APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 7

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2502.5	20775	5	1	0	23.43
				1	24	23.43
				12	6	22.64
				25	0	22.60
	2535	21100		1	0	23.37
				1	24	23.37
				12	6	22.56
				25	0	22.53
	2567.5	21425		1	0	23.22
				1	24	23.22
				12	6	22.51
				25	0	22.43
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	2502.5	20775	5	1	0	22.77
				1	24	22.75
				12	6	21.59
				25	0	21.57
	2535	21100		1	0	22.65
				1	24	22.65
				12	6	21.49
				25	0	21.47
	2567.5	21425		1	0	22.57
				1	24	22.57
				12	6	21.42
				25	0	21.34
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	2502.5	20775	5	1	0	22.69
				1	24	22.67
				12	6	21.48
				25	0	21.39
	2535	21100		1	0	22.59
				1	24	22.59
				12	6	21.43
				25	0	21.40
	2567.5	21425		1	0	22.50
				1	24	22.52
				12	6	21.39
				25	0	21.31

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2505	20800	10	1	0	23.41
				1	49	23.41
				24	12	22.62
				50	0	22.58
	2535	21100		1	0	23.35
				1	49	23.35
				24	12	22.55
				50	0	22.52
	2565	21400		1	0	23.21
				1	49	23.21
				24	12	22.50
				50	0	22.42
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	2505	20800	10	1	0	22.76
				1	49	22.76
				24	12	21.58
				50	0	21.56
	2535	21100		1	0	22.64
				1	49	22.64
				24	12	21.48
				50	0	21.46
	2565	21400		1	0	22.56
				1	49	22.56
				24	12	21.41
				50	0	21.33
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	2505	20800	10	1	0	22.68
				1	49	22.68
				24	12	21.50
				50	0	21.41
	2535	21100		1	0	22.61
				1	49	22.61
				24	12	21.45
				50	0	21.42
	2565	21400		1	0	22.52
				1	49	22.52
				24	12	21.39
				50	0	21.31

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2507.5	20825	15	1	0	23.45
				1	74	23.45
				40	18	22.66
				75	0	22.62
	2535	21100		1	0	23.39
				1	74	23.39
				40	18	22.58
				75	0	22.51
	2562.5	21375		1	0	23.20
				1	74	23.20
				40	18	22.49
				75	0	22.41
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	2507.5	20825	15	1	0	22.75
				1	74	22.75
				40	18	21.59
				75	0	21.53
	2535	21100		1	0	22.61
				1	74	22.61
				40	18	21.45
				75	0	21.43
	2562.5	21375		1	0	22.53
				1	74	22.53
				40	18	21.38
				75	0	21.30
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	2507.5	20825	15	1	0	22.65
				1	74	22.72
				40	18	21.53
				75	0	21.44
	2535	21100		1	0	22.64
				1	74	22.64
				40	18	21.48
				75	0	21.45
	2562.5	21375		1	0	22.55
				1	74	22.55
				40	18	21.42
				75	0	21.34

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2510	20850	20	1	0	23.48
				1	99	23.48
				50	25	22.69
				100	0	22.65
	2535	21100		1	0	23.42
				1	99	23.42
				50	25	22.61
				100	0	22.58
	2560	21350		1	0	23.27
				1	99	23.27
				50	25	22.56
				100	0	22.48
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	2510	20850	20	1	0	22.82
				1	99	22.82
				50	25	21.66
				100	0	21.64
	2535	21100		1	0	22.72
				1	99	22.72
				50	25	21.56
				100	0	21.54
	2560	21350		1	0	22.64
				1	99	22.64
				50	25	21.49
				100	0	21.41
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	2510	20850	20	1	0	22.76
				1	99	22.76
				50	25	21.57
				100	0	21.48
	2535	21100		1	0	22.68
				1	99	22.68
				50	25	21.52
				100	0	21.49
	2560	21350		1	0	22.59
				1	99	22.59
				50	25	21.46
				100	0	21.38

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	4.4939	Fig.1	4.4911	Fig.2	4.4865	Fig.3
7	2535	21100	5	25	0	4.4999	Fig.4	4.4818	Fig.5	4.4956	Fig.6
7	2567.5	21425	5	25	0	4.4844	Fig.7	4.4986	Fig.8	4.4851	Fig.9

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	5.158	Fig.1	5.176	Fig.2	5.020	Fig.3
7	2535	21100	5	25	0	5.133	Fig.4	5.070	Fig.5	5.111	Fig.6
7	2567.5	21425	5	25	0	5.043	Fig.7	5.034	Fig.8	4.987	Fig.9

Fig.1

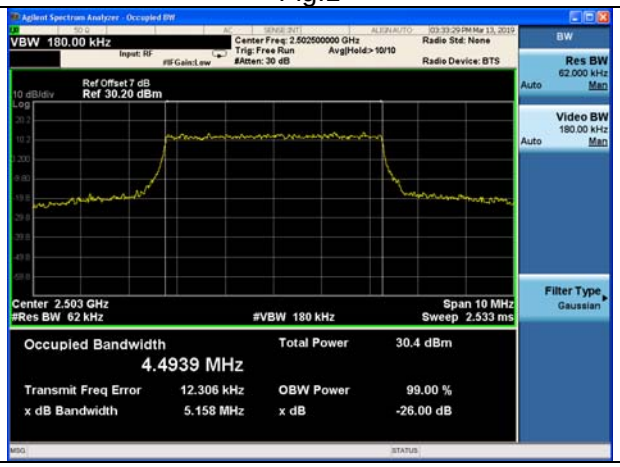


Fig.2

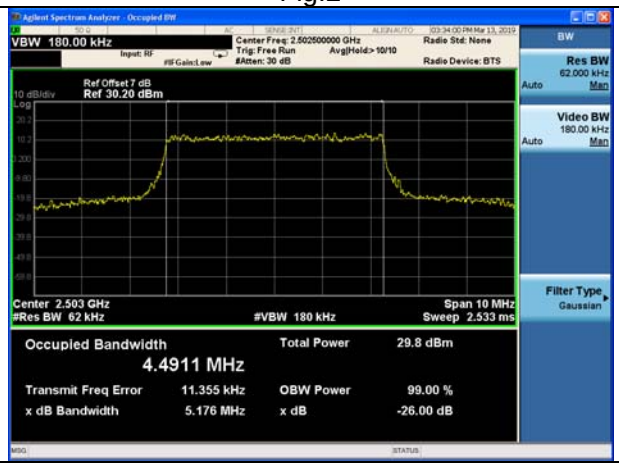


Fig.3

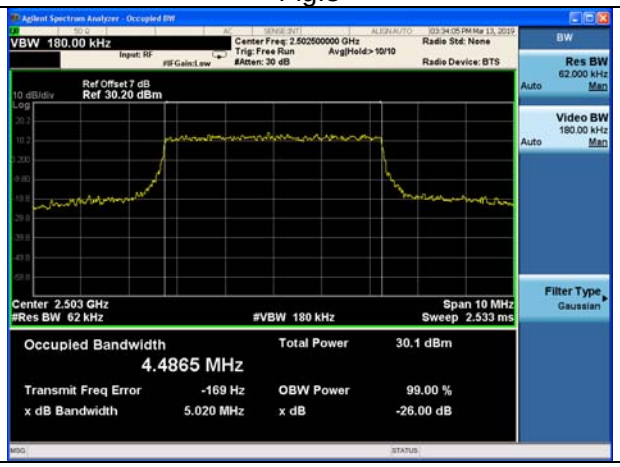


Fig.4

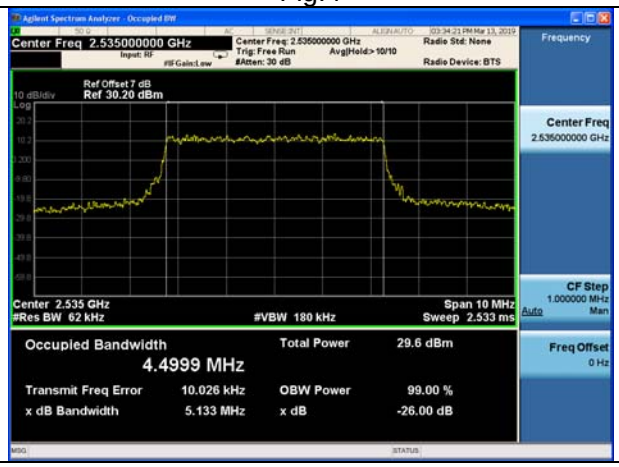


Fig.5

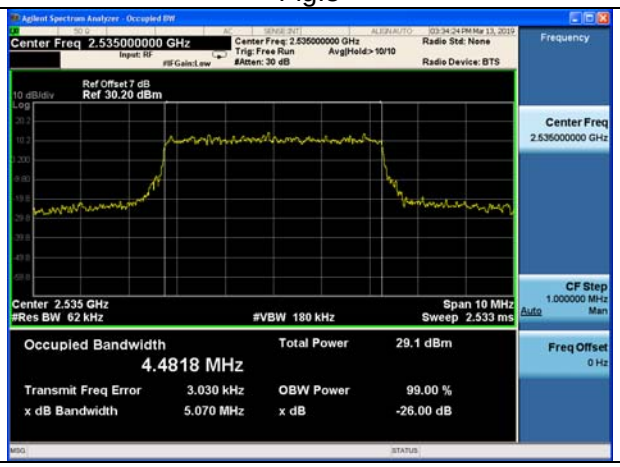


Fig.6

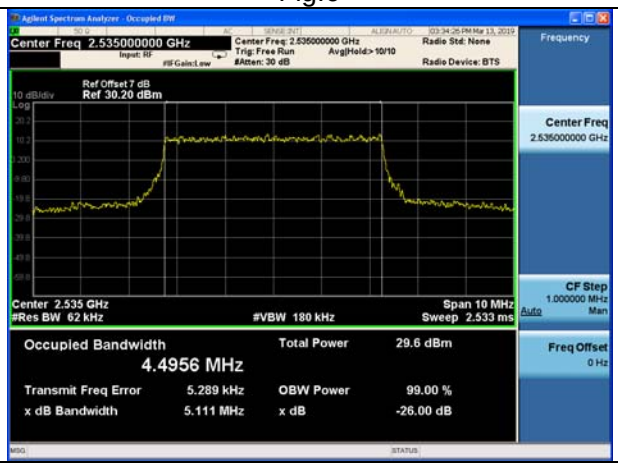


Fig.7

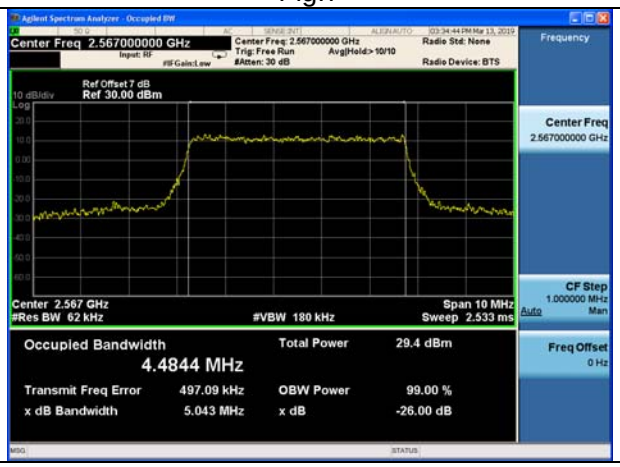


Fig.8

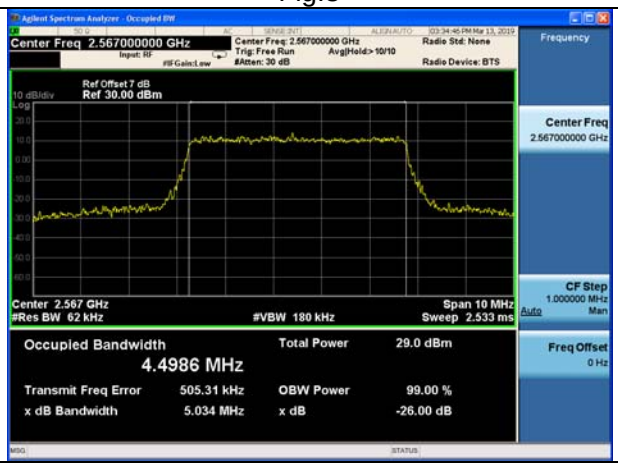
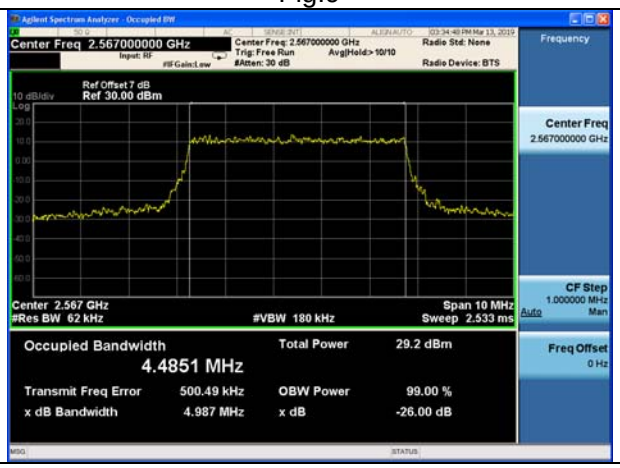


Fig.9



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	8.9740	Fig.1	8.9583	Fig.2	8.9543	Fig.3
7	2535	21100	10	50	0	8.9474	Fig.4	8.9554	Fig.5	8.9578	Fig.6
7	2565	21400	10	50	0	8.9442	Fig.7	8.9508	Fig.8	8.9743	Fig.9

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	9.768	Fig.1	9.977	Fig.2	9.798	Fig.3
7	2535	21100	10	50	0	9.814	Fig.4	9.894	Fig.5	9.922	Fig.6
7	2565	21400	10	50	0	9.783	Fig.7	9.834	Fig.8	9.812	Fig.9

Fig.1

Fig.2

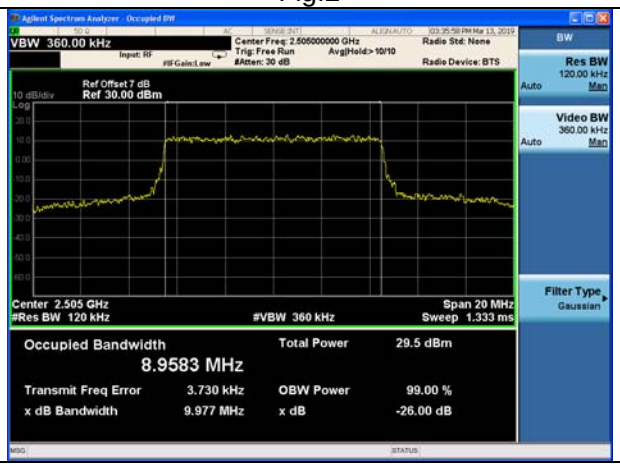


Fig.3

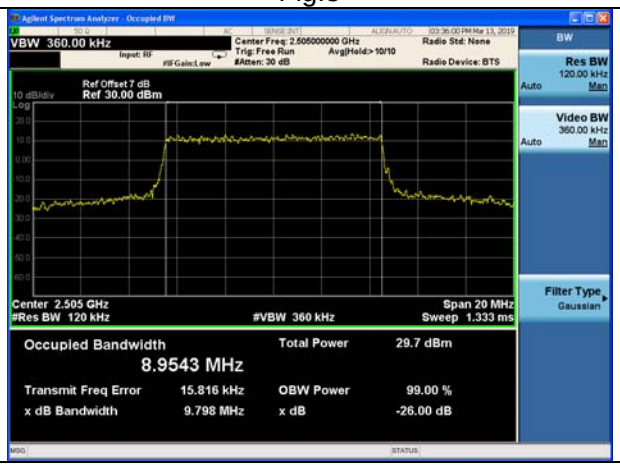


Fig.4

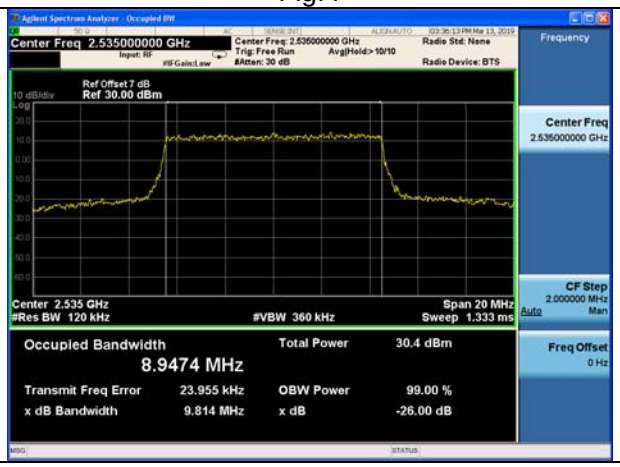


Fig.5

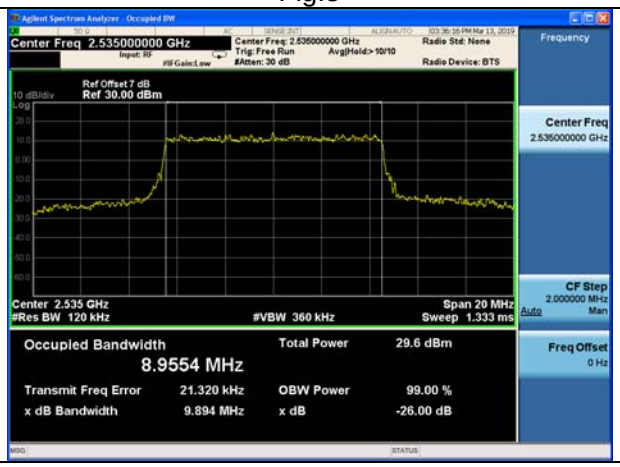


Fig.6

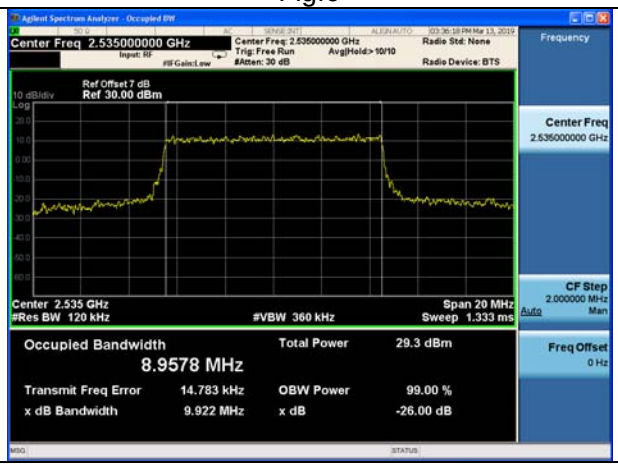


Fig.7

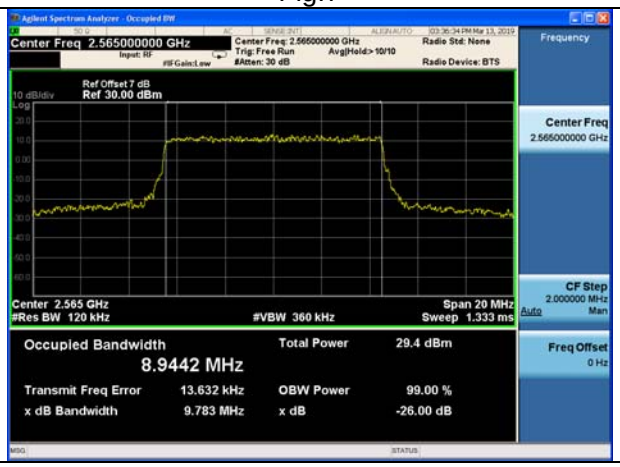


Fig.8

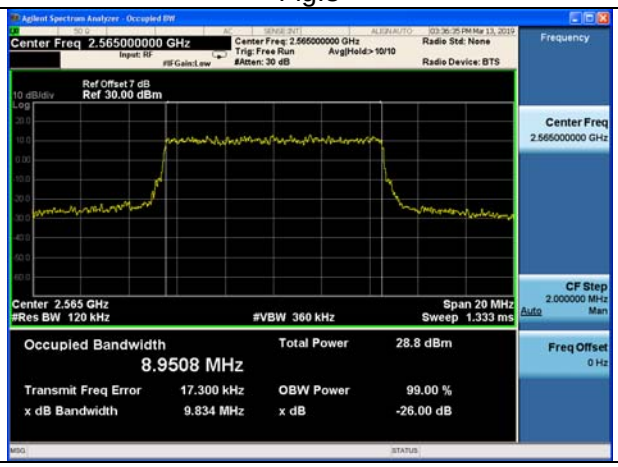
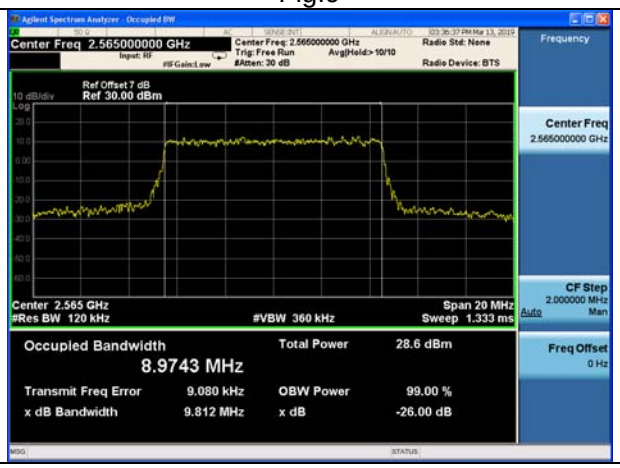


Fig.9



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	13.453	Fig.1	13.434	Fig.2	13.413	Fig.3
7	2535	21100	15	75	0	13.414	Fig.4	13.448	Fig.5	13.456	Fig.6
7	2562.5	21375	15	75	0	13.421	Fig.7	13.441	Fig.8	13.421	Fig.9

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	14.92	Fig.1	14.57	Fig.2	14.59	Fig.3
7	2535	21100	15	75	0	14.60	Fig.4	14.58	Fig.5	14.55	Fig.6
7	2562.5	21375	15	75	0	14.72	Fig.7	14.64	Fig.8	14.80	Fig.9

Fig.1

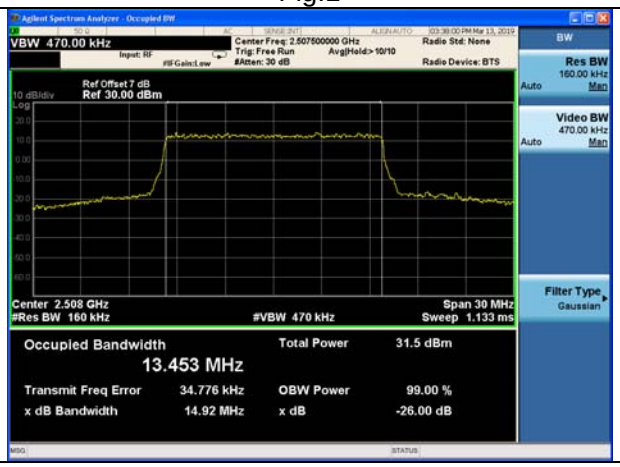


Fig.2

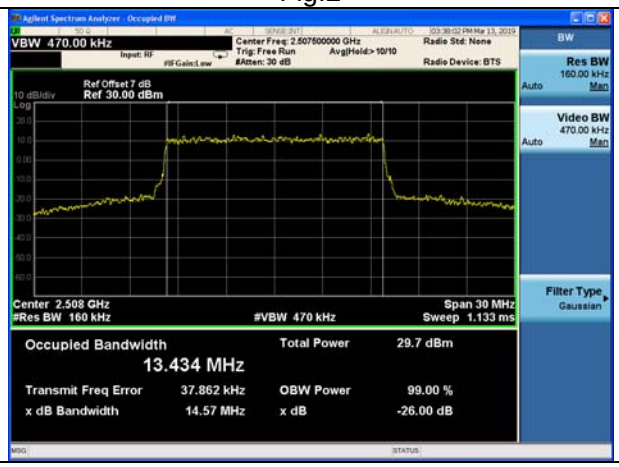


Fig.3

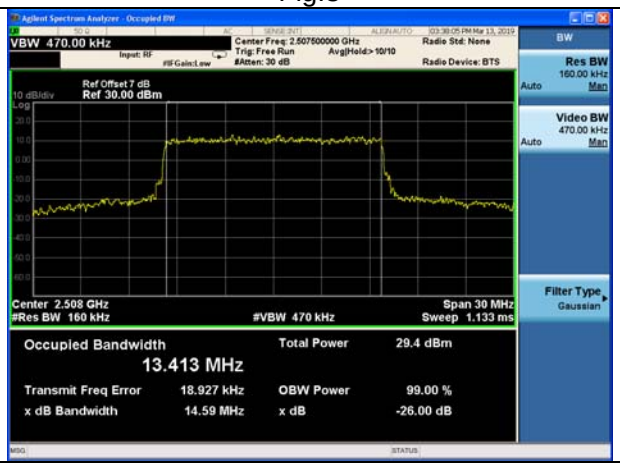


Fig.4

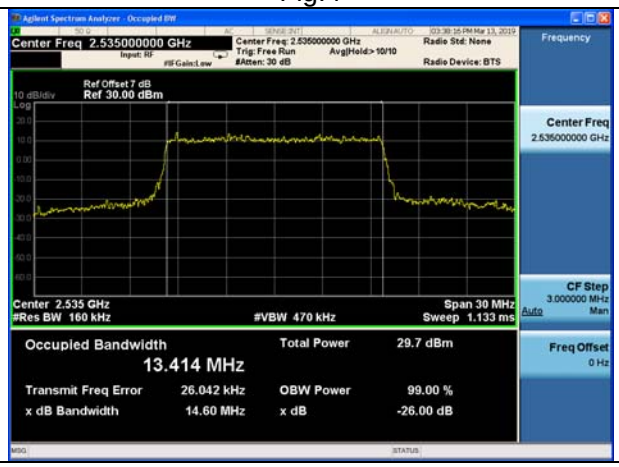


Fig.5

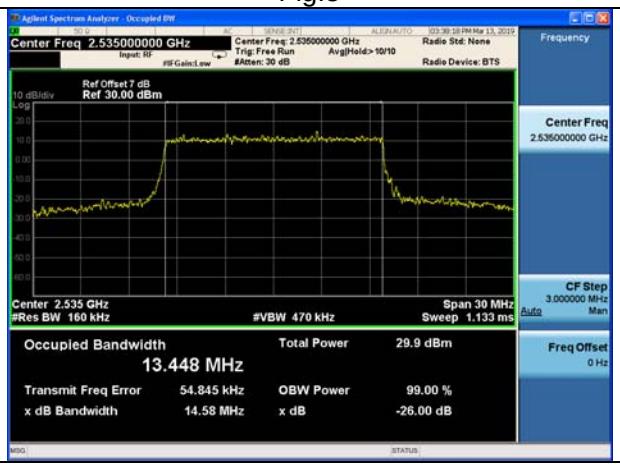


Fig.6

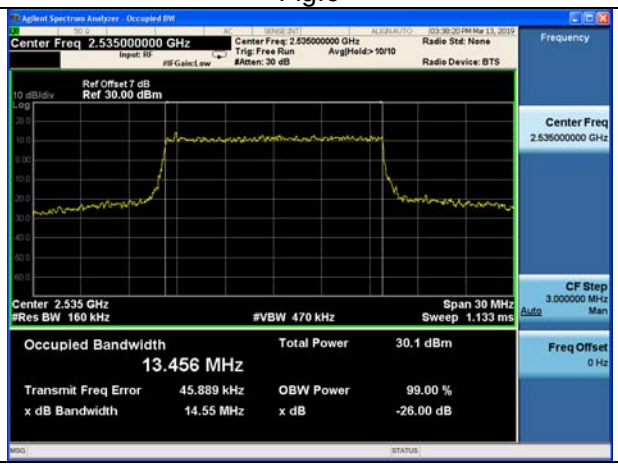


Fig.7

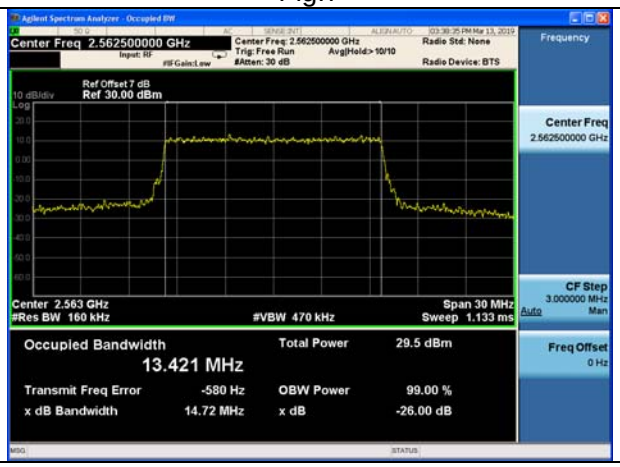


Fig.8

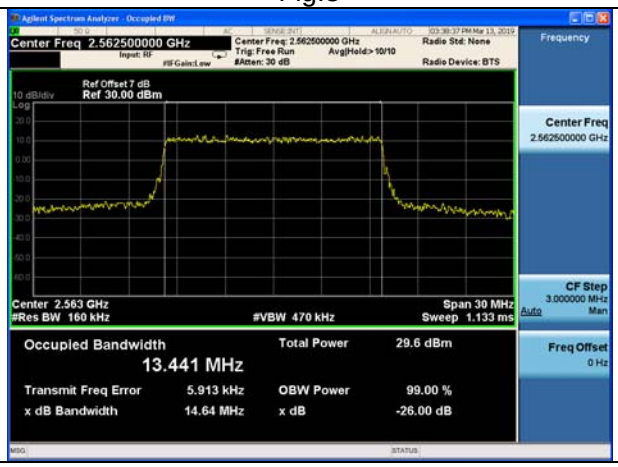
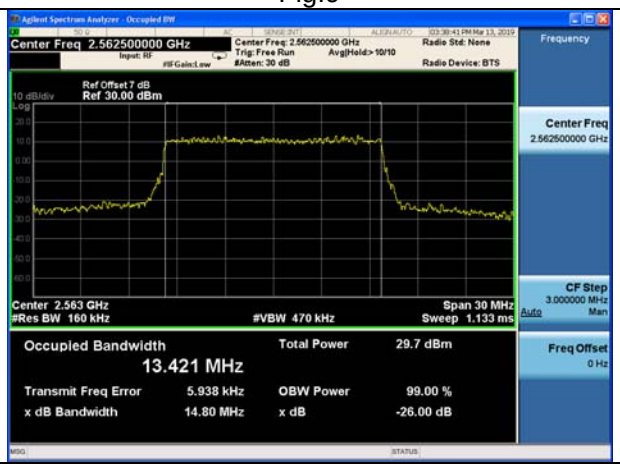


Fig.9



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	17.863	Fig.1	17.822	Fig.2	17.869	Fig.3
7	2535	21100	20	100	0	17.868	Fig.4	17.830	Fig.5	17.841	Fig.6
7	2560	21350	20	100	0	17.851	Fig.7	17.889	Fig.8	17.915	Fig.9

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	19.13	Fig.1	19.30	Fig.2	19.29	Fig.3
7	2535	21100	20	100	0	19.25	Fig.4	19.16	Fig.5	19.09	Fig.6
7	2560	21350	20	100	0	19.26	Fig.7	19.39	Fig.8	19.34	Fig.9

Fig.1

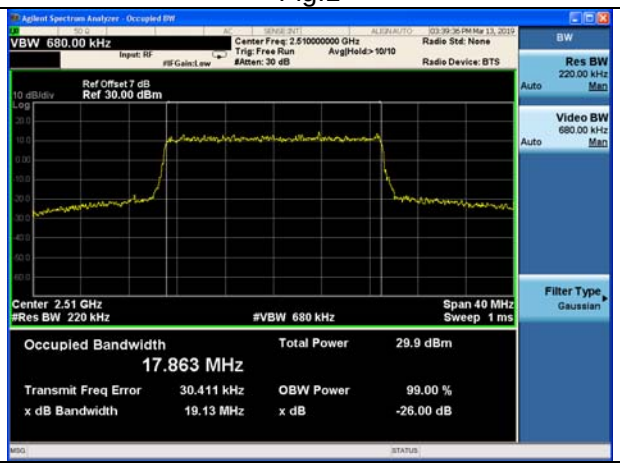


Fig.2

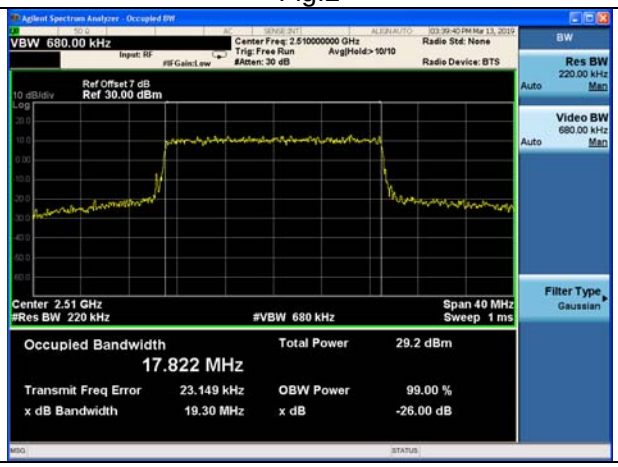


Fig.3

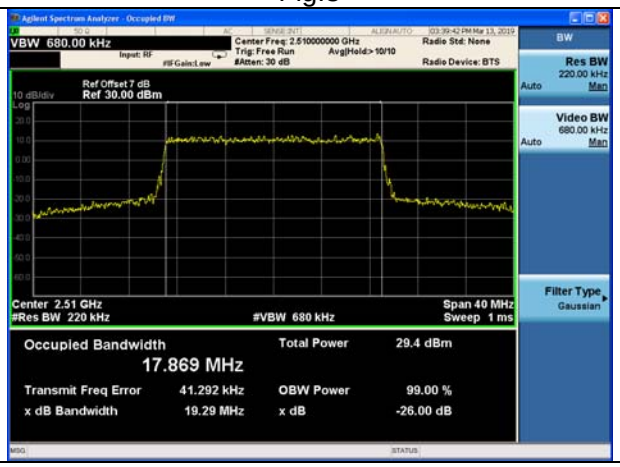


Fig.4

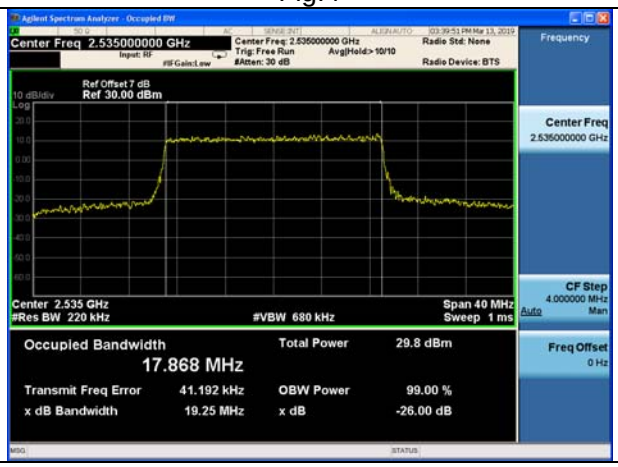


Fig.5	Fig.6

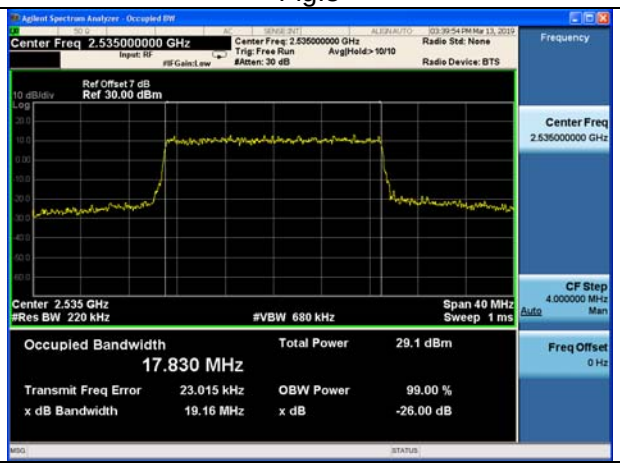
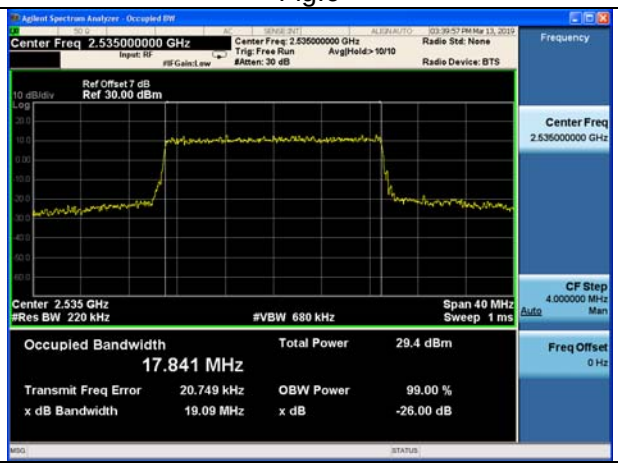

	

Fig.7	Fig.8

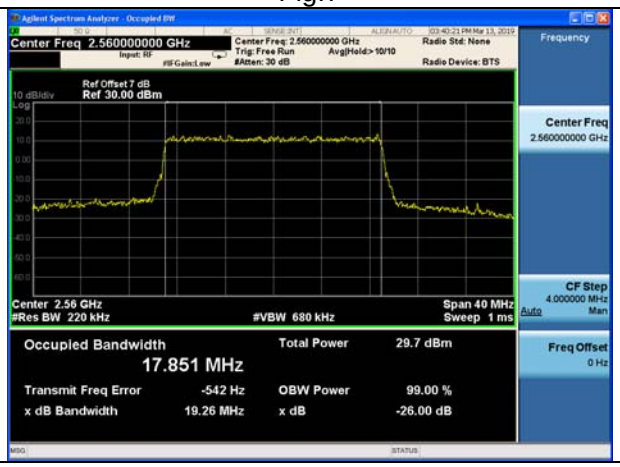
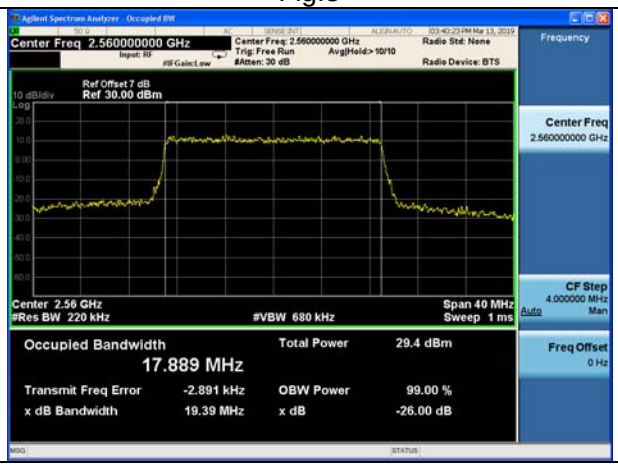
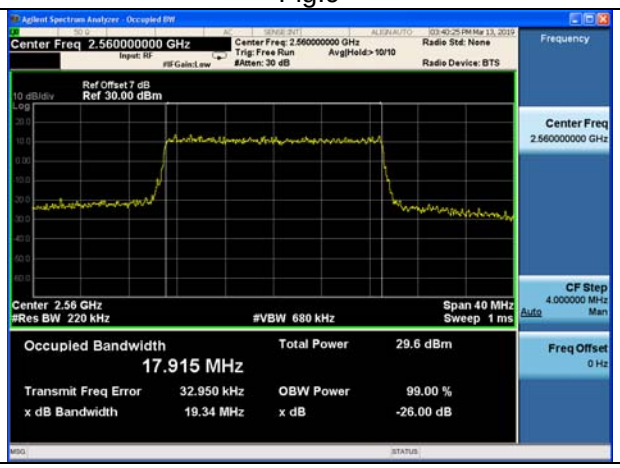
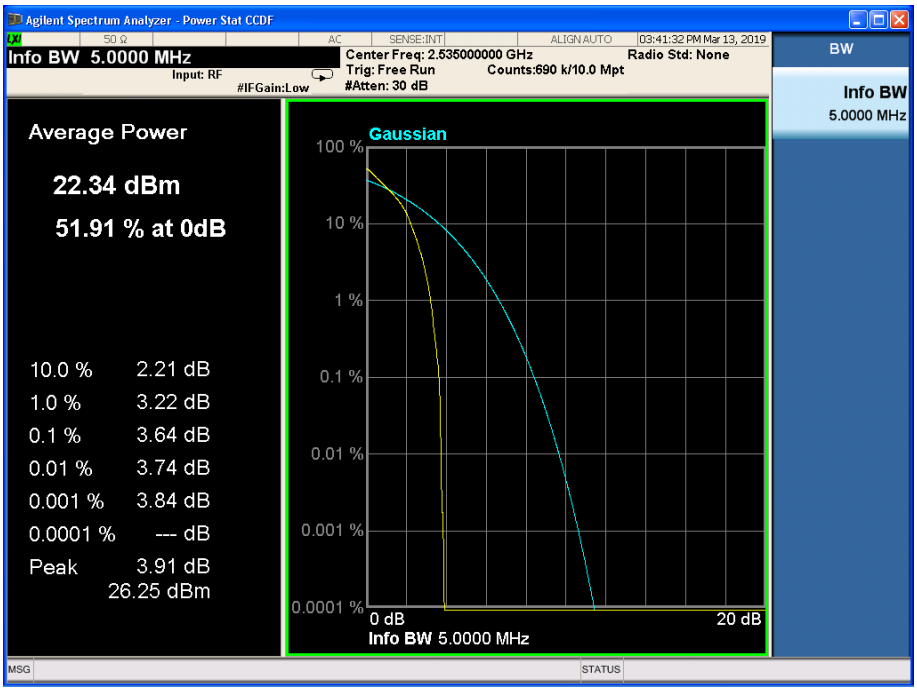

	

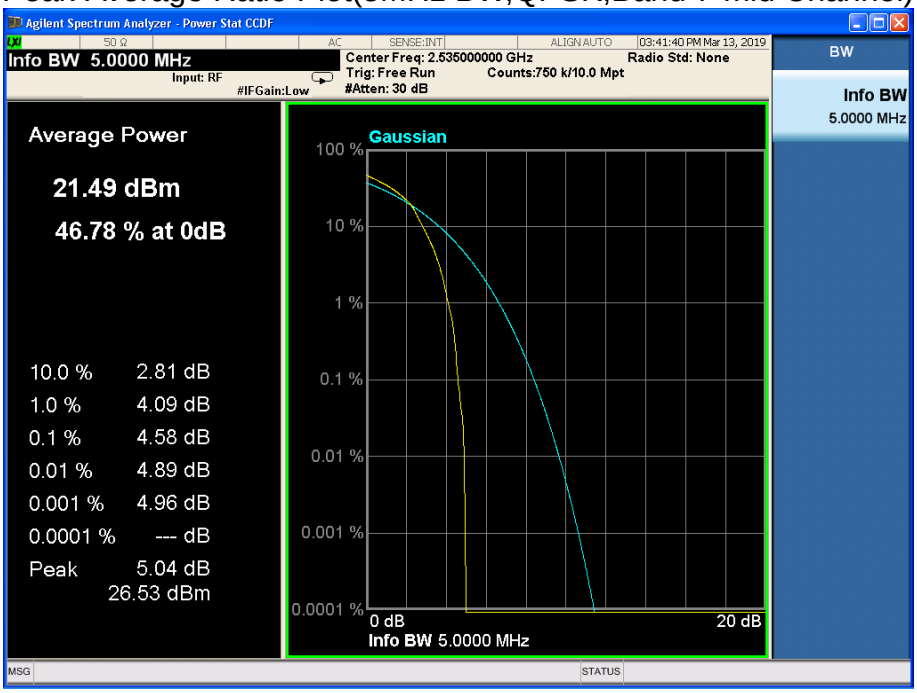
Fig.9	
	

3 Peak-Average Ratio

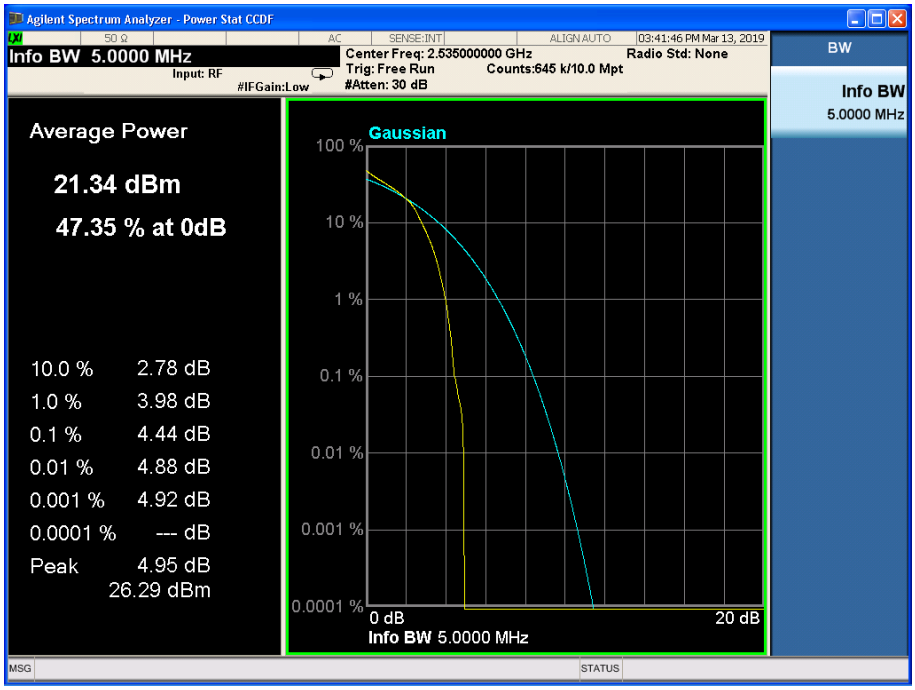
Test result:



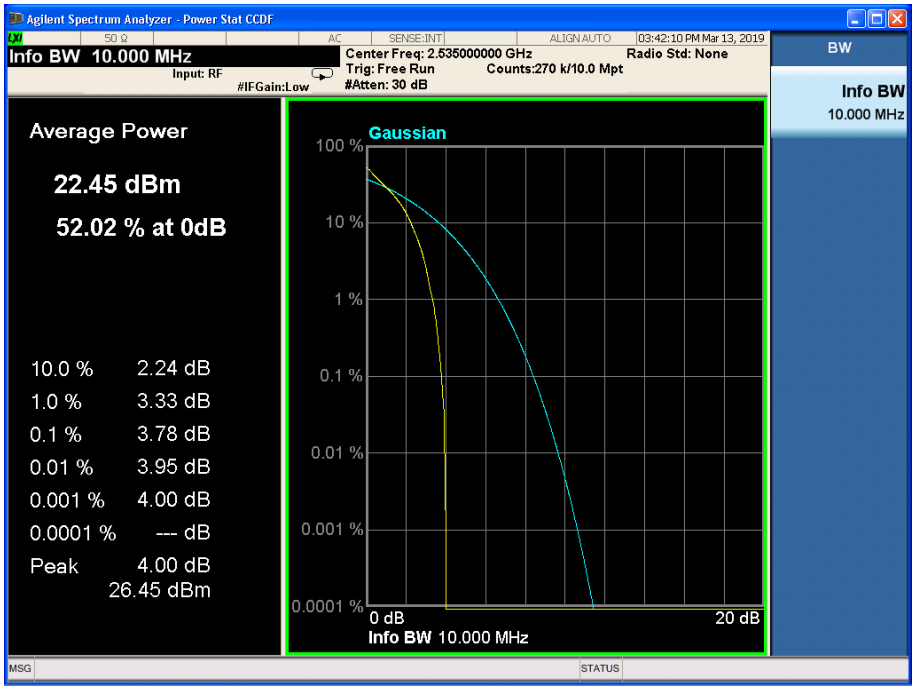
Peak-Average Ratio Plot(5MHz BW,QPSK,Band 7-mid Channel)



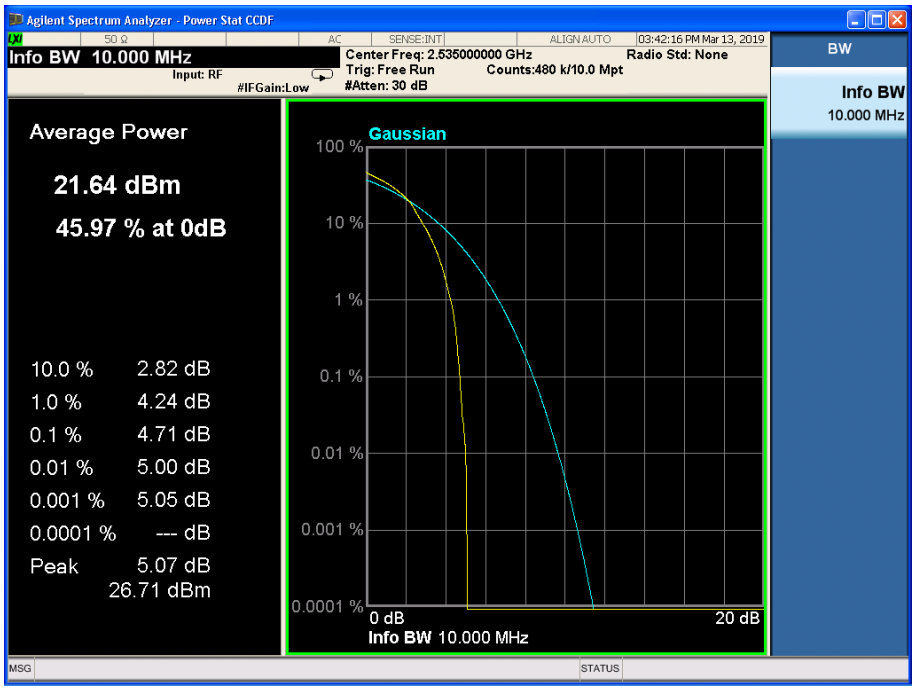
Peak-Average Ratio Plot(5MHz BW,16QAM,Band 7-mid Channel)



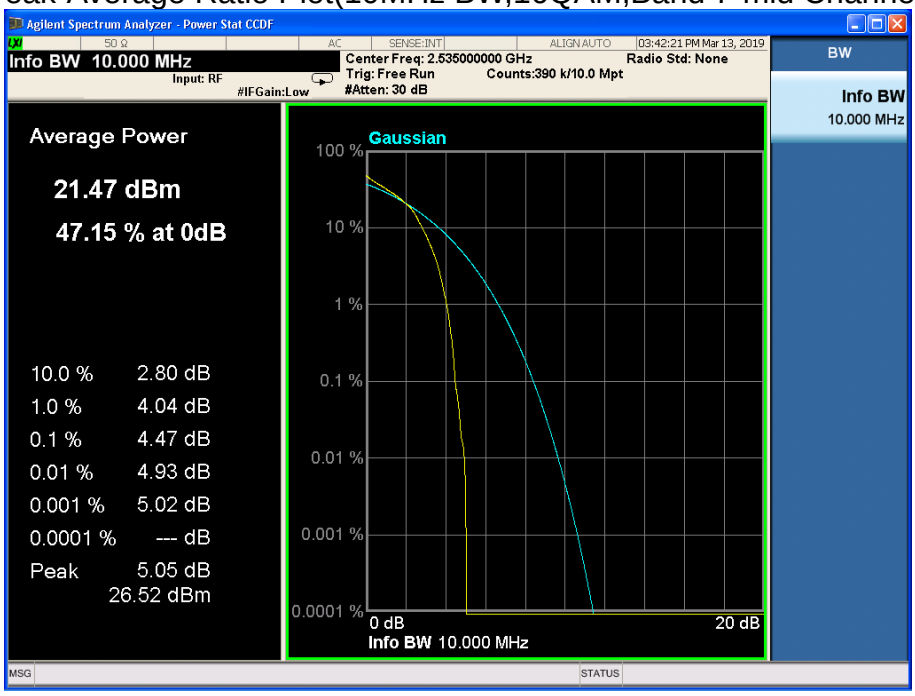
Peak-Average Ratio Plot(5MHz BW,64QAM,Band 7-mid Channel)



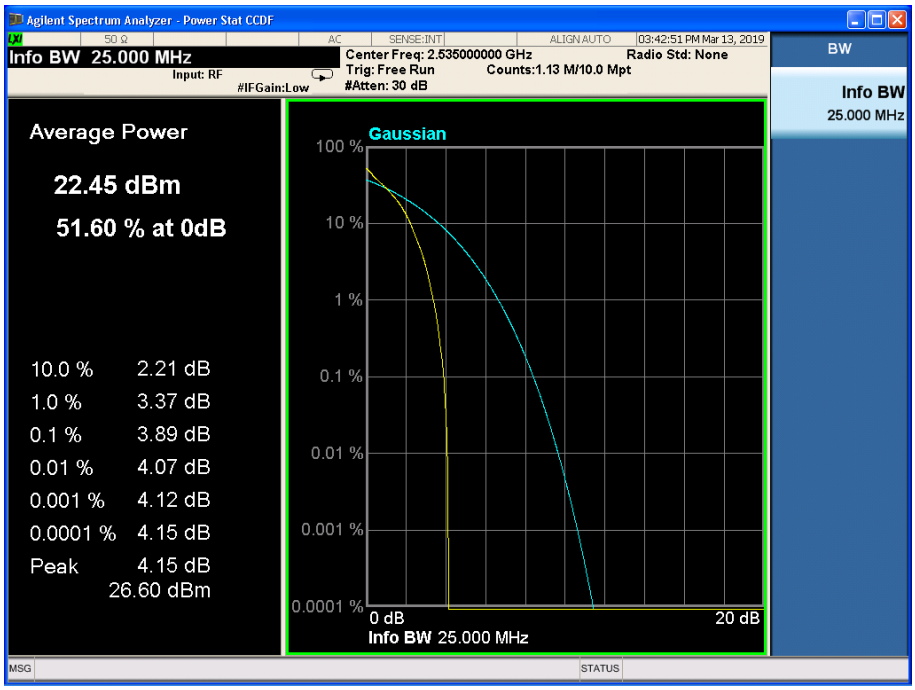
Peak-Average Ratio Plot(10MHz BW,QPSK,Band 7-mid Channel)



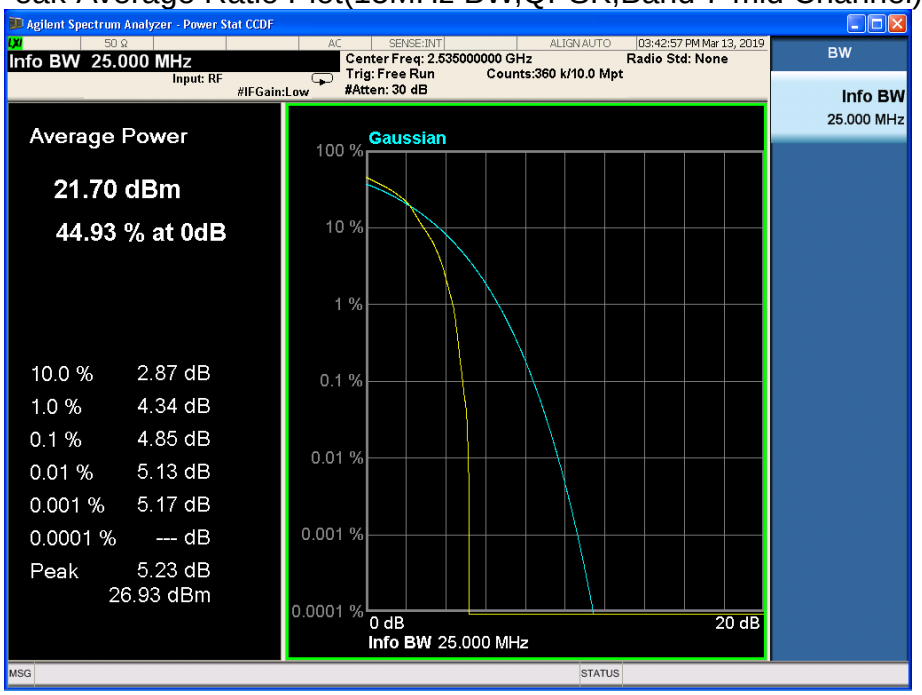
Peak-Average Ratio Plot(10MHz BW,16QAM,Band 7-mid Channel)



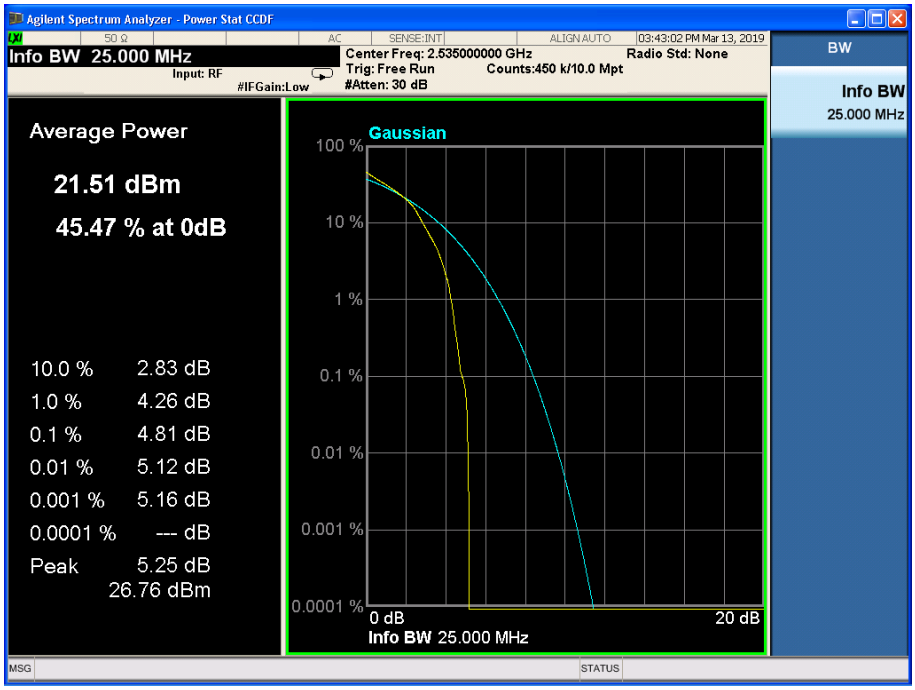
Peak-Average Ratio Plot(10MHz BW,64QAM,Band 7-mid Channel)



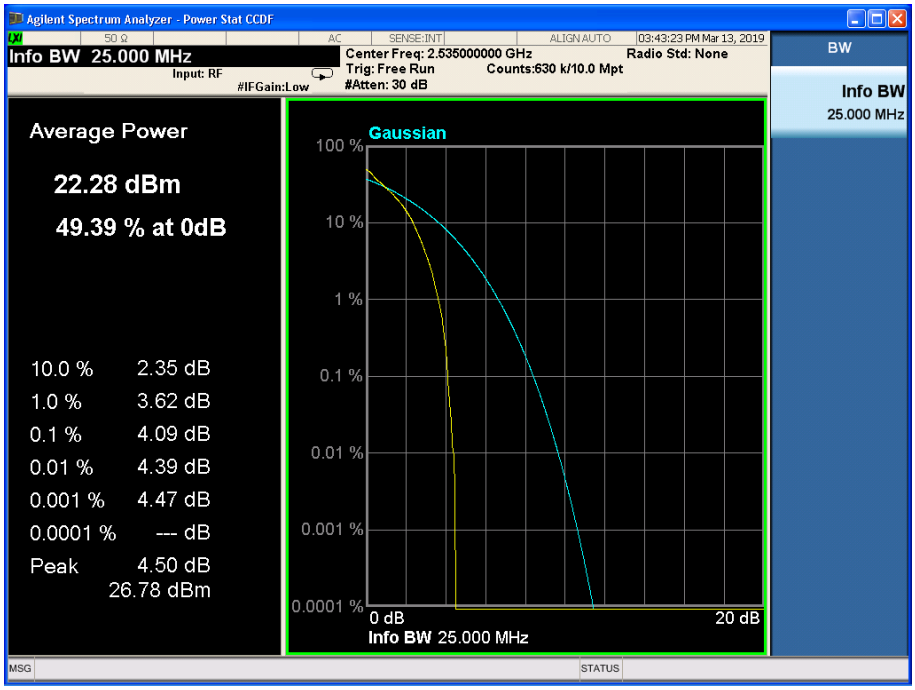
Peak-Average Ratio Plot(15MHz BW,QPSK,Band 7-mid Channel)



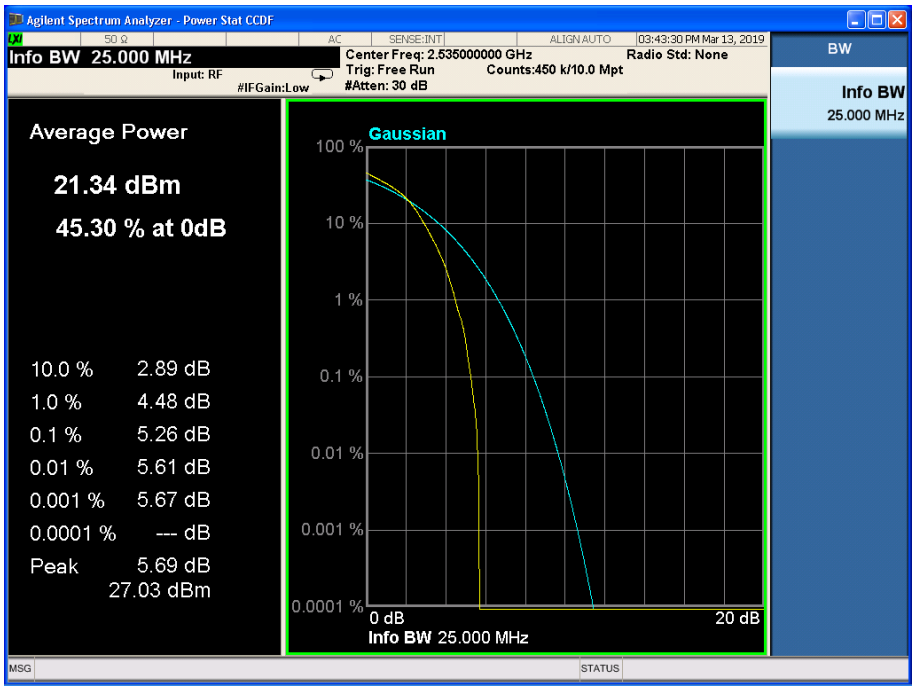
Peak-Average Ratio Plot(15MHz BW,16QAM,Band 7-mid Channel)



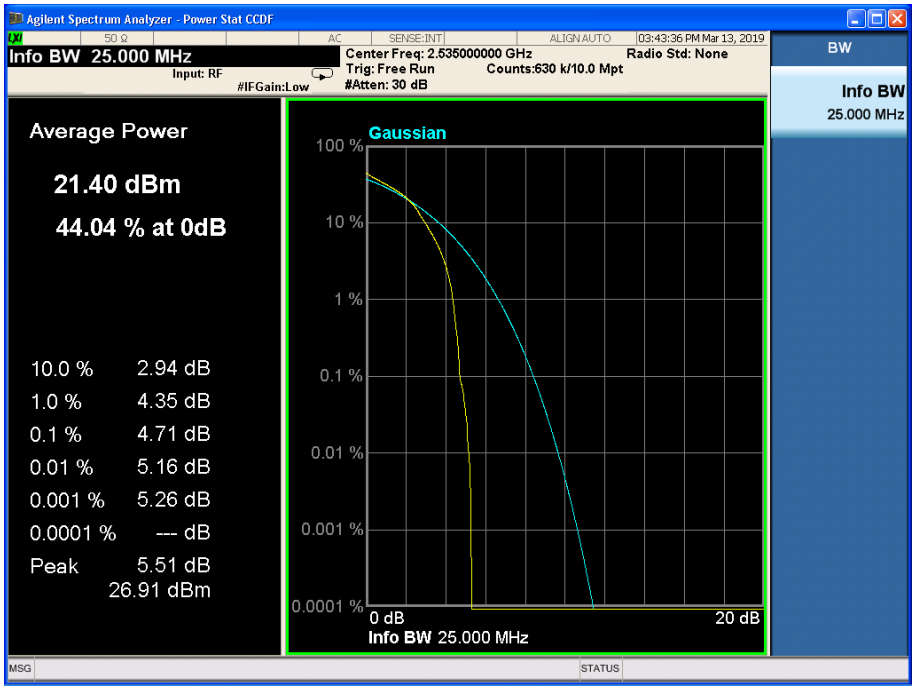
Peak-Average Ratio Plot(15MHz BW,64QAM,Band 7-mid Channel)



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)

4 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

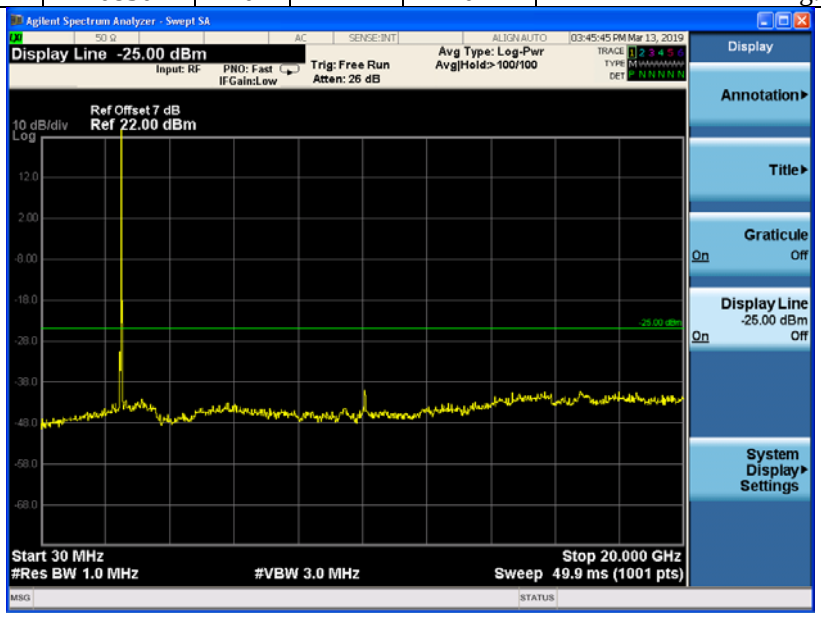


Fig.4

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

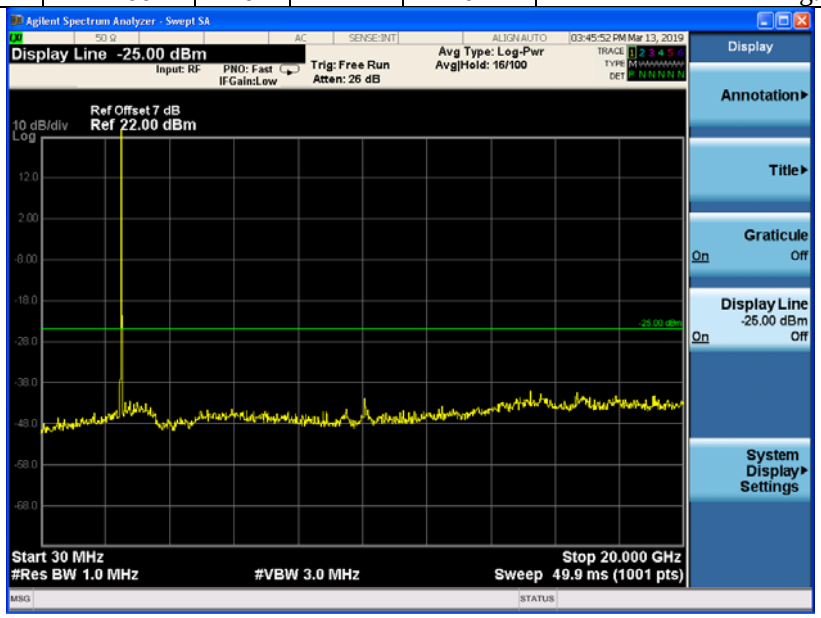


Fig.1

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

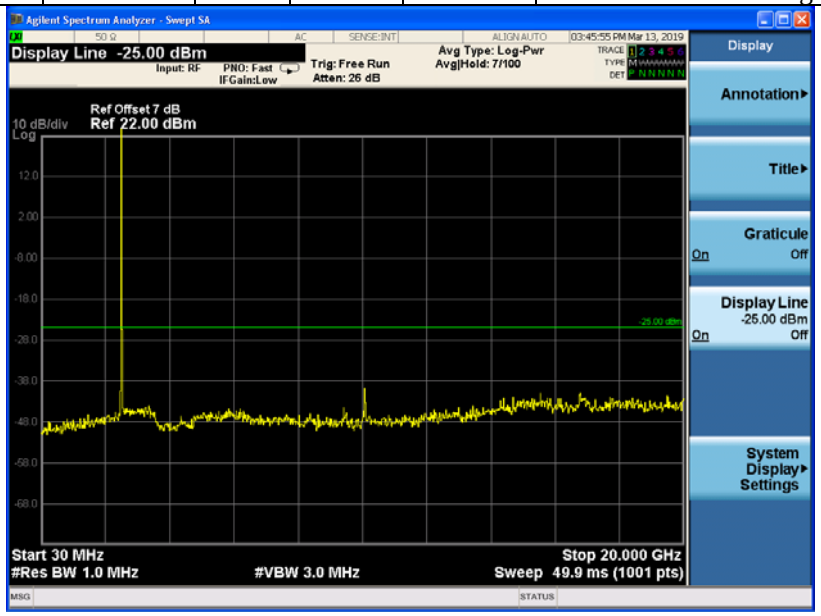


Fig.1

5 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
7	2502.5	20775	5	25	0	Fig.2
7	2567.5	21425	5	1	24	Fig.3
7	2567.5	21425	5	25	0	Fig.4

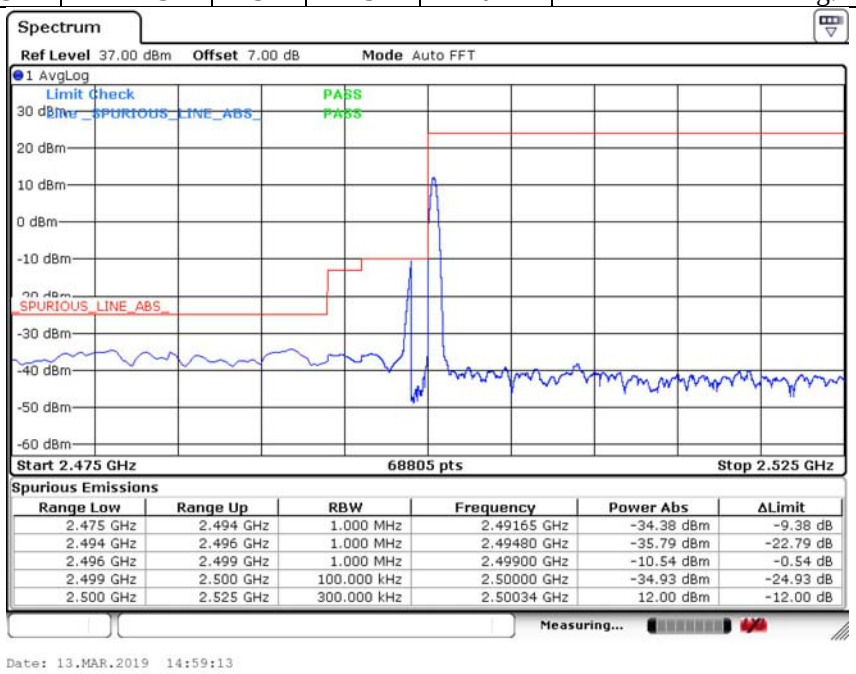


Fig.1

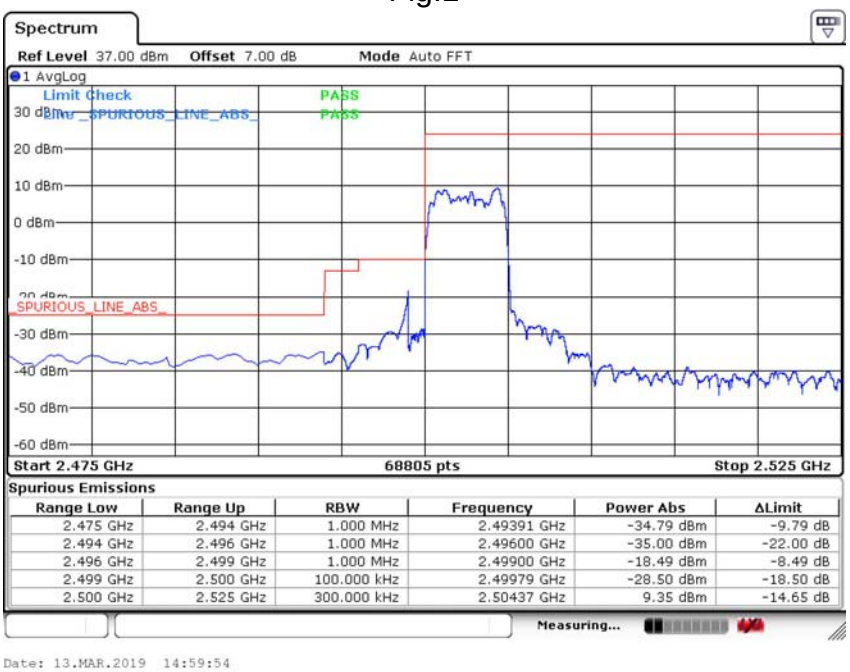
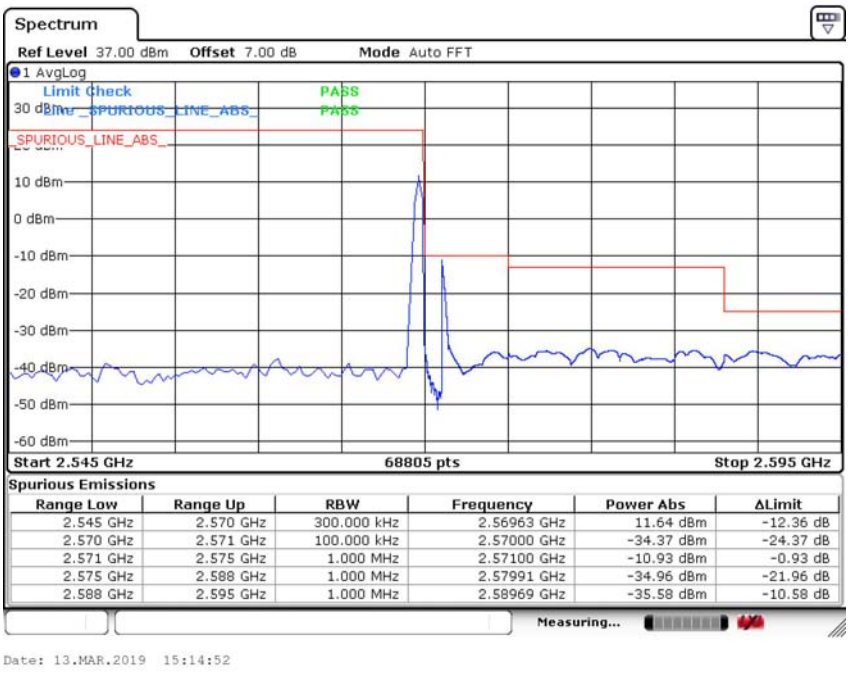


Fig.2

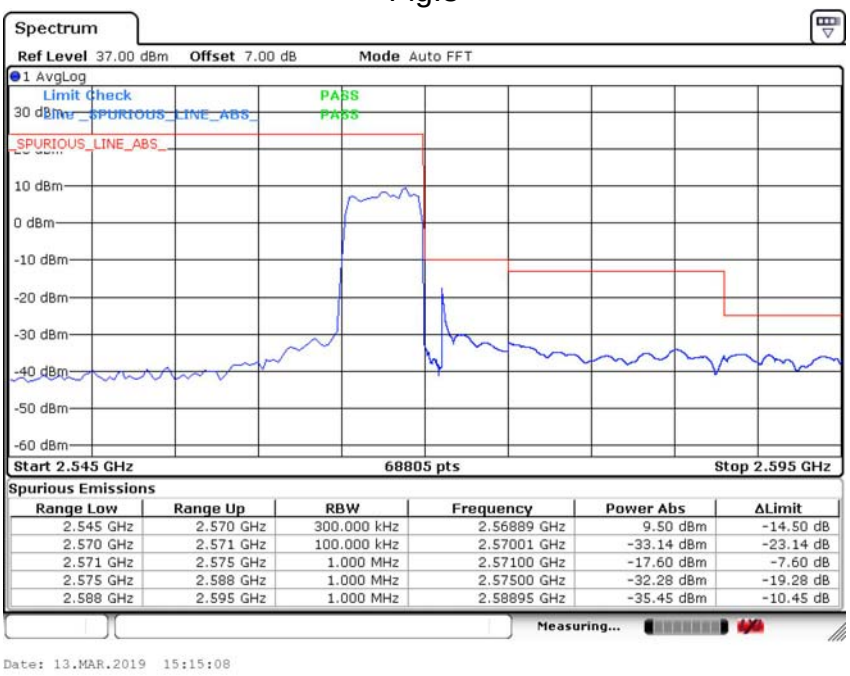


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.545 GHz	2.570 GHz	300.000 kHz	2.56963 GHz	11.64 dBm	-12.36 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-34.37 dBm	-24.37 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-10.93 dBm	-0.93 dB
2.575 GHz	2.588 GHz	1.000 MHz	2.57991 GHz	-34.96 dBm	-21.96 dB
2.588 GHz	2.595 GHz	1.000 MHz	2.58969 GHz	-35.58 dBm	-10.58 dB

Date: 13.MAR.2019 15:14:52

Fig.3



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.545 GHz	2.570 GHz	300.000 kHz	2.56889 GHz	9.50 dBm	-14.50 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-33.14 dBm	-23.14 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-17.60 dBm	-7.60 dB
2.575 GHz	2.588 GHz	1.000 MHz	2.57500 GHz	-32.28 dBm	-19.28 dB
2.588 GHz	2.595 GHz	1.000 MHz	2.58895 GHz	-35.45 dBm	-10.45 dB

Date: 13.MAR.2019 15:15:08

Fig.4

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2505	20800	10	1	0	Fig.1
7	2505	20800	10	50	0	Fig.2
7	2565	21400	10	1	49	Fig.3
7	2565	21400	10	50	0	Fig.4

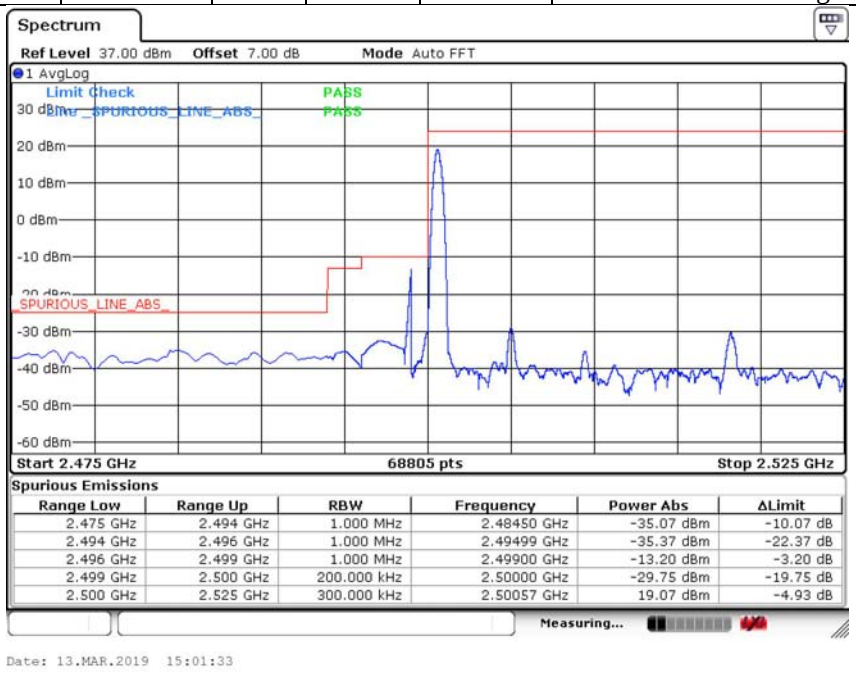


Fig.1

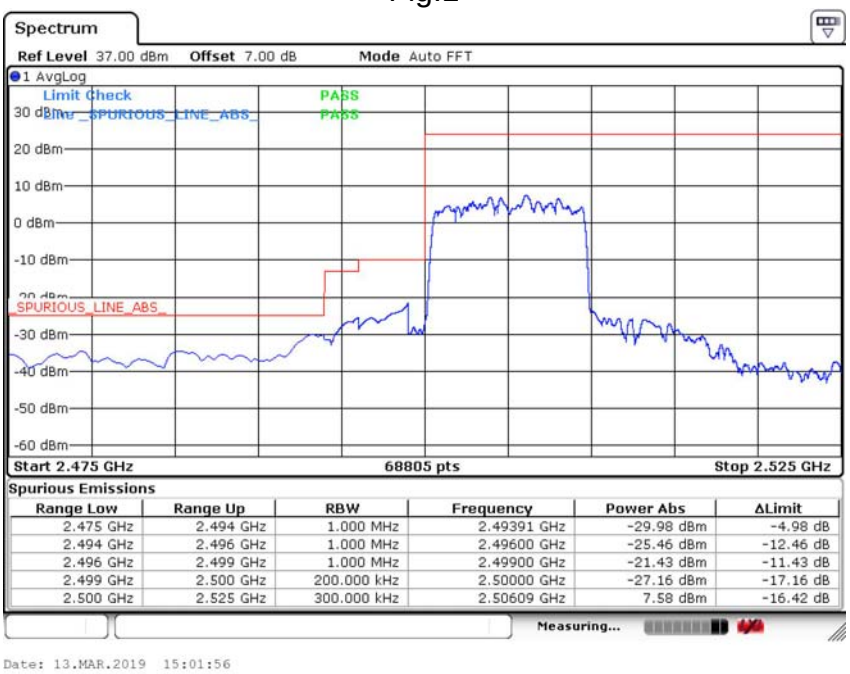


Fig.2

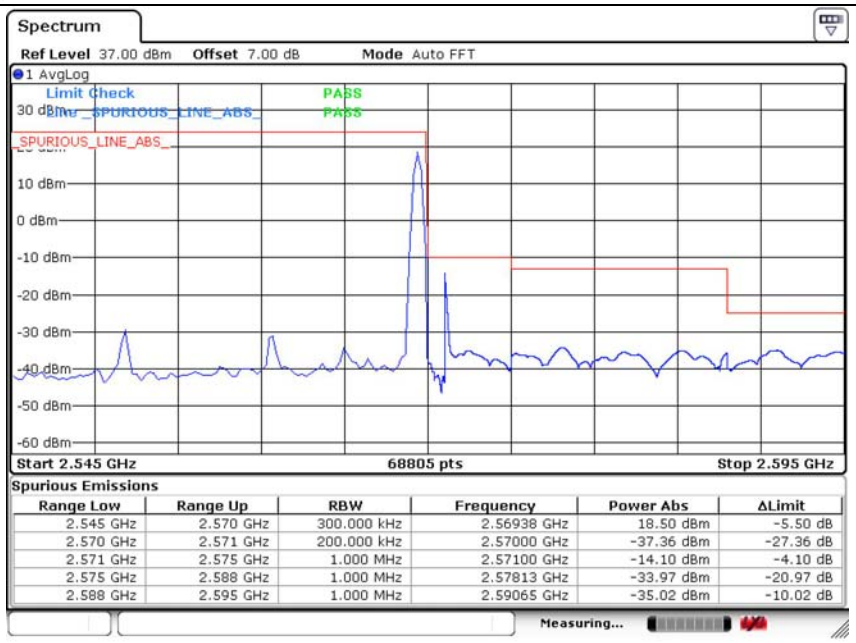

Spectrum
Ref Level 37.00 dBm Offset 7.00 dB Mode Auto FFT
1 AvgLog
Limit Check PASS
SPURIOUS_LINE_ABS PASS
SPURIOUS_LINE_ABS
30 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
Start 2.545 GHz
68805 pts
Stop 2.595 GHz
Spurious Emissions
Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit
2.545 GHz | 2.570 GHz | 300.000 kHz | 2.56938 GHz | 18.50 dBm | -5.50 dB
2.570 GHz | 2.571 GHz | 200.000 kHz | 2.57000 GHz | -37.36 dBm | -27.36 dB
2.571 GHz | 2.575 GHz | 1.000 MHz | 2.57100 GHz | -14.10 dBm | -4.10 dB
2.575 GHz | 2.588 GHz | 1.000 MHz | 2.57813 GHz | -33.97 dBm | -20.97 dB
2.588 GHz | 2.595 GHz | 1.000 MHz | 2.59065 GHz | -35.02 dBm | -10.02 dB
Measuring...
Date: 13.MAR.2019 15:12:23

Fig.3

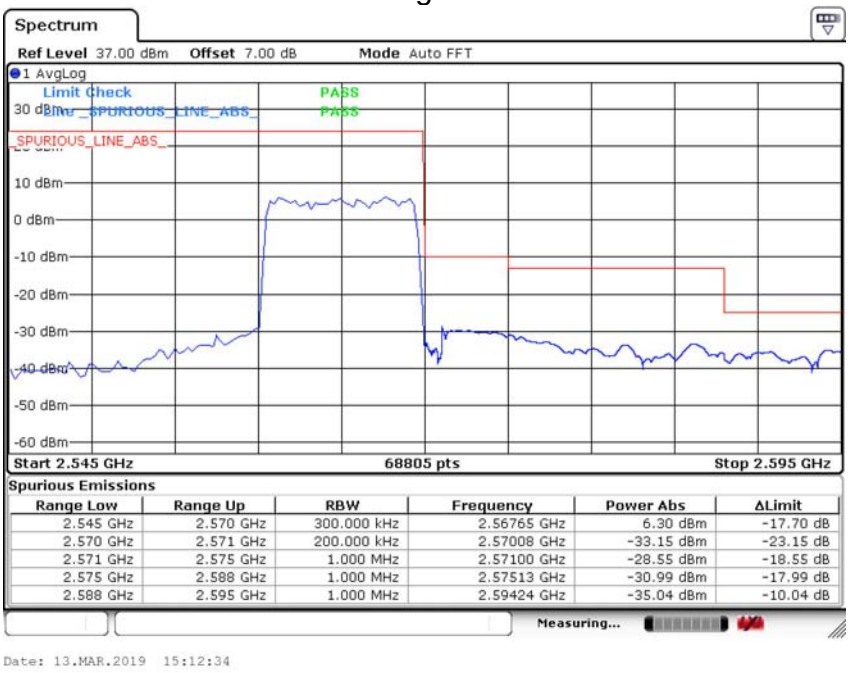

Spectrum
Ref Level 37.00 dBm Offset 7.00 dB Mode Auto FFT
1 AvgLog
Limit Check PASS
SPURIOUS_LINE_ABS PASS
SPURIOUS_LINE_ABS
30 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
Start 2.545 GHz
68805 pts
Stop 2.595 GHz
Spurious Emissions
Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit
2.545 GHz | 2.570 GHz | 300.000 kHz | 2.56765 GHz | 6.30 dBm | -17.70 dB
2.570 GHz | 2.571 GHz | 200.000 kHz | 2.57008 GHz | -33.15 dBm | -23.15 dB
2.571 GHz | 2.575 GHz | 1.000 MHz | 2.57100 GHz | -28.55 dBm | -18.55 dB
2.575 GHz | 2.588 GHz | 1.000 MHz | 2.57513 GHz | -30.99 dBm | -17.99 dB
2.588 GHz | 2.595 GHz | 1.000 MHz | 2.59424 GHz | -35.04 dBm | -10.04 dB
Measuring...
Date: 13.MAR.2019 15:12:34

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
7	2507.5	20825	15	75	0	Fig.2
7	2562.5	21375	15	1	74	Fig.3
7	2562.5	21375	15	75	0	Fig.4

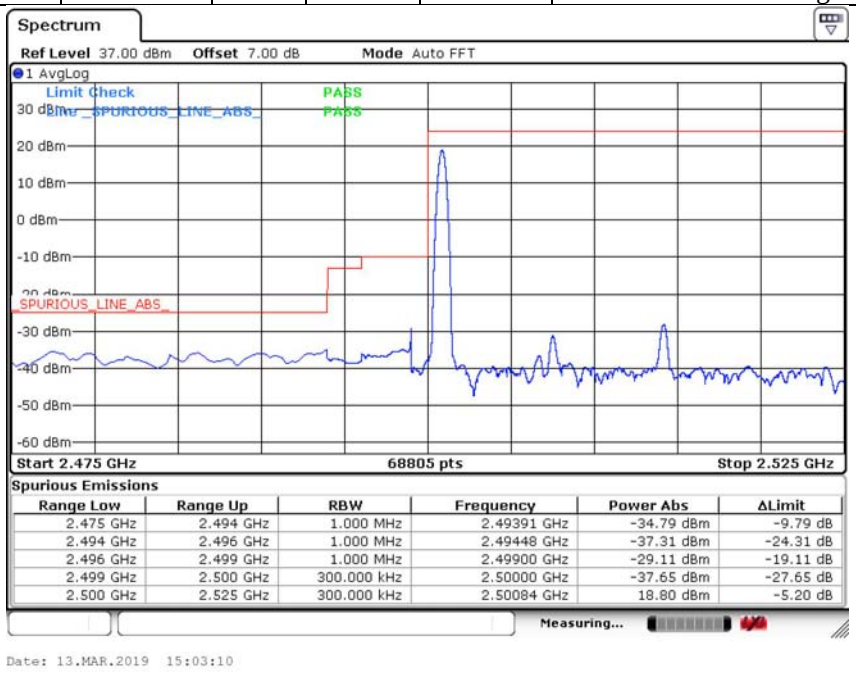


Fig.1

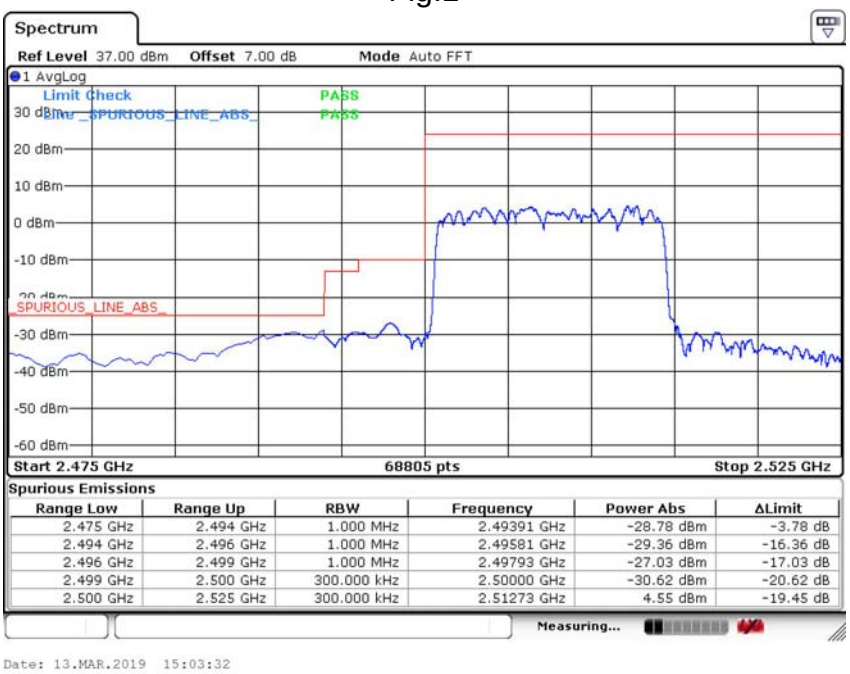


Fig.2

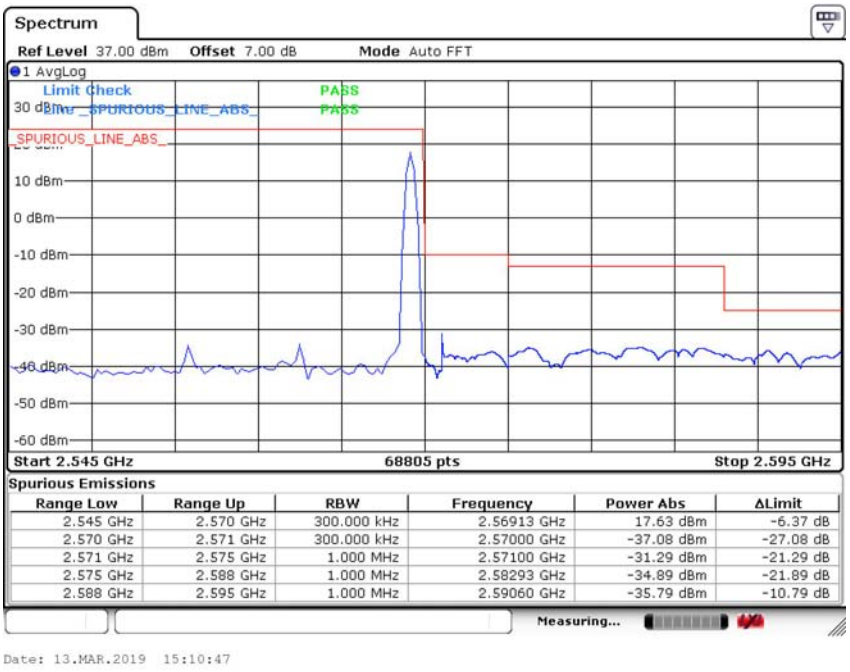

Spectrum
Ref Level 37.00 dBm Offset 7.00 dB Mode Auto FFT
1 AvgLog
Limit Check PASS
SPURIOUS_LINE_ABS PASS
SPURIOUS_LINE_ABS
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
Start 2.545 GHz
68805 pts
Stop 2.595 GHz
Spurious Emissions
Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit
2.545 GHz | 2.570 GHz | 300.000 kHz | 2.56913 GHz | 17.63 dBm | -6.37 dB
2.570 GHz | 2.571 GHz | 300.000 kHz | 2.57000 GHz | -37.08 dBm | -27.08 dB
2.571 GHz | 2.575 GHz | 1.000 MHz | 2.57100 GHz | -31.29 dBm | -21.29 dB
2.575 GHz | 2.588 GHz | 1.000 MHz | 2.58293 GHz | -34.89 dBm | -21.89 dB
2.588 GHz | 2.595 GHz | 1.000 MHz | 2.59060 GHz | -35.79 dBm | -10.79 dB
Measuring...
Date: 13.MAR.2019 15:10:47

Fig.3

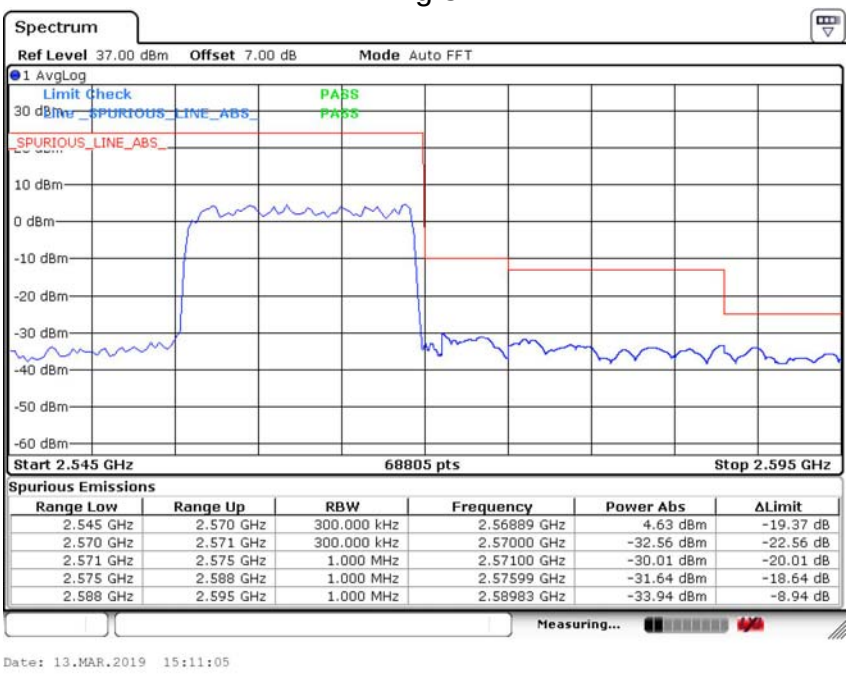

Spectrum
Ref Level 37.00 dBm Offset 7.00 dB Mode Auto FFT
1 AvgLog
Limit Check PASS
SPURIOUS_LINE_ABS PASS
SPURIOUS_LINE_ABS
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
Start 2.545 GHz
68805 pts
Stop 2.595 GHz
Spurious Emissions
Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit
2.545 GHz | 2.570 GHz | 300.000 kHz | 2.56889 GHz | 4.63 dBm | -19.37 dB
2.570 GHz | 2.571 GHz | 300.000 kHz | 2.57000 GHz | -32.56 dBm | -22.56 dB
2.571 GHz | 2.575 GHz | 1.000 MHz | 2.57100 GHz | -30.01 dBm | -20.01 dB
2.575 GHz | 2.588 GHz | 1.000 MHz | 2.57599 GHz | -31.64 dBm | -18.64 dB
2.588 GHz | 2.595 GHz | 1.000 MHz | 2.58983 GHz | -33.94 dBm | -8.94 dB
Measuring...
Date: 13.MAR.2019 15:11:05

Fig.4

Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
7	2510	20850	20	1	0	Fig.1
7	2510	20850	20	100	0	Fig.2
7	2560	21350	20	1	99	Fig.3
7	2560	21350	20	100	0	Fig.4

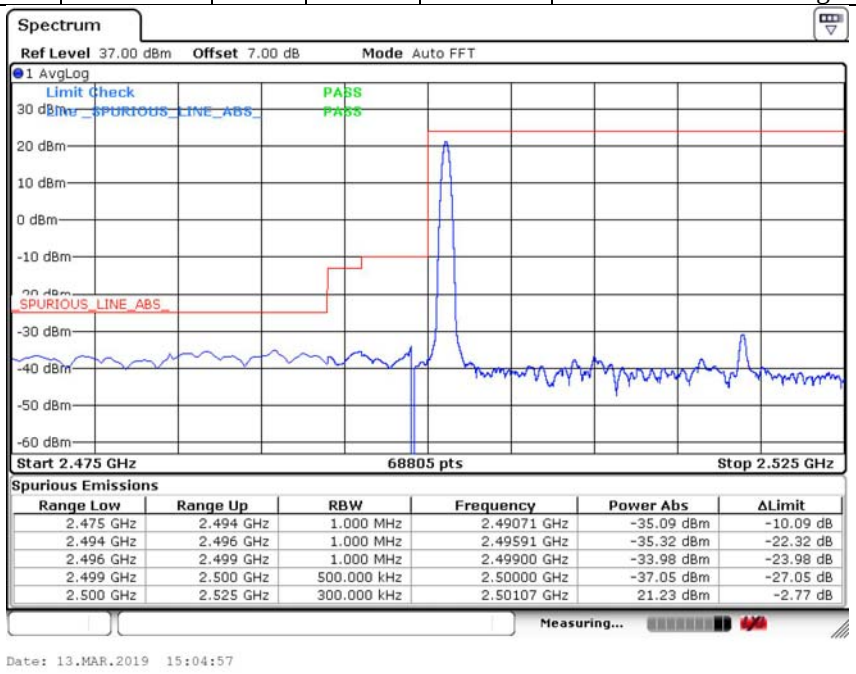


Fig.1

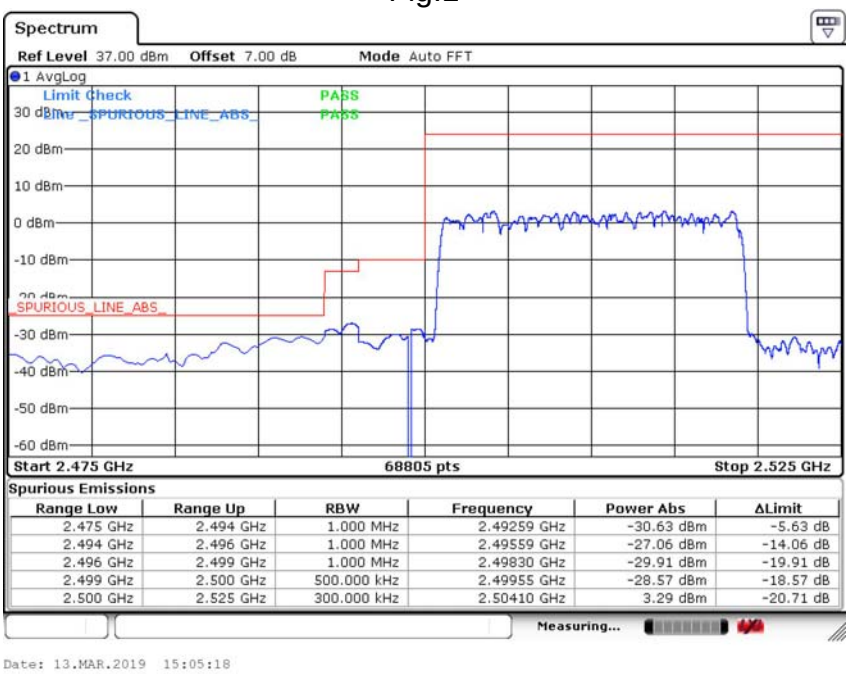
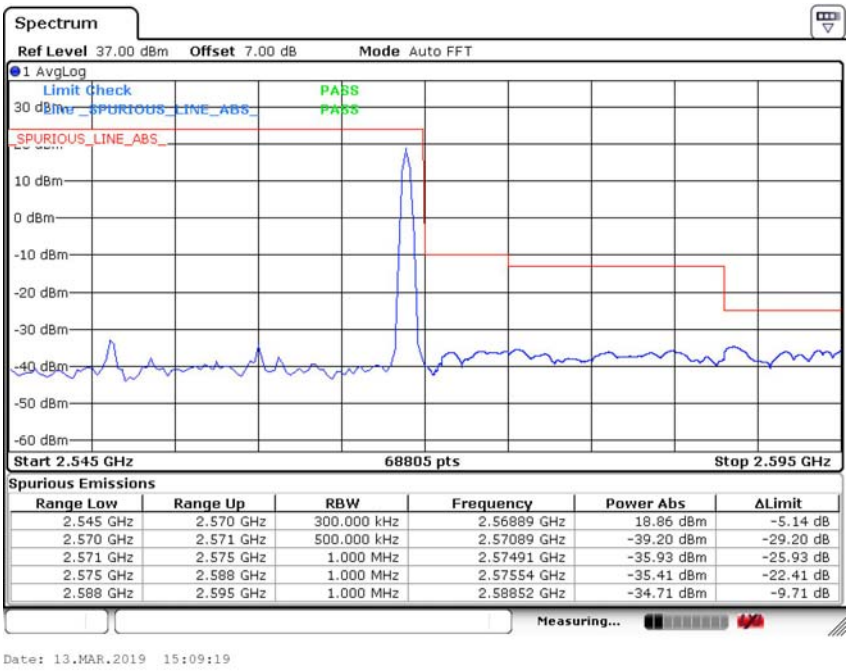


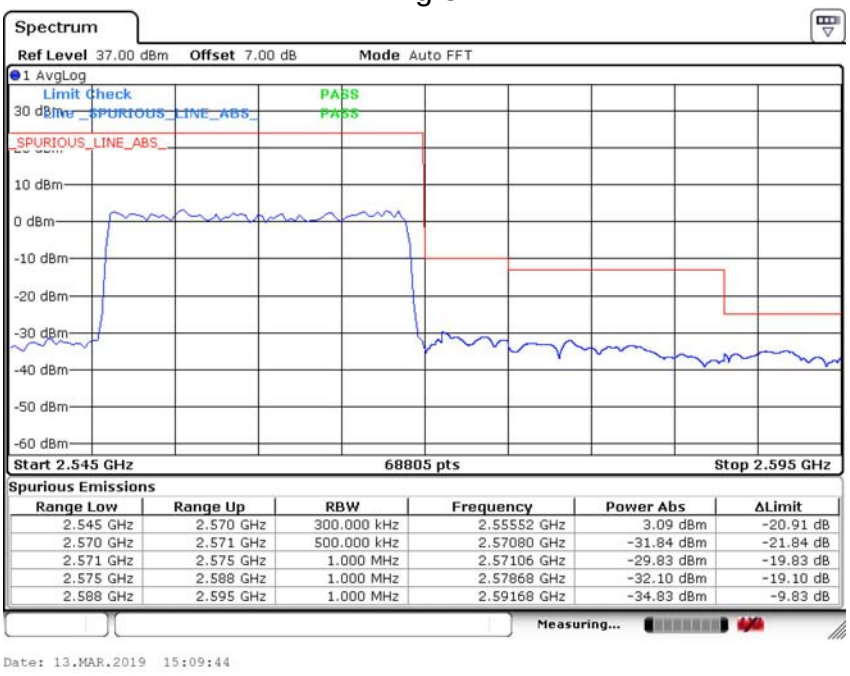
Fig.2



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.545 GHz	2.570 GHz	300.000 kHz	2.56889 GHz	18.86 dBm	-5.14 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57089 GHz	-39.20 dBm	-29.20 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57491 GHz	-35.93 dBm	-25.93 dB
2.575 GHz	2.588 GHz	1.000 MHz	2.57554 GHz	-35.41 dBm	-22.41 dB
2.588 GHz	2.595 GHz	1.000 MHz	2.58852 GHz	-34.71 dBm	-9.71 dB

Fig.3



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.545 GHz	2.570 GHz	300.000 kHz	2.55552 GHz	3.09 dBm	-20.91 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57080 GHz	-31.84 dBm	-21.84 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57106 GHz	-29.83 dBm	-19.83 dB
2.575 GHz	2.588 GHz	1.000 MHz	2.57868 GHz	-32.10 dBm	-19.10 dB
2.588 GHz	2.595 GHz	1.000 MHz	2.59168 GHz	-34.83 dBm	-9.83 dB

Fig.4

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band7 Low Channel			
		5M	10M	15M	20M
-10	NV	0.149	0.079	0.095	0.061
0	NV	0.100	0.059	0.040	0.005
+10	NV	0.038	0.103	0.062	0.081
+20	NV	0.003	0.050	0.066	0.068
+30	NV	0.038	0.076	0.055	0.097
+40	NV	0.054	0.052	0.008	0.064
+50	NV	0.118	0.071	0.071	0.079
+55	NV	0.071	0.083	0.042	0.084
+20	LV	0.062	0.038	0.002	0.089
+20	HV	0.125	0.006	0.042	0.030

Temperature(°C)	Voltage	Test Result (ppm) Band7 High Channel			
		5M	10M	15M	20M
-10	NV	0.107	0.073	0.081	0.026
0	NV	0.020	0.021	0.049	0.014
+10	NV	0.091	0.126	0.030	0.006
+20	NV	0.073	0.079	0.033	0.139
+30	NV	0.006	0.056	0.027	0.046
+40	NV	0.099	0.113	0.113	0.027
+50	NV	0.086	0.109	0.067	0.003
+55	NV	0.090	0.052	0.065	0.006
+20	LV	0.008	0.056	0.043	0.094
+20	HV	0.087	0.074	0.088	0.045