

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
5	836.5	20525	3	15	0	2.761	Fig.1	2.774	Fig.2	2.774	Fig.3

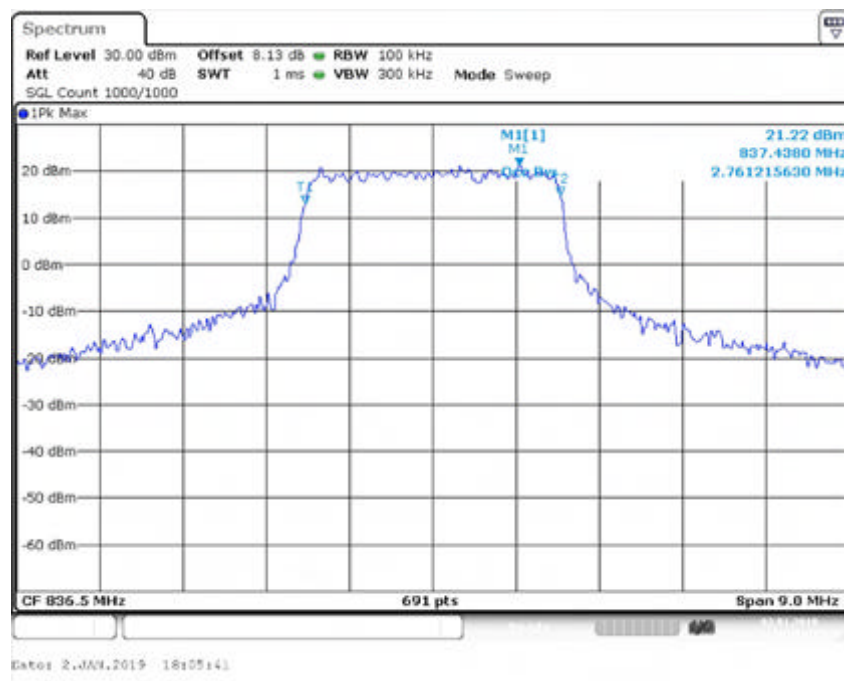


Fig.1

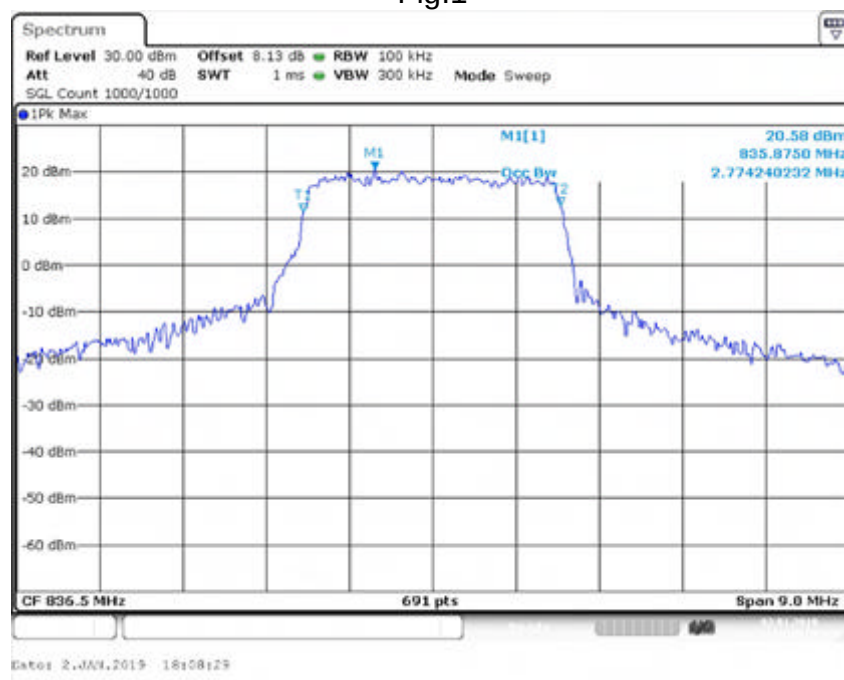


Fig.2

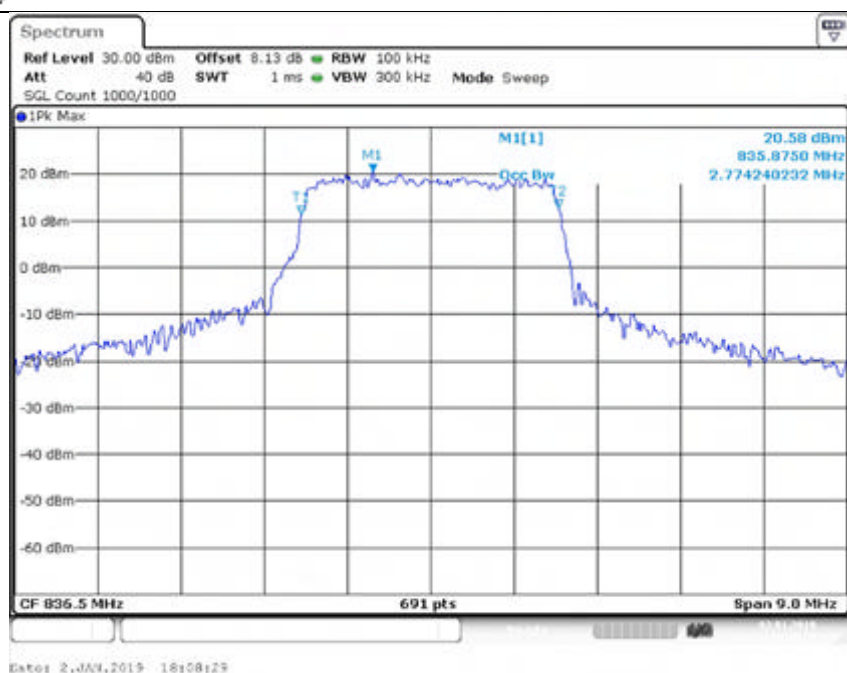


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
5	847.5	20635	3	15	0	2.787	Fig.1	2.774	Fig.2	2.774	Fig.3

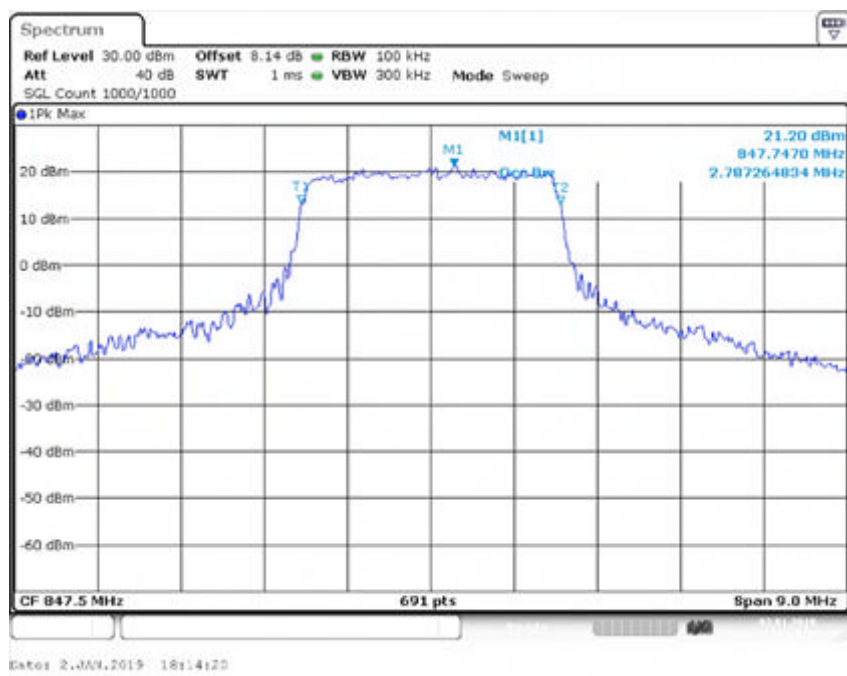


Fig.1

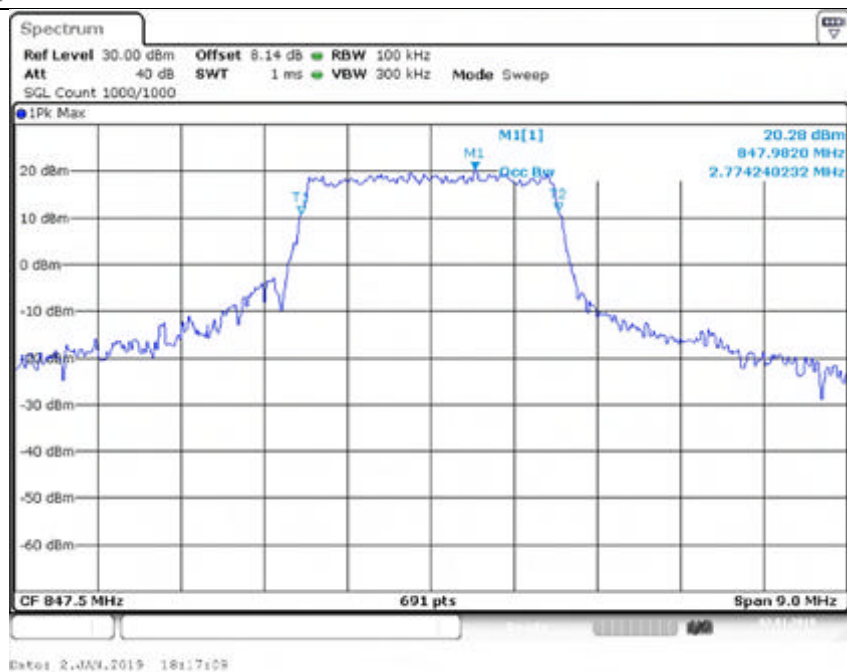


Fig.2

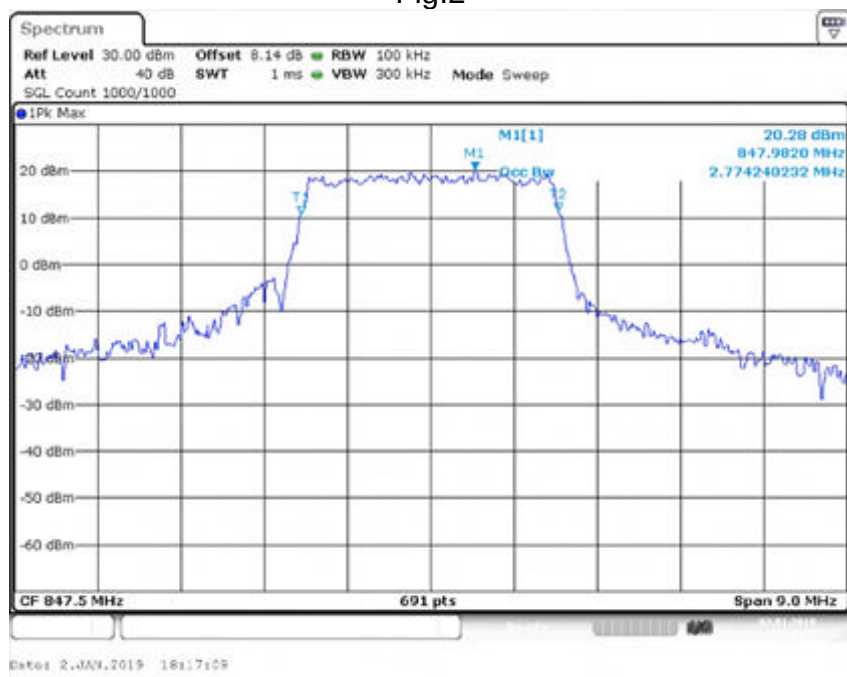


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
5	826.5	20425	5	25	0	4.537	Fig.1	4.515	Fig.2	4.515	Fig.3

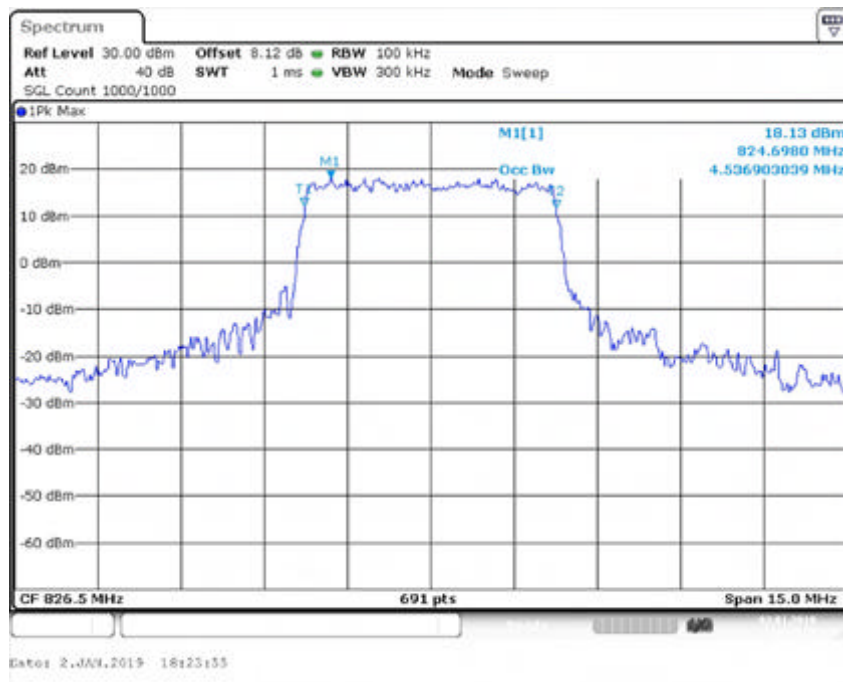


Fig.1

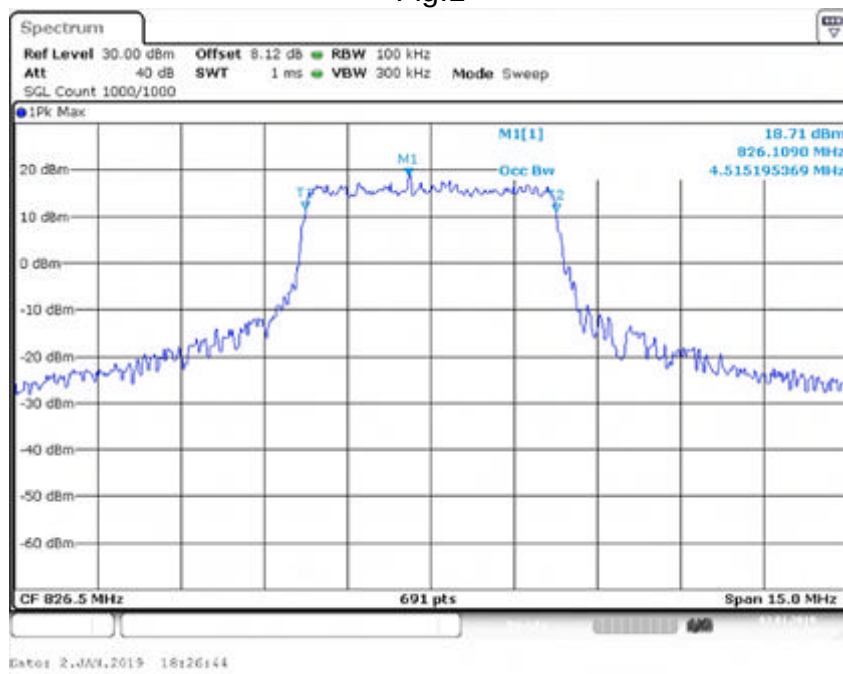


Fig.2

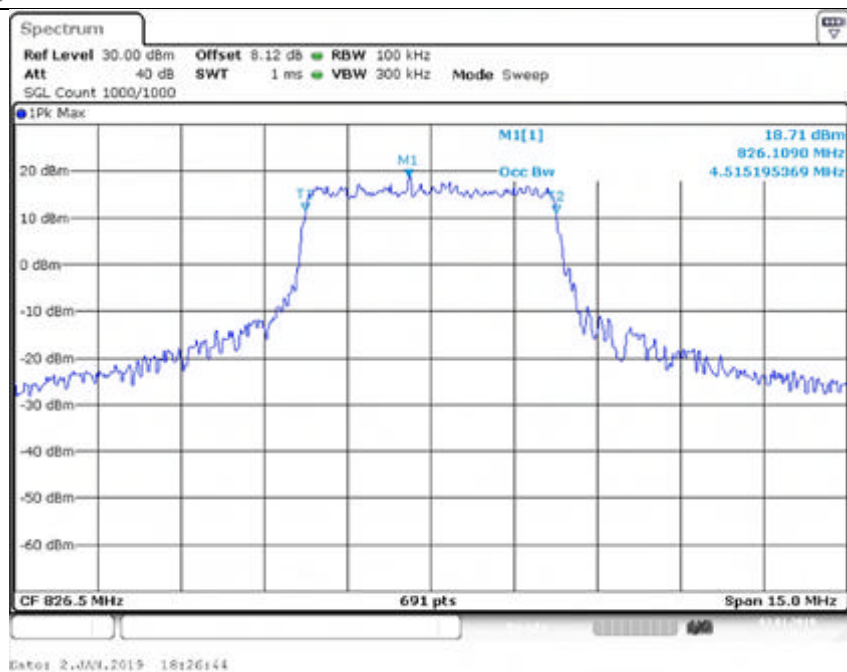


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
5	836.5	20525	5	25	0	4.515	Fig.1	4.537	Fig.2	4.537	Fig.3

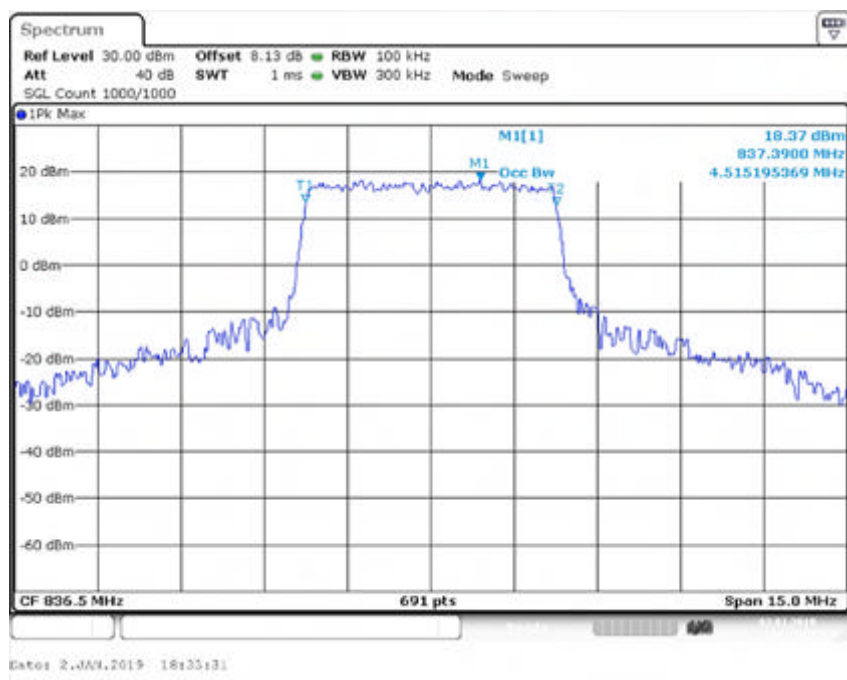


Fig.1

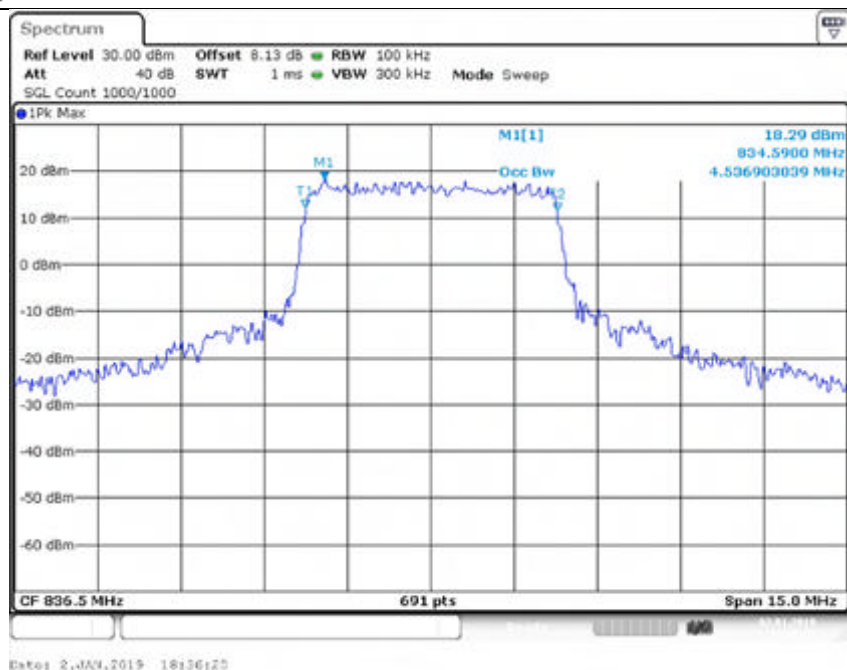


Fig.2

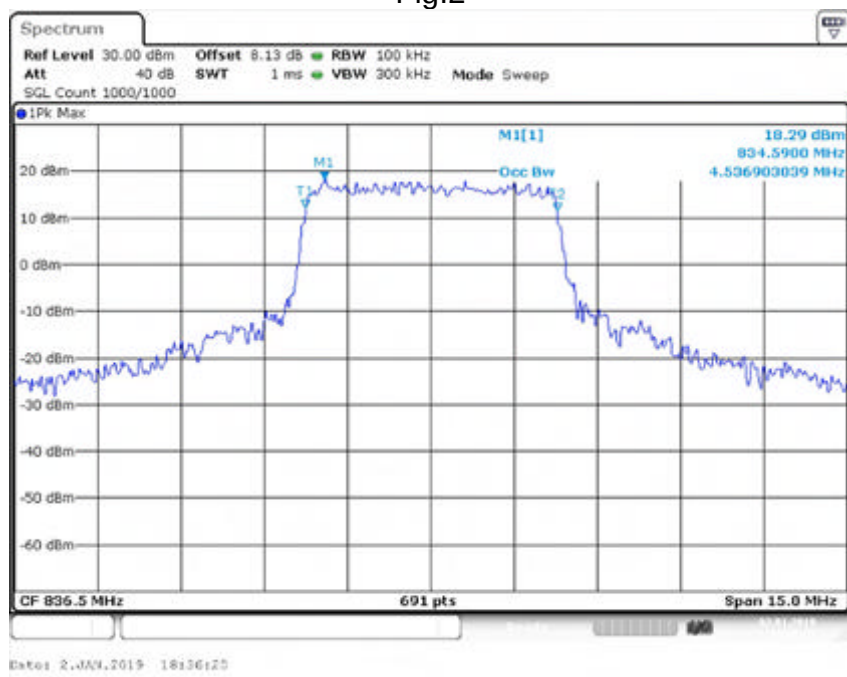


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		16-QAM	
5	846.5	20625	5	25	0	4.515	Fig.1	4.537	Fig.2	4.537	Fig.3

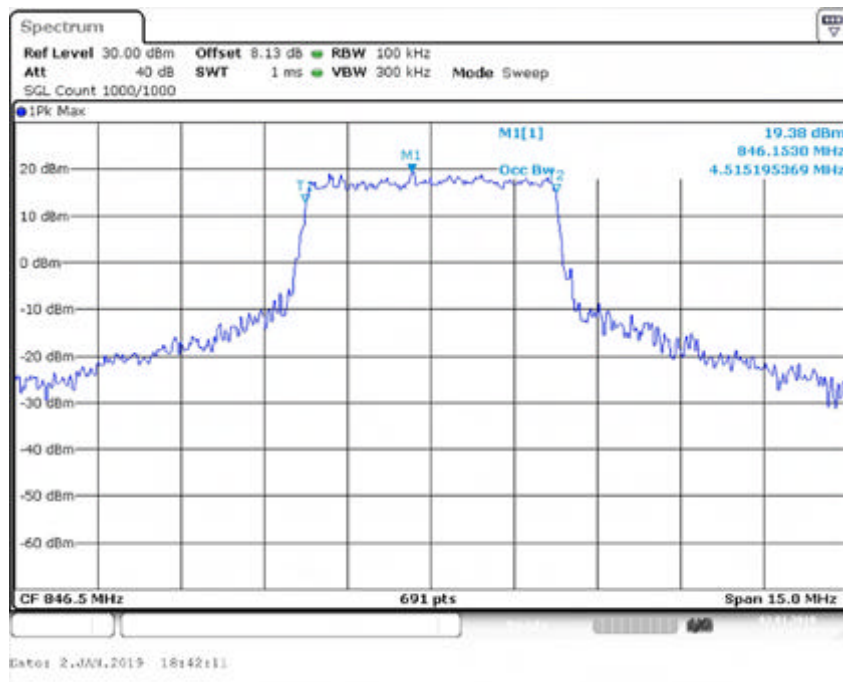


Fig.1

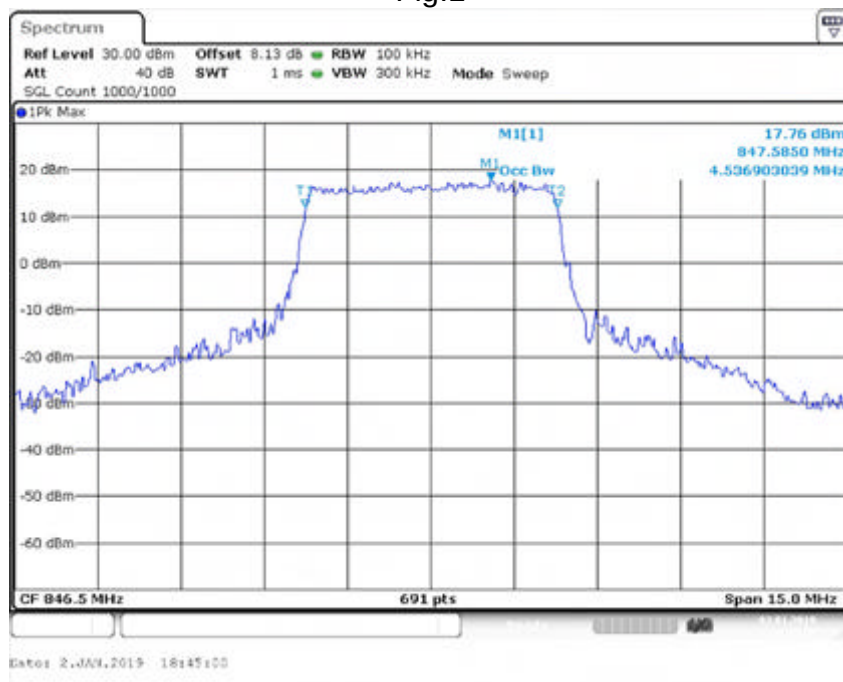


Fig.2

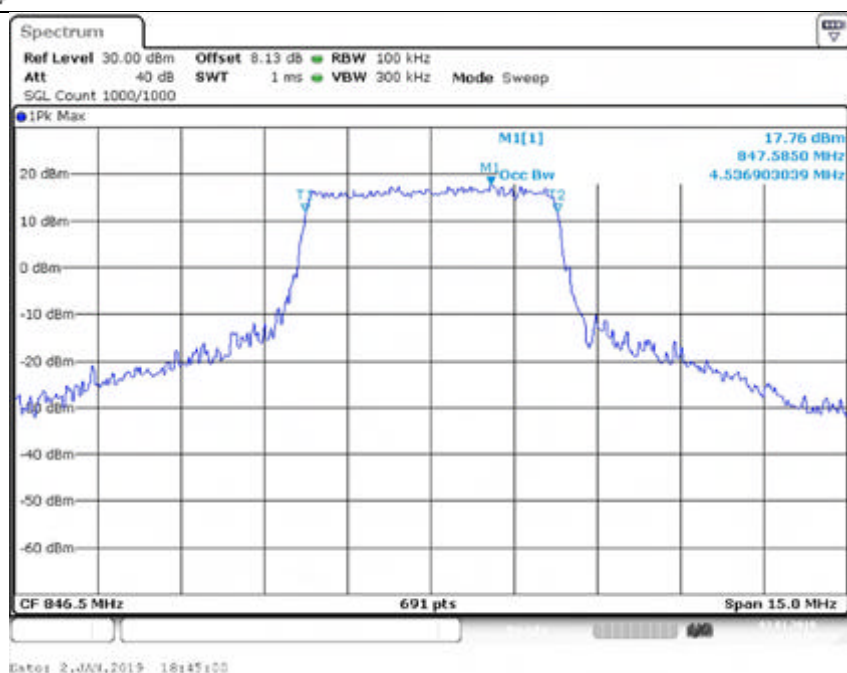


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
5	829	20450	10	50	0	9.117	Fig.1	9.117	Fig.2	9.117	Fig.3

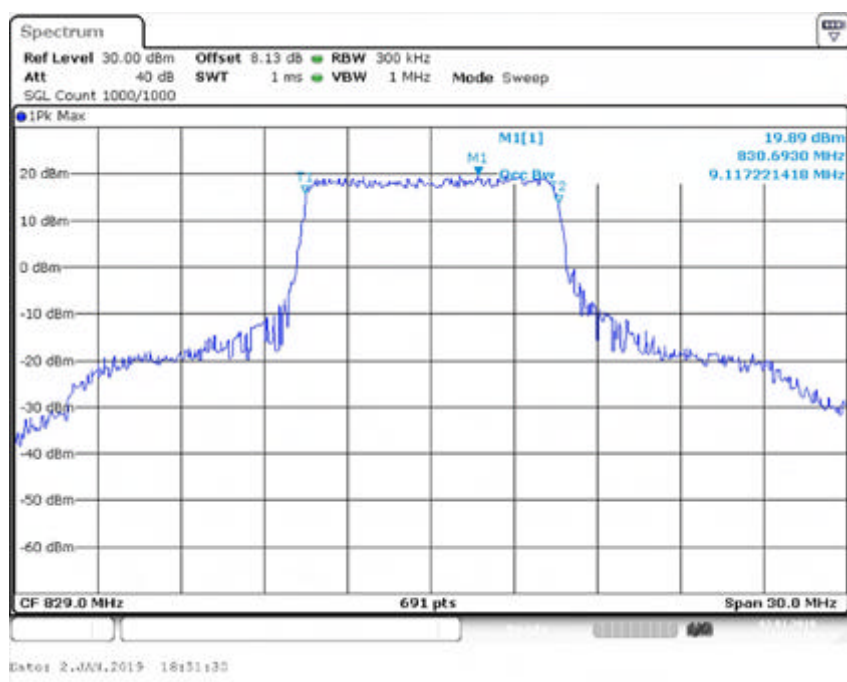


Fig.1

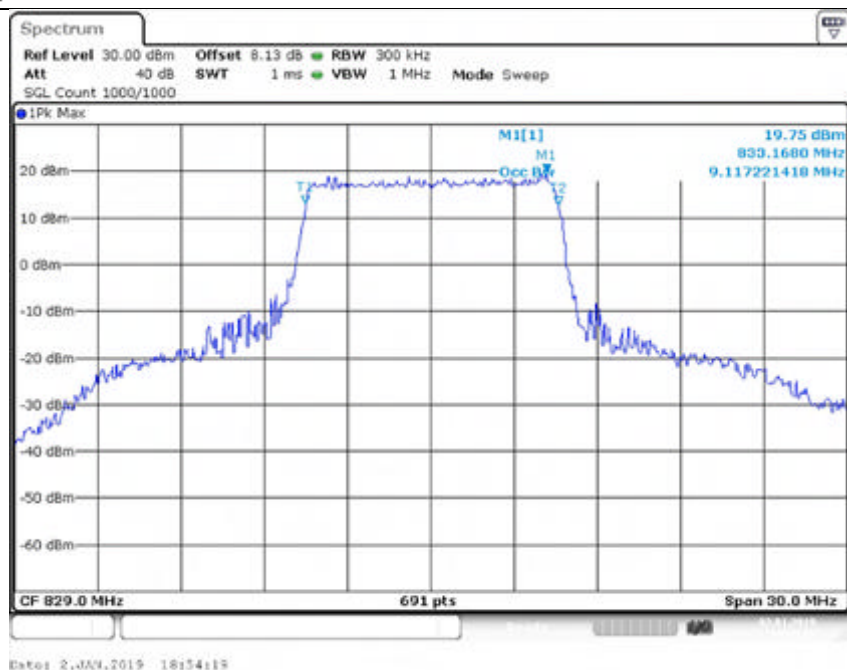


Fig.2

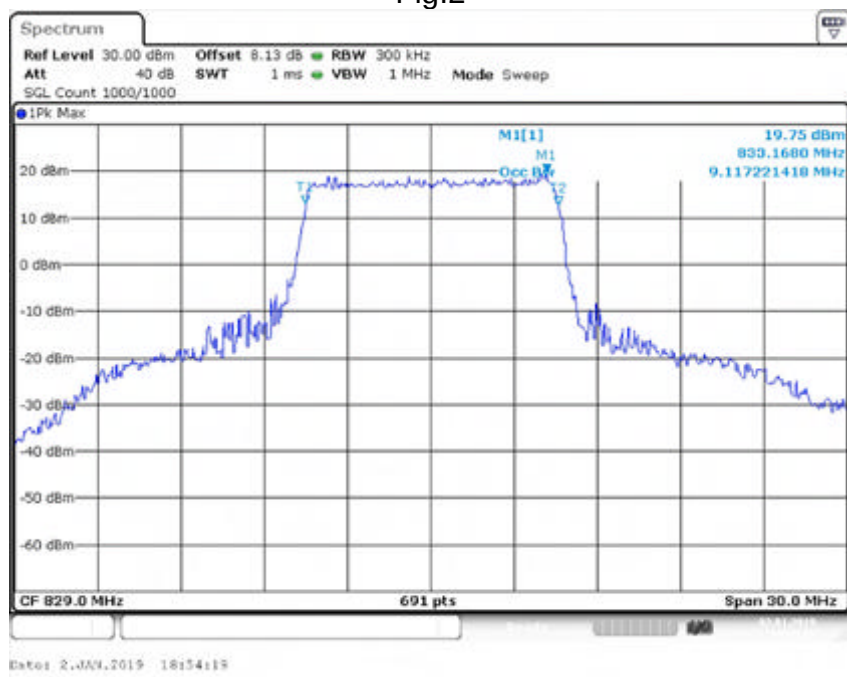


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
5	836.5	20525	10	50	0	9.074	Fig.1	9.117	Fig.2	9.117	Fig.3

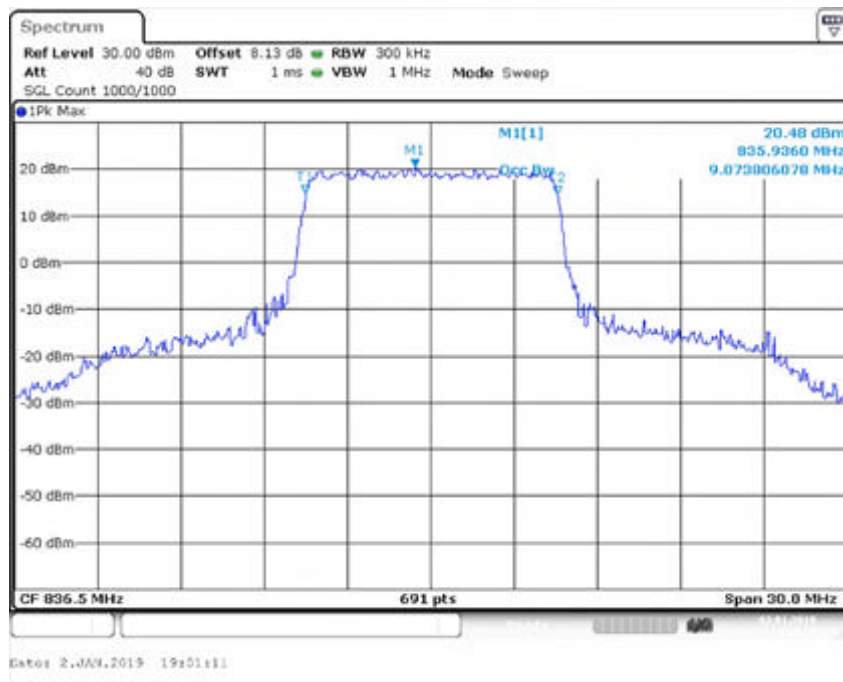


Fig.1

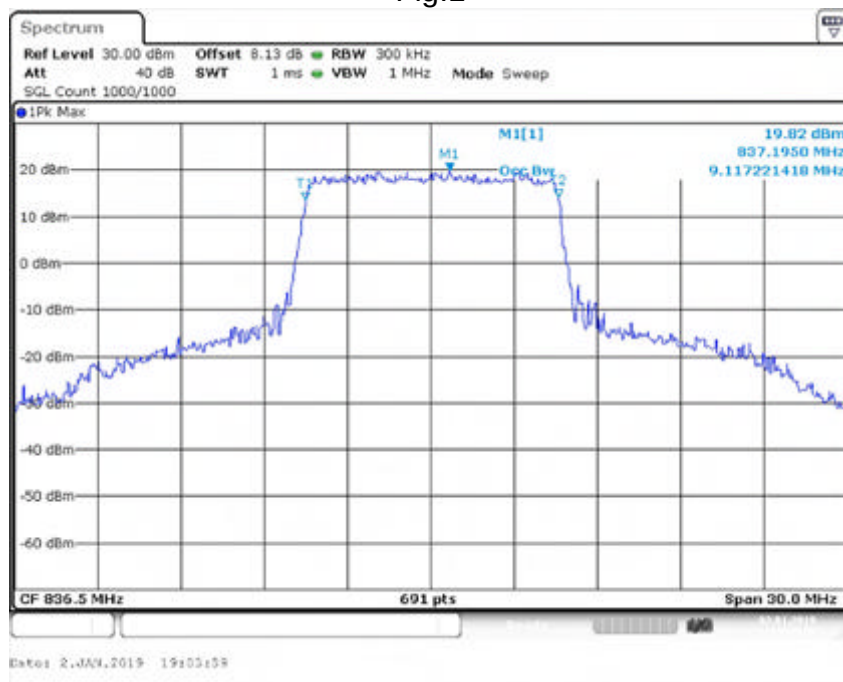


Fig.2

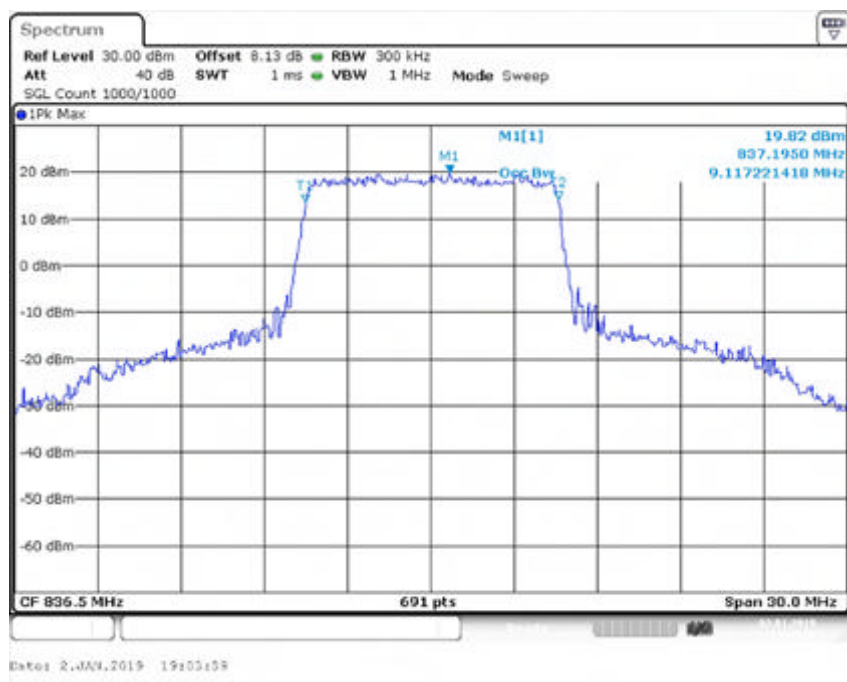


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
5	844	20600	10	50	0	9.074	Fig.1	9.074	Fig.2	9.074	Fig.3

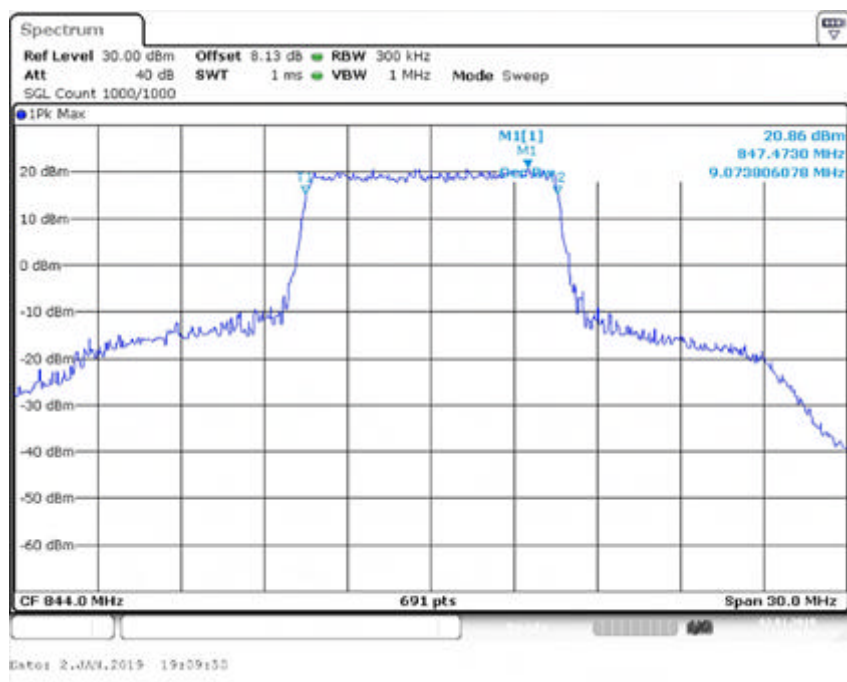


Fig.1

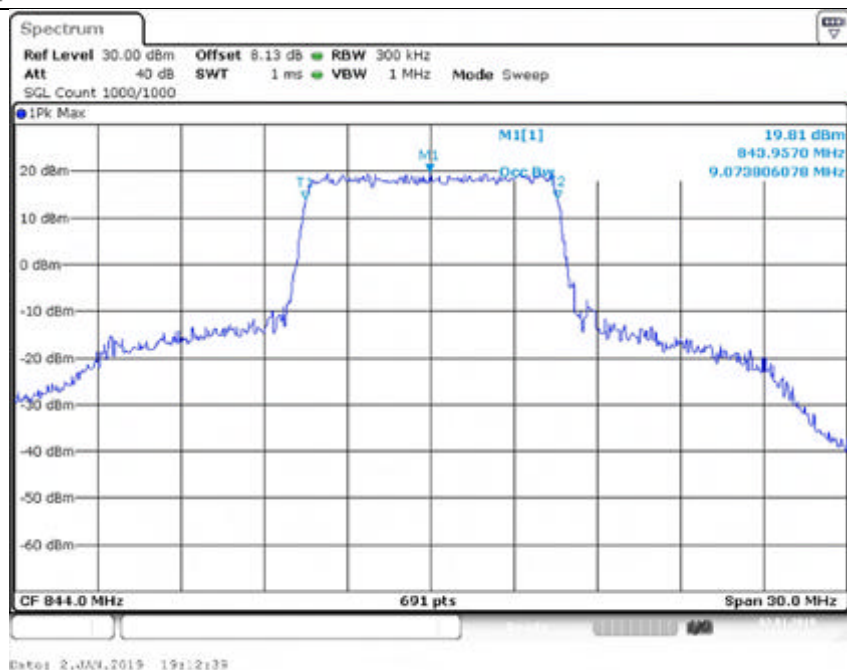


Fig.2

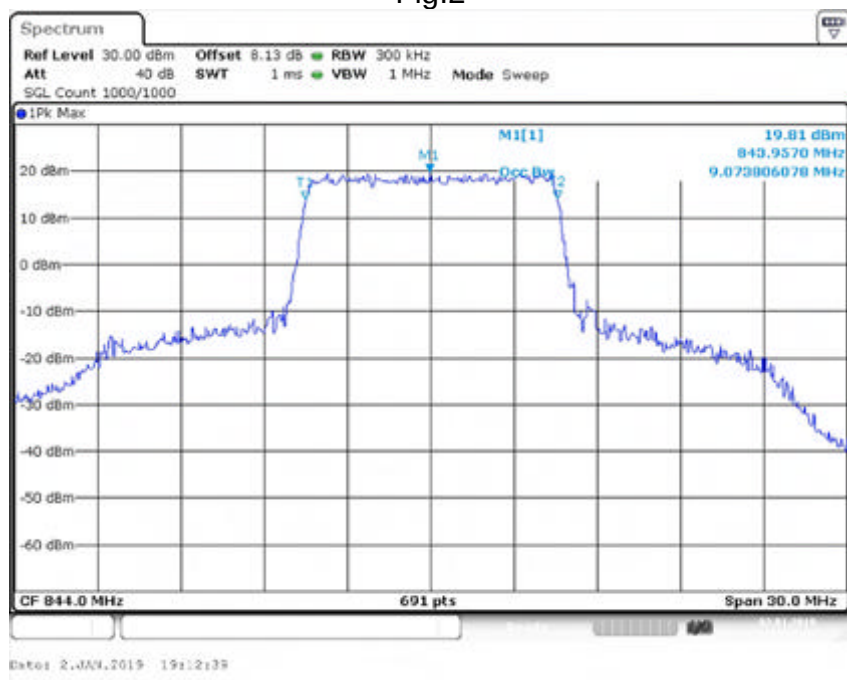


Fig.3

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	
5	824.7	20407	1.4	6	0	1.2946	Fig.1	1.3149	Fig.2	1.3149	Fig.3



Fig.1

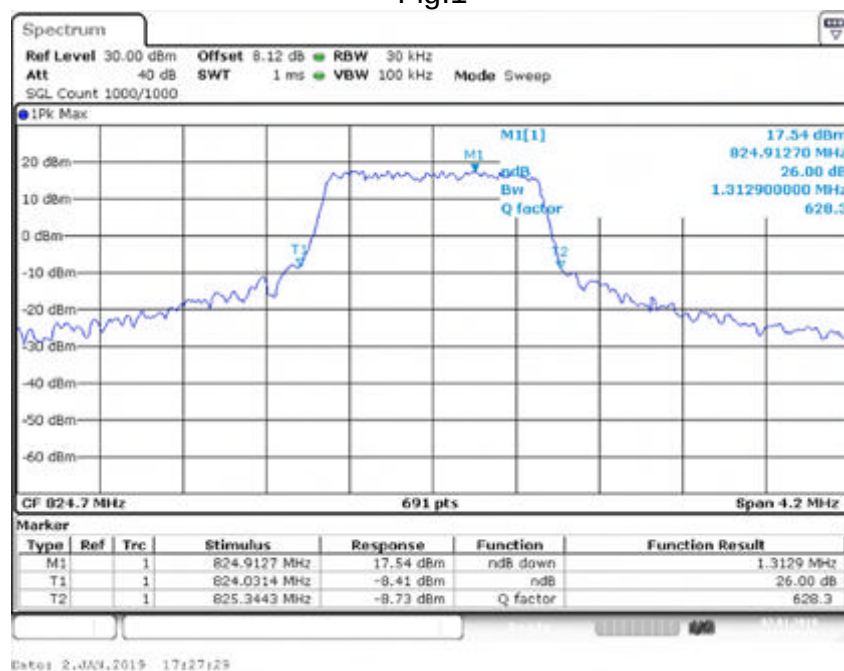


Fig.2

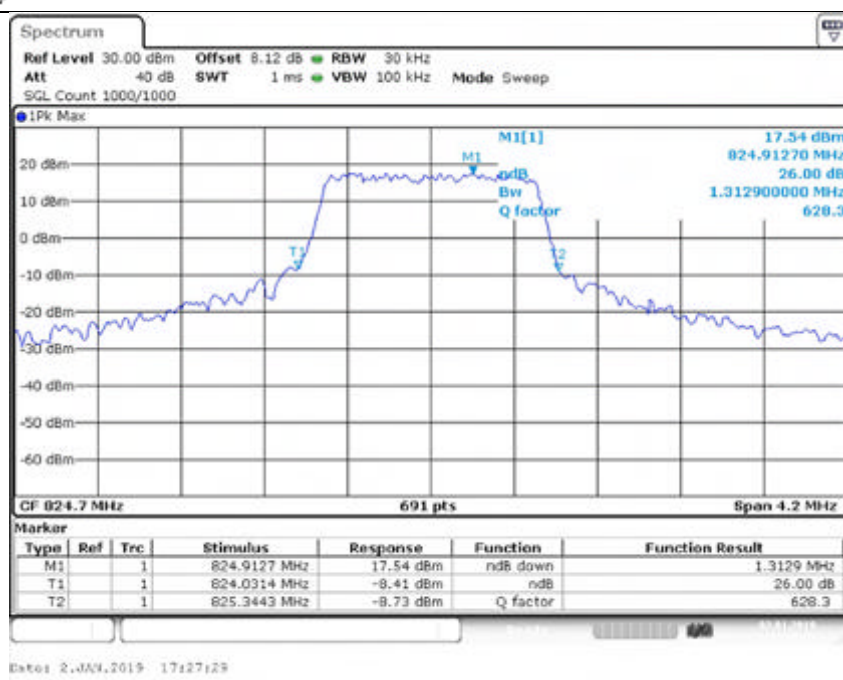


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	836.5	20525	1.4	6	0	1.2886	Fig.1	1.3858	Fig.2	1.3858	Fig.3

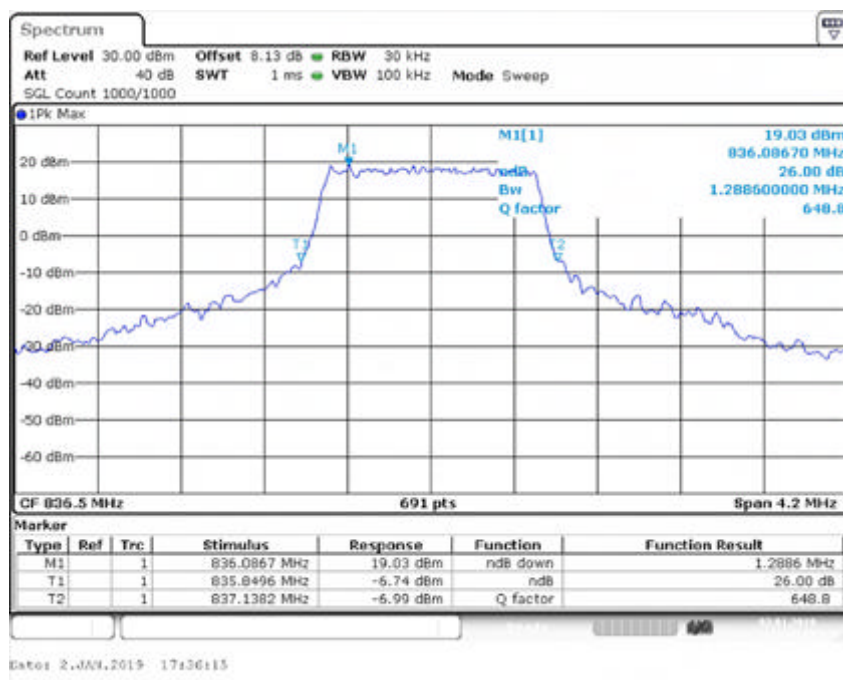


Fig.1



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	
5	848.3	20643	1.4	6	0	1.3068	Fig.1	1.3493	Fig.2	1.3493	Fig.3

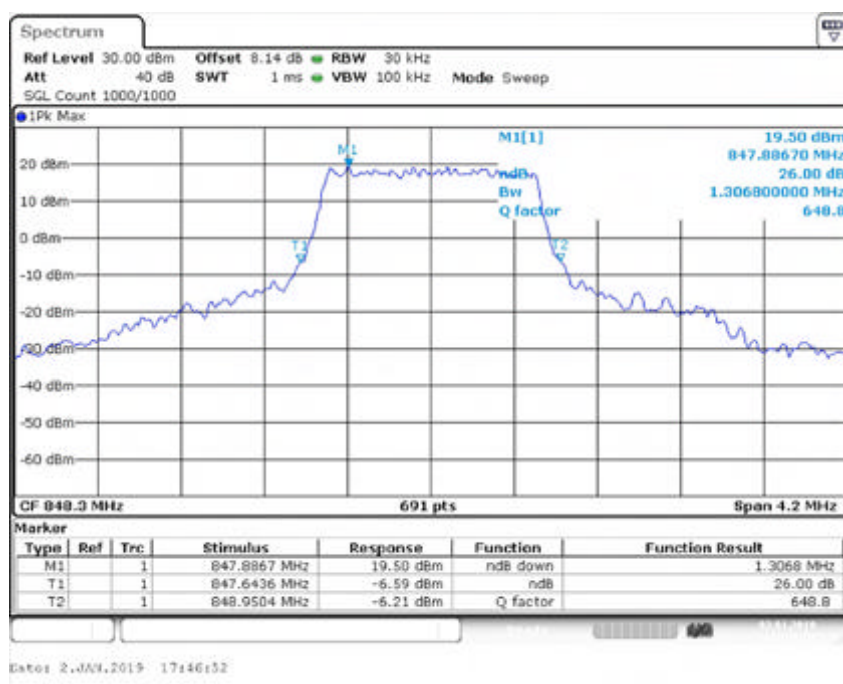


Fig.1

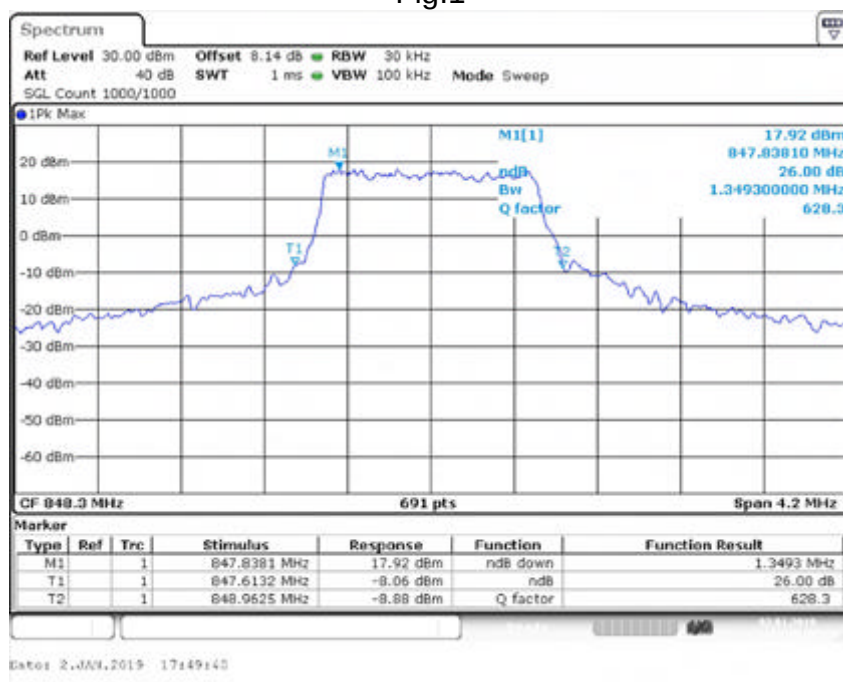


Fig.2

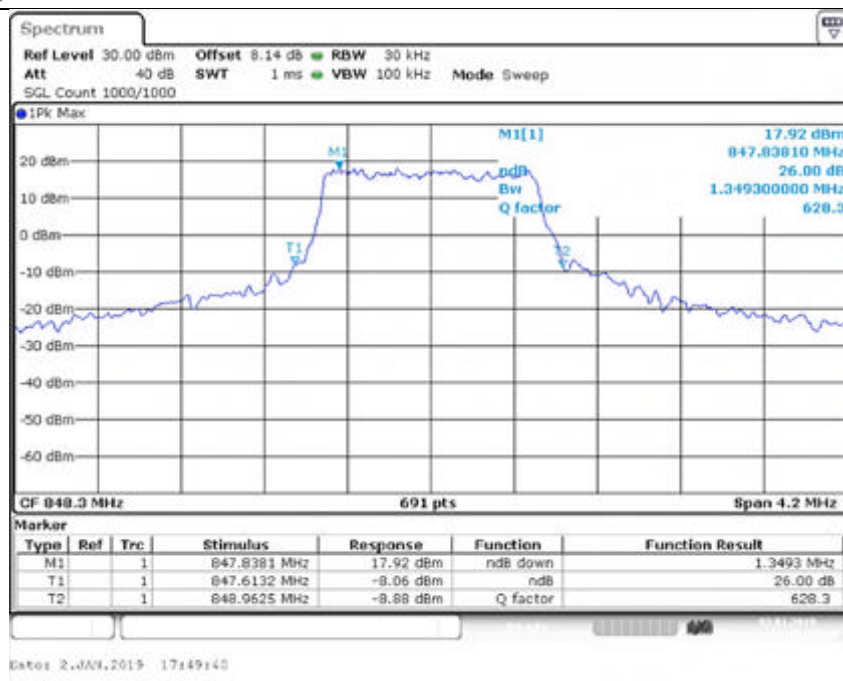


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	825.5	20415	3	15	0	3.230	Fig.1	3.193	Fig.2	3.193	Fig.3

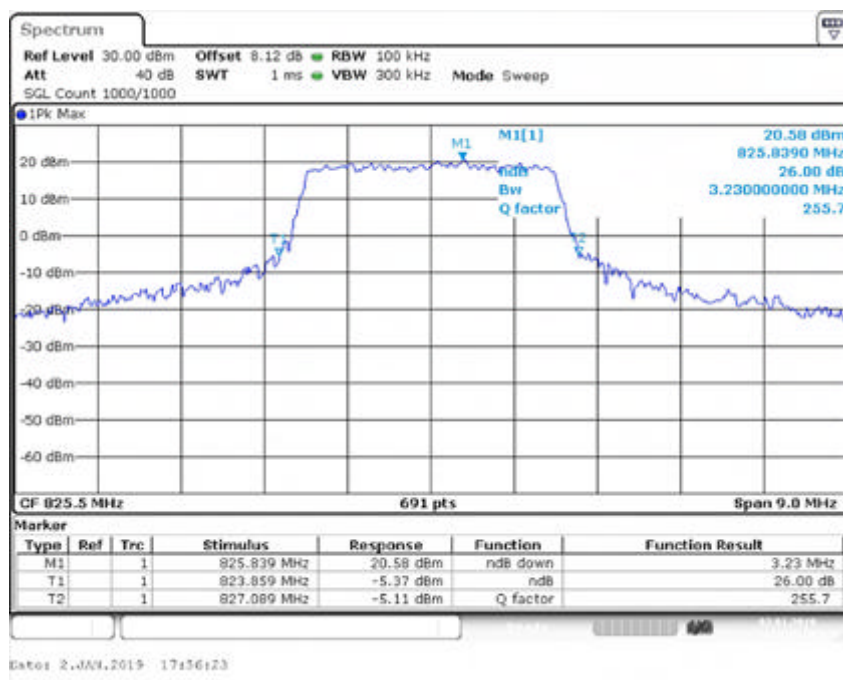


Fig.1

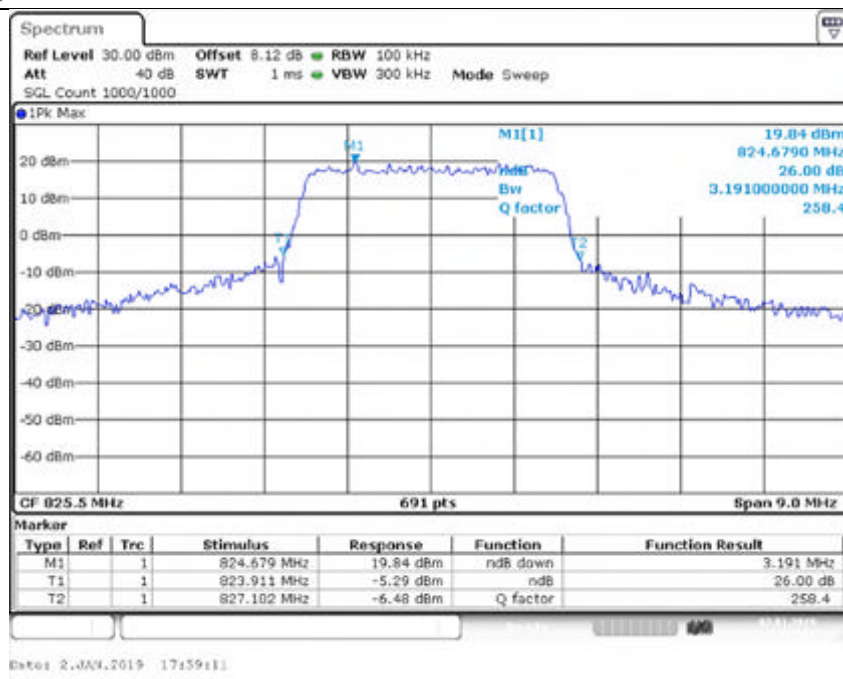


Fig.2

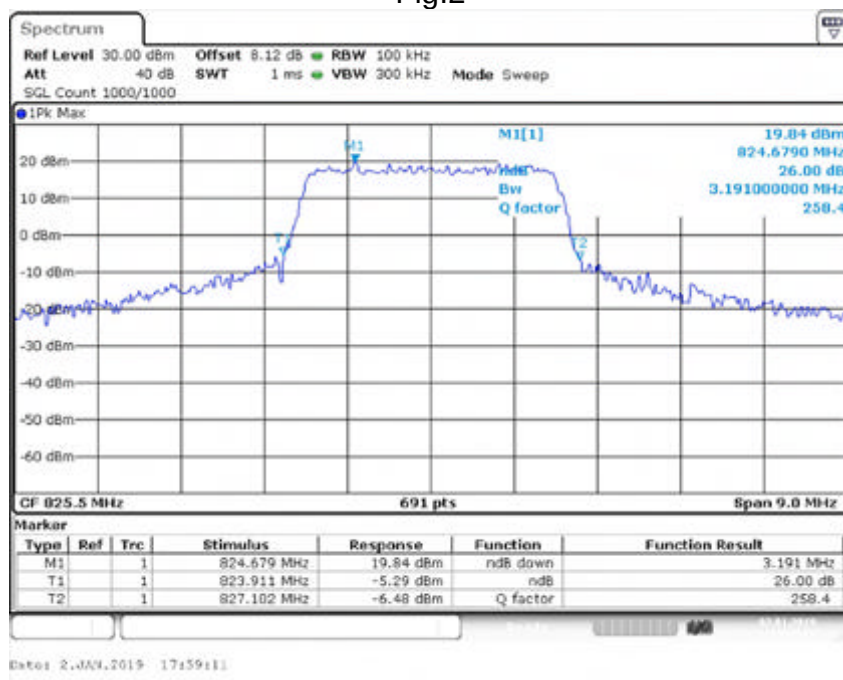


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)			
						QPSK	16-QAM	64-QAM	
5	836.5	20525	3	15	0	3.243	Fig.1	3.347	Fig.2
								3.347	Fig.3

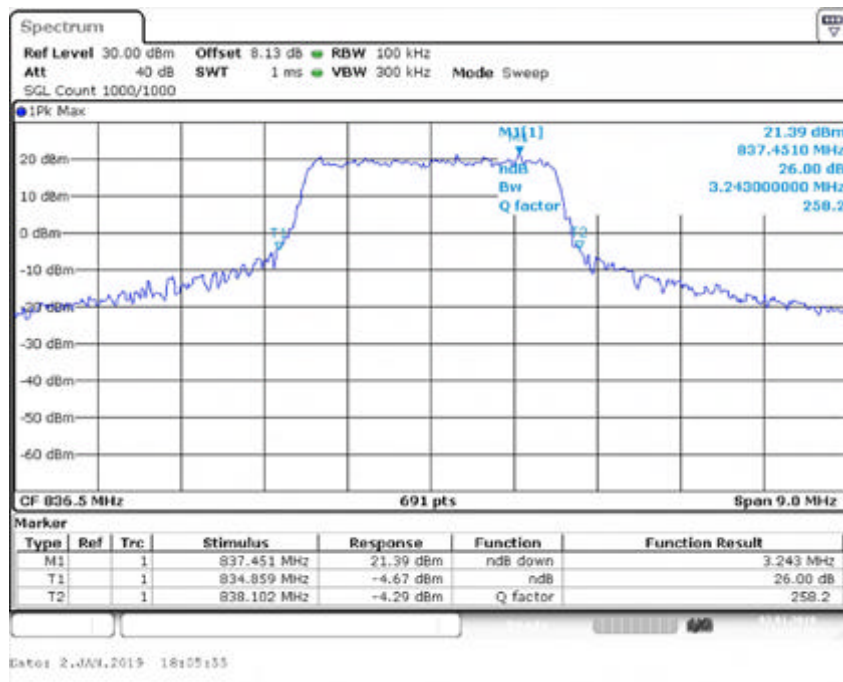


Fig.1

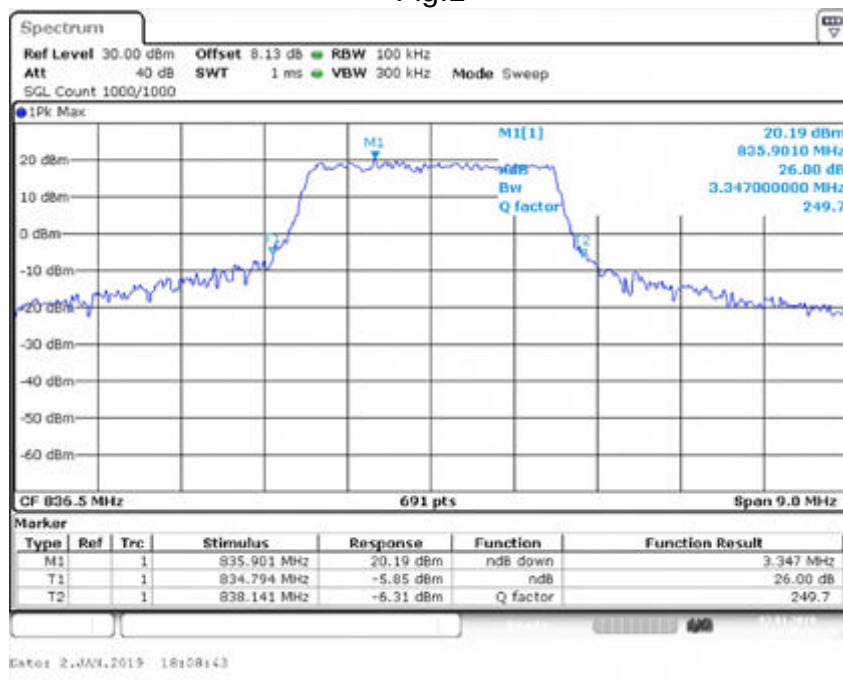


Fig.2

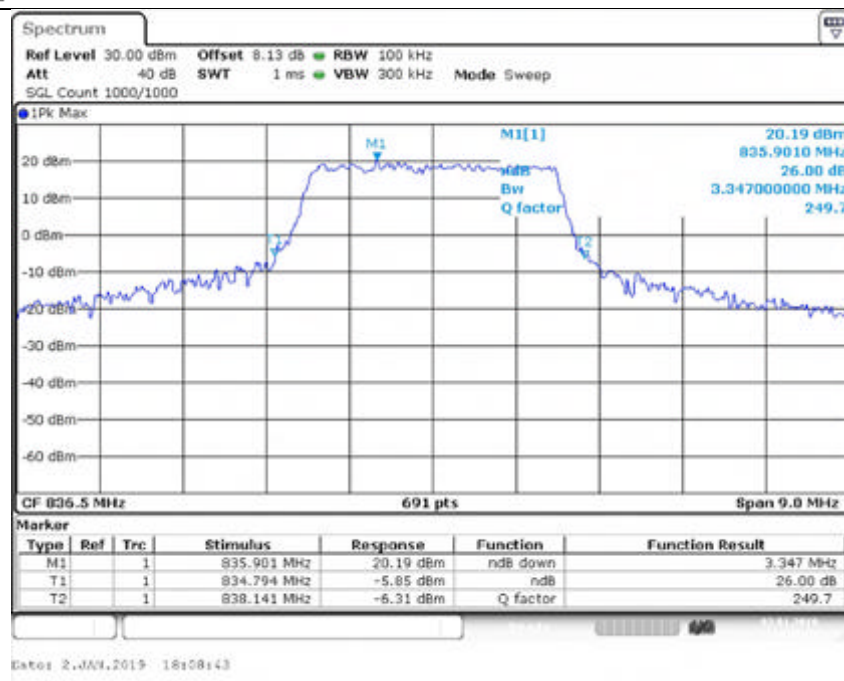


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	847.5	20635	3	15	0	3.204	Fig.1	3.269	Fig.2	3.269	Fig.3

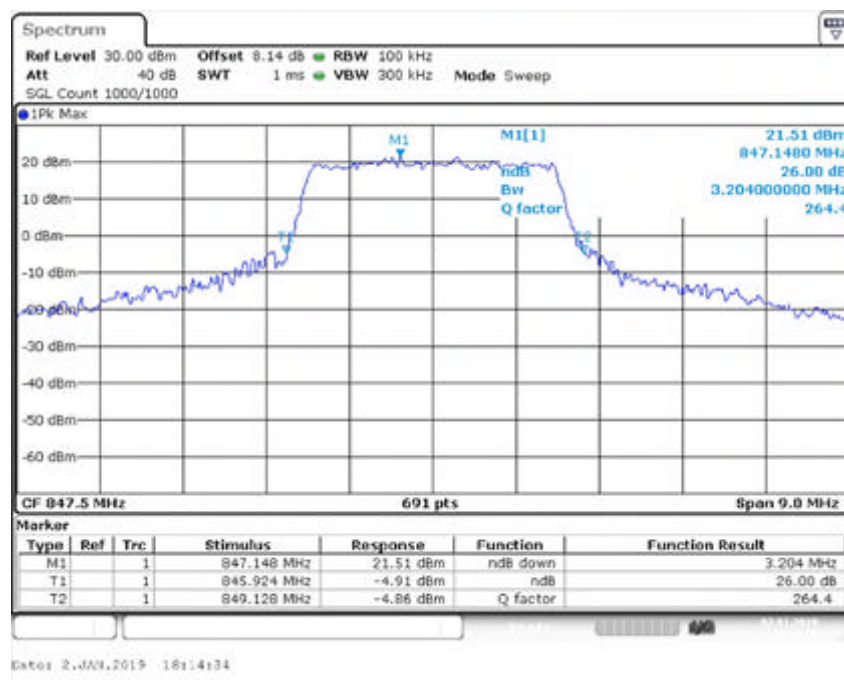


Fig.1

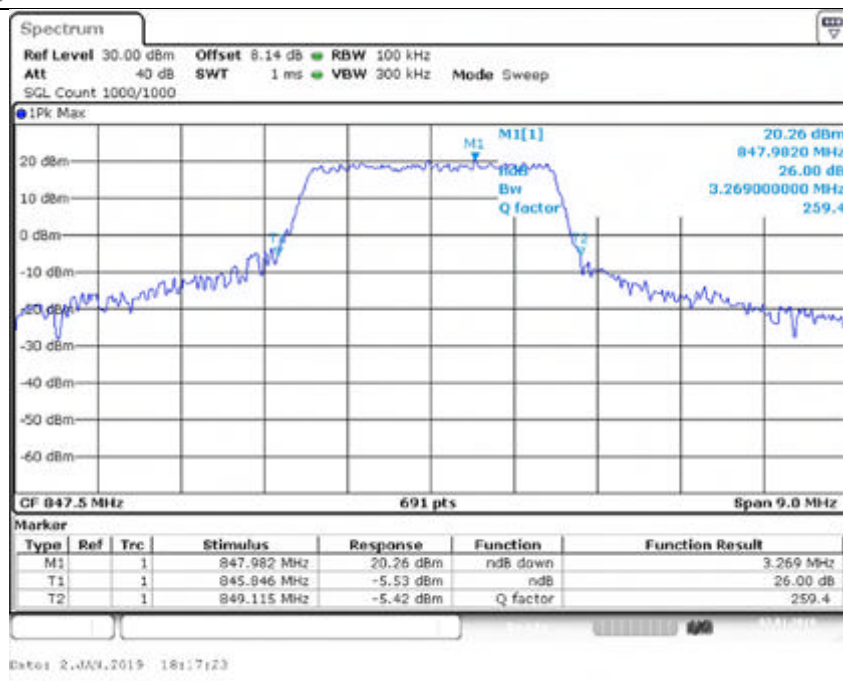


Fig.2

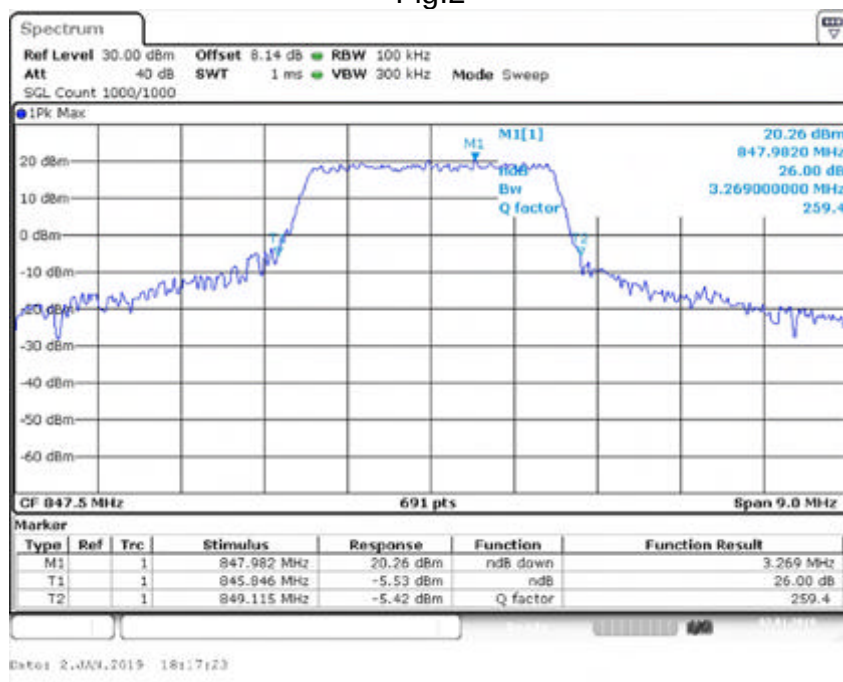


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	826.5	20425	5	25	0	5.232	Fig.1	5.166	Fig.2	5.166	Fig.3

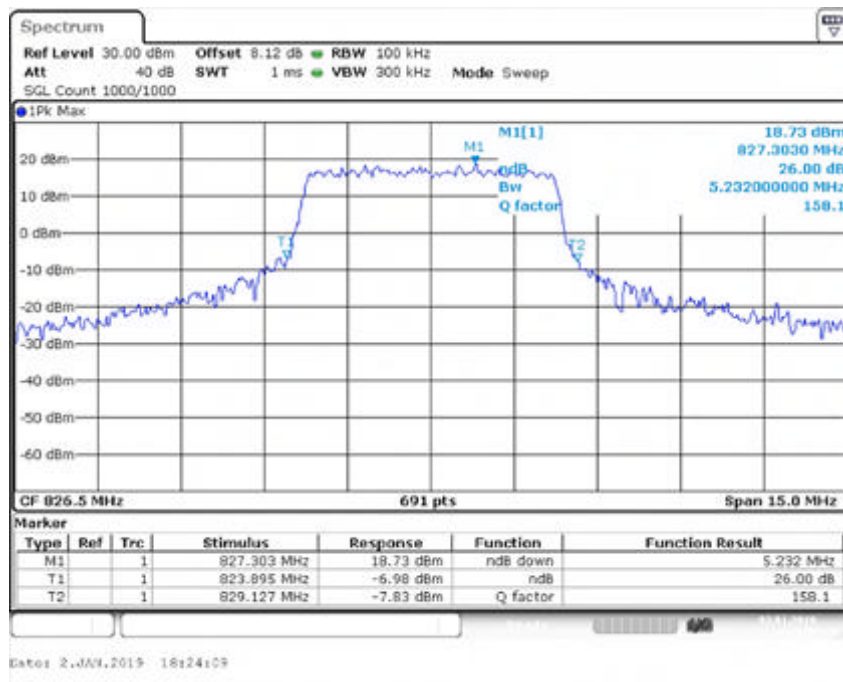


Fig.1

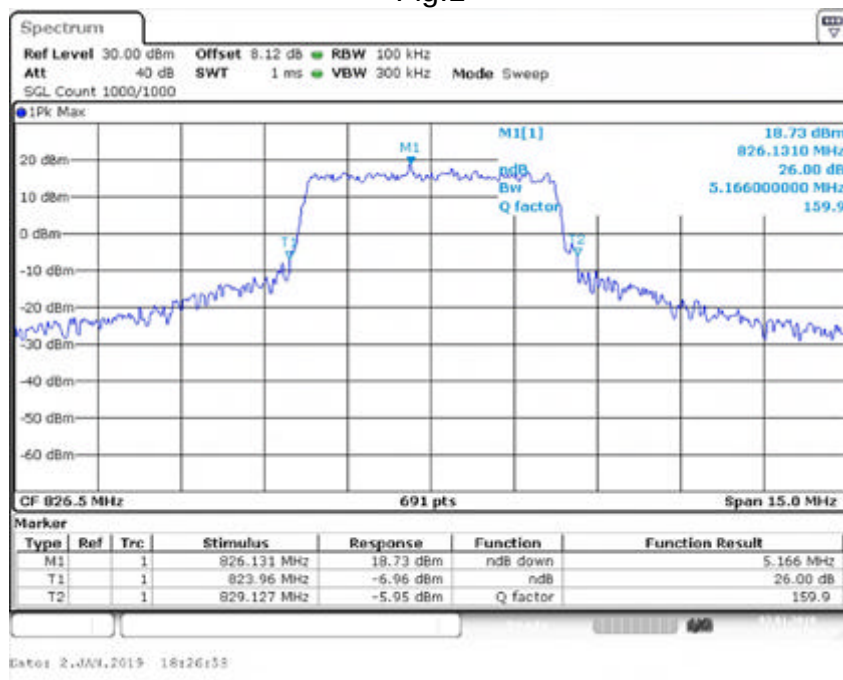


Fig.2

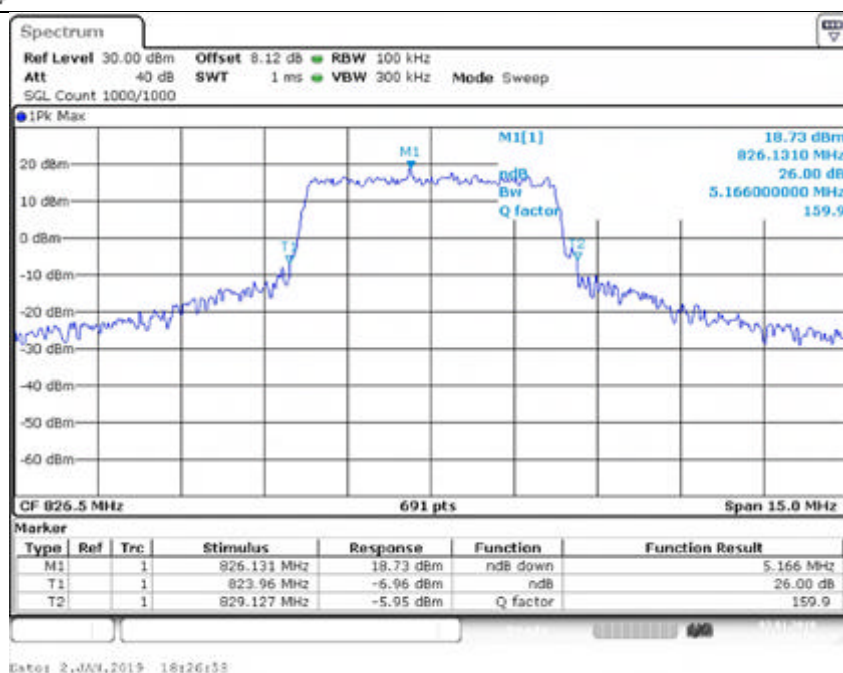


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	836.5	20525	5	25	0	5.145	Fig.1	5.318	Fig.2	5.318	Fig.3

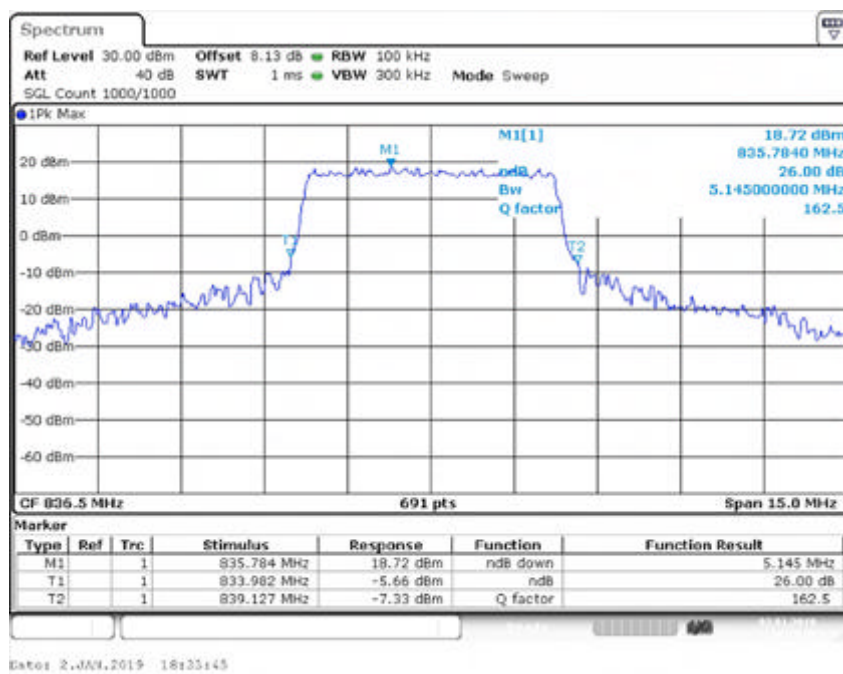


Fig.1

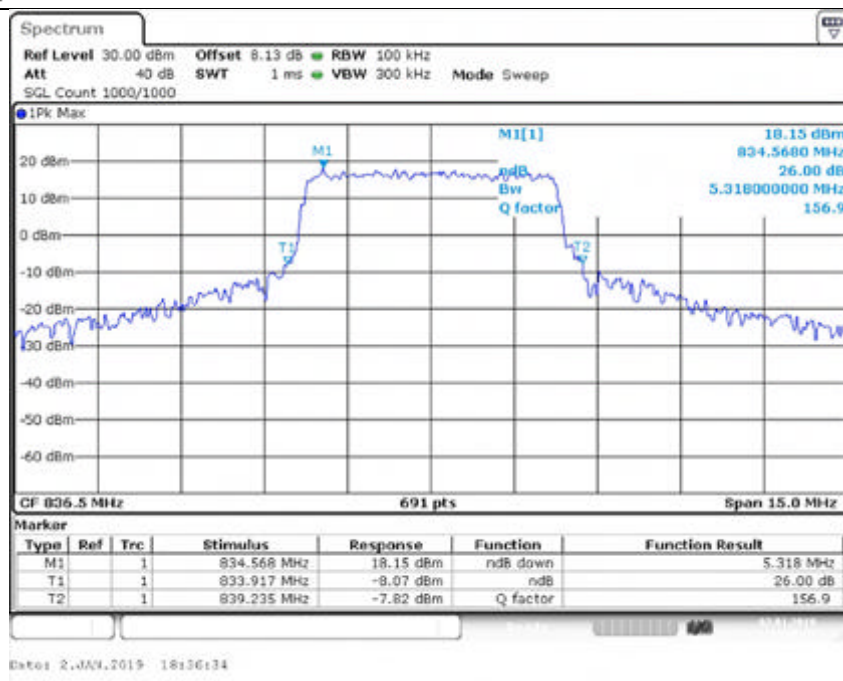


Fig.2

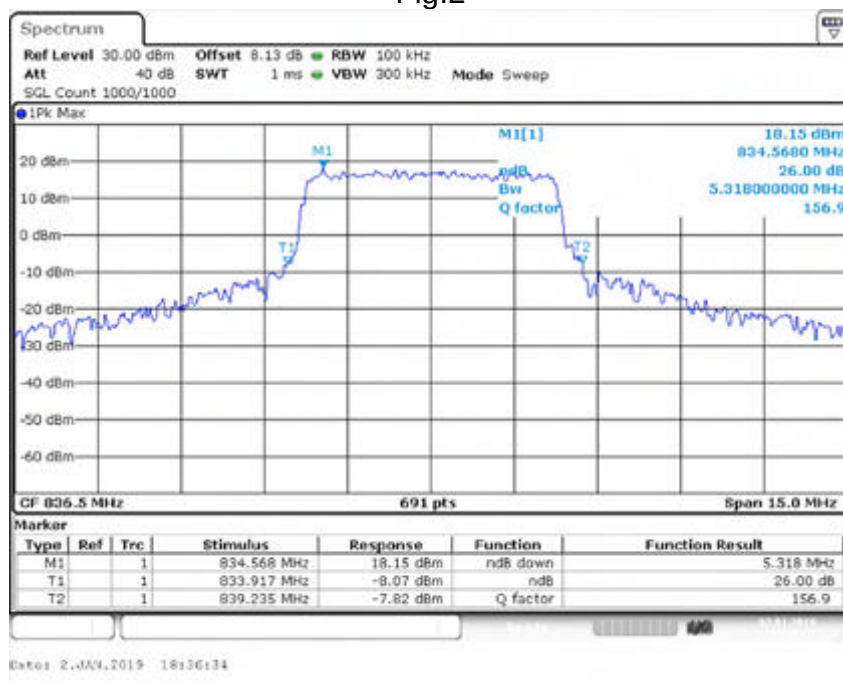


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	846.5	20625	5	25	0	5.384	Fig.1	5.123	Fig.2	5.123	Fig.3

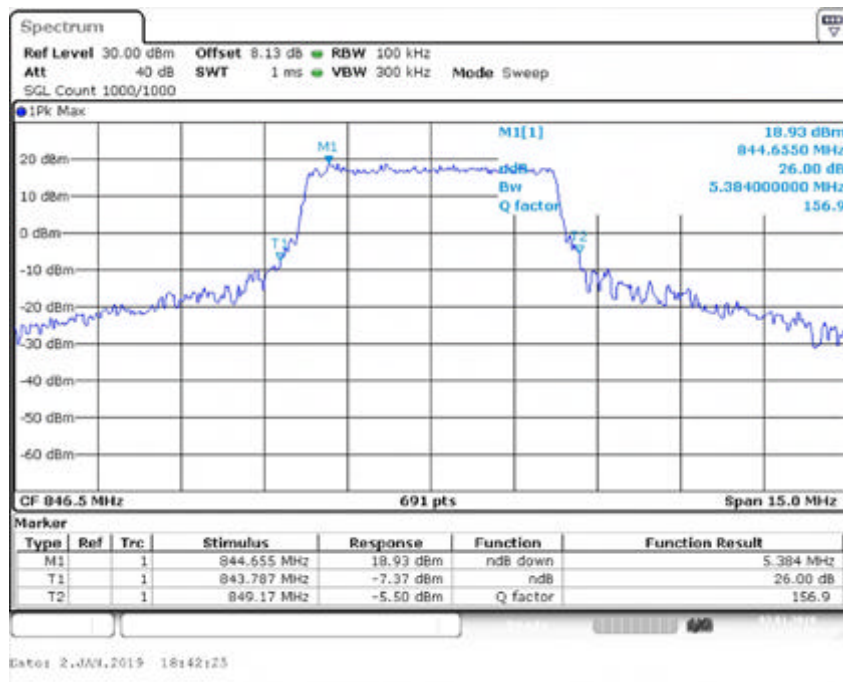


Fig.1

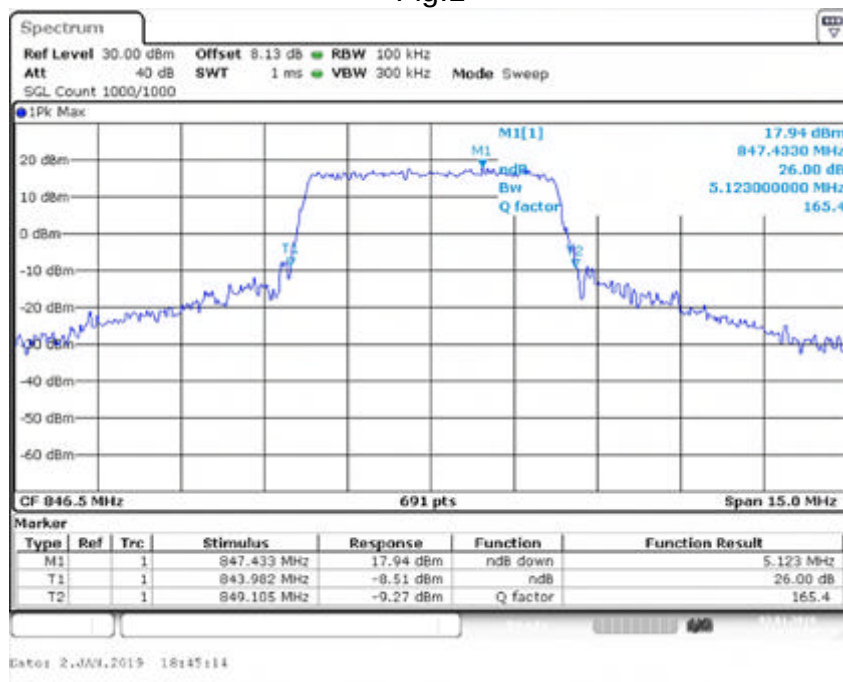


Fig.2

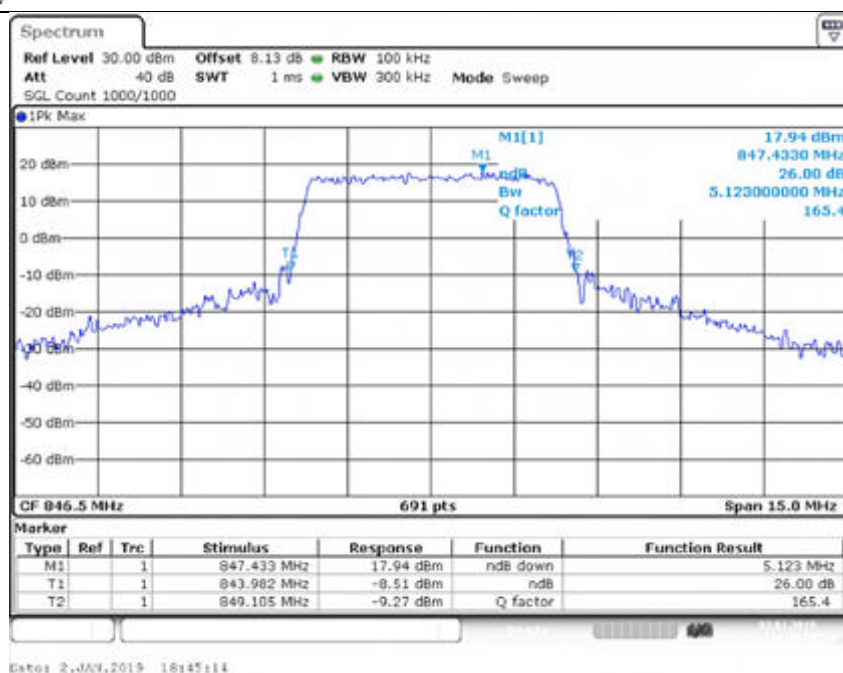


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	829	20450	10	50	0	10.203	Fig.1	10.289	Fig.2	10.289	Fig.3

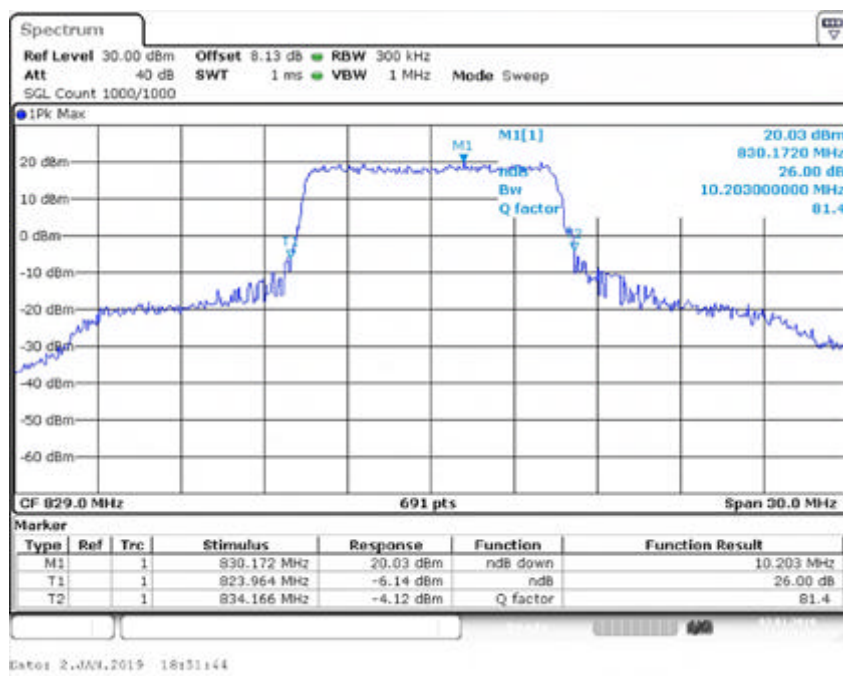


Fig.1

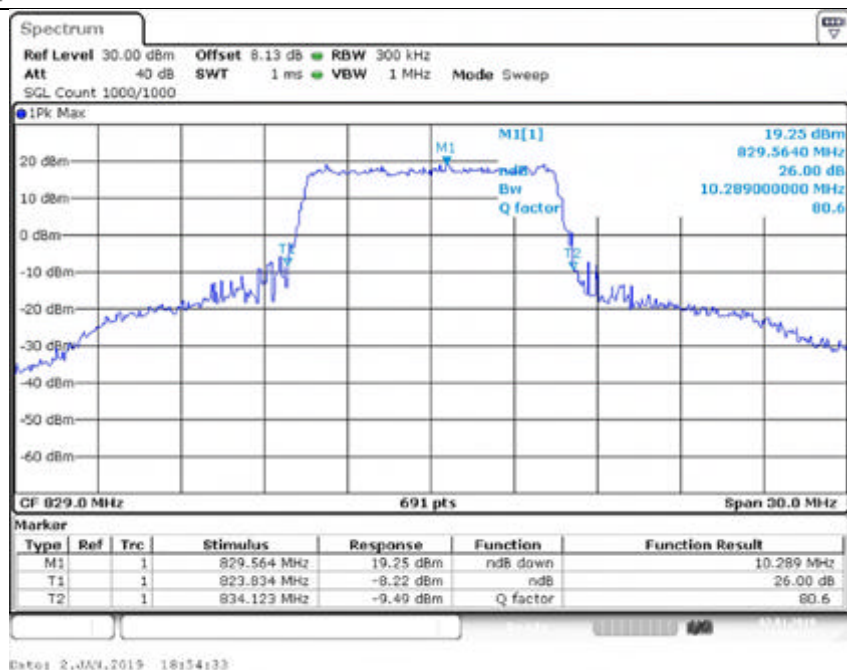


Fig.2

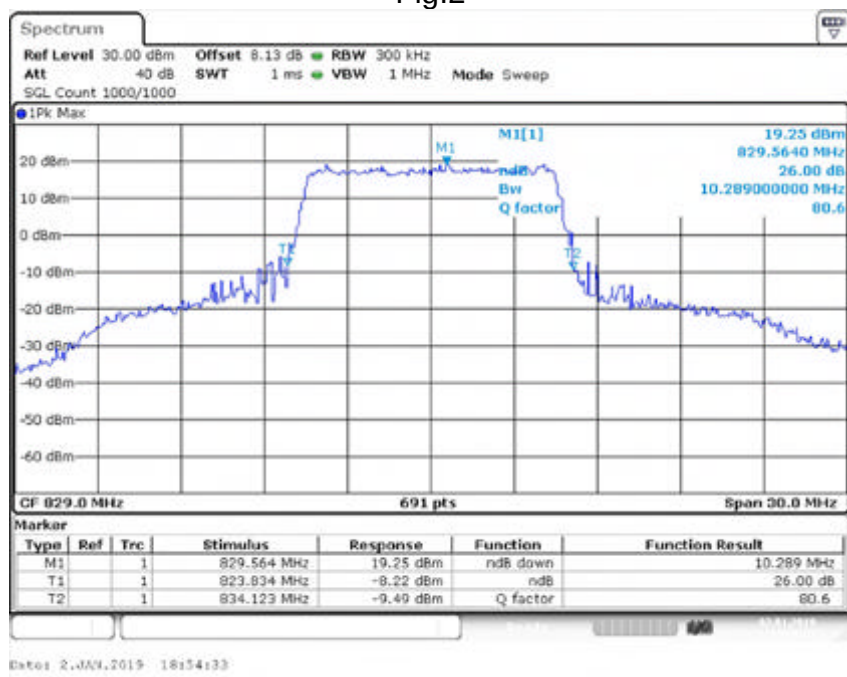


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	836.5	20525	10	50	0	10.376	Fig.1	10.116	Fig.2	10.116	Fig.3

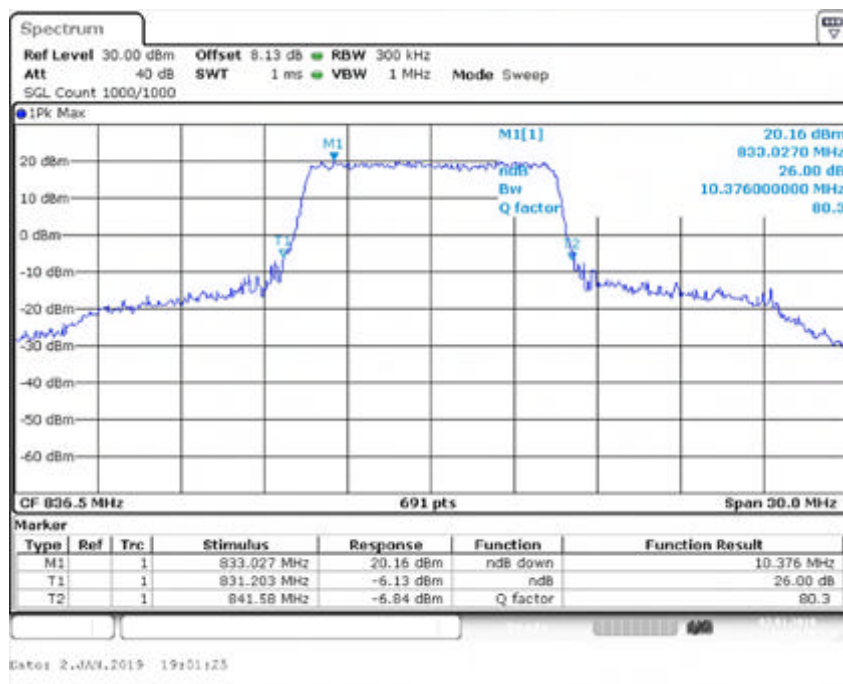


Fig.1

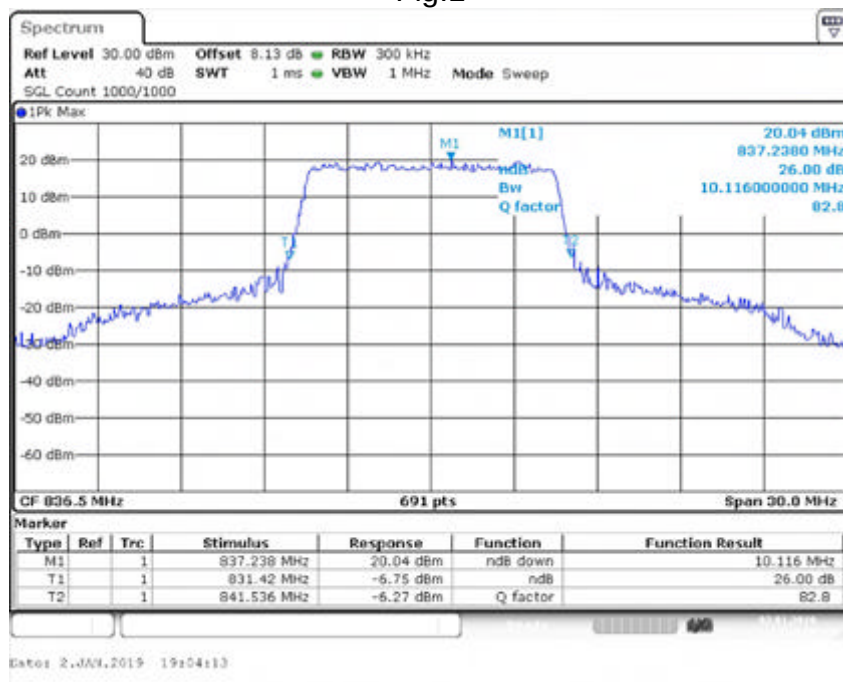


Fig.2

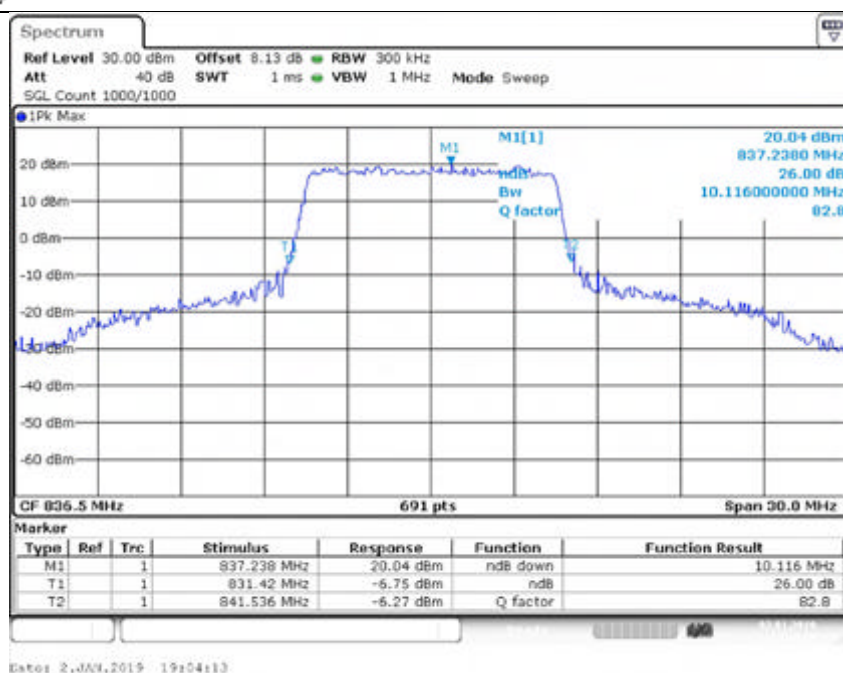


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
5	844	20600	10	50	0	10.159	Fig.1	10.072	Fig.2	10.072	Fig.3

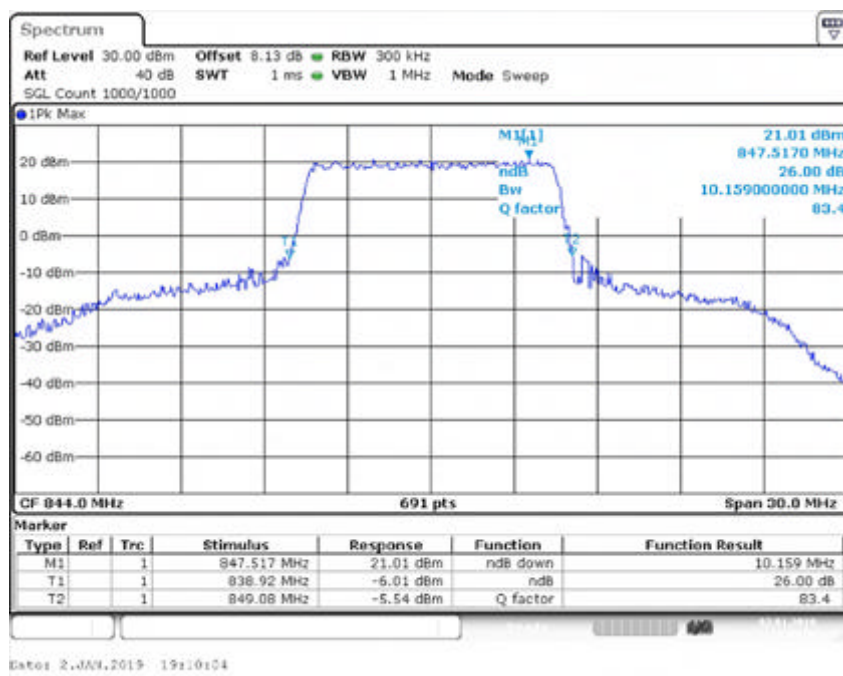


Fig.1

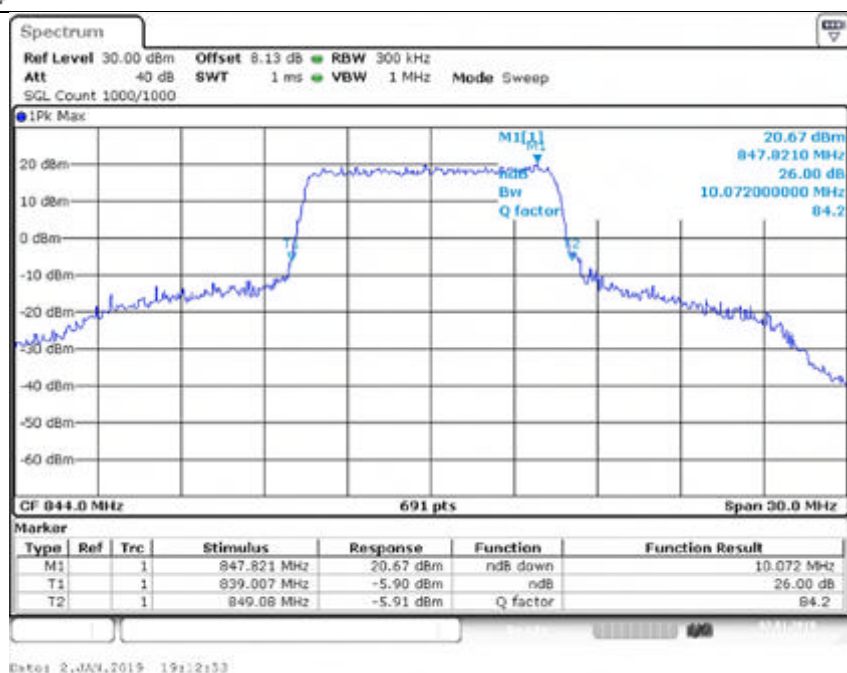


Fig.2

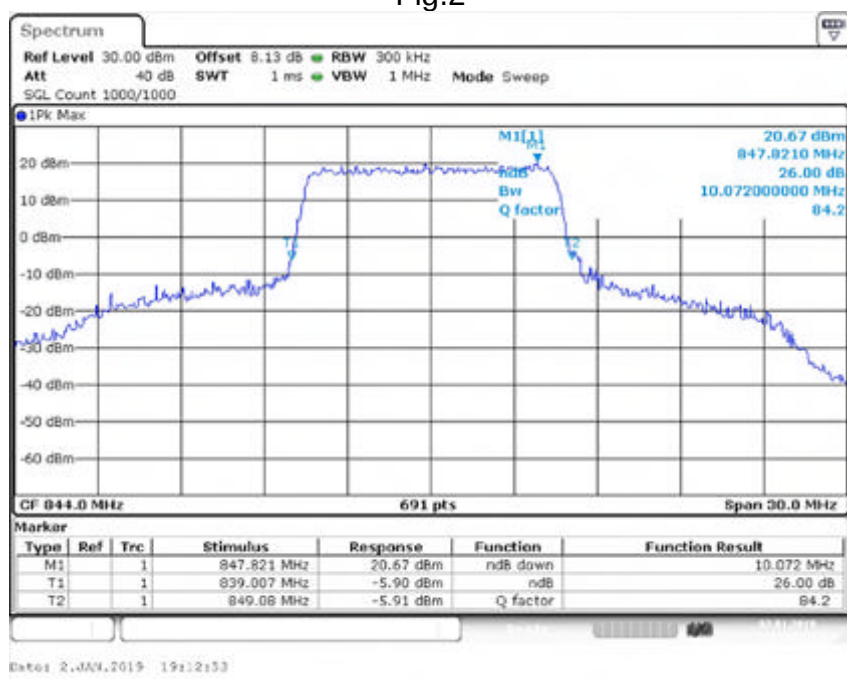
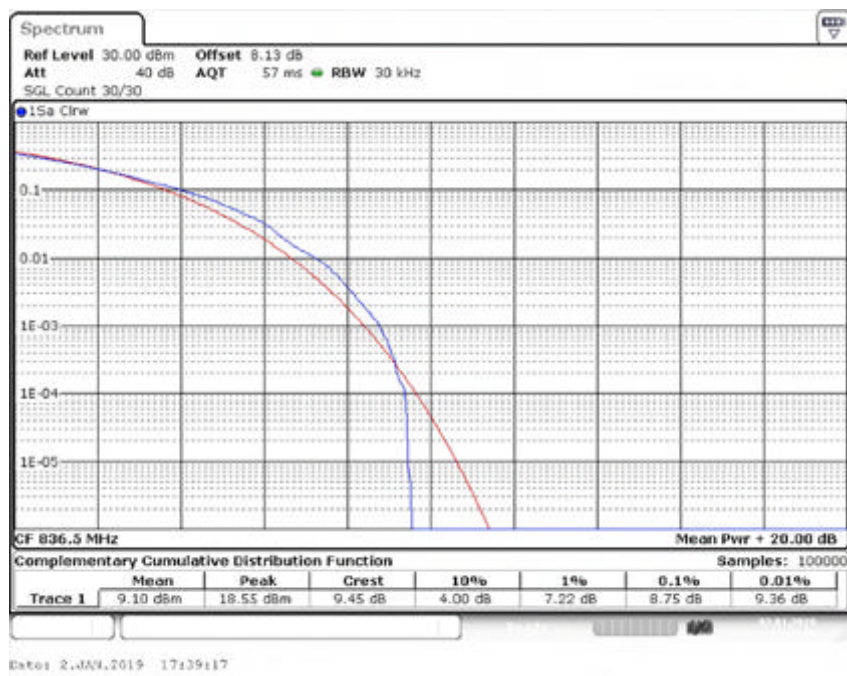


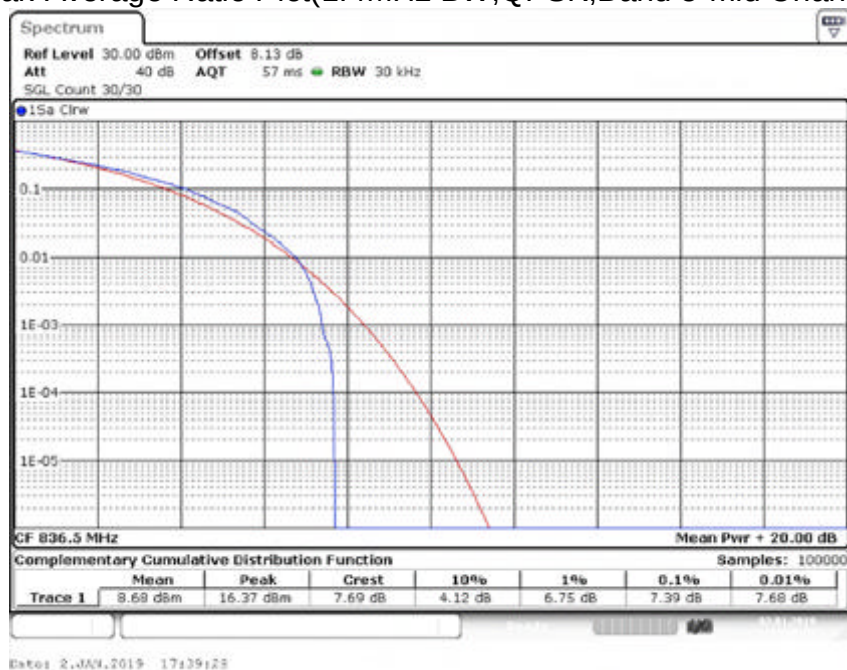
Fig.3

4 Peak-Average Ratio

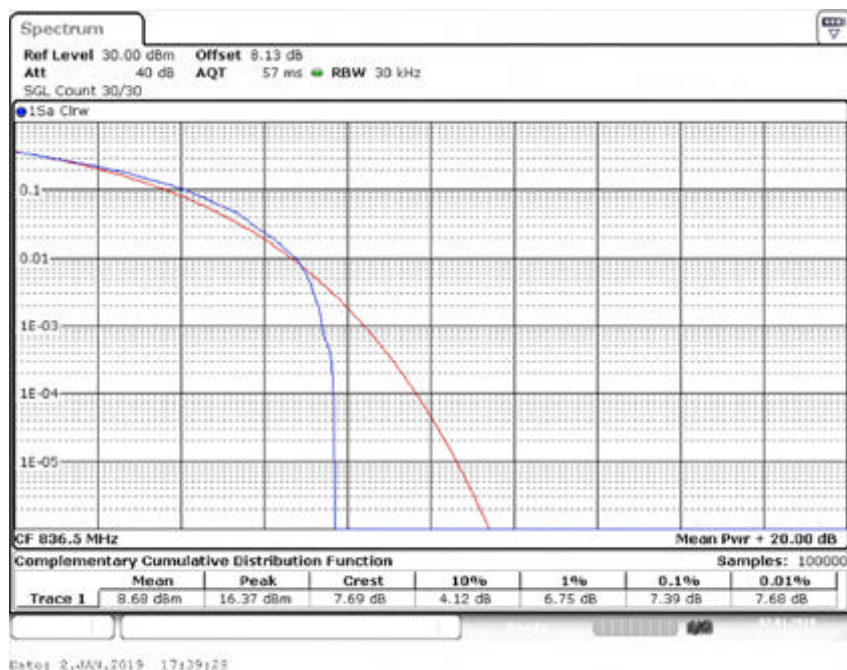
Test result:



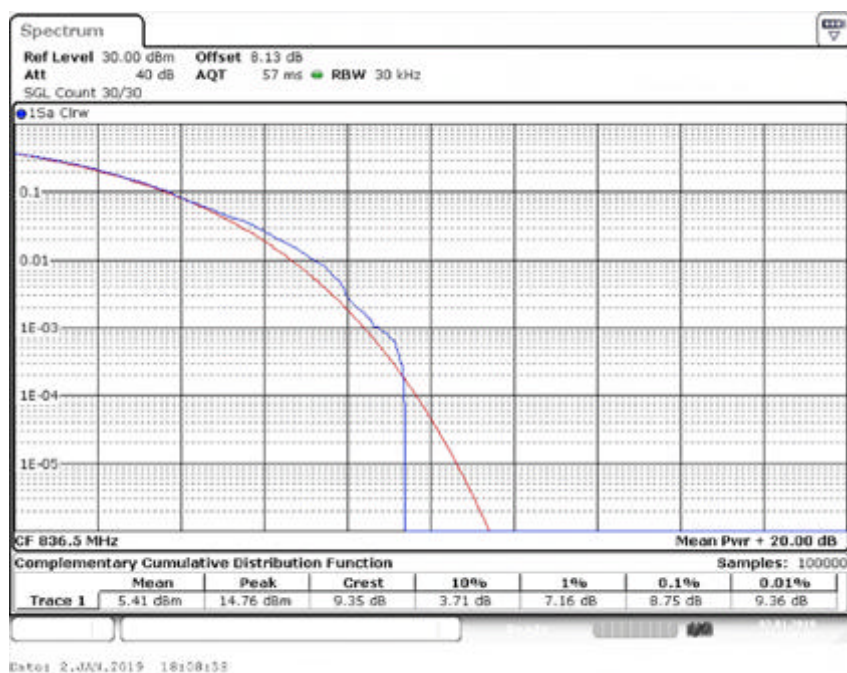
Peak-Average Ratio Plot(1.4MHz BW,QPSK,Band 5-mid Channel)



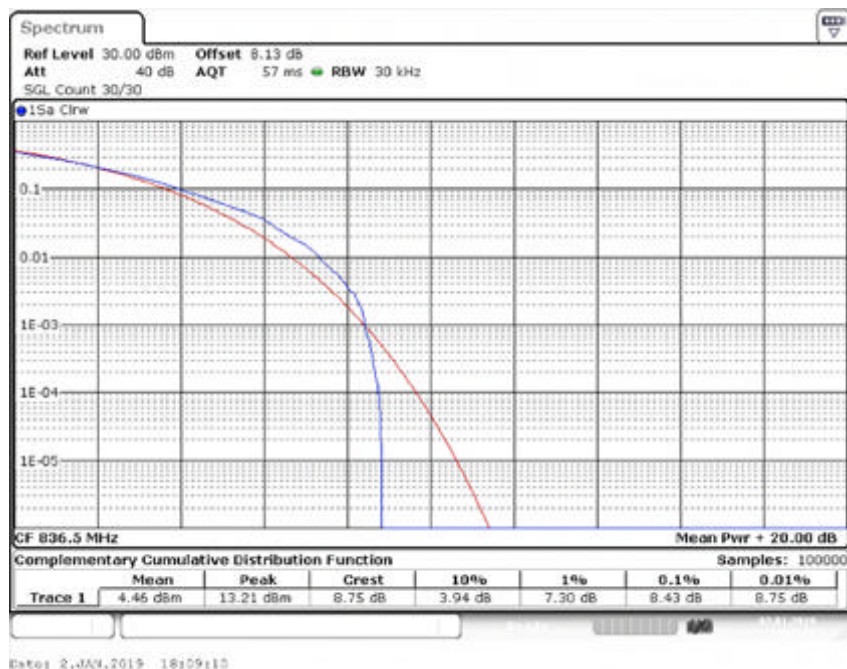
Peak-Average Ratio Plot(1.4MHz BW,16QAM,Band 5-mid Channel)



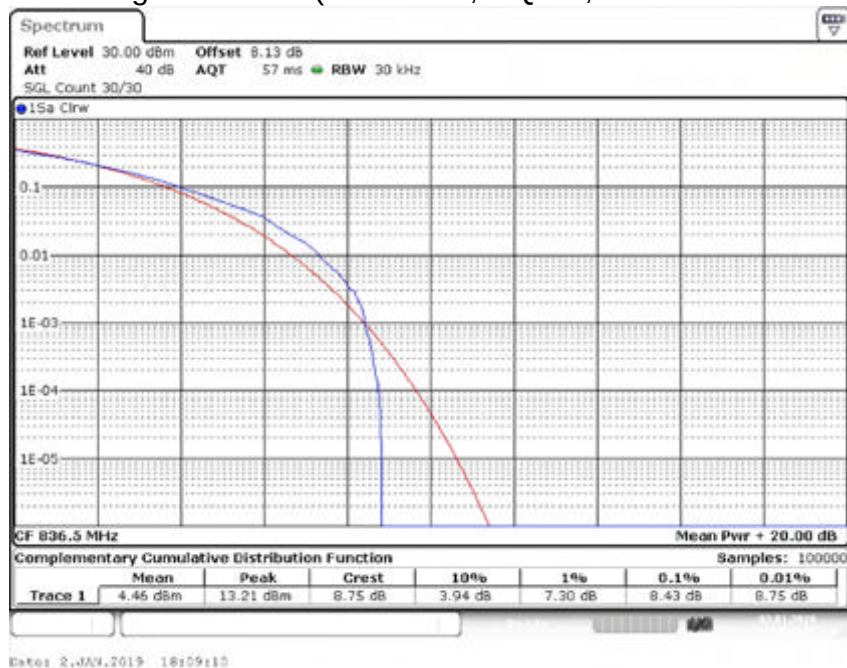
Peak-Average Ratio Plot(1.4MHz BW,64QAM,Band 5-mid Channel)



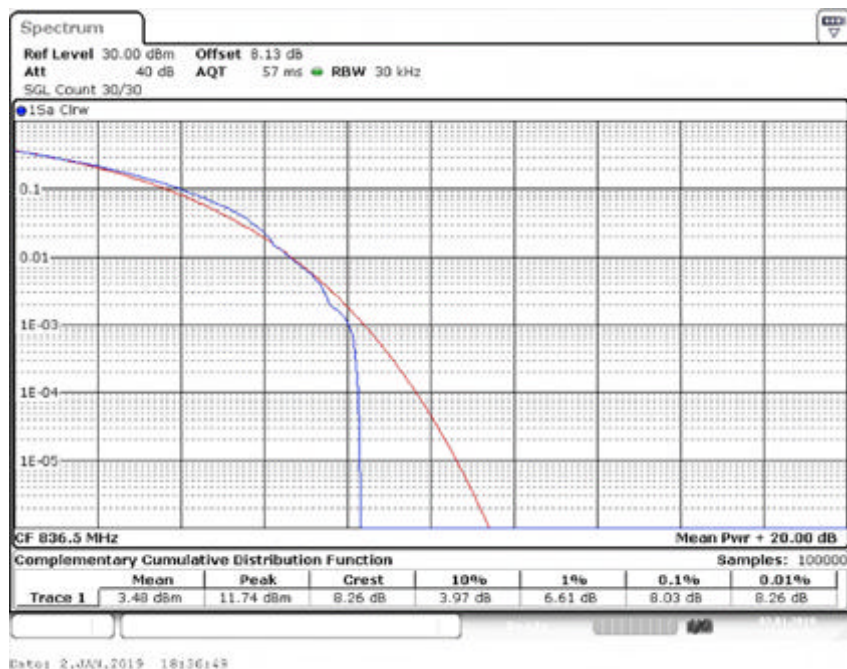
Peak-Average Ratio Plot(3MHz BW,QPSK,Band 5-mid Channel)



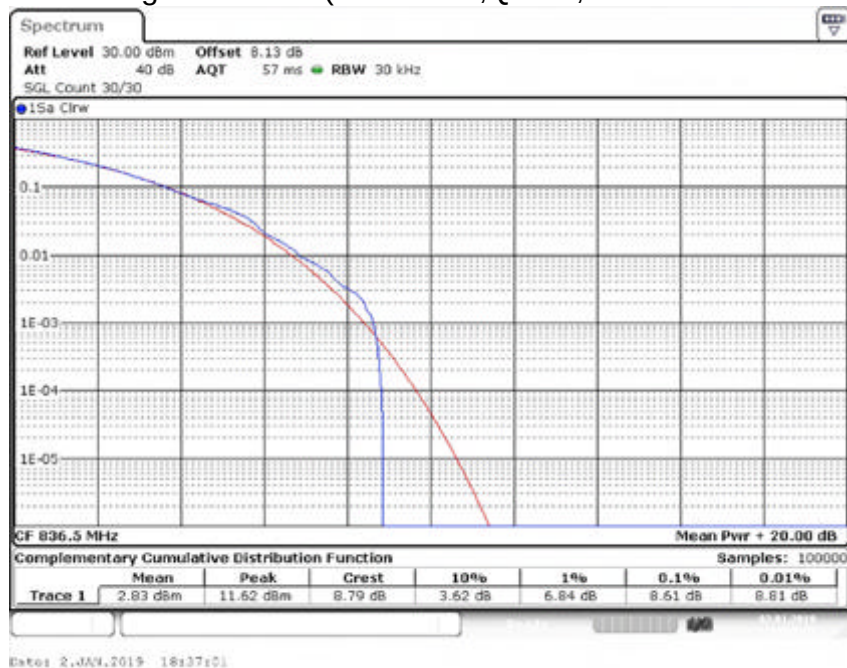
Peak-Average Ratio Plot(3MHz BW,16QAM,Band 5-mid Channel)



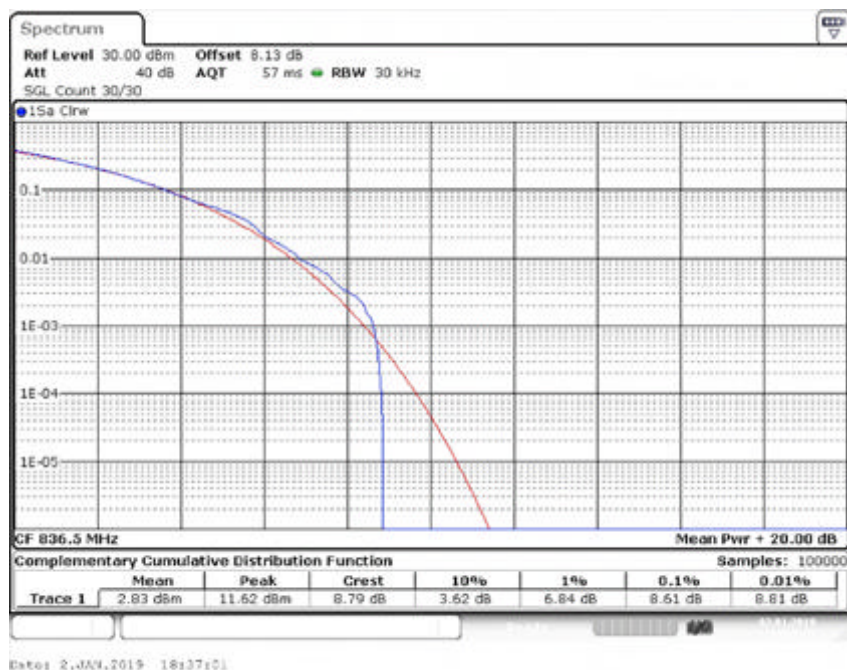
Peak-Average Ratio Plot(3MHz BW,64QAM,Band 5-mid Channel)



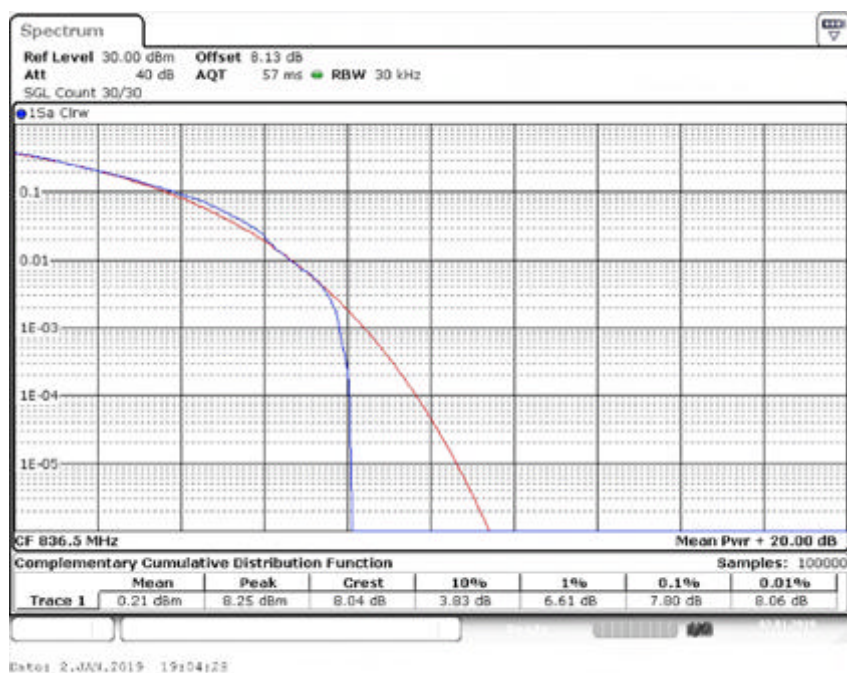
Peak-Average Ratio Plot(5MHz BW,QPSK,Band 5-mid Channel)



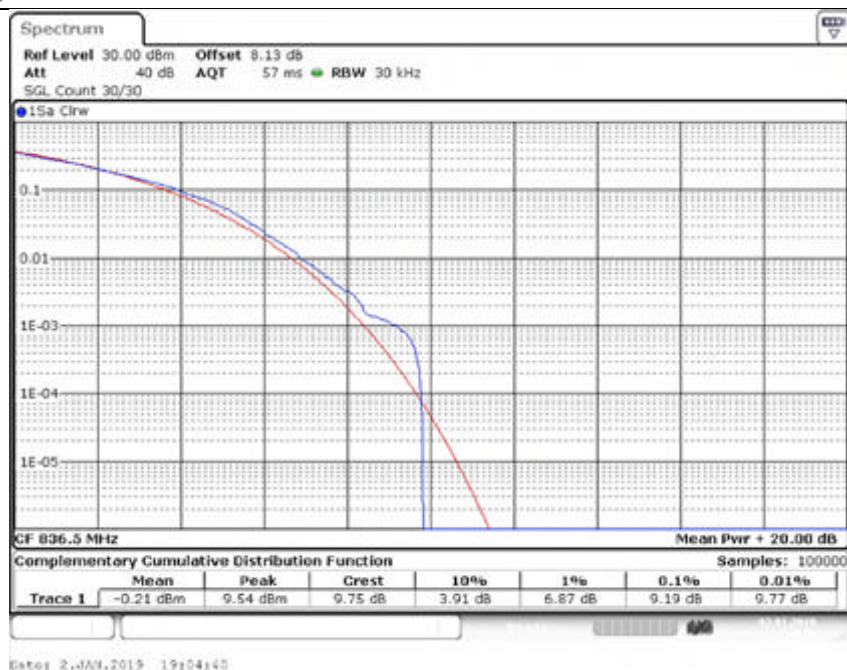
Peak-Average Ratio Plot(5MHz BW,16QAM,Band 5-mid Channel)



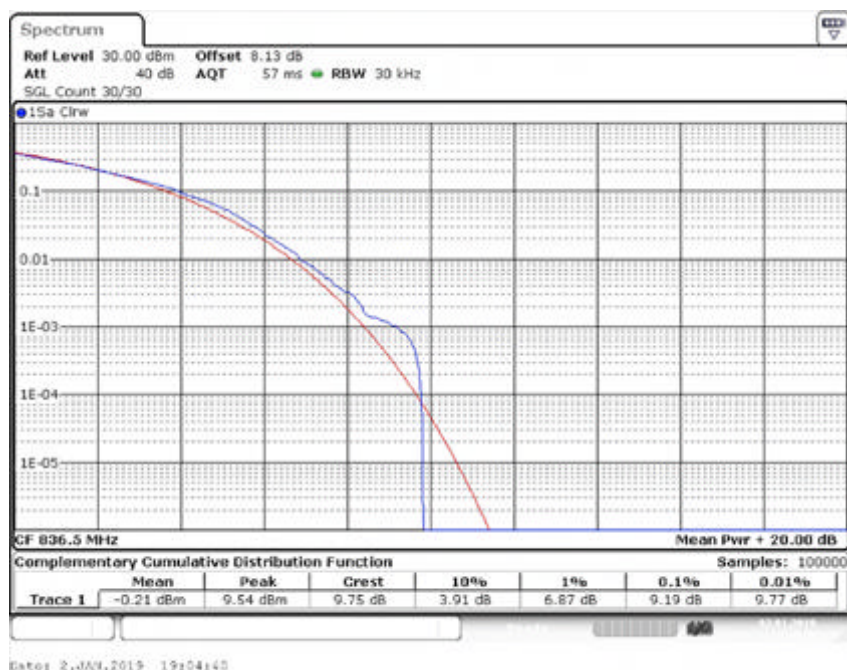
Peak-Average Ratio Plot(5MHz BW,64QAM,Band 5-mid Channel)



Peak-Average Ratio Plot(10MHz BW,QPSK,Band 5-mid Channel)



Peak-Average Ratio Plot(10MHz BW,16QAM,Band 5-mid Channel)



Peak-Average Ratio Plot(10MHz BW,64QAM,Band 5-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
5	829	20450	10	1	0	Fig.1

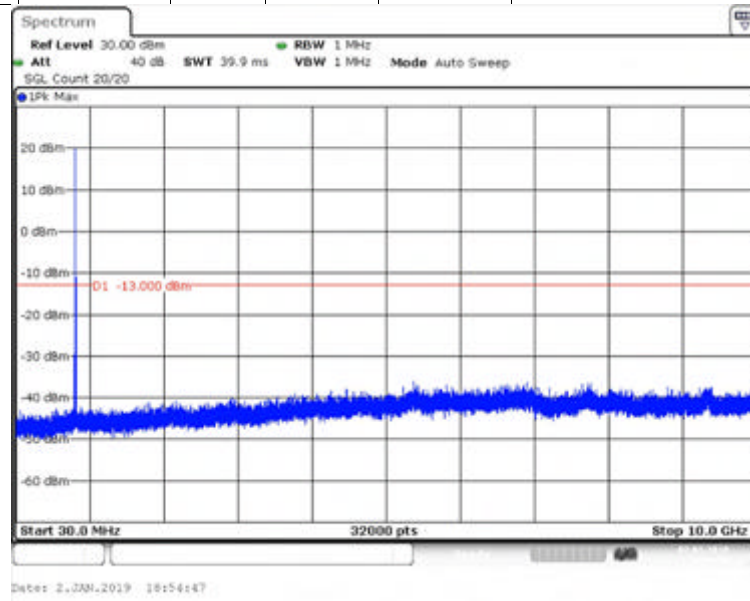


Fig.1

Band	Carrier frequency (MHz)	Channel (Mid)	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
5	836.5	20525	10	1	0	Fig.1

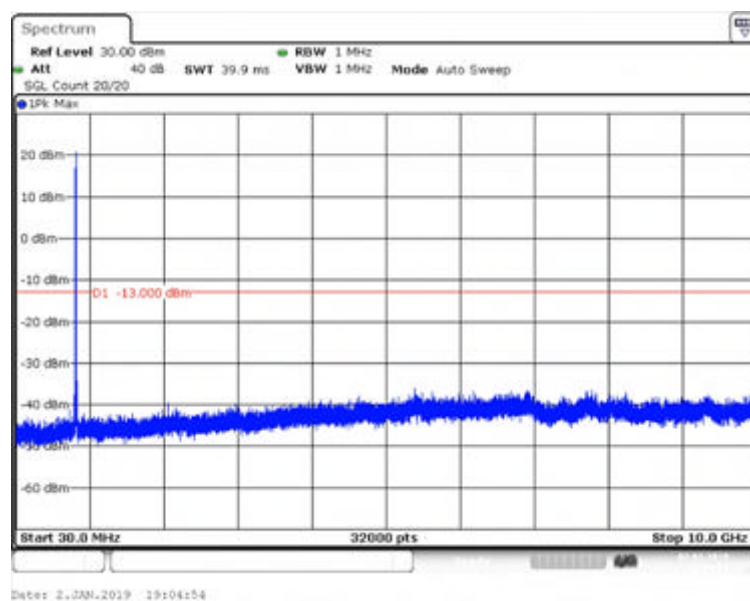


Fig.1

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
5	844	20600	10	1	0	Fig.1

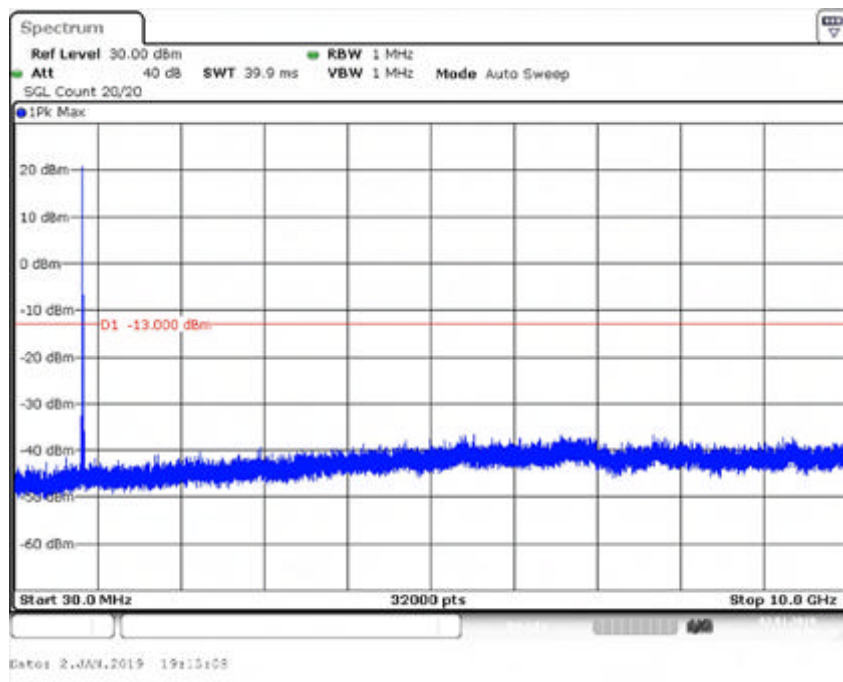


Fig.1

6 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
5	824.7	20407	1.4	1	0	Fig.1
				6	0	Fig.4

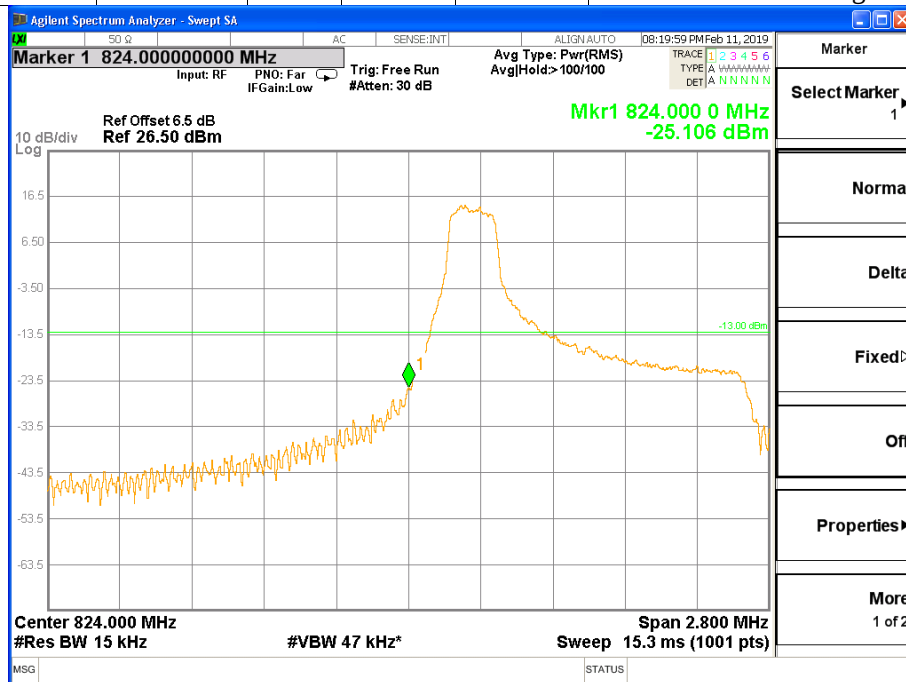


Fig.1

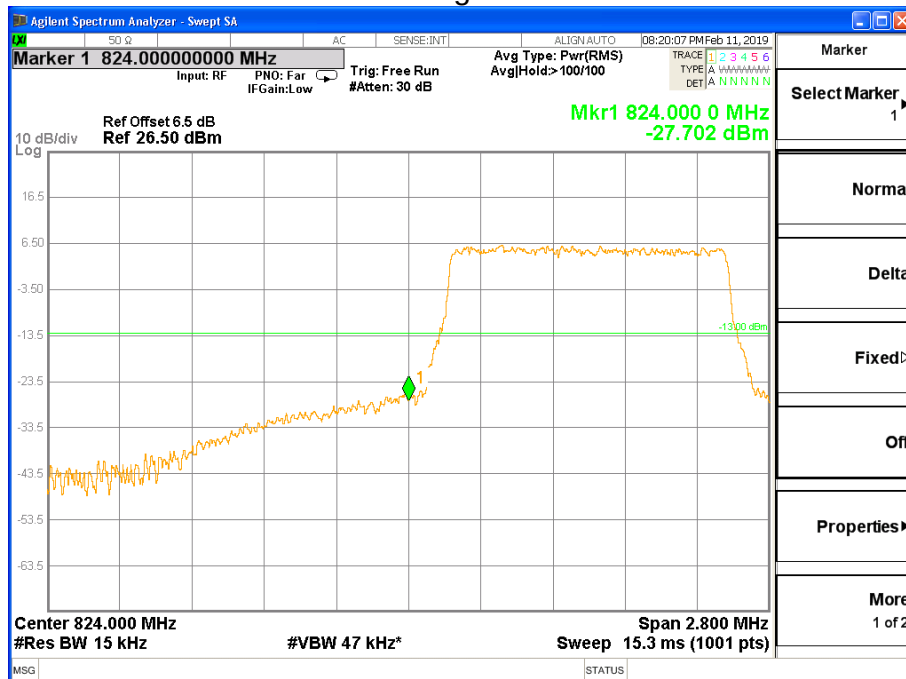


Fig.4

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
5	848.3	20643	1.4	1	0	Fig.1
				6	0	Fig.4

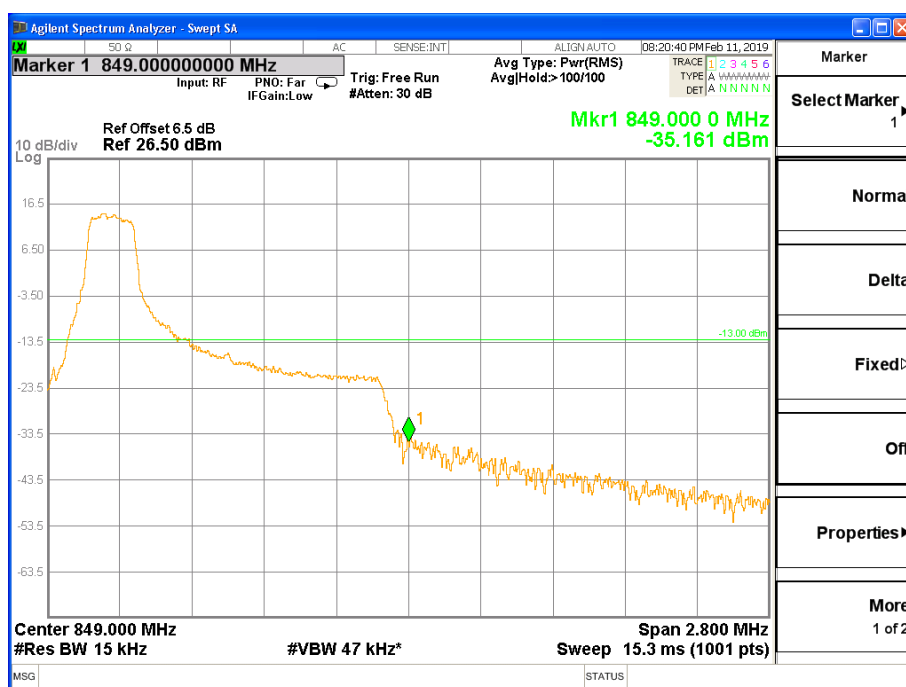


Fig.1

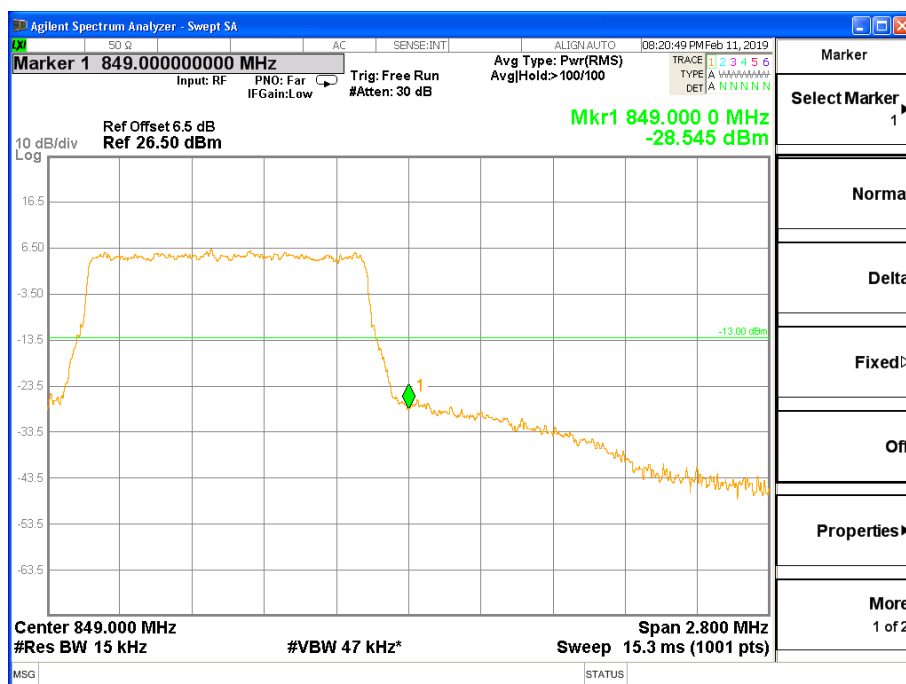


Fig.4

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
5	825.5	20415	3	1	0	Fig.1
				15	0	Fig.4

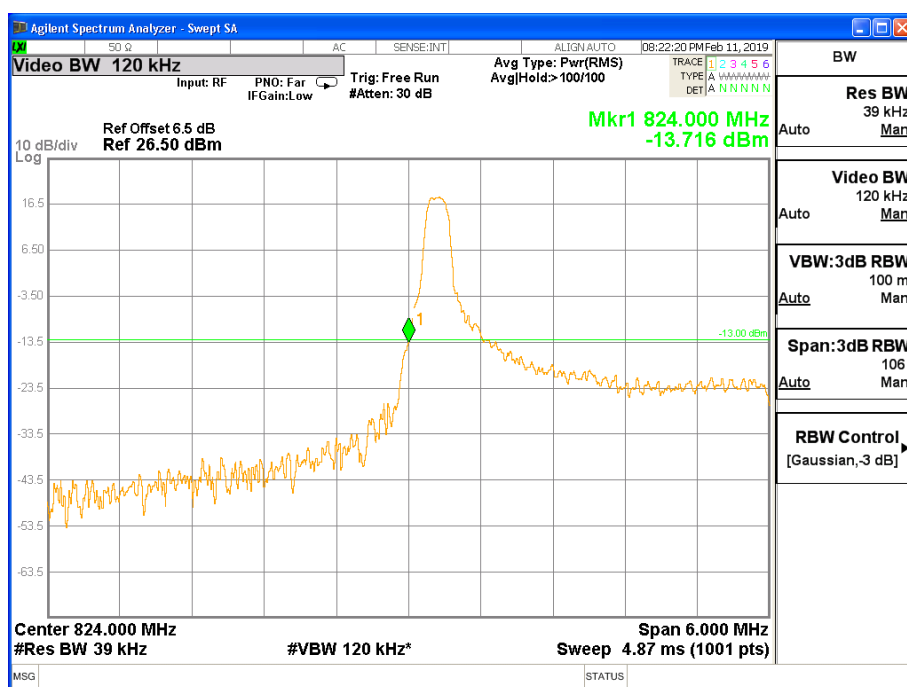


Fig.1

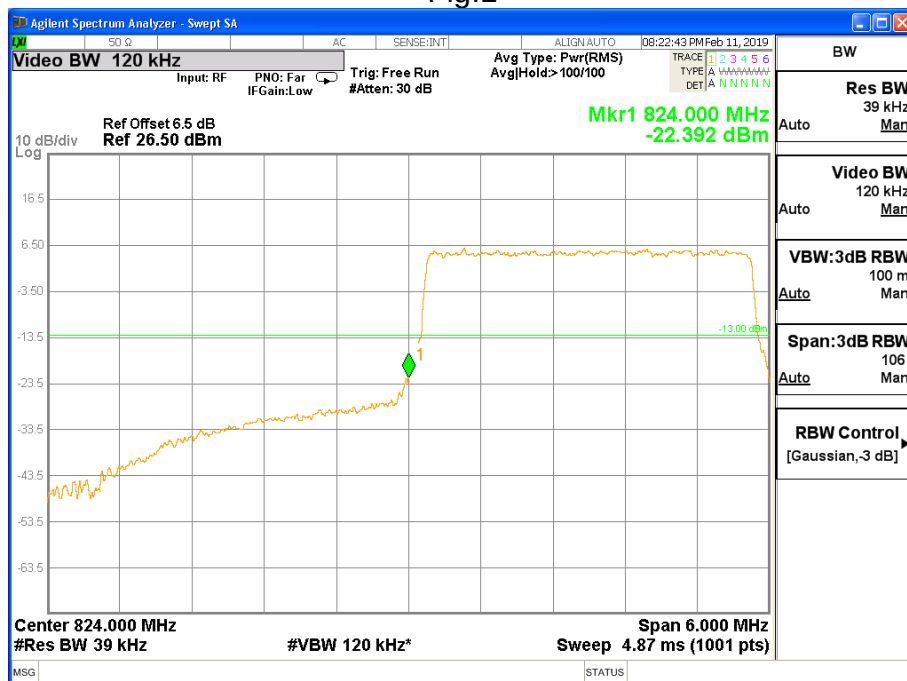


Fig.4

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
5	847.5	20635	3	1	0	Fig.1
				15	0	Fig.4

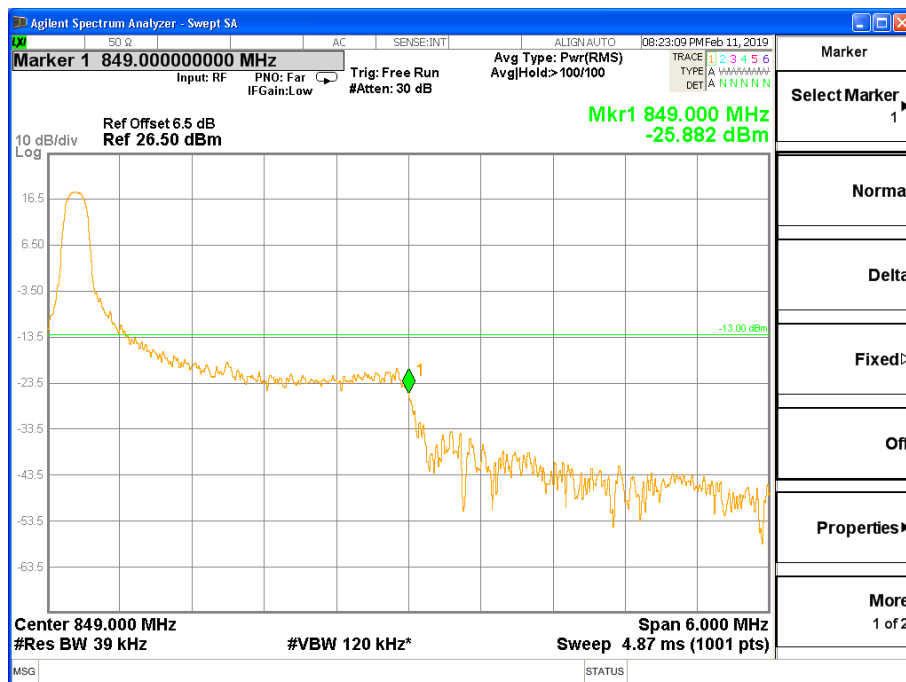


Fig.1

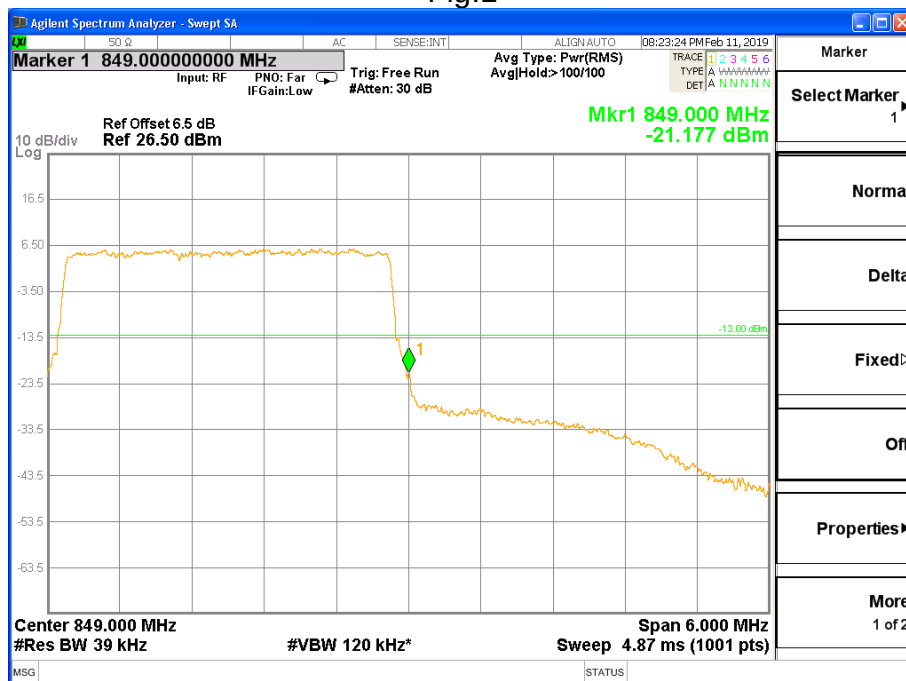


Fig.4

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
5	826.5	20425	5	1	0	Fig.1
				25	0	Fig.4

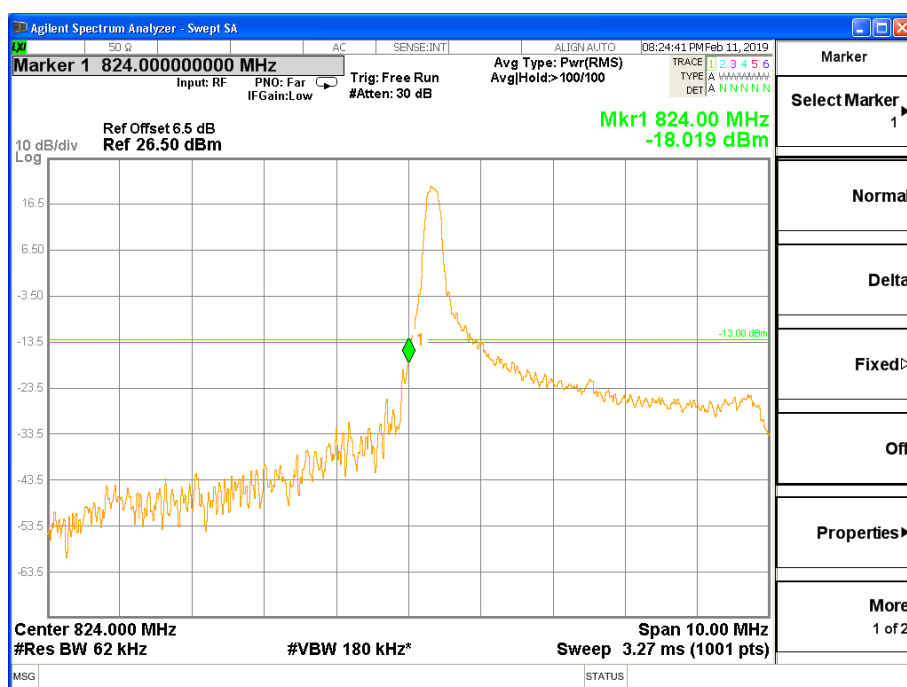


Fig.1

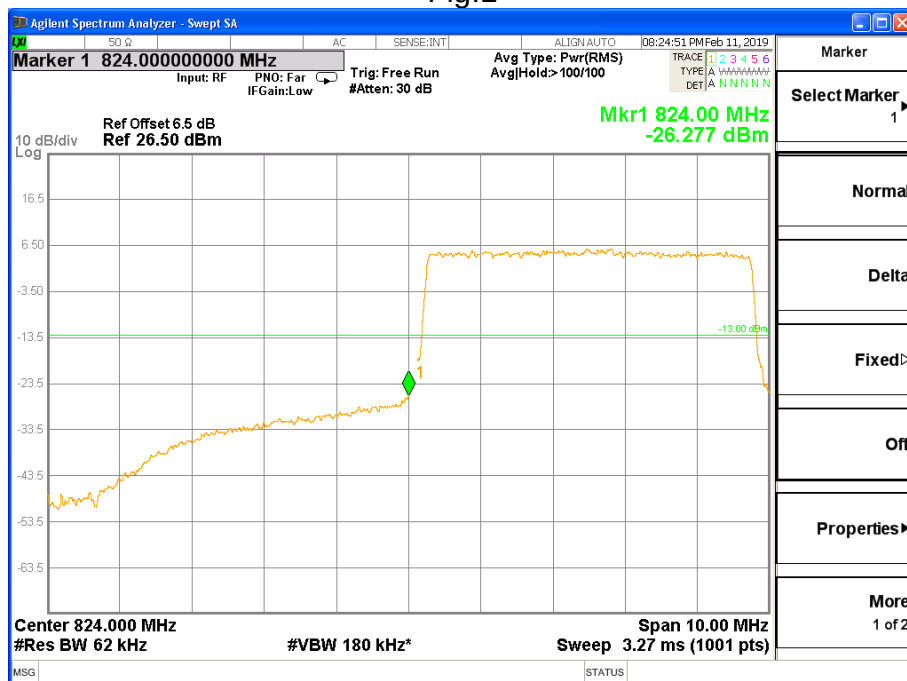


Fig.4

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
5	846.5	20625	5	1	0	Fig.1
				25	0	Fig.4

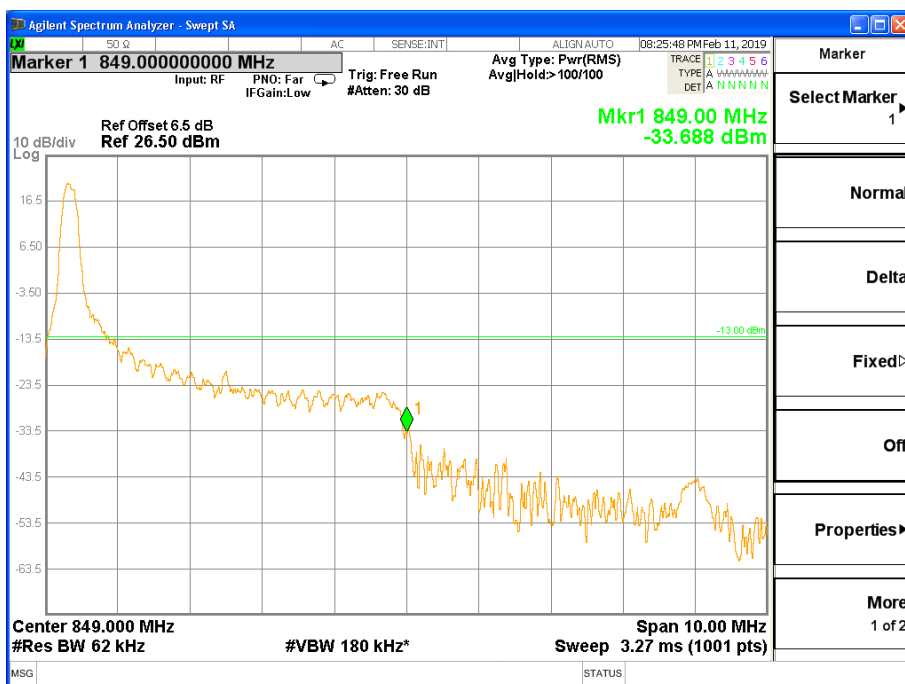


Fig.1

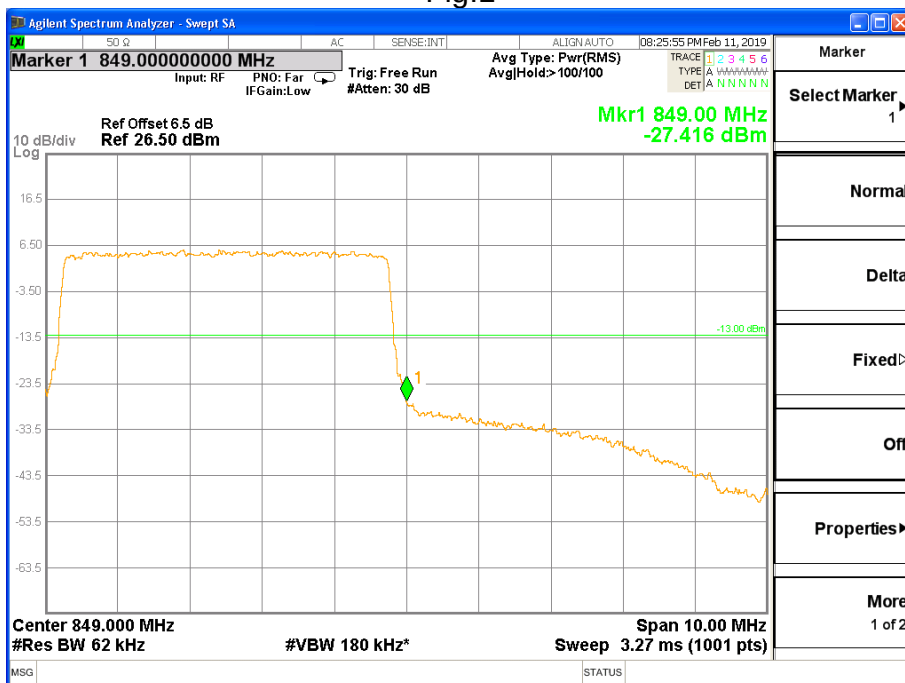


Fig.4

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
5	829	20450	10	1	0	Fig.1
				50	0	Fig.4

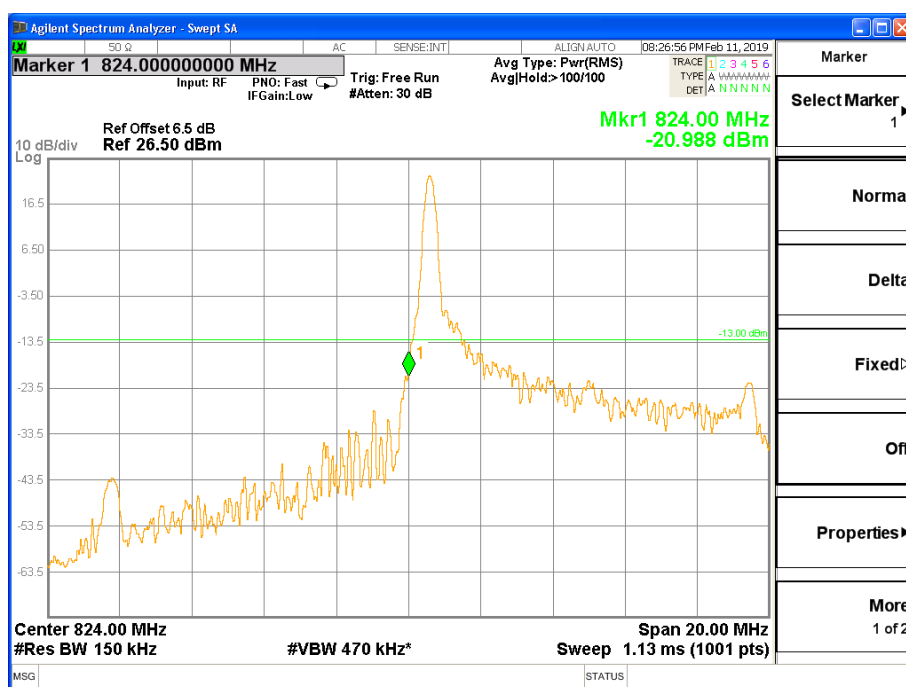


Fig.1

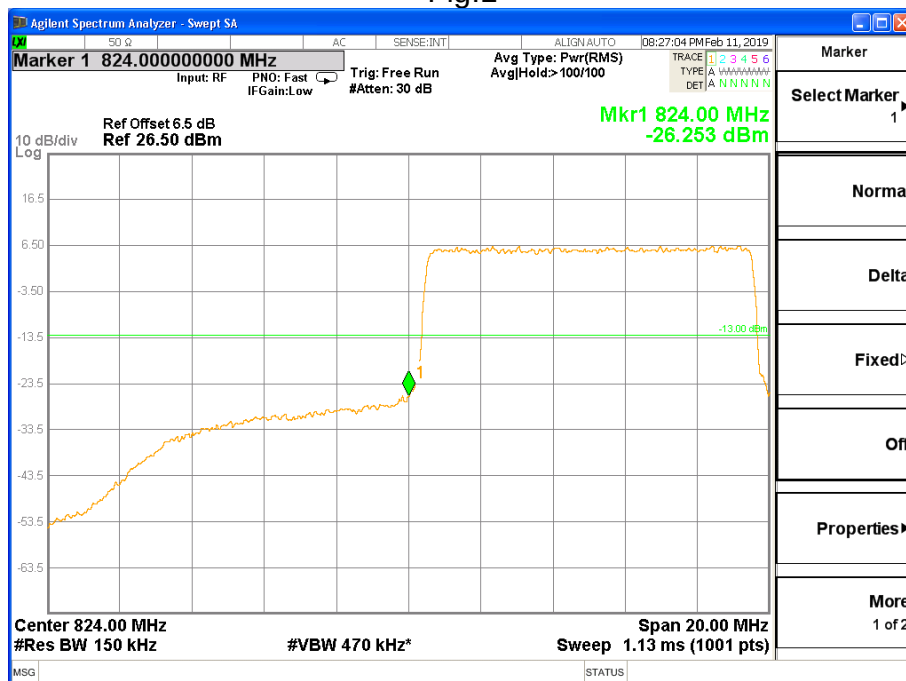


Fig.4

Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
5	844	20600	10	1	0	Fig.1
				50	0	Fig.4

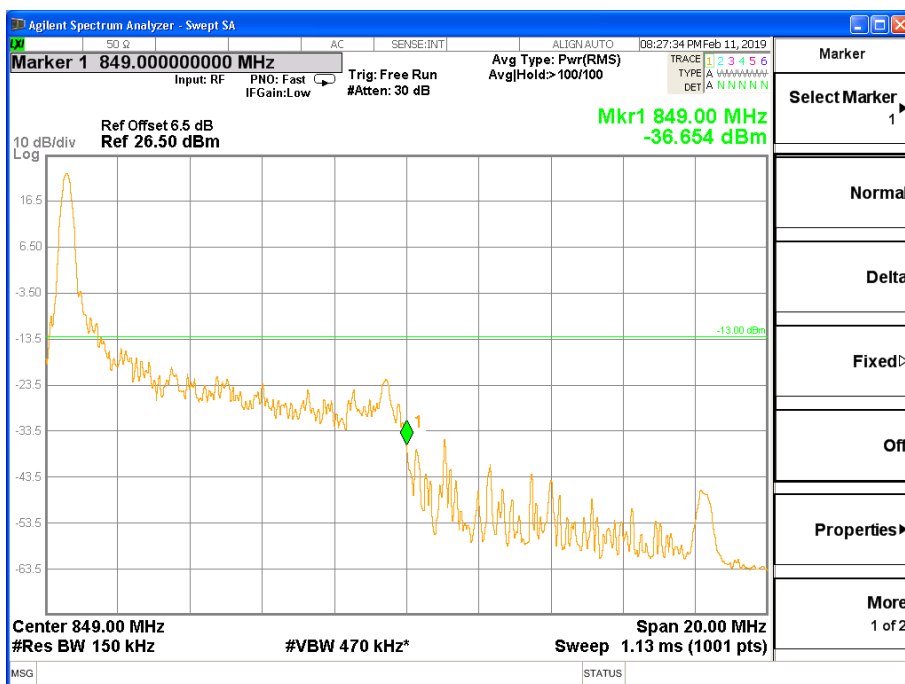


Fig.1

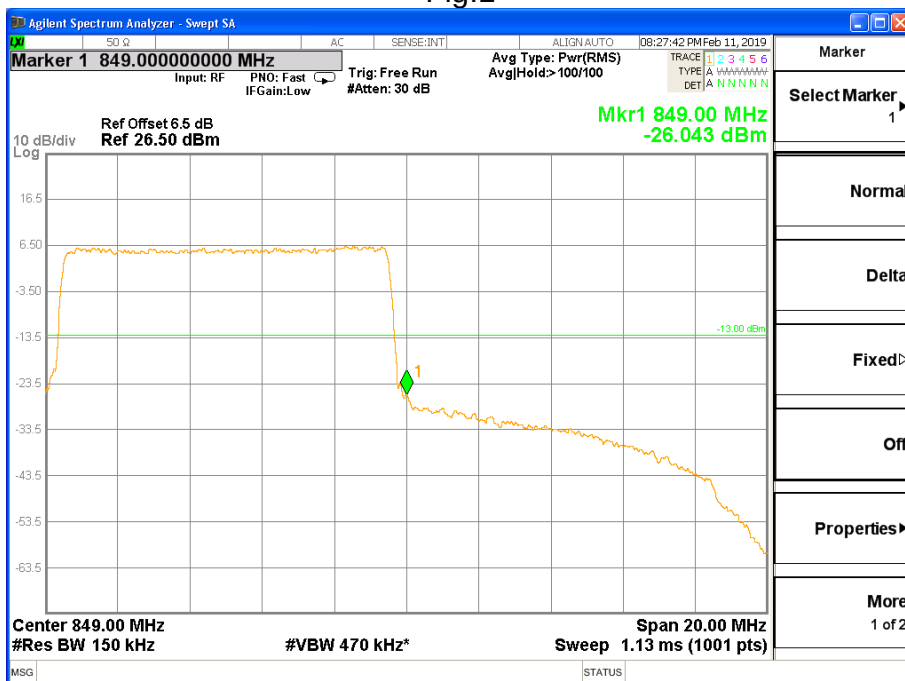


Fig.4

7 Frequency Stability

Test result:

Band	BW	Test Result (ppm)@NV		Test Result (ppm)@NT	
		Temperature(°C)		Voltage	
5	1.4	-10	-0.015	LV	0.012
		0	0.014		
		10	-0.013		
		20	-0.007		
		30	-0.021	HV	-0.004
		20	-0.015		
		40	0.008		
		50	-0.031		
	3	55	-0.013	LV	0.001
		-10	-0.001		
		0	-0.003		
		10	-0.003		
		20	-0.007	HV	-0.005
		30	-0.007		
		20	-0.005		
		40	0.001		
	5	50	-0.001	LV	-0.004
		55	0.004		
		-10	-0.008		
		0	-0.019	HV	-0.003
		10	-0.001		
		20	-0.009		
		30	-0.002		
	10	20	-0.006	LV	-0.006
		40	-0.014		
		50	-0.002		
		55	-0.003		
		-10	-0.001		
	10	0	-0.008	LV	-0.006
		10	-0.008		
		20	-0.004		
		30	-0.006		
		55	-0.003		

		20	-0.009	HV	0.001
		40	-0.006		
		50	-0.009		
		55	-0.005		

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 7

1 RF Power Output

Test result:

Antenna Gain: -6.0dBi

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
QPSK	2502.5	20775	5	1	0	19.7	13.7
				1	24	19.5	13.5
				12	6	19.1	13.1
				25	0	19.1	13.1
	2535	21100		1	0	20.7	14.7
				1	24	20.8	14.8
				12	6	19.8	13.8
				25	0	19.8	13.8
	2567.5	21425		1	0	20.9	14.9
				1	24	20.8	14.8
				12	6	20.1	14.1
				25	0	20.1	14.1

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
16QAM	2502.5	20775	5	1	0	18.4	12.4
				1	24	18.4	12.4
				12	6	18.2	12.2
				25	0	18.4	12.4
	2535	21100		1	0	19.5	13.5
				1	24	19.7	13.7
				12	6	18.9	12.9
				25	0	18.9	12.9
	2567.5	21425		1	0	20.0	14.0
				1	24	20.0	14.0
				12	6	19.2	13.2
				25	0	19.2	13.2

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
64QAM	2502.5	20775	5	1	0	18.0	12.0
				1	24	18.1	12.1
				12	6	17.9	11.9
				25	0	18.2	12.2
	2535	21100		1	0	19.2	13.2
				1	24	19.2	13.2
				12	6	18.4	12.4
				25	0	18.3	12.3
	2567.5	21425		1	0	19.7	13.7
				1	24	19.8	13.8
				12	6	18.8	12.8
				25	0	18.9	12.9

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
QPSK	2505	20800	10	1	0	19.6	13.6
				1	49	19.5	13.5
				24	12	19.1	13.1
				50	0	19.2	13.2
	2535	21100		1	0	20.6	14.6
				1	49	20.7	14.7
				24	12	19.8	13.8
				50	0	19.9	13.9
	2565	21400		1	0	21.1	15.1
				1	49	21.2	15.2
				24	12	20.1	14.1
				50	0	20.1	14.1

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
16QAM	2505	20800	10	1	0	19.5	13.5
				1	49	19.7	13.7
				24	12	18.5	12.5
				50	0	18.4	12.4
	2535	21100		1	0	20.4	14.4
				1	49	20.6	14.6
				24	12	19.0	13.0
				50	0	19.0	13.0
	2565	21400		1	0	19.9	13.9
				1	49	19.8	13.8
				24	12	19.3	13.3
				50	0	19.3	13.3

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
64QAM	2505	20800	10	1	0	19.1	13.1
				1	49	19.3	13.3
				24	12	18.1	12.1
				50	0	18.0	12.0
	2535	21100		1	0	19.9	13.9
				1	49	20.3	14.3
				24	12	18.3	12.3
				50	0	18.5	12.5
	2565	21400		1	0	19.2	13.2
				1	49	19.4	13.4
				24	12	19.0	13.0
				50	0	19.1	13.1

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
QPSK	2507.5	20825	15	1	0	19.7	13.7
				1	74	19.5	13.5
				40	18	18.9	12.9
				75	0	19.2	13.2
	2535	21100		1	0	20.6	14.6
				1	74	20.9	14.9
				40	18	19.9	13.9
				75	0	19.8	13.8
	2562.5	21375		1	0	21.1	15.1
				1	74	21.1	15.1
				40	18	20.1	14.1
				75	0	20.1	14.1

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
16QAM	2507.5	20825	15	1	0	19.5	13.5
				1	74	19.3	13.3
				40	18	18.3	12.3
				75	0	18.4	12.4
	2535	21100		1	0	20.1	14.1
				1	74	20.7	14.7
				40	18	18.9	12.9
				75	0	19.1	13.1
	2562.5	21375		1	0	20.5	14.5
				1	74	20.4	14.4
				40	18	19.2	13.2
				75	0	19.2	13.2

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
64QAM	2507.5	20825	15	1	0	19.2	13.2
				1	74	19.0	13.0
				40	18	18.0	12.0
				75	0	18.1	12.1
	2535	21100		1	0	19.6	13.6
				1	74	20.2	14.2
				40	18	18.2	12.2
				75	0	18.5	12.5
	2562.5	21375		1	0	19.1	13.1
				1	74	20.1	14.1
				40	18	18.5	12.5
				75	0	18.8	12.8

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
QPSK	2510	20850	20	1	0	19.8	13.8
				1	99	19.5	13.5
				50	25	19.2	13.2
				100	0	19.2	13.2
	2535	21100		1	0	20.9	14.9
				1	99	21.1	15.1
				50	25	19.9	13.9
				100	0	19.9	13.9
	2560	21350		1	0	21.2	15.2
				1	99	21.0	15.0
				50	25	20.1	14.1
				100	0	20.1	14.1

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
16QAM	2510	20850	20	1	0	19.0	13.0
				1	99	19.3	13.3
				50	25	18.2	12.2
				100	0	18.4	12.4
	2535	21100		1	0	20.0	14.0
				1	99	20.2	14.2
				50	25	18.9	12.9
				100	0	19.0	13.0
	2560	21350		1	0	20.8	14.8
				1	99	21.1	15.1
				50	25	19.2	13.2
				100	0	19.2	13.2

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average(dBm)
64QAM	2510	20850	20	1	0	18.7	12.7
				1	99	18.8	12.8
				50	25	17.9	11.9
				100	0	18.0	12.0
	2535	21100		1	0	19.7	13.7
				1	99	19.9	13.9
				50	25	18.3	12.3
				100	0	18.5	12.5
	2560	21350		1	0	20.2	14.2
				1	99	20.5	14.5
				50	25	18.7	12.7
				100	0	18.5	12.5

2 Occupied Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2502.5	20775	5	25	0	4.537	Fig.1	4.537	Fig.2	4.537	Fig.3

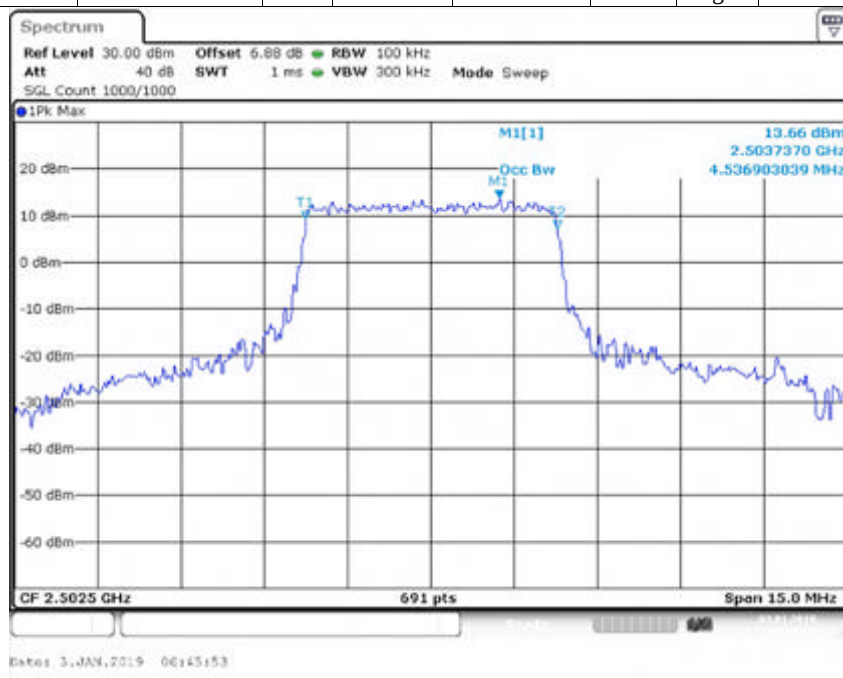


Fig.1

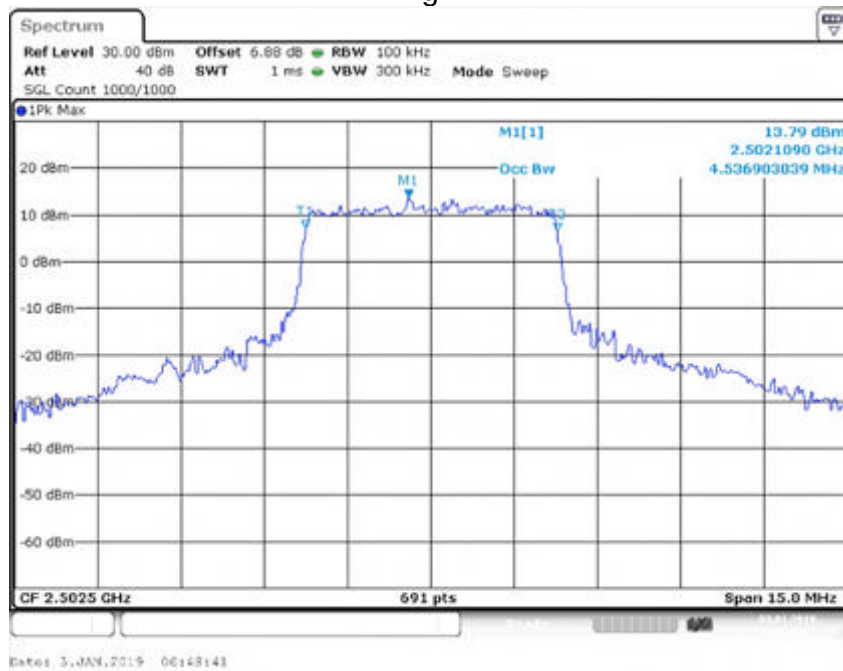


Fig.2

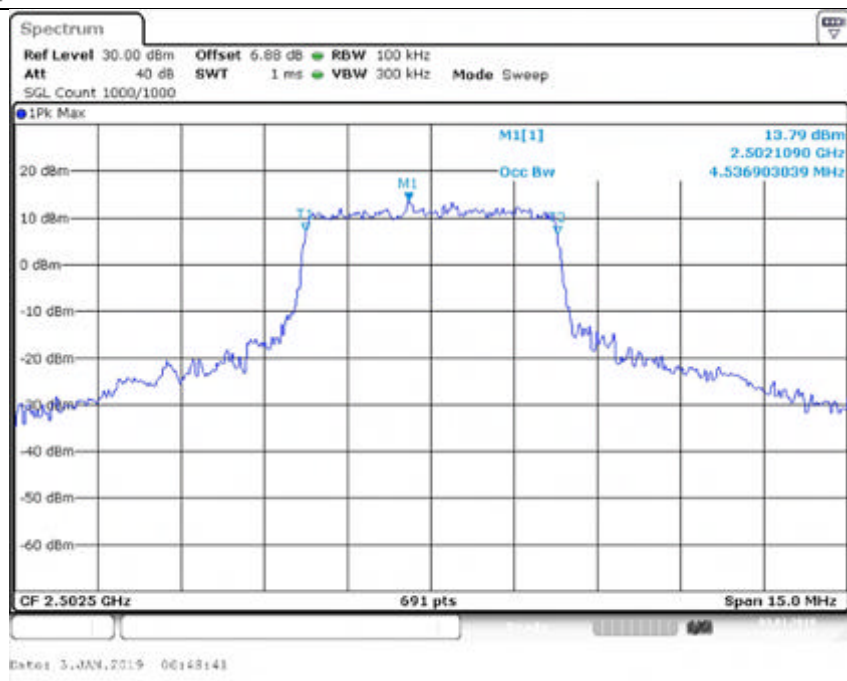


Fig.3

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2535	21100	5	25	0	4.515	Fig.1	4.537	Fig.2	4.537	Fig.3

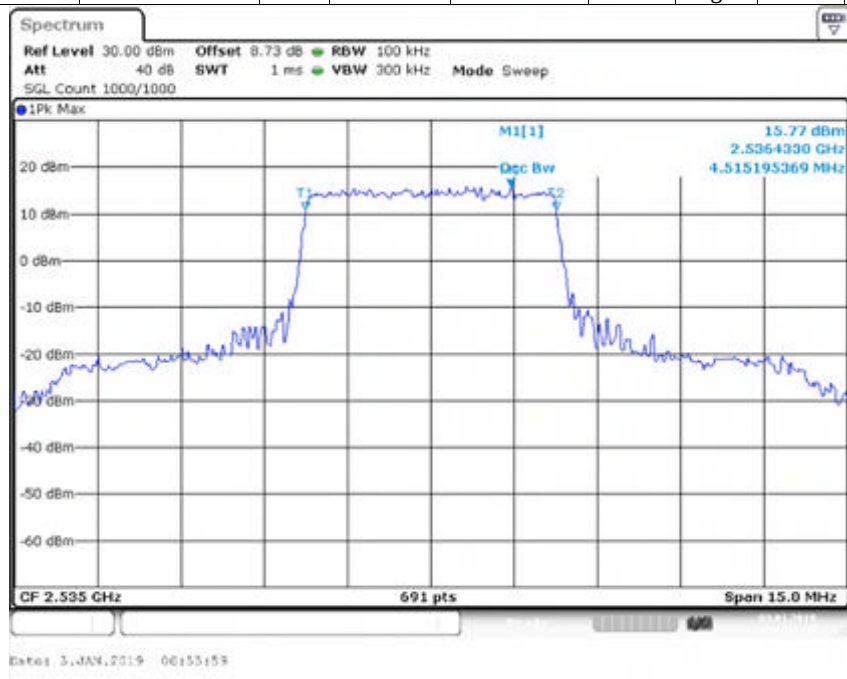


Fig.1

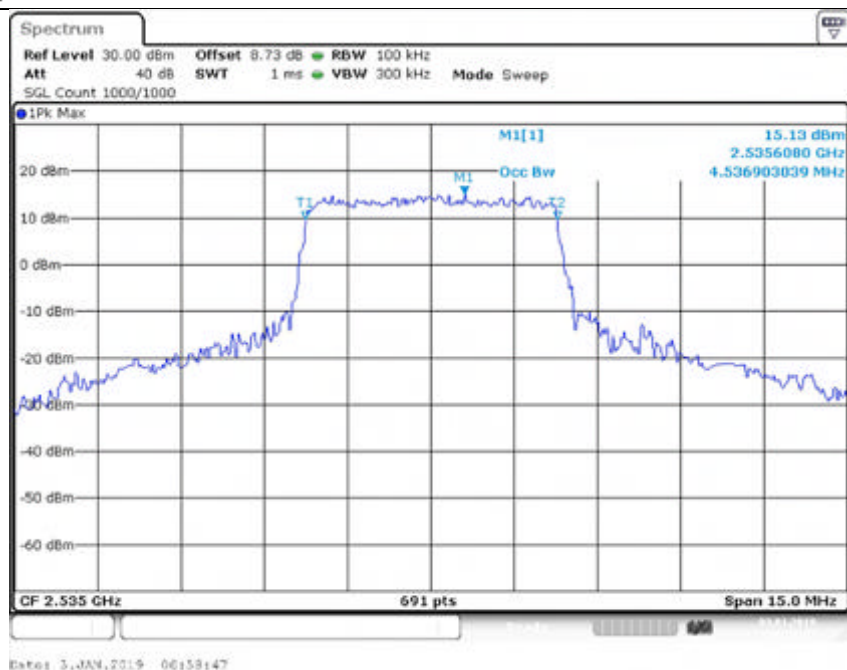


Fig.2

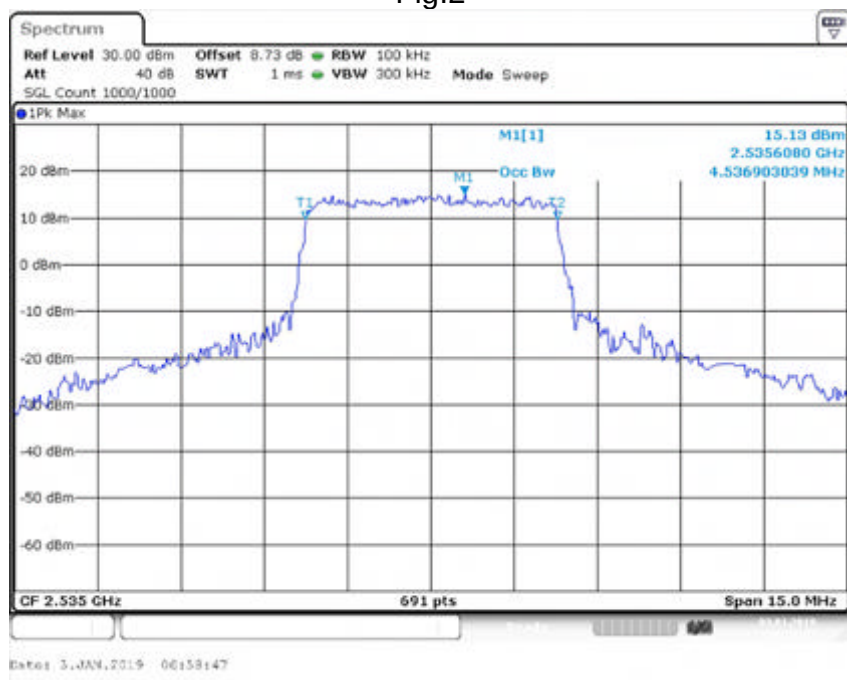


Fig.3

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
7	2567.5	21425	5	25	0	4.515	Fig.1	4.537	Fig.2	4.537	Fig.3

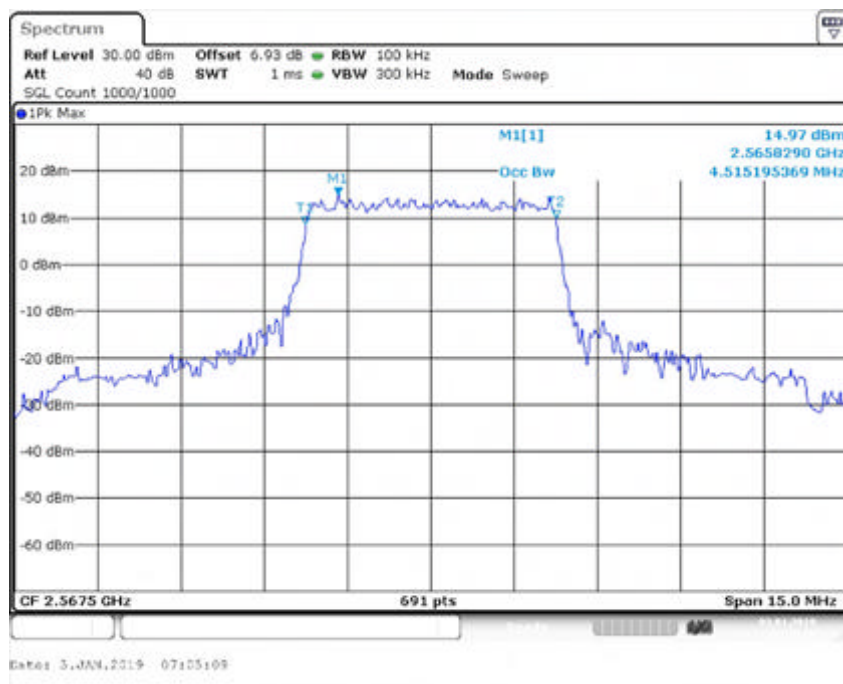


Fig.1

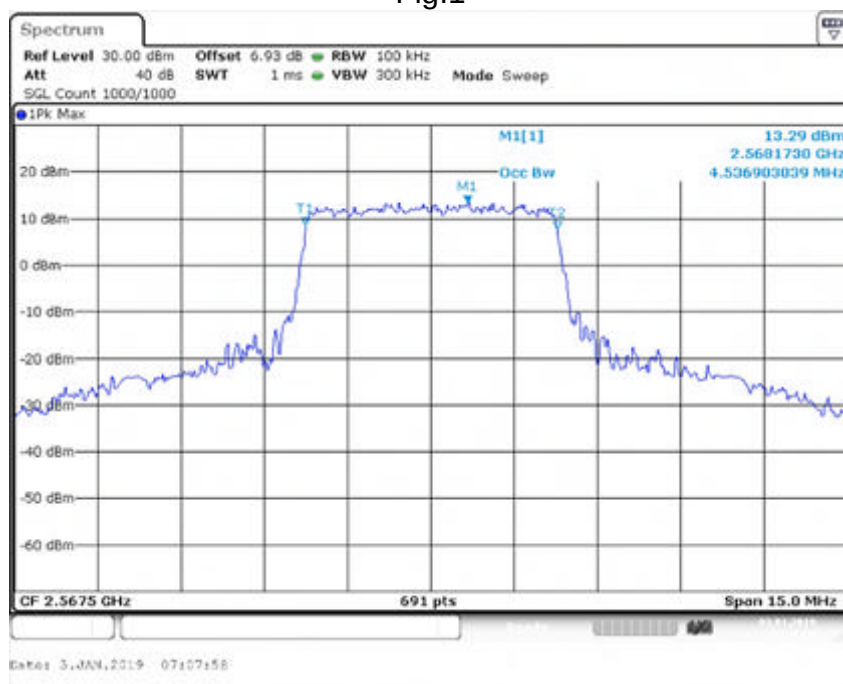


Fig.2

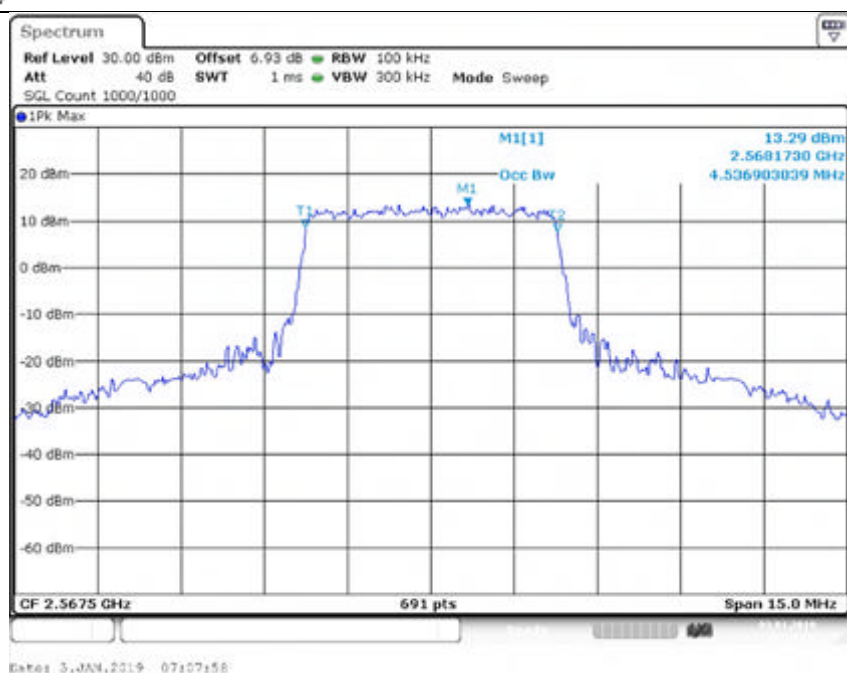


Fig.3

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK	16-QAM	64-QAM			
7	2505	20800	10	50	0	9.074	Fig.1	9.074	Fig.2	9.074	Fig.3

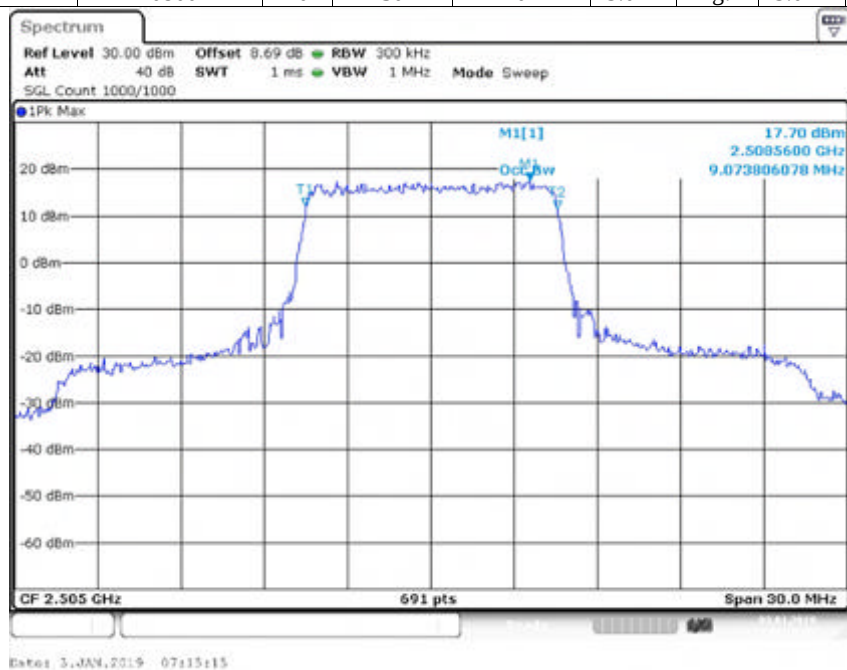


Fig.1

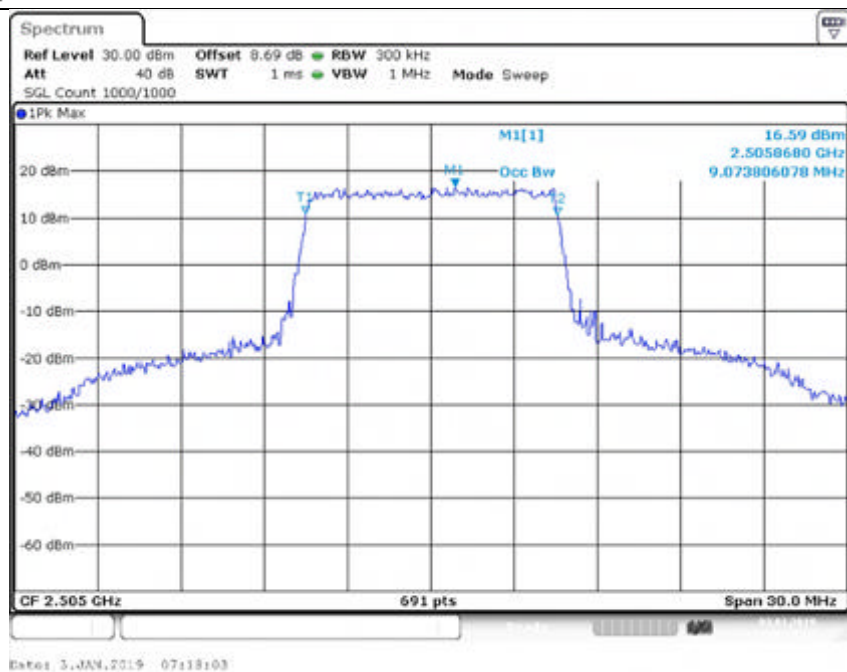


Fig.2

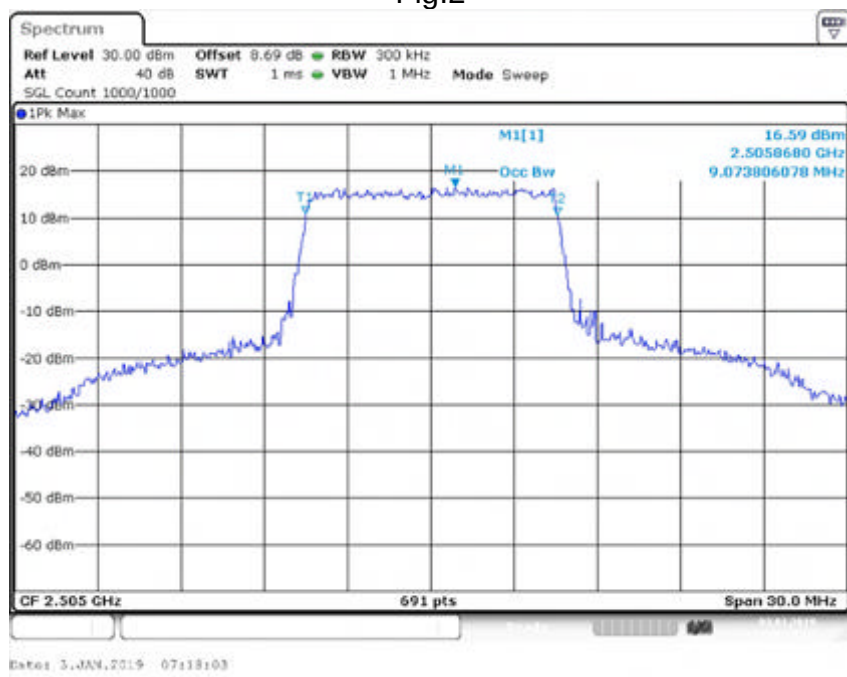


Fig.3