

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	24.12	
				1	3	23.99	
				1	5	24.02	
				3	0	24.15	
				3	1	24.11	
				3	3	24.10	
	6	0		22.89			
	1732.5	20175		1	0	24.24	
				1	3	24.05	
				1	5	24.14	
				3	0	24.27	
				3	1	24.19	
				3	3	24.16	
	6	0		22.95			
	1754.3	20393		1	0	24.19	
				1	3	24.01	
				1	5	24.05	
				3	0	24.16	
				3	1	24.14	
				3	3	24.17	
	6	0		22.96			
	16QAM	1710.7		19957	1	0	23.63
					1	3	23.71
					1	5	23.70
3			0		23.12		
3			1		23.09		
3			3		23.18		
6		0	22.28				
1732.5		20175	1	0	23.60		
			1	3	23.61		
			1	5	23.62		
			3	0	22.81		
			3	1	22.86		
			3	3	22.86		
6		0	22.01				
1754.3		20393	1	0	23.84		
			1	3	23.78		
			1	5	23.83		
			3	0	23.21		
			3	1	22.91		
			3	3	22.89		
6		0	22.31				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1710.7	19957	1.4	1	0	22.33
				1	3	22.28
				1	5	22.33
				3	0	22.33
				3	1	22.23
				3	3	22.33
				6	0	22.34
	1732.5	20175		1	0	22.00
				1	3	22.12
				1	5	22.03
				3	0	22.10
				3	1	22.10
				3	3	22.09
				6	0	22.09
	1754.3	20393		1	0	22.30
				1	3	22.29
				1	5	22.29
				3	0	22.35
				3	1	22.32
				3	3	22.35
				6	0	22.34

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	19965	3	1	0	23.98
				1	8	23.90
				1	14	23.85
				8	0	23.01
				8	4	22.93
				8	7	22.93
	15	0		22.97		
	1732.5	20175		1	0	23.86
				1	8	23.89
				1	14	23.88
				8	0	22.91
				8	4	22.94
				8	7	22.94
	1753.5	20385		15	0	22.88
				1	0	24.36
1			8	24.40		
1			14	24.42		
8			0	23.18		
8			4	23.20		
16QAM	1711.5	19965	8	7	23.20	
			15	0	23.24	
			1	0	23.45	
			1	8	23.40	
			1	14	23.39	
			8	0	22.31	
	1732.5	20175	8	4	22.35	
			8	7	22.35	
			15	0	22.07	
			1	0	23.81	
			1	8	23.68	
			1	14	23.79	
	1753.5	20385	8	0	22.08	
			8	4	22.20	
			8	7	22.20	
15			0	21.95		
1			0	23.36		
1			8	23.36		
			1	14	23.36	
			8	0	22.47	
			8	4	22.51	
			8	7	22.51	
			15	0	22.36	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1711.5	19965	3	1	0	22.07
				1	8	22.07
				1	14	22.07
				8	0	22.06
				8	4	22.06
				8	7	22.05
				15	0	22.06
	1732.5	20175		1	0	22.08
				1	8	22.08
				1	14	22.08
				8	0	22.08
				8	4	22.08
				8	7	22.08
				15	0	22.08
	1753.5	20385		1	0	22.35
				1	8	22.36
				1	14	22.36
				8	0	22.32
				8	4	22.27
				8	7	22.27
				8	7	22.27
				15	0	22.28

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	19975	5	1	0	24.05
				1	12	23.94
				1	24	24.03
				12	0	23.05
				12	7	22.96
				12	13	22.95
	25	0		23.00		
	1	0		23.98		
	1	12		24.05		
	1	24		24.05		
	12	0		22.97		
	12	7		22.96		
	12	13		22.96		
	25	0		23.01		
	1	0		23.96		
	1	12		24.04		
	1	24		24.07		
	16QAM	1712.5		19975	5	12
12			7			23.09
12			13			23.09
25			0			23.17
1			0			22.34
1			12			22.27
1		24	22.27			
12		0	22.05			
12		7	22.07			
12		13	22.12			
25		0	22.24			
1		0	23.05			
1		12	23.13			
1		24	22.98			
12		0	22.03			
12		7	22.05			
12		13	22.05			
25		0	22.02			
1752.5	20375	20375	5	1	0	22.71
				1	12	22.78
				1	24	22.74
				12	0	22.03
				12	7	22.10
				12	13	22.10
25	0	22.12				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1712.5	19975	5	1	0	22.18
				1	12	22.24
				1	24	22.24
				12	0	22.19
				12	7	22.24
				12	13	22.24
				25	0	22.21
	1732.5	20175		1	0	22.02
				1	12	22.02
				1	24	22.03
				12	0	22.02
				12	7	21.99
				12	13	21.92
				25	0	22.00
	1752.5	20375		1	0	22.12
				1	12	22.13
				1	24	22.13
				12	0	22.13
				12	7	22.13
				12	13	22.14
				25	0	22.38

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1715	20000	10	1	0	24.02
				1	25	23.86
				1	49	23.84
				25	0	22.95
				25	12	22.87
				25	25	22.86
	1732.5	20175		50	0	23.07
				1	0	23.90
				1	25	24.02
				1	49	24.02
				25	0	22.89
				25	12	22.86
	1750	20350		25	25	22.86
				50	0	22.91
				1	0	24.26
				1	25	24.35
				1	49	24.33
				25	0	23.12
16QAM	1715	20000	25	12	23.09	
			25	25	23.09	
			50	0	23.11	
			1	0	23.22	
			1	25	23.17	
			1	49	23.16	
	1732.5	20175	25	0	22.11	
			25	12	22.07	
			25	25	22.07	
			50	0	22.15	
			1	0	23.02	
			1	25	23.08	
	1750	20350	1	49	23.05	
			25	0	22.17	
			25	12	22.17	
			25	25	22.15	
			50	0	22.07	
			1	0	23.06	
			1	25	23.00	
			1	49	23.03	
			25	0	22.43	
			25	12	22.41	
			25	25	22.41	
			50	0	22.36	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1715	20000	10	1	0	22.16
				1	25	22.15
				1	49	22.16
				25	0	22.15
				25	12	22.15
				25	25	22.15
				50	0	22.15
	1732.5	20175		1	0	22.07
				1	25	22.07
				1	49	22.07
				25	0	22.07
				25	12	22.07
				25	25	22.07
				50	0	22.07
	1750	20350		1	0	22.36
				1	25	22.36
				1	49	22.36
				25	0	22.47
				25	12	22.19
				25	25	22.33
				50	0	22.37

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	20025	15	1	0	23.97
				1	37	23.75
				1	74	23.82
				36	0	23.07
				36	29	22.93
				36	30	22.93
				75	0	22.93
	1732.5	20175		1	0	24.03
				1	37	23.98
				1	74	23.99
				36	0	22.97
				36	29	22.93
				36	30	22.93
				75	0	22.95
	1747.5	20325		1	0	24.09
				1	37	24.19
				1	74	24.23
				36	0	23.13
				36	29	23.06
				36	30	23.06
				75	0	23.20
16QAM	1717.5	20025	1	0	23.47	
			1	37	23.29	
			1	74	23.33	
			36	0	21.99	
			36	29	21.95	
			36	30	21.95	
			75	0	22.07	
	1732.5	20175	1	0	23.07	
			1	37	23.12	
			1	74	23.12	
			36	0	22.13	
			36	29	22.12	
			36	30	22.12	
			75	0	22.03	
	1747.5	20325	1	0	23.48	
			1	37	23.56	
			1	74	23.55	
			36	0	22.19	
			36	29	22.25	
			36	30	22.26	
			75	0	22.14	

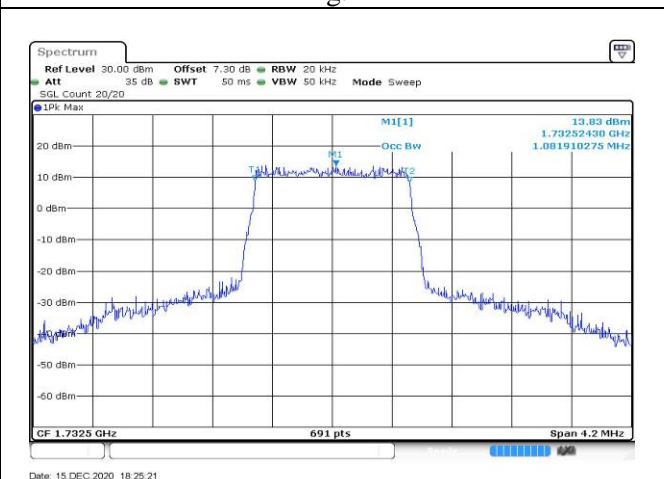
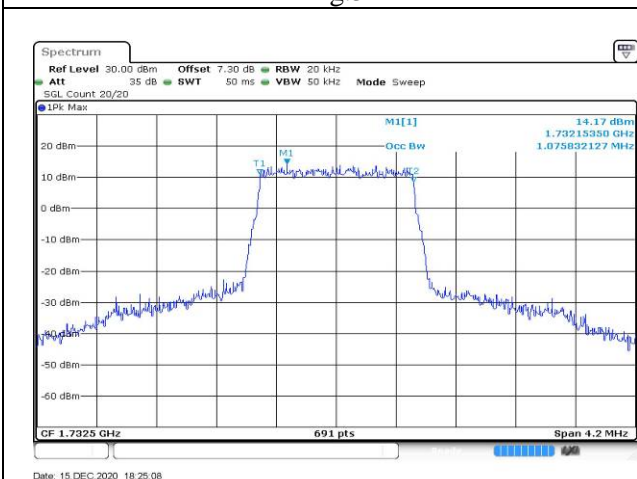
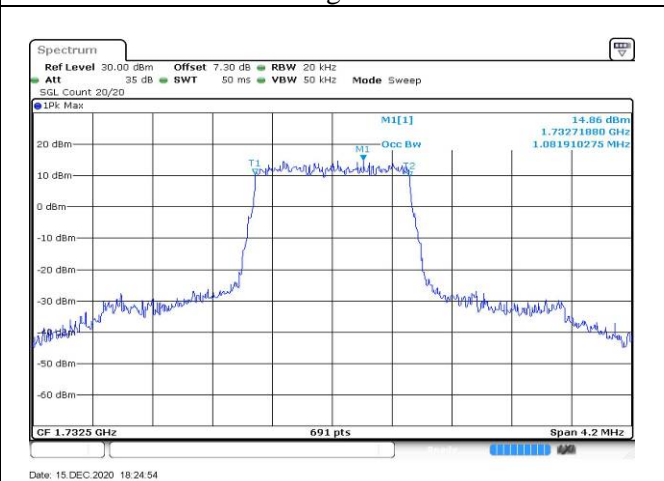
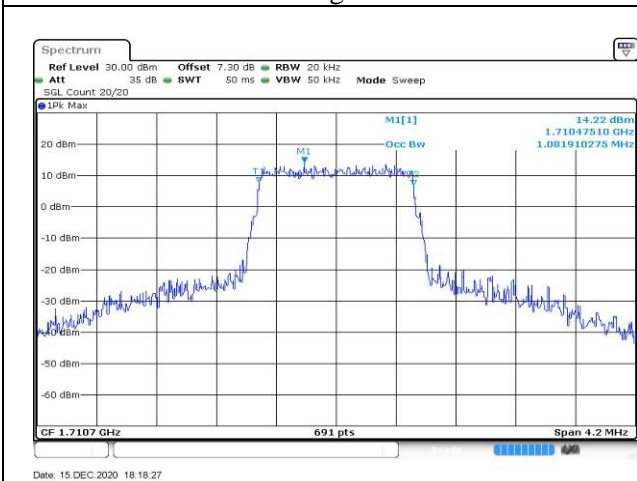
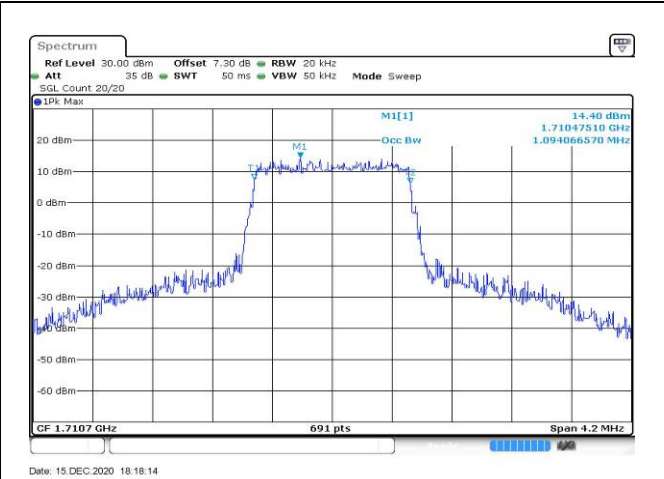
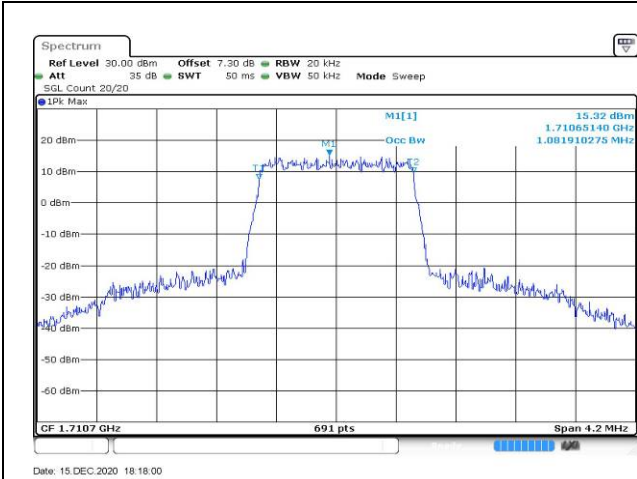
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1717.5	20025	15	1	0	21.92
				1	37	22.12
				1	74	22.12
				36	0	22.13
				36	29	22.12
				36	30	22.12
				75	0	22.12
	1732.5	20175		1	0	22.02
				1	37	22.02
				1	74	22.02
				36	0	22.03
				36	29	22.02
				36	30	22.02
				75	0	22.02
	1747.5	20325		1	0	22.14
				1	37	22.14
				1	74	22.15
				36	0	22.19
				36	29	22.31
				36	30	22.15
				75	0	22.27

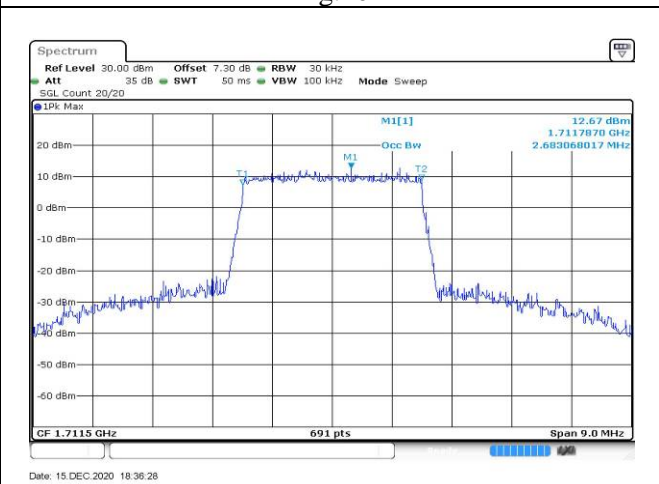
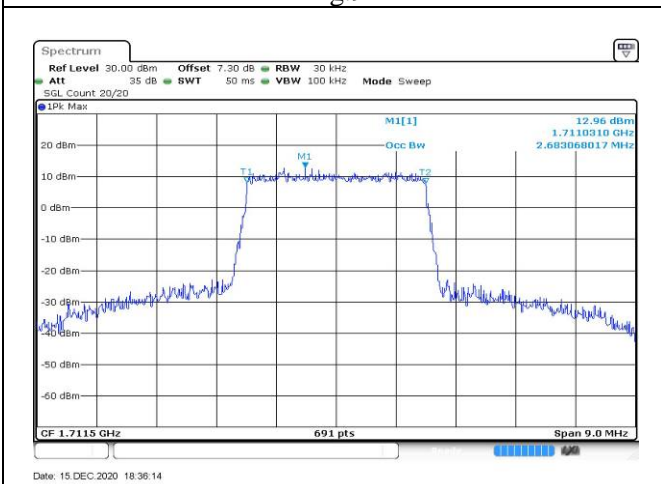
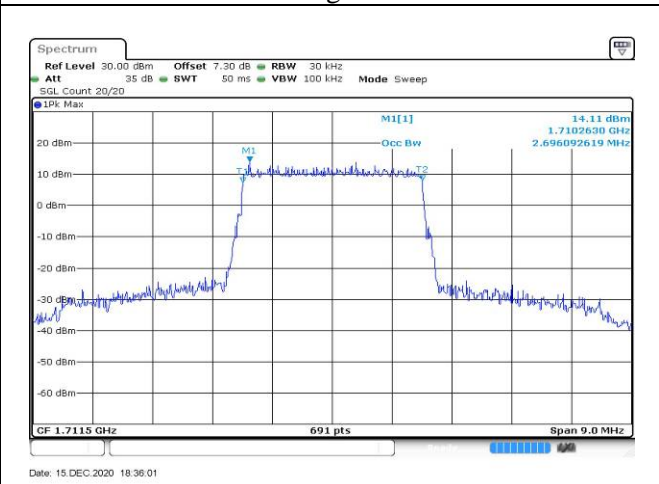
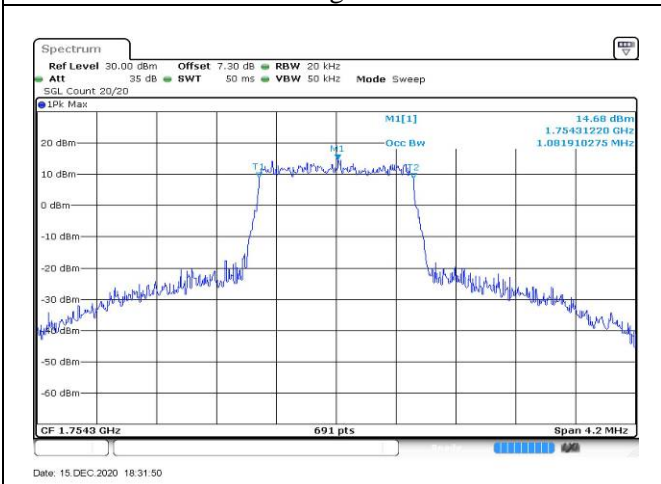
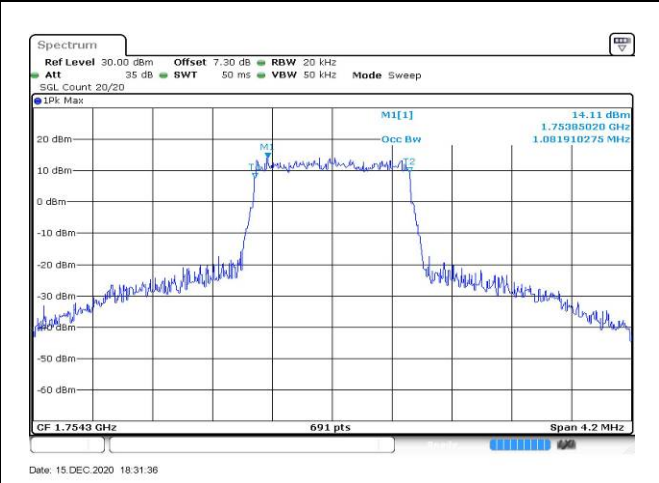
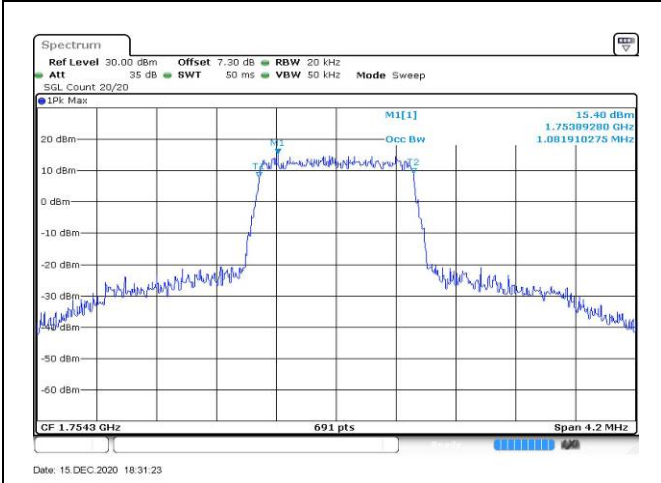
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	20050	20	1	0	24.11
				1	49	24.22
				1	99	24.20
				50	0	22.95
				50	24	23.01
				50	50	23.05
	1732.5	20175		100	0	23.03
				1	0	24.07
				1	49	24.15
				1	99	24.15
				50	0	22.91
				50	24	22.99
	1745	20300		50	50	23.00
				100	0	23.02
				1	0	24.03
				1	49	24.55
				1	99	24.54
				50	0	23.04
16QAM	1720	20050	50	24	23.18	
			50	50	23.18	
			100	0	23.09	
			1	0	23.70	
			1	49	23.60	
			1	99	23.55	
	1732.5	20175	50	0	22.00	
			50	24	22.00	
			50	50	21.99	
			100	0	22.18	
			1	0	22.84	
			1	49	22.97	
	1745	20300	1	99	22.98	
			50	0	22.00	
			50	24	22.14	
			50	50	22.15	
			100	0	22.08	
			1	0	23.67	
			1	49	23.86	
			1	99	23.87	
			50	0	22.14	
			50	24	22.40	
			50	50	22.32	
			100	0	22.06	

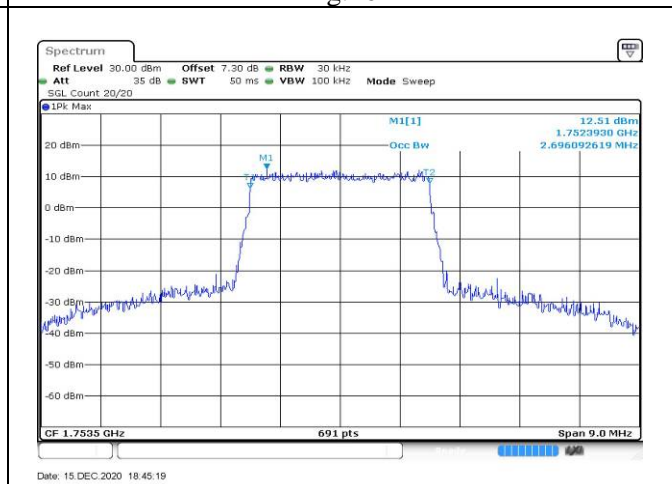
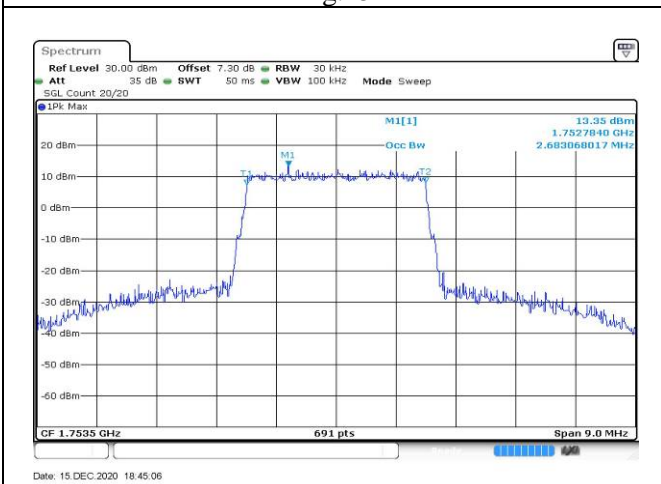
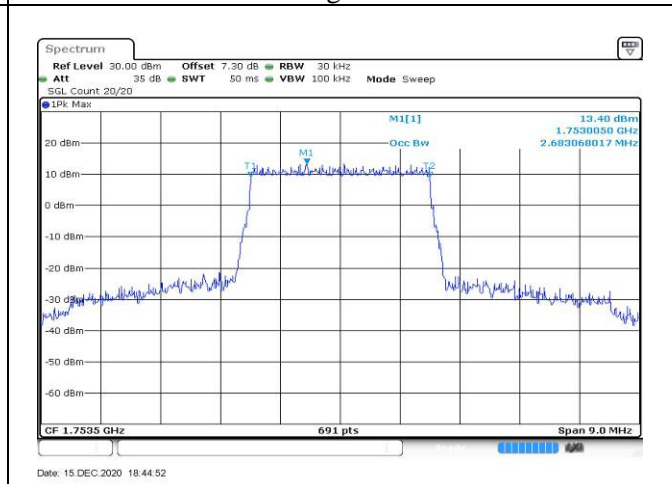
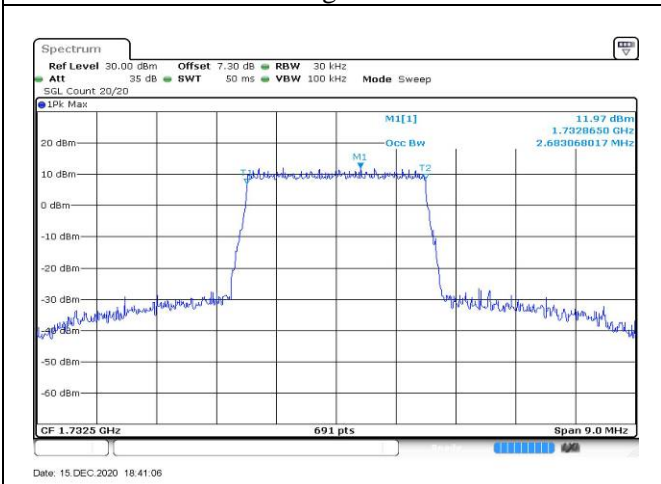
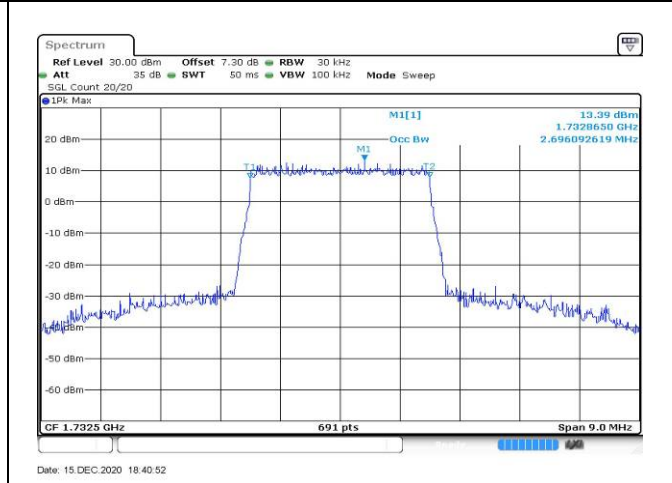
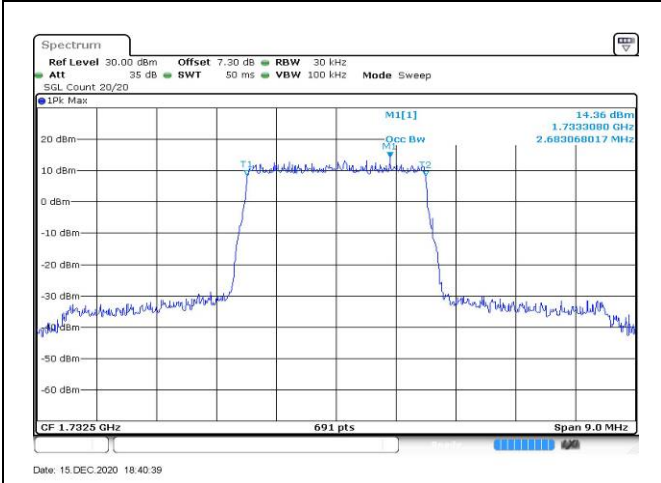
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1720	20050	20	1	0	22.18
				1	49	22.16
				1	99	22.16
				50	0	22.15
				50	24	22.15
				50	50	22.15
				100	0	22.02
	1732.5	20175		1	0	22.07
				1	49	22.07
				1	99	22.06
				50	0	22.06
				50	24	22.06
				50	50	22.07
				100	0	22.07
	1745	20300		1	0	22.09
				1	49	22.24
				1	99	22.07
				50	0	22.07
				50	24	22.08
				50	50	22.09
				100	0	22.09

2 Occupied Bandwidth

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	1.082	Fig.1	1.094	Fig.2	1.082	Fig.3
	1732.5	20175		6	0	1.082	Fig.4	1.076	Fig.5	1.082	Fig.6
	1754.3	20393		6	0	1.082	Fig.7	1.082	Fig.8	1.082	Fig.9
	1711.5	19965	3	15	0	2.696	Fig.10	2.683	Fig.11	2.683	Fig.12
	1732.5	20175		15	0	2.683	Fig.13	2.696	Fig.14	2.683	Fig.15
	1753.5	20385		15	0	2.683	Fig.16	2.683	Fig.17	2.696	Fig.18
	1712.5	19975	5	25	0	4.472	Fig.19	4.472	Fig.20	4.472	Fig.21
	1732.5	20175		25	0	4.472	Fig.22	4.472	Fig.23	4.472	Fig.24
	1752.5	20375		25	0	4.472	Fig.25	4.472	Fig.26	4.472	Fig.27
	1715	20000	10	50	0	8.944	Fig.28	8.944	Fig.29	8.944	Fig.30
	1732.5	20175		50	0	8.944	Fig.31	8.900	Fig.32	8.944	Fig.33
	1750	20350		50	0	8.944	Fig.34	8.944	Fig.35	8.944	Fig.36
	1717.5	20025	15	75	0	13.480	Fig.37	13.415	Fig.38	13.415	Fig.39
	1732.5	20175		75	0	13.415	Fig.40	13.415	Fig.41	13.415	Fig.42
	1747.5	20325		75	0	13.415	Fig.43	13.480	Fig.44	13.415	Fig.45
	1720	20050	20	100	0	17.887	Fig.46	17.887	Fig.47	17.887	Fig.48
	1732.5	20175		100	0	17.887	Fig.49	17.887	Fig.50	17.887	Fig.51
	1745	20300		100	0	17.887	Fig.52	17.887	Fig.53	17.887	Fig.54







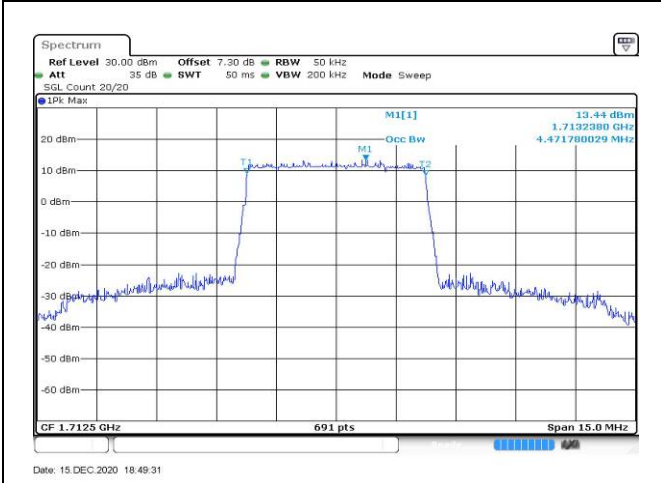


Fig.19

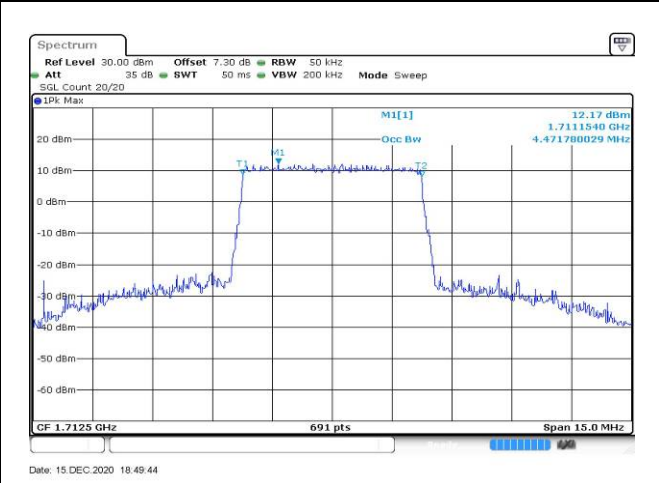


Fig.20

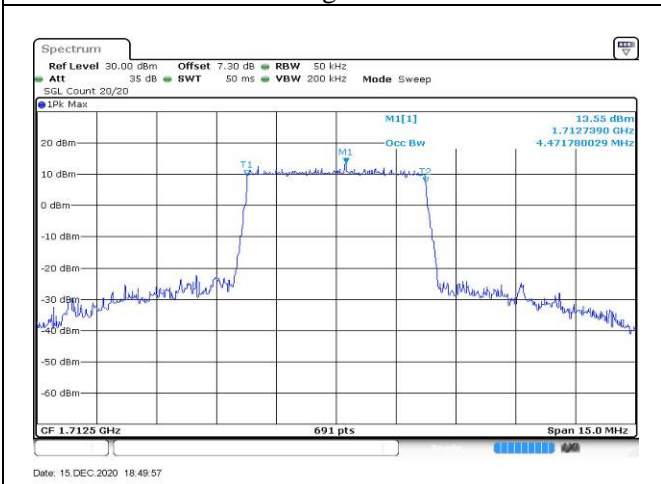


Fig.21

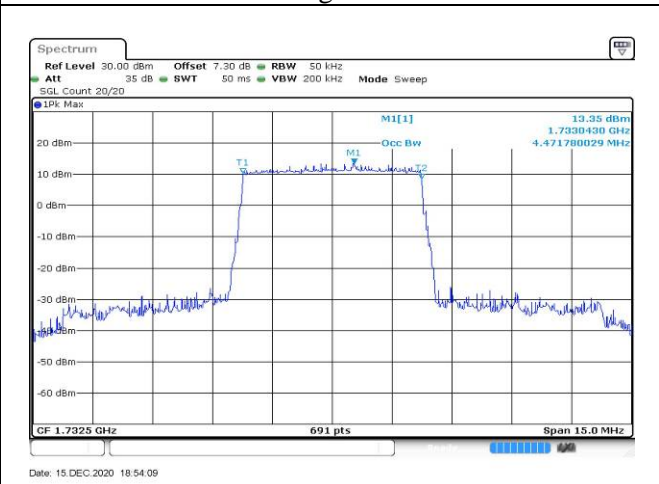


Fig.22

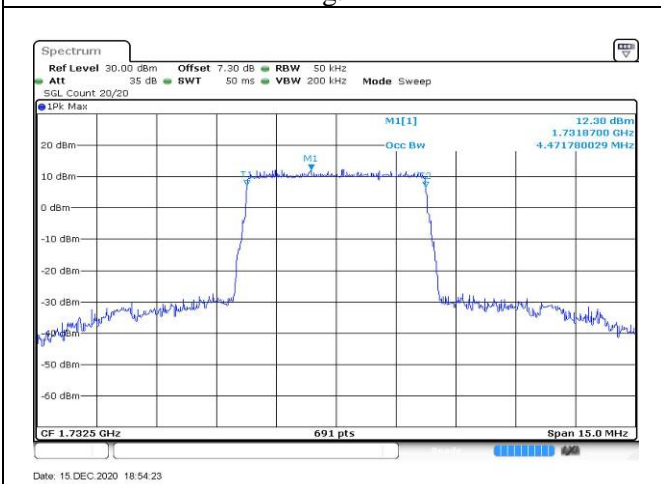


Fig.23

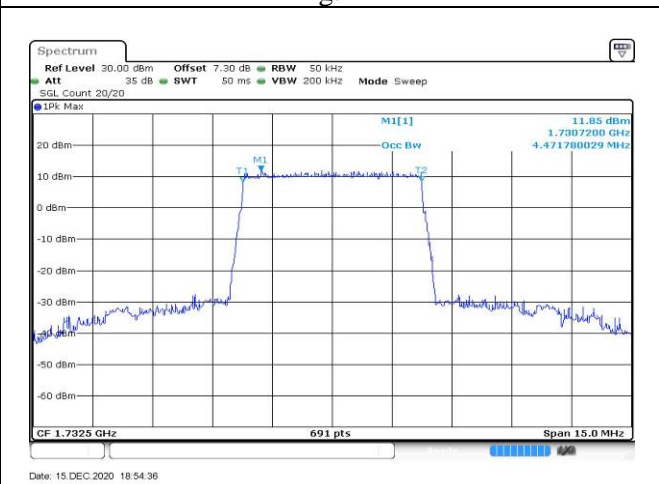


Fig.24

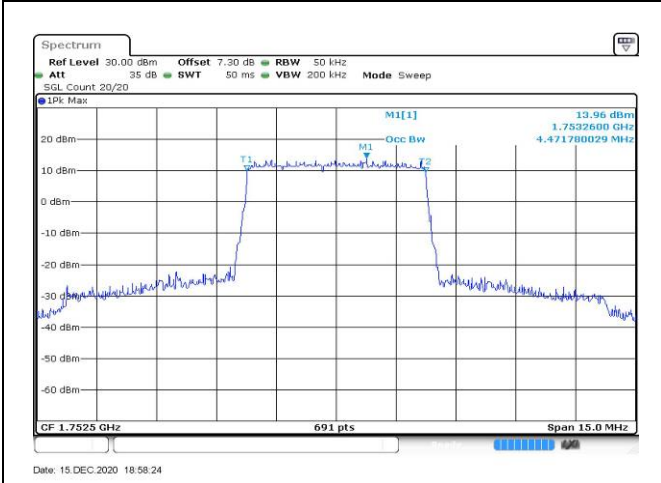


Fig.25

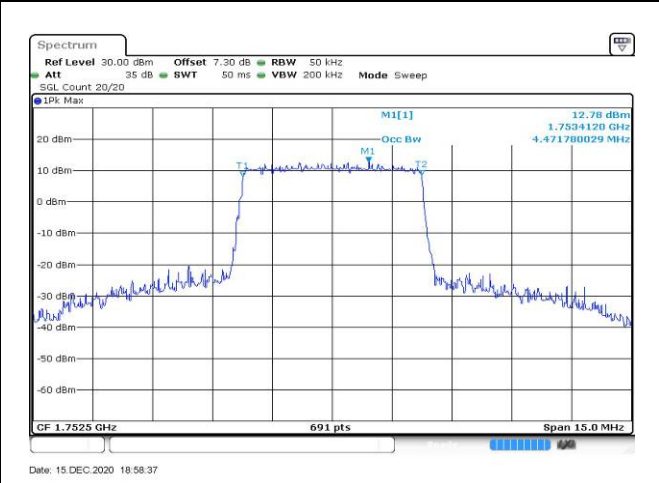


Fig.26

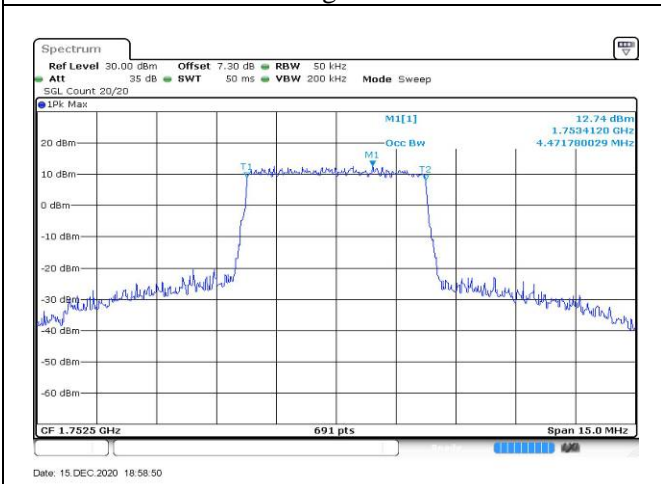


Fig.27

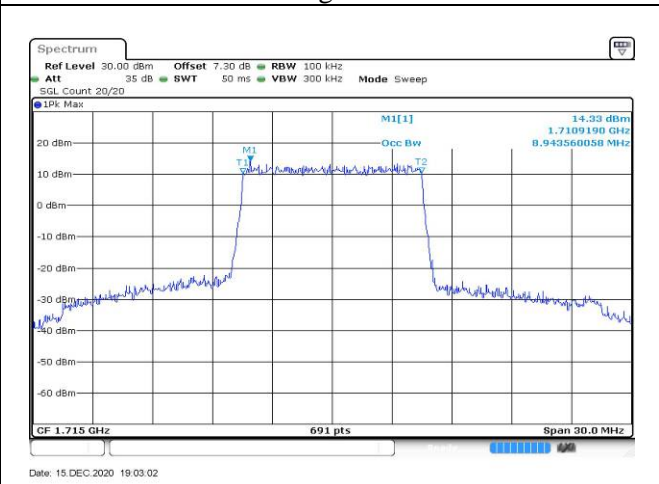


Fig.28

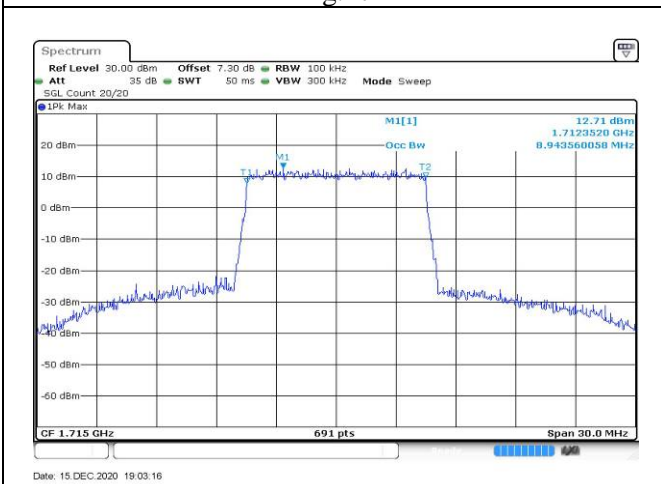


Fig.29

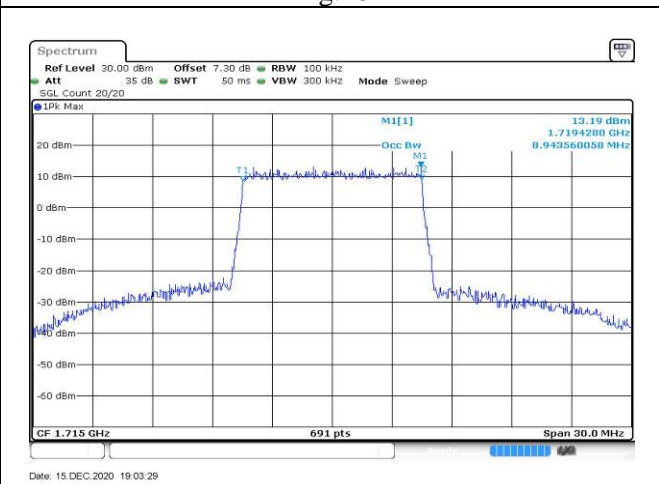
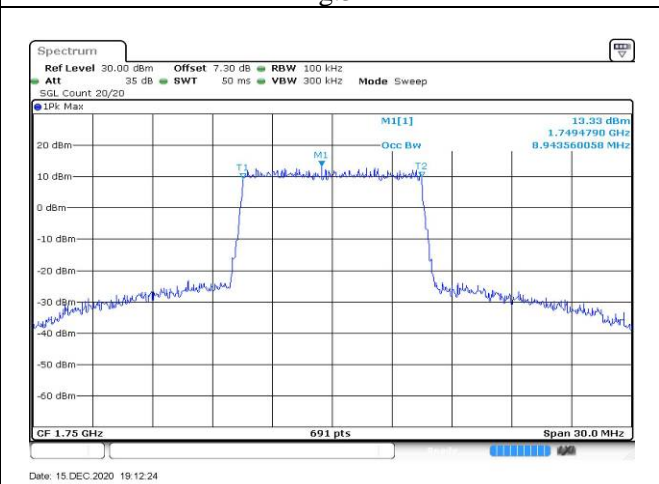
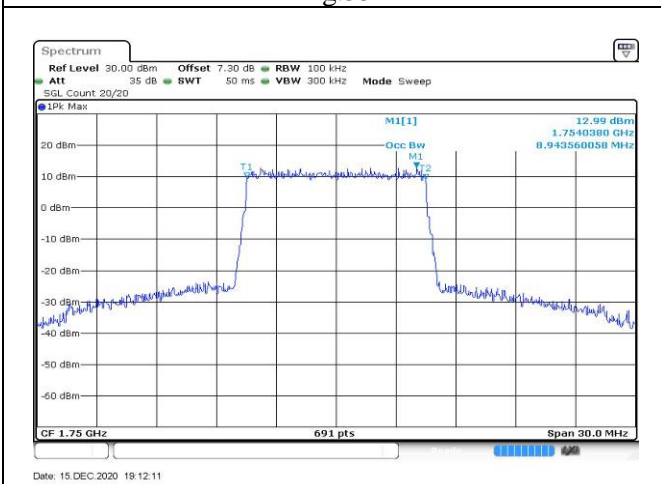
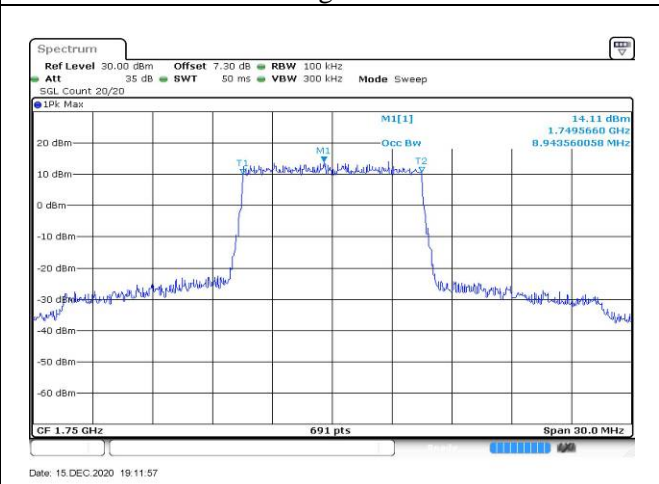
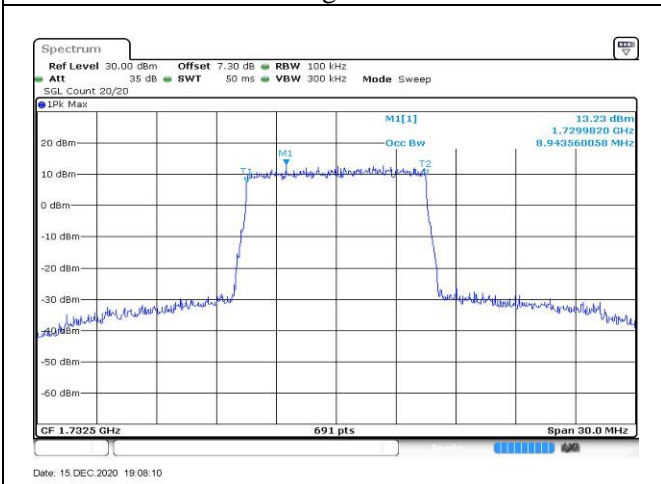
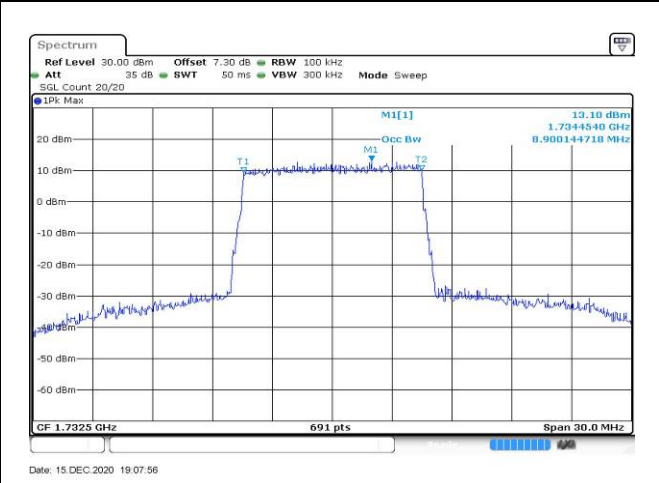
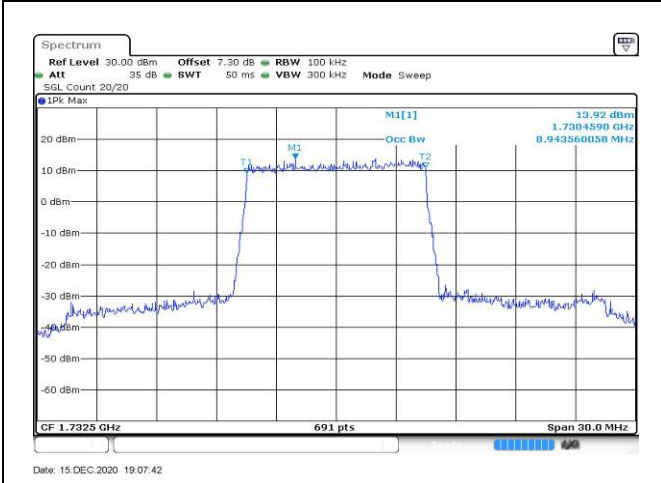


Fig.30



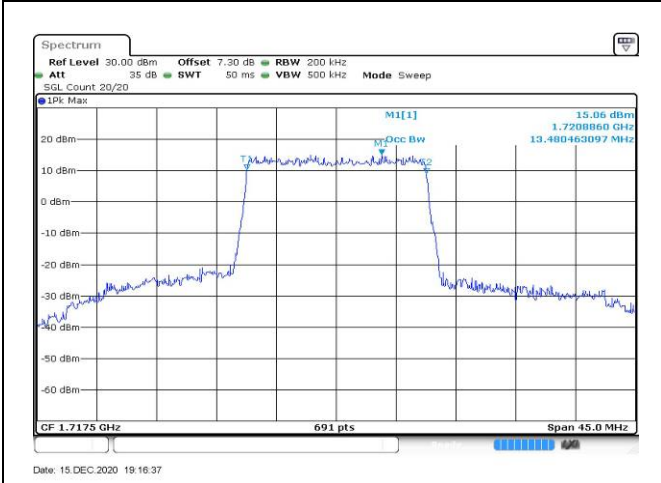


Fig.37

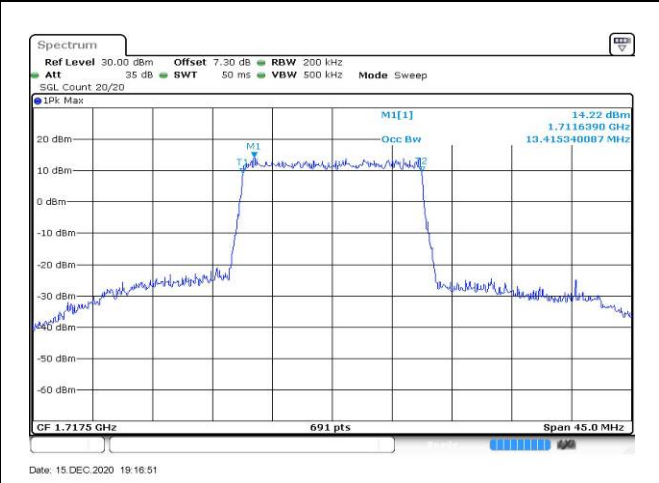


Fig.38

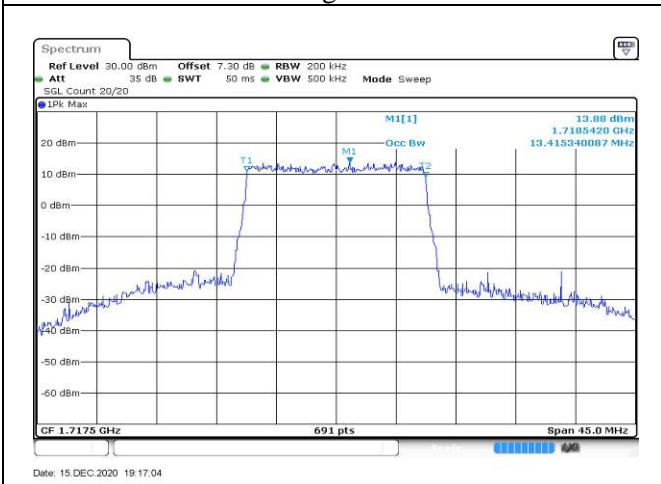


Fig.39

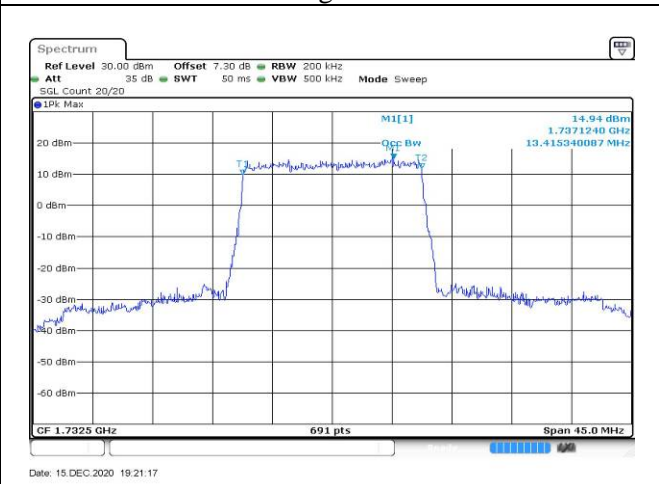


Fig.40

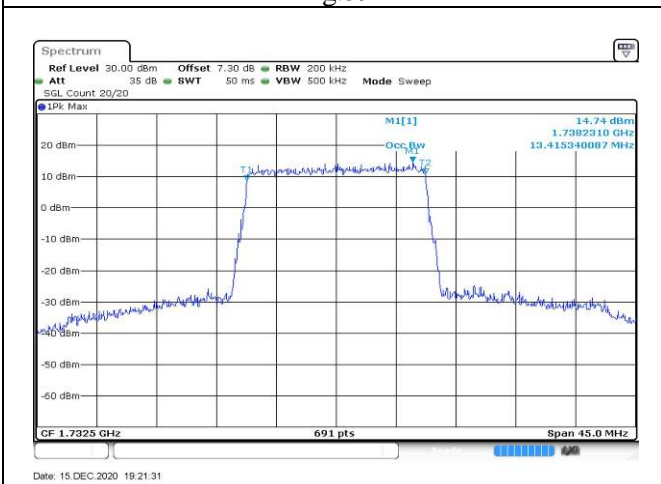


Fig.41

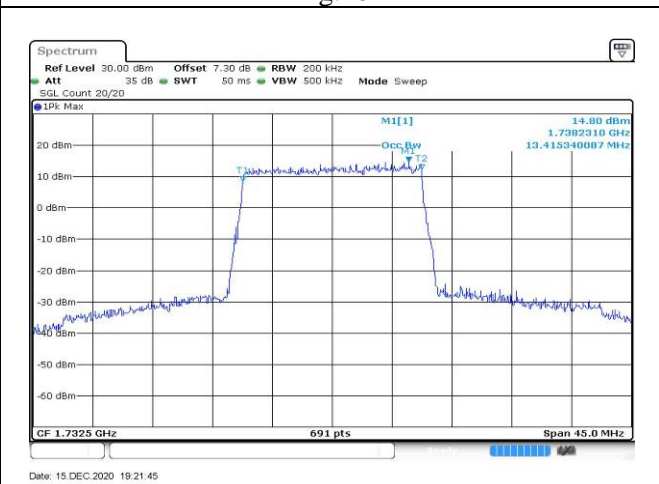


Fig.42

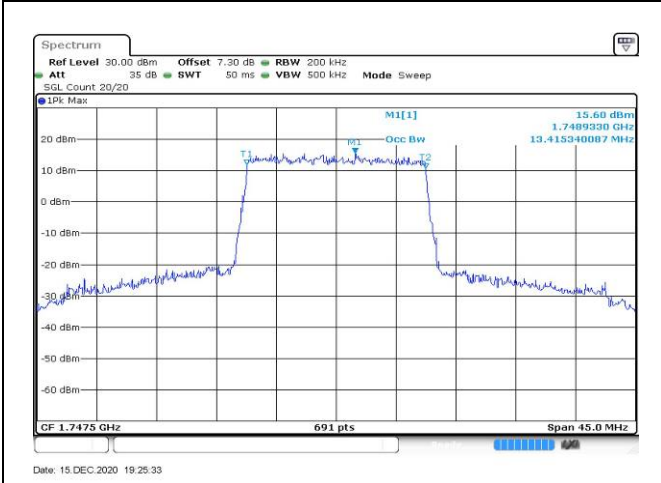


Fig.43

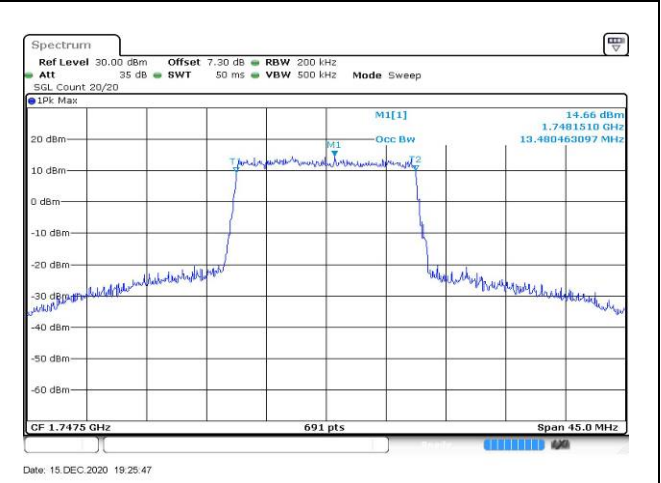


Fig.44

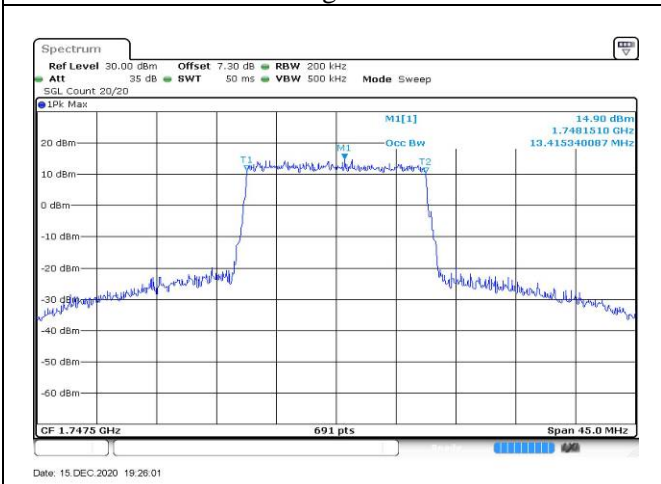


Fig.45

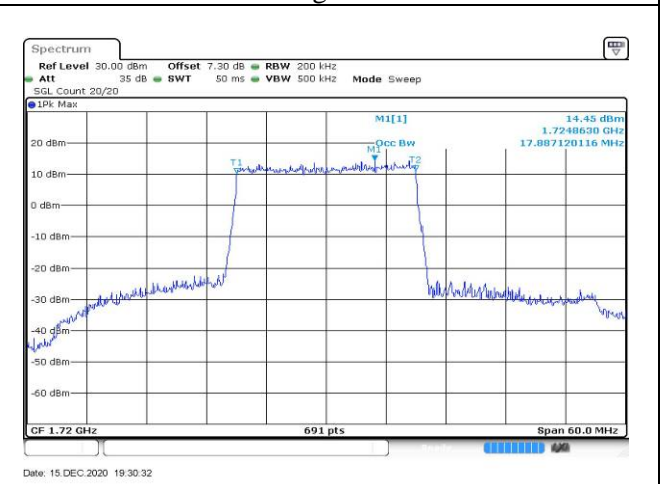


Fig.46

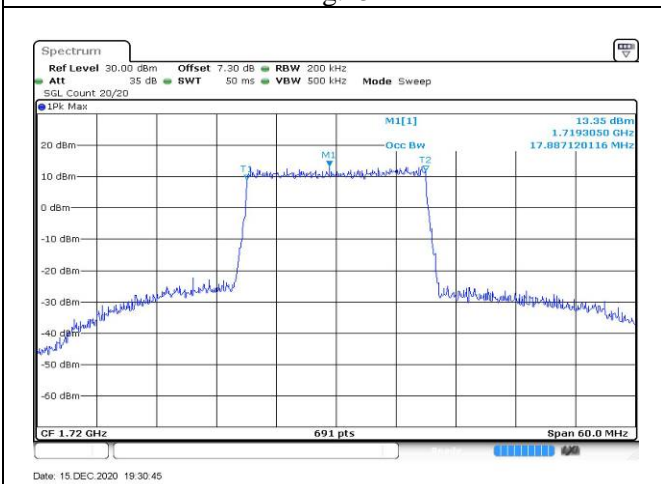


Fig.47

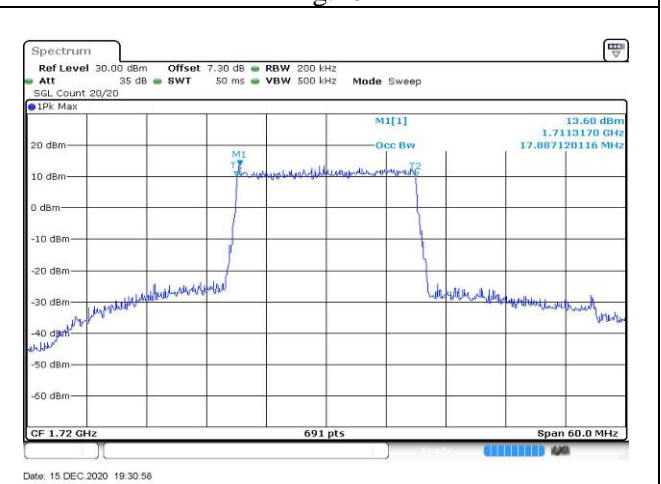
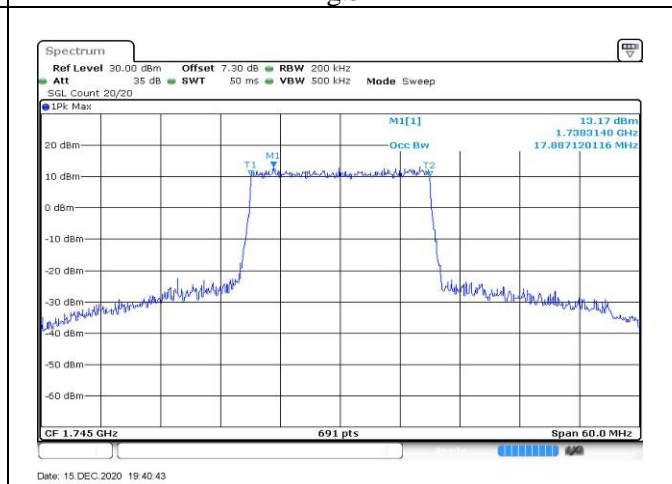
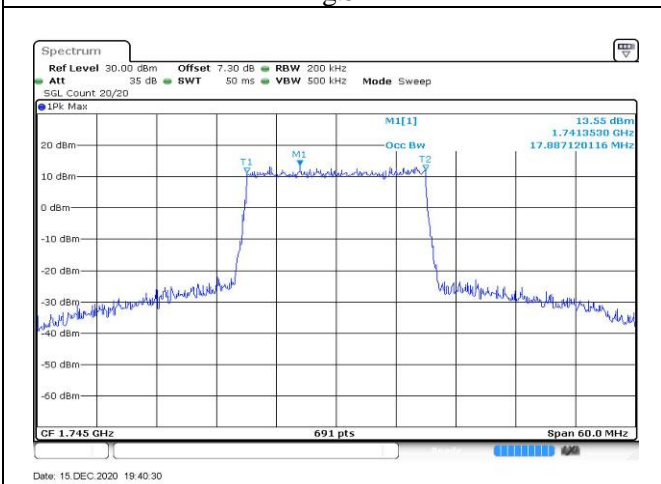
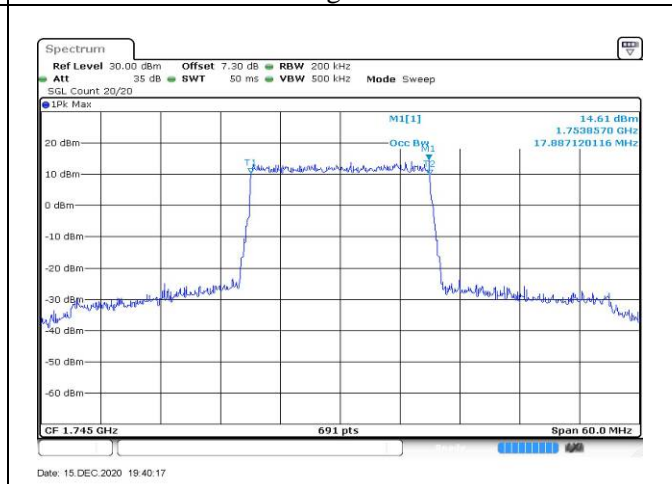
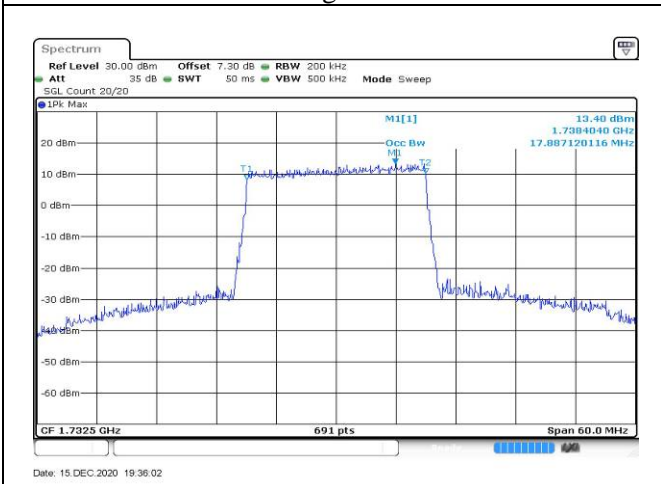
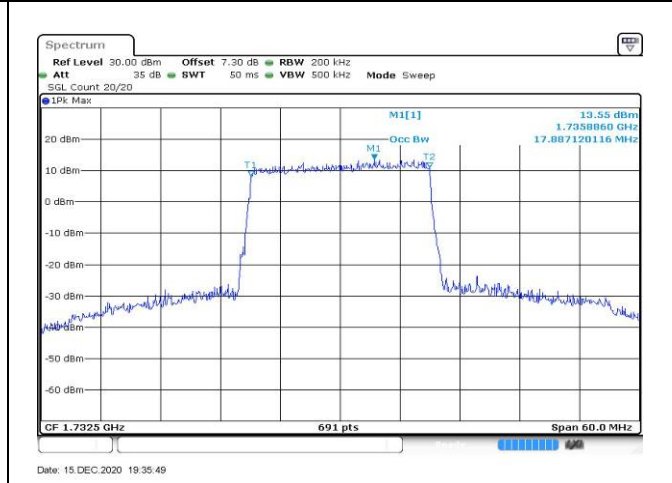
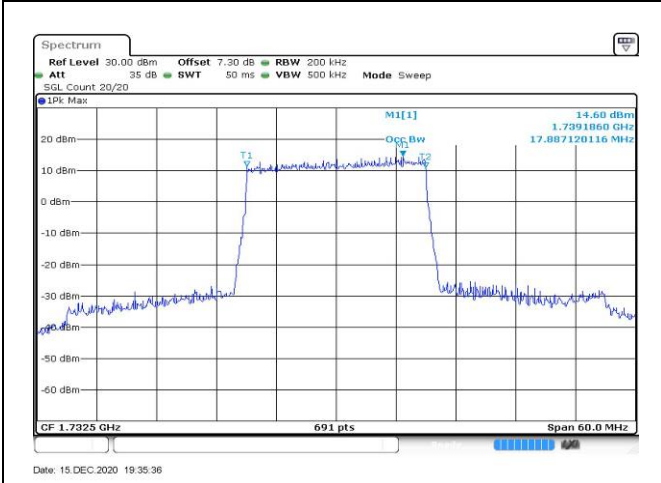


Fig.48



3 Emission Bandwidth

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	1.228	Fig.1	1.234	Fig.2	1.234	Fig.3
	1732.5	20175		6	0	1.234	Fig.4	1.222	Fig.5	1.216	Fig.6
	1754.3	20393		6	0	1.240	Fig.7	1.222	Fig.8	1.228	Fig.9
	1711.5	19965	3	15	0	2.983	Fig.10	2.944	Fig.11	2.970	Fig.12
	1732.5	20175		15	0	2.970	Fig.13	2.970	Fig.14	2.944	Fig.15
	1753.5	20385		15	0	2.996	Fig.16	2.983	Fig.17	3.009	Fig.18
	1712.5	19975	5	25	0	4.884	Fig.19	4.906	Fig.20	4.928	Fig.21
	1732.5	20175		25	0	4.884	Fig.22	4.863	Fig.23	4.928	Fig.24
	1752.5	20375		25	0	4.863	Fig.25	4.884	Fig.26	4.884	Fig.27
	1715	20000	10	50	0	9.682	Fig.28	9.638	Fig.29	9.768	Fig.30
	1732.5	20175		50	0	9.682	Fig.31	9.768	Fig.32	9.682	Fig.33
	1750	20350		50	0	9.682	Fig.34	9.682	Fig.35	9.725	Fig.36
	1717.5	20025	15	75	0	14.783	Fig.37	14.718	Fig.38	14.653	Fig.39
	1732.5	20175		75	0	14.588	Fig.40	14.718	Fig.41	14.588	Fig.42
	1747.5	20325		75	0	14.848	Fig.43	14.588	Fig.44	14.718	Fig.45
	1720	20050	20	100	0	19.450	Fig.46	19.363	Fig.47	19.363	Fig.48
	1732.5	20175		100	0	19.190	Fig.49	19.190	Fig.50	19.363	Fig.51
	1745	20300		100	0	19.276	Fig.52	19.363	Fig.53	19.363	Fig.54

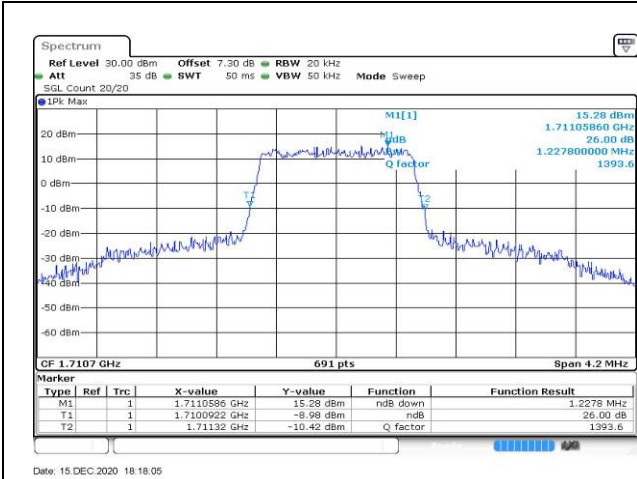


Fig.1

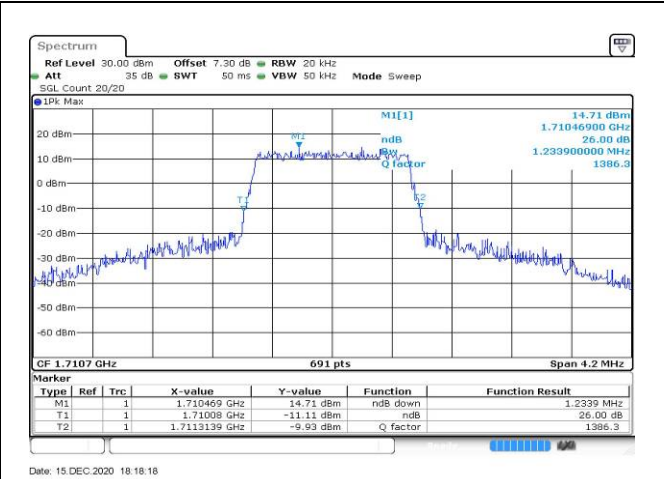


Fig.2

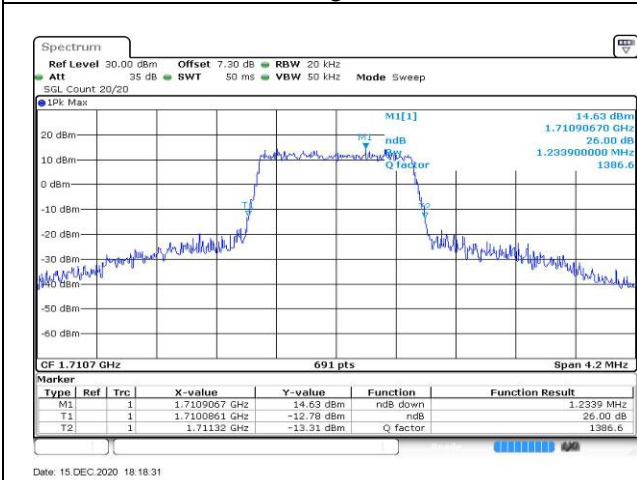


Fig.3

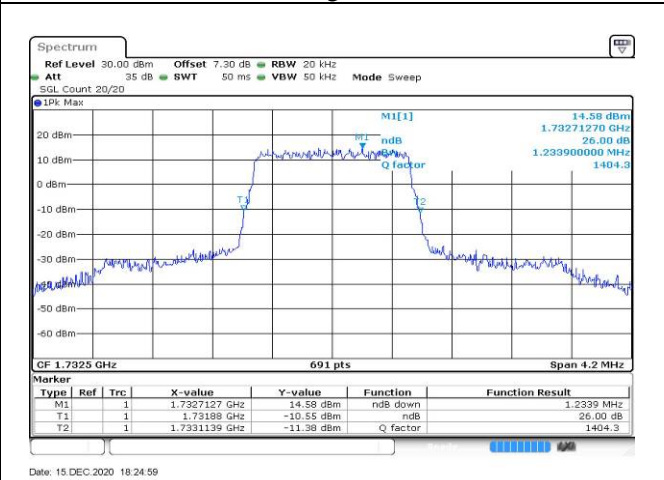


Fig.4

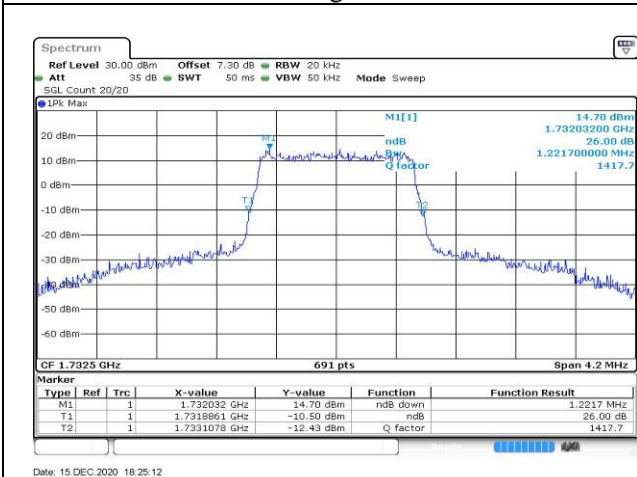


Fig.5

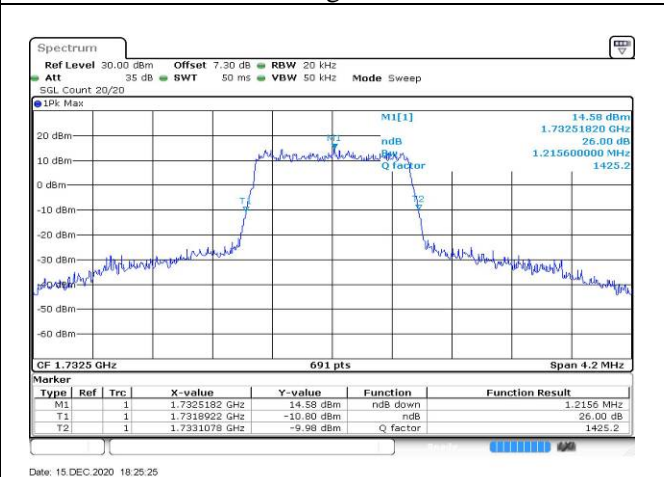


Fig.6

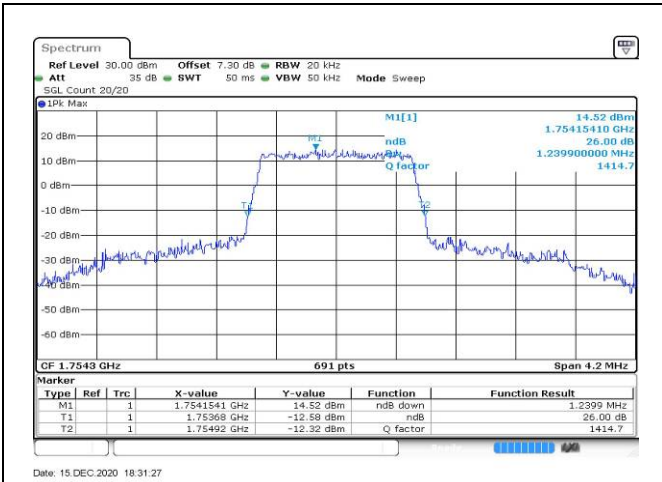


Fig.7

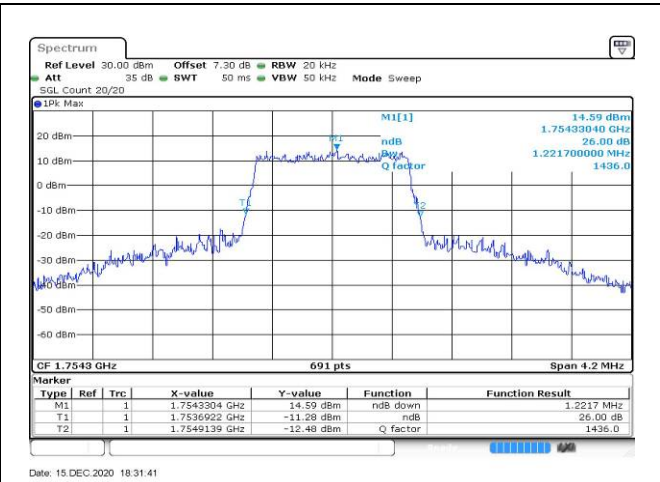


Fig.8

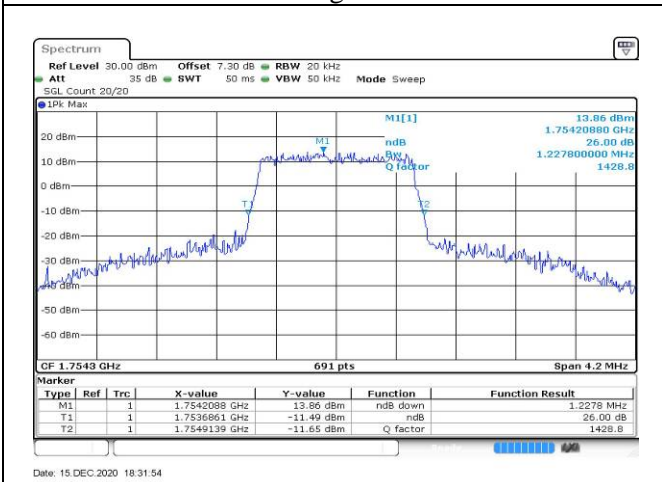


Fig.9

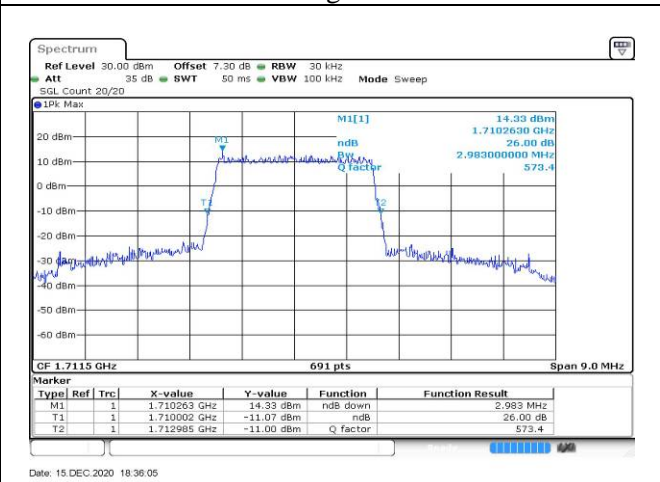


Fig.10

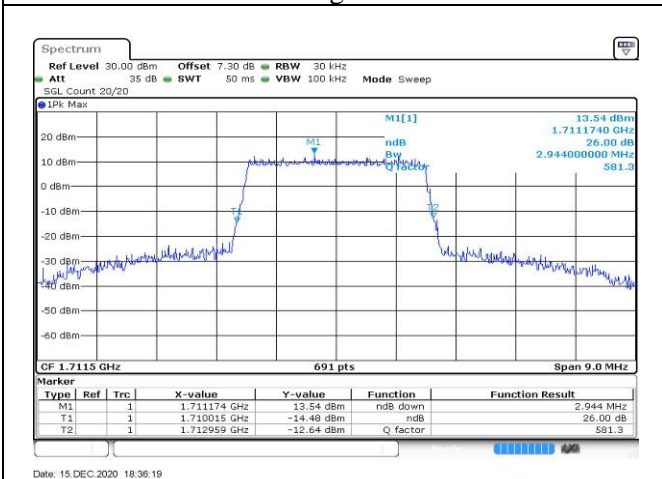


Fig.11

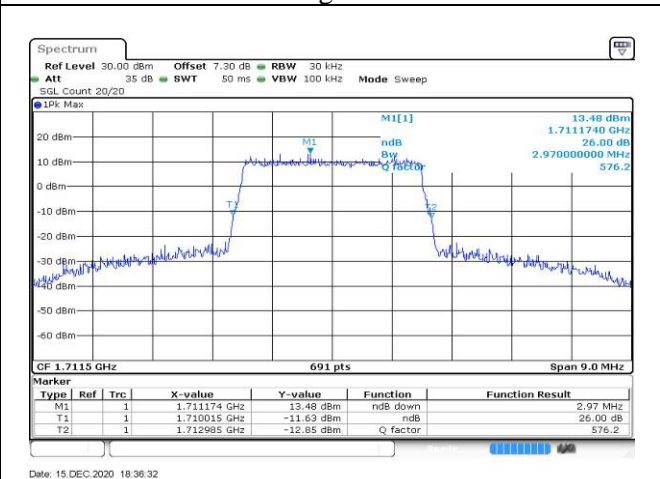


Fig.12

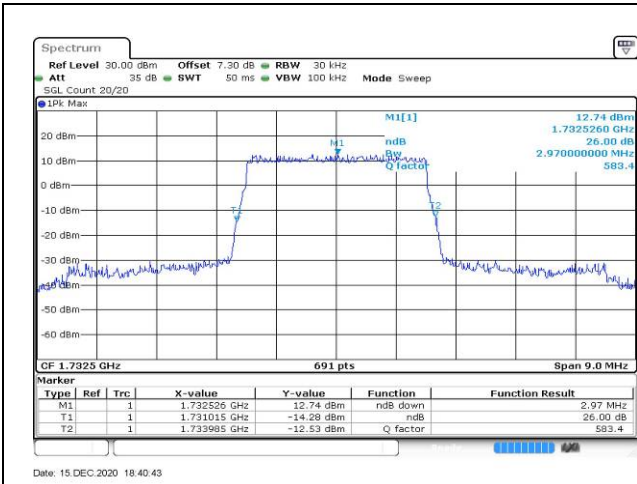


Fig.13

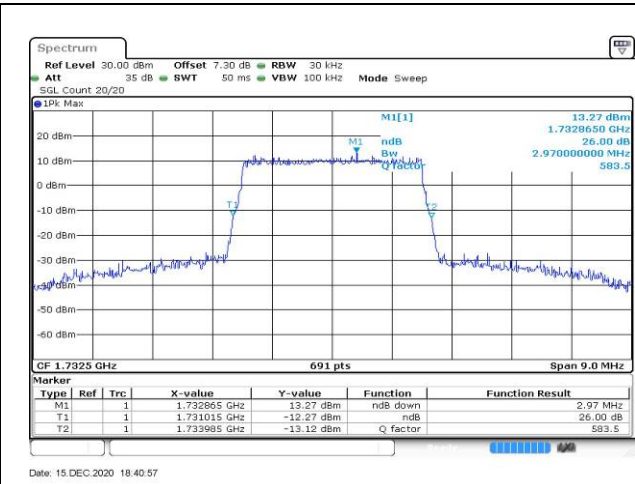


Fig.14

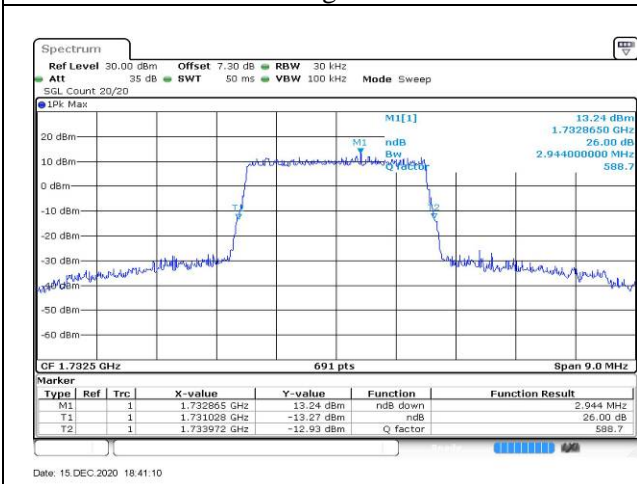


Fig.15

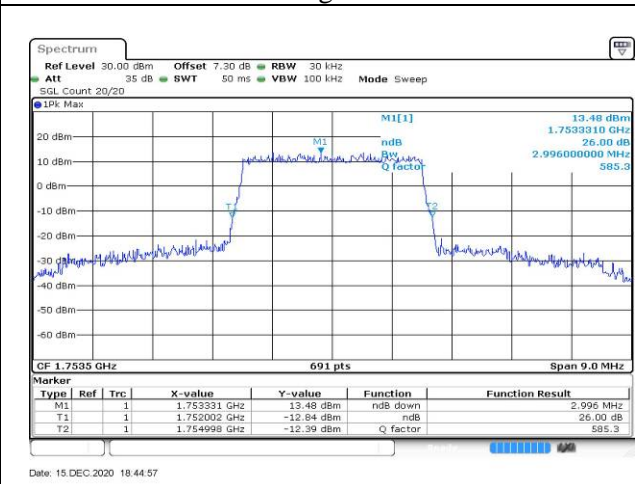


Fig.16

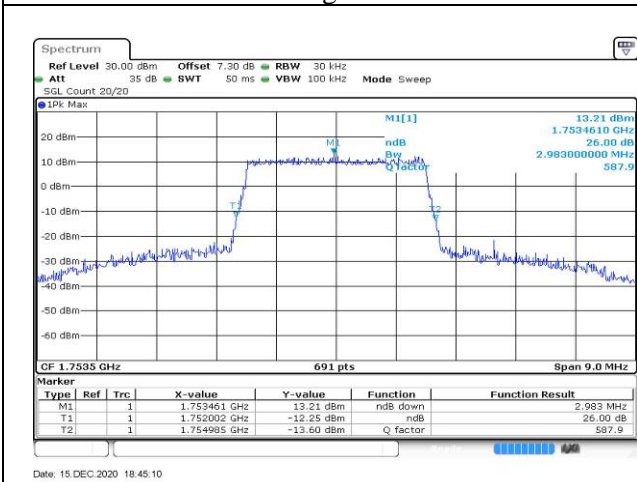


Fig.17

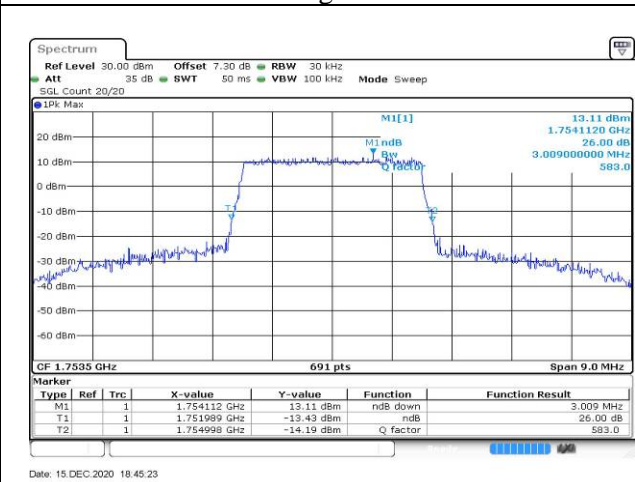


Fig.18