

LTE Band 4

1 RF Power Output

E-UTRA 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	
				15	0	22.88	
	1753.5	20385		1	0	24.36	
				1	8	24.40	
				1	14	24.42	
				8	0	23.18	
				8	4	23.20	
				8	7	23.20	
				15	0	23.24	
	16QAM	1711.5		19965	1	0	23.45
					1	8	23.40
					1	14	23.39
8			0		22.31		
8			4		22.35		
8			7		22.35		
15			0		22.07		
1732.5		20175	1	0	23.81		
			1	8	23.68		
			1	14	23.79		
			8	0	22.08		
			8	4	22.20		
			8	7	22.20		
			15	0	21.95		
1753.5		20385	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
				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	
	1732.5	20175		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	
	1752.5	20375		1	0	23.96	
				1	12	24.04	
				1	24	24.07	
				12	0	23.13	
				12	7	23.09	
				12	13	23.09	
				25	0	23.17	
	16QAM	1712.5		19975	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	
1732.5		20175	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	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
				50	0	23.07
	1732.5	20175		1	0	23.90
				1	25	24.02
				1	49	24.02
				25	0	22.89
				25	12	22.86
				25	25	22.86
				50	0	22.91
	1750	20350		1	0	24.26
				1	25	24.35
				1	49	24.33
				25	0	23.12
				25	12	23.09
				25	25	23.09
				50	0	23.11
16QAM	1715	20000	1	0	23.22	
			1	25	23.17	
			1	49	23.16	
			25	0	22.11	
			25	12	22.07	
			25	25	22.07	
			50	0	22.15	
	1732.5	20175	1	0	23.02	
			1	25	23.08	
			1	49	23.05	
			25	0	22.17	
			25	12	22.17	
			25	25	22.15	
			50	0	22.07	
	1750	20350	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	
				100	0	23.03	
	1732.5	20175		1	0	24.07	
				1	49	24.15	
				1	99	24.15	
				50	0	22.91	
				50	24	22.99	
				50	50	23.00	
				100	0	23.02	
	1745	20300		1	0	24.03	
				1	49	24.55	
				1	99	24.54	
				50	0	23.04	
				50	24	23.18	
				50	50	23.18	
				100	0	23.09	
	16QAM	1720		20050	1	0	23.70
					1	49	23.60
					1	99	23.55
50					0	22.00	
50					24	22.00	
50					50	21.99	
100					0	22.18	
1732.5		20175		1	0	22.84	
				1	49	22.97	
				1	99	22.98	
				50	0	22.00	
				50	24	22.14	
				50	50	22.15	
				100	0	22.08	
1745		20300		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

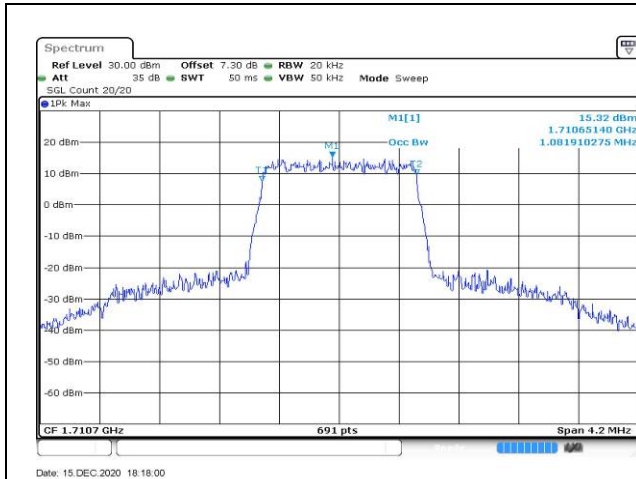


Fig.1

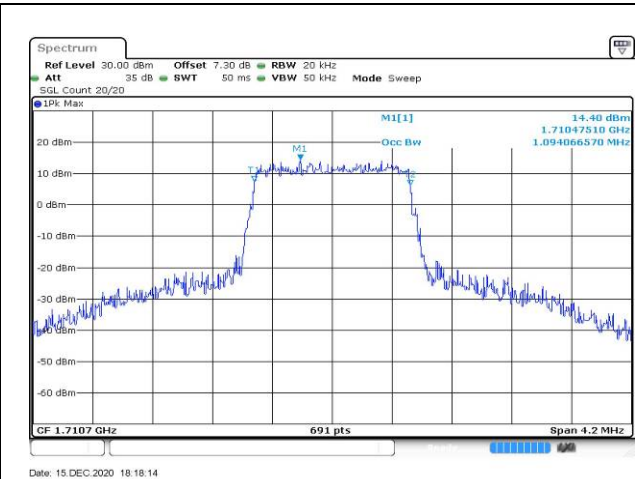


Fig.2

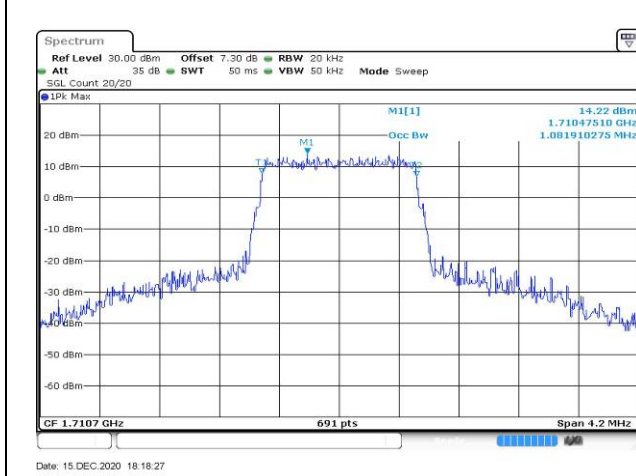


Fig.3

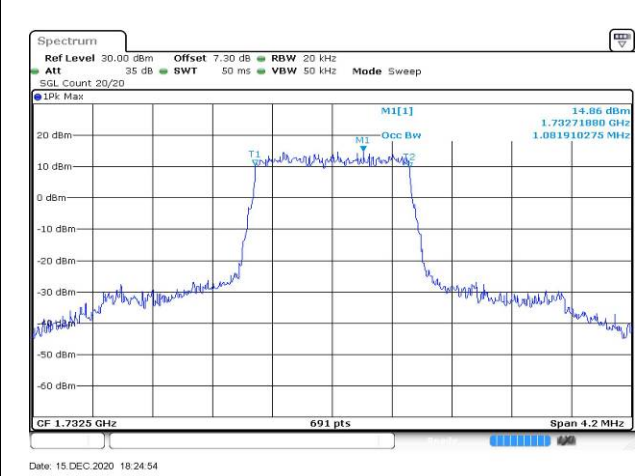


Fig.4

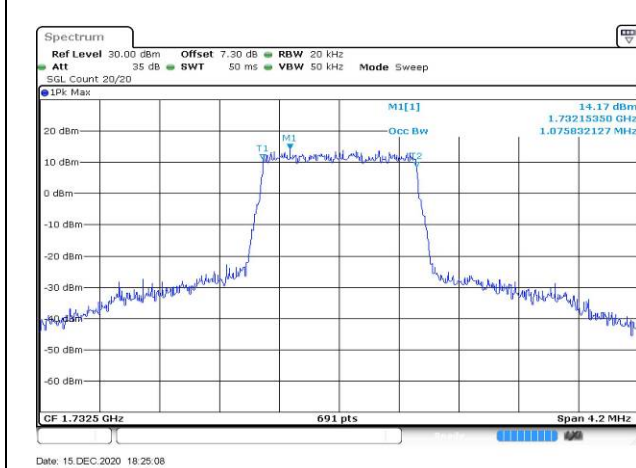


Fig.5

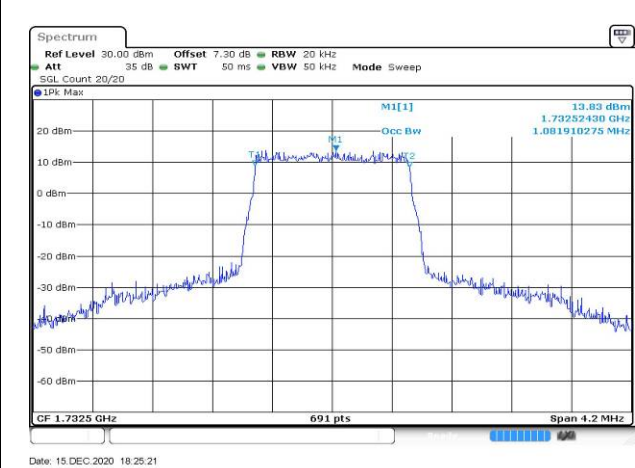


Fig.6

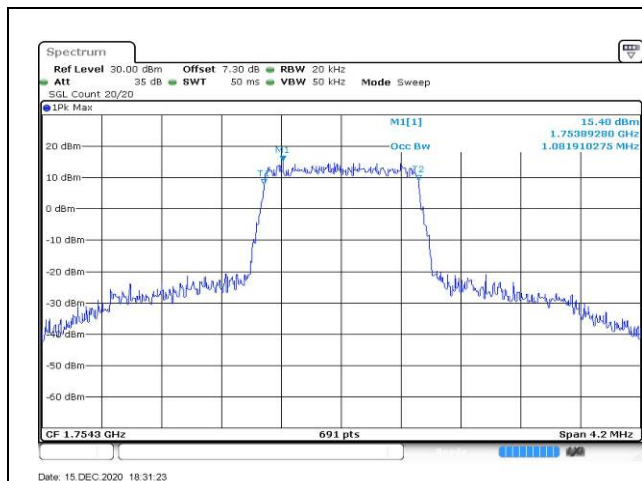


Fig.7

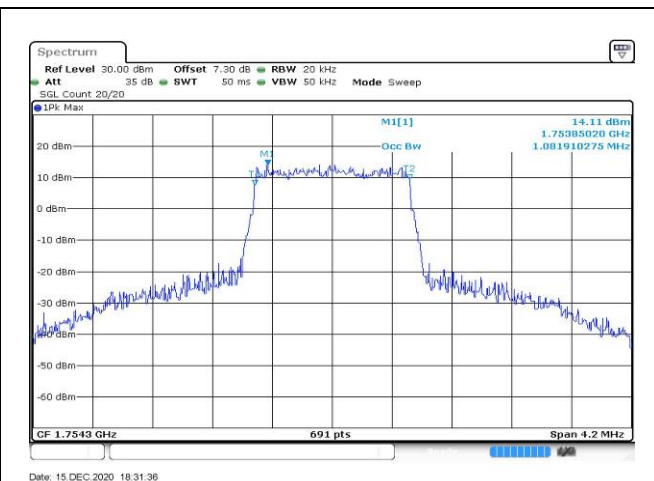


Fig.8

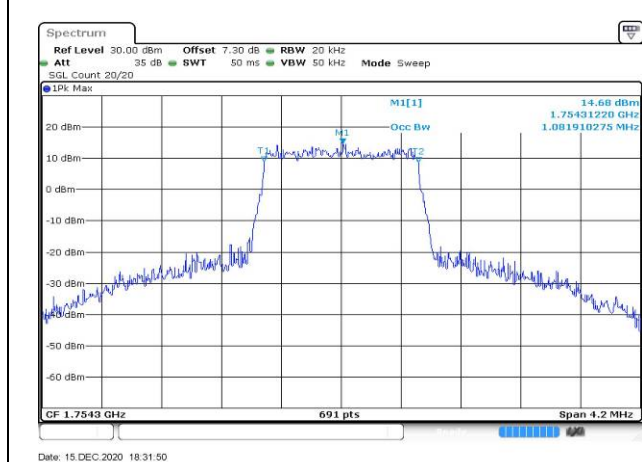


Fig.9

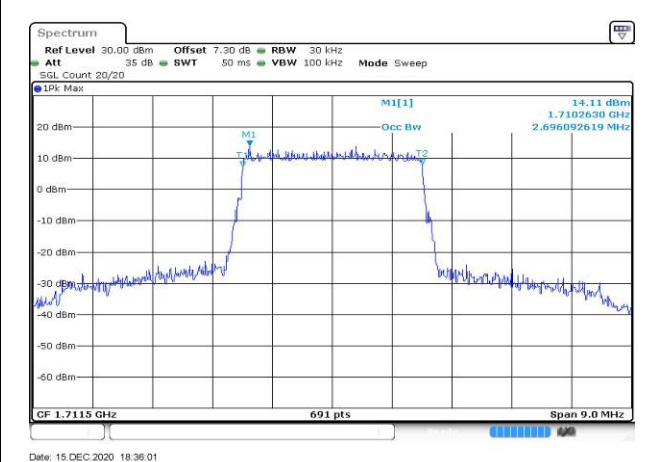


Fig.10

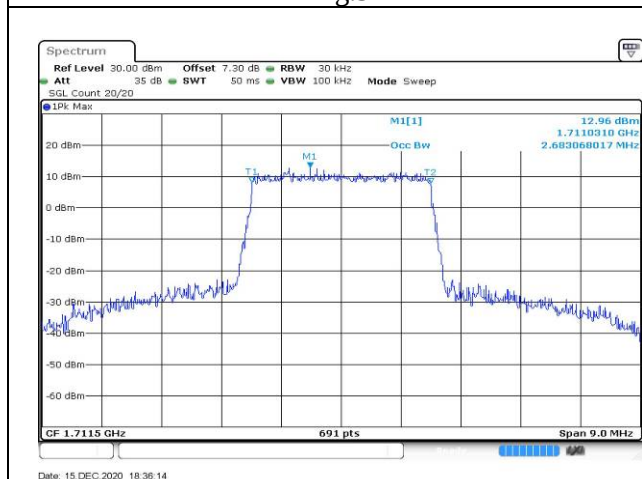


Fig.11

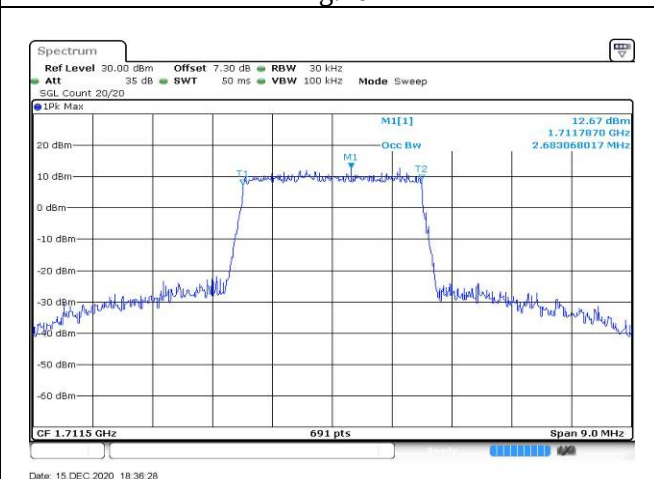


Fig.12

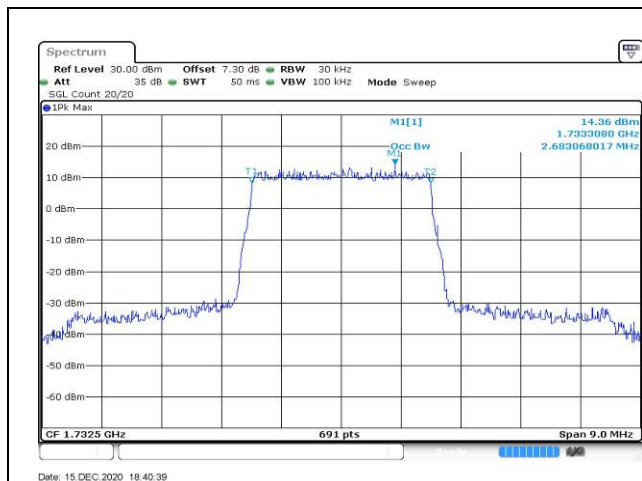


Fig.13

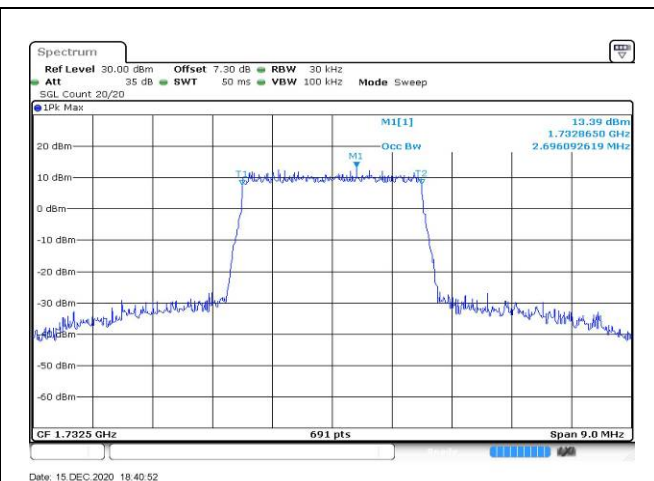


Fig.14

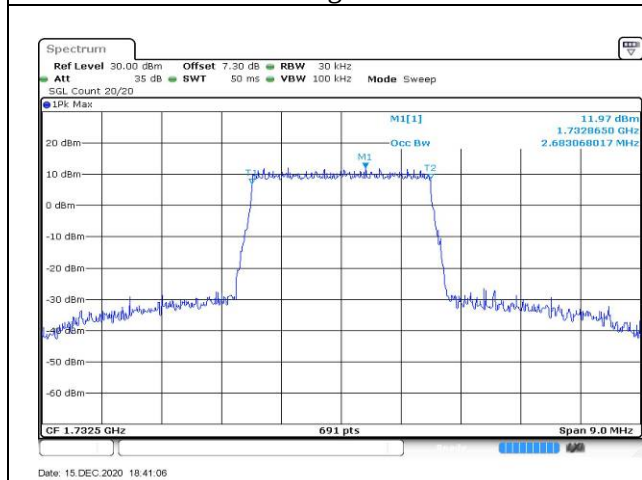


Fig.15

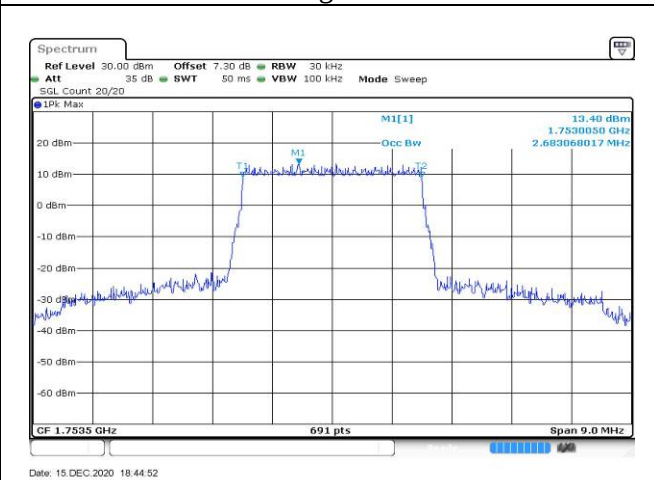


Fig.16

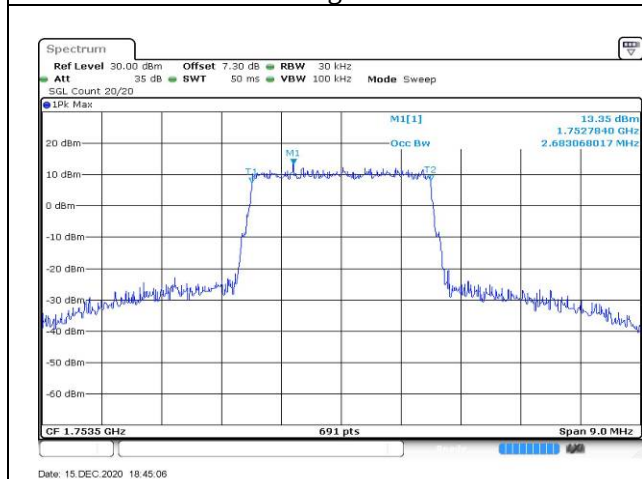


Fig.17

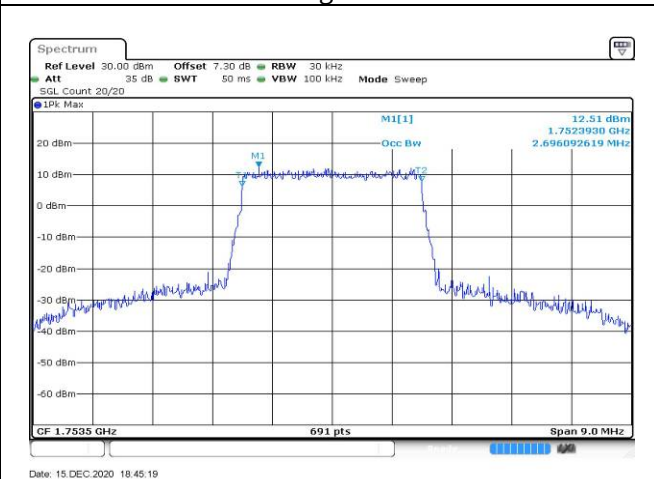
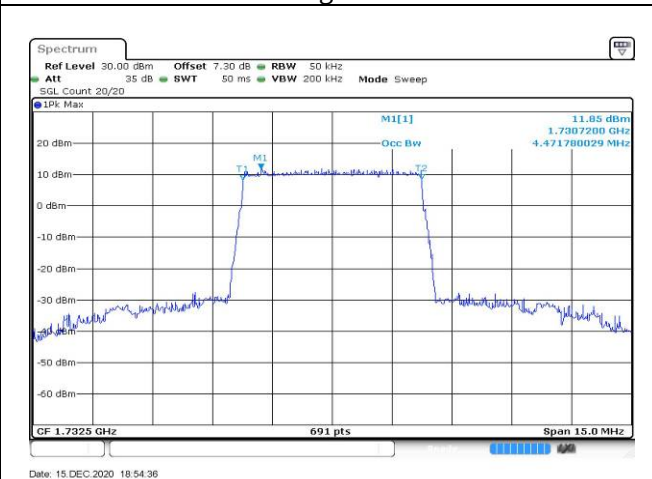
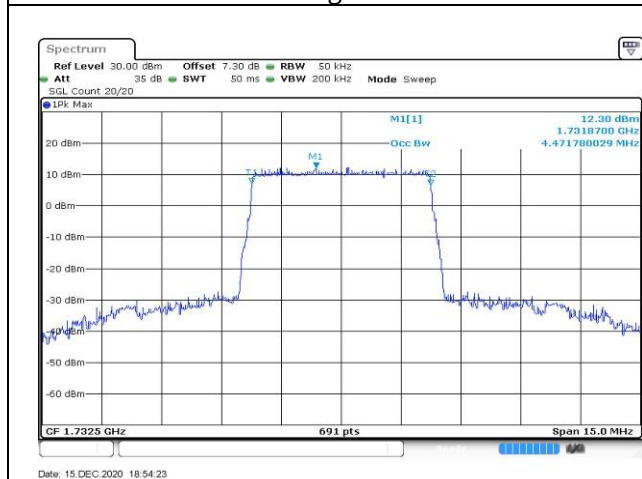
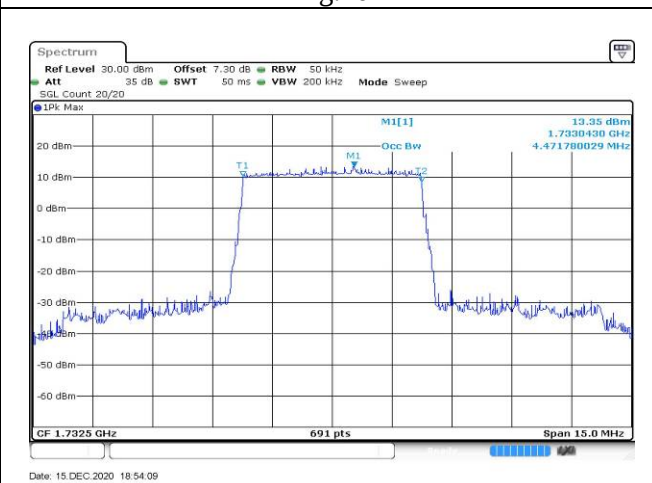
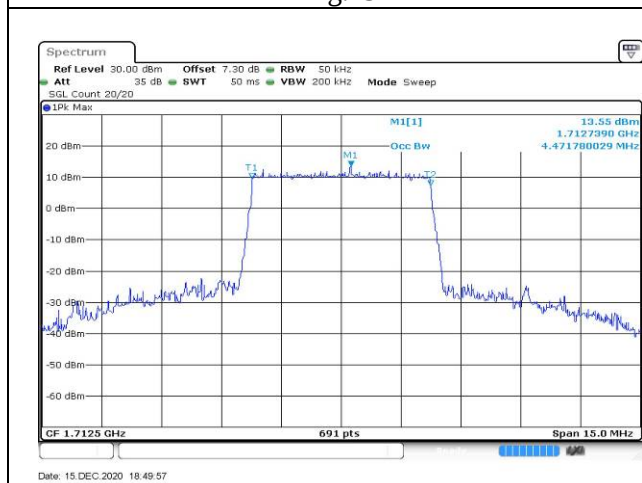
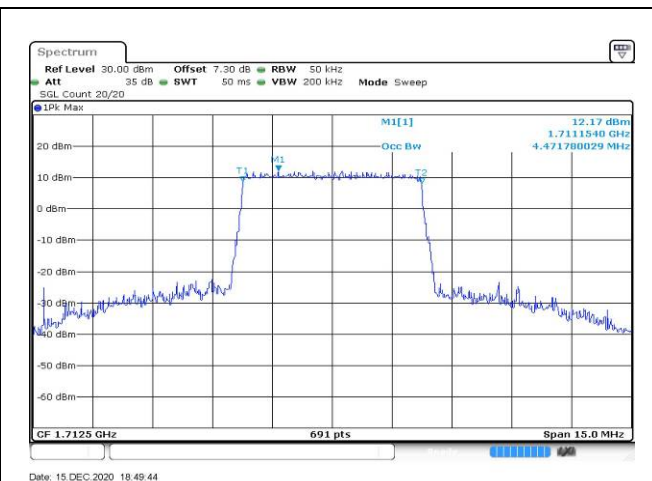
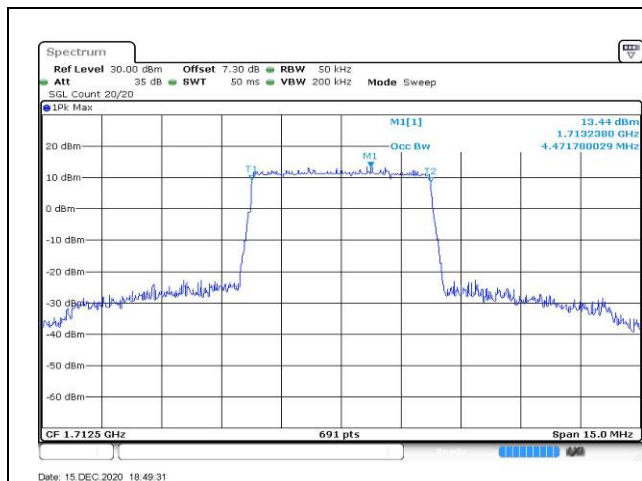


Fig.18



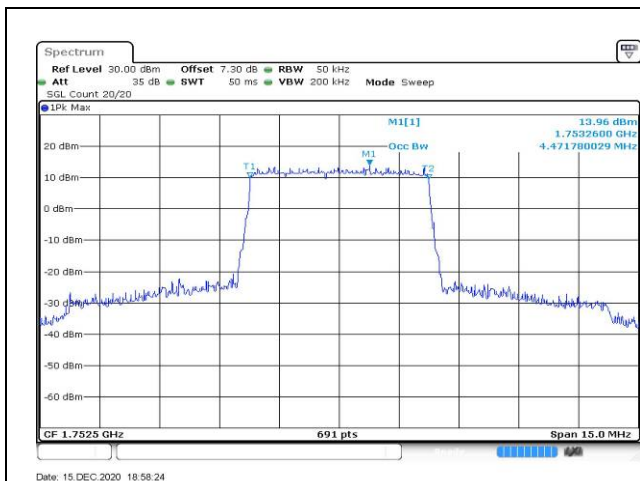


Fig.25

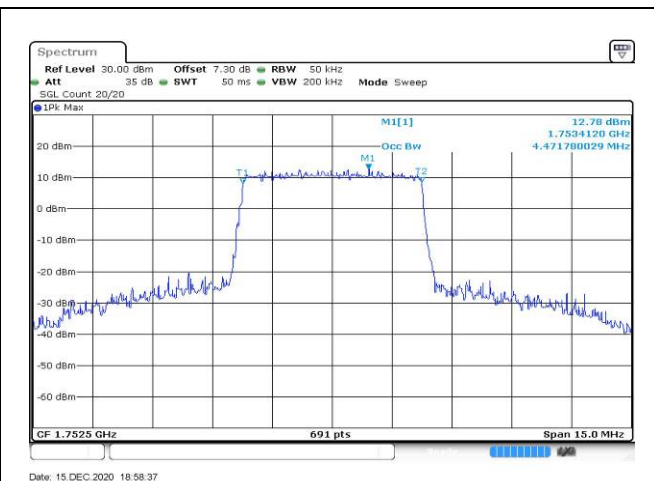


Fig.26

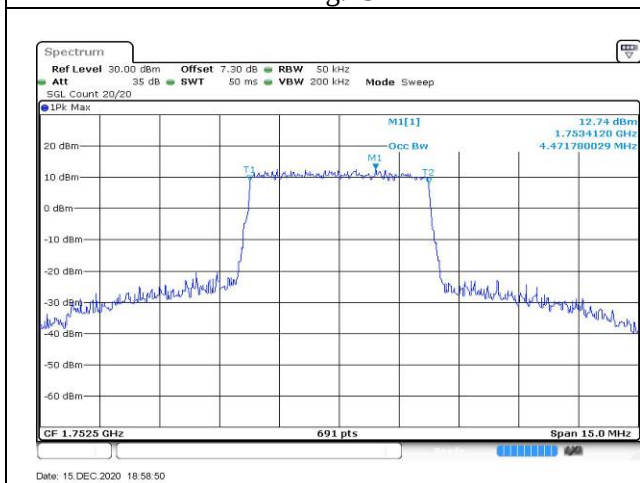


Fig.27

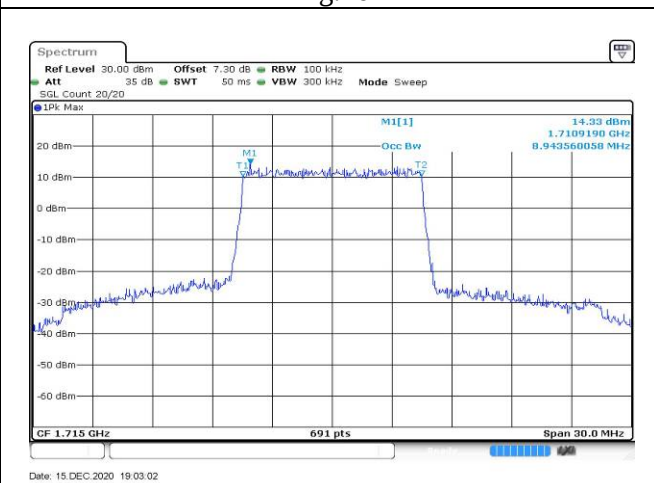


Fig.28

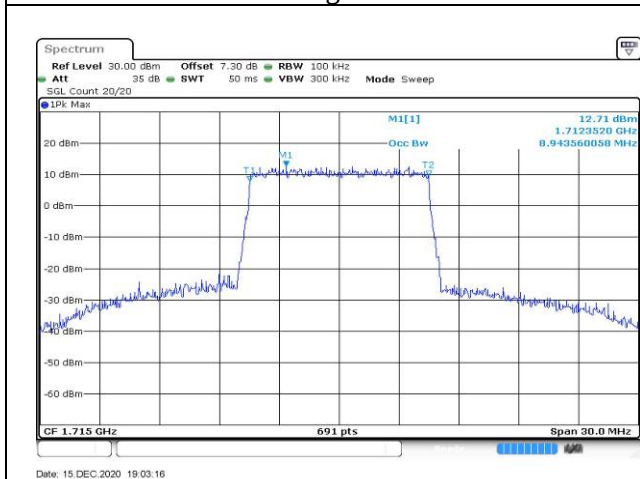


Fig.29

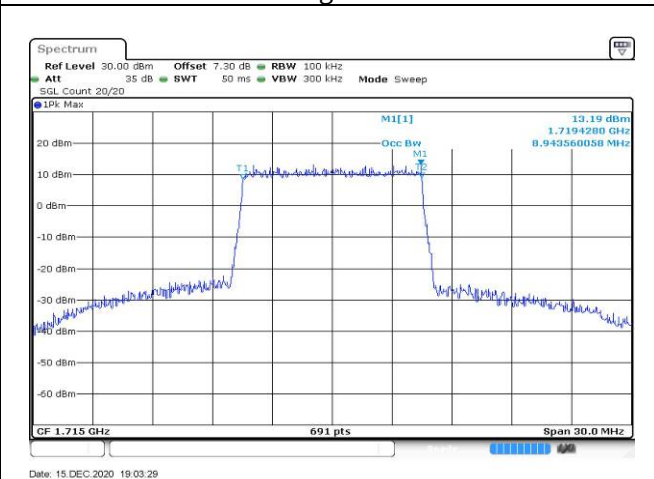
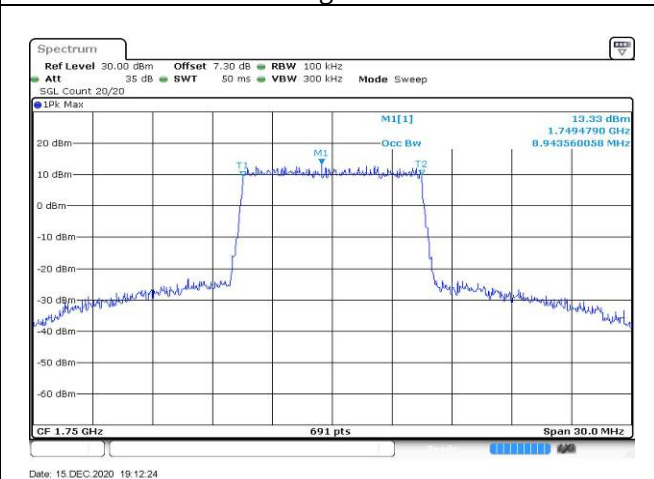
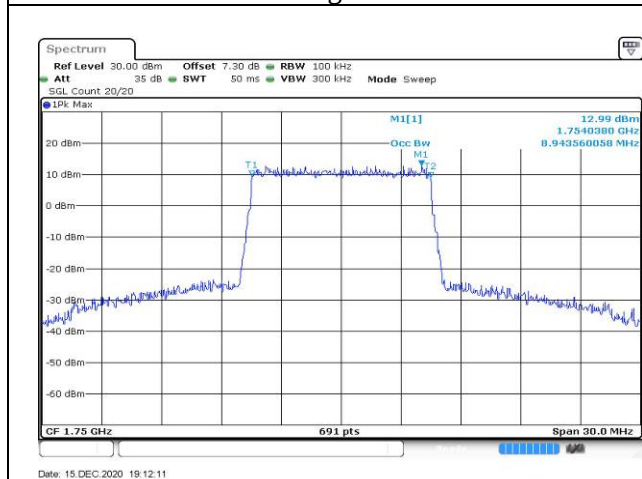
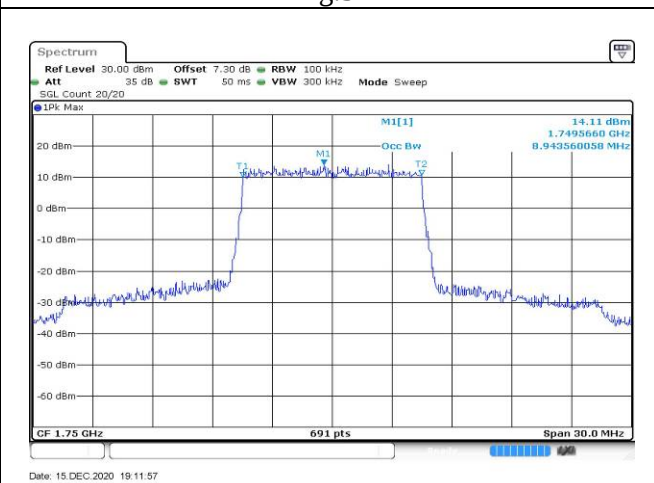
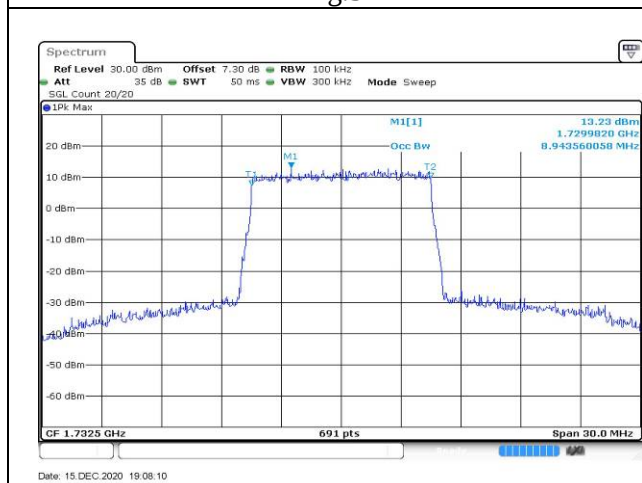
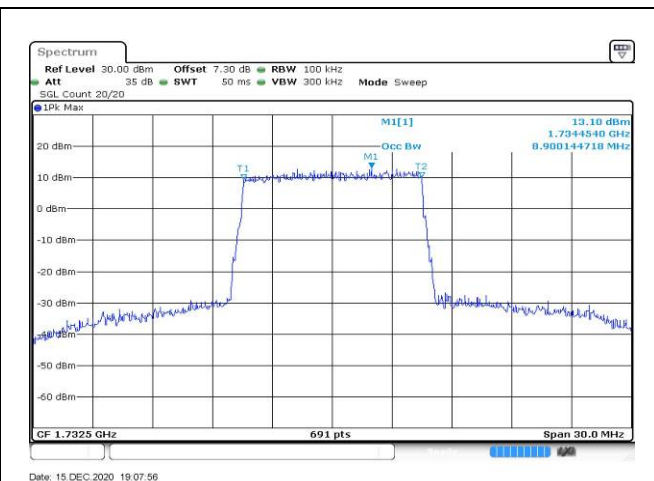
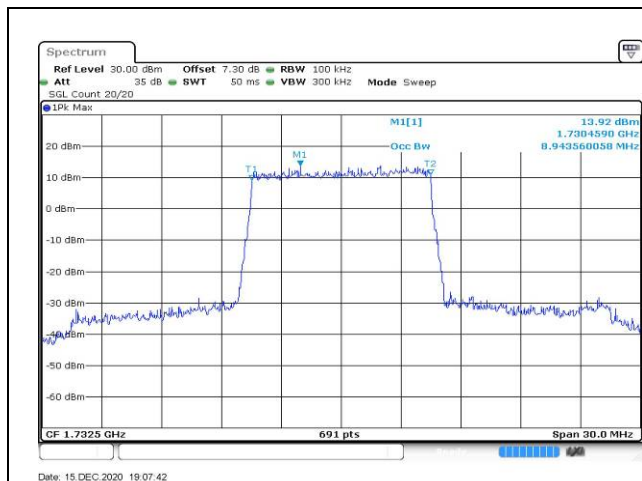
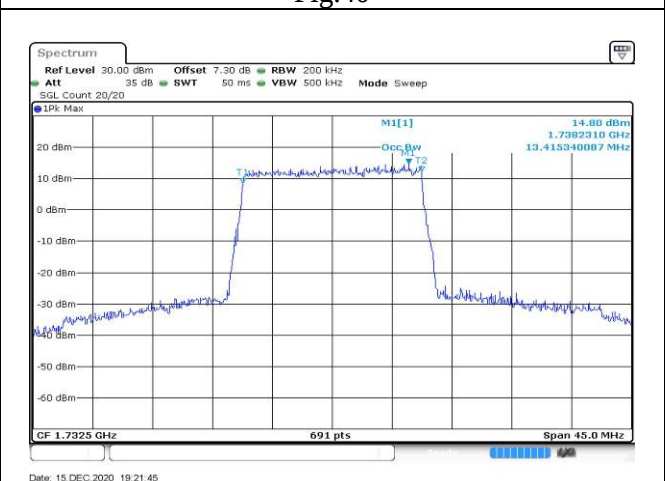
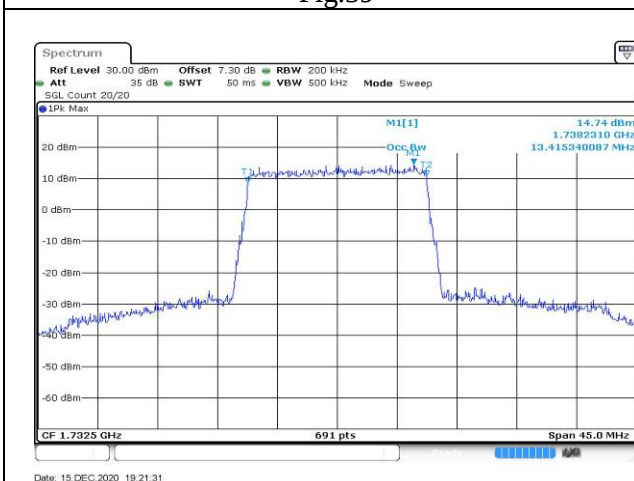
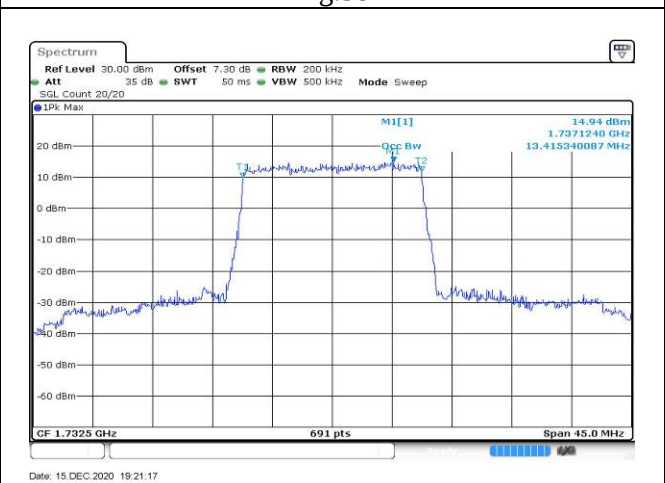
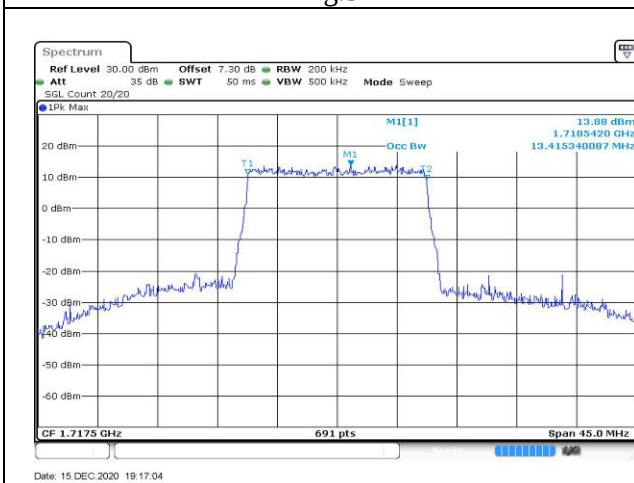
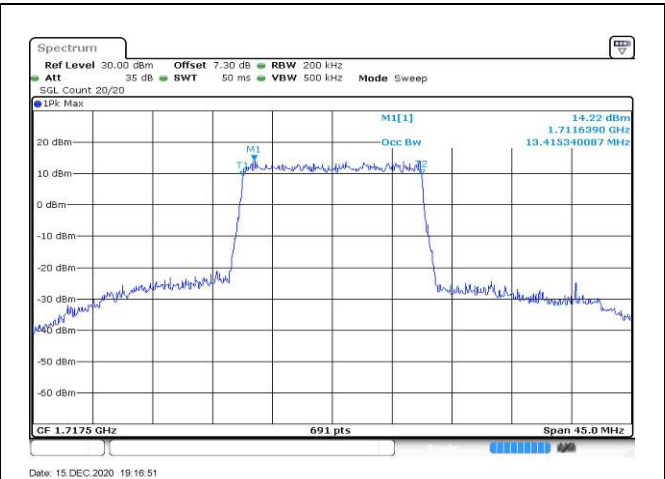
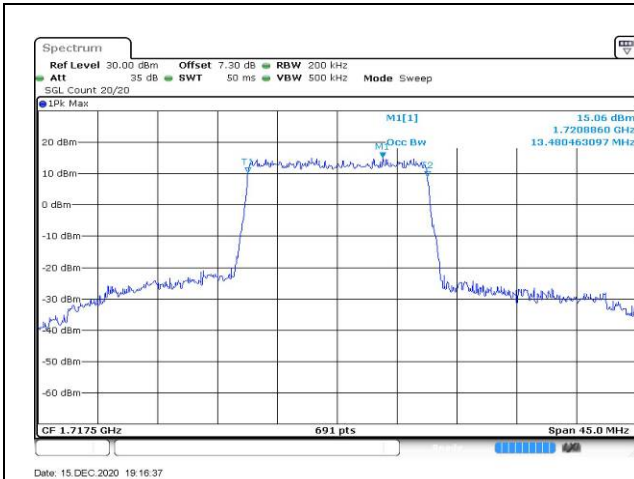


Fig.30





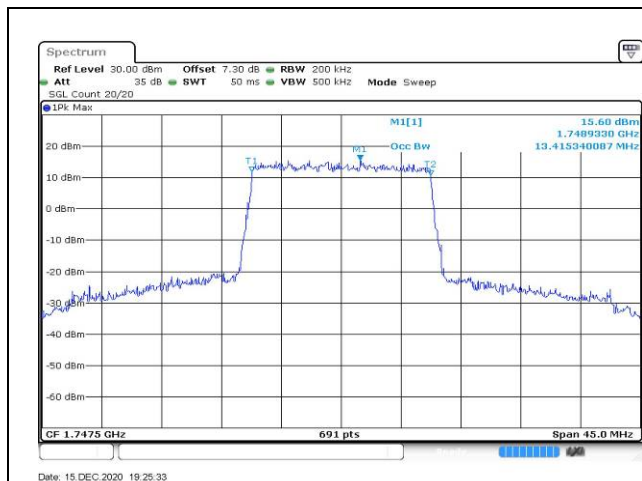


Fig.43

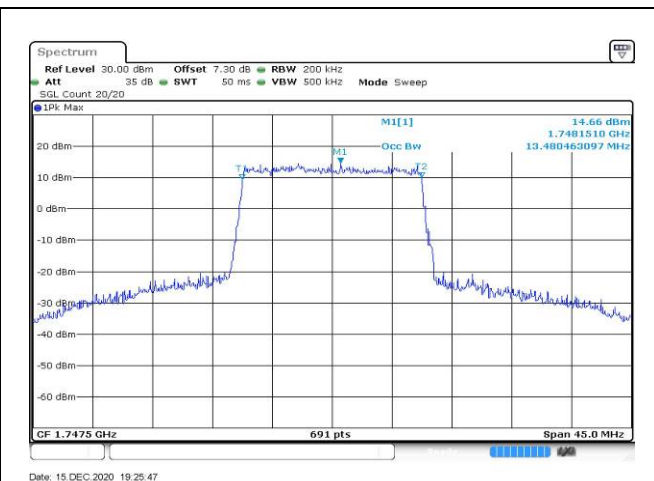


Fig.44

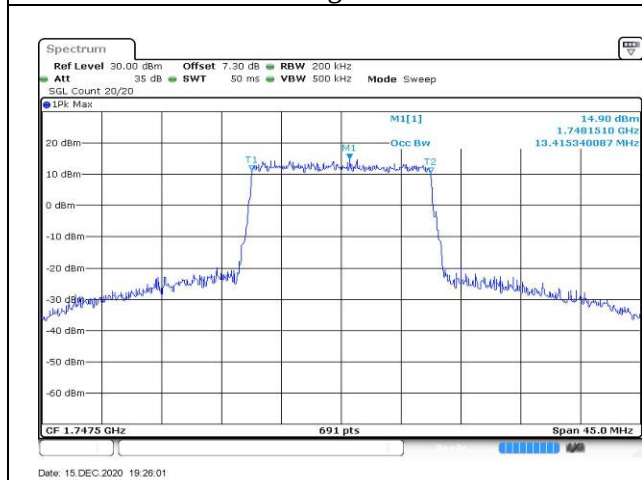


Fig.45

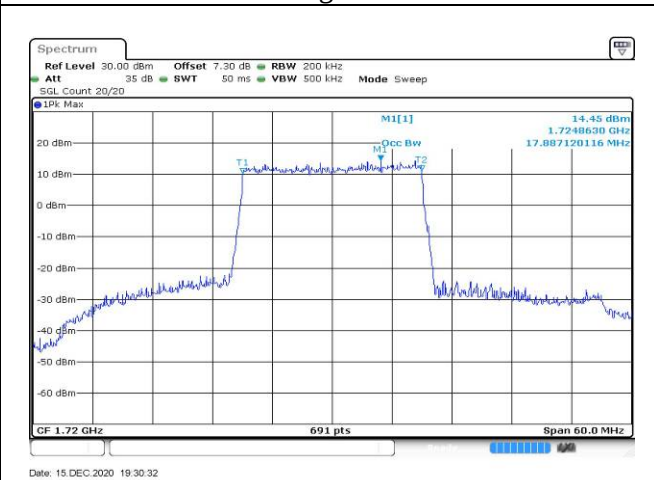


Fig.46

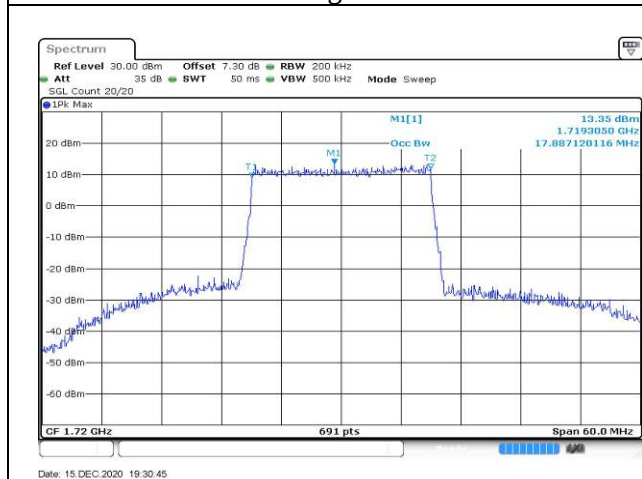


Fig.47

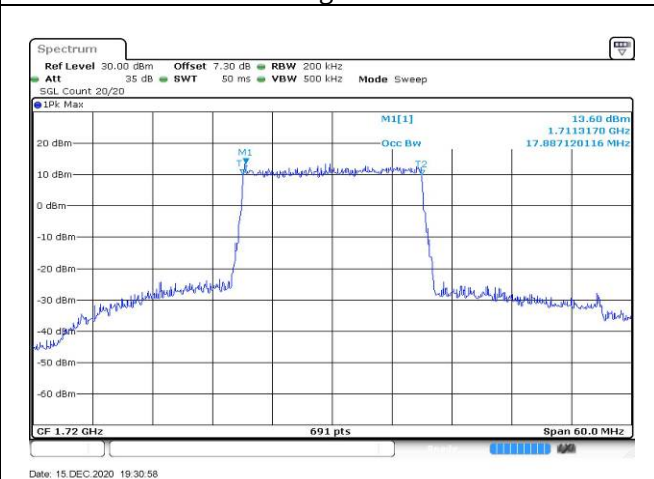


Fig.48

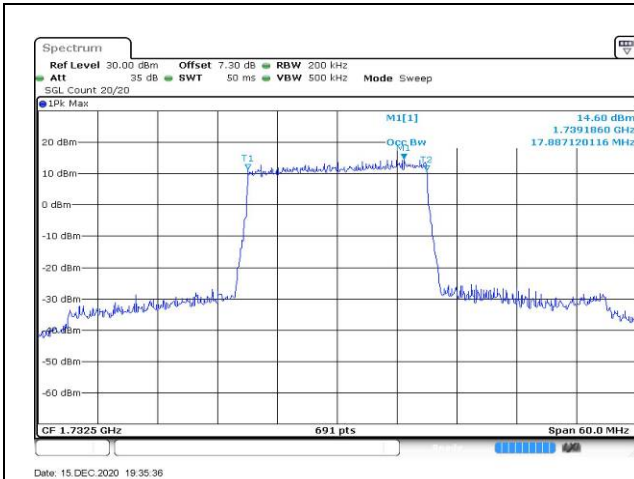


Fig.49

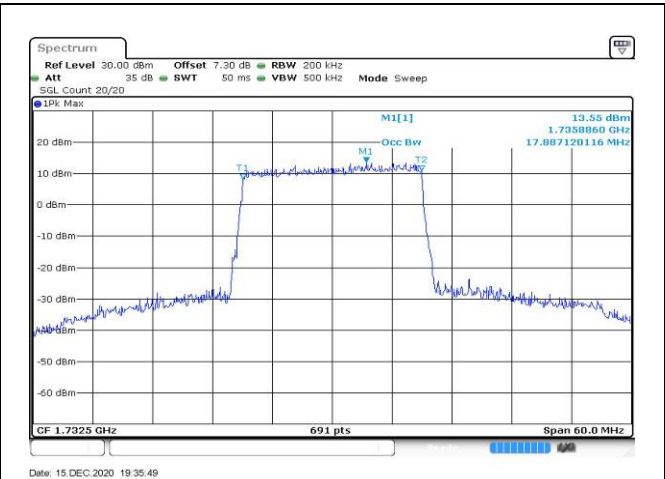


Fig.50

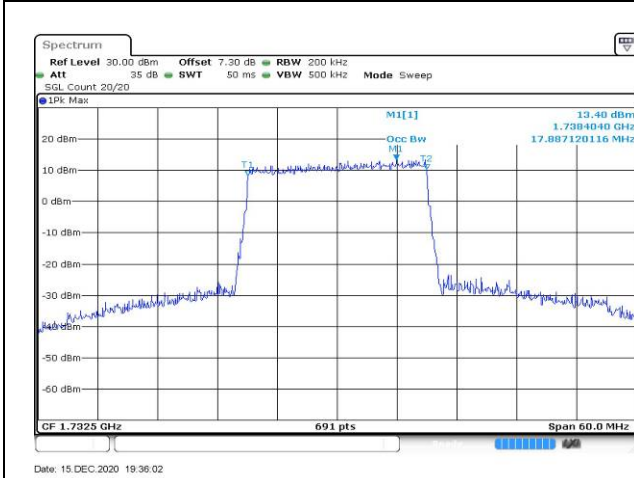


Fig.51

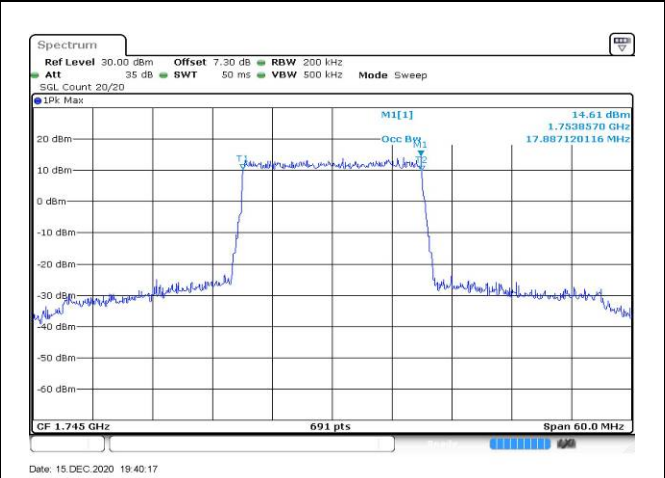


Fig.52

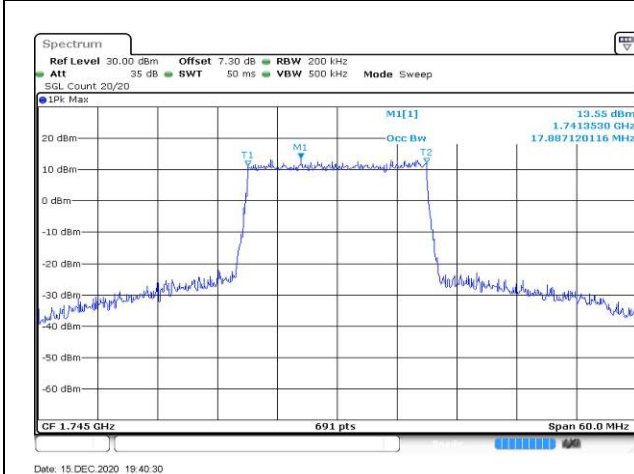


Fig.53

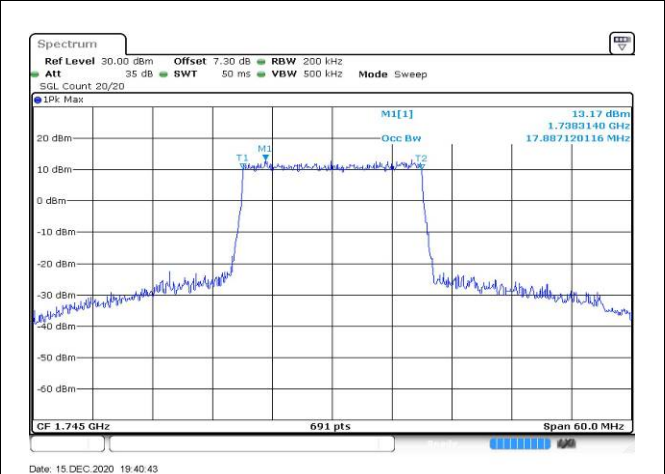


Fig.54

3 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

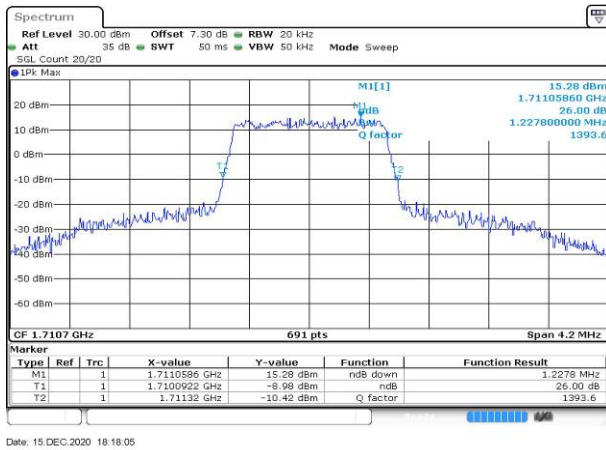


Fig.1

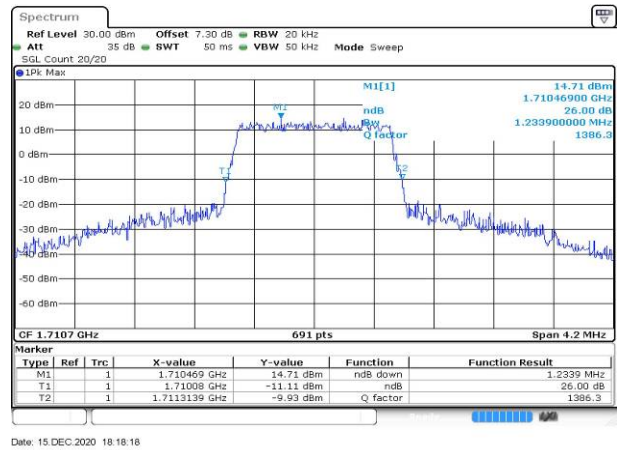


Fig.2

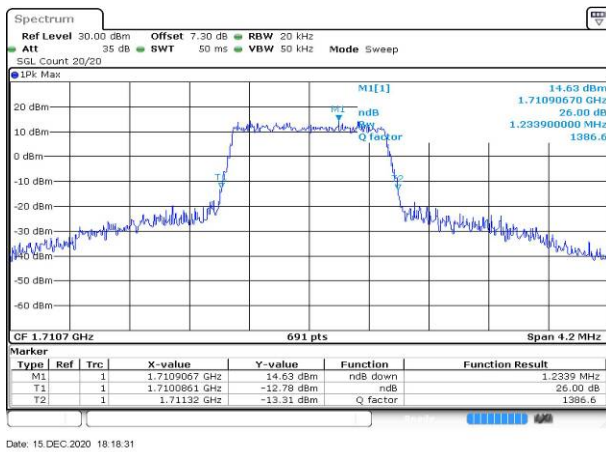


Fig.3

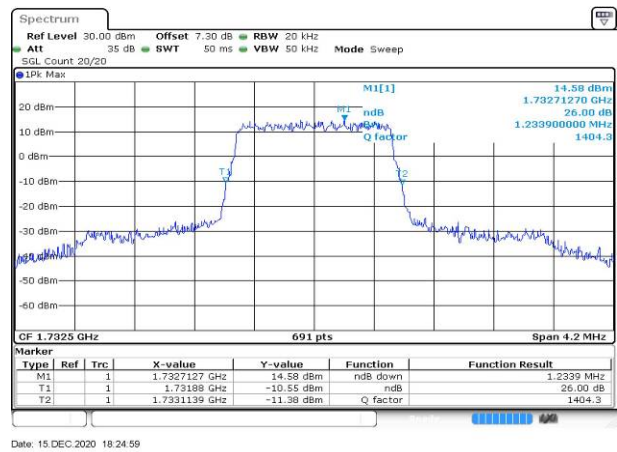


Fig.4

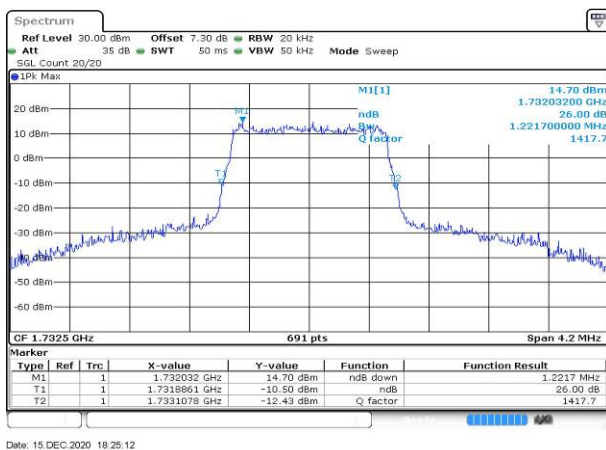


Fig.5

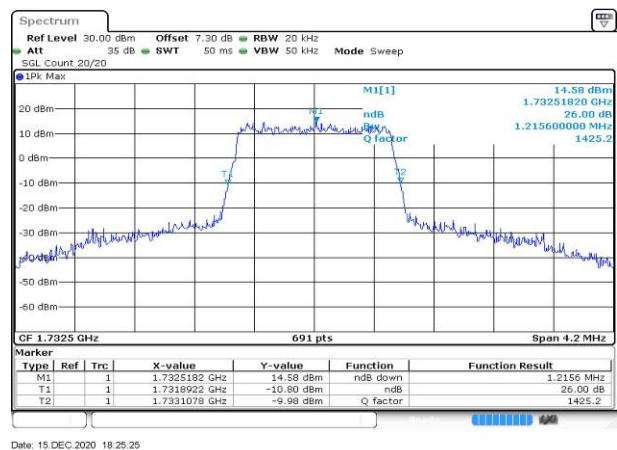


Fig.6

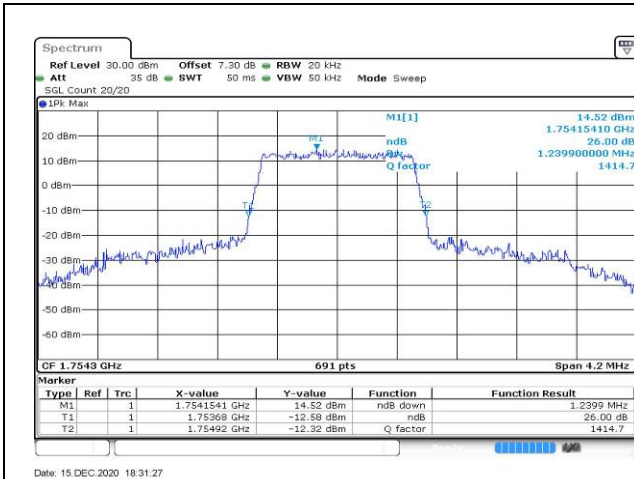


Fig.7

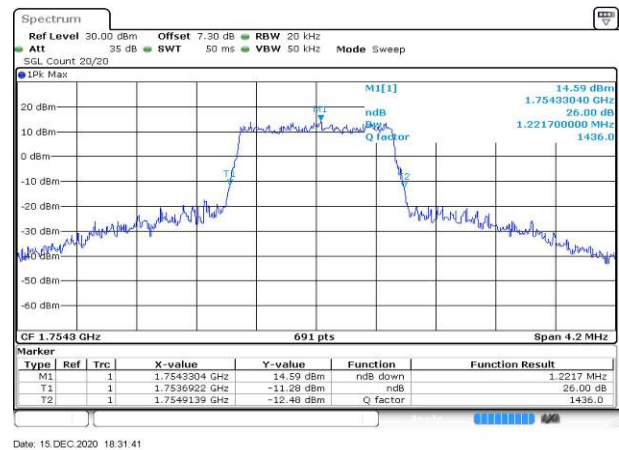


Fig.8

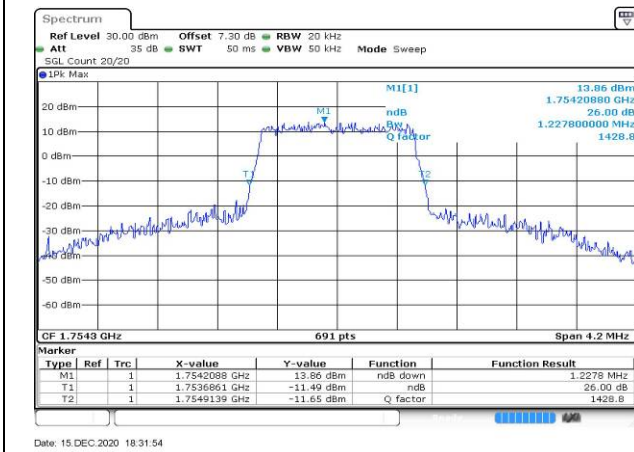


Fig.9

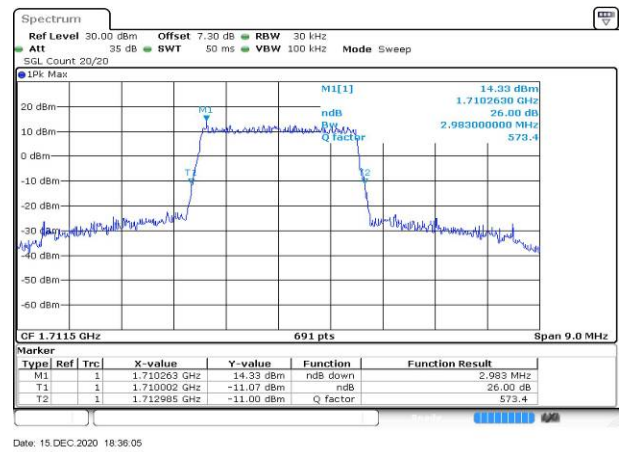


Fig.10

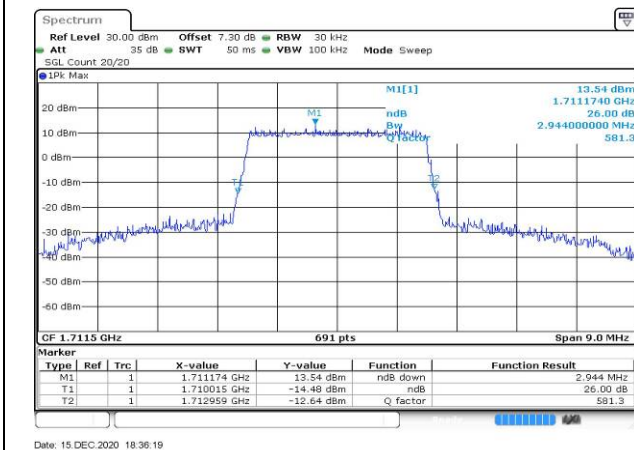


Fig.11

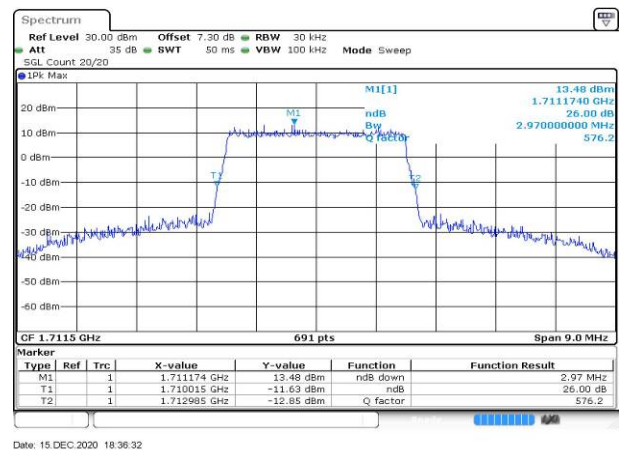


Fig.12

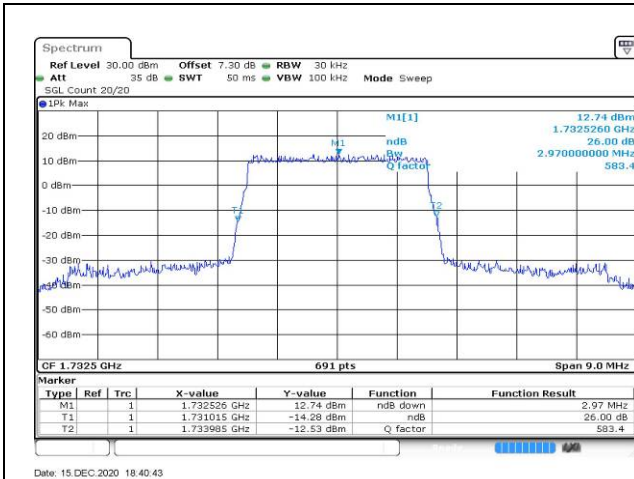


Fig.13

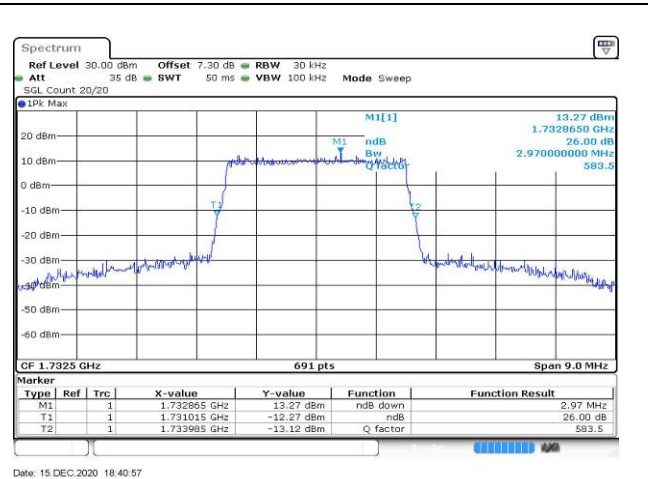


Fig.14

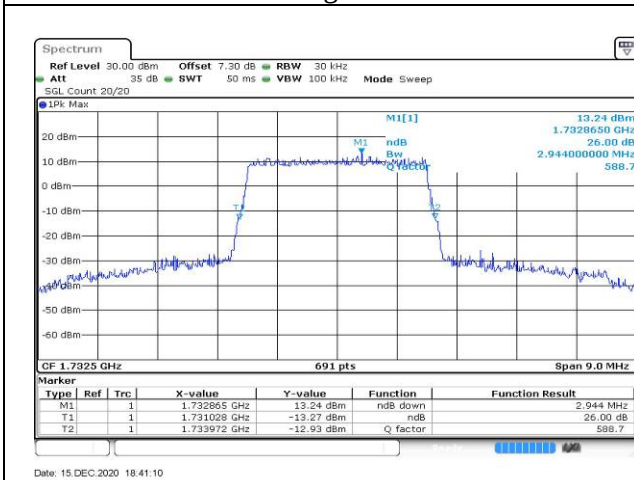


Fig.15

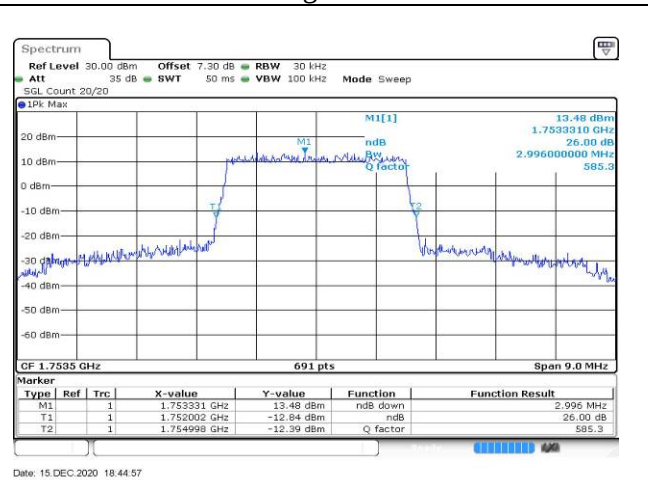


Fig.16

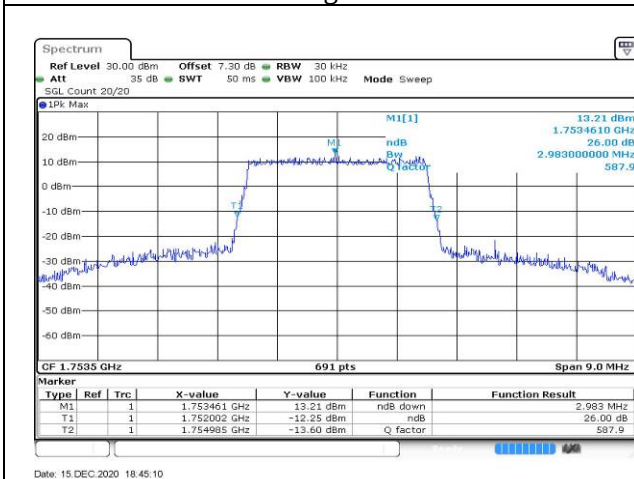


Fig.17

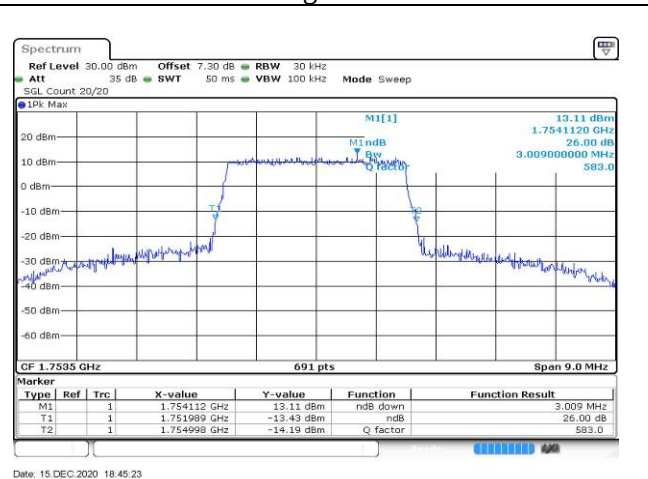


Fig.18