

**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	21.49
				1	3	21.47
				1	5	21.49
				3	0	21.57
				3	1	21.56
				3	3	21.58
	6	0		20.54		
	1732.5	20175		1	0	21.44
				1	3	21.54
				1	5	21.57
				3	0	21.57
				3	1	21.67
				3	3	21.63
	1754.3	20393		6	0	20.48
				1	0	21.65
				1	3	21.76
				1	5	21.67
				3	0	21.74
3			1	21.83		
16QAM	1710.7	19957	3	3	21.82	
			6	0	20.76	
			1	0	20.66	
			1	3	20.71	
			1	5	20.69	
			3	0	20.93	
	1732.5	20175	3	1	20.96	
			3	3	20.98	
			6	0	19.65	
			1	0	20.62	
			1	3	20.78	
			1	5	20.77	
	1754.3	20393	3	0	20.62	
			3	1	20.72	
			3	3	20.62	
			6	0	19.57	
			1	0	20.90	
			1	3	20.93	
			1	5	20.94	
			3	0	20.99	
			3	1	20.96	
			3	3	20.98	
			6	0	19.71	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1710.7	19957	1.4	1	0	19.66
				1	3	19.65
				1	5	19.71
				3	0	19.70
				3	1	19.67
				3	3	19.65
	6	0		19.68		
	1732.5	20175		1	0	19.68
				1	3	19.69
				1	5	19.67
				3	0	19.56
				3	1	19.65
				3	3	19.66
	1754.3	20393		6	0	19.65
				1	0	19.72
				1	3	19.72
				1	5	19.68
				3	0	19.76
				3	1	19.70
				3	3	19.68
				6	0	19.73

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	19965	3	1	0	21.35
				1	8	21.33
				1	14	21.27
				8	0	20.45
				8	4	20.57
				8	7	20.55
	15	0		20.51		
	1	0		21.43		
	1	8		21.51		
	1	14		21.56		
	8	0		20.66		
	8	4		20.70		
	8	7		20.64		
	15	0		20.66		
	1	0		21.78		
	1	8		21.79		
	1	14		21.80		
	8	0		20.90		
8	4	20.87				
8	7	20.86				
15	0	20.92				
16QAM	1711.5	19965	1	0	20.79	
			1	8	20.83	
			1	14	20.82	
			8	0	19.84	
			8	4	19.83	
			8	7	19.89	
	15	0	19.87			
	1	0	21.25			
	1	8	21.31			
	1	14	21.29			
	8	0	19.93			
	8	4	19.93			
	8	7	19.93			
	15	0	19.82			
	1	0	21.00			
	1	8	21.02			
	1	14	20.99			
	8	0	19.90			
8	4	19.92				
8	7	19.99				
15	0	19.94				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1711.5	19965	3	1	0	19.93
				1	8	19.85
				1	14	19.82
				8	0	19.81
				8	4	19.83
				8	7	19.80
				15	0	19.92
	1732.5	20175		1	0	19.84
				1	8	19.82
				1	14	19.80
				8	0	19.80
				8	4	19.81
				8	7	19.81
				15	0	19.80
	1753.5	20385		1	0	19.93
				1	8	19.93
				1	14	19.93
				8	0	19.93
				8	4	19.93
				8	7	19.92
				15	0	19.93

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1712.5	19975	5	1	0	21.61	
				1	12	21.55	
				1	24	21.60	
				12	0	20.78	
				12	7	20.81	
				12	13	20.79	
				25	0	20.81	
	1732.5	20175		1	0	21.56	
				1	12	21.56	
				1	24	21.62	
				12	0	20.68	
				12	7	20.72	
				12	13	20.79	
				25	0	20.72	
	1752.5	20375		1	0	21.80	
				1	12	21.73	
				1	24	21.75	
				12	0	20.81	
				12	7	20.94	
				12	13	20.85	
				25	0	20.82	
	16QAM	1712.5		19975	1	0	20.70
					1	12	20.65
					1	24	20.65
					12	0	19.83
					12	7	19.80
					12	13	19.80
25			0		19.89		
1732.5		20175	1	0	21.06		
			1	12	20.97		
			1	24	20.97		
			12	0	19.81		
			12	7	19.86		
			12	13	19.85		
			25	0	19.72		
1752.5		20375	1	0	20.88		
			1	12	20.95		
			1	24	20.93		
			12	0	19.76		
			12	7	19.95		
			12	13	19.88		
			25	0	19.86		

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1712.5	19975	5	1	0	19.91
				1	12	19.90
				1	24	19.89
				12	0	19.90
				12	7	19.90
				12	13	19.87
				25	0	19.84
	1732.5	20175		1	0	19.80
				1	12	19.72
				1	24	19.77
				12	0	19.75
				12	7	19.73
				12	13	19.74
				25	0	19.82
	1752.5	20375		1	0	19.88
				1	12	19.89
				1	24	19.88
				12	0	19.88
				12	7	19.87
				12	13	19.88
				25	0	19.88

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1715	20000	10	1	0	21.36	
				1	25	21.53	
				1	49	21.43	
				25	0	20.61	
				25	12	20.57	
				25	25	20.64	
	1732.5	20175		50	0	20.64	
				1	0	21.42	
				1	25	21.58	
				1	49	21.46	
				25	0	20.76	
				25	12	20.72	
	1750	20350		25	25	20.67	
				50	0	20.73	
				1	0	21.71	
				1	25	21.83	
				1	49	21.80	
				25	0	20.87	
	16QAM	1715		20000	25	12	20.82
					25	25	20.83
					50	0	20.83
					1	0	21.15
					1	25	21.20
					1	49	21.23
1732.5		20175	25	0	19.78		
			25	12	19.71		
			25	25	19.72		
			50	0	19.73		
			1	0	20.67		
			1	25	20.73		
1750		20350	1	49	20.72		
			25	0	19.92		
			25	12	19.87		
			25	25	19.90		
			50	0	19.80		
			1	0	21.47		
1715		20000	1	25	21.49		
			1	49	21.46		
			25	0	19.97		
			25	12	19.99		
			25	25	19.96		
			50	0	19.83		

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1715	20000	10	1	0	19.70
				1	25	19.72
				1	49	19.71
				25	0	19.69
				25	12	19.67
				25	25	19.67
				50	0	19.67
	1732.5	20175		1	0	19.81
				1	25	19.83
				1	49	19.84
				25	0	19.79
				25	12	19.82
				25	25	19.81
				50	0	19.77
	1750	20350		1	0	19.83
				1	25	19.85
				1	49	19.93
				25	0	19.89
				25	12	19.91
				25	25	19.90
				50	0	19.90



Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	20025	15	1	0	21.61
				1	37	21.73
				1	74	21.71
				36	0	20.68
				36	29	20.71
				36	30	20.75
				75	0	20.69
	1732.5	20175		1	0	21.68
				1	37	21.84
				1	74	21.76
				36	0	20.73
				36	29	20.80
				36	30	20.91
				75	0	20.81
	1747.5	20325		1	0	21.79
				1	37	21.98
				1	74	21.96
				36	0	21.01
				36	29	21.00
				36	30	21.01
				75	0	20.97
16QAM	1717.5	20025	1	0	21.43	
			1	37	21.52	
			1	74	21.60	
			36	0	19.86	
			36	29	19.86	
			36	30	19.91	
			75	0	19.85	
	1732.5	20175	1	0	21.36	
			1	37	21.52	
			1	74	21.52	
			36	0	19.85	
			36	29	19.85	
			36	30	19.89	
			75	0	19.88	
	1747.5	20325	1	0	21.02	
			1	37	21.16	
			1	74	21.17	
			36	0	19.99	
			36	29	20.10	
			36	30	20.13	
			75	0	20.03	

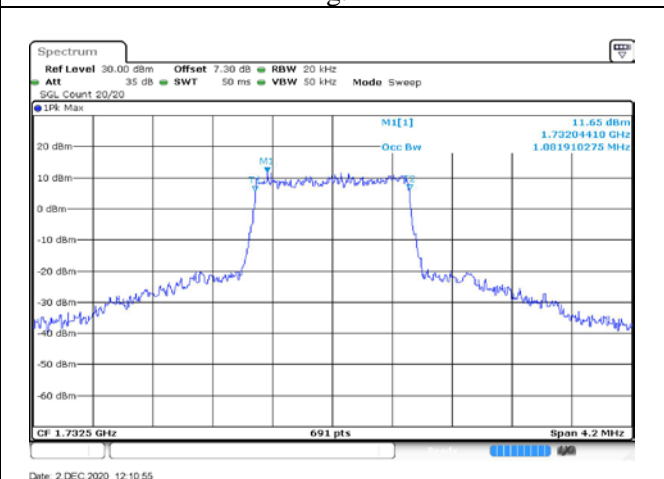
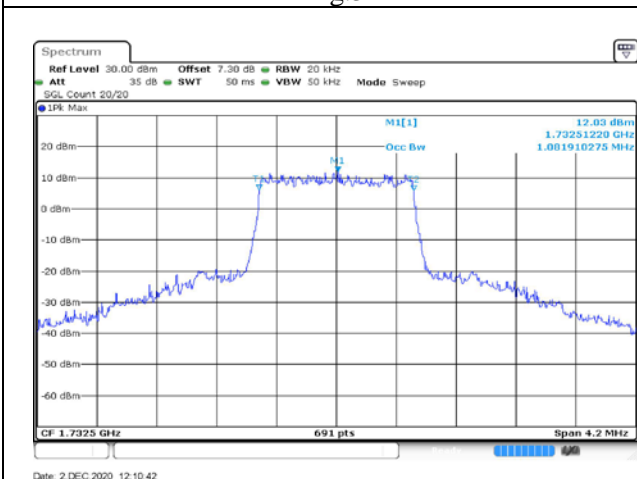
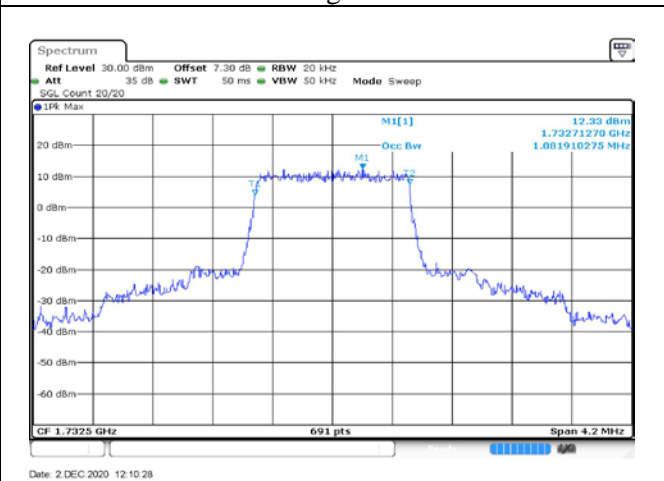
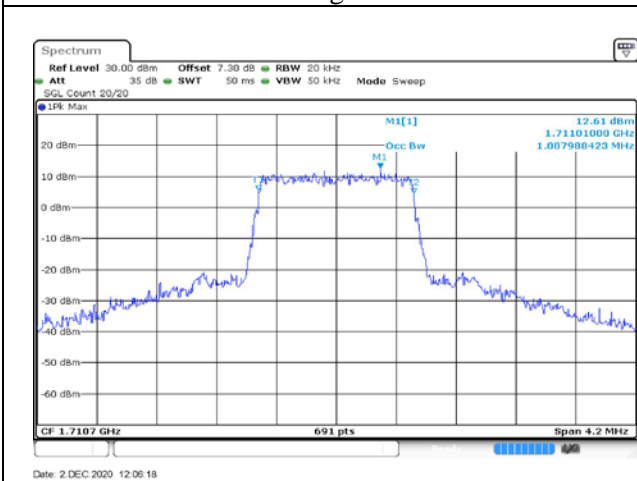
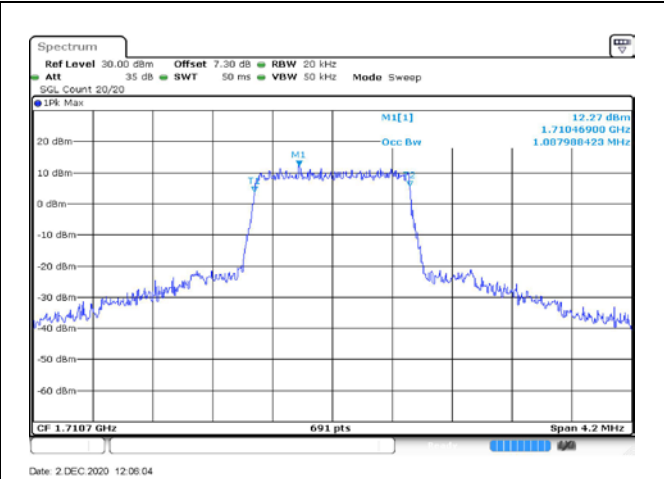
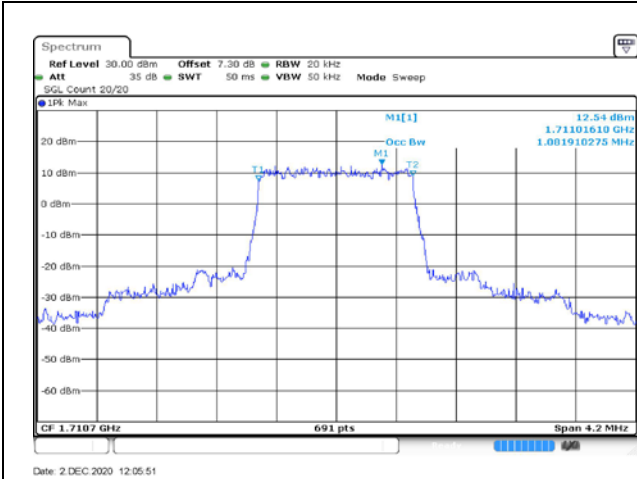
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1717.5	20025	15	1	0	19.93
				1	37	19.88
				1	74	19.85
				36	0	19.84
				36	29	19.91
				36	30	19.89
				75	0	19.95
	1732.5	20175		1	0	19.87
				1	37	19.88
				1	74	19.88
				36	0	19.93
				36	29	19.92
				36	30	19.94
				75	0	19.86
	1747.5	20325		1	0	20.03
				1	37	20.02
				1	74	20.02
				36	0	20.02
				36	29	20.01
				36	30	20.02
				75	0	20.02

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	20050	20	1	0	21.88
				1	49	21.89
				1	99	21.84
				50	0	20.94
				50	24	20.98
				50	50	20.94
	1732.5	20175		100	0	20.91
				1	0	21.72
				1	49	21.80
				1	99	21.77
				50	0	20.86
				50	24	20.93
	1745	20300		50	50	20.98
				100	0	20.95
				1	0	21.85
				1	49	22.05
				1	99	22.02
				50	0	20.86
16QAM	1720	20050	50	24	21.01	
			50	50	21.05	
			100	0	21.01	
			1	0	21.70	
			1	49	21.59	
			1	99	21.63	
	1732.5	20175	50	0	19.91	
			50	24	20.05	
			50	50	20.02	
			100	0	19.94	
			1	0	21.06	
			1	49	21.20	
	1745	20300	1	99	21.23	
			50	0	19.87	
			50	24	19.94	
			50	50	19.98	
			100	0	20.01	
			1	0	21.15	
			1	49	21.26	
			1	99	21.26	
			50	0	19.96	
			50	24	19.99	
			50	50	20.00	
			100	0	19.92	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1720	20050	20	1	0	19.98
				1	49	19.96
				1	99	20.02
				50	0	20.01
				50	24	19.98
				50	50	19.97
				100	0	20.01
	1732.5	20175		1	0	19.99
				1	49	19.98
				1	99	19.98
				50	0	19.97
				50	24	19.98
				50	50	19.96
				100	0	19.96
	1745	20300		1	0	20.07
				1	49	19.97
				1	99	19.99
				50	0	19.92
				50	24	20.02
				50	50	19.96
				100	0	20.03

## 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	1.088	Fig.2	1.088	Fig.3
	1732.5	20175		6	0	1.082	Fig.4	1.082	Fig.5	1.082	Fig.6
	1754.3	20393		6	0	1.088	Fig.7	1.082	Fig.8	1.082	Fig.9
	1711.5	19965	3	15	0	2.683	Fig.10	2.683	Fig.11	2.683	Fig.12
	1732.5	20175		15	0	2.683	Fig.13	2.683	Fig.14	2.683	Fig.15
	1753.5	20385		15	0	2.696	Fig.16	2.683	Fig.17	2.683	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	4.493	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	8.944	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	13.415	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	13.415	Fig.44	13.415	Fig.45
	1720	20050	20	100	0	17.887	Fig.46	17.887	Fig.47	17.800	Fig.48
	1732.5	20175		100	0	17.800	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



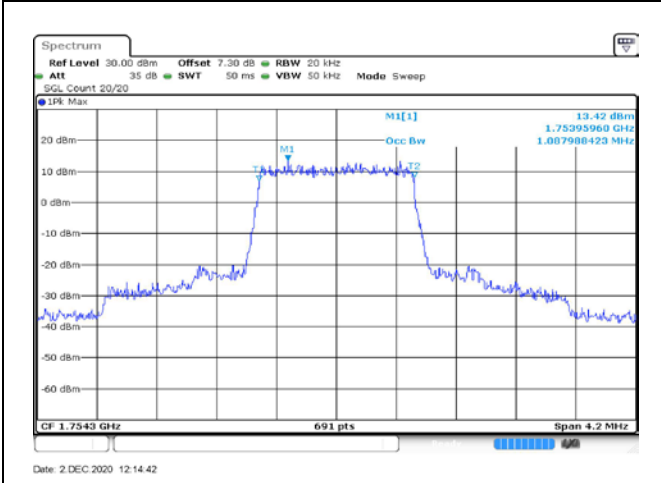


Fig.7

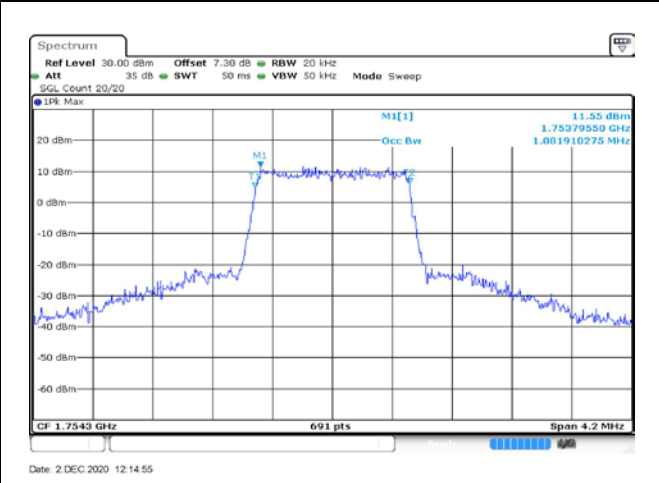


Fig.8

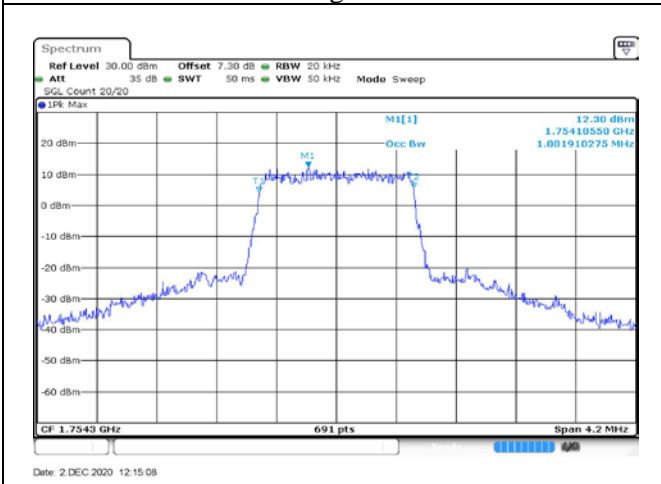


Fig.9

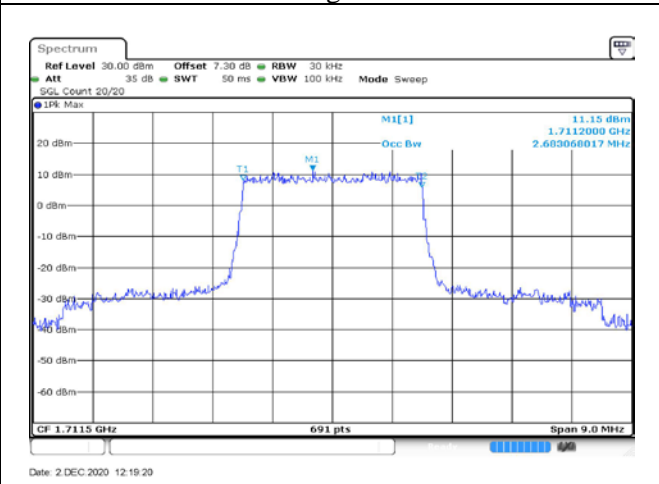


Fig.10

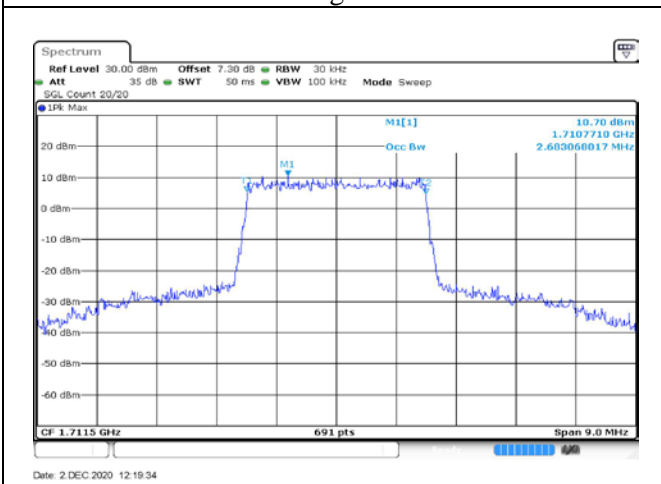


Fig.11

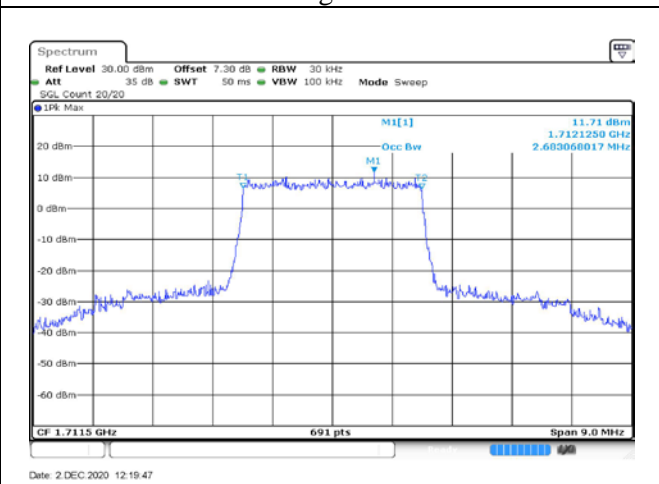


Fig.12

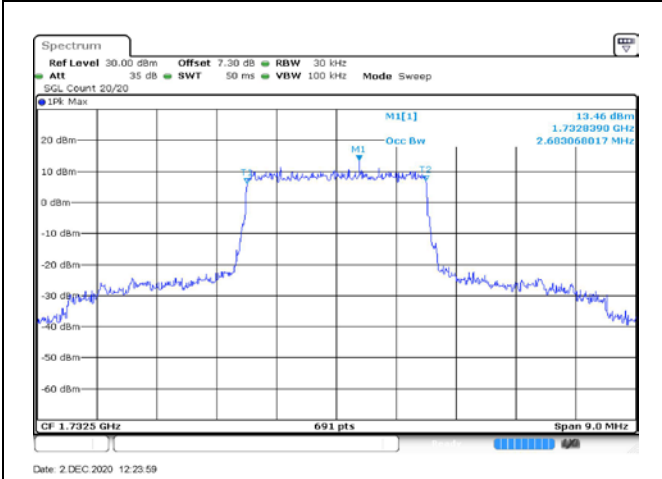


Fig.13

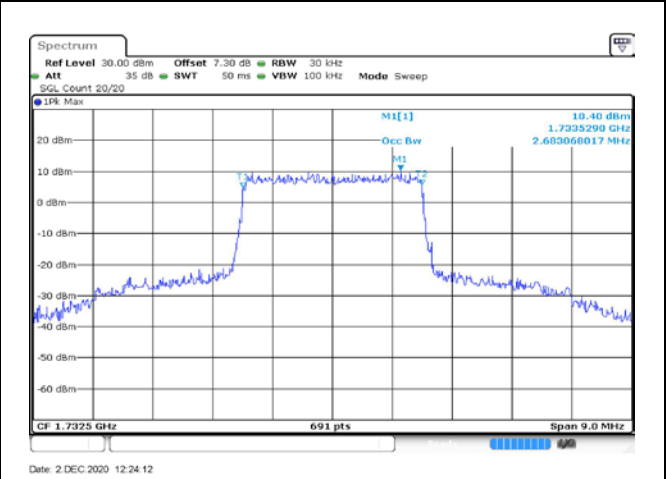


Fig.14

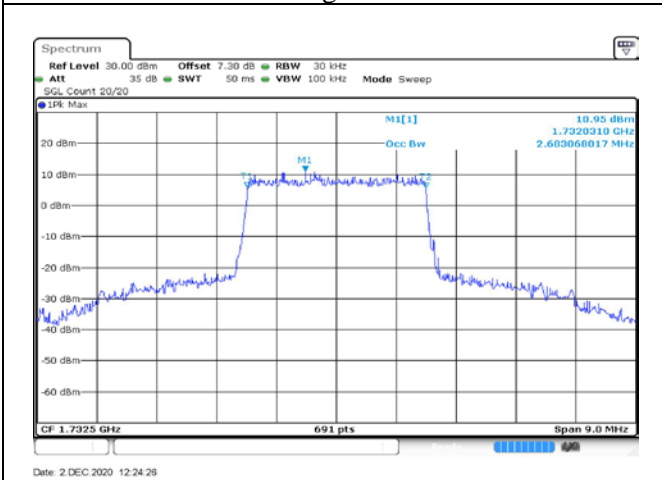


Fig.15

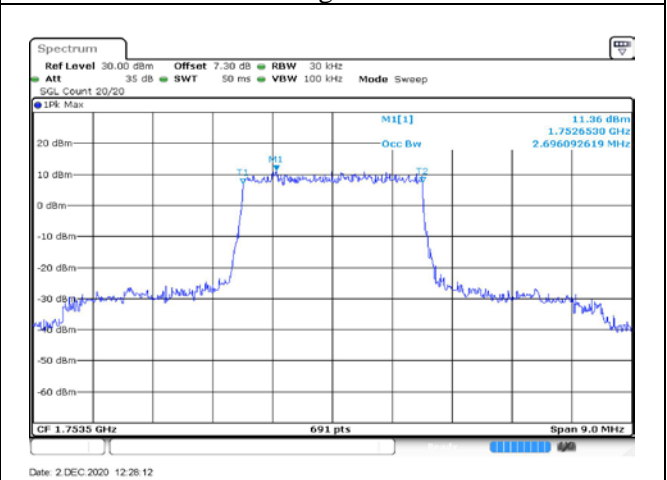


Fig.16

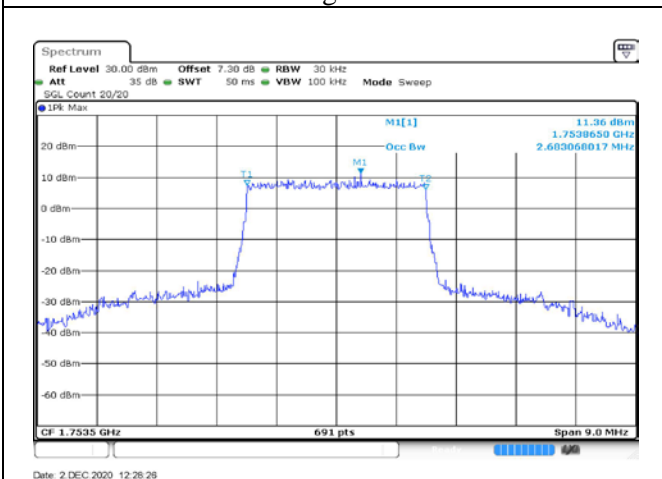


Fig.17

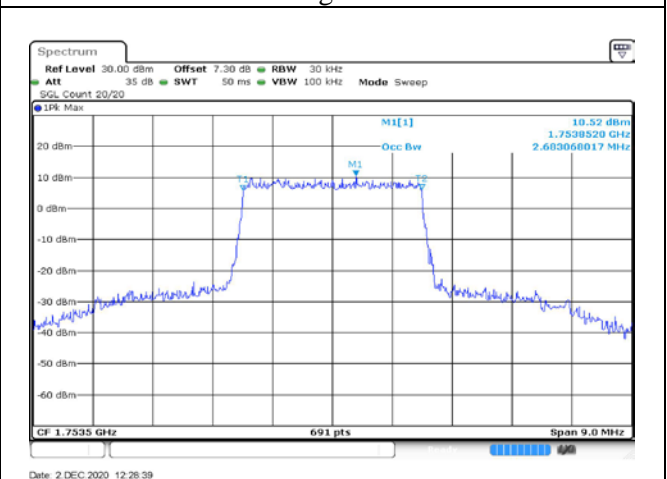


Fig.18



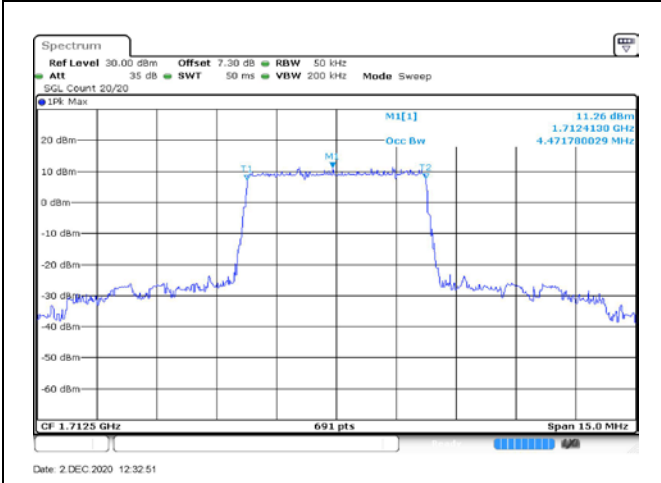


Fig.19

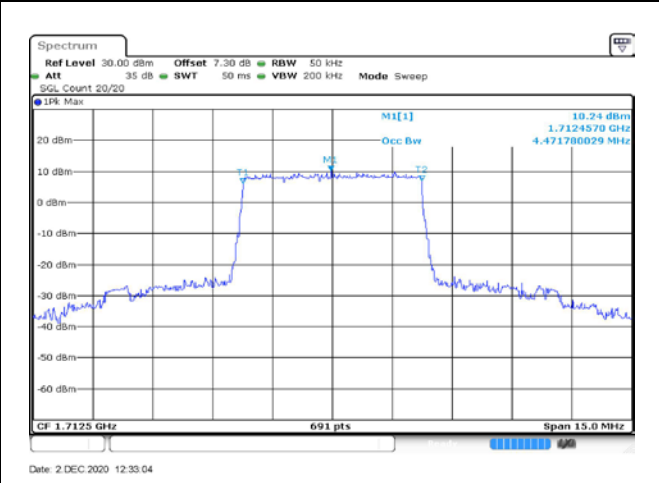


Fig.20

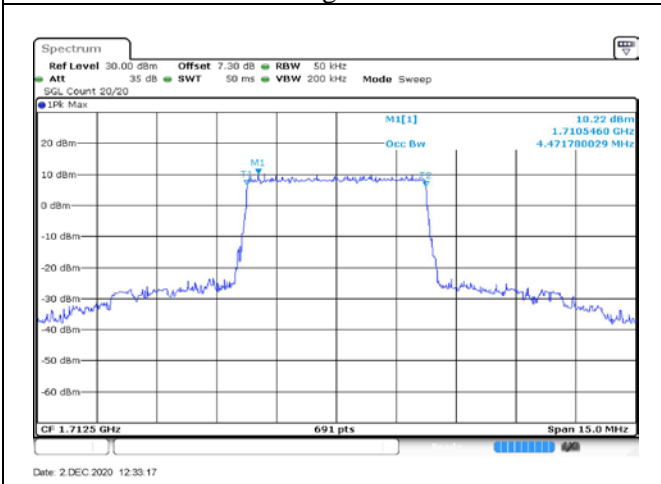


Fig.21

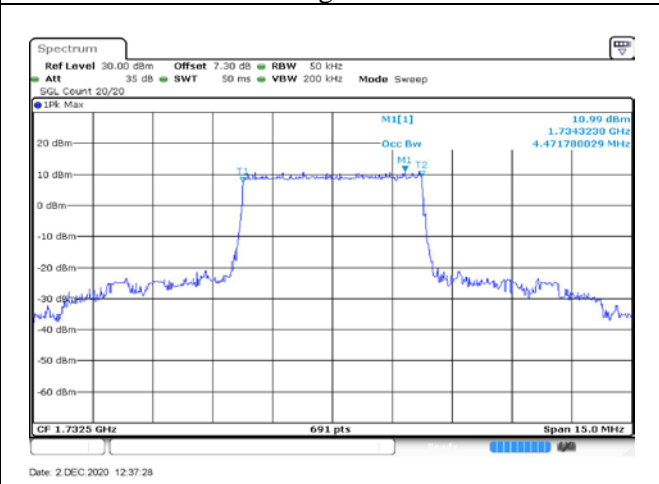


Fig.22

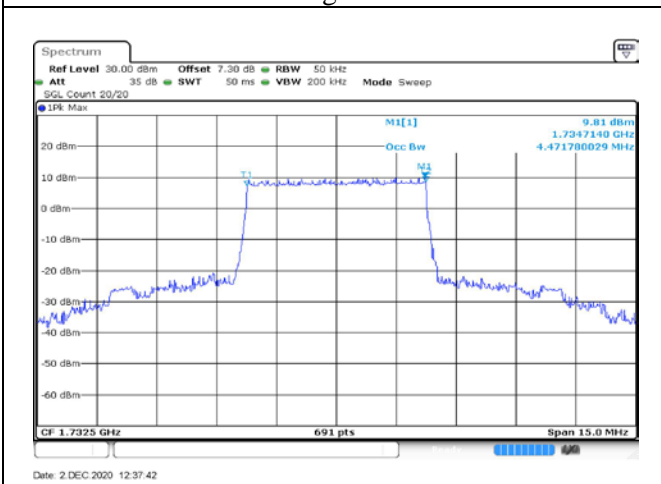


Fig.23

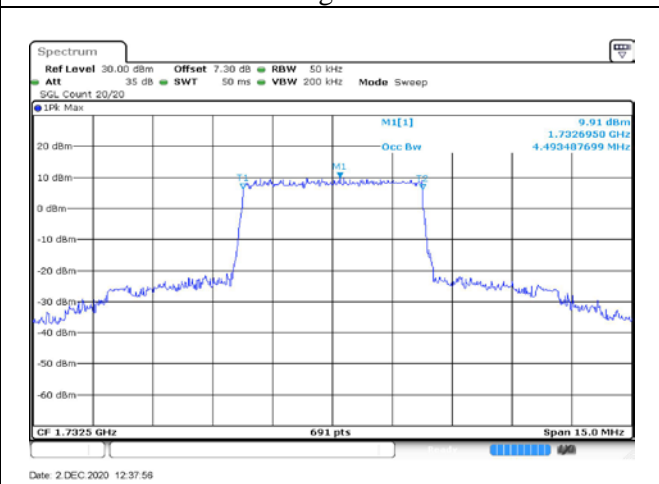


Fig.24

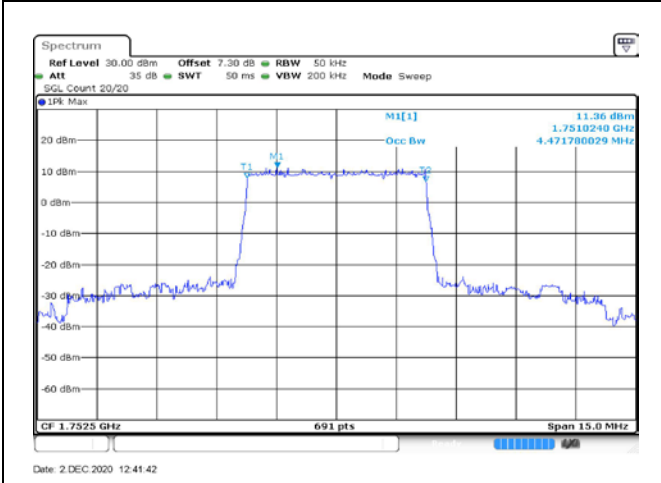


Fig.25

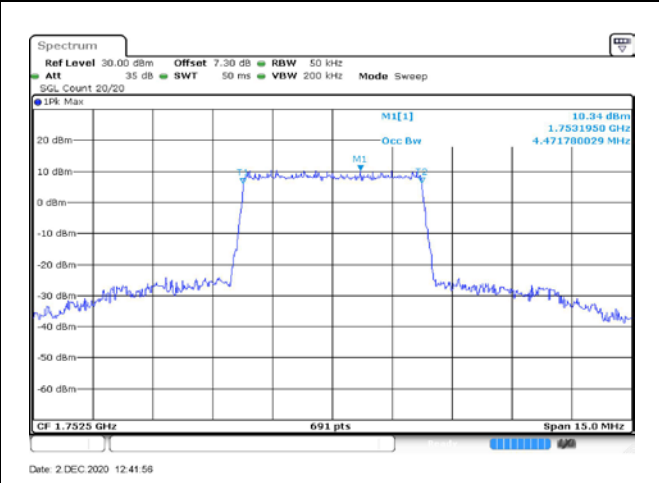


Fig.26

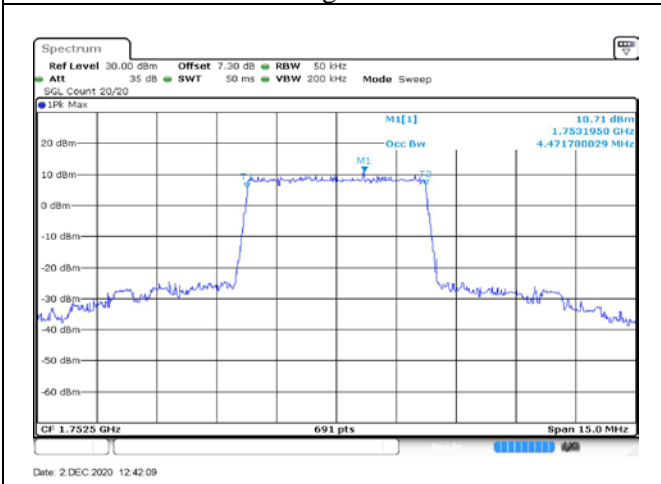


Fig.27

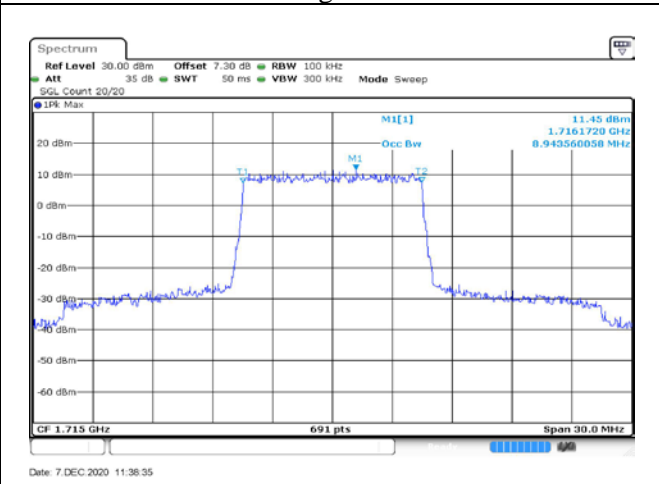


Fig.28

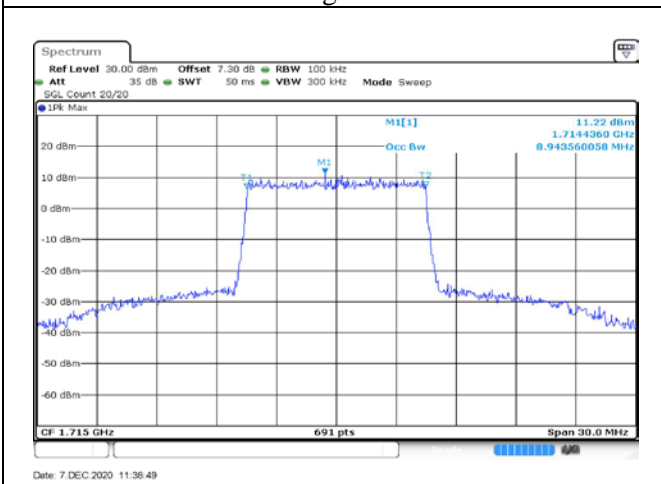


Fig.29

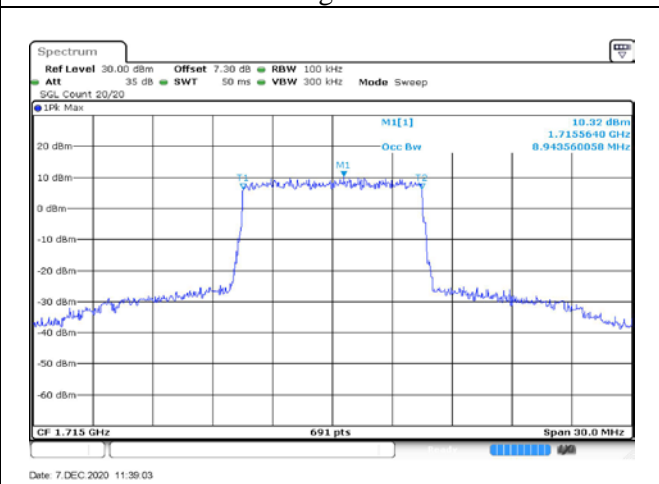


Fig.30

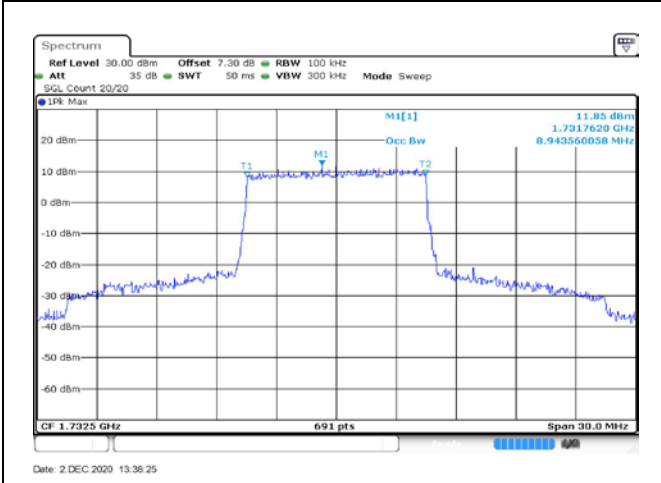


Fig.31

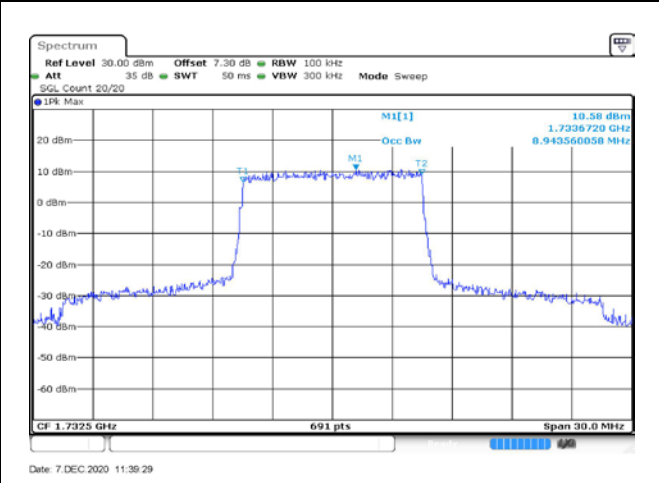


Fig.32

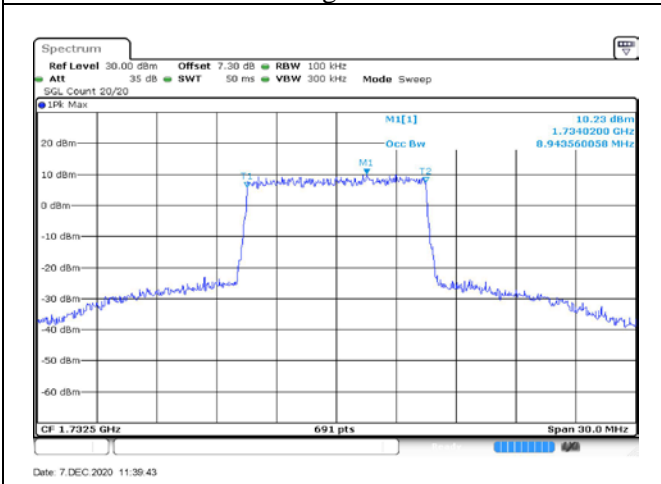


Fig.33

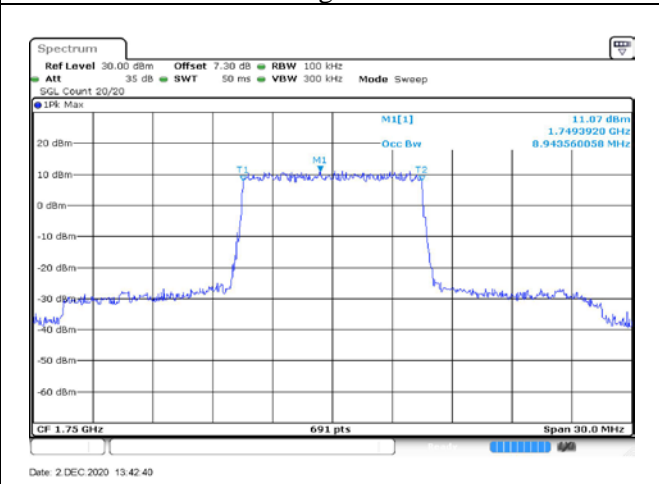


Fig.34

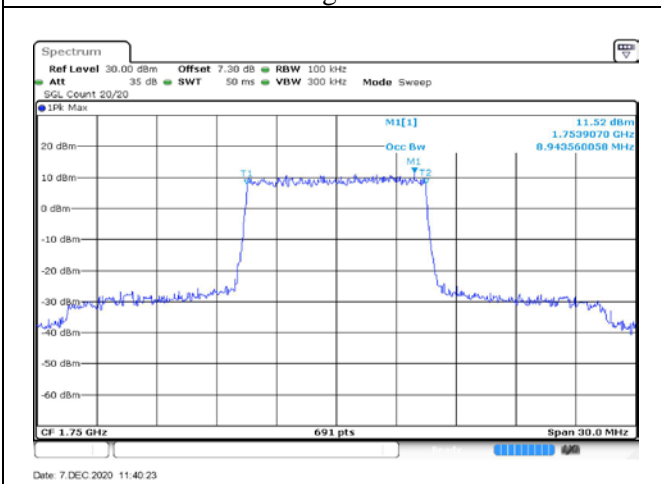


Fig.35

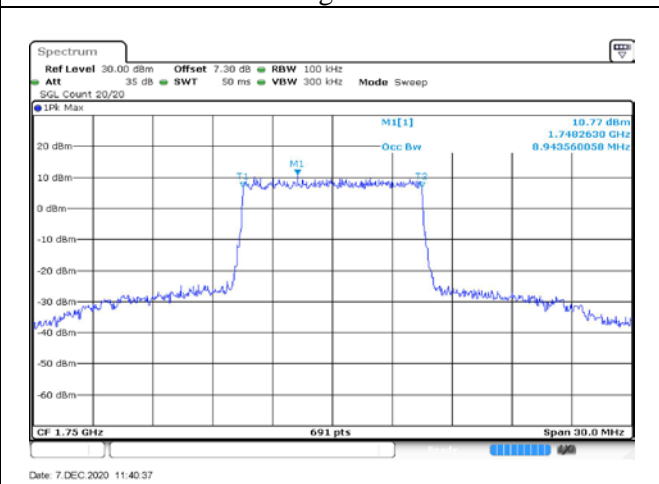


Fig.36

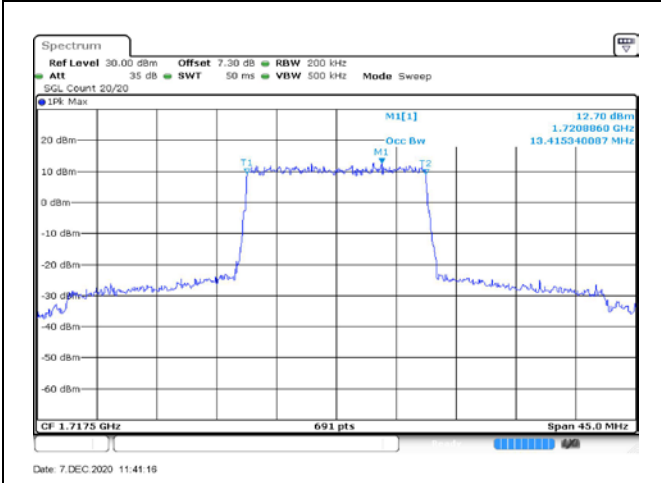


Fig.37

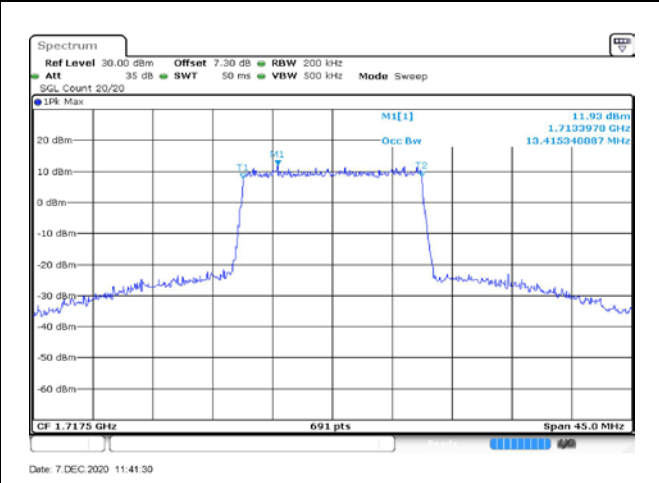


Fig.38

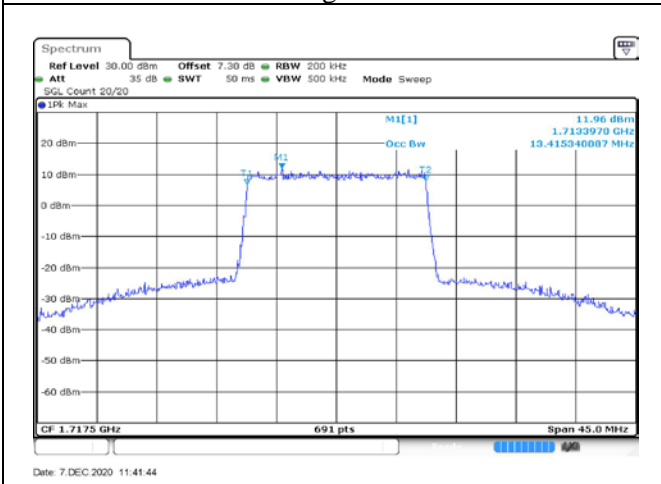


Fig.39

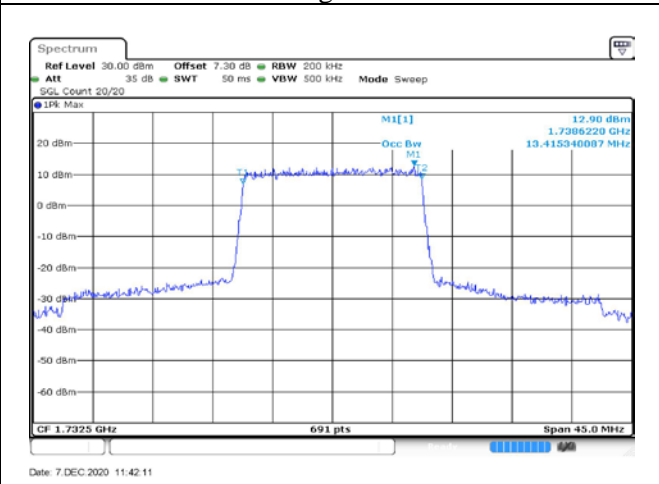


Fig.40

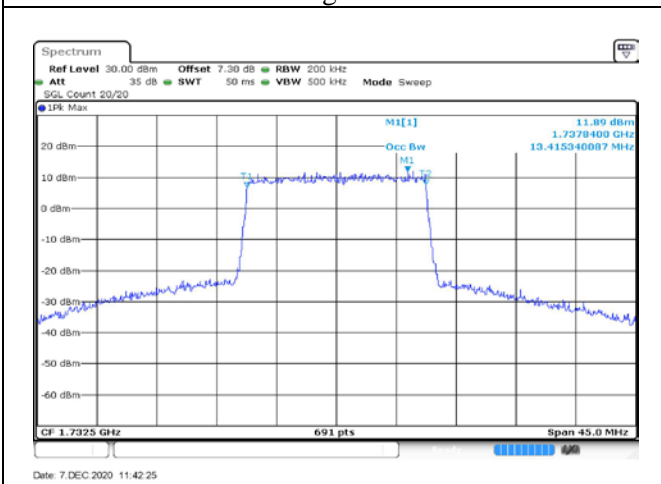


Fig.41

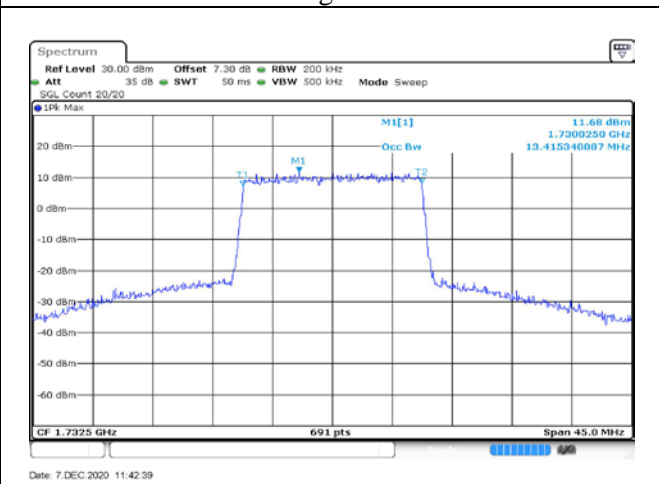
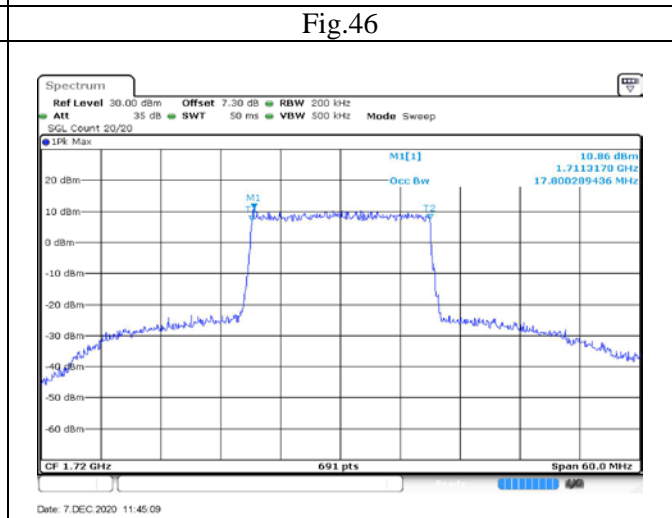
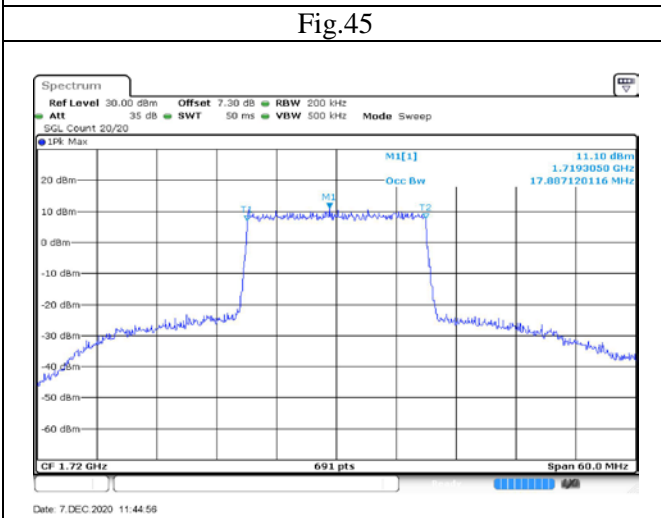
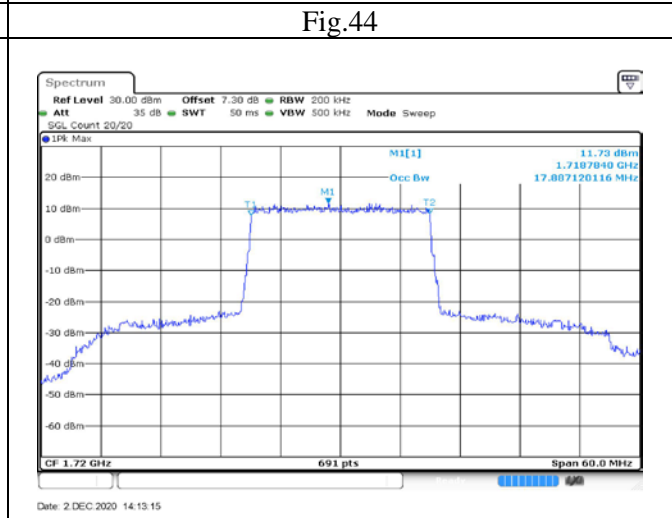
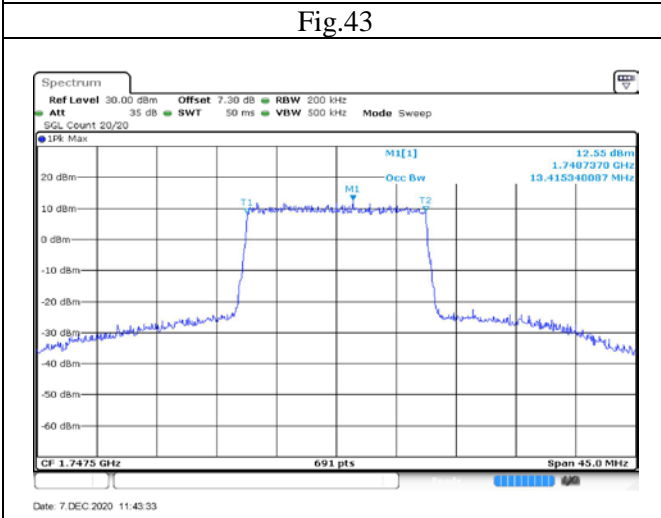
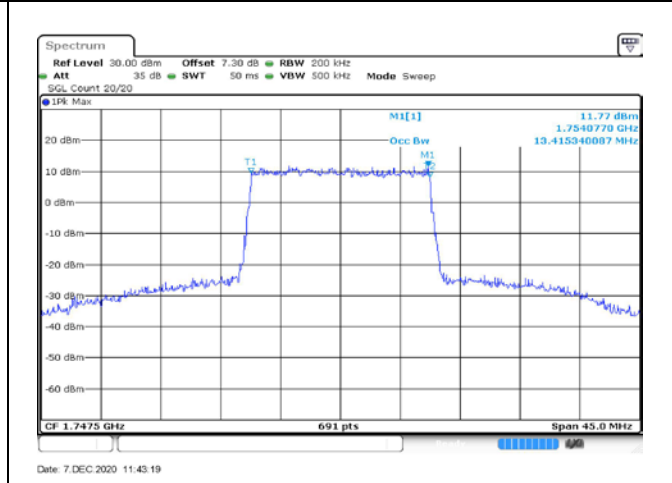
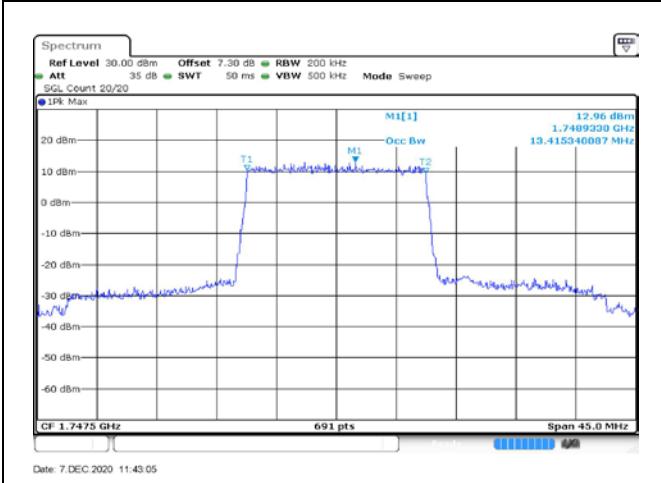


Fig.42



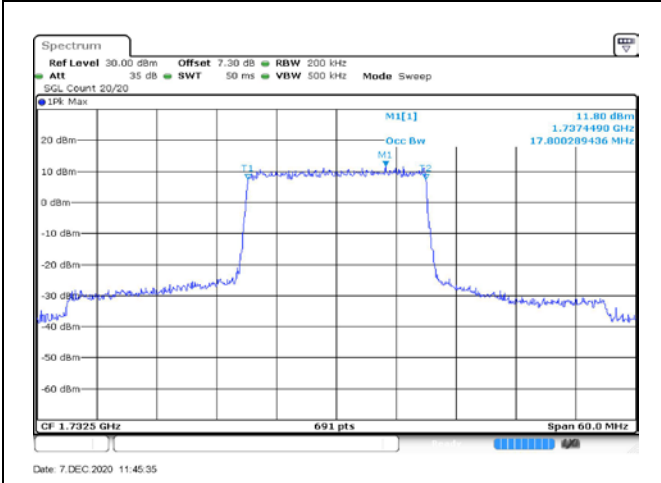


Fig.49

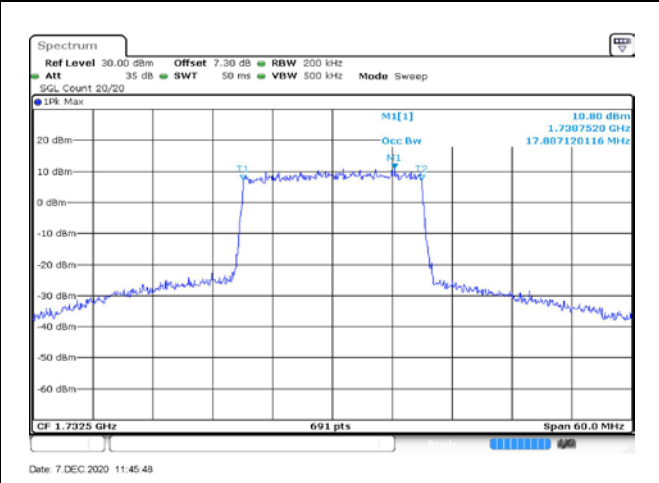


Fig.50

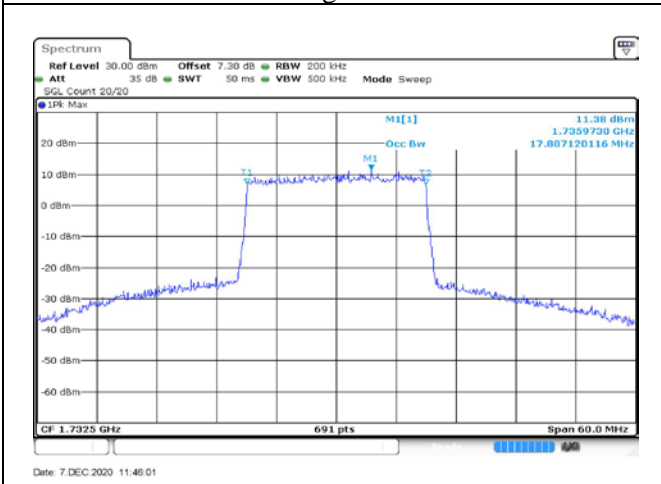


Fig.51

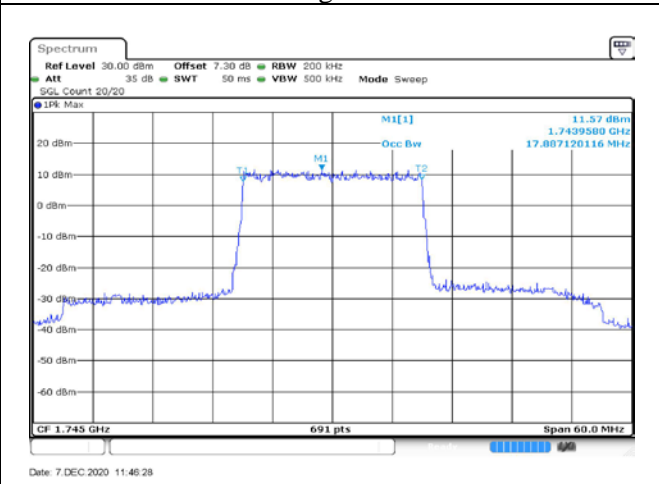


Fig.52

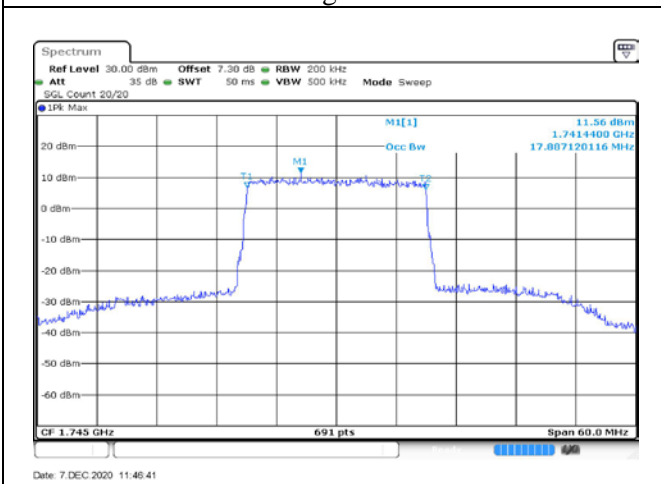


Fig.53

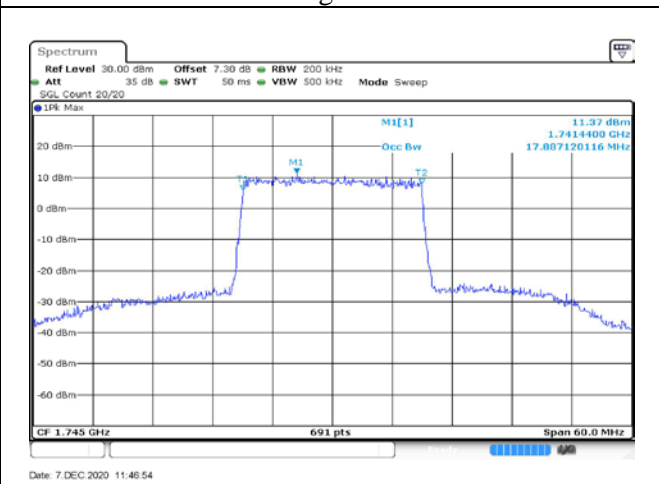


Fig.54

### 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	1.216	Fig.1	1.216	Fig.2	1.204	Fig.3
	1732.5	20175		6	0	1.234	Fig.4	1.216	Fig.5	1.210	Fig.6
	1754.3	20393		6	0	1.222	Fig.7	1.216	Fig.8	1.228	Fig.9
	1711.5	19965	3	15	0	2.931	Fig.10	2.918	Fig.11	2.931	Fig.12
	1732.5	20175		15	0	2.931	Fig.13	2.891	Fig.14	2.918	Fig.15
	1753.5	20385		15	0	2.944	Fig.16	2.944	Fig.17	2.957	Fig.18
	1712.5	19975	5	25	0	4.884	Fig.19	4.776	Fig.20	4.797	Fig.21
	1732.5	20175		25	0	4.841	Fig.22	4.863	Fig.23	4.884	Fig.24
	1752.5	20375		25	0	4.884	Fig.25	4.863	Fig.26	4.884	Fig.27
	1715	20000	10	50	0	9.638	Fig.28	9.551	Fig.29	9.595	Fig.30
	1732.5	20175		50	0	9.638	Fig.31	9.682	Fig.32	9.465	Fig.33
	1750	20350		50	0	9.638	Fig.34	9.551	Fig.35	9.595	Fig.36
	1717.5	20025	15	75	0	14.522	Fig.37	14.457	Fig.38	14.588	Fig.39
	1732.5	20175		75	0	14.457	Fig.40	14.457	Fig.41	14.392	Fig.42
	1747.5	20325		75	0	14.522	Fig.43	14.457	Fig.44	14.522	Fig.45
	1720	20050	20	100	0	19.363	Fig.46	19.016	Fig.47	19.190	Fig.48
	1732.5	20175		100	0	19.016	Fig.49	19.016	Fig.50	19.016	Fig.51
	1745	20300		100	0	19.190	Fig.52	19.276	Fig.53	19.190	Fig.54

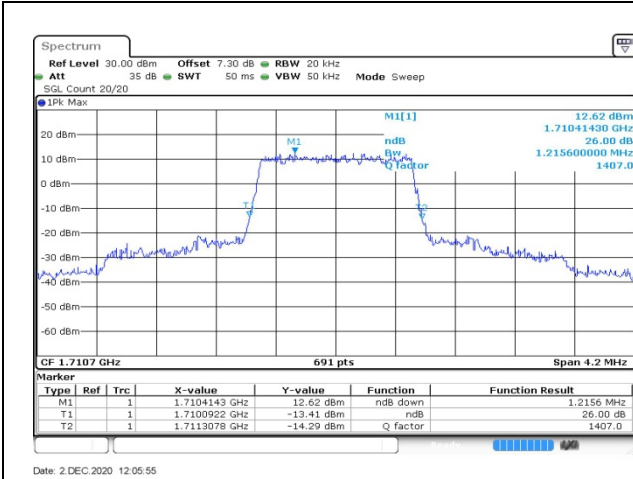


Fig.1

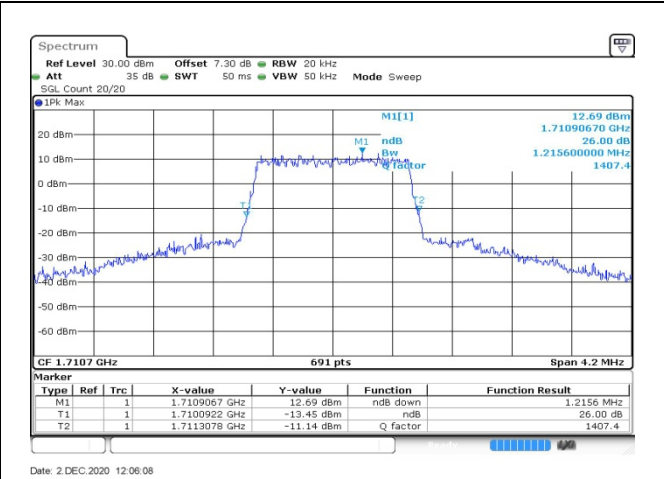


Fig.2

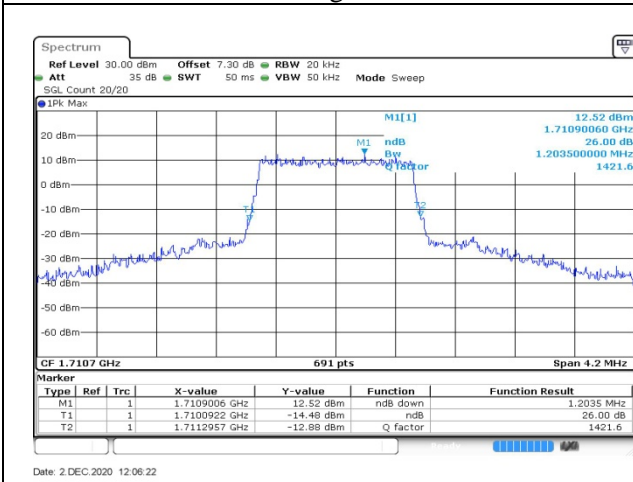


Fig.3

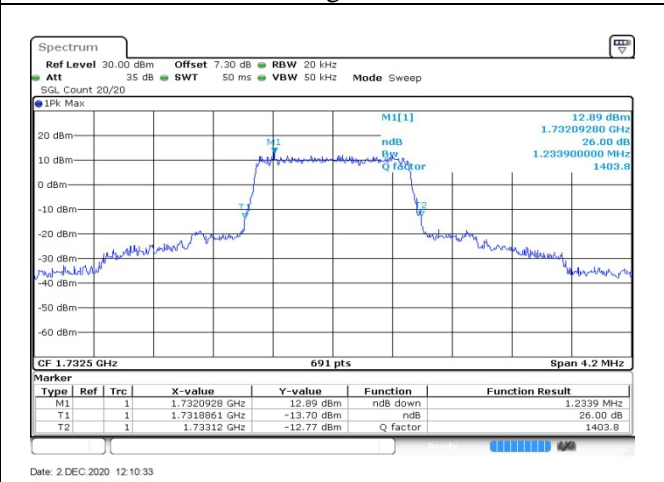


Fig.4

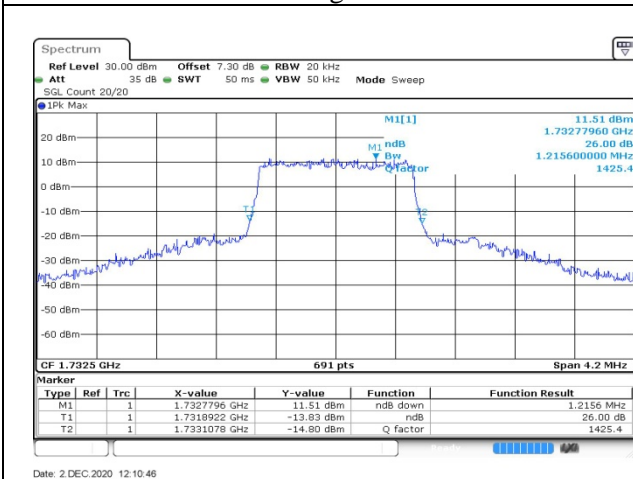


Fig.5

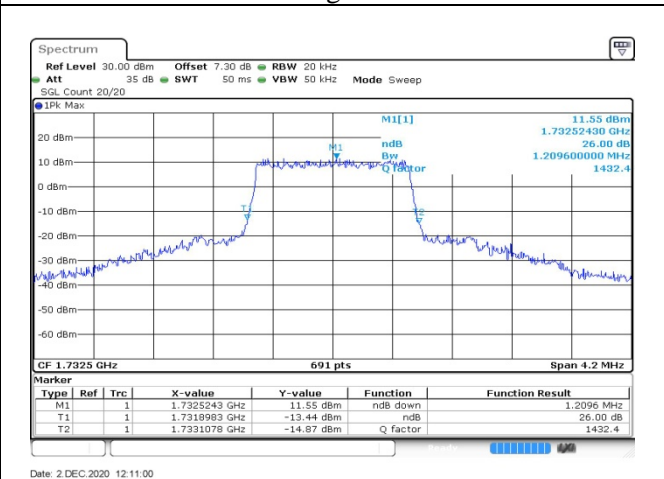


Fig.6