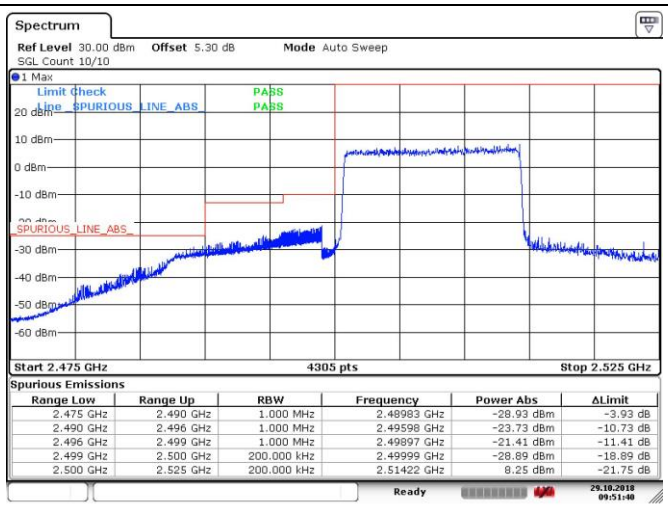
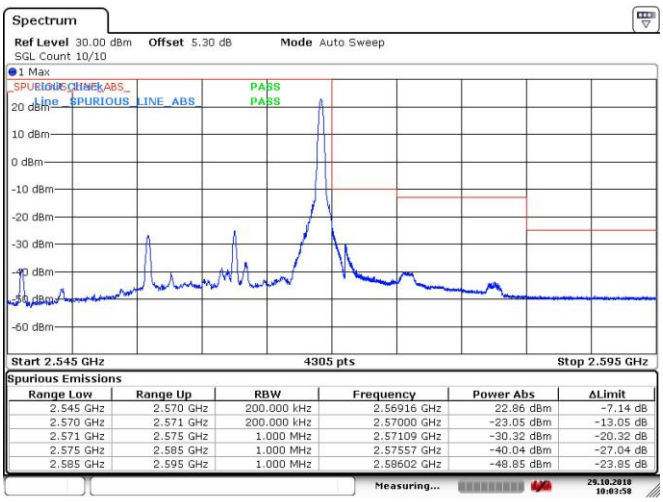
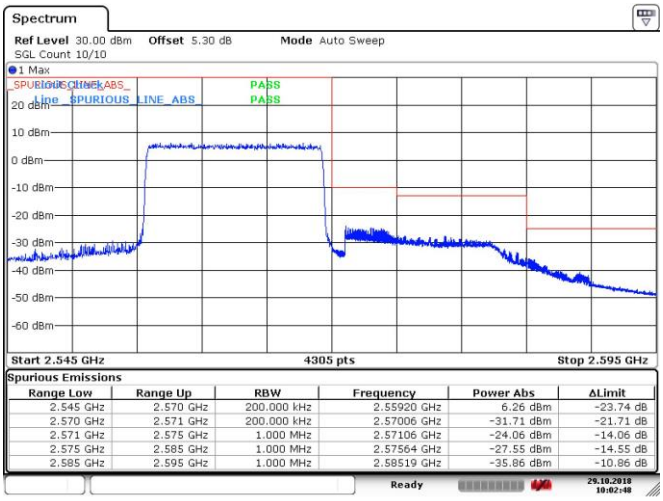


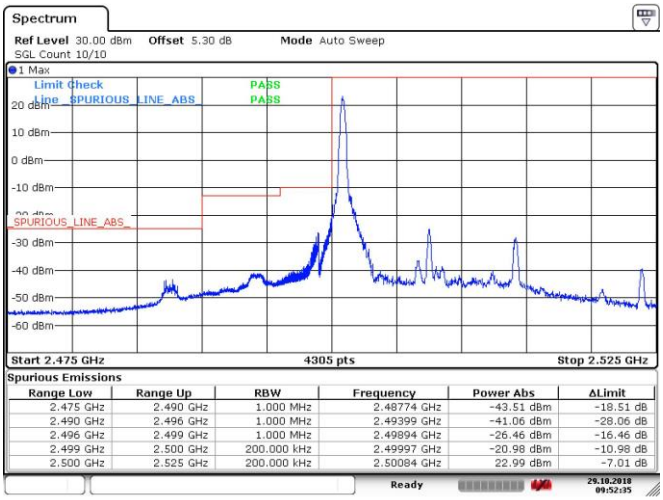
Band7_15MHz_QPSK_21375_1RB#74



Band7_15MHz_QPSK_21375_75RB#0

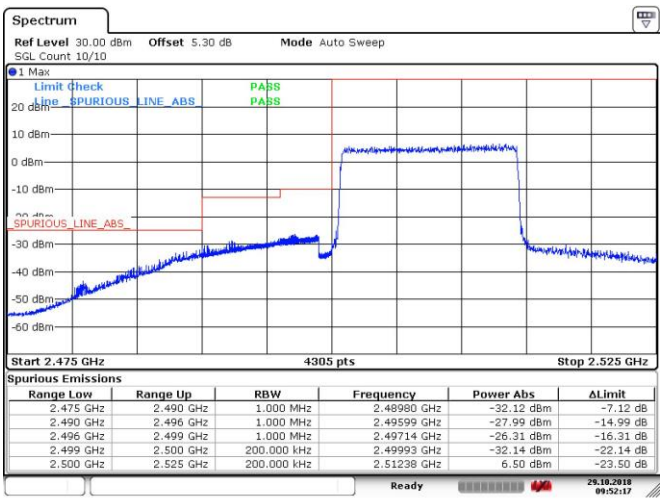


Band7_15MHz_16QAM_20825_1RB#0



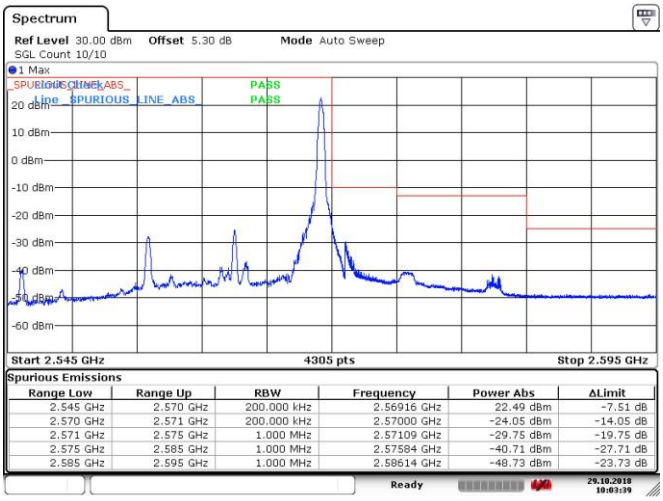
Date: 29.OCT.2018 09:52:35

Band7_15MHz_16QAM_20825_75RB#0



Date: 29.OCT.2018 09:52:17

Band7_15MHz_16QAM_21375_1RB#74



Date: 29.OCT.2018 10:03:40

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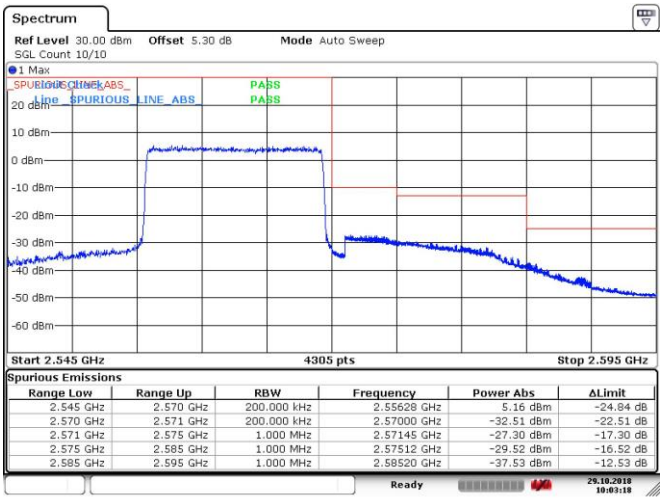
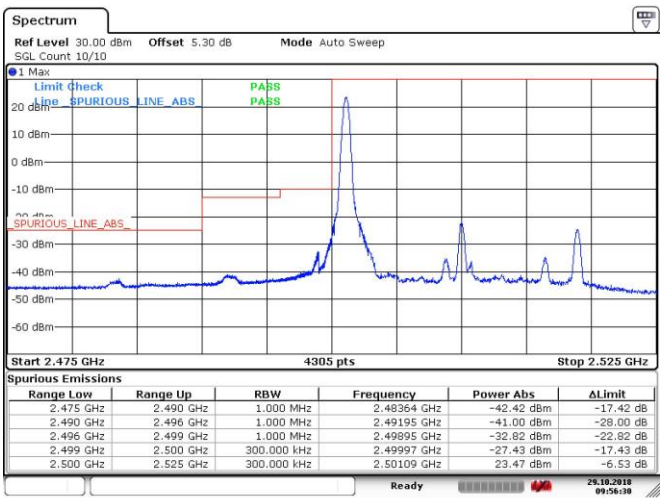


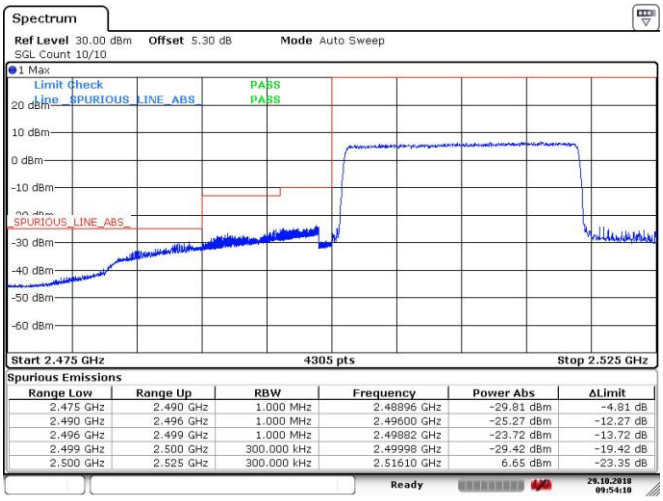
Date: 29.OCT.2018 10:03:19

Band7_20MHz_QPSK_20850_1RB#0



Date: 29.OCT.2018 09:56:31

Band7_20MHz_QPSK_20850_100RB#0



Date: 29.OCT.2018 09:54:10

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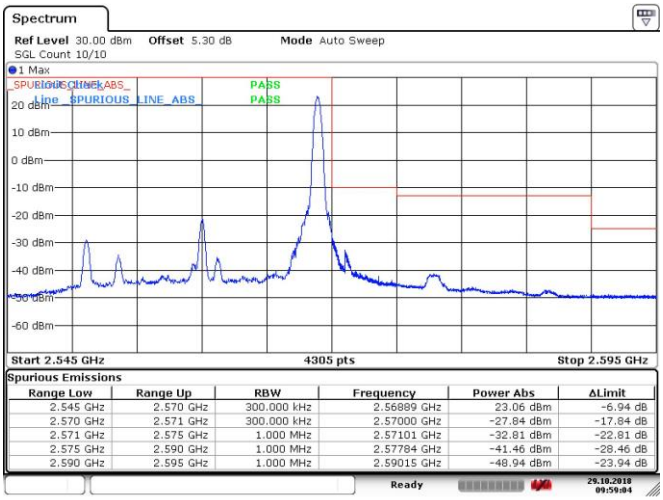
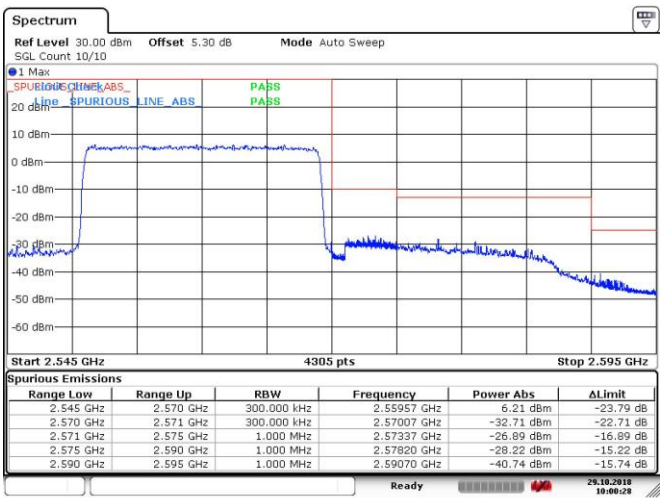


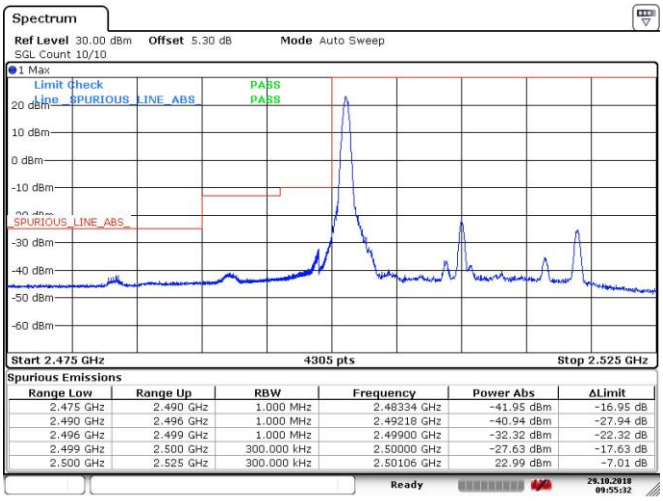
Date: 29.OCT.2018 09:59:04

Band7_20MHz_QPSK_21350_100RB#0



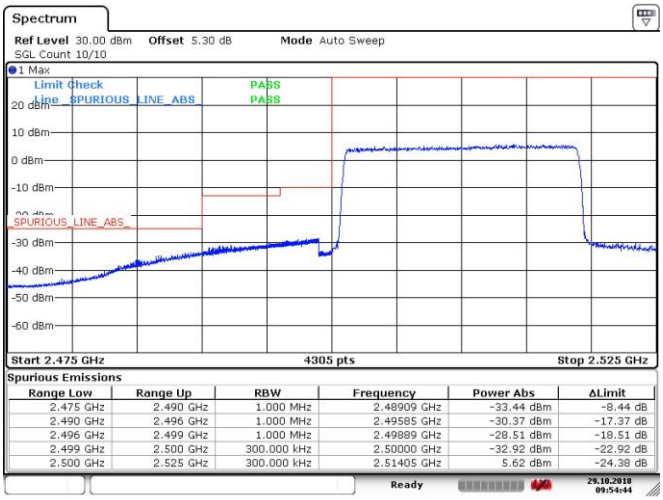
Date: 29.OCT.2018 10:00:28

Band7_20MHz_16QAM_20850_1RB#0



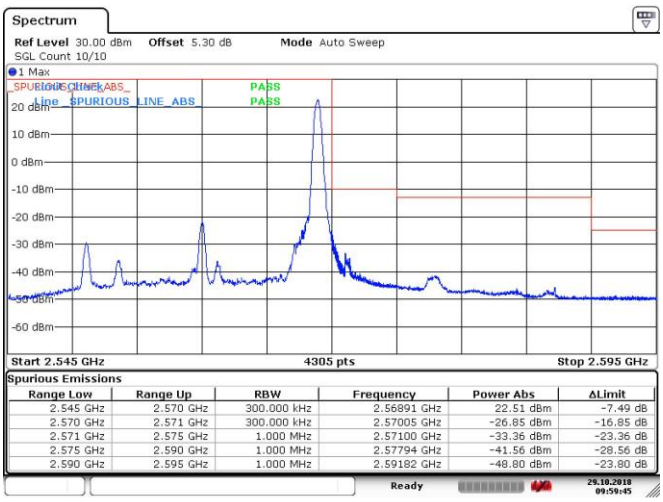
Date: 29.OCT.2018 09:55:32

Band7_20MHz_16QAM_20850_100RB#0



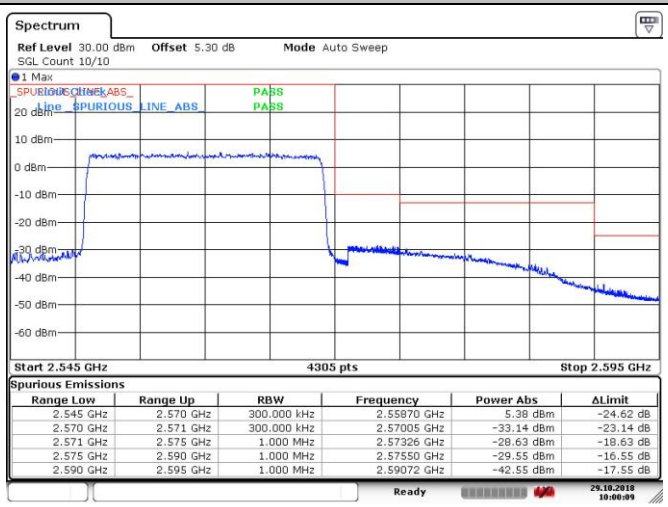
Date: 29.OCT.2018 09:54:44

Band7_20MHz_16QAM_21350_1RB#99



Date: 29.OCT.2018 09:59:46

Band7_20MHz_16QAM_21350_100RB#0



Date: 29.OCT.2018 10:00:09

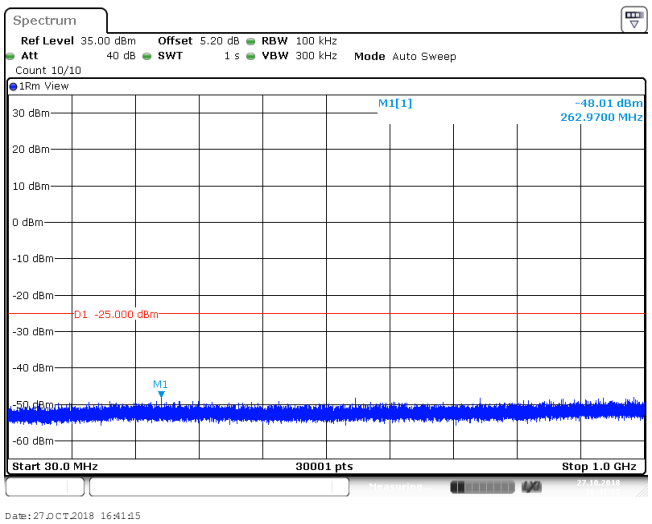
6. Spurious Emission at Antenna Terminal

Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k * (Span / RBW)" with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

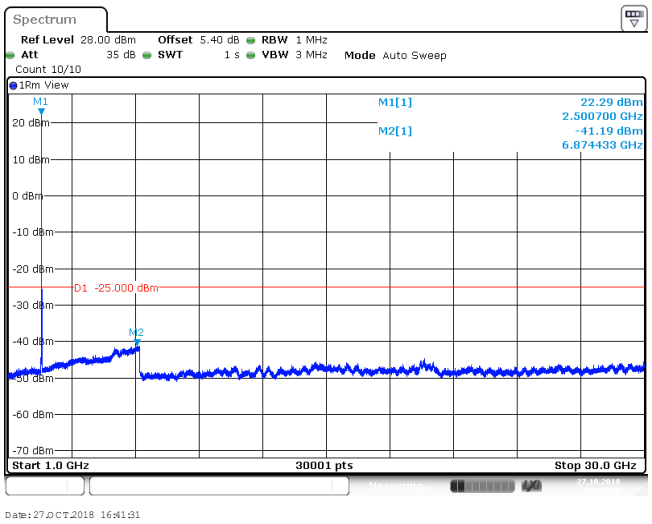
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

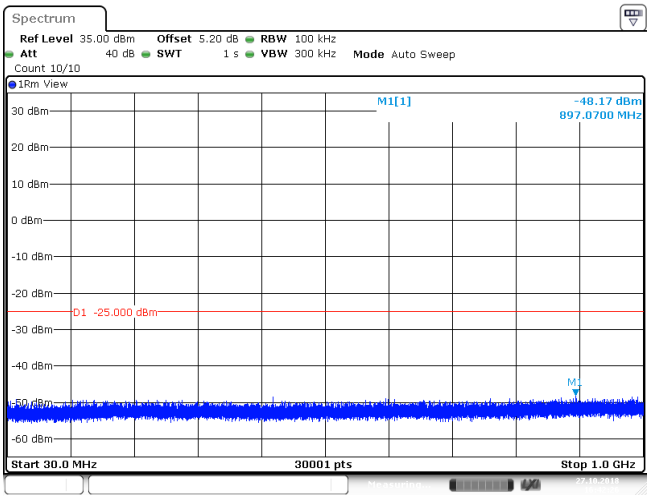
Band7_20MHz_QPSK_20850_1RB#0



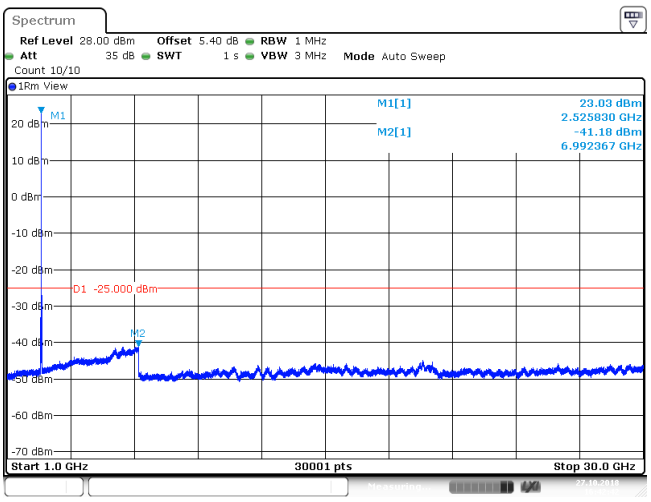
Band7_20MHz_QPSK_20850_1RB#0



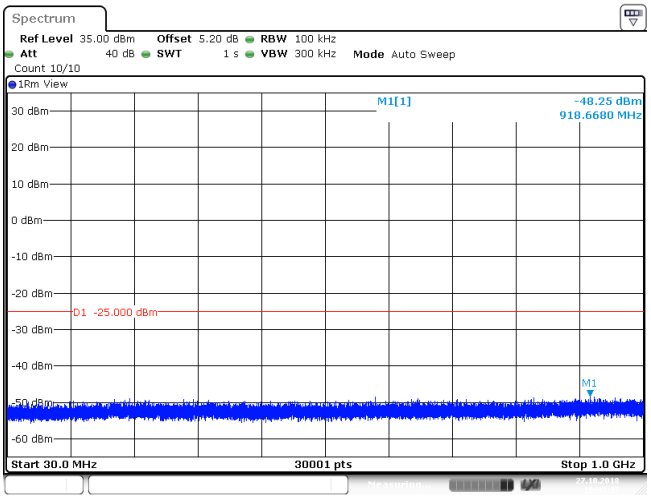
Band7_20MHz_QPSK_21100_1RB#0



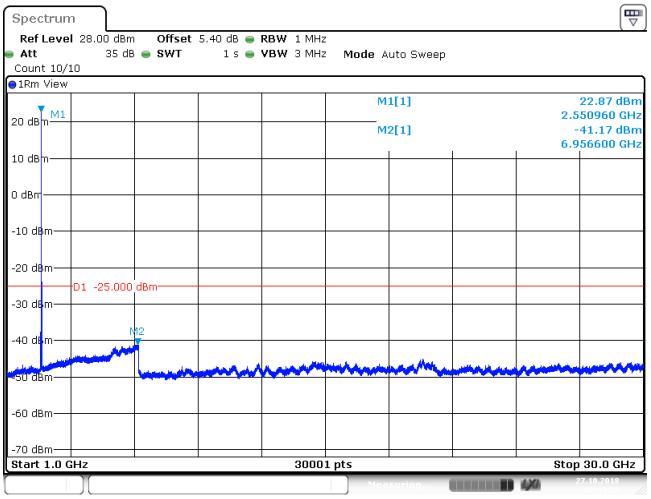
Band7_20MHz_QPSK_21100_1RB#0



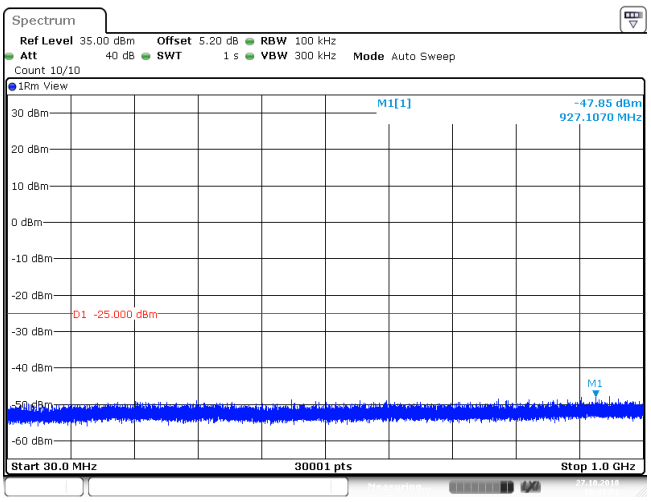
Band7_20MHz_QPSK_21350_1RB#0



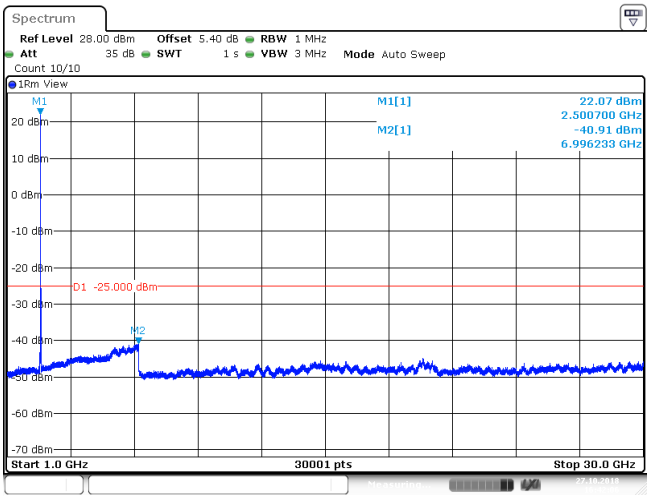
Band7_20MHz_QPSK_21350_1RB#0



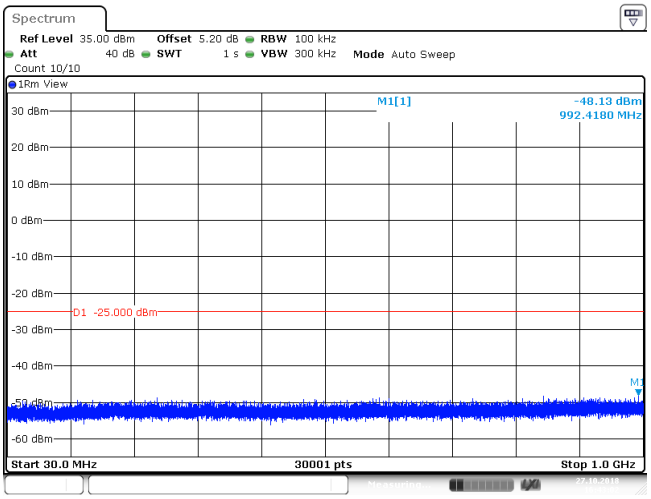
Band7_20MHz_16QAM_20850_1RB#0



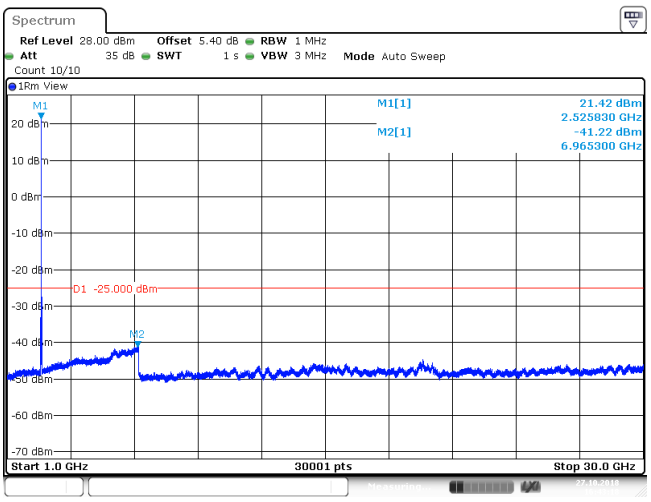
Band7_20MHz_16QAM_20850_1RB#0



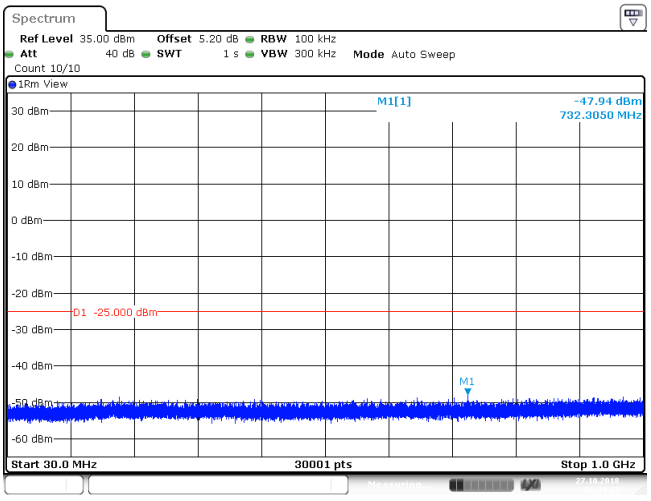
Band7_20MHz_16QAM_21100_1RB#0



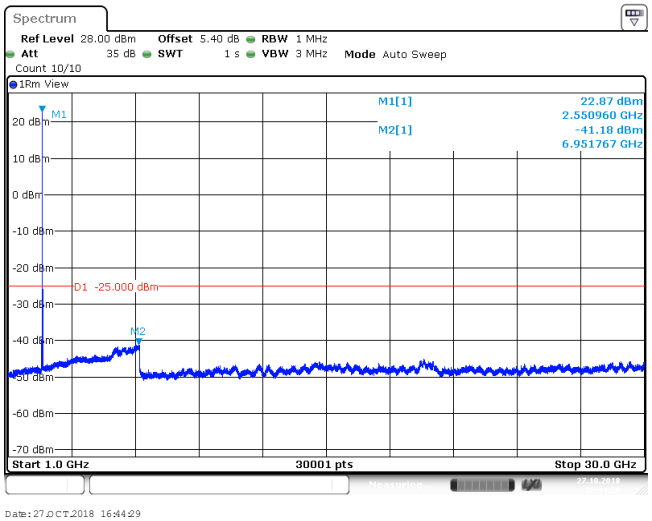
Band7_20MHz_16QAM_21100_1RB#0



Band7_20MHz_16QAM_21350_1RB#0



Band7_20MHz_16QAM_21350_1RB#0



7. Field Strength of Spurious Radiation

7.1. Test BAND = LTE BAND 7

7.1.1. Test Mode =LTE/TM1 20MHz

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.700000	-81.68	-25.00	56.68	Vertical
109.600000	-81.56	-25.00	56.56	Vertical
277.700000	-83.15	-25.00	58.15	Vertical
5002.000000	-65.90	-25.00	40.90	Vertical
7240.925000	-64.55	-25.00	39.55	Vertical
10627.750000	-62.99	-25.00	37.99	Vertical
62.350000	-77.16	-25.00	52.16	Horizontal
106.600000	-80.06	-25.00	55.06	Horizontal
275.000000	-79.59	-25.00	54.59	Horizontal
5002.000000	-65.24	-25.00	40.24	Horizontal
7853.550000	-64.06	-25.00	39.06	Horizontal
11259.875000	-63.81	-25.00	38.81	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
65.050000	-81.87	-25.00	56.87	Vertical
107.850000	-81.63	-25.00	56.63	Vertical
283.450000	-81.87	-25.00	56.87	Vertical
5052.050000	-66.01	-25.00	41.01	Vertical
7711.200000	-64.59	-25.00	39.59	Vertical
12630.400000	-61.33	-25.00	36.33	Vertical
62.500000	-77.37	-25.00	52.37	Horizontal
106.800000	-80.08	-25.00	55.08	Horizontal
274.550000	-79.80	-25.00	54.80	Horizontal
5309.775000	-65.20	-25.00	40.20	Horizontal
7851.925000	-64.05	-25.00	39.05	Horizontal
12630.400000	-62.97	-25.00	37.97	Horizontal

7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.250000	-81.63	-25.00	56.63	Vertical
107.450000	-81.88	-25.00	56.88	Vertical
281.550000	-82.71	-25.00	57.71	Vertical
5359.825000	-66.29	-25.00	41.29	Vertical
7248.725000	-64.67	-25.00	39.67	Vertical
10643.675000	-63.03	-25.00	38.03	Vertical
62.550000	-77.37	-25.00	52.37	Horizontal
107.050000	-80.51	-25.00	55.51	Horizontal
272.700000	-79.73	-25.00	54.73	Horizontal
5102.100000	-62.98	-25.00	37.98	Horizontal
7653.350000	-63.99	-25.00	38.99	Horizontal
10633.600000	-63.05	-25.00	38.05	Horizontal

Remark:

1) The disturbance above 12.75GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.
2) We have tested all modulation and all Bandwidth , but only the worst case data presented in this report.

8. Appendix F: Frequency Stability

9.1. Frequency Vs Voltage

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	VL	NT	-7.20	-0.002869	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VN	NT	7.90	0.003147	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	VH	NT	-0.30	-0.000120	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	4.10	0.001617	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-11.30	-0.004458	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	19.20	0.007574	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VL	NT	-12.30	-0.004805	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VN	NT	5.90	0.002305	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	VH	NT	-7.00	-0.002734	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VL	NT	-6.70	-0.002669	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VN	NT	-17.80	-0.007092	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	VH	NT	-9.70	-0.003865	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VL	NT	10.60	0.004181	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VN	NT	3.80	0.001499	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	VH	NT	7.80	0.003077	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VL	NT	-22.50	-0.008789	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VN	NT	-19.90	-0.007773	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	VH	NT	8.30	0.003242	±2.5	PASS

9.2. Frequency Vs Temperature

Temperature										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	NV	-30	-3.00	-0.001195	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	-20	5.00	0.001992	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	0	-11.00	-0.004382	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	10	-10.60	-0.004223	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	20	-19.90	-0.007928	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	30	11.70	0.004661	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	40	-6.40	-0.002550	±2.5	PASS
Band7	20MHz	QPSK	20850	100RB#0	NV	50	-22.40	-0.008924	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-2.40	-0.000947	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-7.10	-0.002801	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-5.00	-0.001972	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-6.60	-0.002604	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	6.60	0.002604	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-0.90	-0.000355	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-7.30	-0.002880	±2.5	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-15.60	-0.006154	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-30	-7.50	-0.002930	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	-20	-0.10	-0.000039	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	0	-11.80	-0.004609	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	10	-17.10	-0.006680	±2.5	PASS

Band7	20MHz	QPSK	21350	100RB#0	NV	20	3.50	0.001367	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	30	-11.90	-0.004648	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	40	-12.30	-0.004805	±2.5	PASS
Band7	20MHz	QPSK	21350	100RB#0	NV	50	9.00	0.003516	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-30	-2.40	-0.000956	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	-20	-1.90	-0.000757	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	0	12.10	0.004821	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	10	-4.20	-0.001673	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	20	0.20	0.000080	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	30	7.40	0.002948	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	40	11.80	0.004701	±2.5	PASS
Band7	20MHz	16QAM	20850	100RB#0	NV	50	-5.70	-0.002271	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-30	-3.90	-0.001538	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	-20	-11.60	-0.004576	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	0	-3.70	-0.001460	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	10	-7.20	-0.002840	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	20	1.00	0.000394	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	30	-25.20	-0.009941	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	40	1.60	0.000631	±2.5	PASS
Band7	20MHz	16QAM	21100	100RB#0	NV	50	5.10	0.002012	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-30	-25.00	-0.009766	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	-20	7.30	0.002852	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	0	-14.60	-0.005703	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	10	-6.50	-0.002539	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	20	-21.20	-0.008281	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	30	-11.70	-0.004570	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	40	-28.50	-0.011133	±2.5	PASS
Band7	20MHz	16QAM	21350	100RB#0	NV	50	-4.40	-0.001719	±2.5	PASS

The End