

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		16-QAM	
7	2535	21100	10	50	0	9.074	Fig.1	9.074	Fig.2	9.074	Fig.3

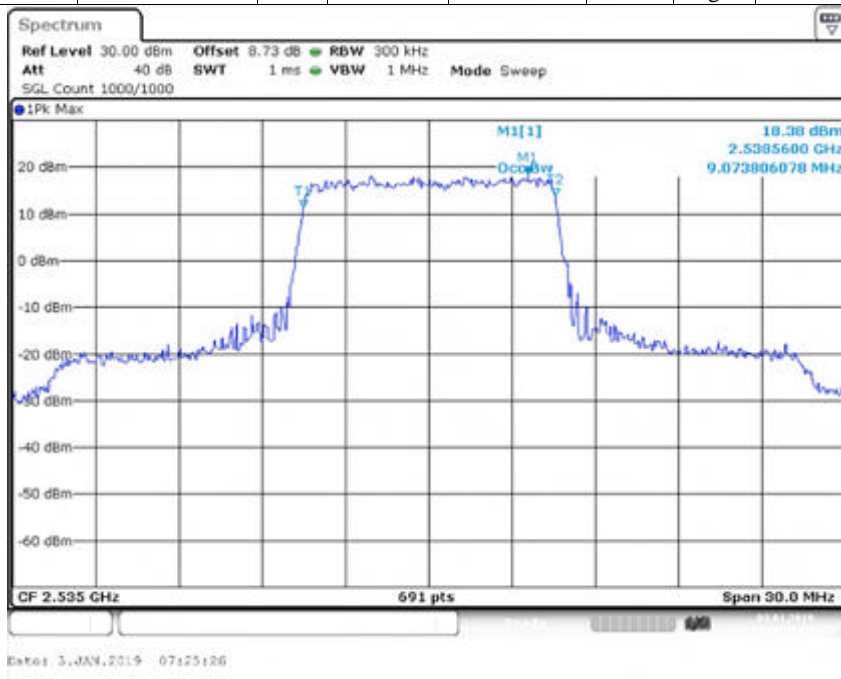


Fig.1

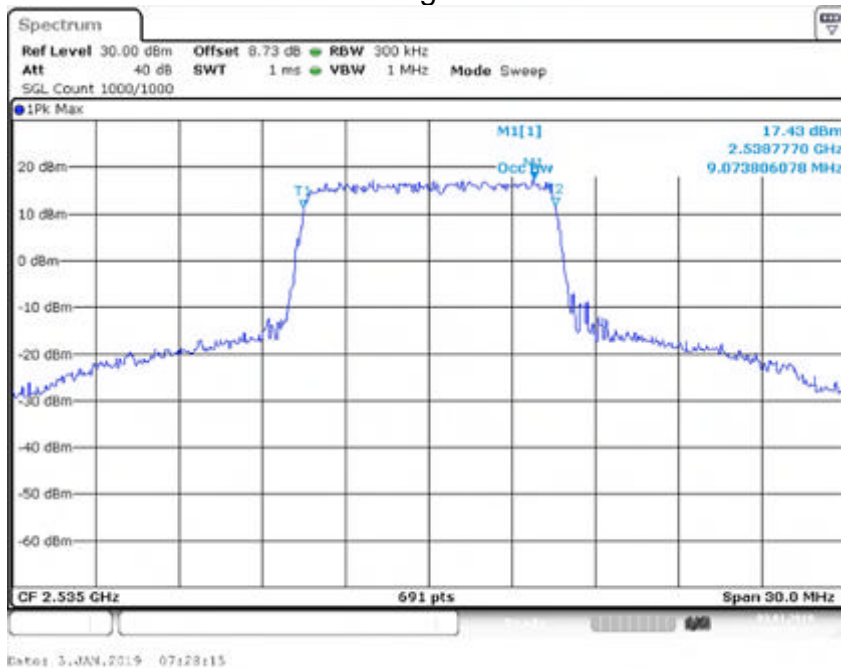


Fig.2

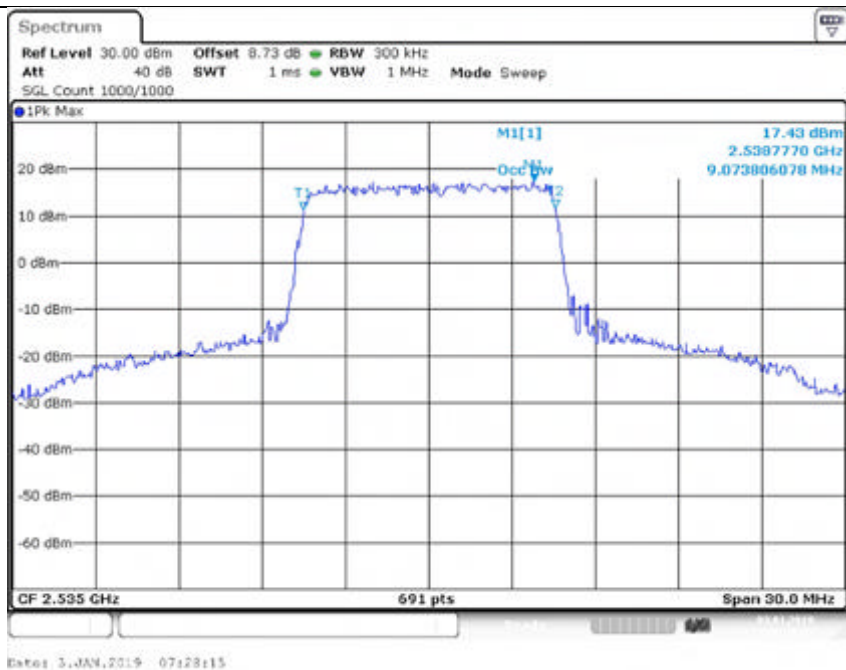


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2565	21400	10	50	0	9.117	Fig.1	9.117	Fig.2	9.117	Fig.2

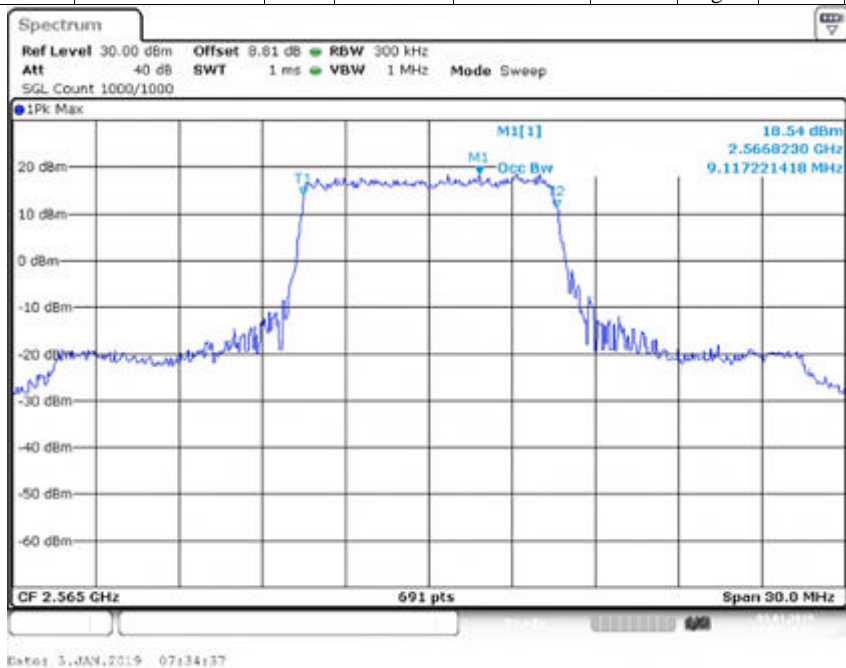


Fig.1

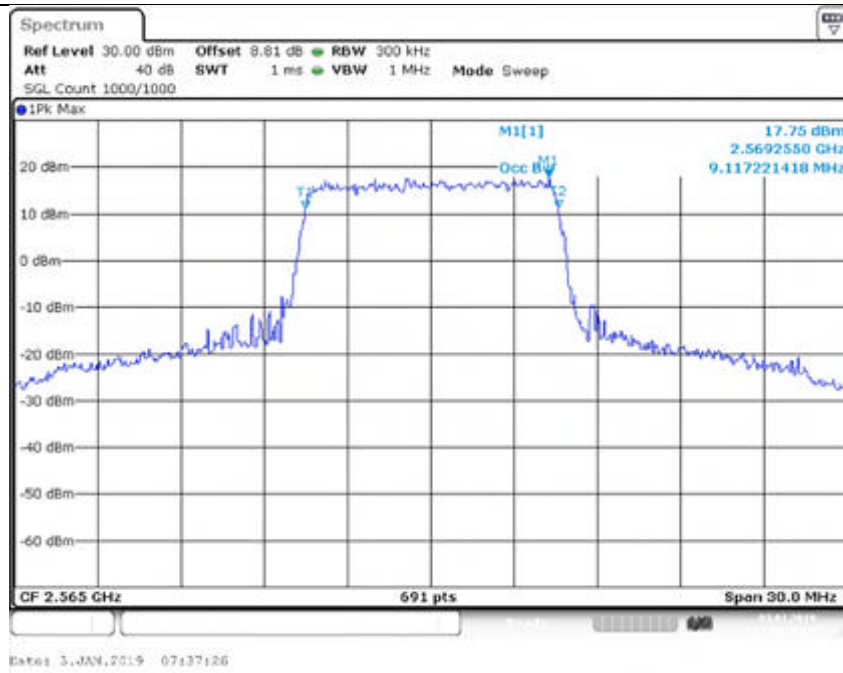


Fig.2

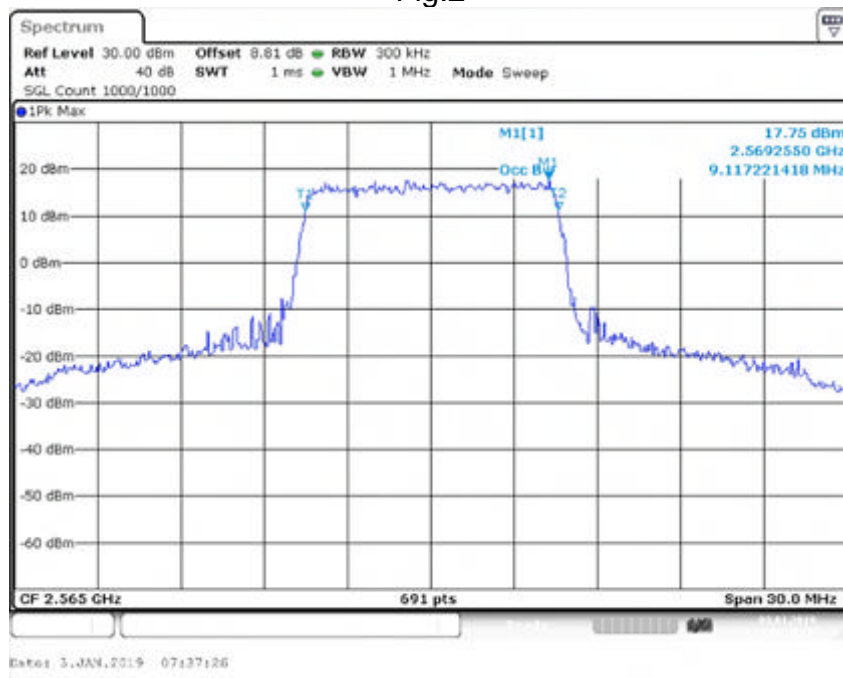


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2507.5	20825	15	75	0	13.480	Fig.1	13.546	Fig.2	13.546	Fig.3

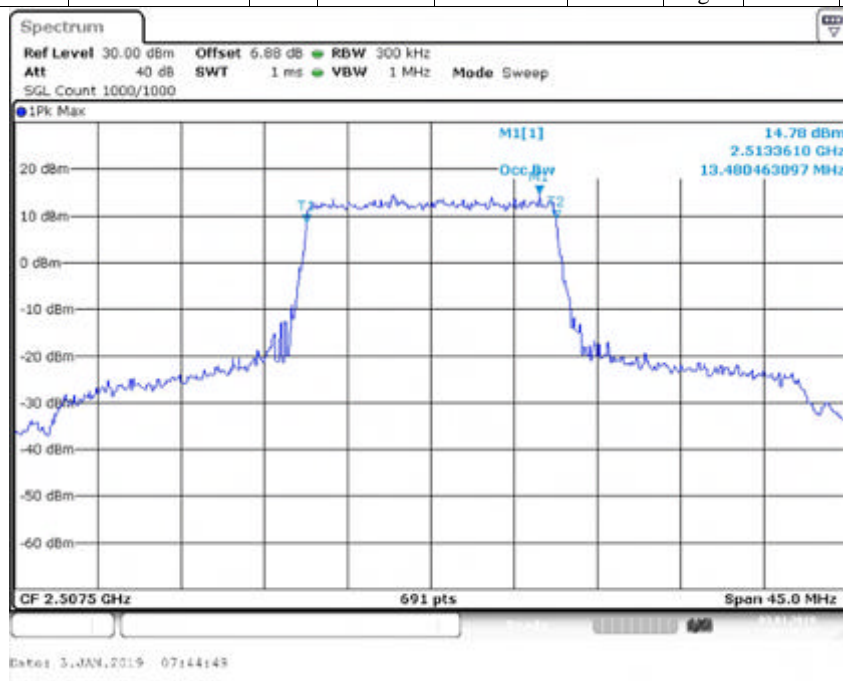


Fig.1

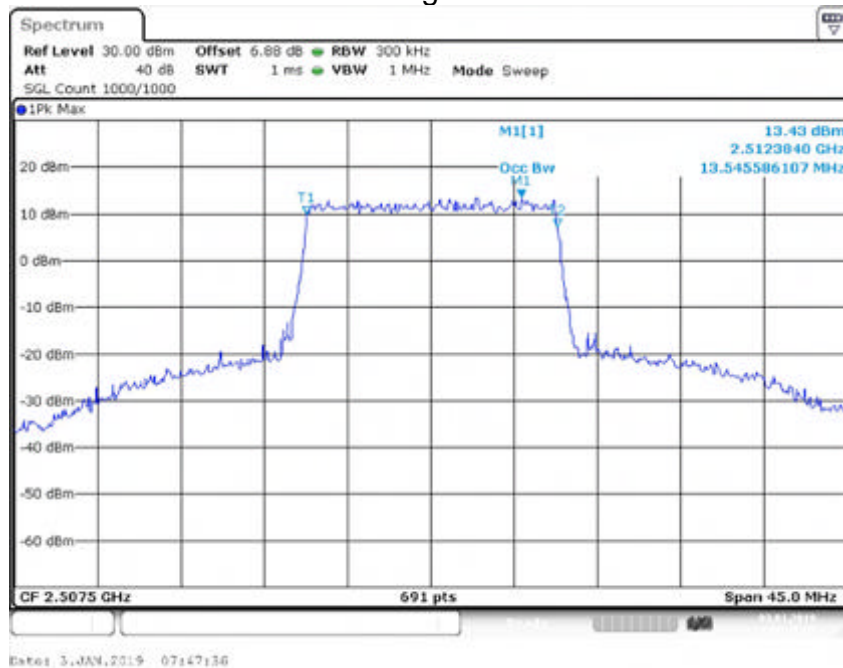


Fig.2

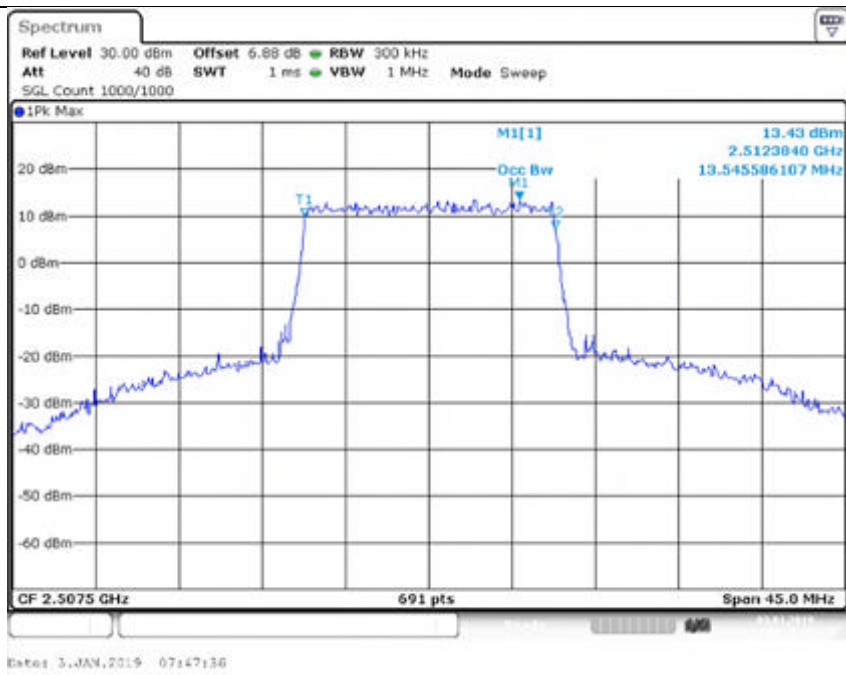


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2535	21100	15	75	0	13.480	Fig.1	13.546	Fig.2	13.546	Fig.3

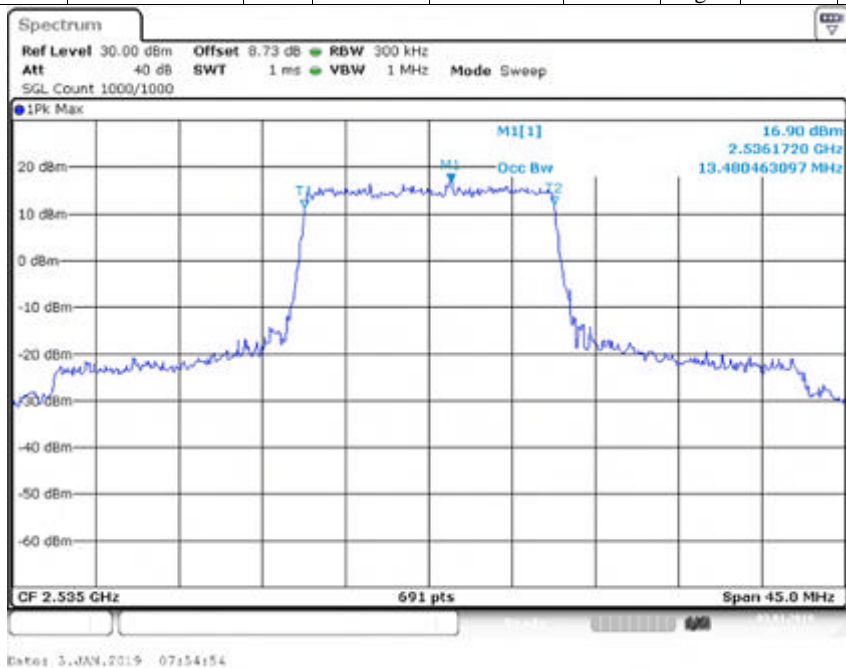


Fig.1

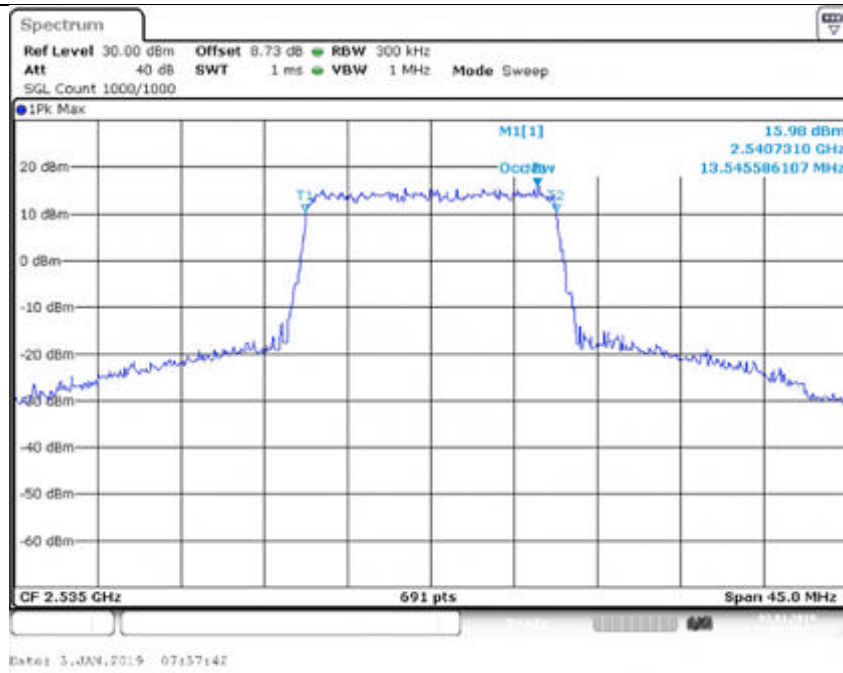


Fig.2

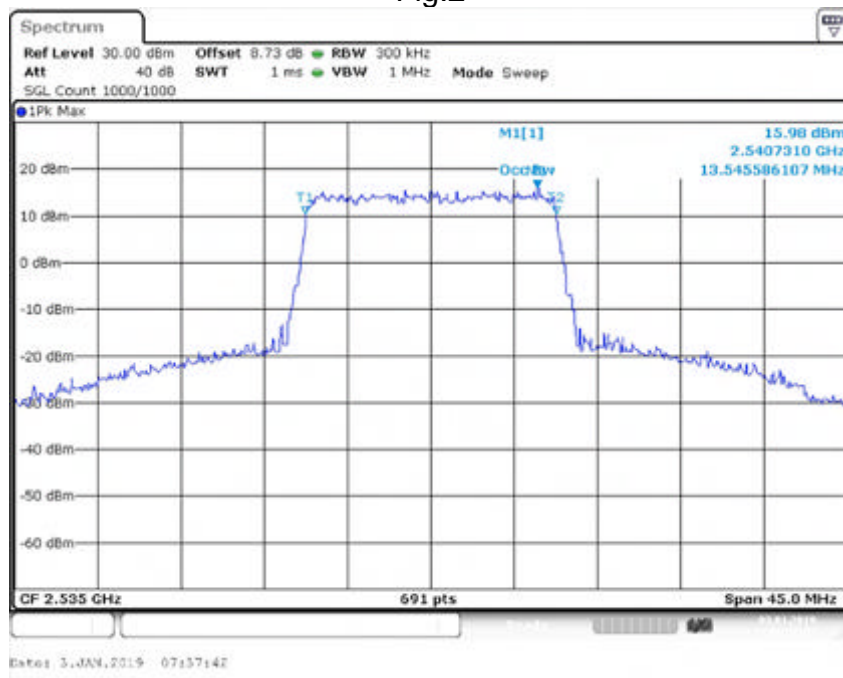


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2562.5	21375	15	75	0	13.480	Fig.1	13.546	Fig.2	13.546	Fig.3

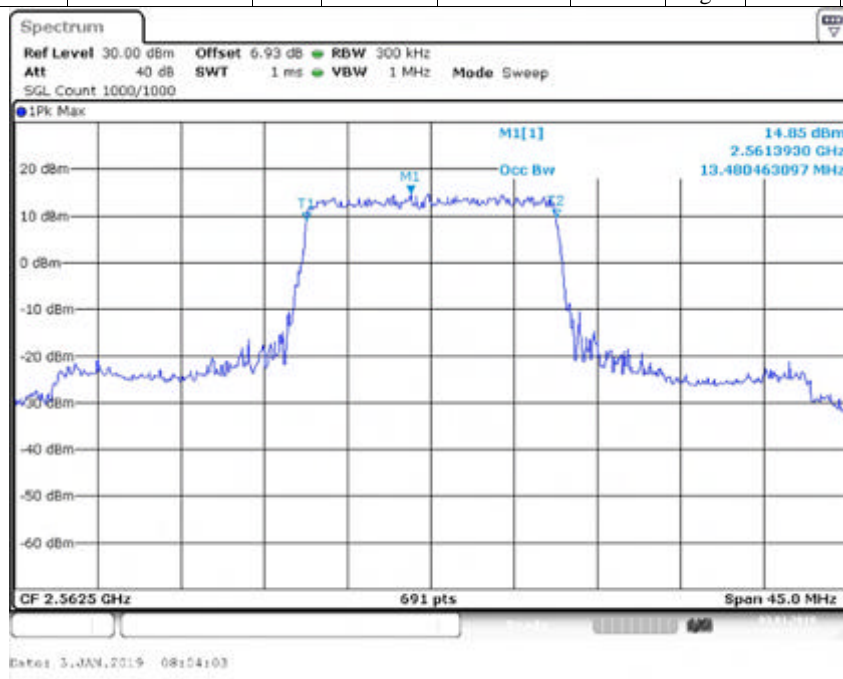


Fig.1

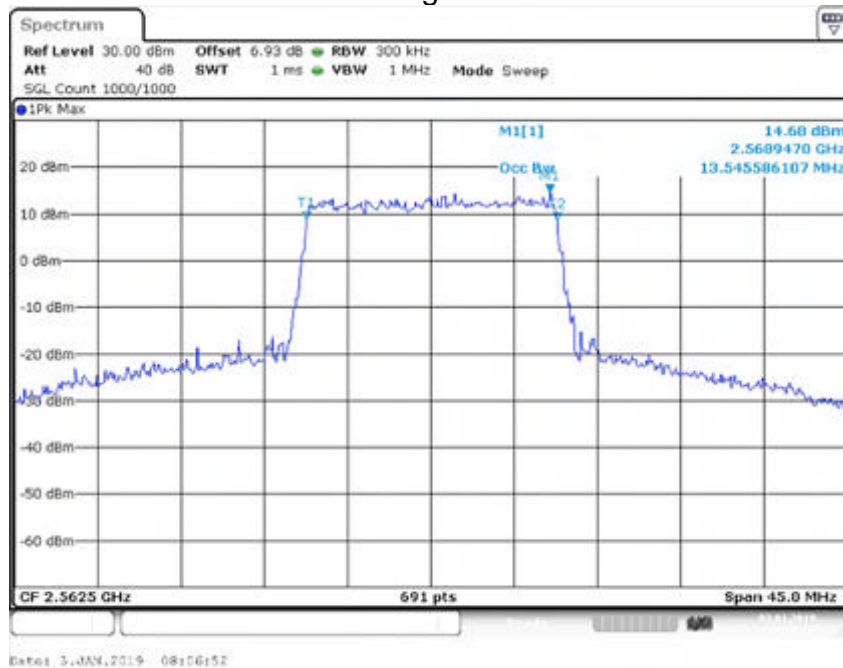


Fig.2

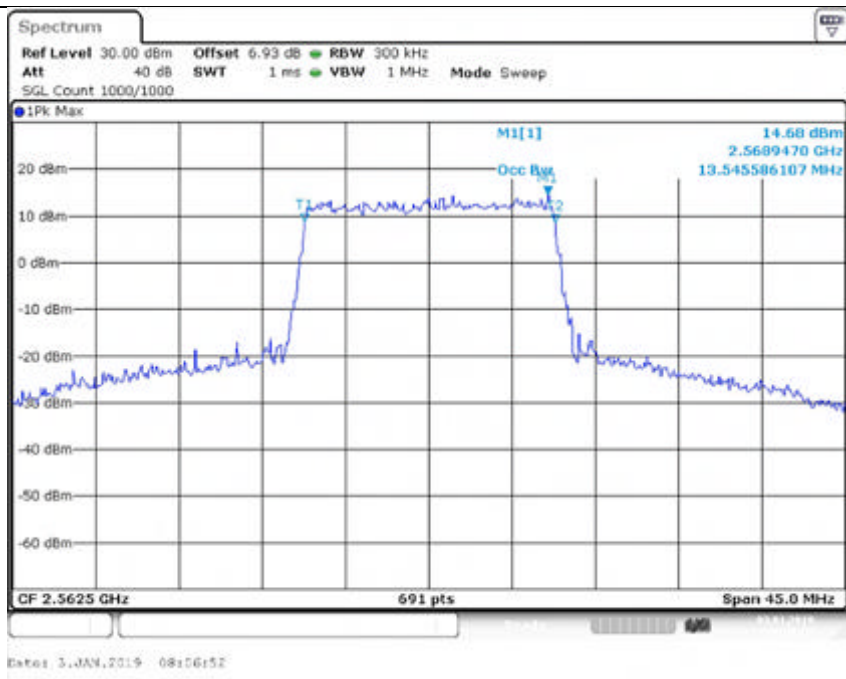


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2510	20850	20	100	0	17.974	Fig.1	17.974	Fig.2	17.974	Fig.3

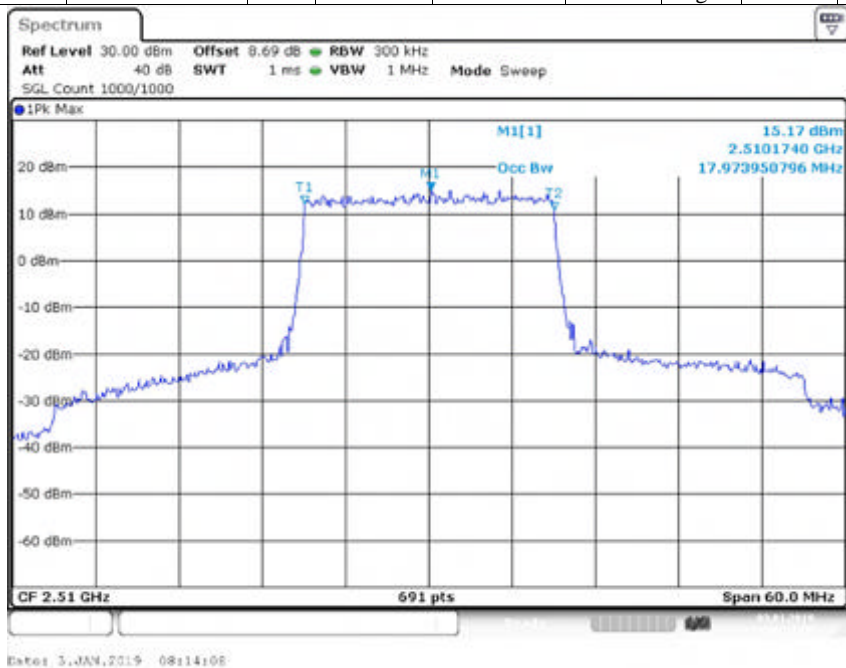


Fig.1

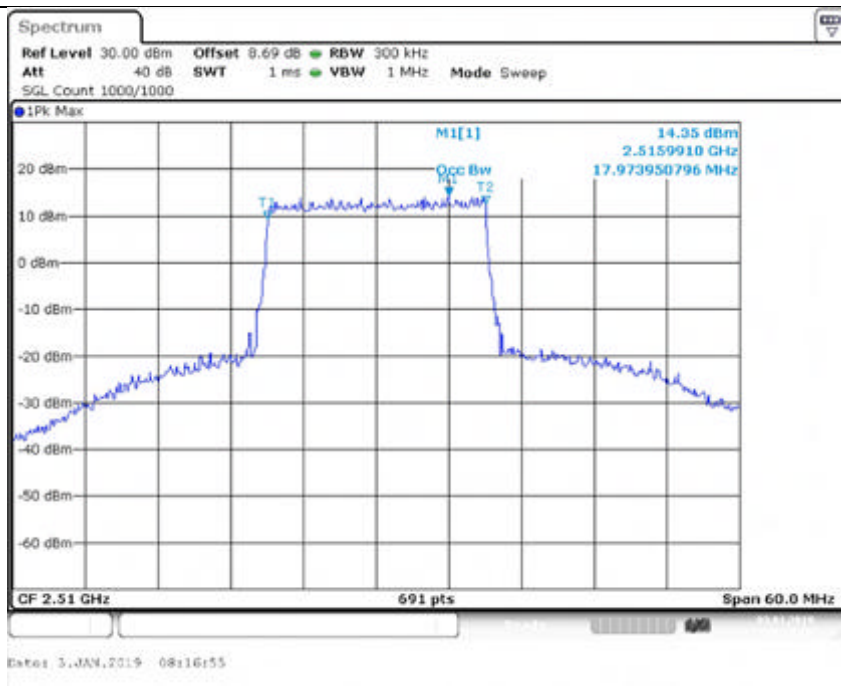


Fig.2

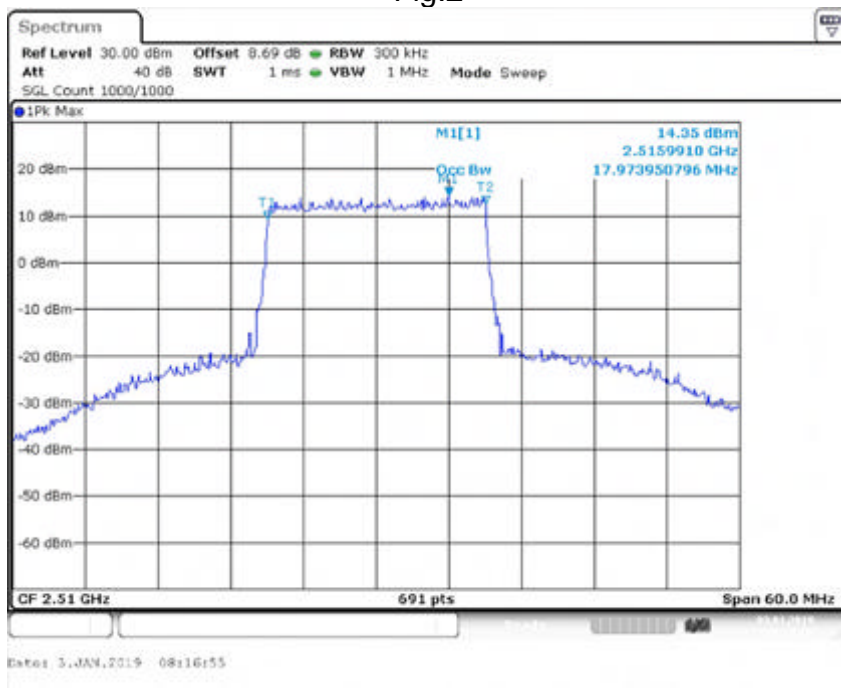


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2535	21100	20	100	0	17.974	Fig.1	17.974	Fig.2	17.974	Fig.3

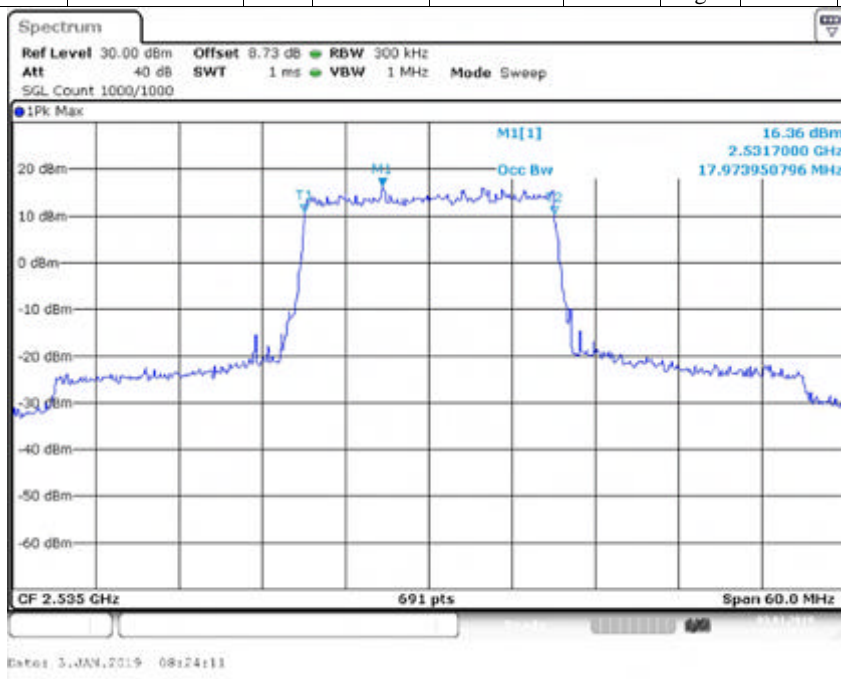


Fig.1

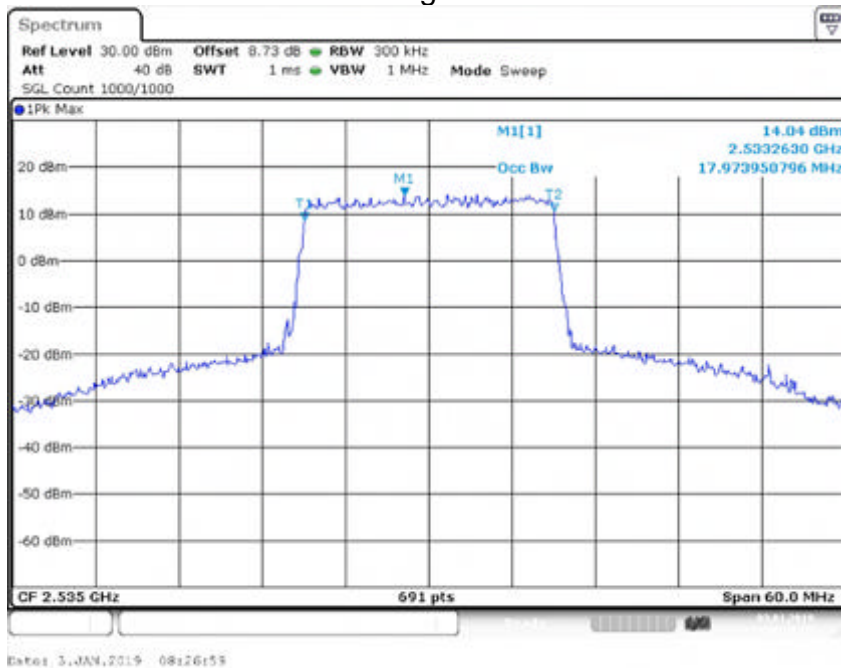


Fig.2

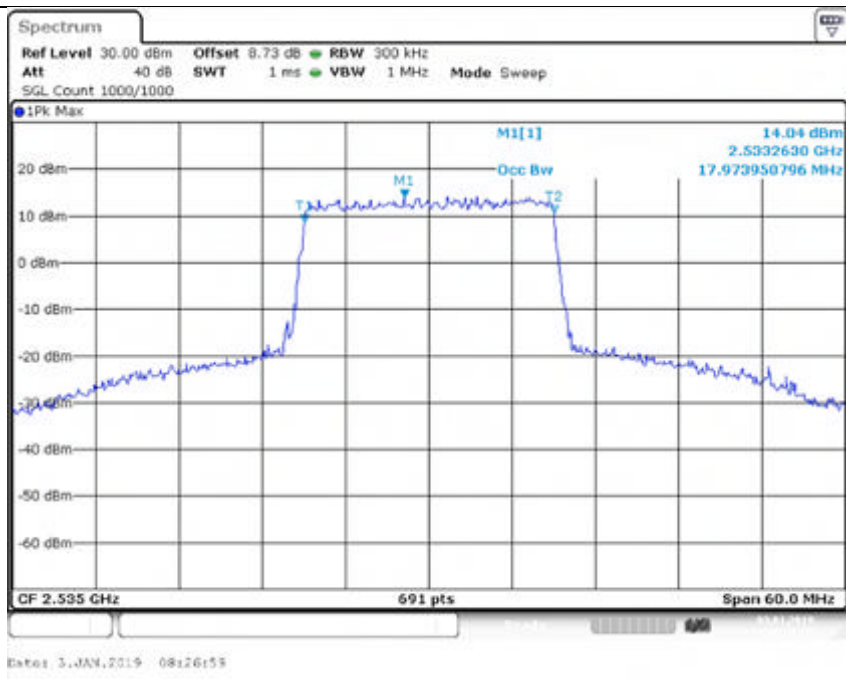


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2560	21350	20	100	0	17.974	Fig.1	17.974	Fig.2	17.974	Fig.3

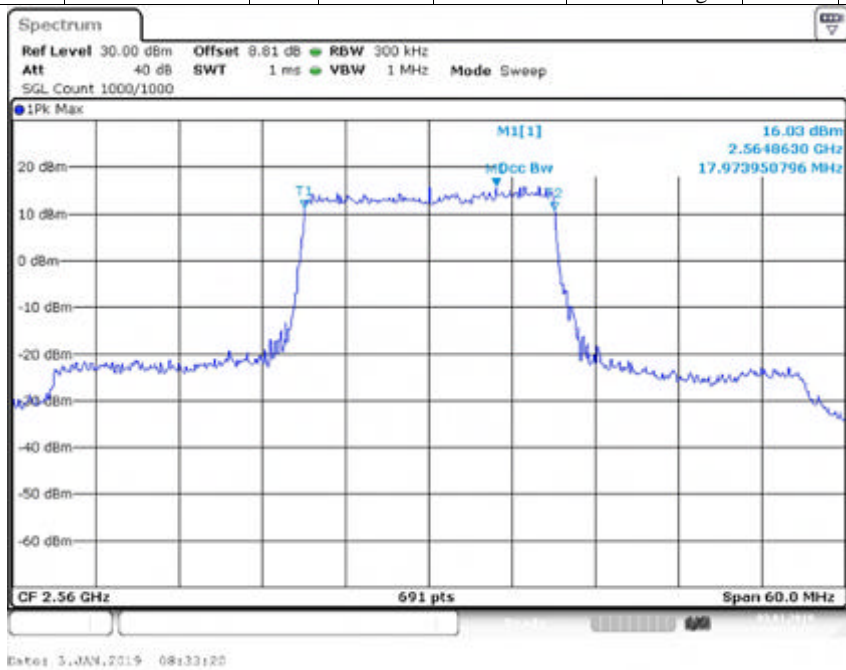


Fig.1

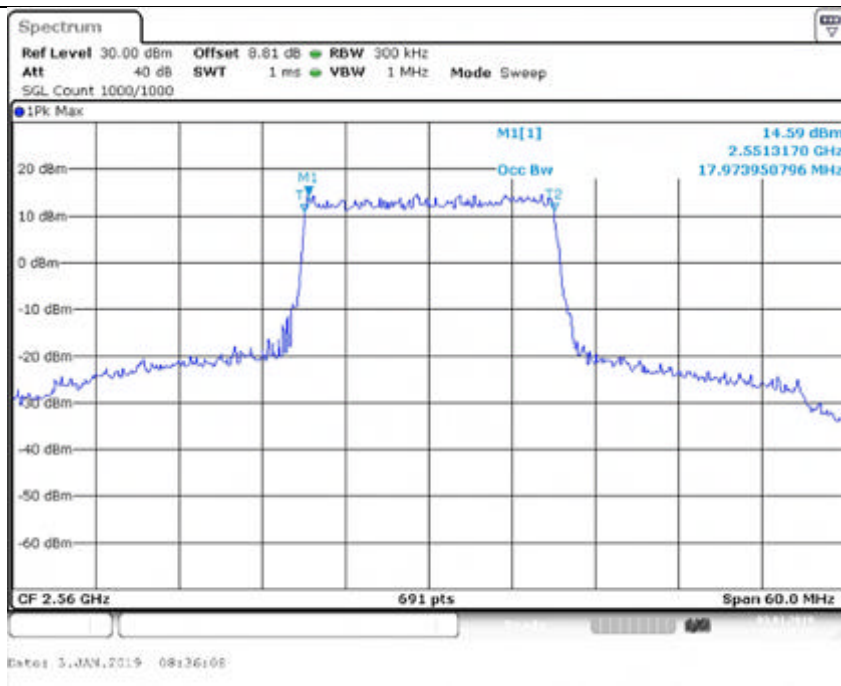


Fig.2

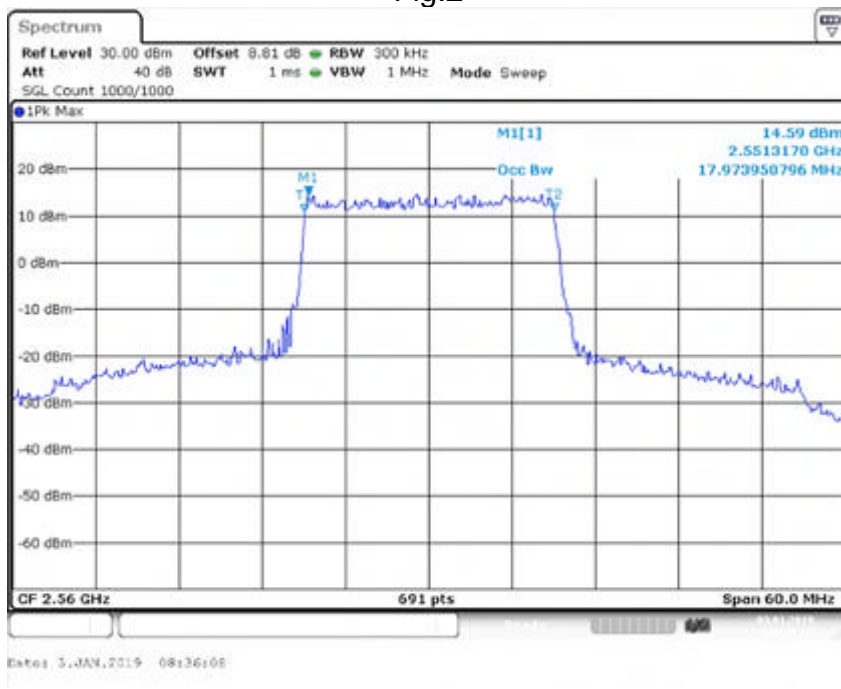


Fig.3

3 Emission Bandwidth Test result

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2502.5	20775	5	25	0	5.058	Fig.1	5.123	Fig.2	5.123	Fig.3



Fig.1

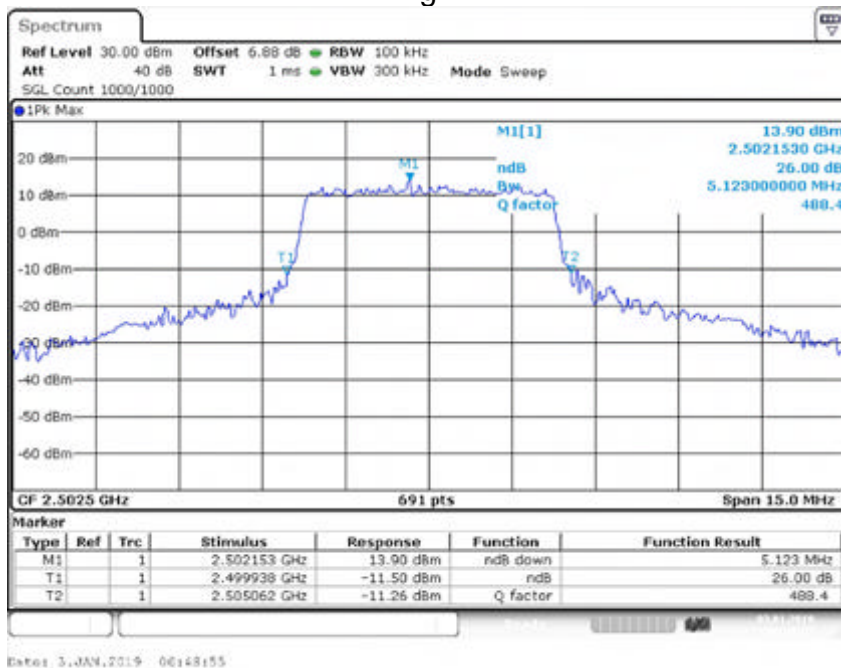


Fig.2

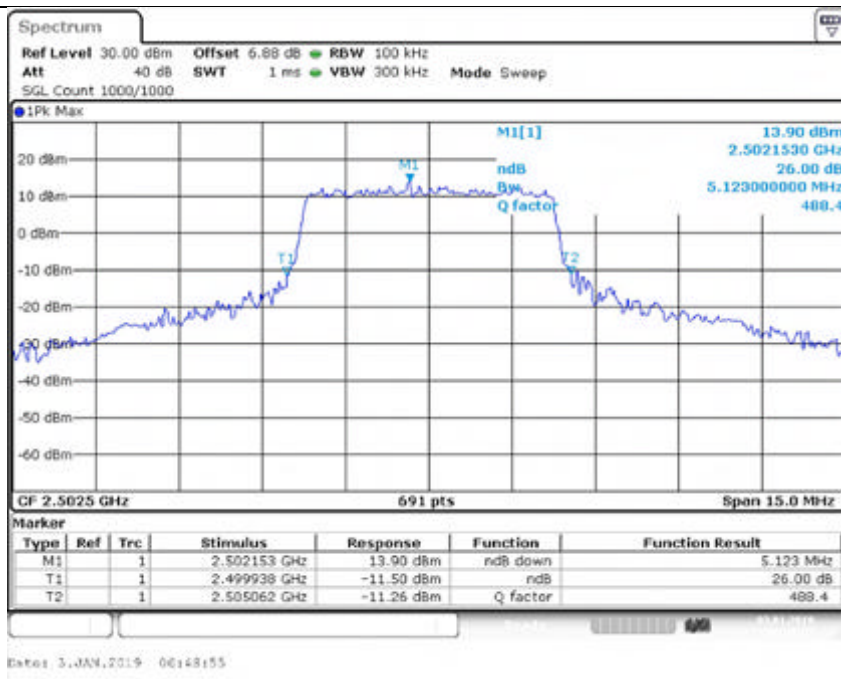


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2535	21100	5	25	0	5.123	Fig.1	5.253	Fig.2	5.253	Fig.3

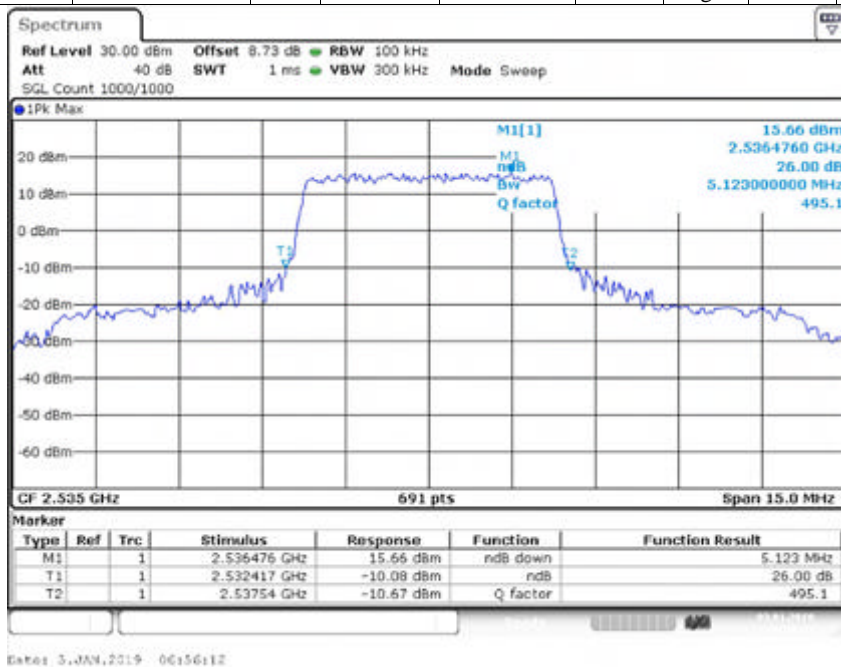


Fig.1

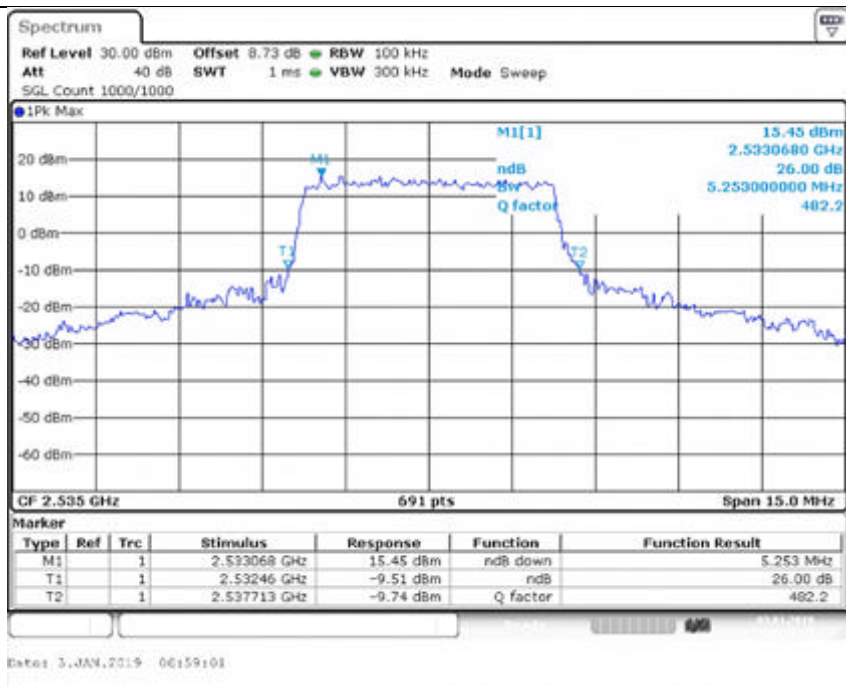


Fig.2

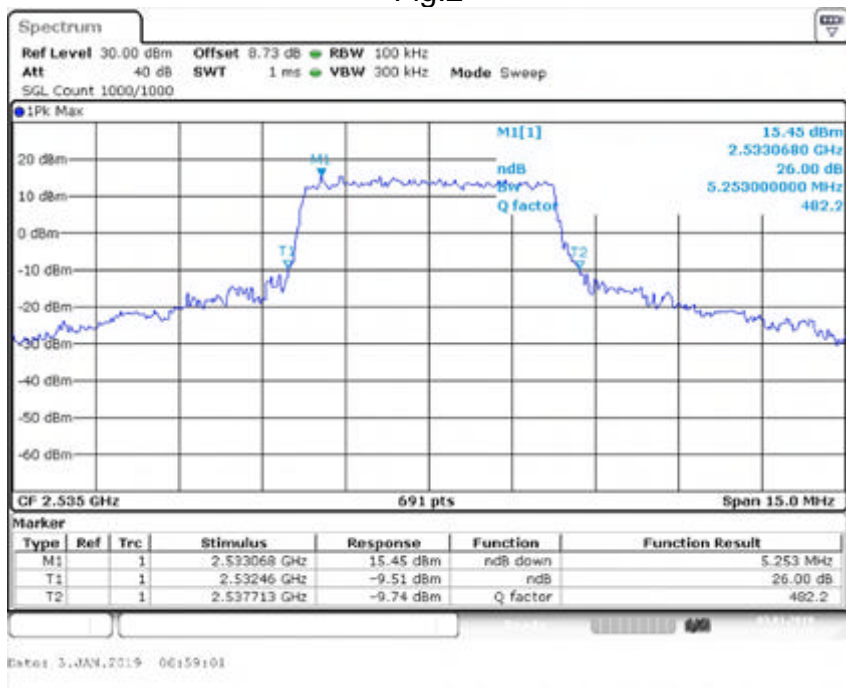


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2567.5	21425	5	25	0	5.188	Fig.1	5.275	Fig.2	5.275	Fig.3

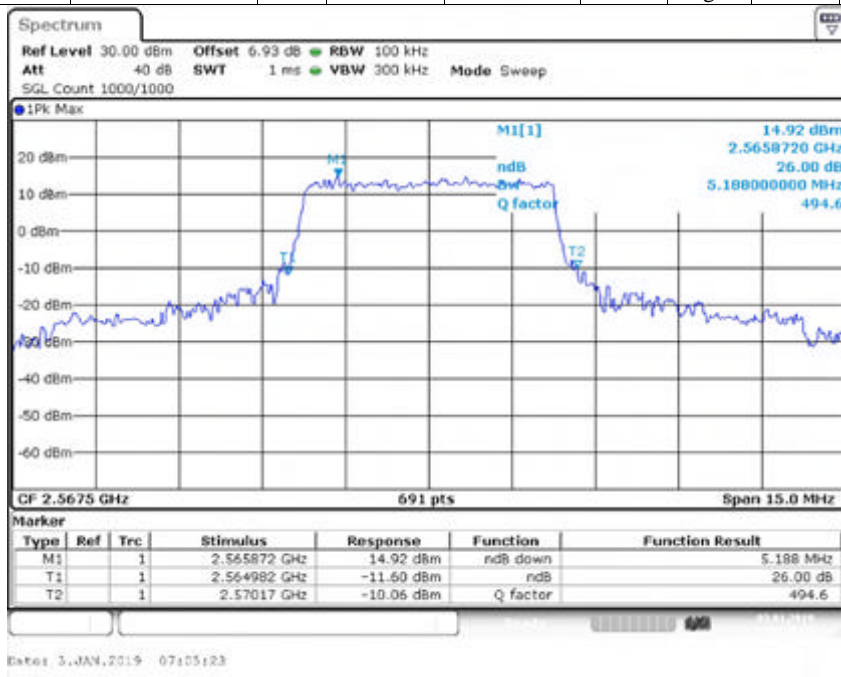


Fig.1

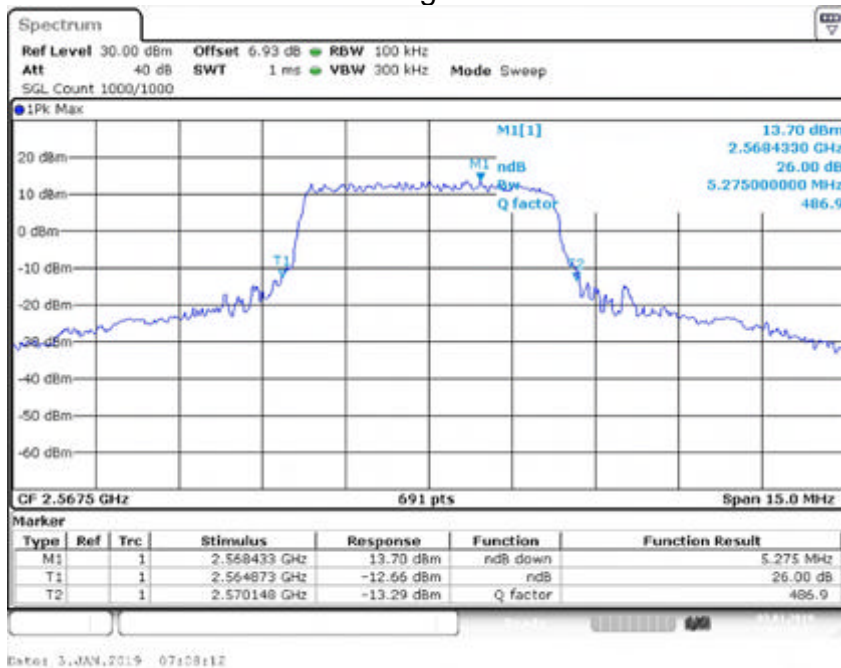


Fig.2

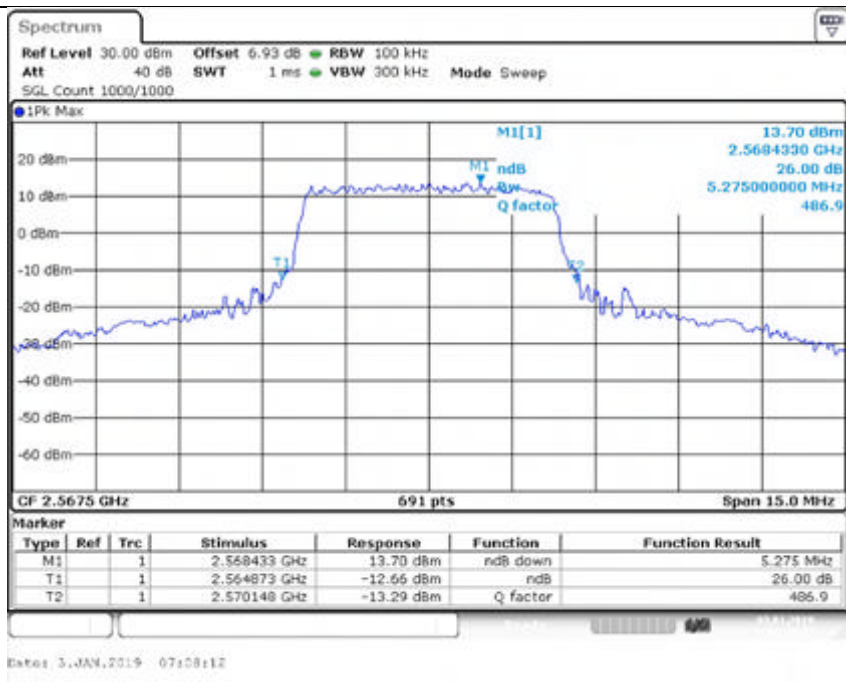


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2505	20800	10	50	0	10.333	Fig.1	10.159	Fig.2	10.159	Fig.3

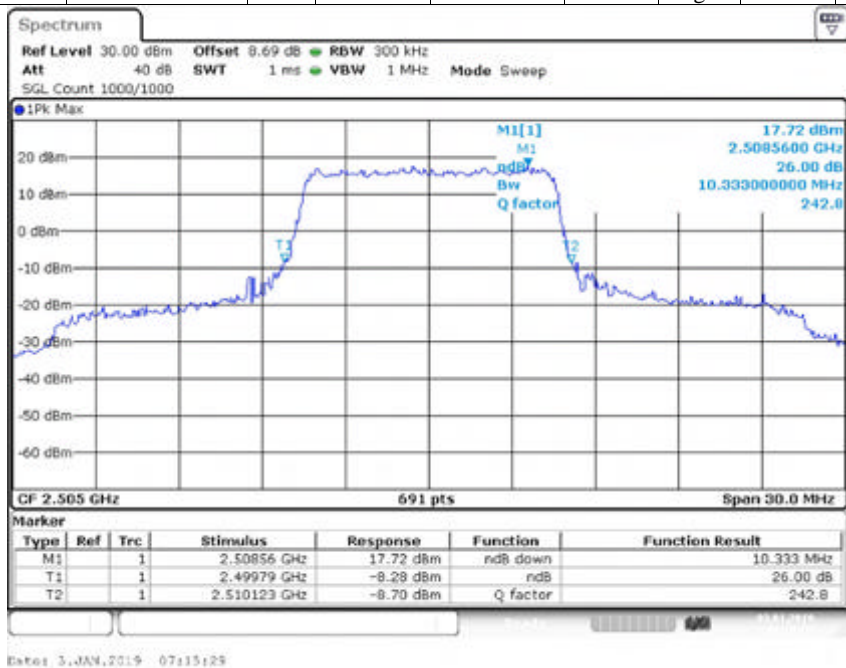


Fig.1

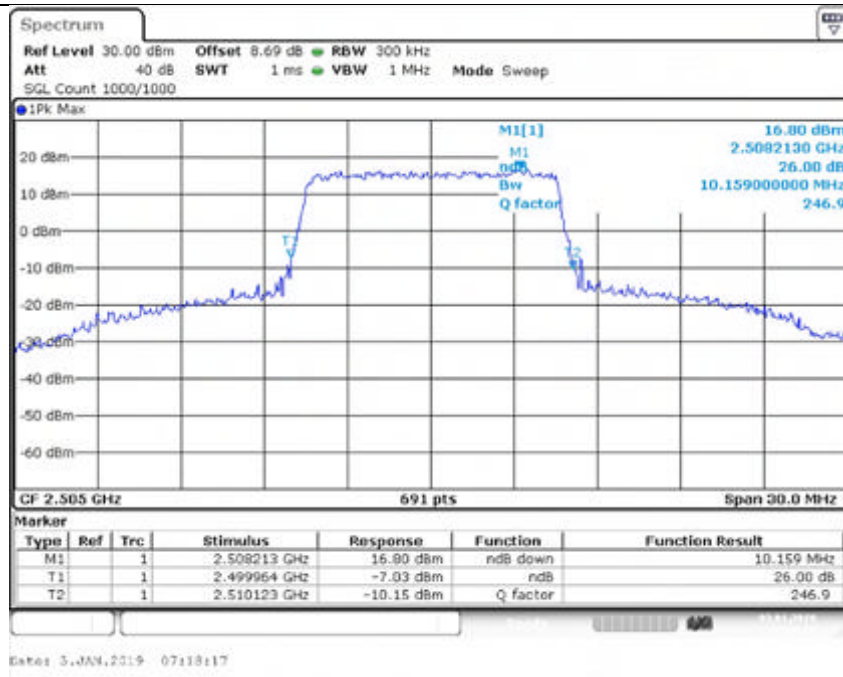


Fig.2

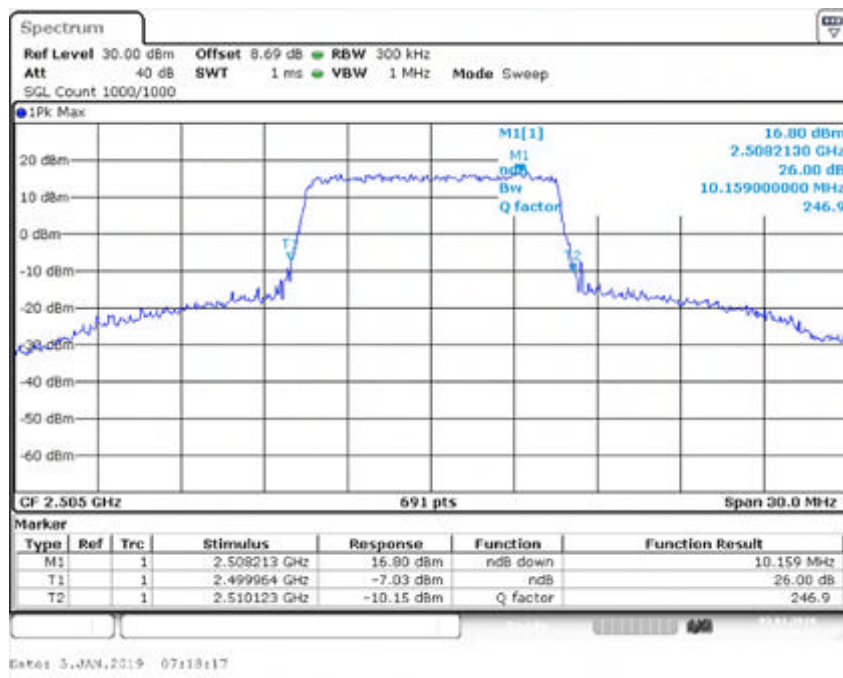


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2535	21100	10	50	0	10.203	Fig.1	10.333	Fig.2	10.333	Fig.3

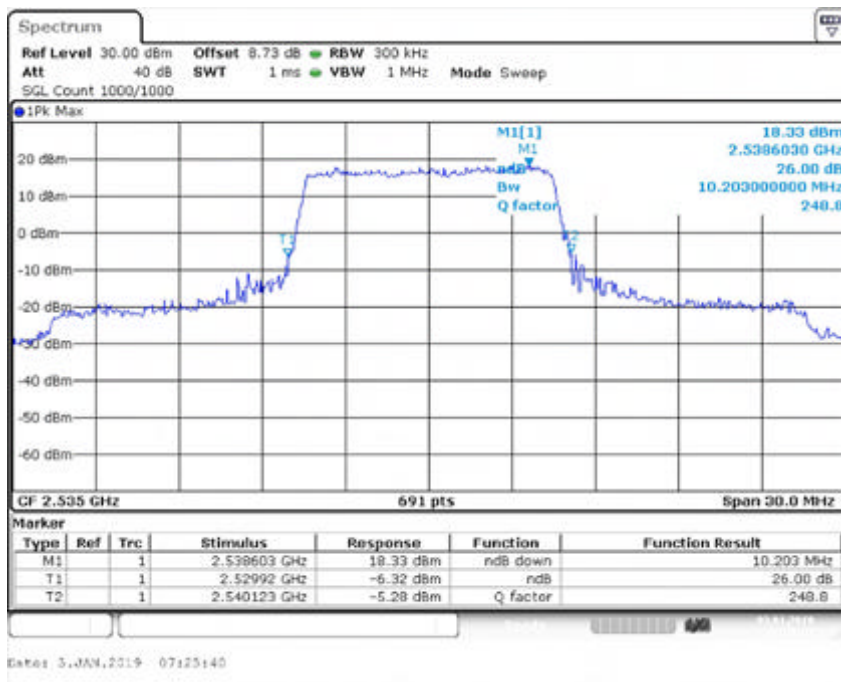


Fig.1

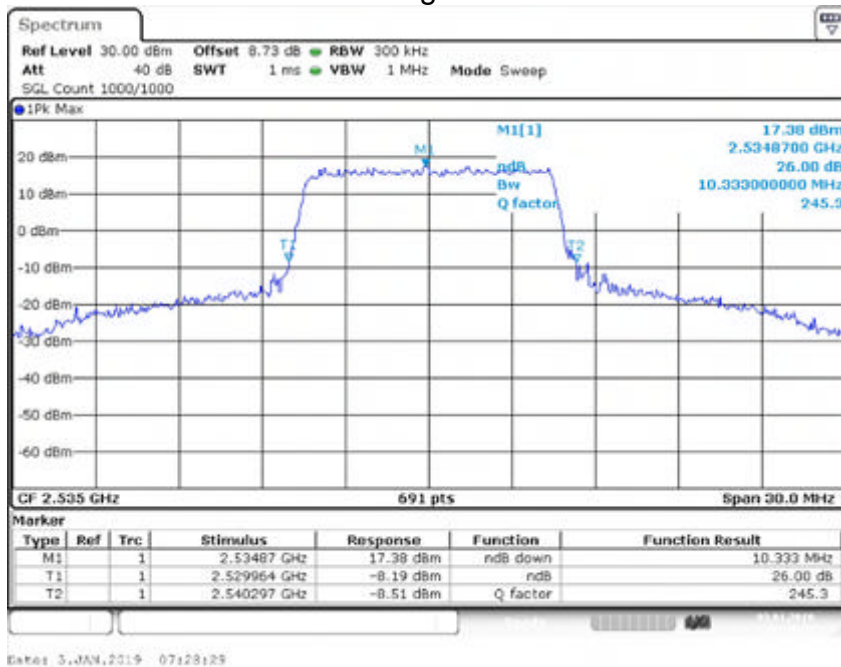


Fig.2

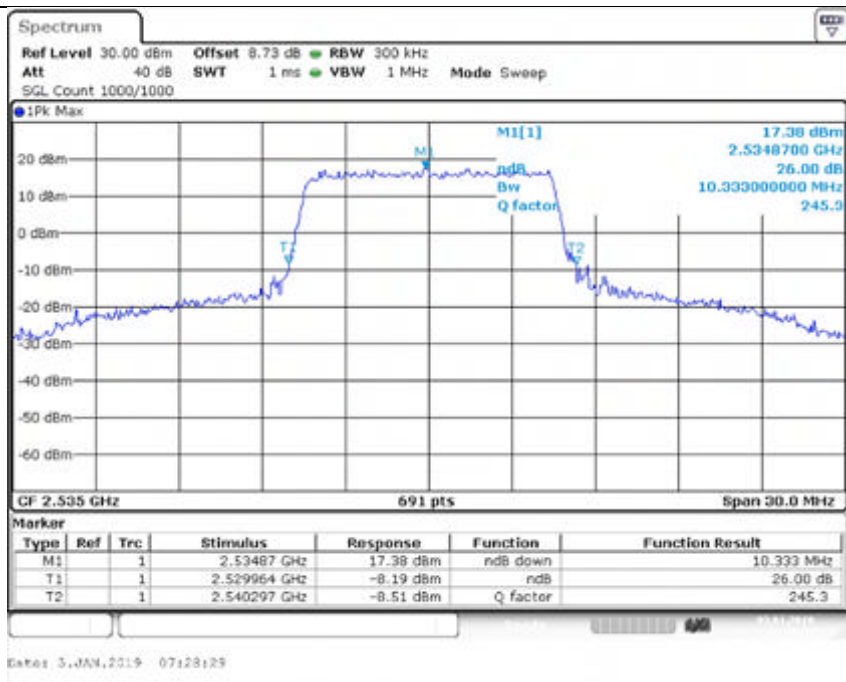


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2565	21400	10	50	0	10.203	Fig.1	10.159	Fig.2	10.159	Fig.3

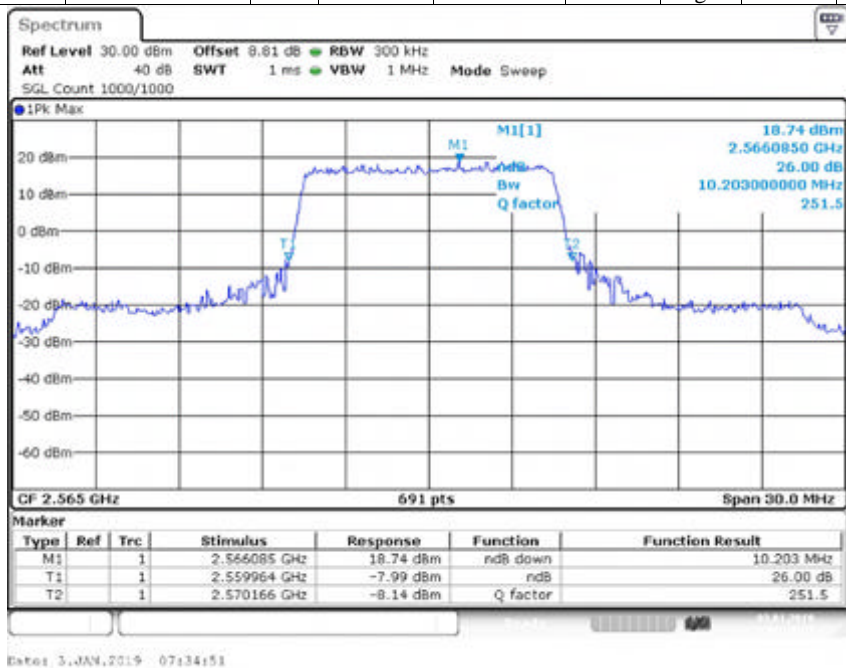


Fig.1

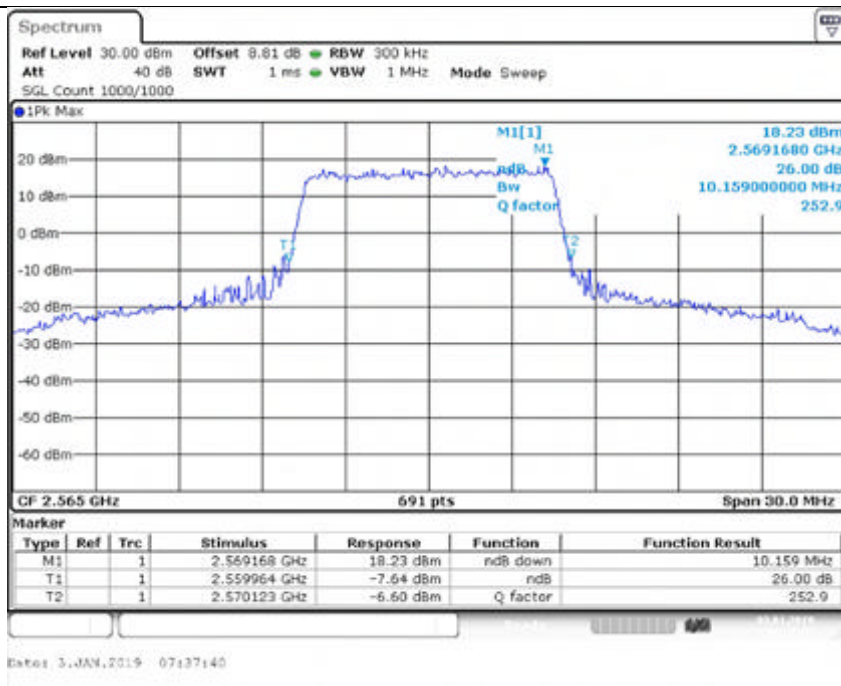


Fig.2

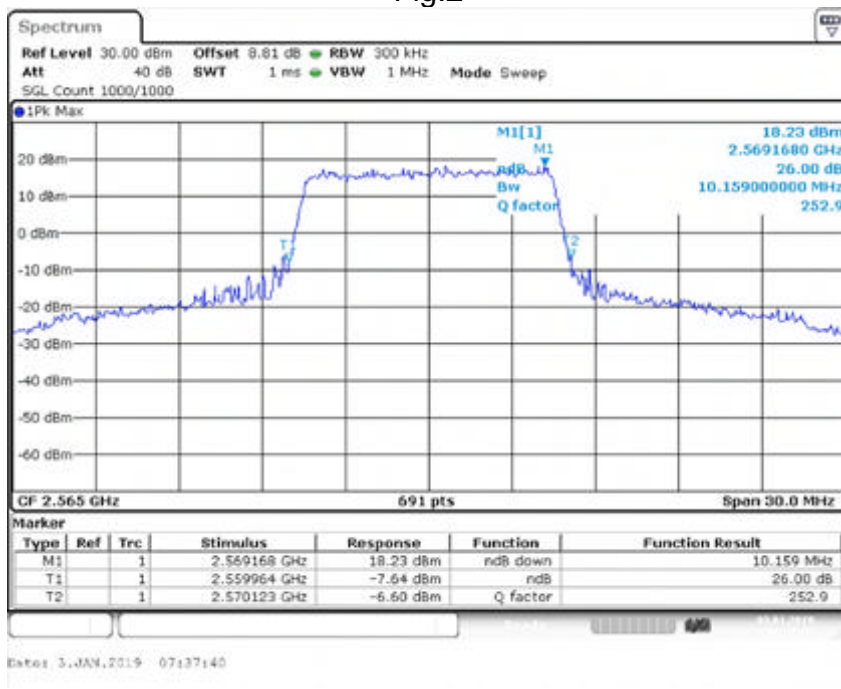


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2507.5	20825	15	75	0	15.043	Fig.1	14.978	Fig.2	14.978	Fig.3

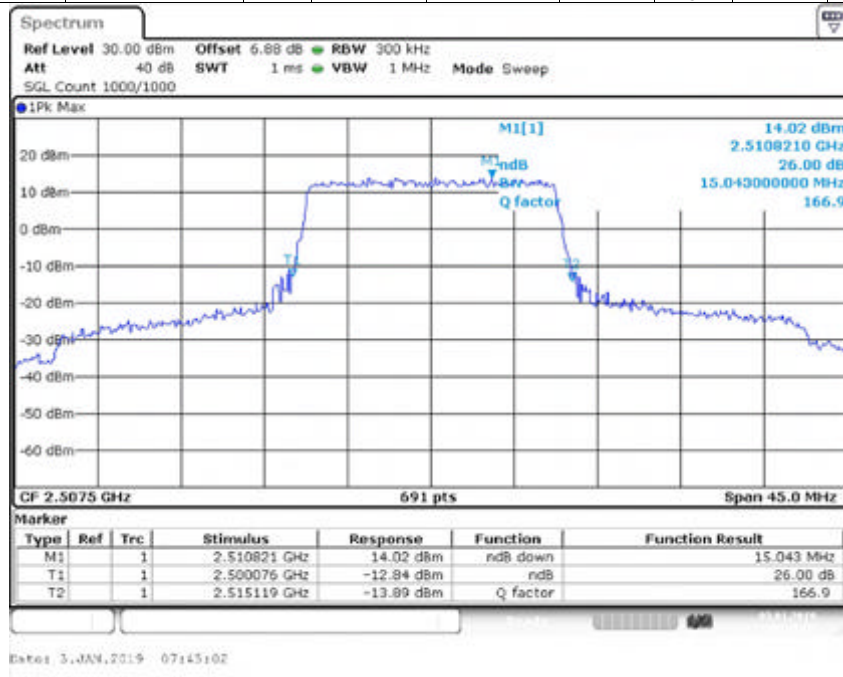


Fig.1

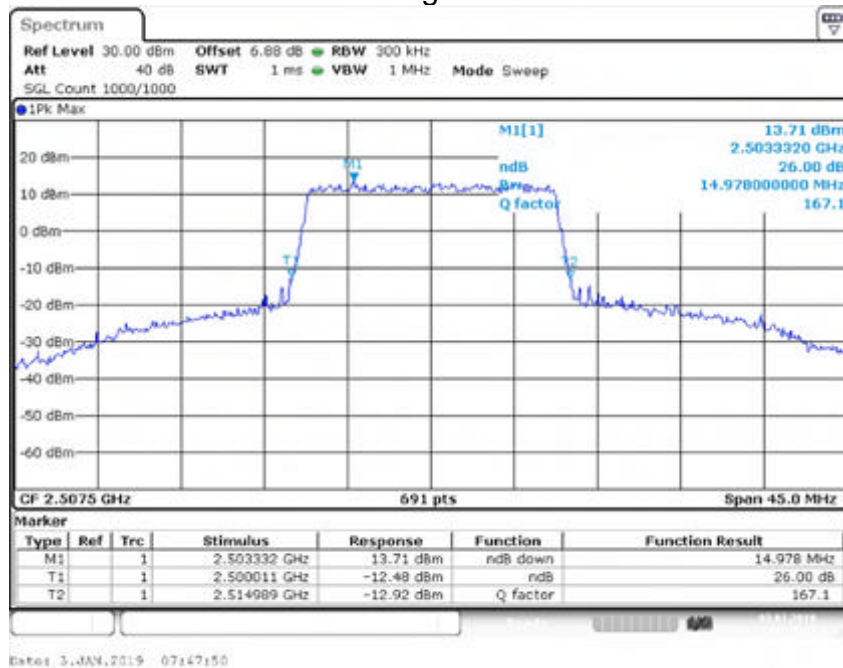


Fig.2

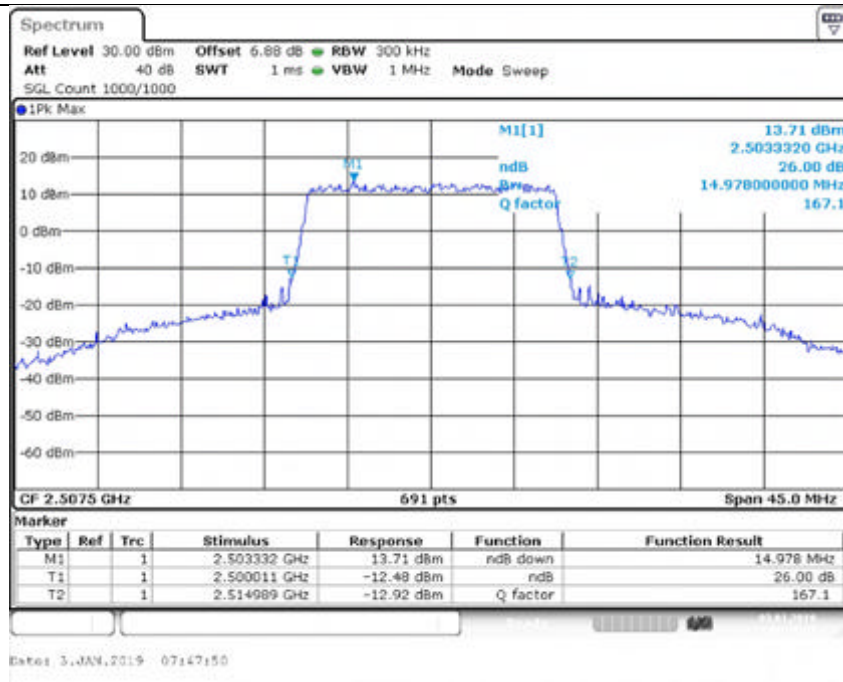


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2535	21100	15	75	0	15.174	Fig.1	15.109	Fig.2	15.109	Fig.3

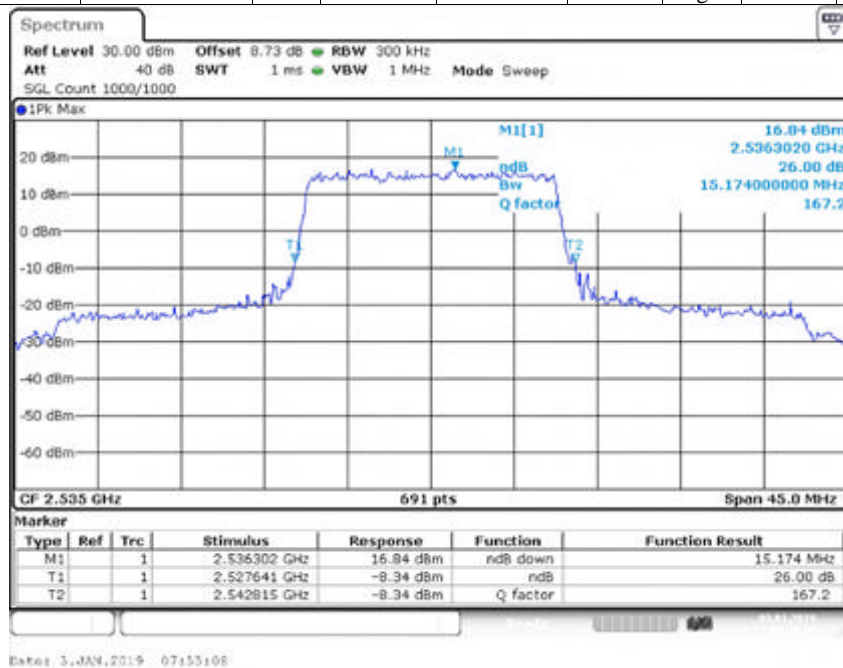


Fig.1

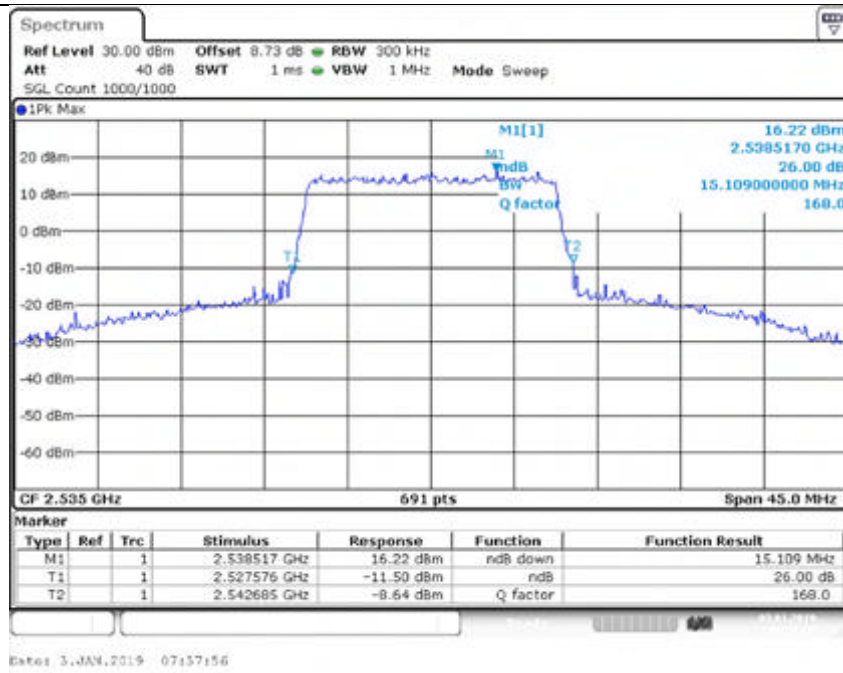


Fig.2

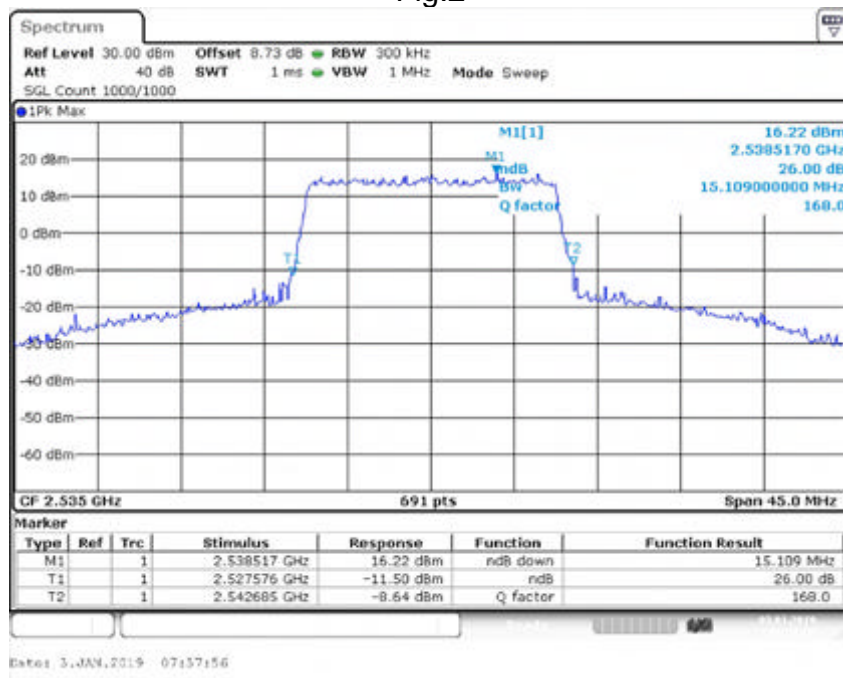


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2562.5	21375	15	75	0	15.109	Fig.1	14.913	Fig.2	14.913	Fig.3

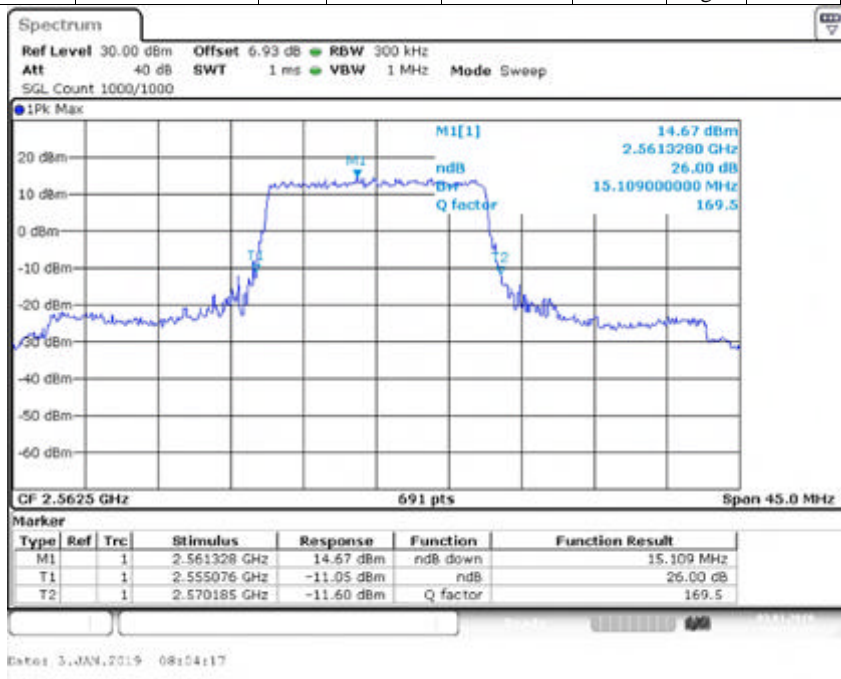


Fig.1

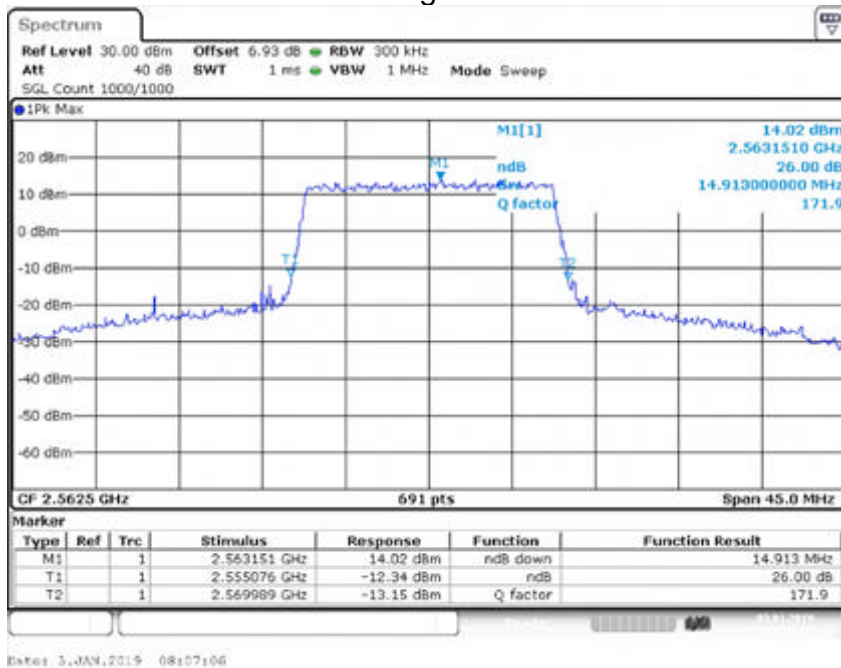


Fig.2

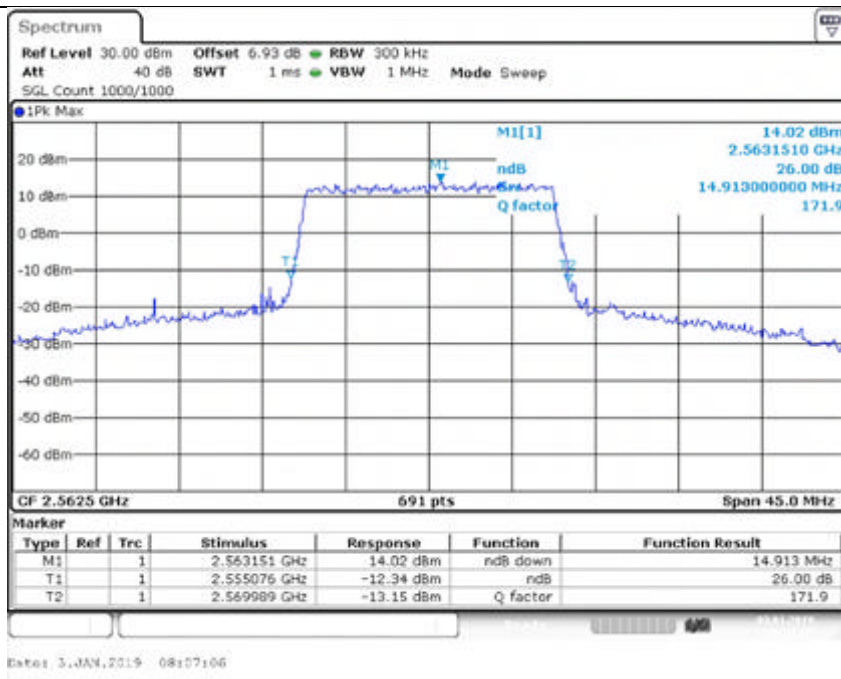


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2510	20850	20	100	0	19.537	Fig.1	19.624	Fig.2	19.624	Fig.3

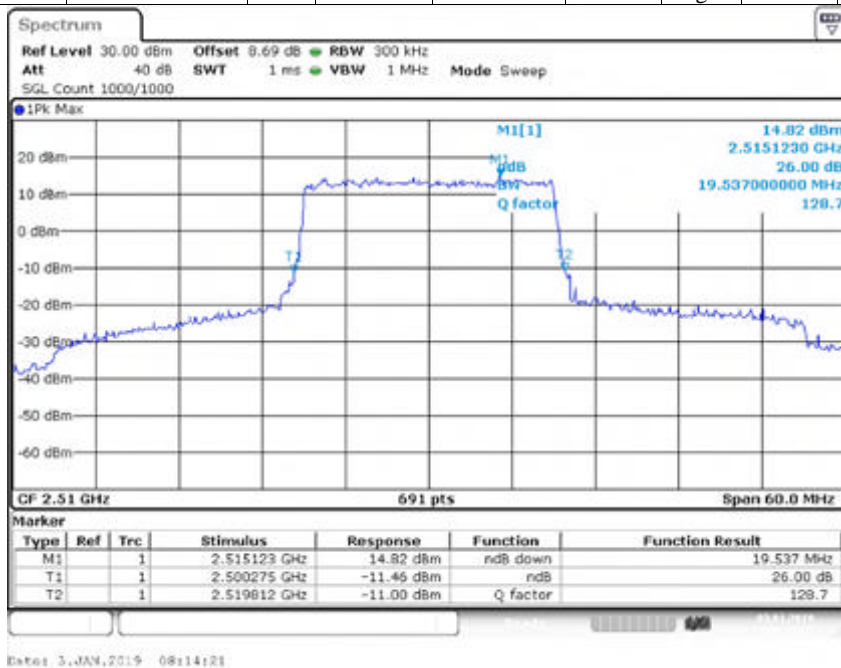


Fig.1

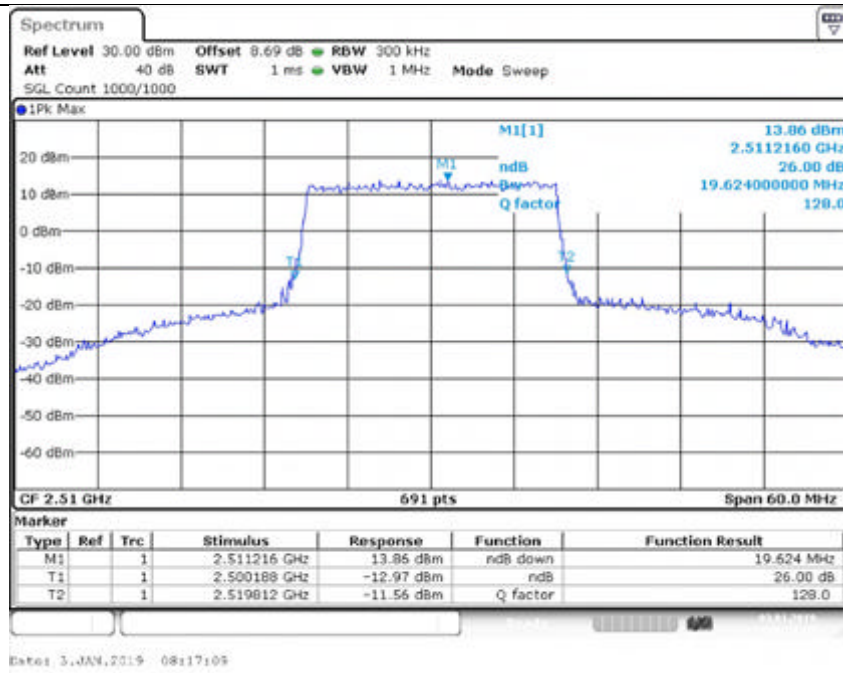


Fig.2

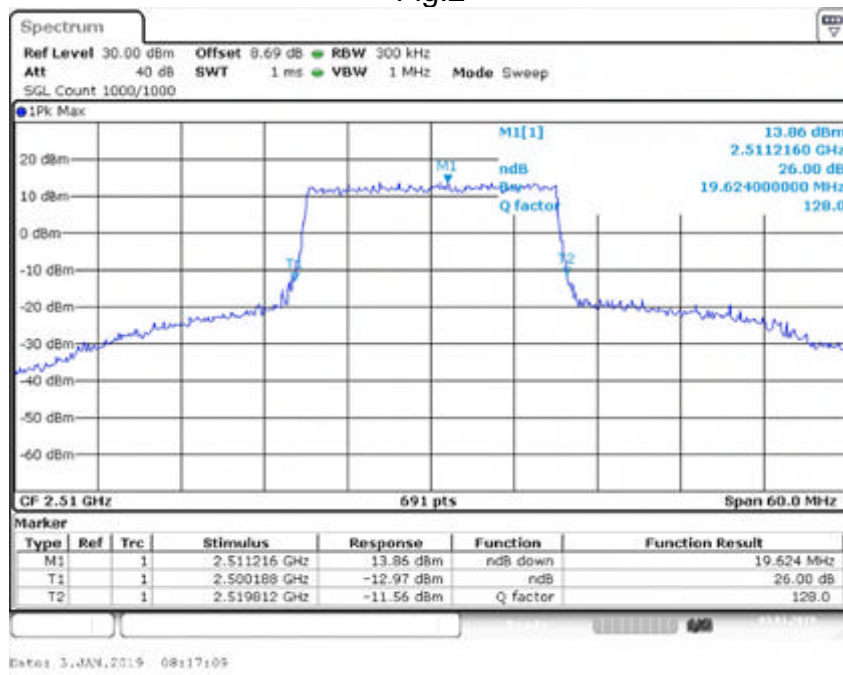


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2535	21100	20	100	0	19.624	Fig.1	19.711	Fig.2	19.711	Fig.3

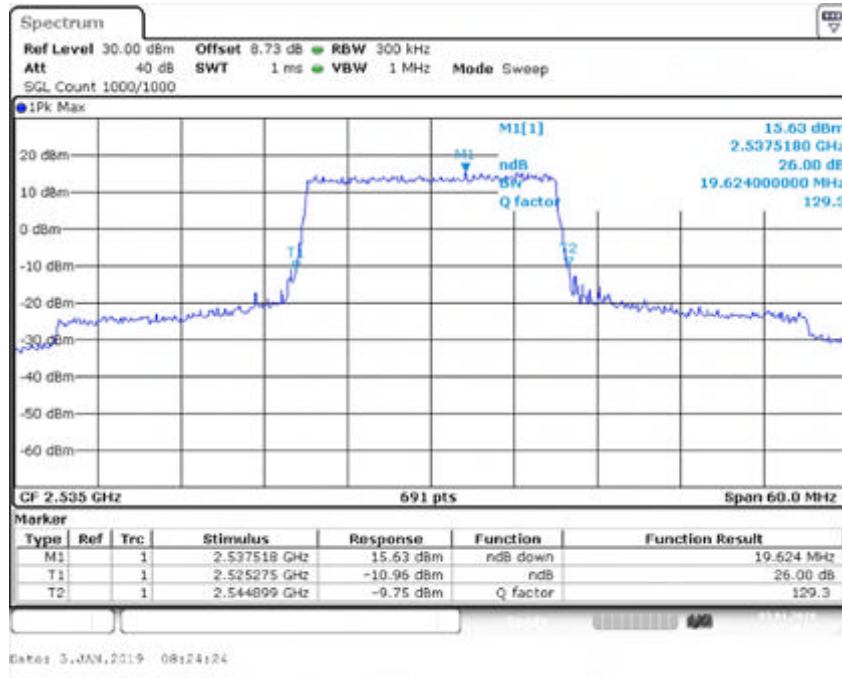


Fig.1

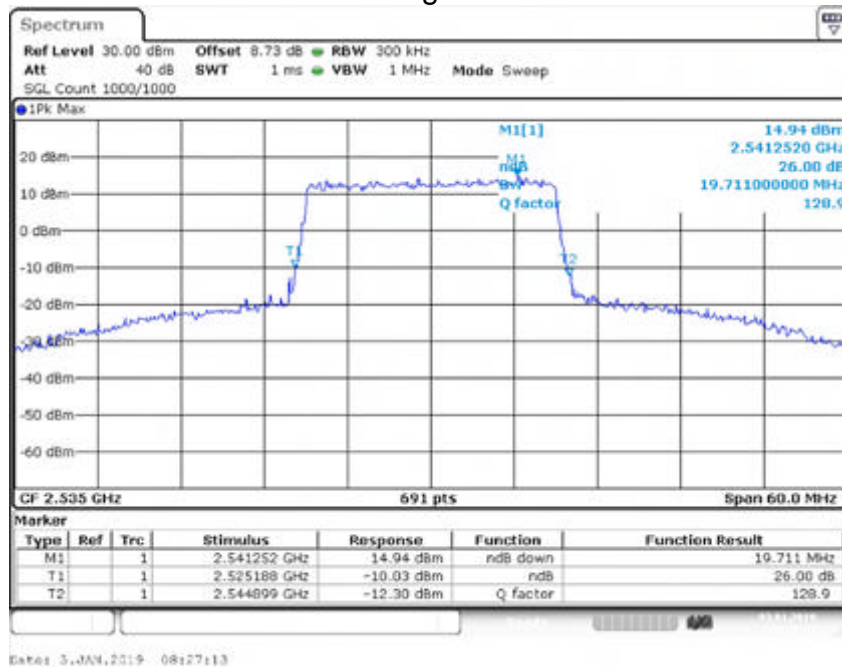


Fig.2

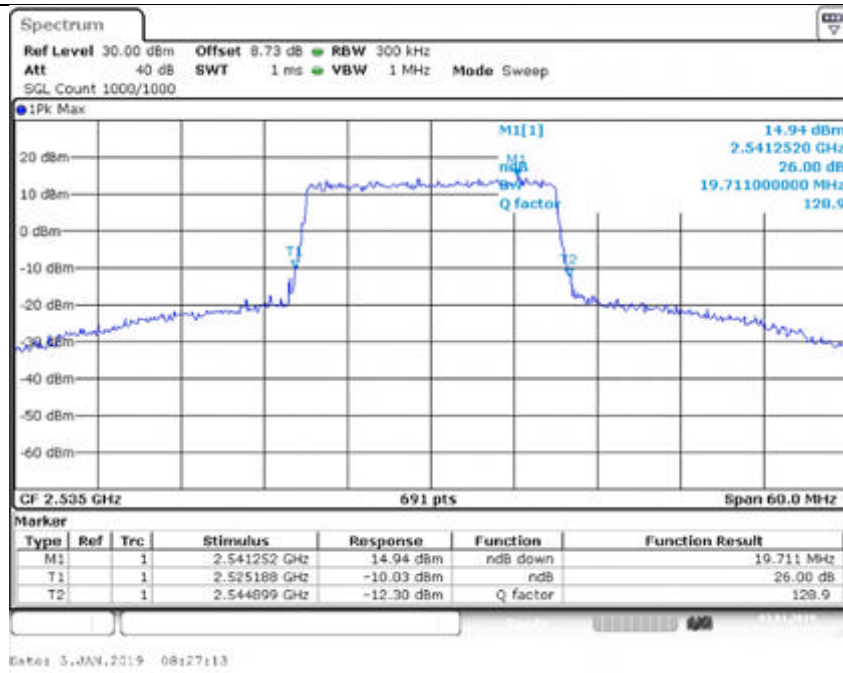


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2560	21350	20	100	0	19.884	Fig.1	19.624	Fig.2	19.624	Fig.3

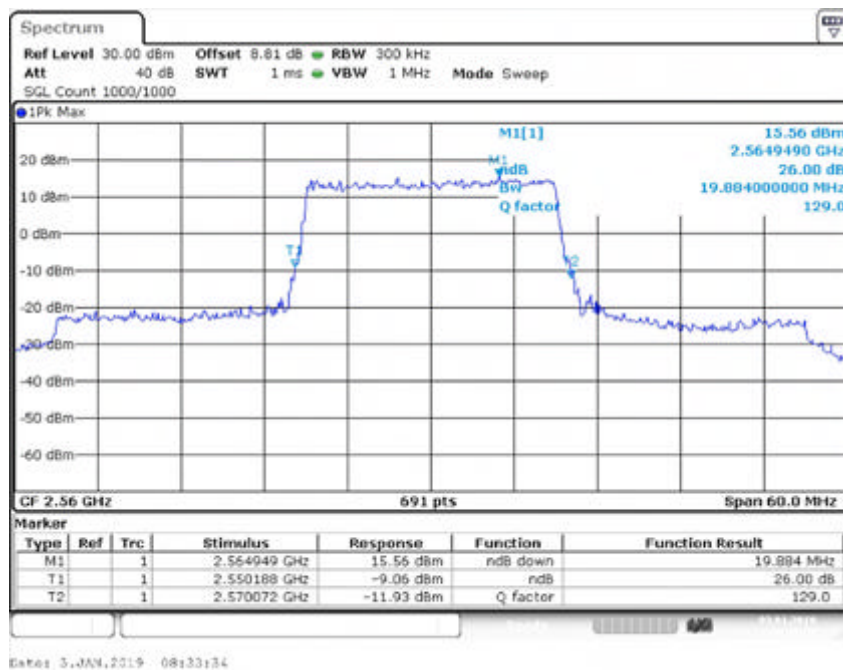


Fig.1

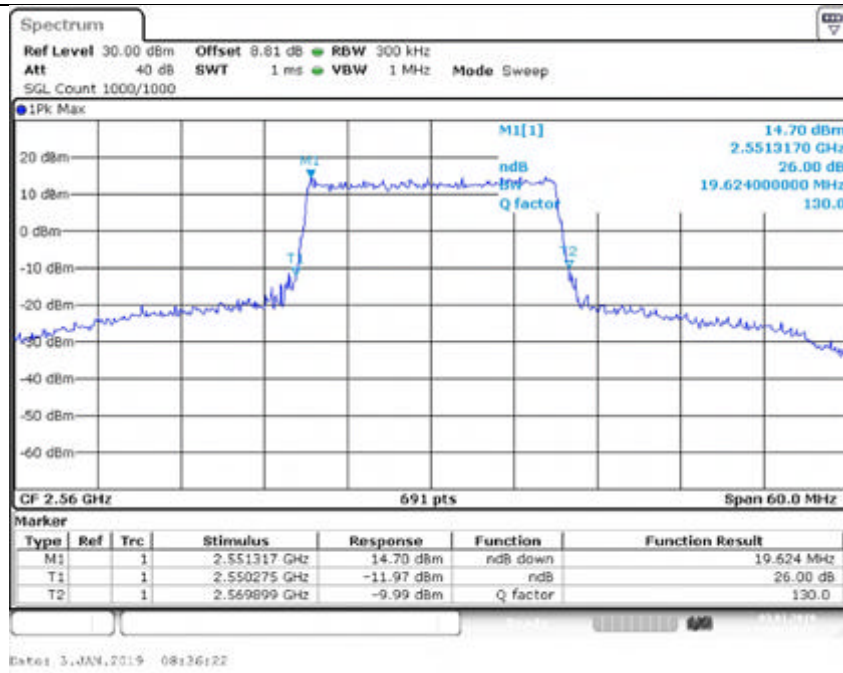


Fig.2

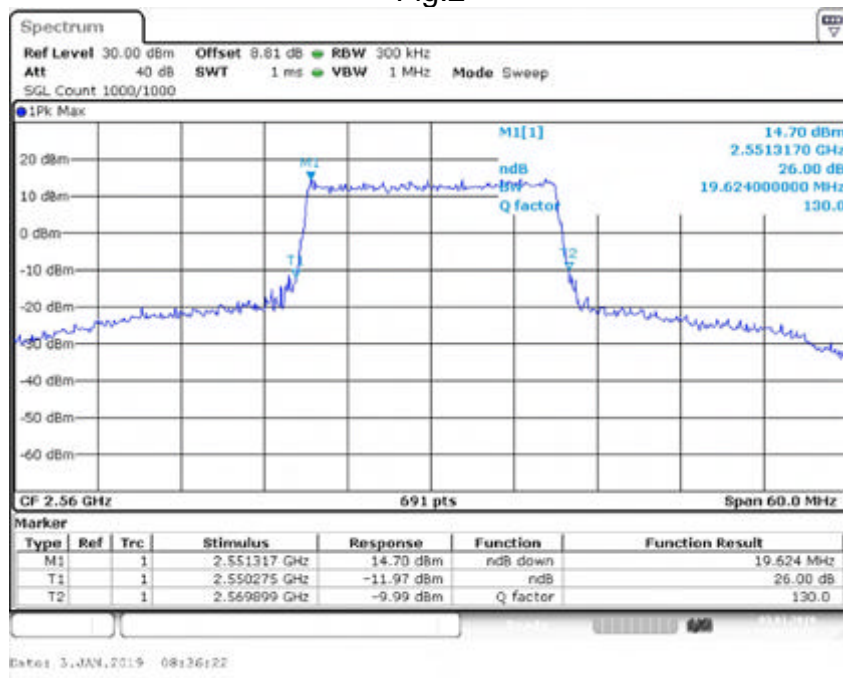
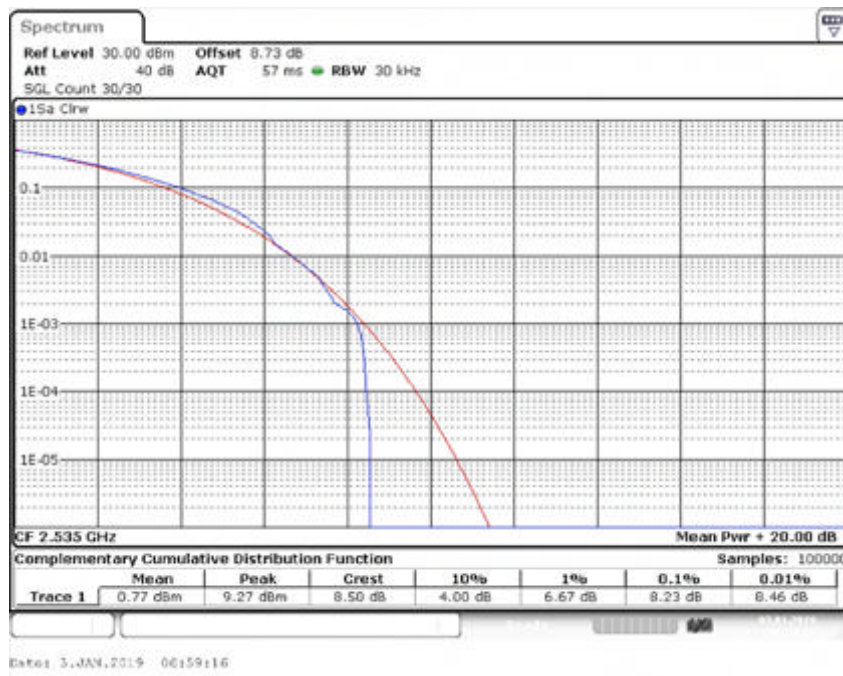


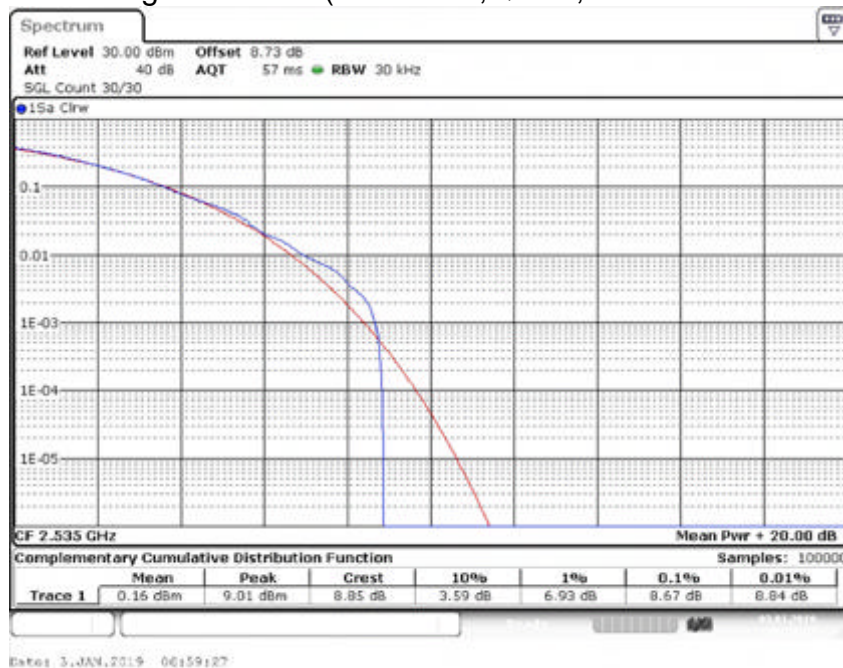
Fig.3

4 Peak-Average Ratio

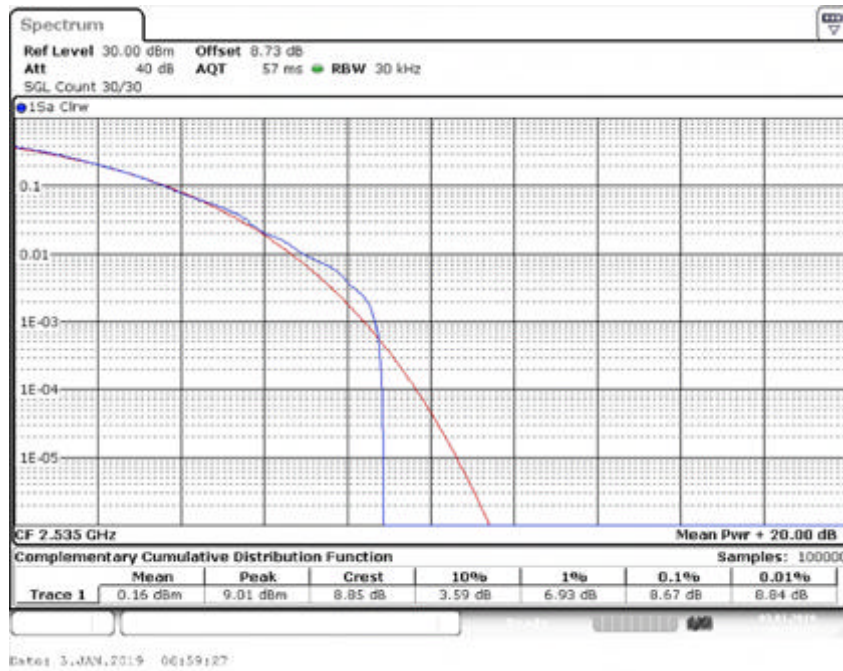
Test result:



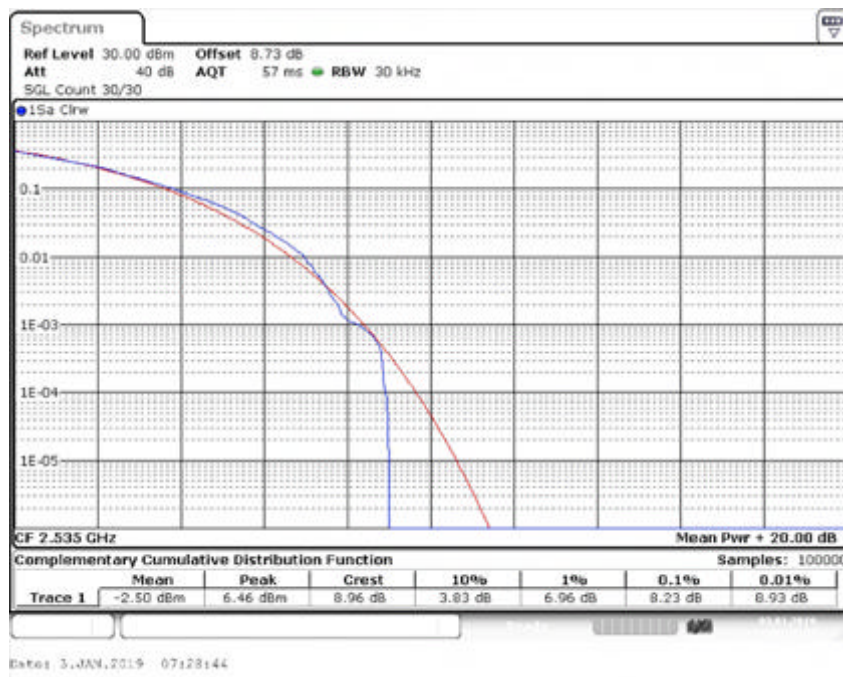
Peak-Average Ratio Plot(5MHz BW,QPSK,Band 7-mid Channel)



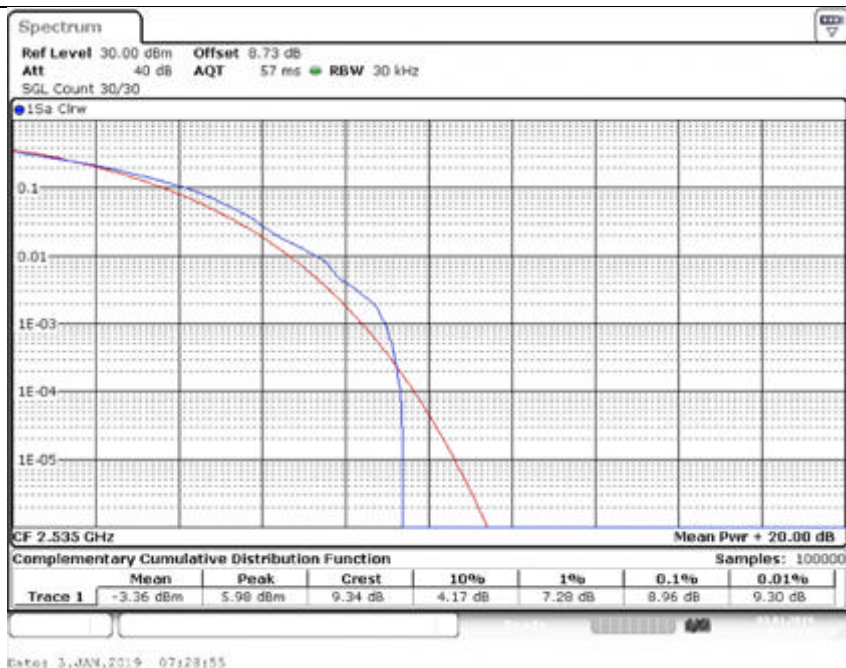
Peak-Average Ratio Plot(5MHz BW,16QAM,Band 7-mid Channel)



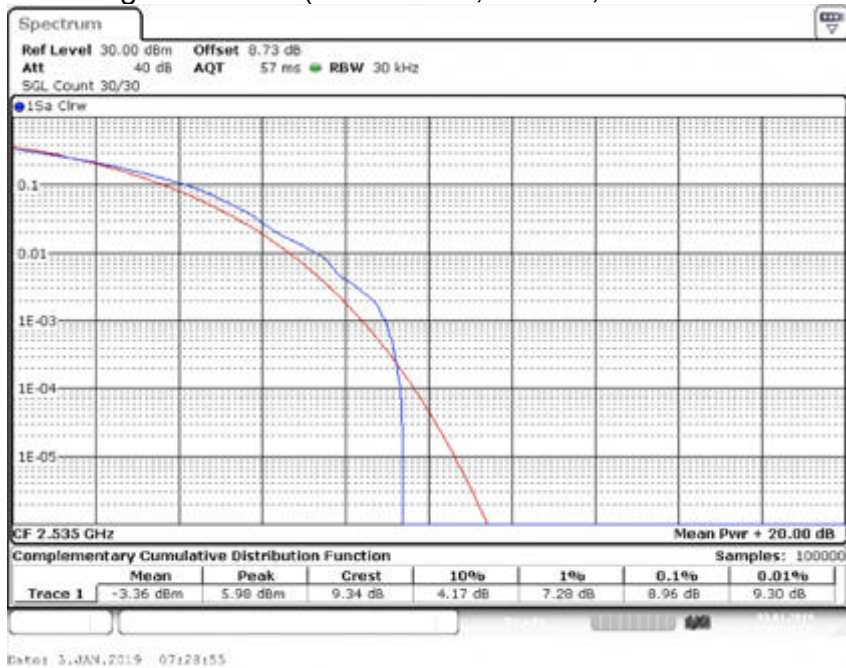
Peak-Average Ratio Plot(5MHz BW,64QAM,Band 7-mid Channel)



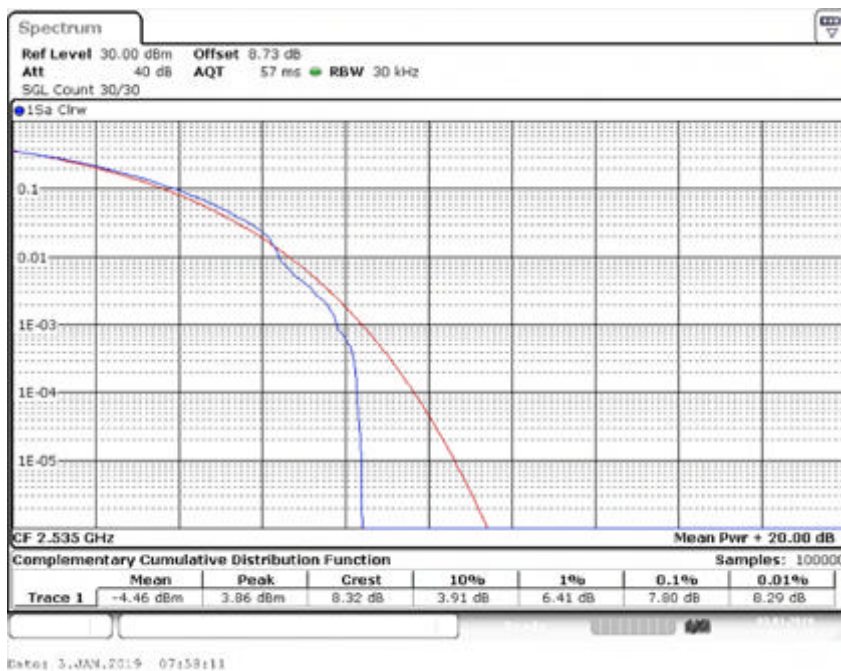
Peak-Average Ratio Plot(10MHz BW,QPSK,Band 7-mid Channel)



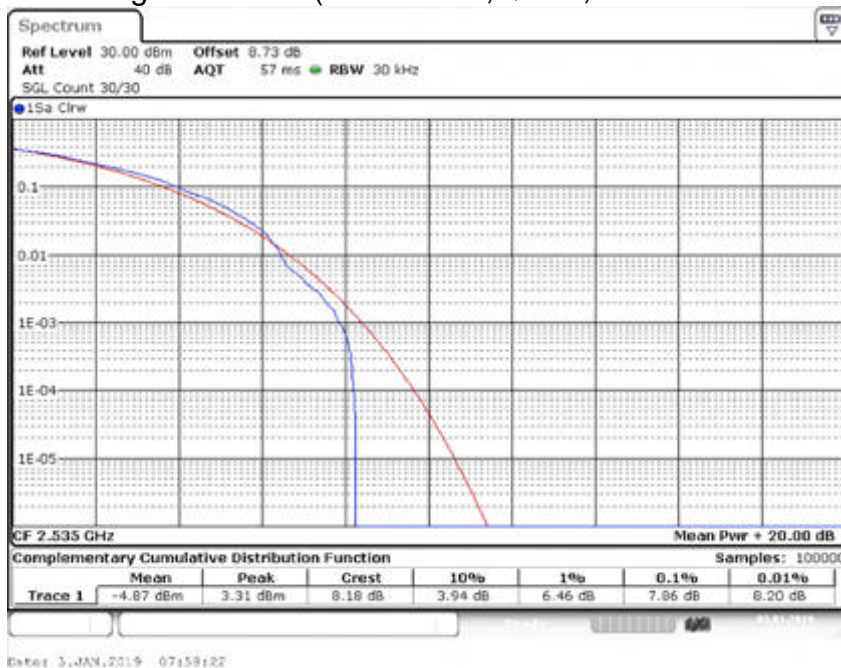
Peak-Average Ratio Plot(10MHz BW,16QAM,Band 7-mid Channel)



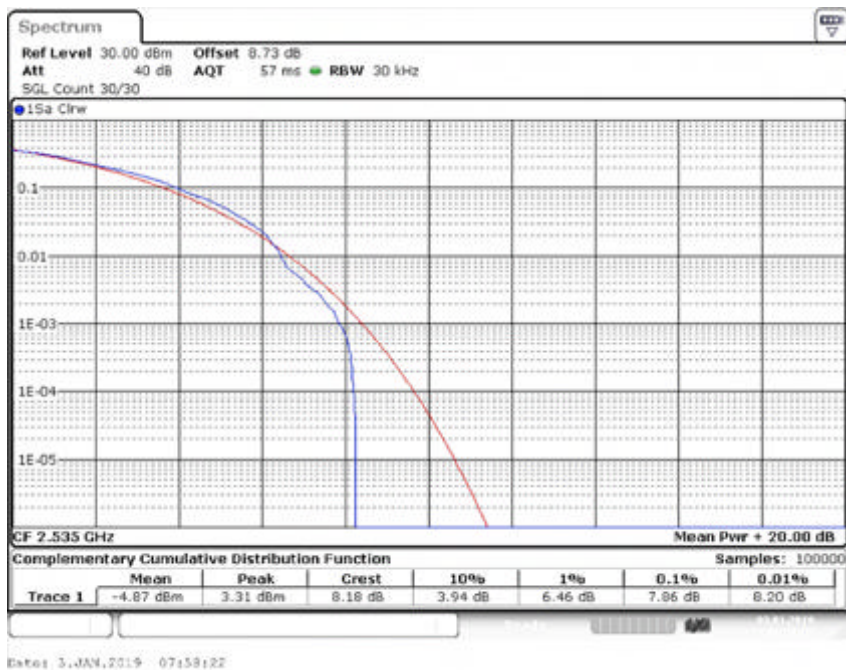
Peak-Average Ratio Plot(10MHz BW,64QAM,Band 7-mid Channel)



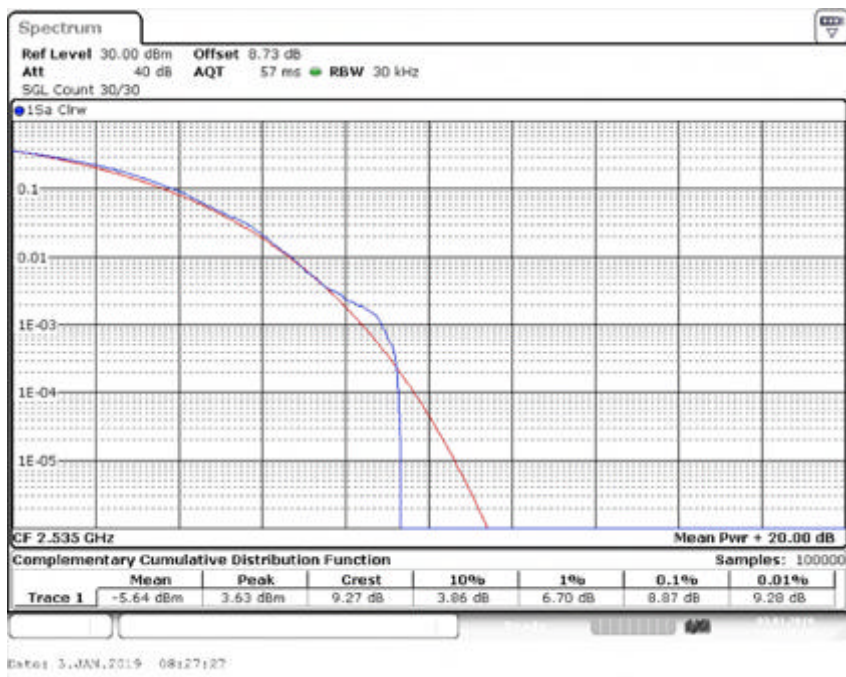
Peak-Average Ratio Plot(15MHz BW,QPSK,Band 7-mid Channel)



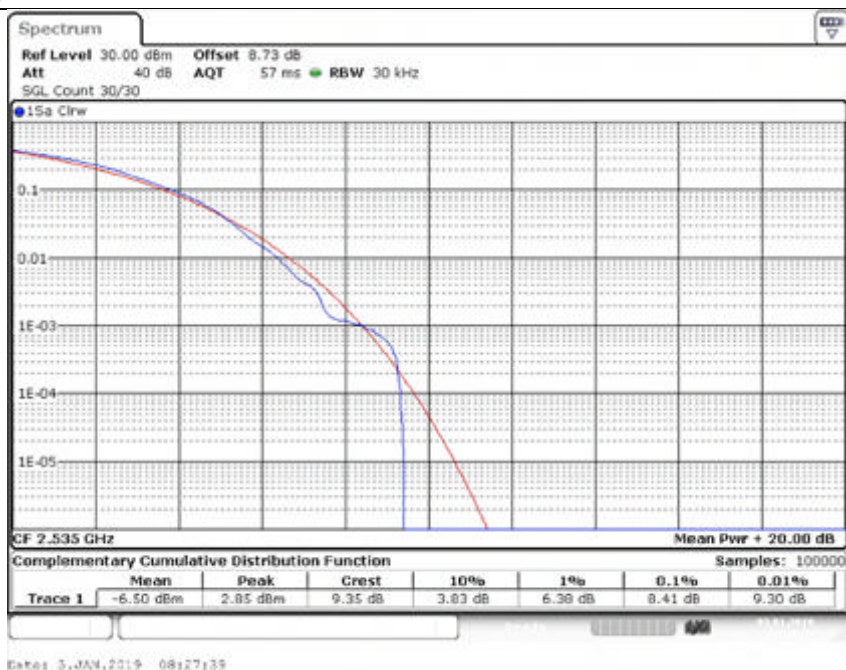
Peak-Average Ratio Plot(15MHz BW,16QAM,Band 7-mid Channel)



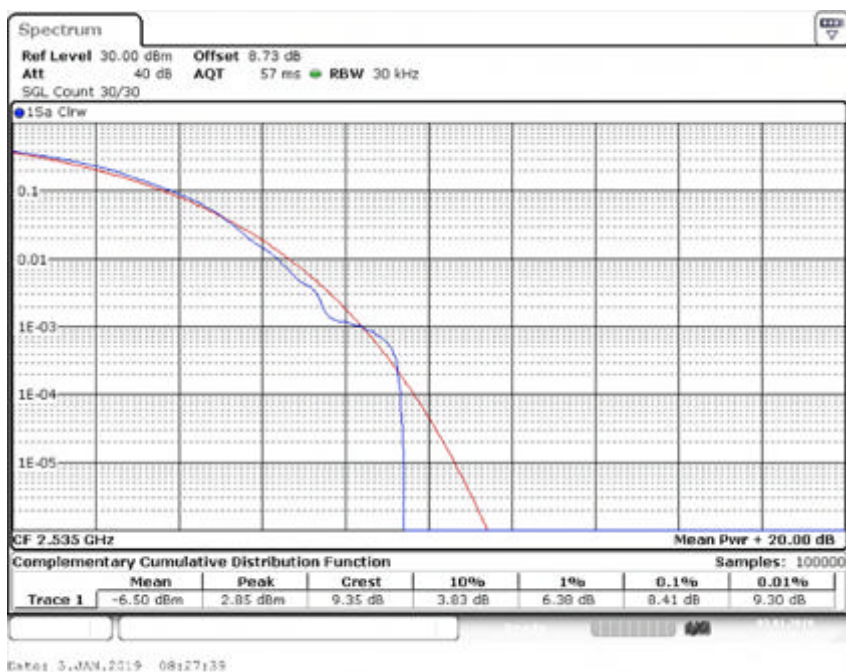
Peak-Average Ratio Plot(15MHz BW,64QAM,Band 7-mid Channel)



Peak-Average Ratio Plot(20MHz BW,QPSK,Band 7-mid Channel)



Peak-Average Ratio Plot(20MHz BW,16QAM,Band 7-mid Channel)



Peak-Average Ratio Plot(20MHz BW,64QAM,Band 7-mid Channel)

5 Spurious Emissions at antenna terminal

Test result

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
7	2510	20850	20	1	0	Fig.4

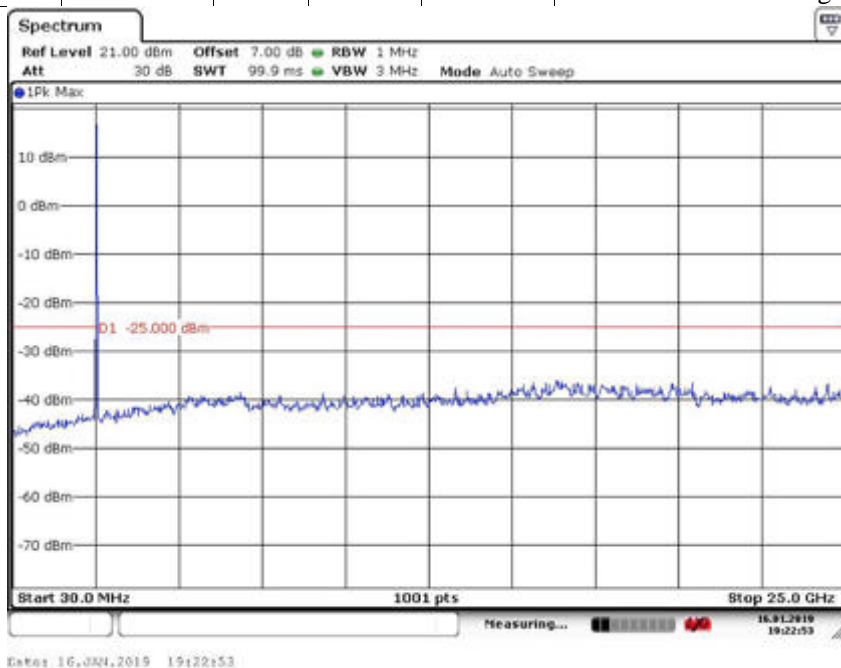


Fig.4

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
7	2535	21100	20	1	0	Fig.1

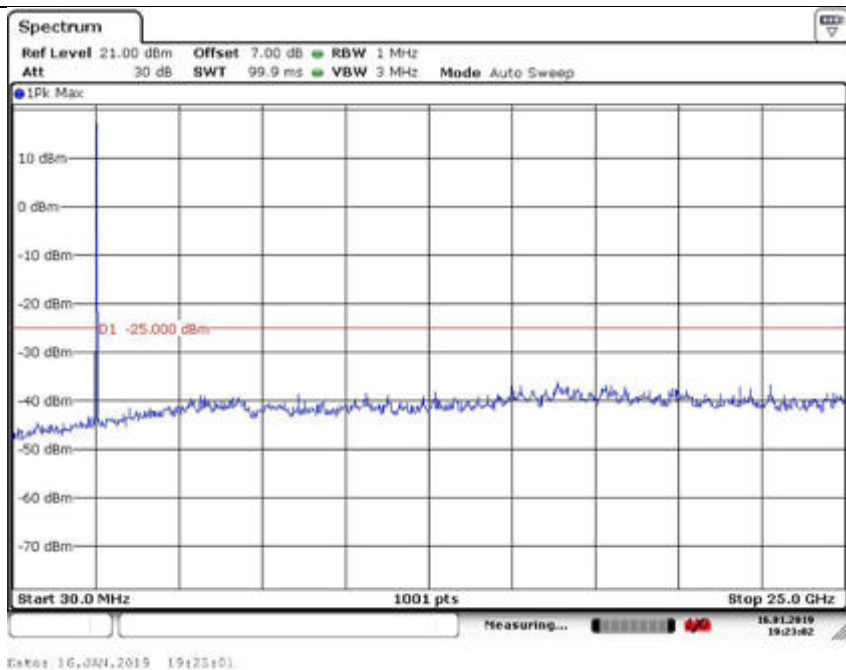


Fig.1

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
7	2560	21350	20	1	0	Fig.1

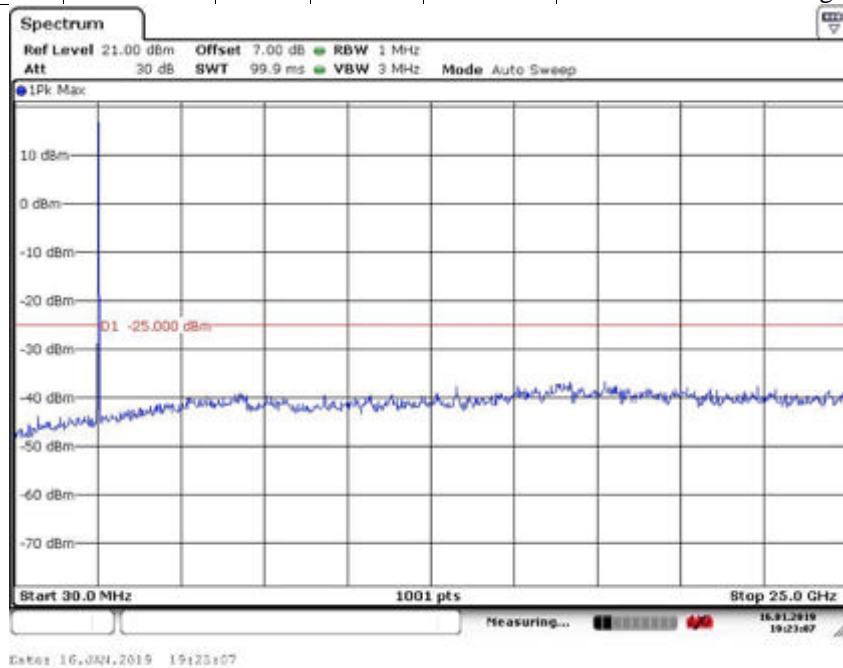


Fig.1

6 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2502.5	20775	5	1	0	Fig.1
				25	0	Fig.4

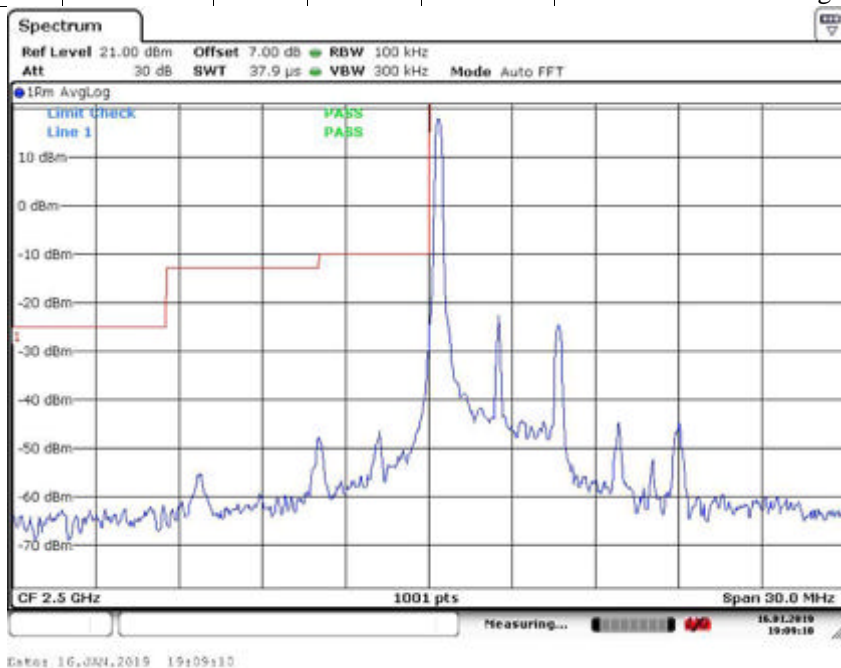


Fig.1

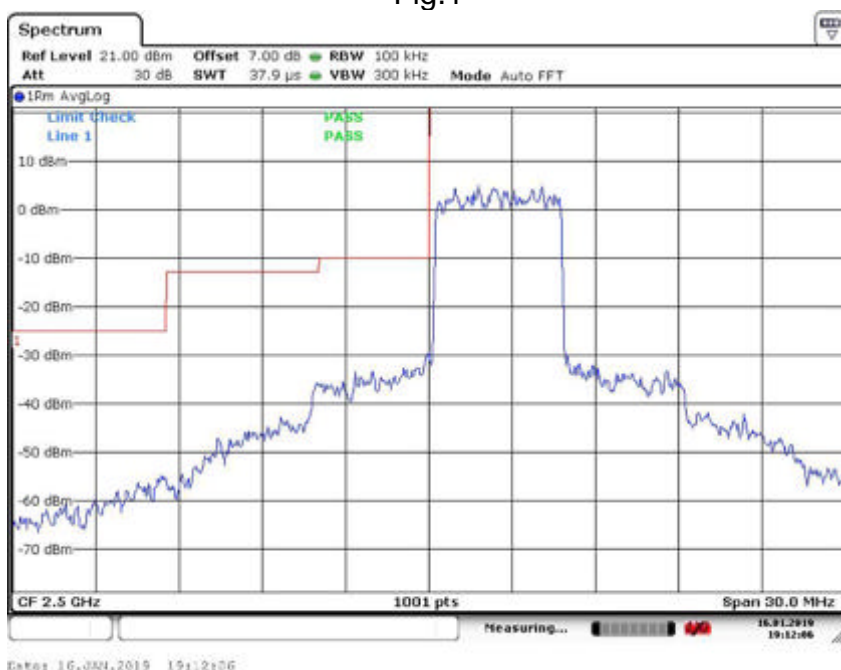


Fig.4

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2567.5	21425	5	1	0	Fig.1
				25	0	Fig.4

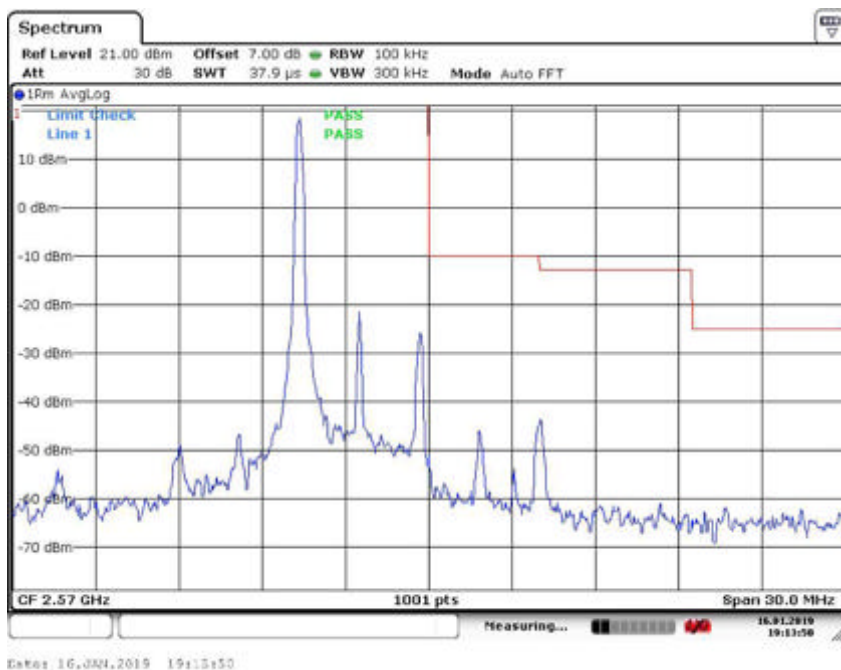


Fig.1

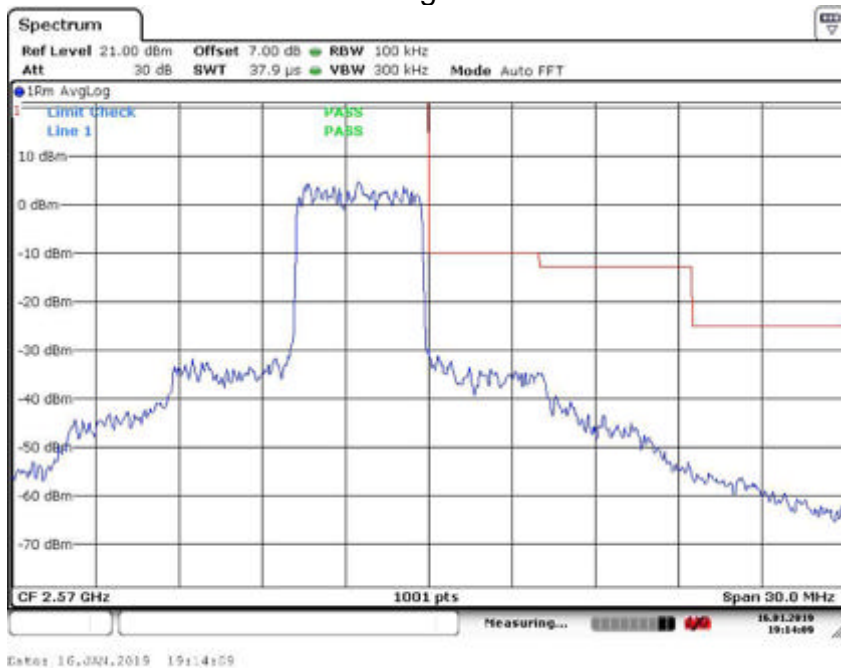


Fig.4

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2505	20800	10	1	0	Fig.1
				50	0	Fig.4

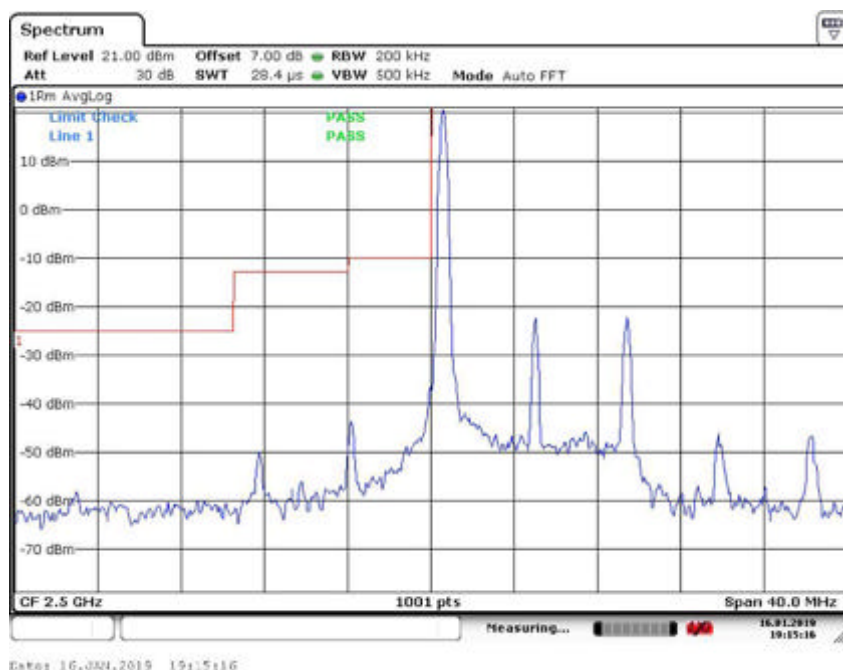


Fig.1

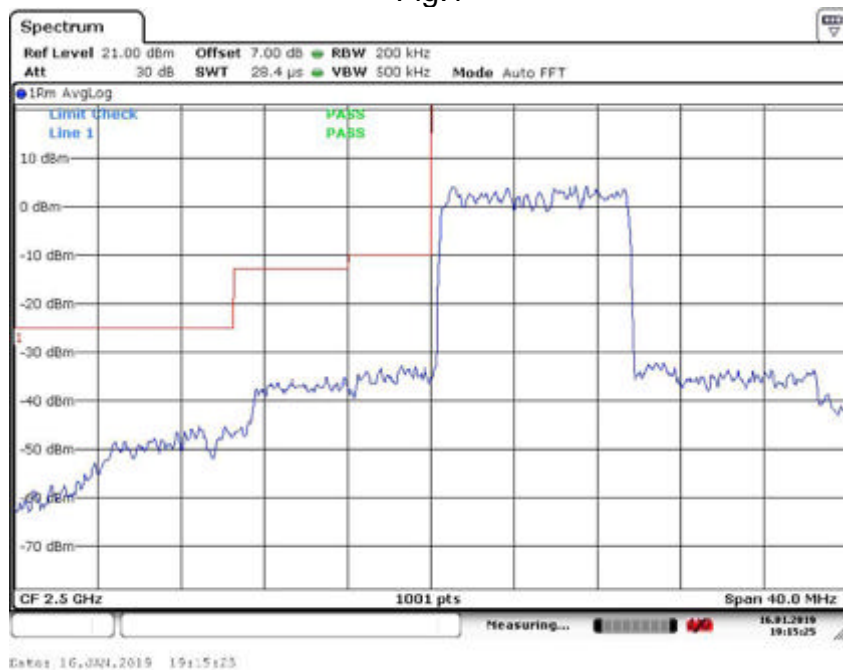


Fig.4

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2565	21400	10	1	0	Fig.1
				50	0	Fig.4

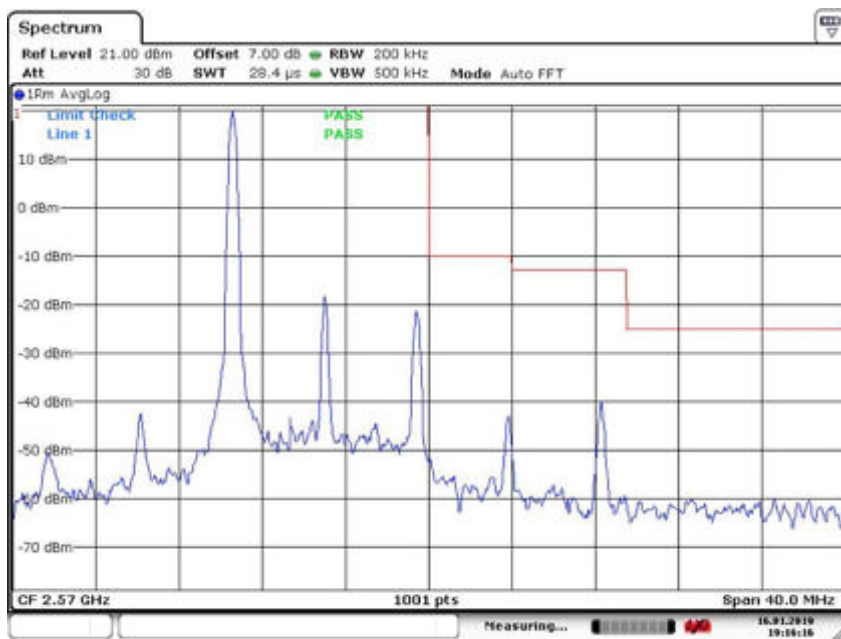


Fig.1

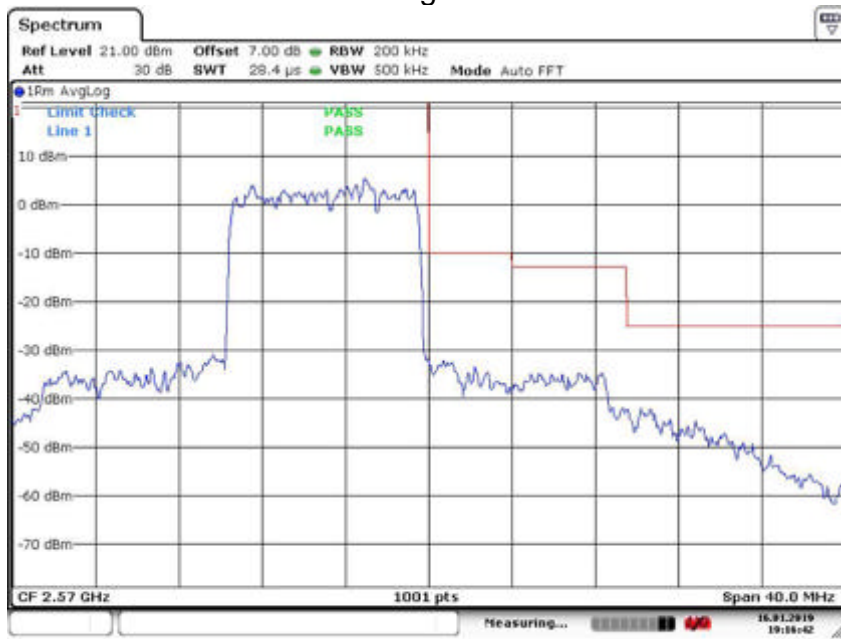


Fig.4

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2507.5	20825	15	1	0	Fig.1
				75	0	Fig.4

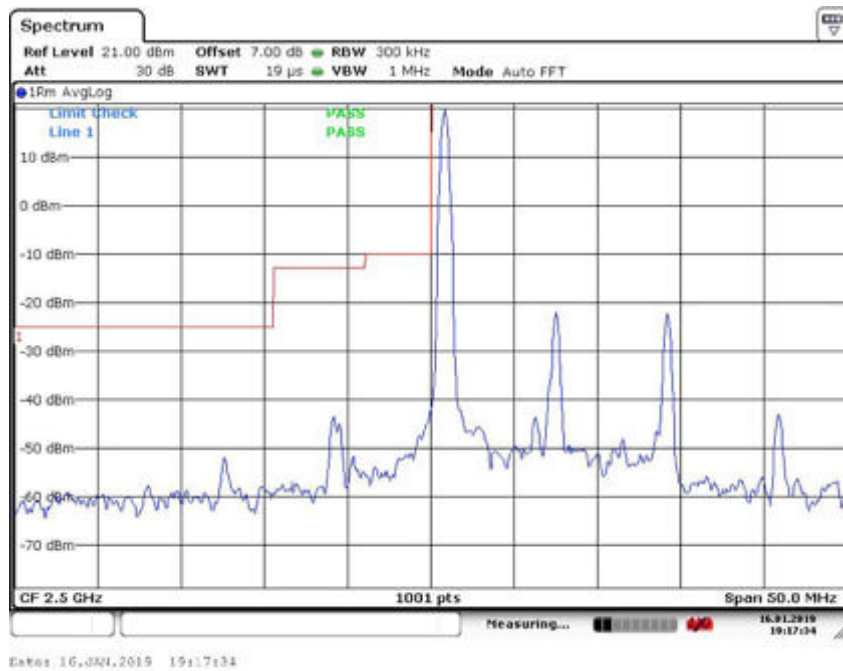


Fig.1

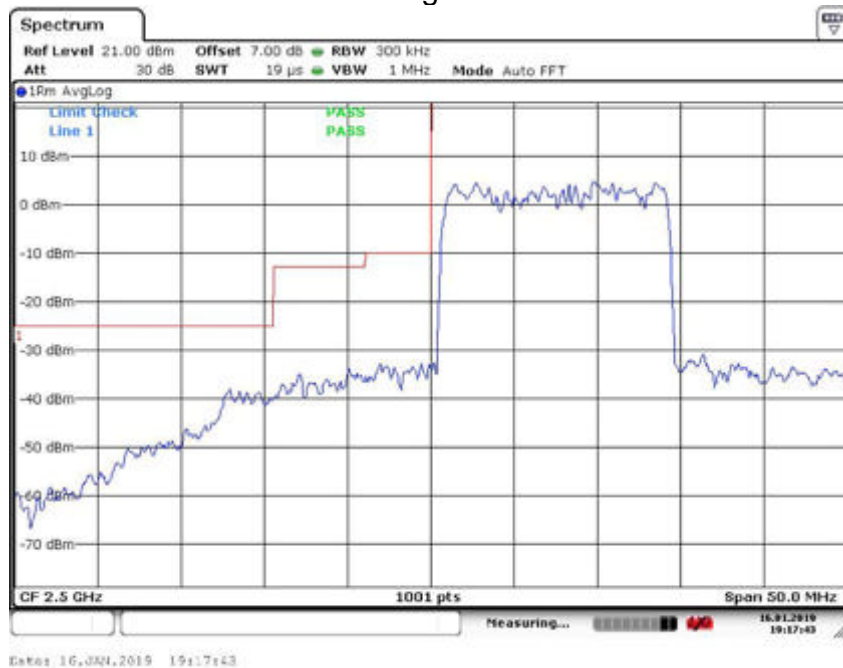
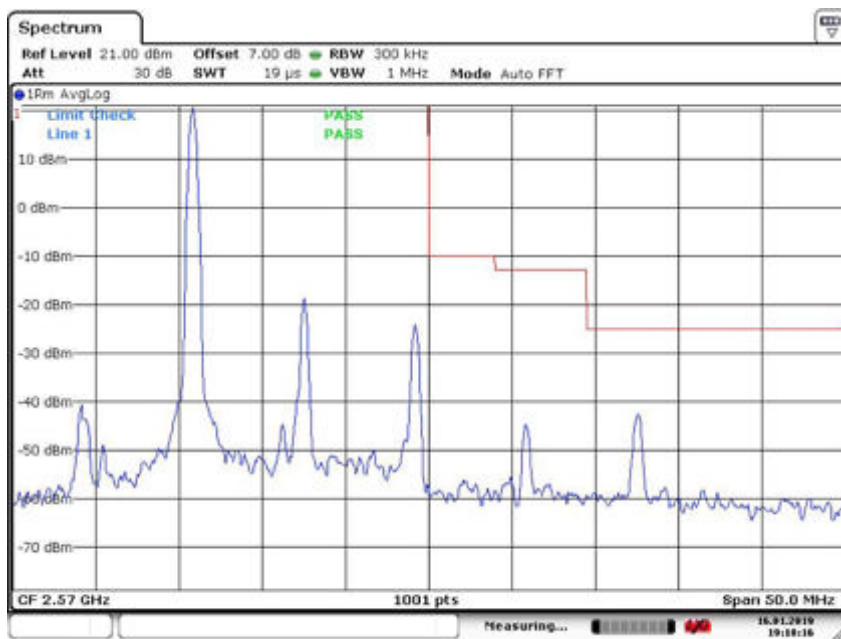


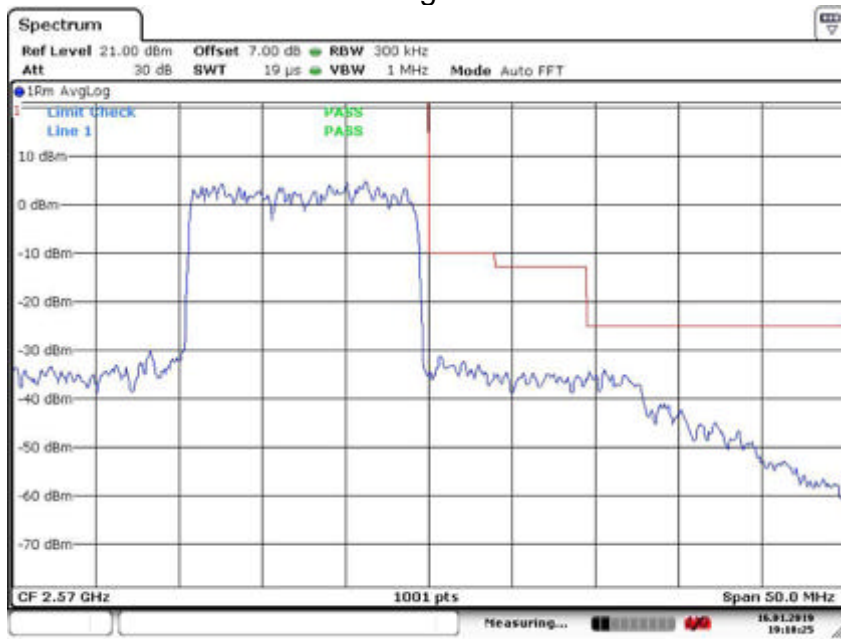
Fig.4

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2562.5	21375	15	1	0	Fig.1
				75	0	Fig.4



Date: 16, JAN, 2019 19:18:13

Fig.1



Date: 16, JAN, 2019 19:18:25

Fig.4

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2510	20850	20	1	0	Fig.1
				100	0	Fig.4

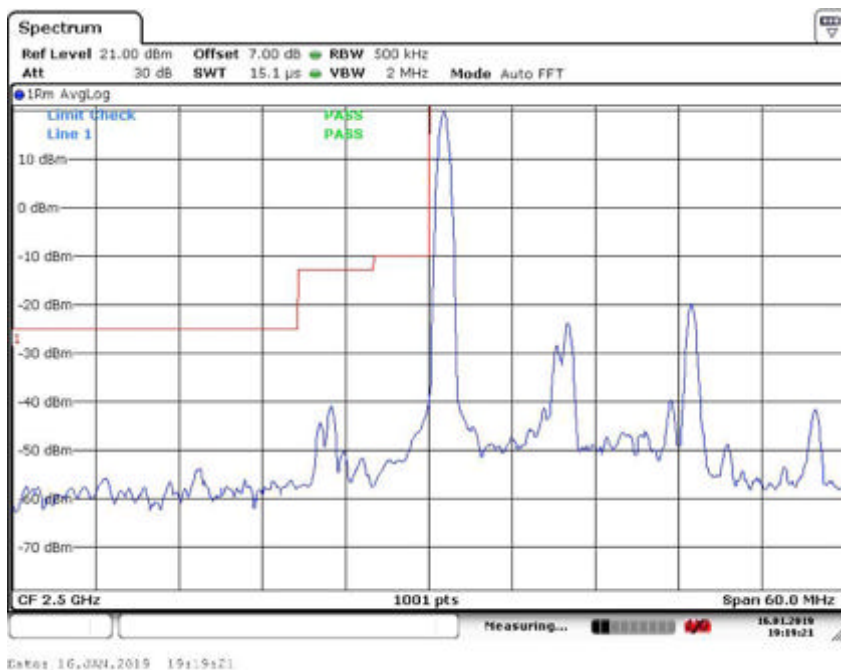


Fig.1

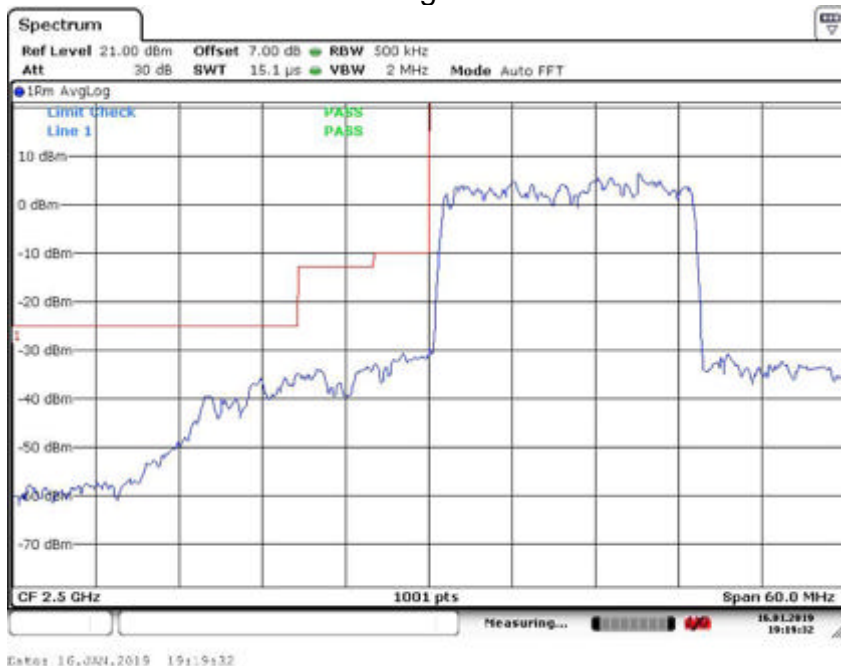


Fig.4

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2560	21350	20	1	0	Fig.1
				100	0	Fig.4

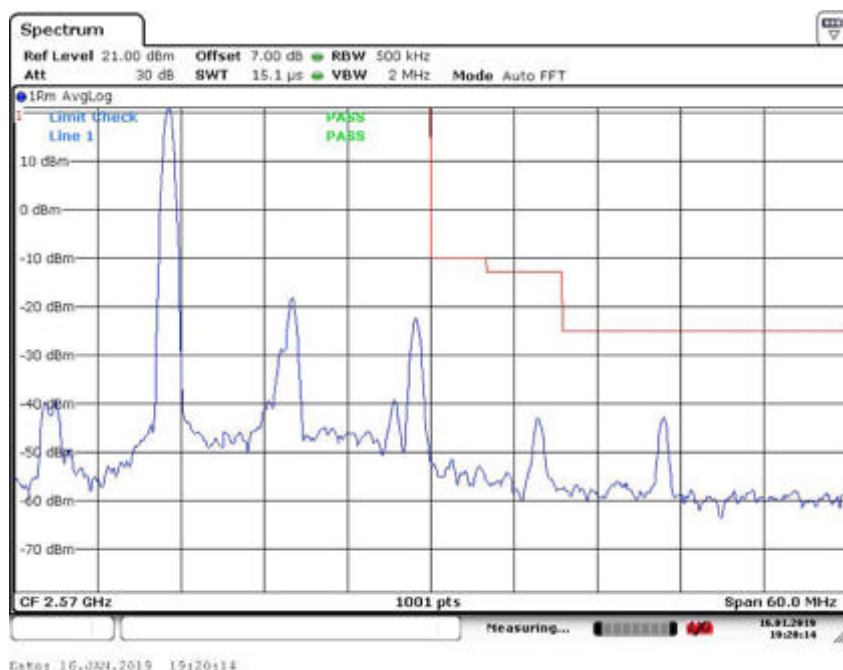


Fig.1

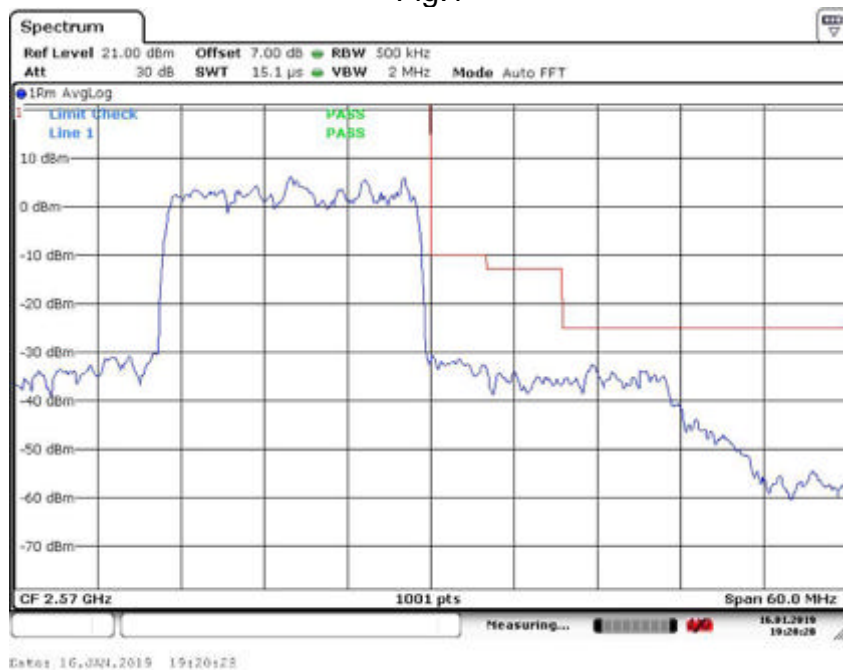


Fig.4

7 Frequency Stability

Test result:

Band	BW	Test Result (ppm)@NV		Test Result (ppm)@NT	
		Temperature(°C)		Voltage	
7	5	-10	0.003	LV	0.002
		0	0.000		
		10	-0.001		
		20	0.005		
		30	-0.001	HV	
		20	0.005		
		40	-0.002		
		50	0.000		
	55	0.002			
	10	-10	-0.001	LV	0.003
		0	-0.001		
		10	0.000		
		20	-0.002		
		30	0.001	HV	
		20	0.000		
		40	0.000		
		50	-0.001		
	55	0.001			
	15	-10	0.000	LV	-0.004
		0	0.001		
		10	-0.002		
		20	0.003		
		30	-0.003	HV	
		20	0.002		
		40	-0.003		
		50	-0.003		
	55	-0.004			
	20	-10	-0.003	LV	0.002
		0	0.002		
		10	-0.002		
		20	0.002		
		30	-0.003		

		20	-0.003	HV	0.003
		40	0.003		
		50	0.002		
		55	0.004		

APPENDIX B – TEST DATA OF RADIATED EMISSION

LTE band 2 (20MHz)

Test result:

Channel 18615

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2457.99	-48.66	-13	Vertical
2778.60	-48.11	-13	Vertical
3726.46	-41.02	-13	Vertical
6679.23	-40.32	-13	Horizontal
9959.47	-37.78	-13	Vertical
17823.31	-34.61	-13	Vertical

Channel 18900

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2458.54	-49.45	-13	Vertical
2779.03	-48.00	-13	Horizontal
3729.40	-41.00	-13	Horizontal
6676.68	-39.71	-13	Vertical
9959.78	-37.30	-13	Vertical
17824.15	-34.29	-13	Vertical

Channel 19175

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2459.42	-48.70	-13	Vertical
2777.45	-48.25	-13	Vertical
3729.41	-40.43	-13	Vertical
6677.50	-40.04	-13	Vertical
9960.35	-37.57	-13	Horizontal
17820.92	-33.87	-13	Vertical

LTE band 4 (20MHz)

Test result:

Channel 19957

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2456.73	-49.46	-13	Vertical
2780.20	-47.92	-13	Vertical
3727.61	-40.70	-13	Vertical
6676.61	-39.87	-13	Horizontal
9959.77	-37.23	-13	Vertical
17820.97	-33.85	-13	Vertical

Channel 20175

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2459.82	-49.64	-13	Vertical
2780.23	-48.10	-13	Vertical
3728.59	-40.52	-13	Horizontal
6678.79	-40.29	-13	Vertical
9959.47	-36.93	-13	Vertical
17821.81	-34.17	-13	Vertical

Channel 20393

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2460.28	-48.95	-13	Vertical
2778.33	-47.34	-13	Horizontal
3728.78	-40.14	-13	Vertical
6677.84	-40.18	-13	Vertical
9962.19	-37.03	-13	Vertical
17820.49	-34.32	-13	Vertical

LTE band 5 (10MHz)

Test result:

Channel 20400

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1649.09	-52.15	-13	Vertical
1667.31	-50.54	-13	Vertical
2533.79	-44.33	-13	Vertical
2575.47	-43.56	-13	Horizontal
8962.75	-39.67	-13	Vertical
9971.47	-35.83	-13	Vertical

Channel 20525

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1646.97	-52.77	-13	Vertical
1666.83	-50.93	-13	Vertical
2535.43	-44.45	-13	Horizontal
2574.88	-43.97	-13	Horizontal
8964.52	-39.94	-13	Vertical
9970.04	-36.72	-13	Vertical

Channel 20649

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1647.12	-53.10	-13	Vertical
1667.17	-50.84	-13	Vertical
2534.11	-44.40	-13	Horizontal
2575.01	-44.24	-13	Vertical
8963.70	-40.07	-13	Vertical
9968.37	-36.60	-13	Vertical

LTE band 7 (20MHz)

Test result:

Channel 20775

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2458.04	-49.39	-25	Vertical
2776.45	-47.48	-25	Vertical
3726.68	-40.86	-25	Vertical
6679.43	-39.91	-25	Horizontal
9959.90	-37.66	-25	Vertical
17824.14	-33.98	-25	Vertical

Channel 21100

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2460.31	-49.00	-25	Vertical
2778.16	-48.12	-25	Vertical
3726.07	-40.25	-25	Horizontal
6678.31	-40.51	-25	Horizontal
9960.94	-37.57	-25	Vertical
17821.56	-33.94	-25	Vertical

Channel 21350

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2457.12	-48.85	-25	Vertical
2780.24	-47.76	-25	Vertical
3726.78	-40.78	-25	Horizontal
6678.35	-39.82	-25	Vertical
9958.87	-37.15	-25	Vertical
17822.47	-34.08	-25	Vertical

---End of Test Report---