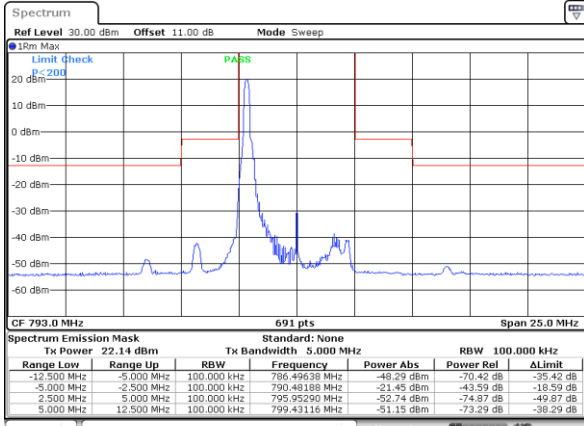


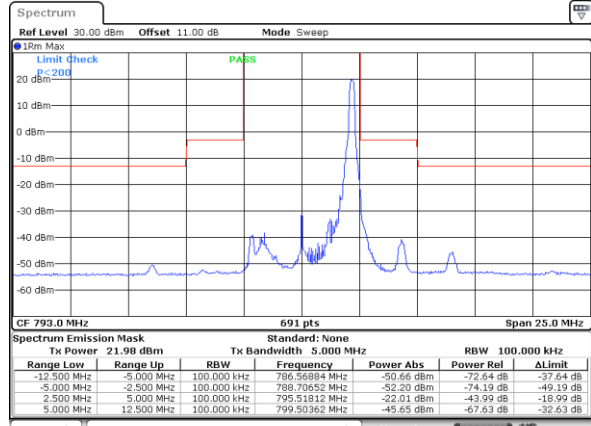


LTE Band 14 / 5MHz / 16QAM

Middle Channel / 1RB

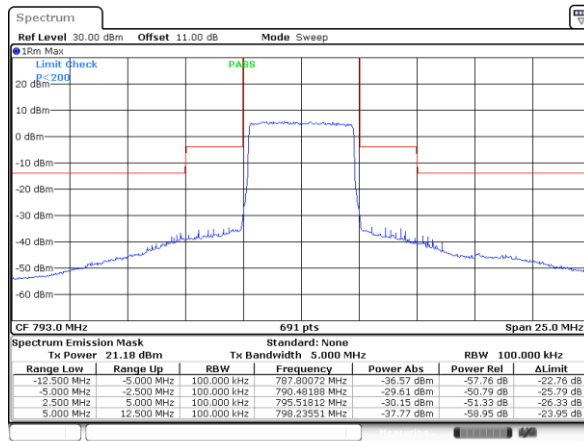


Date: 27_SEP.2020 11:17:31



Date: 27_SEP.2020 11:16:35

Middle Channel / Full RB

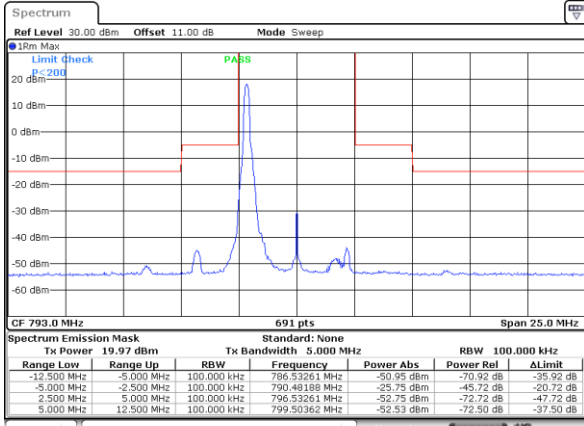


Date: 27_SEP.2020 11:18:28

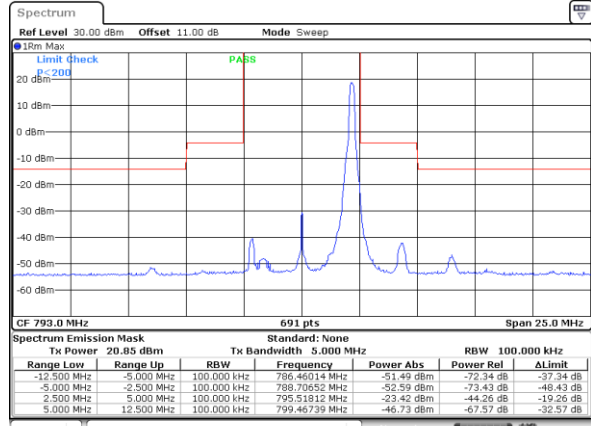


LTE Band 14 / 5MHz / 64QAM

Middle Channel / 1RB

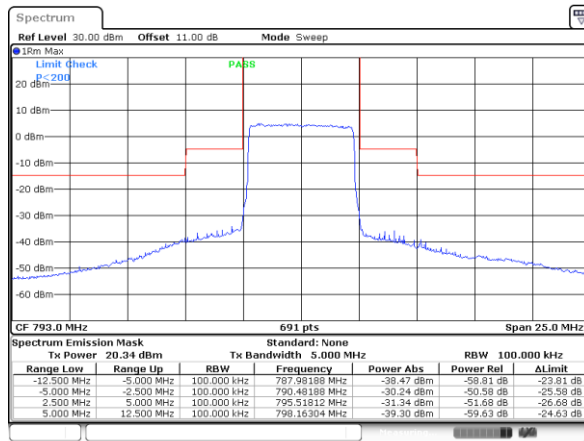


Date: 27_SEP.2020 11:17:50



Date: 27_SEP.2020 11:16:16

Middle Channel / Full RB

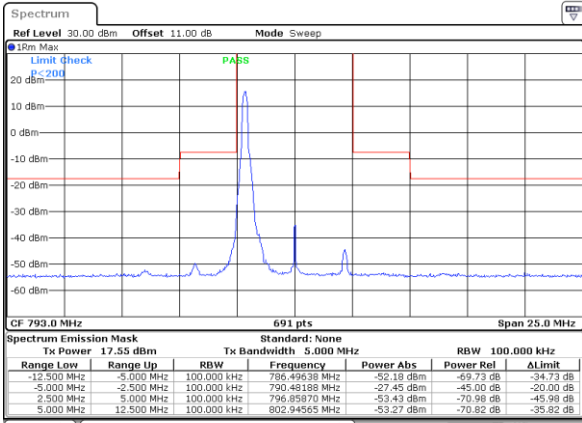


Date: 27_SEP.2020 11:18:09

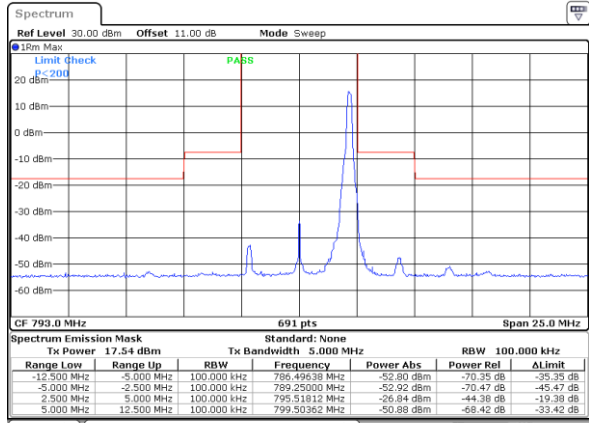


LTE Band 14 / 5MHz / 256QAM

Middle Channel / 1RB

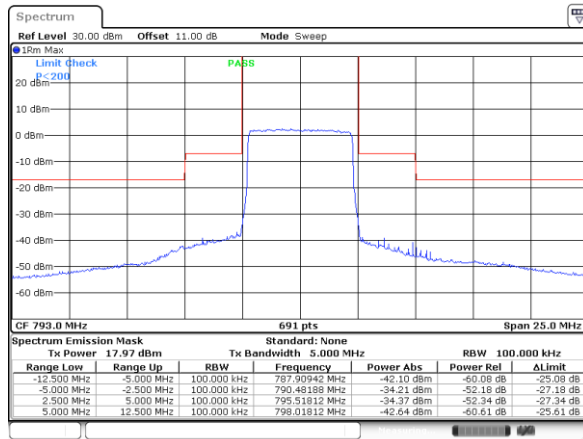


Date: 28_SEP.2020 10:10:42



Date: 28_SEP.2020 10:12:143

Middle Channel / Full RB

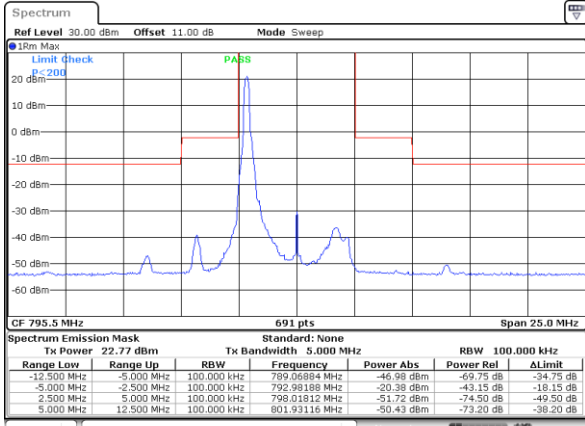


Date: 28_SEP.2020 10:09:47

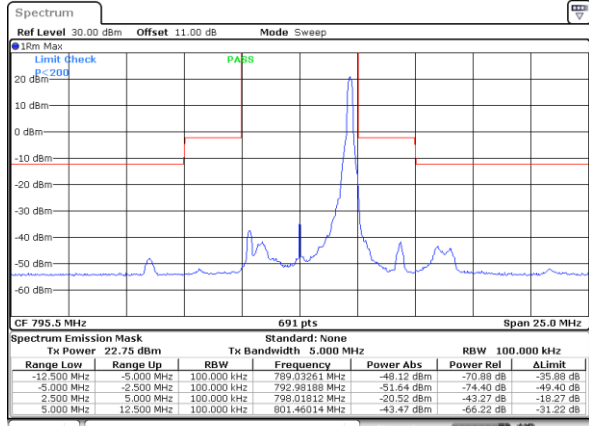


LTE Band 14 / 5MHz / QPSK

Highest Channel / 1RB

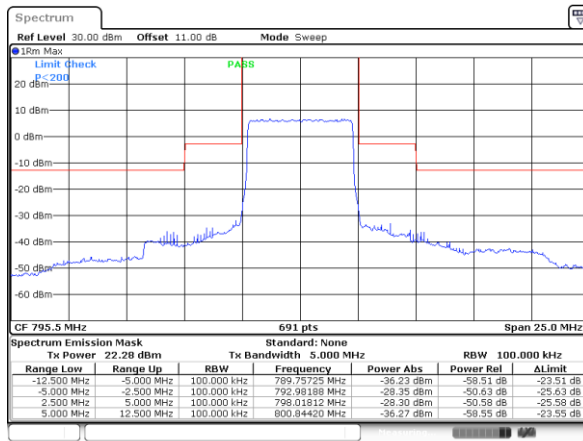


Date: 27_SEP.2020 11:20:43



Date: 27_SEP.2020 11:21:02

Highest Channel / Full RB

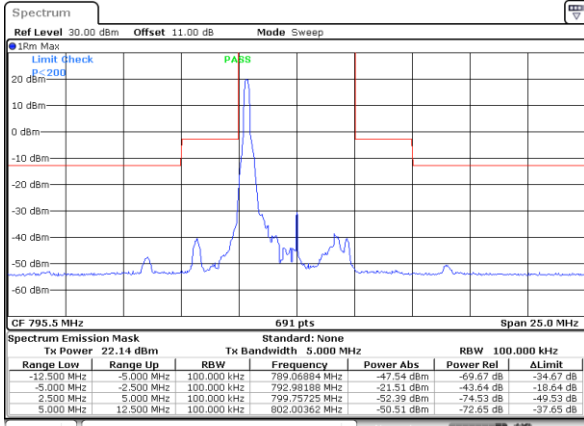


Date: 27_SEP.2020 11:19:06

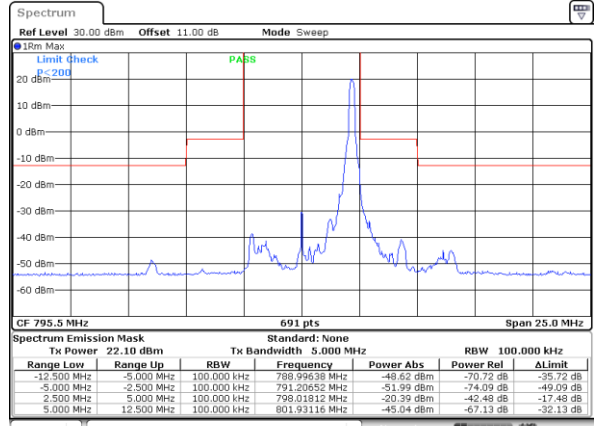


LTE Band 14 / 5MHz / 16QAM

Highest Channel / 1RB

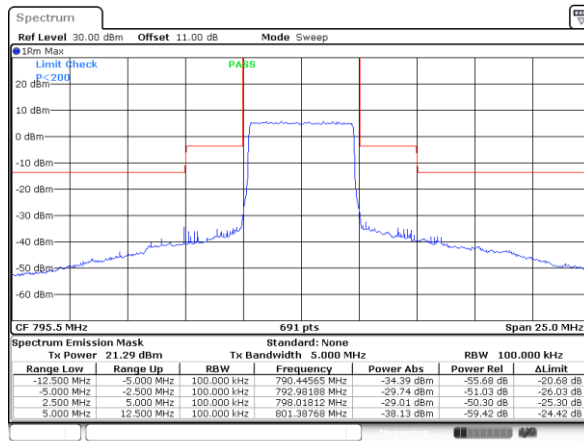


Date: 27_SEP.2020 11:20:23



Date: 27_SEP.2020 11:21:21

Highest Channel / Full RB

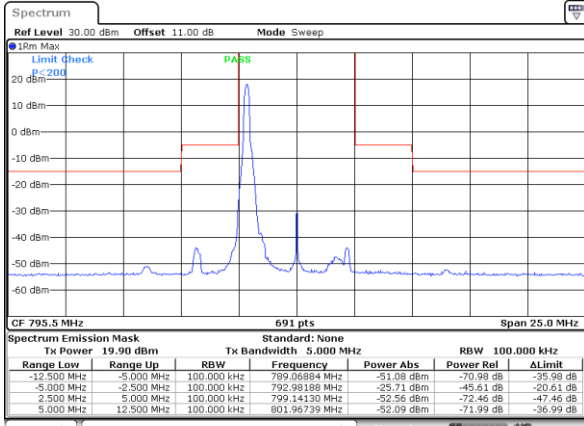


Date: 27_SEP.2020 11:19:25

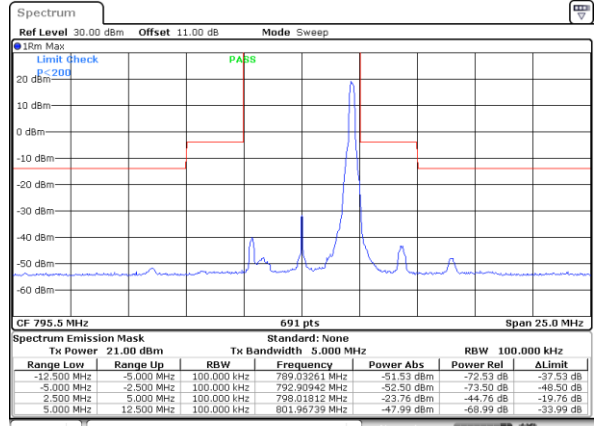


LTE Band 14 / 5MHz / 64QAM

Highest Channel / 1RB

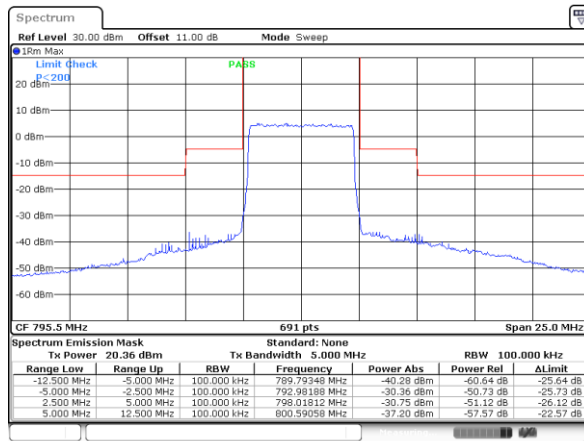


Date: 27_SEP.2020 11:20:04



Date: 27_SEP.2020 11:21:41

Highest Channel / Full RB

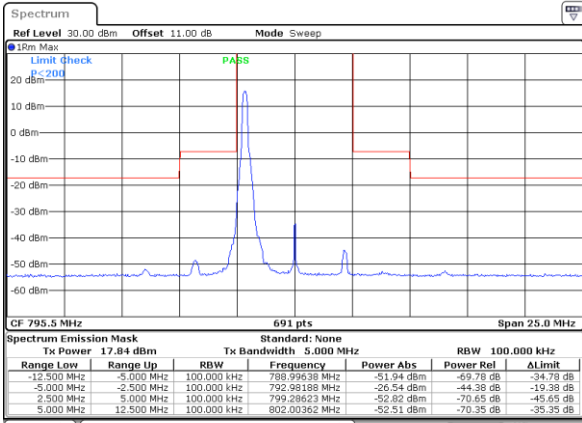


Date: 27_SEP.2020 11:19:44

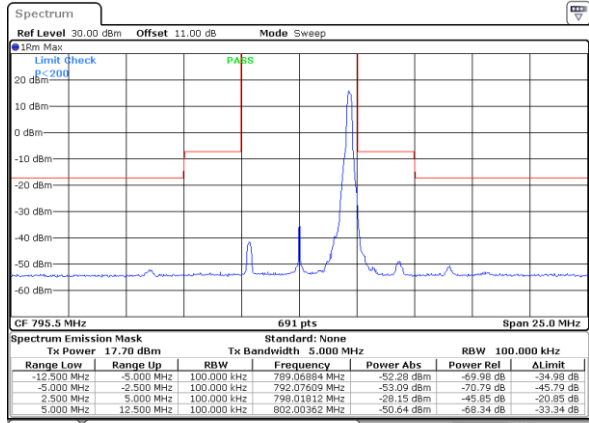


LTE Band 14 / 5MHz / 256QAM

Highest Channel / 1RB

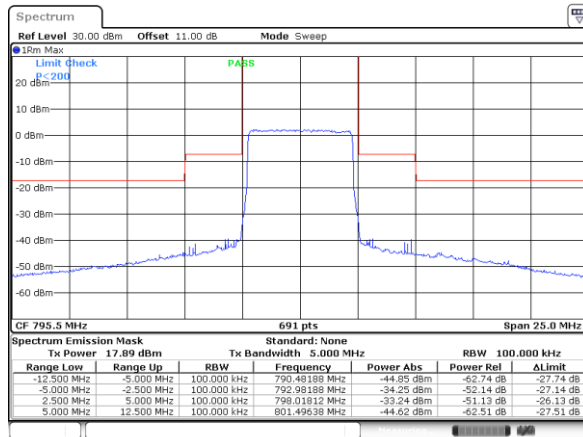


Date: 28_SEP.2020 10:19:03



Date: 28_SEP.2020 10:19:38

Highest Channel / Full RB

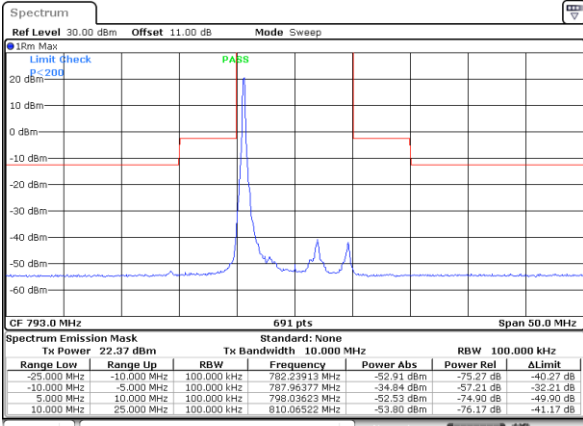


Date: 28_SEP.2020 10:16:08

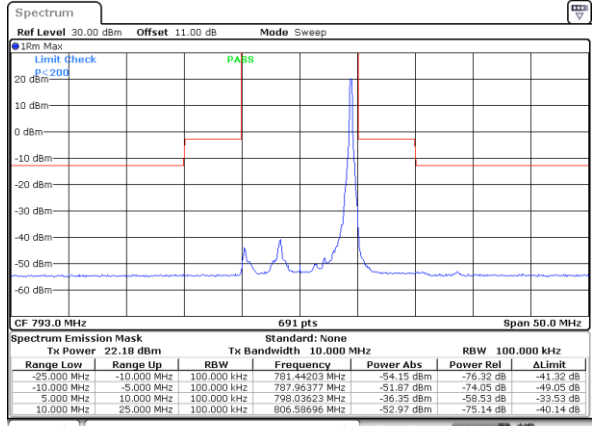


LTE Band 14 / 10MHz / QPSK

Middle Channel / 1RB

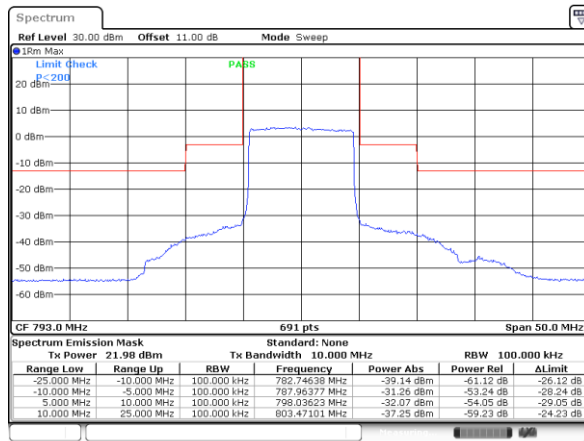


Date: 27_SEP.2020 11:22:57



Date: 27_SEP.2020 11:22:38

Middle Channel / Full RB

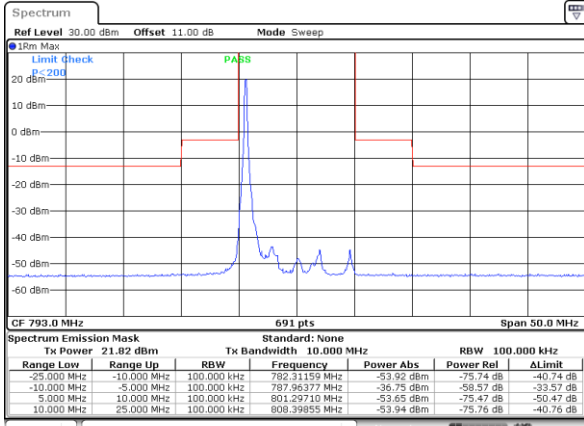


Date: 27_SEP.2020 11:24:31

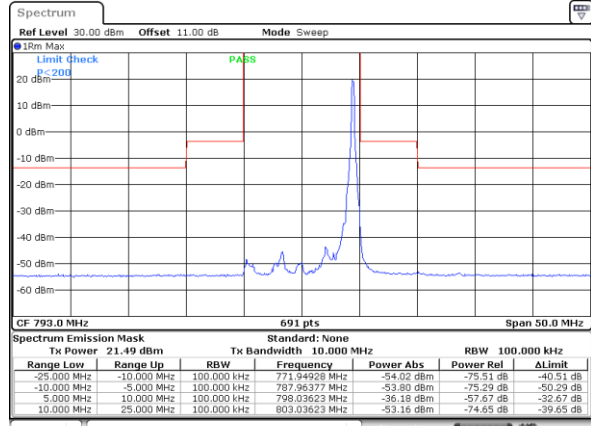


LTE Band 14 / 10MHz / 16QAM

Middle Channel / 1RB

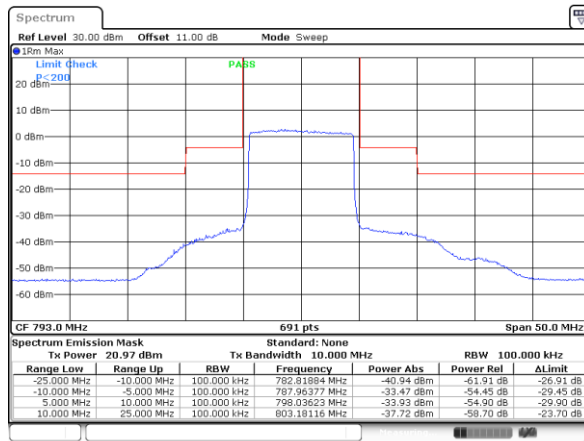


Date: 27_SEP.2020 11:23:16



Date: 27_SEP.2020 11:22:19

Middle Channel / Full RB

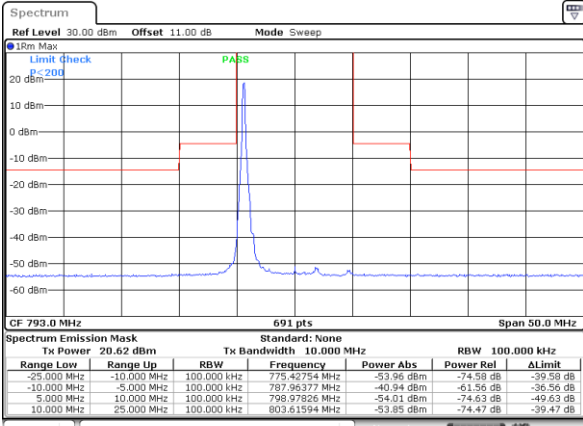


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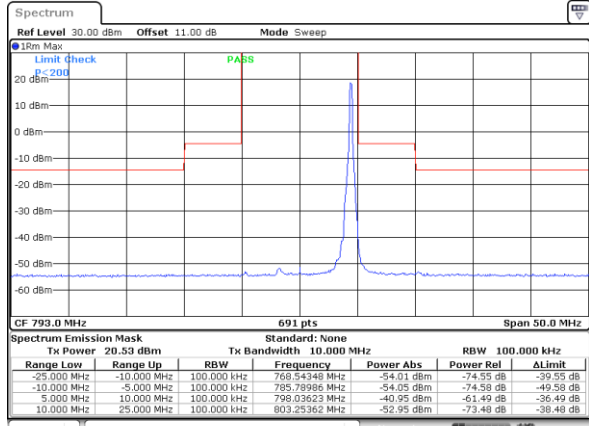


LTE Band 14 / 10MHz / 64QAM

Middle Channel / 1RB

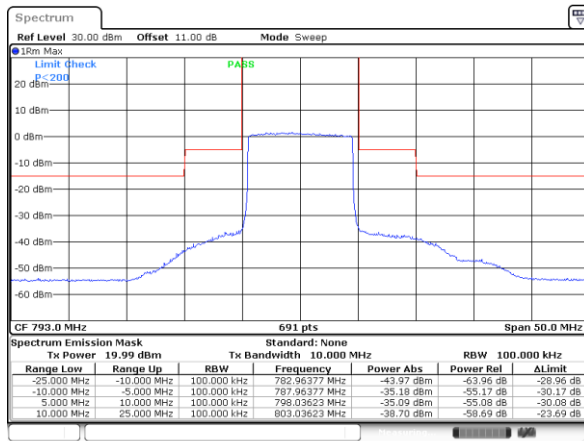


Date: 27_SEP.2020 11:23:35



Date: 27_SEP.2020 11:22:00

Middle Channel / Full RB

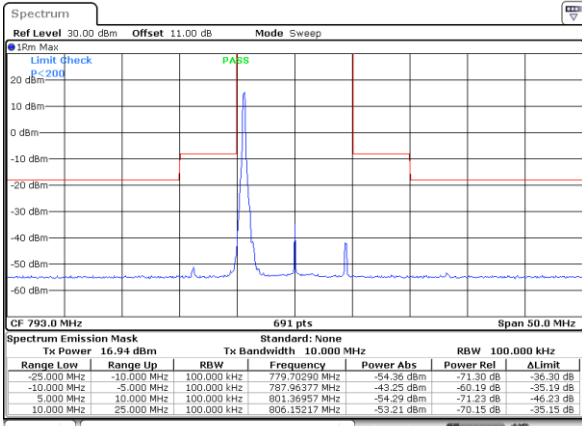


Date: 27_SEP.2020 11:23:54

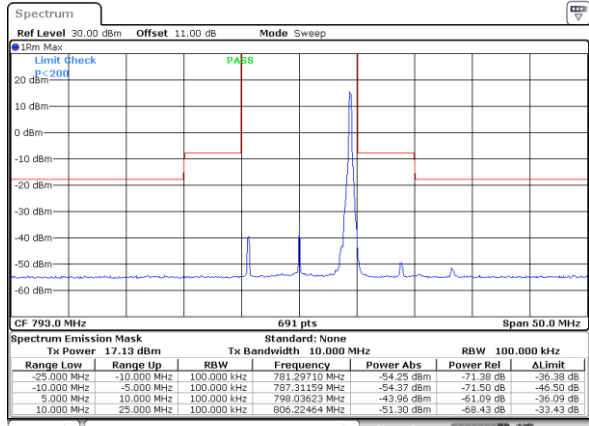


LTE Band 14 / 10MHz / 256QAM

Middle Channel / 1RB

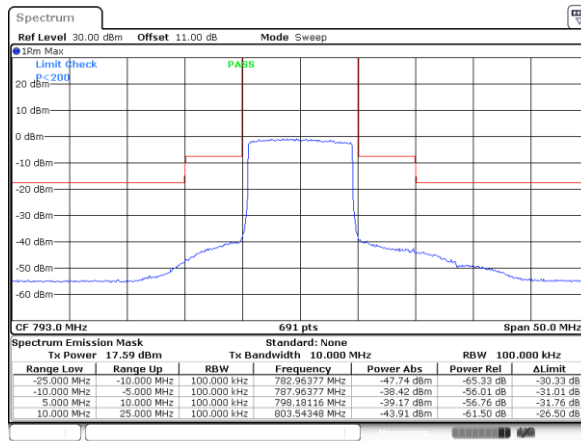


Date: 28_SEP.2020 10:25:00



Date: 28_SEP.2020 10:28:39

Middle Channel / Full RB



Date: 28_SEP.2020 10:22:52



Frequency Stability

Test Conditions		LTE Band 14 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0025	PASS
40	Normal Voltage	0.0079	
30	Normal Voltage	0.0034	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0039	
0	Normal Voltage	0.0154	
-10	Normal Voltage	0.0045	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0040	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.25 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of ERP and Radiated Test

ERP

LTE Band 14 / 5MHz (Average) (GT - LC = 3.6 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	12	23.68	0.2333	25.13	0.3258
Middle		1	12	23.61	0.2296	25.06	0.3206
Highest		1	12	23.53	0.2254	24.98	0.3148
Lowest	16QAM	1	12	22.99	0.1991	24.44	0.2780
Middle		1	12	22.93	0.1963	24.38	0.2742
Highest		1	12	22.77	0.1892	24.22	0.2642
Lowest	64QAM	1	0	21.93	0.1560	23.38	0.2178
Middle		1	0	21.88	0.1542	23.33	0.2153
Highest		1	0	21.80	0.1514	23.25	0.2113
Lowest	256QAM	1	12	18.80	0.0759	22.40	0.1738
Middle		1	12	18.85	0.0767	22.45	0.1758
Highest		1	12	18.68	0.0738	22.28	0.1690
Limit	ERP < 3W			Result		PASS	

LTE Band 14 / 10MHz (Average) (GT - LC = 3.6 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	-	-	-	-	-	-
Middle		1	0	23.71	0.2350	25.16	0.3281
Highest		-	-	-	-	-	-
Lowest	16QAM	-	-	-	-	-	-
Middle		1	0	22.98	0.1986	24.43	0.2773
Highest		-	-	-	-	-	-
Lowest	64QAM	-	-	-	-	-	-
Middle		1	0	21.87	0.1538	23.32	0.2148
Highest		-	-	-	-	-	-
Lowest	256QAM	-	-	-	-	-	-
Middle		1	0	18.86	0.0769	22.46	0.1762
Highest		-	-	-	-	-	-
Limit	ERP < 3W			Result		PASS	



Radiated Spurious Emission

LTE Band 14

LTE Band 14 / 5MHz / QPSK									
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	1576	-63.01	-42.15	-20.86	-71.47	-68.35	0.90	8.39	H
	2365	-58.92	-13	-45.92	-72.48	-66.16	1.12	10.51	H
	3153	-57.21	-13	-44.21	-72.67	-65.43	1.30	11.67	H
									H
									H
									H
	1576	-63.69	-42.15	-21.54	-71.62	-69.03	0.90	8.39	V
	2368	-59.21	-13	-46.21	-72.54	-66.45	1.12	10.52	V
	3152	-56.81	-13	-43.81	-72.69	-65.03	1.30	11.66	V
									V
									V
									V
Middle	1584	-63.21	-42.15	-21.06	-71.61	-68.58	0.90	8.42	H
	2376	-58.94	-13	-45.94	-72.45	-66.19	1.12	10.53	H
	3160	-57.27	-13	-44.27	-72.74	-65.51	1.30	11.68	H
									H
									H
									H
	1584	-63.45	-42.15	-21.30	-71.38	-68.82	0.90	8.42	V
	2376	-59.36	-13	-46.36	-72.68	-66.61	1.12	10.53	V
	3160	-56.94	-13	-43.94	-72.85	-65.18	1.30	11.68	V
									V
									V
									V



Highest	1584	-62.86	-42.15	-20.71	-71.26	-68.23	0.90	8.42	H
	2376	-58.86	-13	-45.86	-72.37	-66.11	1.12	10.53	H
	3176	-57.58	-13	-44.58	-73.09	-65.85	1.30	11.72	H
									H
									H
									H
									H
	1584	-62.56	-42.15	-20.41	-70.49	-67.93	0.90	8.42	V
	2376	-59.28	-13	-46.28	-72.60	-66.53	1.12	10.53	V
	3176	-57.17	-13	-44.17	-73.14	-65.44	1.30	11.72	V
									V
									V
									V
									V

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



LTE Band 14 / 10MHz / QPSK									
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	1576	-63.14	-42.15	-20.99	-71.6	-68.48	0.90	8.39	H
	2368	-58.90	-13	-45.90	-72.46	-66.14	1.12	10.52	H
	3152	-57.53	-13	-44.53	-72.99	-65.75	1.30	11.66	H
									H
									H
									H
									H
	1576	-62.91	-42.15	-20.76	-70.84	-68.25	0.90	8.39	V
	2368	-59.12	-13	-46.12	-72.45	-66.36	1.12	10.52	V
	3152	-57.31	-13	-44.31	-73.19	-65.53	1.30	11.66	V
									V
									V
									V
									V

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