

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 66

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1710.7	131979	1.4	1	0	23.19
				1	5	23.19
				3	2	22.46
				6	0	22.35
	1745	132322		1	0	23.15
				1	5	23.15
				3	2	22.40
				6	0	22.30
	1779.3	132665		1	0	23.32
				1	5	23.32
				3	2	22.53
				6	0	22.44
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1710.7	131979	1.4	1	0	22.50
				1	5	22.50
				3	2	21.42
				6	0	21.29
	1745	132322		1	0	22.44
				1	5	22.43
				3	2	21.33
				6	0	21.22
	1779.3	132665		1	0	22.54
				1	5	22.45
				3	2	21.46
				6	0	21.40
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1710.7	131979	1.4	1	0	22.39
				1	5	22.39
				3	2	21.31
				6	0	21.23
	1745	132322		1	0	22.39
				1	5	22.39
				3	2	21.27
				6	0	21.16
	1779.3	132665		1	0	22.53
				1	5	22.53
				3	2	21.42
				6	0	21.34

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	131987	3	1	0	23.16
				1	14	23.16
				8	4	22.43
				15	0	22.32
	1745	132322		1	0	23.12
				1	14	23.12
				8	4	22.37
				15	0	22.29
	1778.5	132657		1	0	23.31
				1	14	23.31
				8	4	22.52
				15	0	22.43
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1711.5	131987	3	1	0	22.49
				1	14	22.49
				8	4	21.41
				15	0	21.28
	1745	132322		1	0	22.46
				1	14	22.45
				8	4	21.35
				15	0	21.24
	1778.5	132657		1	0	22.56
				1	14	22.47
				8	4	21.48
				15	0	21.42
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1711.5	131987	3	1	0	22.41
				1	14	22.41
				8	4	21.33
				15	0	21.21
	1745	132322		1	0	22.37
				1	14	22.37
				8	4	21.25
				15	0	21.14
	1778.5	132657		1	0	22.51
				1	14	22.51
				8	4	21.40
				15	0	21.32

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	131997	5	1	0	23.13
				1	24	23.13
				12	6	22.40
				25	0	22.29
	1745	132322		1	0	23.09
				1	24	23.09
				12	6	22.34
				25	0	22.26
	1777.5	132647		1	0	23.28
				1	24	23.28
				12	6	22.49
				25	0	22.40
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1712.5	131997	5	1	0	22.46
				1	24	22.46
				12	6	21.39
				25	0	21.26
	1745	132322		1	0	22.45
				1	24	22.44
				12	6	21.34
				25	0	21.23
	1777.5	132647		1	0	22.55
				1	24	22.46
				12	6	21.50
				25	0	21.44
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1712.5	131997	5	1	0	22.43
				1	24	22.43
				12	6	21.35
				25	0	21.24
	1745	132322		1	0	22.40
				1	24	22.40
				12	6	21.28
				25	0	21.17
	1777.5	132647		1	0	22.54
				1	24	22.54
				12	6	21.43
				25	0	21.35

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1715	132022	10	1	0	23.12
				1	49	23.12
				24	12	22.39
				50	0	22.28
	1745	132322		1	0	23.08
				1	49	23.08
				24	12	22.33
				50	0	22.25
	1775	132622		1	0	23.27
				1	49	23.27
				24	12	22.48
				50	0	22.39
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1715	132022	10	1	0	22.45
				1	49	22.45
				24	12	21.37
				50	0	21.28
	1745	132322		1	0	22.47
				1	49	22.46
				24	12	21.36
				50	0	21.25
	1775	132622		1	0	22.57
				1	49	22.48
				24	12	21.49
				50	0	21.43
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1715	132022	10	1	0	22.42
				1	49	22.42
				24	12	21.33
				50	0	21.22
	1745	132322		1	0	22.38
				1	49	22.38
				24	12	21.26
				50	0	21.15
	1775	132622		1	0	22.52
				1	49	22.52
				24	12	21.41
				50	0	21.33

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	132047	15	1	0	23.10
				1	74	23.10
				40	18	22.37
				75	0	22.26
	1745	132322		1	0	23.06
				1	74	23.06
				40	18	22.31
				75	0	22.23
	1772.5	132597		1	0	23.25
				1	74	23.25
				40	18	22.46
				75	0	22.37
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1717.5	132047	15	1	0	22.43
				1	74	22.43
				40	18	21.35
				75	0	21.28
	1745	132322		1	0	22.47
				1	74	22.46
				40	18	21.33
				75	0	21.22
	1772.5	132597		1	0	22.54
				1	74	22.45
				40	18	21.46
				75	0	21.40
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1717.5	132047	15	1	0	22.39
				1	74	22.39
				40	18	21.31
				75	0	21.20
	1745	132322		1	0	22.36
				1	74	22.36
				40	18	21.23
				75	0	21.12
	1772.5	132597		1	0	22.49
				1	74	22.49
				40	18	21.38
				75	0	21.30

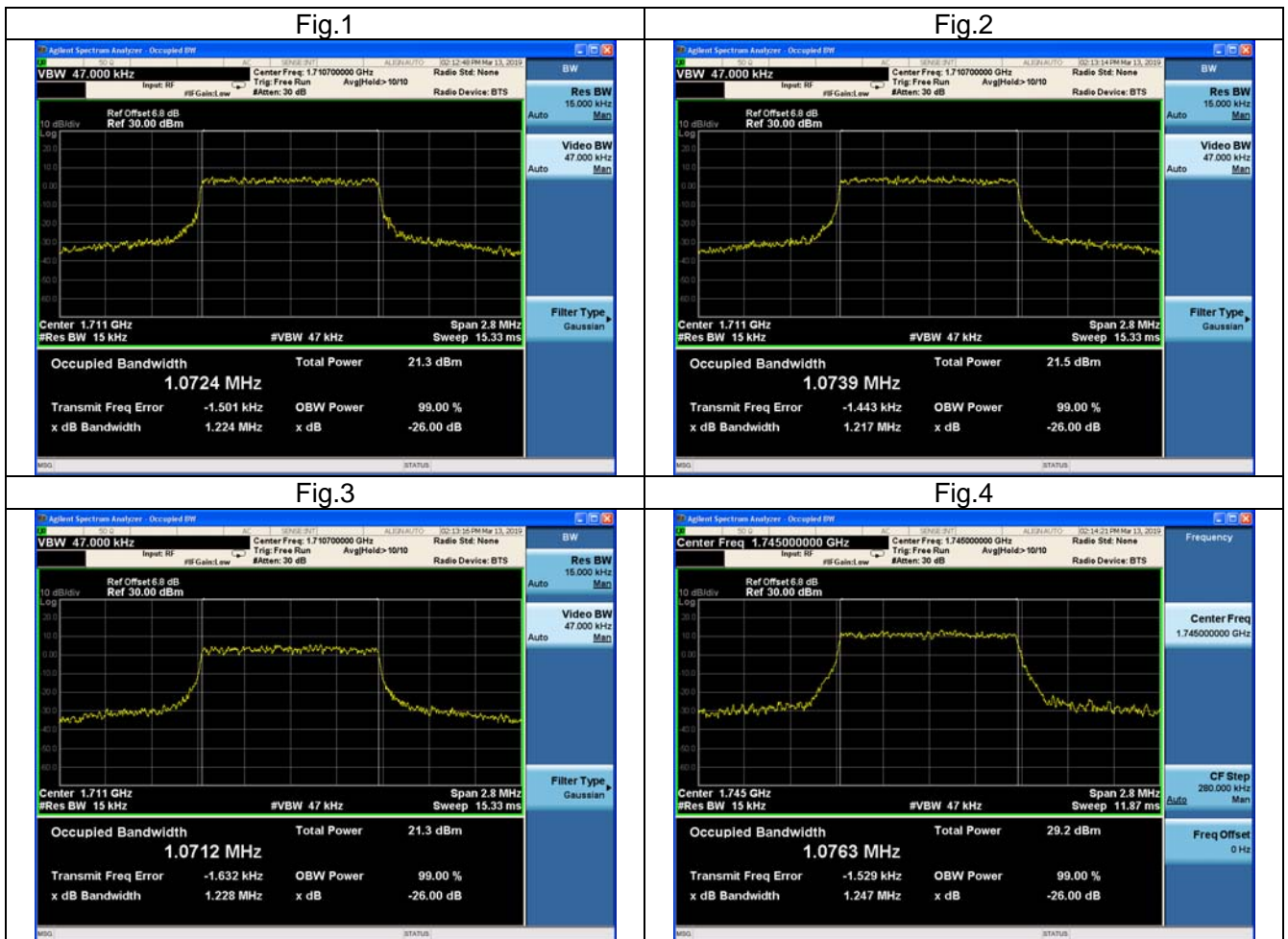
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	132072	20	1	0	23.21
				1	99	23.21
				50	25	22.48
				100	0	22.37
	1745	132322		1	0	23.17
				1	99	23.17
				50	25	22.42
				100	0	22.34
	1770	132572		1	0	23.36
				1	99	23.36
				50	25	22.57
				100	0	22.48
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1720	132072	20	1	0	22.54
				1	99	22.54
				50	25	21.46
				100	0	21.33
	1745	132322		1	0	22.52
				1	99	22.51
				50	25	21.41
				100	0	21.30
	1770	132572		1	0	22.62
				1	99	22.53
				50	25	21.54
				100	0	21.48
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1720	132072	20	1	0	22.47
				1	99	22.47
				50	25	21.39
				100	0	21.28
	1745	132322		1	0	22.44
				1	99	22.44
				50	25	21.32
				100	0	21.21
	1770	132572		1	0	22.58
				1	99	22.58
				50	25	21.47
				100	0	21.39

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	
66	1710.7	131979	1.4	6	0	1.0724	Fig.1	1.0739	Fig.2	1.0712	Fig.3
66	1745	132322	1.4	6	0	1.0763	Fig.4	1.0759	Fig.5	1.0750	Fig.6
66	1779.3	132665	1.4	6	0	1.0780	Fig.7	1.0784	Fig.8	1.0760	Fig.9

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1710.7	131979	1.4	6	0	1.224	Fig.1	1.217	Fig.2	1.228	Fig.3
66	1745	132322	1.4	6	0	1.247	Fig.4	1.237	Fig.5	1.250	Fig.6
66	1779.3	132665	1.4	6	0	1.235	Fig.7	1.233	Fig.8	1.238	Fig.9



Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1711.5	131987	3	15	0	2.6974	Fig.1	2.7049	Fig.2	2.6957	Fig.3
66	1745	132322	3	15	0	2.6934	Fig.4	2.6875	Fig.5	2.6911	Fig.6
66	1778.5	132657	3	15	0	2.7010	Fig.7	2.6958	Fig.8	2.6919	Fig.9

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1711.5	131987	3	15	0	2.920	Fig.1	2.924	Fig.2	2.926	Fig.3
66	1745	132322	3	15	0	2.899	Fig.4	2.876	Fig.5	2.895	Fig.6
66	1778.5	132657	3	15	0	2.891	Fig.7	2.909	Fig.8	2.921	Fig.9

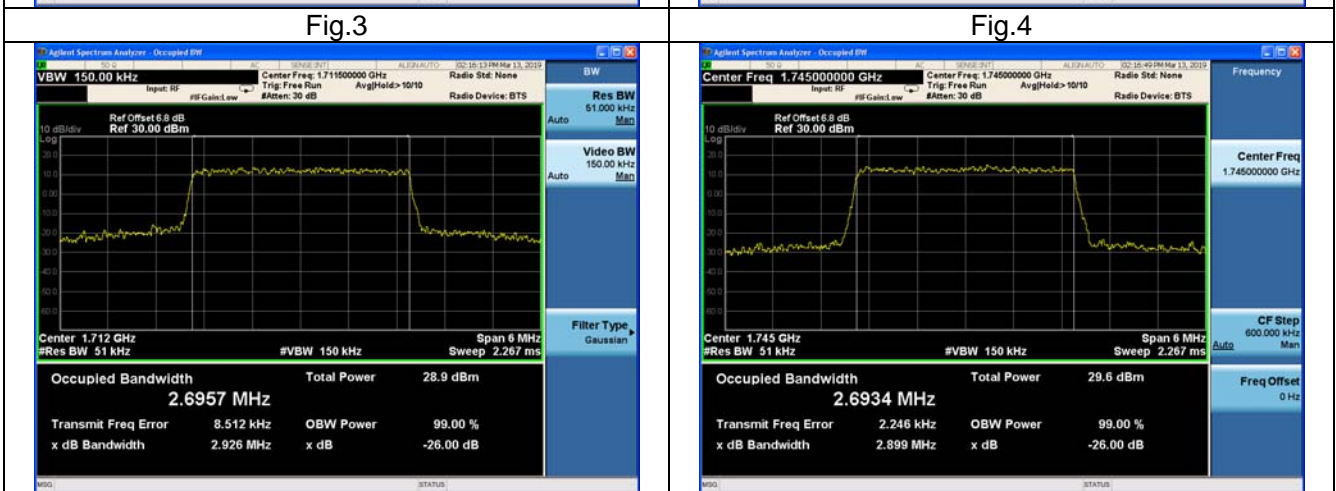
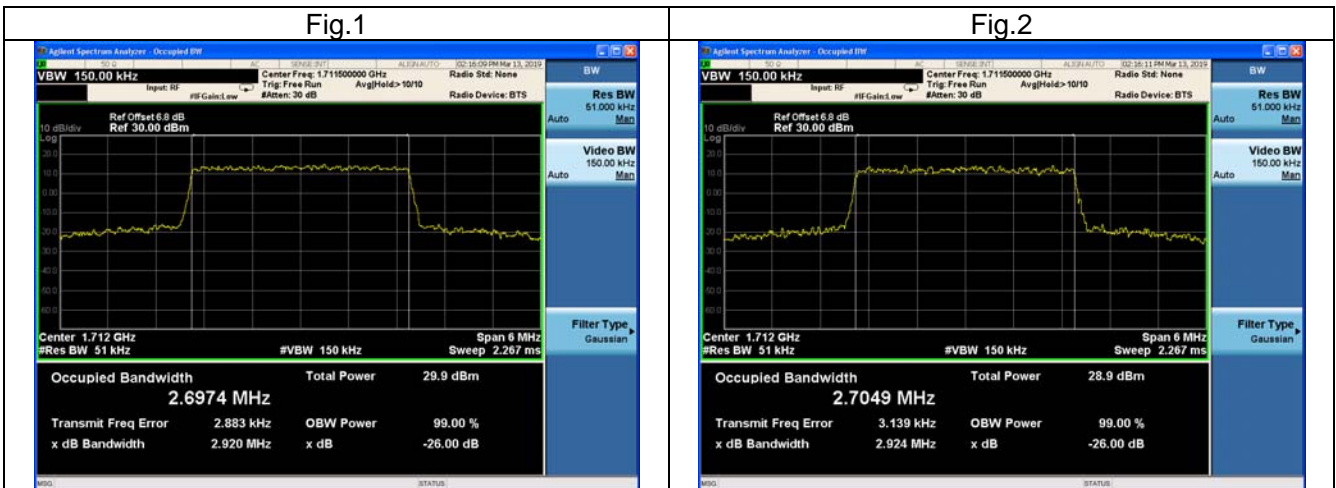


Fig.5

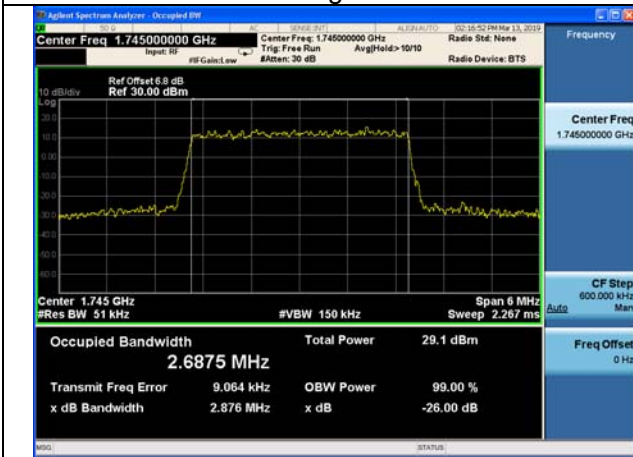


Fig.6

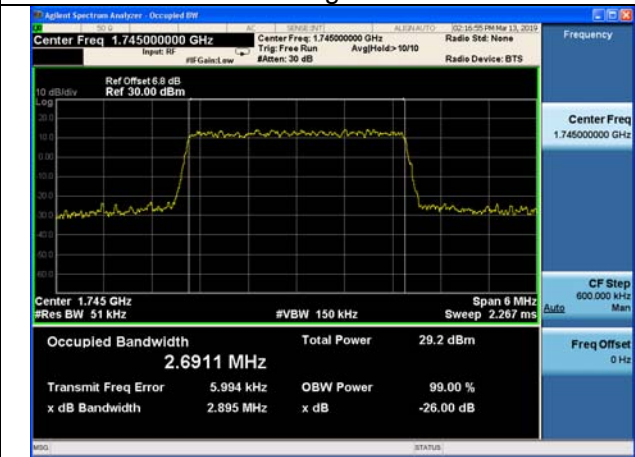


Fig.7

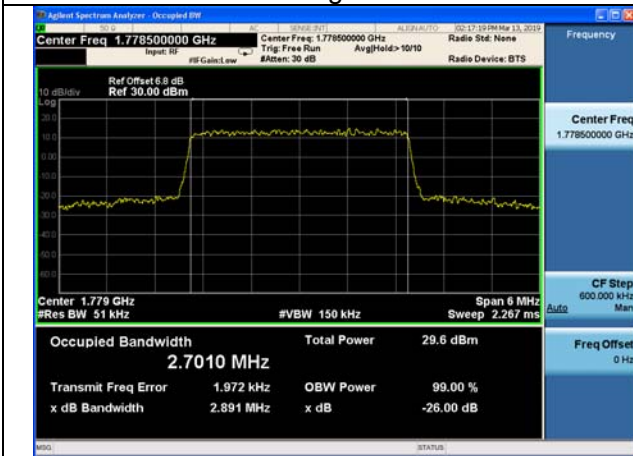


Fig.8

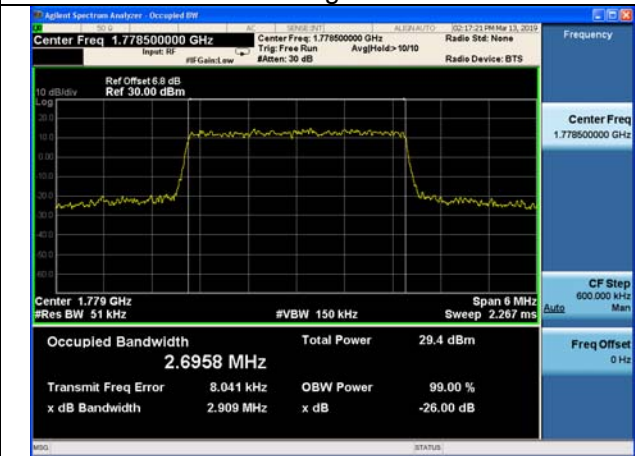
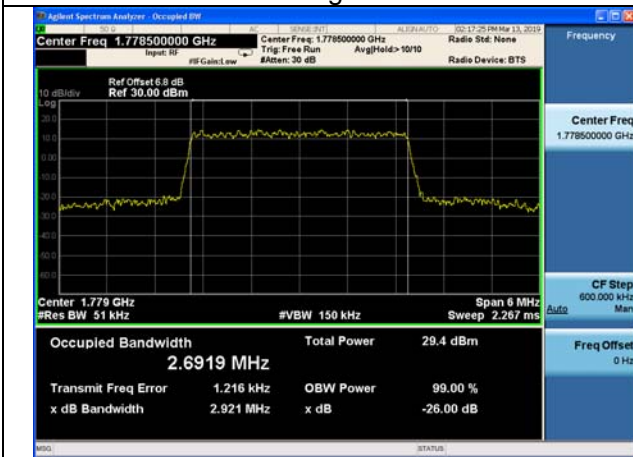


Fig.9



Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1712.5	131997	5	25	0	4.4864	Fig.1	4.4807	Fig.2	4.4795	Fig.3
66	1745	132322	5	25	0	4.5028	Fig.4	4.4763	Fig.5	4.4901	Fig.6
66	1777.5	132647	5	25	0	4.4896	Fig.7	4.4840	Fig.8	4.4766	Fig.9

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1712.5	131997	5	25	0	5.030	Fig.1	5.151	Fig.2	5.071	Fig.3
66	1745	132322	5	25	0	4.980	Fig.4	5.048	Fig.5	5.000	Fig.6
66	1777.5	132647	5	25	0	5.031	Fig.7	5.041	Fig.8	5.086	Fig.9

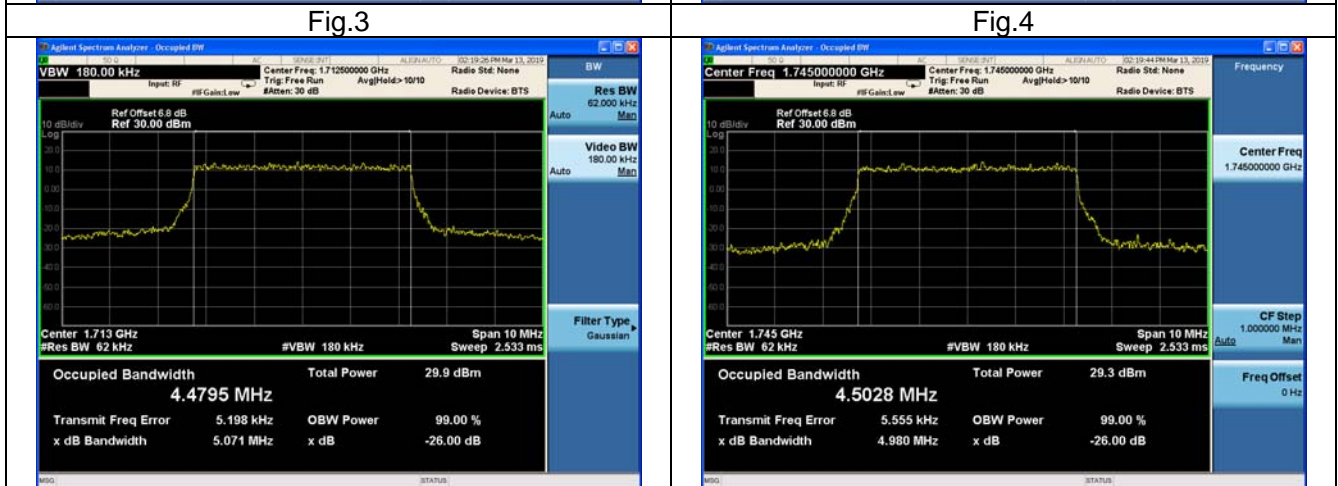
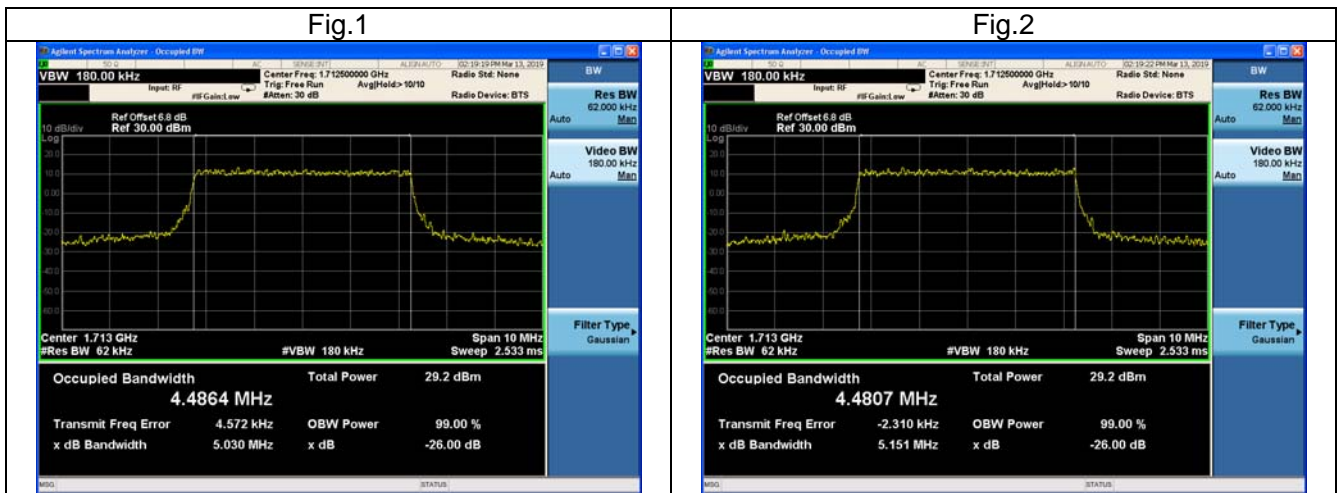


Fig.5

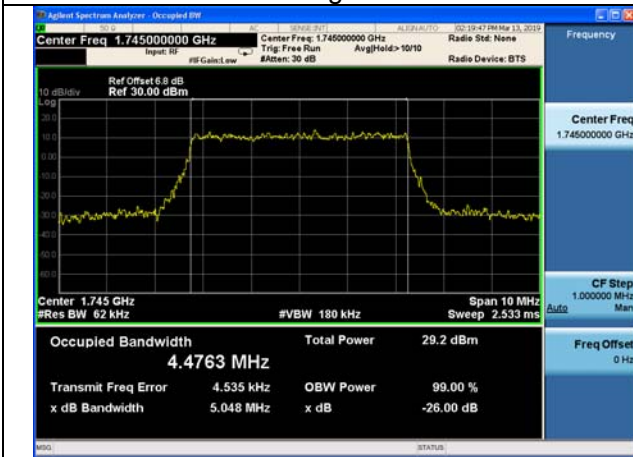


Fig.6

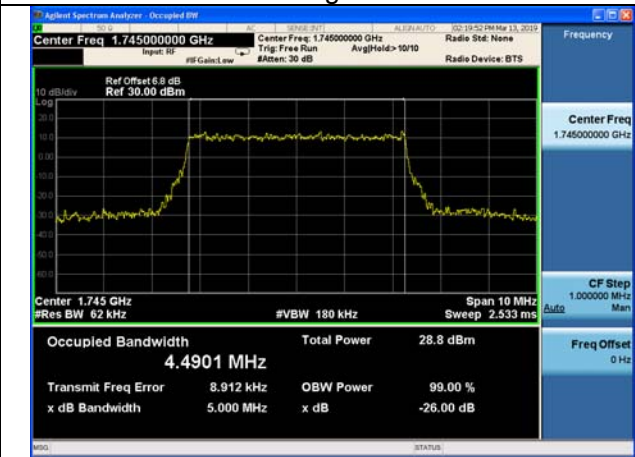


Fig.7

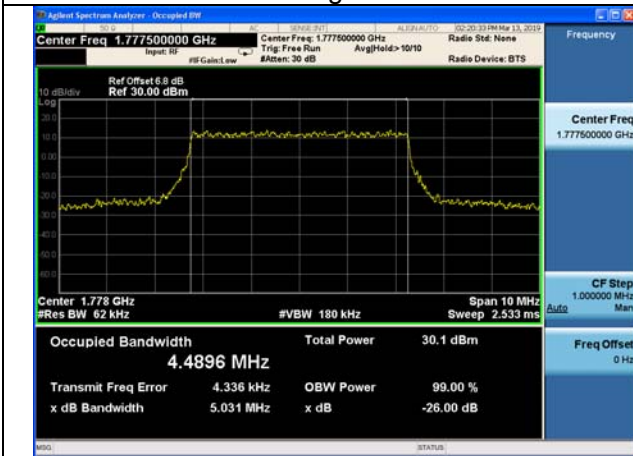


Fig.8

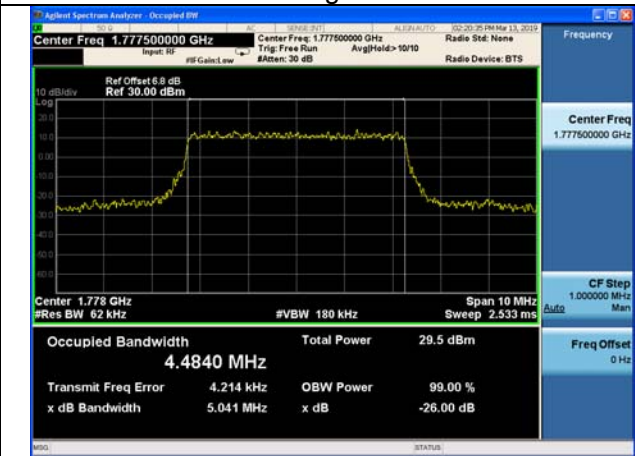
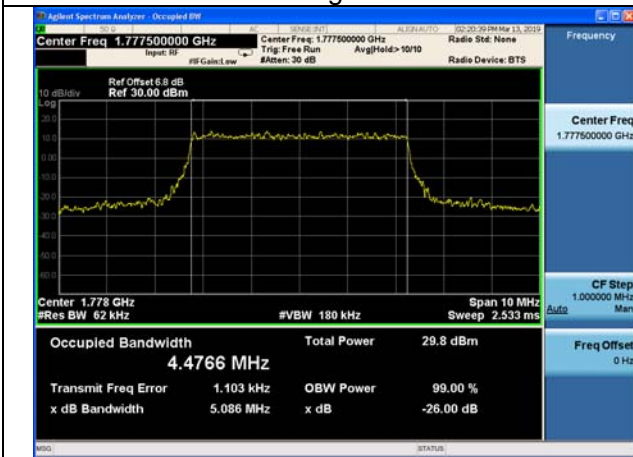


Fig.9



Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1715	132022	10	50	0	8.9827	Fig.1	8.9840	Fig.2	8.9673	Fig.3
66	1745	132322	10	50	0	8.9580	Fig.4	8.9359	Fig.5	8.9642	Fig.6
66	1775	132622	10	50	0	8.9761	Fig.7	8.9681	Fig.8	8.9672	Fig.9

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1715	132022	10	50	0	9.885	Fig.1	9.840	Fig.2	9.850	Fig.3
66	1745	132322	10	50	0	9.827	Fig.4	9.831	Fig.5	9.808	Fig.6
66	1775	132622	10	50	0	9.899	Fig.7	9.932	Fig.8	9.928	Fig.9

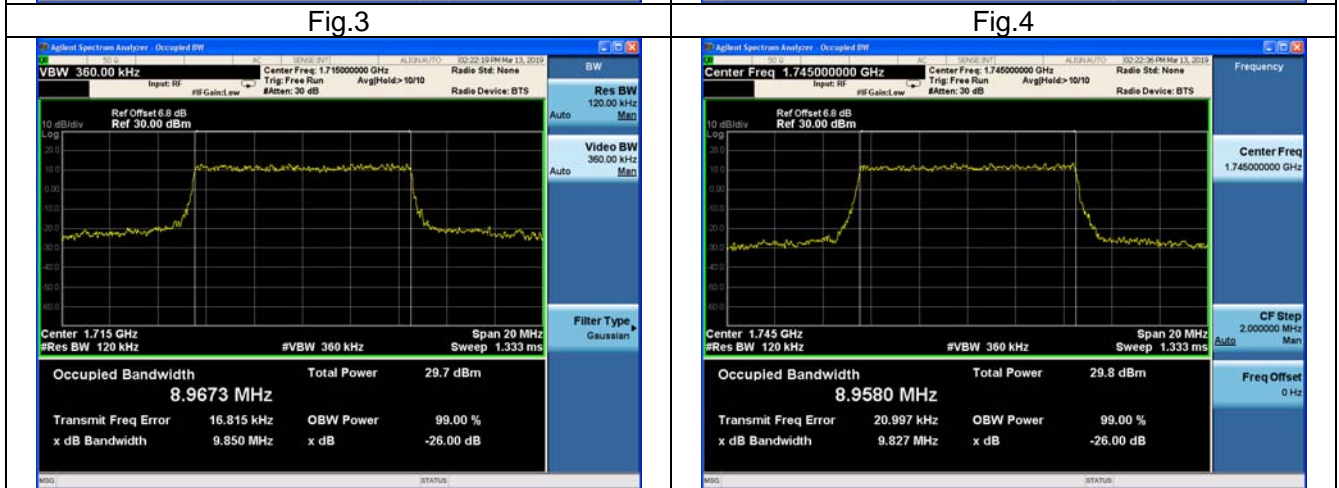
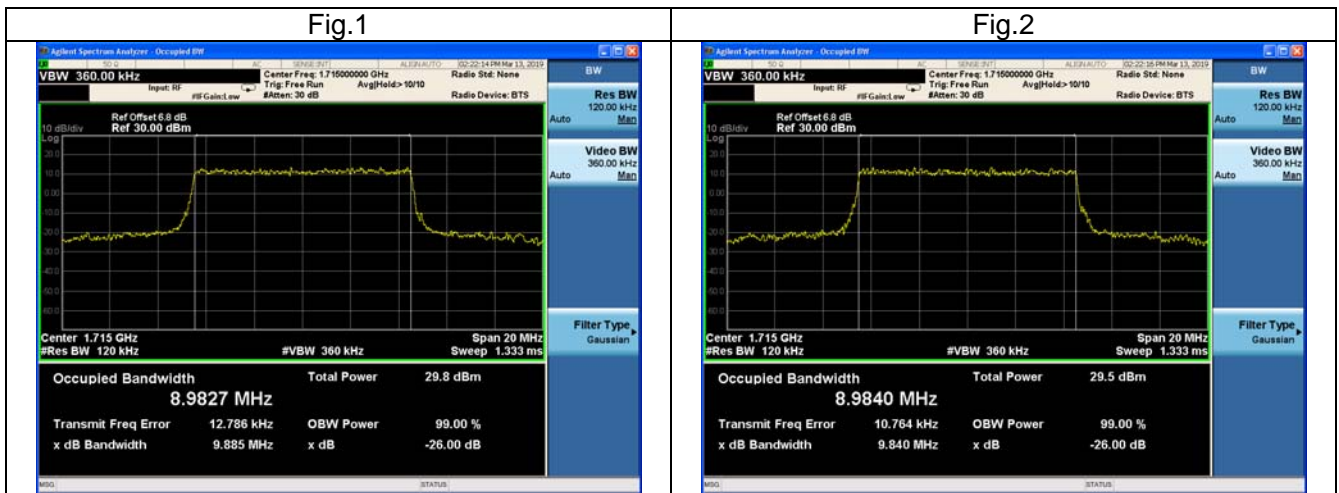


Fig.5

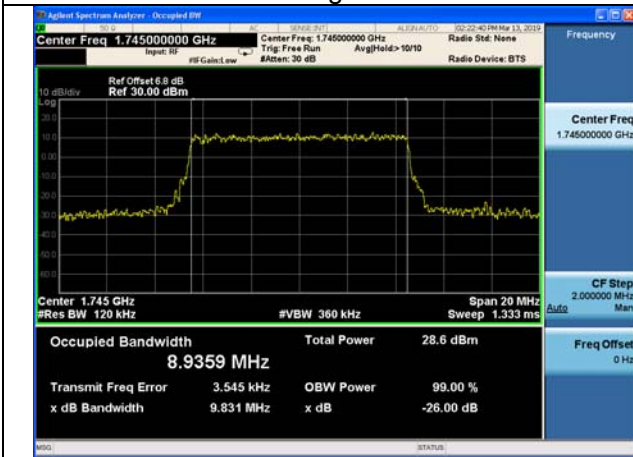


Fig.6

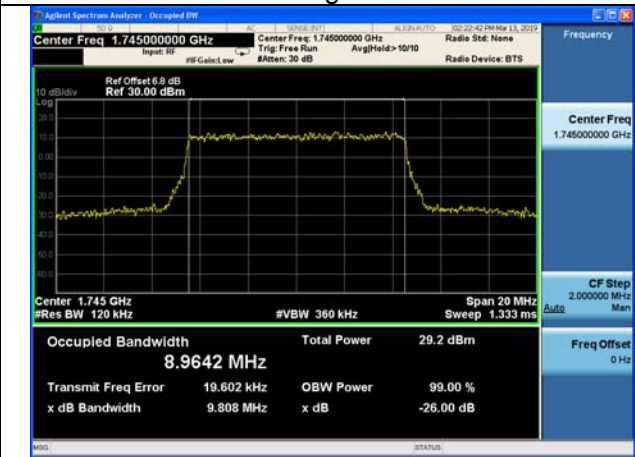


Fig.7

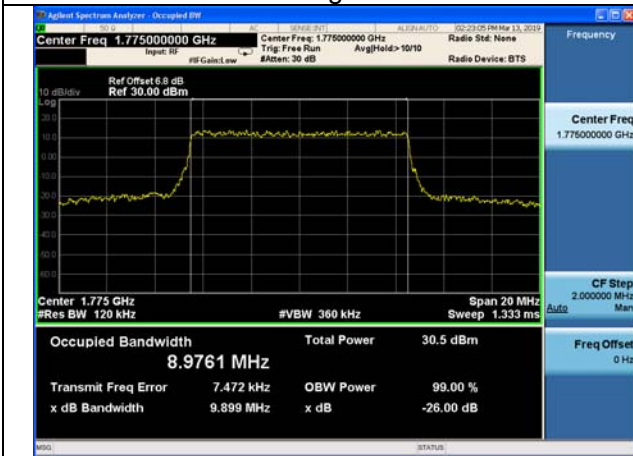


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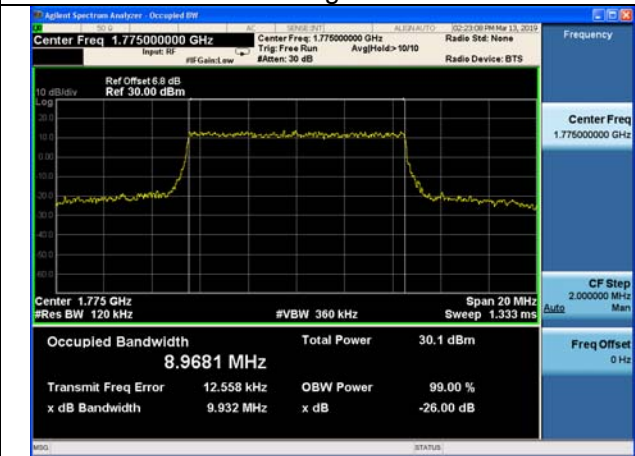
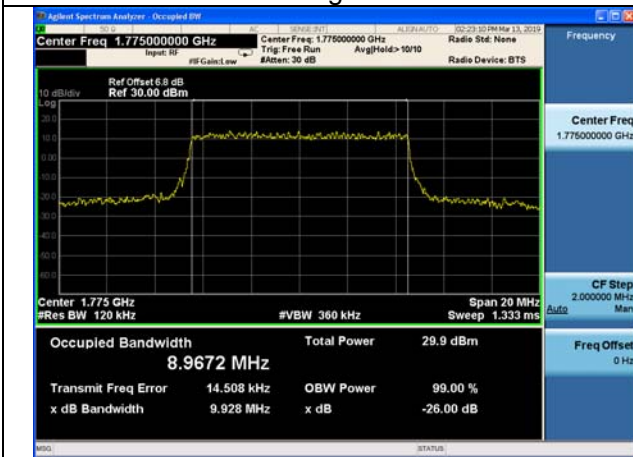


Fig.9



Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1717.5	132047	15	75	0	13.457	Fig.1	13.482	Fig.2	13.424	Fig.3
66	1745	132322	15	75	0	13.440	Fig.4	13.411	Fig.5	13.426	Fig.6
66	1772.5	132597	15	75	0	13.480	Fig.7	13.492	Fig.8	13.407	Fig.9

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1717.5	132047	15	75	0	14.65	Fig.1	14.83	Fig.2	14.55	Fig.3
66	1745	132322	15	75	0	14.54	Fig.4	14.52	Fig.5	14.74	Fig.6
66	1772.5	132597	15	75	0	14.86	Fig.7	14.45	Fig.8	14.64	Fig.9

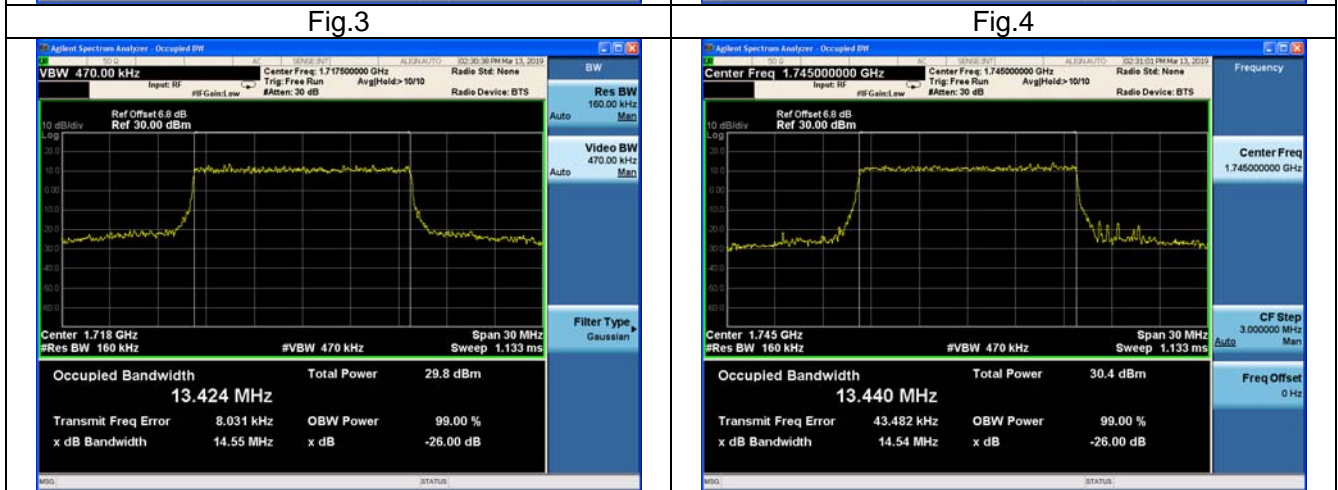
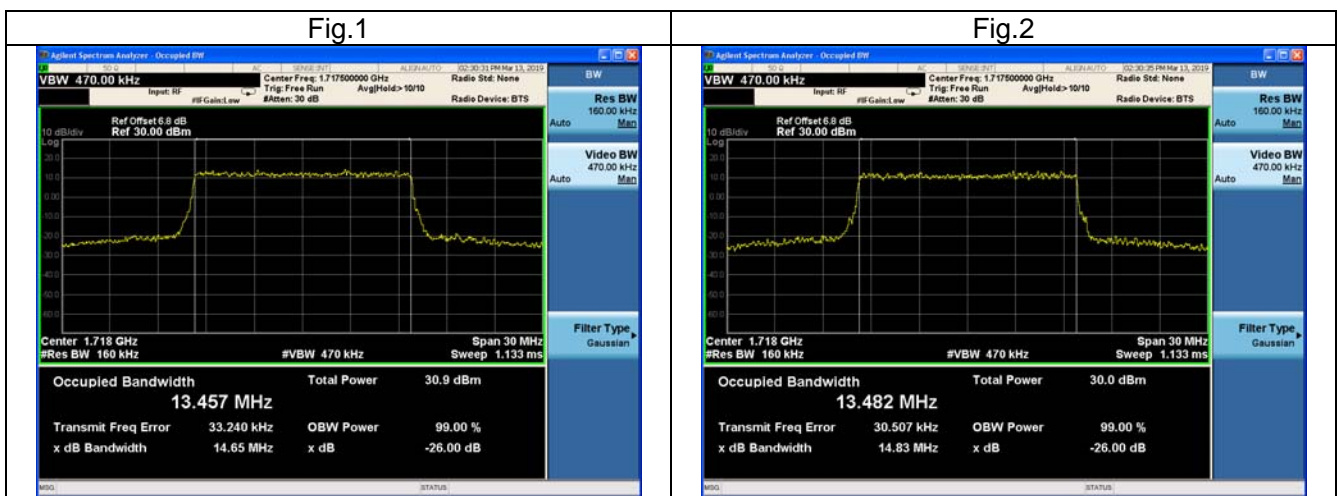


Fig.5

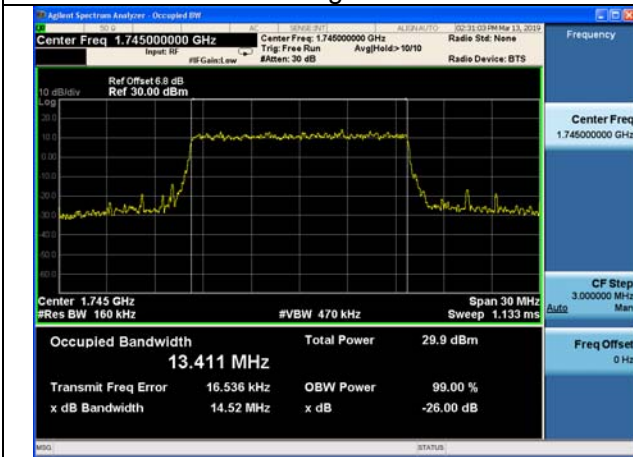


Fig.6

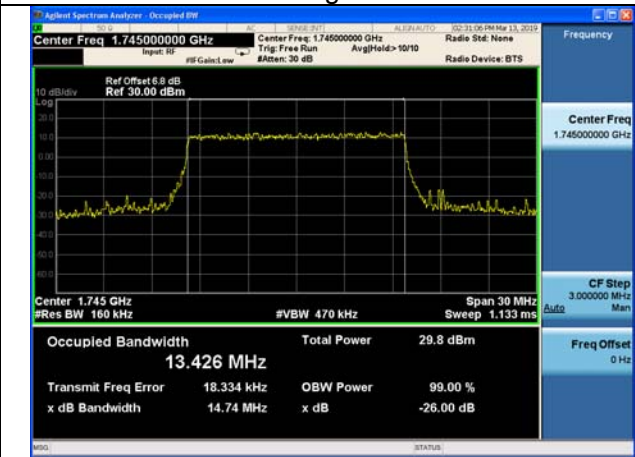


Fig.7

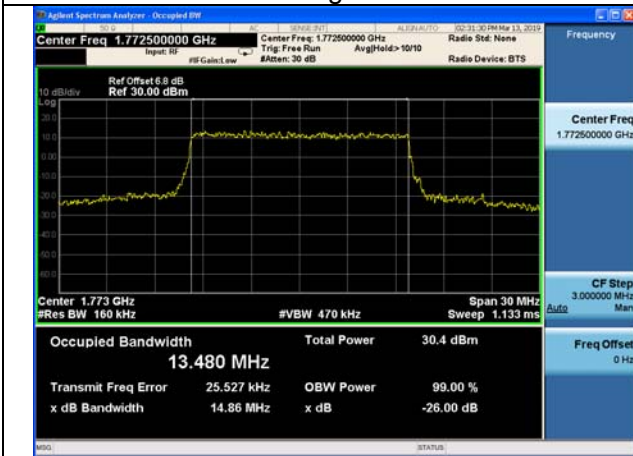


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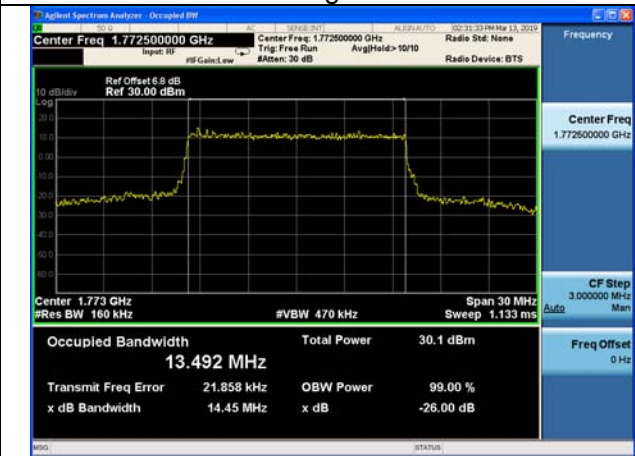
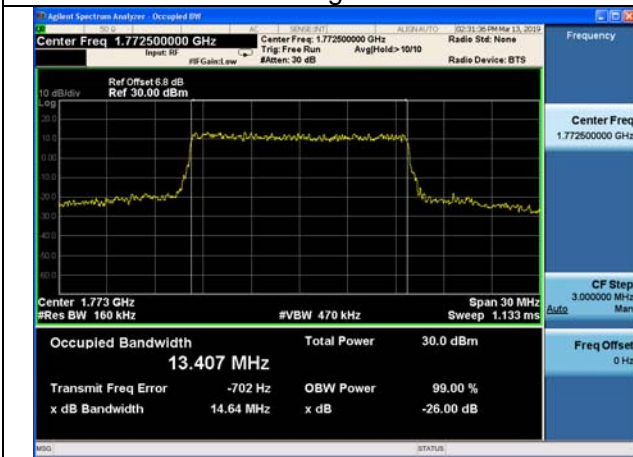


Fig.9



Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1720	132072	20	100	0	17.856	Fig.1	17.875	Fig.2	17.886	Fig.3
66	1745	132322	20	100	0	17.857	Fig.4	17.887	Fig.5	17.916	Fig.6
66	1770	132572	20	100	0	17.900	Fig.7	17.902	Fig.8	17.896	Fig.9

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
66	1720	132072	20	100	0	19.35	Fig.1	19.04	Fig.2	19.18	Fig.3
66	1745	132322	20	100	0	19.34	Fig.4	19.11	Fig.5	19.05	Fig.6
66	1770	132572	20	100	0	19.16	Fig.7	19.26	Fig.8	19.28	Fig.9

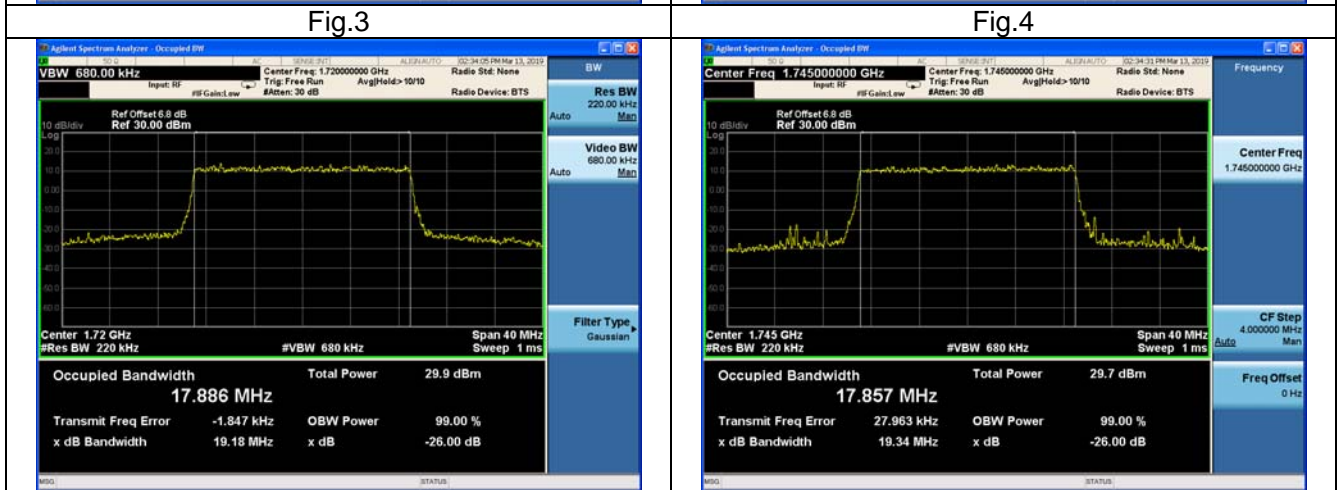
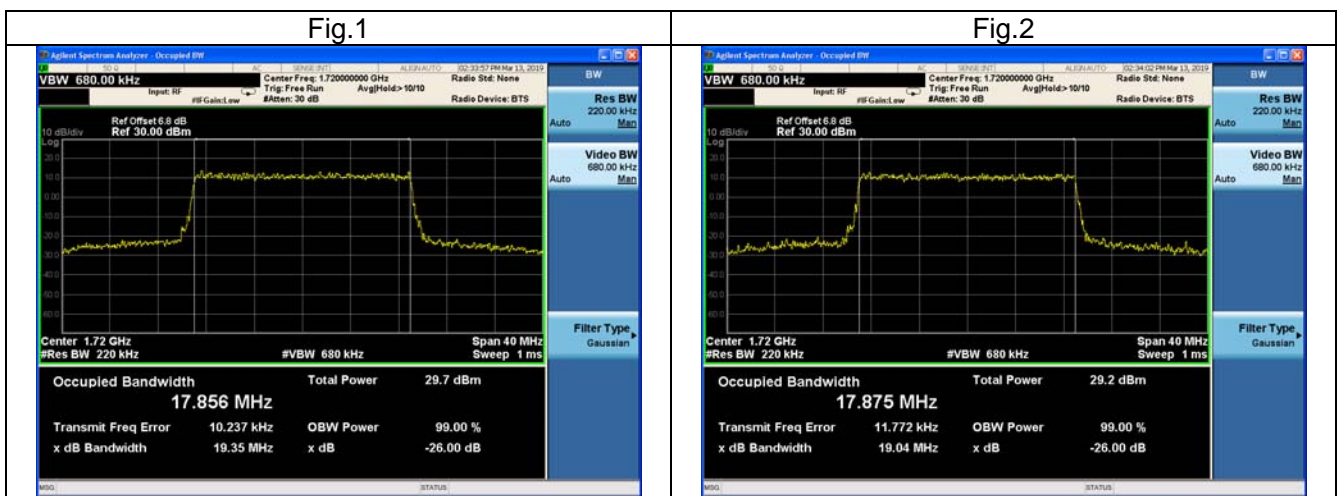


Fig.5

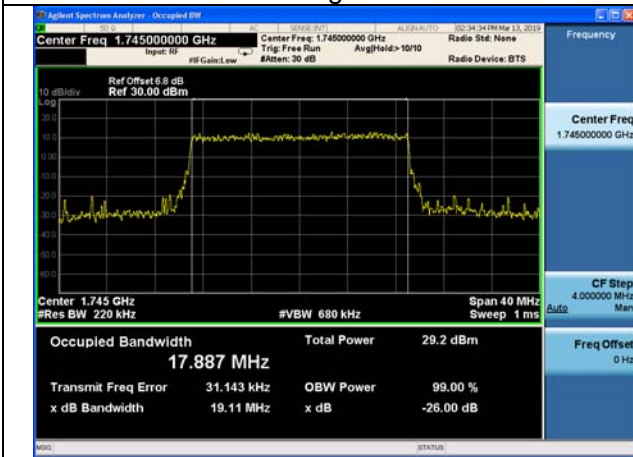


Fig.6

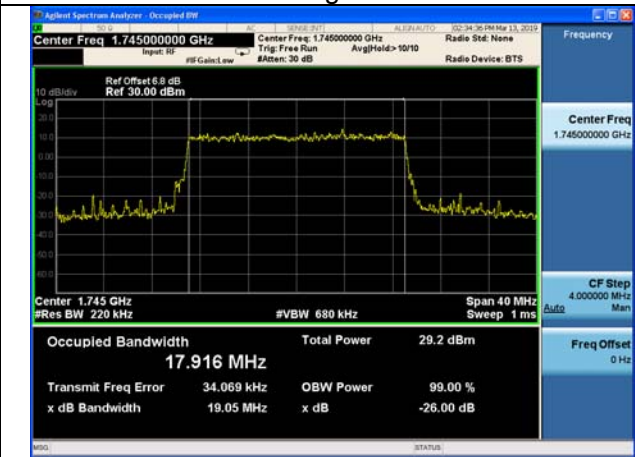


Fig.7

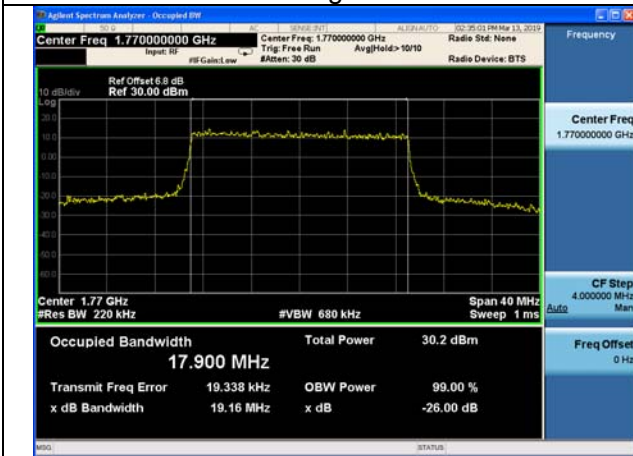


Fig.8

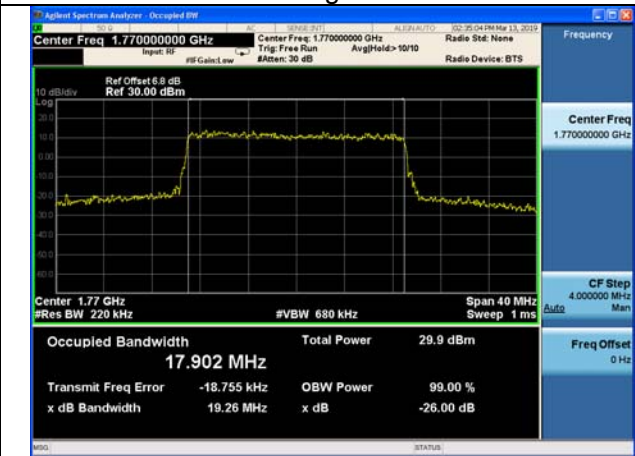
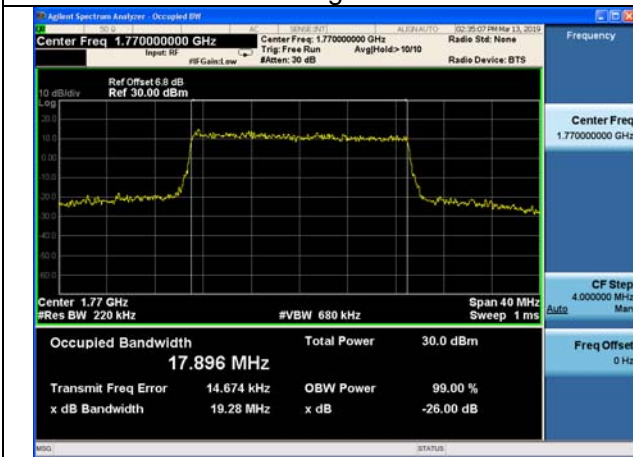
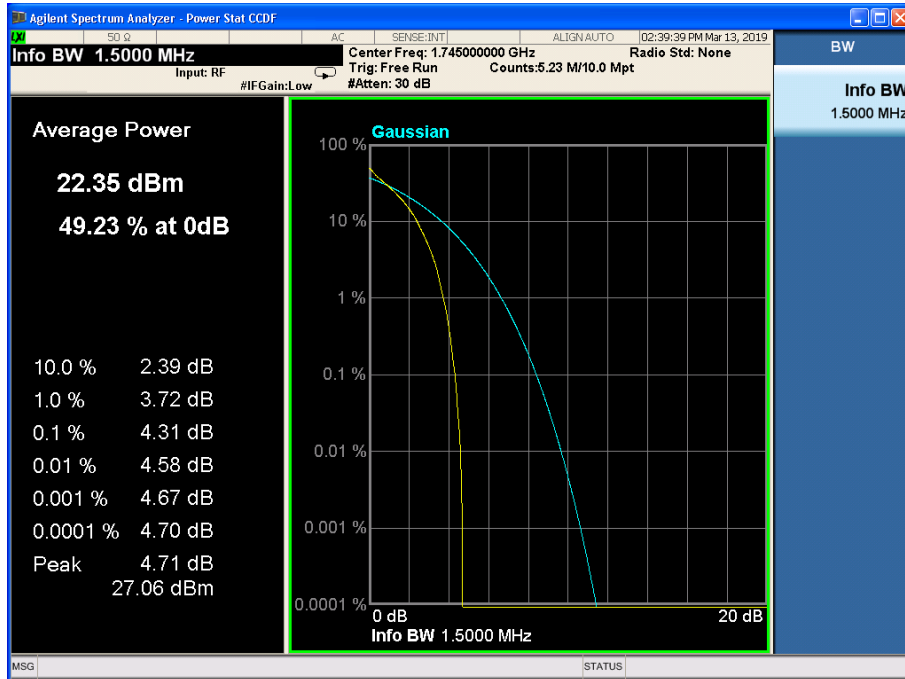


Fig.9

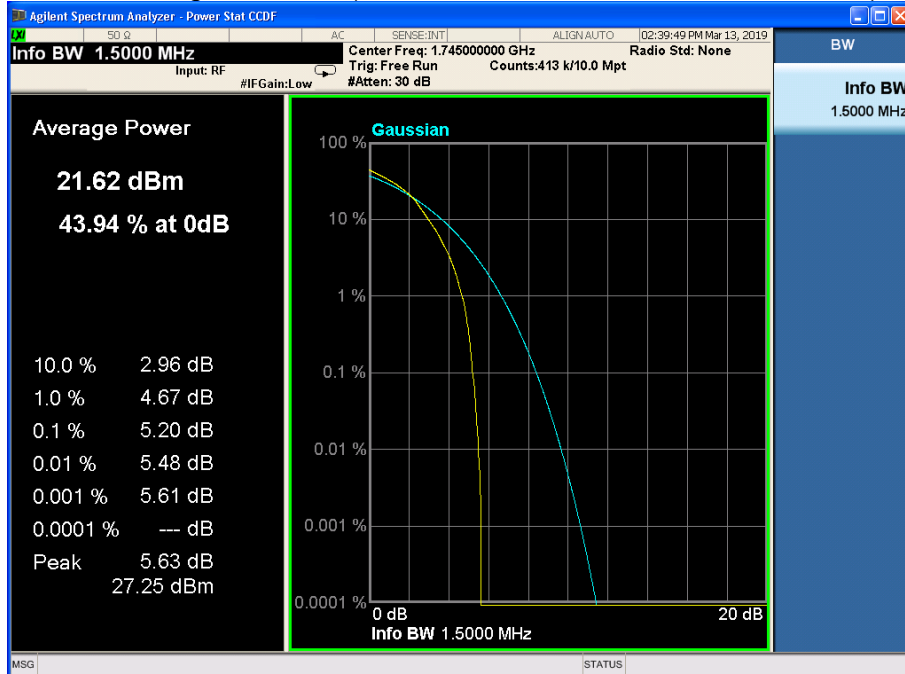


3 Peak-Average Ratio

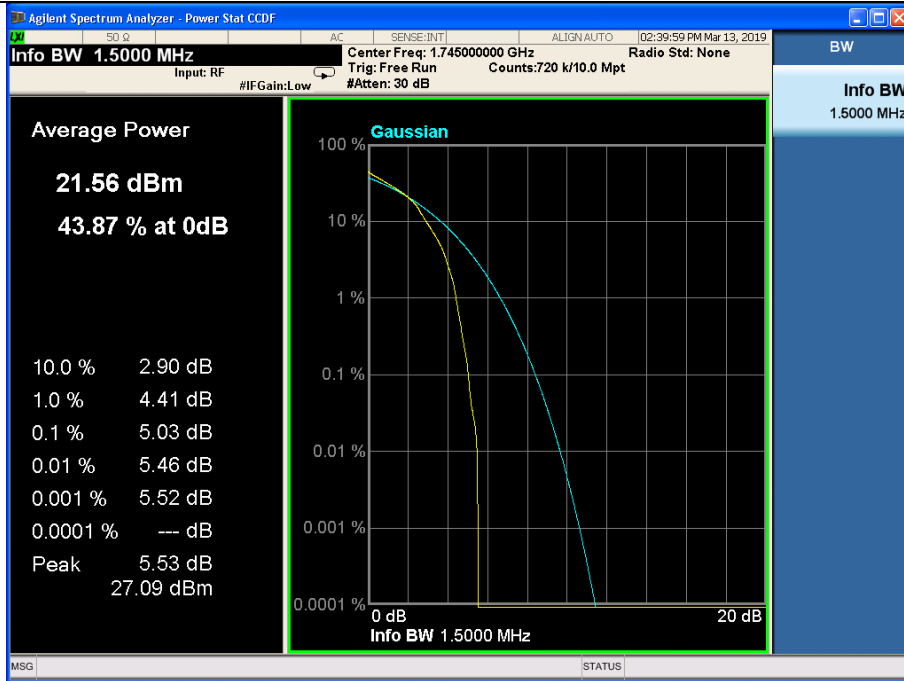
Test result:



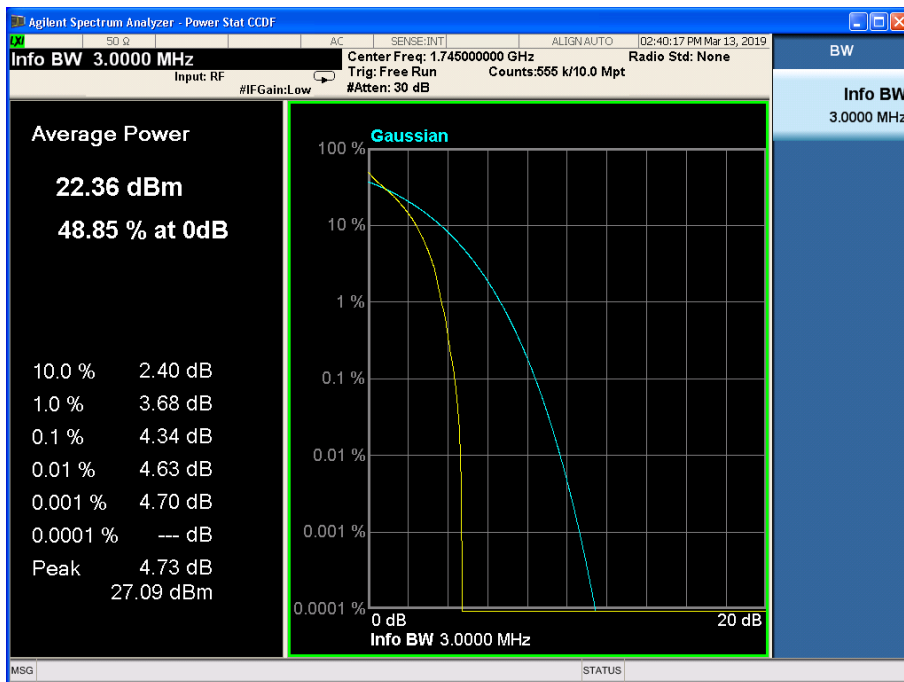
Peak-Average Ratio Plot(1.4MHz BW,QPSK,Band 66-mid Channel)



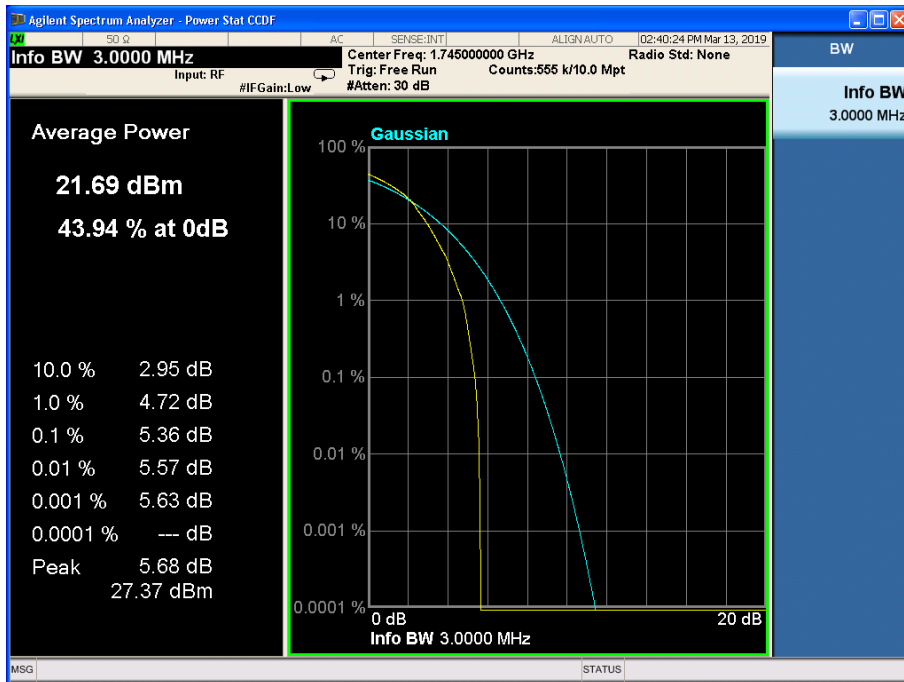
Peak-Average Ratio Plot(1.4MHz BW,16QAM,Band 66-mid Channel)



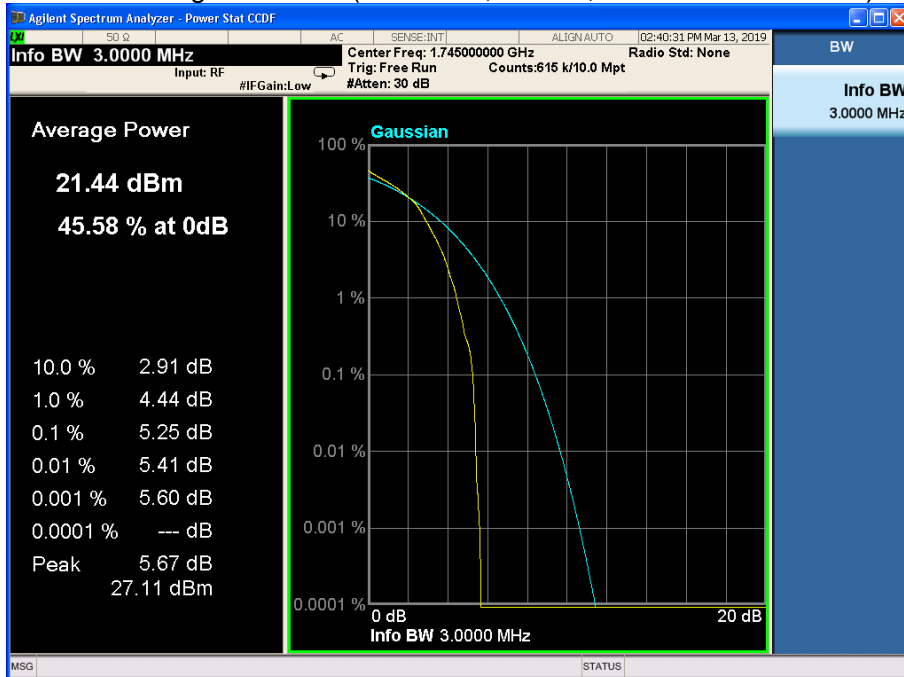
Peak-Average Ratio Plot(1.4MHz BW,64QAM,Band 66-mid Channel)



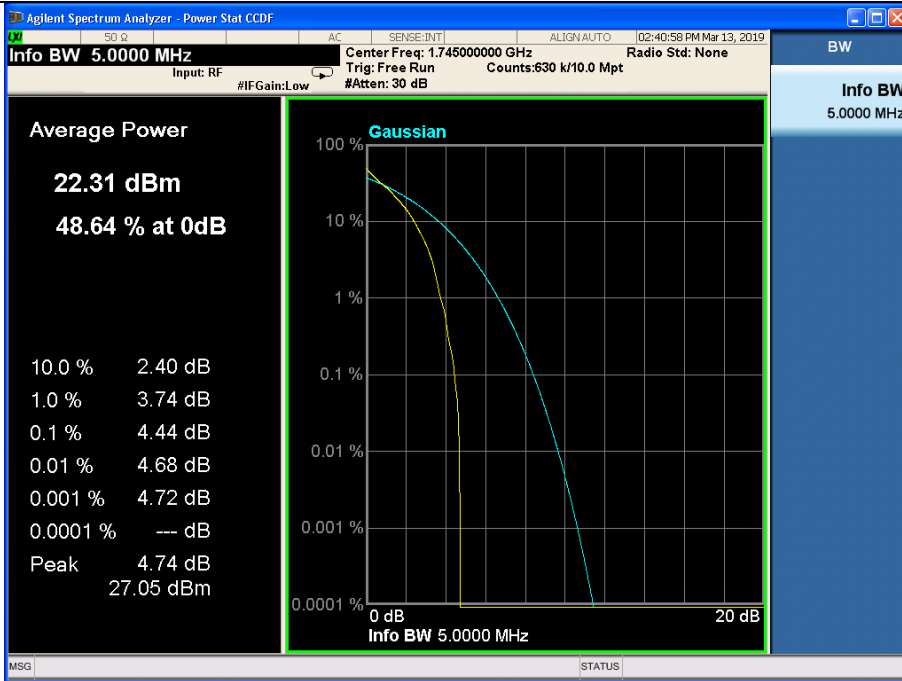
Peak-Average Ratio Plot(3MHz BW,QPSK,Band 66-mid Channel)



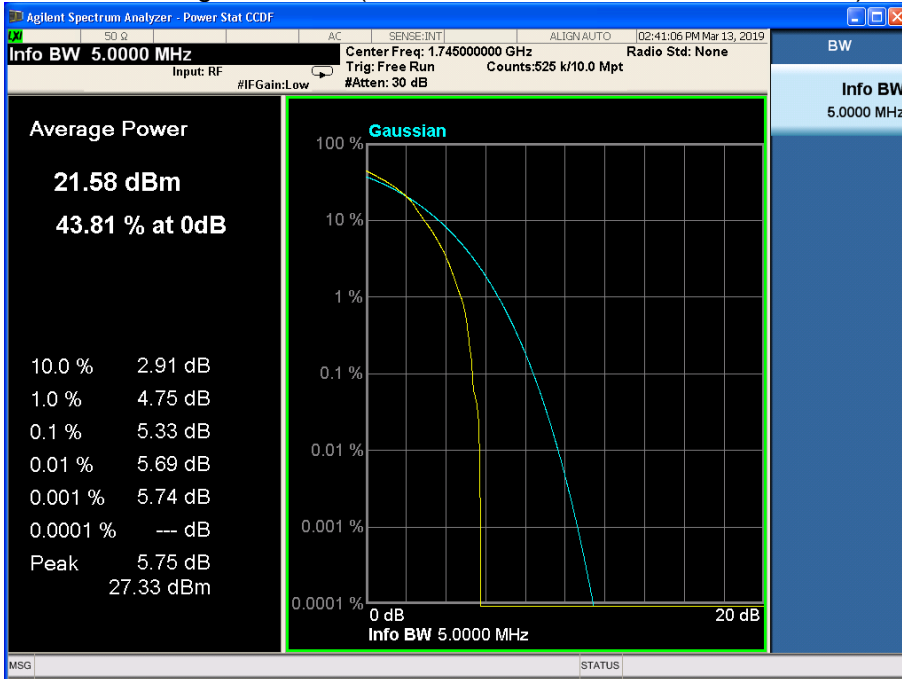
Peak-Average Ratio Plot(3MHz BW,16QAM,Band 66-mid Channel)



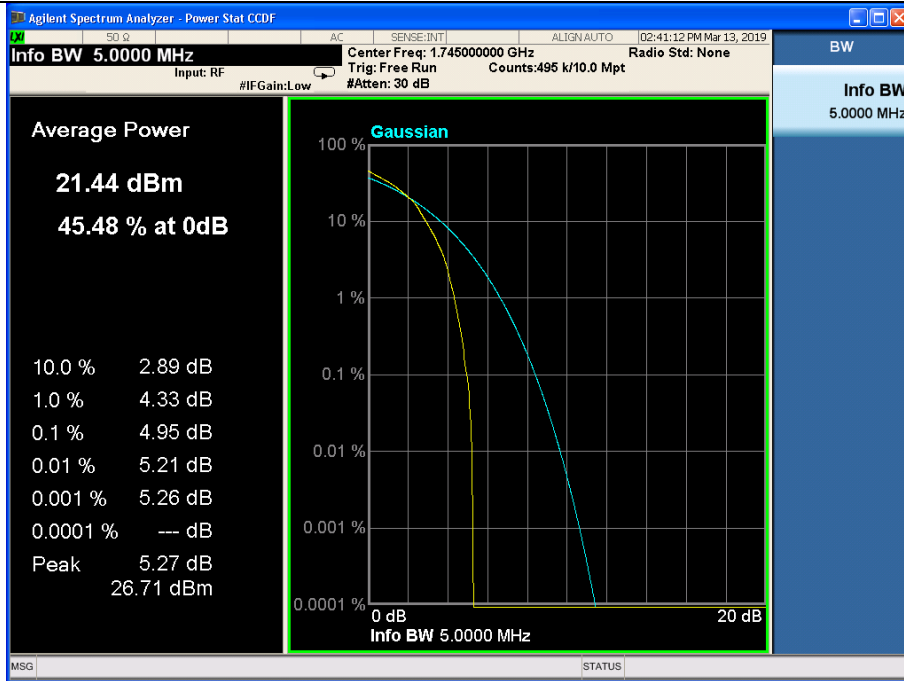
Peak-Average Ratio Plot(3MHz BW,64QAM,Band 66-mid Channel)



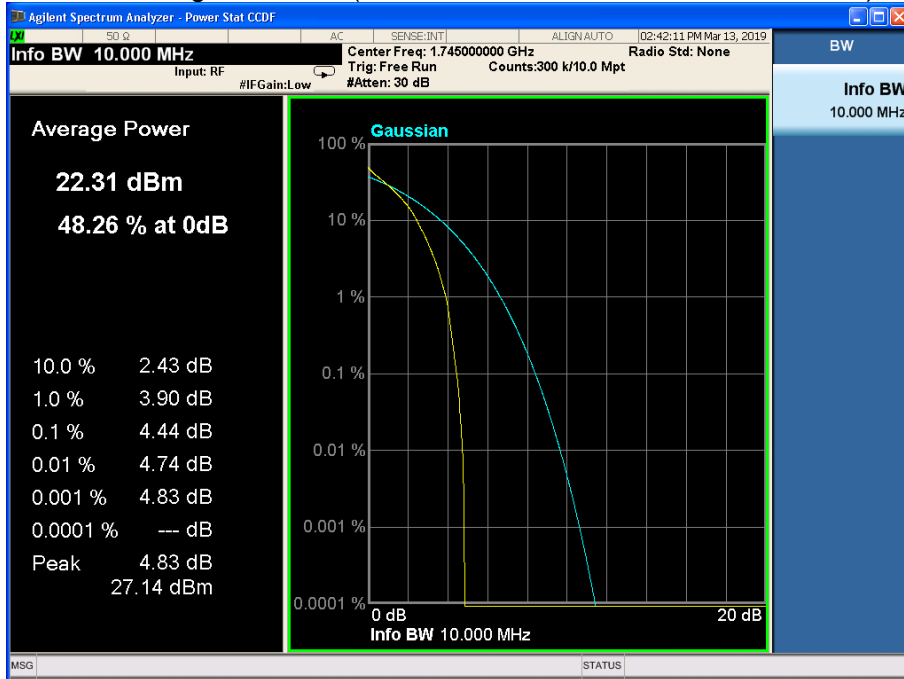
Peak-Average Ratio Plot(5MHz BW,QPSK,Band 66-mid Channel)



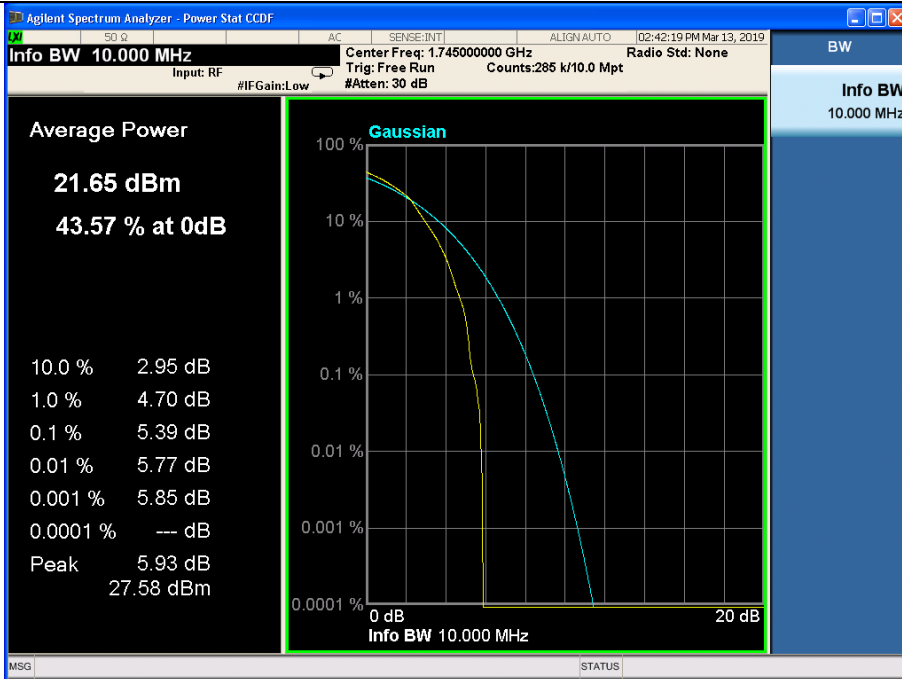
Peak-Average Ratio Plot(5MHz BW,16QAM,Band 66-mid Channel)



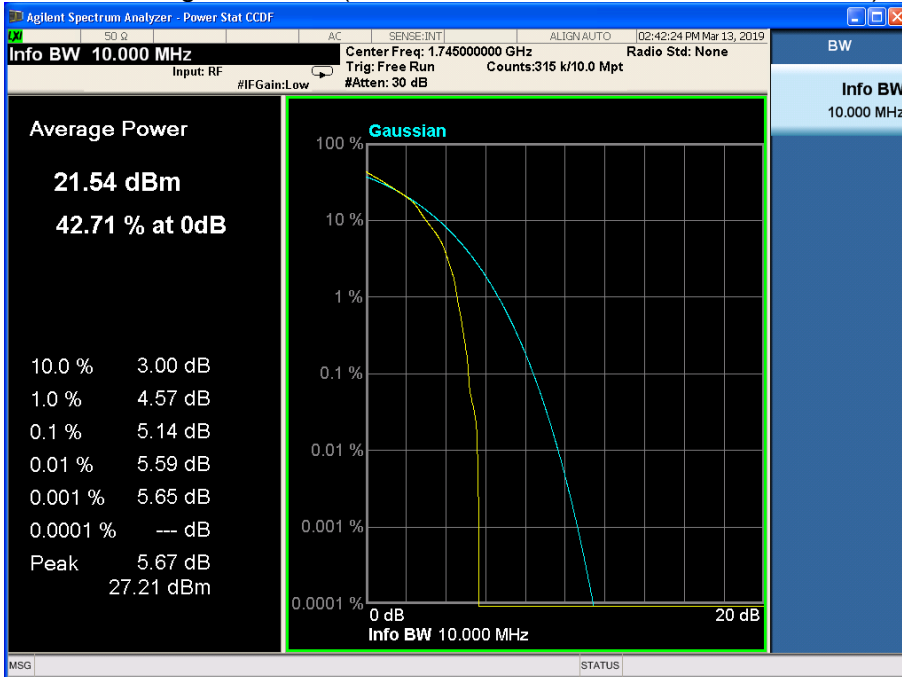
Peak-Average Ratio Plot(5MHz BW,64QAM,Band 66-mid Channel)



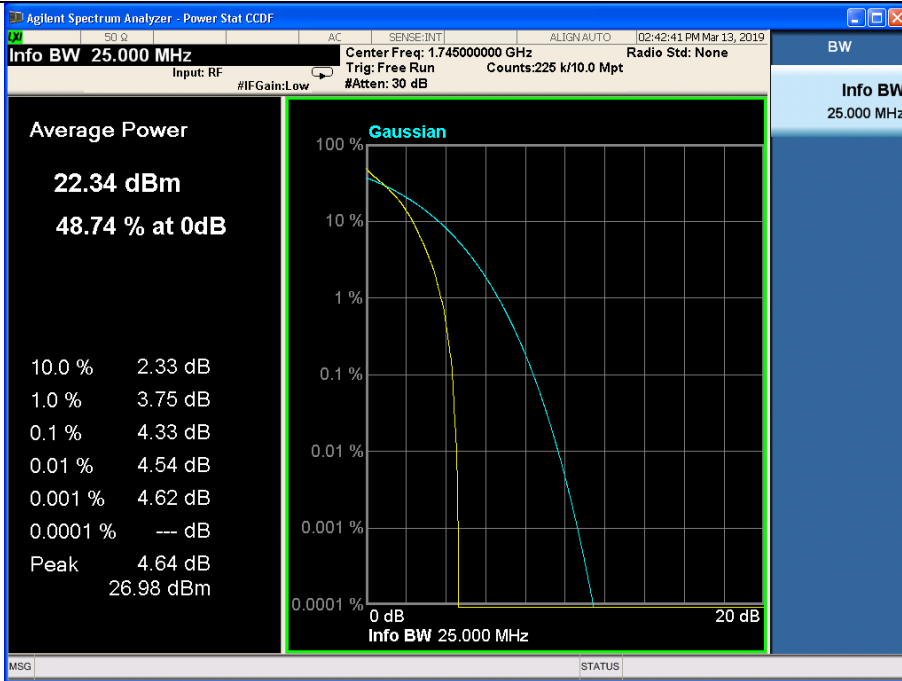
Peak-Average Ratio Plot(10MHz BW,QPSK,Band 66-mid Channel)



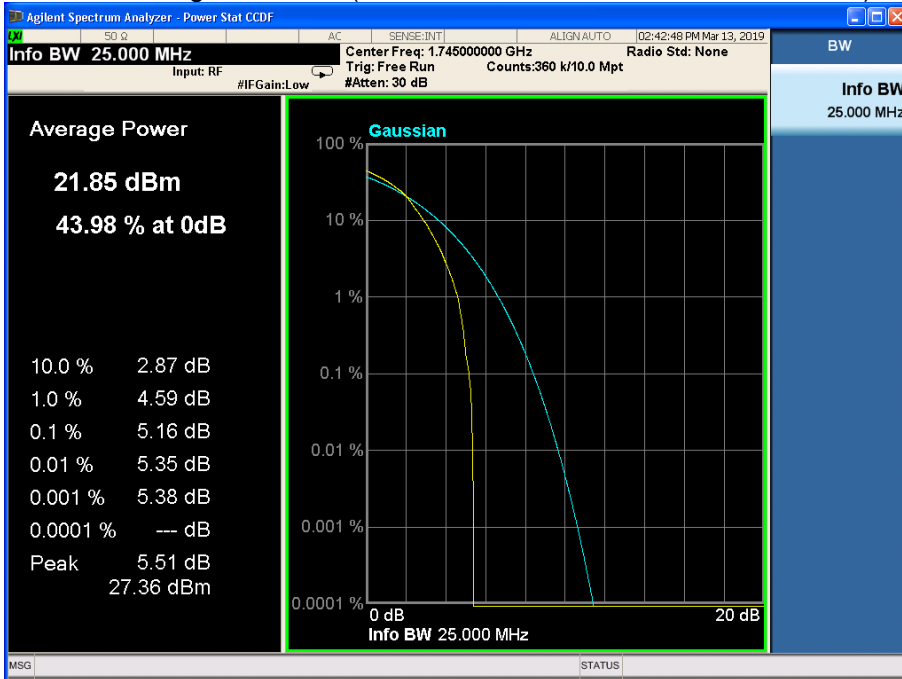
Peak-Average Ratio Plot(10MHz BW,16QAM,Band 66-mid Channel)



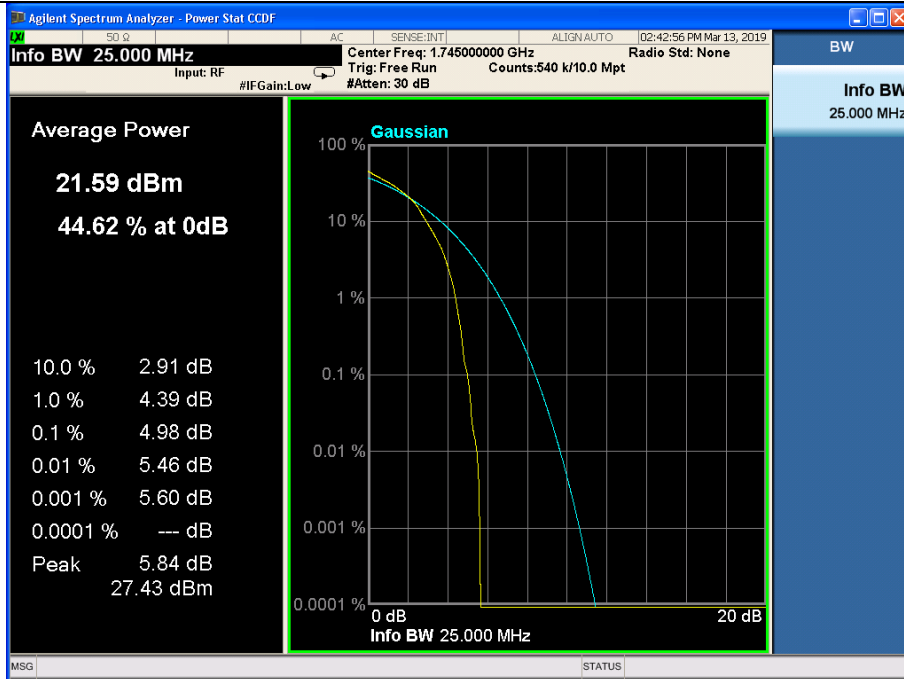
Peak-Average Ratio Plot(10MHz BW,64QAM,Band 66-mid Channel)



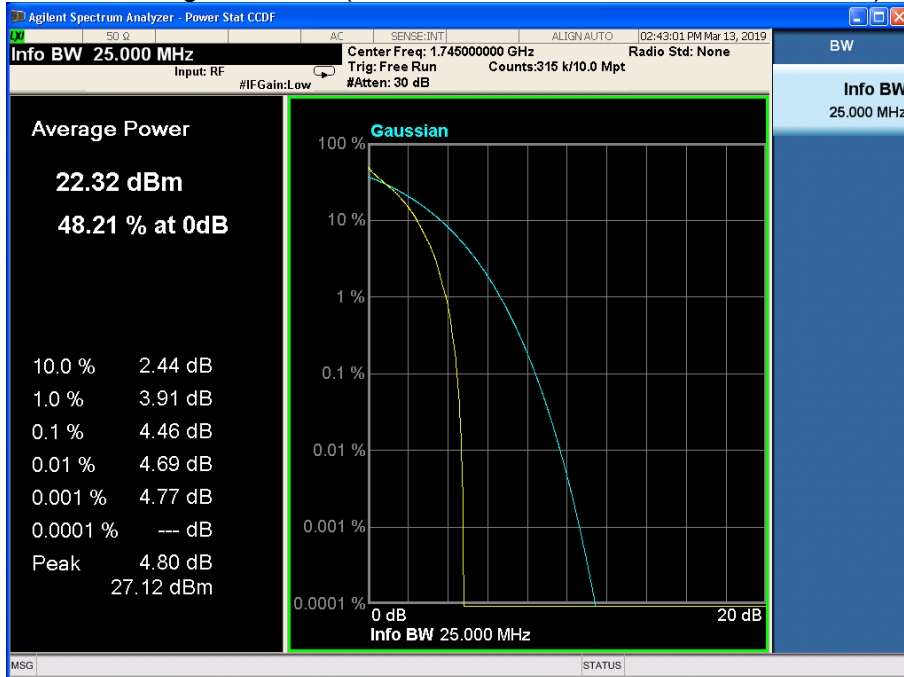
Peak-Average Ratio Plot(15MHz BW,QPSK,Band 66-mid Channel)



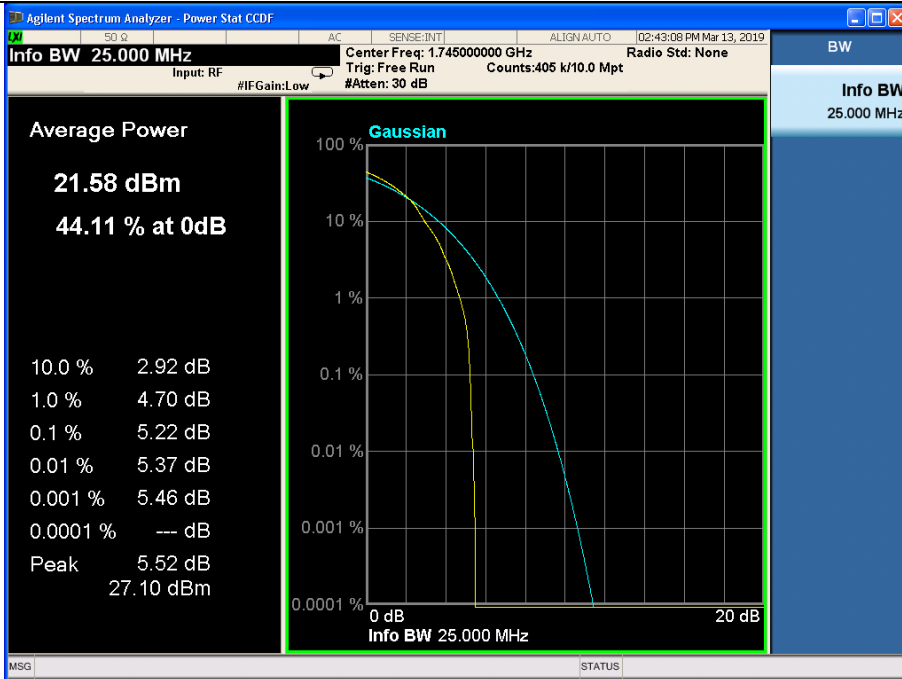
Peak-Average Ratio Plot(15MHz BW,16QAM,Band 66-mid Channel)



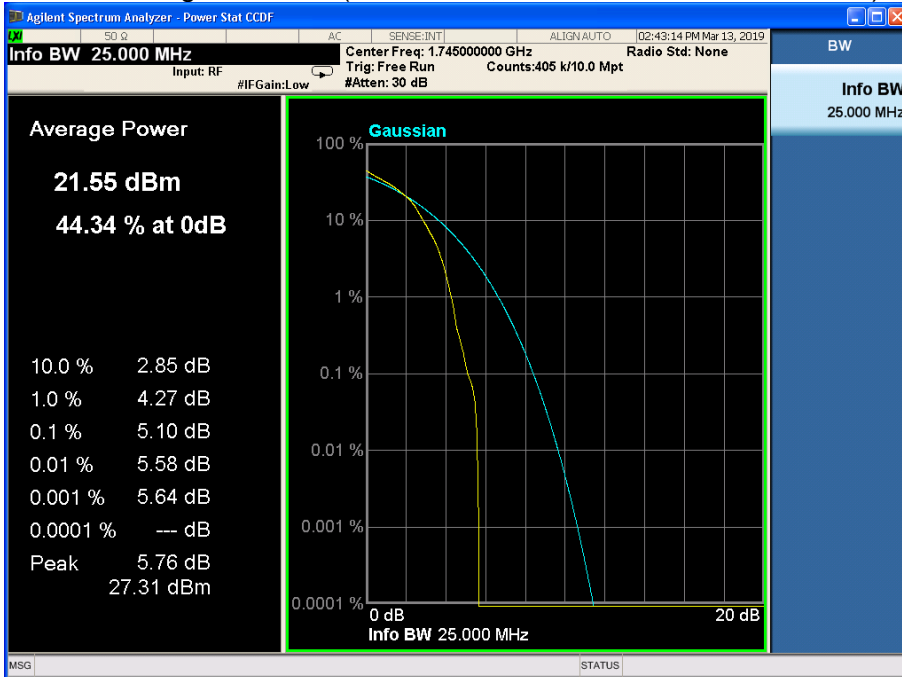
Peak-Average Ratio Plot(15MHz BW,64QAM,Band 66-mid Channel)



Peak-Average Ratio Plot(20MHz BW,QPSK,Band 66-mid Channel)



Peak-Average Ratio Plot(20MHz BW,16QAM,Band 66-mid Channel)



Peak-Average Ratio Plot(20MHz BW,64QAM,Band 66-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
66	1720	132072	20	1	0	Fig.1

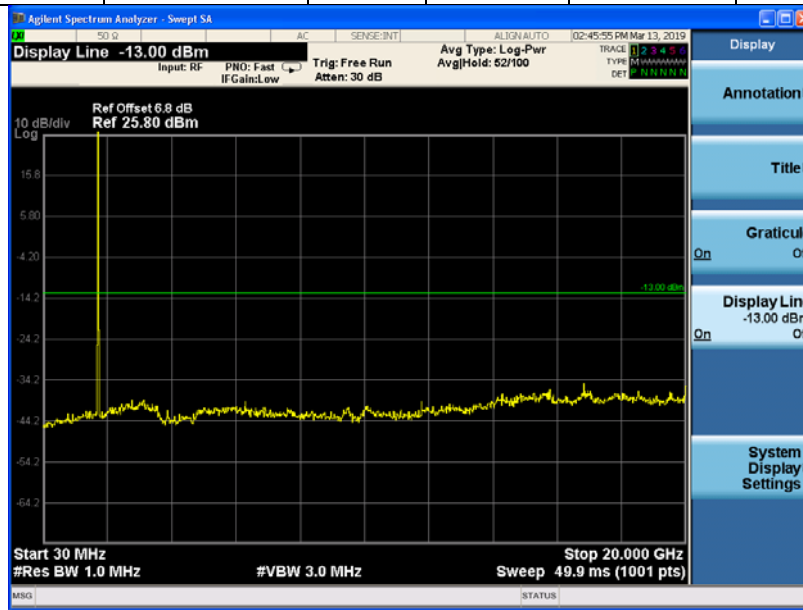


Fig.1

Band	Carrier frequency (MHz)	Channel(Mid)	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
66	1745	132322	20	1	0	Fig.1

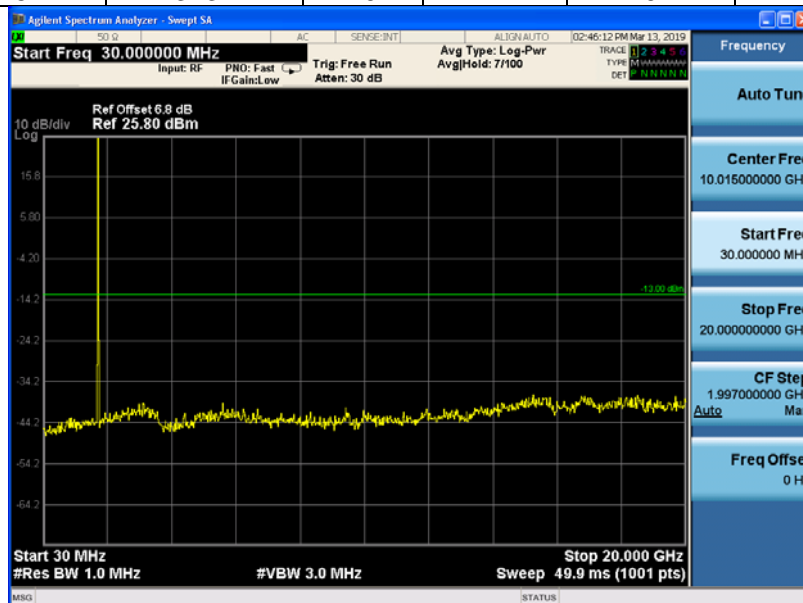


Fig.1

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
66	1770	132572	20	1	0	Fig.1

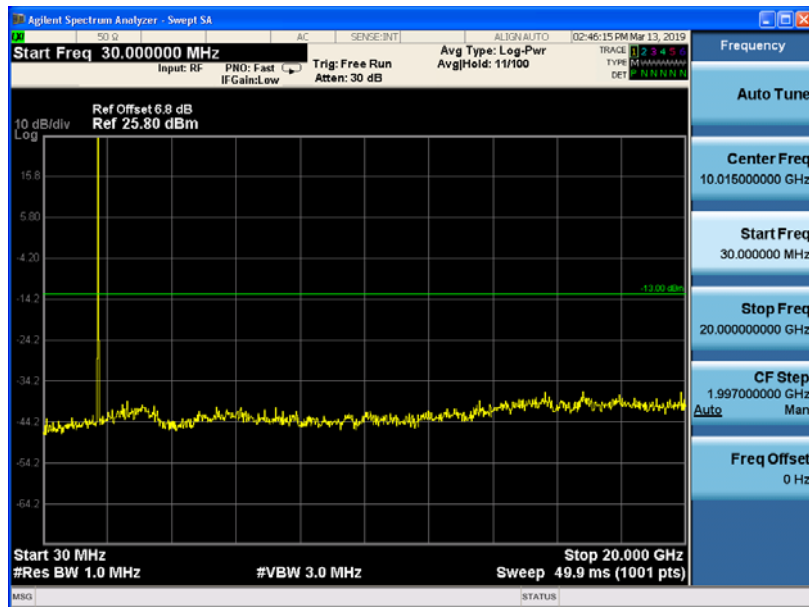


Fig.1

5 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
66	1710.7	131979	1.4	1	0	Fig.1
				6	0	Fig.4

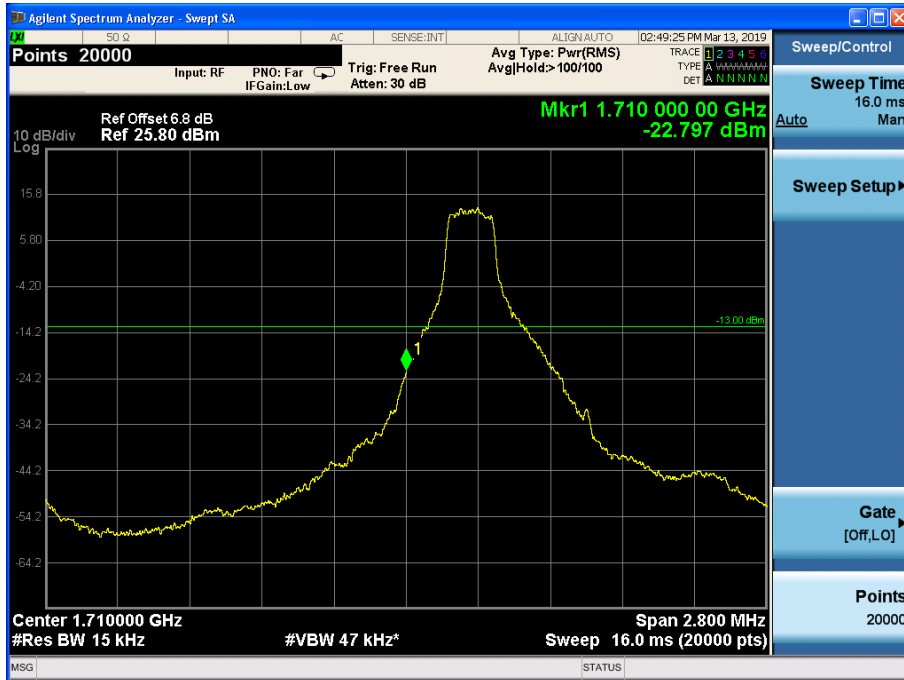


Fig.1

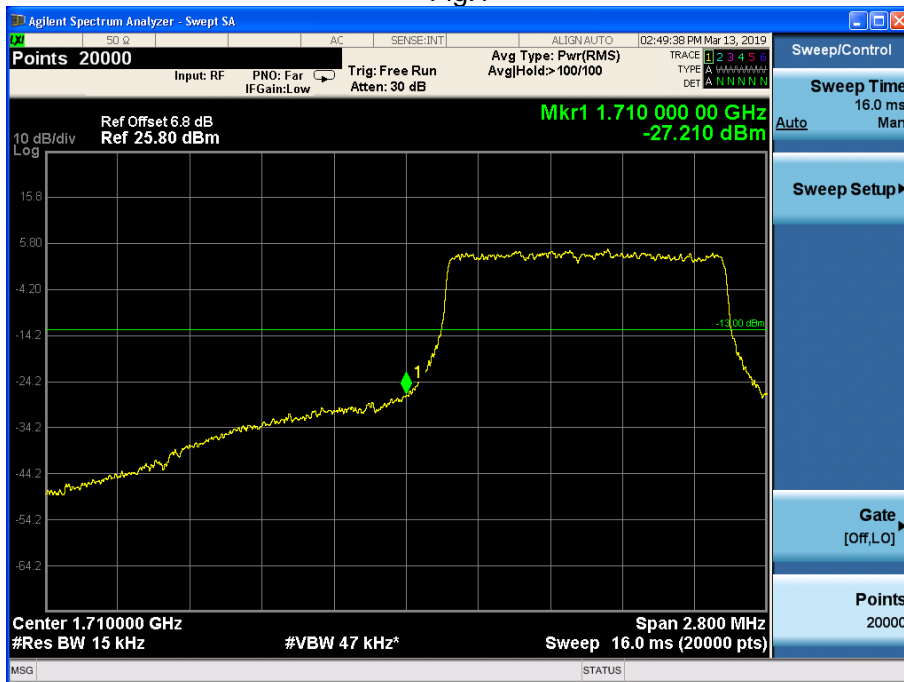


Fig.4

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1779.3	132665	1.4	1	5	Fig.1
				6	0	Fig.4

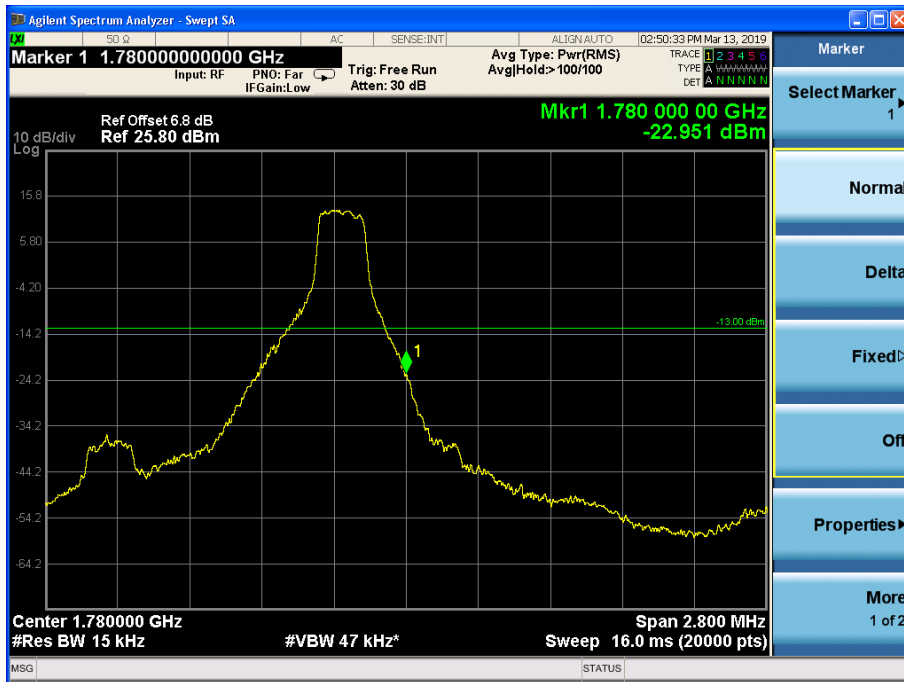


Fig.1

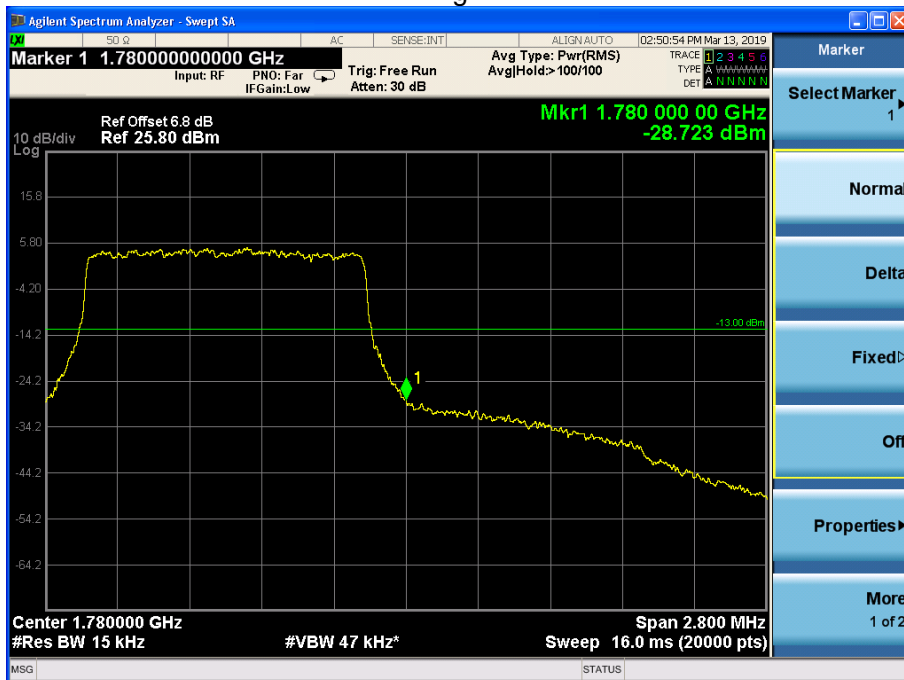


Fig.4

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1711.5	131987	3	1	0	Fig.1
				15	0	Fig.4



Fig.1

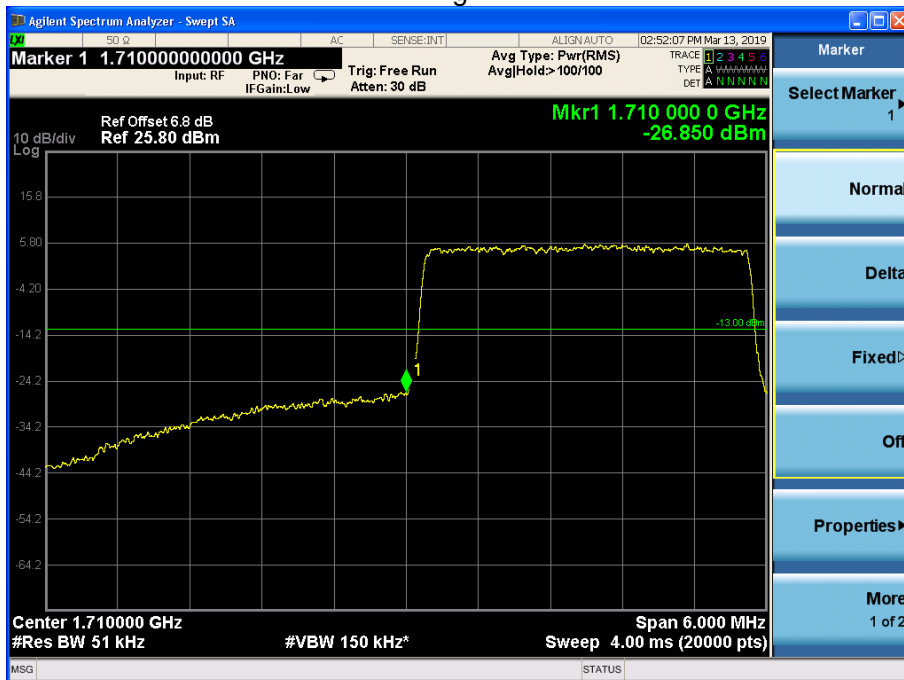


Fig.4

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1778.5	132657	3	1	14	Fig.1
				15	0	Fig.4



Fig.4



Fig.8

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1712.5	131997	5	1	0	Fig.1
				25	0	Fig.4

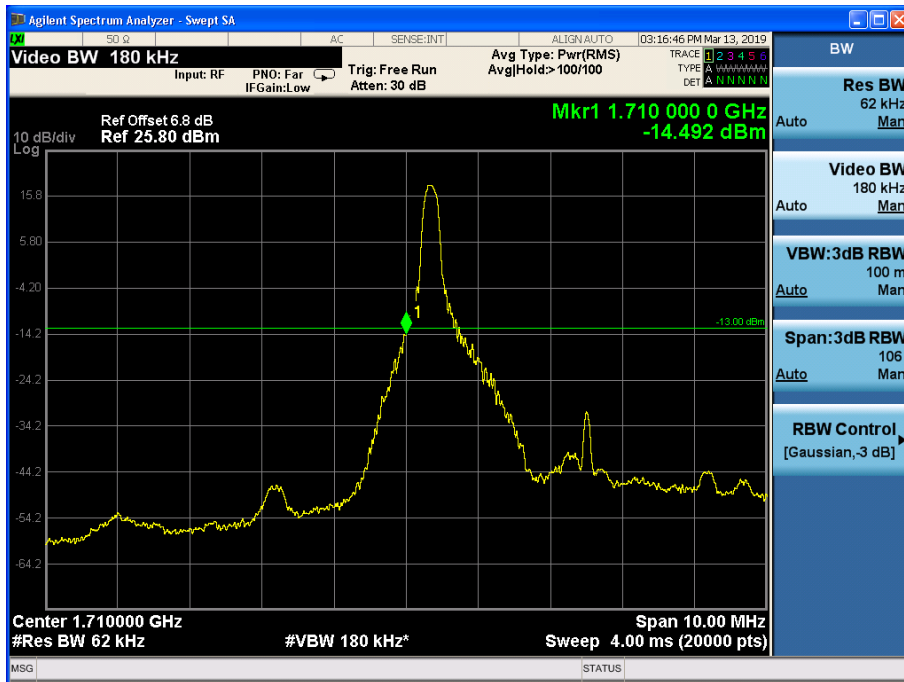


Fig.1

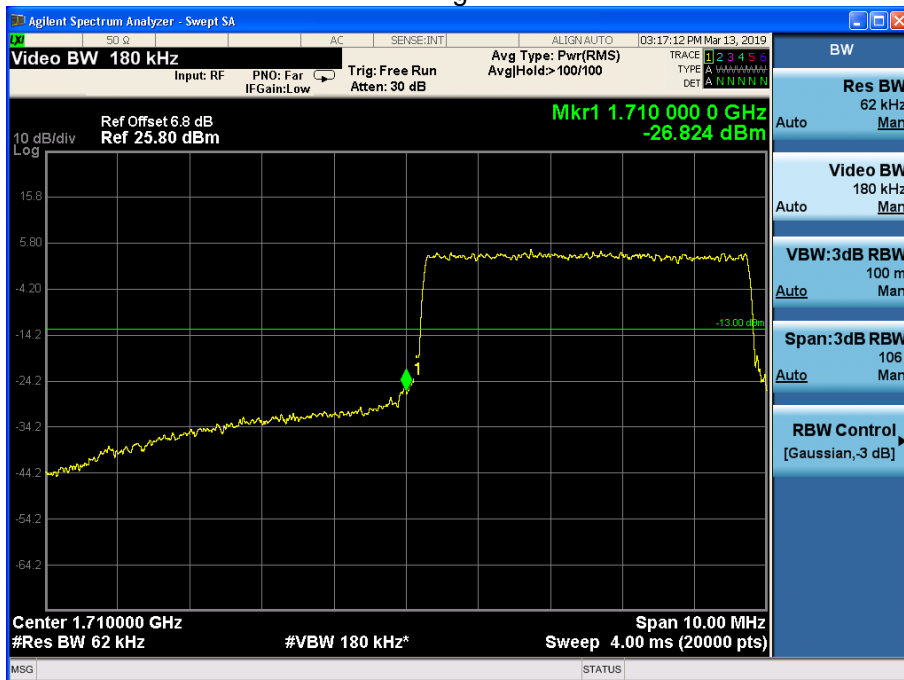


Fig.4

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1777.5	132647	5	1	24	Fig.1
				25	0	Fig.4

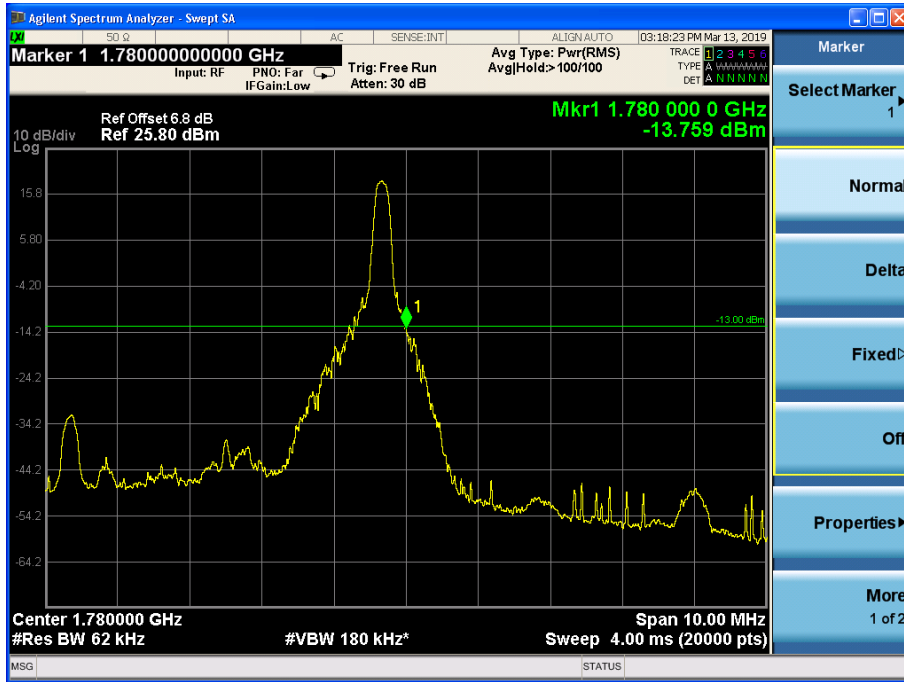


Fig.1

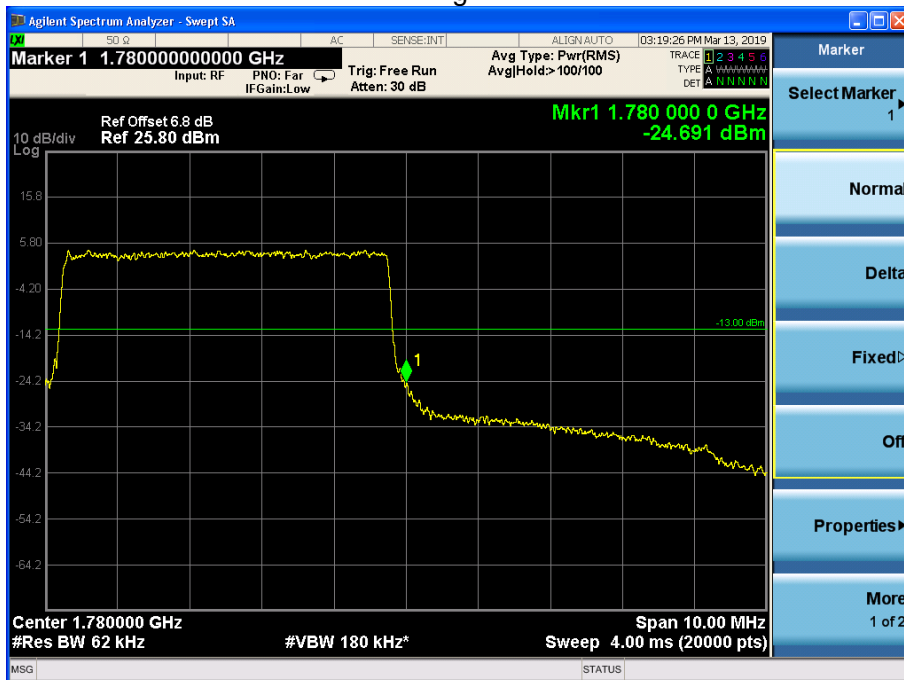


Fig.4

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1715	132022	10	1	0	Fig.1
				50	0	Fig.4

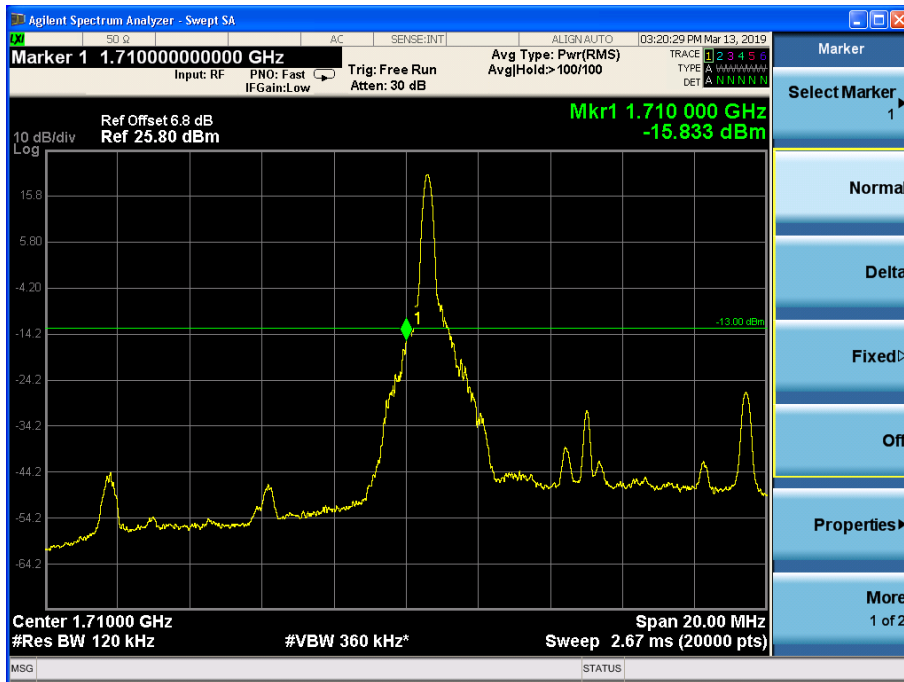


Fig.1

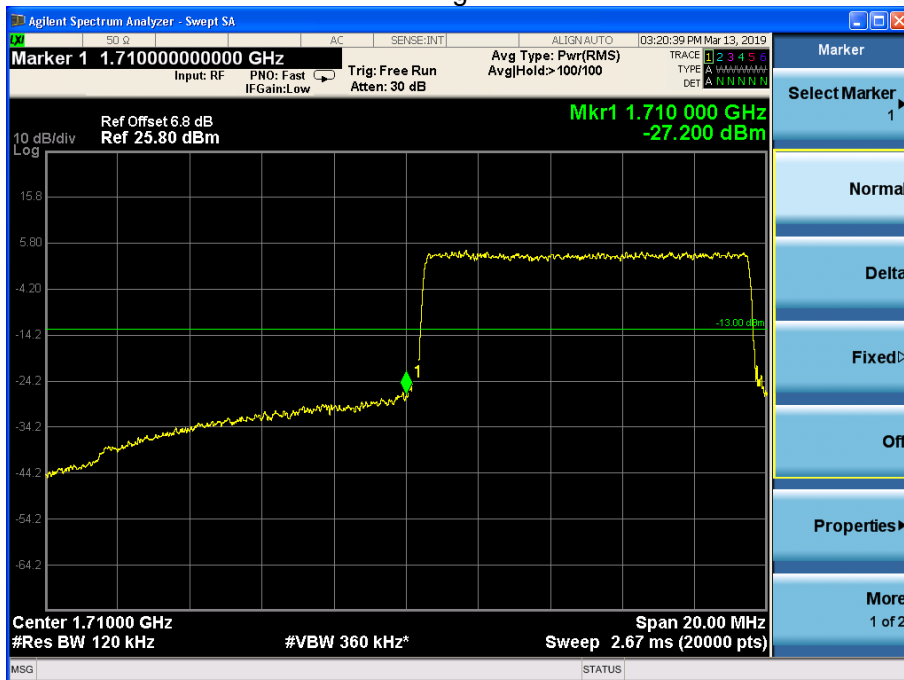


Fig.4

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1775	132622	10	1	49	Fig.1
				50	0	Fig.4

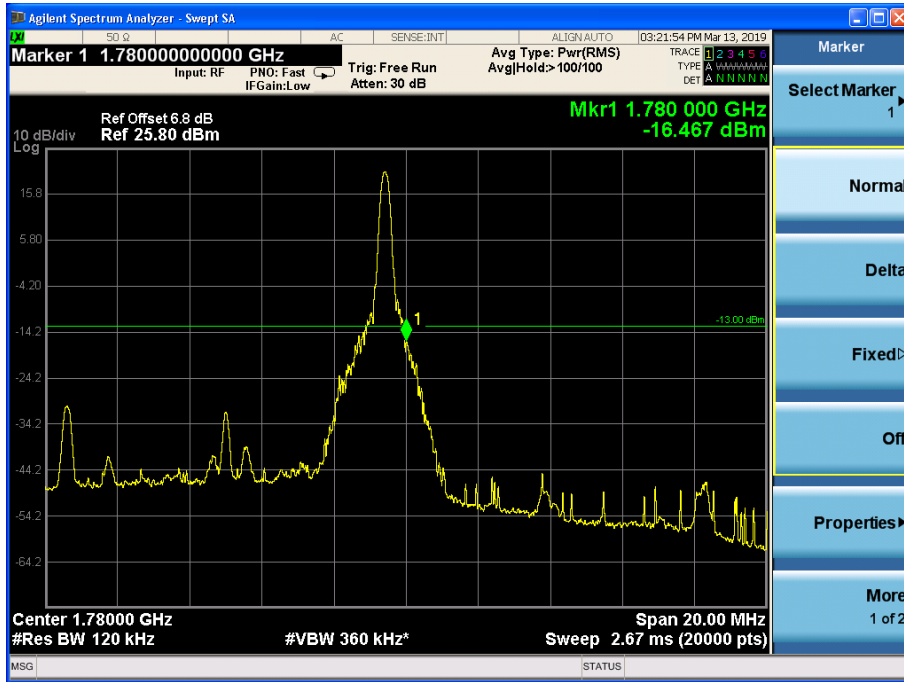


Fig.1



Fig.4

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1717.5	132047	15	1	0	Fig.1
				75	0	Fig.4

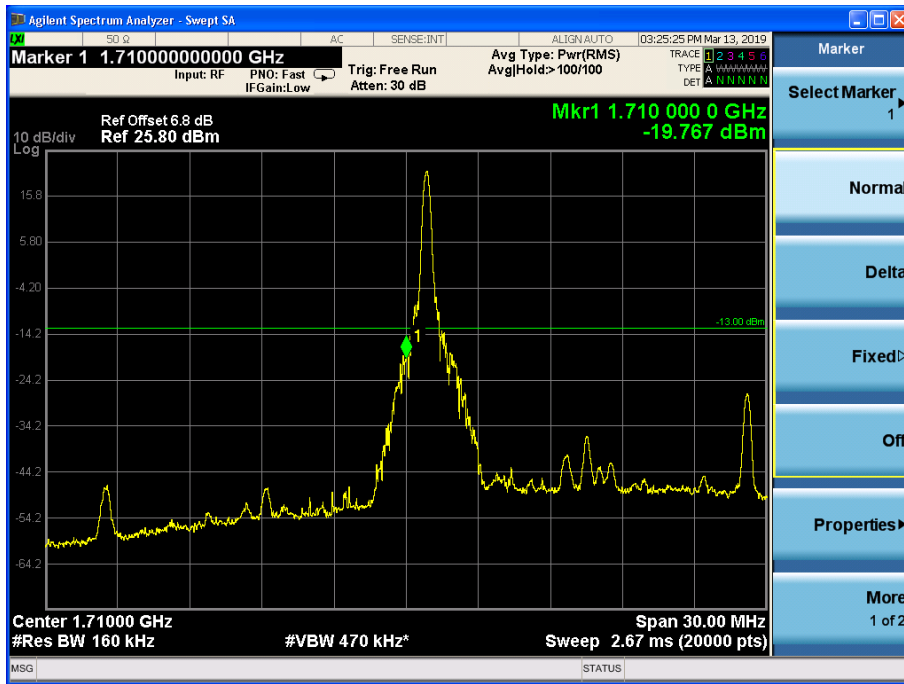


Fig.1

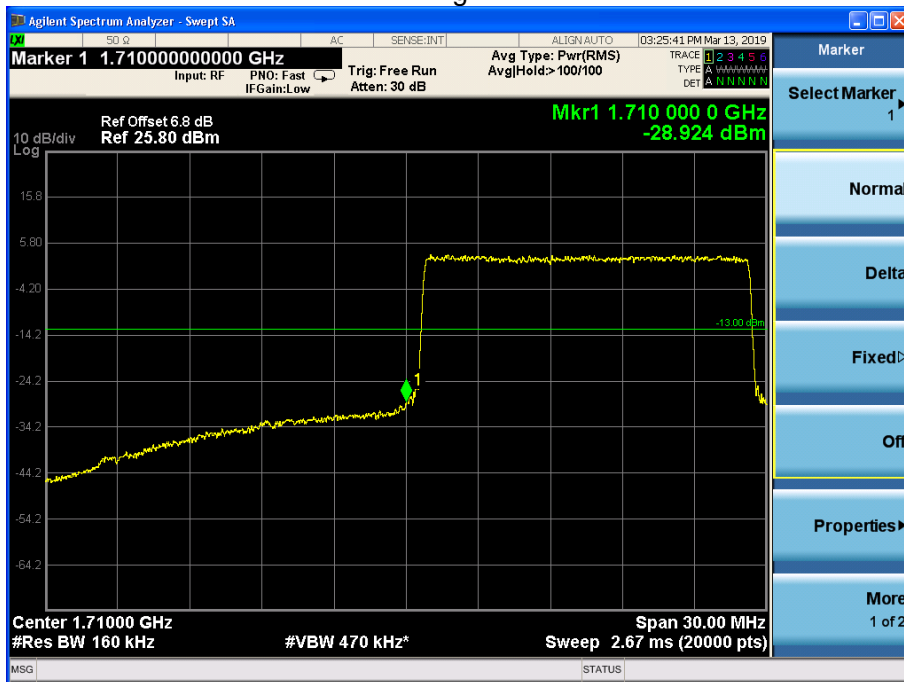


Fig.4

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1772.5	132597	15	1	74	Fig.1
				75	0	Fig.4

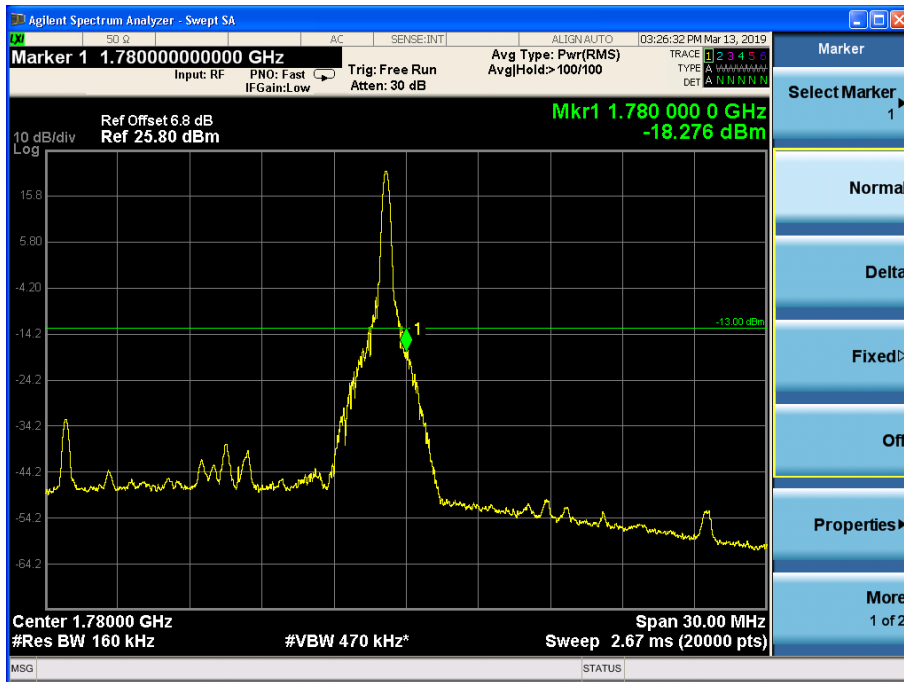


Fig.1



Fig.4

Band	Carrier frequency (MHz)	Channel(Low)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1720	132072	20	1	0	Fig.1
				100	0	Fig.4

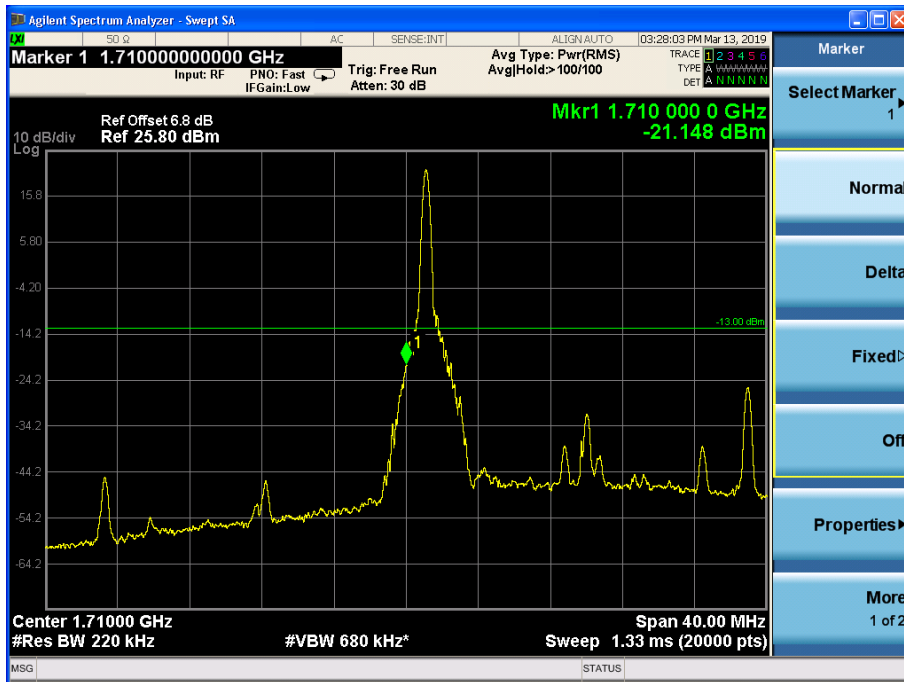


Fig.1

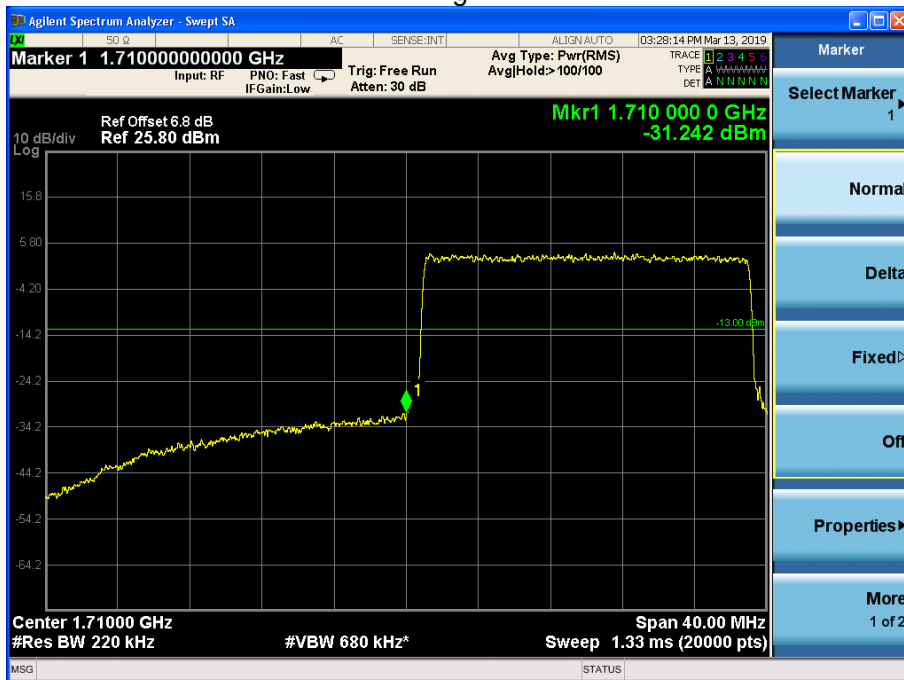


Fig.4

Band	Carrier frequency (MHz)	Channel(High)	BW	RB Size	RB Offset	Band EdgesPlot
						QPSK
66	1770	132572	20	1	99	Fig.1
				100	0	Fig.4

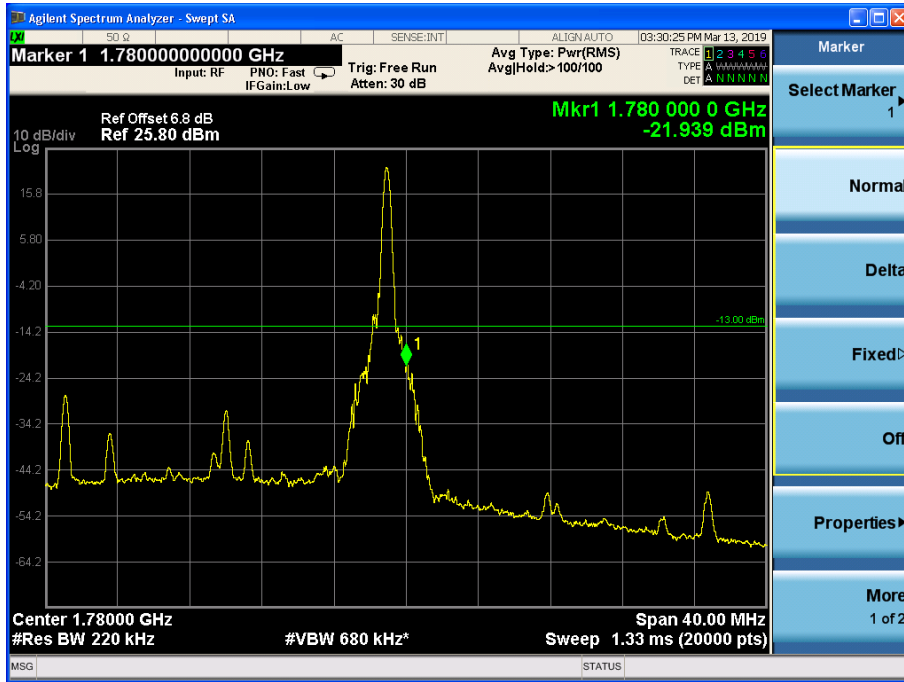


Fig.1



Fig.4

6 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band66 Low Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.050	0.048	0.032	0.007	0.013	0.124
0	NV	0.036	0.034	0.144	0.088	0.005	0.055
+10	NV	0.049	0.051	0.113	0.051	0.131	0.062
+20	NV	0.112	0.020	0.130	0.040	0.048	0.090
+30	NV	0.141	0.050	0.003	0.021	0.083	0.136
+40	NV	0.064	0.105	0.097	0.097	0.012	0.009
+50	NV	0.025	0.077	0.132	0.050	0.146	0.112
+55	NV	0.063	0.019	0.034	0.041	0.012	0.057
+20	LV	0.047	0.101	0.127	0.023	0.065	0.066
+20	HV	0.005	0.062	0.134	0.076	0.135	0.012

Temperature(°C)	Voltage	Test Result (ppm) Band66 High Channel					
		1.4M	3M	5M	10M	15M	20M
-10	NV	0.017	0.015	0.006	0.095	0.060	0.131
0	NV	0.013	0.090	0.128	0.041	0.064	0.112
+10	NV	0.033	0.072	0.140	0.065	0.130	0.040
+20	NV	0.149	0.101	0.076	0.114	0.120	0.110
+30	NV	0.062	0.002	0.050	0.107	0.073	0.124
+40	NV	0.055	0.020	0.014	0.085	0.034	0.076
+50	NV	0.107	0.096	0.135	0.082	0.023	0.160
+55	NV	0.075	0.086	0.116	0.009	0.034	0.125
+20	LV	0.025	0.001	0.061	0.080	0.038	0.047
+20	HV	0.051	0.031	0.110	0.018	0.040	0.139