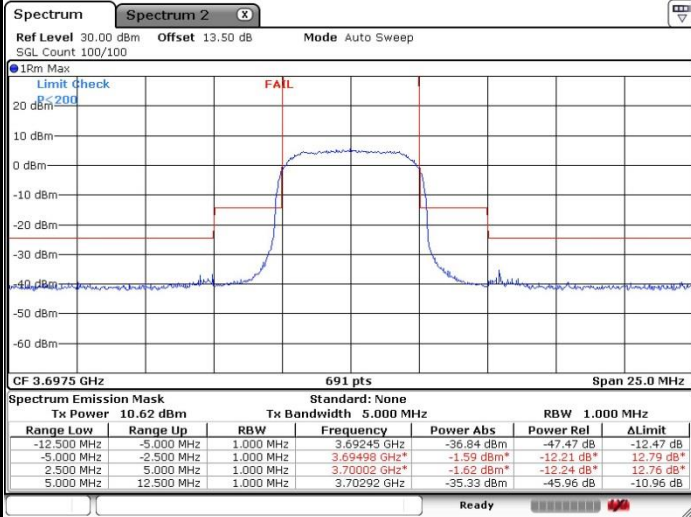


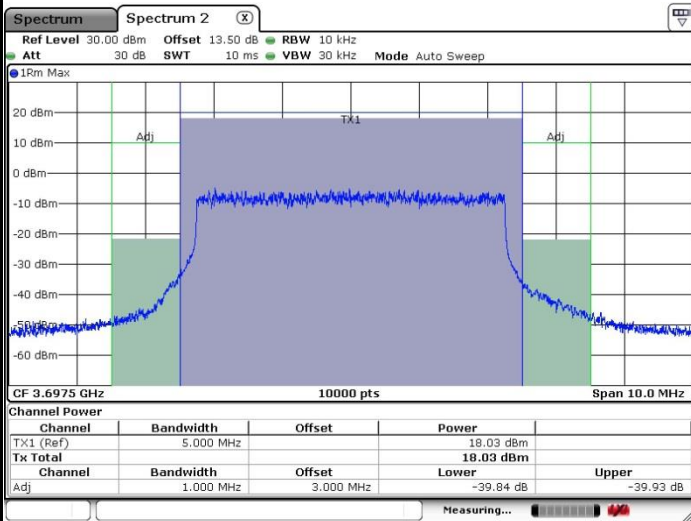


LTE Band 43 / 5MHz

High channel / Full RB / 64QAM



Date: 11. DEC. 2018 21:32:17



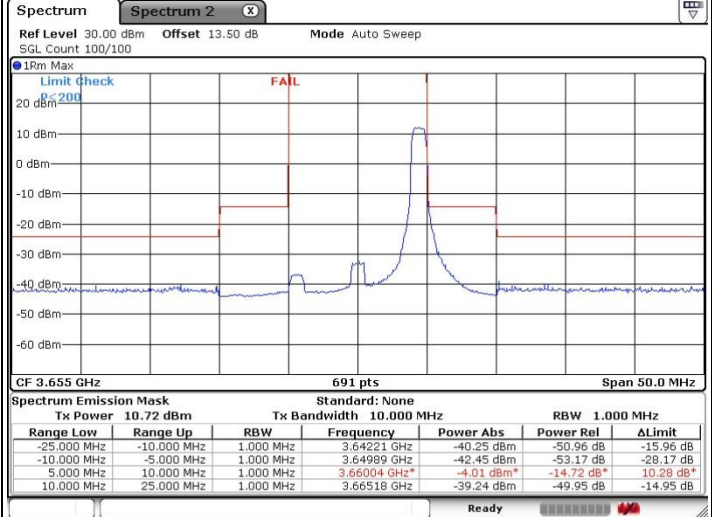
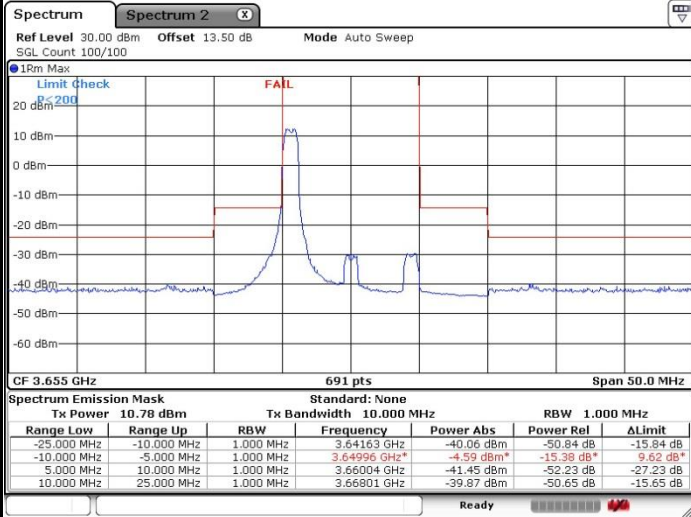
Date: 11. DEC. 2018 21:32:56



LTE Band 43 / 10MHz

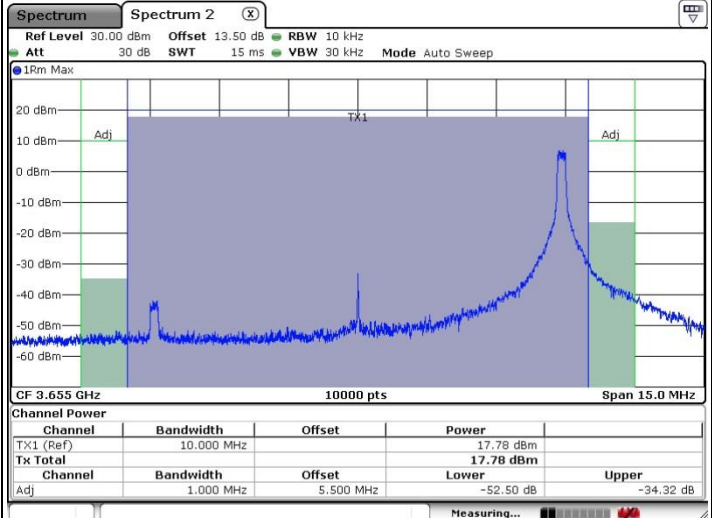
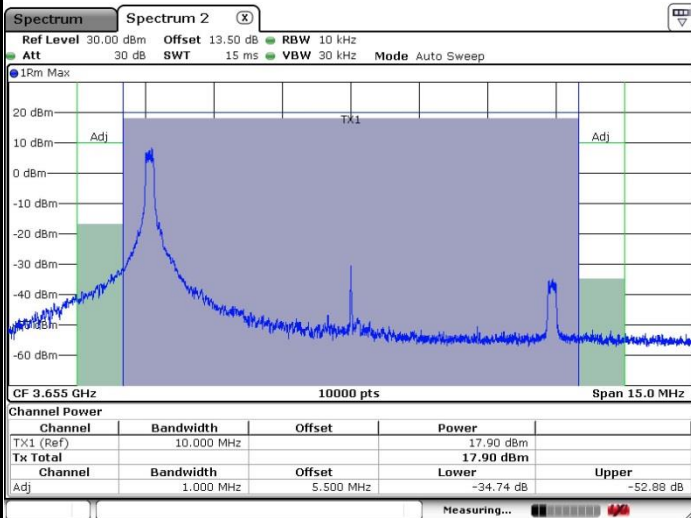
Low channel / 1 RB 0 / 64QAM

Low channel / 1 RB Max / 64QAM



Date: 11.DEC.2018 21:58:31

Date: 11.DEC.2018 22:04:00



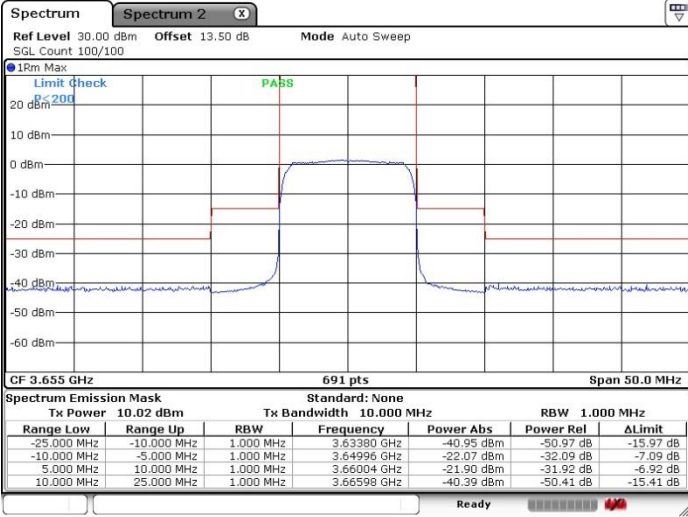
Date: 11.DEC.2018 21:59:03

Date: 11.DEC.2018 22:04:37



LTE Band 43 / 10MHz

Low channel / Full RB / 64QAM



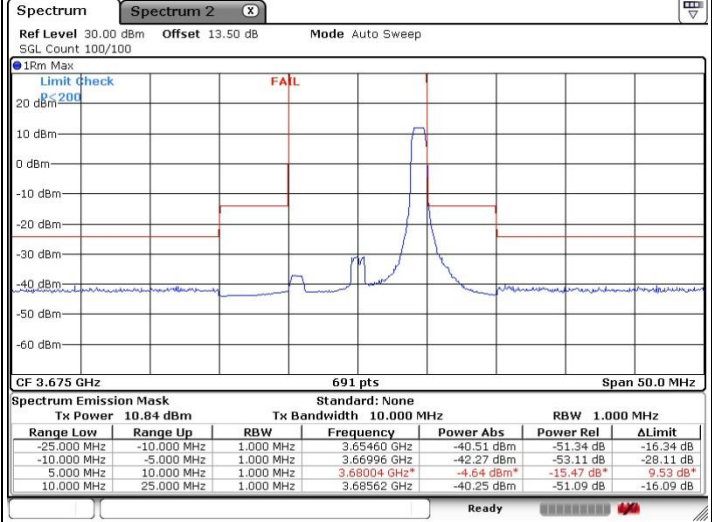
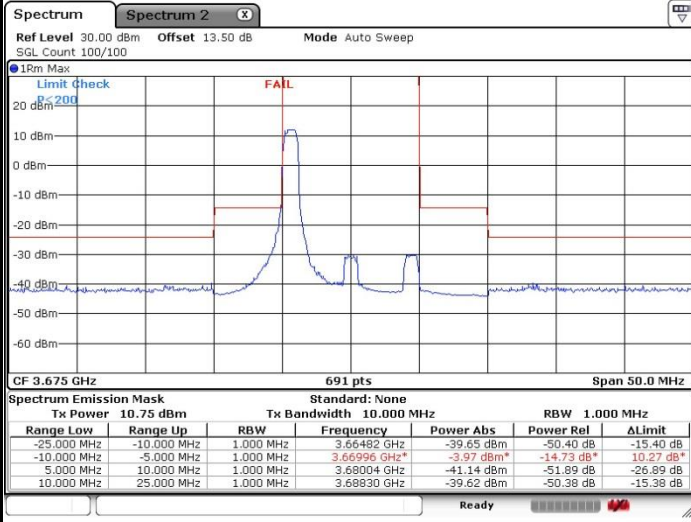
Date: 11.DEC.2018 21:51:18



LTE Band 43 / 10MHz

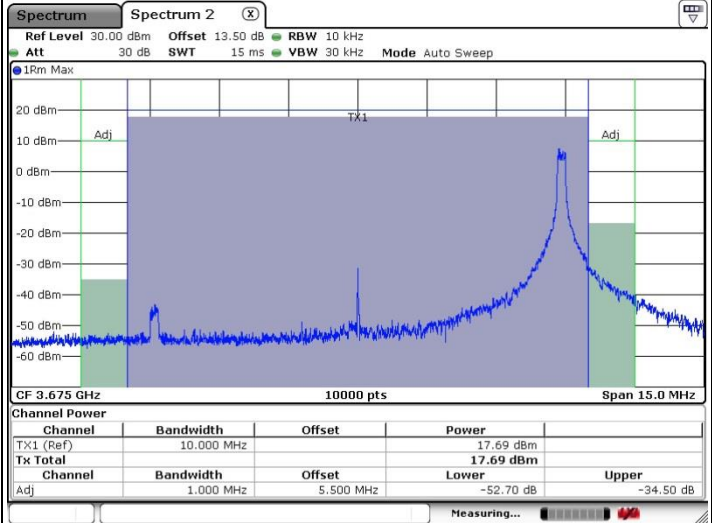
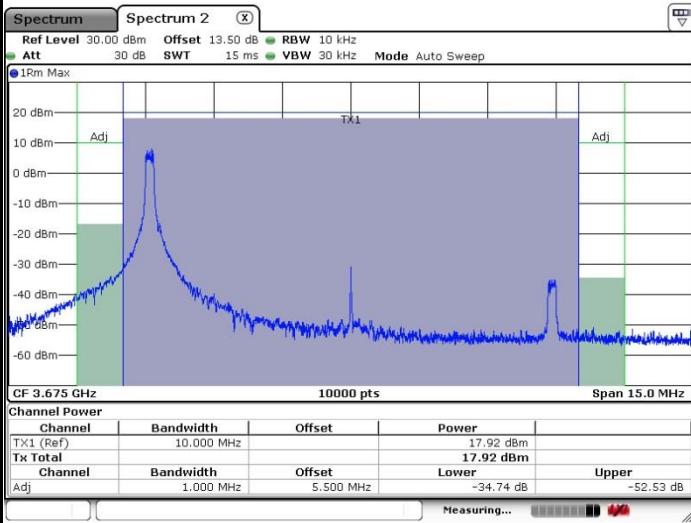
Middle channel / 1 RB 0 / 64QAM

Middle channel / 1 RB Max / 64QAM



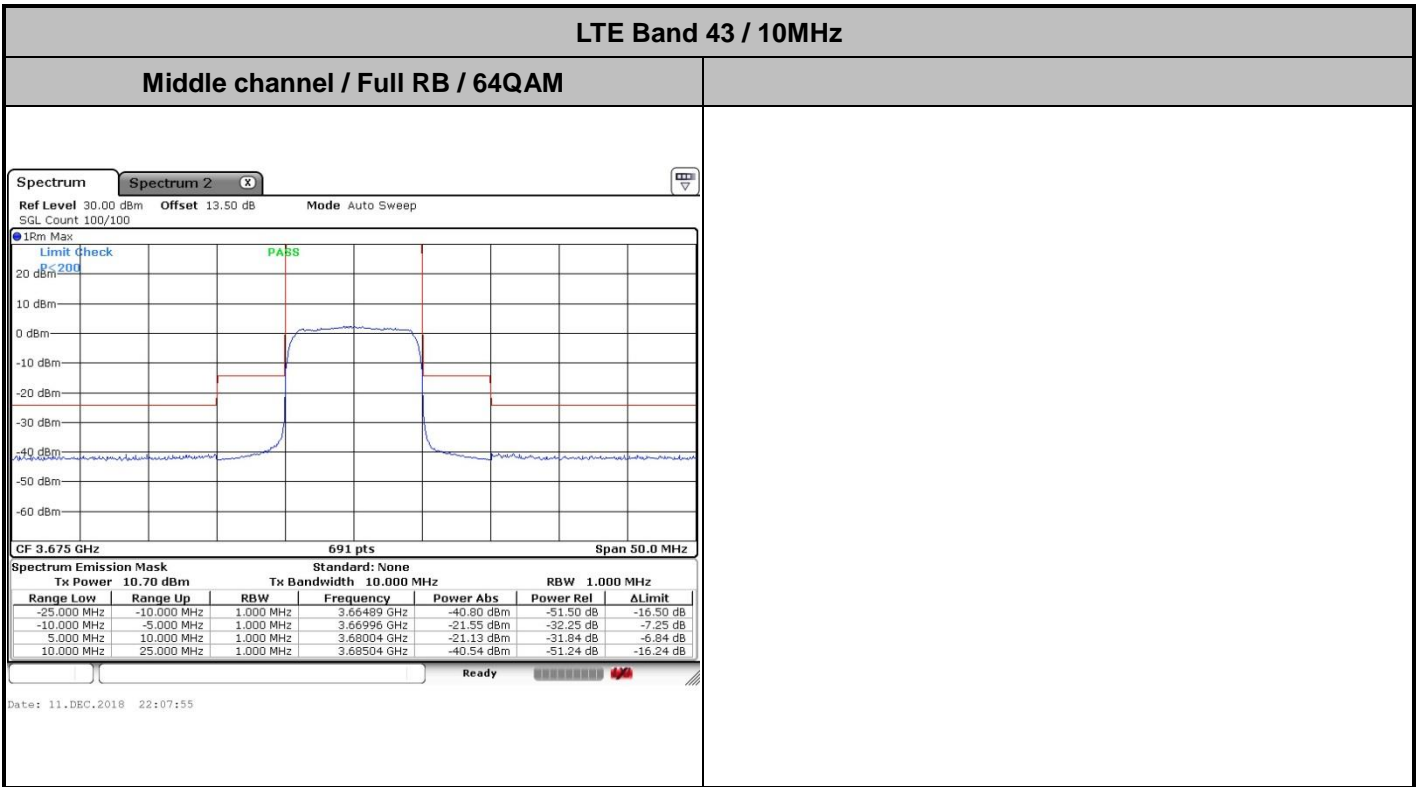
Date: 11.DEC.2018 22:21:33

Date: 11.DEC.2018 22:26:34



Date: 11.DEC.2018 22:22:08

Date: 11.DEC.2018 22:27:01

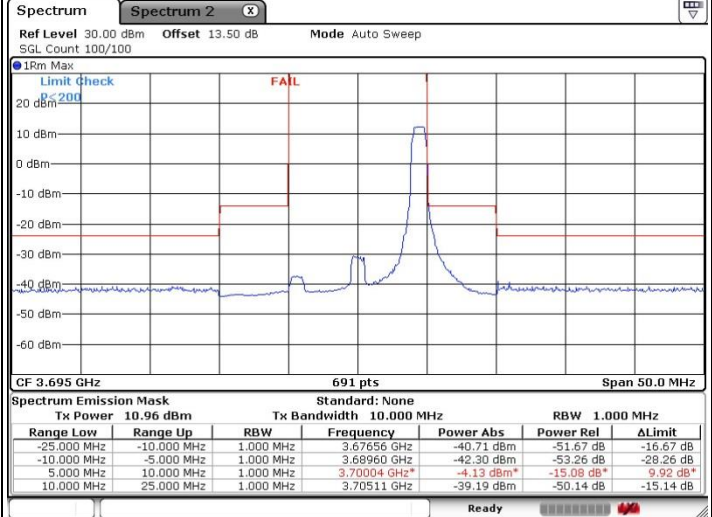
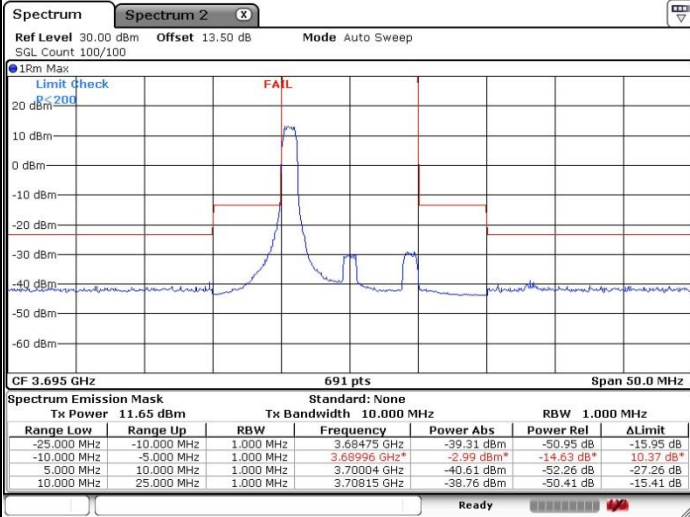




LTE Band 43 / 10MHz

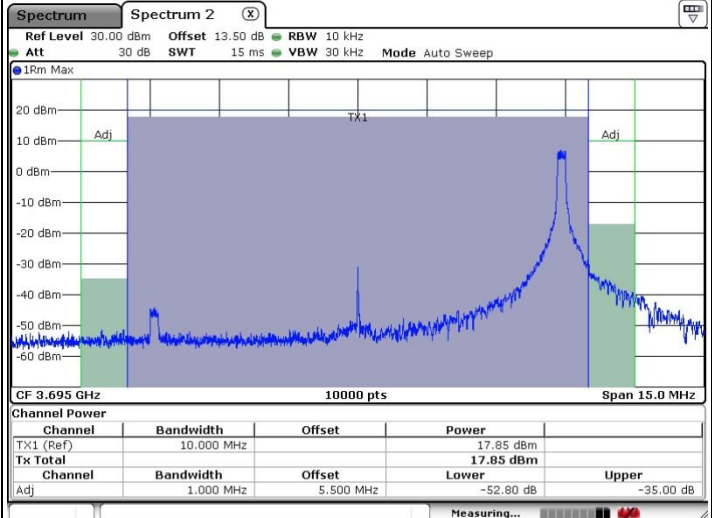
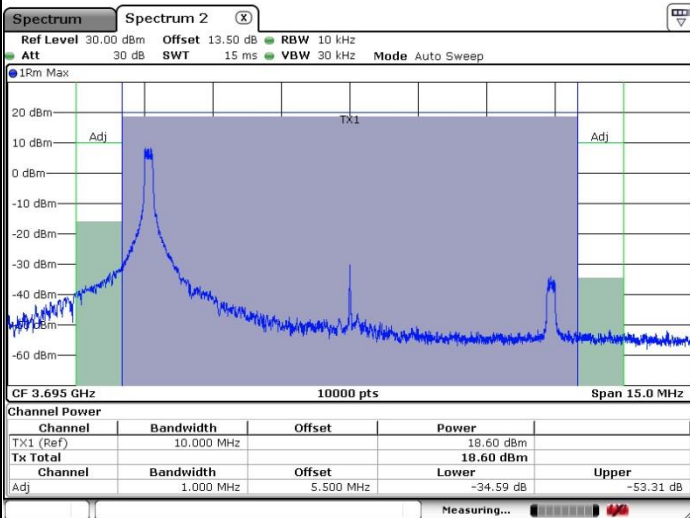
High channel / 1 RB 0 / 64QAM

High channel / 1 RB Max / 64QAM



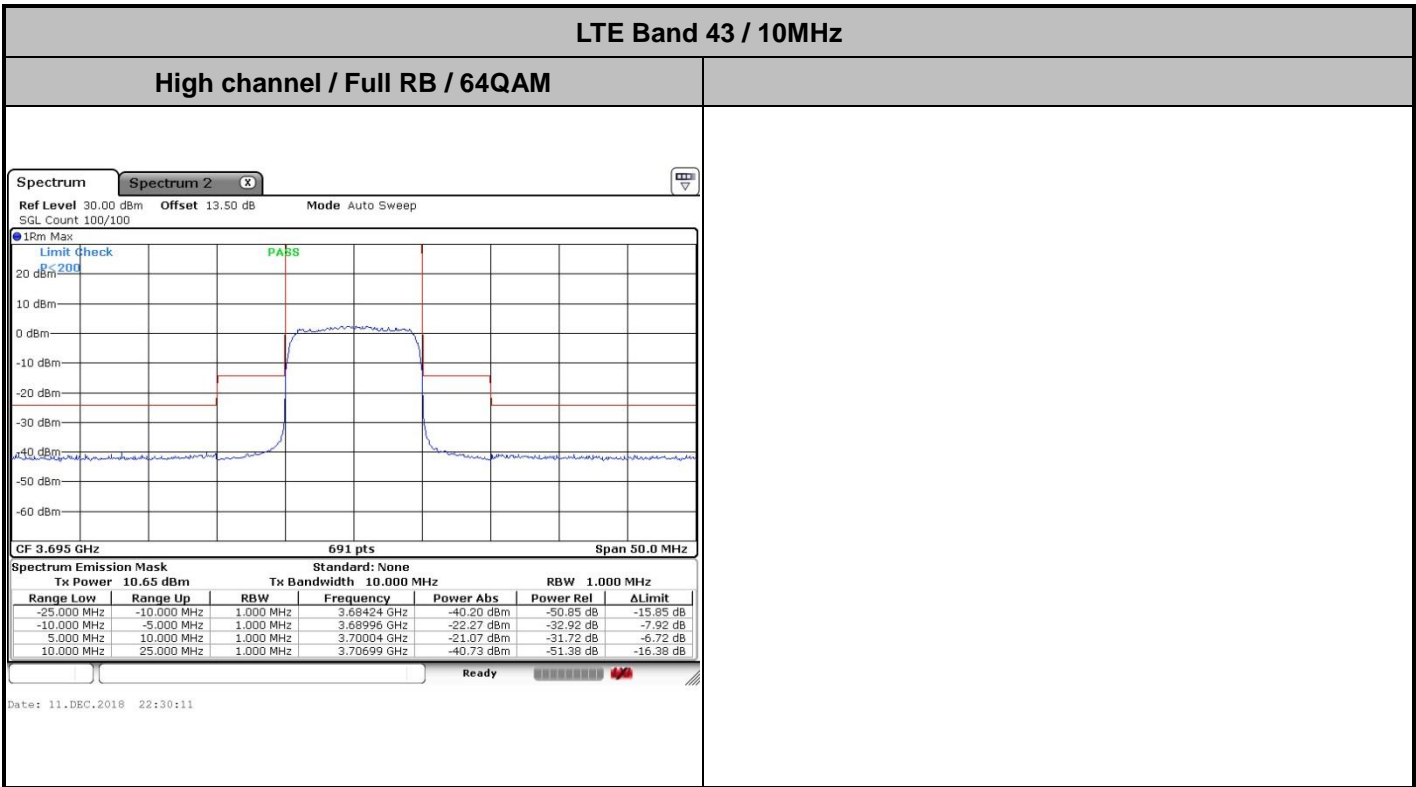
Date: 11.DEC.2018 22:34:04

Date: 11.DEC.2018 22:37:50



Date: 11.DEC.2018 22:34:28

Date: 11.DEC.2018 22:38:13

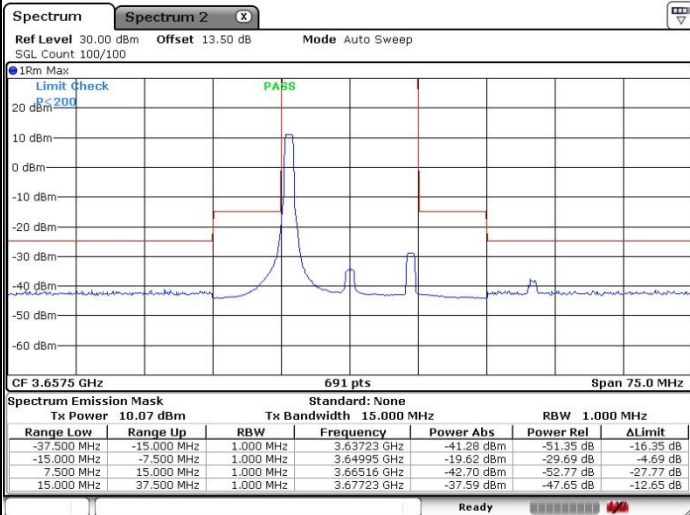




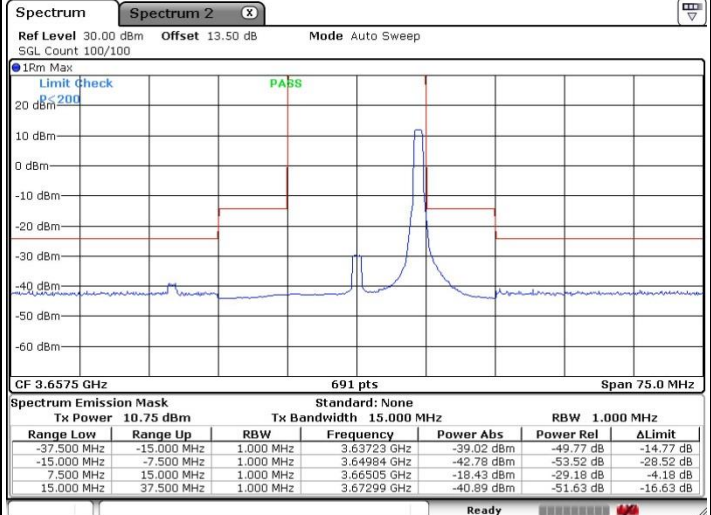
LTE Band 43 / 15MHz

Low channel / 1 RB 0 / 64QAM

Low channel / 1 RB max / 64QAM



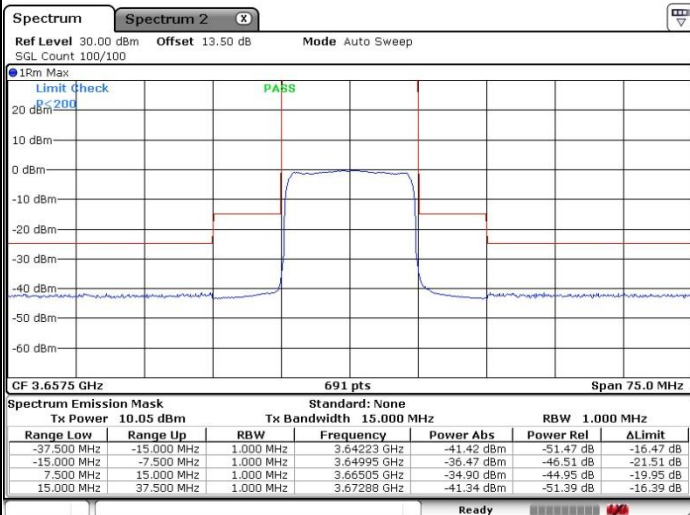
Date: 11.DEC.2018 23:05:53



Date: 11.DEC.2018 23:19:24

LTE Band 43 / 15MHz

Low channel / Full RB / 64QAM



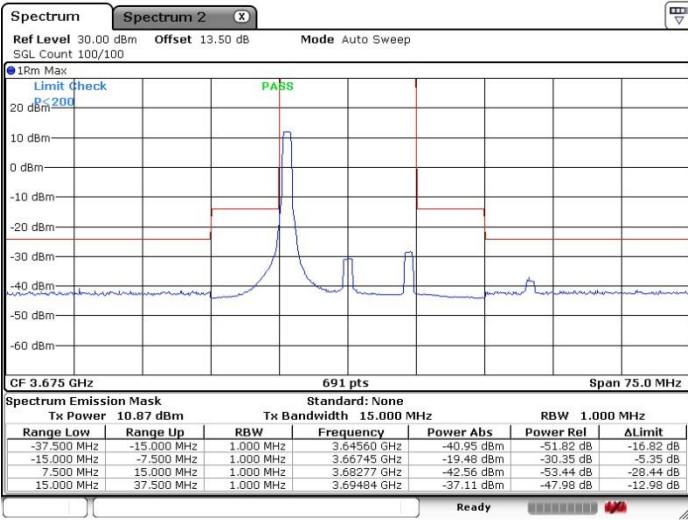
Date: 11.DEC.2018 23:00:46



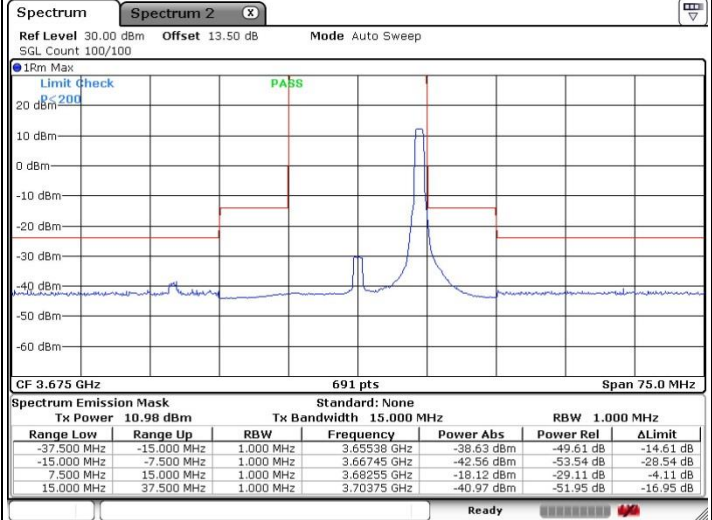
LTE Band 43 / 15MHz

Middle channel / 1 RB 0 / 64QAM

Middle channel / 1 RB max / 64QAM



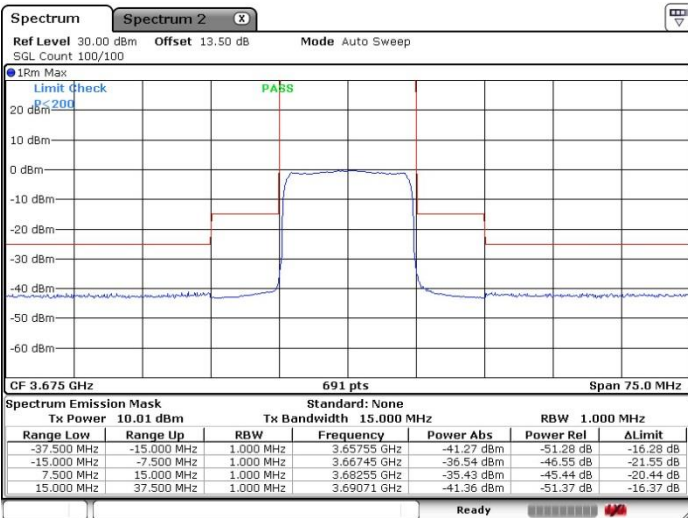
Date: 11.DEC.2018 23:32:04



Date: 11.DEC.2018 23:34:28

LTE Band 43 / 15MHz

Middle channel / Full RB / 64QAM



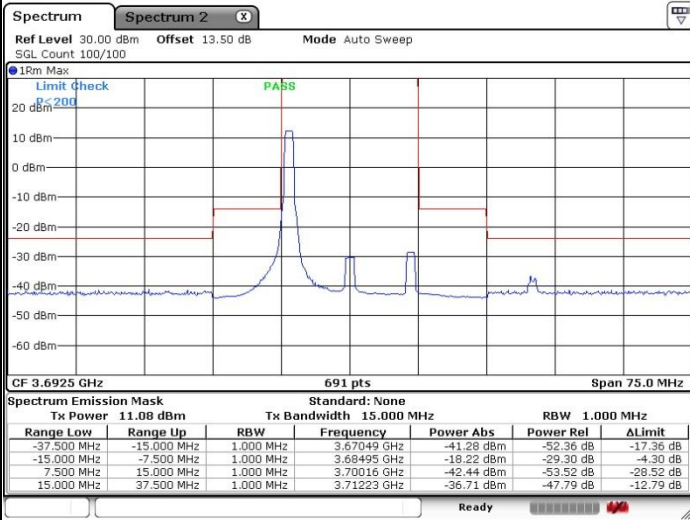
Date: 11.DEC.2018 23:25:24



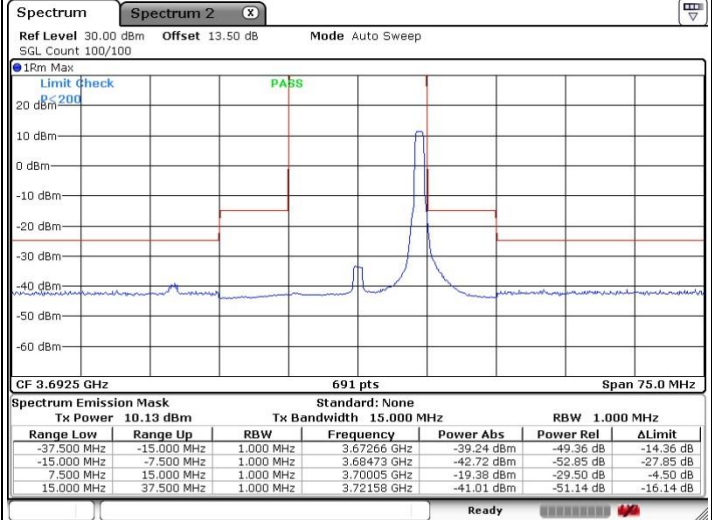
LTE Band 43 / 15MHz

High channel / 1 RB 0 / 64QAM

High channel / 1 RB max / 64QAM



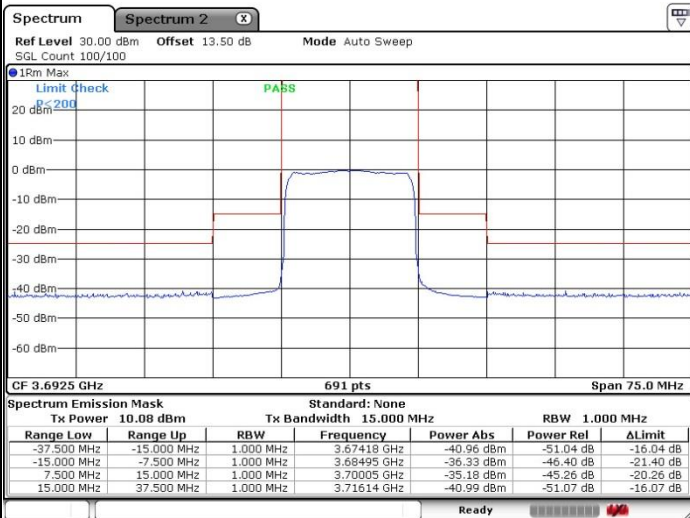
Date: 11.DEC.2018 23:40:34



Date: 11.DEC.2018 23:42:46

LTE Band 43 / 15MHz

High channel / Full RB / 64QAM



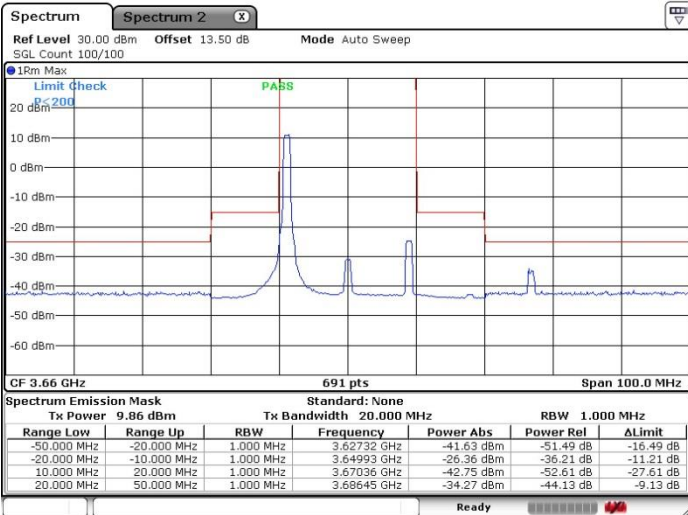
Date: 11.DEC.2018 23:38:01



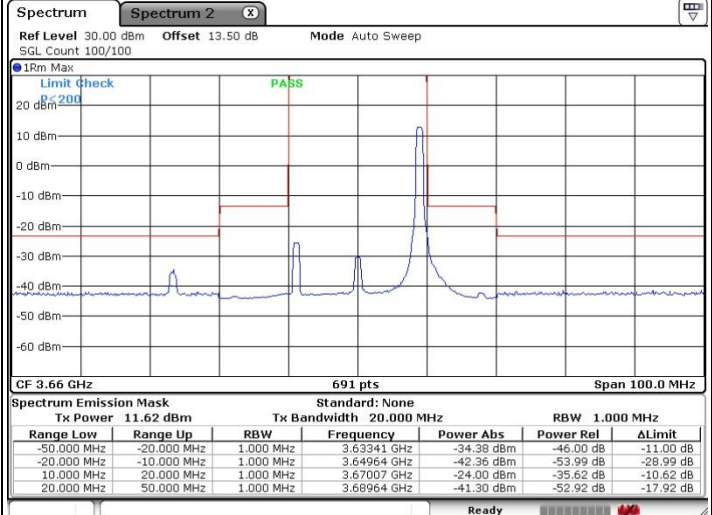
LTE Band 43 / 20MHz

Low channel / 1 RB 0 / 64QAM

Low channel / 1 RB max / 64QAM



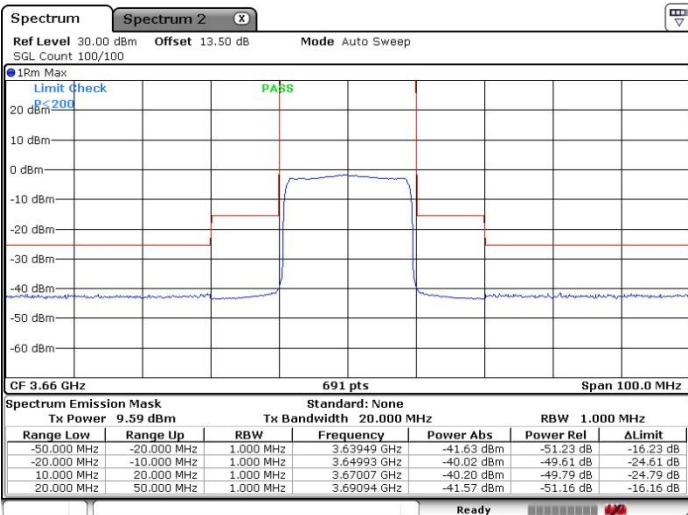
Date: 11.DEC.2018 23:50:43



Date: 12.DEC.2018 00:07:32

LTE Band 43 / 20MHz

Low channel / Full RB / 64QAM



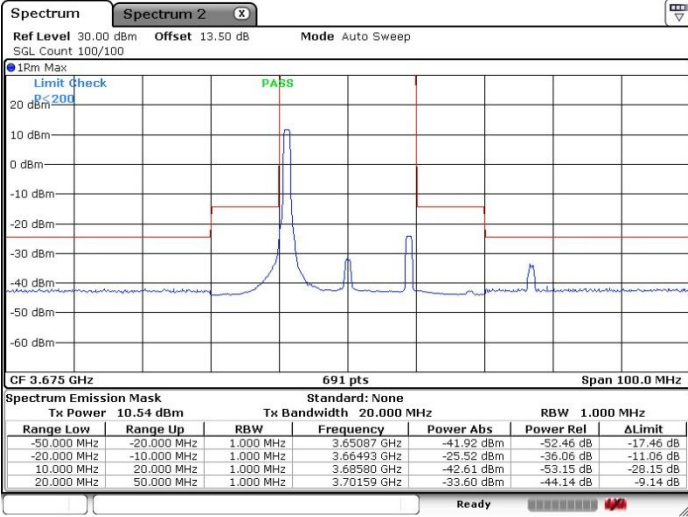
Date: 11.DEC.2018 23:48:35



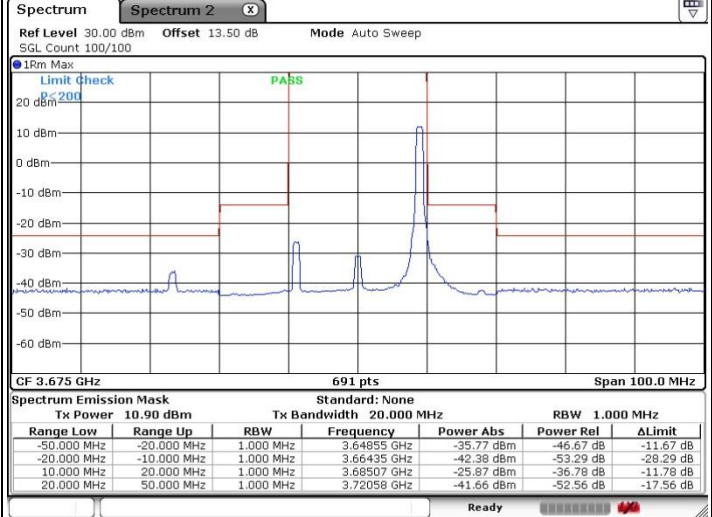
LTE Band 43 / 20MHz

Middle channel / 1 RB 0 / 64QAM

Middle channel / 1 RB max / 64QAM



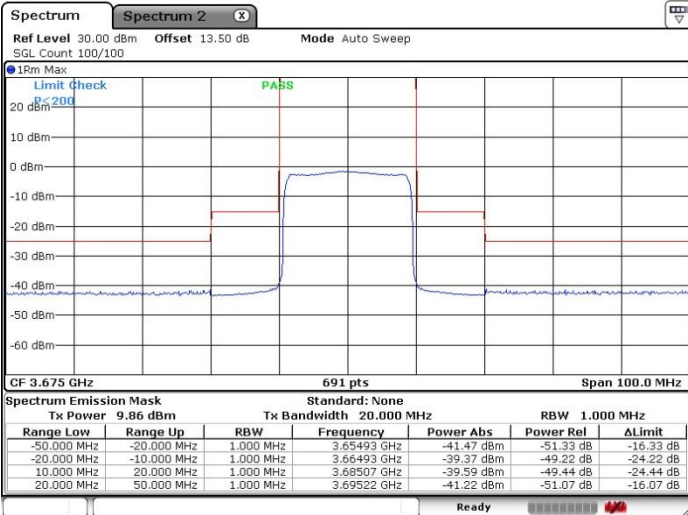
Date: 12.DEC.2018 00:12:50



Date: 12.DEC.2018 00:14:53

LTE Band 43 / 20MHz

Middle channel / Full RB / 64QAM



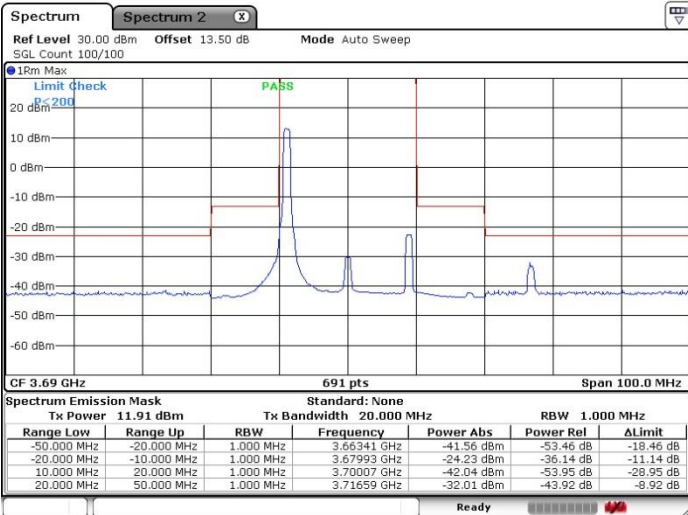
Date: 12.DEC.2018 00:10:18



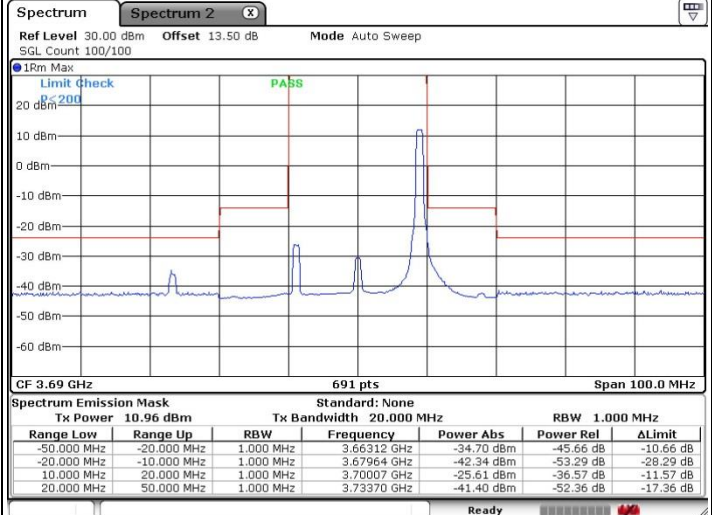
LTE Band 43 / 20MHz

High channel / 1 RB 0 / 64QAM

High channel / 1 RB max / 64QAM



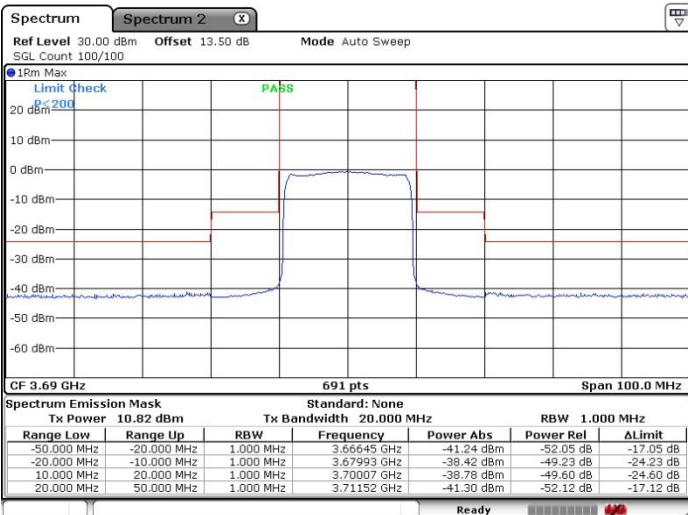
Date: 12.DEC.2018 00:20:55



Date: 12.DEC.2018 00:23:18

LTE Band 43 / 20MHz

High channel / Full RB / 64QAM



Date: 12.DEC.2018 00:18:03



Frequency Stability

Test Conditions		LTE Band 43 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0029	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0052	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0028	
-30	Normal Voltage	0.0024	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0023	

Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.15 V. ; Maximum Voltage =4.2 V
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of EIRP and Radiated Test

EIRP

<For IDU Antenna>

LTE Band 43 / 5MHz (Average) (GT - LC = 2.63 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	11.81	0.0152	14.44	0.0278
Middle		1	12	12.17	0.0165	14.80	0.0302
Highest		1	12	12.27	0.0169	14.90	0.0309
Lowest	16QAM	1	12	11.11	0.0129	13.74	0.0237
Middle		1	12	11.35	0.0136	13.98	0.0250
Highest		1	12	11.43	0.0139	14.06	0.0255
Lowest	64QAM	1	12	10.94	0.0124	13.57	0.0228
Middle		1	12	11.19	0.0132	13.82	0.0241
Highest		1	12	11.29	0.0135	13.92	0.0247
Limit	EIRP < 1W			Result		PASS	

LTE Band 43 / 10MHz (Average) (GT - LC = 2.63 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	11.90	0.0155	14.53	0.0284
Middle		1	25	12.30	0.0170	14.93	0.0311
Highest		1	25	12.44	0.0175	15.07	0.0321
Lowest	16QAM	1	0	11.03	0.0127	13.66	0.0232
Middle		1	0	11.41	0.0138	14.04	0.0254
Highest		1	0	11.83	0.0152	14.46	0.0279
Lowest	64QAM	1	0	10.82	0.0121	13.45	0.0221
Middle		1	0	11.22	0.0132	13.85	0.0243
Highest		1	0	11.66	0.0147	14.29	0.0269
Limit	EIRP < 1W			Result		PASS	

LTE Band 43 / 15MHz (Average) (GT - LC = 2.63 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	12.13	0.0163	14.76	0.0299
Middle		1	0	12.42	0.0175	15.05	0.0320
Highest		1	0	12.87	0.0194	15.50	0.0355
Lowest	16QAM	1	0	11.27	0.0134	13.90	0.0245
Middle		1	0	11.60	0.0145	14.23	0.0265
Highest		1	0	12.04	0.0160	14.67	0.0293
Lowest	64QAM	1	0	11.10	0.0129	13.73	0.0236
Middle		1	0	11.42	0.0139	14.05	0.0254
Highest		1	0	11.84	0.0153	14.47	0.0280
Limit	EIRP < 1W			Result		PASS	



LTE Band 43 / 20MHz (Average) (GT - LC = 2.63 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	12.37	0.0173	15.00	0.0316
Middle		1	0	12.71	0.0187	15.34	0.0342
Highest		1	0	13.04	0.0201	15.67	0.0369
Lowest	16QAM	1	0	11.66	0.0147	14.29	0.0269
Middle		1	0	11.97	0.0157	14.60	0.0288
Highest		1	0	12.25	0.0168	14.88	0.0308
Lowest	64QAM	1	0	11.62	0.0145	14.25	0.0266
Middle		1	0	11.80	0.0151	14.43	0.0277
Highest		1	0	12.09	0.0162	14.72	0.0296
Limit	EIRP < 1W			Result		PASS	



<For ODU Antenna>

LTE Band 43 / 5MHz (Average) (GT - LC = 14.8 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	11.81	0.0152	26.61	0.4581
Middle		1	12	12.17	0.0165	26.97	0.4977
Highest		1	12	12.27	0.0169	27.07	0.5093
Lowest	16QAM	1	12	11.11	0.0129	25.91	0.3899
Middle		1	12	11.35	0.0136	26.15	0.4121
Highest		1	12	11.43	0.0139	26.23	0.4198
Lowest	64QAM	1	12	10.94	0.0124	25.74	0.3750
Middle		1	12	11.19	0.0132	25.99	0.3972
Highest		1	12	11.29	0.0135	26.09	0.4064
Limit	EIRP < 25W			Result		PASS	

LTE Band 43 / 10MHz (Average) (GT - LC = 14.8 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	11.90	0.0155	26.70	0.4677
Middle		1	25	12.30	0.0170	27.10	0.5129
Highest		1	25	12.44	0.0175	27.24	0.5297
Lowest	16QAM	1	0	11.03	0.0127	25.83	0.3828
Middle		1	0	11.41	0.0138	26.21	0.4178
Highest		1	0	11.83	0.0152	26.63	0.4603
Lowest	64QAM	1	0	10.82	0.0121	25.62	0.3648
Middle		1	0	11.22	0.0132	26.02	0.3999
Highest		1	0	11.66	0.0147	26.46	0.4426
Limit	EIRP < 25W			Result		PASS	

LTE Band 43 / 15MHz (Average) (GT - LC = 14.8 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	12.13	0.0163	26.93	0.4932
Middle		1	0	12.42	0.0175	27.22	0.5272
Highest		1	0	12.87	0.0194	27.67	0.5848
Lowest	16QAM	1	0	11.27	0.0134	26.07	0.4046
Middle		1	0	11.60	0.0145	26.40	0.4365
Highest		1	0	12.04	0.0160	26.84	0.4831
Lowest	64QAM	1	0	11.10	0.0129	25.90	0.3890
Middle		1	0	11.42	0.0139	26.22	0.4188
Highest		1	0	11.84	0.0153	26.64	0.4613
Limit	EIRP < 25W			Result		PASS	



LTE Band 43 / 20MHz (Average) (GT - LC = 14.8 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	12.37	0.0173	27.17	0.5212
Middle		1	0	12.71	0.0187	27.51	0.5636
Highest		1	0	13.04	0.0201	27.84	0.6081
Lowest	16QAM	1	0	11.66	0.0147	26.46	0.4426
Middle		1	0	11.97	0.0157	26.77	0.4753
Highest		1	0	12.25	0.0168	27.05	0.5070
Lowest	64QAM	1	0	11.62	0.0145	26.42	0.4385
Middle		1	0	11.80	0.0151	26.60	0.4571
Highest		1	0	12.09	0.0162	26.89	0.4887
Limit	EIRP < 25W			Result		PASS	



Radiated Spurious Emission

LTE Band 43 (IDU Antenna)

LTE Band 43 / 5MHz / QPSK									
Channel	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)
Lowest	7301	-45.72	-13	-32.72	-74.71	-55.26	1.88	11.42	H
	10951	-41.98	-13	-28.98	-74.06	-50.26	2.62	10.90	H
	14601	-37.54	-13	-24.54	-73.8	-45.98	2.88	11.32	H
									H
									H
									H
	7301	-46.07	-13	-33.07	-74.84	-55.61	1.88	11.42	V
	10951	-42.29	-13	-29.29	-74.19	-50.57	2.62	10.90	V
	14601	-38.87	-13	-25.87	-73.89	-47.31	2.88	11.32	V
									V
									V
									V
Middle	7345	-45.39	-13	-32.39	-74.34	-54.83	1.91	11.35	H
	11018	-42.15	-13	-29.15	-74.25	-50.43	2.64	10.92	H
	14691	-36.82	-13	-23.82	-73.5	-45.53	2.90	11.61	H
									H
									H
									H
	7345	-45.82	-13	-32.82	-74.57	-55.26	1.91	11.35	V
	11018	-42.31	-13	-29.31	-74.24	-50.59	2.64	10.92	V
	14691	-38.15	-13	-25.15	-73.3	-46.86	2.90	11.61	V
									V
									V
									V



Highest	7391	-45.94	-13	-32.94	-74.86	-55.28	1.93	11.27	H
	11086	-42.14	-13	-29.14	-74.34	-50.53	2.61	11.00	H
	14781	-36.25	-13	-23.25	-73.45	-45.22	2.93	11.90	H
									H
									H
									H
	7391	-45.97	-13	-32.97	-74.73	-55.31	1.93	11.27	V
	11086	-42.17	-13	-29.17	-74.21	-50.56	2.61	11.00	V
	14781	-38.33	-13	-25.33	-73.67	-47.30	2.93	11.90	V
									V
									V
									V

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



LTE Band 43 (ODU Antenna)

LTE Band 43 / 5MHz / QPSK									
Channel	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)
Lowest	7300	-46.01	-13	-33.01	-75	-55.55	1.88	11.42	H
	10951	-42.18	-13	-29.18	-74.26	-50.46	2.62	10.90	H
	14604	-37.68	-13	-24.68	-73.94	-46.13	2.88	11.33	H
									H
									H
									H
	7300	-46.19	-13	-33.19	-74.96	-55.73	1.88	11.42	V
	10951	-41.85	-13	-28.85	-73.75	-50.13	2.62	10.90	V
	14604	-38.92	-13	-25.92	-73.94	-47.37	2.88	11.33	V
									V
									V
									V
Middle	7345	-45.23	-13	-32.23	-74.18	-54.67	1.91	11.35	H
	11020	-41.37	-13	-28.37	-73.47	-49.65	2.64	10.92	H
	14688	-36.08	-13	-23.08	-72.76	-44.78	2.90	11.60	H
									H
									H
									H
	7345	-45.54	-13	-32.54	-74.29	-54.98	1.91	11.35	V
	11020	-42.19	-13	-29.19	-74.12	-50.47	2.64	10.92	V
	14688	-37.99	-13	-24.99	-73.14	-46.69	2.90	11.60	V
									V
									V
									V



Highest	7390	-45.68	-13	-32.68	-74.6	-55.03	1.93	11.28	H
	11086	-41.94	-13	-28.94	-74.14	-50.33	2.61	11.00	H
	14784	-36.31	-13	-23.31	-73.51	-45.29	2.93	11.91	H
									H
									H
									H
	7390	-46.25	-13	-33.25	-75.01	-55.60	1.93	11.28	V
	11086	-42.04	-13	-29.04	-74.08	-50.43	2.61	11.00	V
	14784	-37.90	-13	-24.90	-73.24	-46.88	2.93	11.91	V
									V
									V
									V

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