Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
0.009 – 26900	2649	-20.66	compliant
QPSK-Modulation ANT2			
0.009 – 26900	2661	-22.66	compliant
QPSK-Modulation ANT3			
0.009 – 26900	17419	-23.91	compliant
QPSK-Modulation ANT4			
0.009 – 26900	2661	-22.50	compliant
16QAM-Modulation ANT1			
0.009 – 26900	2649	-23.13	compliant
16QAM-Modulation ANT2			
0.009 – 26900	17416	-23.72	compliant
16QAM-Modulation ANT3			
0.009 – 26900	2661	-23.58	compliant
16QAM-Modulation ANT4			
0.009 – 26900	2649	-23.25	compliant
64QAM-Modulation ANT1			
0.009 – 26900	2661	-23.49	compliant
64QAM-Modulation ANT2			
0.009 – 26900	17417	-24.17	compliant
64QAM-Modulation ANT3			
0.009 – 26900	17418	-23.92	compliant
64QAM-Modulation ANT4			
0.009 – 26900	2661	-24.13	compliant
256QAM-Modulation ANT1			
0.009 – 26900	2661	-23.54	compliant
256QAM-Modulation ANT2			
0.009 – 26900	17415	-23.65	compliant
256QAM-Modulation ANT3			
0.009 – 26900	2661	-20.49	compliant
256QAM-Modulation ANT4			
0.009 – 26900	2661	-21.84	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 25 Spurious Emissions (10 MHz CH BW)

Config C Lower band edge:

Carrier Frequency: 2627.5 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
	2620	-27.97	compliant
QPSK-Modulation ANT2			
	2620	-29.67	compliant
QPSK-Modulation ANT3			
	2620	-29.77	compliant
QPSK-Modulation ANT4			
	2620	-28.21	compliant
16QAM-Modulation ANT1			
	2620	-28.92	compliant
16QAM-Modulation ANT2			
	2620	-29.49	compliant
16QAM-Modulation ANT3			
	2620	-29.67	compliant
16QAM-Modulation ANT4			
	2620	-28.95	compliant
64QAM-Modulation ANT1			
	2620	-29.11	compliant
64QAM-Modulation ANT2			
	2620	-29.43	compliant
64QAM-Modulation ANT3			
	2620	-28.93	compliant
64QAM-Modulation ANT4			
	2620	-29.31	compliant
256QAM-Modulation ANT1			
	2620	-27.86	compliant
256QAM-Modulation ANT2			
	2620	-29.48	compliant
256QAM-Modulation ANT3			
	2620	-29.45	compliant
256QAM-Modulation ANT4			
	2620	-29.88	compliant

Measurement Uncertainty:	f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB

Table 26 Spurious Emissions (Lower band edge) (15 MHz CH BW)

Config C Upper band edge:

Carrier Frequency: 2682.5 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
	2690	-27.08	compliant
QPSK-Modulation ANT2			
	2690	-28.39	compliant
QPSK-Modulation ANT3			
	2690	-26.85	compliant
QPSK-Modulation ANT4			
	2690	-29.13	compliant
16QAM-Modulation ANT1			
	2690	-27.31	compliant
16QAM-Modulation ANT2			
	2690	-28.38	compliant
16QAM-Modulation ANT3			
	2690	-28.33	compliant
16QAM-Modulation ANT4			
	2690	-28.54	compliant
64QAM-Modulation ANT1			
	2690	-26.53	compliant
64QAM-Modulation ANT2			
	2690	-28.69	compliant
64QAM-Modulation ANT3			
	2690	-27.89	compliant
64QAM-Modulation ANT4			
	2690	-28.00	compliant
256QAM-Modulation ANT1			
	2690	-27.54	compliant
256QAM-Modulation ANT2			
	2690	-28.37	compliant

256QAM-Modulation ANT3			
	2690	-28.71	compliant
256QAM-Modulation ANT4			
	2690	-28.46	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 27 Spurious Emissions (Upper band edge) (15 MHz CH BW)

Config C Spurious emissions:

Carrier Frequency: 2655 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
0.009 – 26900	2664	-23.64	compliant
QPSK-Modulation ANT2			
0.009 – 26900	2664	-23.79	compliant
QPSK-Modulation ANT3			
0.009 – 26900	2664	-22.00	compliant
QPSK-Modulation ANT4			
0.009 – 26900	2646	-21.87	compliant
16QAM-Modulation ANT1			
0.009 – 26900	2664	-23.43	compliant
16QAM-Modulation ANT2			
0.009 – 26900	2664	-23.85	compliant
16QAM-Modulation ANT3			
0.009 – 26900	2664	-23.44	compliant
16QAM-Modulation ANT4			
0.009 – 26900	2664	-23.41	compliant
64QAM-Modulation ANT1			
0.009 – 26900	2664	-23.60	compliant
64QAM-Modulation ANT2			
0.009 – 26900	2664	-22.75	compliant

64QAM-Modulation ANT3			
0.009 – 26900	2664	-23.30	compliant
64QAM-Modulation ANT4			
0.009 – 26900	2664	-23.03	compliant
256QAM-Modulation ANT1			
0.009 – 26900	2664	-23.19	compliant
256QAM-Modulation ANT2			
0.009 – 26900	2664	-21.27	compliant
256QAM-Modulation ANT3			
0.009 – 26900	2664	-22.89	compliant
256QAM-Modulation ANT4			
0.009 – 26900	2664	-22.96	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 28 Spurious Emissions (15 MHz CH BW)

Config D Lower band edge:

Carrier Frequency: 2630 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
	2620	-29.00	compliant
QPSK-Modulation ANT2			
	2620	-29.95	compliant
QPSK-Modulation ANT3			
	2620	-28.39	compliant
QPSK-Modulation ANT4			
	2620	-28.73	compliant
16QAM-Modulation ANT1			
	2620	-28.53	compliant
16QAM-Modulation ANT2			
	2620	-29.41	compliant
16QAM-Modulation ANT3			
	2620	-28.00	compliant

16QAM-Modulation ANT4			
	2620	-28.99	compliant
64QAM-Modulation ANT1			
	2620	-27.98	compliant
64QAM-Modulation ANT2			
	2620	-29.69	compliant
64QAM-Modulation ANT3			
	2620	-29.59	compliant
64QAM-Modulation ANT4			
	2620	-29.76	compliant
256QAM-Modulation ANT1			
	2620	-28.24	compliant
256QAM-Modulation ANT2			
	2620	-29.58	compliant
256QAM-Modulation ANT3			
	2620	-28.79	compliant
256QAM-Modulation ANT4			
	2620	-28.05	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 29 Spurious Emissions (Lower band edge) (20 MHz CH BW)

Config D Upper band edge:

Carrier Frequency: 2680.0 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
	2690	-28.27	compliant
QPSK-Modulation ANT2			
	2690	-28.06	compliant
QPSK-Modulation ANT3			
	2690	-27.83	compliant
QPSK-Modulation ANT4			
	2690	-28.48	compliant

16QAM-Modulation ANT1			
	2690	-27.16	compliant
16QAM-Modulation ANT2			
	2690	-28.10	compliant
16QAM-Modulation ANT3			
	2690	-26.52	compliant
16QAM-Modulation ANT4			
	2690	-28.18	compliant
64QAM-Modulation ANT1			
	2690	-27.94	compliant
64QAM-Modulation ANT2			
	2690	-28.06	compliant
64QAM-Modulation ANT3			
	2690	-27.77	compliant
64QAM-Modulation ANT4			
	2690	-28.72	compliant
256QAM-Modulation ANT1			
	2690	-27.53	compliant
256QAM-Modulation ANT2			
	2690	-28.29	compliant
256QAM-Modulation ANT3			
	2690	-27.98	compliant
256QAM-Modulation ANT4			
	2690	-28.40	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 30 Spurious Emissions (Upper band edge) (20 MHz CH BW)

Config D Spurious emissions:

Carrier Frequency: 2655 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
0.009 – 26900	2667	-22.08	compliant
QPSK-Modulation ANT2			
0.009 – 26900	2666	-20.56	compliant

QPSK-Modulation ANT3			
0.009 – 26900	2666	-21.81	compliant
QPSK-Modulation ANT4			
0.009 – 26900	2666	-21.55	compliant
16QAM-Modulation ANT1			
0.009 – 26900	2666	-21.98	compliant
16QAM-Modulation ANT2			
0.009 – 26900	2666	-21.61	compliant
16QAM-Modulation ANT3			
0.009 – 26900	2666	-20.65	compliant
16QAM-Modulation ANT4			
0.009 – 26900	2666	-21.14	compliant
64QAM-Modulation ANT1			
0.009 – 26900	2666	-21.96	compliant
64QAM-Modulation ANT2			
0.009 – 26900	2666	-21.85	compliant
64QAM-Modulation ANT3			
0.009 – 26900	2666	-21.77	compliant
64QAM-Modulation ANT4			
0.009 – 26900	2666	-21.38	compliant
256QAM-Modulation ANT1			
0.009 – 26900	2666	-21.95	compliant
256QAM-Modulation ANT2			
0.009 – 26900	2666	-21.59	compliant
256QAM-Modulation ANT3			
0.009 – 26900	2666	-21.51	compliant
256QAM-Modulation ANT4			
0.009 – 26900	2666	-19.80	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 31 Spurious Emissions (20 MHz CH BW)

Config E Lower band edge:

Carrier Frequency: 2622.5 / 2627.5 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
	2620	-30.11	compliant
QPSK-Modulation ANT2			
	2620	-31.35	compliant
QPSK-Modulation ANT3			
	2620	-30.78	compliant
QPSK-Modulation ANT4			
	2620	-31.12	compliant
16QAM-Modulation ANT1			
	2620	-23.93	compliant
16QAM-Modulation ANT2			
	2620	-30.24	compliant
16QAM-Modulation ANT3			
	2620	-30.44	compliant
16QAM-Modulation ANT4			
	2620	-31.11	compliant
64QAM-Modulation ANT1			
	2620	-30.04	compliant
64QAM-Modulation ANT2			
	2620	-30.49	compliant
64QAM-Modulation ANT3			
	2620	-31.44	compliant
64QAM-Modulation ANT4			
	2620	-30.97	compliant
256QAM-Modulation ANT1			
	2620	-30.58	compliant
256QAM-Modulation ANT2			
	2620	-31.38	compliant
256QAM-Modulation ANT3			
	2620	-30.84	compliant
256QAM-Modulation ANT4			
	2620	-30.92	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB,	

	8.0GHz ≤ f: ±1.9dB

Table 32 Spurious Emissions (Lower band edge) (5+5 MHz CH BW)

Config E Upper band edge:

Carrier Frequency: 2682.5 / 2687.5 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
	2690	-23.00	compliant
QPSK-Modulation ANT2			
	2690	-23.35	compliant
QPSK-Modulation ANT3			
	2690	-23.61	compliant
QPSK-Modulation ANT4			
	2690	-23.75	compliant
16QAM-Modulation ANT1			
	2690	-23.75	compliant
16QAM-Modulation ANT2			
	2690	-23.92	compliant
16QAM-Modulation ANT3			
	2690	-24.20	compliant
16QAM-Modulation ANT4			
	2690	-24.43	compliant
64QAM-Modulation ANT1			
	2690	-24.04	compliant
64QAM-Modulation ANT2			
	2690	-24.31	compliant
64QAM-Modulation ANT3			
	2690	-24.31	compliant
64QAM-Modulation ANT4			
	2690	-24.33	compliant
256QAM-Modulation ANT1			
	2690	-24.02	compliant
256QAM-Modulation ANT2			
	2690	-24.32	compliant
256QAM-Modulation ANT3			

	2690	-24.44	compliant
256QAM-Modulation ANT4			
	2690	-24.35	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 33 Spurious Emissions (Upper band edge) (5+5 MHz CH BW)

Config E Spurious emissions:

Carrier Frequency: 2652.5 / 2657.5 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
0.009 – 26900	2649	-21.58	compliant
QPSK-Modulation ANT2			
0.009 – 26900	2661	-24.01	compliant
QPSK-Modulation ANT3			
0.009 – 26900	2661	-21.06	compliant
QPSK-Modulation ANT4			
0.009 – 26900	2661	-22.33	compliant
16QAM-Modulation ANT1			
0.009 – 26900	2661	-23.33	compliant
16QAM-Modulation ANT2			
0.009 – 26900	17416	-23.78	compliant
16QAM-Modulation ANT3			
0.009 – 26900	2661	-22.98	compliant
16QAM-Modulation ANT4			
0.009 – 26900	2649	-23.70	compliant
64QAM-Modulation ANT1			
0.009 – 26900	2649	-23.79	compliant
64QAM-Modulation ANT2			
0.009 – 26900	2661	-23.90	compliant
64QAM-Modulation ANT3			
0.009 – 26900	2649	-21.53	compliant
64QAM-Modulation ANT4			
0.009 – 26900	2661	-22.30	compliant
256QAM-Modulation ANT1			

0.009 – 26900	2649	-23.03	compliant
256QAM-Modulation ANT2			
0.009 – 26900	2661	-21.83	compliant
256QAM-Modulation ANT3			
0.009 – 26900	2661	-23.45	compliant
256QAM-Modulation ANT4			
0.009 – 26900	2661	-22.11	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 34 Spurious Emissions (5+5 MHz CH BW)

Config F Lower band edge:

Carrier Frequency: 2625 / 2635 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
	2620	-28.21	compliant
QPSK-Modulation ANT2			
	2620	-28.92	compliant
QPSK-Modulation ANT3			
	2620	-26.93	compliant
QPSK-Modulation ANT4			
	2620	-28.02	compliant
16QAM-Modulation ANT1			
	2620	-28.29	compliant
16QAM-Modulation ANT2			
	2620	-29.04	compliant
16QAM-Modulation ANT3			
	2620	-28.89	compliant
16QAM-Modulation ANT4			
	2620	-29.50	compliant
64QAM-Modulation ANT1			
	2620	-28.06	compliant
64QAM-Modulation ANT2			

	2620	-29.06	compliant
64QAM-Modulation ANT3			
	2620	-27.59	compliant
64QAM-Modulation ANT4			
	2620	-29.60	compliant
256QAM-Modulation ANT1			
	2620	-28.10	compliant
256QAM-Modulation ANT2			
	2620	-28.13	compliant
256QAM-Modulation ANT3			
	2620	-29.19	compliant
256QAM-Modulation ANT4			
	2620	-27.98	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 35 Spurious Emissions (Lower band edge) (10+10 MHz CH BW)

Config F Upper band edge:

Carrier Frequency: 2675 / 2685 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
	2690	-26.86	compliant
QPSK-Modulation ANT2			
	2690	-26.39	compliant
QPSK-Modulation ANT3			
	2690	-27.17	compliant
QPSK-Modulation ANT4			
	2690	-25.57	compliant
16QAM-Modulation ANT1			
	2690	-26.93	compliant
16QAM-Modulation ANT2			
	2690	-27.24	compliant
16QAM-Modulation ANT3			
	2690	-26.98	compliant
16QAM-Modulation ANT4			

	2690	-27.48	compliant
64QAM-Modulation ANT1			
	2690	-27.06	compliant
64QAM-Modulation ANT2			
	2690	-27.23	compliant
64QAM-Modulation ANT3			
	2690	-27.03	compliant
64QAM-Modulation ANT4			
	2690	-27.37	compliant
256QAM-Modulation ANT1			
	2690	-25.91	compliant
256QAM-Modulation ANT2			
	2690	-27.32	compliant
256QAM-Modulation ANT3			
	2690	-26.76	compliant
256QAM-Modulation ANT4			
	2690	-27.63	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 36 Spurious Emissions (Upper band edge) (10+10 MHz CH BW)

Config F Spurious emissions:

Carrier Frequency: 2650 / 2660 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
0.009 – 26900	2666	-21.05	compliant
QPSK-Modulation ANT2			
0.009 – 26900	2666	-21.13	compliant
QPSK-Modulation ANT3			
0.009 – 26900	2666	-21.59	compliant
QPSK-Modulation ANT4			
0.009 – 26900	2666	-20.66	compliant
16QAM-Modulation ANT1			
0.009 – 26900	2666	-21.43	compliant
16QAM-Modulation ANT2			

0.009 – 26900	2666	-19.63	compliant
16QAM-Modulation ANT3			
0.009 – 26900	2666	-21.06	compliant
16QAM-Modulation ANT4			
0.009 – 26900	2666	-20.91	compliant
64QAM-Modulation ANT1			
0.009 – 26900	2666	-21.12	compliant
64QAM-Modulation ANT2			
0.009 – 26900	2666	-21.33	compliant
64QAM-Modulation ANT3			
0.009 – 26900	2666	-21.35	compliant
64QAM-Modulation ANT4			
0.009 – 26900	2666	-20.68	compliant
256QAM-Modulation ANT1			
0.009 – 26900	2666	-21.20	compliant
256QAM-Modulation ANT2			
0.009 – 26900	2666	-21.15	compliant
256QAM-Modulation ANT3			
0.009 – 26900	2666	-19.87	compliant
256QAM-Modulation ANT4			
0.009 – 26900	2666	-20.78	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 37 Spurious Emissions (10+10 MHz CH BW)

Config G Lower band edge:

Carrier Frequency: 2627.5 / 2642.5 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
	2620	-25.97	compliant
QPSK-Modulation ANT2			
	2620	-25.57	compliant
QPSK-Modulation ANT3			
	2620	-25.14	compliant
QPSK-Modulation ANT4			

	2620	-25.42	compliant
16QAM-Modulation ANT1			
	2620	-25.55	compliant
16QAM-Modulation ANT2			
	2620	-25.55	compliant
16QAM-Modulation ANT3			
	2620	-25.33	compliant
16QAM-Modulation ANT4			
	2620	-25.66	compliant
64QAM-Modulation ANT1			
	2620	-25.88	compliant
64QAM-Modulation ANT2			
	2620	-25.59	compliant
64QAM-Modulation ANT3			
	2620	-25.45	compliant
64QAM-Modulation ANT4			
	2620	-25.35	compliant
256QAM-Modulation ANT1			
	2620	-25.67	compliant
256QAM-Modulation ANT2			
	2620	-25.19	compliant
256QAM-Modulation ANT3			
	2620	-25.28	compliant
256QAM-Modulation ANT4			
	2620	-25.30	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 38 Spurious Emissions (Lower band edge) (15+15MHz CH BW)

Config G Upper band edge:

Carrier Frequency: 2627.5 / 2642.5 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			

	2690	-20.40	compliant
QPSK-Modulation ANT2			
	2690	-20.67	compliant
QPSK-Modulation ANT3			
	2690	-21.22	compliant
QPSK-Modulation ANT4			
	2690	-20.40	compliant
16QAM-Modulation ANT1			
	2690	-20.32	compliant
16QAM-Modulation ANT2			
	2690	-20.73	compliant
16QAM-Modulation ANT3			
	2690	-20.82	compliant
16QAM-Modulation ANT4			
	2690	-21.15	compliant
64QAM-Modulation ANT1			
	2690	-21.11	compliant
64QAM-Modulation ANT2			
	2690	-20.18	compliant
64QAM-Modulation ANT3			
	2690	-20.34	compliant
64QAM-Modulation ANT4			
	2690	-21.14	compliant
256QAM-Modulation ANT1			
	2690	-20.19	compliant
256QAM-Modulation ANT2			
	2690	-20.95	compliant
256QAM-Modulation ANT3			
	2690	-20.88	compliant
256QAM-Modulation ANT4			
	2690	-20.82	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 39 Spurious Emissions (Upper band edge) (15+15MHz CH BW)

Config G Spurious emissions:

Carrier Frequency: 2647.5 / 2662.5 MHz			
Frequency Range [MHz]	Emission Frequency [MHz]	Maximum Emission Level [dBm]	Result
QPSK-Modulation ANT1			
0.009 – 26900	2671	-19.14	compliant
QPSK-Modulation ANT2			
0.009 – 26900	2671	-19.18	compliant
QPSK-Modulation ANT3			
0.009 – 26900	2671	-19.25	compliant
QPSK-Modulation ANT4			
0.009 – 26900	2671	-20.70	compliant
16QAM-Modulation ANT1			
0.009 – 26900	2671	-19.15	compliant
16QAM-Modulation ANT2			
0.009 – 26900	2671	-19.36	compliant
16QAM-Modulation ANT3			
0.009 – 26900	2671	-19.16	compliant
16QAM-Modulation ANT4			
0.009 – 26900	2639	-20.06	compliant
64QAM-Modulation ANT1			
0.009 – 26900	2671	-19.15	compliant
64QAM-Modulation ANT2			
0.009 – 26900	2671	-19.19	compliant
64QAM-Modulation ANT3			
0.009 – 26900	2671	-19.09	compliant
64QAM-Modulation ANT4			
0.009 – 26900	2671	-19.94	compliant
256QAM-Modulation ANT1			
0.009 – 26900	2671	-19.11	compliant
256QAM-Modulation ANT2			
0.009 – 26900	2671	-19.36	compliant
256QAM-Modulation ANT3			
0.009 – 26900	2671	-19.11	compliant
256QAM-Modulation ANT4			
0.009 – 26900	2671	-20.35	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB,	

	1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB

Table 40 Spurious Emissions (15+15MHz CH BW)

Config H Lower band edge:

Carrier Frequency: 2620 / 2650 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
	2620	-24.41	compliant
QPSK-Modulation ANT2			
	2620	-24.59	compliant
QPSK-Modulation ANT3			
	2620	-23.38	compliant
QPSK-Modulation ANT4			
	2620	-24.46	compliant
16QAM-Modulation ANT1			
	2620	-24.18	compliant
16QAM-Modulation ANT2			
	2620	-24.50	compliant
16QAM-Modulation ANT3			
	2620	-24.32	compliant
16QAM-Modulation ANT4			
	2620	-24.76	compliant
64QAM-Modulation ANT1			
	2620	-24.23	compliant
64QAM-Modulation ANT2			
	2620	-24.48	compliant
64QAM-Modulation ANT3			
	2620	-24.02	compliant
64QAM-Modulation ANT4			
	2620	-24.64	compliant
256QAM-Modulation ANT1			
	2620	-23.88	compliant

256QAM-Modulation ANT2			
	2620	-24.74	compliant
256QAM-Modulation ANT3			
	2620	-24.25	compliant
256QAM-Modulation ANT4			
	2620	-24.78	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 41 Spurious Emissions (Lower band edge) (20+20MIIz CH BW)

Config H Upper band edge:

Carrier Frequency: 2670 / 2680 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
	2690	-22.93	compliant
QPSK-Modulation ANT2			
	2690	-23.58	compliant
QPSK-Modulation ANT3			
	2690	-22.30	compliant
QPSK-Modulation ANT4			
	2690	-23.15	compliant
16QAM-Modulation ANT1			
	2690	-22.61	compliant
16QAM-Modulation ANT2			
	2690	-23.99	compliant
16QAM-Modulation ANT3			
	2690	-23.29	compliant
16QAM-Modulation ANT4			
	2690	-23.96	compliant
64QAM-Modulation ANT1			
	2690	-22.93	compliant
64QAM-Modulation ANT2			
	2690	-23.81	compliant

64QAM-Modulation ANT3			
	2690	-23.95	compliant
64QAM-Modulation ANT4			
	2690	-22.96	compliant
256QAM-Modulation ANT1			
	2690	-23.30	compliant
256QAM-Modulation ANT2			
	2690	-23.49	compliant
256QAM-Modulation ANT3			
	2690	-23.53	compliant
256QAM-Modulation ANT4			
	2690	-23.40	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 42 Spurious Emissions (Upper band edge) (20+20MHz CH BW)

Config H Spurious emissions:

Carrier Frequency: 2635 / 2675 MHz			
Frequency Range [MHz]	**Emission Frequency [MHz]**	**Maximum Emission Level [dBm]**	**Result**
QPSK-Modulation ANT1			
0.009 – 26900	2677	-19.56	compliant
QPSK-Modulation ANT2			
0.009 – 26900	2677	-19.56	compliant
QPSK-Modulation ANT3			
0.009 – 26900	2677	-19.16	compliant
QPSK-Modulation ANT4			
0.009 – 26900	2678	-19.54	compliant
16QAM-Modulation ANT1			
0.009 – 26900	2676	-20.31	compliant
16QAM-Modulation ANT2			
0.009 – 26900	2677	-19.35	compliant
16QAM-Modulation ANT3			
0.009 – 26900	2678	-19.25	compliant
16QAM-Modulation ANT4			
0.009 – 26900	2677	-19.57	compliant

64QAM-Modulation ANT1			
0.009 – 26900	2677	-19.33	compliant
64QAM-Modulation ANT2			
0.009 – 26900	2678	-19.21	compliant
64QAM-Modulation ANT3			
0.009 – 26900	2676	-19.36	compliant
64QAM-Modulation ANT4			
0.009 – 26900	2677	-19.45	compliant
256QAM-Modulation ANT1			
0.009 – 26900	2677	-20.23	compliant
256QAM-Modulation ANT2			
0.009 – 26900	2676	-19.24	compliant
256QAM-Modulation ANT3			
0.009 – 26900	2676	-19.34	compliant
256QAM-Modulation ANT4			
0.009 – 26900	2677	-19.57	compliant
Measurement Uncertainty:		f < 1.0GHz: ±1.1dB, 1.0GHz ≤ f <3.6GHz: ±1.2dB, 3.6GHz ≤ f <8.0GHz: ±1.6dB, 8.0GHz ≤ f: ±1.9dB	

Table 43 Spurious Emissions (20+20MHz CH BW)

The measured conducted emission levels were found to be compliant with the manufacturer's specifications and with all requirements of the FCC and IC rules.

4.2 Test No. 3: Field Strength of Spurious Radiation (§ 2.1053, § 2.1057, § 27.53, RSS-199)

4.2.1. Limits

§27.53 para. No. 27.53(m) For BRS and EBS stations, the power of any emissions outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) measured in watts.

(m)(2) For digital base stations, the attenuation shall be not less than 43 + 10 log (P) dB (P = transmitter power in Watts).

RSS-199 clause 4.5 the power of any unwanted emissions from the channel edge of the equipment shall be attenuated below the transmitter output power by at least 43 + 10 log P dB (P = transmitter power in Watts).

The compliance limit was calculated in the following way:

Transmitter output power [W]: P

Transmitter output power [dBm]: 30+10 log P (conversion from W to dBm)

Required attenuation: 40 + 10 log P

Compliance limit = Transmitter output power – Required attenuation

= 30 +10 log P (40 + 10 log P) = -13 dBm

The limit of -13 dBm has been calculated to correspond 84.4 dB(µV/m).

4.2.2. Test Configuration

The measurements were performed in an anechoic chamber. The radiated test site complies with the site attenuation requirements listed in ANSI C63.4 2014 and is listed with the FCC and registered with the IC.

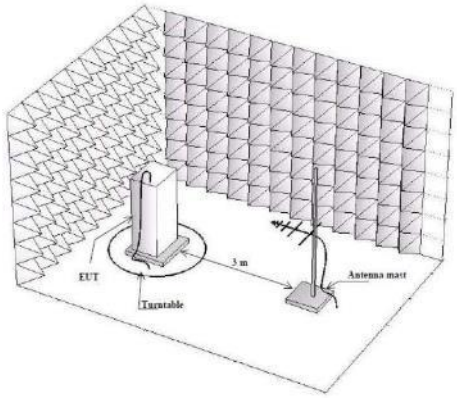

Figure 2 Test Configuration

Photographs of the EUT in the anechoic chamber are shown on page 158 of this measurement report.

4.2.3. Test Procedure and Results

TIA-603-D-2010, Section 2.2.6

The test was performed in a semi-anechoic shielded room. The EUT was placed on a non-conductive 0.8 m high table standing on the turntable. During the test in the frequency range 30 - 26900MHz the distance from the EUT to the measuring antenna was 3 m. In order to find the maximum levels of the disturbance radiation the angle of the turntable, the height of the measuring antenna were varied during the tests. The test was performed with the measuring antenna being both in horizontal and vertical polarizations.

Vertical and horizontal polarizations in the frequency range 30 - 26900 MHz was first measured by using the peak detector. During the peak detector scan the turntable was rotated from 0° to 360° with 30° step with the antenna heights 1.0 m and 2.5 m.

The limit of -13 dBm has been calculated to correspond 84.4 dB (µV/m). Spurious emissions closer than 20 dB to the limit was measured with average detector.

According to § 2.1057, all emissions from the lowest radio frequency generated in the equipment, without going below 9 kHz, up to the 10th harmonic were investigated.

The antenna substitution method was used to determine the equivalent radiated power at spurious frequencies. The EUT was replaced with a reference substitution antenna with a known gain referenced to an isotropic radiator $G_{Antenna[dBi]}$. This antenna was fed with a signal at the spurious frequency $P_{Gen[dBm]}$. The level of the signal was adjusted to repeat the previously measured level. The resulting

EIRP is the signal level fed to the reference antenna corrected for gain referenced to an isotropic.

The formula below was used to calculate the EIRP of the EUT.

$$P_{EIRP[dbm]} = P_{Gen[dBm]} - L_{Cable[dB]} + G_{Antenna[dBi]}$$

Worst case detected emission levels are reported in the following table (refer to spectral plots included on pages 229 for details). The antenna factor and cable loss is according to the manufacturer's specification.

Measured laboratory room temperature and humidity during the tests				
Date	Temperature Min-Max:		Humidity Min-Max:	
15. – 21. January 19	21.5 °C	24.9 °C	2.7	10.5

Config A, B, C, D, E, F, G, H:

Carrier Frequency: 2655MHz			
Frequency Range [MHz]	Frequency Range [MHz]	Frequency Range [MHz]	Frequency Range [MHz]
QPSK-Modulation TX1			
30 - 26900	More than 20dB below limit -13dBm		Compliant
Measurement Uncertainty:			Measurement Uncertainty:

Table 44 Field Strength of Spurious Radiation (5 MHz Channel BW)

The measured emission levels were found to be compliant with the manufacturer's specifications and with all requirements of the FCC rules.

5. TEST DATA AND SCREENSHOTS

5.1 Part List of the RF Measurement Test Equipment

No.	Test Equipment	Manufacturer & Type	Serial Number	Calibration date	Calibration due	Test No.
1	Signal Analyzer	Rohde & Schwarz: FSV 30	100781	07/2018	07/2019	1, 2,
2	Signal Analyzer	Rohde & Schwarz: FSW 43	104001	07/2018	07/2019	1, 2,
3	Vector Network Analyzer	Rohde & Schwarz: ZVA40	100146	07/2018	07/2019	1, 2,
4	Vector Network Analyzer	Rohde & Schwarz: ZVL13	101177	07/2018	07/2019	1, 2,
5	Calibration Unit	Rohde & Schwarz: ZV-Z54	100125	7/2018	7/2019	1, 2,
6	High Pass Filter	K&L Salisbury 11SH10-12000/T38000-KP/K	1	cnn	-	1,2
7	Multimeter	Fluke 83	65870302	01/2019	01/2020	1, 2,
8	Humidity and Temperature Indicator	Vaisala: HMI 31	P3730008	01/2019	01/2020	1, 2,
9	DC Power Supply	Sorensen SGI80/188D-1AAA	0525A00545	cnn	-	1,2
10	Attenuator	SHX:DTS 100G-20dB-24G-3.5mm(F,F)-B	14111101	cnn	-	1, 2,
11	Attenuator	SHX:DTS 100G-20dB-24G-3.5mm(F,F)-B	14111102	cnn	-	1, 2,
12	EMI Test Receiver	R&S ESU40	100262	07/2018	07/2019	3
13	Horn Antenna	ETS-Lindgren 3116C-PA	00150635	11/2018	11/2019	3
14	Horn Antenna	ETS-Lindgren ETS3115	6346	07/2018	07/2019	3
15	Bilog Antenna	Schaffner Chase CBL6112	2003	07/2018	07/2019	3
16	Humidity and temperature meter	Vaisala HM34	G3330003	05/2018	05/2019	3
17	Mast Controller	Maturo NCD/180 2	17210416	cnn	-	3
18	4 meter mast	Maturo TAM4.0-E	086/17210915	cnn	-	3
19	Anechoic Chamber	S&MC	B83317-C6019	09/2016	09/2019	3
20	Amplifier	Miteq 4FSX4	902638	cnn	-	3

Table 61 Part List of the RF Measurement Test Equipment

5.2 Spectral Plots

5.2.1. Test No. 2: Spurious Emissions at the Antenna Terminals

Screenshots of highest power and emission antenna, in this unit it was antenna port 2. The external attenuation (connection loss of the set up) is already added in the results. Limit line is set fixed to level -19.02dB.

Config A ANT2:

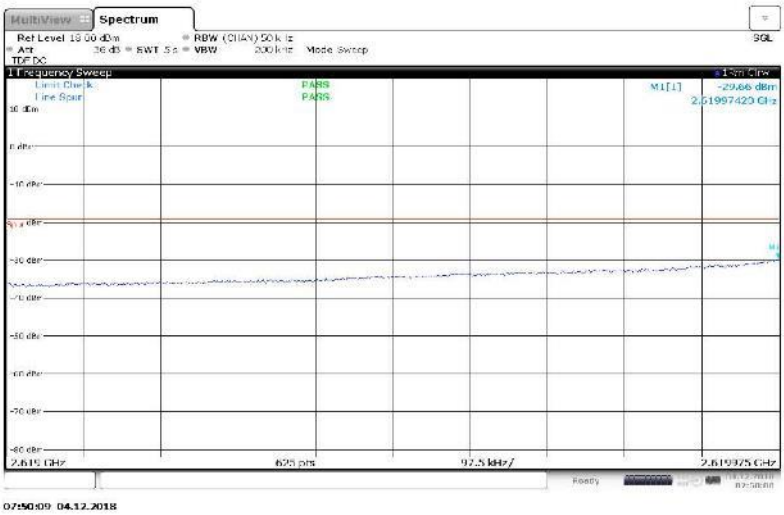

Figure 3 Spurious Emissions (Lower Band Edge) – QPSK (2622.5 MHz, 5 MHz Channel BW)

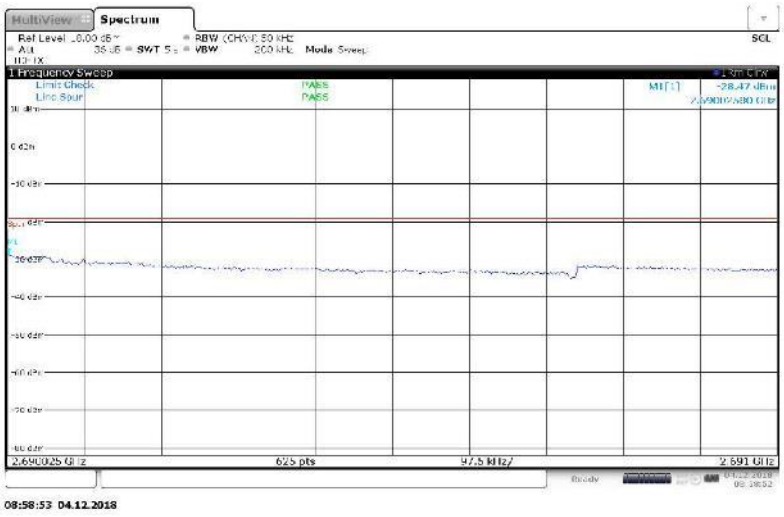

Figure 4 Spurious Emissions (Upper Band Edge) – QPSK (2687.5 MHz, 5 MHz Channel BW)

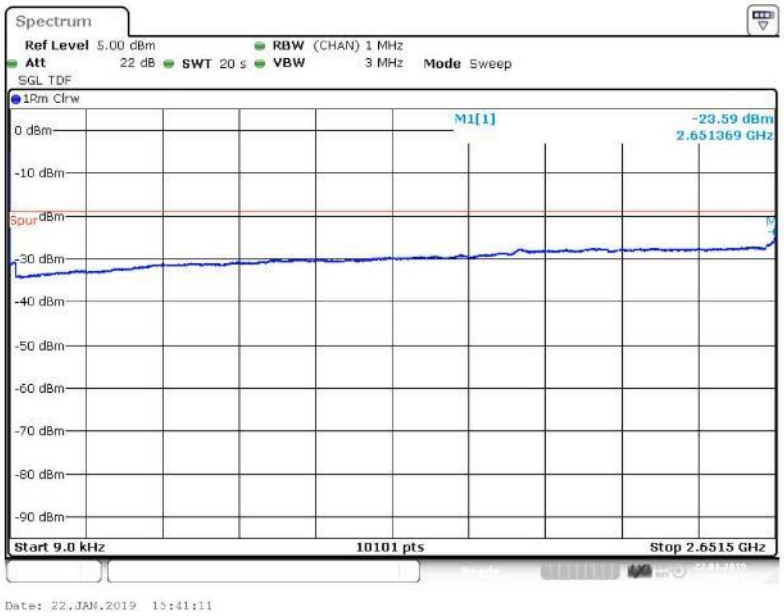

Figure 5 Spurious Emissions (9kHz – 2.6515 GHz) - QPSK (2655 MHz, 5 MHz Channel BW)

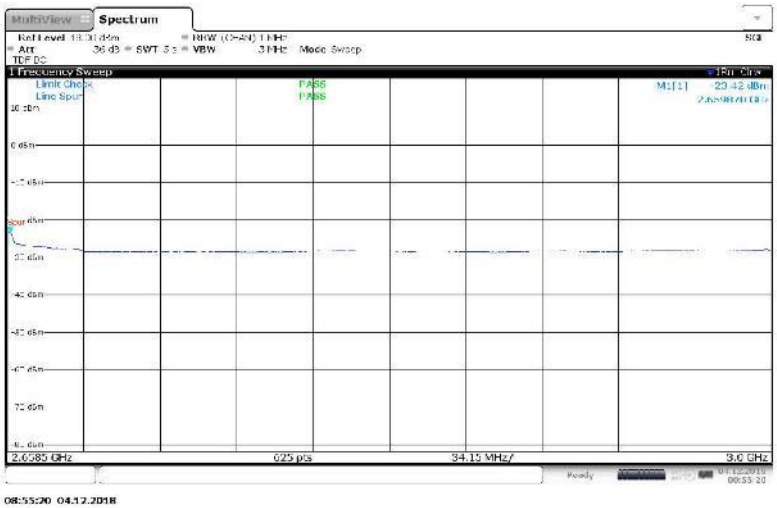

Figure 6 Spurious Emissions (2.6585 GHz – 3 GHz) – QPSK (2655 MHz, 5 MHz Channel BW)

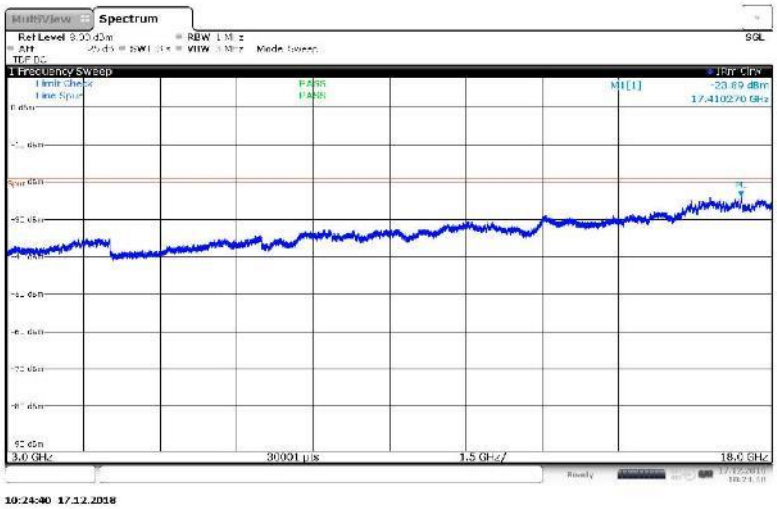

Figure 7 Spurious Emissions (3 GHz – 18GHz) – QPSK (2655 MHz, 5 MHz Channel BW)

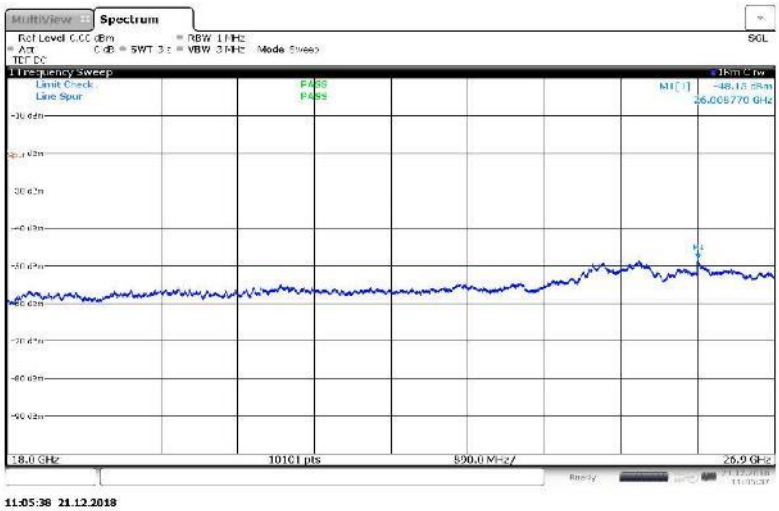

Figure 8 Spurious Emissions (18GHz – 26.9GHz) – QPSK (2655 MHz, 5 MHz Channel BW)

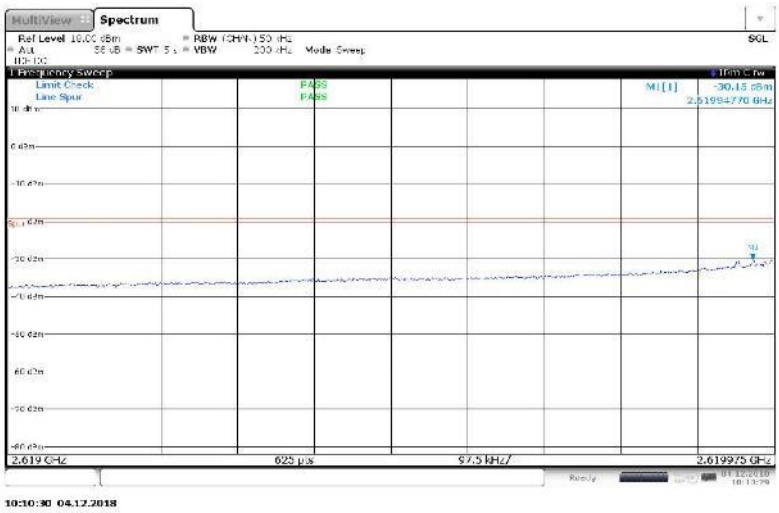

Figure 9 Spurious Emissions (Lower Band Edge) – 16QAM (2622.5 MHz, 5 MHz Channel BW)

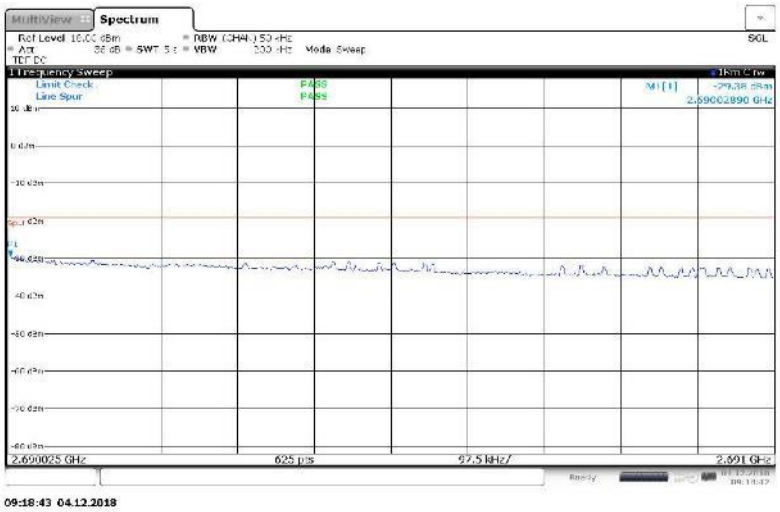

Figure 10 Spurious Emissions (Upper Band Edge) – 16QAM (2687.5 MHz, 5 MHz Channel BW)

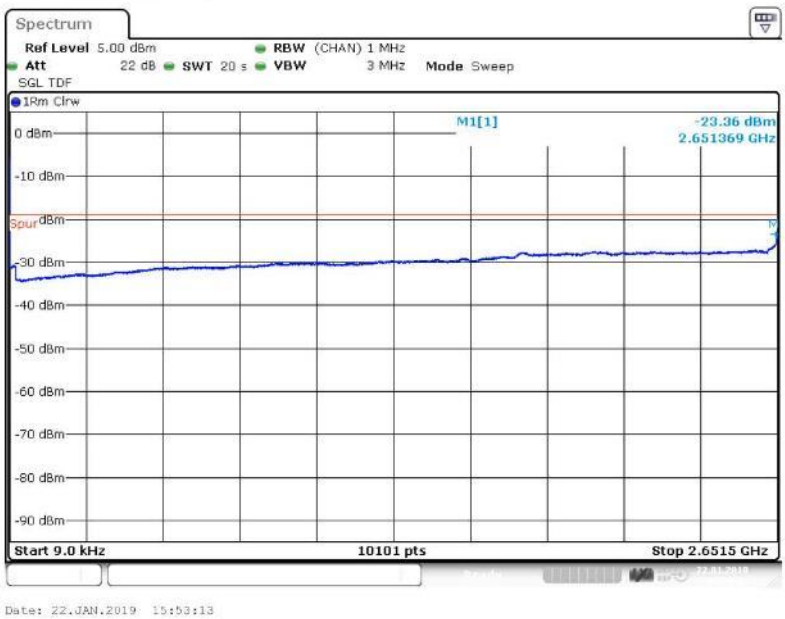

Figure 11 Spurious Emissions (9kHz – 2.6515 GHz) – 16QAM (2655 MHz, 5 MHz Channel BW)

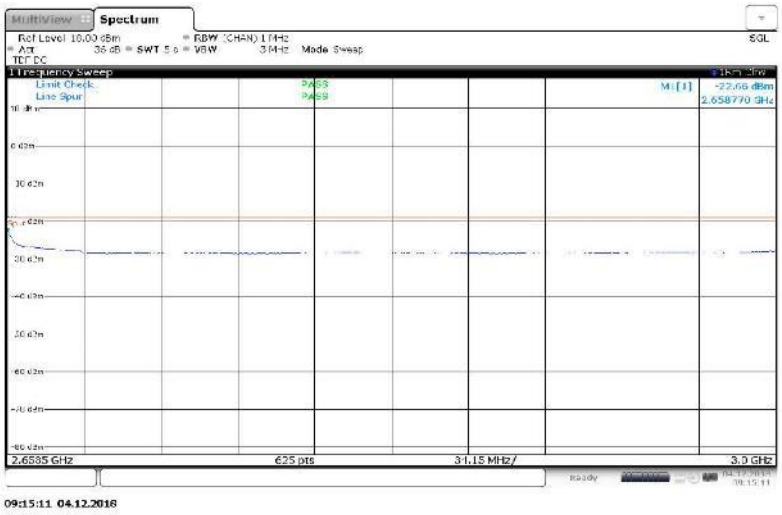

Figure 12 Spurious Emissions (2.6585 GHz – 3 GHz) – 16QAM (2655 MHz, 5 MHz Channel BW)

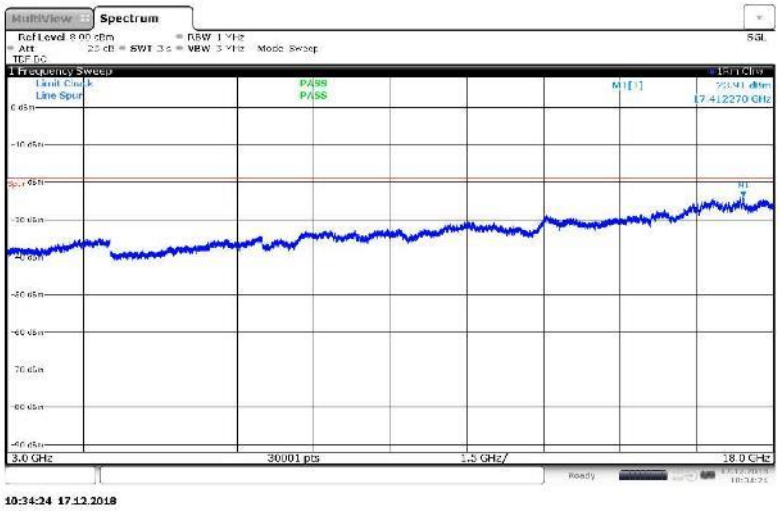

Figure 13 Spurious Emissions (3 GHz – 18GHz) – 16QAM (2655 MHz, 5 MHz Channel BW)

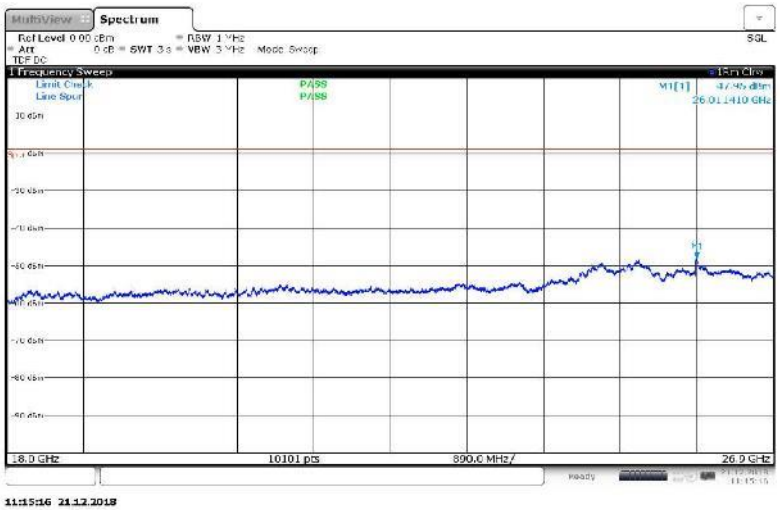

Figure 14 Spurious Emissions (18GHz – 26.9GHz) – 16QAM (2655 MHz, 5 MHz Channel BW)

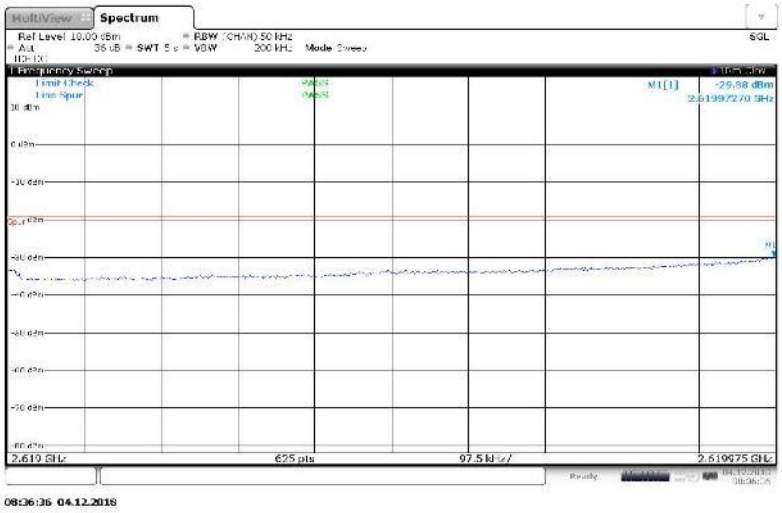

Figure 15 Spurious Emissions (Lower Band Edge) – 64QAM (2622.5 MHz, 5 MHz Channel BW)

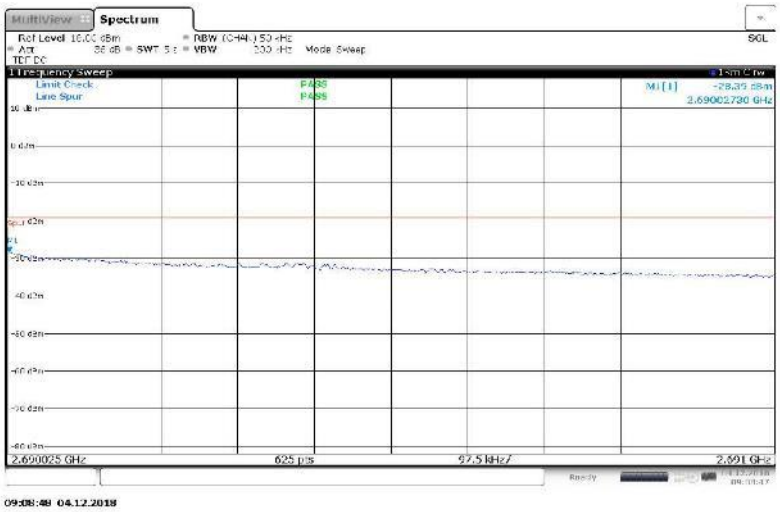

Figure 16 Spurious Emissions (Upper Band Edge) – 64QAM (2687.5 MHz, 5 MHz Channel BW)

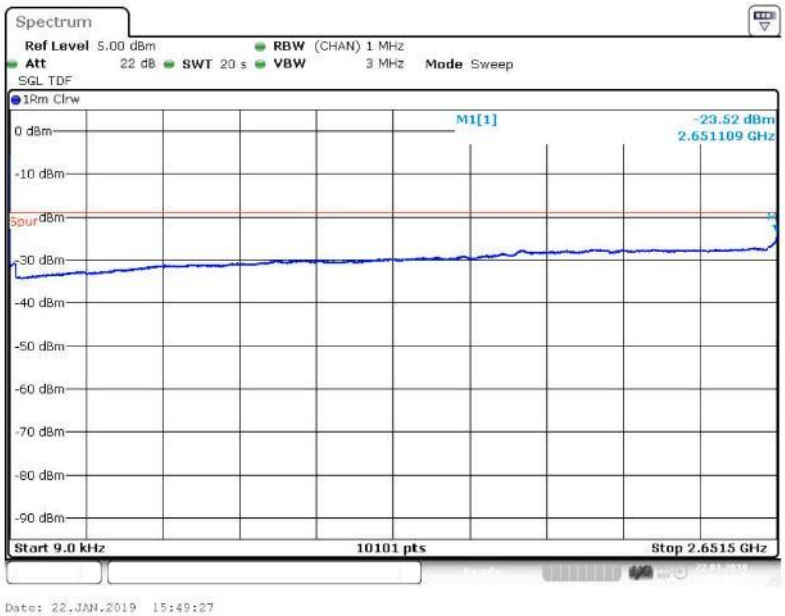

Figure 17 Spurious Emissions (9kHz – 2.6515 GHz) – 64QAM (2655 MHz, 5 MHz Channel BW)

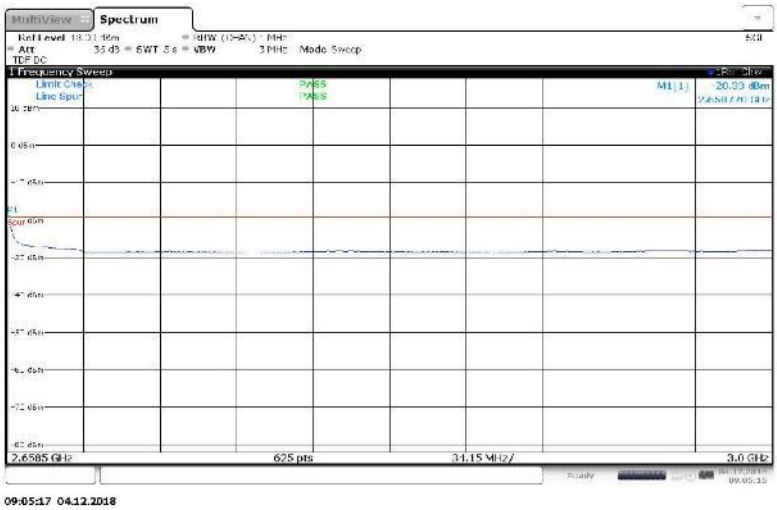

Figure 18 Spurious Emissions (2.6585 GHz – 3 GHz) – 64QAM (2655 MHz, 5 MHz Channel BW)

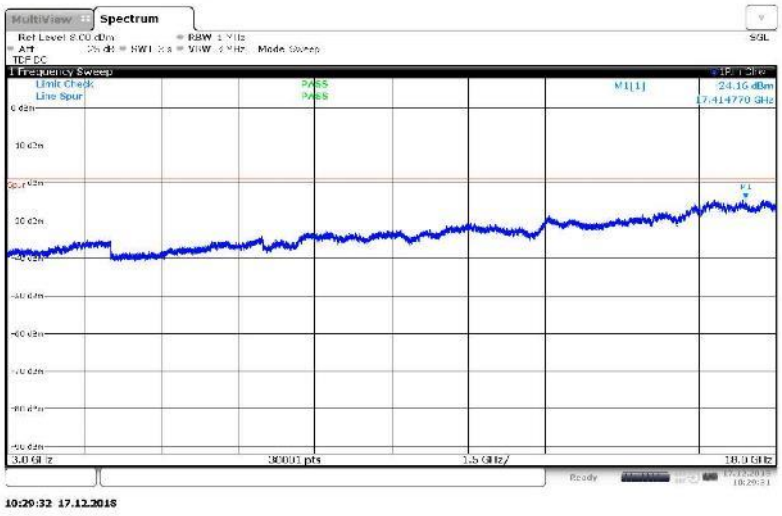

Figure 19 Spurious Emissions (3 GHz – 18GHz) – 64QAM (2655 MHz, 5 MHz Channel BW)

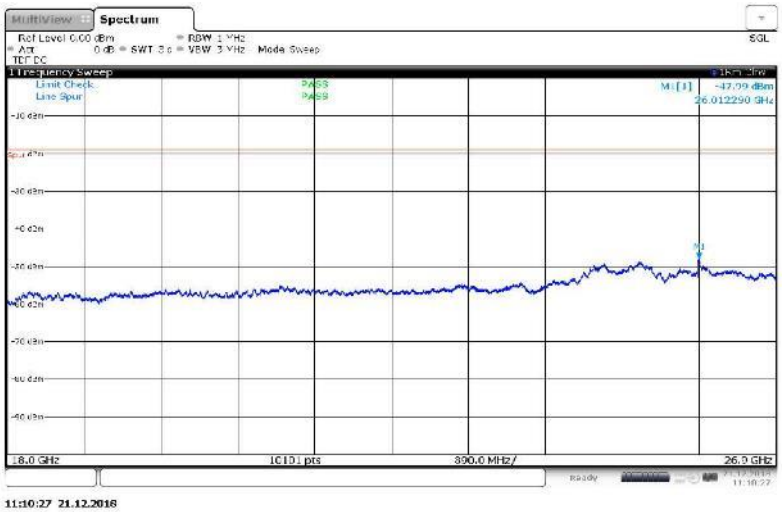

Figure 20 Spurious Emissions (18GHz – 26.9GHz) – 64QAM (2655 MHz, 5 MHz Channel BW)

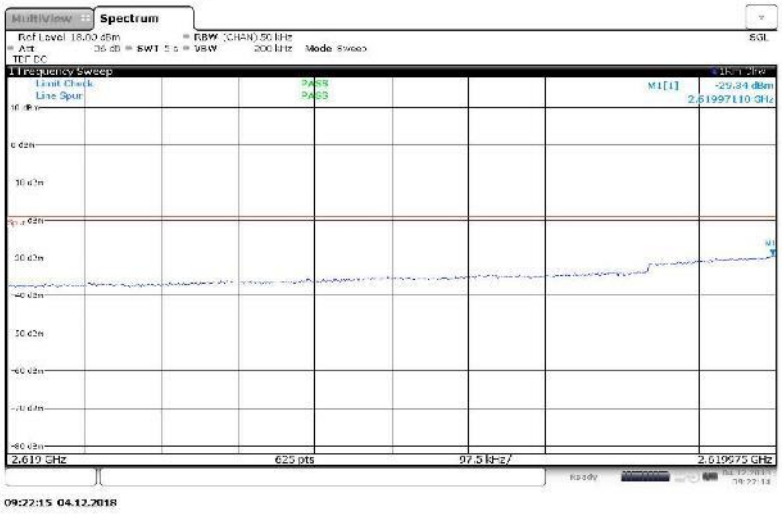

Figure 21 Spurious Emissions (Lower Band Edge) – 256QAM (2622.5 MHz, 5 MHz Channel BW)

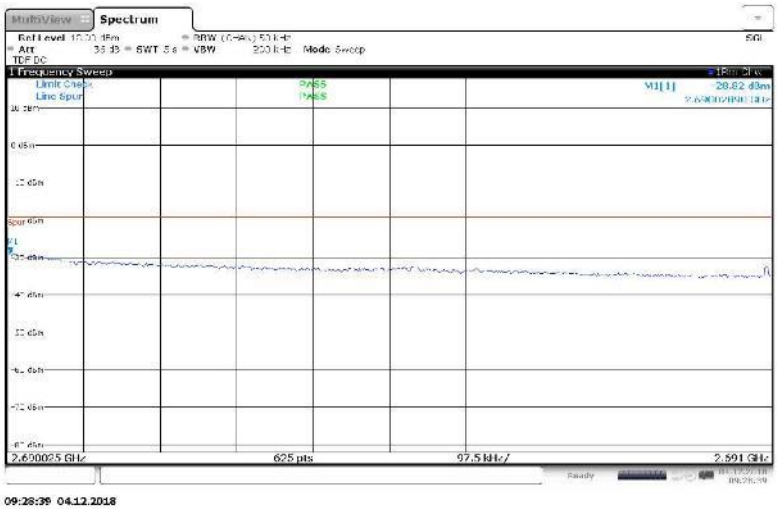

Figure 22 Spurious Emissions (Upper Band Edge) – 256QAM (2687.5 MHz, 5 MHz Channel BW)

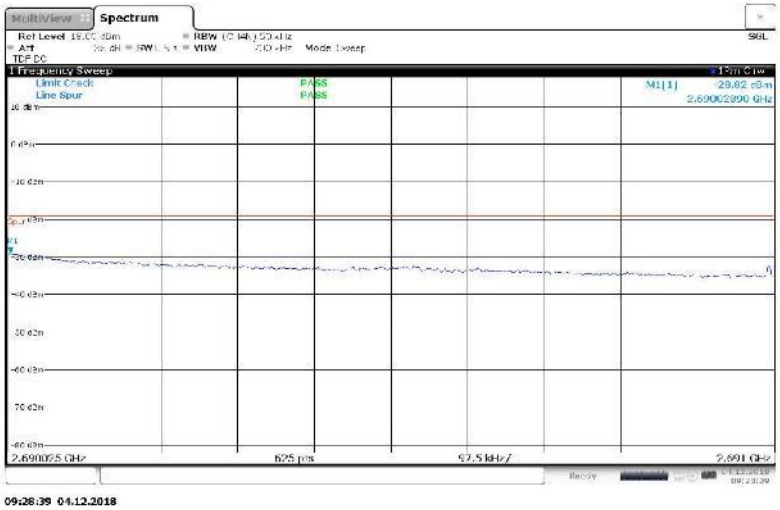

Figure 23 Spurious Emissions (9kHz – 2.6515 GHz) – 256QAM (2655 MHz, 5 MHz Channel BW)

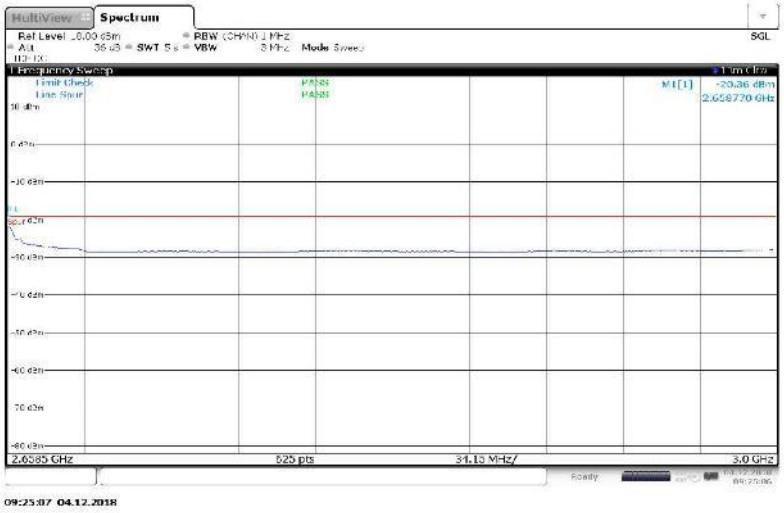

Figure 24 Spurious Emissions (2.6585 GHz – 3 GHz) – 256QAM (2655 MHz, 5 MHz Channel BW)

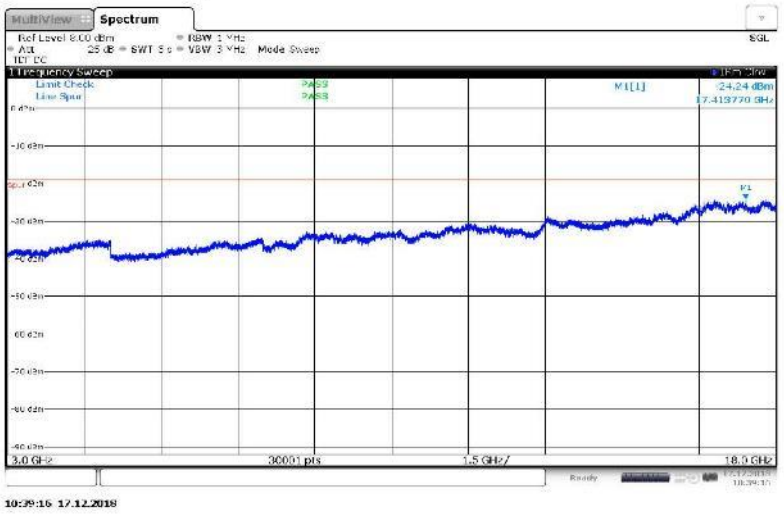

Figure 25 Spurious Emissions (3 GHz – 18GHz) – 256QAM (2655 MHz, 5 MHz Channel BW)

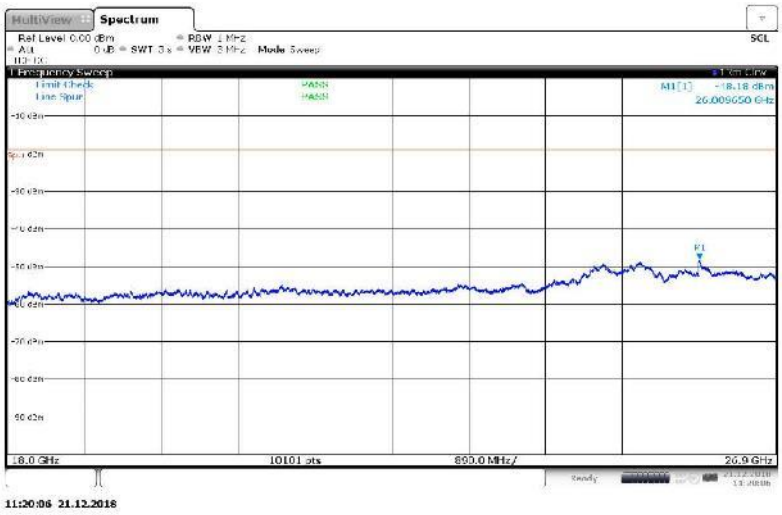

Figure 26 Spurious Emissions (18GHz – 26.9GHz) – 256QAM (2655 MHz, 5 MHz Channel BW)

Config B ANT2:

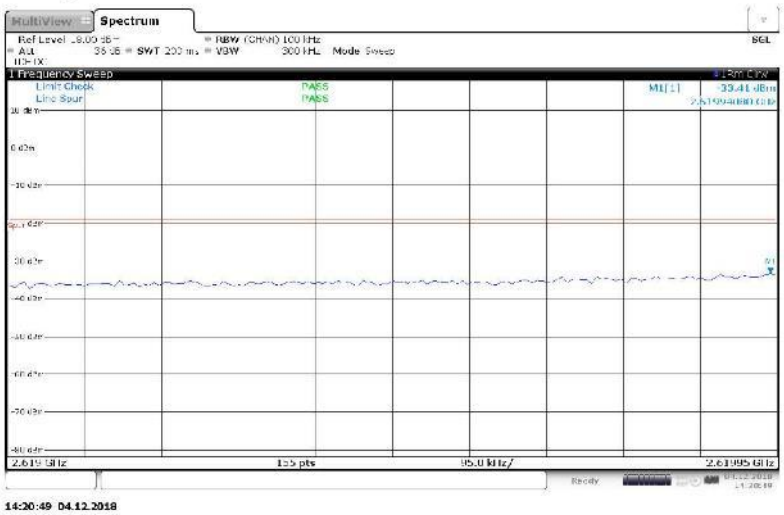

Figure 27 Spurious Emissions (Lower Band Edge) – QPSK (2625 MHz, 10 MHz Channel BW)

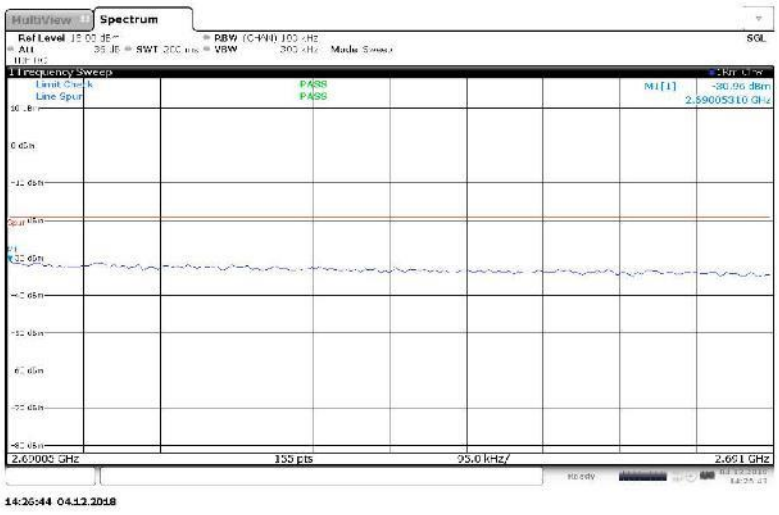

Figure 28 Spurious Emissions (Upper Band Edge) – QPSK (2685 MHz, 10 MHz Channel BW)

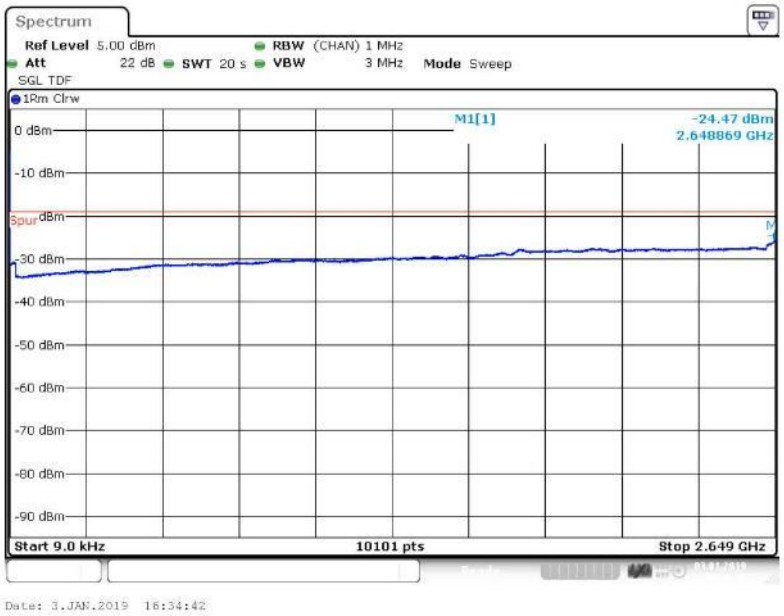

Figure 29 Spurious Emissions (9kHz – 2.649 GHz) – QPSK (2655 MHz, 10 MHz Channel BW)

Figure 30 Spurious Emissions (2.661 GHz – 3 GHz) – QPSK (2655 MHz, 10 MHz Channel BW)

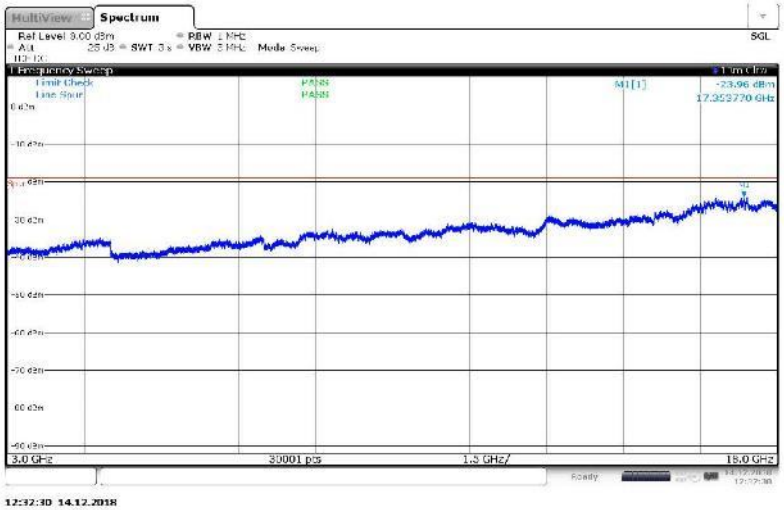

Figure 31 Spurious Emissions (3 GHz – 18GHz) – QPSK (2655 MHz, 10 MHz Channel BW)

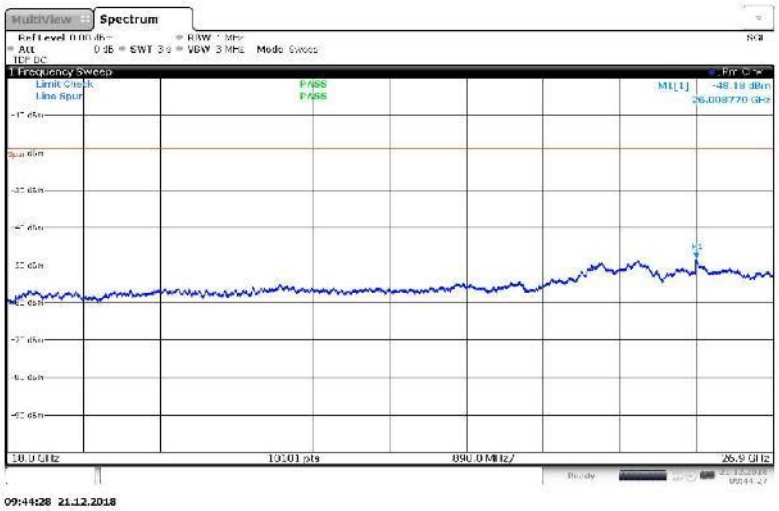

Figure 32 Spurious Emissions (18GHz – 26.9GHz) – QPSK (2655 MHz, 10 MHz Channel BW)