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
690.000 M	698.900 M	100.00 k	698.900010 M	-30.02	-17.02
698.900 M	699.000 M	100.00 k	698.941906 M	-30.72	-17.72
699.000 M	709.000 M	100.00 k	702.810000 M	3.15	-26.85

Date: 16.DEC.2013 13:15:13

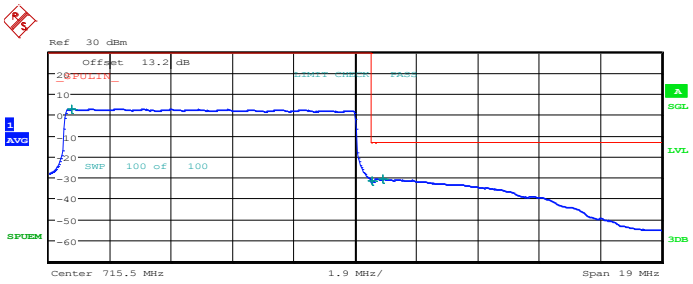
Higher Band Edge Plot for 16QAM -RB Size 1, RB Offset 49



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
706.000 M	716.000 M	100.00 k	715.400000 M	19.28	-10.72
716.000 M	716.100 M	100.00 k	716.003800 M	-40.96	-27.96
716.100 M	725.000 M	100.00 k	716.100000 M	-42.16	-29.16

Date: 16.DEC.2013 13:32:19

Higher Band Edge Plot for 16QAM -RB Size 50, RB Offset 0



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
706.000 M	716.000 M	100.00 k	706.700000 M	2.68	-27.32
716.000 M	716.100 M	100.00 k	716.013900 M	-31.65	-18.65
716.100 M	725.000 M	100.00 k	716.349200 M	-30.76	-17.76

Date: 16.DEC.2013 13:39:46

3.5 Conducted Spurious Emission Measurement

3.5.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 9 kHz up to a frequency including its 10^{th} harmonic.

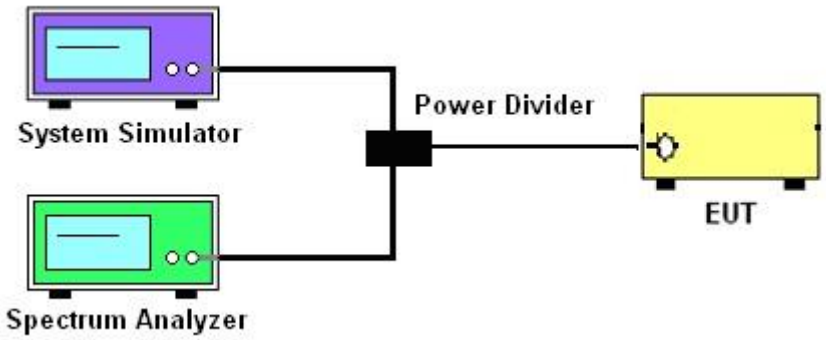
3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

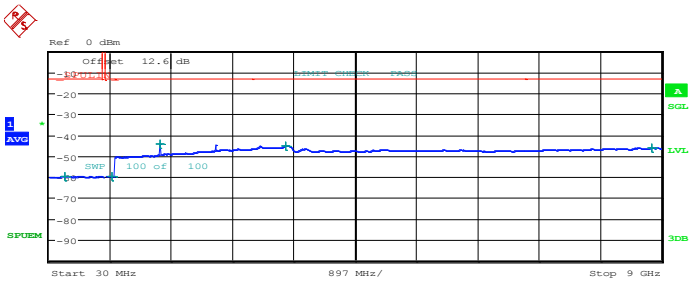
3.5.4 Test Setup



3.5.5 Test Result (Plots) of Conducted Spurious Emission

Band :	LTE Band 5	Channel :	CH20407 (Low)
Band Width :	1.4MHz		

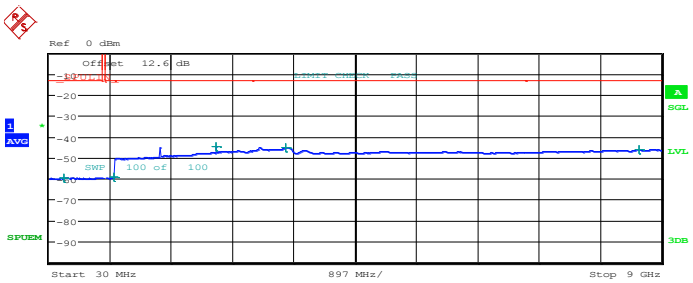
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	252.940000 M	-59.69	-46.69
860.000 M	1.000 G	100.00 k	957.160000 M	-59.76	-46.76
1.000 G	3.000 G	1.00 M	1.648000 G	-44.34	-31.34
3.000 G	7.000 G	1.00 M	3.500000 G	-45.32	-32.32
7.000 G	9.000 G	1.00 M	8.854000 G	-46.29	-33.29

Date: 13.DEC.2013 10:40:23

16QAM (RB Size 1, RB Offset 0)

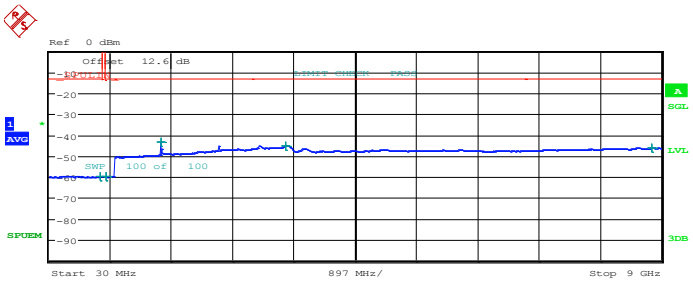


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	245.875000 M	-59.66	-46.66
860.000 M	1.000 G	100.00 k	982.360000 M	-59.59	-46.59
1.000 G	3.000 G	1.00 M	2.474000 G	-44.71	-31.71
3.000 G	7.000 G	1.00 M	3.500000 G	-45.35	-32.35
7.000 G	9.000 G	1.00 M	8.670000 G	-46.32	-33.32

Date: 13.DEC.2013 10:41:21

Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	1.4MHz		

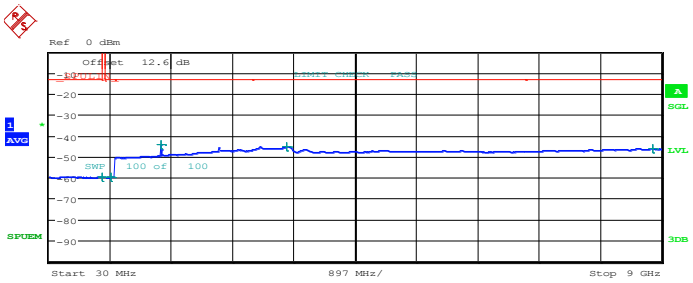
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	782.815000 M	-59.71	-46.71
860.000 M	1.000 G	100.00 k	860.140000 M	-59.75	-46.75
1.000 G	3.000 G	1.00 M	1.672000 G	-43.24	-30.24
3.000 G	7.000 G	1.00 M	3.500000 G	-45.37	-32.37
7.000 G	9.000 G	1.00 M	8.858000 G	-46.31	-33.31

Date: 13.DEC.2013 10:43:47

16QAM (RB Size 1, RB Offset 0)

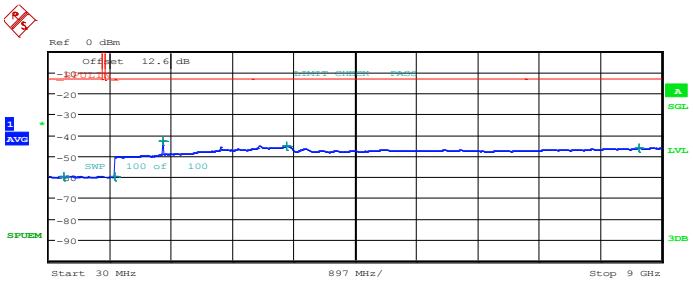


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	811.075000 M	-59.79	-46.79
860.000 M	1.000 G	100.00 k	934.480000 M	-59.80	-46.80
1.000 G	3.000 G	1.00 M	1.672000 G	-44.40	-31.40
3.000 G	7.000 G	1.00 M	3.512000 G	-45.36	-32.36
7.000 G	9.000 G	1.00 M	8.866000 G	-46.26	-33.26

Date: 13.DEC.2013 10:44:41

Band :	LTE Band 5	Channel :	CH20643 (High)
Band Width :	1.4MHz		

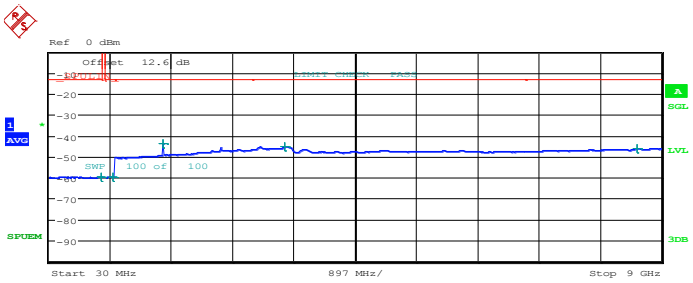
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	241.165000 M	-59.74	-46.74
860.000 M	1.000 G	100.00 k	989.080000 M	-59.80	-46.80
1.000 G	3.000 G	1.00 M	1.696000 G	-43.16	-30.16
3.000 G	7.000 G	1.00 M	3.512000 G	-45.39	-32.39
7.000 G	9.000 G	1.00 M	8.666000 G	-46.30	-33.30

Date: 13.DEC.2013 10:50:01

16QAM (RB Size 1, RB Offset 0)

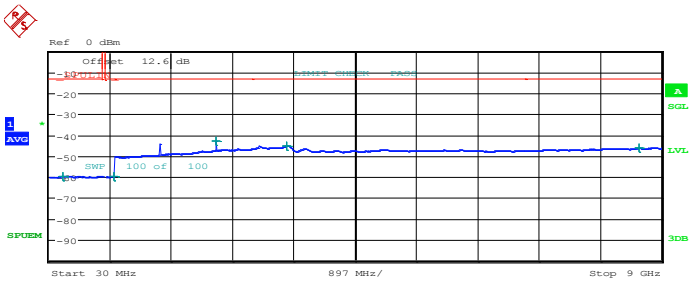


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	790.665000 M	-59.79	-46.79
860.000 M	1.000 G	100.00 k	967.520000 M	-59.73	-46.73
1.000 G	3.000 G	1.00 M	1.696000 G	-44.08	-31.08
3.000 G	7.000 G	1.00 M	3.484000 G	-45.36	-32.36
7.000 G	9.000 G	1.00 M	8.644000 G	-46.31	-33.31

Date: 13.DEC.2013 10:51:01

Band :	LTE Band 5	Channel :	CH20415 (Low)
Band Width :	3MHz		

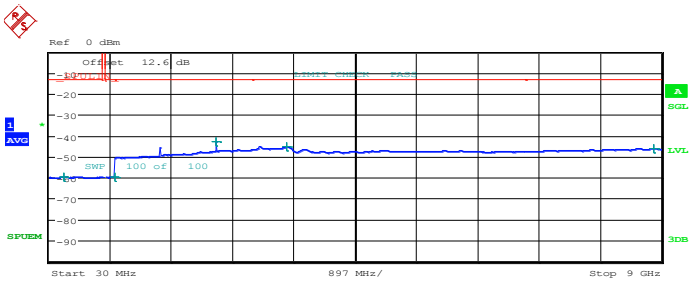
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	235.670000 M	-59.65	-46.65
860.000 M	1.000 G	100.00 k	972.280000 M	-59.87	-46.87
1.000 G	3.000 G	1.00 M	2.474000 G	-42.80	-29.80
3.000 G	7.000 G	1.00 M	3.512000 G	-45.37	-32.37
7.000 G	9.000 G	1.00 M	8.670000 G	-46.32	-33.32

Date: 13.DEC.2013 12:53:12

16QAM (RB Size 1, RB Offset 0)

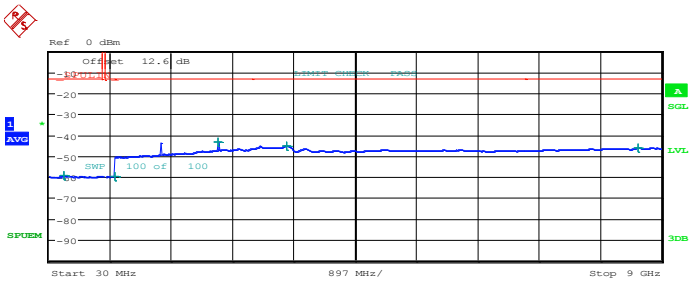


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	239.595000 M	-59.66	-46.66
860.000 M	1.000 G	100.00 k	989.780000 M	-59.78	-46.78
1.000 G	3.000 G	1.00 M	2.474000 G	-42.88	-29.88
3.000 G	7.000 G	1.00 M	3.508000 G	-45.37	-32.37
7.000 G	9.000 G	1.00 M	8.892000 G	-46.33	-33.33

Date: 13.DEC.2013 12:54:03

Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	3MHz		

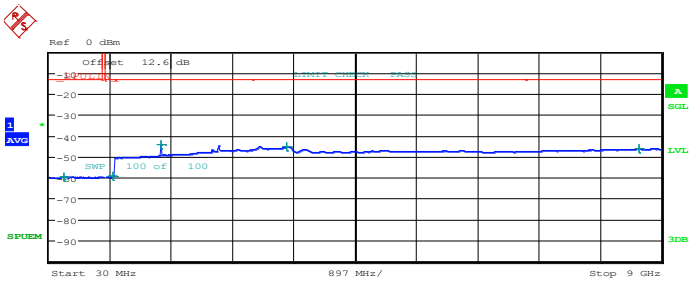
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	240.380000 M	-59.59	-46.59
860.000 M	1.000 G	100.00 k	998.180000 M	-59.80	-46.80
1.000 G	3.000 G	1.00 M	2.508000 G	-43.39	-30.39
3.000 G	7.000 G	1.00 M	3.504000 G	-45.27	-32.27
7.000 G	9.000 G	1.00 M	8.654000 G	-46.21	-33.21

Date: 13.DEC.2013 12:56:31

16QAM (RB Size 1, RB Offset 0)

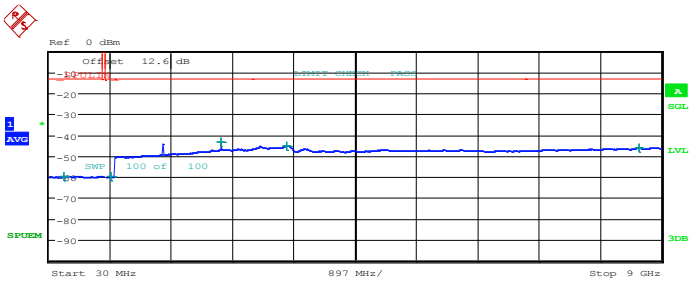


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	239.595000 M	-59.72	-46.72
860.000 M	1.000 G	100.00 k	968.920000 M	-59.51	-46.51
1.000 G	3.000 G	1.00 M	1.670000 G	-44.32	-31.32
3.000 G	7.000 G	1.00 M	3.508000 G	-45.35	-32.35
7.000 G	9.000 G	1.00 M	8.674000 G	-46.27	-33.27

Date: 13.DEC.2013 12:57:20

Band :	LTE Band 5	Channel :	CH20635 (High)
Band Width :	3MHz		

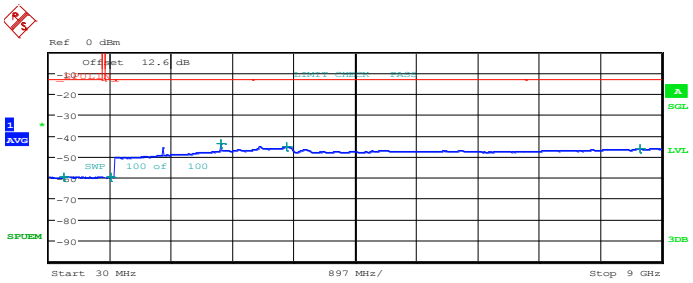
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	240.380000 M	-59.65	-46.65
860.000 M	1.000 G	100.00 k	933.220000 M	-59.95	-46.95
1.000 G	3.000 G	1.00 M	2.540000 G	-43.51	-30.51
3.000 G	7.000 G	1.00 M	3.512000 G	-45.30	-32.30
7.000 G	9.000 G	1.00 M	8.664000 G	-46.30	-33.30

Date: 13.DEC.2013 13:06:58

16QAM (RB Size 1, RB Offset 0)

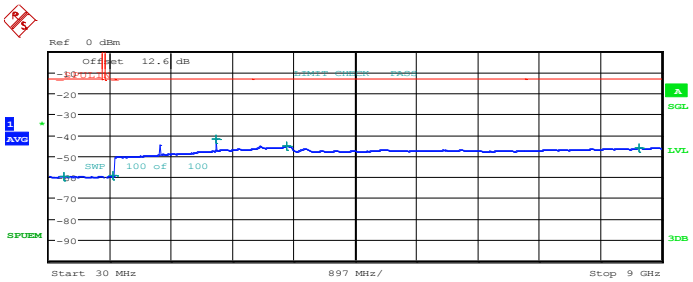


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	247.445000 M	-59.73	-46.73
860.000 M	1.000 G	100.00 k	938.260000 M	-59.67	-46.67
1.000 G	3.000 G	1.00 M	2.540000 G	-43.98	-30.98
3.000 G	7.000 G	1.00 M	3.504000 G	-45.39	-32.39
7.000 G	9.000 G	1.00 M	8.678000 G	-46.32	-33.32

Date: 13.DEC.2013 13:08:03

Band :	LTE Band 5	Channel :	CH20425 (Low)
Band Width :	5MHz		

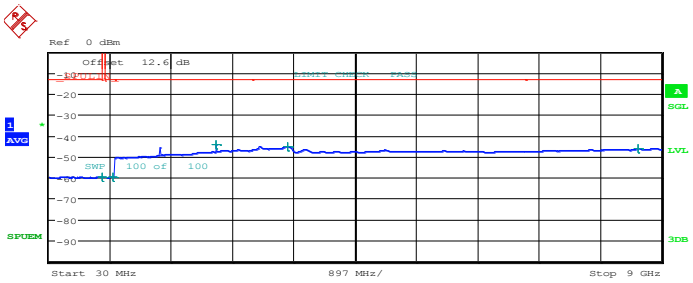
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	241.165000 M	-59.68	-46.68
860.000 M	1.000 G	100.00 k	970.180000 M	-59.61	-46.61
1.000 G	3.000 G	1.00 M	2.474000 G	-42.22	-29.22
3.000 G	7.000 G	1.00 M	3.504000 G	-45.25	-32.25
7.000 G	9.000 G	1.00 M	8.666000 G	-46.31	-33.31

Date: 13.DEC.2013 13:20:27

16QAM (RB Size 1, RB Offset 0)

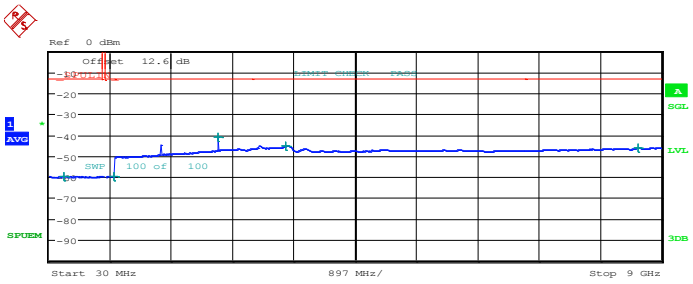


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	804.795000 M	-59.69	-46.69
860.000 M	1.000 G	100.00 k	959.960000 M	-59.86	-46.86
1.000 G	3.000 G	1.00 M	2.474000 G	-44.31	-31.31
3.000 G	7.000 G	1.00 M	3.516000 G	-45.36	-32.36
7.000 G	9.000 G	1.00 M	8.656000 G	-46.28	-33.28

Date: 13.DEC.2013 13:21:39

Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	5MHz		

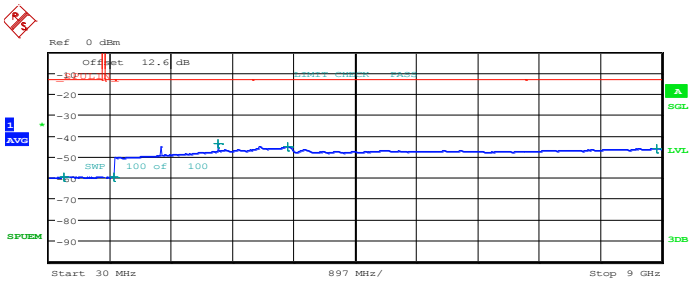
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	247.445000 M	-59.79	-46.79
860.000 M	1.000 G	100.00 k	972.000000 M	-59.79	-46.79
1.000 G	3.000 G	1.00 M	2.504000 G	-41.31	-28.31
3.000 G	7.000 G	1.00 M	3.488000 G	-45.34	-32.34
7.000 G	9.000 G	1.00 M	8.656000 G	-46.31	-33.31

Date: 13.DEC.2013 13:23:53

16QAM (RB Size 1, RB Offset 0)

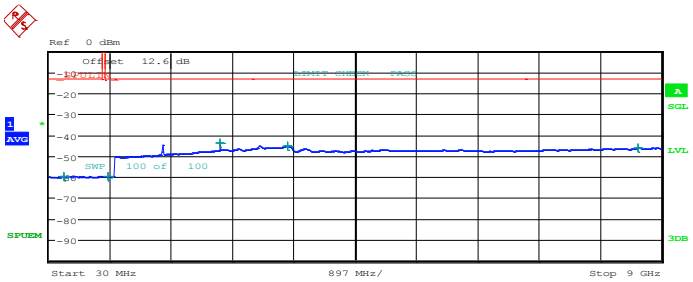


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	244.305000 M	-59.76	-46.76
860.000 M	1.000 G	100.00 k	973.540000 M	-59.69	-46.69
1.000 G	3.000 G	1.00 M	2.504000 G	-43.75	-30.75
3.000 G	7.000 G	1.00 M	3.516000 G	-45.36	-32.36
7.000 G	9.000 G	1.00 M	8.932000 G	-46.31	-33.31

Date: 13.DEC.2013 13:24:42

Band :	LTE Band 5	Channel :	CH20625 (High)
Band Width :	5MHz		

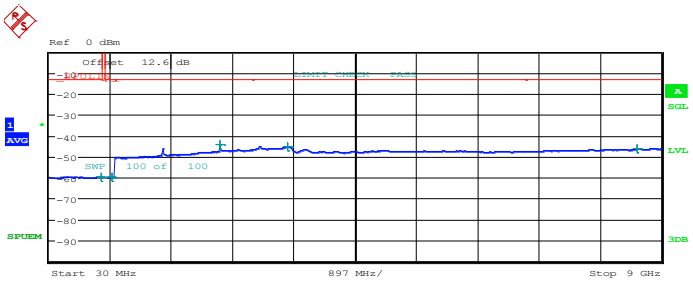
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	238.810000 M	-59.63	-46.63
860.000 M	1.000 G	100.00 k	890.940000 M	-59.80	-46.80
1.000 G	3.000 G	1.00 M	2.534000 G	-43.98	-30.98
3.000 G	7.000 G	1.00 M	3.520000 G	-45.40	-32.40
7.000 G	9.000 G	1.00 M	8.656000 G	-46.27	-33.27

Date: 13.DEC.2013 13:32:48

16QAM (RB Size 1, RB Offset 0)

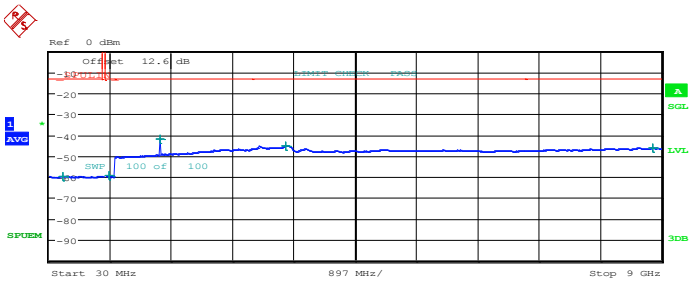


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	793.020000 M	-59.75	-46.75
860.000 M	1.000 G	100.00 k	953.660000 M	-59.68	-46.68
1.000 G	3.000 G	1.00 M	2.534000 G	-44.60	-31.60
3.000 G	7.000 G	1.00 M	3.516000 G	-45.35	-32.35
7.000 G	9.000 G	1.00 M	8.646000 G	-46.35	-33.35

Date: 13.DEC.2013 13:33:39

Band :	LTE Band 5	Channel :	CH20450 (Low)
Band Width :	10MHz		

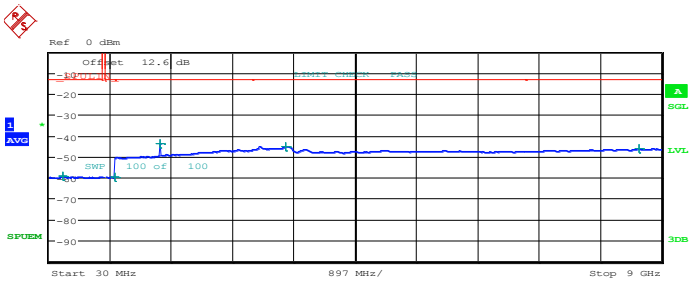
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	229.390000 M	-59.75	-46.75
860.000 M	1.000 G	100.00 k	909.840000 M	-59.59	-46.59
1.000 G	3.000 G	1.00 M	1.650000 G	-42.11	-29.11
3.000 G	7.000 G	1.00 M	3.500000 G	-45.33	-32.33
7.000 G	9.000 G	1.00 M	8.864000 G	-46.35	-33.35

Date: 16.DEC.2013 09:32:23

16QAM (RB Size 1, RB Offset 0)

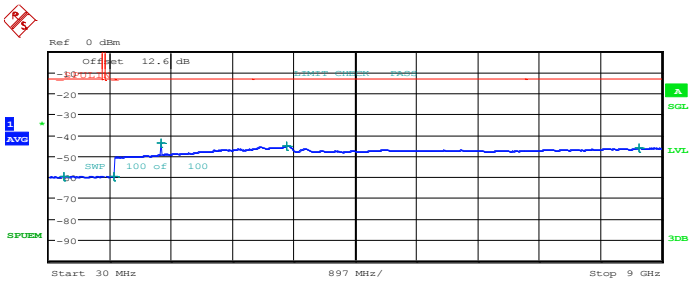


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	238.025000 M	-59.62	-46.62
860.000 M	1.000 G	100.00 k	997.060000 M	-59.81	-46.81
1.000 G	3.000 G	1.00 M	1.650000 G	-44.09	-31.09
3.000 G	7.000 G	1.00 M	3.500000 G	-45.32	-32.32
7.000 G	9.000 G	1.00 M	8.668000 G	-46.27	-33.27

Date: 16.DEC.2013 09:33:20

Band :	LTE Band 5	Channel :	CH20525 (Middle)
Band Width :	10MHz		

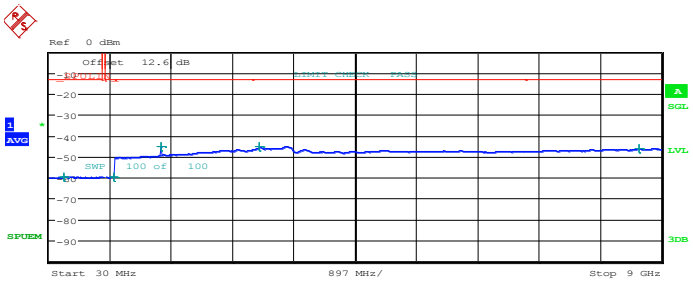
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	242.735000 M	-59.78	-46.78
860.000 M	1.000 G	100.00 k	972.000000 M	-59.83	-46.83
1.000 G	3.000 G	1.00 M	1.664000 G	-44.12	-31.12
3.000 G	7.000 G	1.00 M	3.508000 G	-45.28	-32.28
7.000 G	9.000 G	1.00 M	8.664000 G	-46.32	-33.32

Date: 16.DEC.2013 09:38:09

16QAM (RB Size 1, RB Offset 0)

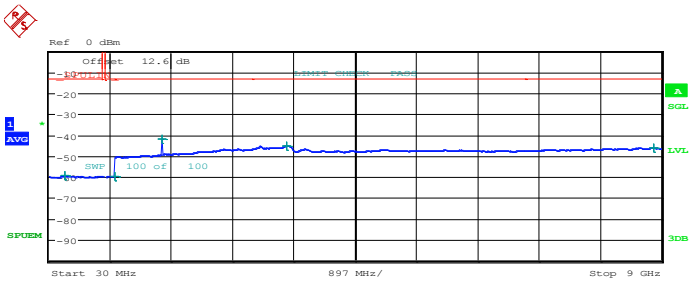


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	241.165000 M	-59.72	-46.72
860.000 M	1.000 G	100.00 k	977.600000 M	-59.76	-46.76
1.000 G	3.000 G	1.00 M	1.664000 G	-45.48	-32.48
3.000 G	7.000 G	1.00 M	3.112000 G	-45.36	-32.36
7.000 G	9.000 G	1.00 M	8.676000 G	-46.30	-33.30

Date: 16.DEC.2013 09:39:01

Band :	LTE Band 5	Channel :	CH20600 (High)
Band Width :	10MHz		

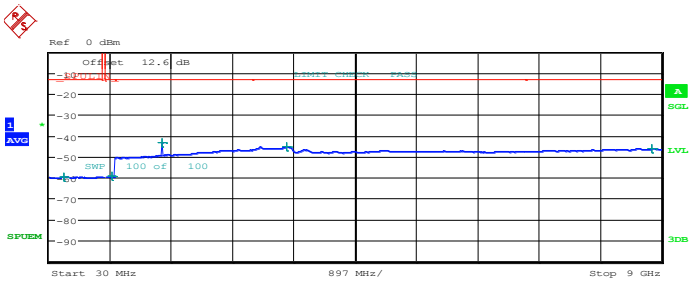
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	252.940000 M	-59.62	-46.62
860.000 M	1.000 G	100.00 k	993.140000 M	-59.68	-46.68
1.000 G	3.000 G	1.00 M	1.680000 G	-42.17	-29.17
3.000 G	7.000 G	1.00 M	3.508000 G	-45.27	-32.27
7.000 G	9.000 G	1.00 M	8.880000 G	-46.37	-33.37

Date: 16.DEC.2013 09:45:19

16QAM (RB Size 1, RB Offset 0)

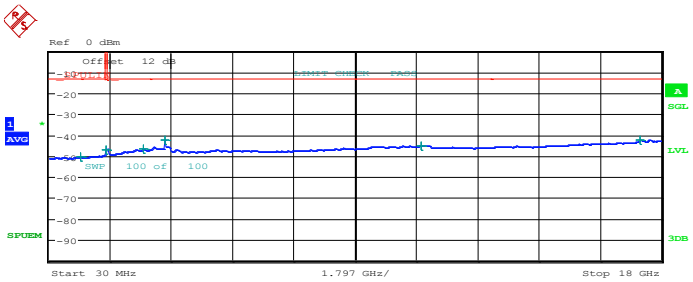


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	815.000 M	100.00 k	244.305000 M	-59.76	-46.76
860.000 M	1.000 G	100.00 k	948.620000 M	-59.62	-46.62
1.000 G	3.000 G	1.00 M	1.680000 G	-43.39	-30.39
3.000 G	7.000 G	1.00 M	3.512000 G	-45.34	-32.34
7.000 G	9.000 G	1.00 M	8.854000 G	-46.26	-33.26

Date: 16.DEC.2013 09:46:09

Band :	LTE Band 4	Channel :	CH19957 (Low)
Band Width :	1.4MHz		

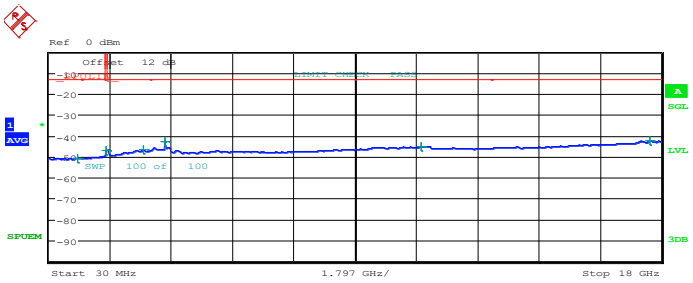
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	961.200000 M	-50.64	-37.64
1.000 G	1.700 G	1.00 M	1.699300 G	-47.23	-34.23
1.765 G	3.000 G	1.00 M	2.793755 G	-46.67	-33.67
3.000 G	9.000 G	1.00 M	3.420000 G	-42.26	-29.26
9.000 G	13.000 G	1.00 M	10.944000 G	-45.15	-32.15
13.000 G	18.000 G	1.00 M	17.375000 G	-42.63	-29.63

Date: 11.DEC.2013 21:22:51

16QAM (RB Size 1, RB Offset 0)

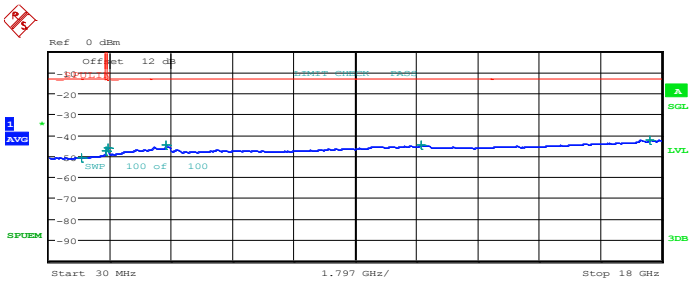


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	876.810000 M	-50.74	-37.74
1.000 G	1.700 G	1.00 M	1.699300 G	-47.25	-34.25
1.765 G	3.000 G	1.00 M	2.793755 G	-46.75	-33.75
3.000 G	9.000 G	1.00 M	3.420000 G	-42.90	-29.90
9.000 G	13.000 G	1.00 M	10.932000 G	-45.20	-32.20
13.000 G	18.000 G	1.00 M	17.655000 G	-42.60	-29.60

Date: 11.DEC.2013 21:23:58

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	1.4MHz		

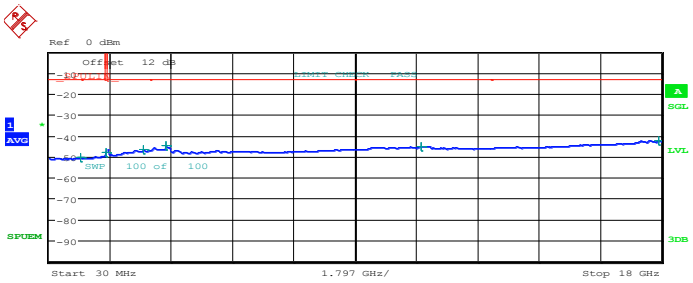
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	979.630000 M	-50.86	-37.86
1.000 G	1.700 G	1.00 M	1.698600 G	-47.54	-34.54
1.765 G	3.000 G	1.00 M	1.766235 G	-46.32	-33.32
3.000 G	9.000 G	1.00 M	3.462000 G	-44.73	-31.73
9.000 G	13.000 G	1.00 M	10.948000 G	-45.03	-32.03
13.000 G	18.000 G	1.00 M	17.660000 G	-42.56	-29.56

Date: 11.DEC.2013 21:25:58

16QAM (RB Size 1, RB Offset 0)

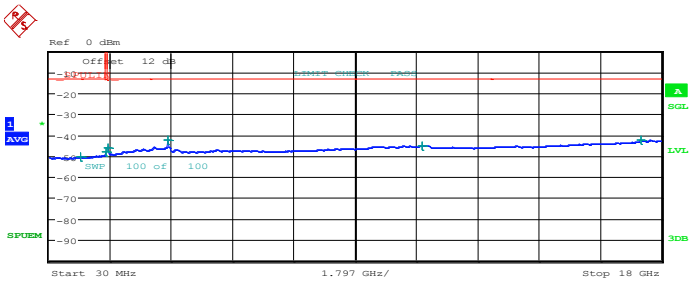


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	964.110000 M	-50.70	-37.70
1.000 G	1.700 G	1.00 M	1.699300 G	-47.89	-34.89
1.765 G	3.000 G	1.00 M	2.796225 G	-46.68	-33.68
3.000 G	9.000 G	1.00 M	3.462000 G	-45.06	-32.06
9.000 G	13.000 G	1.00 M	10.948000 G	-45.12	-32.12
13.000 G	18.000 G	1.00 M	17.900000 G	-42.65	-29.65

Date: 11.DEC.2013 21:25:00

Band :	LTE Band 4	Channel :	CH20393 (High)
Band Width :	1.4MHz		

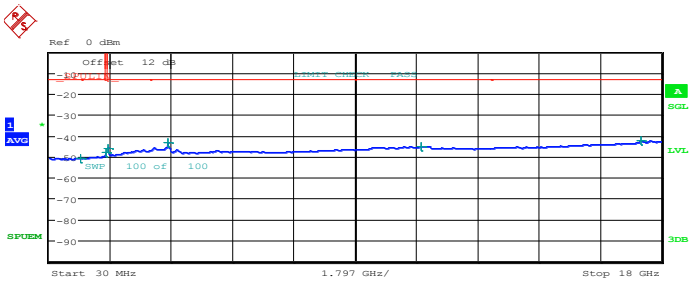
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	960.230000 M	-50.66	-37.66
1.000 G	1.700 G	1.00 M	1.698600 G	-48.19	-35.19
1.765 G	3.000 G	1.00 M	1.766235 G	-46.25	-33.25
3.000 G	9.000 G	1.00 M	3.504000 G	-42.61	-29.61
9.000 G	13.000 G	1.00 M	10.960000 G	-45.25	-32.25
13.000 G	18.000 G	1.00 M	17.390000 G	-42.60	-29.60

Date: 11.DEC.2013 21:27:10

16QAM (RB Size 1, RB Offset 0)

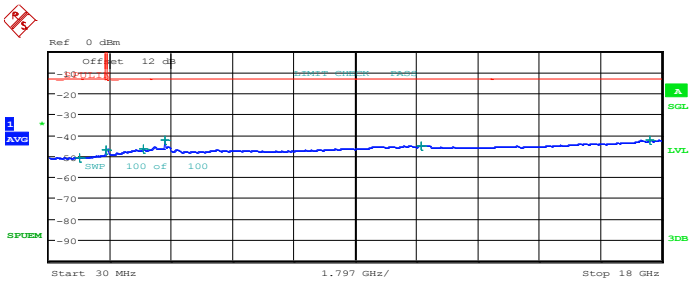


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	965.080000 M	-50.78	-37.78
1.000 G	1.700 G	1.00 M	1.699300 G	-48.27	-35.27
1.765 G	3.000 G	1.00 M	1.766235 G	-46.14	-33.14
3.000 G	9.000 G	1.00 M	3.504000 G	-43.35	-30.35
9.000 G	13.000 G	1.00 M	10.956000 G	-45.27	-32.27
13.000 G	18.000 G	1.00 M	17.385000 G	-42.56	-29.56

Date: 11.DEC.2013 21:28:41

Band :	LTE Band 4	Channel :	CH19965 (Low)
Band Width :	3MHz		

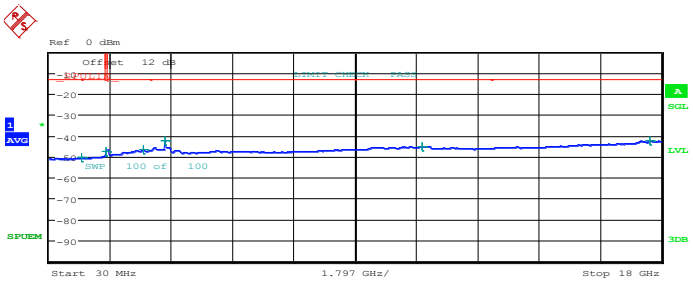
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	931.130000 M	-50.82	-37.82
1.000 G	1.700 G	1.00 M	1.699300 G	-47.18	-34.18
1.765 G	3.000 G	1.00 M	2.794990 G	-46.76	-33.76
3.000 G	9.000 G	1.00 M	3.420000 G	-42.40	-29.40
9.000 G	13.000 G	1.00 M	10.956000 G	-45.24	-32.24
13.000 G	18.000 G	1.00 M	17.655000 G	-42.65	-29.65

Date: 11.DEC.2013 21:37:21

16QAM (RB Size 1, RB Offset 0)

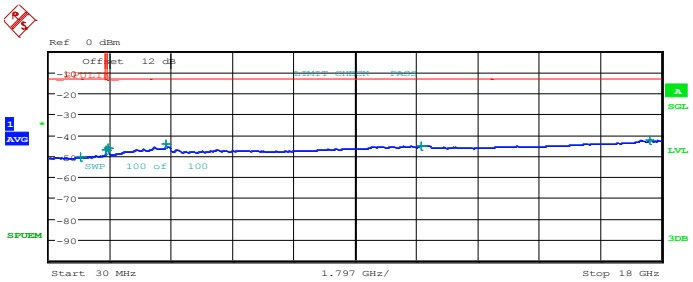


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	976.720000 M	-50.70	-37.70
1.000 G	1.700 G	1.00 M	1.699300 G	-47.47	-34.47
1.765 G	3.000 G	1.00 M	2.796225 G	-46.69	-33.69
3.000 G	9.000 G	1.00 M	3.420000 G	-42.70	-29.70
9.000 G	13.000 G	1.00 M	10.964000 G	-45.20	-32.20
13.000 G	18.000 G	1.00 M	17.665000 G	-42.55	-29.55

Date: 11.DEC.2013 21:38:19

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	3MHz		

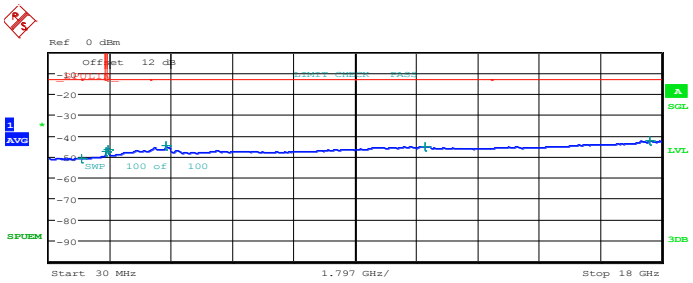
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	965.080000 M	-50.64	-37.64
1.000 G	1.700 G	1.00 M	1.699300 G	-47.18	-34.18
1.765 G	3.000 G	1.00 M	1.766235 G	-46.35	-33.35
3.000 G	9.000 G	1.00 M	3.462000 G	-44.49	-31.49
9.000 G	13.000 G	1.00 M	10.936000 G	-45.21	-32.21
13.000 G	18.000 G	1.00 M	17.655000 G	-42.56	-29.56

Date: 11.DEC.2013 21:36:13

16QAM (RB Size 1, RB Offset 0)

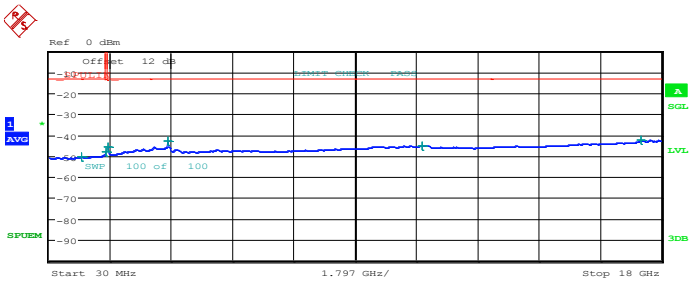


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	974.780000 M	-50.73	-37.73
1.000 G	1.700 G	1.00 M	1.699300 G	-47.64	-34.64
1.765 G	3.000 G	1.00 M	1.766235 G	-46.55	-33.55
3.000 G	9.000 G	1.00 M	3.462000 G	-44.85	-31.85
9.000 G	13.000 G	1.00 M	11.068000 G	-45.26	-32.26
13.000 G	18.000 G	1.00 M	17.650000 G	-42.58	-29.58

Date: 11.DEC.2013 21:35:16

Band :	LTE Band 4	Channel :	CH20385 (High)
Band Width :	3MHz		

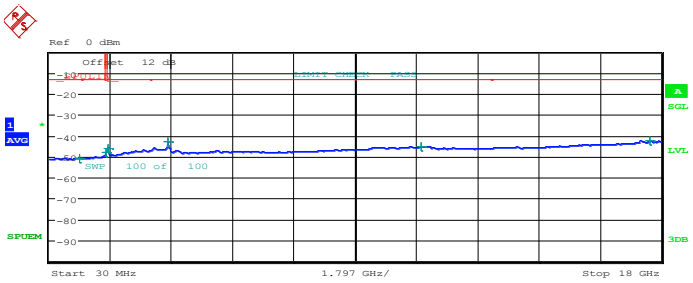
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	982.540000 M	-50.61	-37.61
1.000 G	1.700 G	1.00 M	1.697900 G	-48.09	-35.09
1.765 G	3.000 G	1.00 M	1.766235 G	-45.85	-32.85
3.000 G	9.000 G	1.00 M	3.504000 G	-42.84	-29.84
9.000 G	13.000 G	1.00 M	10.976000 G	-45.19	-32.19
13.000 G	18.000 G	1.00 M	17.385000 G	-42.59	-29.59

Date: 11.DEC.2013 21:45:20

16QAM (RB Size 1, RB Offset 0)

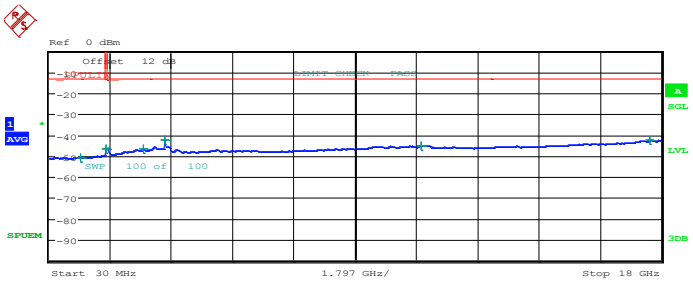


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	925.310000 M	-50.76	-37.76
1.000 G	1.700 G	1.00 M	1.699300 G	-48.11	-35.11
1.765 G	3.000 G	1.00 M	1.766235 G	-46.29	-33.29
3.000 G	9.000 G	1.00 M	3.504000 G	-42.93	-29.93
9.000 G	13.000 G	1.00 M	10.940000 G	-45.24	-32.24
13.000 G	18.000 G	1.00 M	17.655000 G	-42.58	-29.58

Date: 11.DEC.2013 21:44:26

Band :	LTE Band 4	Channel :	CH19975 (Low)
Band Width :	5MHz		

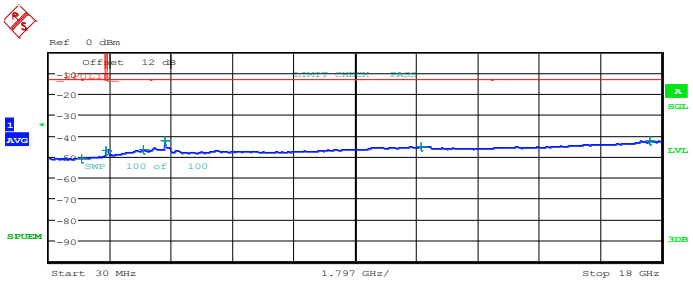
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	944.710000 M	-50.72	-37.72
1.000 G	1.700 G	1.00 M	1.699300 G	-46.71	-33.71
1.765 G	3.000 G	1.00 M	2.794990 G	-46.72	-33.72
3.000 G	9.000 G	1.00 M	3.420000 G	-42.52	-29.52
9.000 G	13.000 G	1.00 M	10.948000 G	-45.22	-32.22
13.000 G	18.000 G	1.00 M	17.665000 G	-42.60	-29.60

Date: 11.DEC.2013 21:51:45

16QAM (RB Size 1, RB Offset 0)

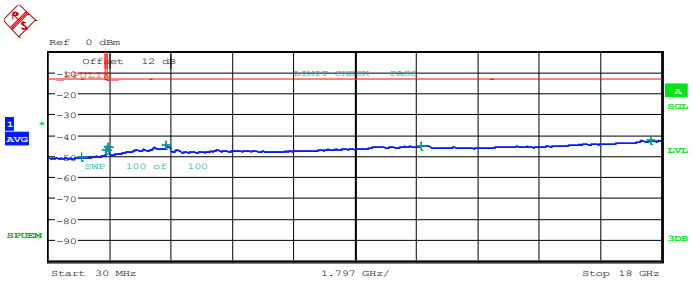


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	966.050000 M	-50.79	-37.79
1.000 G	1.700 G	1.00 M	1.698600 G	-47.26	-34.26
1.765 G	3.000 G	1.00 M	2.794990 G	-46.64	-33.64
3.000 G	9.000 G	1.00 M	3.420000 G	-42.61	-29.61
9.000 G	13.000 G	1.00 M	10.948000 G	-45.23	-32.23
13.000 G	18.000 G	1.00 M	17.660000 G	-42.52	-29.52

Date: 11.DEC.2013 21:53:34

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	5MHz		

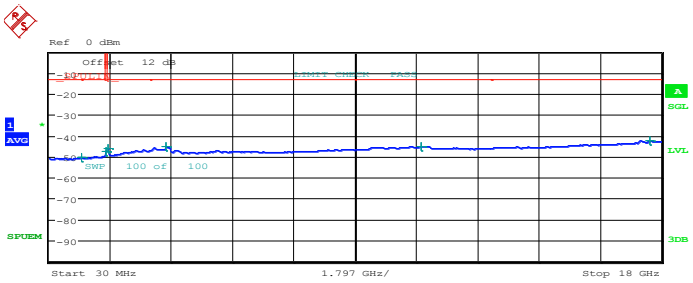
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	966.050000 M	-50.64	-37.64
1.000 G	1.700 G	1.00 M	1.699300 G	-47.41	-34.41
1.765 G	3.000 G	1.00 M	1.766235 G	-45.96	-32.96
3.000 G	9.000 G	1.00 M	3.456000 G	-44.88	-31.88
9.000 G	13.000 G	1.00 M	10.952000 G	-45.20	-32.20
13.000 G	18.000 G	1.00 M	17.670000 G	-42.59	-29.59

Date: 11.DEC.2013 21:50:22

16QAM (RB Size 1, RB Offset 0)

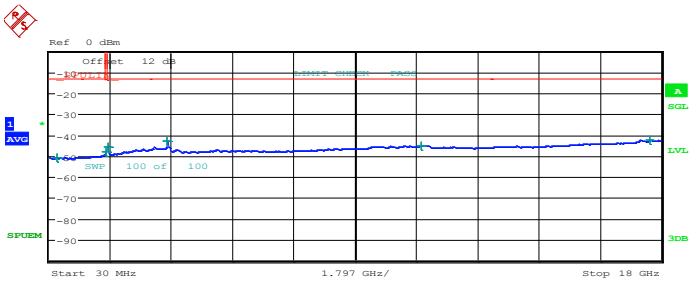


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	979.630000 M	-50.62	-37.62
1.000 G	1.700 G	1.00 M	1.699300 G	-47.47	-34.47
1.765 G	3.000 G	1.00 M	1.766235 G	-46.46	-33.46
3.000 G	9.000 G	1.00 M	3.456000 G	-45.21	-32.21
9.000 G	13.000 G	1.00 M	10.952000 G	-45.24	-32.24
13.000 G	18.000 G	1.00 M	17.645000 G	-42.61	-29.61

Date: 11.DEC.2013 21:49:24

Band :	LTE Band 4	Channel :	CH20375 (High)
Band Width :	5MHz		

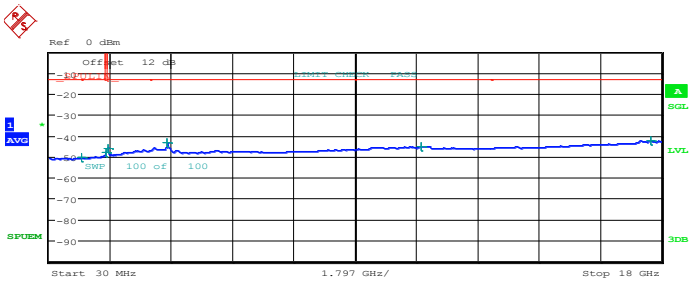
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	256.980000 M	-50.77	-37.77
1.000 G	1.700 G	1.00 M	1.699300 G	-48.13	-35.13
1.765 G	3.000 G	1.00 M	1.766235 G	-45.92	-32.92
3.000 G	9.000 G	1.00 M	3.498000 G	-43.10	-30.10
9.000 G	13.000 G	1.00 M	10.948000 G	-45.17	-32.17
13.000 G	18.000 G	1.00 M	17.665000 G	-42.59	-29.59

Date: 11.DEC.2013 21:59:37

16QAM (RB Size 1, RB Offset 0)

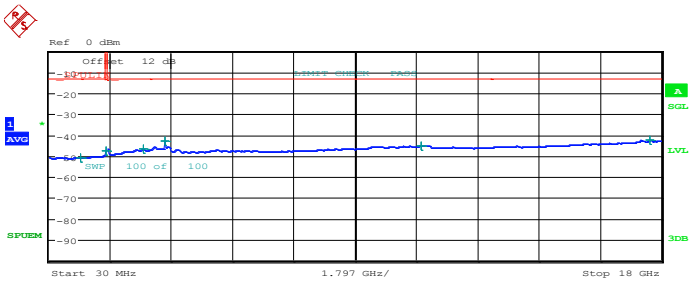


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	986.420000 M	-50.69	-37.69
1.000 G	1.700 G	1.00 M	1.699300 G	-48.06	-35.06
1.765 G	3.000 G	1.00 M	1.766235 G	-46.05	-33.05
3.000 G	9.000 G	1.00 M	3.498000 G	-43.31	-30.31
9.000 G	13.000 G	1.00 M	10.944000 G	-45.13	-32.13
13.000 G	18.000 G	1.00 M	17.670000 G	-42.60	-29.60

Date: 11.DEC.2013 22:00:37

Band :	LTE Band 4	Channel :	CH20000 (Low)
Band Width :	10MHz		

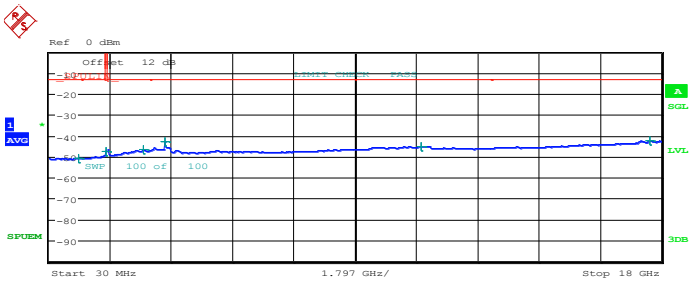
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	957.320000 M	-50.78	-37.78
1.000 G	1.700 G	1.00 M	1.699300 G	-47.46	-34.46
1.765 G	3.000 G	1.00 M	2.793755 G	-46.63	-33.63
3.000 G	9.000 G	1.00 M	3.420000 G	-42.91	-29.91
9.000 G	13.000 G	1.00 M	10.940000 G	-45.23	-32.23
13.000 G	18.000 G	1.00 M	17.655000 G	-42.56	-29.56

Date: 11.DEC.2013 21:07:43

16QAM (RB Size 1, RB Offset 0)

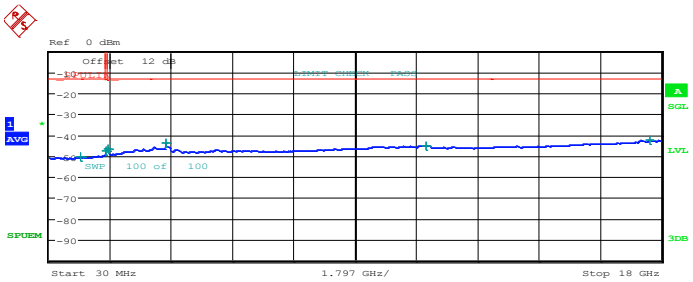


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	899.120000 M	-50.77	-37.77
1.000 G	1.700 G	1.00 M	1.699300 G	-47.54	-34.54
1.765 G	3.000 G	1.00 M	2.794990 G	-46.75	-33.75
3.000 G	9.000 G	1.00 M	3.420000 G	-42.96	-29.96
9.000 G	13.000 G	1.00 M	10.940000 G	-45.21	-32.21
13.000 G	18.000 G	1.00 M	17.650000 G	-42.59	-29.59

Date: 11.DEC.2013 21:06:41

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	10MHz		

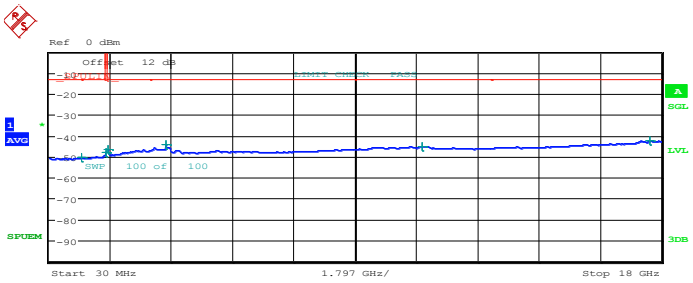
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	962.170000 M	-50.60	-37.60
1.000 G	1.700 G	1.00 M	1.699300 G	-47.63	-34.63
1.765 G	3.000 G	1.00 M	1.766235 G	-46.62	-33.62
3.000 G	9.000 G	1.00 M	3.456000 G	-44.00	-31.00
9.000 G	13.000 G	1.00 M	11.088000 G	-45.22	-32.22
13.000 G	18.000 G	1.00 M	17.655000 G	-42.65	-29.65

Date: 11.DEC.2013 21:08:54

16QAM (RB Size 1, RB Offset 0)

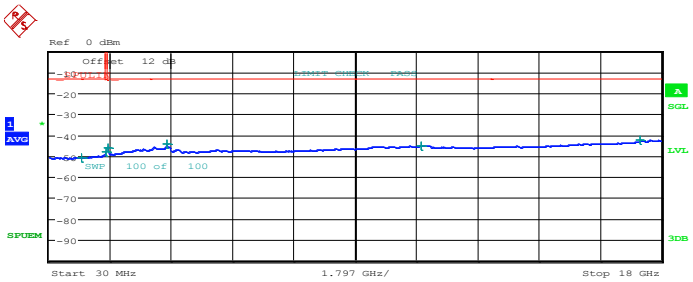


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	979.630000 M	-50.67	-37.67
1.000 G	1.700 G	1.00 M	1.699300 G	-47.89	-34.89
1.765 G	3.000 G	1.00 M	1.766235 G	-46.53	-33.53
3.000 G	9.000 G	1.00 M	3.456000 G	-44.14	-31.14
9.000 G	13.000 G	1.00 M	10.964000 G	-45.17	-32.17
13.000 G	18.000 G	1.00 M	17.665000 G	-42.60	-29.60

Date: 11.DEC.2013 21:09:54

Band :	LTE Band 4	Channel :	CH20350 (High)
Band Width :	10MHz		

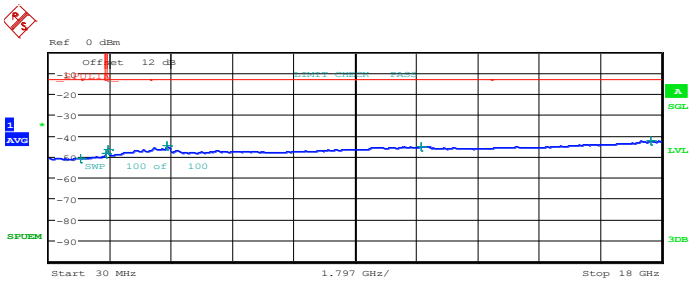
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	993.210000 M	-50.75	-37.75
1.000 G	1.700 G	1.00 M	1.699300 G	-47.91	-34.91
1.765 G	3.000 G	1.00 M	1.766235 G	-46.08	-33.08
3.000 G	9.000 G	1.00 M	3.492000 G	-44.43	-31.43
9.000 G	13.000 G	1.00 M	10.944000 G	-45.24	-32.24
13.000 G	18.000 G	1.00 M	17.380000 G	-42.53	-29.53

Date: 11.DEC.2013 21:11:57

16QAM (RB Size 1, RB Offset 0)

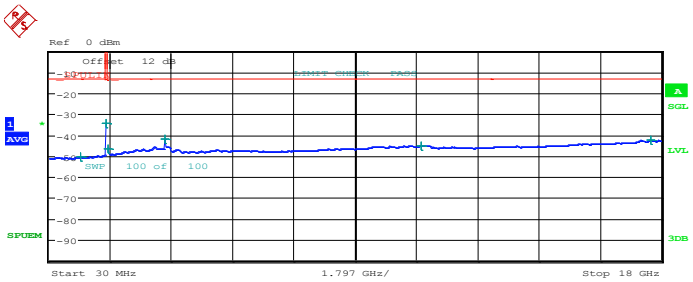


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	952.470000 M	-50.76	-37.76
1.000 G	1.700 G	1.00 M	1.699300 G	-48.47	-35.47
1.765 G	3.000 G	1.00 M	1.767470 G	-46.60	-33.60
3.000 G	9.000 G	1.00 M	3.492000 G	-44.62	-31.62
9.000 G	13.000 G	1.00 M	10.940000 G	-45.16	-32.16
13.000 G	18.000 G	1.00 M	17.670000 G	-42.55	-29.55

Date: 11.DEC.2013 21:10:57

Band :	LTE Band 4	Channel :	CH20025 (Low)
Band Width :	15MHz		

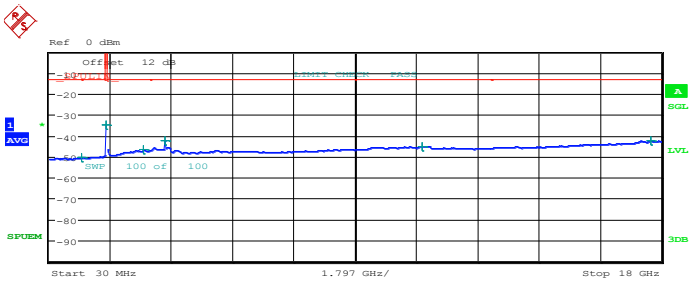
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	950.530000 M	-50.66	-37.66
1.000 G	1.700 G	1.00 M	1.697900 G	-34.62	-21.62
1.765 G	3.000 G	1.00 M	1.766235 G	-46.74	-33.74
3.000 G	9.000 G	1.00 M	3.420000 G	-42.15	-29.15
9.000 G	13.000 G	1.00 M	10.956000 G	-45.16	-32.16
13.000 G	18.000 G	1.00 M	17.670000 G	-42.60	-29.60

Date: 11.DEC.2013 22:12:10

16QAM (RB Size 1, RB Offset 0)

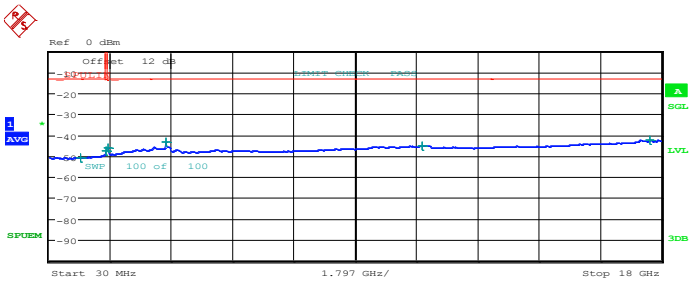


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	991.270000 M	-50.70	-37.70
1.000 G	1.700 G	1.00 M	1.697900 G	-34.83	-21.83
1.765 G	3.000 G	1.00 M	2.796225 G	-46.78	-33.78
3.000 G	9.000 G	1.00 M	3.420000 G	-42.69	-29.69
9.000 G	13.000 G	1.00 M	10.960000 G	-45.19	-32.19
13.000 G	18.000 G	1.00 M	17.670000 G	-42.49	-29.49

Date: 11.DEC.2013 22:13:11

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	15MHz		

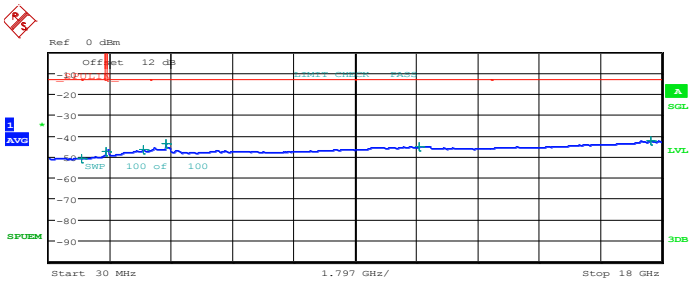
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	949.560000 M	-50.85	-37.85
1.000 G	1.700 G	1.00 M	1.699300 G	-47.67	-34.67
1.765 G	3.000 G	1.00 M	1.766235 G	-46.13	-33.13
3.000 G	9.000 G	1.00 M	3.450000 G	-43.43	-30.43
9.000 G	13.000 G	1.00 M	10.960000 G	-45.21	-32.21
13.000 G	18.000 G	1.00 M	17.650000 G	-42.62	-29.62

Date: 11.DEC.2013 22:05:19

16QAM (RB Size 1, RB Offset 0)

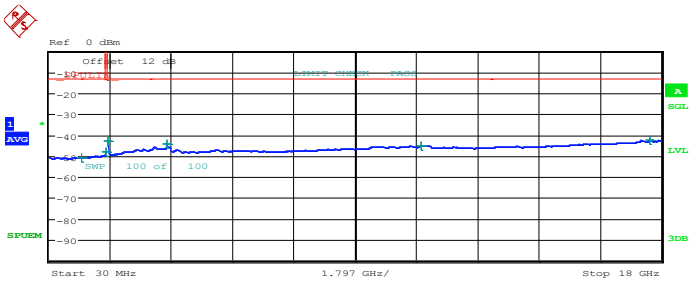


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	978.660000 M	-50.74	-37.74
1.000 G	1.700 G	1.00 M	1.699300 G	-47.73	-34.73
1.765 G	3.000 G	1.00 M	2.793755 G	-46.78	-33.78
3.000 G	9.000 G	1.00 M	3.450000 G	-43.73	-30.73
9.000 G	13.000 G	1.00 M	10.896000 G	-45.21	-32.21
13.000 G	18.000 G	1.00 M	17.670000 G	-42.61	-29.61

Date: 11.DEC.2013 22:03:32

Band :	LTE Band 4	Channel :	CH20325 (High)
Band Width :	15MHz		

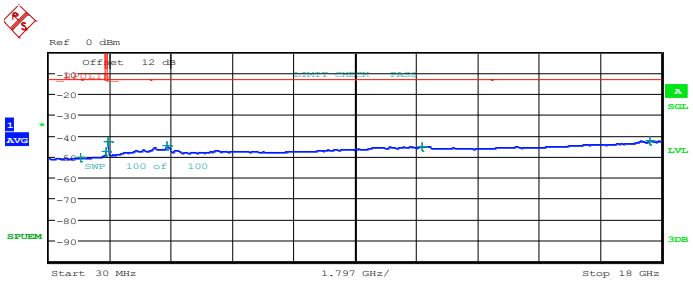
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	984.480000 M	-50.71	-37.71
1.000 G	1.700 G	1.00 M	1.699300 G	-47.93	-34.93
1.765 G	3.000 G	1.00 M	1.767470 G	-42.84	-29.84
3.000 G	9.000 G	1.00 M	3.480000 G	-44.48	-31.48
9.000 G	13.000 G	1.00 M	10.948000 G	-45.21	-32.21
13.000 G	18.000 G	1.00 M	17.655000 G	-42.62	-29.62

Date: 11.DEC.2013 22:19:31

16QAM (RB Size 1, RB Offset 0)

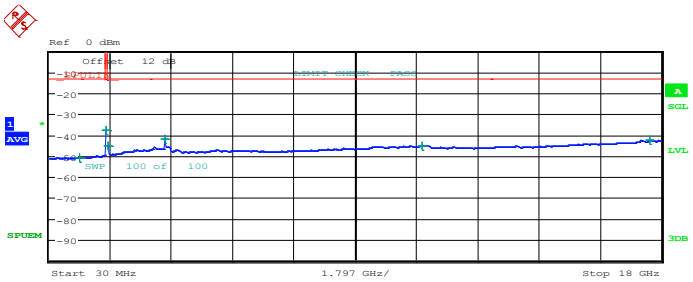


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	943.740000 M	-50.62	-37.62
1.000 G	1.700 G	1.00 M	1.699300 G	-47.74	-34.74
1.765 G	3.000 G	1.00 M	1.767470 G	-42.81	-29.81
3.000 G	9.000 G	1.00 M	3.480000 G	-44.77	-31.77
9.000 G	13.000 G	1.00 M	10.972000 G	-45.08	-32.08
13.000 G	18.000 G	1.00 M	17.655000 G	-42.57	-29.57

Date: 11.DEC.2013 22:18:34

Band :	LTE Band 4	Channel :	CH20050 (Low)
Band Width :	20MHz		

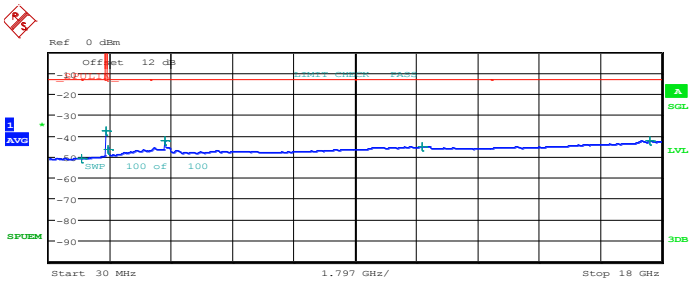
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	924.340000 M	-50.79	-37.79
1.000 G	1.700 G	1.00 M	1.693700 G	-37.68	-24.68
1.765 G	3.000 G	1.00 M	1.766235 G	-45.52	-32.52
3.000 G	9.000 G	1.00 M	3.420000 G	-42.13	-29.13
9.000 G	13.000 G	1.00 M	10.960000 G	-45.13	-32.13
13.000 G	18.000 G	1.00 M	17.650000 G	-42.66	-29.66

Date: 11.DEC.2013 22:25:42

16QAM (RB Size 1, RB Offset 0)

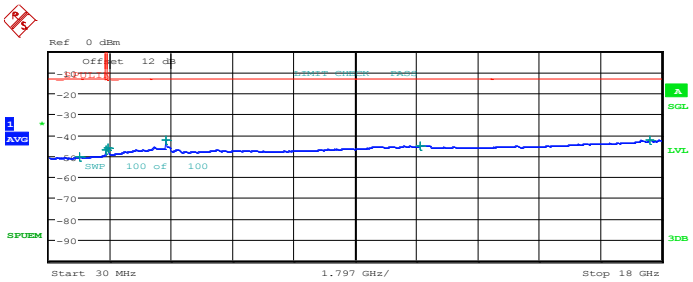


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	993.210000 M	-50.84	-37.84
1.000 G	1.700 G	1.00 M	1.693700 G	-37.89	-24.89
1.765 G	3.000 G	1.00 M	1.767470 G	-46.55	-33.55
3.000 G	9.000 G	1.00 M	3.420000 G	-42.57	-29.57
9.000 G	13.000 G	1.00 M	10.972000 G	-45.22	-32.22
13.000 G	18.000 G	1.00 M	17.660000 G	-42.66	-29.66

Date: 11.DEC.2013 22:27:07

Band :	LTE Band 4	Channel :	CH20175 (Middle)
Band Width :	20MHz		

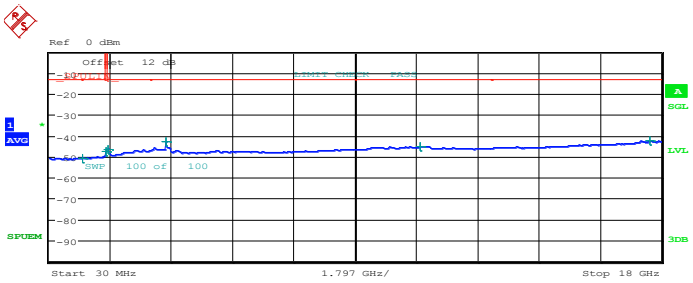
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	915.610000 M	-50.66	-37.66
1.000 G	1.700 G	1.00 M	1.699300 G	-47.37	-34.37
1.765 G	3.000 G	1.00 M	1.766235 G	-46.38	-33.38
3.000 G	9.000 G	1.00 M	3.444000 G	-42.66	-29.66
9.000 G	13.000 G	1.00 M	10.916000 G	-45.18	-32.18
13.000 G	18.000 G	1.00 M	17.650000 G	-42.61	-29.61

Date: 11.DEC.2013 22:24:14

16QAM (RB Size 1, RB Offset 0)

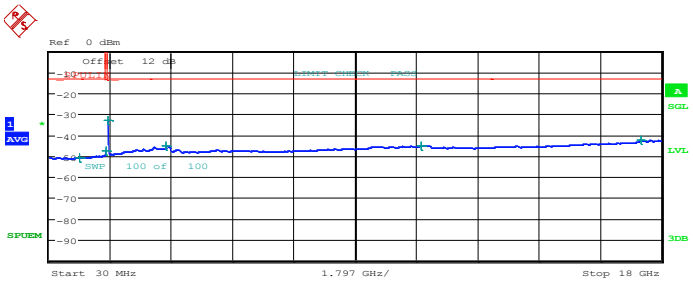


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	997.090000 M	-50.74	-37.74
1.000 G	1.700 G	1.00 M	1.698600 G	-47.65	-34.65
1.765 G	3.000 G	1.00 M	1.767470 G	-46.51	-33.51
3.000 G	9.000 G	1.00 M	3.444000 G	-43.06	-30.06
9.000 G	13.000 G	1.00 M	10.928000 G	-45.26	-32.26
13.000 G	18.000 G	1.00 M	17.650000 G	-42.59	-29.59

Date: 11.DEC.2013 22:23:19

Band :	LTE Band 4	Channel :	CH20300 (High)
Band Width :	20MHz		

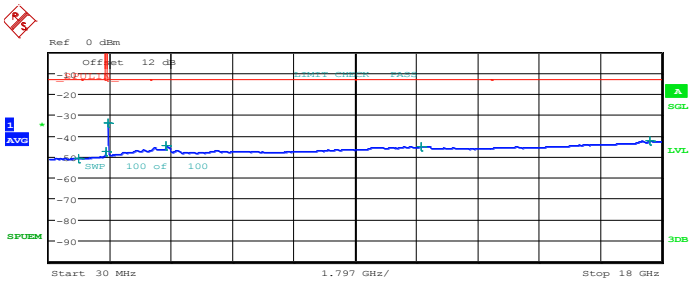
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	914.640000 M	-50.78	-37.78
1.000 G	1.700 G	1.00 M	1.699300 G	-47.52	-34.52
1.765 G	3.000 G	1.00 M	1.766235 G	-33.18	-20.18
3.000 G	9.000 G	1.00 M	3.468000 G	-45.15	-32.15
9.000 G	13.000 G	1.00 M	10.948000 G	-45.10	-32.10
13.000 G	18.000 G	1.00 M	17.390000 G	-42.65	-29.65

Date: 11.DEC.2013 22:33:15

16QAM (RB Size 1, RB Offset 0)

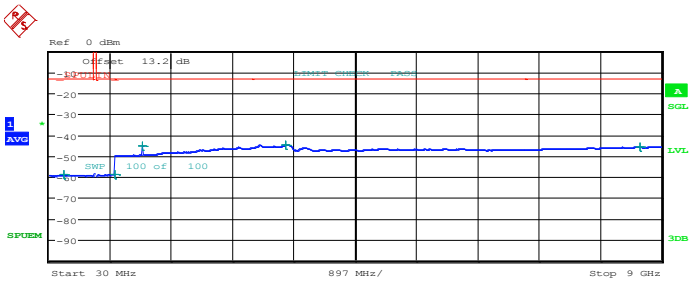


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	882.630000 M	-50.78	-37.78
1.000 G	1.700 G	1.00 M	1.698600 G	-47.77	-34.77
1.765 G	3.000 G	1.00 M	1.766235 G	-33.89	-20.89
3.000 G	9.000 G	1.00 M	3.468000 G	-44.98	-31.98
9.000 G	13.000 G	1.00 M	10.952000 G	-45.24	-32.24
13.000 G	18.000 G	1.00 M	17.650000 G	-42.65	-29.65

Date: 11.DEC.2013 22:32:16

Band :	LTE Band 12	Channel :	CH23017 (Low)
Band Width :	1.4MHz		

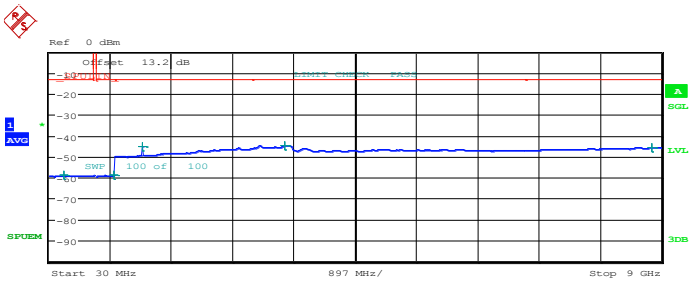
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	241.200000 M	-59.10	-46.10
725.000 M	1.000 G	100.00 k	994.225000 M	-58.84	-45.84
1.000 G	3.000 G	1.00 M	1.400000 G	-45.11	-32.11
3.000 G	7.000 G	1.00 M	3.492000 G	-44.74	-31.74
7.000 G	9.000 G	1.00 M	8.686000 G	-45.74	-32.74

Date: 16.DEC.2013 10:31:27

16QAM (RB Size 1, RB Offset 0)

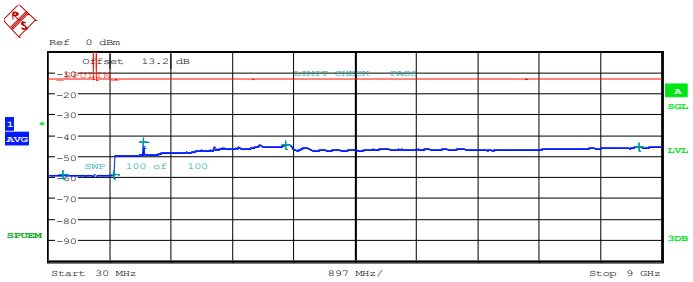


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	243.180000 M	-59.10	-46.10
725.000 M	1.000 G	100.00 k	972.775000 M	-59.05	-46.05
1.000 G	3.000 G	1.00 M	1.400000 G	-45.09	-32.09
3.000 G	7.000 G	1.00 M	3.480000 G	-44.73	-31.73
7.000 G	9.000 G	1.00 M	8.854000 G	-45.71	-32.71

Date: 16.DEC.2013 10:30:31

Band :	LTE Band 12	Channel :	CH23095 (Middle)
Band Width :	1.4MHz		

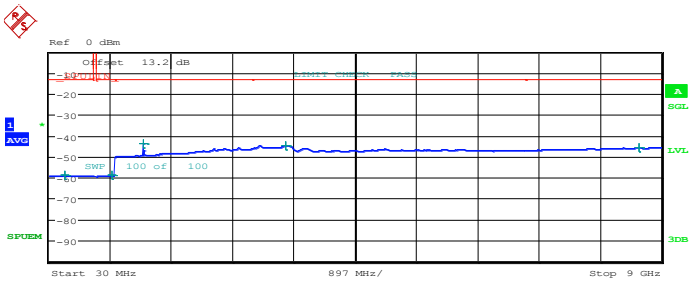
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	237.900000 M	-58.98	-45.98
725.000 M	1.000 G	100.00 k	973.600000 M	-58.92	-45.92
1.000 G	3.000 G	1.00 M	1.414000 G	-43.47	-30.47
3.000 G	7.000 G	1.00 M	3.496000 G	-44.62	-31.62
7.000 G	9.000 G	1.00 M	8.676000 G	-45.73	-32.73

Date: 16.DEC.2013 10:33:25

16QAM (RB Size 1, RB Offset 0)

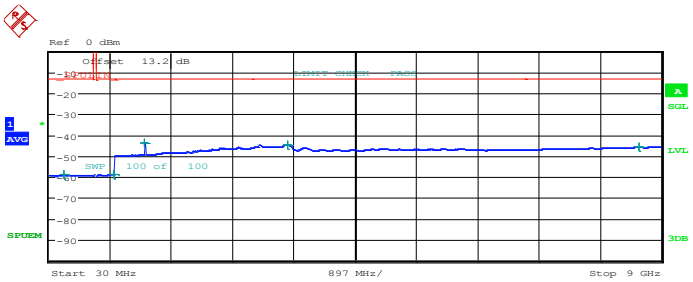


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	257.700000 M	-59.12	-46.12
725.000 M	1.000 G	100.00 k	954.350000 M	-58.88	-45.88
1.000 G	3.000 G	1.00 M	1.414000 G	-43.90	-30.90
3.000 G	7.000 G	1.00 M	3.492000 G	-44.63	-31.63
7.000 G	9.000 G	1.00 M	8.672000 G	-45.64	-32.64

Date: 16.DEC.2013 10:34:27

Band :	LTE Band 12	Channel :	CH23173 (High)
Band Width :	1.4MHz		

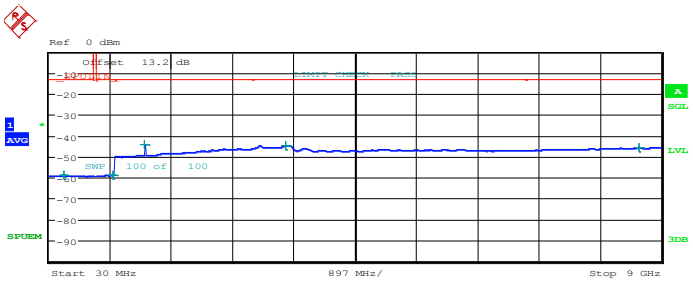
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	249.780000 M	-59.09	-46.09
725.000 M	1.000 G	100.00 k	983.775000 M	-58.94	-45.94
1.000 G	3.000 G	1.00 M	1.430000 G	-43.74	-30.74
3.000 G	7.000 G	1.00 M	3.516000 G	-44.69	-31.69
7.000 G	9.000 G	1.00 M	8.666000 G	-45.74	-32.74

Date: 16.DEC.2013 10:45:23

16QAM (RB Size 1, RB Offset 0)

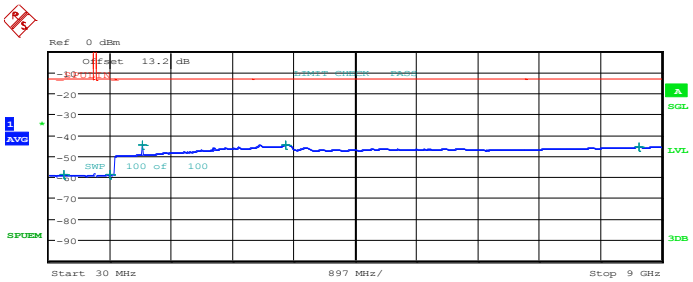


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	249.120000 M	-59.11	-46.11
725.000 M	1.000 G	100.00 k	961.500000 M	-58.94	-45.94
1.000 G	3.000 G	1.00 M	1.430000 G	-44.18	-31.18
3.000 G	7.000 G	1.00 M	3.500000 G	-44.67	-31.67
7.000 G	9.000 G	1.00 M	8.676000 G	-45.69	-32.69

Date: 16.DEC.2013 10:44:25

Band :	LTE Band 12	Channel :	CH23025 (Low)
Band Width :	3MHz		

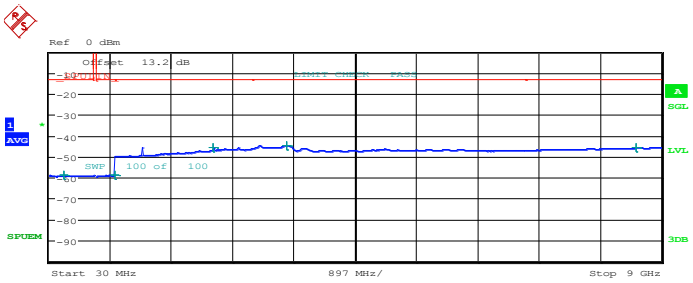
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	246.480000 M	-59.10	-46.10
725.000 M	1.000 G	100.00 k	919.150000 M	-59.03	-46.03
1.000 G	3.000 G	1.00 M	1.400000 G	-44.78	-31.78
3.000 G	7.000 G	1.00 M	3.496000 G	-44.65	-31.65
7.000 G	9.000 G	1.00 M	8.672000 G	-45.79	-32.79

Date: 16.DEC.2013 10:53:32

16QAM (RB Size 1, RB Offset 0)

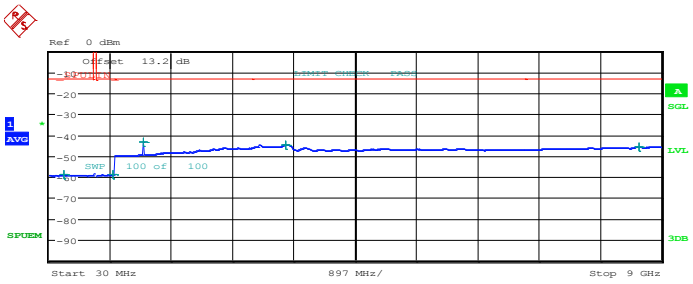


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	239.880000 M	-58.88	-45.88
725.000 M	1.000 G	100.00 k	994.225000 M	-58.99	-45.99
1.000 G	3.000 G	1.00 M	2.436000 G	-45.55	-32.55
3.000 G	7.000 G	1.00 M	3.512000 G	-44.65	-31.65
7.000 G	9.000 G	1.00 M	8.626000 G	-45.75	-32.75

Date: 16.DEC.2013 10:52:33

Band :	LTE Band 12	Channel :	CH23095 (Middle)
Band Width :	3MHz		

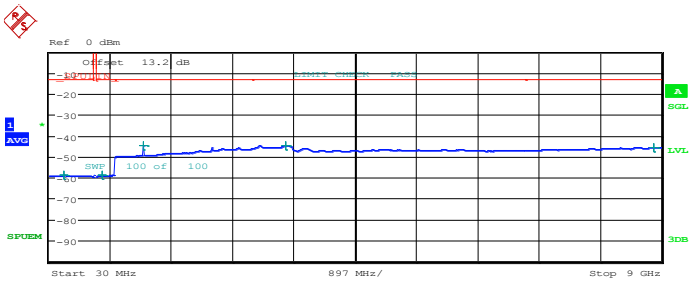
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	251.100000 M	-59.10	-46.10
725.000 M	1.000 G	100.00 k	969.200000 M	-58.99	-45.99
1.000 G	3.000 G	1.00 M	1.412000 G	-43.33	-30.33
3.000 G	7.000 G	1.00 M	3.500000 G	-44.68	-31.68
7.000 G	9.000 G	1.00 M	8.666000 G	-45.68	-32.68

Date: 16.DEC.2013 10:56:10

16QAM (RB Size 1, RB Offset 0)

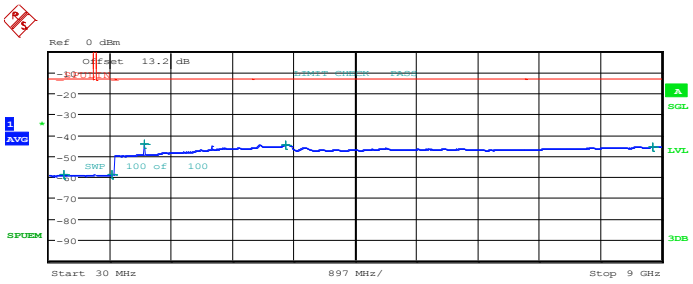


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	241.200000 M	-59.04	-46.04
725.000 M	1.000 G	100.00 k	802.000000 M	-58.97	-45.97
1.000 G	3.000 G	1.00 M	1.412000 G	-44.67	-31.67
3.000 G	7.000 G	1.00 M	3.496000 G	-44.71	-31.71
7.000 G	9.000 G	1.00 M	8.878000 G	-45.80	-32.80

Date: 16.DEC.2013 11:01:52

Band :	LTE Band 12	Channel :	CH23165 (High)
Band Width :	3MHz		

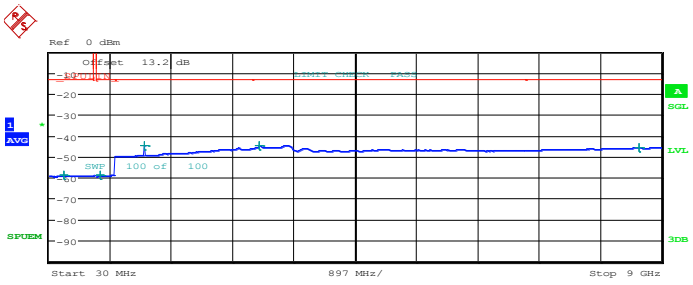
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	244.500000 M	-59.11	-46.11
725.000 M	1.000 G	100.00 k	945.825000 M	-59.05	-46.05
1.000 G	3.000 G	1.00 M	1.426000 G	-44.57	-31.57
3.000 G	7.000 G	1.00 M	3.488000 G	-44.66	-31.66
7.000 G	9.000 G	1.00 M	8.868000 G	-45.72	-32.72

Date: 16.DEC.2013 11:07:16

16QAM (RB Size 1, RB Offset 0)

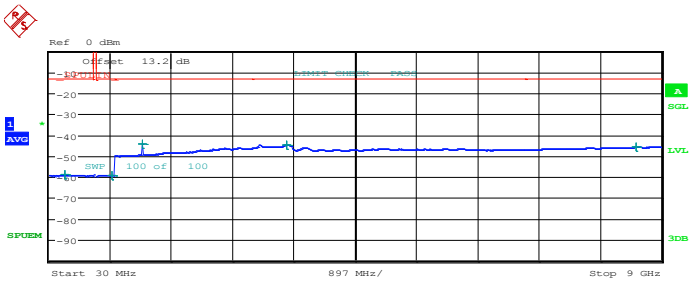


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	239.220000 M	-59.02	-46.02
725.000 M	1.000 G	100.00 k	781.375000 M	-58.91	-45.91
1.000 G	3.000 G	1.00 M	1.426000 G	-44.66	-31.66
3.000 G	7.000 G	1.00 M	3.112000 G	-44.70	-31.70
7.000 G	9.000 G	1.00 M	8.670000 G	-45.71	-32.71

Date: 16.DEC.2013 11:06:14

Band :	LTE Band 12	Channel :	CH23035 (Low)
Band Width :	5MHz		

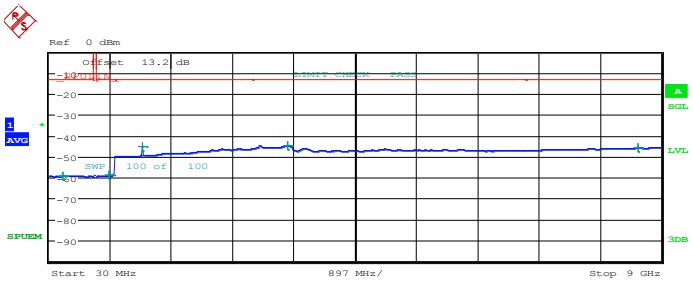
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	253.740000 M	-59.07	-46.07
725.000 M	1.000 G	100.00 k	944.725000 M	-59.21	-46.21
1.000 G	3.000 G	1.00 M	1.400000 G	-44.44	-31.44
3.000 G	7.000 G	1.00 M	3.504000 G	-44.66	-31.66
7.000 G	9.000 G	1.00 M	8.626000 G	-45.81	-32.81

Date: 16.DEC.2013 12:56:02

16QAM (RB Size 1, RB Offset 0)

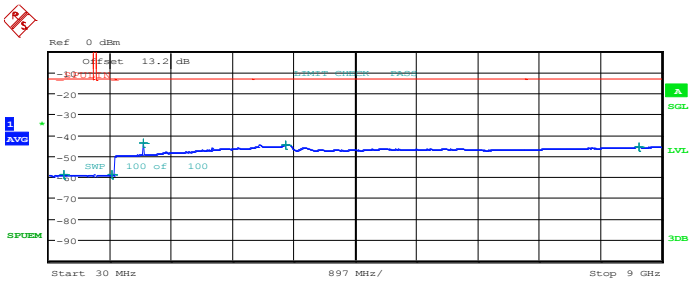


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	236.580000 M	-59.20	-46.20
725.000 M	1.000 G	100.00 k	904.300000 M	-59.07	-46.07
1.000 G	3.000 G	1.00 M	1.400000 G	-45.16	-32.16
3.000 G	7.000 G	1.00 M	3.516000 G	-44.75	-31.75
7.000 G	9.000 G	1.00 M	8.660000 G	-45.74	-32.74

Date: 16.DEC.2013 12:55:03

Band :	LTE Band 12	Channel :	CH23095 (Middle)
Band Width :	5MHz		

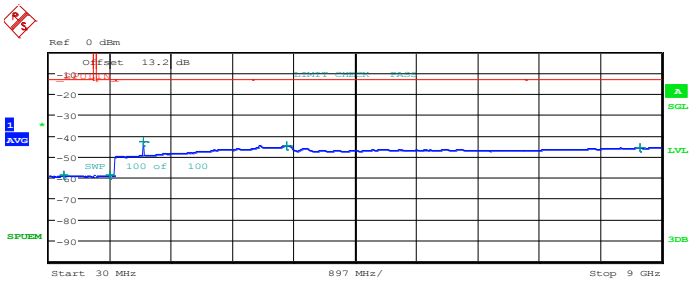
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	241.200000 M	-59.11	-46.11
725.000 M	1.000 G	100.00 k	945.275000 M	-59.07	-46.07
1.000 G	3.000 G	1.00 M	1.410000 G	-43.81	-30.81
3.000 G	7.000 G	1.00 M	3.500000 G	-44.74	-31.74
7.000 G	9.000 G	1.00 M	8.664000 G	-45.72	-32.72

Date: 16.DEC.2013 12:58:33

16QAM (RB Size 1, RB Offset 0)

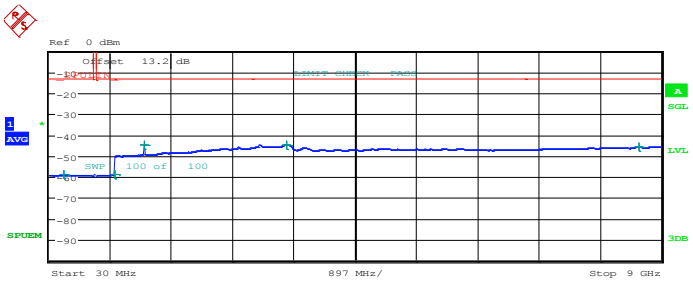


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	245.160000 M	-59.02	-46.02
725.000 M	1.000 G	100.00 k	923.825000 M	-59.10	-46.10
1.000 G	3.000 G	1.00 M	1.410000 G	-43.08	-30.08
3.000 G	7.000 G	1.00 M	3.508000 G	-44.77	-31.77
7.000 G	9.000 G	1.00 M	8.680000 G	-45.75	-32.75

Date: 16.DEC.2013 12:59:31

Band :	LTE Band 12	Channel :	CH23155 (High)
Band Width :	5MHz		

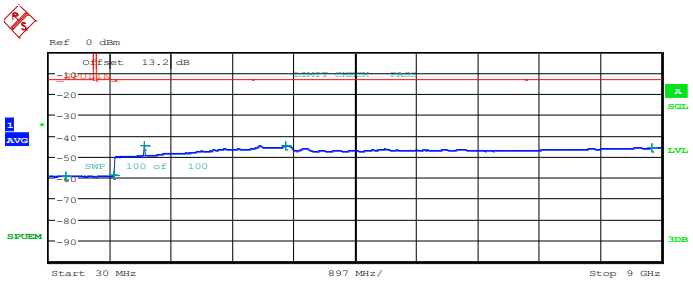
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	243.180000 M	-59.13	-46.13
725.000 M	1.000 G	100.00 k	994.500000 M	-58.96	-45.96
1.000 G	3.000 G	1.00 M	1.422000 G	-44.84	-31.84
3.000 G	7.000 G	1.00 M	3.508000 G	-44.70	-31.70
7.000 G	9.000 G	1.00 M	8.666000 G	-45.74	-32.74

Date: 16.DEC.2013 13:07:13

16QAM (RB Size 1, RB Offset 0)

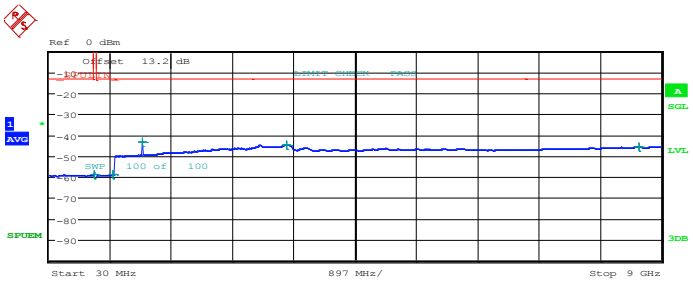


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	267.600000 M	-59.22	-46.22
725.000 M	1.000 G	100.00 k	983.500000 M	-59.10	-46.10
1.000 G	3.000 G	1.00 M	1.422000 G	-44.91	-31.91
3.000 G	7.000 G	1.00 M	3.500000 G	-44.75	-31.75
7.000 G	9.000 G	1.00 M	8.858000 G	-45.75	-32.75

Date: 16.DEC.2013 13:04:24

Band :	LTE Band 12	Channel :	CH23060 (Low)
Band Width :	10MHz		

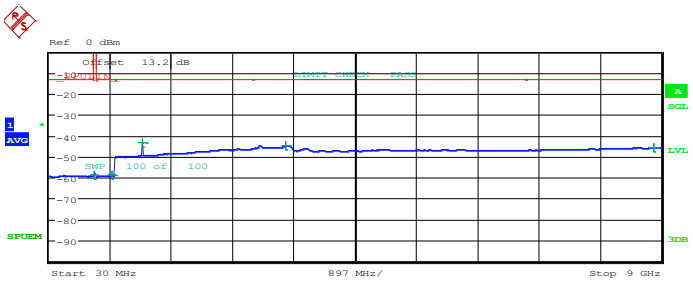
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	689.340000 M	-59.06	-46.06
725.000 M	1.000 G	100.00 k	957.925000 M	-59.08	-46.08
1.000 G	3.000 G	1.00 M	1.400000 G	-43.41	-30.41
3.000 G	7.000 G	1.00 M	3.504000 G	-44.72	-31.72
7.000 G	9.000 G	1.00 M	8.666000 G	-45.77	-32.77

Date: 16.DEC.2013 13:19:58

16QAM (RB Size 1, RB Offset 0)

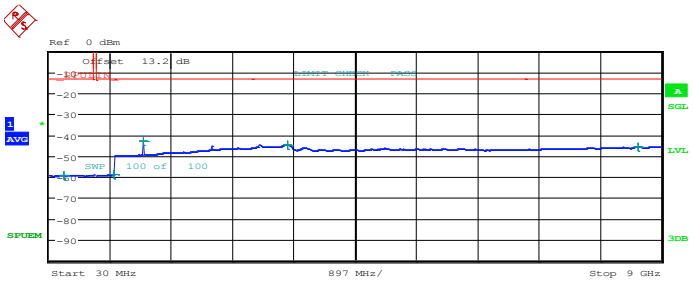


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	689.340000 M	-59.05	-46.05
725.000 M	1.000 G	100.00 k	954.350000 M	-59.10	-46.10
1.000 G	3.000 G	1.00 M	1.400000 G	-43.31	-30.31
3.000 G	7.000 G	1.00 M	3.500000 G	-44.75	-31.75
7.000 G	9.000 G	1.00 M	8.888000 G	-45.78	-32.78

Date: 16.DEC.2013 13:17:18

Band :	LTE Band 12	Channel :	CH23095 (Moddle)
Band Width :	10MHz		

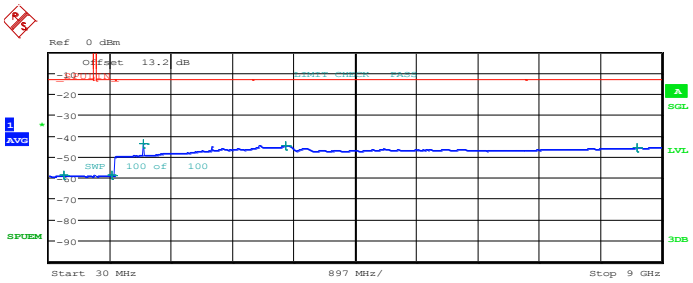
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	242.520000 M	-59.16	-46.16
725.000 M	1.000 G	100.00 k	974.700000 M	-59.07	-46.07
1.000 G	3.000 G	1.00 M	1.406000 G	-42.72	-29.72
3.000 G	7.000 G	1.00 M	3.520000 G	-44.76	-31.76
7.000 G	9.000 G	1.00 M	8.662000 G	-45.70	-32.70

Date: 16.DEC.2013 13:25:46

16QAM (RB Size 1, RB Offset 0)

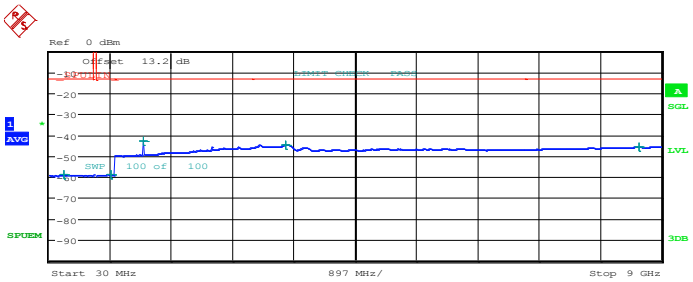


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	239.220000 M	-59.11	-46.11
725.000 M	1.000 G	100.00 k	945.825000 M	-59.10	-46.10
1.000 G	3.000 G	1.00 M	1.406000 G	-43.73	-30.73
3.000 G	7.000 G	1.00 M	3.500000 G	-44.72	-31.72
7.000 G	9.000 G	1.00 M	8.642000 G	-45.62	-32.62

Date: 16.DEC.2013 13:26:43

Band :	LTE Band 12	Channel :	CH23130 (High)
Band Width :	10MHz		

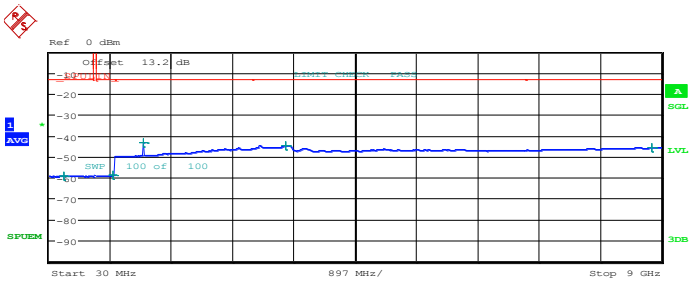
QPSK (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	247.140000 M	-59.11	-46.11
725.000 M	1.000 G	100.00 k	933.450000 M	-59.04	-46.04
1.000 G	3.000 G	1.00 M	1.414000 G	-42.92	-29.92
3.000 G	7.000 G	1.00 M	3.500000 G	-44.77	-31.77
7.000 G	9.000 G	1.00 M	8.672000 G	-45.73	-32.73

Date: 16.DEC.2013 13:29:54

16QAM (RB Size 1, RB Offset 0)



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	244.500000 M	-59.23	-46.23
725.000 M	1.000 G	100.00 k	958.475000 M	-58.96	-45.96
1.000 G	3.000 G	1.00 M	1.414000 G	-43.43	-30.43
3.000 G	7.000 G	1.00 M	3.488000 G	-44.75	-31.75
7.000 G	9.000 G	1.00 M	8.862000 G	-45.74	-32.74

Date: 16.DEC.2013 13:28:51

3.6 Radiated Spurious Emission Measurement

3.6.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.6.2 Measuring Instruments

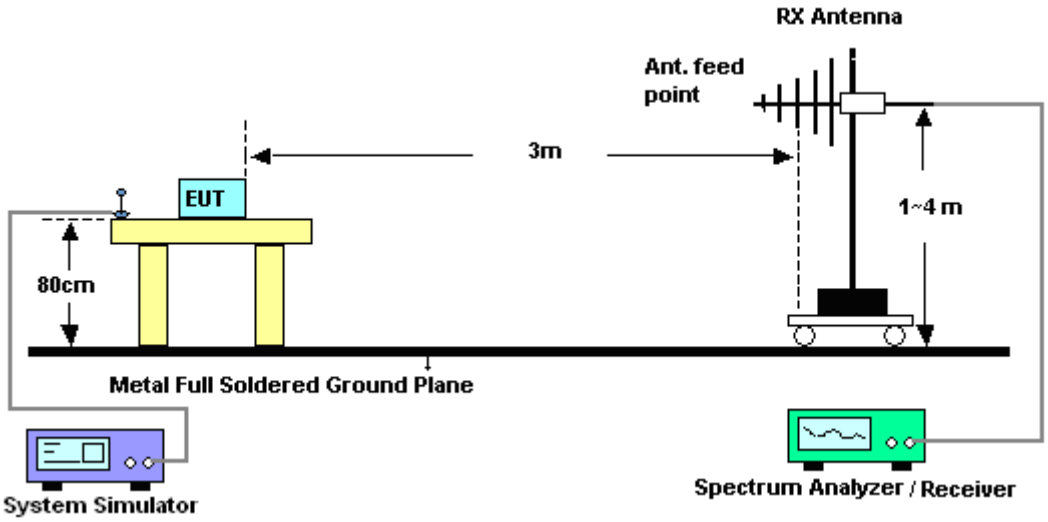
The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

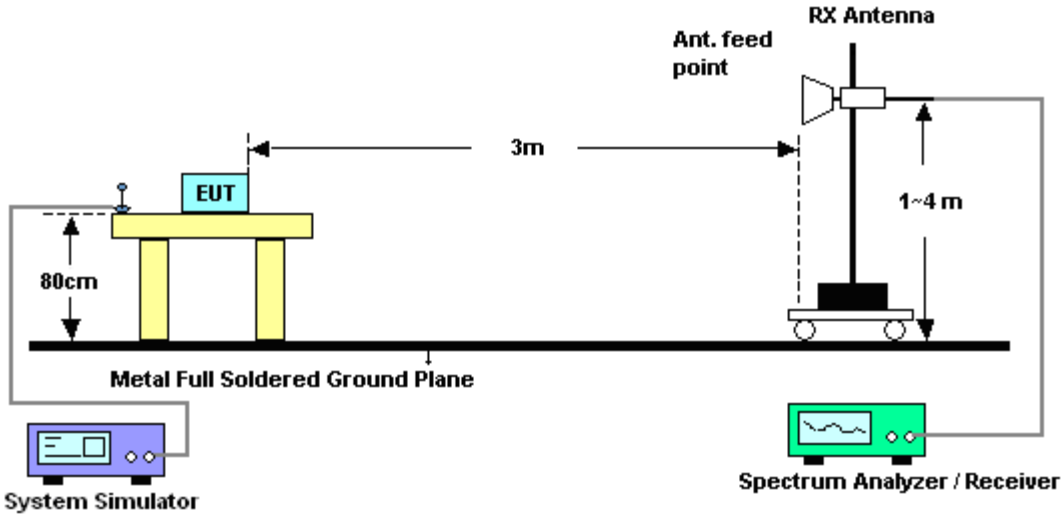
1. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
12. ERP (dBm) = EIRP - 2.15

3.6.4 Test Setup

For radiated emissions from 30MHz to 1GHz

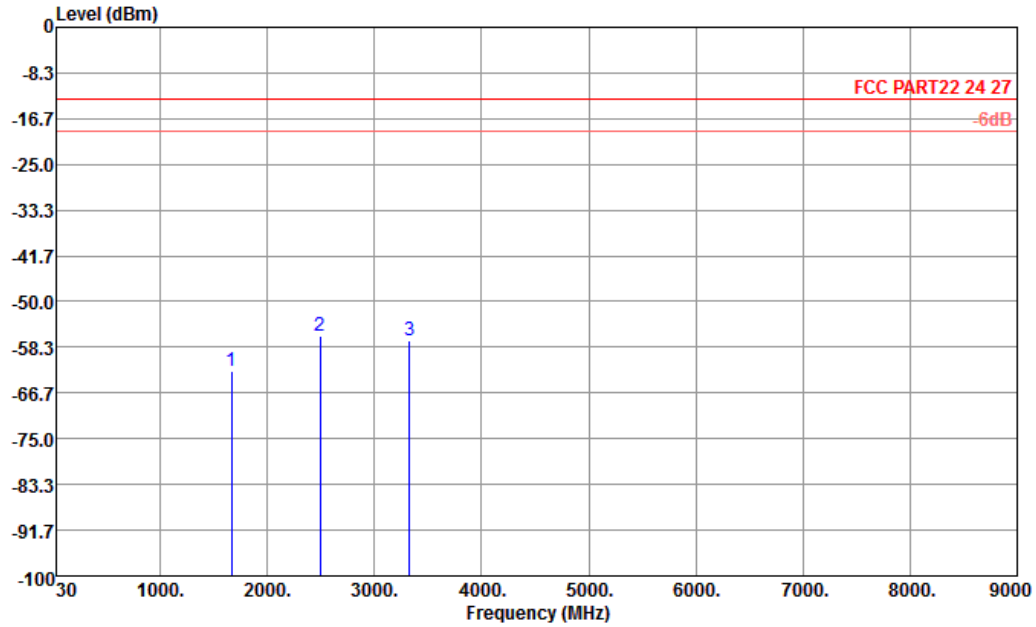


For radiated emissions above 1GHz



3.6.5 Test Result of Field Strength of Spurious Radiated

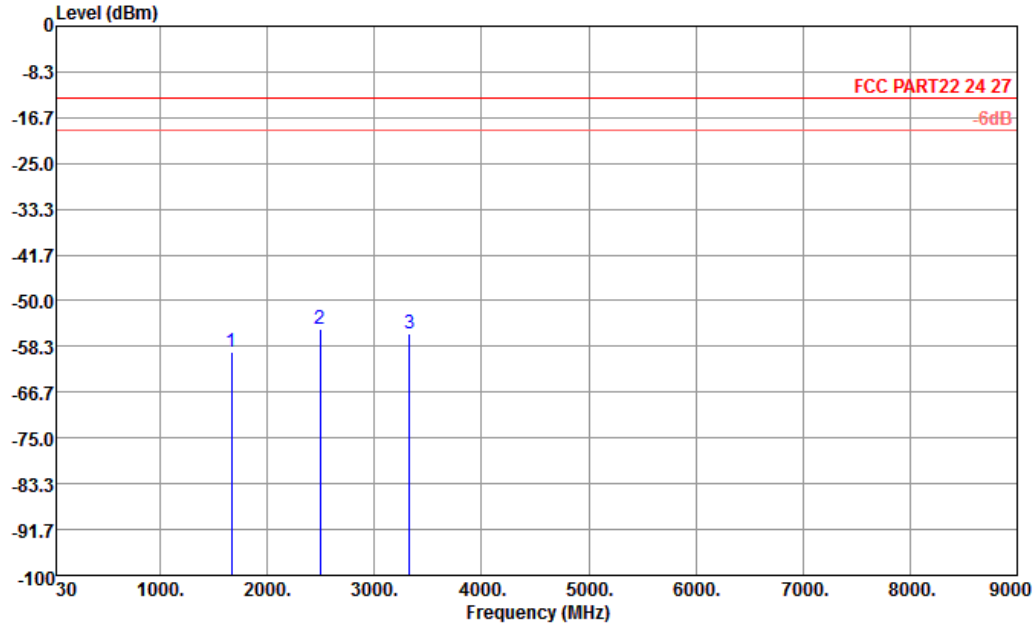
Band :	LTE Band 5	**Temperature :**	23~24°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	43~44%
Test Engineer :	Stone Lin	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1664	-62.75	-13	-49.75	-63.30	-63.40	0.57	3.37	H	Pass
2496	-56.39	-13	-43.39	-64.91	-58.62	0.78	5.16	H	Pass
3326	-57.21	-13	-44.21	-66.57	-60.85	0.87	6.66	H	Pass

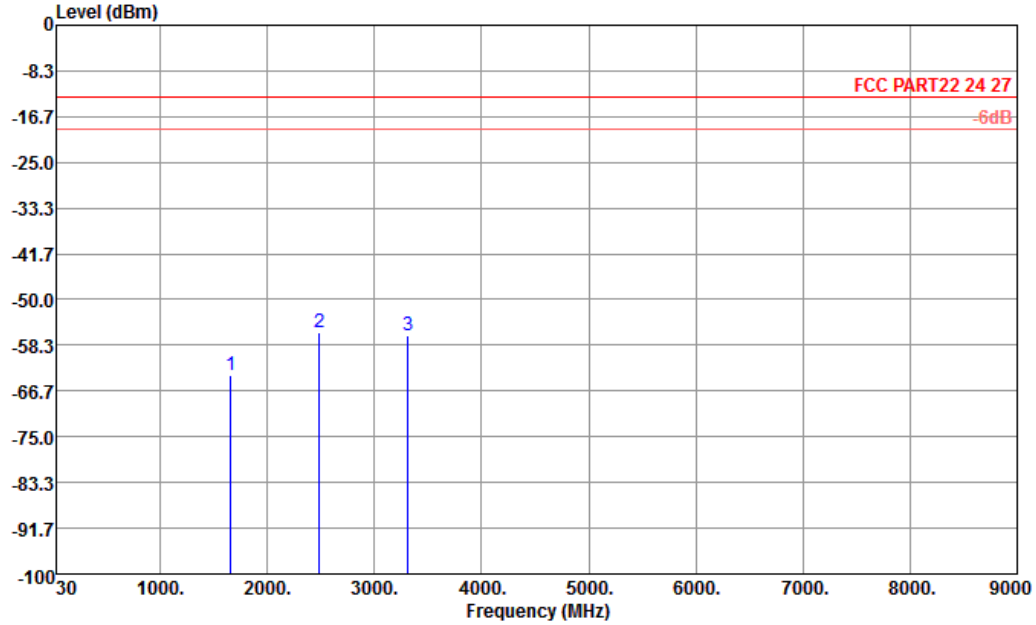
Band :	LTE Band 5	Temperature :	23~24°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1664	-59.46	-13	-46.46	-63.11	-60.11	0.57	3.37	V	Pass
2495	-55.10	-13	-42.10	-64.22	-57.33	0.78	5.16	V	Pass
3326	-56.04	-13	-43.04	-65.97	-59.68	0.87	6.66	V	Pass

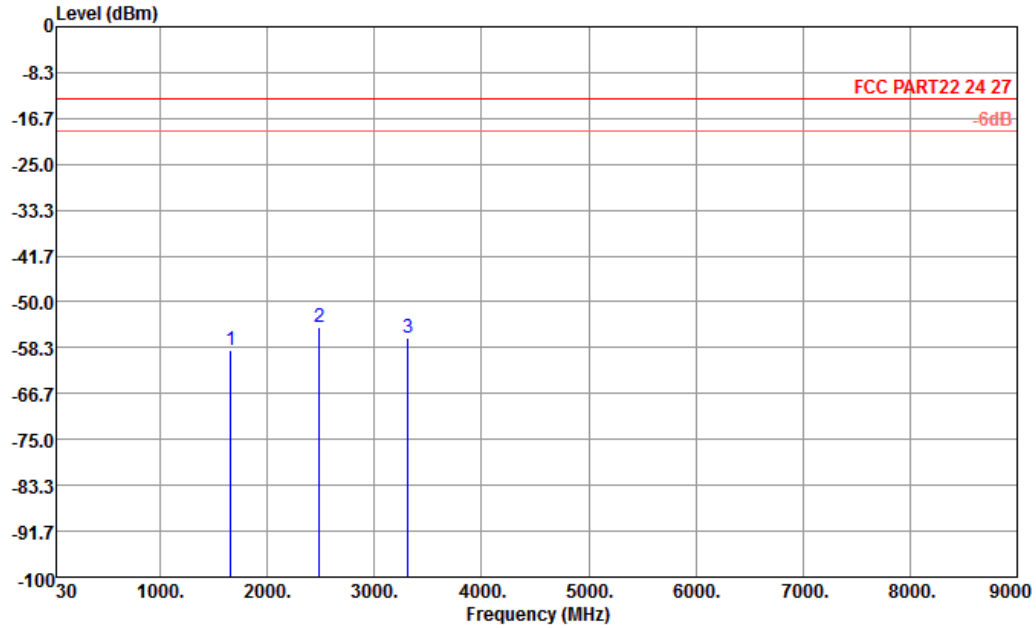
Band :	LTE Band 5	**Temperature :**	23~24°C
Test Mode :	5MHz QPSK RB Size 1 Offset 24	**Relative Humidity :**	43~44%
Test Engineer :	Stone Lin	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1658	-63.65	-13	-50.65	-64.08	-64.30	0.57	3.37	H	Pass
2487	-55.86	-13	-42.86	-64.38	-58.09	0.78	5.16	H	Pass
3316	-56.61	-13	-43.61	-65.97	-60.25	0.87	6.66	H	Pass

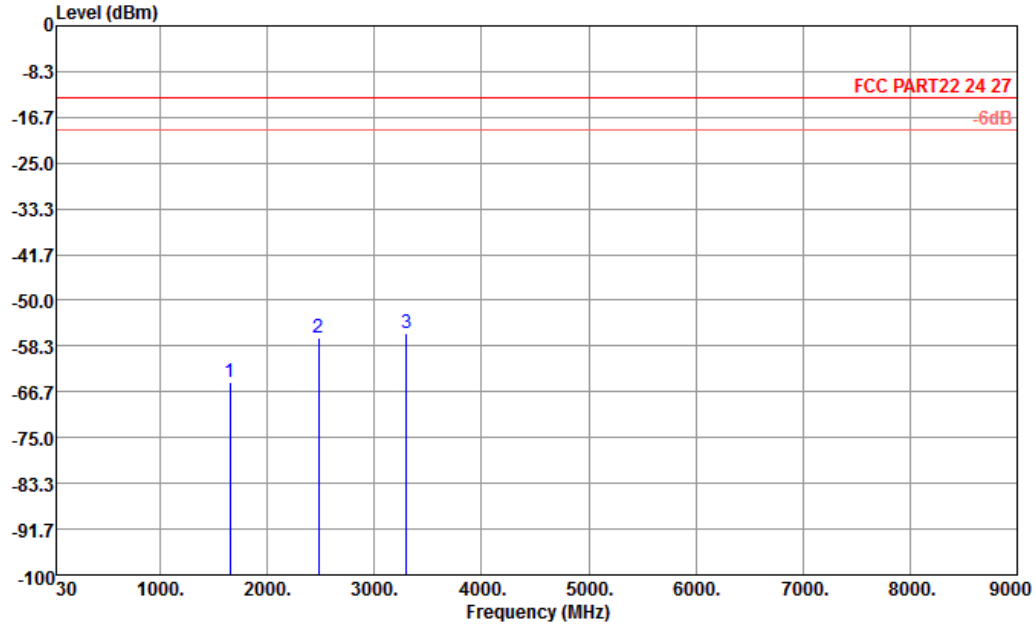
Band :	LTE Band 5	Temperature :	23~24°C
Test Mode :	5MHz QPSK RB Size 1 Offset 24	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1658	-58.72	-13	-45.72	-62.43	-59.37	0.57	3.37	V	Pass
2487	-54.71	-13	-41.71	-63.90	-56.94	0.78	5.16	V	Pass
3316	-56.41	-13	-43.41	-66.25	-60.05	0.87	6.66	V	Pass

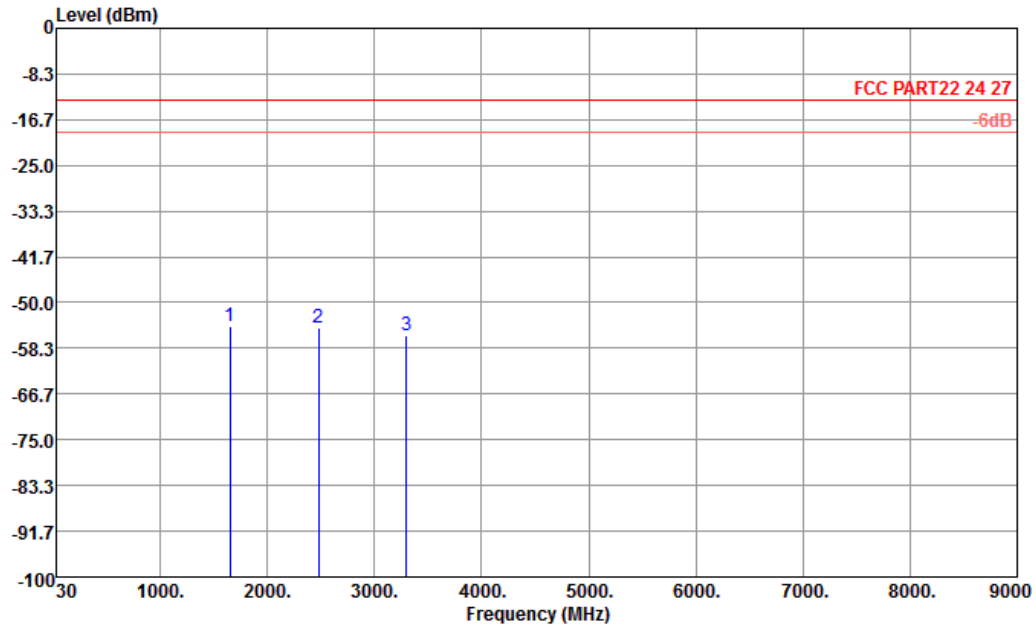
Band :	LTE Band 5	**Temperature :**	23~24°C
Test Mode :	3MHz QPSK RB Size 1 Offset 14	**Relative Humidity :**	43~44%
Test Engineer :	Stone Lin	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1652	-64.88	-13	-51.88	-65.31	-65.53	0.57	3.37	H	Pass
2476	-56.95	-13	-43.95	-64.76	-59.18	0.78	5.16	H	Pass
3302	-56.10	-13	-43.10	-65.46	-59.74	0.87	6.66	H	Pass

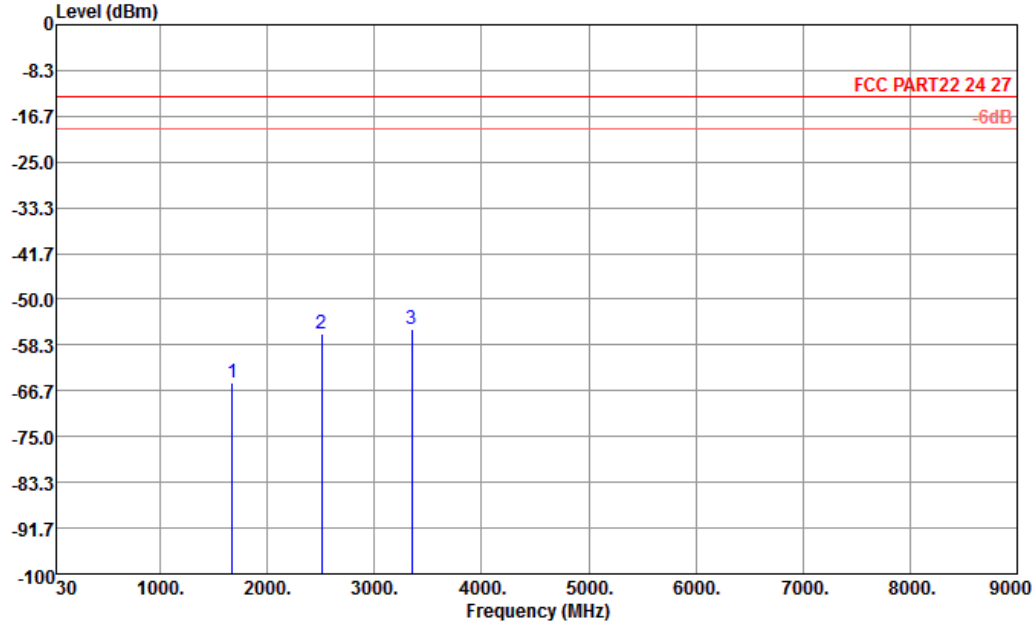
Band :	LTE Band 5	Temperature :	23~24°C
Test Mode :	3MHz QPSK RB Size 1 Offset 14	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1654	-54.32	-13	-41.32	-58.61	-54.97	0.57	3.37	V	Pass
2476	-54.71	-13	-41.71	-63.90	-56.94	0.78	5.16	V	Pass
3302	-56.05	-13	-43.05	-65.98	-59.69	0.87	6.66	V	Pass

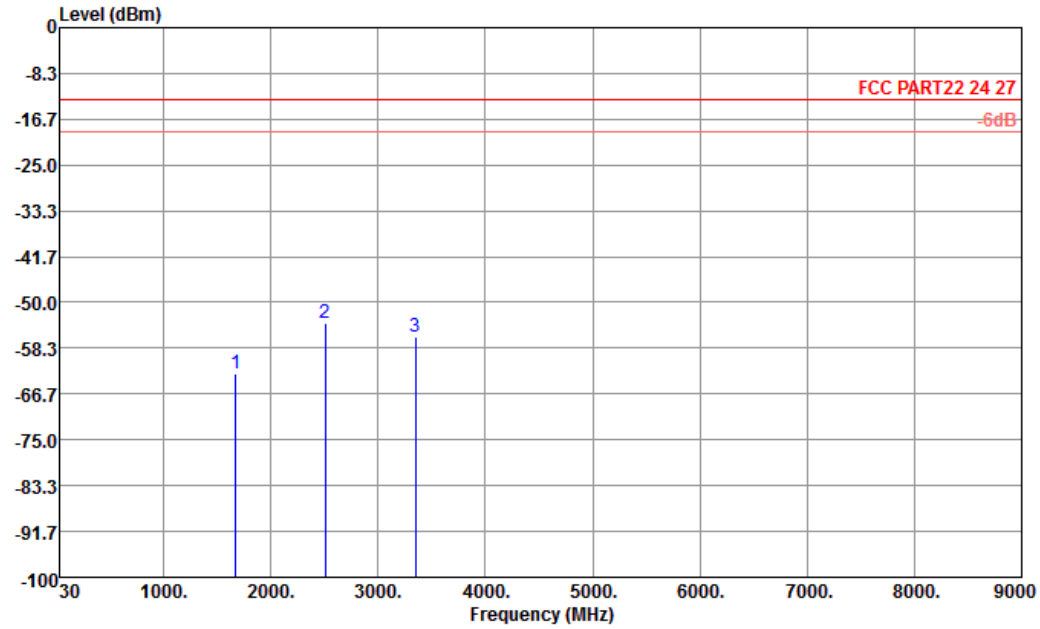
Band :	LTE Band 5	Temperature :	23~24°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 2	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-65.21	-13	-52.21	-65.64	-65.86	0.57	3.37	H	Pass
2510	-56.19	-13	-43.19	-64.71	-58.42	0.78	5.16	H	Pass
3346	-55.49	-13	-42.49	-64.85	-59.13	0.87	6.66	H	Pass

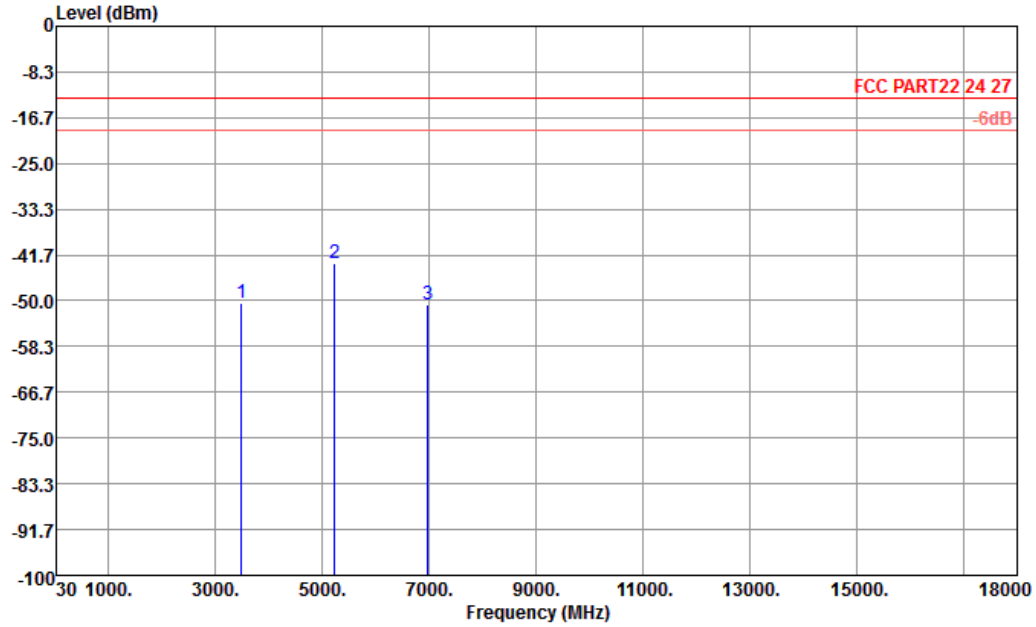
Band :	LTE Band 5	Temperature :	23~24°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset2	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1672	-62.97	-13	-49.97	-65.87	-63.62	0.57	3.37	V	Pass
2510	-53.66	-13	-40.66	-62.97	-55.89	0.78	5.16	V	Pass
3346	-56.14	-13	-43.14	-66.05	-59.78	0.87	6.66	V	Pass

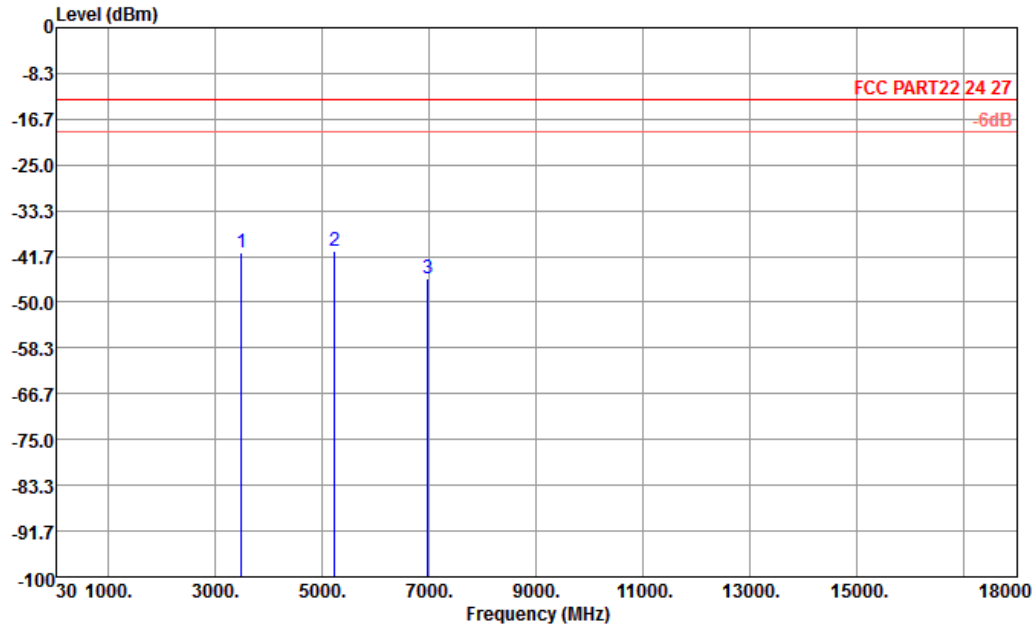
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	20MHz QPSK RB Size 1 Offset 49	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3490	-50.46	-13	-37.46	-61.66	-56.84	0.78	7.16	H	Pass
5234	-43.26	-13	-30.26	-57.62	-51.80	1.04	9.58	H	Pass
6978	-50.78	-13	-37.78	-64.75	-60.89	1.35	11.46	H	Pass

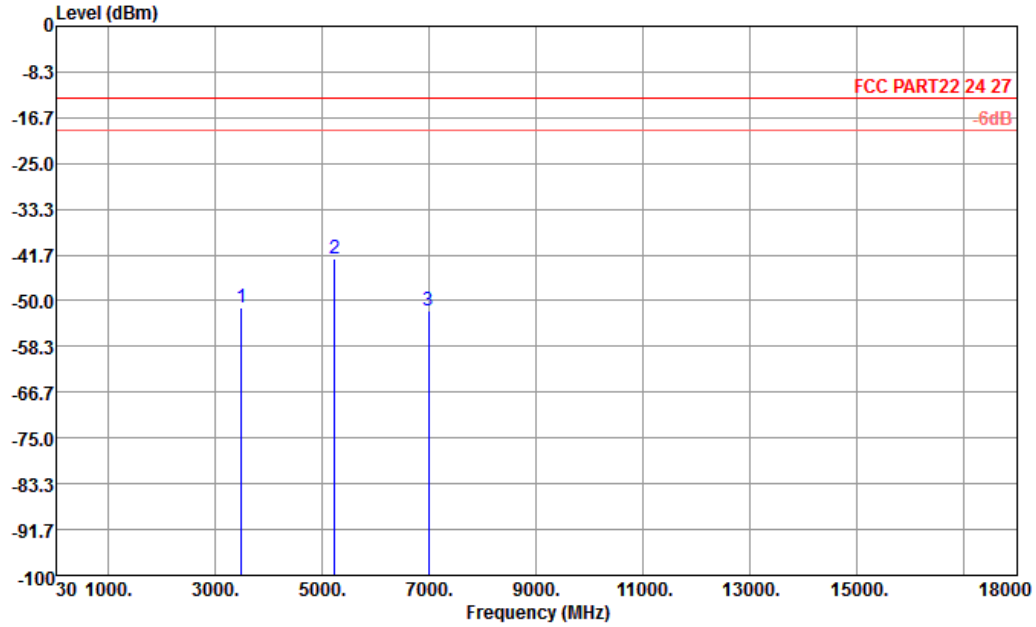
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	20MHz QPSK RB Size 1 Offset 49	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3490	-40.85	-13	-27.85	-53.27	-47.23	0.78	7.16	V	Pass
5234	-40.60	-13	-27.60	-54.16	-49.14	1.04	9.58	V	Pass
6982	-45.60	-13	-32.60	-59.68	-55.71	1.35	11.46	V	Pass

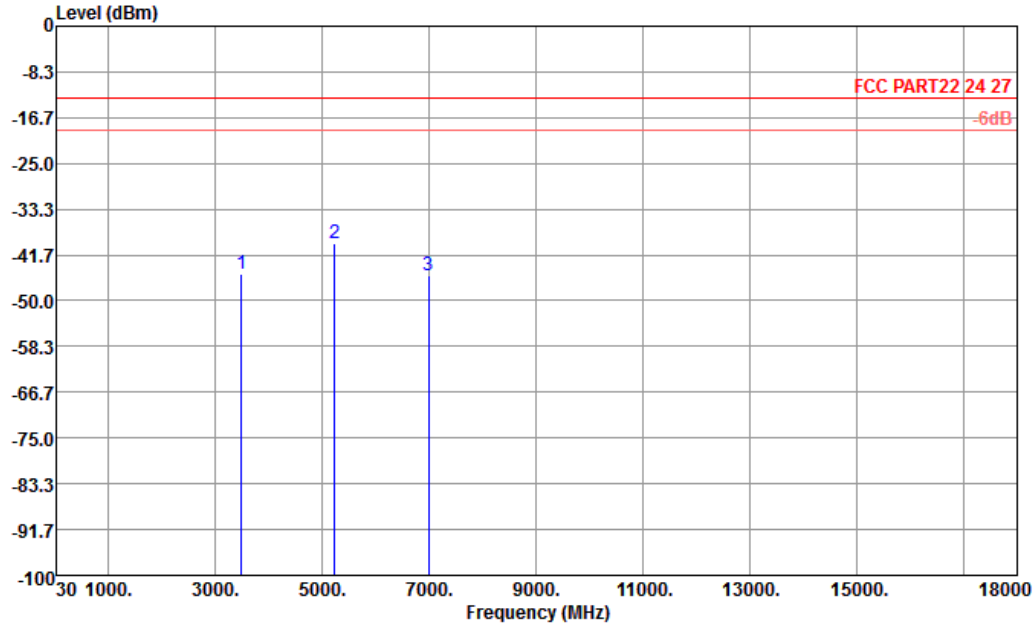
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	15MHz QPSK RB Size 1 Offset 37	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3496	-51.20	-13	-38.20	-62.29	-57.58	0.78	7.16	H	Pass
5242	-42.38	-13	-29.38	-56.82	-50.92	1.04	9.58	H	Pass
6990	-51.76	-13	-38.76	-65.54	-61.87	1.35	11.46	H	Pass

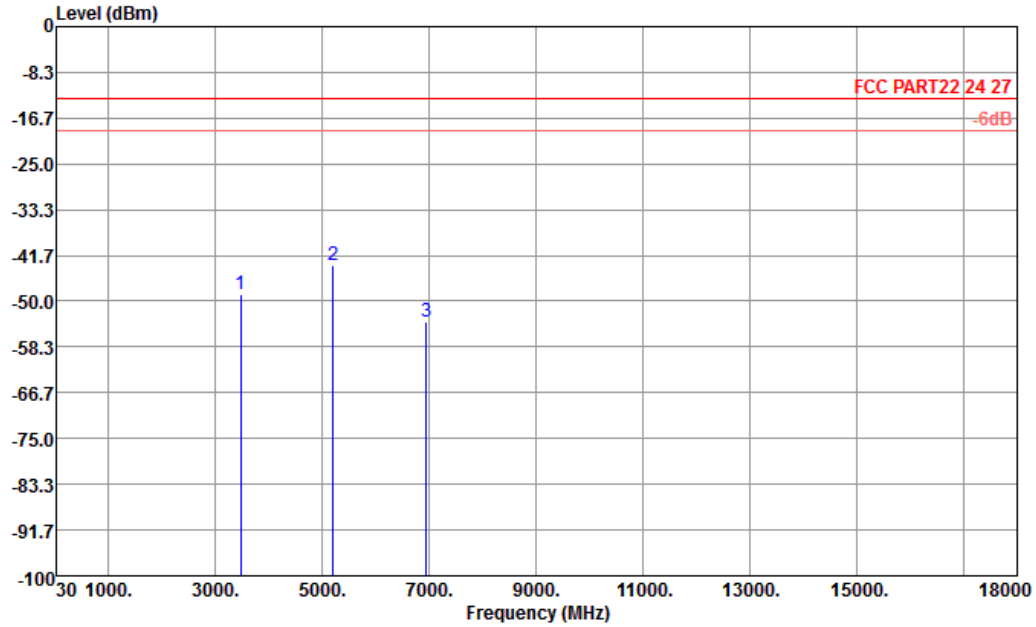
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	15MHz QPSK RB Size 1 Offset 37	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3494	-45.17	-13	-32.17	-57.16	-51.55	0.78	7.16	V	Pass
5242	-39.57	-13	-26.57	-53.2	-48.11	1.04	9.58	V	Pass
6992	-45.47	-13	-32.47	-59.57	-55.58	1.35	11.46	V	Pass

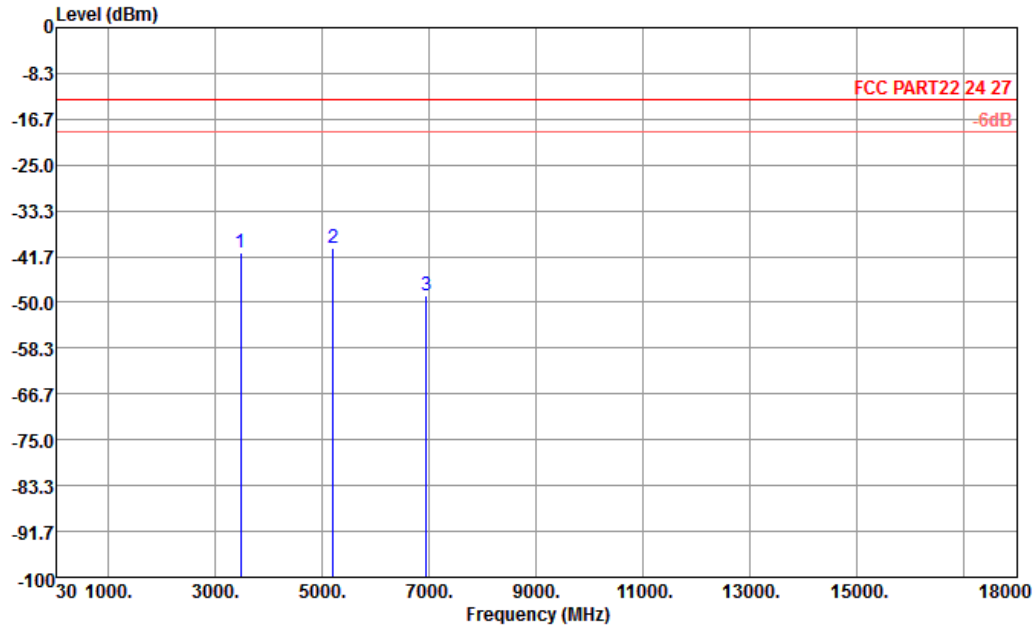
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	10MHz QPSK RB Size 1 Offset 49	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3474	-48.61	-13	-35.61	-60.19	-54.99	0.78	7.16	H	Pass
5210	-43.48	-13	-30.48	-57.85	-52.02	1.04	9.58	H	Pass
6950	-53.63	-13	-40.63	-66.33	-63.74	1.35	11.46	H	Pass

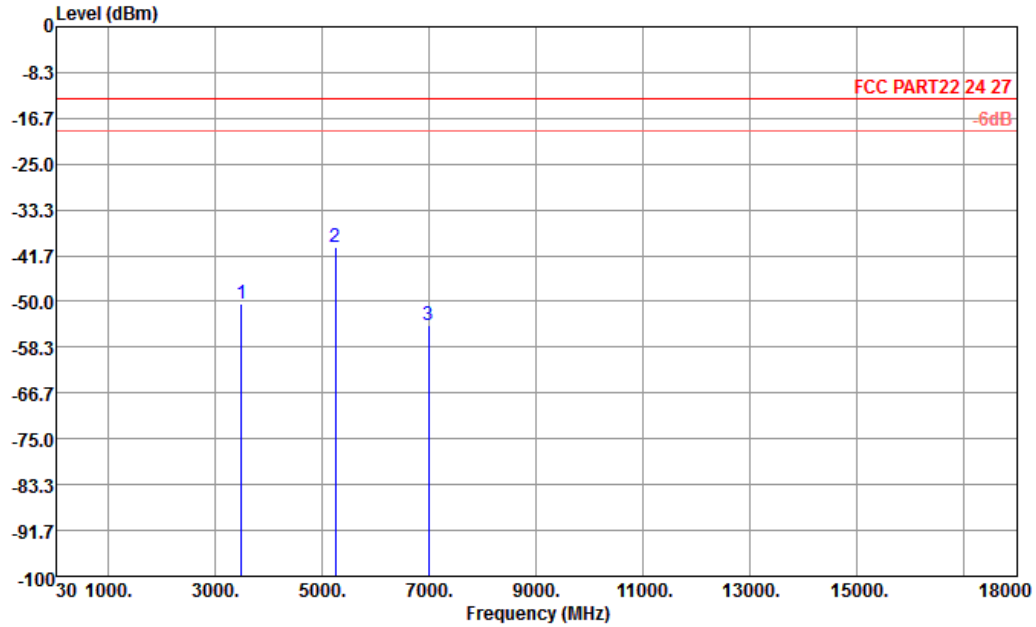
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	10MHz QPSK RB Size 1 Offset 49	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3474	-41.02	-13	-28.02	-53.44	-47.40	0.78	7.16	V	Pass
5210	-40.21	-13	-27.21	-53.82	-48.75	1.04	9.58	V	Pass
6950	-48.66	-13	-35.66	-62.07	-58.77	1.35	11.46	V	Pass

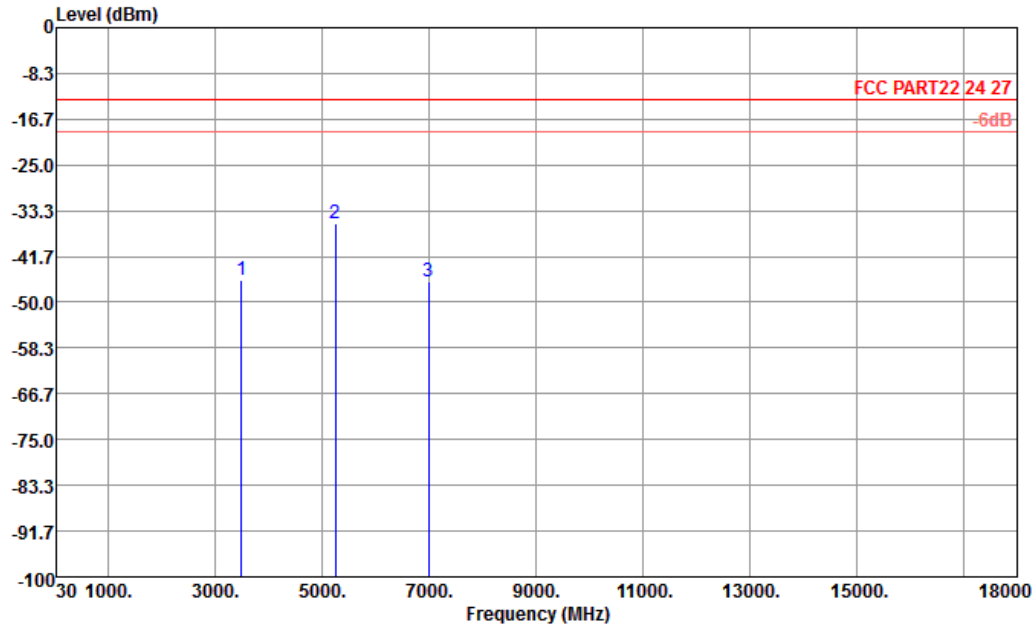
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3500	-50.52	-13	-37.52	-61.71	-56.90	0.78	7.16	H	Pass
5250	-40.09	-13	-27.09	-54.78	-48.63	1.04	9.58	H	Pass
7000	-54.40	-13	-41.40	-66.92	-64.51	1.35	11.46	H	Pass

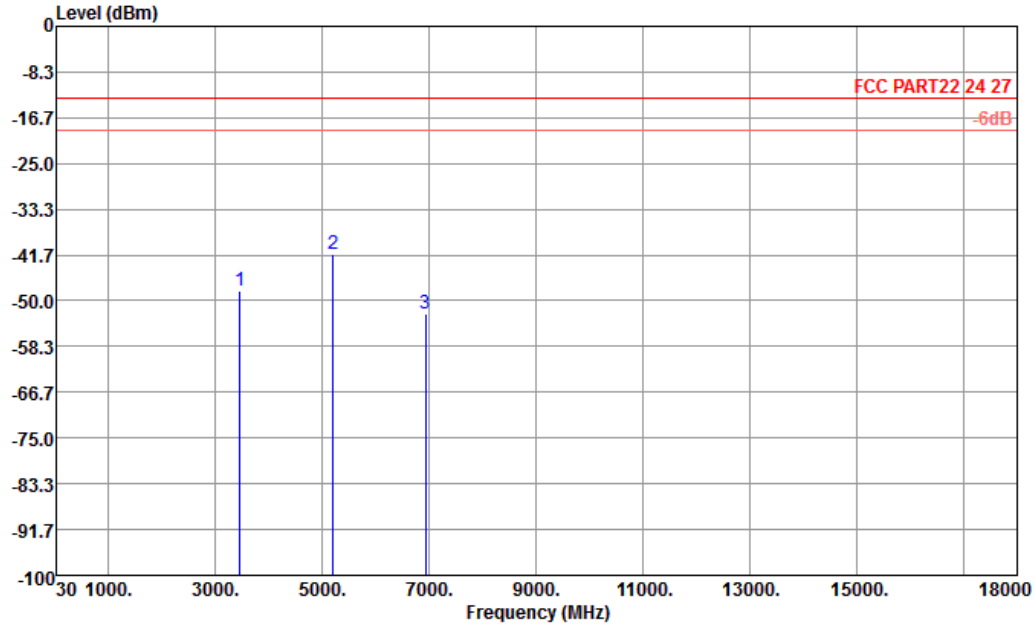
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3500	-45.83	-13	-32.83	-57.75	-52.21	0.78	7.16	V	Pass
5250	-35.61	-13	-22.61	-49.37	-44.15	1.04	9.58	V	Pass
7000	-46.22	-13	-33.22	-60.14	-56.33	1.35	11.46	V	Pass

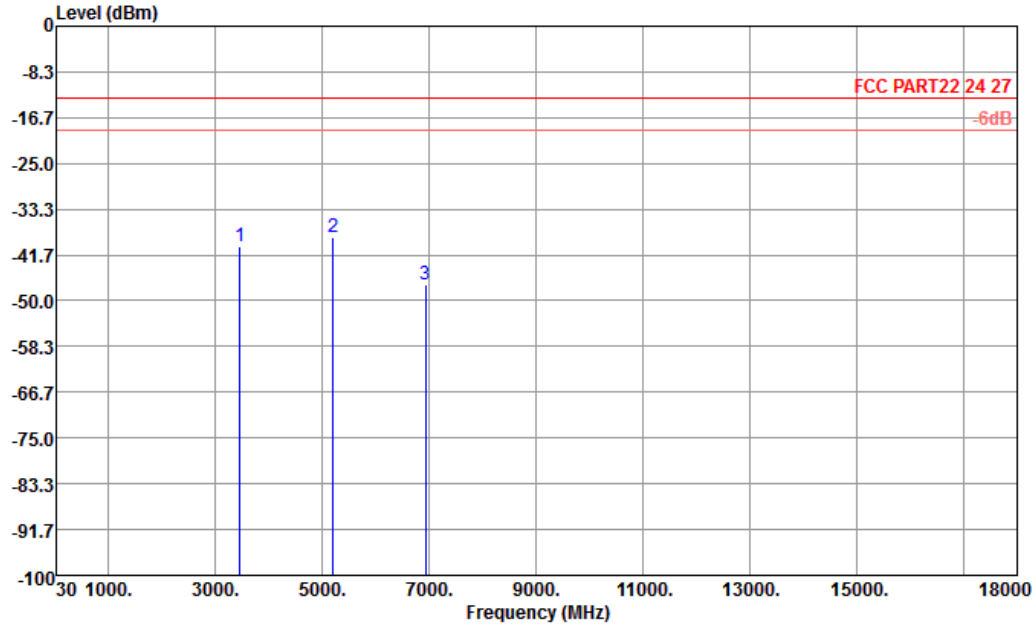
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	3MHz QPSK RB Size 1 Offset 14	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3468	-48.21	-13	-35.21	-59.87	-54.59	0.78	7.16	H	Pass
5202	-41.50	-13	-28.50	-56.03	-50.04	1.04	9.58	H	Pass
6936	-52.33	-13	-39.33	-65.82	-62.44	1.35	11.46	H	Pass

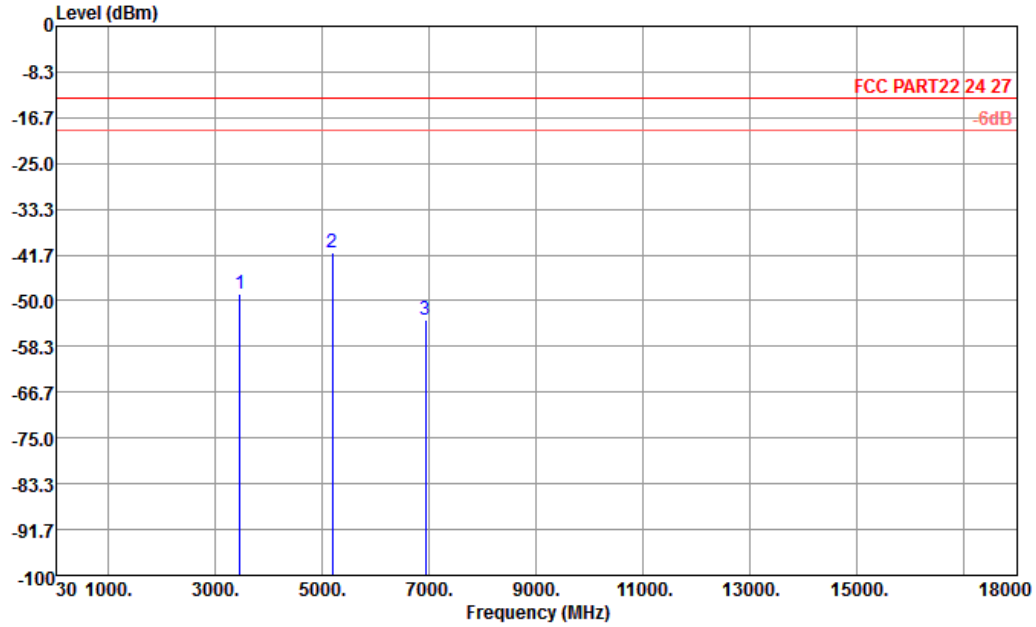
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	3MHz QPSK RB Size 1 Offset 14	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3468	-40.00	-13	-27.00	-52.42	-46.38	0.78	7.16	V	Pass
5202	-38.47	-13	-25.47	-52.03	-47.01	1.04	9.58	V	Pass
6936	-47.05	-13	-34.05	-60.6	-57.16	1.35	11.46	V	Pass

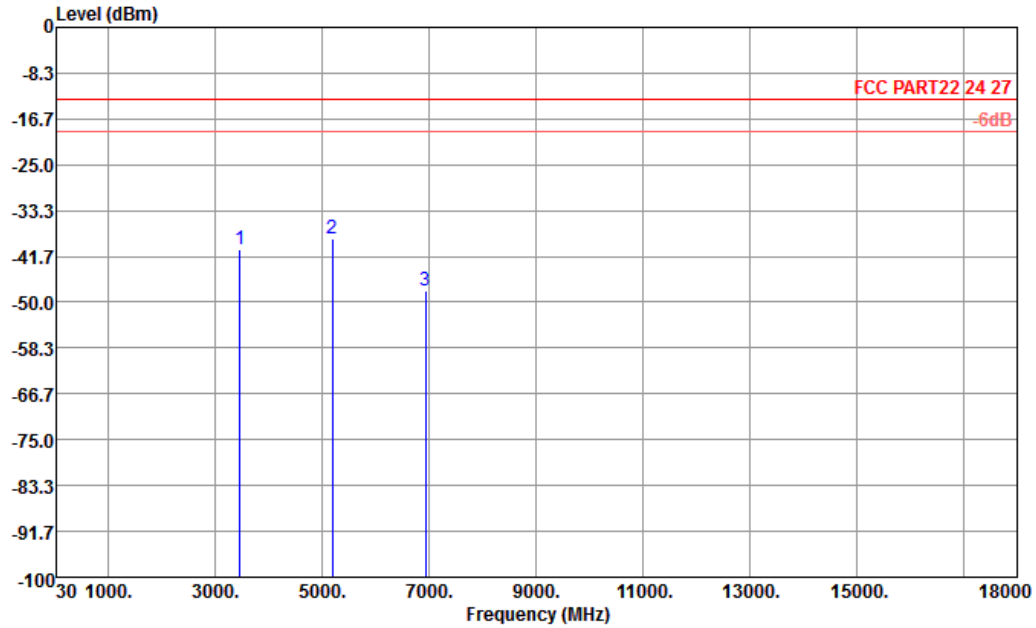
Band :	LTE Band 4	**Temperature :**	23~24°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 5	**Relative Humidity :**	43~44%
Test Engineer :	Stone Lin	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3466	-48.63	-13	-35.63	-60.21	-55.01	0.78	7.16	H	Pass
5198	-41.34	-13	-28.34	-55.88	-49.88	1.04	9.58	H	Pass
6930	-53.42	-13	-40.42	-66.22	-63.53	1.35	11.46	H	Pass

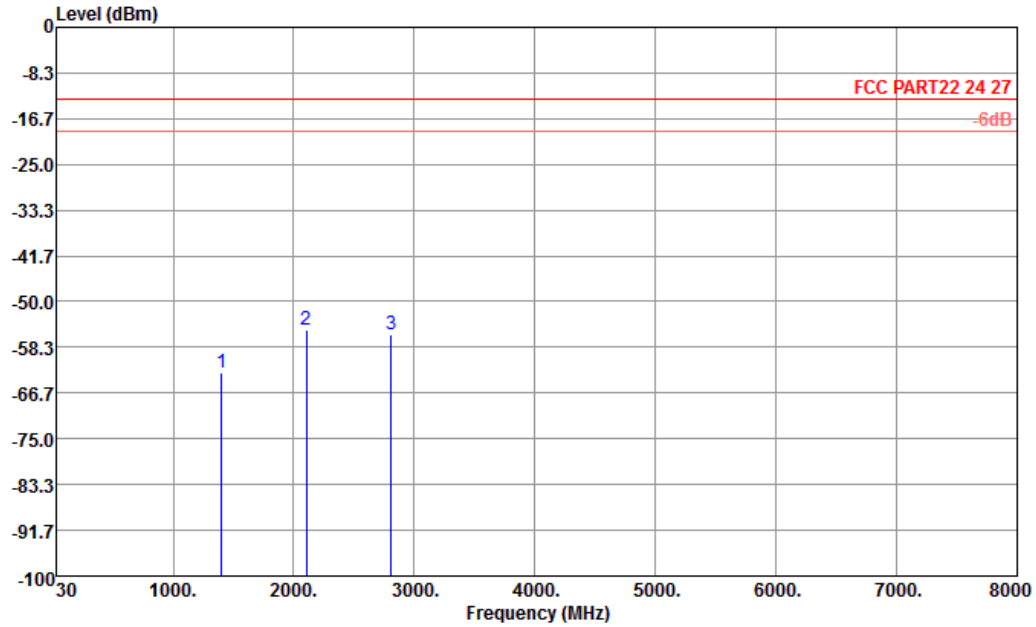
Band :	LTE Band 4	Temperature :	23~24°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 5	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3466	-40.40	-13	-27.40	-52.82	-46.78	0.78	7.16	V	Pass
5198	-38.39	-13	-25.39	-51.95	-46.93	1.04	9.58	V	Pass
6934	-48.00	-13	-35.00	-61.35	-58.11	1.35	11.46	V	Pass

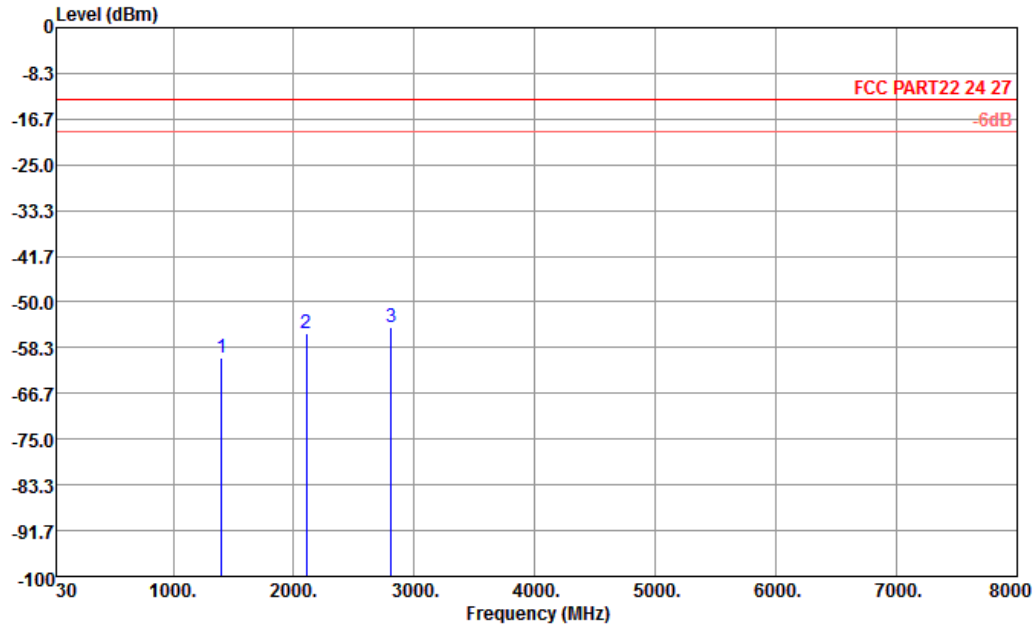
Band :	LTE Band 12	**Temperature :**	23~24°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	**Relative Humidity :**	43~44%
Test Engineer :	Stone Lin	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1404	-62.94	-13	-49.94	-63.40	-63.59	0.57	3.37	H	Pass
2106	-55.18	-13	-42.18	-63.70	-57.41	0.78	5.16	H	Pass
2808	-55.99	-13	-42.99	-65.35	-59.63	0.87	6.66	H	Pass

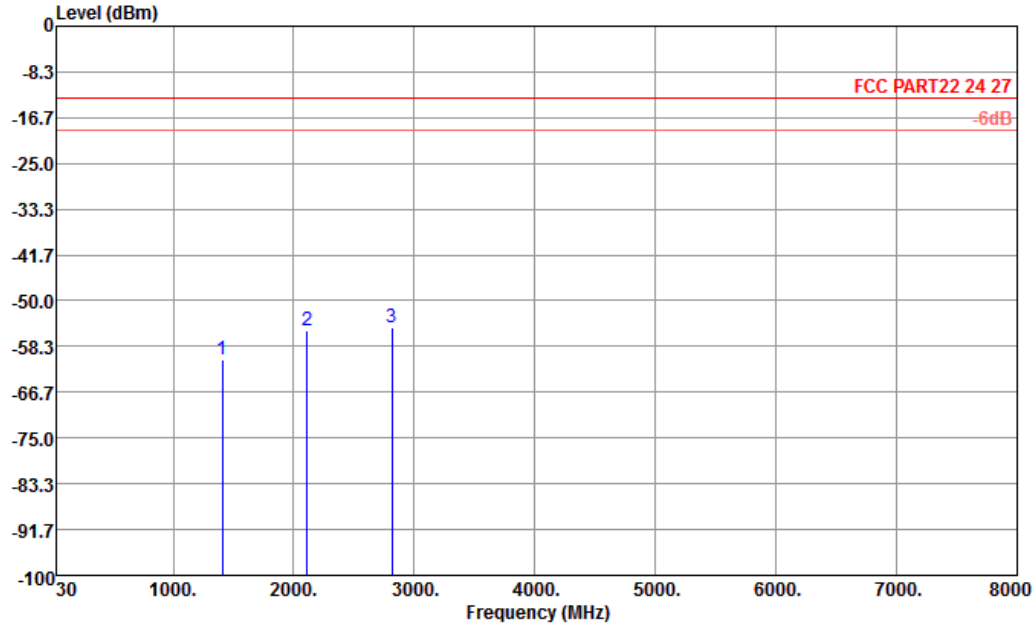
Band :	LTE Band 12	Temperature :	23~24°C
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1404	-60.19	-13	-47.19	-63.79	-60.84	0.57	3.37	V	Pass
2106	-55.72	-13	-42.72	-64.85	-57.95	0.78	5.16	V	Pass
2808	-54.48	-13	-41.48	-64.29	-58.12	0.87	6.66	V	Pass

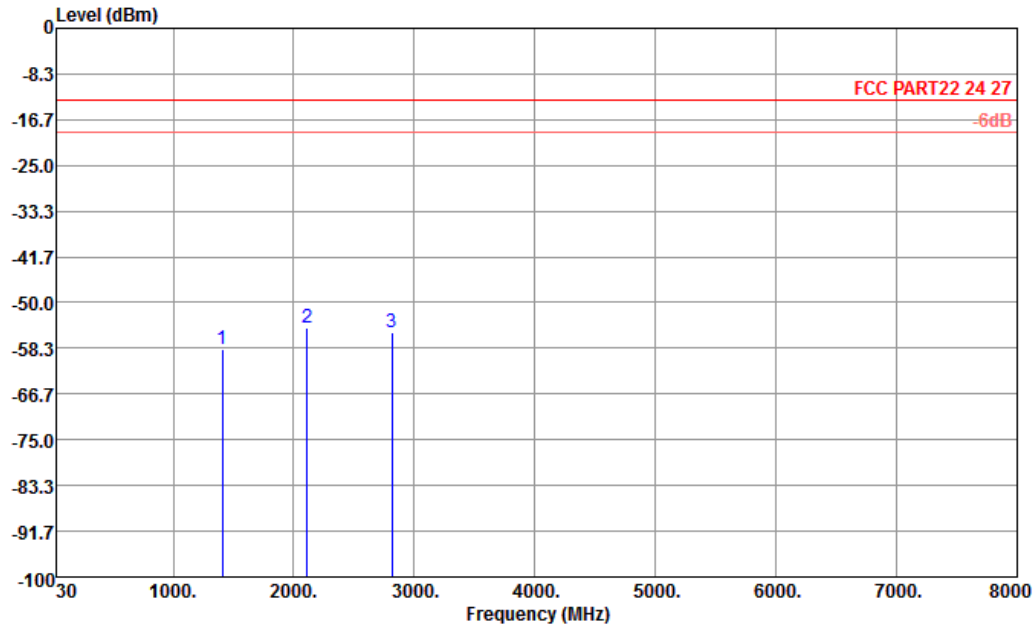
Band :	LTE Band 12	**Temperature :**	23~24°C
Test Mode :	5MHz QPSK RB Size 1 Offset 24	**Relative Humidity :**	43~44%
Test Engineer :	Stone Lin	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1408	-60.83	-13	-47.83	-62.18	-61.48	0.57	3.37	H	Pass
2112	-55.54	-13	-42.54	-64.06	-57.77	0.78	5.16	H	Pass
2816	-54.84	-13	-41.84	-64.20	-58.48	0.87	6.66	H	Pass

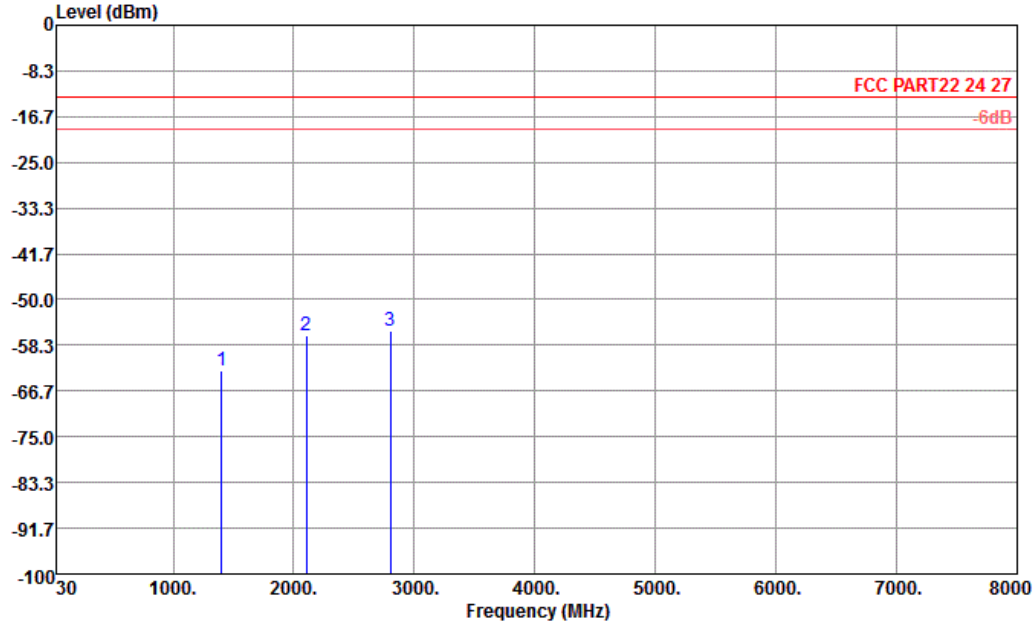
Band :	LTE Band 12	Temperature :	23~24°C
Test Mode :	5MHz QPSK RB Size 1 Offset 24	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1408	-58.58	-13	-45.58	-62.31	-59.23	0.57	3.37	V	Pass
2112	-54.67	-13	-41.67	-63.87	-56.90	0.78	5.16	V	Pass
2816	-55.49	-13	-42.49	-65.30	-59.13	0.87	6.66	V	Pass

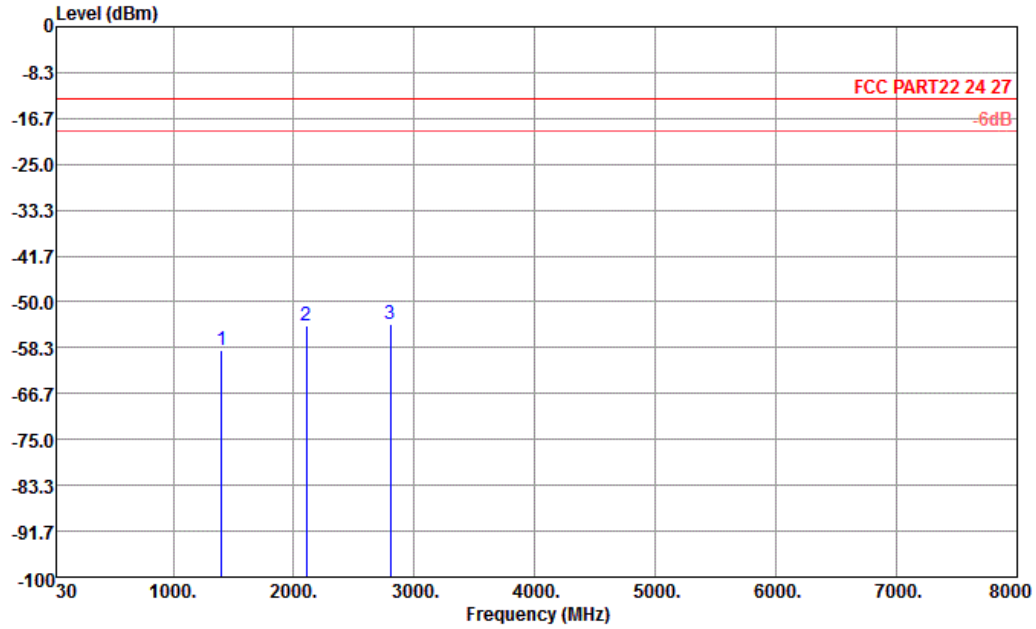
Band :	LTE Band 12	**Temperature :**	23~24°C
Test Mode :	3MHz QPSK RB Size 1 Offset 14	**Relative Humidity :**	43~44%
Test Engineer :	Stone Lin	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1403	-63.03	-13	-50.03	-63.46	-63.68	0.57	3.37	H	Pass
2105	-56.51	-13	-43.51	-64.32	-58.74	0.78	5.16	H	Pass
2807	-55.79	-13	-42.79	-65.15	-59.43	0.87	6.66	H	Pass

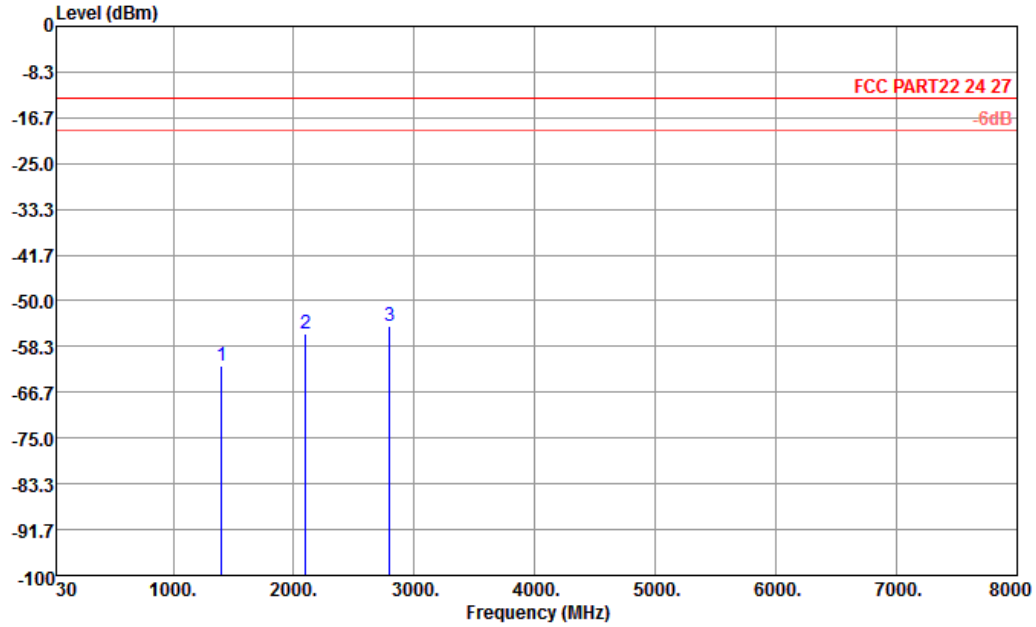
Band :	LTE Band 12	Temperature :	23~24°C
Test Mode :	3MHz QPSK RB Size 1 Offset 14	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1403	-58.74	-13	-45.74	-62.45	-59.39	0.57	3.37	V	Pass
2105	-55.02	-13	-42.02	-64.14	-57.25	0.78	5.16	V	Pass
2807	-55.20	-13	-42.20	-64.94	-58.84	0.87	6.66	V	Pass

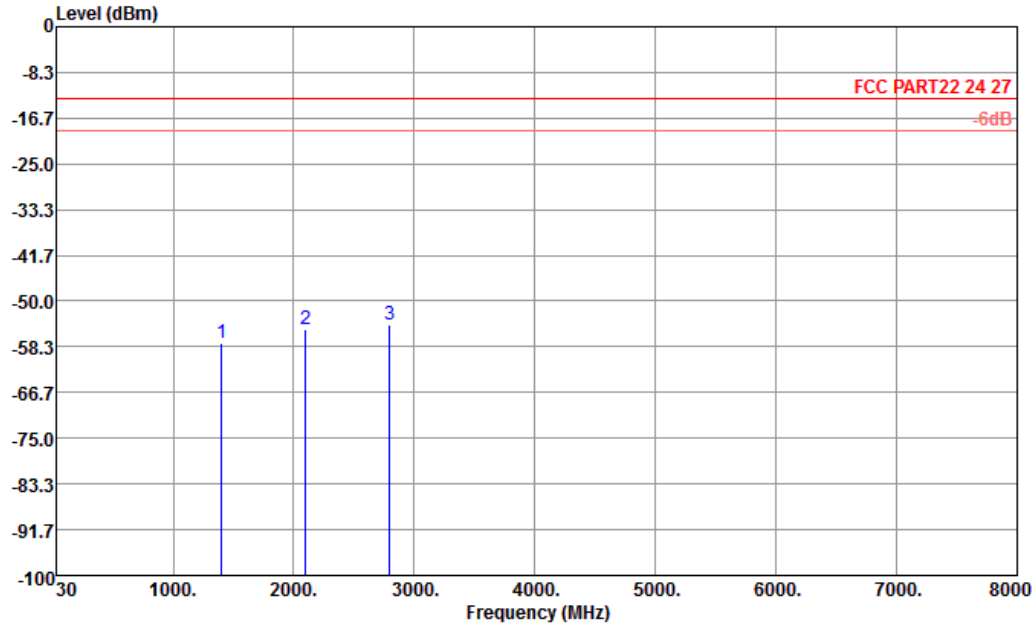
Band :	LTE Band 12	**Temperature :**	23~24°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 5	**Relative Humidity :**	43~44%
Test Engineer :	Stone Lin	**Polarization :**	Horizontal
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 HORIZONTAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1400	-61.91	-13	-48.91	-62.86	-62.56	0.57	3.37	H	Pass
2100	-55.93	-13	-42.93	-64.45	-58.16	0.78	5.16	H	Pass
2798	-54.73	-13	-41.73	-64.09	-58.37	0.87	6.66	H	Pass

Band :	LTE Band 12	Temperature :	23~24°C
Test Mode :	1.4MHz QPSK RB Size 1 Offset 5	Relative Humidity :	43~44%
Test Engineer :	Stone Lin	Polarization :	Vertical
Remark :	Spurious emissions within 30-10th harmonic were found more than 20dB below limit line.		



Site : 03CH01-KS
Condition : FCC PART22 24 27 HF_EIRP_FACTOR130726 VERTICAL

Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
1400	-57.62	-13	-44.62	-61.52	-58.27	0.57	3.37	V	Pass
2100	-55.22	-13	-42.22	-64.34	-57.45	0.78	5.16	V	Pass
2798	-54.37	-13	-41.37	-64.20	-58.01	0.87	6.66	V	Pass

3.7 Frequency Stability Measurement

3.7.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

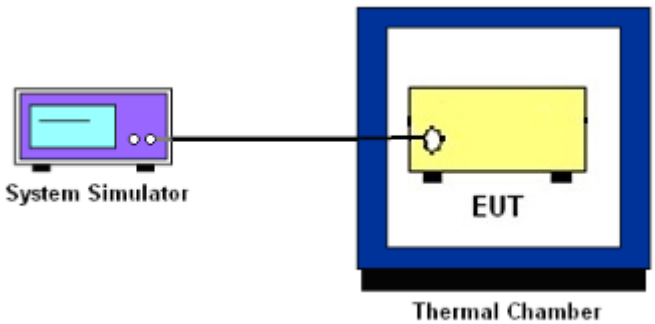
3.7.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.7.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at 25±5° C and connected with the base station.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

3.7.5 Test Setup



3.7.6 Test Result of Temperature Variation

Band :	LTE Band 5	Limit (ppm) :	2.5

Temperature (°C)	BW 10MHz	Result
	Deviation (ppm)	
50	0.0289	PASS
40	0.0226	
30	0.0258	
20	0.0268	
10	0.0240	
0	0.0201	
-10	0.0296	
-20	0.0312	
-30	0.0196	

Band :	LTE Band 4	Limit (ppm) :	2.5

Temperature (°C)	BW 10MHz	Result
	Deviation (ppm)	
50	0.0300	PASS
40	0.0311	
30	0.0291	
20	0.0275	
10	0.0270	
0	0.0273	
-10	0.0286	
-20	0.0309	
-30	0.0244	

Band :	LTE Band 12 (QPSK)	Limit (ppm) :	2.5

Temperature (°C)	BW 10MHz	Result
	Deviation (ppm)	
50	0.2882	PASS
40	0.3050	
30	0.3175	
20	0.2931	
10	0.3162	
0	0.2800	
-10	0.3244	
-20	0.3266	
-30	0.3177	

3.7.7 Test Result of Voltage Variation

Band	Bandwidth	Voltage (Volt)	Deviation (ppm)	Limit (ppm)	Result
LTE Band 5	10M	12.96	0.0218	2.5	PASS
		Normal	0.0208		
		11.04	0.0240		
LTE Band 4	10M	12.96	0.0331	2.5	PASS
		Normal	0.0275		
		11.04	0.0291		
LTE Band 12	10M	12.96	0.3005	2.5	PASS
		Normal	0.3193		
		11.04	0.3295		

Remark:

1. Normal Voltage = 12.00V.
2. The manufacturer declared that the EUT could work properly between voltage 11.04V ~ 12.96V.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 07, 2013	Dec. 11, 2013~ Dec. 17, 2013	Jun. 06, 2014	Conducted (TH02-HY)
Thermal Chamber	Ten Billion	TTH-D3SP	TBN-930701	N/A	Jul. 19, 2013	Dec. 11, 2013~ Dec. 17, 2013	Jul. 18, 2014	Conducted (TH02-HY)
LTE Base Station	Anritsu	MT8820C	6201026480	30MHz~2.7GHz SISO	Jan. 04, 2013	Dec. 11, 2013~ Dec. 17, 2013	Jan. 03, 2014	Conducted (TH02-HY)
EMI Test Receiver	R&S	ESCI	100534	9kHz ~ 3GHz	Nov. 05, 2013	Dec. 10, 2013~ Dec. 12, 2013	Nov. 04, 2014	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP40	100319	9kHz ~ 40GHz	Dec. 29, 2012	Dec. 10, 2013~ Dec. 12, 2013	Dec. 28, 2013	Radiation (03CH01-KS)
Amplifier	Wireless	FPA-6592G	060029	9kHz ~ 2GHz	Dec. 10, 2013	Dec. 10, 2013~ Dec. 12, 2013	Dec. 09, 2014	Radiation (03CH01-KS)
Amplifier	Wireless	FPA-6592G	060004	9kHz ~ 2GHz	Dec. 10, 2013	Dec. 10, 2013~ Dec. 12, 2013	Dec. 09, 2014	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz ~ 26.5GHz	Dec. 29, 2012	Dec. 10, 2013~ Dec. 12, 2013	Dec. 28, 2013	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701030	1GHz ~ 18GHz	Nov. 18, 2013	Dec. 10, 2013~ Dec. 12, 2013	Nov. 17, 2014	Radiation (03CH01-KS)
Bilog Antenna	TESEQ	CBL6112D	23183	25MHz ~ 2GHz	Jan. 02, 2013	Dec. 10, 2013~ Dec. 12, 2013	Jan. 02, 2014	Radiation (03CH01-KS)

5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.50**