

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 4

1 RF Power Output

Rx Power Output							
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1710.7	19957	1.4	1	0	22.95	
				1	3	22.97	
				1	5	22.92	
				3	0	23.04	
				3	1	22.96	
				3	3	22.94	
	6	0		21.88			
	1732.5	20175		1	0	22.84	
				1	3	22.96	
				1	5	23.00	
				3	0	22.89	
				3	1	22.89	
				3	3	22.88	
	6	0		21.88			
	1754.3	20393		1	0	23.26	
				1	3	23.25	
				1	5	23.24	
				3	0	23.23	
				3	1	23.14	
				3	3	23.15	
	6	0		22.18			
	16QAM	1710.7		19957	1	0	22.65
					1	3	22.07
					1	5	22.08
3			0		21.85		
3			1		21.91		
3			3		21.87		
6		0	20.90				
1732.5		20175	1	0	22.02		
			1	3	22.08		
			1	5	22.60		
			3	0	21.67		
			3	1	21.71		
			3	3	21.71		
6		0	21.02				
1754.3		20393	1	0	21.93		
			1	3	21.97		
			1	5	21.97		
			3	0	21.98		
			3	1	21.95		
			3	3	21.94		
6		0	21.30				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1710.7	19957	1.4	1	0	21.10
				1	3	21.10
				1	5	21.10
				3	0	21.13
				3	1	21.10
				3	3	21.11
				6	0	21.10
	1732.5	20175		1	0	21.03
				1	3	21.04
				1	5	21.04
				3	0	21.04
				3	1	21.04
				3	3	21.04
				6	0	21.17
	1754.3	20393		1	0	21.33
				1	3	21.31
				1	5	21.39
				3	0	21.33
				3	1	21.39
				3	3	21.58
				6	0	21.39

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	19965	3	1	0	23.10
				1	8	23.02
				1	14	23.09
				8	0	22.08
				8	4	22.11
				8	7	22.22
				15	0	22.11
	1732.5	20175		1	0	22.77
				1	8	22.85
				1	14	22.93
				8	0	21.92
				8	4	21.93
				8	7	21.98
				15	0	21.96
	1753.5	20385		1	0	23.30
				1	8	23.31
				1	14	23.30
				8	0	22.13
				8	4	22.14
				8	7	22.12
				15	0	22.13
16QAM	1711.5	19965	1	0	22.57	
			1	8	22.43	
			1	14	22.43	
			8	0	21.49	
			8	4	21.37	
			8	7	21.38	
			15	0	21.27	
	1732.5	20175	1	0	22.62	
			1	8	22.68	
			1	14	22.68	
			8	0	20.80	
			8	4	21.01	
			8	7	21.03	
			15	0	20.89	
	1753.5	20385	1	0	22.26	
			1	8	22.32	
			1	14	22.20	
			8	0	21.42	
			8	4	21.63	
			8	7	21.34	
			15	0	21.31	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1711.5	19965	3	1	0	21.27
				1	8	21.26
				1	14	21.26
				8	0	21.26
				8	4	21.23
				8	7	21.25
				15	0	21.24
	1732.5	20175		1	0	20.90
				1	8	20.89
				1	14	20.89
				8	0	20.93
				8	4	20.84
				8	7	20.97
				15	0	20.96
	1753.5	20385		1	0	21.26
				1	8	21.21
				1	14	21.23
				8	0	21.20
				8	4	21.13
				8	7	21.27
				15	0	21.10

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1712.5	19975	5	1	0	23.05	
				1	12	23.07	
				1	24	23.05	
				12	0	22.22	
				12	7	22.13	
				12	13	22.13	
				25	0	22.12	
	1732.5	20175		1	0	22.94	
				1	12	22.99	
				1	24	22.98	
				12	0	21.88	
				12	7	21.90	
				12	13	21.89	
				25	0	21.86	
	1752.5	20375		1	0	23.05	
				1	12	23.05	
				1	24	23.04	
				12	0	22.21	
				12	7	22.20	
				12	13	22.20	
				25	0	22.21	
	16QAM	1712.5		19975	1	0	21.48
					1	12	21.42
					1	24	21.42
12					0	21.35	
12					7	21.27	
12					13	21.28	
25					0	21.35	
1732.5		20175		1	0	22.13	
				1	12	21.96	
				1	24	21.97	
				12	0	20.85	
				12	7	20.96	
				12	13	20.97	
				25	0	21.01	
1752.5		20375		1	0	22.15	
				1	12	22.16	
				1	24	21.80	
				12	0	20.99	
				12	7	21.00	
				12	13	20.97	
				25	0	21.09	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1712.5	19975	5	1	0	21.32
				1	12	21.35
				1	24	21.36
				12	0	21.36
				12	7	21.36
				12	13	21.38
				25	0	21.37
	1732.5	20175		1	0	20.89
				1	12	20.90
				1	24	20.90
				12	0	20.90
				12	7	20.90
				12	13	21.02
				25	0	21.02
	1752.5	20375		1	0	21.09
				1	12	21.10
				1	24	21.10
				12	0	21.10
				12	7	21.09
				12	13	21.09
				25	0	21.09

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	1715	20000	10	1	0	23.18	
				1	25	22.83	
				1	49	22.81	
				25	0	22.22	
				25	12	21.92	
				25	25	21.92	
				50	0	22.14	
	1732.5	20175		1	0	22.93	
				1	25	23.02	
				1	49	23.01	
				25	0	21.83	
				25	12	22.02	
				25	25	21.89	
				50	0	21.95	
	1750	20350		1	0	23.18	
				1	25	23.28	
				1	49	23.26	
				25	0	22.47	
				25	12	22.16	
				25	25	20.04	
				50	0	20.21	
	16QAM	1715		20000	1	0	22.47
					1	25	22.20
					1	49	22.18
25					0	21.37	
25					12	21.10	
25					25	21.12	
50					0	21.24	
1732.5		20175		1	0	22.69	
				1	25	22.80	
			1	49	22.68		
			25	0	21.01		
			25	12	21.07		
			25	25	21.08		
			50	0	21.13		
1750		20350	1	0	19.72		
			1	25	19.72		
			1	49	19.72		
			25	0	21.65		
			25	12	21.36		
			25	25	21.37		
			50	0	21.44		

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1715	20000	10	1	0	21.24
				1	25	21.23
				1	49	21.24
				25	0	21.24
				25	12	21.25
				25	25	21.25
				50	0	21.25
	1732.5	20175		1	0	21.13
				1	25	21.25
				1	49	20.93
				25	0	20.93
				25	12	20.93
				25	25	20.93
				50	0	21.13
	1750	20350		1	0	21.36
				1	25	21.37
				1	49	21.39
				25	0	21.40
				25	12	21.41
				25	25	21.42
				50	0	21.43

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	20025	15	1	0	23.17
				1	37	22.78
				1	74	22.76
				36	0	22.21
				36	29	21.93
				36	30	21.93
				75	0	21.89
	1732.5	20175		1	0	22.86
				1	37	23.04
				1	74	23.03
				36	0	21.92
				36	29	21.91
				36	30	21.92
				75	0	21.87
	1747.5	20325		1	0	23.12
				1	37	23.16
				1	74	23.29
				36	0	22.12
				36	29	22.13
				36	30	22.12
				75	0	22.42
16QAM	1717.5	20025	1	0	22.47	
			1	37	22.15	
			1	74	22.15	
			36	0	21.31	
			36	29	20.98	
			36	30	21.05	
			75	0	21.12	
	1732.5	20175	1	0	22.08	
			1	37	22.11	
			1	74	22.71	
			36	0	20.99	
			36	29	20.93	
			36	30	20.99	
			75	0	21.03	
	1747.5	20325	1	0	22.54	
			1	37	22.59	
			1	74	22.59	
			36	0	21.12	
			36	29	21.18	
			36	30	21.19	
			75	0	21.40	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1717.5	20025	15	1	0	21.12
				1	37	20.95
				1	74	20.96
				36	0	20.89
				36	29	20.91
				36	30	20.92
				75	0	21.13
	1732.5	20175		1	0	20.77
				1	37	21.04
				1	74	21.04
				36	0	21.12
				36	29	21.04
				36	30	21.08
				75	0	21.04
	1747.5	20325		1	0	21.41
				1	37	21.40
				1	74	21.52
				36	0	21.51
				36	29	21.51
				36	30	21.40
				75	0	21.40

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	20050	20	1	0	23.20
				1	49	22.89
				1	99	22.82
				50	0	22.06
				50	24	21.82
				50	50	21.81
				100	0	21.93
	1732.5	20175		1	0	23.06
				1	49	22.99
				1	99	23.00
				50	0	21.90
				50	24	21.92
				50	50	21.92
				100	0	21.97
	1745	20300		1	0	23.00
				1	49	23.22
				1	99	23.16
				50	0	22.06
				50	24	22.36
				50	50	22.36
				100	0	22.06
16QAM	1720	20050	1	0	22.24	
			1	49	21.78	
			1	99	21.84	
			50	0	21.33	
			50	24	21.02	
			50	50	21.02	
			100	0	20.98	
	1732.5	20175	1	0	22.41	
			1	49	22.55	
			1	99	22.46	
			50	0	21.03	
			50	24	21.10	
			50	50	21.11	
			100	0	21.02	
	1745	20300	1	0	22.50	
			1	49	22.74	
			1	99	22.71	
			50	0	21.05	
			50	24	21.36	
			50	50	21.36	
			100	0	21.24	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1720	20050	20	1	0	20.99
				1	49	20.98
				1	99	20.98
				50	0	20.98
				50	24	20.97
				50	50	20.99
				100	0	20.92
	1732.5	20175		1	0	21.02
				1	49	21.02
				1	99	21.02
				50	0	21.02
				50	24	21.02
				50	50	21.02
				100	0	21.03
	1745	20300		1	0	21.24
				1	49	21.24
				1	99	21.24
				50	0	21.24
				50	24	21.24
				50	50	21.23
				100	0	21.24

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	1.088	Fig.4	1.082	Fig.5	1.082	Fig.6
	1754.3	20393		6	0	1.088	Fig.7	1.088	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	2.696	Fig.15
	1753.5	20385		15	0	2.696	Fig.16	2.696	Fig.17	2.709	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	13.480	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

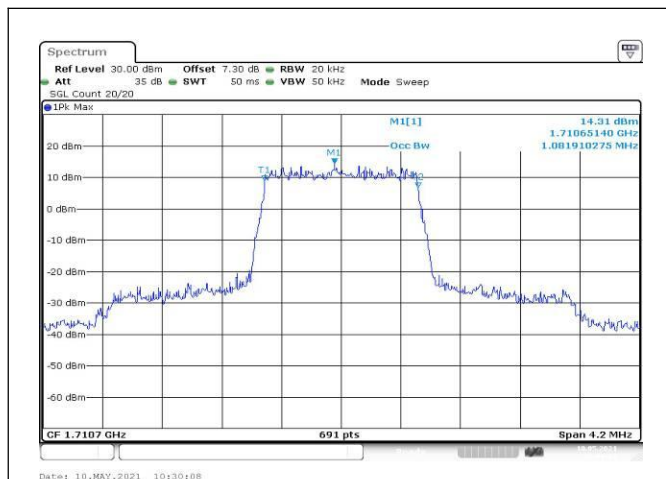


Fig.1

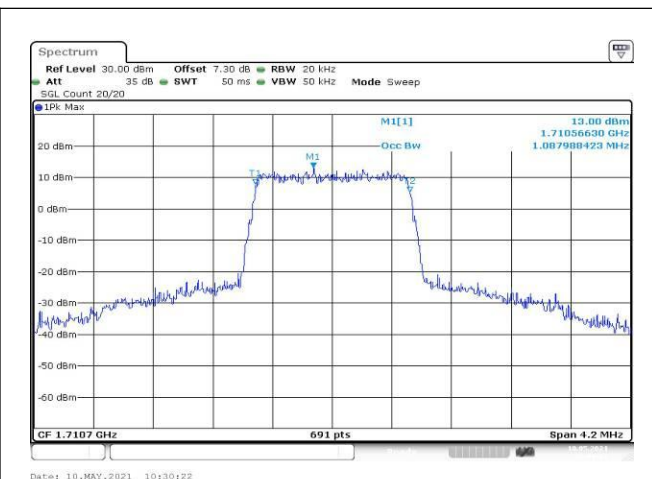


Fig.2

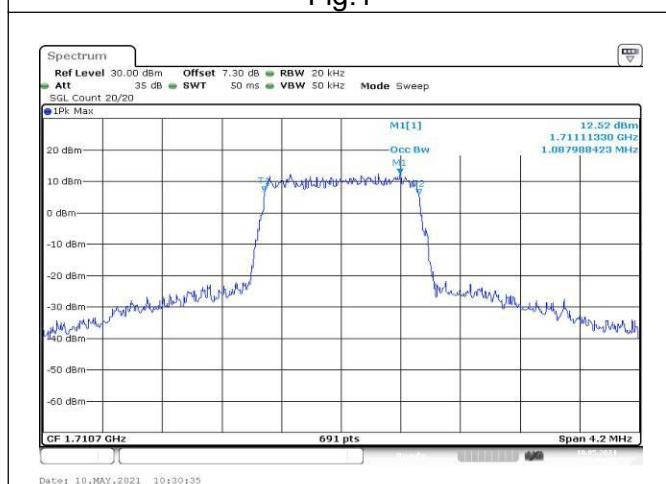


Fig.3

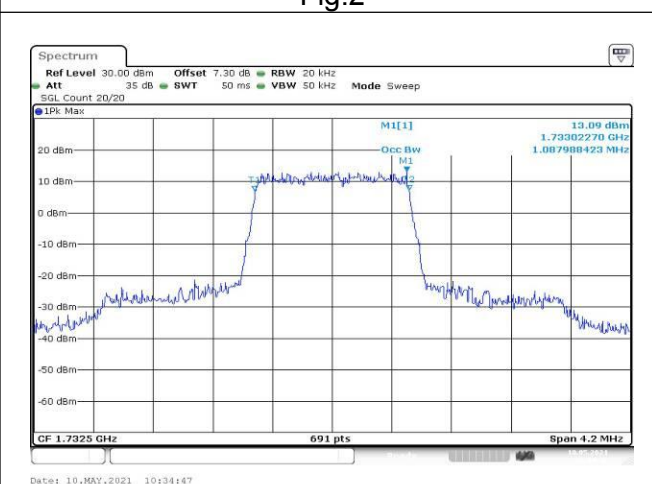


Fig.4

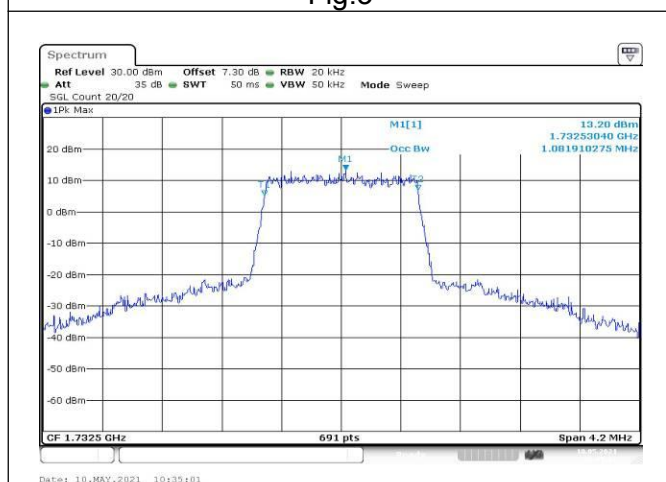


Fig.5

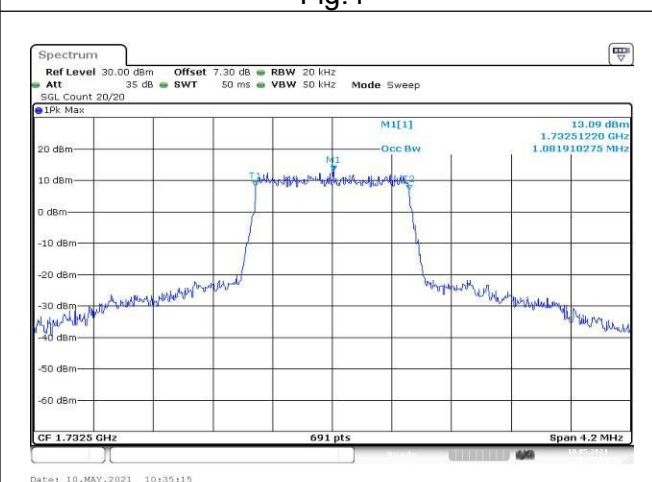


Fig.6

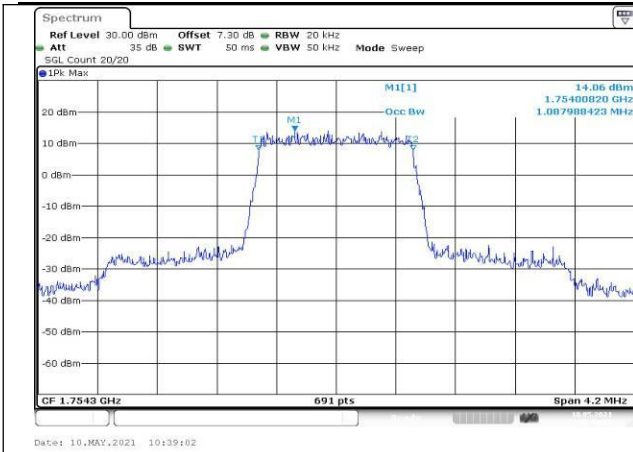


Fig.7

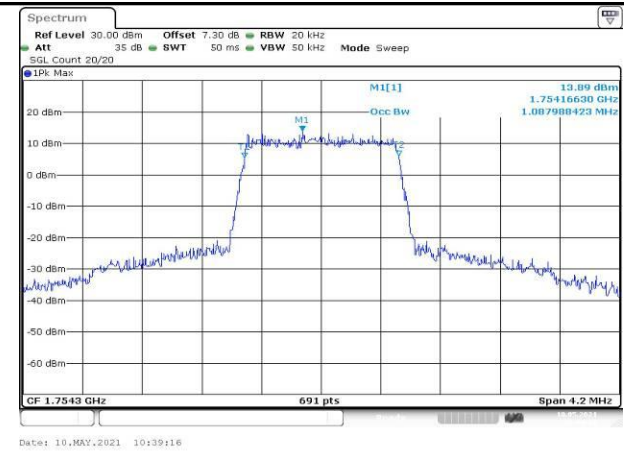


Fig.8

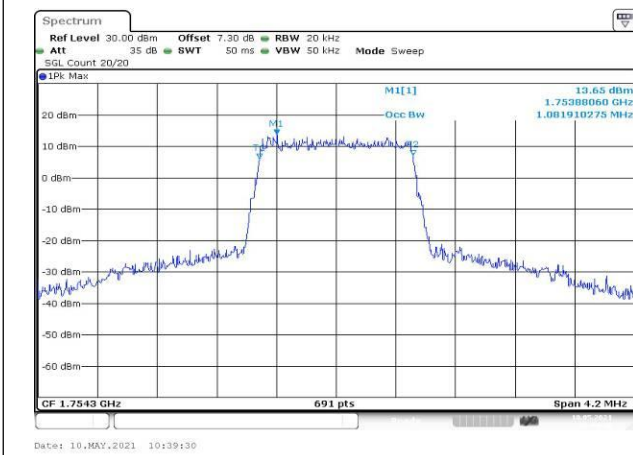


Fig.9

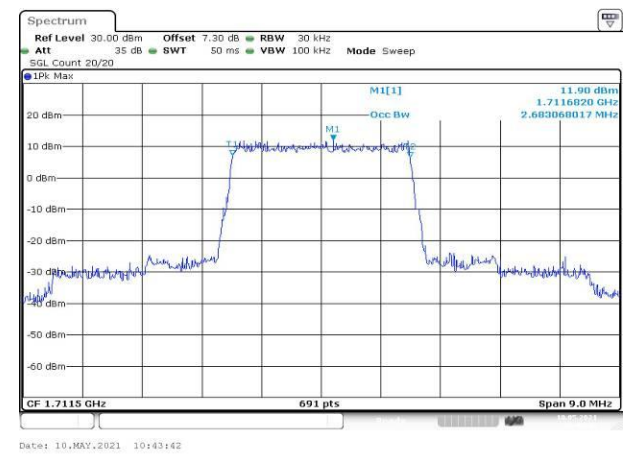


Fig.10

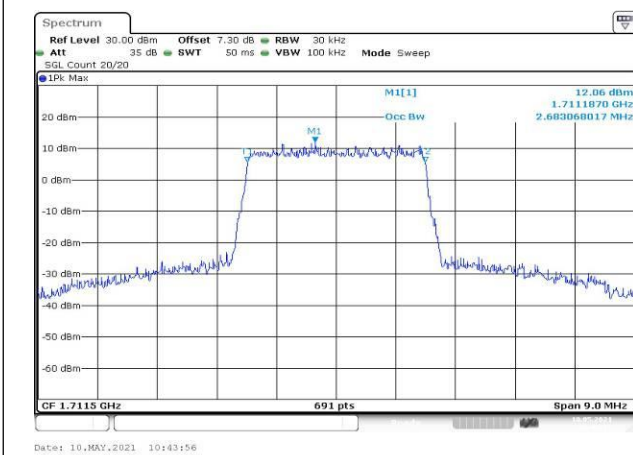


Fig.11

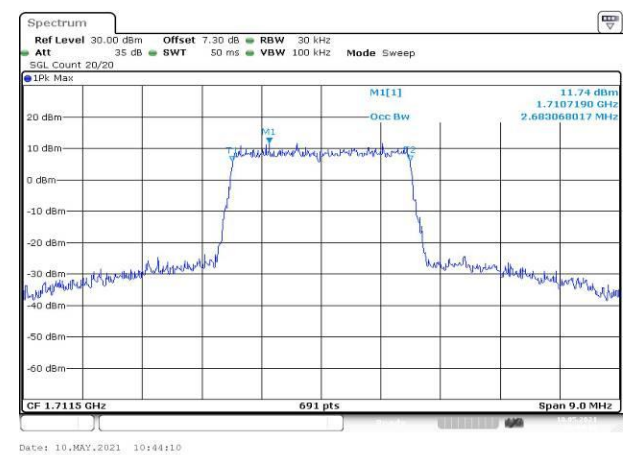
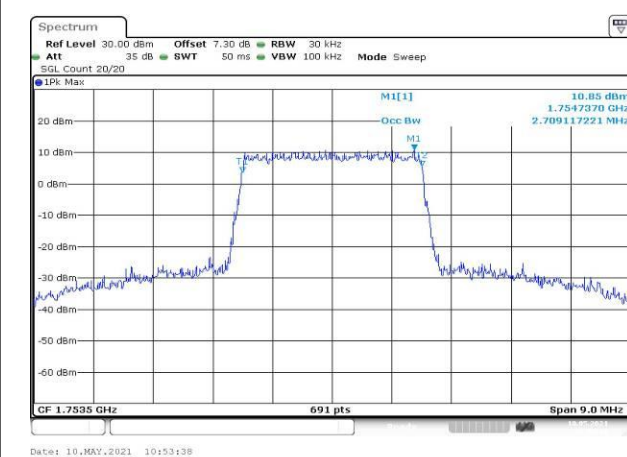
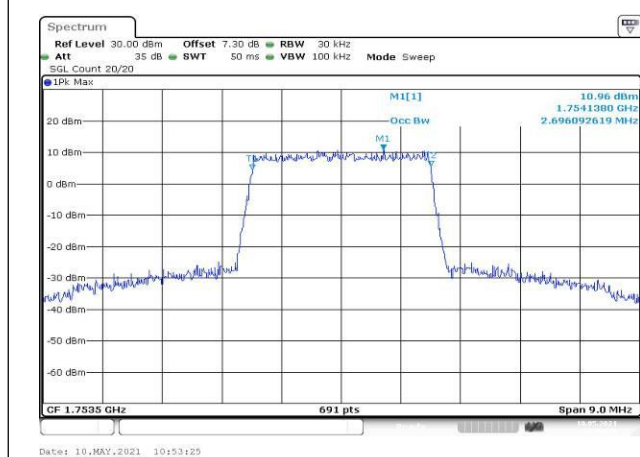
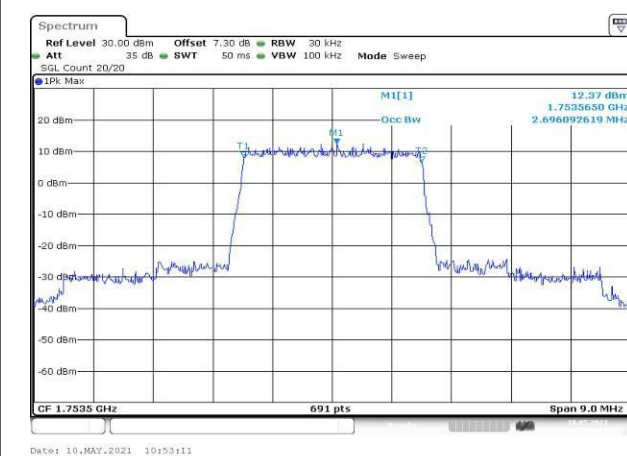
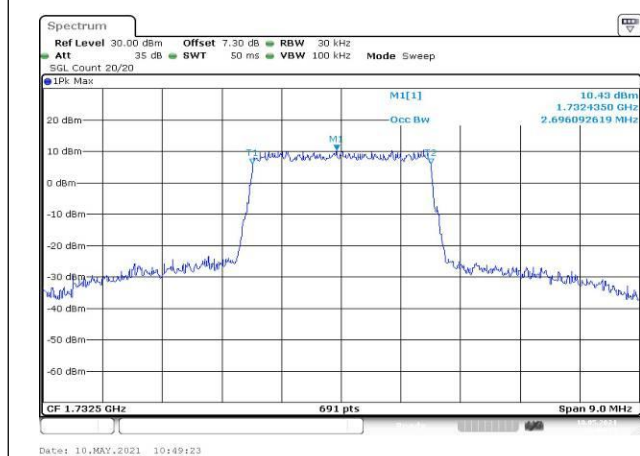
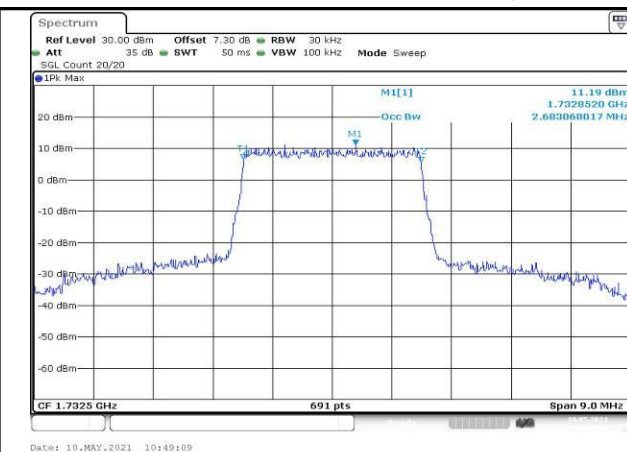
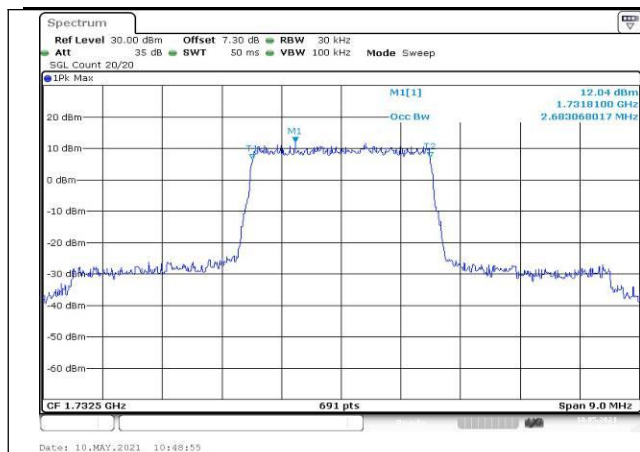
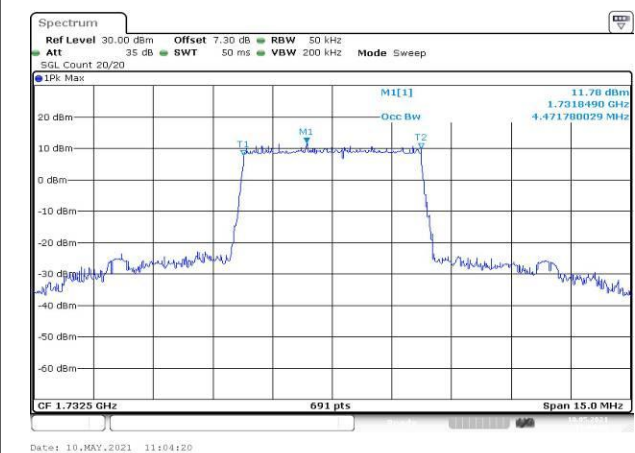
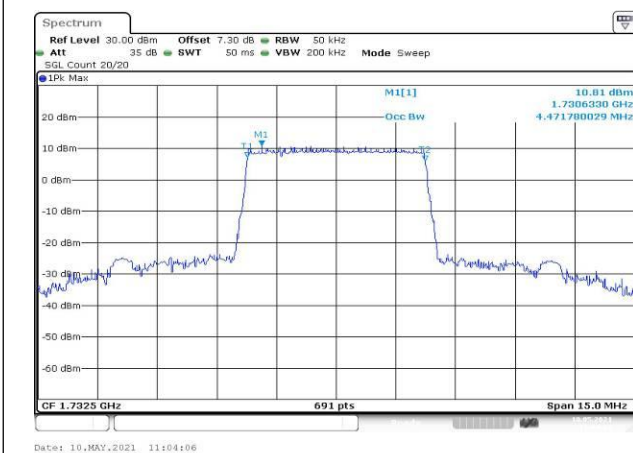
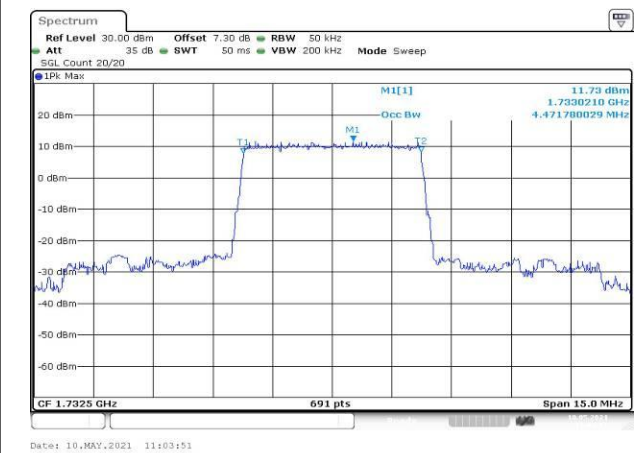
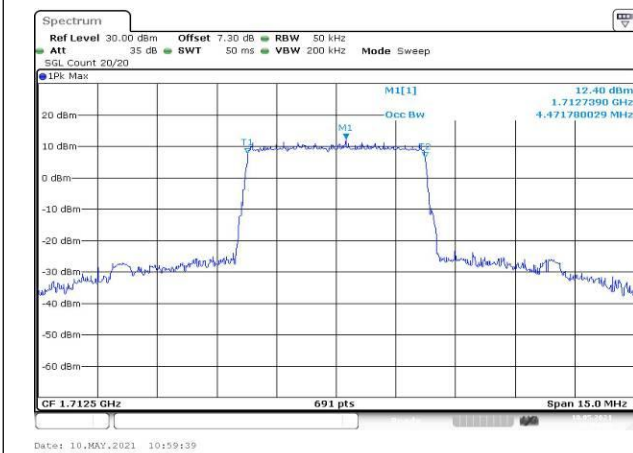
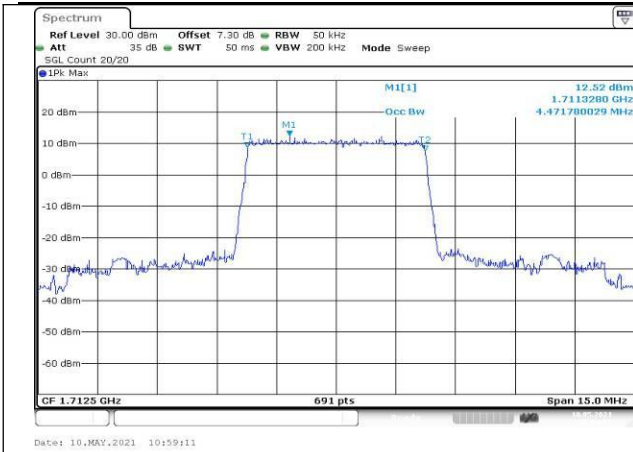


Fig.12





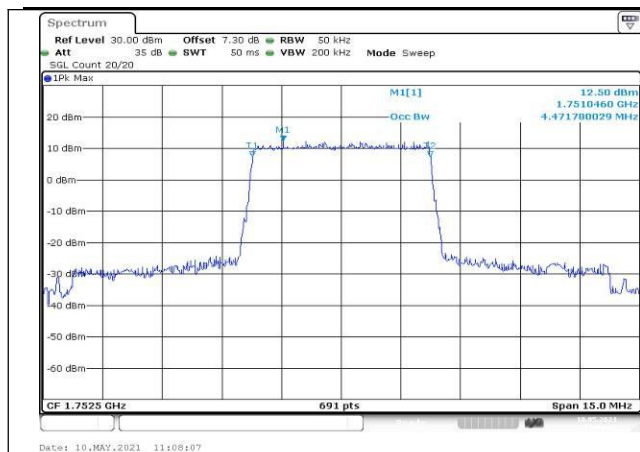


Fig.25

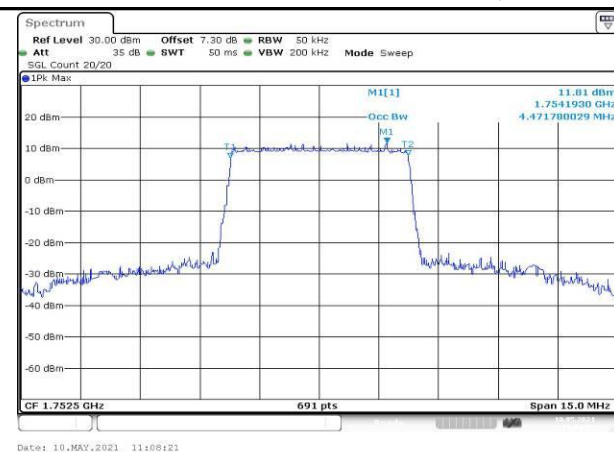


Fig.26

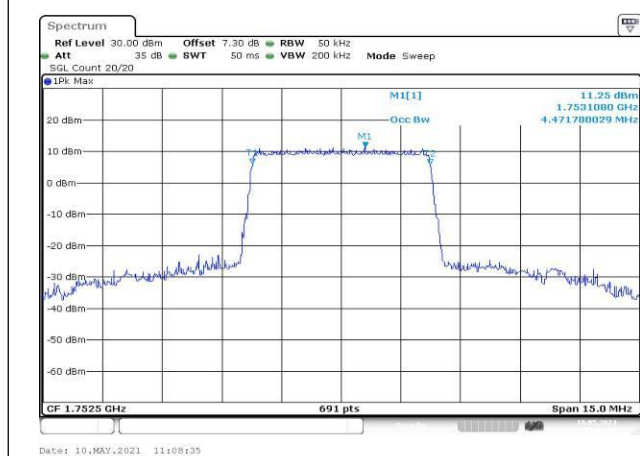


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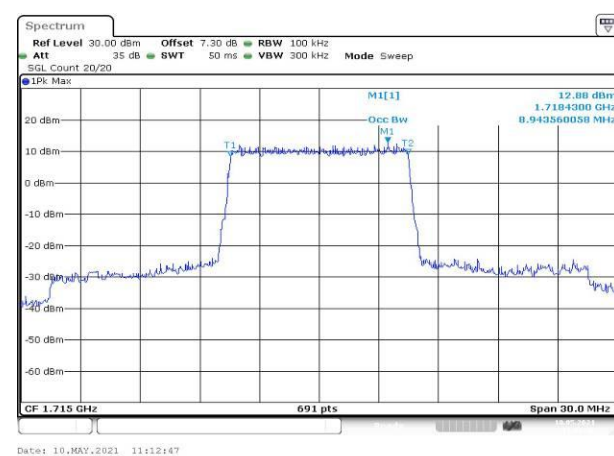


Fig.28

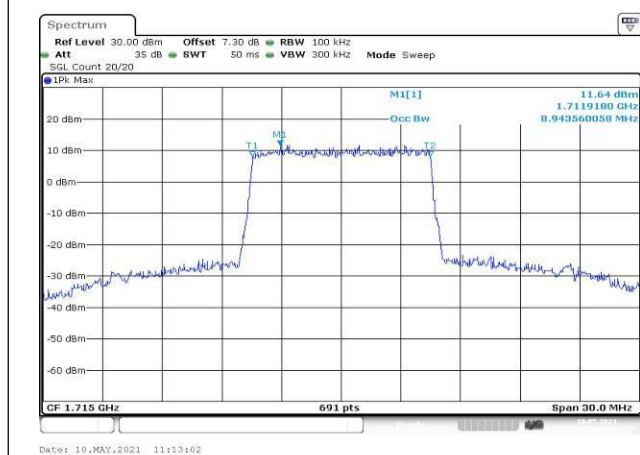


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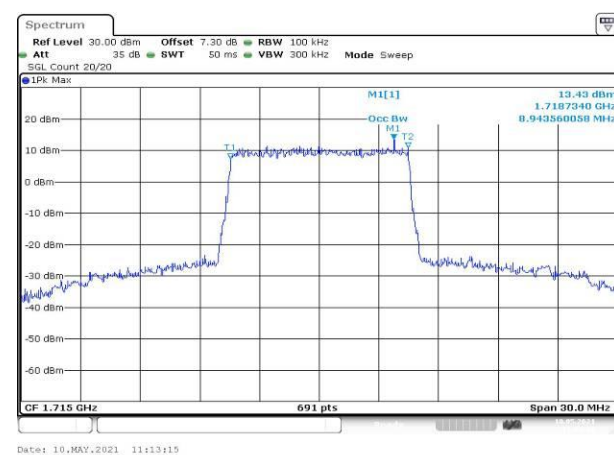


Fig.30

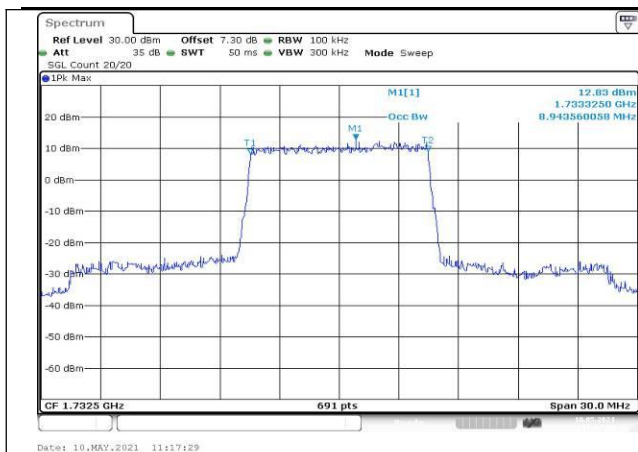


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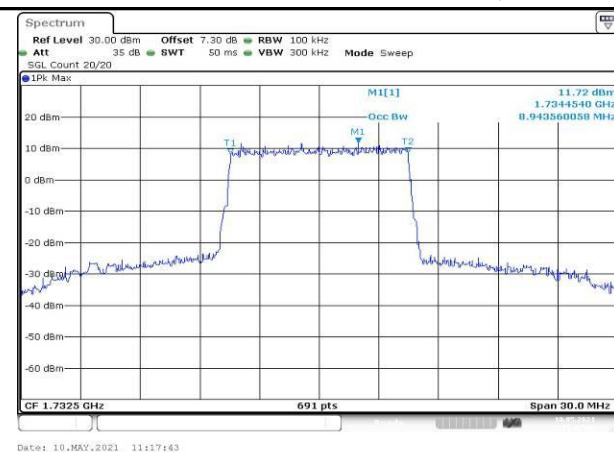


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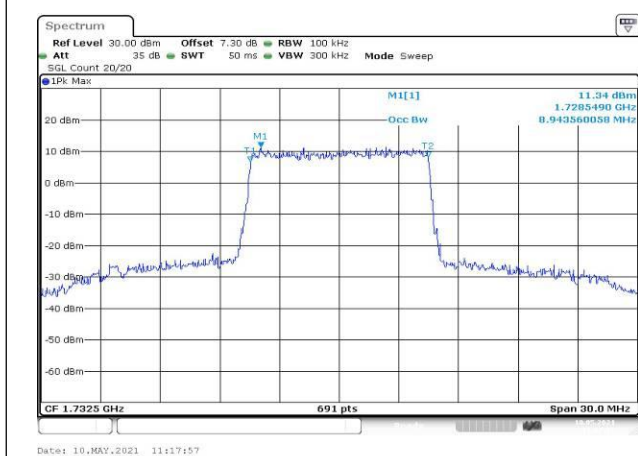


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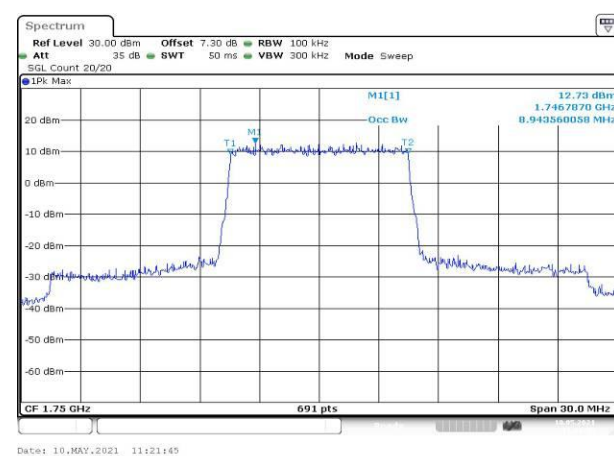


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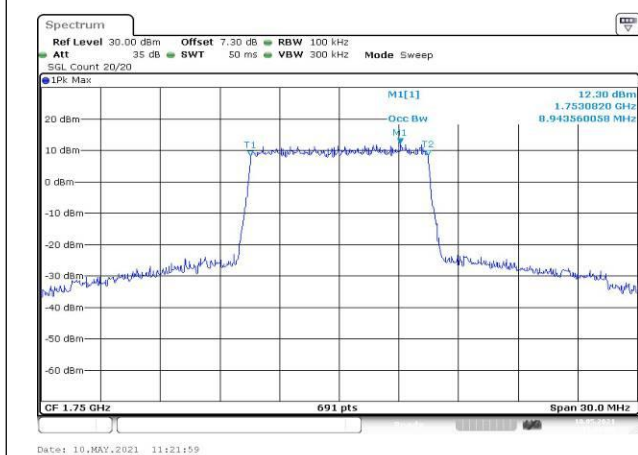


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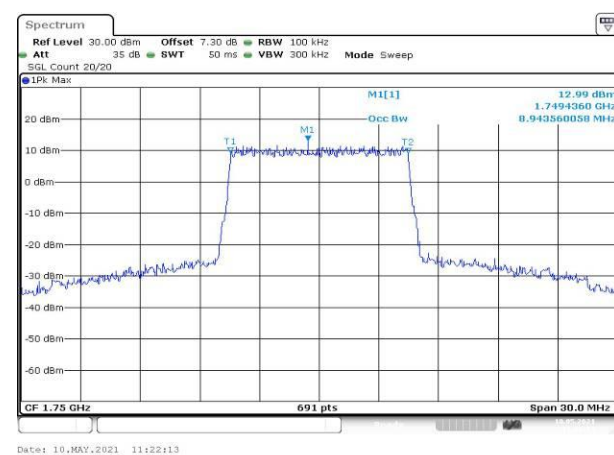
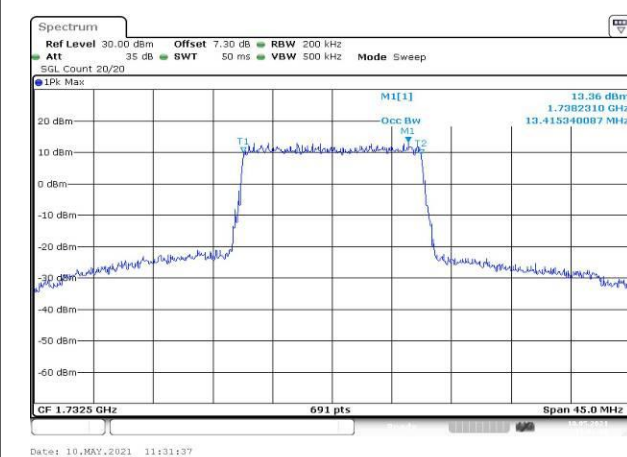
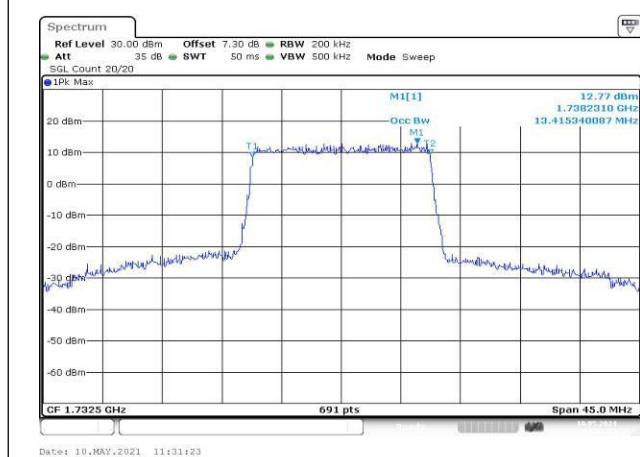
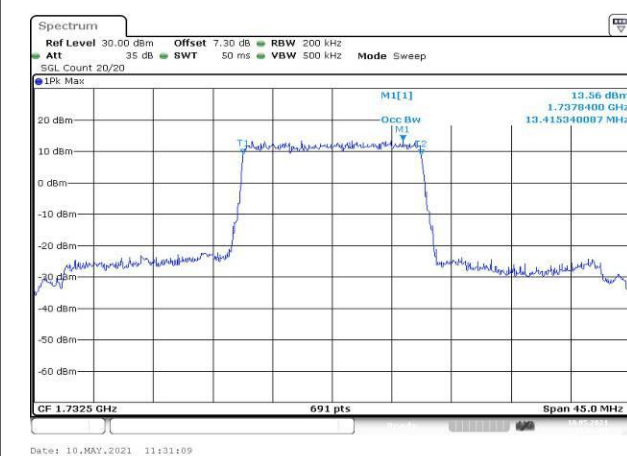
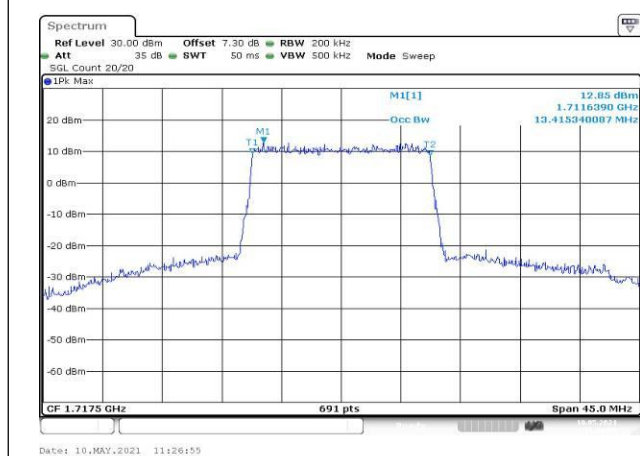
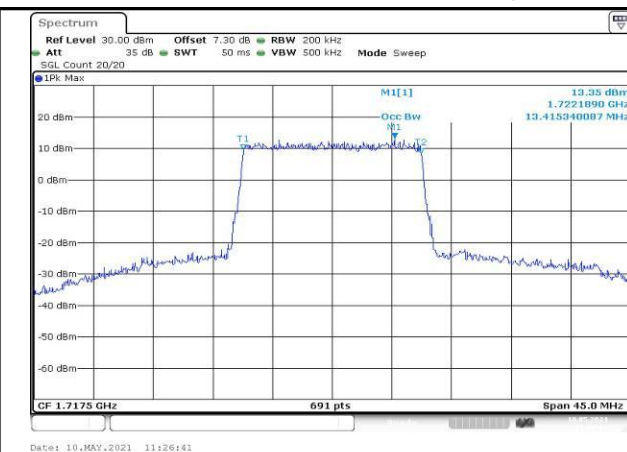
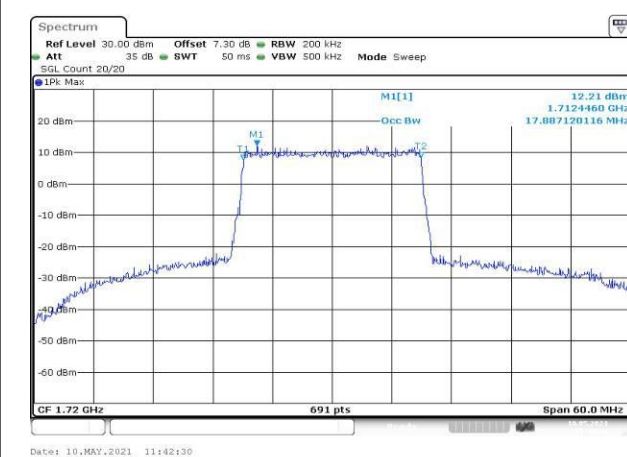
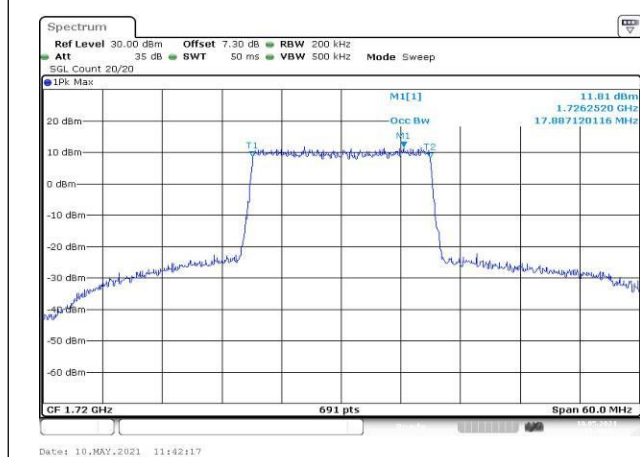
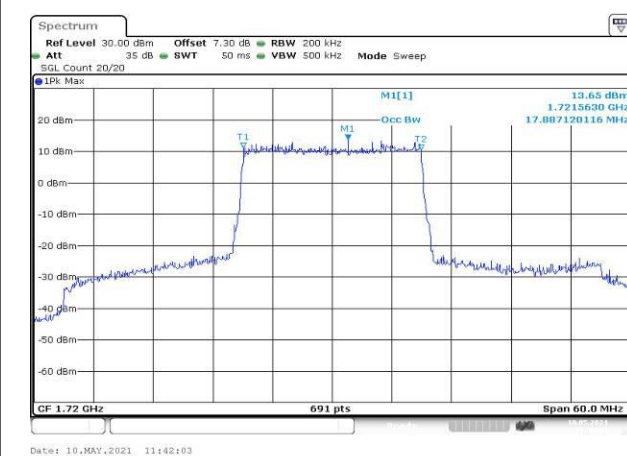
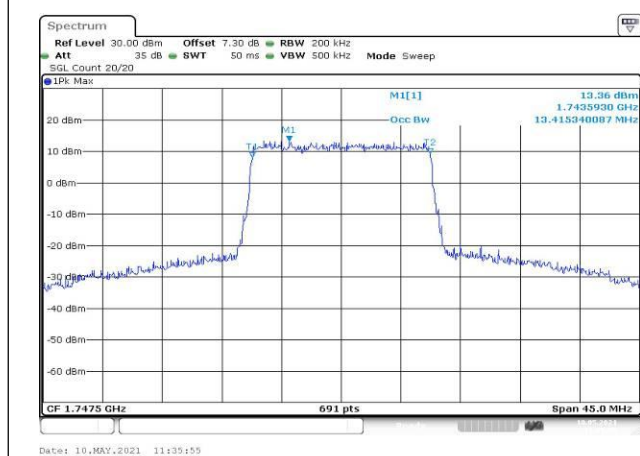
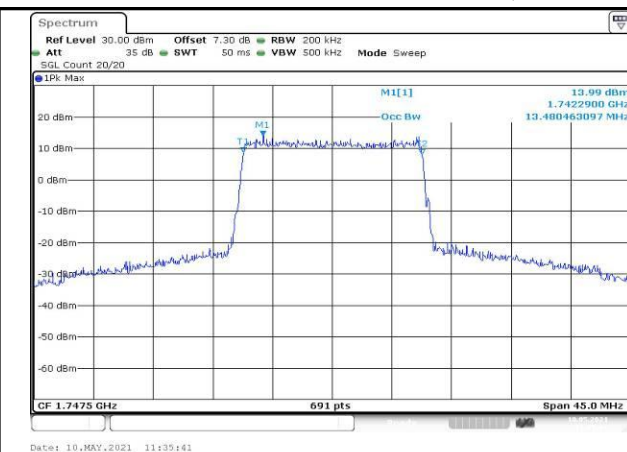
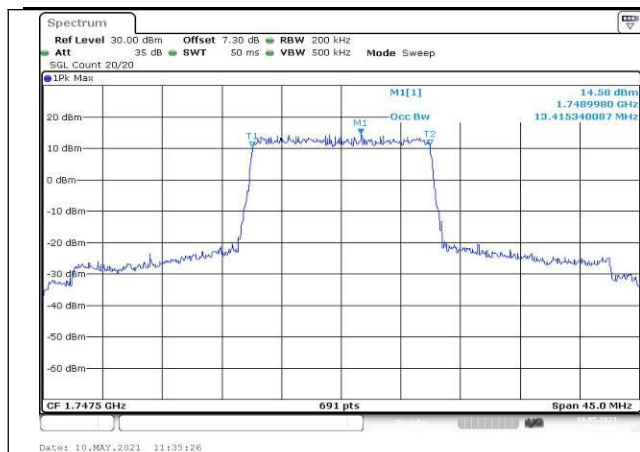
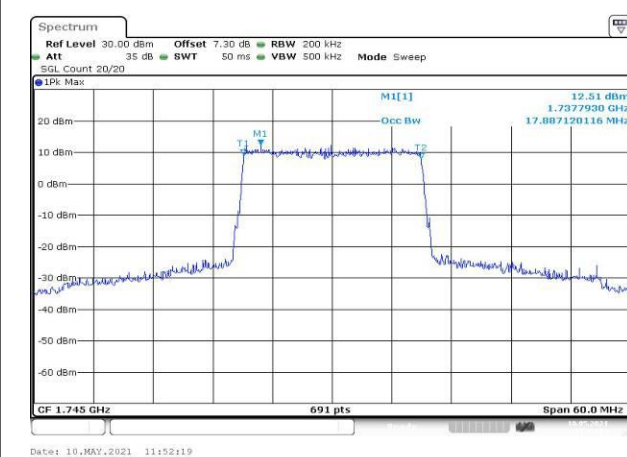
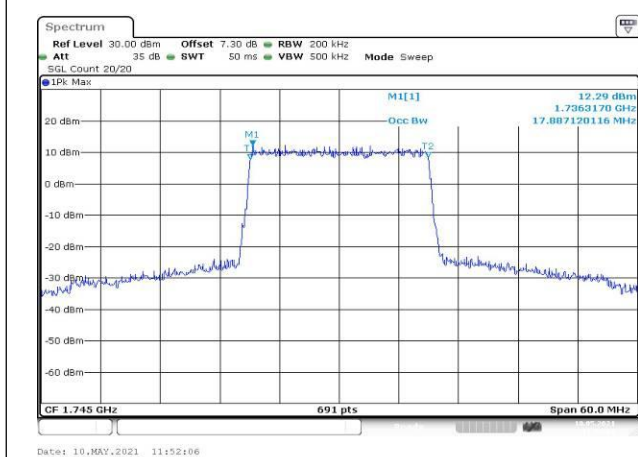
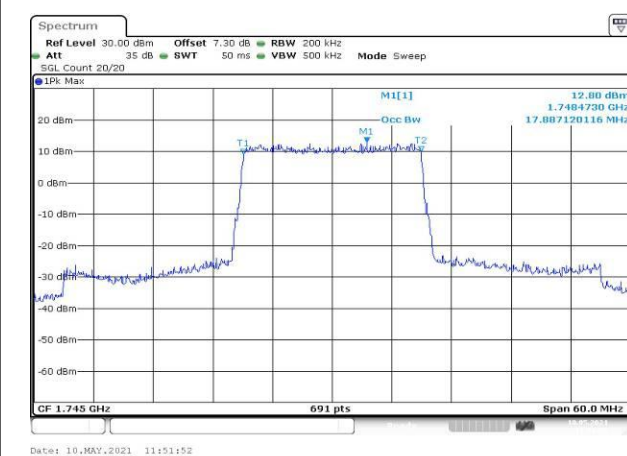
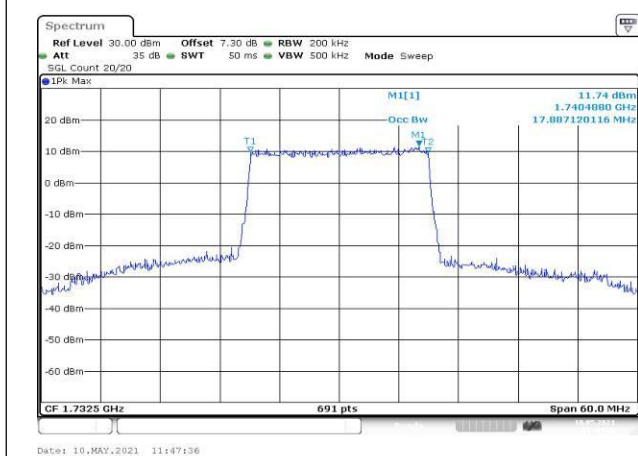
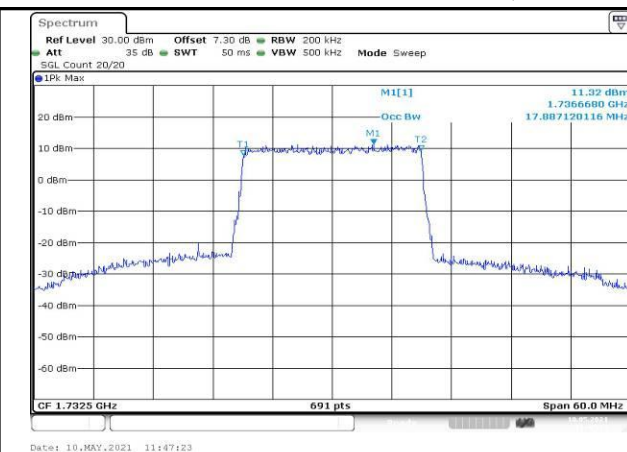
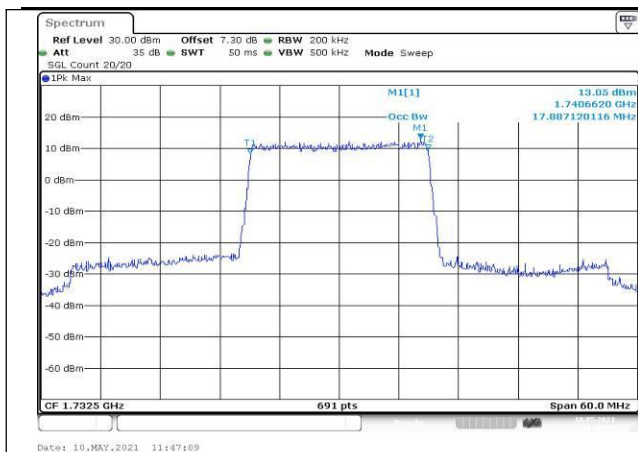


Fig.36







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	1.240	Fig.2	1.240	Fig.3
	1732.5	20175		6	0	1.234	Fig.4	1.228	Fig.5	1.228	Fig.6
	1754.3	20393		6	0	1.222	Fig.7	1.222	Fig.8	1.222	Fig.9
	1711.5	19965	3	15	0	2.970	Fig.10	2.983	Fig.11	2.996	Fig.12
	1732.5	20175		15	0	2.983	Fig.13	2.983	Fig.14	2.970	Fig.15
	1753.5	20385		15	0	2.983	Fig.16	2.983	Fig.17	2.996	Fig.18
	1712.5	19975	5	25	0	4.906	Fig.19	4.841	Fig.20	4.863	Fig.21
	1732.5	20175		25	0	4.906	Fig.22	4.906	Fig.23	4.906	Fig.24
	1752.5	20375		25	0	4.884	Fig.25	4.884	Fig.26	4.928	Fig.27
	1715	20000	10	50	0	9.682	Fig.28	9.768	Fig.29	9.768	Fig.30
	1732.5	20175		50	0	9.638	Fig.31	9.768	Fig.32	9.638	Fig.33
	1750	20350		50	0	9.725	Fig.34	9.768	Fig.35	9.812	Fig.36
	1717.5	20025	15	75	0	14.783	Fig.37	14.653	Fig.38	14.718	Fig.39
	1732.5	20175		75	0	14.718	Fig.40	14.588	Fig.41	14.913	Fig.42
	1747.5	20325		75	0	14.783	Fig.43	14.588	Fig.44	14.783	Fig.45
	1720	20050	20	100	0	19.276	Fig.46	19.276	Fig.47	19.276	Fig.48
	1732.5	20175		100	0	19.363	Fig.49	19.537	Fig.50	19.363	Fig.51
	1745	20300		100	0	19.537	Fig.52	19.450	Fig.53	19.450	Fig.54

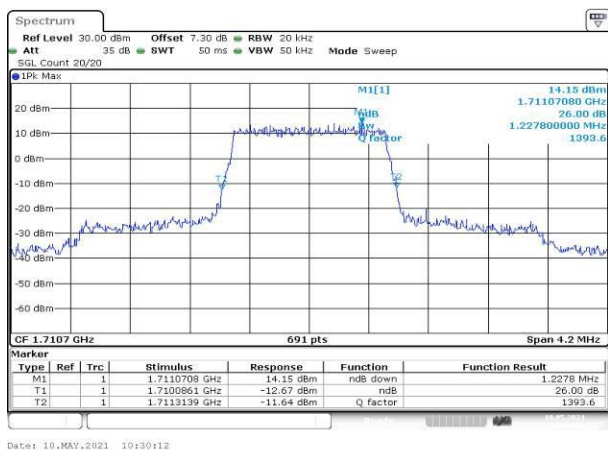


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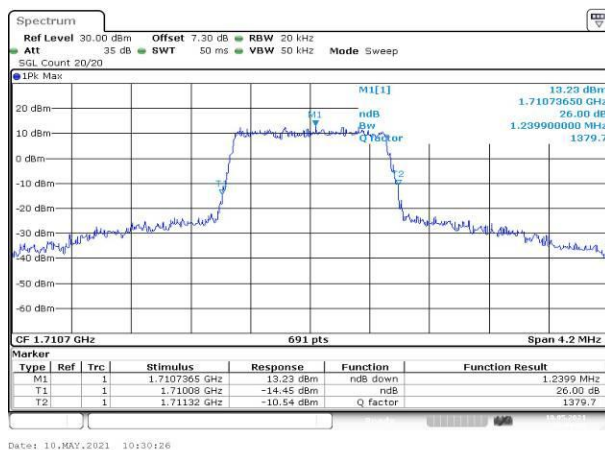


Fig.2

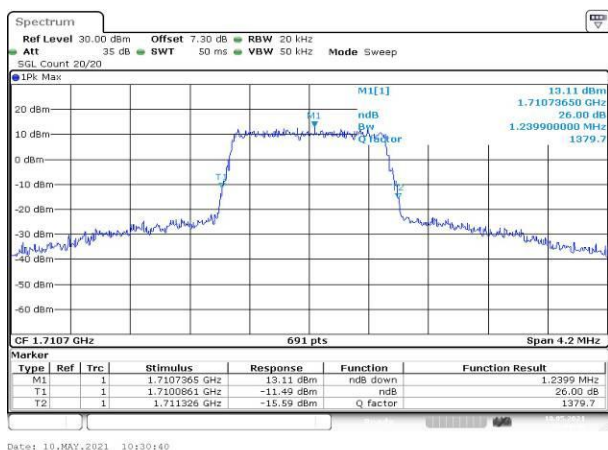


Fig.3

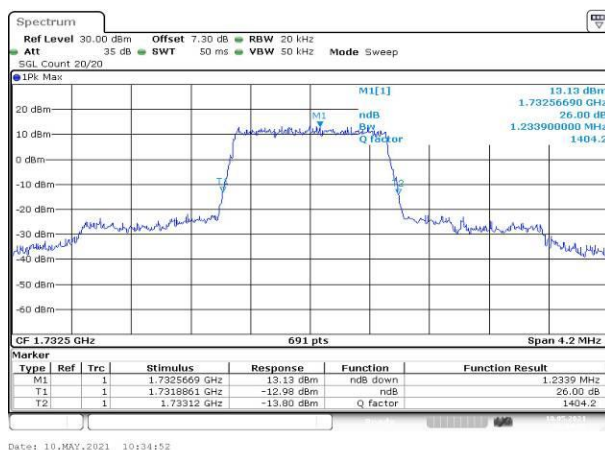


Fig.4

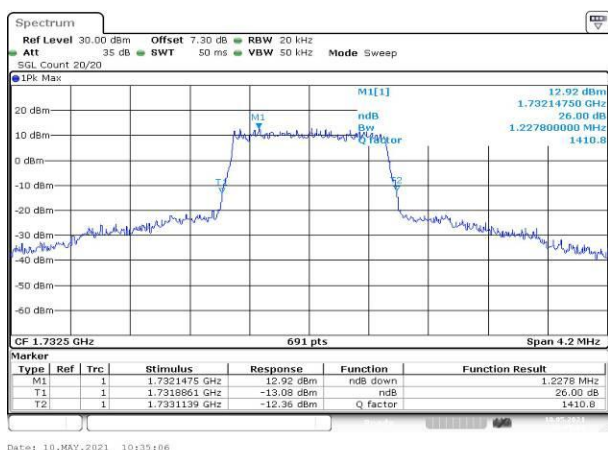


Fig.5

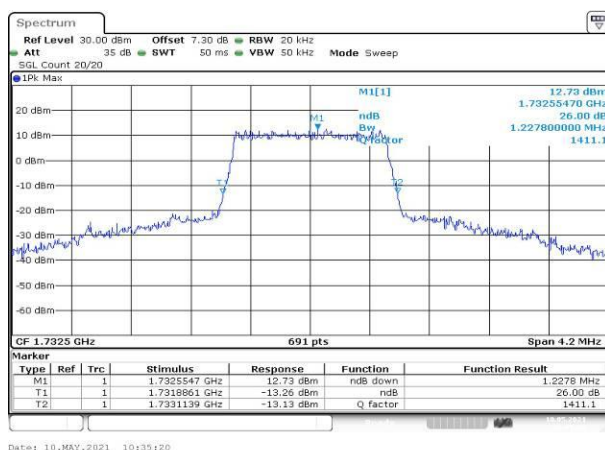
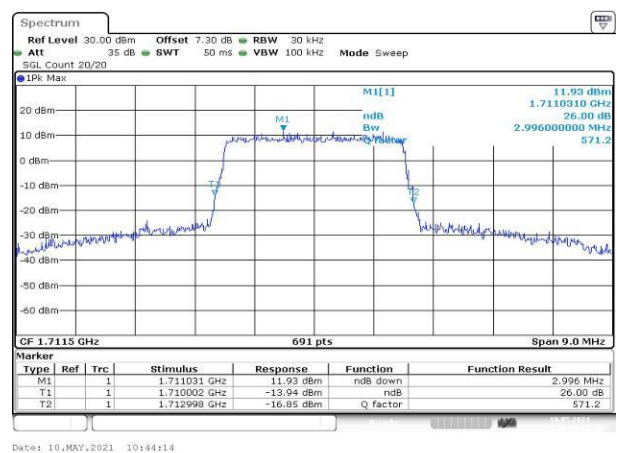
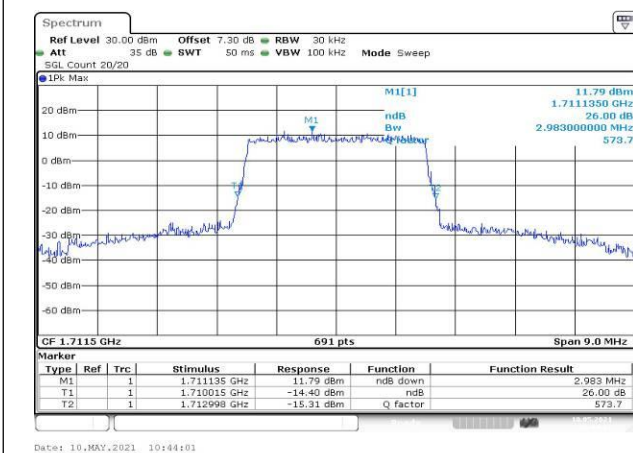
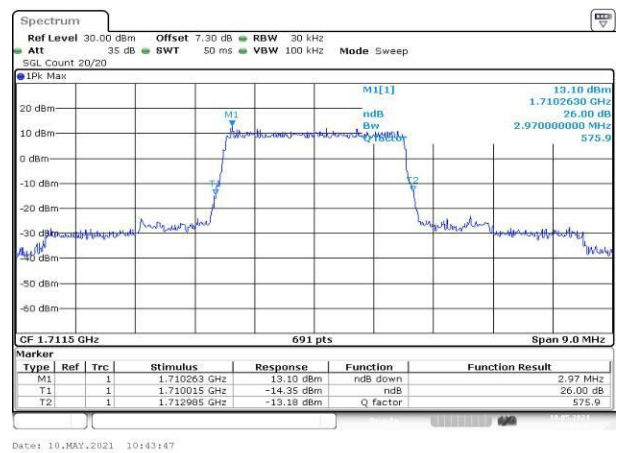
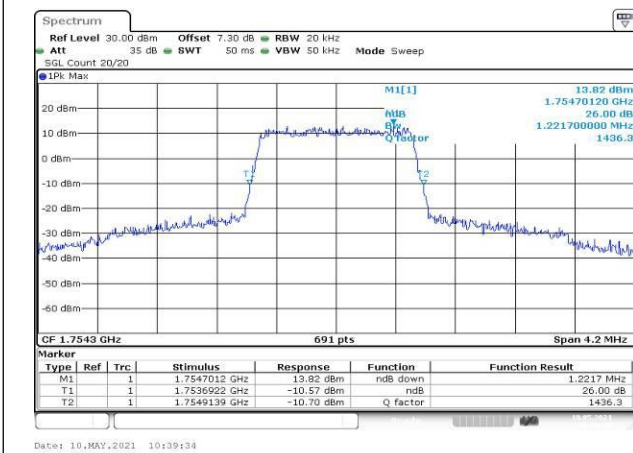
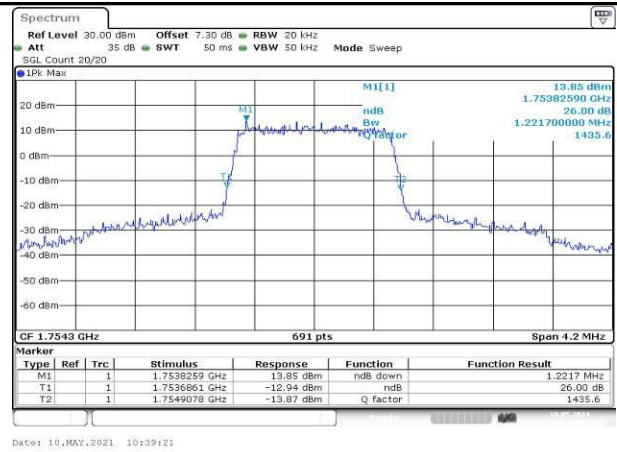
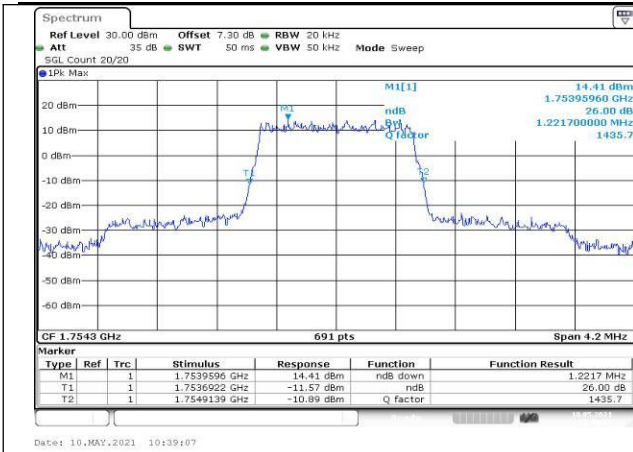


Fig.6



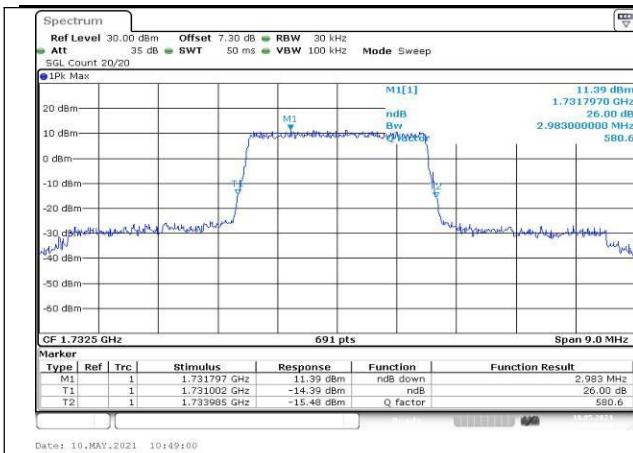


Fig.13

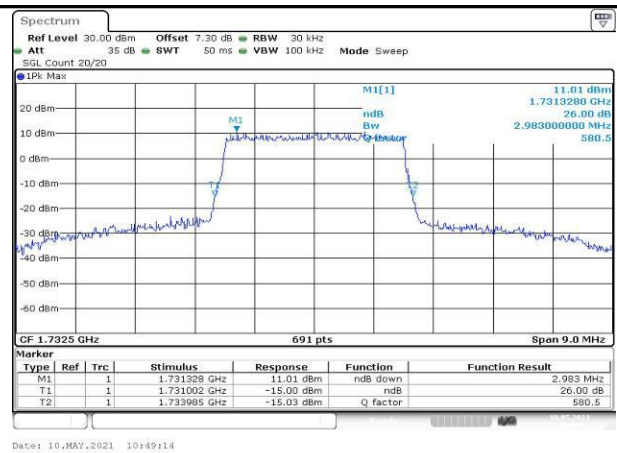


Fig.14

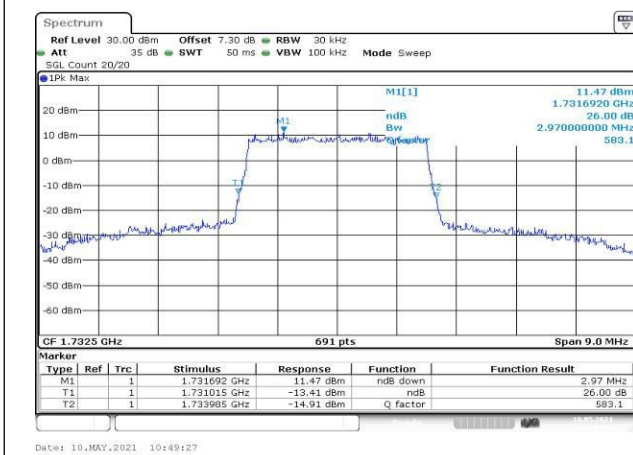


Fig.15

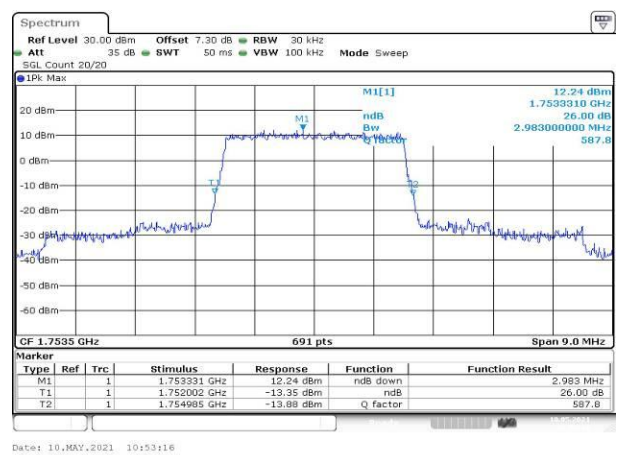


Fig.16

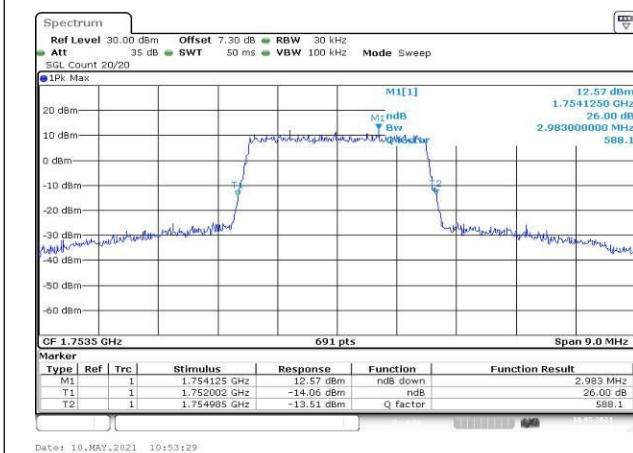


Fig.17

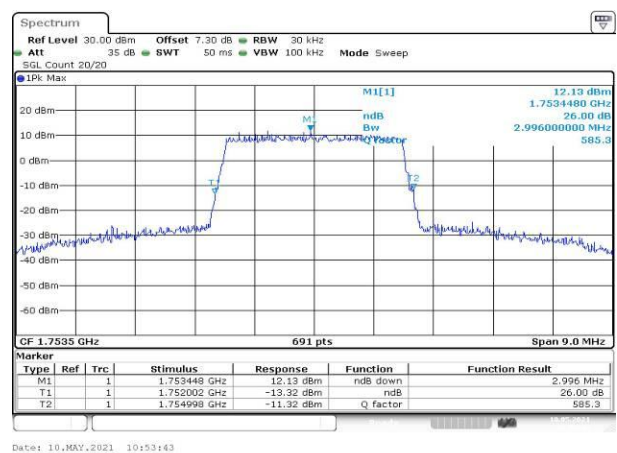


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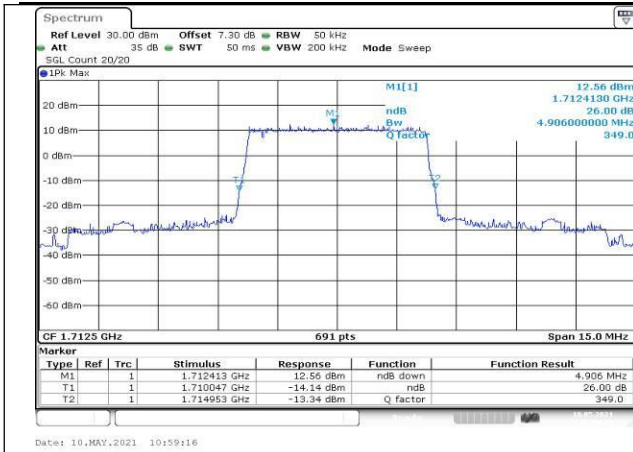


Fig.19

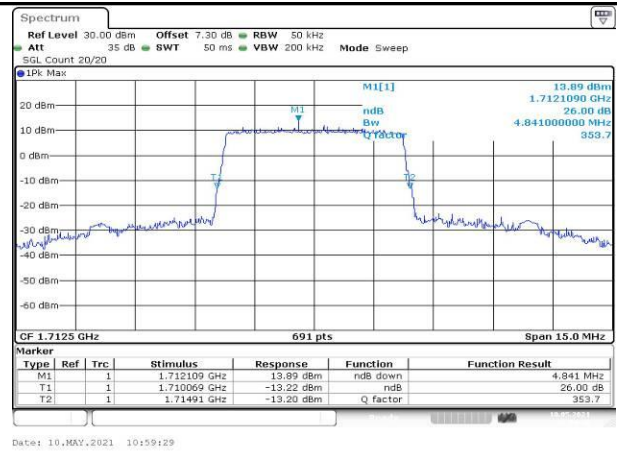


Fig.20

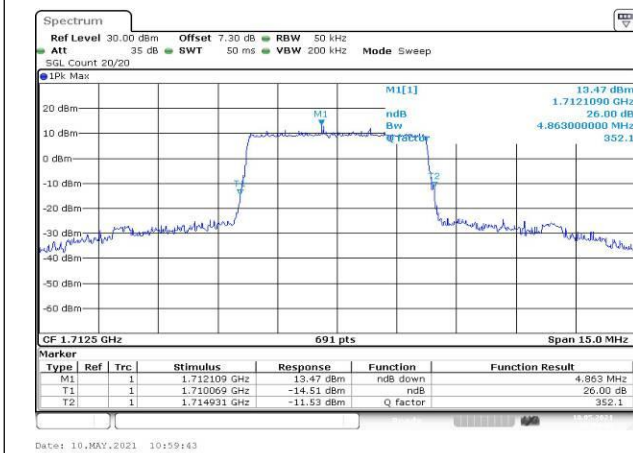


Fig.21

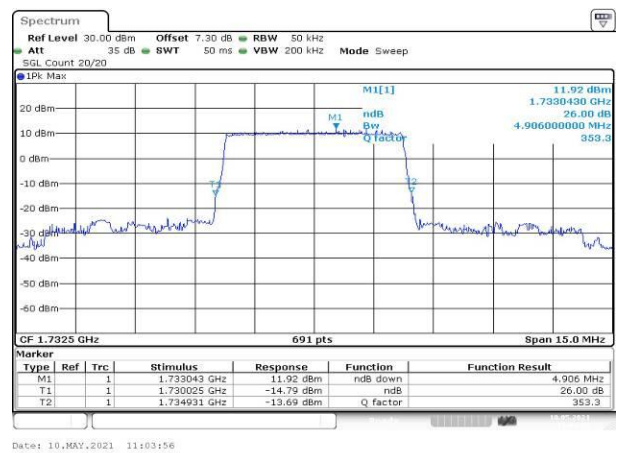


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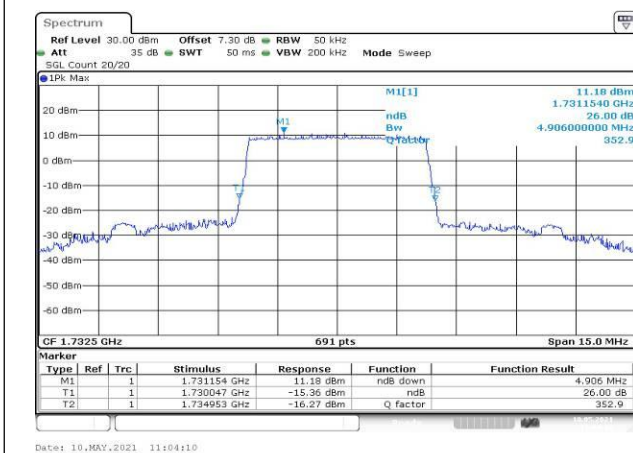


Fig.23

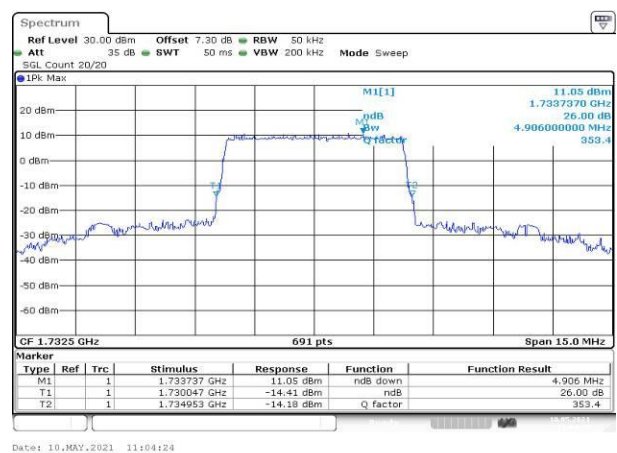


Fig.24

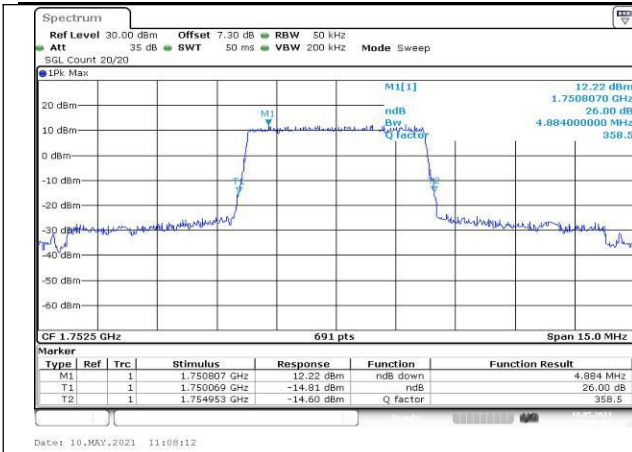


Fig.25

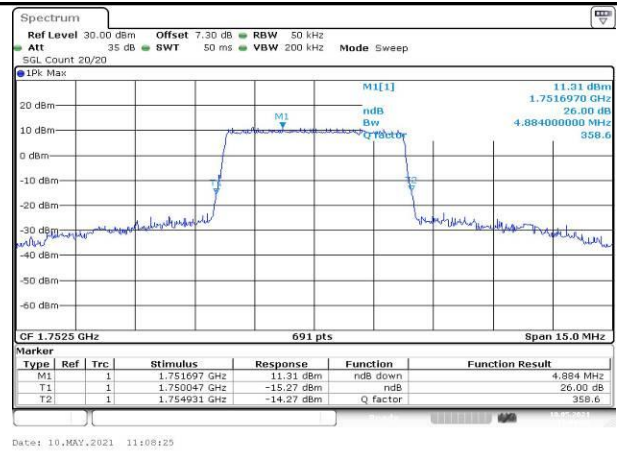


Fig.26

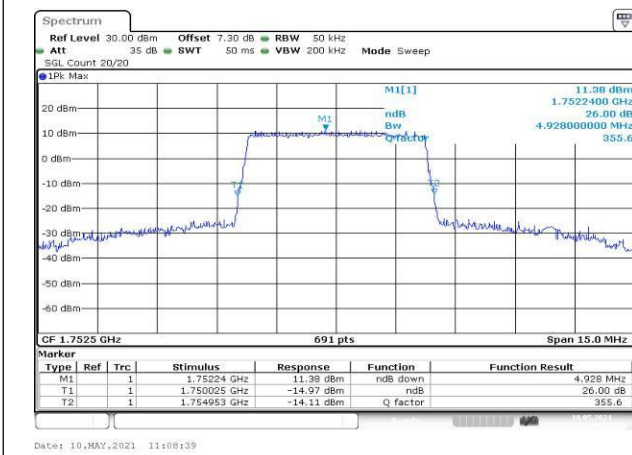


Fig.27

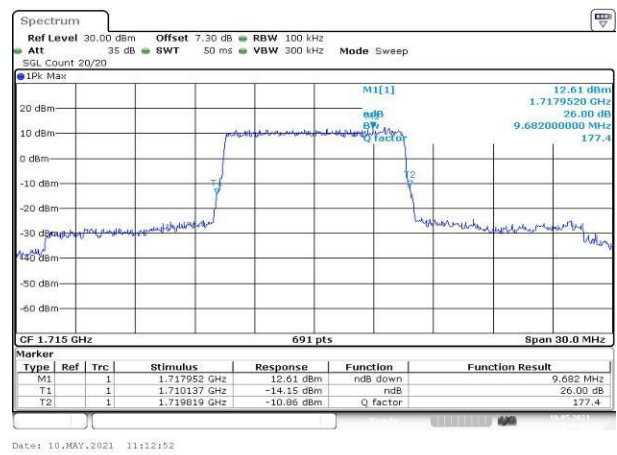


Fig.28

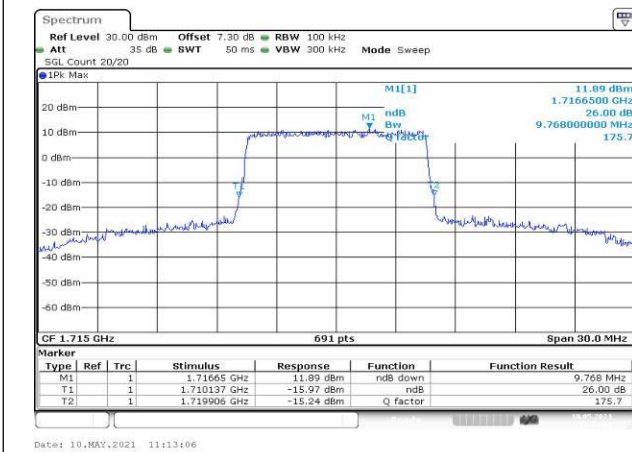


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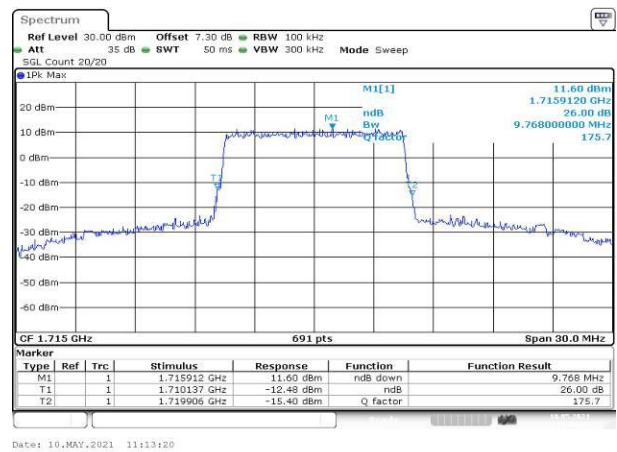


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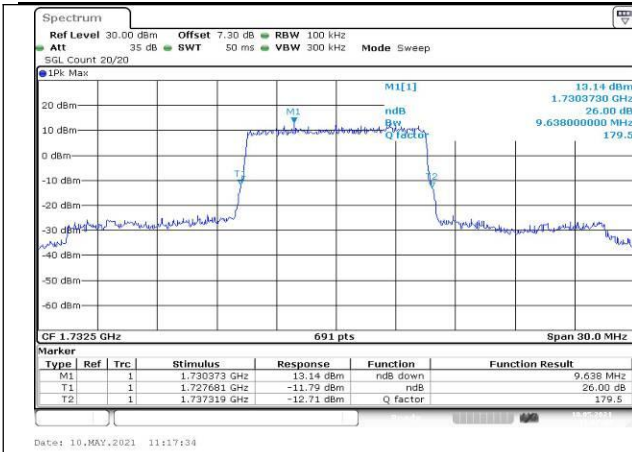


Fig.31

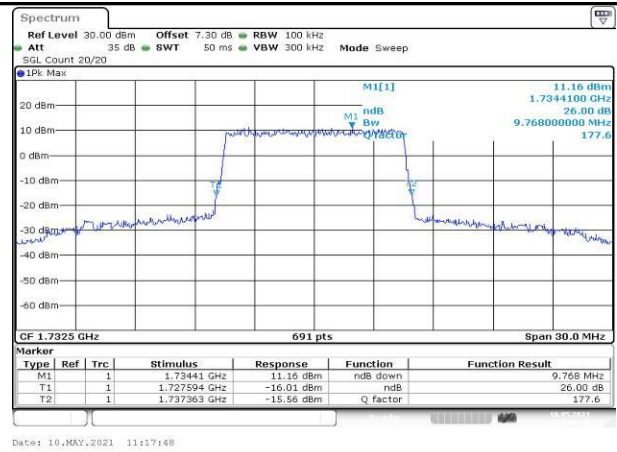


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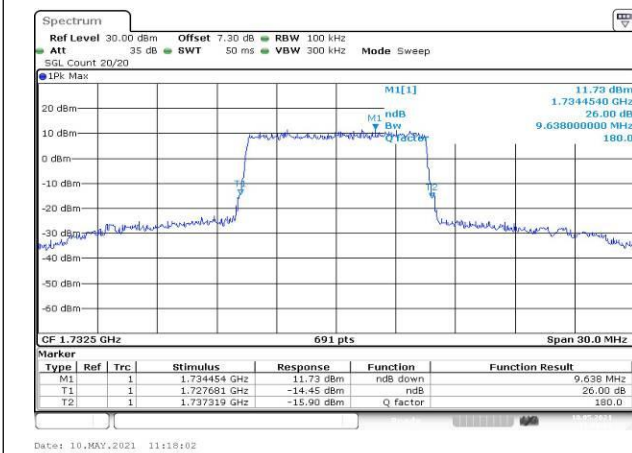


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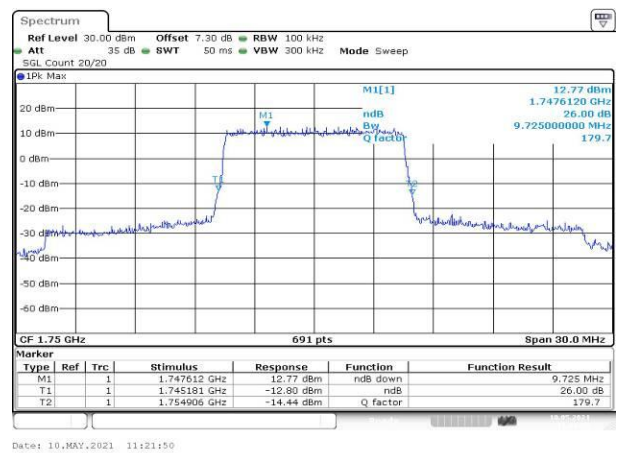


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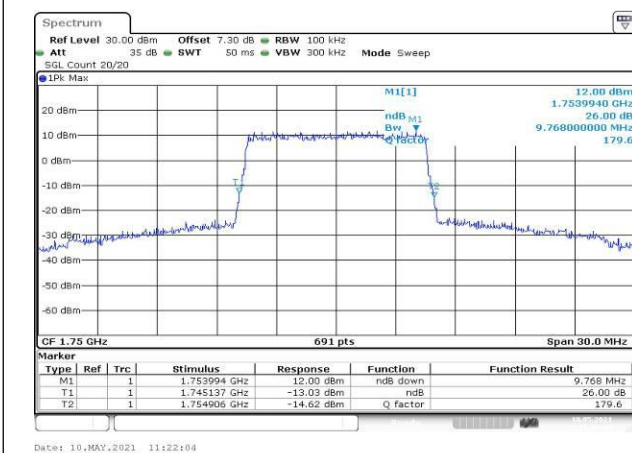


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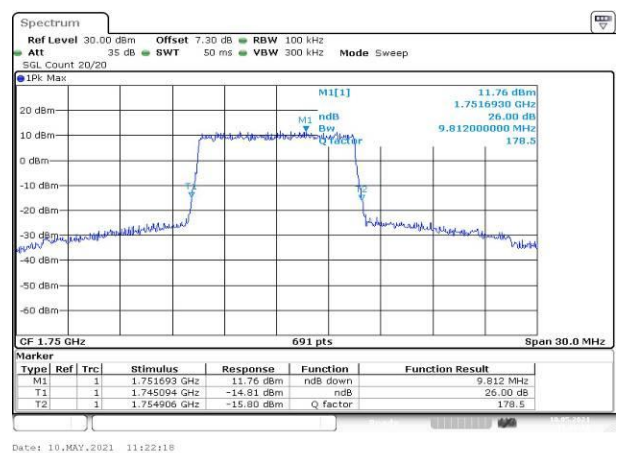


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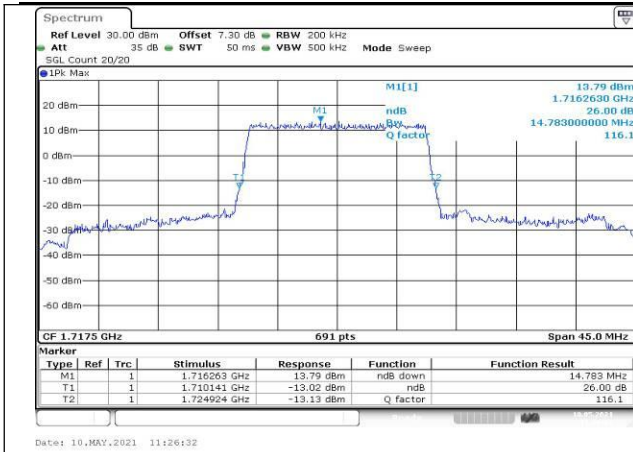


Fig.37

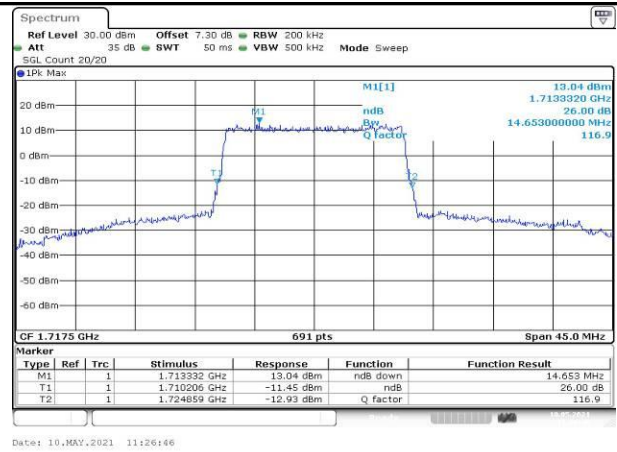


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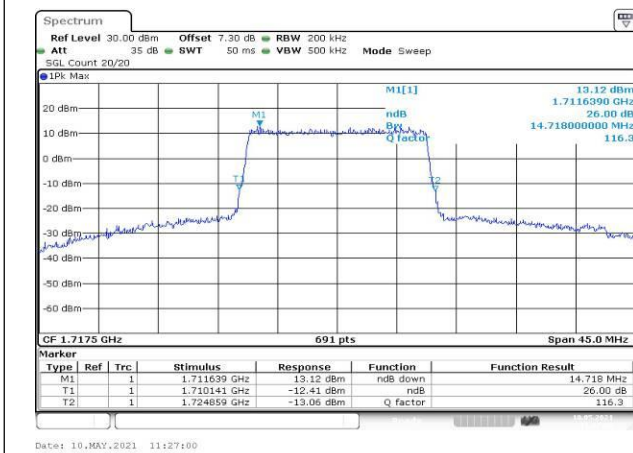


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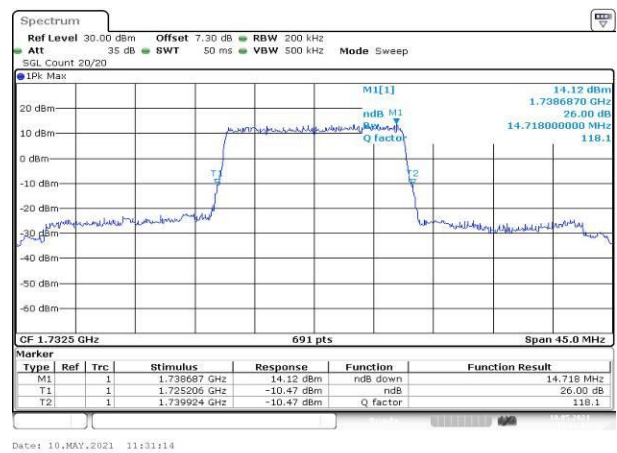


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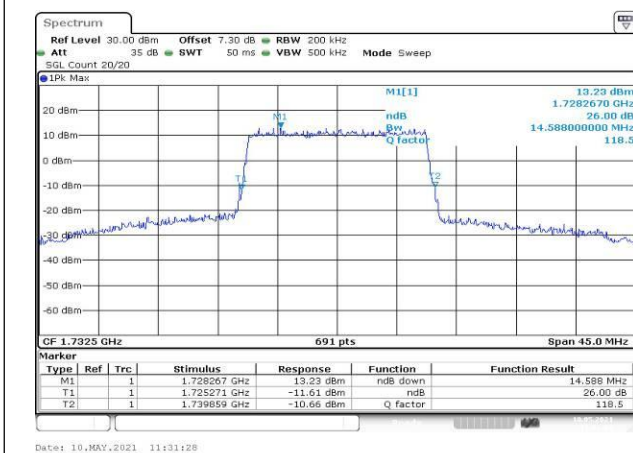


Fig.41

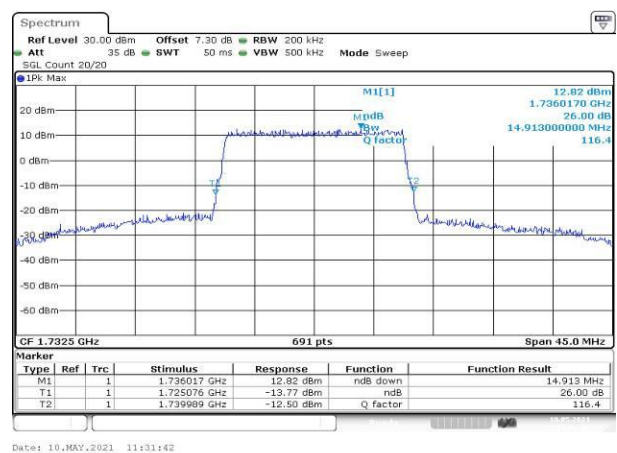


Fig.42

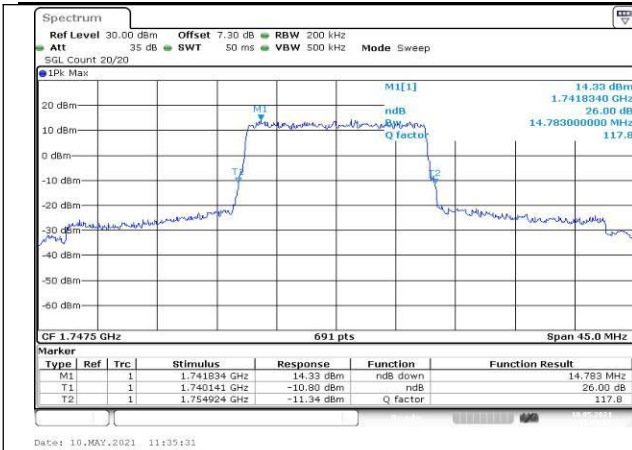


Fig.43

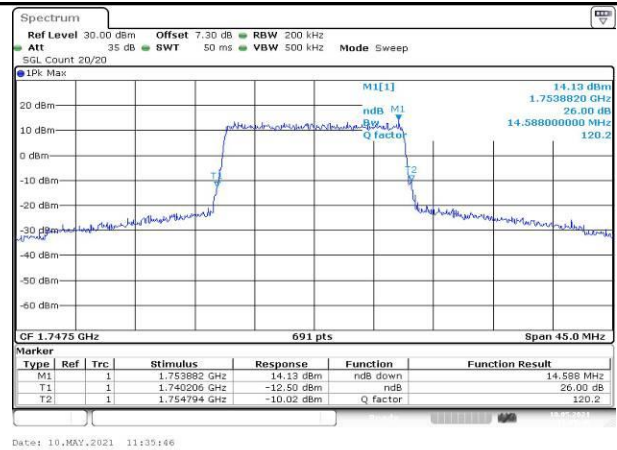


Fig.44

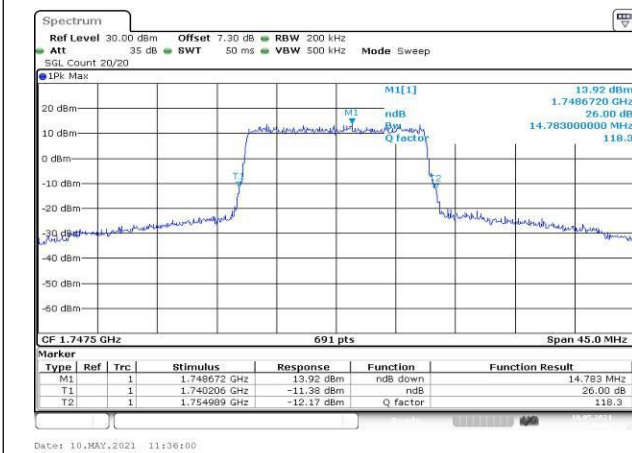


Fig.45

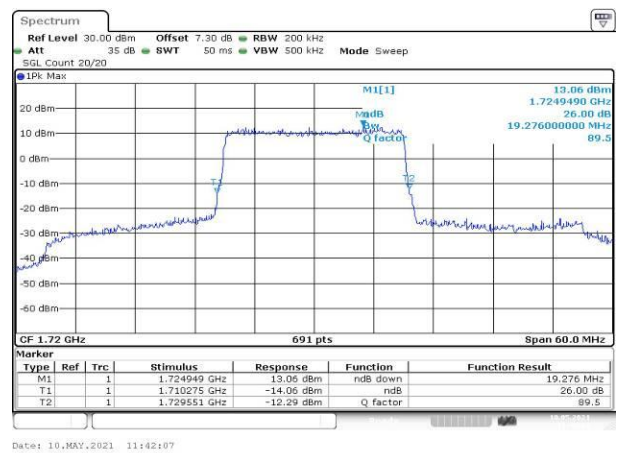


Fig.46

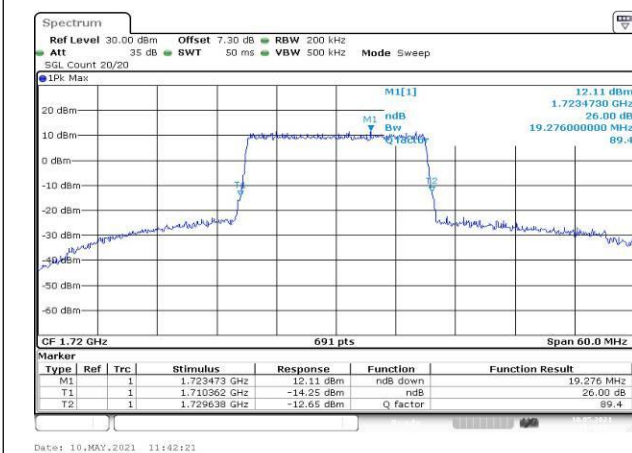


Fig.47

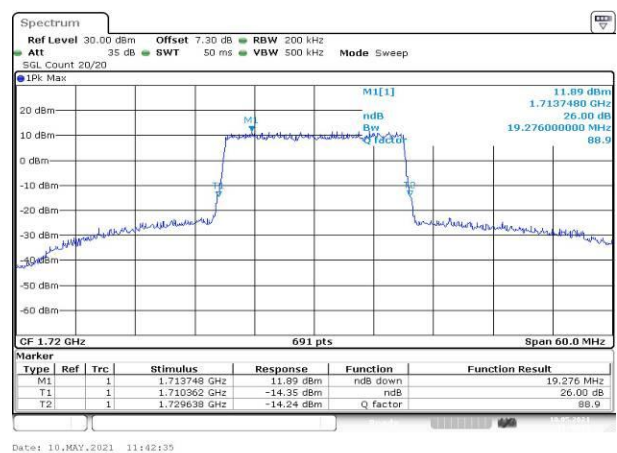
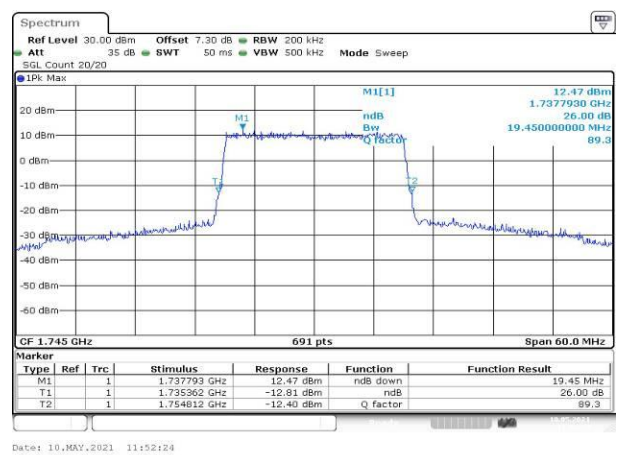
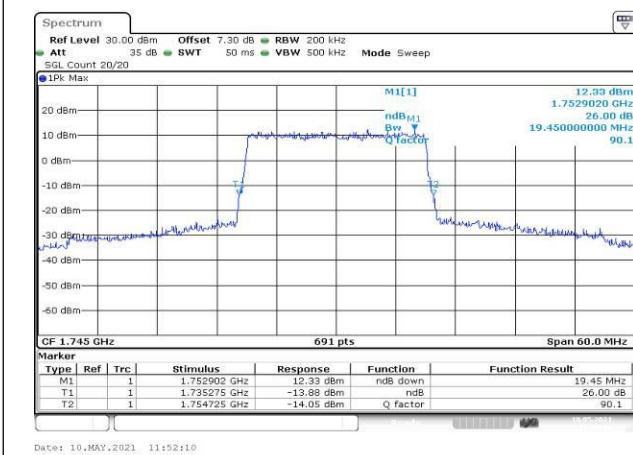
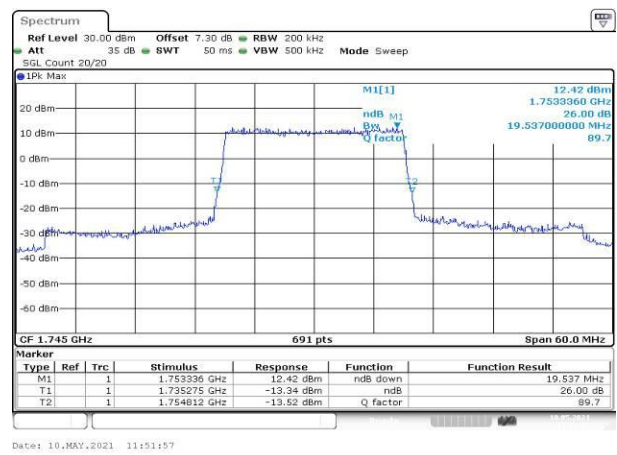
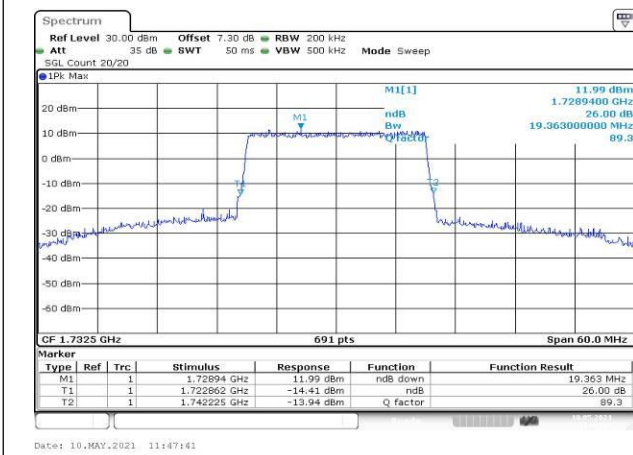
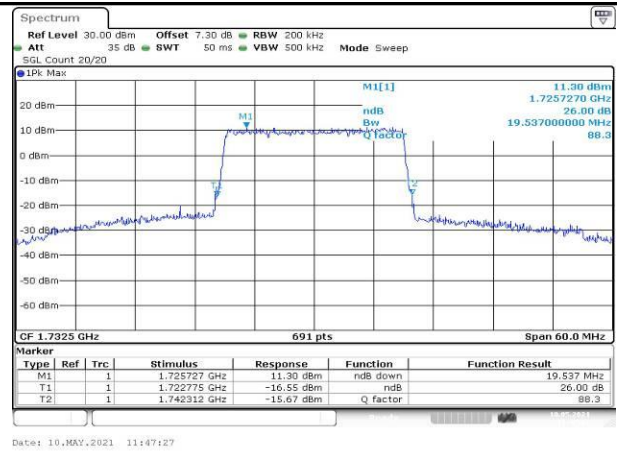
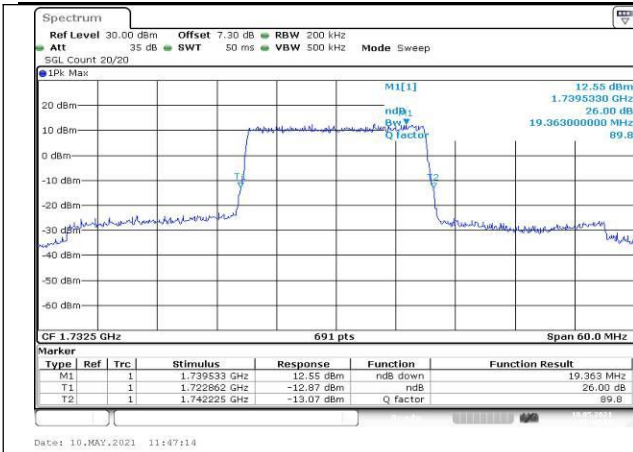


Fig.48



4 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
4	1710.7	19957	1.4	1	5	Fig.1	Fig.2	Fig.3
	1710.7	19957		6	0	Fig.4	Fig.5	Fig.6
	1732.5	20175		1	5	Fig.7	Fig.8	Fig.9
	1732.5	20175		6	0	Fig.10	Fig.11	Fig.12
	1754.3	20393		1	5	Fig.13	Fig.14	Fig.15
	1754.3	20393		6	0	Fig.16	Fig.17	Fig.18
	1711.5	19965	3	1	14	Fig.19	Fig.20	Fig.21
	1711.5	19965		15	0	Fig.22	Fig.23	Fig.24
	1732.5	20175		1	14	Fig.25	Fig.26	Fig.27
	1732.5	20175		15	0	Fig.28	Fig.29	Fig.30
	1753.5	20385		1	14	Fig.31	Fig.32	Fig.33
	1753.5	20385		15	0	Fig.34	Fig.35	Fig.36
	1712.5	19975	5	1	24	Fig.37	Fig.38	Fig.39
	1712.5	19975		25	0	Fig.40	Fig.41	Fig.42
	1732.5	20175		1	24	Fig.43	Fig.44	Fig.45
	1732.5	20175		25	0	Fig.46	Fig.47	Fig.48
	1752.5	20375		1	24	Fig.49	Fig.50	Fig.51
	1752.5	20375		25	0	Fig.52	Fig.53	Fig.54
	1715	20000	10	1	49	Fig.55	Fig.56	Fig.57
	1715	20000		50	0	Fig.58	Fig.59	Fig.60
	1732.5	20175		1	49	Fig.61	Fig.62	Fig.63
	1732.5	20175		50	0	Fig.64	Fig.65	Fig.66
	1750	20350		1	49	Fig.67	Fig.68	Fig.69
	1750	20350		50	0	Fig.70	Fig.71	Fig.72
	1717.5	20025	15	1	74	Fig.73	Fig.74	Fig.75
	1717.5	20025		75	0	Fig.76	Fig.77	Fig.78
	1732.5	20175		1	74	Fig.79	Fig.80	Fig.81
	1732.5	20175		75	0	Fig.82	Fig.83	Fig.84
	1747.5	20325		1	74	Fig.85	Fig.86	Fig.87
	1747.5	20325		75	0	Fig.88	Fig.89	Fig.90
	1720	20050	20	1	99	Fig.91	Fig.92	Fig.93
	1720	20050		100	0	Fig.94	Fig.95	Fig.96
	1732.5	20175		1	99	Fig.97	Fig.98	Fig.99
	1732.5	20175		100	0	Fig.100	Fig.101	Fig.102
	1745	20300		1	99	Fig.103	Fig.104	Fig.105
	1745	20300		100	0	Fig.106	Fig.107	Fig.108

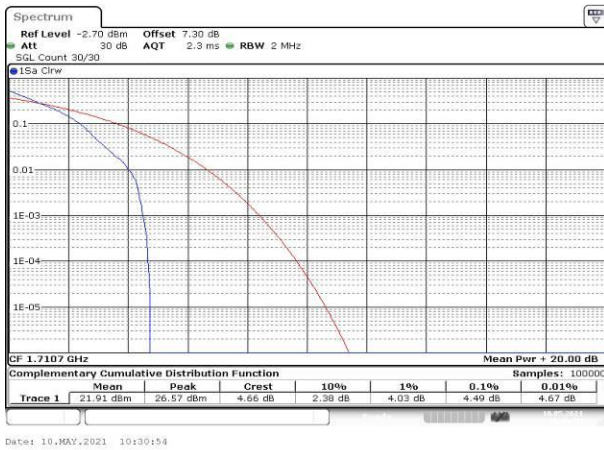


Fig.1

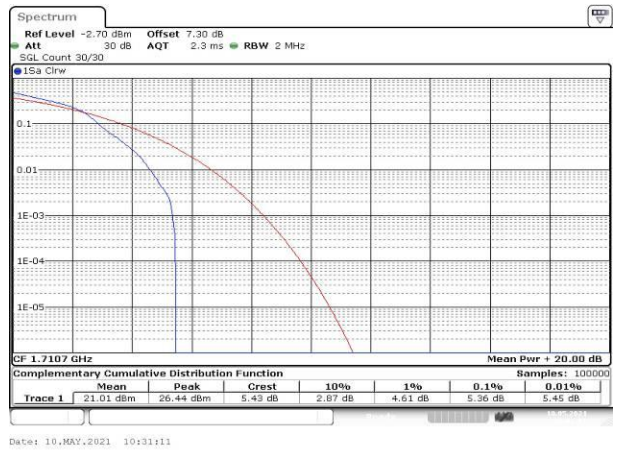


Fig.2

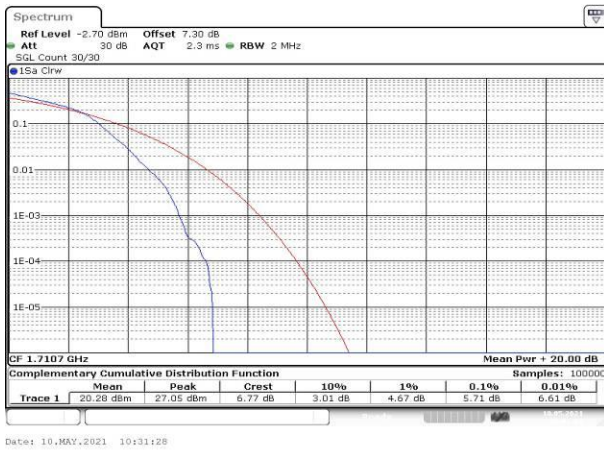


Fig.3

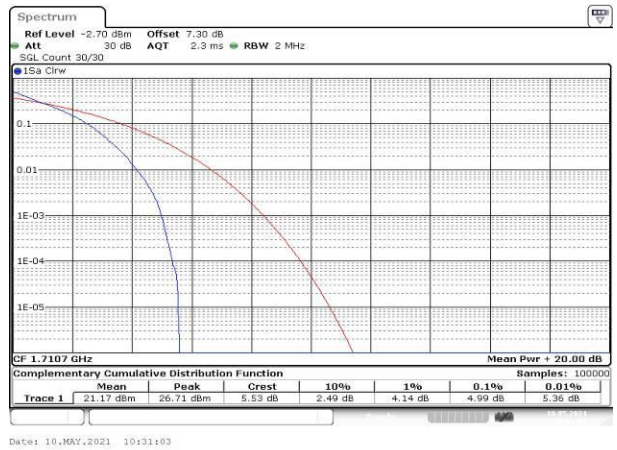


Fig.4

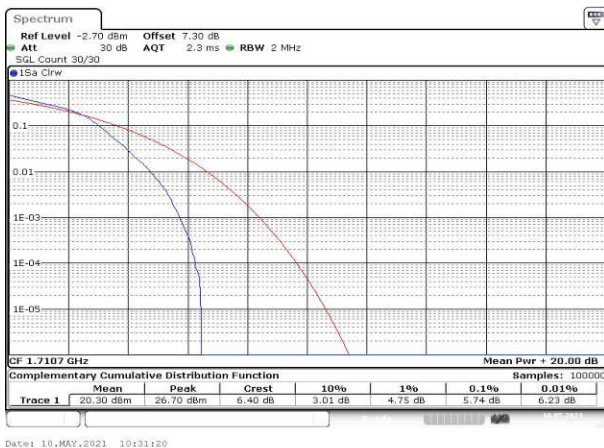


Fig.5

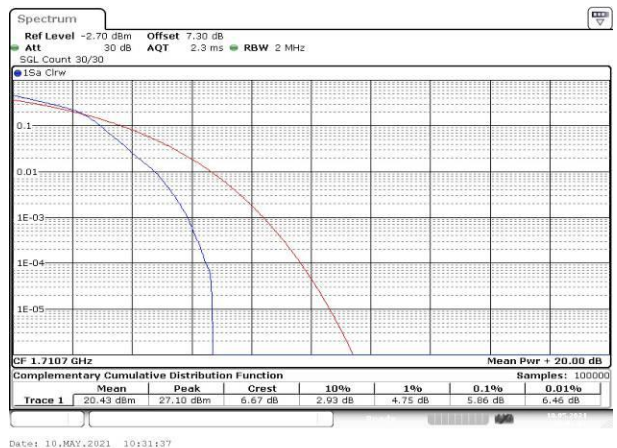


Fig.6