

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 4

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1710.7	19957	1.4	1	0	24.27
				1	5	24.44
				3	2	23.10
				6	0	23.07
	1732.5	20175		1	0	24.71
				1	5	24.31
				3	2	23.36
				6	0	23.15
	1754.3	20393		1	0	24.13
				1	5	24.34
				3	2	23.35
				6	0	23.26
16QAM	1710.7	19957	1.4	1	0	23.11
				1	5	23.16
				3	2	22.07
				6	0	22.36
	1732.5	20175		1	0	23.51
				1	5	23.81
				3	2	22.28
				6	0	21.90
	1754.3	20393		1	0	23.41
				1	5	23.44
				3	2	22.03
				6	0	22.34
64QAM	1710.7	19957	1.4	1	0	23.38
				1	5	23.40
				3	2	22.23
				6	0	22.25
	1732.5	20175		1	0	23.07
				1	5	23.11
				3	2	22.35
				6	0	22.31
	1754.3	20393		1	0	23.38
				1	5	23.35
				3	2	21.93
				6	0	22.25

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	19965	3	1	0	24.17
				1	14	24.17
				8	4	23.15
				15	0	23.21
	1732.5	20175		1	0	24.55
				1	14	24.37
				8	4	22.96
				15	0	22.99
	1753.5	20385		1	0	24.45
				1	14	24.21
				8	4	23.06
				15	0	23.36
16QAM	1711.5	19965	3	1	0	23.24
				1	14	23.14
				8	4	22.00
				15	0	22.02
	1732.5	20175		1	0	23.84
				1	14	23.91
				8	4	22.30
				15	0	21.94
	1753.5	20385		1	0	23.09
				1	14	23.43
				8	4	22.18
				15	0	22.22
64QAM	1711.5	19965	3	1	0	23.24
				1	14	23.52
				8	4	22.06
				15	0	22.27
	1732.5	20175		1	0	23.22
				1	14	23.38
				8	4	22.20
				15	0	22.32
	1753.5	20385		1	0	23.51
				1	14	23.46
				8	4	22.14
				15	0	22.24

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	19975	5	1	0	24.19
				1	24	24.34
				12	6	23.37
				25	0	22.95
	1732.5	20175		1	0	24.61
				1	24	24.36
				12	6	23.25
				25	0	23.24
	1752.5	20375		1	0	24.08
				1	24	24.47
				12	6	23.18
				25	0	23.34
16QAM	1712.5	19975	5	1	0	23.30
				1	24	22.90
				12	6	22.21
				25	0	22.10
	1732.5	20175		1	0	23.71
				1	24	23.83
				12	6	21.98
				25	0	22.07
	1752.5	20375		1	0	23.06
				1	24	23.19
				12	6	22.24
				25	0	22.15
64QAM	1712.5	19975	5	1	0	23.22
				1	24	23.15
				12	6	22.15
				25	0	22.01
	1732.5	20175		1	0	23.46
				1	24	23.05
				12	6	22.33
				25	0	22.39
	1752.5	20375		1	0	23.72
				1	24	23.57
				12	6	21.91
				25	0	22.15

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1715	20000	10	1	0	24.07
				1	49	24.28
				24	12	23.36
				50	0	22.99
	1732.5	20175		1	0	24.44
				1	49	24.65
				24	12	23.32
				50	0	23.19
	1750	20350		1	0	24.50
				1	49	24.32
				24	12	23.19
				50	0	23.23
16QAM	1715	20000	10	1	0	22.89
				1	49	23.20
				24	12	21.98
				50	0	22.47
	1732.5	20175		1	0	23.53
				1	49	23.80
				24	12	21.97
				50	0	22.28
	1750	20350		1	0	23.18
				1	49	23.50
				24	12	22.00
				50	0	22.40
64QAM	1715	20000	10	1	0	23.32
				1	49	23.53
				24	12	22.37
				50	0	22.14
	1732.5	20175		1	0	23.08
				1	49	22.99
				24	12	22.25
				50	0	22.22
	1750	20350		1	0	23.30
				1	49	23.27
				24	12	22.37
				50	0	22.14

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	20025	15	1	0	24.16
				1	74	24.30
				40	18	23.29
				75	0	23.26
	1732.5	20175		1	0	24.46
				1	74	24.52
				40	18	23.36
				75	0	23.07
	1747.5	20325		1	0	24.52
				1	74	24.51
				40	18	23.34
				75	0	22.90
16QAM	1717.5	20025	15	1	0	23.22
				1	74	22.86
				40	18	22.37
				75	0	22.16
	1732.5	20175		1	0	23.75
				1	74	23.64
				40	18	22.41
				75	0	22.27
	1747.5	20325		1	0	23.09
				1	74	23.32
				40	18	22.01
				75	0	22.29
64QAM	1717.5	20025	15	1	0	23.24
				1	74	23.55
				40	18	22.06
				75	0	22.23
	1732.5	20175		1	0	23.28
				1	74	23.04
				40	18	21.99
				75	0	21.97
	1747.5	20325		1	0	23.29
				1	74	23.73
				40	18	22.37
				75	0	22.31

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	20050	20	1	0	24.49
				1	99	24.49
				50	25	23.46
				100	0	23.40
	1732.5	20175		1	0	24.72
				1	99	24.72
				50	25	23.36
				100	0	23.38
	1745	20300		1	0	24.52
				1	99	24.52
				50	25	23.44
				100	0	23.39
16QAM	1720	20050	20	1	0	23.35
				1	99	23.35
				50	25	22.45
				100	0	22.52
	1732.5	20175		1	0	23.92
				1	99	23.92
				50	25	22.41
				100	0	22.40
	1745	20300		1	0	23.50
				1	99	23.50
				50	25	22.46
				100	0	22.50
64QAM	1720	20050	20	1	0	23.58
				1	99	23.58
				50	25	22.53
				100	0	22.50
	1732.5	20175		1	0	23.49
				1	99	23.49
				50	25	22.37
				100	0	22.39
	1745	20300		1	0	23.73
				1	99	23.73
				50	25	22.41
				100	0	22.44

2 Occupied Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
4	1710.7	19957	1.4	6	0	1.0799	Fig.1	1.0791	Fig.2	1.0800	Fig.3
	1732.5	20175		6	0	1.0809	Fig.4	1.0836	Fig.5	1.0814	Fig.6
	1754.3	20393		6	0	1.0767	Fig.7	1.0835	Fig.8	1.0818	Fig.9
	1711.5	19965	3	15	0	2.6679	Fig.10	2.6773	Fig.11	2.6770	Fig.12
	1732.5	20175		15	0	2.6673	Fig.13	2.6736	Fig.14	2.6736	Fig.15
	1753.5	20385		15	0	2.6757	Fig.16	2.6753	Fig.17	2.6736	Fig.18
	1712.5	19975	5	25	0	4.4721	Fig.19	4.4743	Fig.20	4.4745	Fig.21
	1732.5	20175		25	0	4.4663	Fig.22	4.4654	Fig.23	4.4690	Fig.24
	1752.5	20375		25	0	4.4696	Fig.25	4.4740	Fig.26	4.4753	Fig.27
	1715	20000	10	50	0	8.9537	Fig.28	8.9470	Fig.29	8.9133	Fig.30
	1732.5	20175		50	0	8.9601	Fig.31	8.9603	Fig.32	8.9415	Fig.33
	1750	20350		50	0	8.9477	Fig.34	8.9422	Fig.35	8.9486	Fig.36
	1717.5	20025	15	75	0	13.425	Fig.37	13.404	Fig.38	13.397	Fig.39
	1732.5	20175		75	0	13.382	Fig.40	13.448	Fig.41	13.417	Fig.42
	1747.5	20325		75	0	13.371	Fig.43	13.412	Fig.44	13.439	Fig.45
	1720	20050	20	100	0	17.841	Fig.46	17.880	Fig.47	17.877	Fig.48
	1732.5	20175		100	0	17.872	Fig.49	17.855	Fig.50	17.842	Fig.51
	1745	20300		100	0	17.858	Fig.52	17.891	Fig.53	17.900	Fig.54

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
4	1710.7	19957	1.4	6	0	1.251	Fig.1	1.209	Fig.2	1.224	Fig.3
	1732.5	20175		6	0	1.245	Fig.4	1.221	Fig.5	1.246	Fig.6
	1754.3	20393		6	0	1.267	Fig.7	1.259	Fig.8	1.216	Fig.9
	1711.5	19965	3	15	0	2.914	Fig.10	2.919	Fig.11	2.913	Fig.12
	1732.5	20175		15	0	2.907	Fig.13	2.904	Fig.14	2.904	Fig.15
	1753.5	20385		15	0	2.929	Fig.16	2.902	Fig.17	2.914	Fig.18
	1712.5	19975	5	25	0	4.851	Fig.19	4.956	Fig.20	5.098	Fig.21
	1732.5	20175		25	0	4.997	Fig.22	4.951	Fig.23	5.060	Fig.24
	1752.5	20375		25	0	4.958	Fig.25	5.050	Fig.26	4.852	Fig.27
	1715	20000	10	50	0	9.804	Fig.28	9.753	Fig.29	9.828	Fig.30
	1732.5	20175		50	0	9.704	Fig.31	9.949	Fig.32	9.836	Fig.33
	1750	20350		50	0	9.657	Fig.34	9.762	Fig.35	9.739	Fig.36
	1717.5	20025	15	75	0	14.48	Fig.37	14.50	Fig.38	14.69	Fig.39
	1732.5	20175		75	0	14.66	Fig.40	14.52	Fig.41	14.55	Fig.42
	1747.5	20325		75	0	14.53	Fig.43	14.78	Fig.44	14.64	Fig.45
	1720	20050	20	100	0	19.12	Fig.46	19.17	Fig.47	19.27	Fig.48
	1732.5	20175		100	0	19.53	Fig.49	19.28	Fig.50	19.20	Fig.51
	1745	20300		100	0	19.39	Fig.52	19.34	Fig.53	19.24	Fig.54

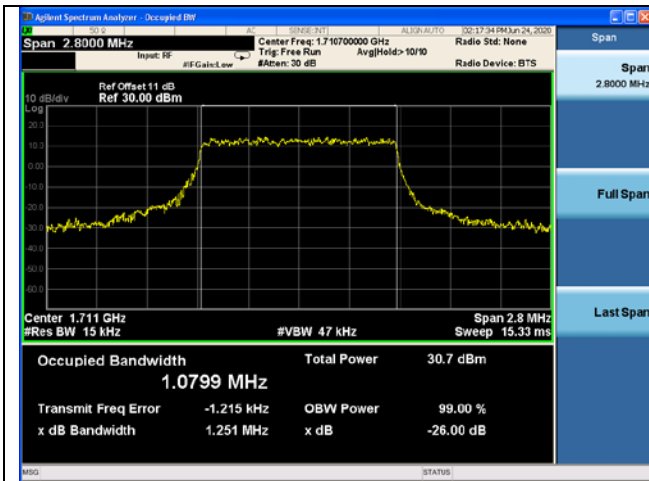


Fig.1



Fig.2

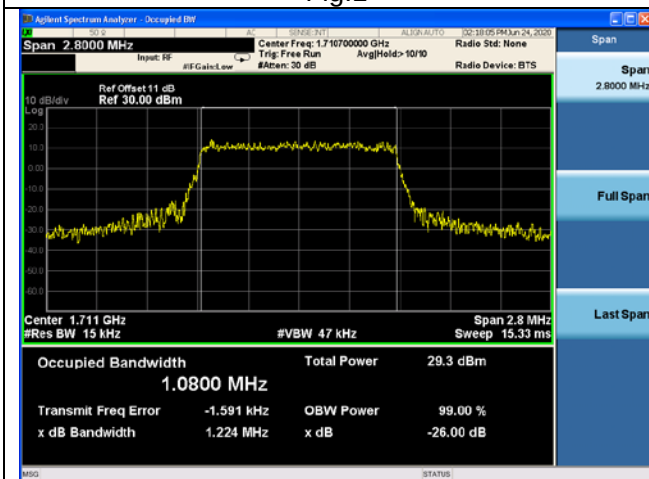


Fig.3

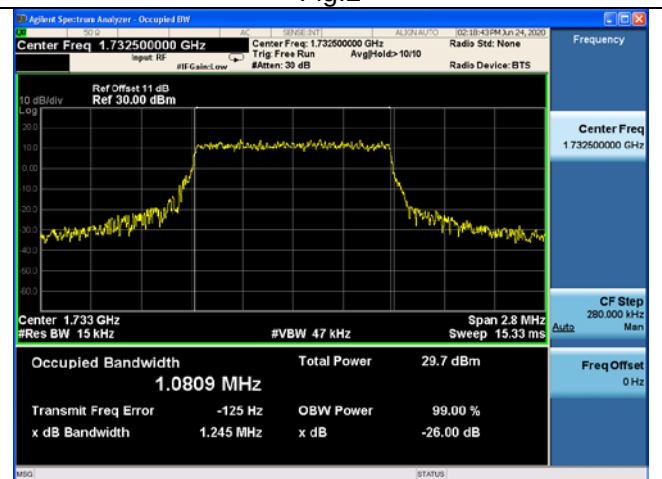


Fig.4

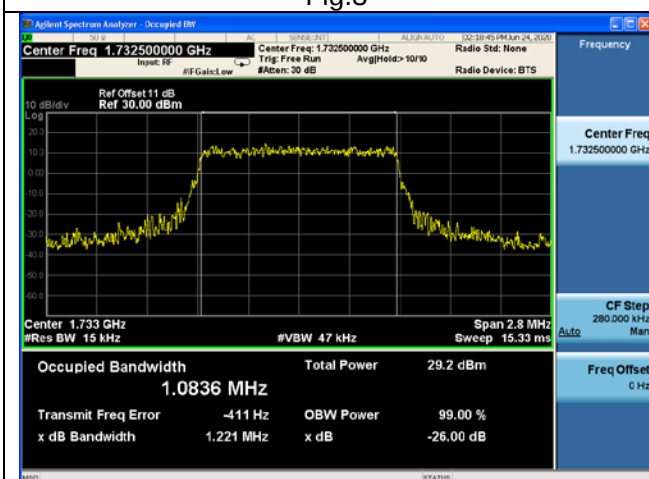


Fig.5

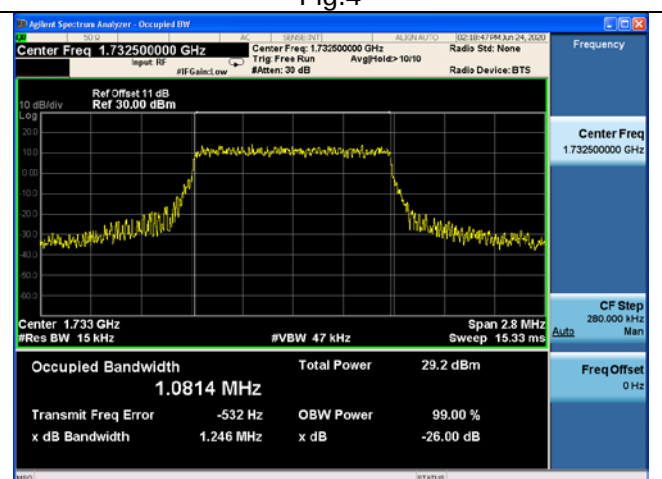


Fig.6

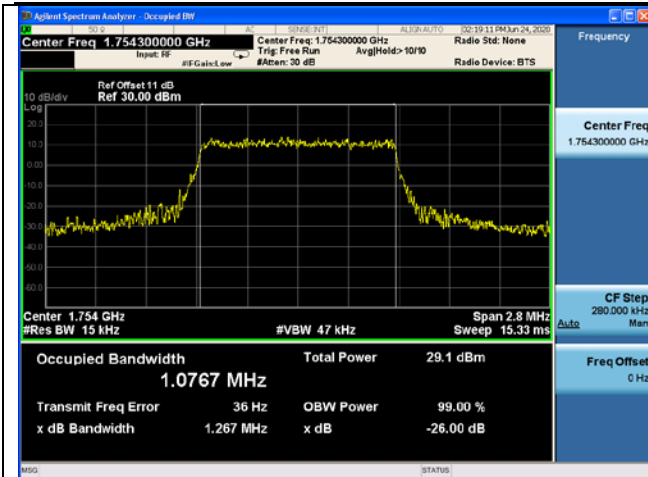


Fig.7

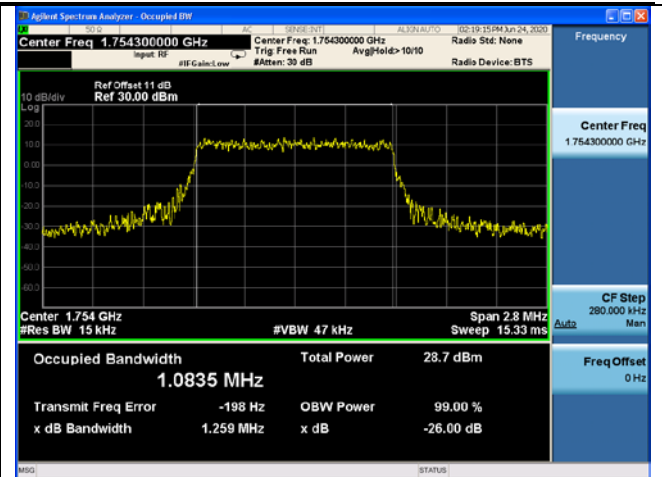


Fig.8

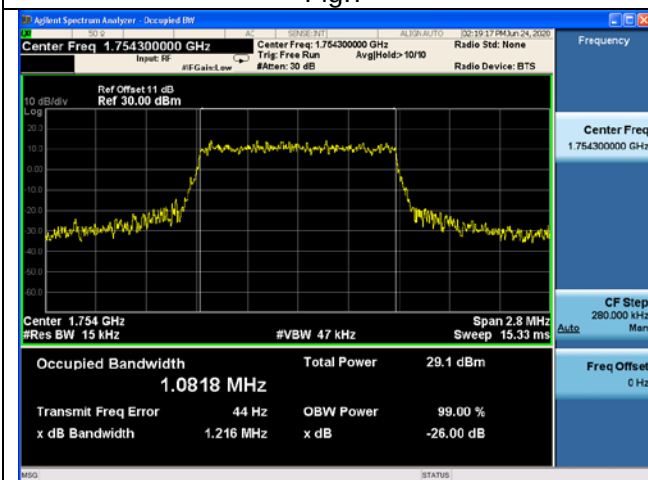


Fig.9

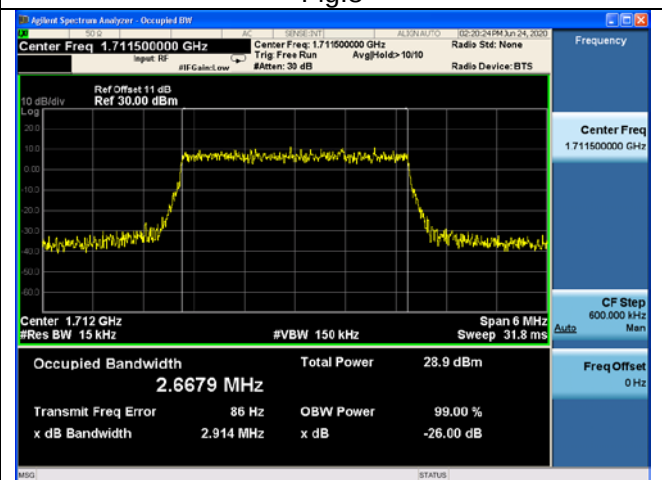


Fig.10

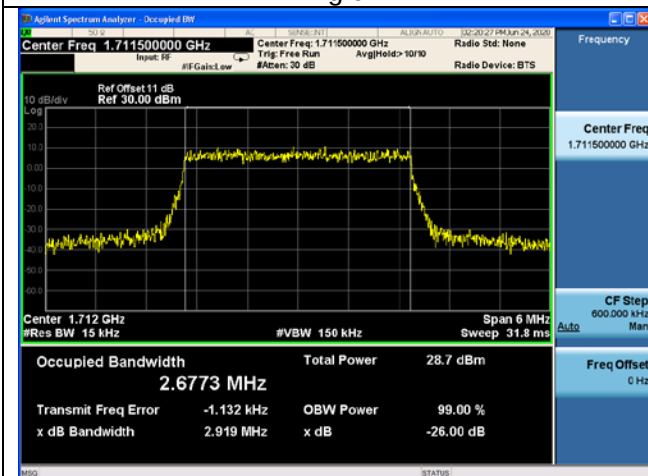


Fig.11

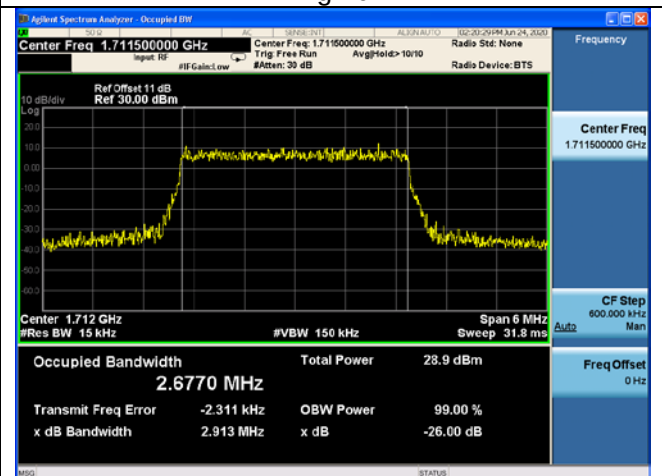


Fig.12

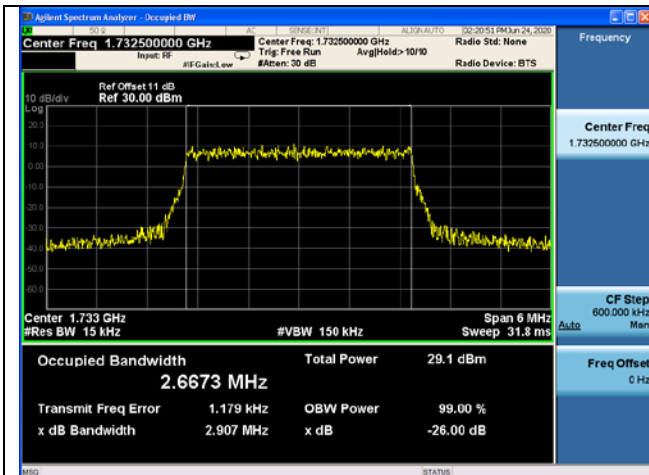


Fig.13

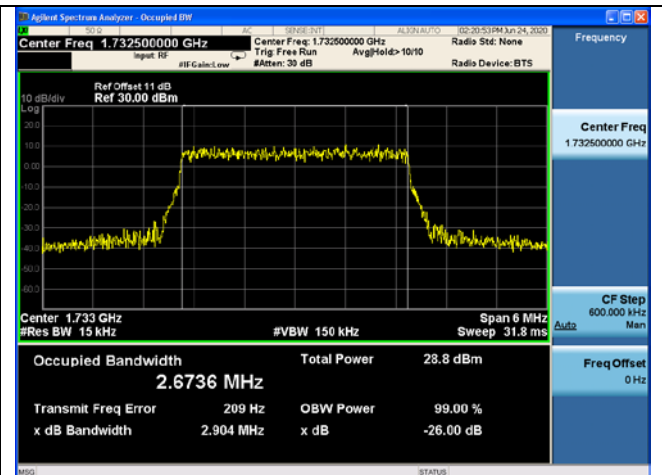


Fig.14

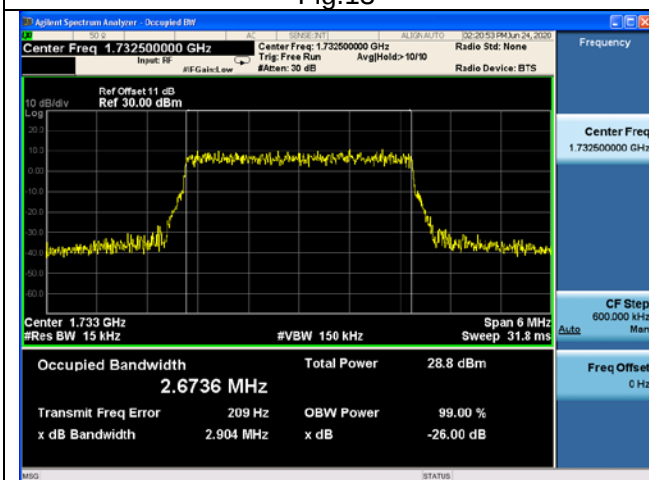


Fig.15

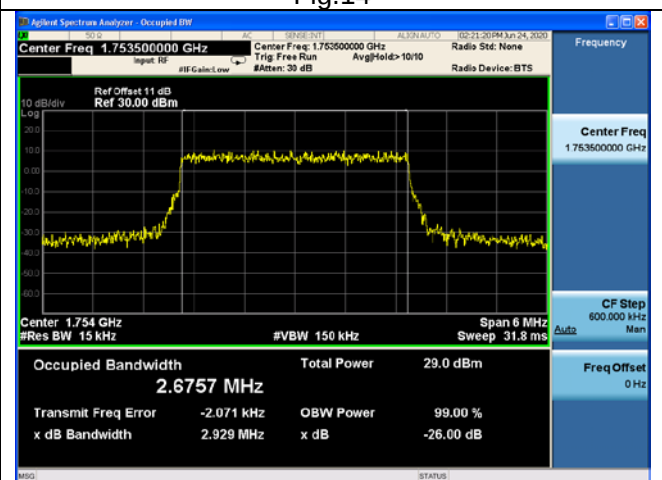


Fig.16

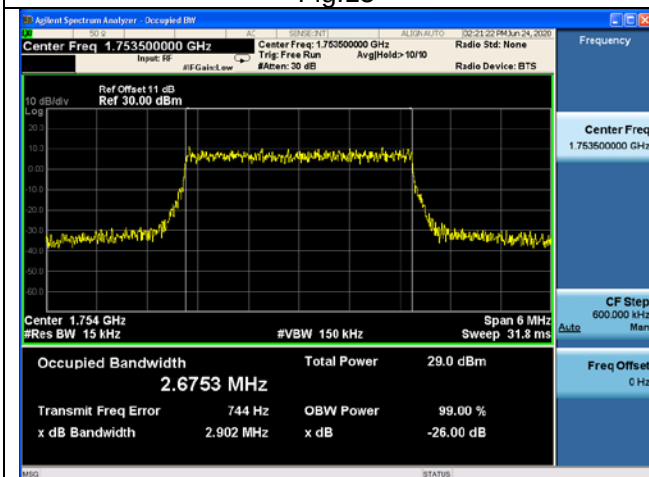


Fig.17

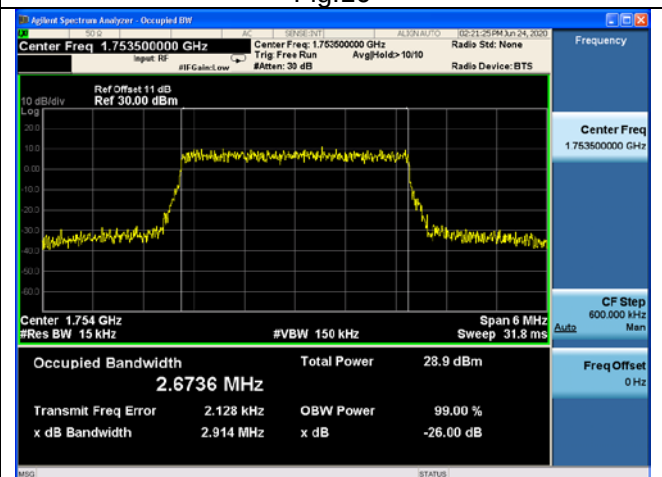


Fig.18

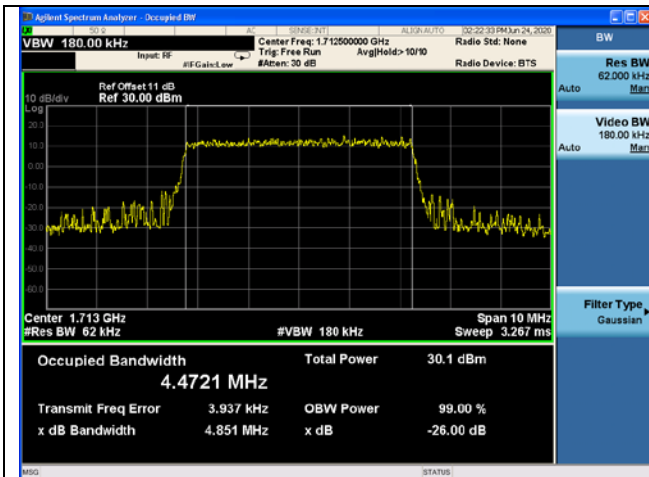


Fig.19

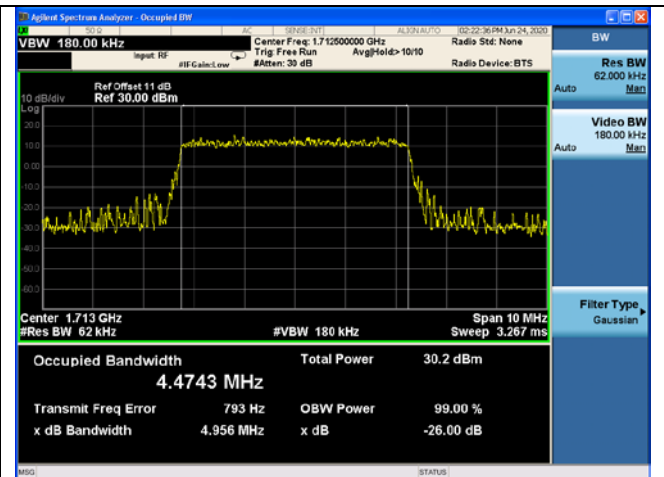


Fig.20

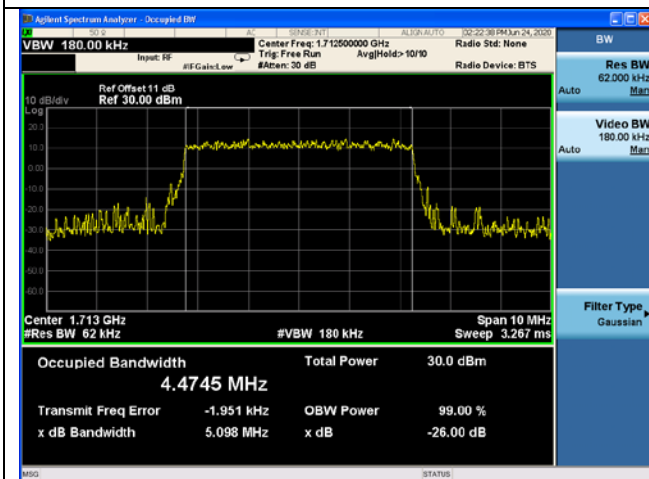


Fig.21

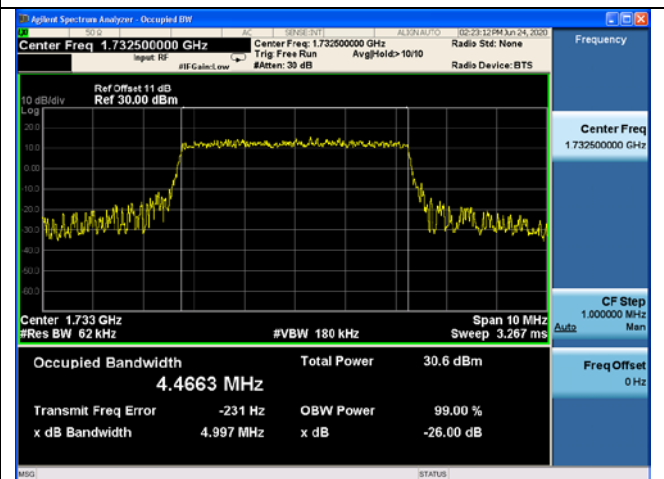


Fig.22

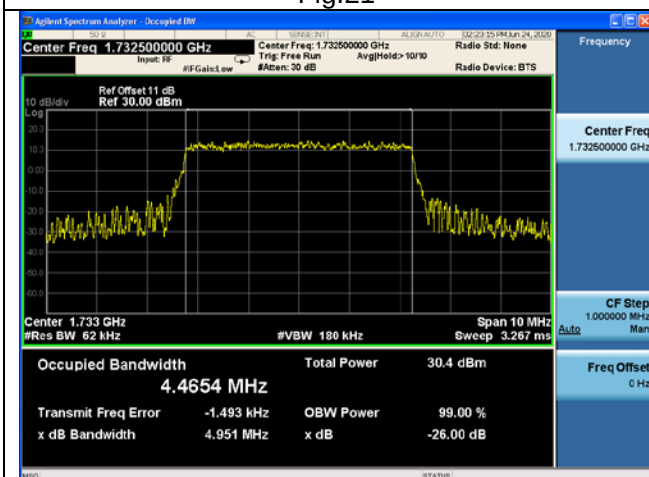


Fig.23

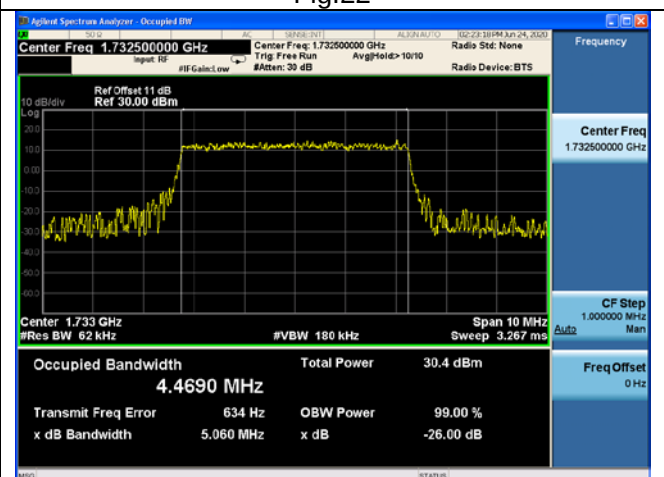


Fig.24

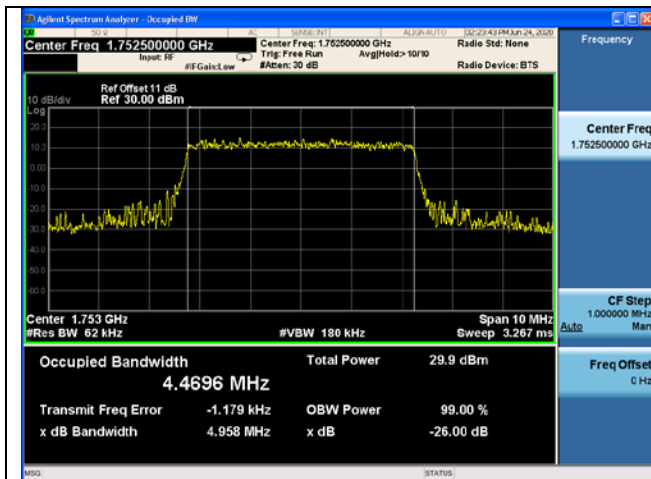


Fig.25

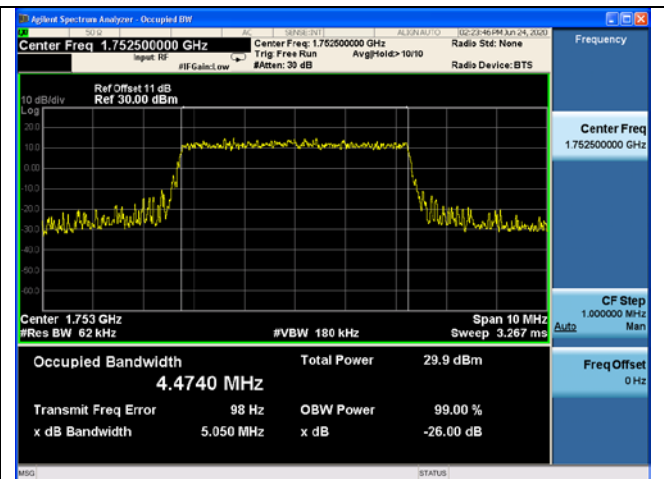


Fig.26

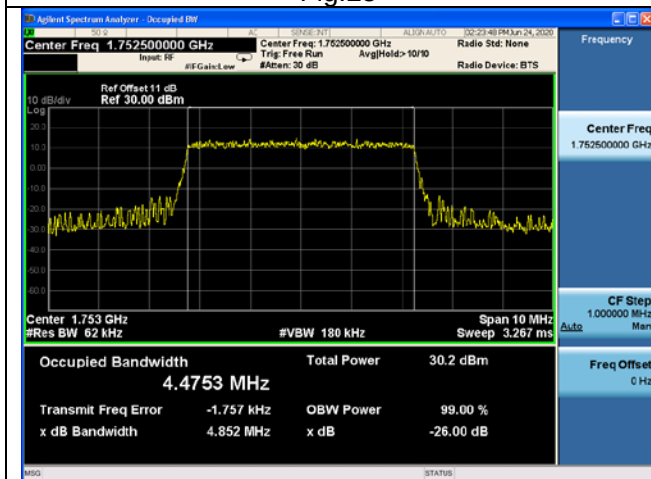


Fig.27

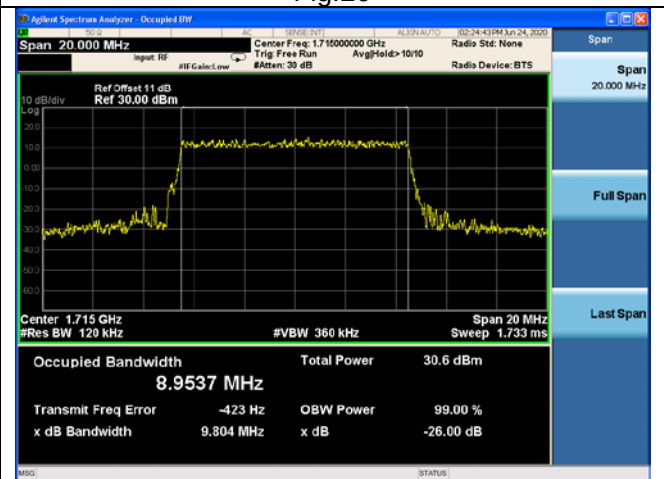


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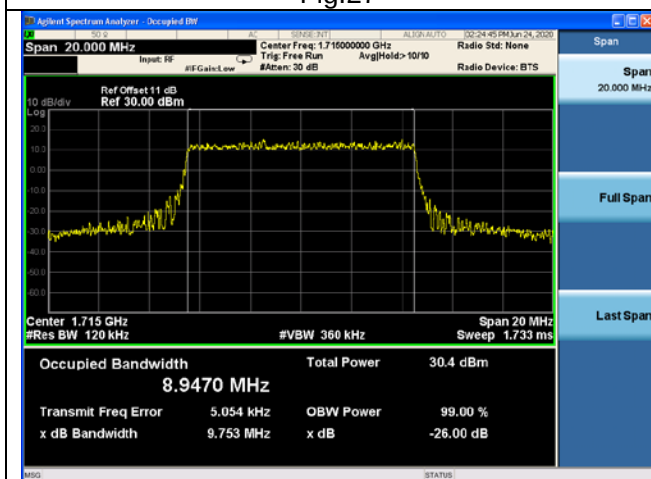


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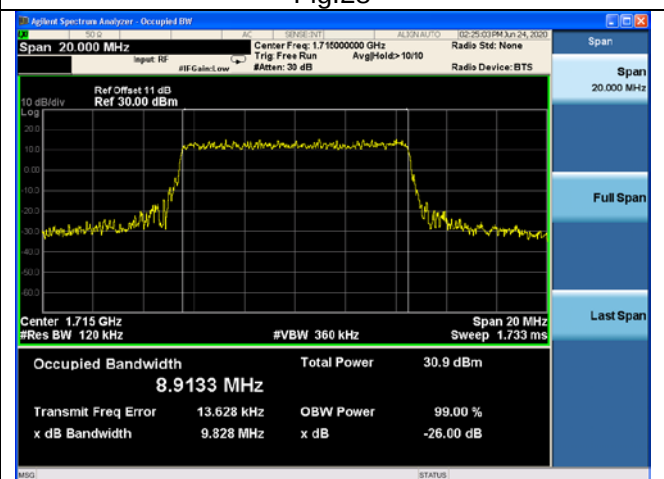


Fig.30

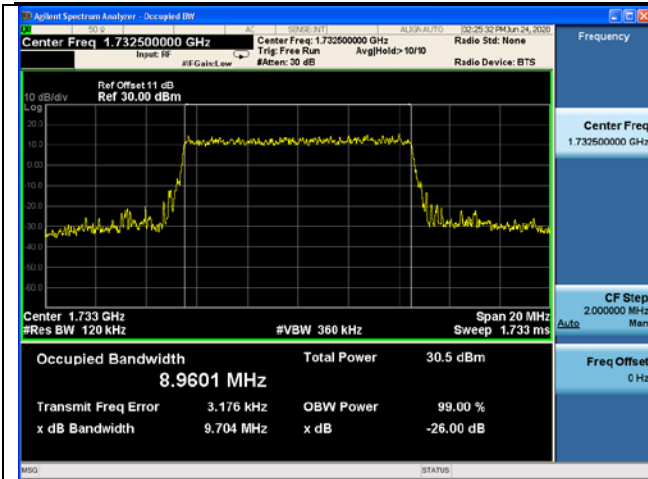


Fig.31

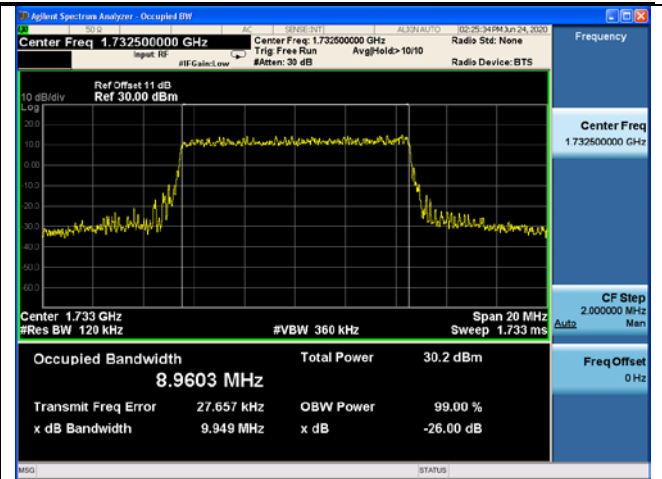


Fig.32

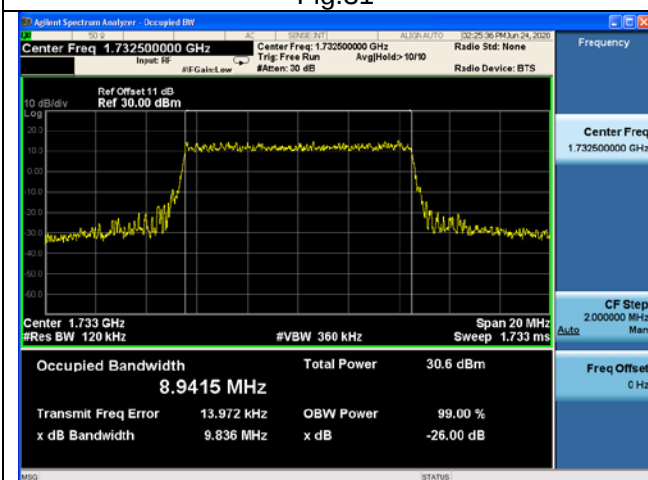


Fig.33

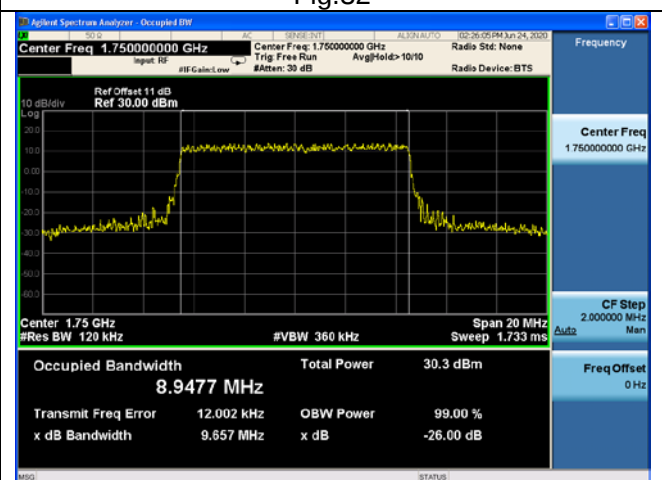


Fig.34

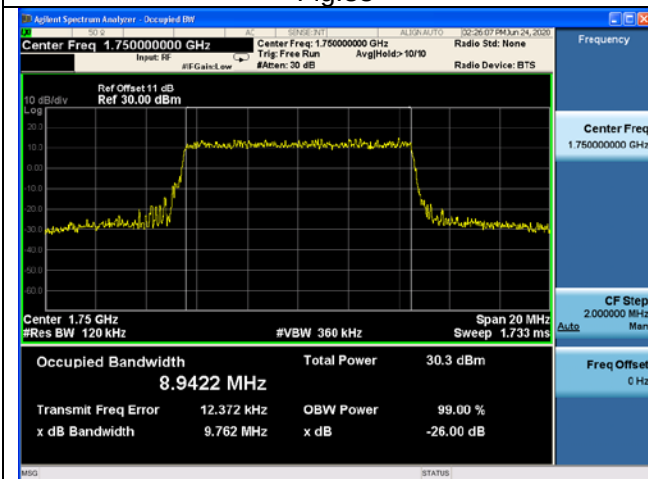


Fig.35

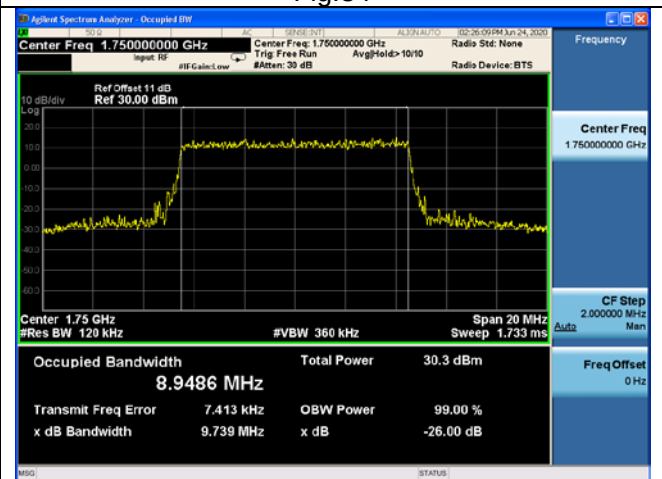


Fig.36

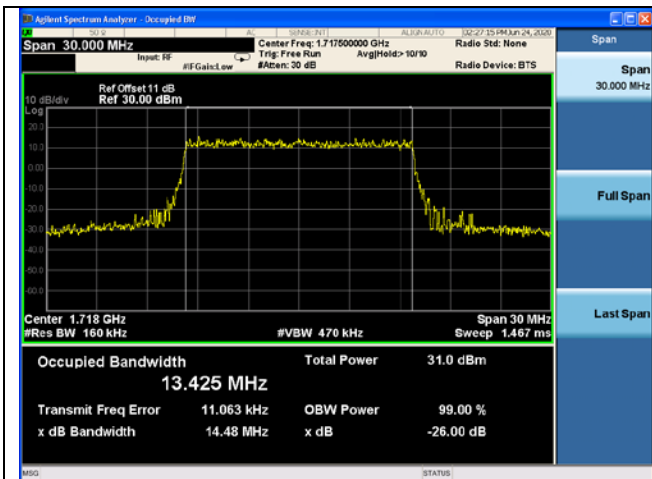


Fig.37

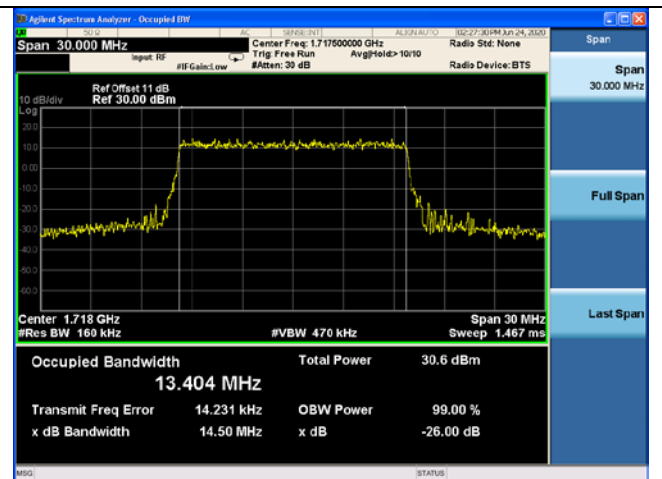


Fig.38

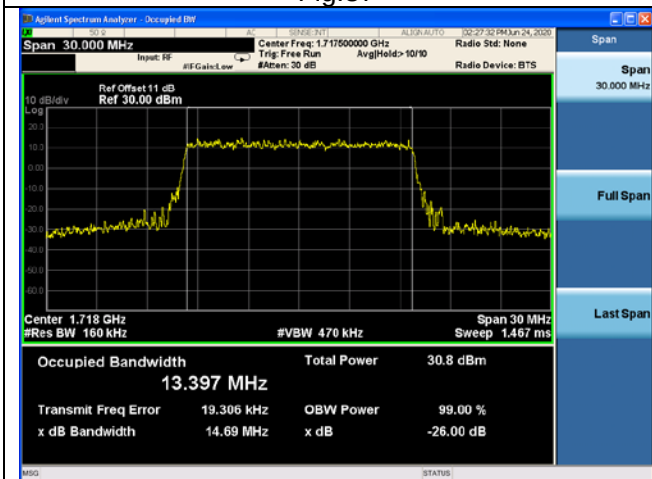


Fig.39

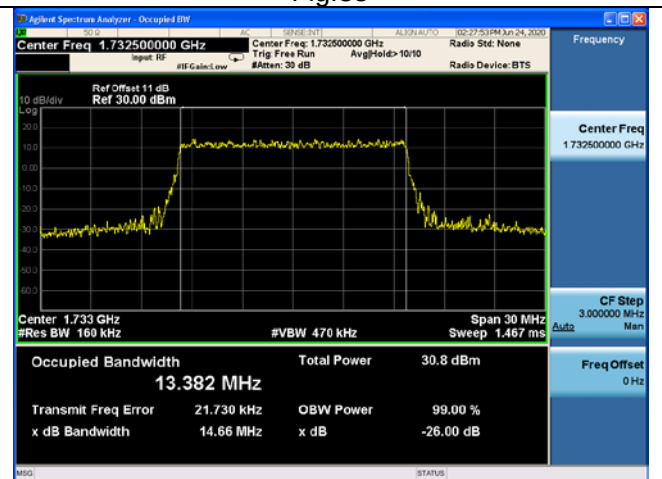


Fig.40

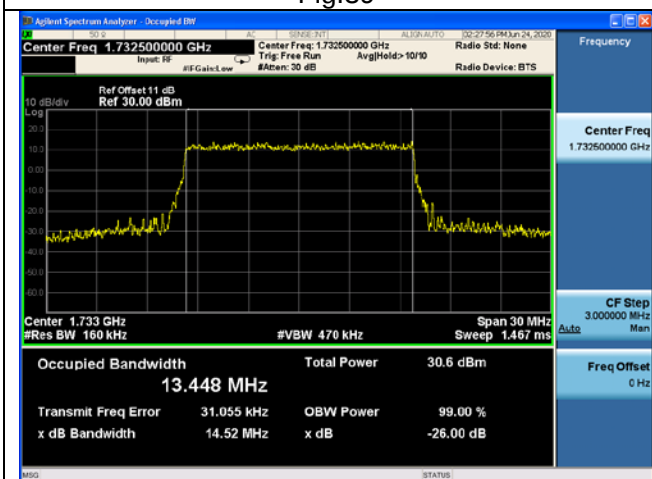


Fig.41

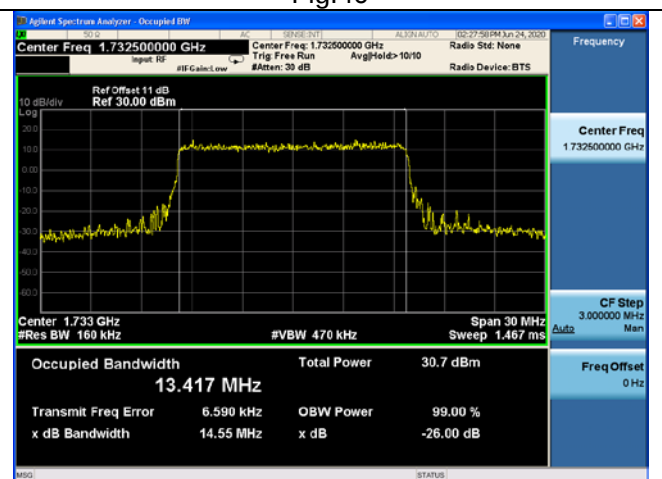


Fig.42

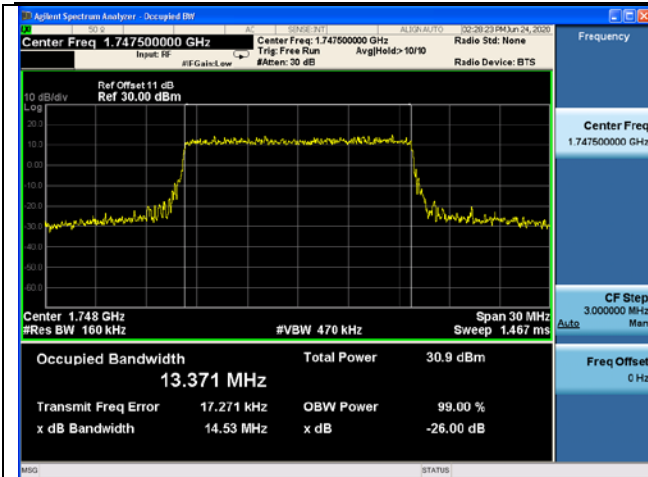


Fig.43

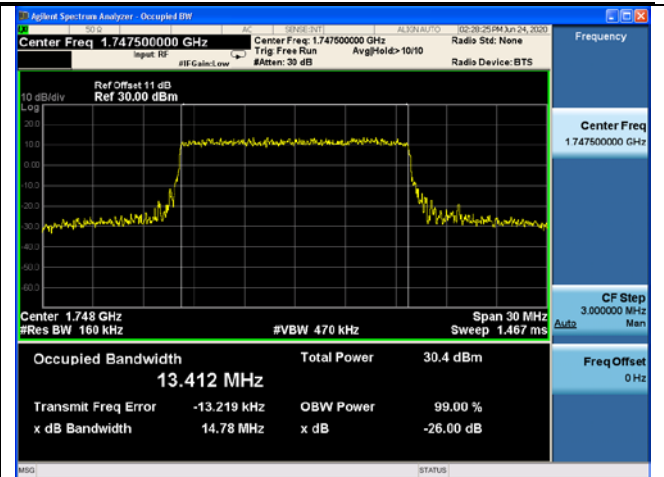


Fig.44

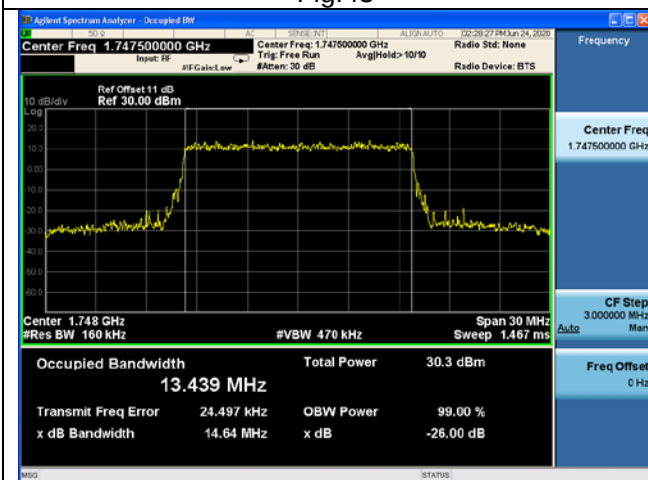


Fig.45

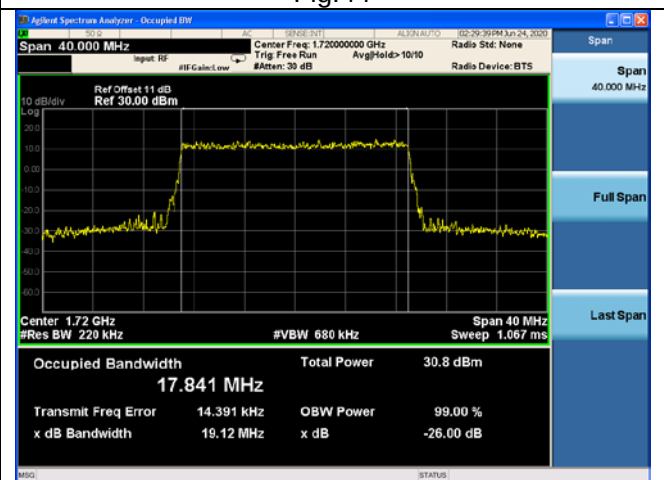


Fig.46

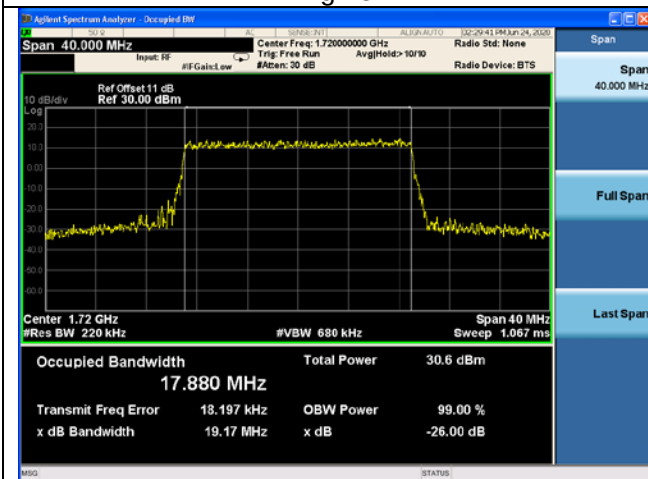


Fig.47

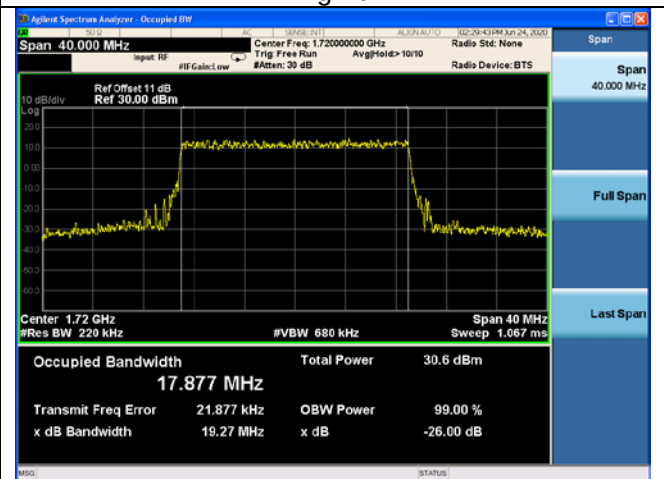


Fig.48

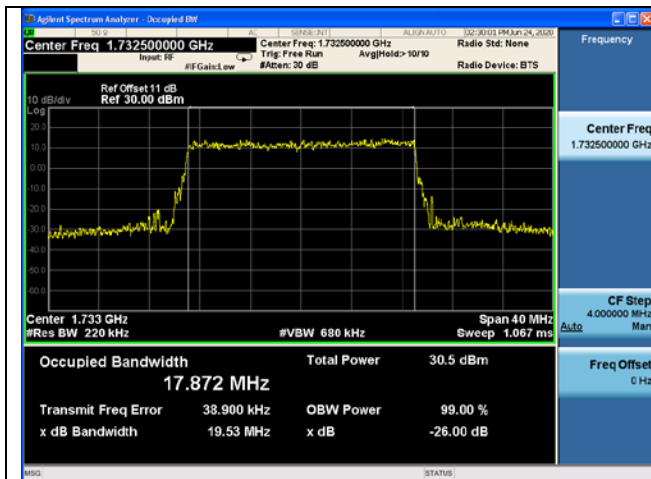


Fig.49

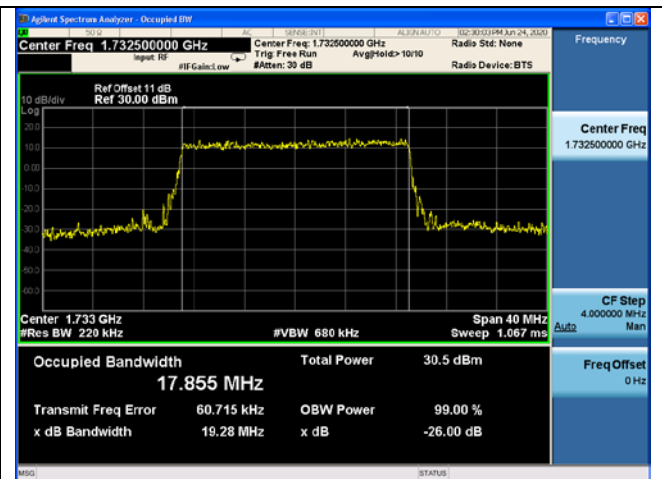


Fig.50

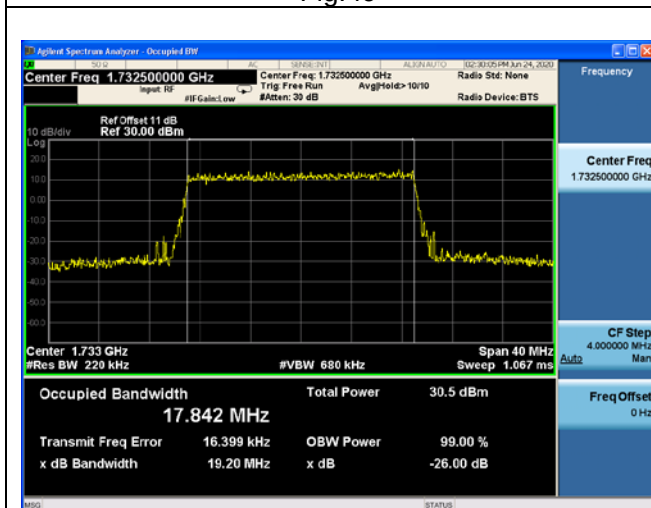


Fig.51

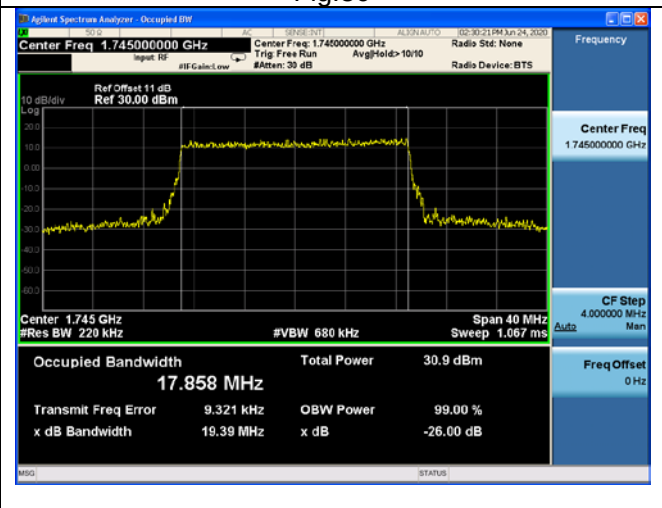


Fig.52

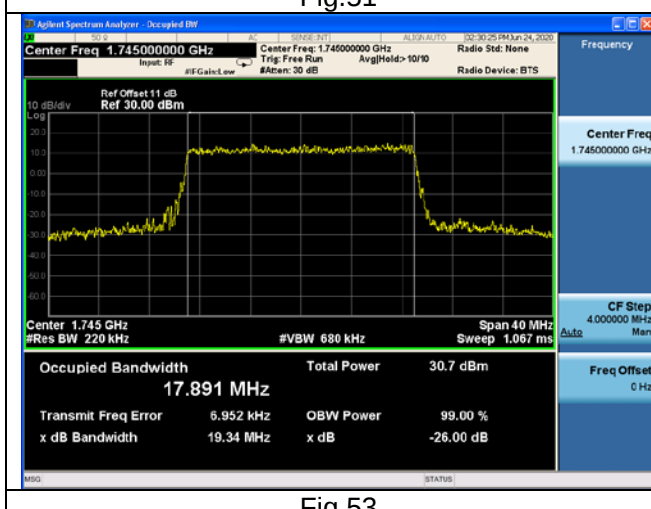


Fig.53

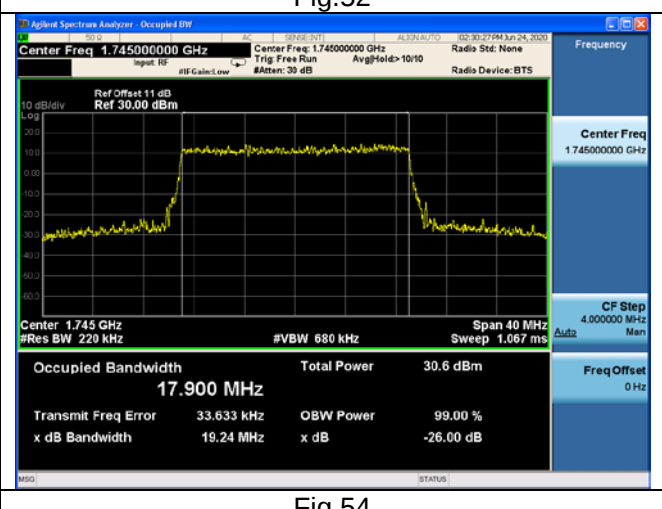


Fig.54

3 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
4	1732.5	20175	1.4	1	0	Fig.1	Fig.2	Fig.3
			3	1	0	Fig.4	Fig.5	Fig.6
			5	1	0	Fig.7	Fig.8	Fig.9
			10	1	0	Fig.10	Fig.11	Fig.12
			15	1	0	Fig.13	Fig.14	Fig.15
			20	1	0	Fig.16	Fig.17	Fig.18

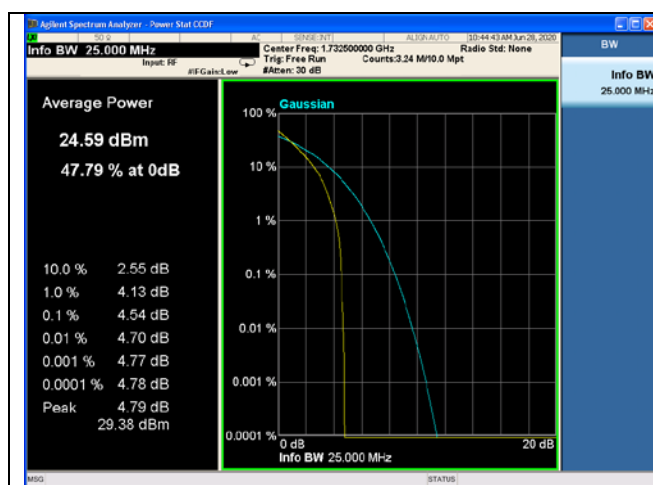


Fig.1

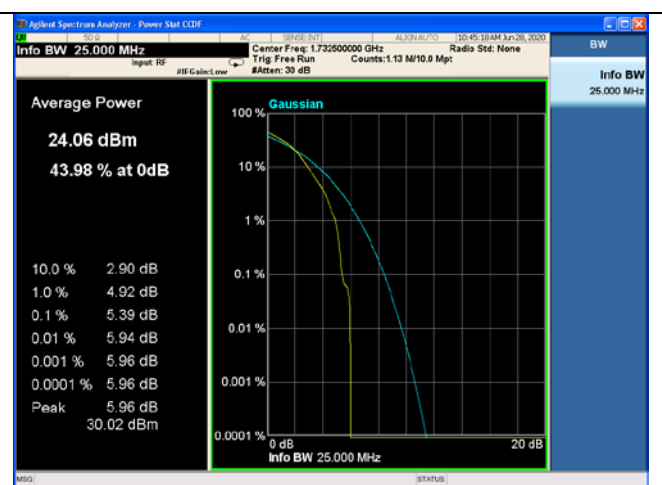


Fig.2

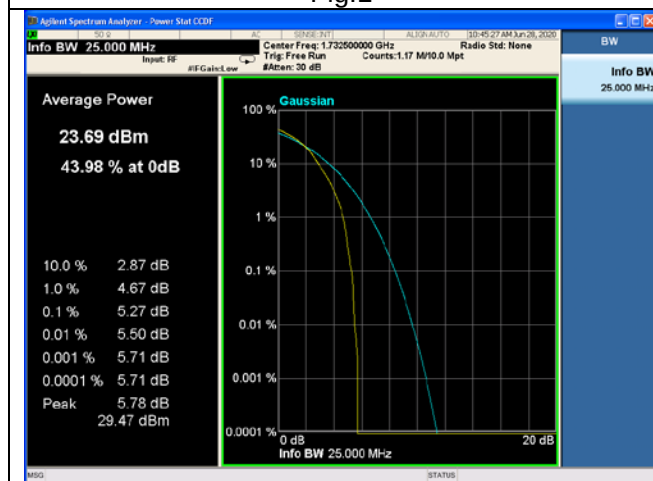


Fig.3

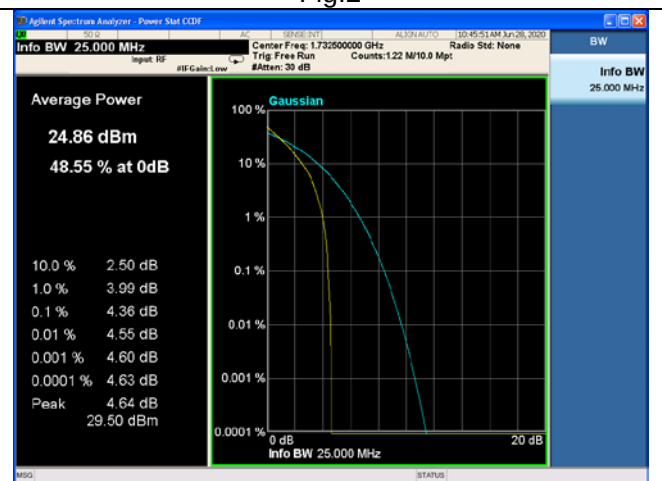


Fig.4

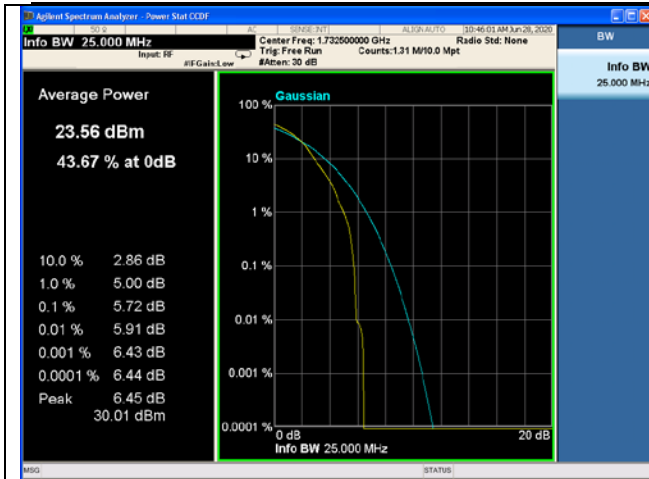


Fig.5

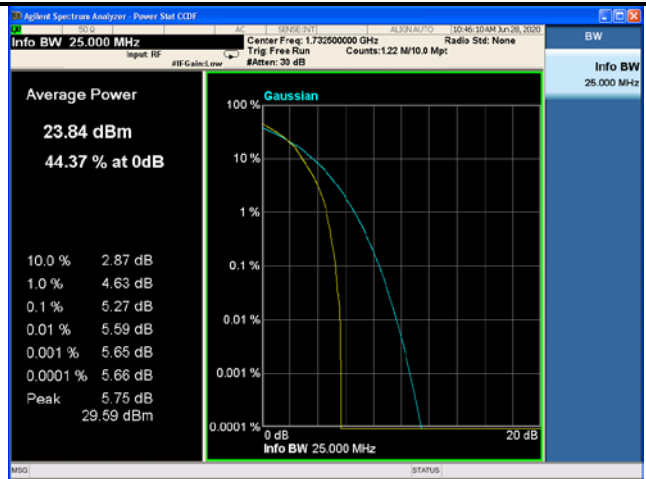


Fig.6

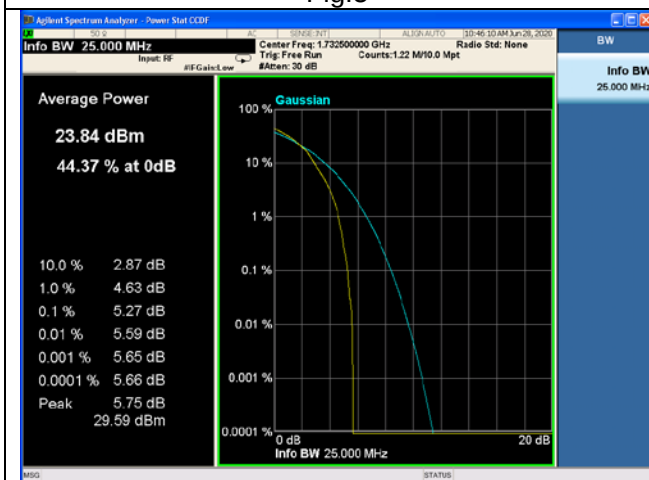


Fig.7

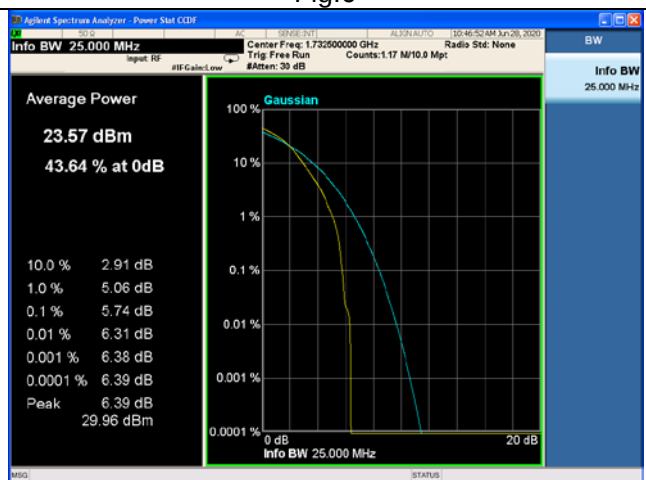


Fig.8

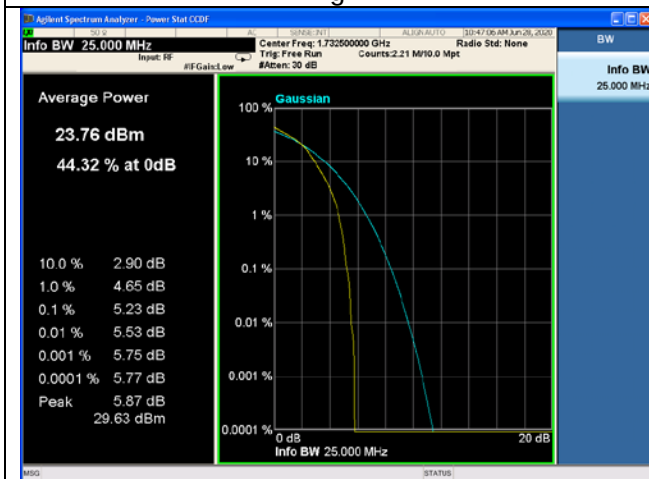


Fig.9

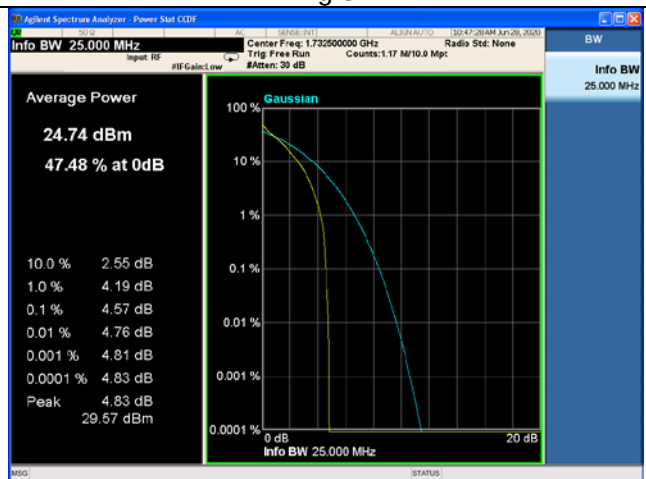


Fig.10

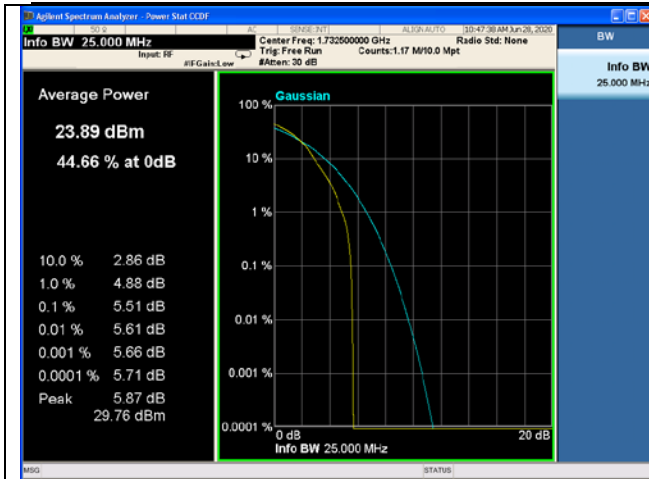


Fig.11

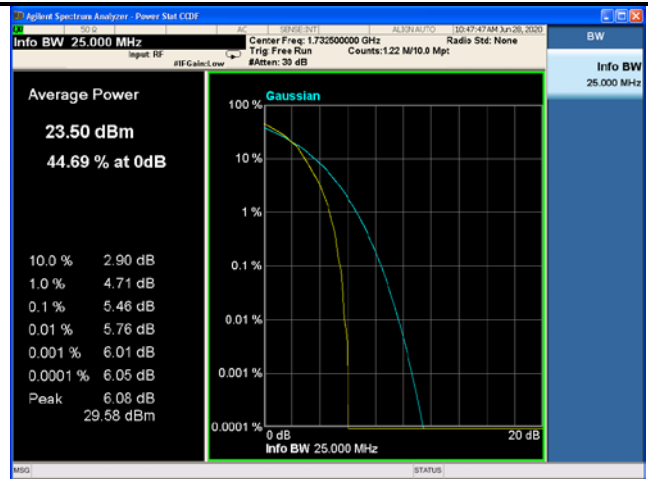


Fig.12

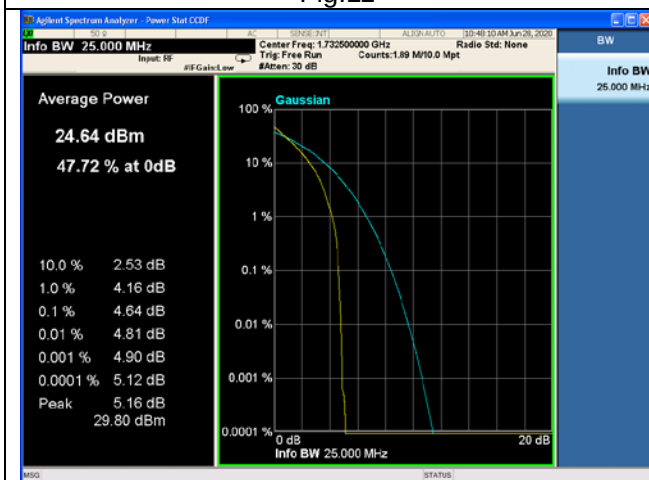


Fig.13

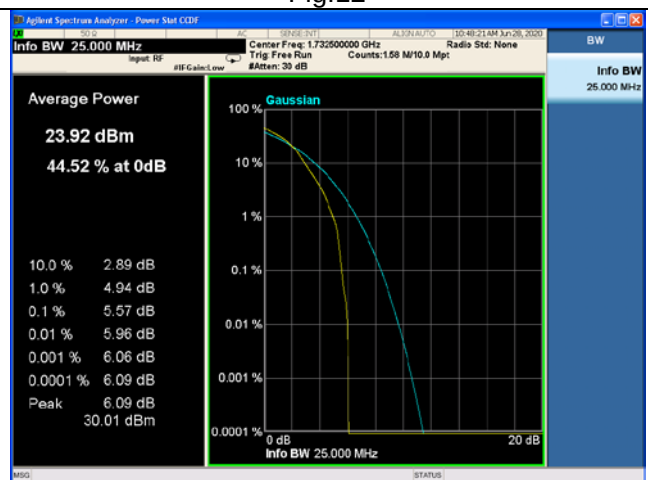


Fig.14

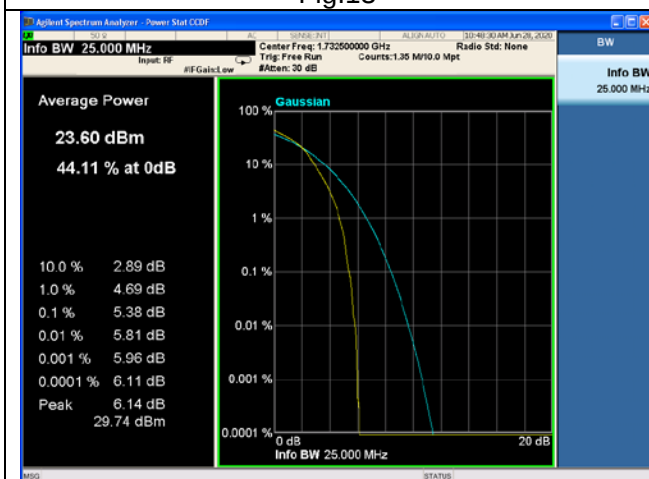


Fig.15

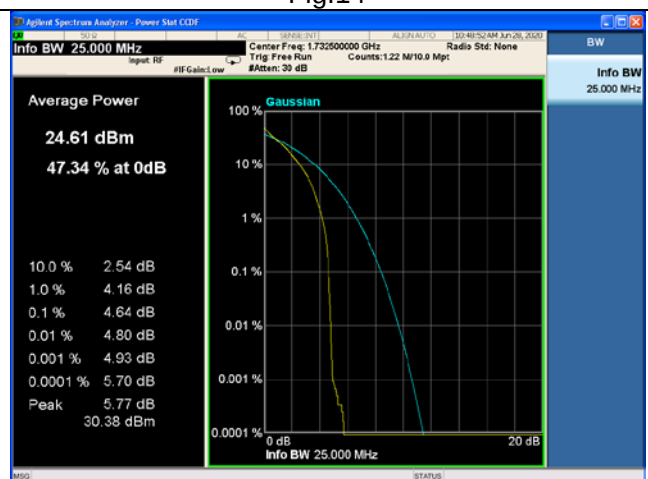


Fig.16

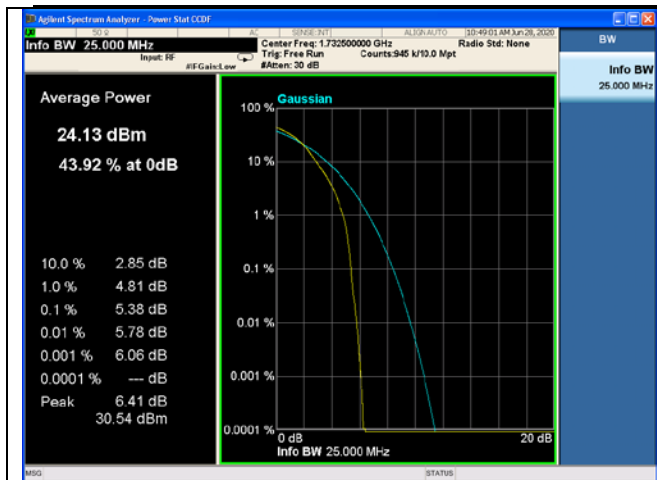


Fig.17

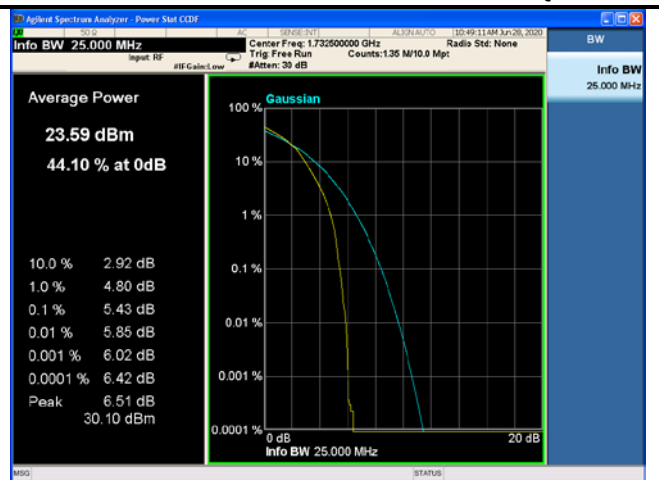


Fig.18

4 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
4	1720	20050	20	1	0	Fig.1-2
	1732.5	20175	20	1	0	Fig.3-4
	1745	20300	20	1	0	Fig.5-6

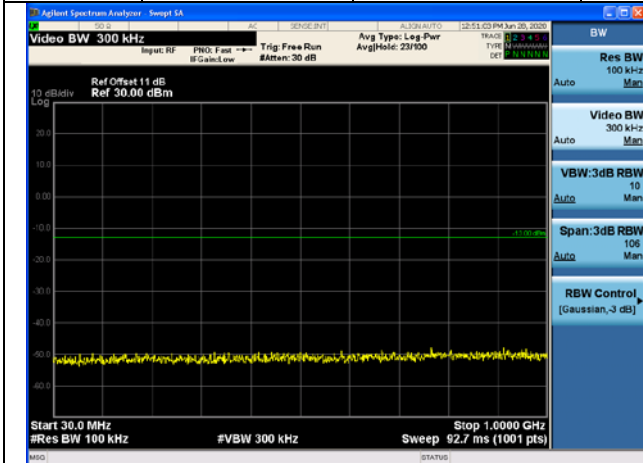


Fig.1

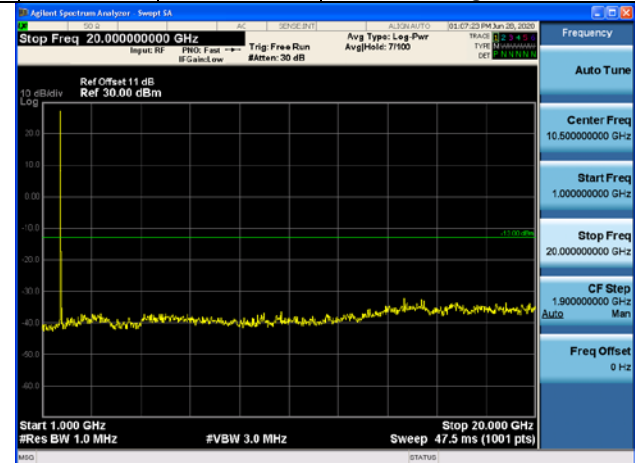


Fig.2

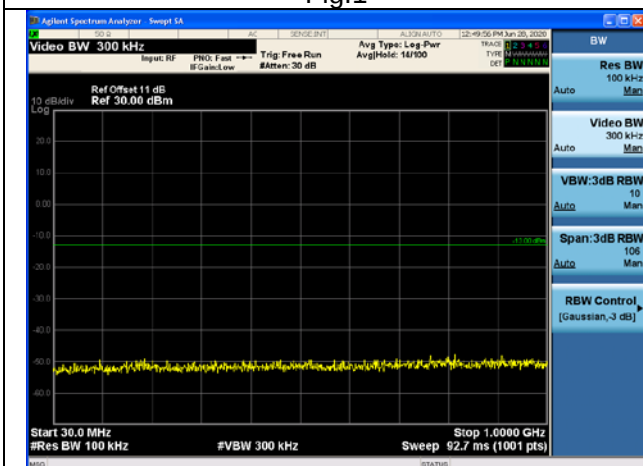


Fig3

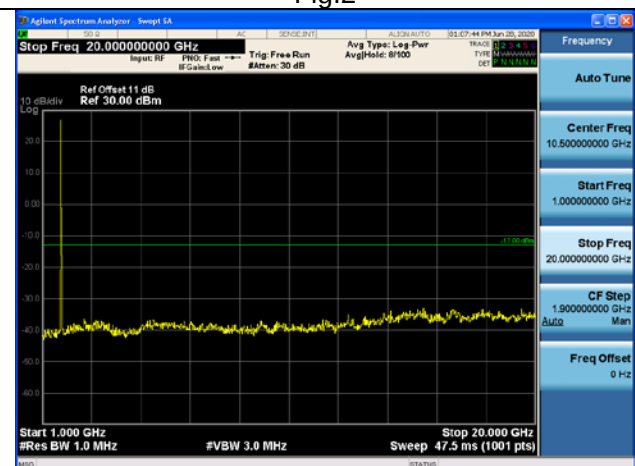


Fig4

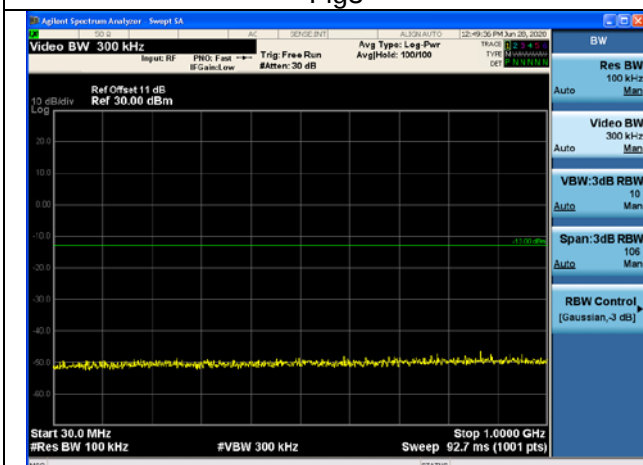


Fig5

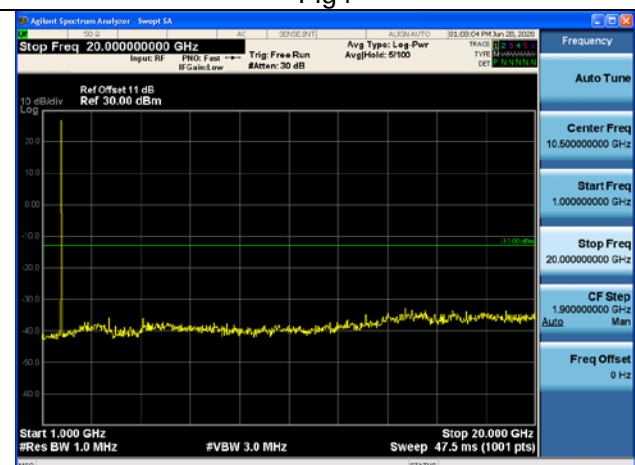


Fig6

5 Band Edges Compliance

Test result

Test Result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
4	1710.7	19957	1.4	1	0	Fig.1
				6	0	Fig.2
	1754.3	20393		1	5	Fig.3
				6	0	Fig.4
	1711.5	19965	3	1	0	Fig.5
				15	0	Fig.6
	1753.5	20385		1	14	Fig.7
				15	0	Fig.8
	1712.5	19975	5	1	0	Fig.9
				25	0	Fig.10
	1752.5	20375		1	24	Fig.11
				25	0	Fig.12
	1715	20000	10	1	0	Fig.13
				50	0	Fig.14
	1750	20350		1	49	Fig.15
				50	0	Fig.16
	1717.5	20025	15	1	0	Fig.17
				75	0	Fig.18
	1747.5	20325		1	74	Fig.19
				75	0	Fig.20
	1720	20050	20	1	0	Fig.21
				100	0	Fig.22
	1745	20300		1	99	Fig.23
				100	0	Fig.24

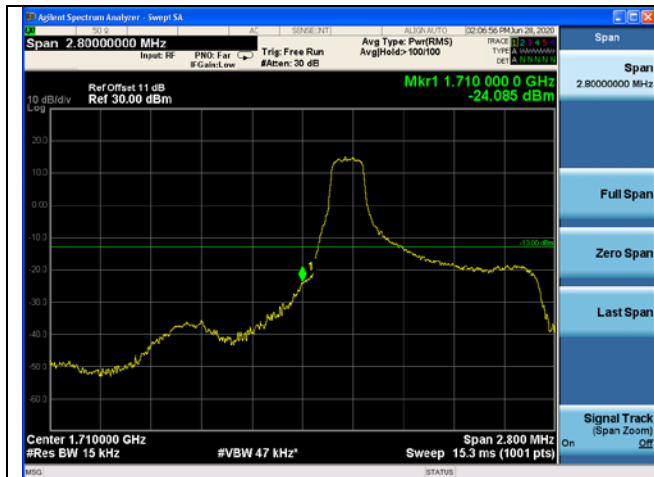


Fig.1

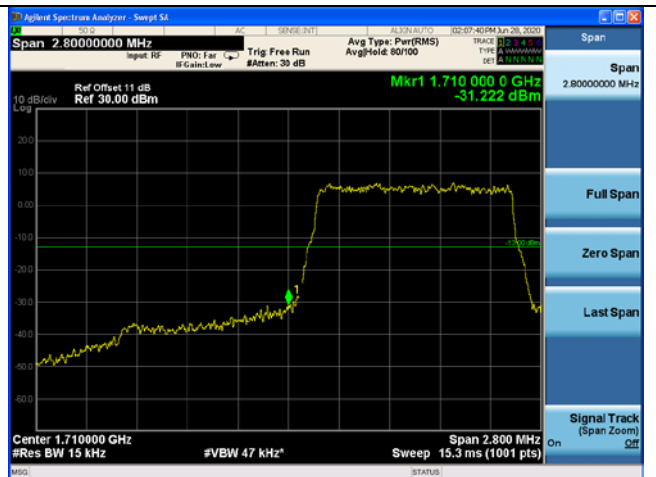


Fig.2

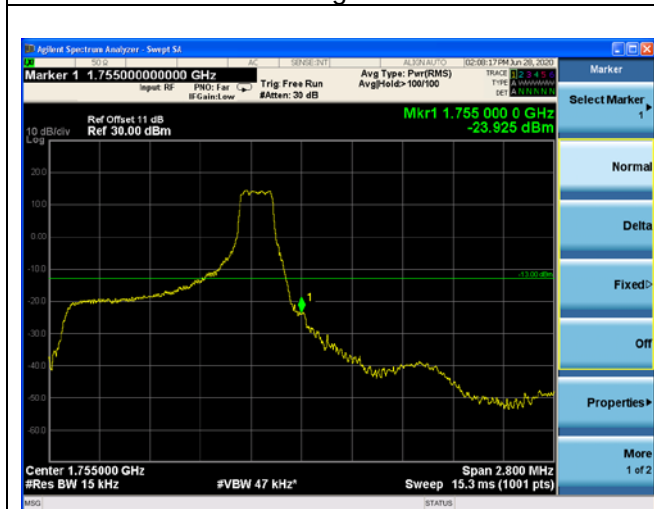


Fig.3

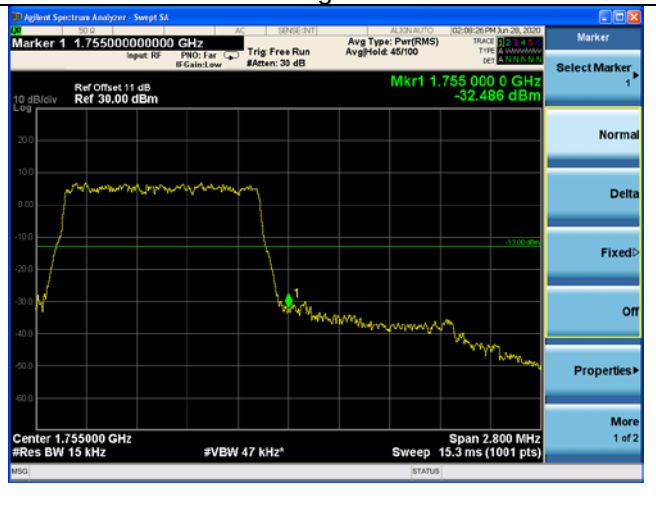


Fig.4

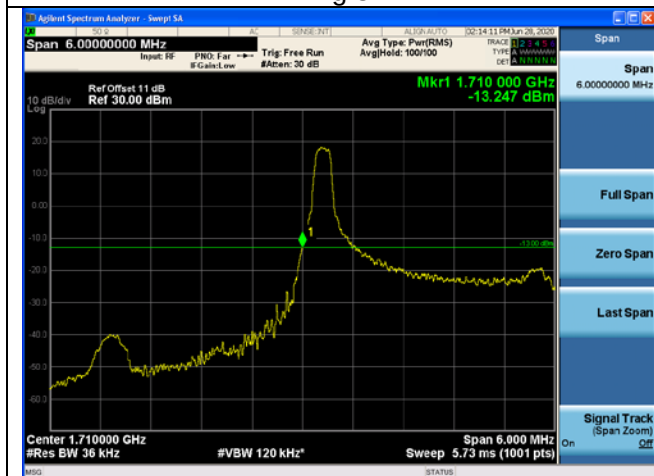


Fig.5

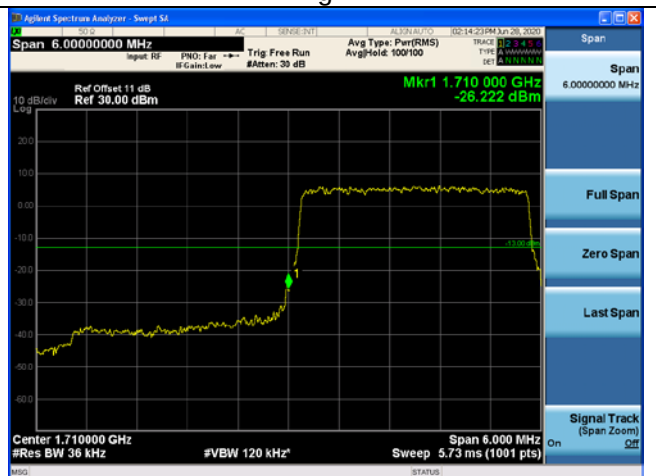


Fig.6

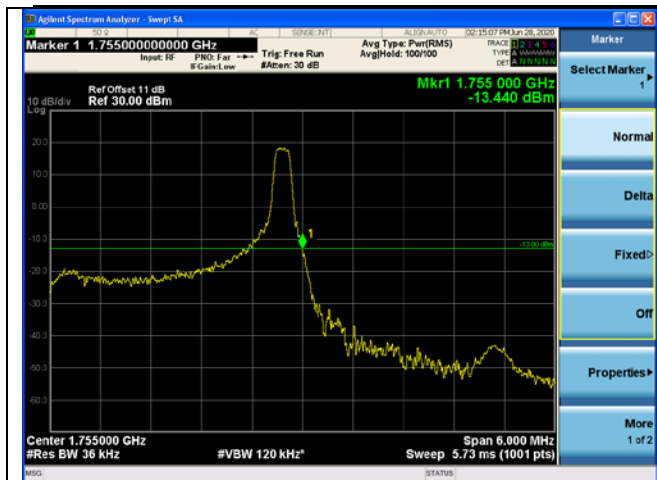


Fig.7



Fig.8

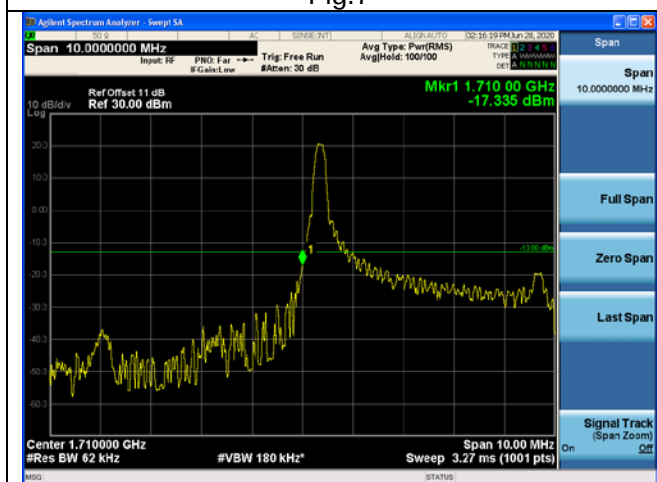


Fig.9

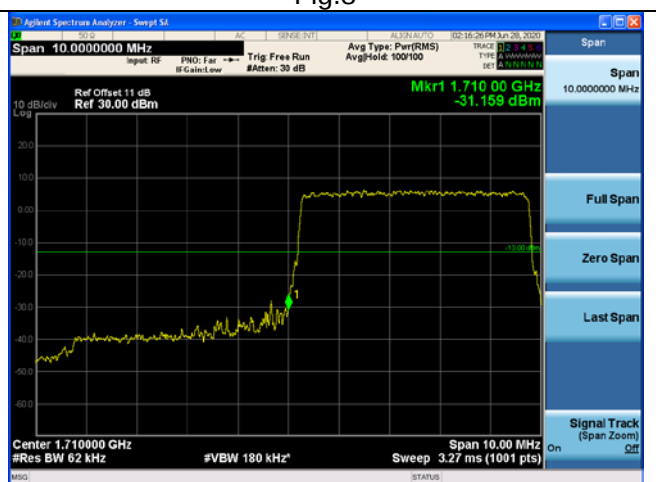


Fig.10

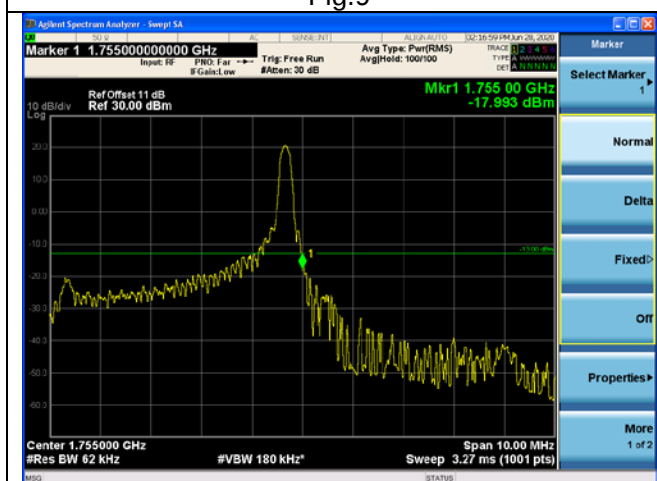


Fig.11

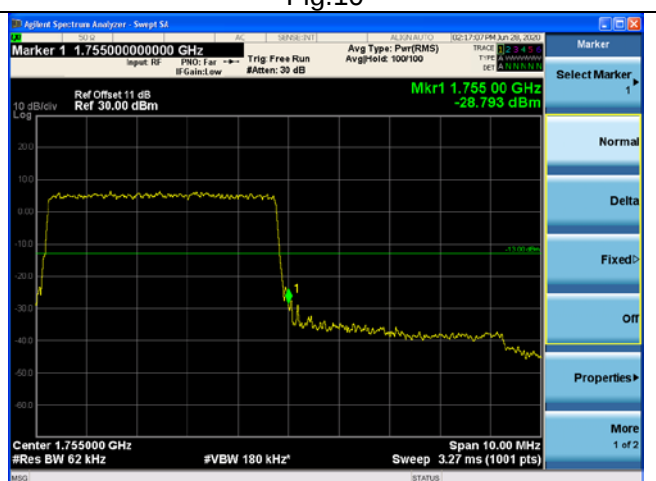


Fig.12