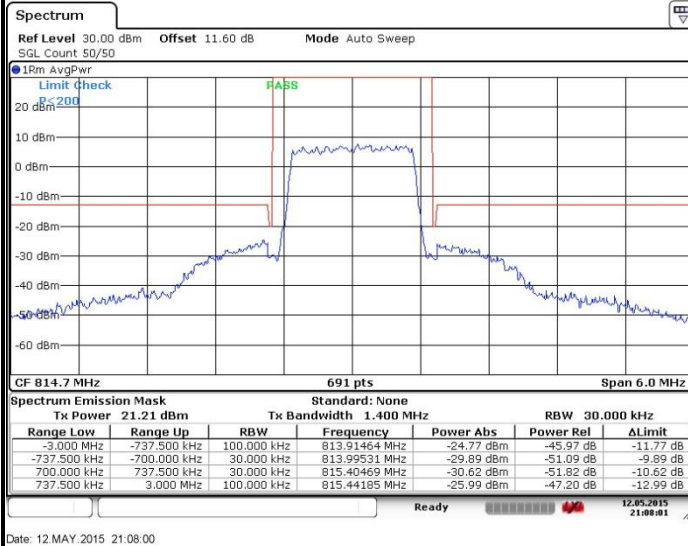




LTE Band 26 / 1.4MHz / 16QAM

Lowest Band Edge / Full RB



Remark:

Test Result(dBm)

 $\text{= Power Abs(dBm) + (1\% of OBW/measured RBW) (dB)}$ $\text{= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)}$ $\text{= Power Abs (dBm) +0.97 (dB)}$

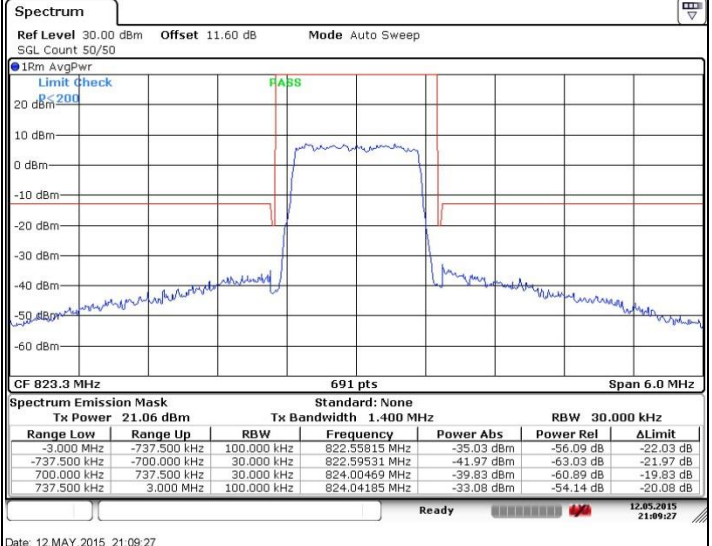
<1> Test result of 813.99531MHz:

 $-29.89 \text{ (dBm)} + 0.97 \text{ (dB)} = -28.92 \text{ (dBm)}$

<2> Test result of 815.40469MHz:

 $-30.62 \text{ (dBm)} + 0.97 \text{ (dB)} = -29.65 \text{ (dBm)}$

Highest Band Edge / Full RB



Remark:

Test Result(dBm)

 $\text{= Power Abs(dBm) + (1\% of OBW/measured RBW) (dB)}$ $\text{= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)}$ $\text{= Power Abs (dBm) +0.97 (dB)}$

<1> Test result of 822.59531MHz:

 $-41.97 \text{ (dBm)} + 0.97 \text{ (dB)} = -41.00 \text{ (dBm)}$

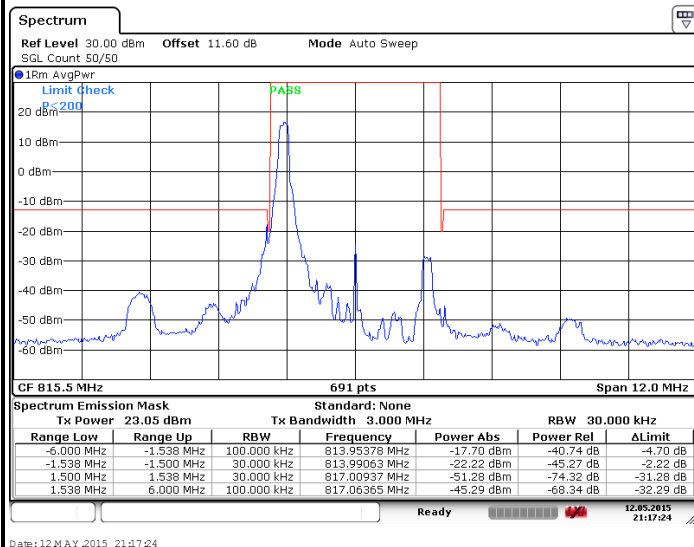
<2> Test result of 824.00469MHz:

 $-39.83 \text{ (dBm)} + 0.97 \text{ (dB)} = -38.86 \text{ (dBm)}$

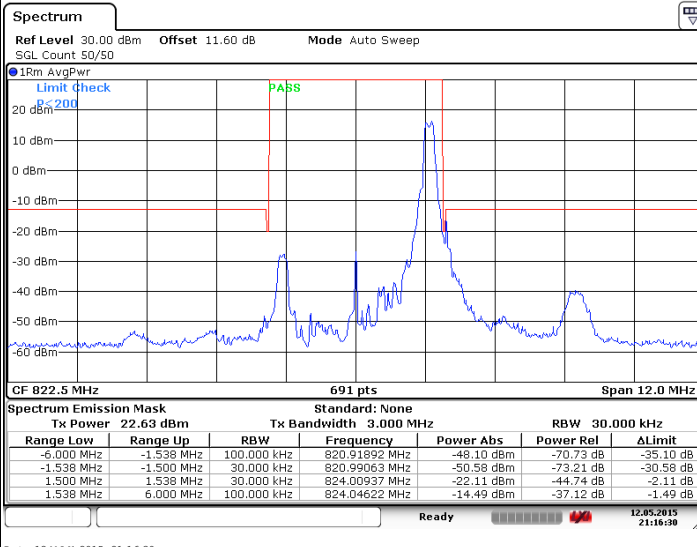


LTE Band 26 / 3MHz / QPSK

Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 813.99063MHz:

-22.22 (dBm) + 0.97 (dB) = -21.25 (dBm)

<2> Test result of 817.00937MHz:

-51.28 (dBm) + 0.97 (dB) = -50.31 (dBm)

Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 820.99063MHz:

-50.58 (dBm) + 0.97 (dB) = -49.61 (dBm)

<2> Test result of 824.00937MHz:

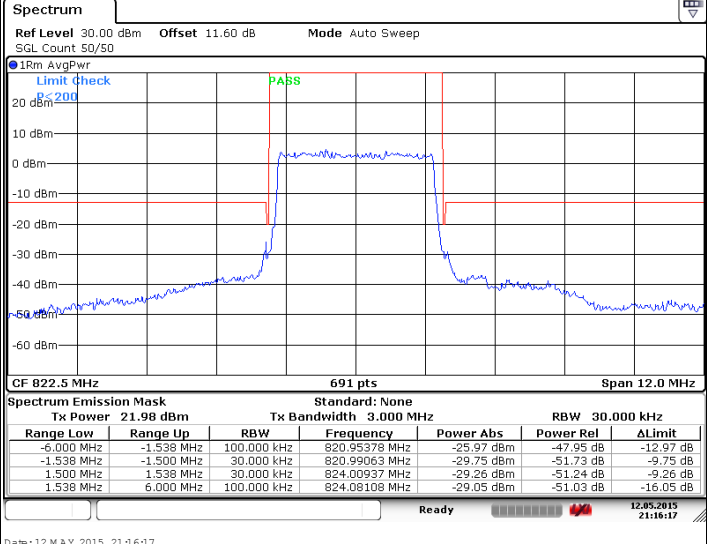
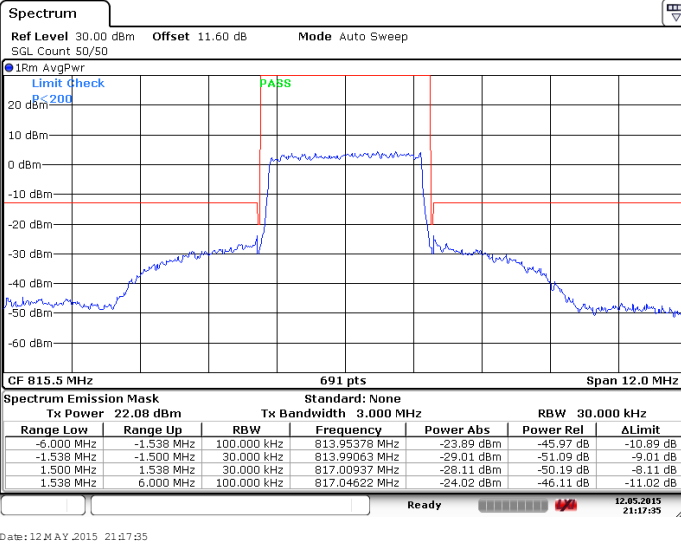
-22.11 (dBm) + 0.97 (dB) = -21.14 (dBm)



LTE Band 26 / 3MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 813.99063MHz:

-29.01 (dBm) + 0.97 (dB) = -28.04 (dBm)

<2> Test result of 817.00937MHz:

-28.11 (dBm) + 0.97 (dB) = -27.14 (dBm)

Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 820.99063MHz:

-29.75 (dBm) + 0.97 (dB) = -28.78 (dBm)

<2> Test result of 824.00937MHz:

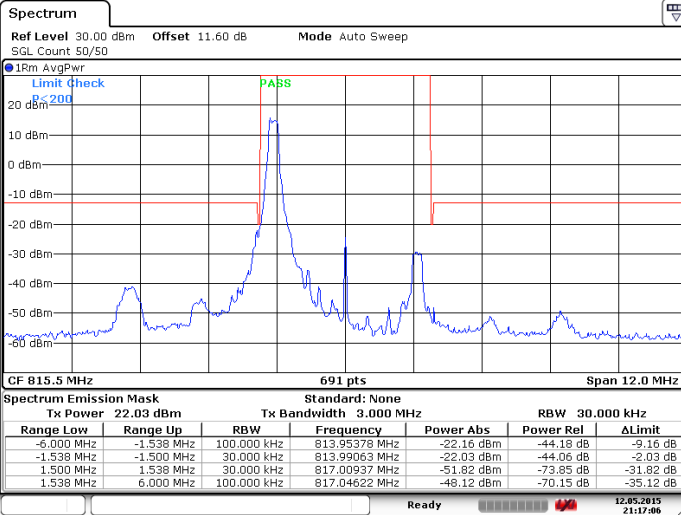
-29.26 (dBm) + 0.97 (dB) = -28.29 (dBm)



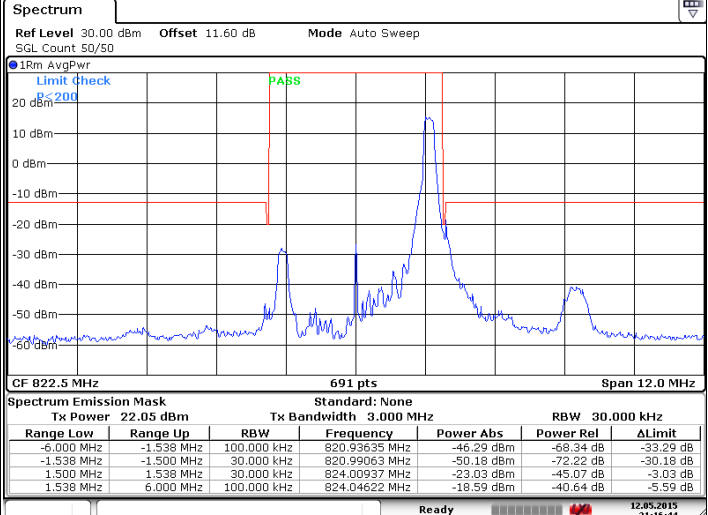
LTE Band 26 / 3MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



Date: 12 MAY 2015 21:17:07



Date: 12 MAY 2015 21:18:44

Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 813.99063MHz:

-22.03 (dBm) + 0.97 (dB) = -21.06 (dBm)

<2> Test result of 817.00937MHz:

-51.82 (dBm) + 0.97 (dB) = -50.85 (dBm)

Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 820.99063MHz:

-50.18 (dBm) + 0.97 (dB) = -49.21 (dBm)

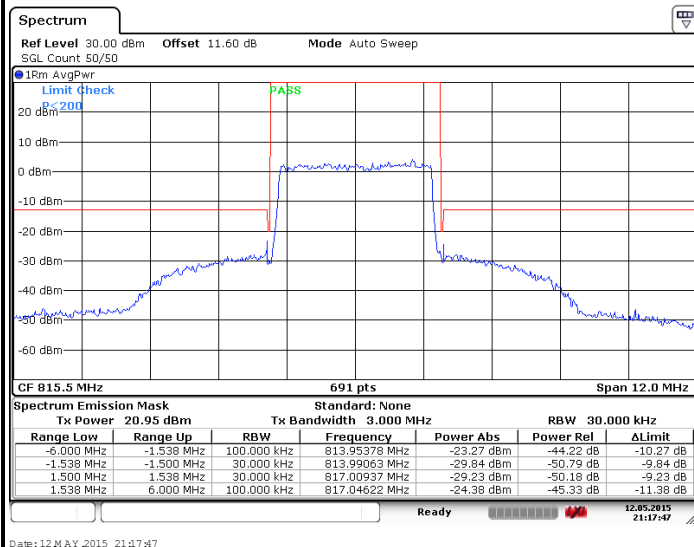
<2> Test result of 824.00937MHz:

-23.03 (dBm) + 0.97 (dB) = -22.06 (dBm)

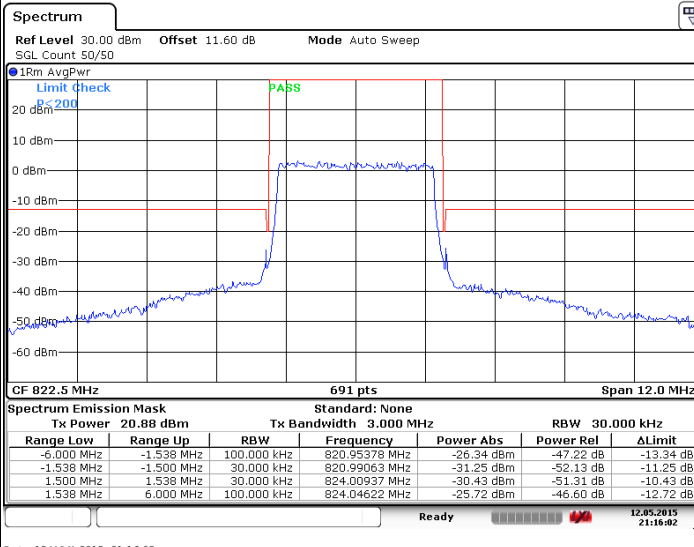


LTE Band 26 / 3MHz / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB



Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 813.99063MHz:

-29.84 (dBm) + 0.97 (dB) = -28.87 (dBm)

<2> Test result of 817.00937MHz:

-29.23 (dBm) + 0.97 (dB) = -28.26 (dBm)

Remark:

Test Result(dBm)

= Power Abs(dBm) + (1% of OBW/measured RBW) (dB)
= Power Abs (dBm) +10*LOG(37.5kHz/30kHz)(dB)
= Power Abs (dBm) +0.97 (dB)

<1> Test result of 820.99063MHz:

-31.25 (dBm) + 0.97 (dB) = -30.28 (dBm)

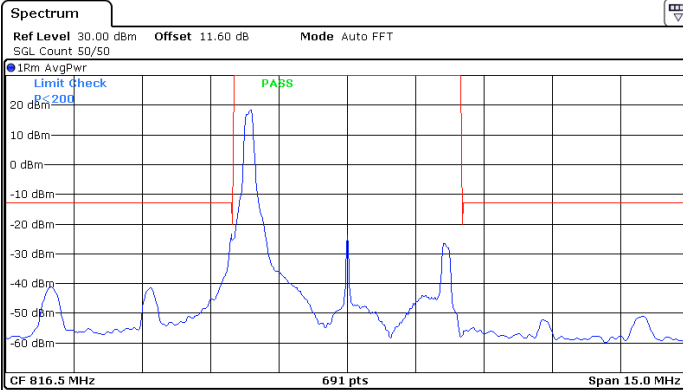
<2> Test result of 824.00937MHz:

-30.43 (dBm) + 0.97 (dB) = -29.46 (dBm)



LTE Band 26 / 5MHz / QPSK

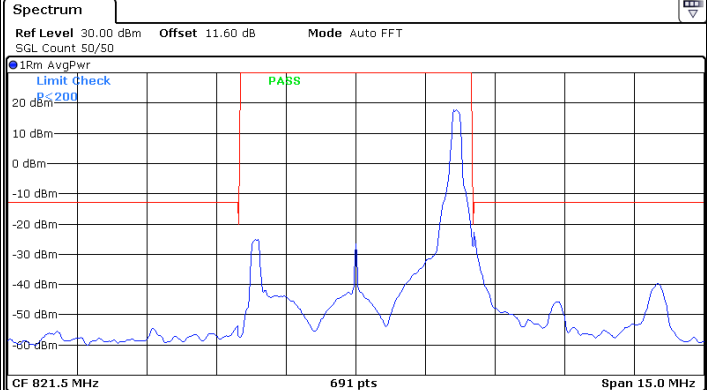
Lowest Band Edge / 1 RB



Spectrum Emission Mask						
Standard: None						
Tx Power 22.69 dBm Tx Bandwidth 5.000 MHz						
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.95162 MHz	-23.34 dBm	-46.03 dB	-10.34 dB
-2.538 MHz	-2.500 MHz	50.000 kHz	813.98125 MHz	-25.42 dBm	-48.11 dB	-5.42 dB
2.500 MHz	2.538 MHz	50.000 kHz	819.01875 MHz	-57.41 dBm	-60.10 dB	-37.41 dB
2.538 MHz	7.500 MHz	100.000 kHz	822.96615 MHz	-50.97 dBm	-73.67 dB	-37.97 dB

Date: 12 MAY 2015 21:21:42

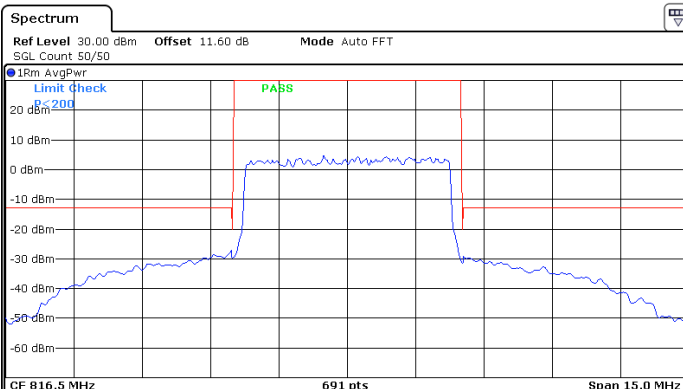
Highest Band Edge / 1 RB



Spectrum Emission Mask						
Standard: None						
Tx Power 22.45 dBm Tx Bandwidth 5.000 MHz						
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.95162 MHz	-53.63 dBm	-76.08 dB	-40.63 dB
-2.538 MHz	-2.500 MHz	50.000 kHz	818.98125 MHz	-57.19 dBm	-79.64 dB	-37.19 dB
2.500 MHz	2.538 MHz	50.000 kHz	824.01875 MHz	-27.37 dBm	-49.82 dB	-7.37 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.04838 MHz	-22.63 dBm	-45.08 dB	-9.63 dB

Date: 12 MAY 2015 21:22:47

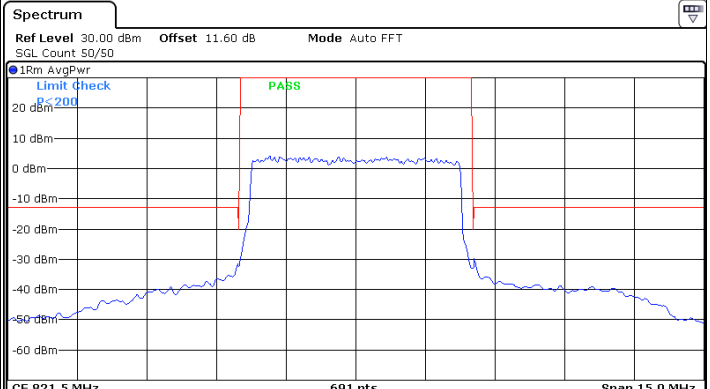
Lowest Band Edge / Full RB



Spectrum Emission Mask						
Standard: None						
Tx Power 22.14 dBm Tx Bandwidth 5.000 MHz						
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.95162 MHz	-27.20 dBm	-49.34 dB	-14.20 dB
-2.538 MHz	-2.500 MHz	50.000 kHz	813.98125 MHz	-29.86 dBm	-51.99 dB	-9.86 dB
2.500 MHz	2.538 MHz	50.000 kHz	819.01875 MHz	-31.48 dBm	-53.62 dB	-11.48 dB
2.538 MHz	7.500 MHz	100.000 kHz	819.04838 MHz	-29.21 dBm	-51.35 dB	-16.21 dB

Date: 12 MAY 2015 21:21:33

Highest Band Edge / Full RB



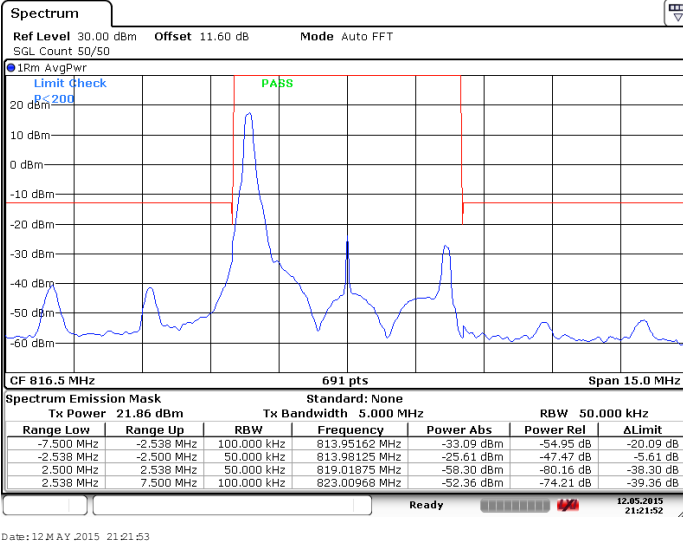
Spectrum Emission Mask						
Standard: None						
Tx Power 21.98 dBm Tx Bandwidth 5.000 MHz						
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.95162 MHz	-31.43 dBm	-53.41 dB	-18.43 dB
-2.538 MHz	-2.500 MHz	50.000 kHz	818.98125 MHz	-32.39 dBm	-54.36 dB	-12.39 dB
2.500 MHz	2.538 MHz	50.000 kHz	824.01875 MHz	-32.98 dBm	-54.96 dB	-12.98 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.04838 MHz	-29.69 dBm	-51.67 dB	-16.69 dB

Date: 12 MAY 2015 21:22:56

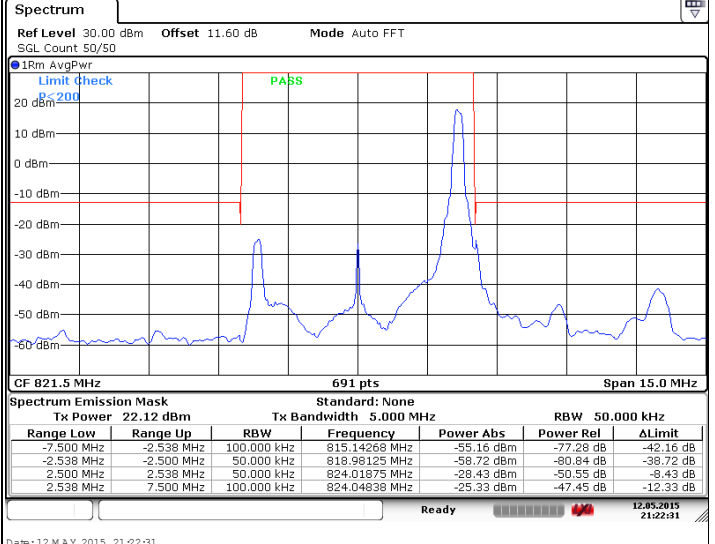


LTE Band 26 / 5MHz / 16QAM

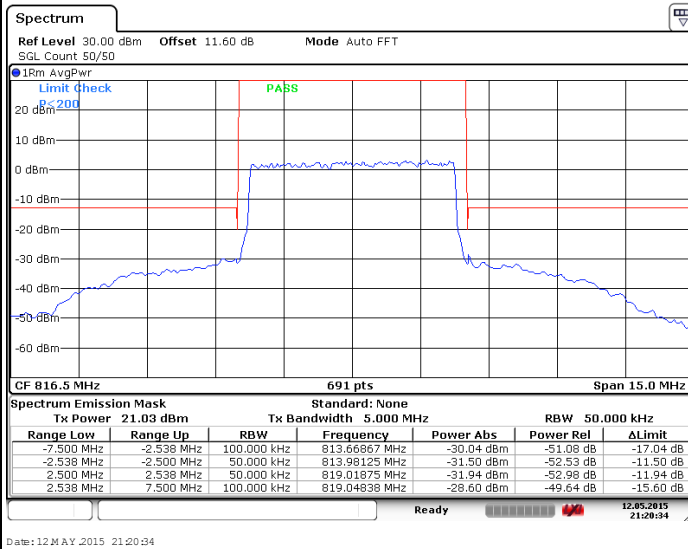
Lowest Band Edge / 1RB



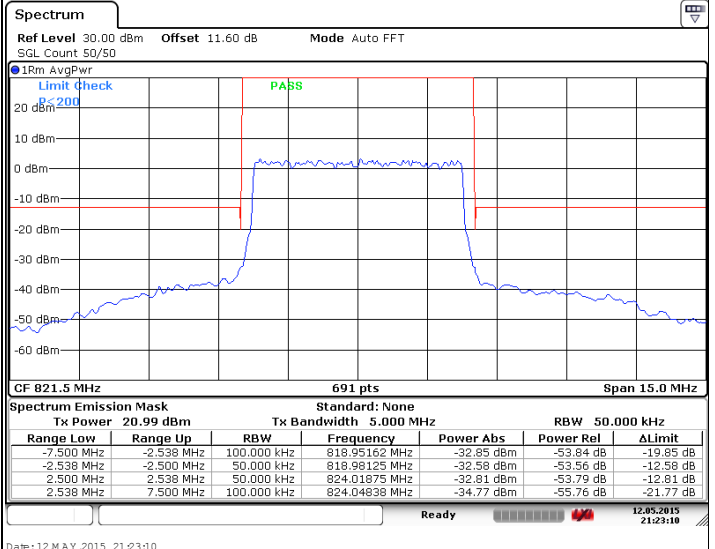
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

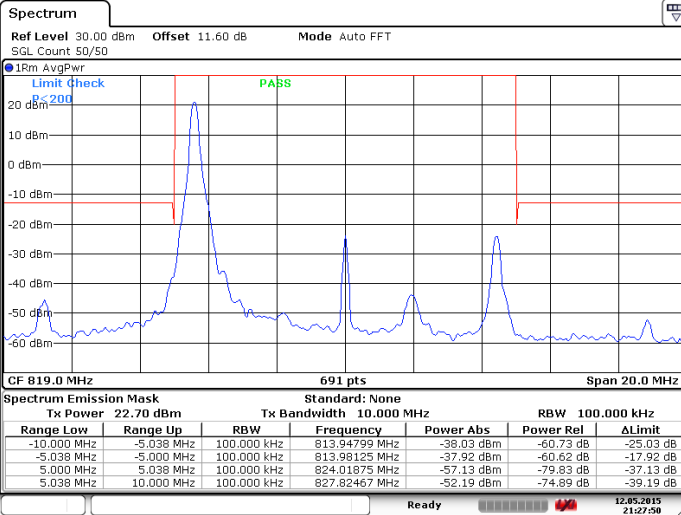




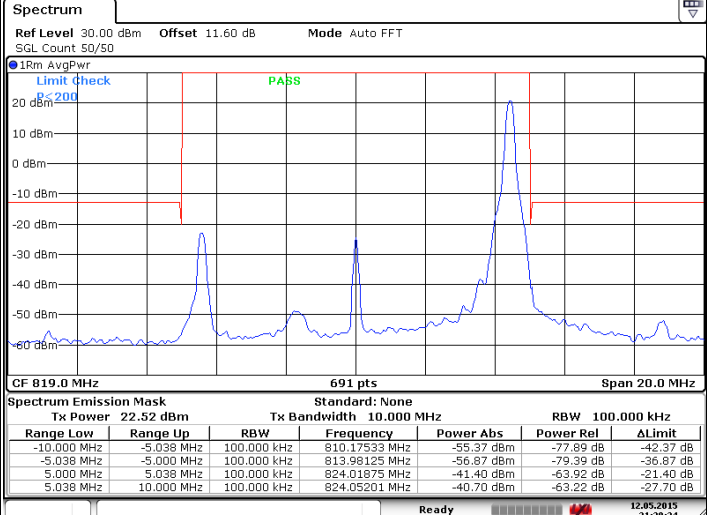
LTE Band 26 / 10MHz / QPSK

Middle Band Edge / 1 RB

Middle Band Edge / 1 RB

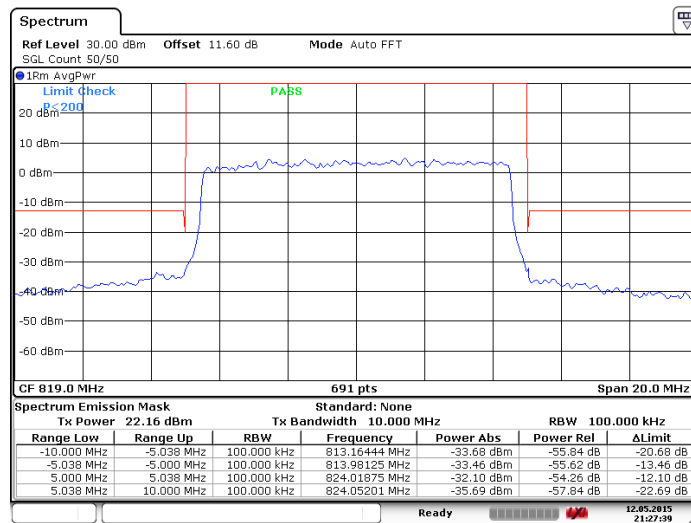


Date: 12 MAY 2015 21:27:50



Date: 12 MAY 2015 21:28:24

Band Edge / Full RB

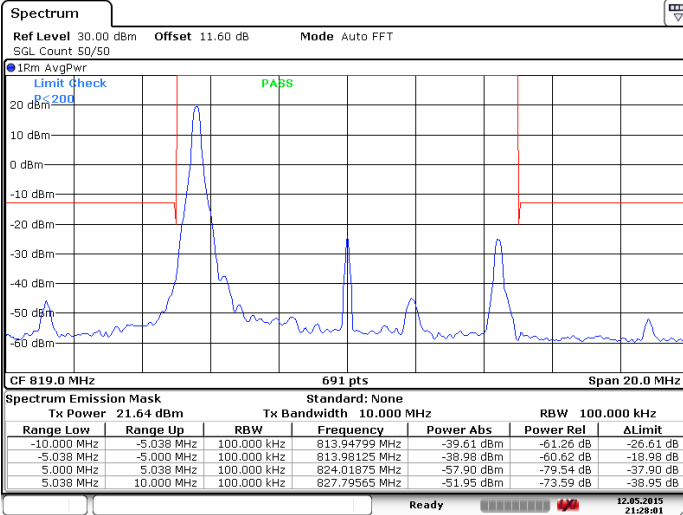


Date: 12 MAY 2015 21:27:59

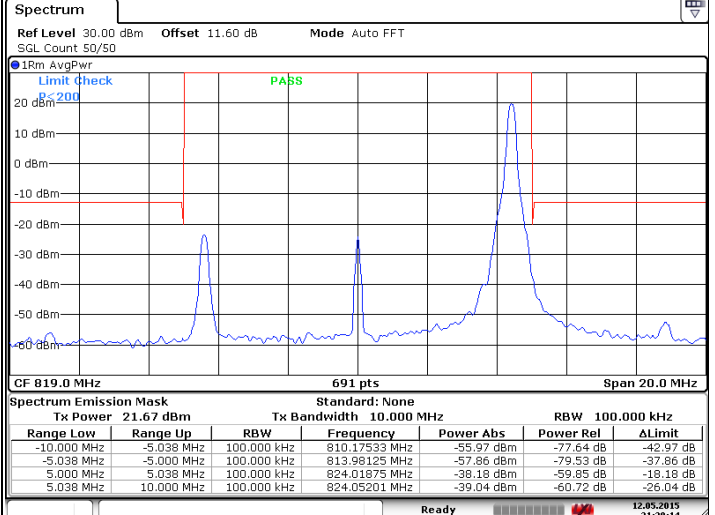


LTE Band 26 / 10MHz / 16QAM

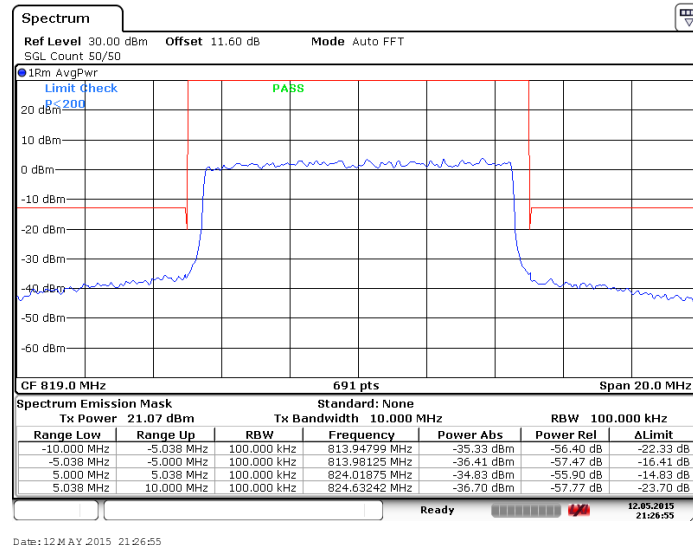
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Band Edge / Full RB

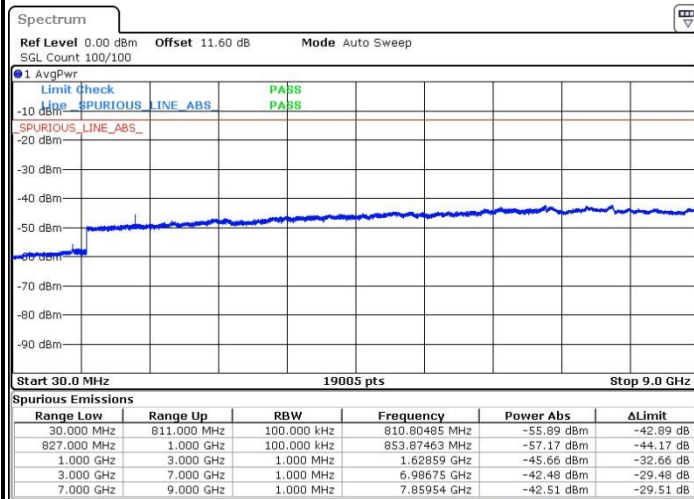




Emissions Mask – Out Of Band Emissions

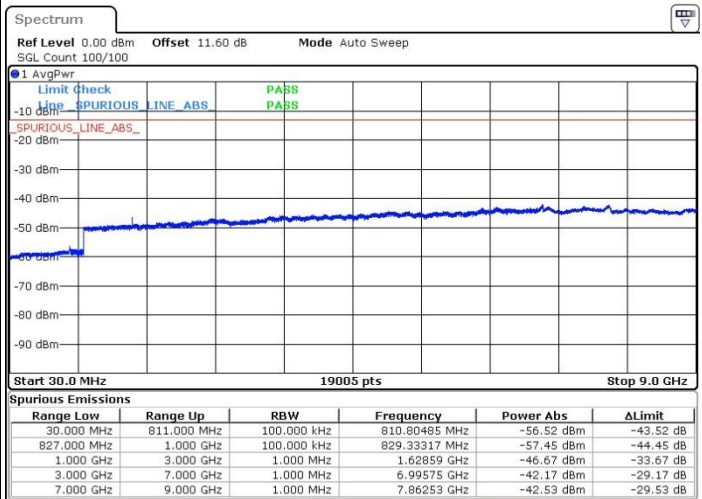
LTE Band 26 / 1.4MHz

Lowest Channel / QPSK



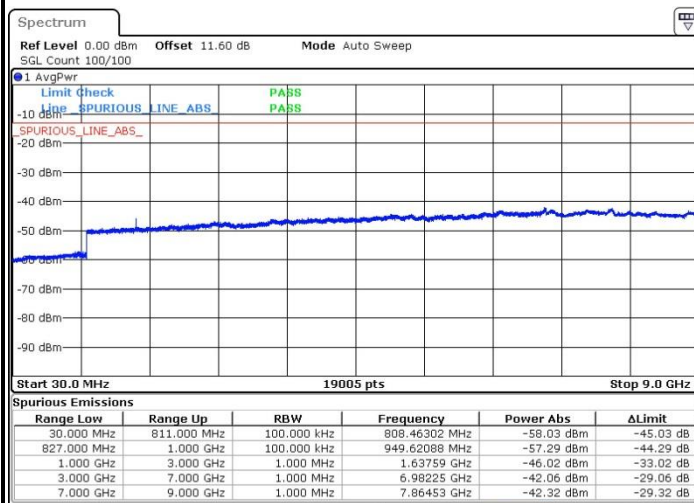
Date: 12 MAY 2015 21:48:19

Lowest Channel / 16QAM



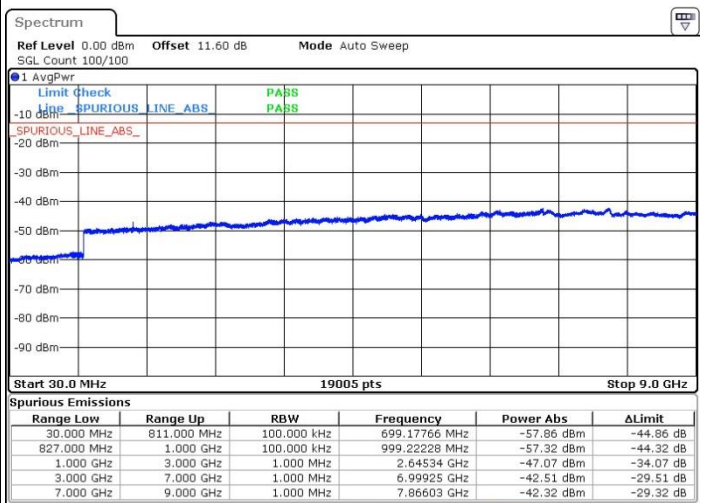
Date: 12 MAY 2015 21:49:31

Middle Channel / QPSK



Date: 12 MAY 2015 21:50:44

Middle Channel / 16QAM



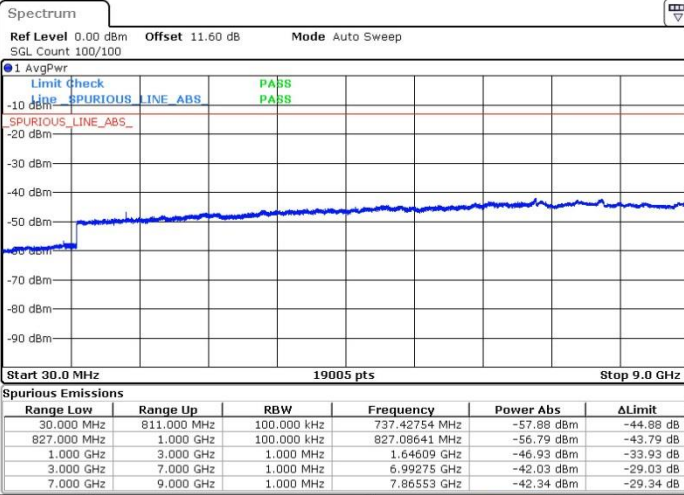
Date: 12 MAY 2015 21:51:56



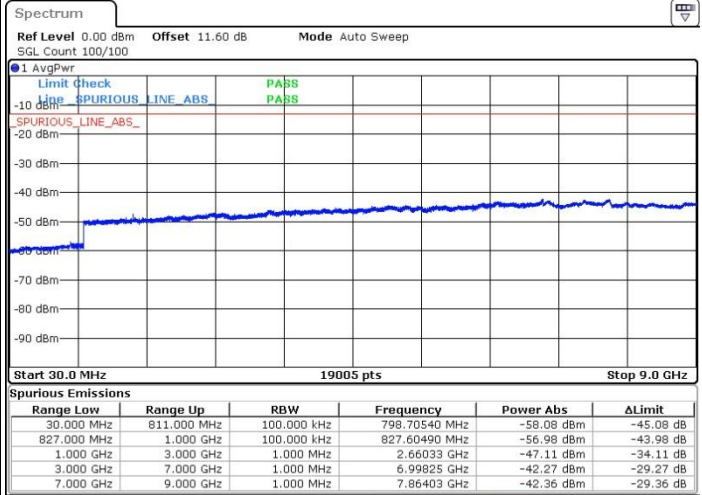
LTE Band 26 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 12 MAY 2015 21:53:08

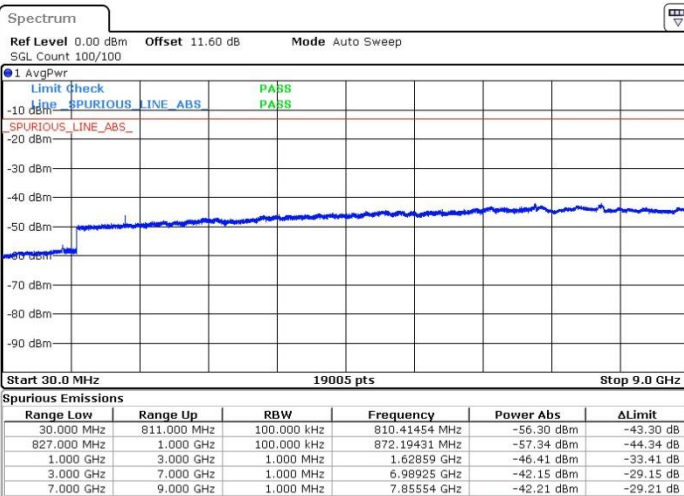


Date: 12 MAY 2015 21:54:21

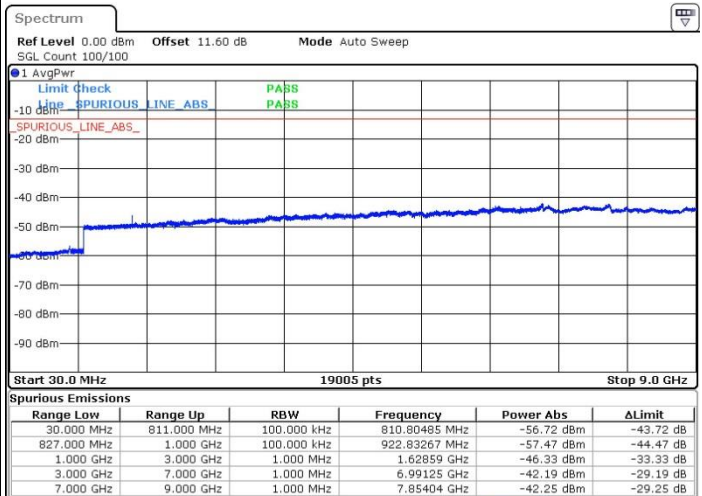
LTE Band 26 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 12 MAY 2015 21:55:34



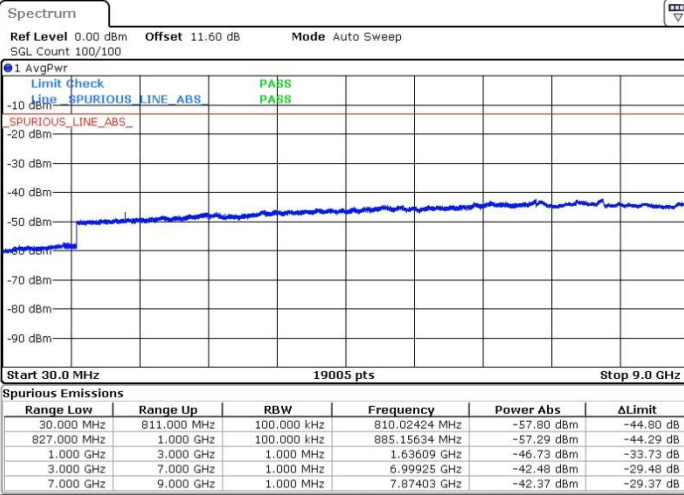
Date: 12 MAY 2015 21:56:46



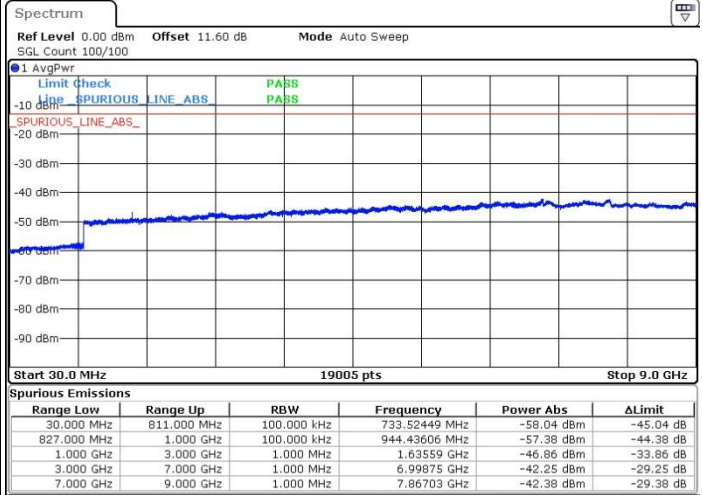
LTE Band 26 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



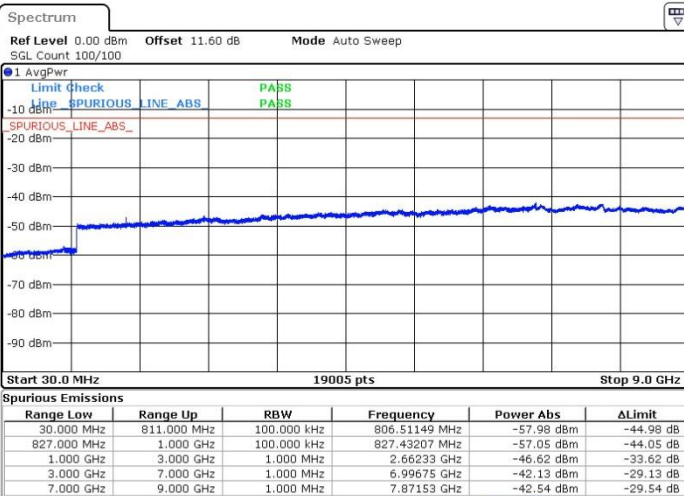
Date: 12 MAY 2015 21:57:58



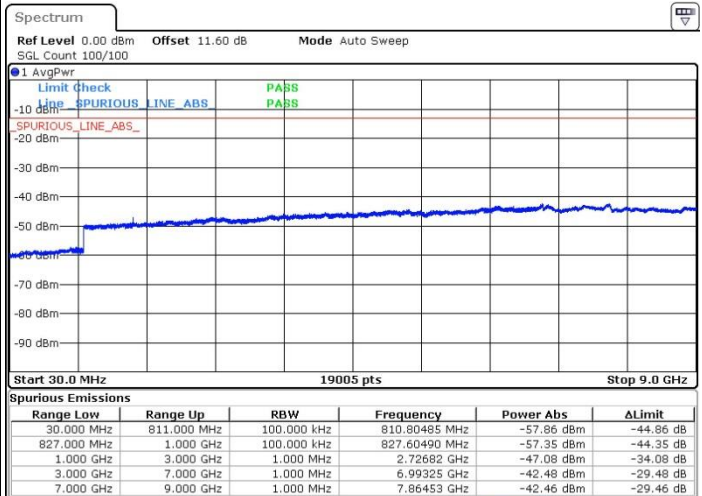
Date: 12 MAY 2015 21:58:11

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 12 MAY 2015 22:00:23



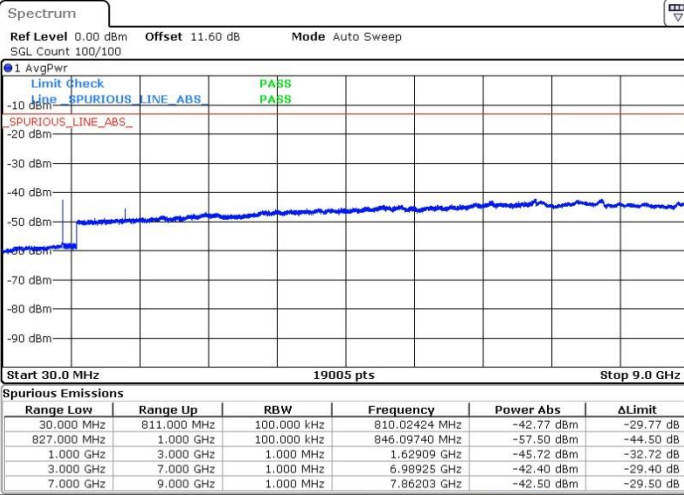
Date: 12 MAY 2015 22:01:36



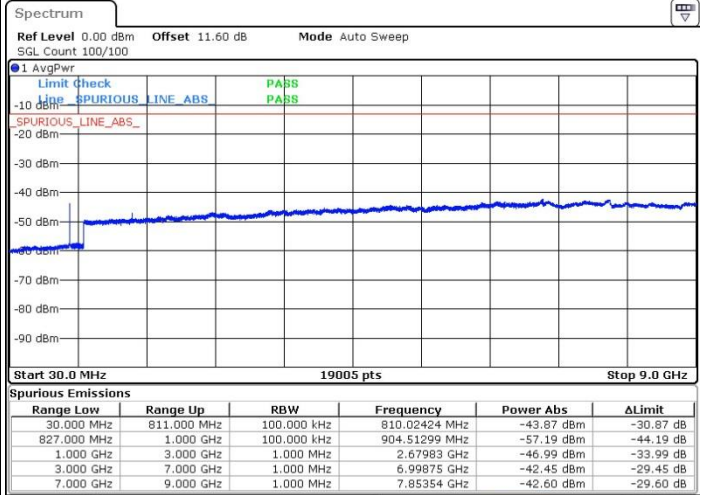
LTE Band 26 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



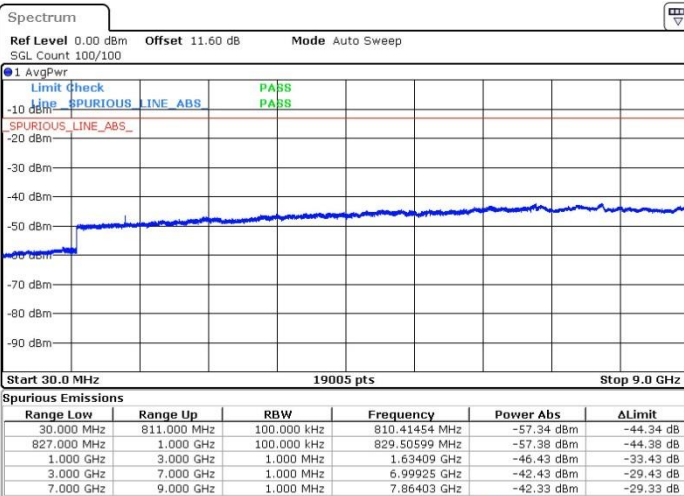
Date: 12 MAY 2015 22:02:48



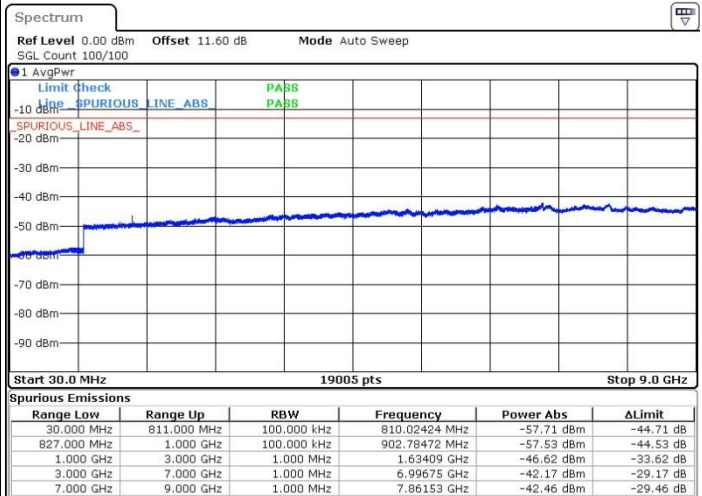
Date: 12 MAY 2015 22:04:00

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 12 MAY 2015 22:05:13

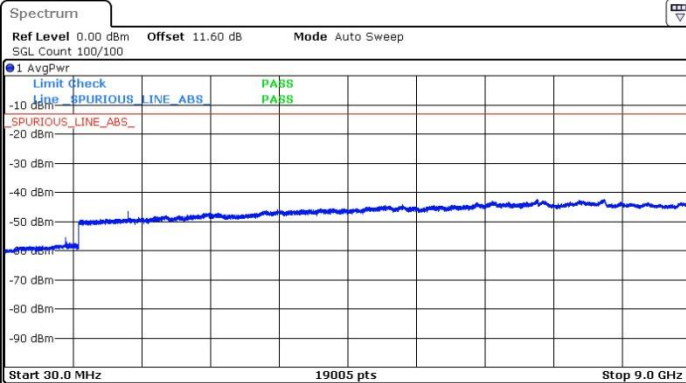


Date: 12 MAY 2015 22:06:25



LTE Band 26 / 5MHz

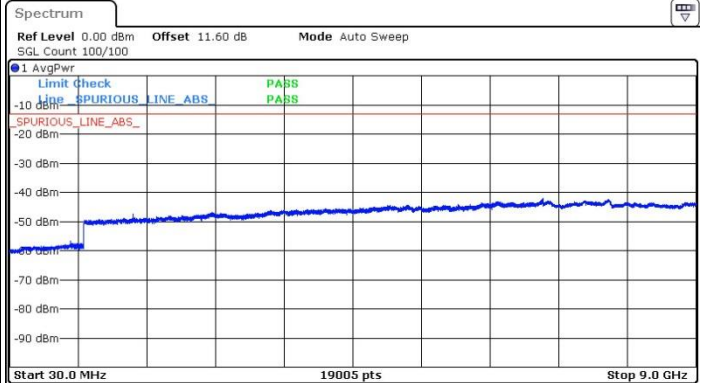
Highest Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	811.000 MHz	100.000 kHz	810.80485 MHz	-57.94 dBm	-44.94 dB
827.000 MHz	1.000 GHz	100.000 kHz	827.95055 MHz	-55.60 dBm	-42.60 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.63909 GHz	-46.56 dBm	-33.56 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99325 GHz	-42.39 dBm	-29.39 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.86253 GHz	-42.24 dBm	-29.24 dB

Date: 12 MAY 2015 22:07:37

Highest Channel / 16QAM

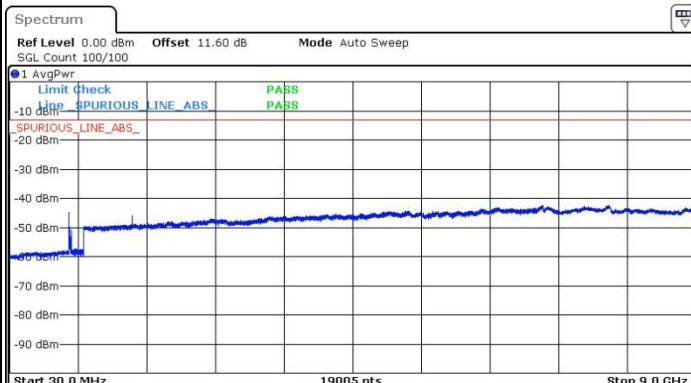


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	811.000 MHz	100.000 kHz	809.24363 MHz	-57.92 dBm	-44.92 dB
827.000 MHz	1.000 GHz	100.000 kHz	827.95055 MHz	-56.58 dBm	-43.58 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.67083 GHz	-46.76 dBm	-33.76 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99825 GHz	-42.22 dBm	-29.22 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85704 GHz	-42.40 dBm	-29.40 dB

Date: 12 MAY 2015 22:08:50

LTE Band 26 / 10MHz

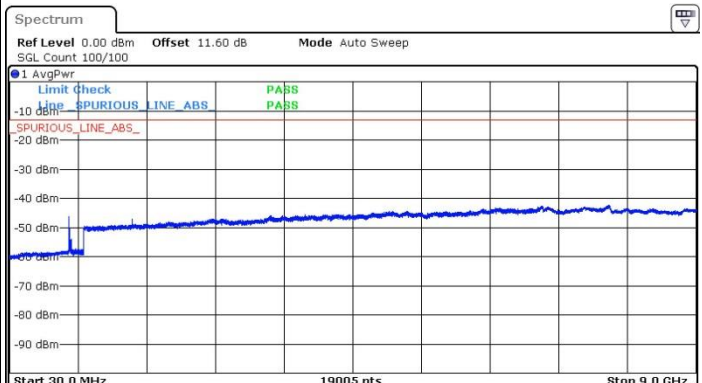
Middle Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	811.000 MHz	100.000 kHz	805.73088 MHz	-44.63 dBm	-31.63 dB
827.000 MHz	1.000 GHz	100.000 kHz	832.27123 MHz	-51.09 dBm	-38.09 dB
1.000 GHz	3.000 GHz	1.000 MHz	1.62959 GHz	-46.11 dBm	-33.11 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99025 GHz	-42.47 dBm	-29.47 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85904 GHz	-42.43 dBm	-29.43 dB

Date: 12 MAY 2015 22:10:02

Middle Channel / 16QAM



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	811.000 MHz	100.000 kHz	805.73088 MHz	-46.13 dBm	-33.13 dB
827.000 MHz	1.000 GHz	100.000 kHz	832.27123 MHz	-53.96 dBm	-40.96 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.80430 GHz	-47.02 dBm	-34.02 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98975 GHz	-42.60 dBm	-29.60 dB
7.000 GHz	9.000 GHz	1.000 MHz	7.85854 GHz	-42.43 dBm	-29.43 dB

Date: 12 MAY 2015 22:11:14

Frequency Stability

Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0042	
0	Normal Voltage	0.0037	
-10	Normal Voltage	0.0040	
-20	Normal Voltage	0.0010	
-30	Normal Voltage	0.0060	
20	Maximum Voltage	0.0050	
20	Normal Voltage	0.0053	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage = 3.87V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.35 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Appendix B. Test Results of Radiated Test

LTE Band 26 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	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)
Lowest	1632	-57.68	-13	-44.68	-68.57	-59.49	0.97	4.93	H
	2448	-60.17	-13	-47.17	-76.11	-61.99	1.27	5.24	H
	3264	-59.74	-13	-46.74	-76.92	-63.02	1.53	6.96	H
	1632	-57.21	-13	-44.21	-68.68	-59.02	0.97	4.93	V
	2448	-58.69	-13	-45.69	-76.22	-60.51	1.27	5.24	V
	3264	-58.05	-13	-45.05	-76.97	-61.33	1.53	6.96	V
Middle	1640	-59.33	-13	-46.33	-70.28	-61.11	0.97	4.91	H
	2460	-59.54	-13	-46.54	-75.63	-61.39	1.28	5.28	H
	3280	-59.53	-13	-46.53	-76.76	-62.88	1.54	7.03	H
	1640	-56.83	-13	-43.83	-68.34	-58.61	0.97	4.91	V
	2460	-58.37	-13	-45.37	-75.86	-60.22	1.28	5.28	V
	3280	-57.96	-13	-44.96	-76.82	-61.31	1.54	7.03	V
Highest	1648	-59.35	-13	-46.35	-70.18	-61.11	0.98	4.89	H
	2472	-59.35	-13	-46.35	-75.62	-61.23	1.28	5.32	H
	3296	-59.61	-13	-46.61	-76.87	-63.02	1.54	7.10	H
	1648	-57.41	-13	-44.41	-69.24	-59.17	0.98	4.89	V
	2472	-58.43	-13	-45.43	-76.19	-60.31	1.28	5.32	V
	3296	-58.06	-13	-45.06	-77.03	-61.47	1.54	7.10	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 26 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	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)
Lowest	1632	-56.85	-13	-43.85	-67.73	-58.66	0.97	4.93	H
	2448	-60.09	-13	-47.09	-76.17	-61.91	1.27	5.24	H
	3264	-59.63	-13	-46.63	-76.9	-62.91	1.53	6.96	H
	1632	-56.21	-13	-43.21	-67.86	-58.02	0.97	4.93	V
	2448	-58.39	-13	-45.39	-76	-60.21	1.27	5.24	V
	3264	-58.01	-13	-45.01	-76.97	-61.29	1.53	6.96	V
Middle	1640	-59.14	-13	-46.14	-70.2	-60.92	0.97	4.91	H
	2456	-60.08	-13	-47.08	-76.01	-61.92	1.28	5.27	H
	3280	-59.73	-13	-46.73	-77.12	-63.08	1.54	7.03	H
	1640	-56.44	-13	-43.44	-68.15	-58.22	0.97	4.91	V
	2456	-58.24	-13	-45.24	-75.92	-60.08	1.28	5.27	V
	3280	-58.08	-13	-45.08	-77.05	-61.43	1.54	7.03	V
Highest	1648	-60.01	-13	-47.01	-70.95	-61.77	0.98	4.89	H
	2472	-59.68	-13	-46.68	-75.97	-61.56	1.28	5.32	H
	3296	-59.71	-13	-46.71	-76.91	-63.12	1.54	7.10	H
	1648	-57.05	-13	-44.05	-68.66	-58.81	0.98	4.89	V
	2472	-58.67	-13	-45.67	-76.25	-60.55	1.28	5.32	V
	3296	-58.18	-13	-45.18	-77.04	-61.59	1.54	7.10	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 26 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	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)
Lowest	1624	-56.32	-13	-43.32	-66.87	-58.16	0.97	4.95	H
	2440	-59.91	-13	-46.91	-75.66	-61.71	1.27	5.22	H
	3256	-60.19	-13	-47.19	-76.93	-63.44	1.53	6.93	H
	1624	-55.99	-13	-42.99	-67.17	-57.83	0.97	4.95	V
	2440	-58.41	-13	-45.41	-75.28	-60.21	1.27	5.22	V
	3256	-58.40	-13	-45.40	-76.76	-61.65	1.53	6.93	V
Middle	1632	-57.80	-13	-44.80	-67.92	-59.61	0.97	4.93	H
	2448	-56.97	-13	-43.97	-72.65	-58.79	1.27	5.24	H
	3264	-59.65	-13	-46.65	-76.88	-62.93	1.53	6.96	H
	1632	-56.41	-13	-43.41	-67.47	-58.22	0.97	4.93	V
	2448	-58.10	-13	-45.10	-75.04	-59.92	1.27	5.24	V
	3264	-58.36	-13	-45.36	-76.75	-61.64	1.53	6.96	V
Highest	1640	-59.84	-13	-46.84	-70.77	-61.62	0.97	4.91	H
	2456	-60.08	-13	-47.08	-76.11	-61.92	1.28	5.27	H
	3280	-60.18	-13	-47.18	-77.05	-63.53	1.54	7.03	H
	1640	-56.01	-13	-43.01	-67.7	-57.79	0.97	4.91	V
	2456	-57.52	-13	-44.52	-74.65	-59.36	1.28	5.27	V
	3280	-58.29	-13	-45.29	-76.71	-61.64	1.54	7.03	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 26 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	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)
Middle	1632	-58.30	-13	-45.30	-68.62	-60.11	0.97	4.93	H
	2440	-60.39	-13	-47.39	-75.86	-62.19	1.27	5.22	H
	3256	-59.53	-13	-46.53	-76.86	-62.78	1.53	6.93	H
	1632	-57.40	-13	-44.40	-68.47	-59.21	0.97	4.93	V
	2440	-58.05	-13	-45.05	-75.2	-59.85	1.27	5.22	V
	3256	-58.43	-13	-45.43	-76.79	-61.68	1.53	6.93	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.