

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 4

1 RF Power Output

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	24.65	
				1	3	24.65	
				1	5	24.60	
				3	0	24.68	
				3	1	24.70	
				3	3	24.68	
				6	0	23.68	
	1732.5	20175		1	0	24.55	
				1	3	24.42	
				1	5	24.53	
				3	0	24.47	
				3	1	24.47	
				3	3	24.60	
				6	0	23.46	
	1754.3	20393		1	0	24.34	
				1	3	24.22	
				1	5	24.44	
				3	0	24.21	
				3	1	24.31	
				3	3	24.27	
				6	0	23.21	
	16QAM	1710.7		19957	1	0	24.47
					1	3	24.52
					1	5	24.47
3					0	23.82	
3					1	23.88	
3					3	23.87	
6					0	22.98	
1732.5		20175		1	0	23.77	
				1	3	24.24	
				1	5	24.23	
				3	0	23.52	
				3	1	23.78	
				3	3	23.69	
				6	0	22.74	
1754.3		20393		1	0	23.42	
				1	3	23.40	
				1	5	23.30	
				3	0	23.28	
3	1	23.25					
3	3	23.26					
6	0	22.66					

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1710.7	19957	1.4	1	0	22.98
				1	3	22.98
				1	5	22.98
				3	0	22.97
				3	1	22.68
				3	3	22.88
				6	0	22.84
	1732.5	20175		1	0	22.75
				1	3	22.75
				1	5	22.75
				3	0	22.64
				3	1	22.65
				3	3	22.75
				6	0	22.75
	1754.3	20393		1	0	22.54
				1	3	22.50
				1	5	22.33
				3	0	22.35
				3	1	22.35
				3	3	22.34
				6	0	22.40

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1711.5	19965	3	1	0	24.73	
				1	8	24.46	
				1	14	24.53	
				8	0	23.64	
				8	4	23.62	
				8	7	23.63	
				15	0	23.69	
	1732.5	20175		1	0	24.50	
				1	8	24.50	
				1	14	24.48	
				8	0	23.44	
				8	4	23.44	
				8	7	23.45	
				15	0	23.45	
	1753.5	20385		1	0	24.37	
				1	8	24.35	
				1	14	24.30	
				8	0	23.23	
				8	4	23.23	
				8	7	23.23	
				15	0	23.24	
	16QAM	1711.5		19965	1	0	24.23
					1	8	24.07
					1	14	24.06
8					0	23.16	
8					4	23.05	
8					7	23.04	
15					0	22.88	
1732.5		20175		1	0	24.32	
				1	8	24.33	
				1	14	24.20	
				8	0	22.65	
				8	4	22.66	
				8	7	22.63	
				15	0	22.53	
1753.5		20385		1	0	23.08	
				1	8	23.08	
				1	14	22.97	
				8	0	22.53	
				8	4	22.53	
				8	7	22.53	
				15	0	22.47	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1711.5	19965	3	1	0	22.88
				1	8	22.88
				1	14	22.89
				8	0	22.89
				8	4	22.88
				8	7	22.89
				15	0	22.89
	1732.5	20175		1	0	22.61
				1	8	22.61
				1	14	22.54
				8	0	22.58
				8	4	22.68
				8	7	22.62
				15	0	22.58
	1753.5	20385		1	0	22.39
				1	8	22.39
				1	14	22.31
				8	0	22.24
				8	4	22.39
				8	7	22.39
				15	0	22.38

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	19975	5	1	0	24.65
				1	12	24.59
				1	24	24.58
				12	0	23.75
				12	7	23.61
				12	13	23.61
				25	0	23.55
	1732.5	20175		1	0	24.63
				1	12	24.51
				1	24	24.62
				12	0	23.46
				12	7	23.47
				12	13	23.47
				25	0	23.47
	1752.5	20375		1	0	24.07
				1	12	23.90
				1	24	23.90
				12	0	23.22
				12	7	23.25
				12	13	23.25
				25	0	23.23
16QAM	1712.5	19975	1	0	22.99	
			1	12	22.96	
			1	24	22.97	
			12	0	22.81	
			12	7	22.67	
			12	13	22.67	
			25	0	22.73	
	1732.5	20175	1	0	23.56	
			1	12	23.45	
			1	24	23.68	
			12	0	22.63	
			12	7	22.53	
			12	13	22.53	
			25	0	22.61	
	1752.5	20375	1	0	22.84	
			1	12	22.84	
			1	24	22.84	
			12	0	22.23	
			12	7	22.17	
			12	13	22.17	
			25	0	22.23	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1712.5	19975	5	1	0	22.79
				1	12	22.73
				1	24	22.85
				12	0	22.74
				12	7	22.85
				12	13	22.86
				25	0	22.86
	1732.5	20175		1	0	22.60
				1	12	22.62
				1	24	22.61
				12	0	22.61
				12	7	22.62
				12	13	22.62
				25	0	22.62
	1752.5	20375		1	0	22.44
				1	12	22.43
				1	24	22.44
				12	0	22.23
				12	7	22.23
				12	13	22.23
				25	0	22.44

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1715	20000	10	1	0	24.62	
				1	25	24.51	
				1	49	24.49	
				25	0	23.51	
				25	12	23.68	
				25	25	23.68	
				50	0	23.54	
	1732.5	20175		1	0	24.68	
				1	25	24.63	
				1	49	24.43	
				25	0	23.57	
				25	12	23.48	
				25	25	23.48	
				50	0	23.45	
	1750	20350		1	0	24.37	
				1	25	24.37	
				1	49	24.36	
				25	0	23.39	
				25	12	23.33	
				25	25	23.21	
				50	0	23.34	
	16QAM	1715		20000	1	0	24.05
					1	25	23.81
					1	49	23.81
25					0	22.79	
25					12	22.74	
25					25	22.74	
50					0	22.65	
1732.5		20175		1	0	24.31	
				1	25	24.28	
			1	49	24.19		
			25	0	22.71		
			25	12	22.59		
			25	25	22.60		
			50	0	22.63		
1750		20350	1	0	23.12		
			1	25	23.08		
			1	49	22.92		
			25	0	22.61		
			25	12	22.47		
			25	25	22.47		
			50	0	22.45		

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1715	20000	10	1	0	22.65
				1	25	22.65
				1	49	22.66
				25	0	22.65
				25	12	22.65
				25	25	22.66
				50	0	22.66
	1732.5	20175		1	0	22.63
				1	25	22.63
				1	49	22.63
				25	0	22.64
				25	12	22.64
				25	25	22.64
				50	0	22.64
	1750	20350		1	0	22.45
				1	25	22.45
				1	49	22.45
				25	0	22.45
				25	12	22.45
				25	25	22.32
				50	0	22.32

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	20025	15	1	0	24.70
				1	37	24.50
				1	74	24.48
				36	0	23.60
				36	29	23.51
				36	30	23.51
				75	0	23.53
	1732.5	20175		1	0	24.68
				1	37	24.31
				1	74	24.43
				36	0	23.47
				36	29	23.46
				36	30	23.45
				75	0	23.43
	1747.5	20325		1	0	24.43
				1	37	24.14
				1	74	24.14
				36	0	23.25
				36	29	23.14
				36	30	23.15
				75	0	23.23
16QAM	1717.5	20025		1	0	24.17
				1	37	24.06
				1	74	24.05
				36	0	22.72
				36	29	22.75
				36	30	22.77
				75	0	22.79
	1732.5	20175		1	0	23.79
				1	37	23.54
				1	74	23.57
				36	0	22.75
				36	29	22.63
				36	30	22.63
				75	0	22.62
	1747.5	20325		1	0	23.80
				1	37	23.71
				1	74	23.68
				36	0	22.49
				36	29	22.31
				36	30	22.31
				75	0	22.36

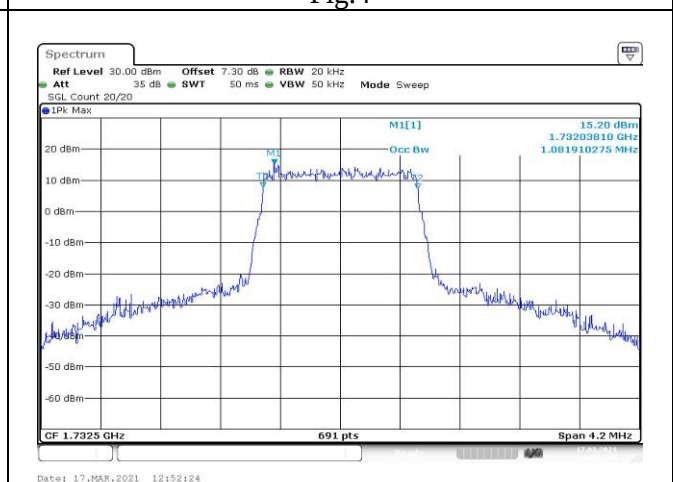
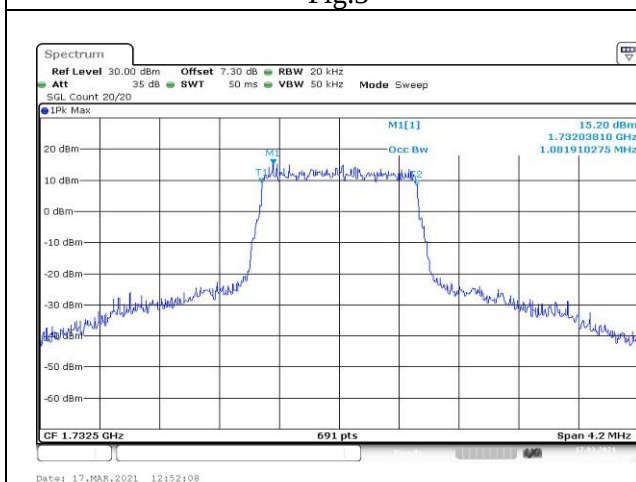
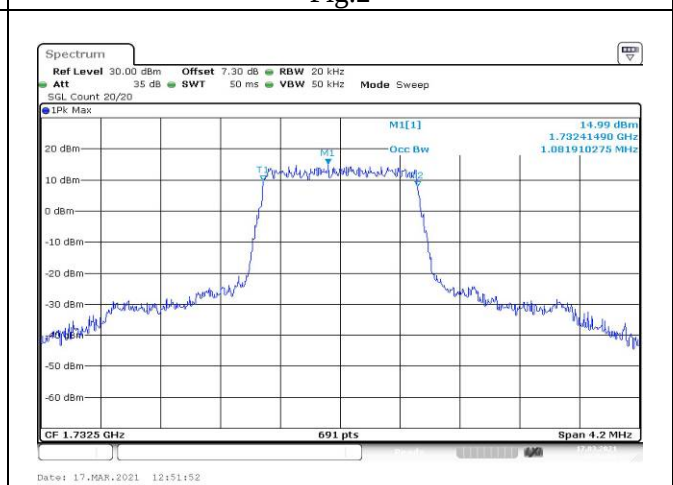
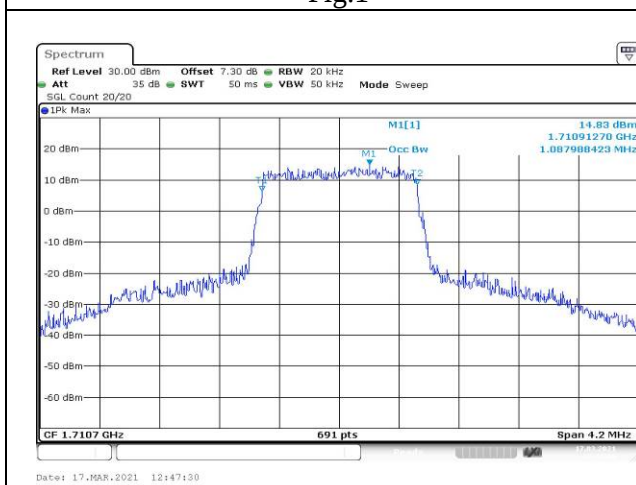
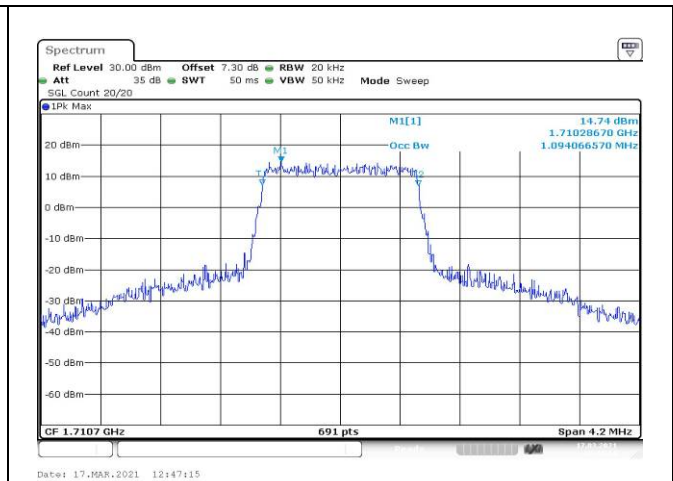
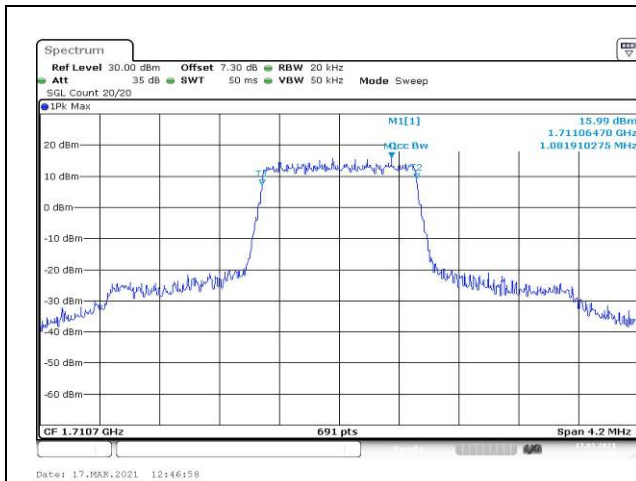
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1717.5	20025	15	1	0	22.80
				1	37	22.80
				1	74	22.80
				36	0	22.80
				36	29	22.80
				36	30	22.81
				75	0	22.70
	1732.5	20175		1	0	22.62
				1	37	22.62
				1	74	22.62
				36	0	22.62
				36	29	22.63
				36	30	22.62
				75	0	22.63
	1747.5	20325		1	0	22.28
				1	37	22.36
				1	74	22.28
				36	0	22.37
				36	29	22.36
				36	30	22.37
				75	0	22.29

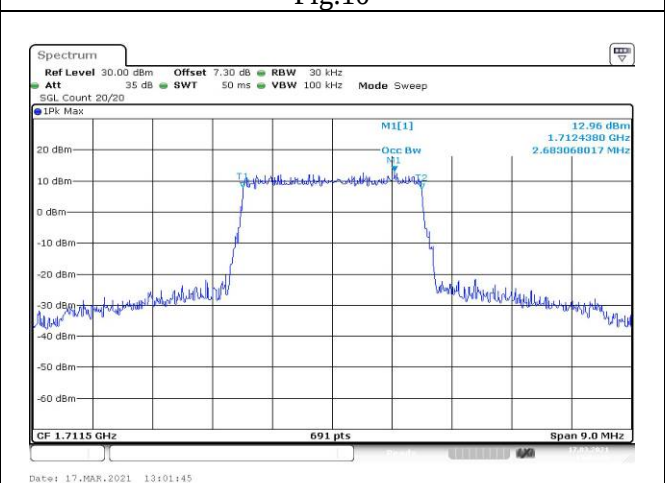
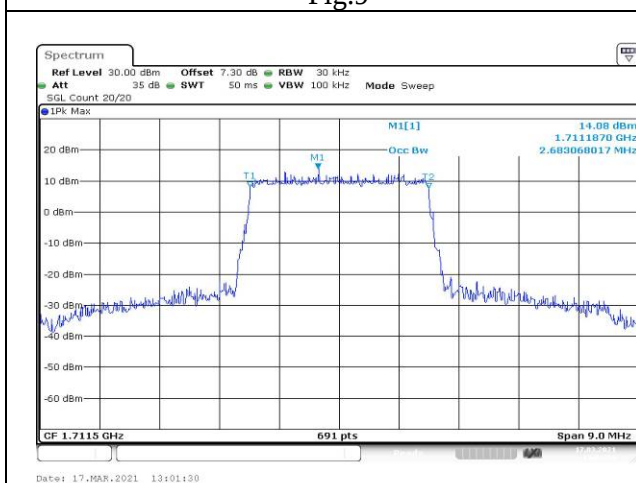
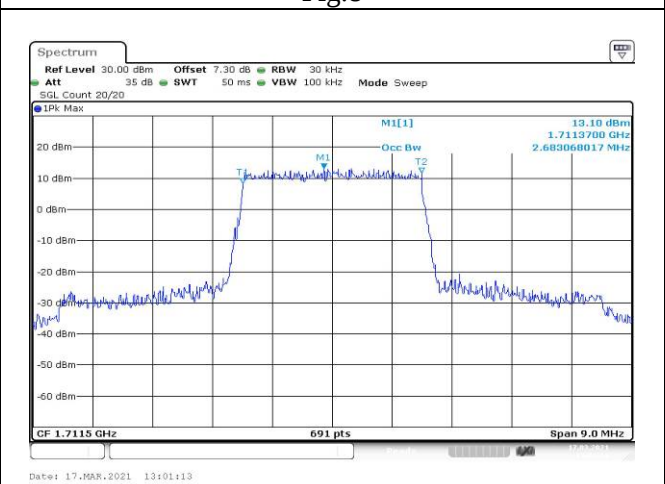
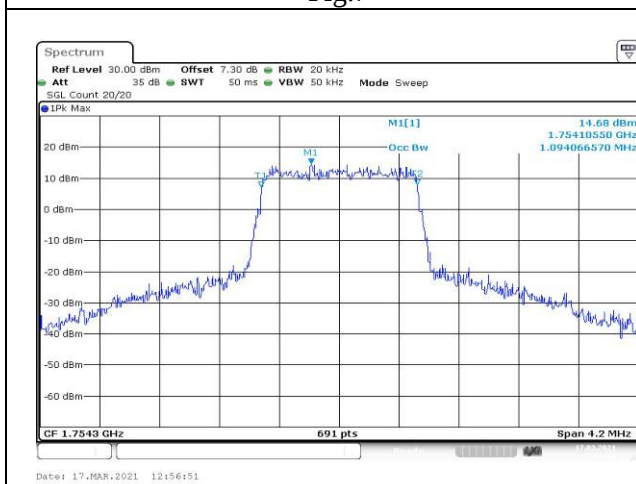
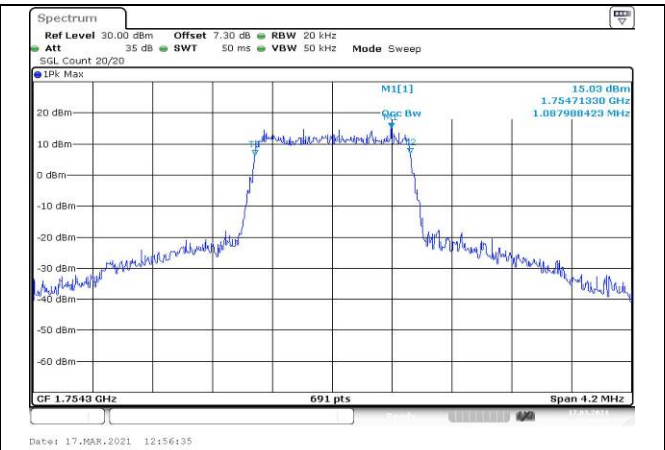
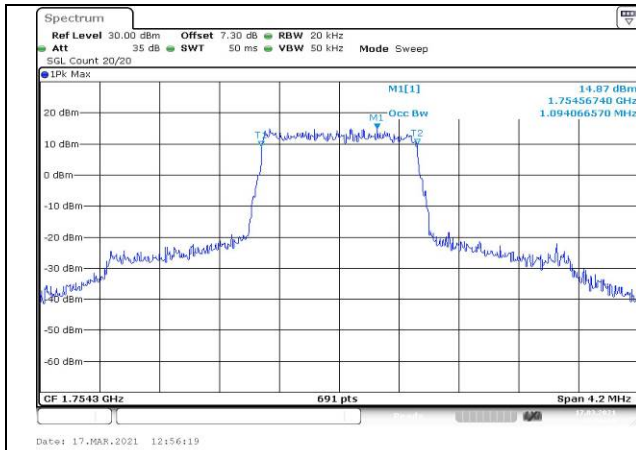
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	20050	20	1	0	24.87
				1	49	24.50
				1	99	24.47
				50	0	23.61
				50	24	23.57
				50	50	23.46
				100	0	23.56
	1732.5	20175		1	0	24.56
				1	49	24.58
				1	99	24.57
				50	0	23.64
				50	24	23.42
				50	50	23.42
				100	0	23.43
	1745	20300		1	0	24.52
				1	49	24.29
				1	99	24.28
				50	0	23.43
				50	24	23.28
				50	50	23.29
				100	0	23.21
16QAM	1720	20050	1	0	23.97	
			1	49	23.69	
			1	99	23.52	
			50	0	22.81	
			50	24	22.68	
			50	50	22.68	
			100	0	22.70	
	1732.5	20175	1	0	23.75	
			1	49	23.46	
			1	99	23.53	
			50	0	22.60	
			50	24	22.54	
			50	50	22.66	
			100	0	22.57	
	1745	20300	1	0	24.37	
			1	49	24.07	
			1	99	24.08	
			50	0	22.49	
			50	24	22.42	
			50	50	22.42	
			100	0	22.40	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1720	20050	20	1	0	22.71
				1	49	22.71
				1	99	22.71
				50	0	22.71
				50	24	22.72
				50	50	22.71
				100	0	22.71
	1732.5	20175		1	0	22.57
				1	49	22.57
				1	99	22.57
				50	0	22.57
				50	24	22.57
				50	50	22.64
				100	0	22.56
	1745	20300		1	0	22.40
				1	49	22.40
				1	99	22.40
				50	0	22.41
				50	24	22.41
				50	50	22.41
				100	0	22.41

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	1.088	Fig.3
	1732.5	20175		6	0	1.082	Fig.4	1.082	Fig.5	1.082	Fig.6
	1754.3	20393		6	0	1.094	Fig.7	1.088	Fig.8	1.094	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	2.683	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	4.472	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	8.944	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	13.480	Fig.41	13.415	Fig.42
	1747.5	20325		75	0	13.415	Fig.43	13.415	Fig.44	13.480	Fig.45
	1720	20050	20	100	0	17.887	Fig.46	17.887	Fig.47	17.974	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	17.974	Fig.53	17.974	Fig.54





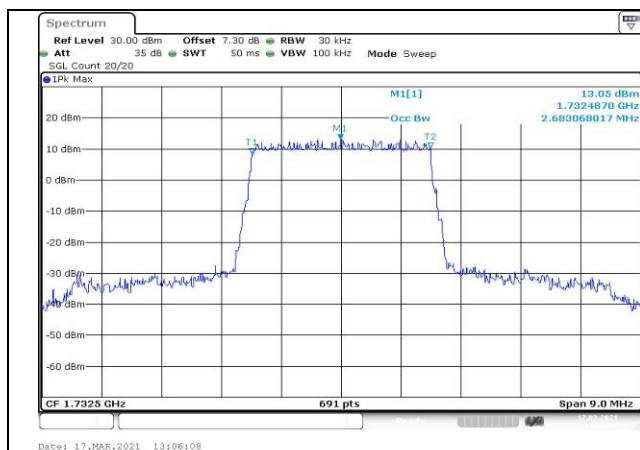


Fig.13

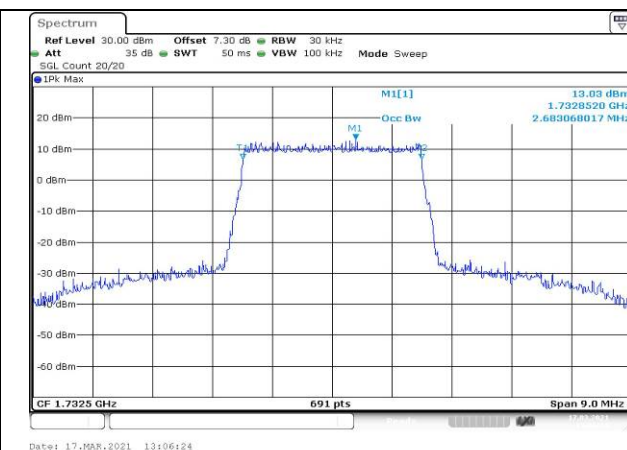


Fig.14

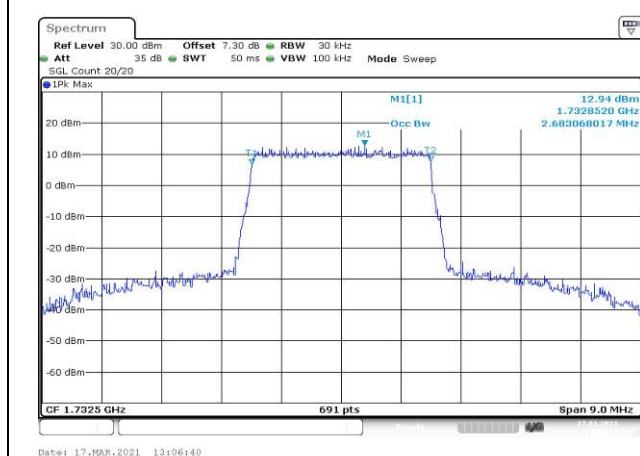


Fig.15

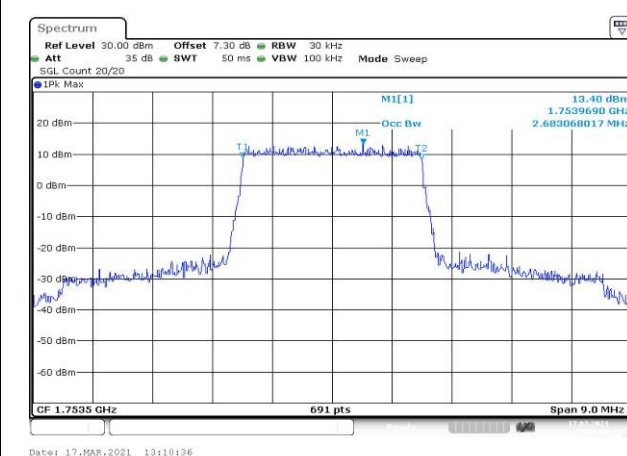


Fig.16

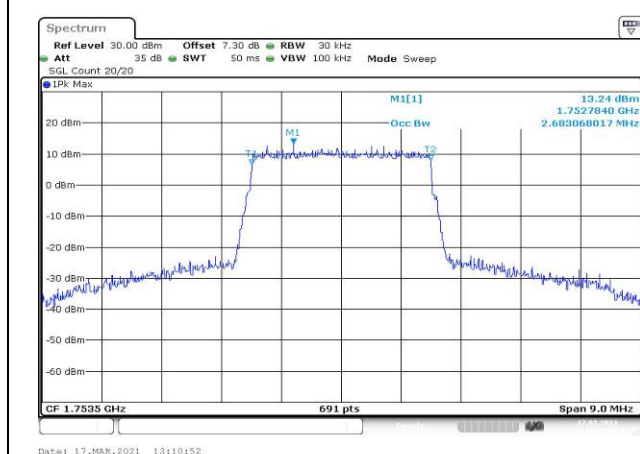


Fig.17

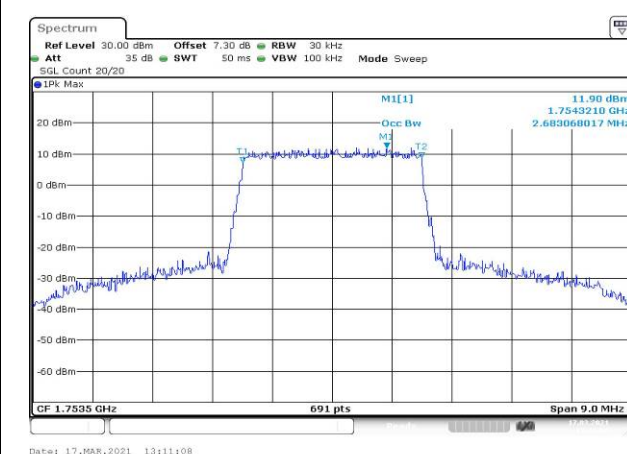


Fig.18

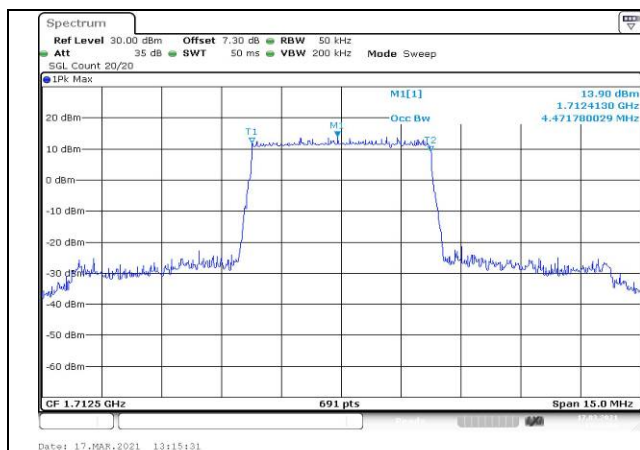


Fig.19

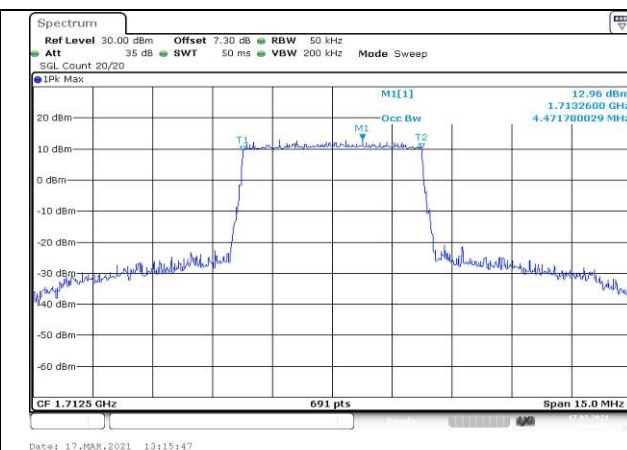


Fig.20

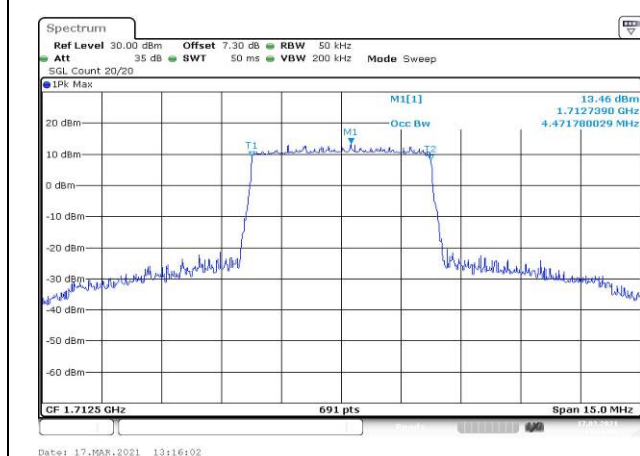


Fig.21

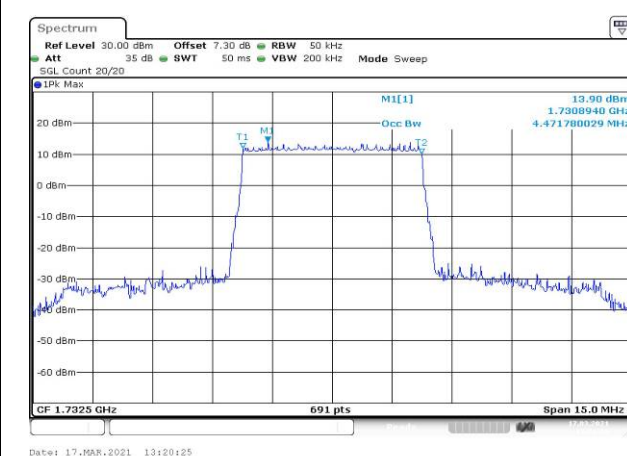


Fig.22

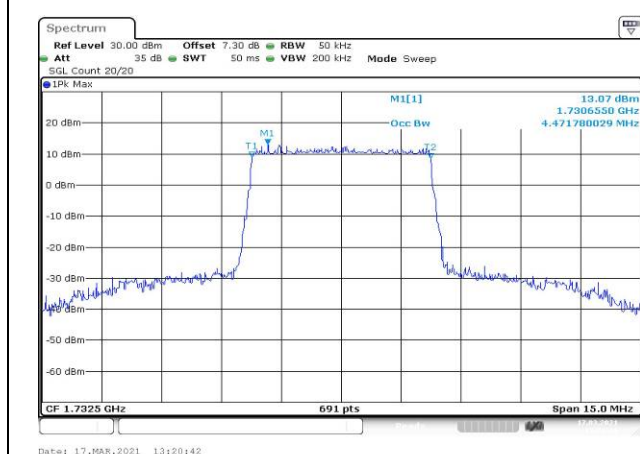


Fig.23

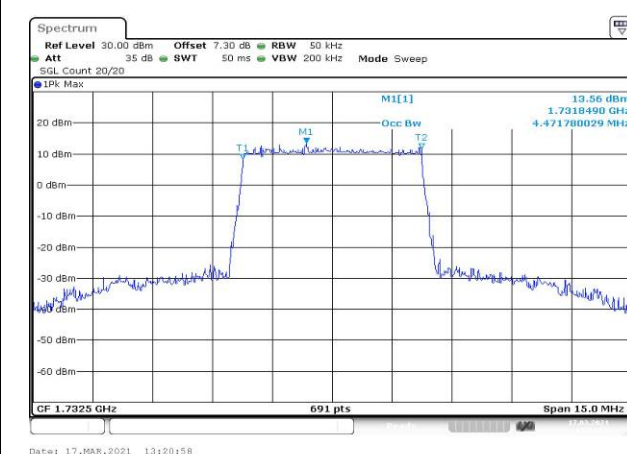


Fig.24

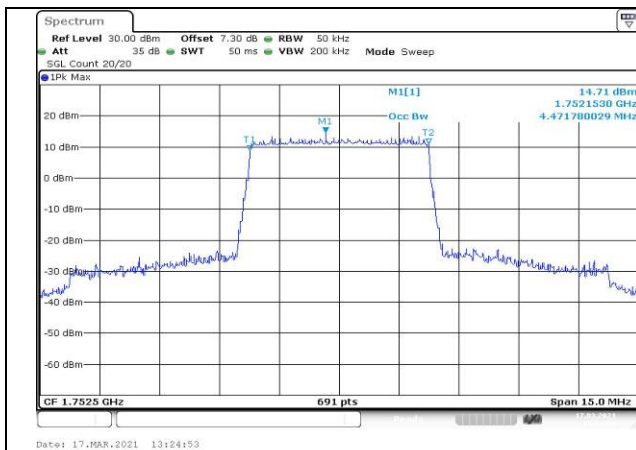


Fig.25

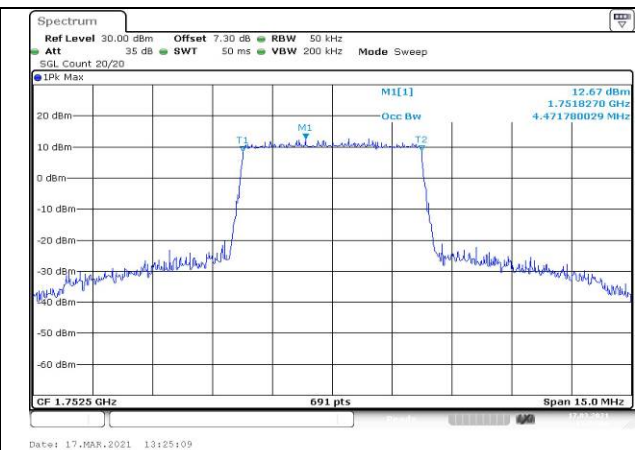


Fig.26

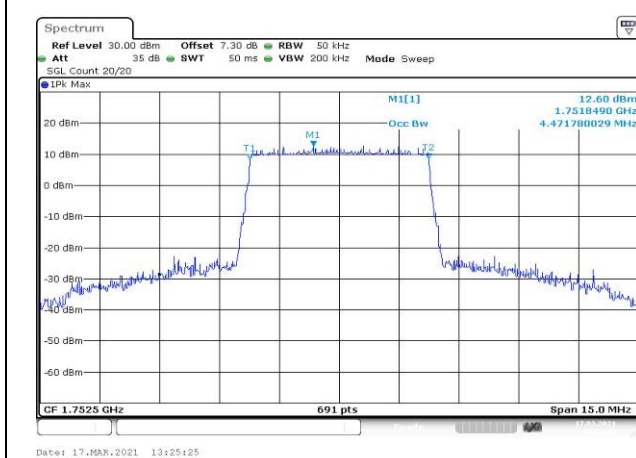


Fig.27

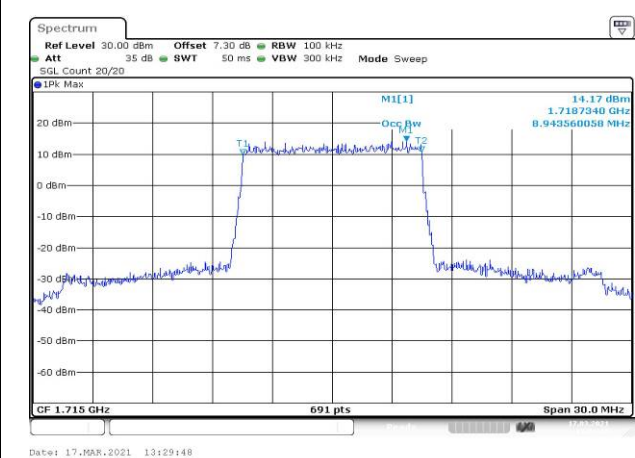


Fig.28

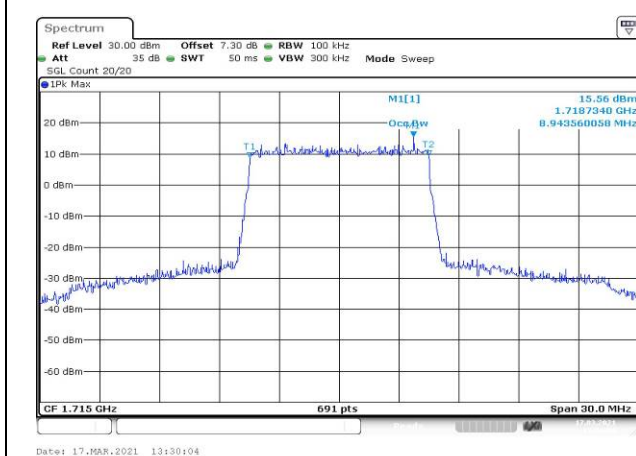


Fig.29

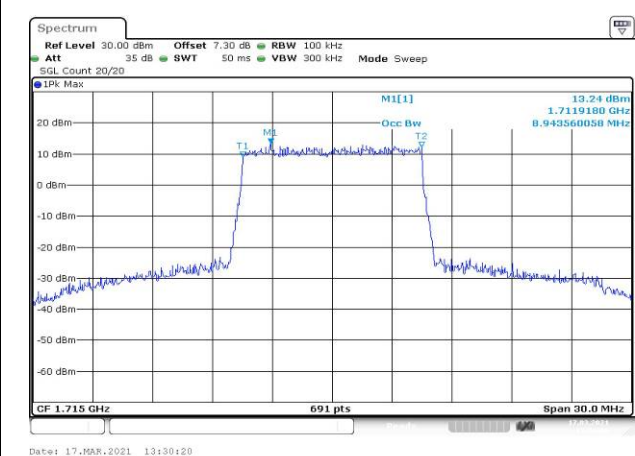
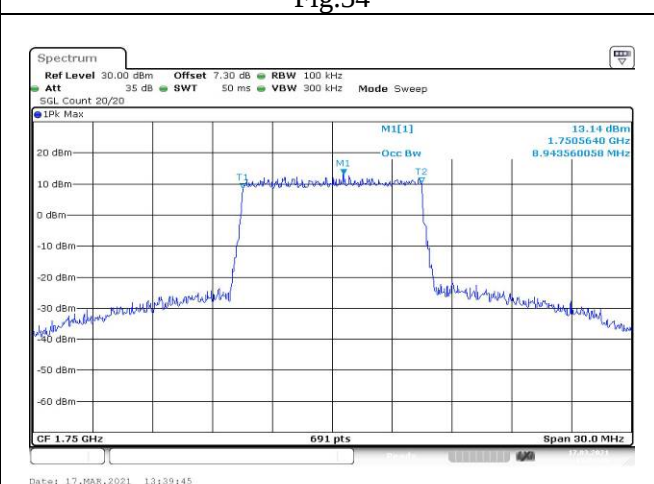
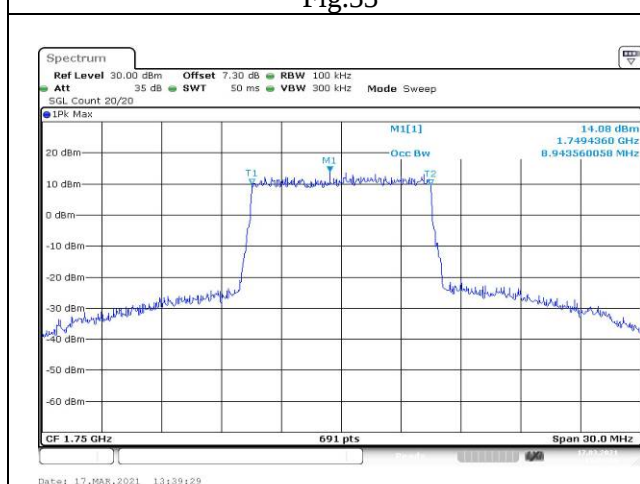
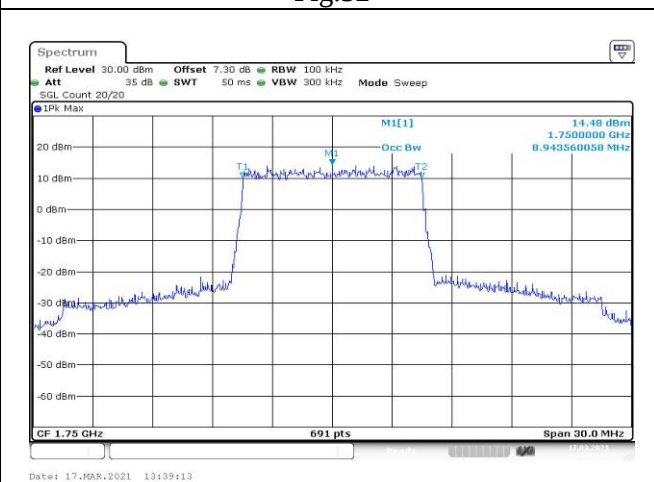
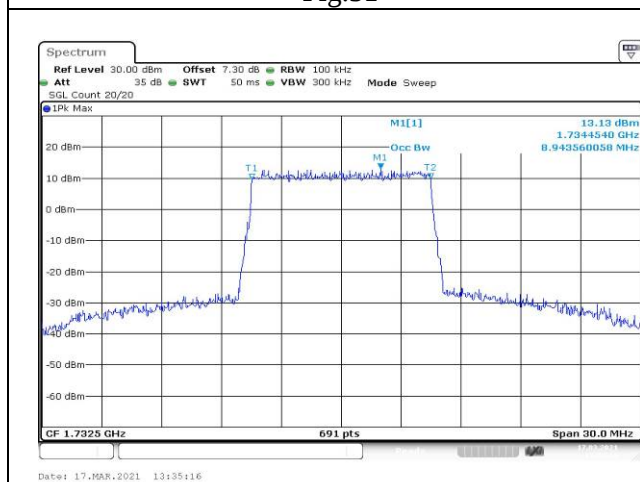
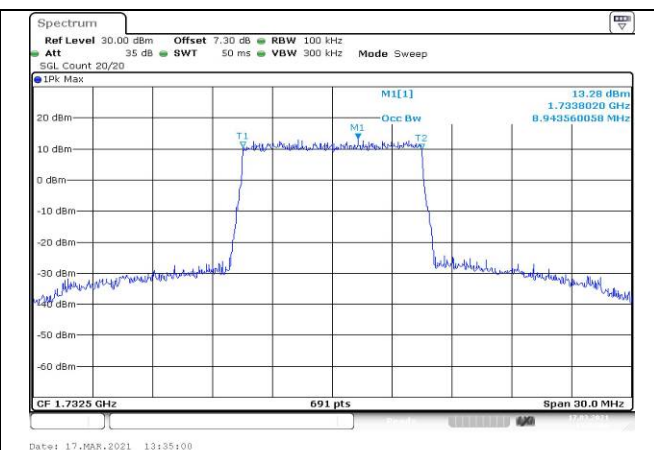
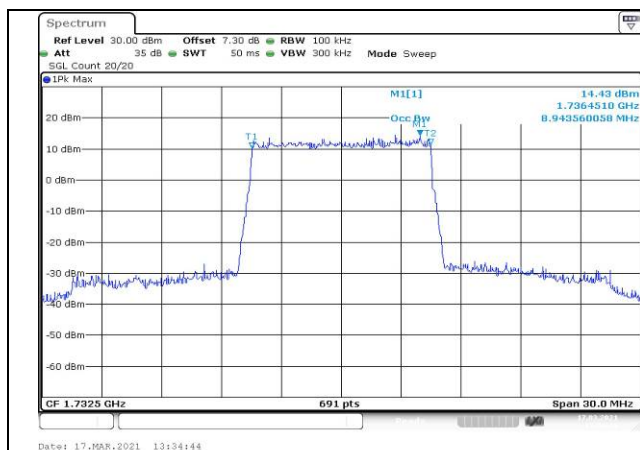


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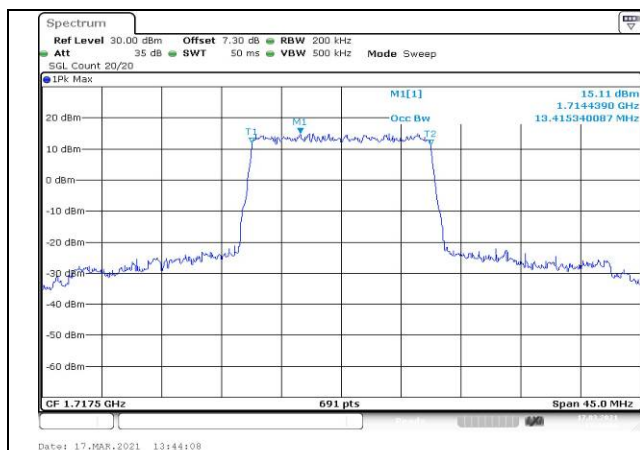


Fig.37

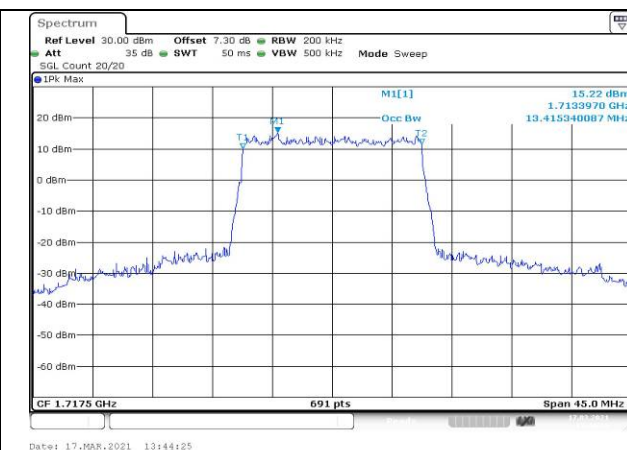


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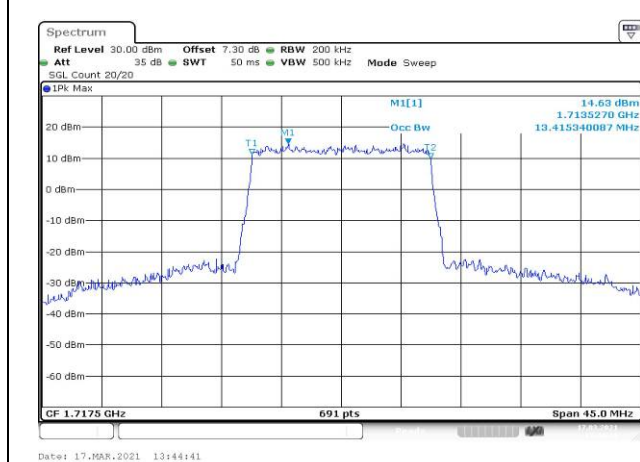


Fig.39

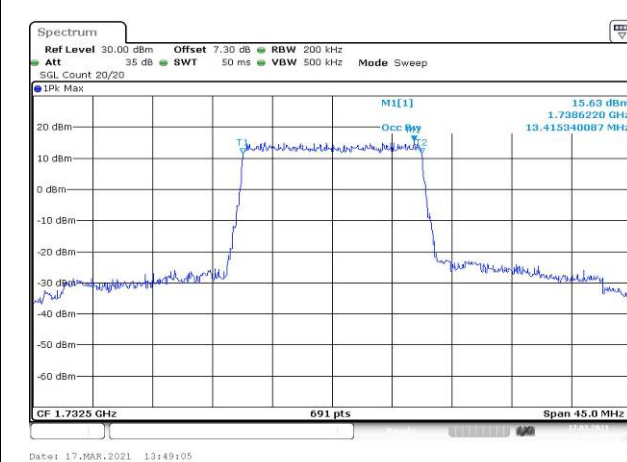


Fig.40

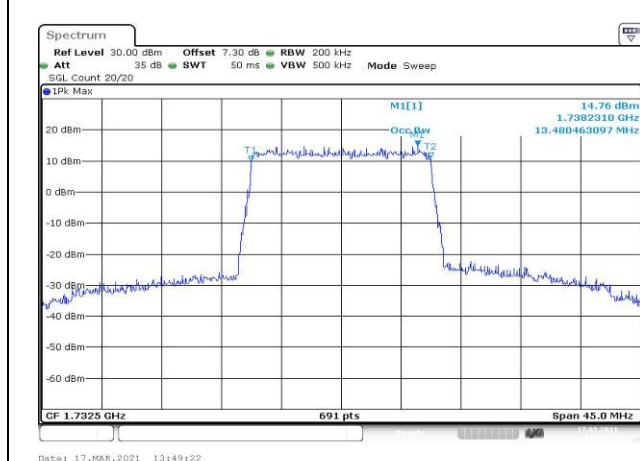


Fig.41

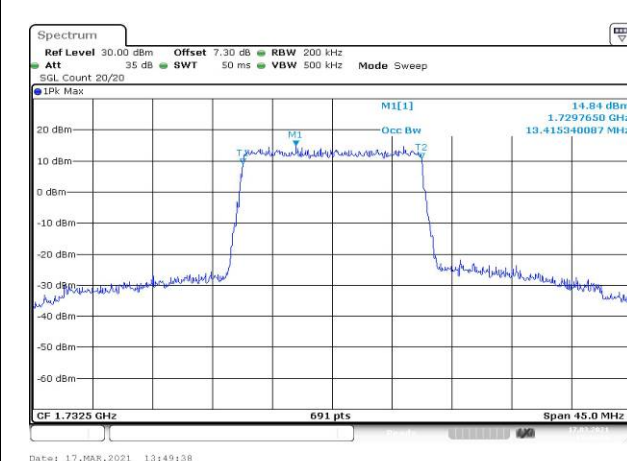
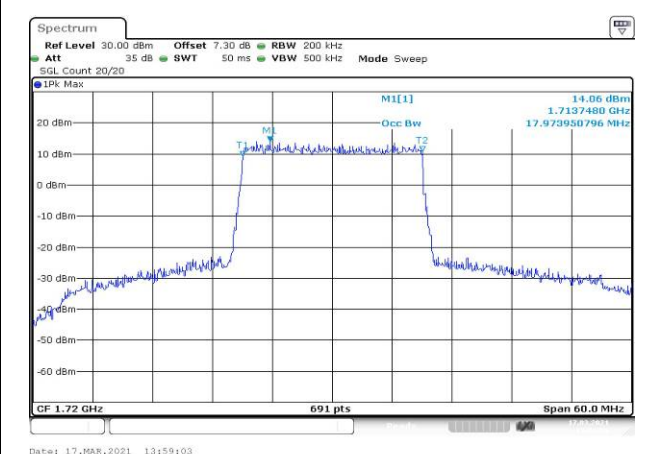
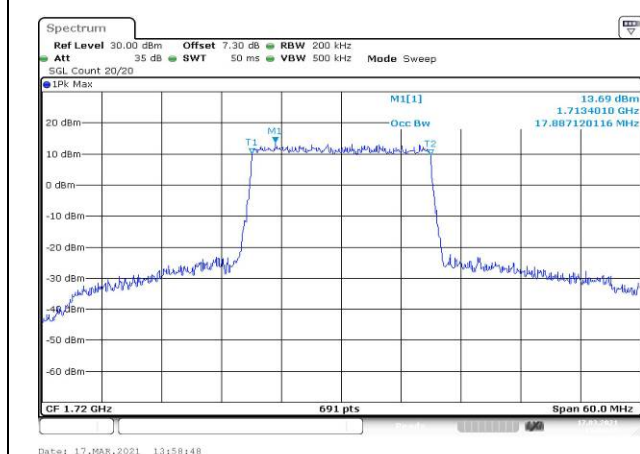
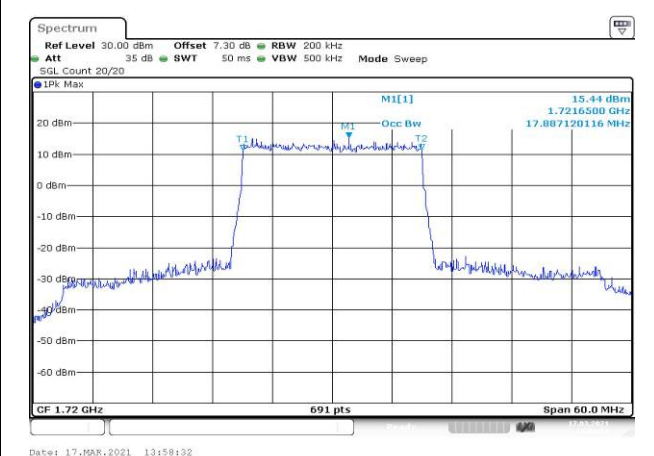
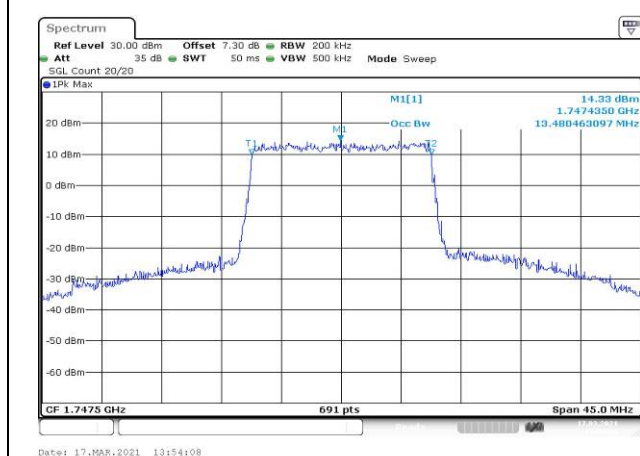
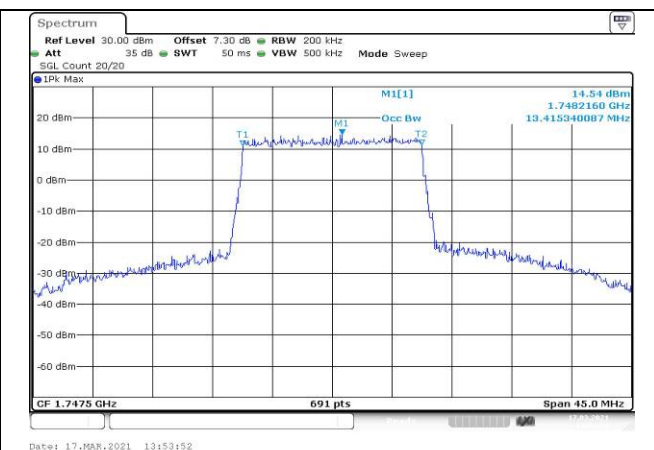
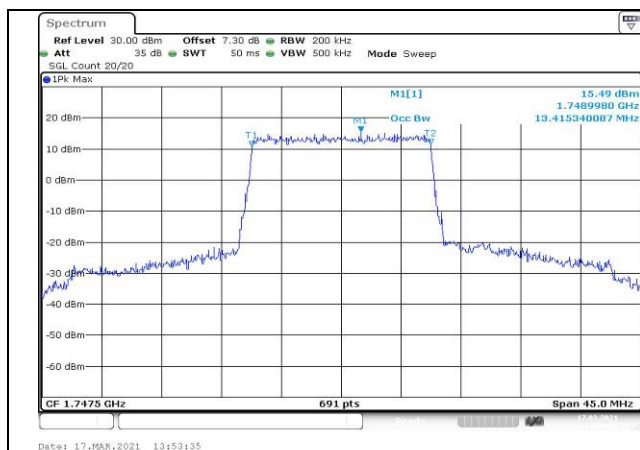


Fig.42



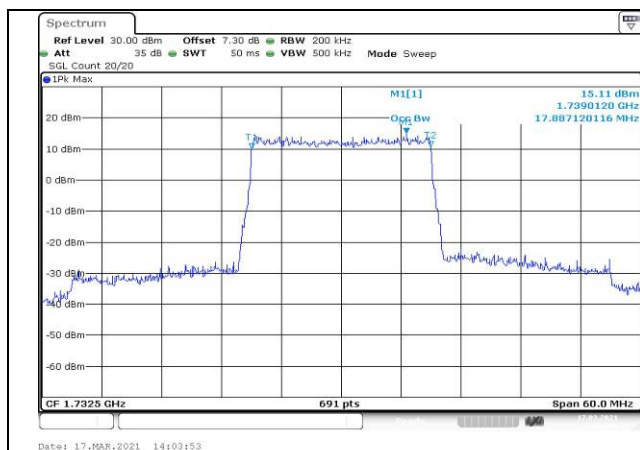


Fig.49

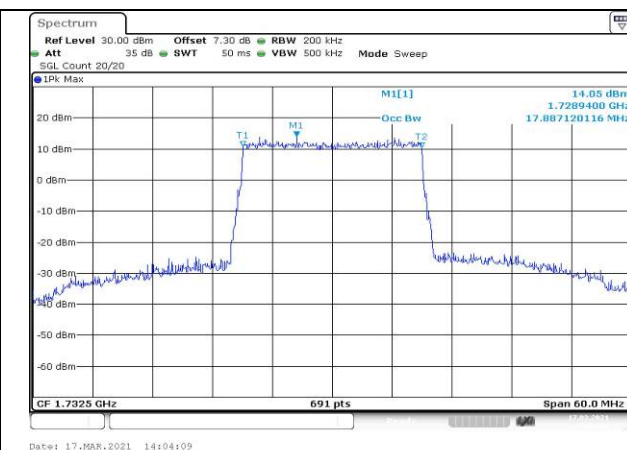


Fig.50

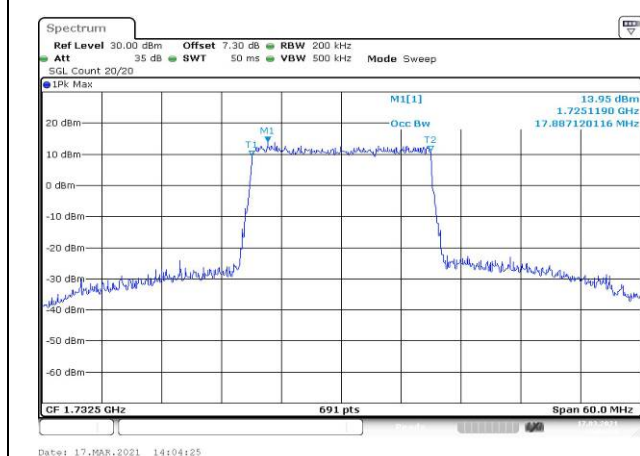


Fig.51

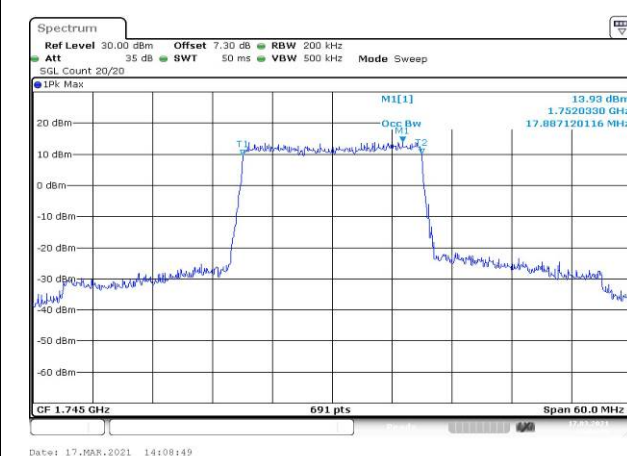


Fig.52

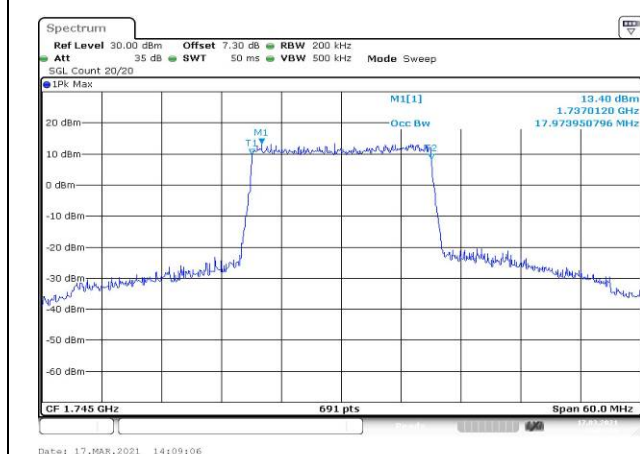


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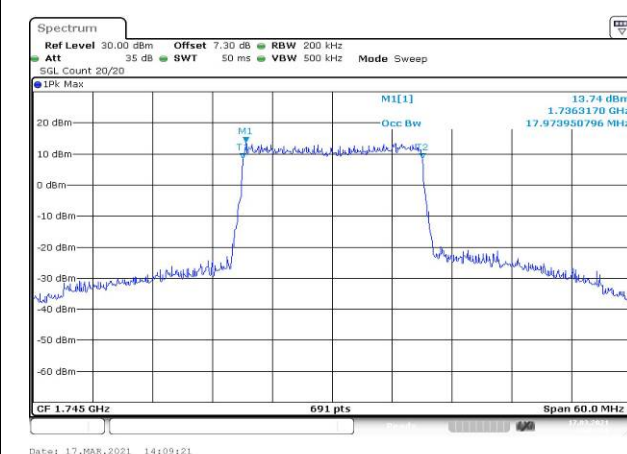


Fig.54

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	1.234	Fig.1	1.234	Fig.2	1.228	Fig.3
	1732.5	20175		6	0	1.234	Fig.4	1.234	Fig.5	1.228	Fig.6
	1754.3	20393		6	0	1.234	Fig.7	1.234	Fig.8	1.228	Fig.9
	1711.5	19965	3	15	0	2.983	Fig.10	2.983	Fig.11	2.970	Fig.12
	1732.5	20175		15	0	2.983	Fig.13	2.983	Fig.14	2.996	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	4.841	Fig.19	4.906	Fig.20	4.819	Fig.21
	1732.5	20175		25	0	4.863	Fig.22	4.906	Fig.23	4.884	Fig.24
	1752.5	20375		25	0	4.863	Fig.25	4.906	Fig.26	4.863	Fig.27
	1715	20000	10	50	0	9.682	Fig.28	9.768	Fig.29	9.768	Fig.30
	1732.5	20175		50	0	9.725	Fig.31	9.682	Fig.32	9.682	Fig.33
	1750	20350		50	0	9.768	Fig.34	9.725	Fig.35	9.768	Fig.36
	1717.5	20025	15	75	0	14.718	Fig.37	14.653	Fig.38	14.718	Fig.39
	1732.5	20175		75	0	14.588	Fig.40	14.718	Fig.41	14.783	Fig.42
	1747.5	20325		75	0	14.848	Fig.43	14.653	Fig.44	14.653	Fig.45
	1720	20050	20	100	0	19.276	Fig.46	19.363	Fig.47	19.450	Fig.48
	1732.5	20175		100	0	19.450	Fig.49	19.450	Fig.50	19.537	Fig.51
	1745	20300		100	0	19.363	Fig.52	19.363	Fig.53	19.276	Fig.54

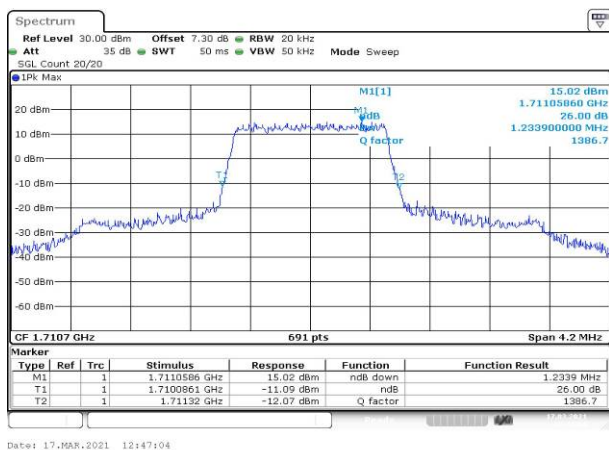


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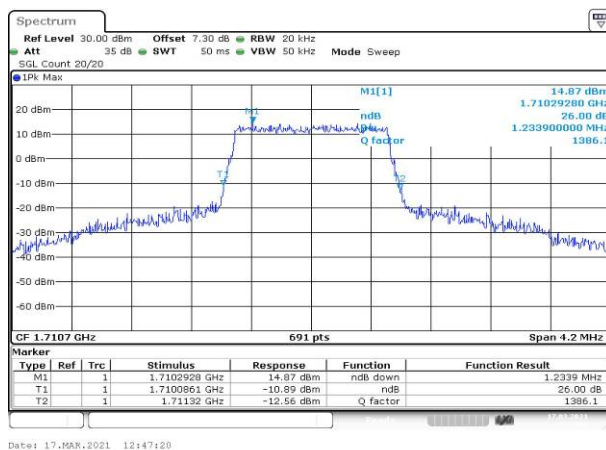


Fig.2

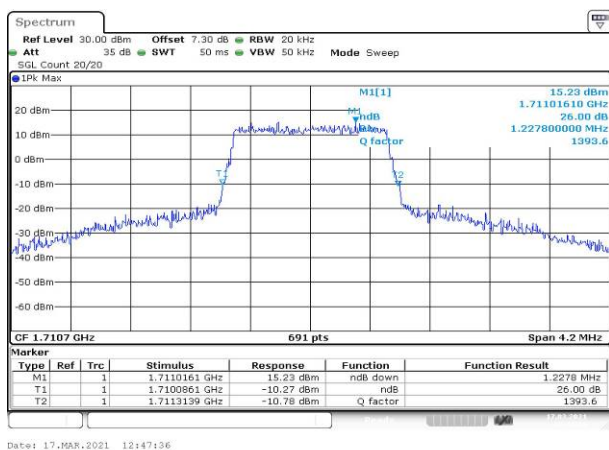


Fig.3

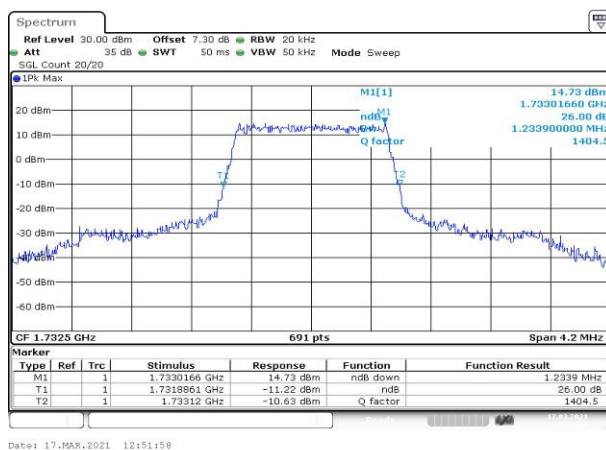


Fig.4

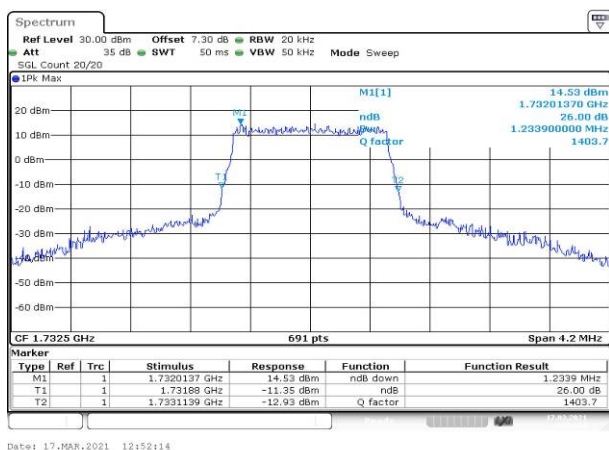


Fig.5

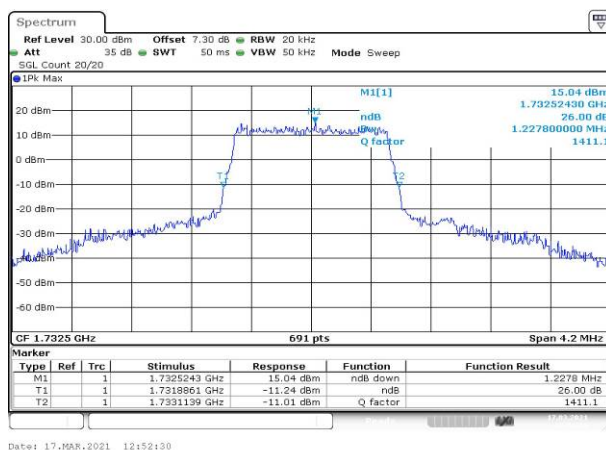


Fig.6

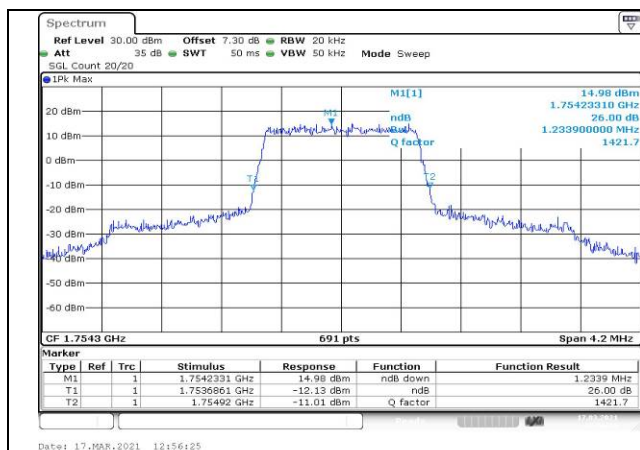


Fig.7

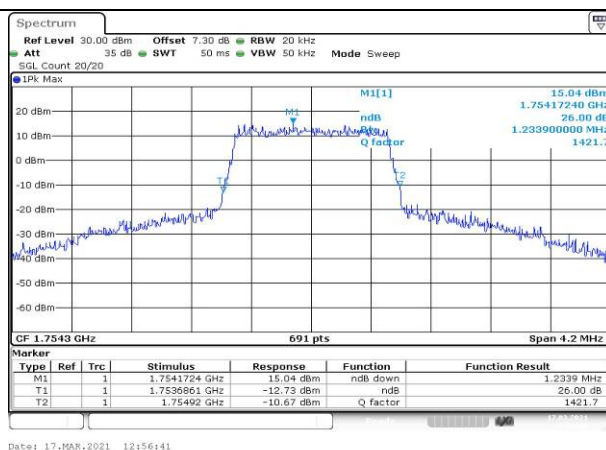


Fig.8

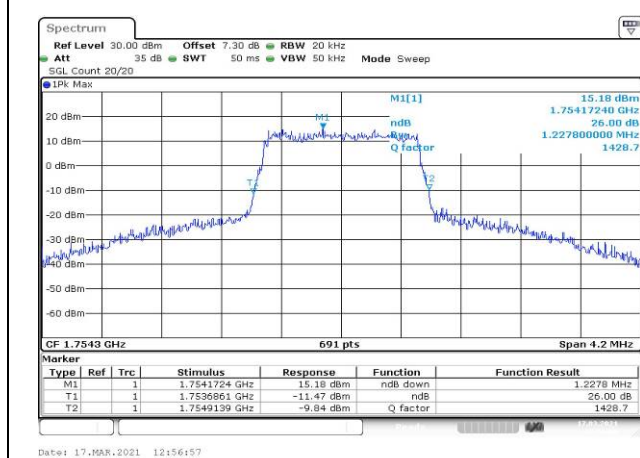


Fig.9

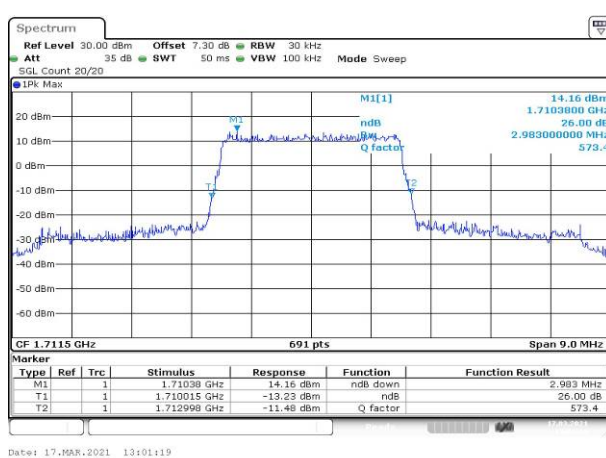


Fig.10

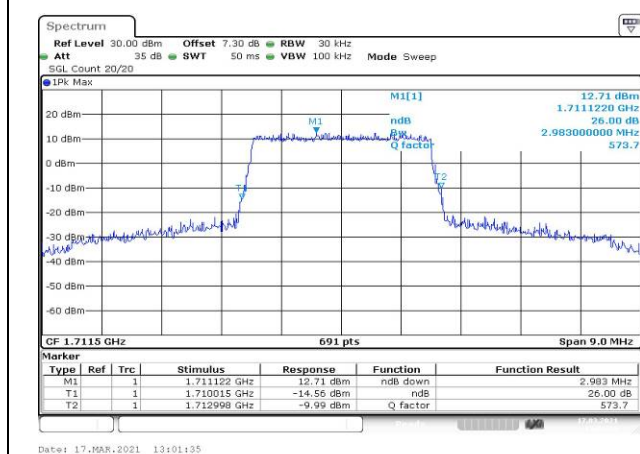


Fig.11

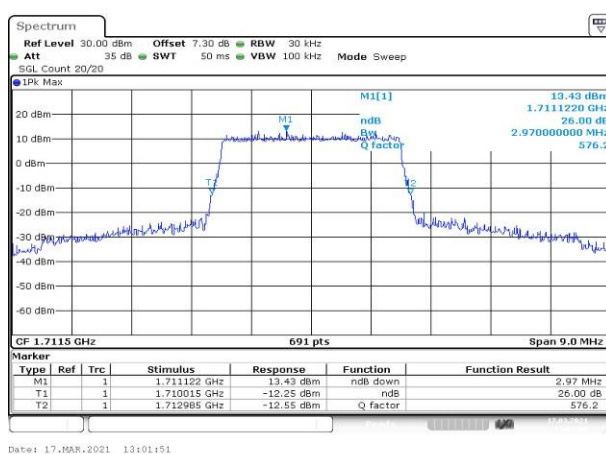
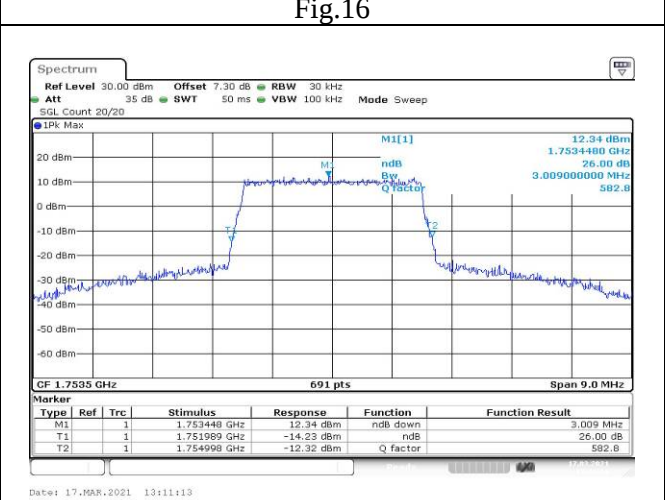
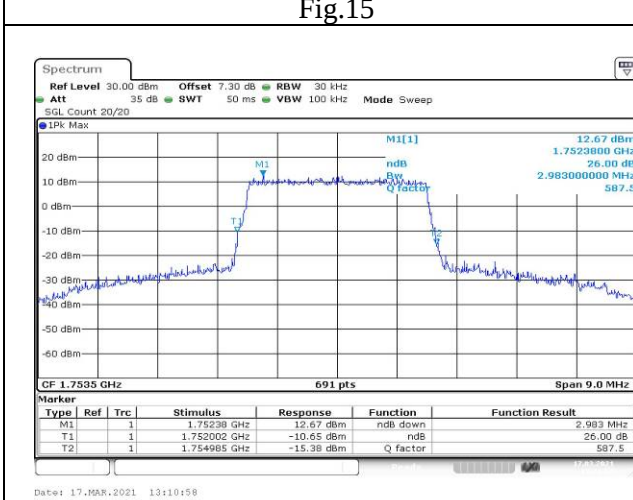
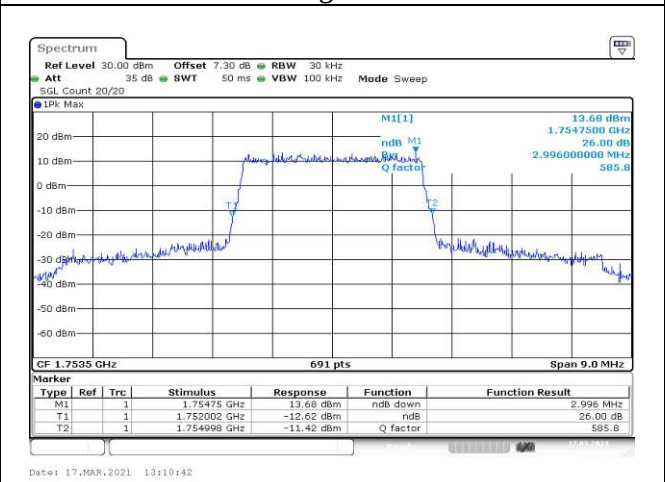
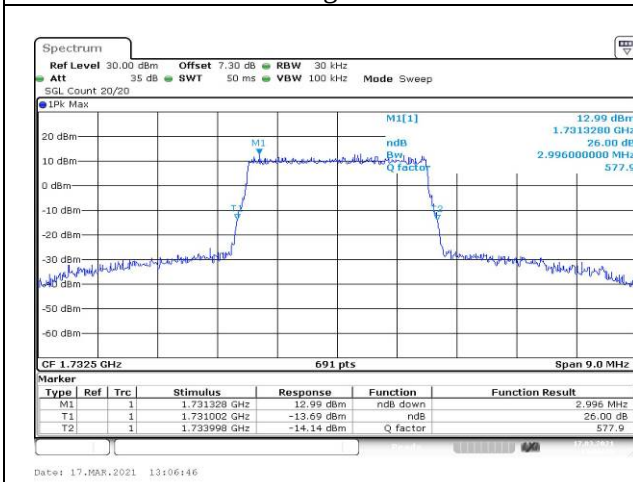
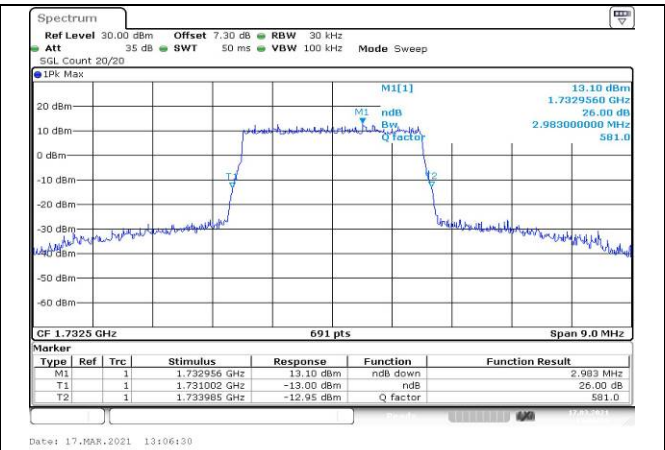
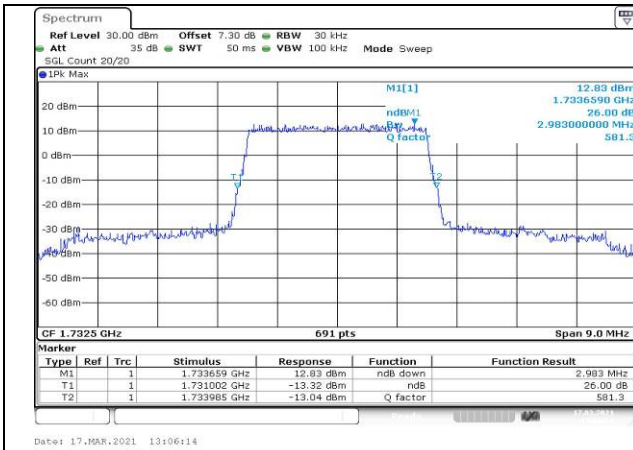
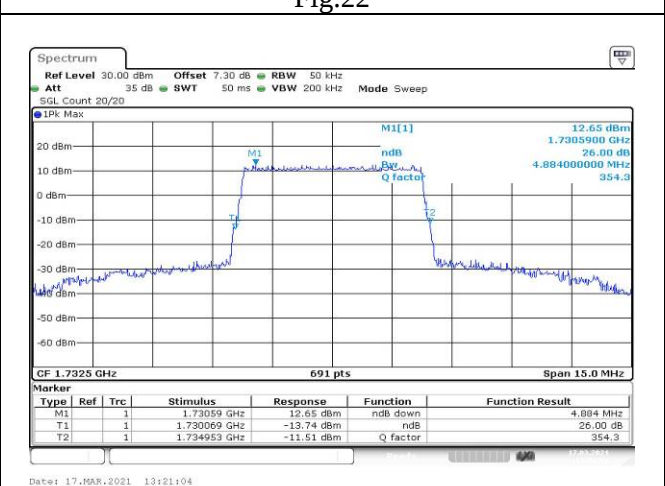
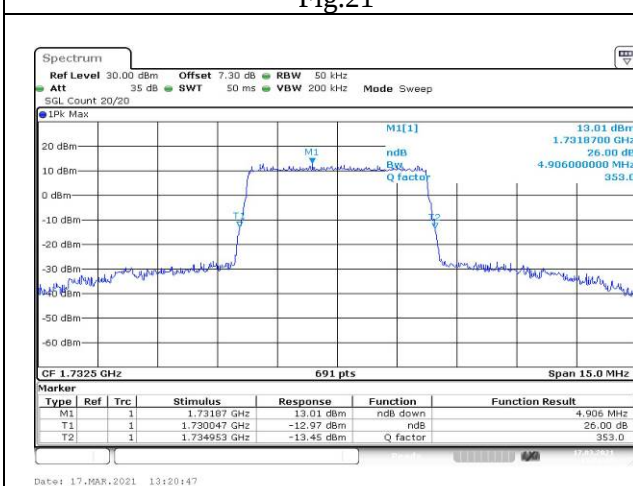
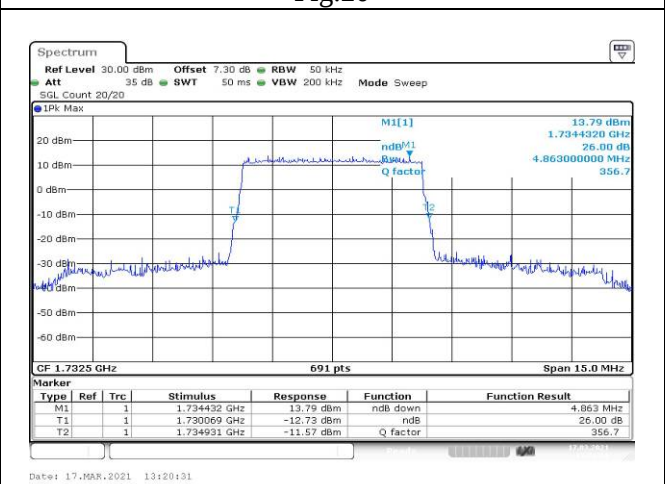
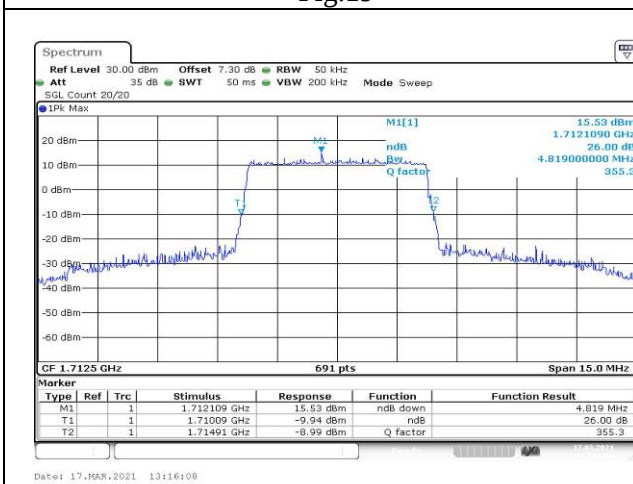
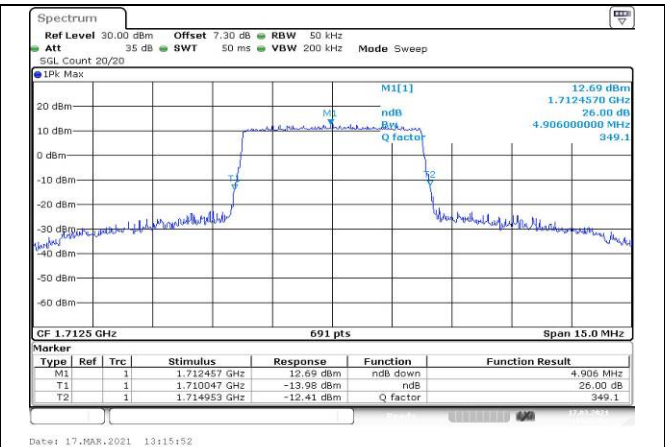
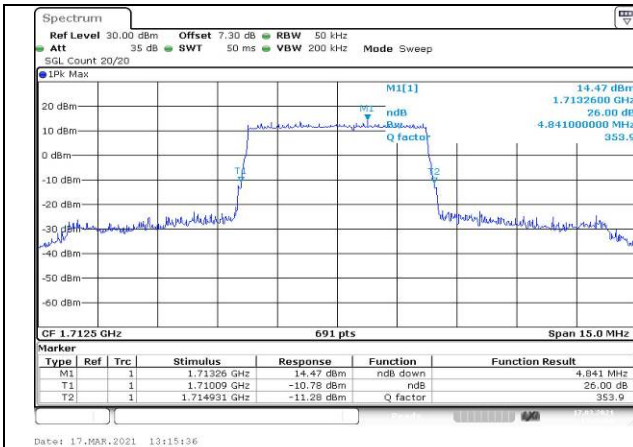


Fig.12





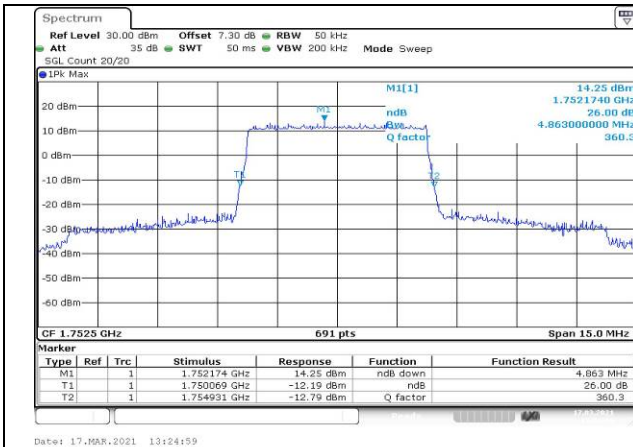


Fig.25

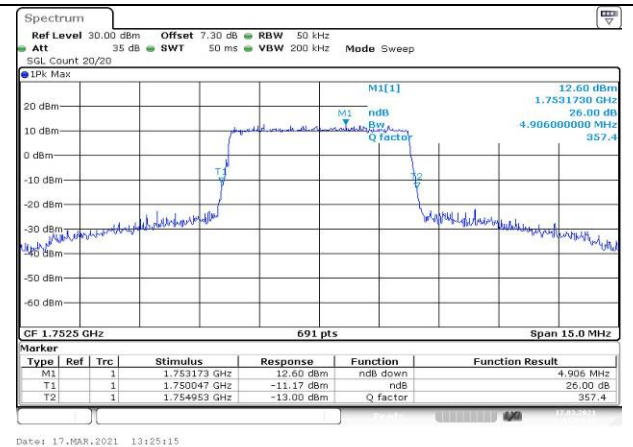


Fig.26

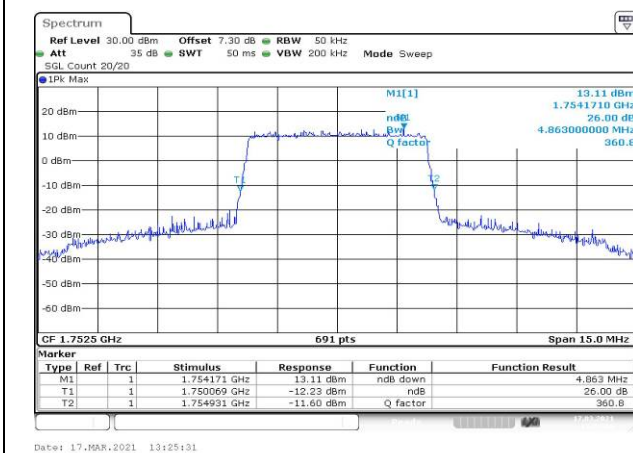


Fig.27

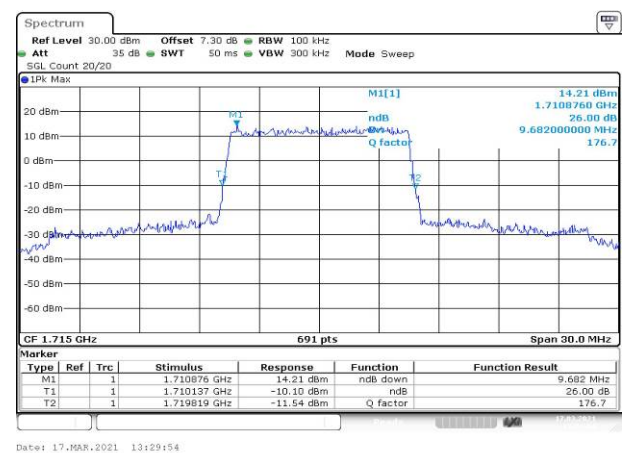


Fig.28

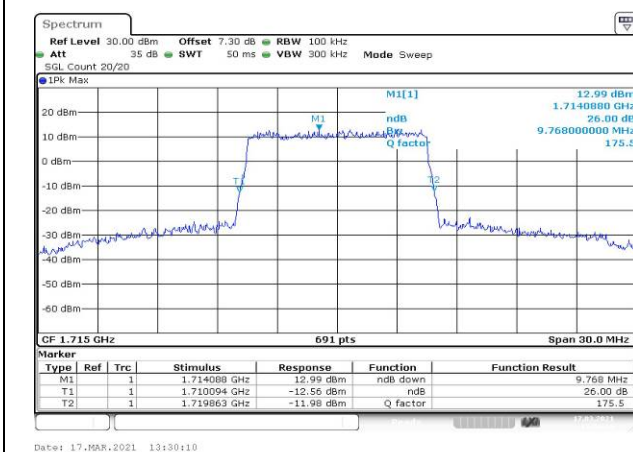


Fig.29

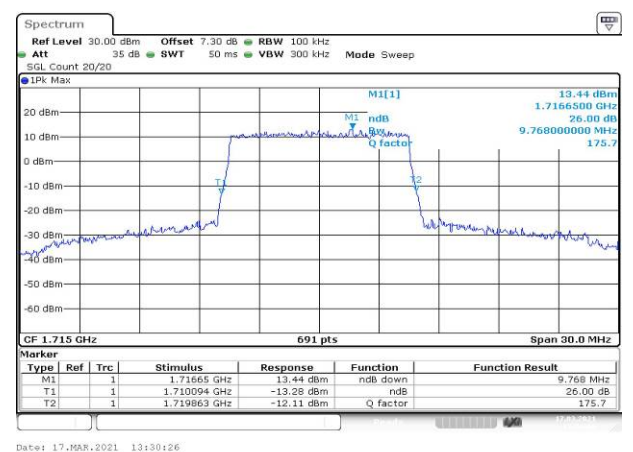


Fig.30

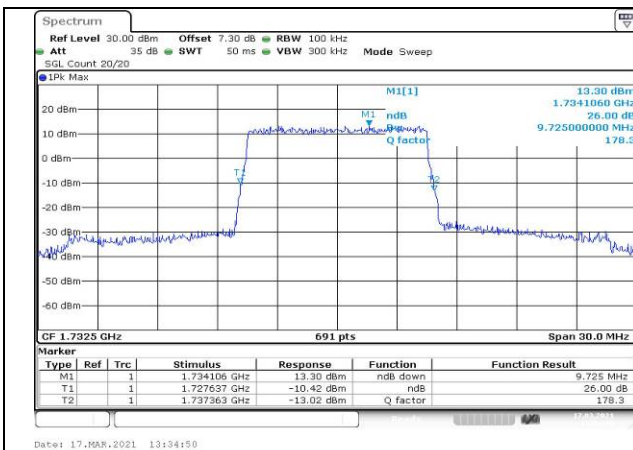


Fig.31

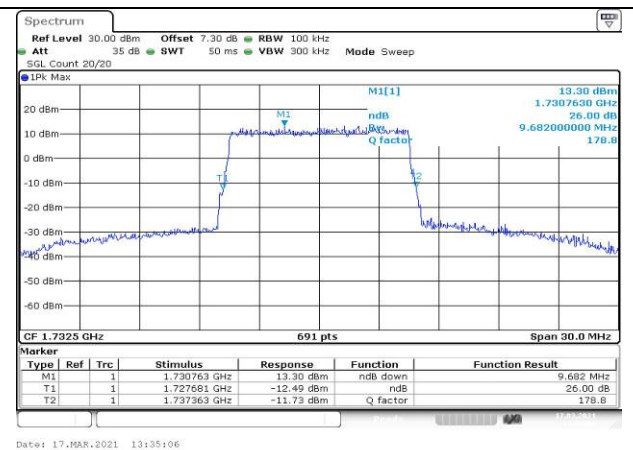


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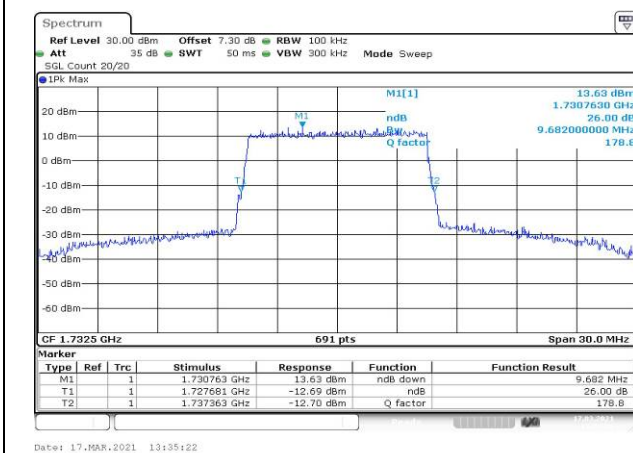


Fig.33

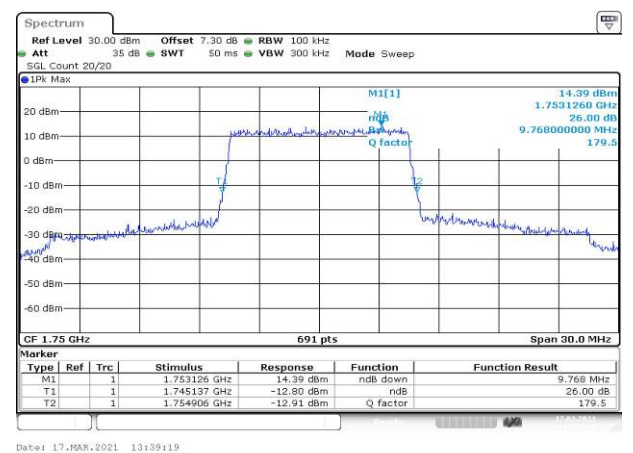


Fig.34

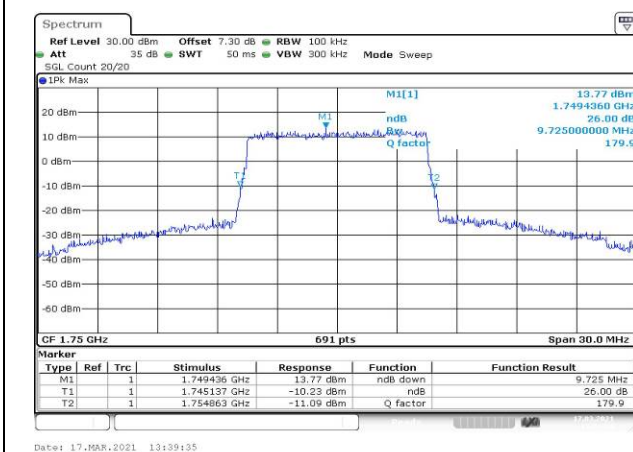


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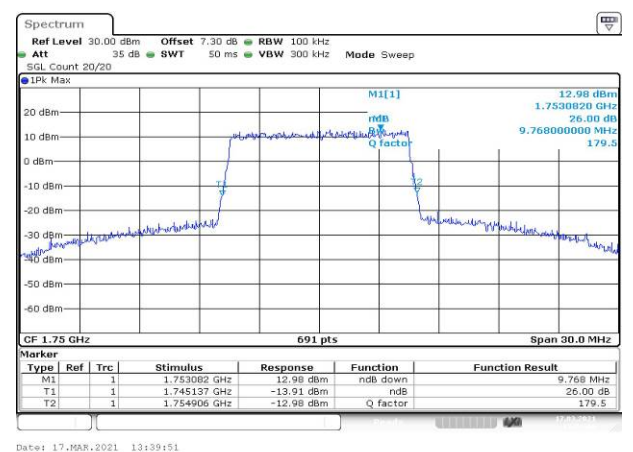


Fig.36

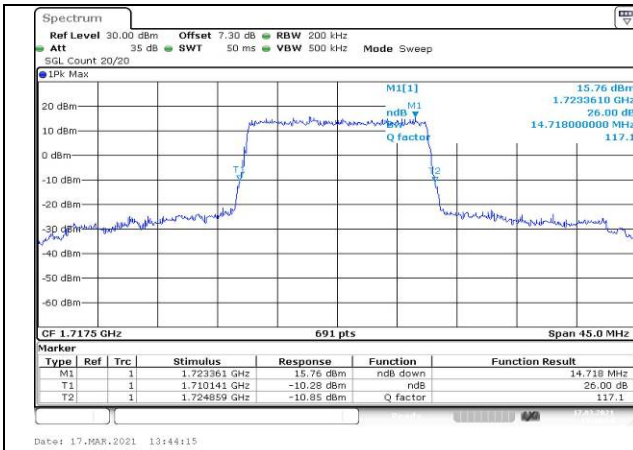


Fig.37

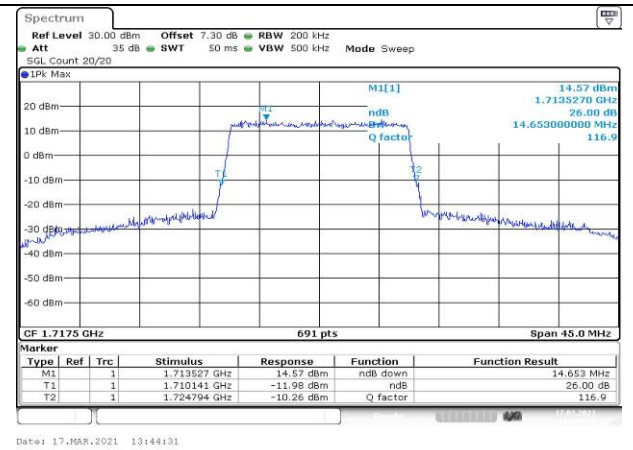


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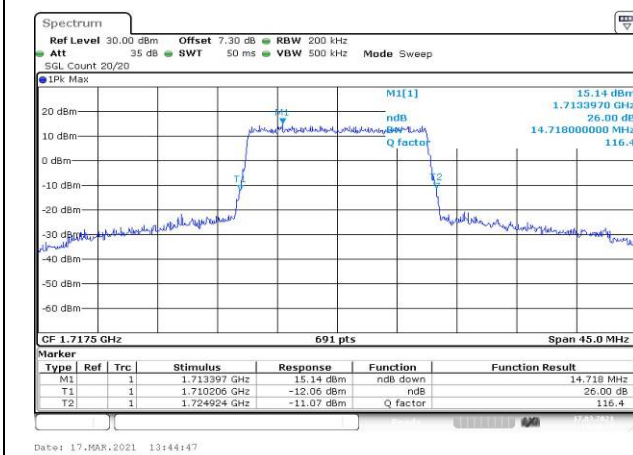


Fig.39

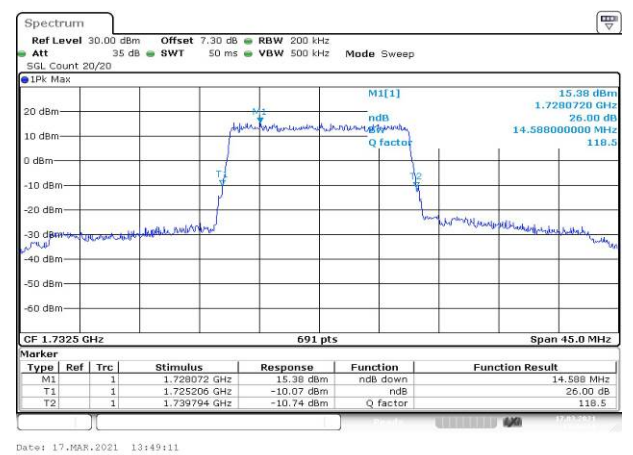


Fig.40

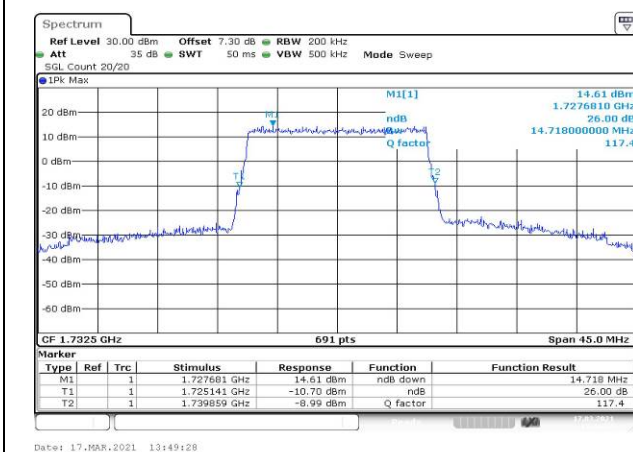


Fig.41

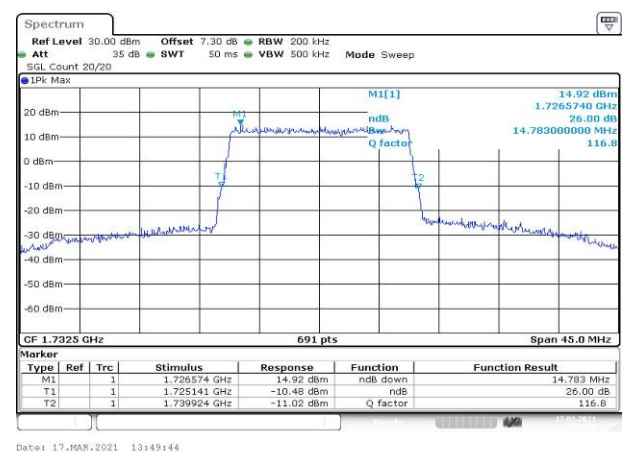


Fig.42