

**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	23.71
				1	3	23.77
				1	5	23.71
				3	0	23.86
				3	1	23.81
				3	3	23.86
	6	0		22.88		
	1	0		23.66		
	1	3		23.69		
	1	5		23.66		
	3	0		23.64		
	3	1		23.65		
	3	3		23.69		
	6	0		22.66		
	1	0		23.97		
	1	3		23.96		
	1	5		24.06		
	3	0		24.04		
3	1	24.04				
3	3	24.09				
6	0	23.12				
16QAM	1710.7	19957	1	0	22.87	
			1	3	22.91	
			1	5	22.84	
			3	0	23.15	
			3	1	23.02	
			3	3	23.10	
	6	0	21.87			
	1	0	22.76			
	1	3	22.76			
	1	5	22.79			
	3	0	22.67			
	3	1	22.59			
	3	3	22.66			
	6	0	21.72			
	1	0	23.09			
	1	3	23.16			
	1	5	23.17			
	3	0	23.20			
3	1	23.28				
3	3	23.18				
6	0	21.94				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1710.7	19957	1.4	1	0	21.92
				1	3	21.83
				1	5	21.86
				3	0	21.82
				3	1	21.87
				3	3	21.80
	1732.5	20175		6	0	21.87
				1	0	21.72
				1	3	21.79
				1	5	21.77
				3	0	21.72
				3	1	21.77
	1754.3	20393		3	3	21.71
				6	0	21.76
				1	0	21.97
				1	3	21.93
				1	5	21.95
				3	0	21.99
				3	1	21.93
				3	3	21.95
				6	0	21.94

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	19965	3	1	0	23.92
				1	8	23.76
				1	14	23.81
				8	0	22.96
				8	4	22.83
				8	7	22.89
	15	0		22.86		
	1732.5	20175		1	0	23.78
				1	8	23.76
				1	14	23.84
				8	0	22.70
				8	4	22.76
				8	7	22.72
	1753.5	20385		15	0	22.70
				1	0	24.17
1			8	24.09		
1			14	24.14		
8			0	23.15		
8			4	23.07		
16QAM	1711.5	19965	8	7	23.06	
			15	0	23.10	
			1	0	23.42	
			1	8	23.47	
			1	14	23.40	
			8	0	22.09	
	1732.5	20175	8	4	22.06	
			8	7	22.08	
			15	0	21.98	
			1	0	22.89	
			1	8	22.90	
			1	14	22.94	
	1753.5	20385	8	0	21.69	
			8	4	21.79	
			8	7	21.77	
15			0	21.68		
1			0	23.31		
1			8	23.23		
			1	14	23.18	
			8	0	22.14	
			8	4	22.14	
			8	7	22.16	
			15	0	22.13	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1711.5	19965	3	1	0	21.98
				1	8	21.94
				1	14	21.91
				8	0	21.95
				8	4	21.98
				8	7	21.95
	15	0		21.94		
	1	0		21.62		
	1	8		21.66		
	1	14		21.62		
	8	0		21.69		
	8	4		21.65		
	8	7		21.70		
	15	0		21.66		
	1	0		22.23		
	1	8		22.19		
	1	14		22.18		
	8	0		22.22		
8	4	22.18				
8	7	22.17				
15	0	22.15				
1753.5	20385					

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	19975	5	1	0	23.78
				1	12	23.76
				1	24	23.78
				12	0	22.92
				12	7	22.84
				12	13	22.90
	25	0		22.88		
	1732.5	20175		1	0	23.69
				1	12	23.70
				1	24	23.74
				12	0	22.80
				12	7	22.69
				12	13	22.69
	25	0		22.75		
	1752.5	20375		1	0	23.99
1			12	23.99		
1			24	24.09		
12			0	23.05		
12			7	23.18		
12			13	23.18		
25	0	23.11				
16QAM	1712.5	19975	1	0	22.78	
			1	12	22.79	
			1	24	22.76	
			12	0	21.94	
			12	7	21.83	
			12	13	21.82	
	25	0	21.98			
	1732.5	20175	1	0	22.93	
			1	12	22.92	
			1	24	23.00	
			12	0	21.79	
			12	7	21.70	
			12	13	21.72	
	25	0	21.77			
	1752.5	20375	1	0	23.16	
1			12	23.09		
1			24	23.09		
12			0	21.98		
12			7	22.08		
12			13	22.17		
25	0	22.18				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1712.5	19975	5	1	0	21.95
				1	12	22.00
				1	24	21.98
				12	0	21.95
				12	7	21.97
				12	13	22.04
				25	0	22.00
	1732.5	20175		1	0	21.79
				1	12	21.75
				1	24	21.71
				12	0	21.79
				12	7	21.72
				12	13	21.72
				25	0	21.74
	1752.5	20375		1	0	22.19
				1	12	22.18
				1	24	22.18
				12	0	22.19
				12	7	22.19
				12	13	22.19
				25	0	22.18

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1715	20000	10	1	0	23.91
				1	25	23.79
				1	49	23.82
				25	0	23.04
				25	12	22.98
				25	25	22.96
	1732.5	20175		50	0	22.99
				1	0	23.82
				1	25	23.87
				1	49	23.86
				25	0	22.89
				25	12	22.79
	1750	20350		25	25	22.75
				50	0	22.85
				1	0	24.07
1			25	24.10		
1			49	24.13		
25			0	23.19		
16QAM	1715	20000	25	12	23.19	
			25	25	23.24	
			50	0	23.20	
			1	0	23.46	
			1	25	23.49	
			1	49	23.42	
	1732.5	20175	25	0	22.07	
			25	12	22.00	
			25	25	22.06	
			50	0	22.02	
			1	0	22.89	
			1	25	23.03	
	1750	20350	1	49	22.95	
			25	0	21.89	
			25	12	21.74	
25			25	21.78		
50			0	21.85		
1			0	23.18		
			1	25	23.17	
			1	49	23.16	
			25	0	22.24	
			25	12	22.35	
			25	25	22.34	
			50	0	22.23	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1715	20000	10	1	0	22.02
				1	25	22.01
				1	49	22.03
				25	0	22.02
				25	12	22.03
				25	25	22.01
	1732.5	20175		50	0	22.01
				1	0	21.80
				1	25	21.77
				1	49	21.83
				25	0	21.75
				25	12	21.83
	1750	20350		25	25	21.87
				50	0	21.78
				1	0	22.30
				1	25	22.23
				1	49	22.29
				25	0	22.24
				25	12	22.21
				25	25	22.23
				50	0	22.23

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	20025	15	1	0	23.79
				1	37	23.68
				1	74	23.68
				36	0	23.06
				36	29	22.94
				36	30	22.90
	1732.5	20175		75	0	23.01
				1	0	23.80
				1	37	23.82
				1	74	23.84
				36	0	22.83
				36	29	22.81
	1747.5	20325		36	30	22.81
				75	0	22.86
				1	0	23.91
				1	37	24.01
				1	74	23.98
				36	0	23.17
16QAM	1717.5	20025	36	29	23.18	
			36	30	23.26	
			75	0	23.15	
			1	0	23.37	
			1	37	23.25	
			1	74	23.20	
	1732.5	20175	36	0	21.99	
			36	29	21.96	
			36	30	21.89	
			75	0	21.93	
			1	0	22.89	
			1	37	23.04	
	1747.5	20325	1	74	23.02	
			36	0	21.77	
			36	29	21.73	
			36	30	21.85	
			75	0	21.84	
			1	0	23.41	
			1	37	23.54	
			1	74	23.48	
			36	0	22.13	
			36	29	22.22	
			36	30	22.18	
			75	0	22.15	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1717.5	20025	15	1	0	21.95
				1	37	22.00
				1	74	21.99
				36	0	21.90
				36	29	21.96
				36	30	21.99
	1732.5	20175		75	0	21.98
				1	0	21.86
				1	37	21.83
				1	74	21.79
				36	0	21.83
				36	29	21.85
	1747.5	20325		36	30	21.79
				75	0	21.77
				1	0	22.16
				1	37	22.13
				1	74	22.06
				36	0	22.05
			36	29	22.06	
			36	30	22.11	
			75	0	22.14	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	20050	20	1	0	23.80
				1	49	23.58
				1	99	23.58
				50	0	22.89
				50	24	22.88
				50	50	22.93
	1732.5	20175		100	0	22.89
				1	0	23.77
				1	49	23.91
				1	99	23.87
				50	0	22.74
				50	24	22.74
	1745	20300		50	50	22.69
				100	0	22.68
				1	0	23.71
				1	49	23.98
				1	99	23.97
				50	0	23.08
16QAM	1720	20050	50	24	23.25	
			50	50	23.27	
			100	0	23.15	
			1	0	23.13	
			1	49	22.85	
			1	99	22.88	
	1732.5	20175	50	0	21.81	
			50	24	21.92	
			50	50	21.87	
			100	0	21.97	
			1	0	23.01	
			1	49	23.09	
	1745	20300	1	99	23.07	
			50	0	21.70	
			50	24	21.70	
			50	50	21.67	
			100	0	21.70	
			1	0	23.28	
			1	49	23.53	
			1	99	23.52	
			50	0	22.15	
			50	24	22.24	
			50	50	22.23	
			100	0	22.16	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1720	20050	20	1	0	21.97
				1	49	21.92
				1	99	21.98
				50	0	21.87
				50	24	21.89
				50	50	21.88
				100	0	21.91
	1732.5	20175		1	0	21.70
				1	49	21.69
				1	99	21.67
				50	0	21.71
				50	24	21.74
				50	50	21.68
				100	0	21.72
	1745	20300		1	0	22.15
				1	49	22.15
				1	99	22.16
				50	0	22.15
				50	24	22.16
				50	50	22.16
				100	0	22.17

## 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	1.082	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	2.670	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	13.480	Fig.38	13.480	Fig.39
	1732.5	20175		75	0	13.415	Fig.40	13.415	Fig.41	13.415	Fig.42
	1747.5	20325		75	0	13.480	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	17.887	Fig.53	17.887	Fig.54

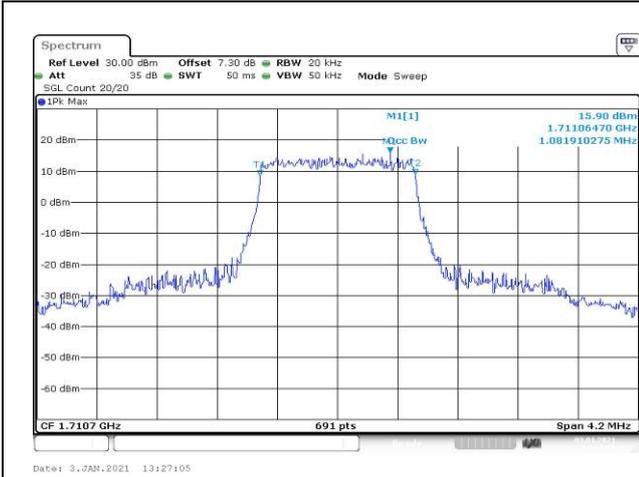


Fig.1

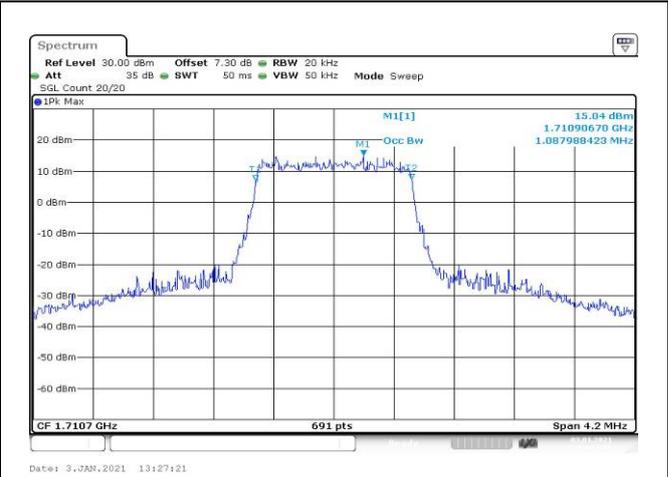


Fig.2

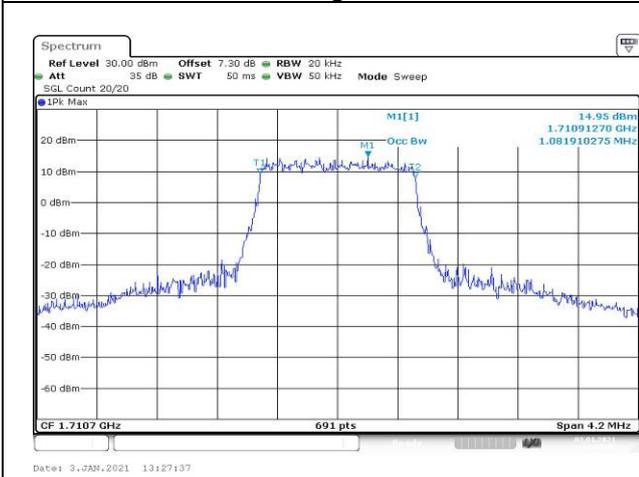


Fig.3

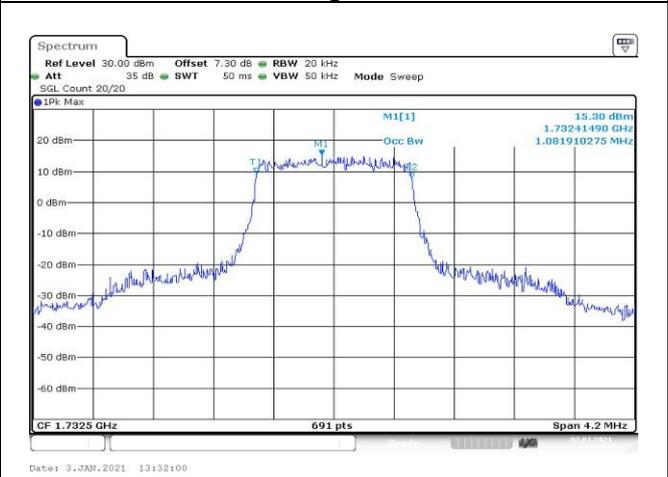


Fig.4

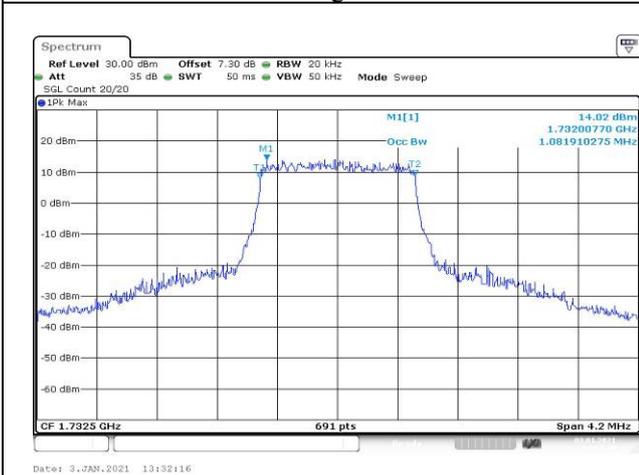


Fig.5

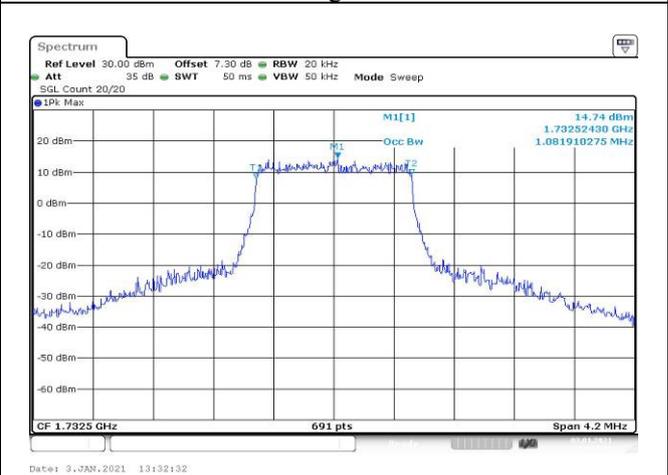


Fig.6

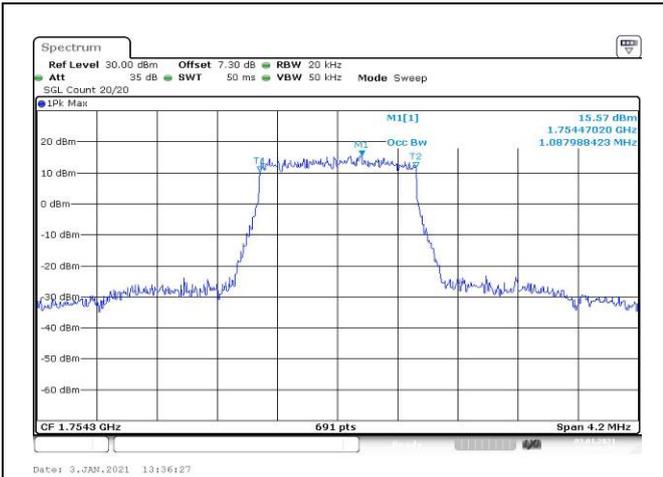


Fig.7

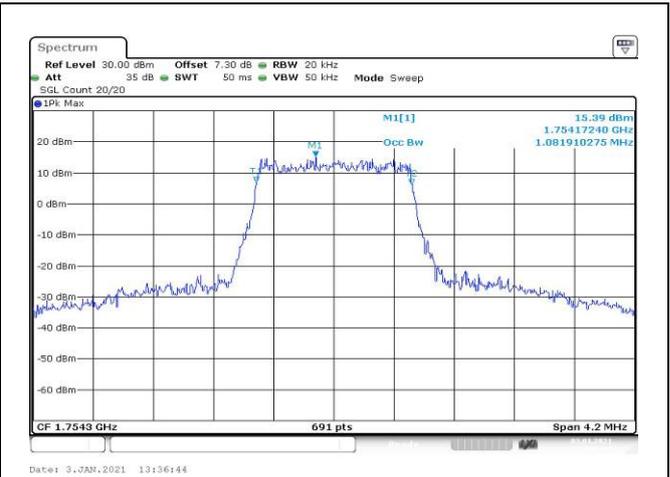


Fig.8

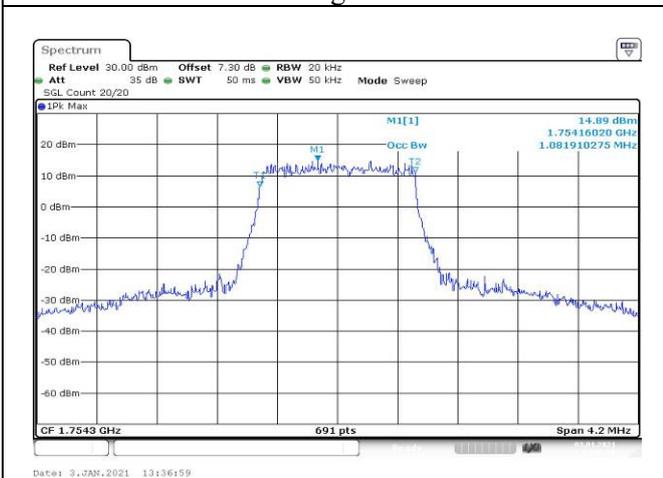


Fig.9

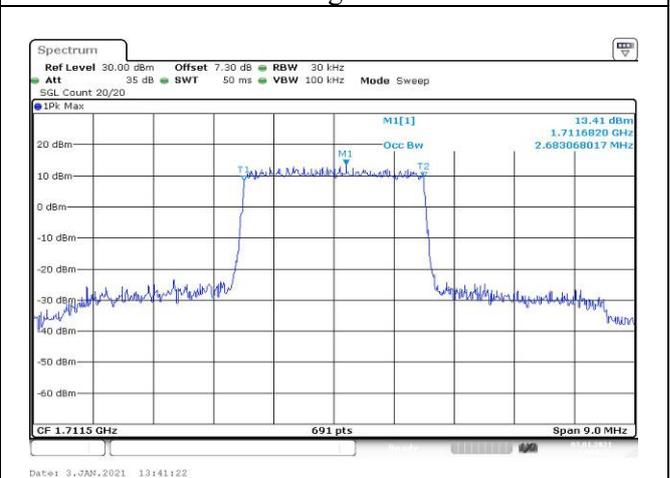


Fig.10

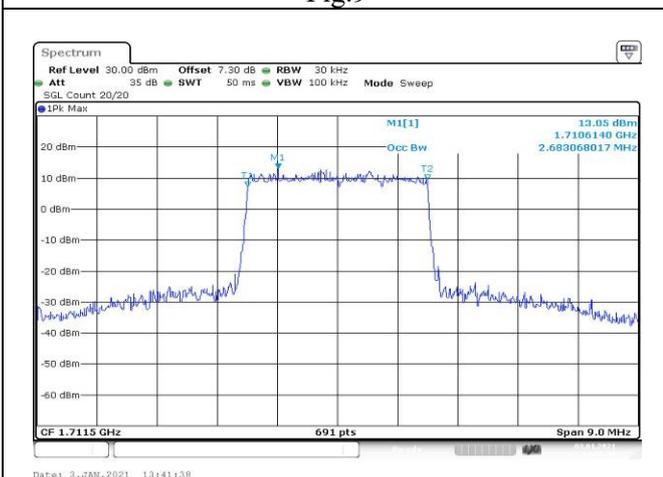


Fig.11

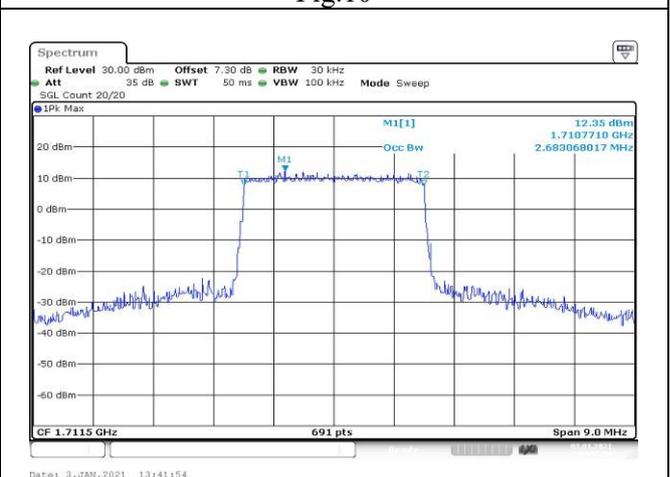


Fig.12

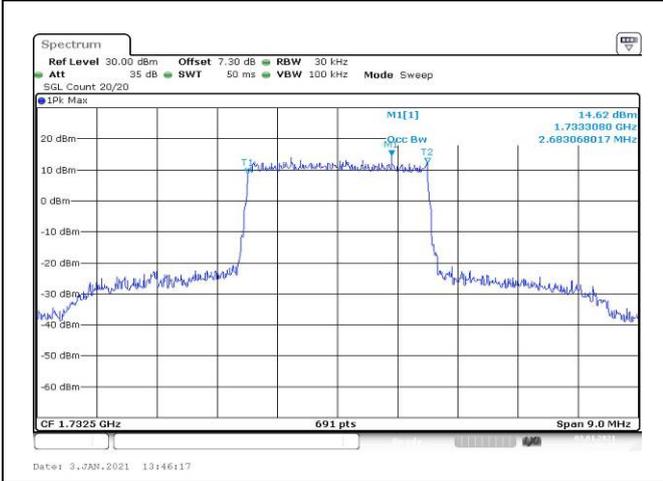


Fig.13

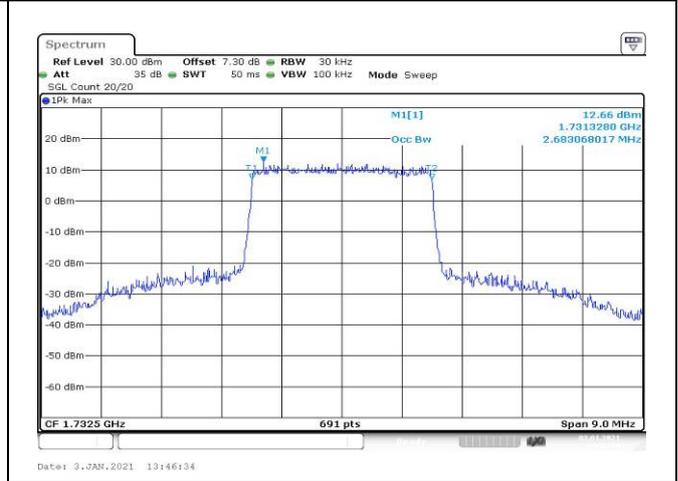


Fig.14

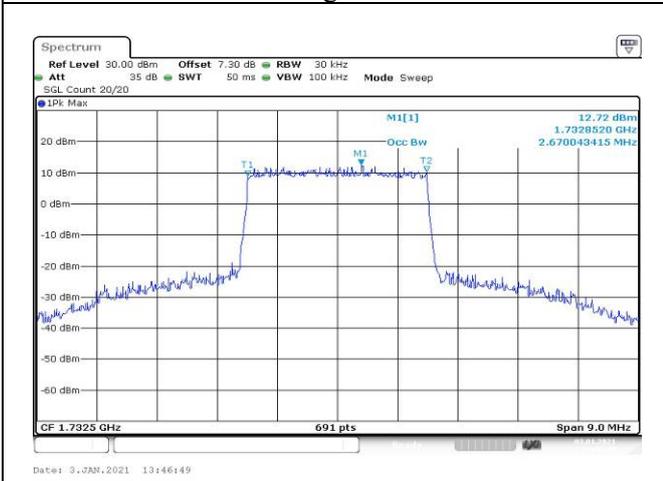


Fig.15

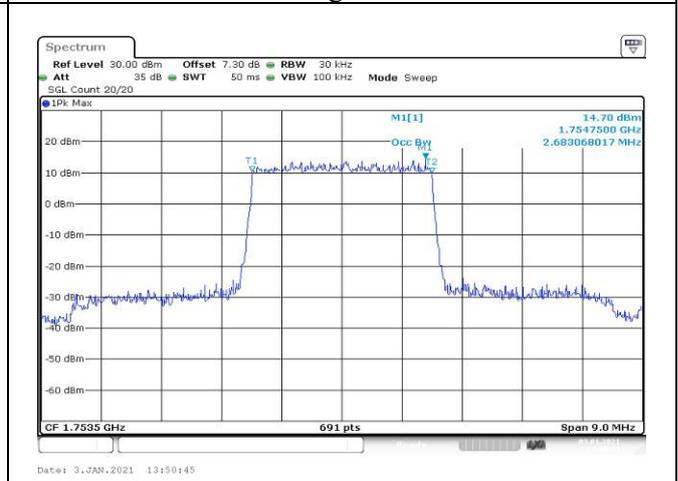


Fig.16

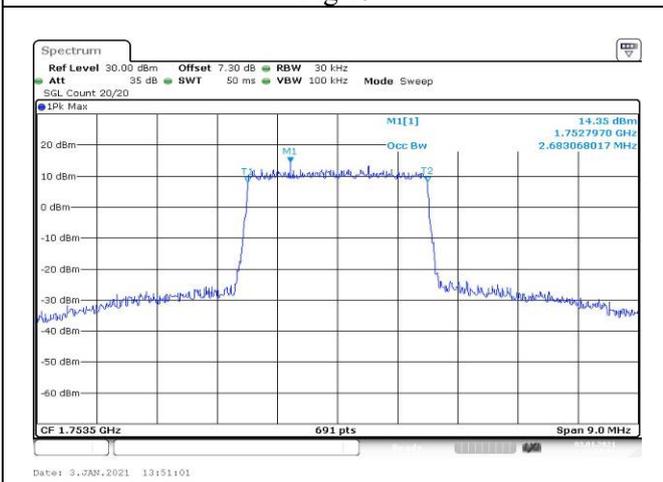


Fig.17

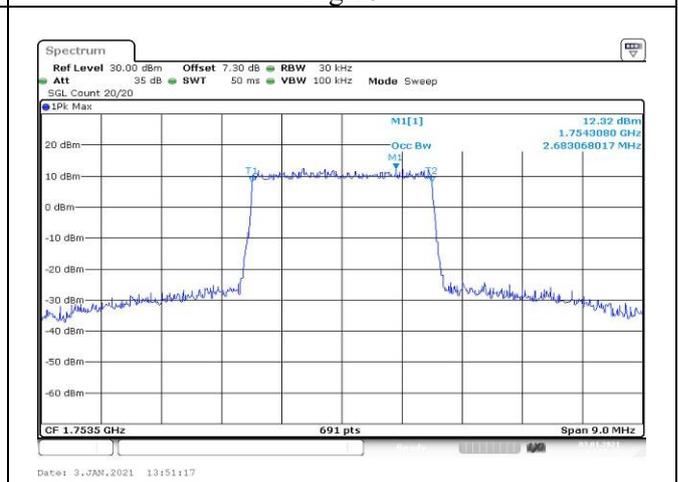


Fig.18

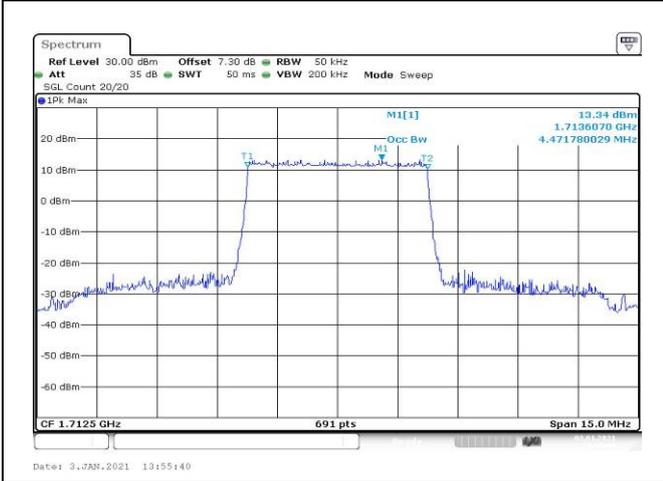


Fig.19

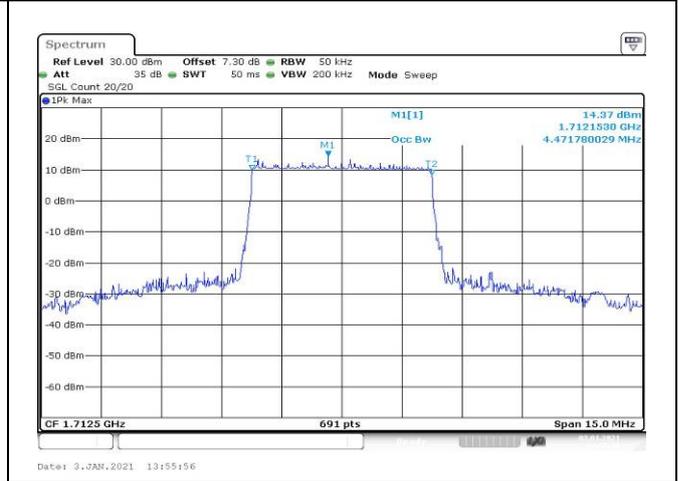


Fig.20

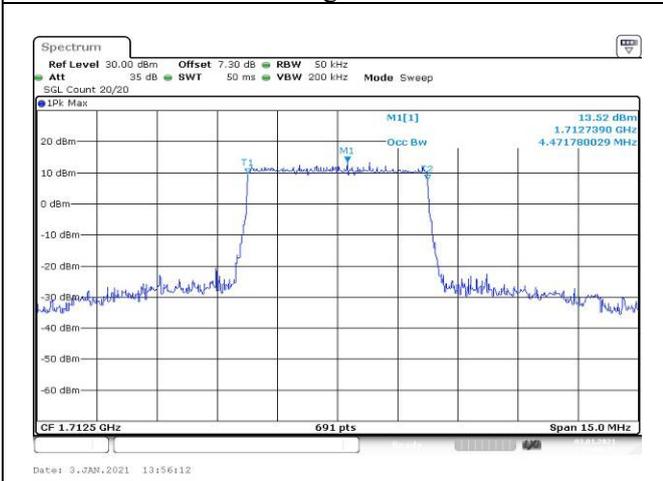


Fig.21

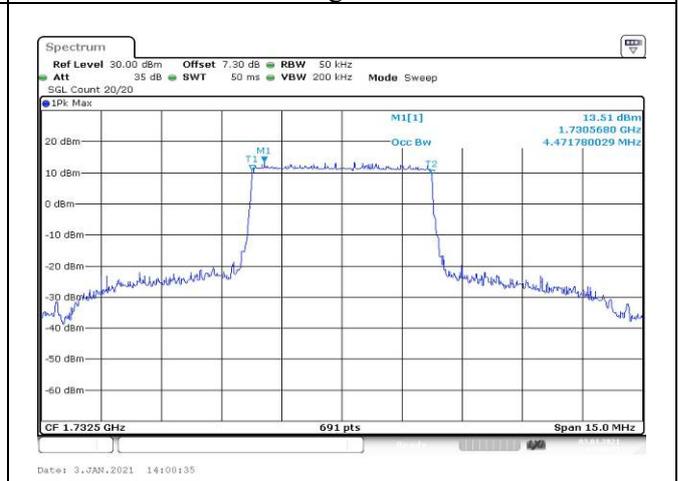


Fig.22

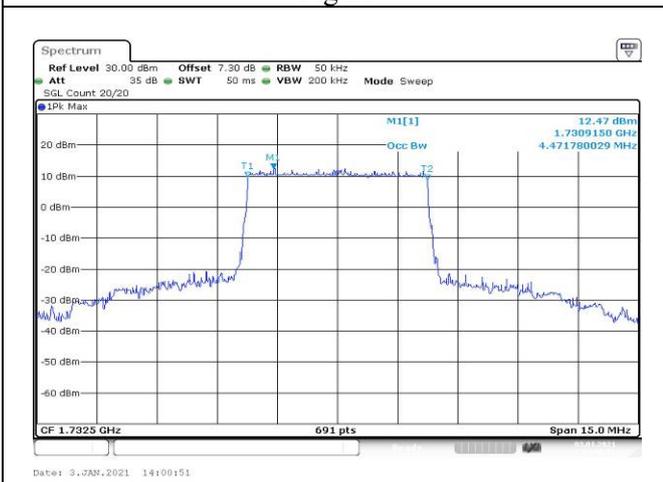


Fig.23

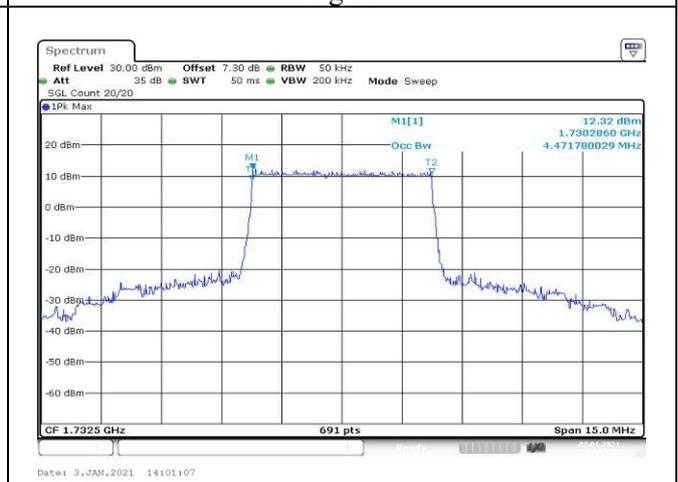


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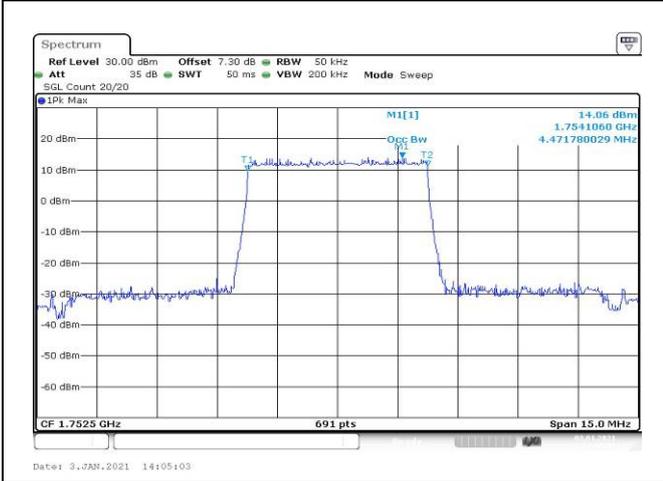


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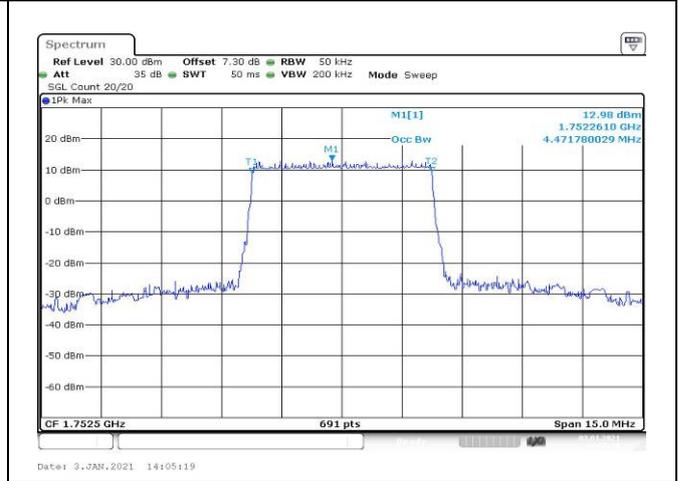


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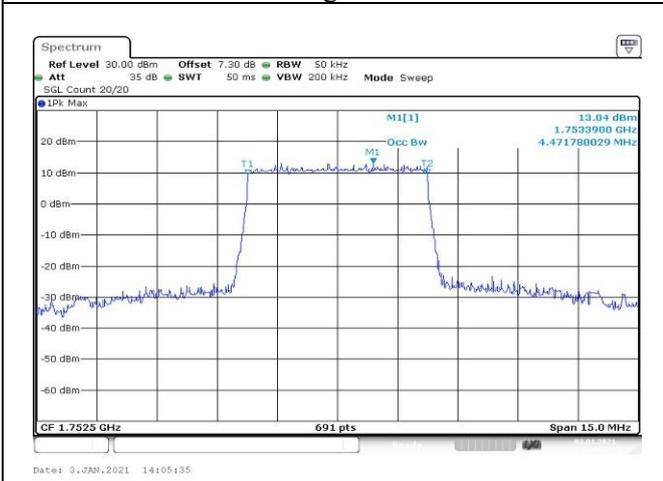


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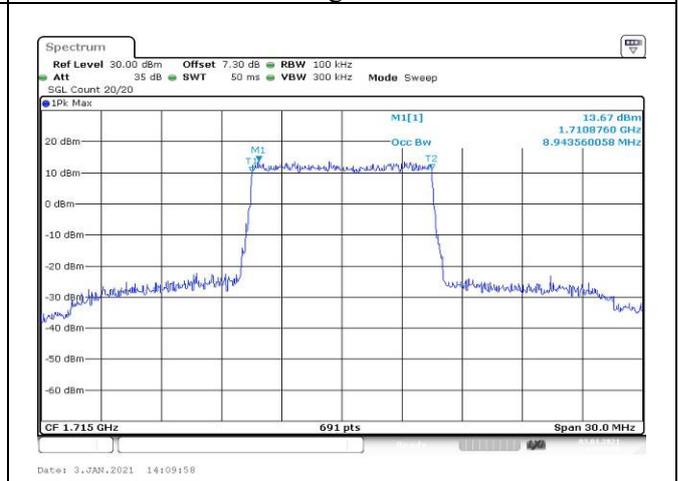


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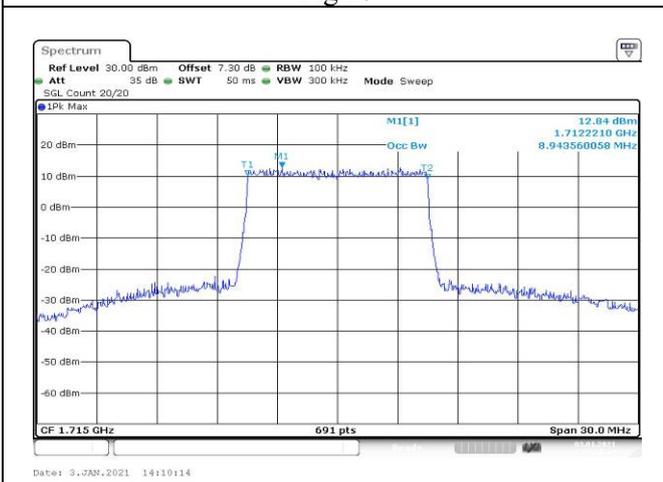


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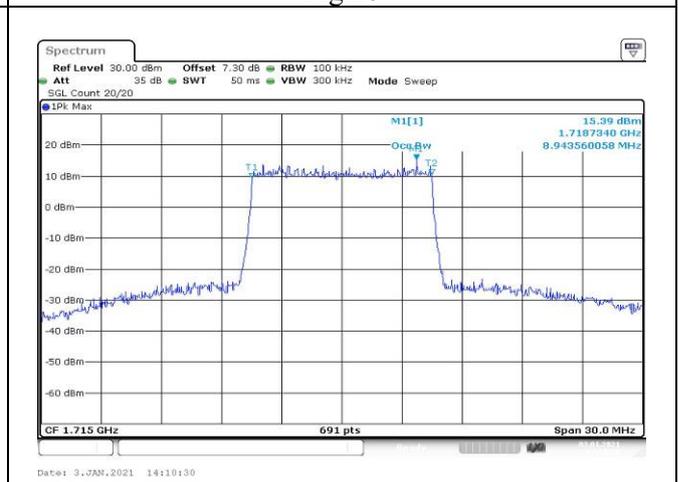


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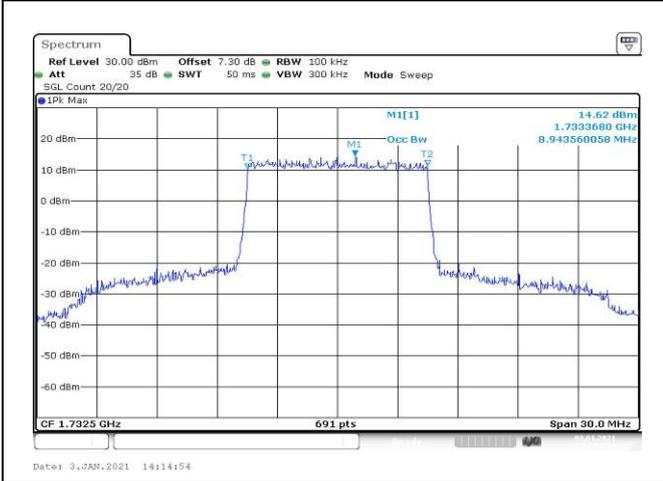


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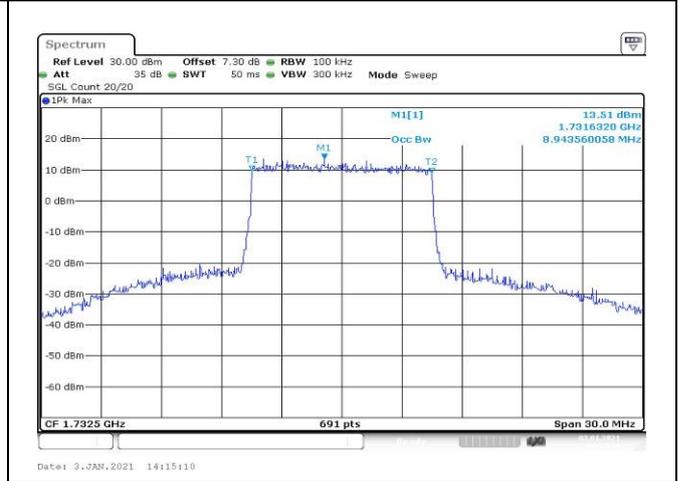


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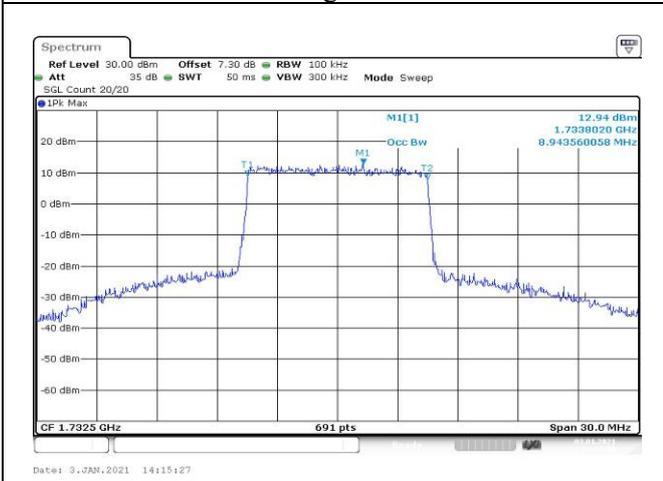


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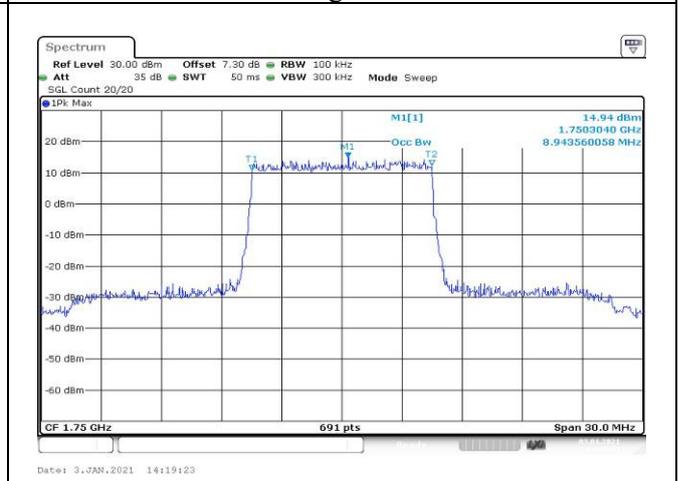


Fig.34



Fig.35

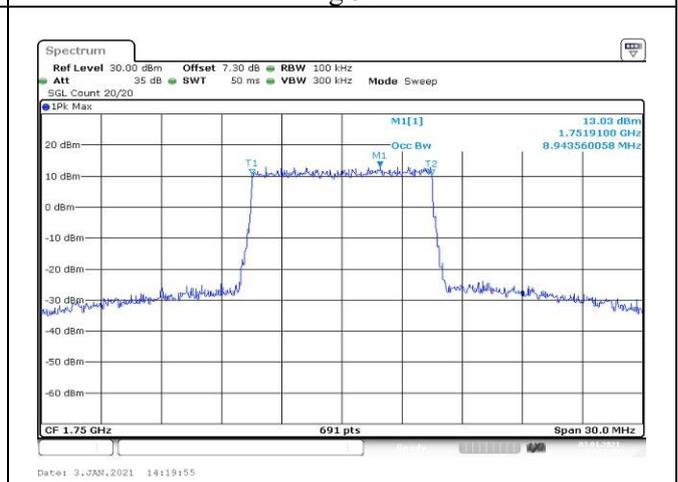
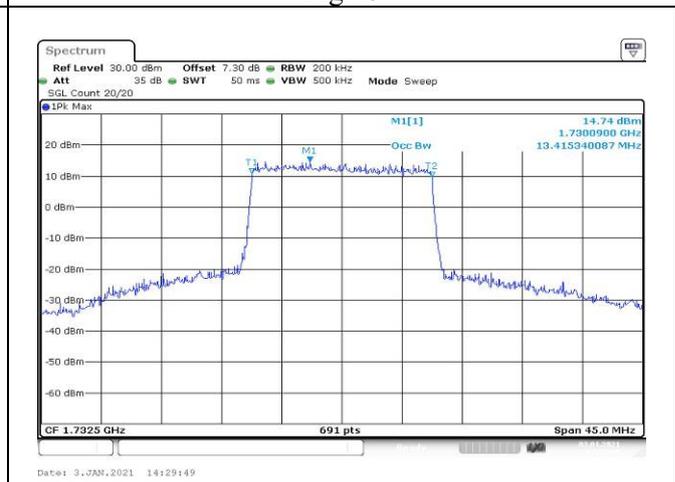
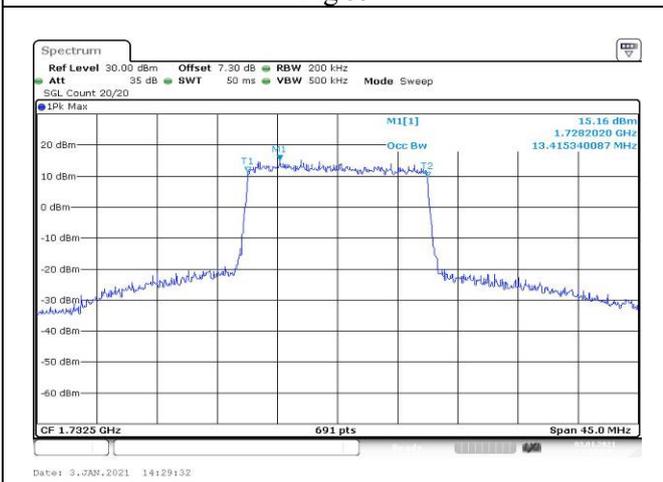
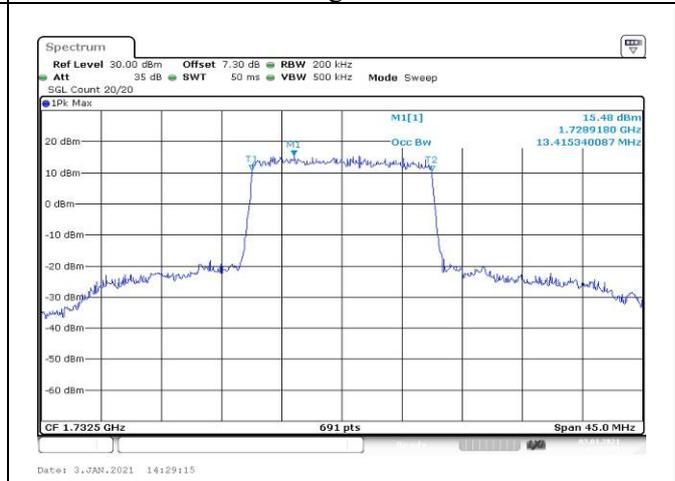
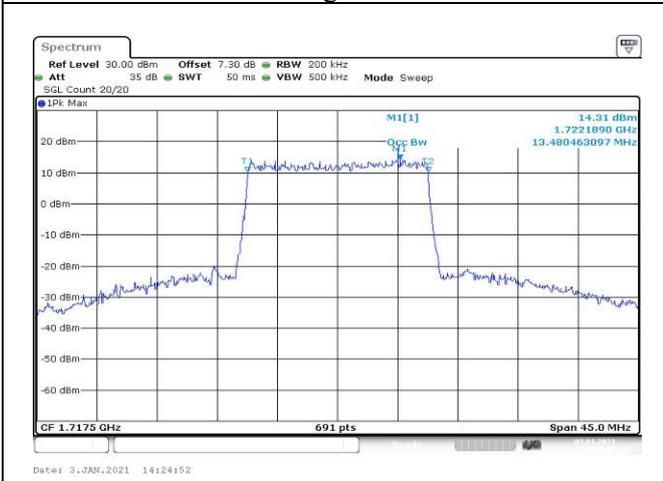
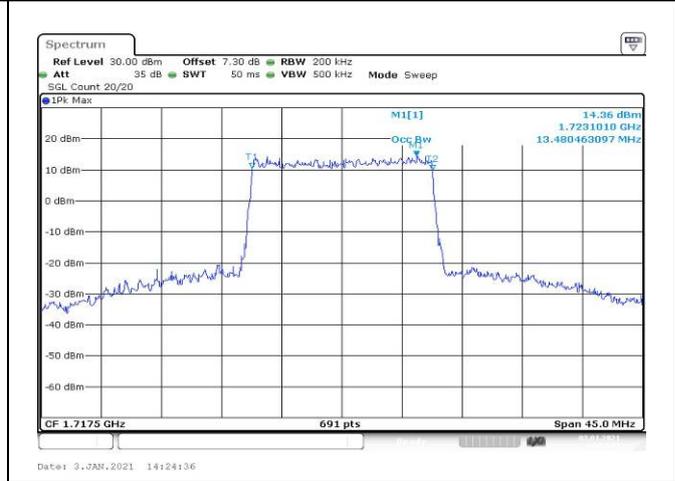
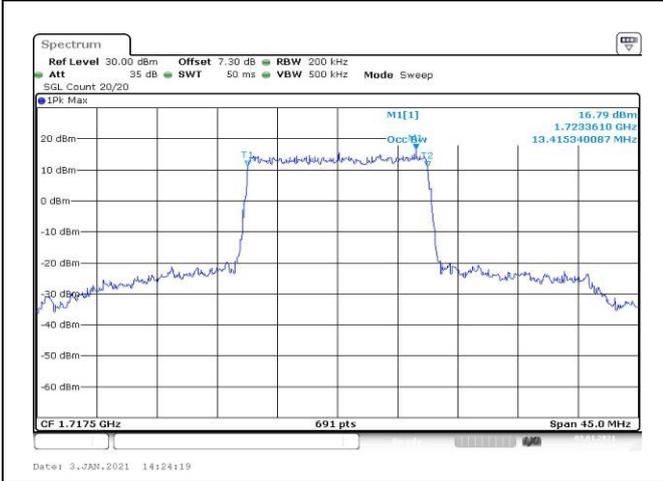


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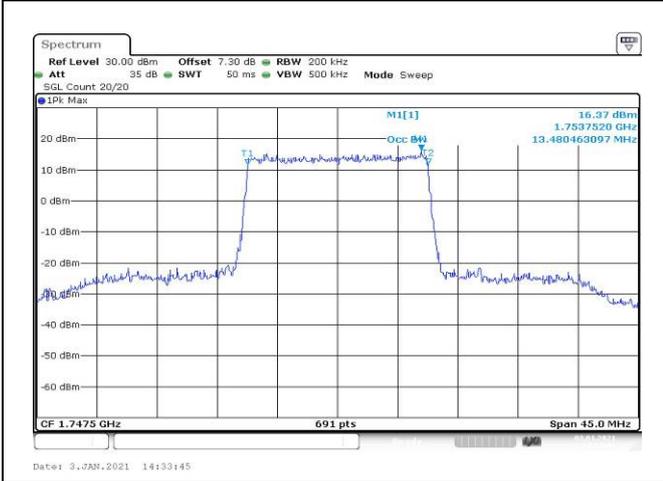


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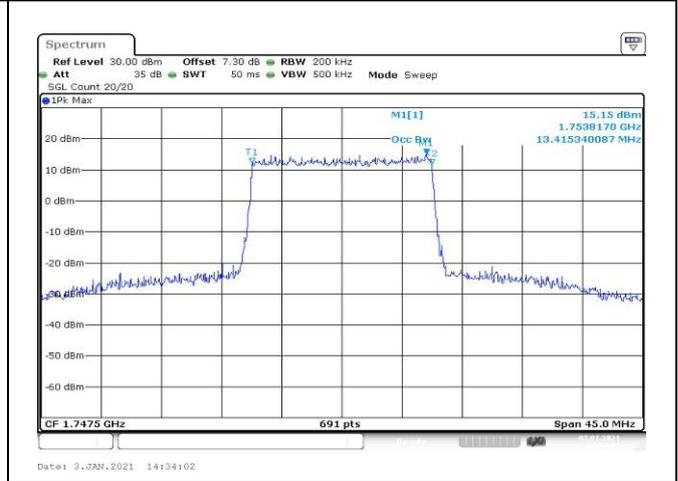


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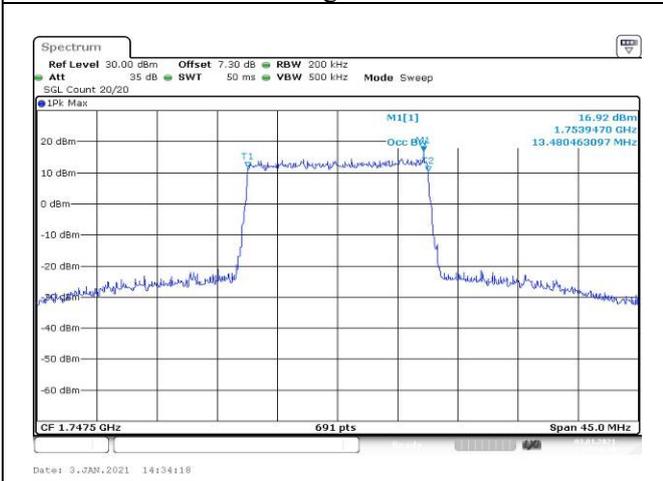


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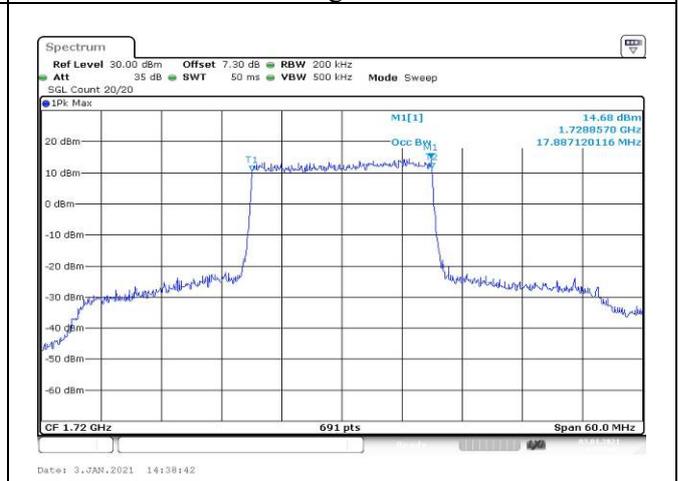


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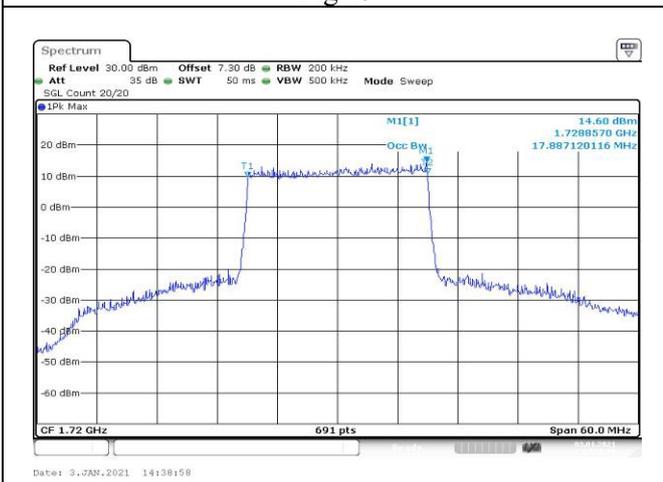


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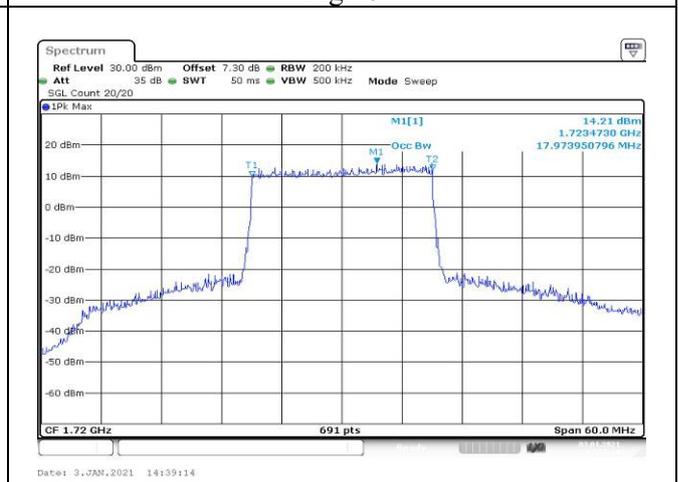


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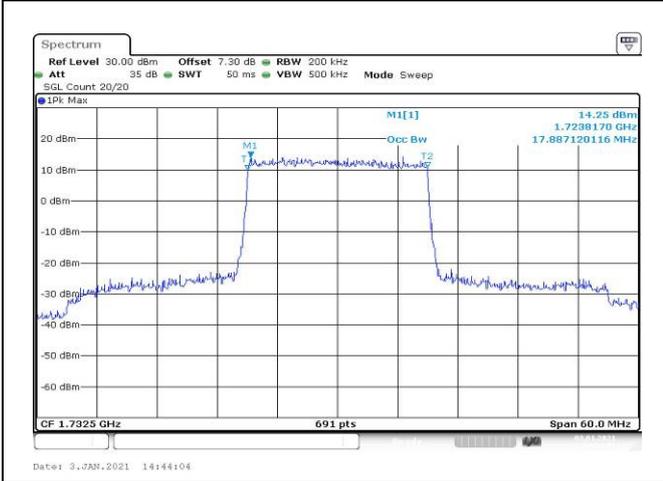


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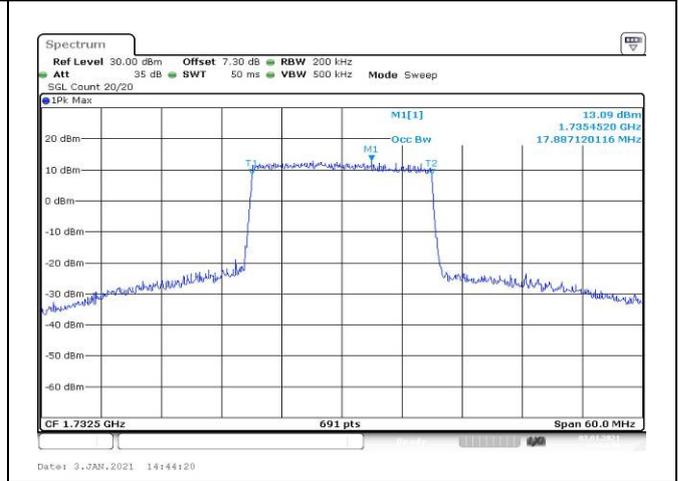


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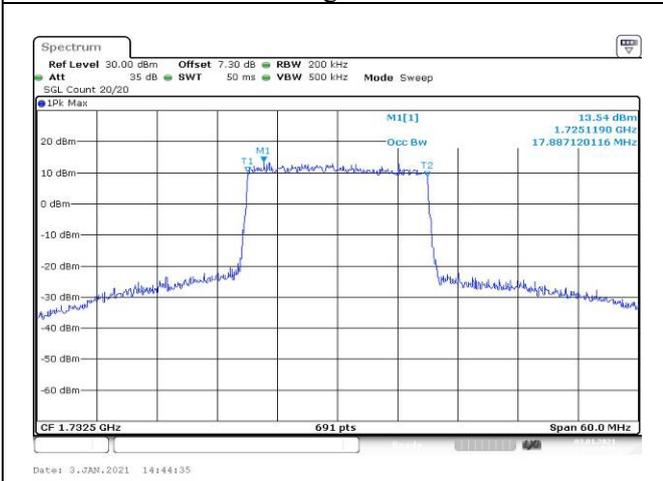


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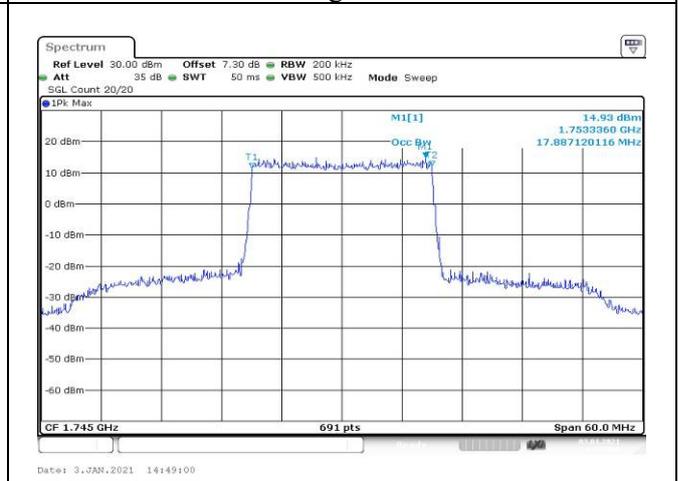


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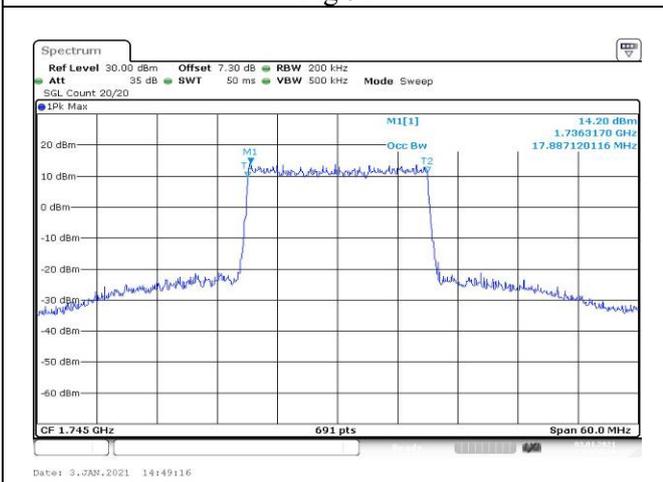


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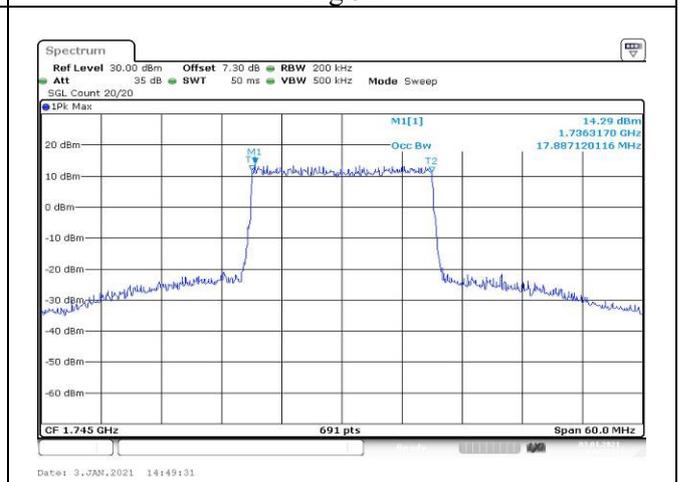


Fig.54

### 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	1.246	Fig.2	1.252	Fig.3
	1732.5	20175		6	0	1.258	Fig.4	1.240	Fig.5	1.246	Fig.6
	1754.3	20393		6	0	1.258	Fig.7	1.252	Fig.8	1.246	Fig.9
	1711.5	19965	3	15	0	2.852	Fig.10	2.865	Fig.11	2.826	Fig.12
	1732.5	20175		15	0	2.839	Fig.13	2.865	Fig.14	2.865	Fig.15
	1753.5	20385		15	0	2.852	Fig.16	2.865	Fig.17	2.865	Fig.18
	1712.5	19975	5	25	0	4.841	Fig.19	4.754	Fig.20	4.819	Fig.21
	1732.5	20175		25	0	4.819	Fig.22	4.819	Fig.23	4.797	Fig.24
	1752.5	20375		25	0	4.797	Fig.25	4.841	Fig.26	4.841	Fig.27
	1715	20000	10	50	0	9.595	Fig.28	9.421	Fig.29	9.508	Fig.30
	1732.5	20175		50	0	9.508	Fig.31	9.508	Fig.32	9.465	Fig.33
	1750	20350		50	0	9.465	Fig.34	9.508	Fig.35	9.551	Fig.36
	1717.5	20025	15	75	0	14.392	Fig.37	14.457	Fig.38	14.392	Fig.39
	1732.5	20175		75	0	14.327	Fig.40	14.327	Fig.41	14.392	Fig.42
	1747.5	20325		75	0	14.457	Fig.43	14.262	Fig.44	14.457	Fig.45
	1720	20050	20	100	0	18.842	Fig.46	19.016	Fig.47	19.016	Fig.48
	1732.5	20175		100	0	18.929	Fig.49	19.016	Fig.50	18.929	Fig.51
	1745	20300		100	0	19.016	Fig.52	19.016	Fig.53	19.103	Fig.54

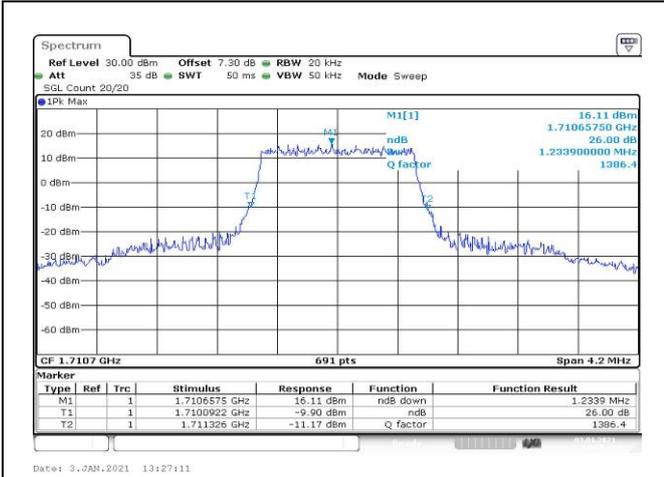


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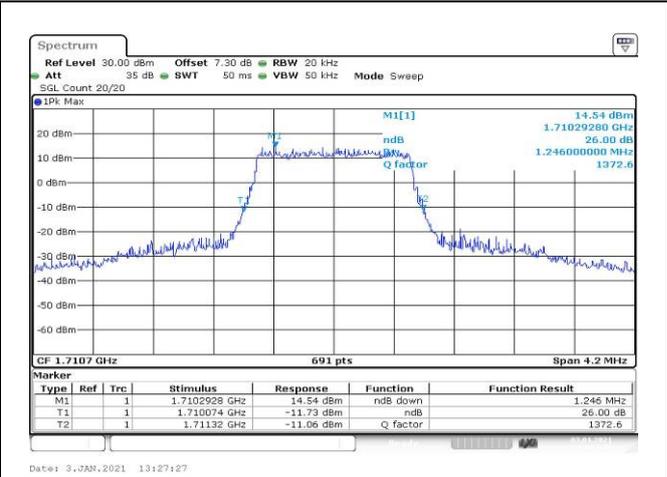


Fig.2

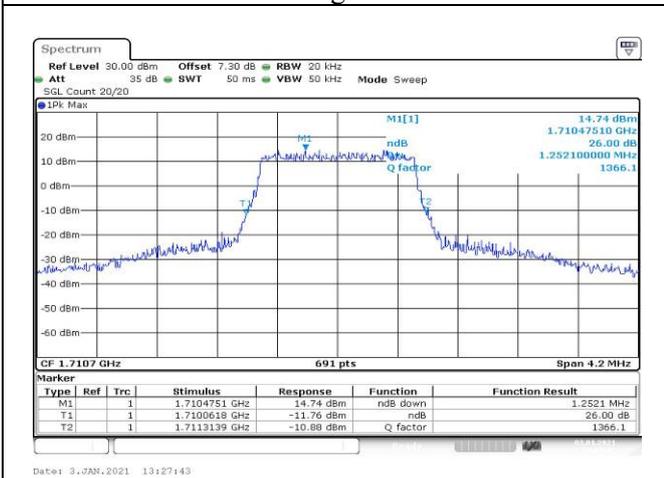


Fig.3

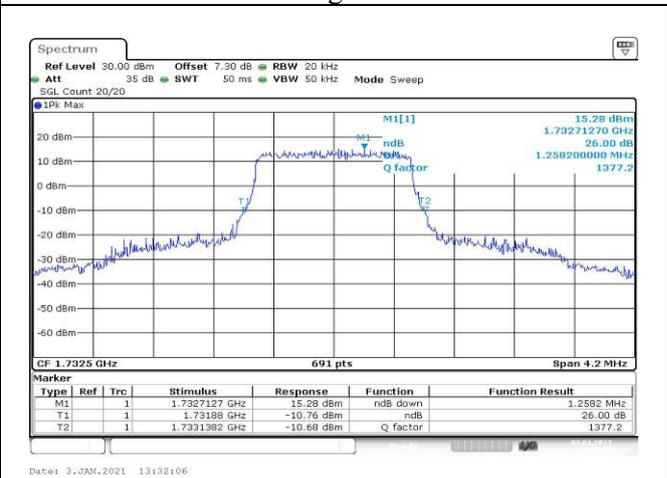


Fig.4



Fig.5

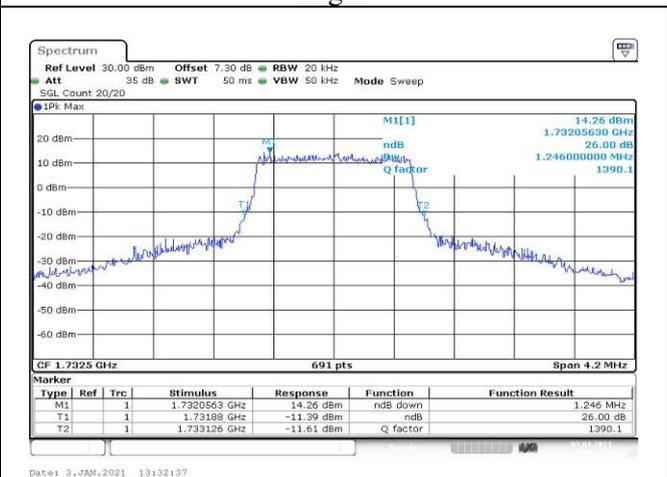


Fig.6

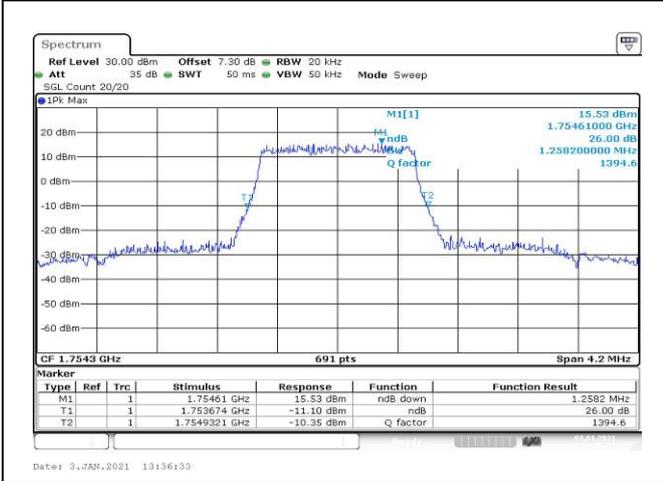


Fig.7

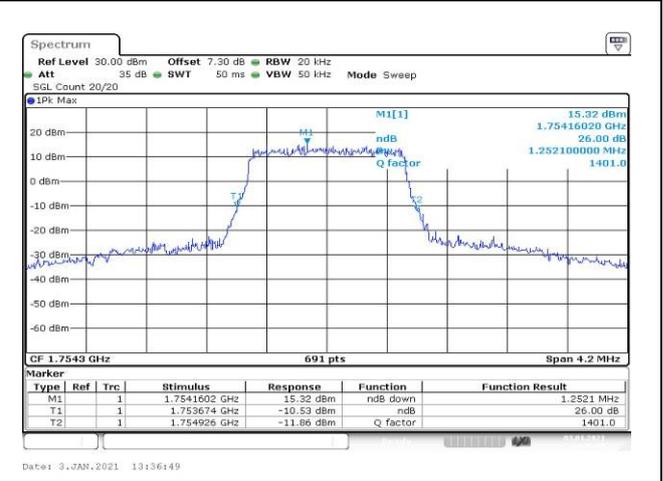


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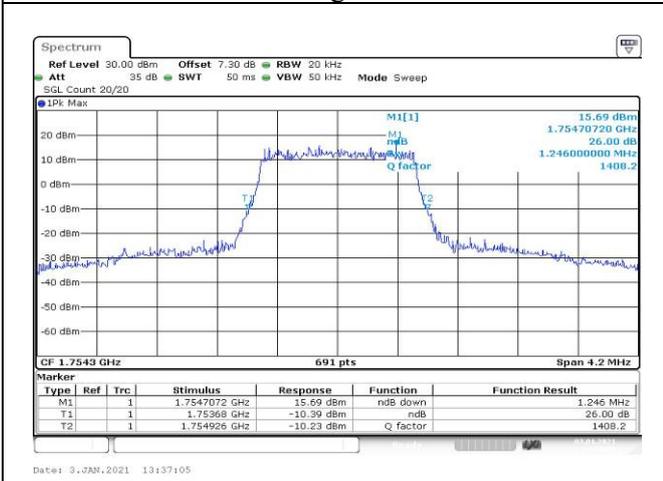


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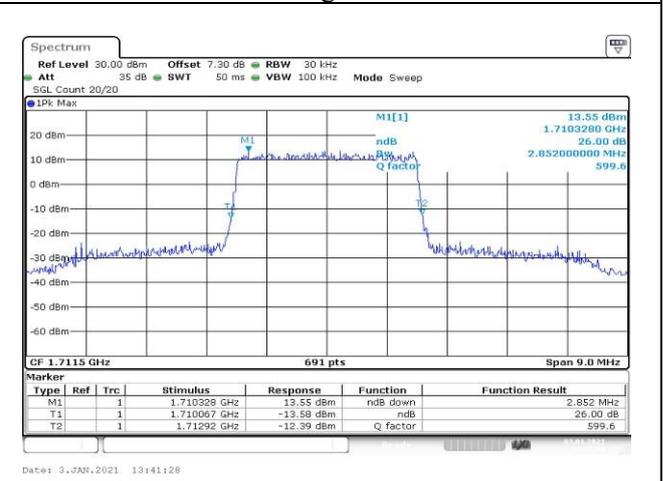


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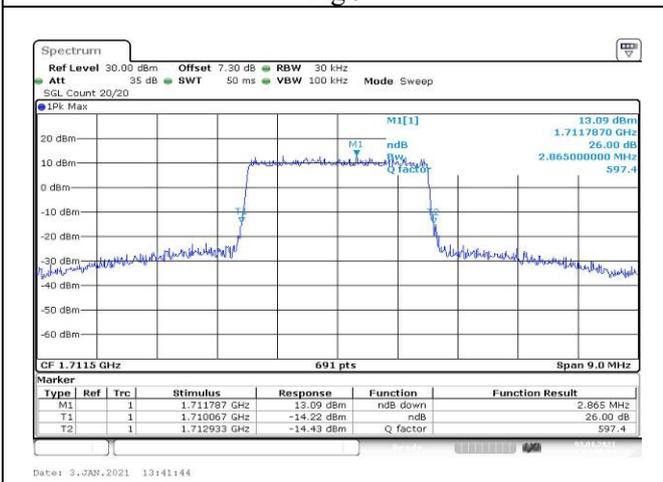


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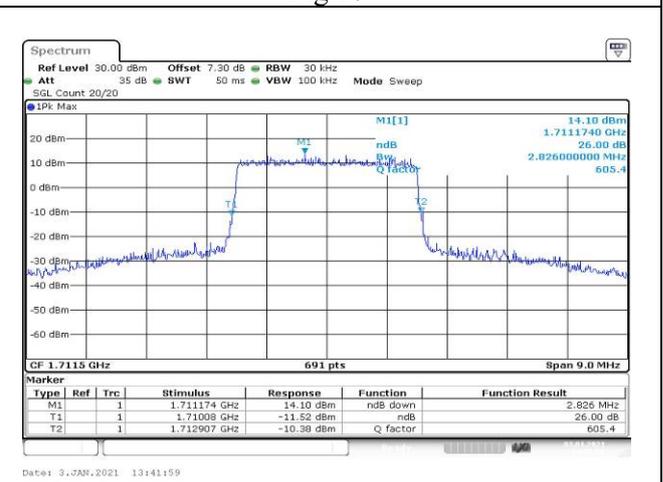


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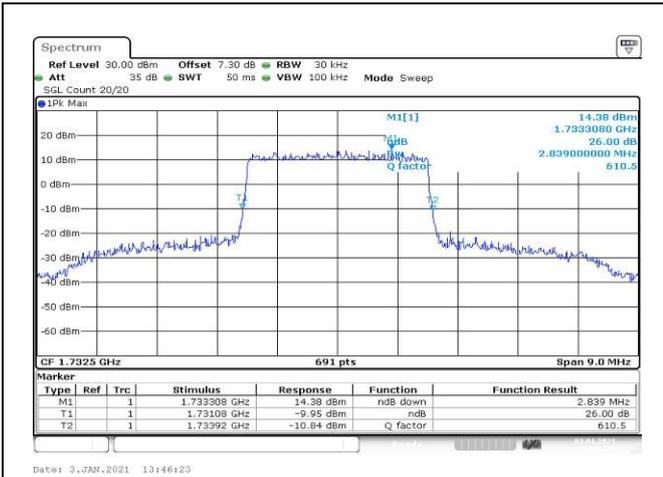


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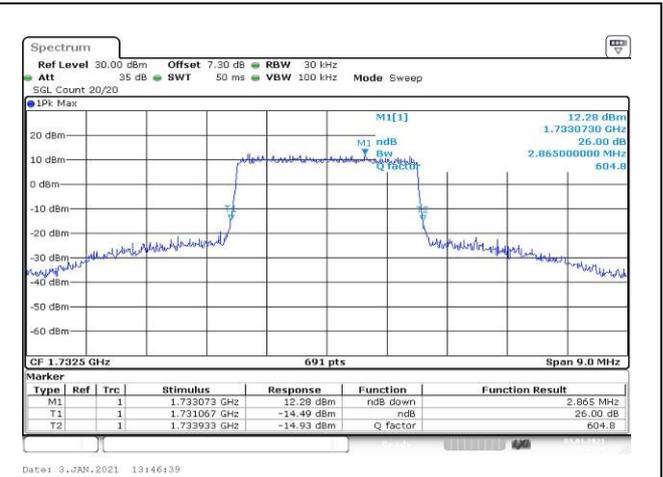


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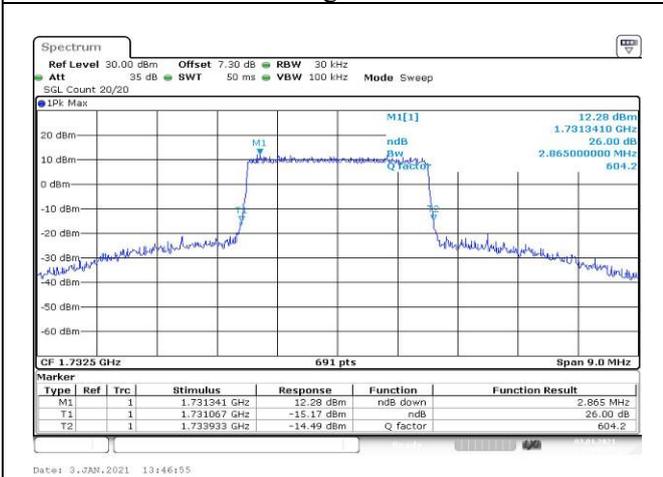


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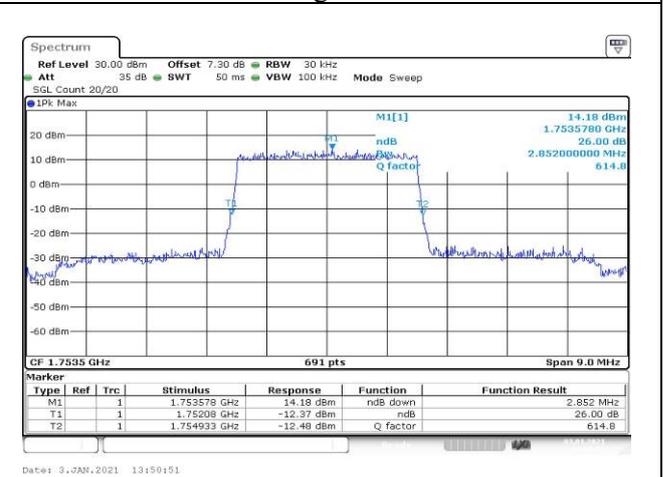


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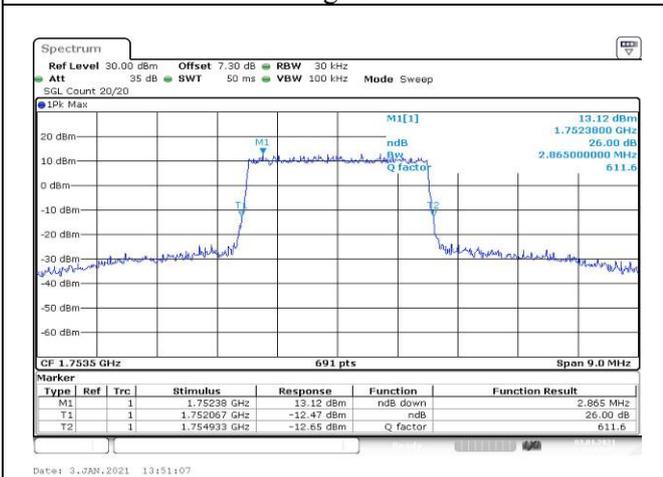


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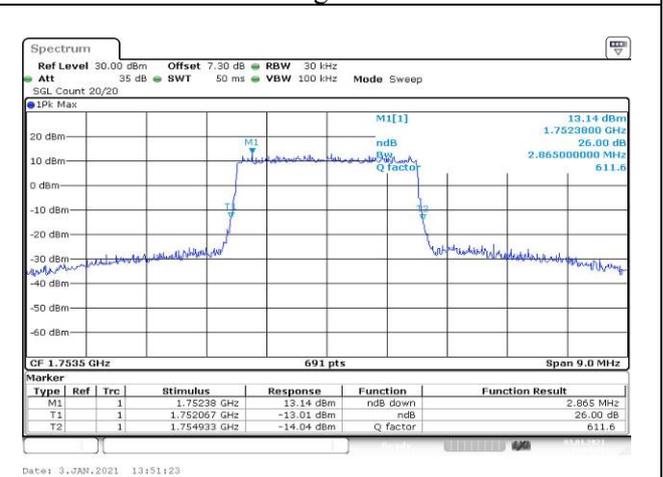


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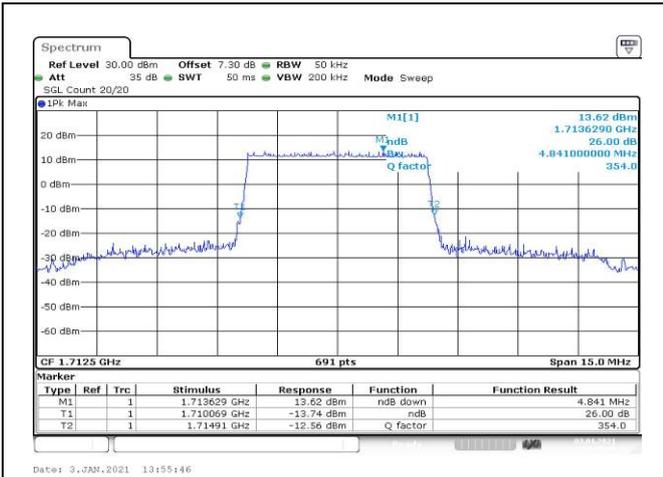


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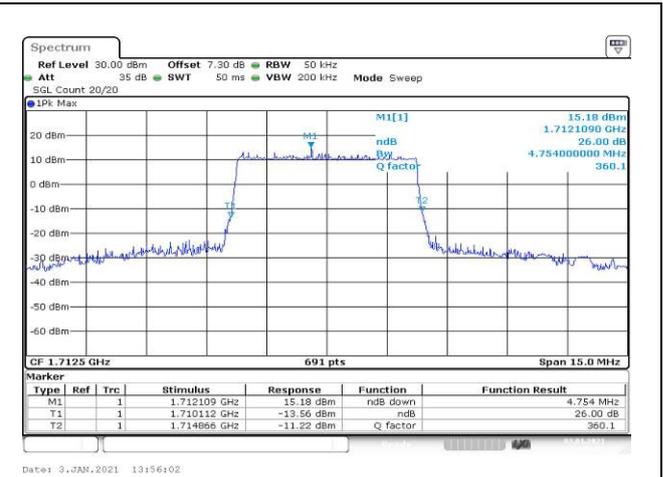


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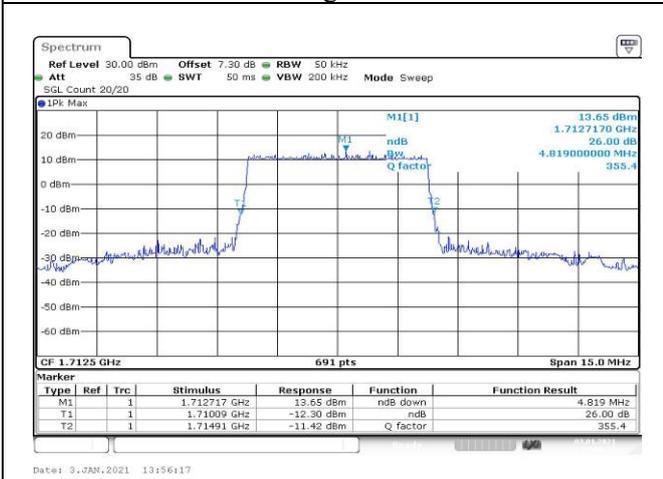


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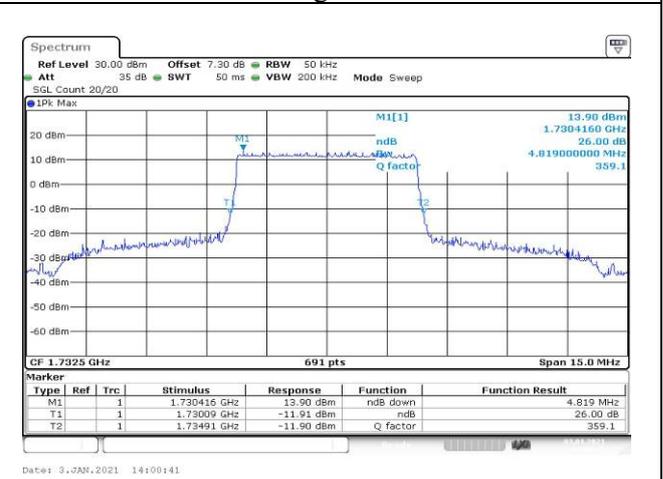


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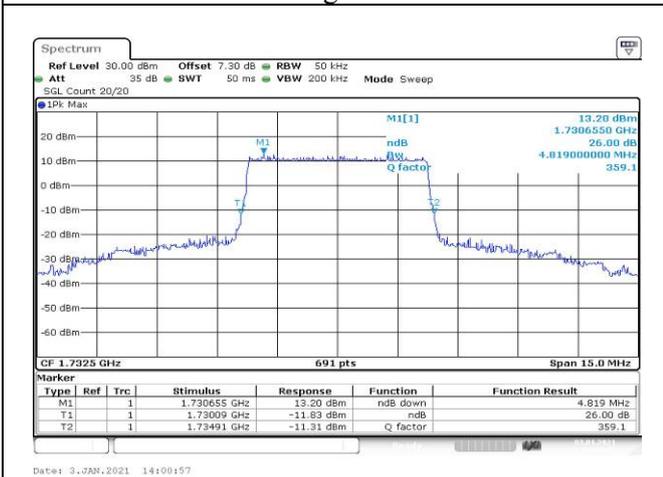


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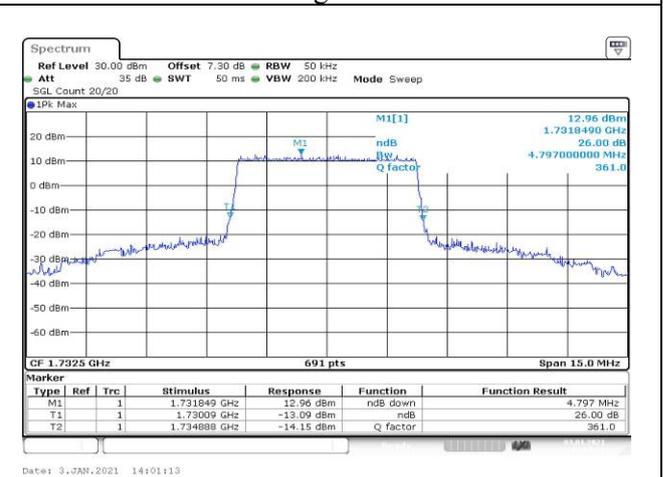


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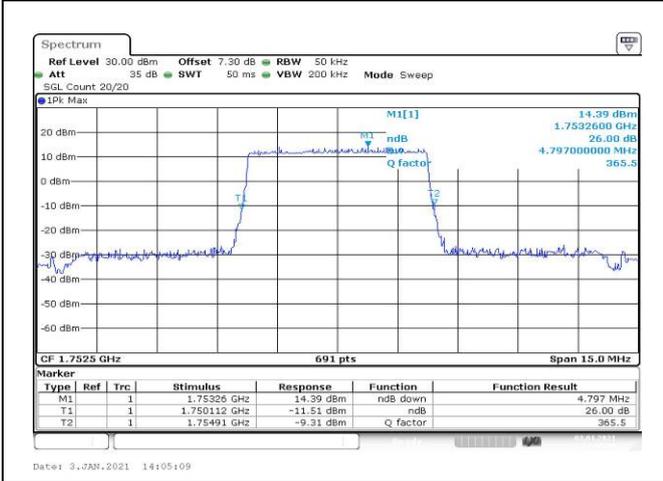


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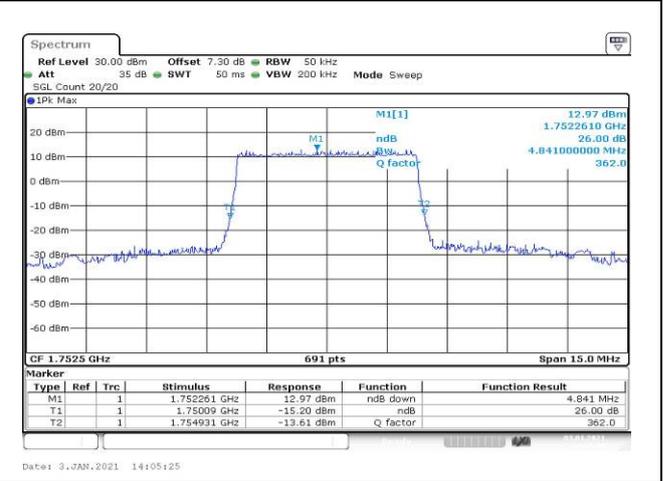


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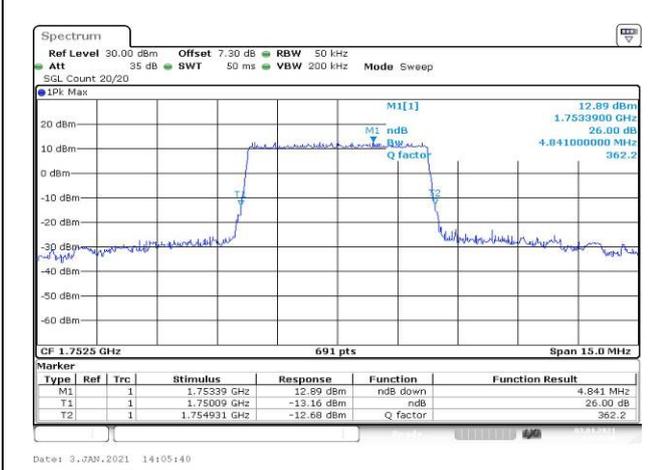


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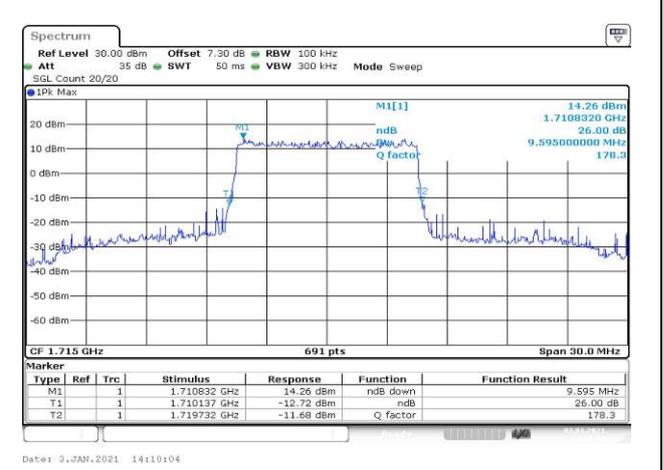


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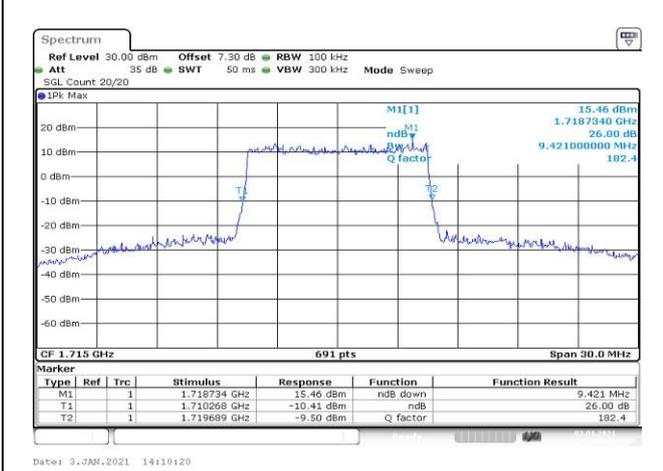


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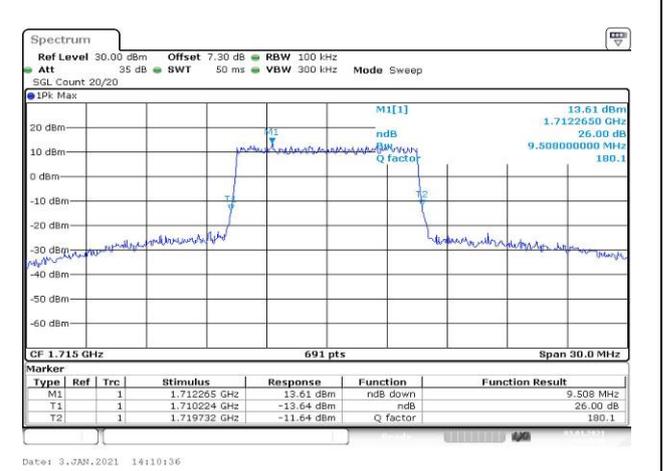


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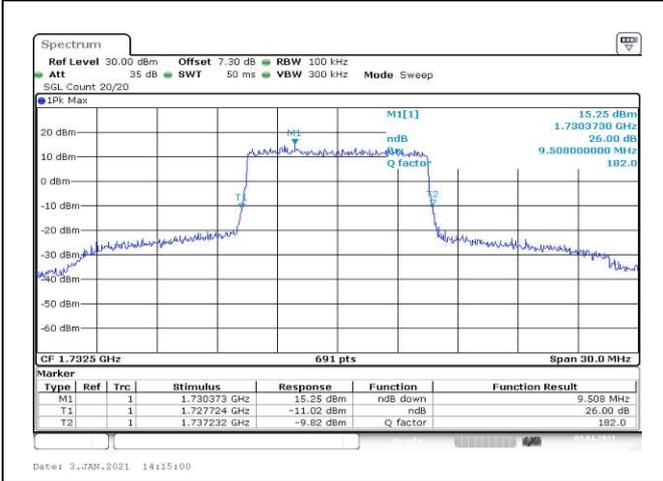


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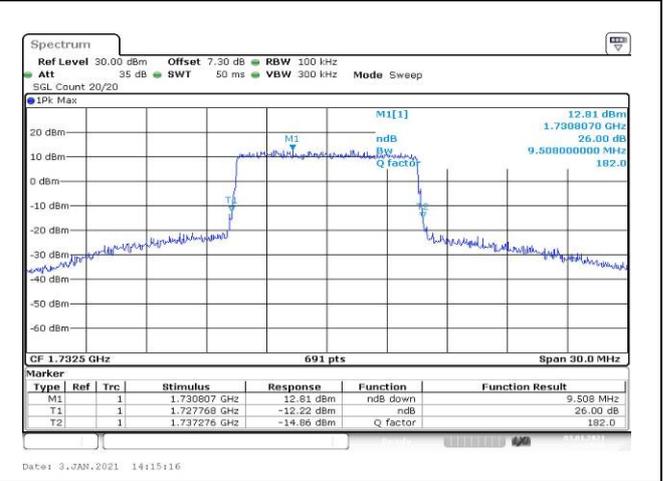


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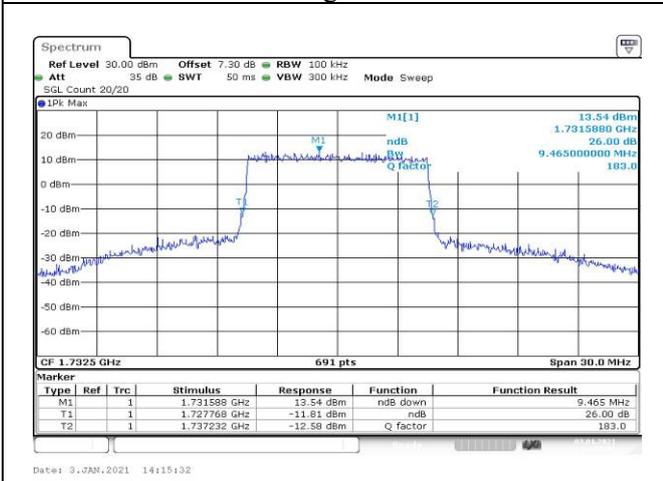


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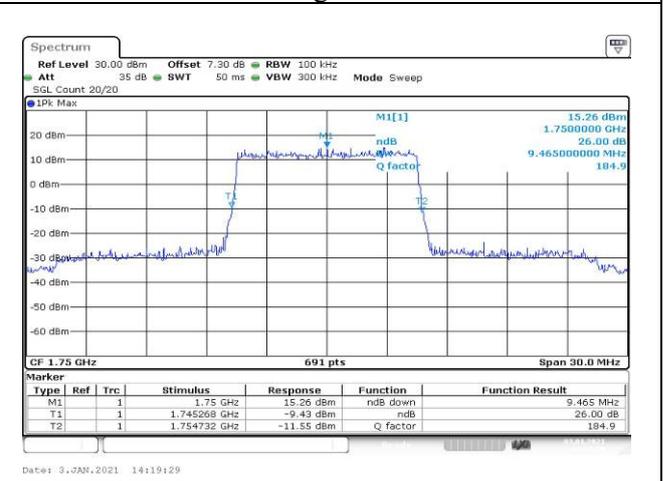


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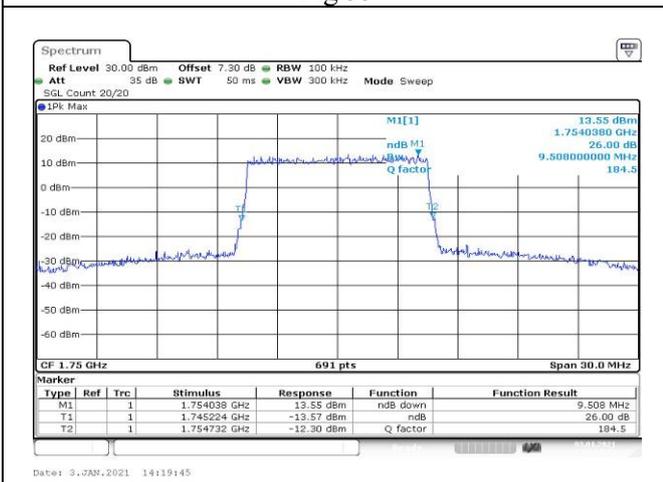


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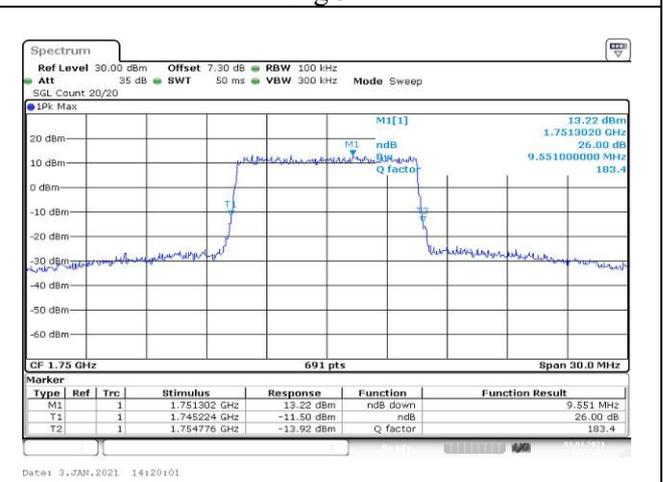


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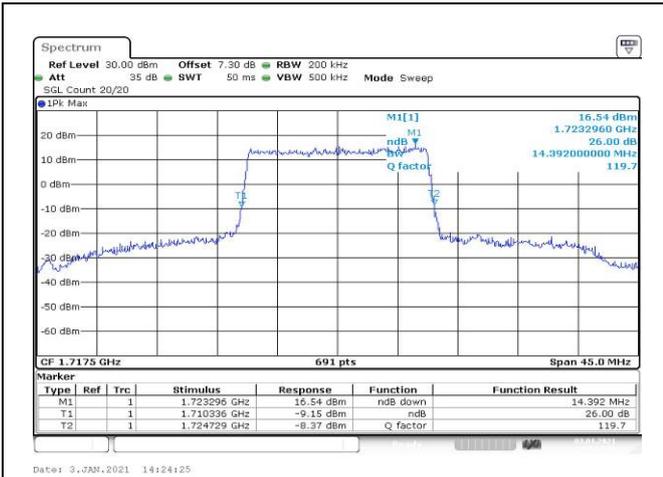


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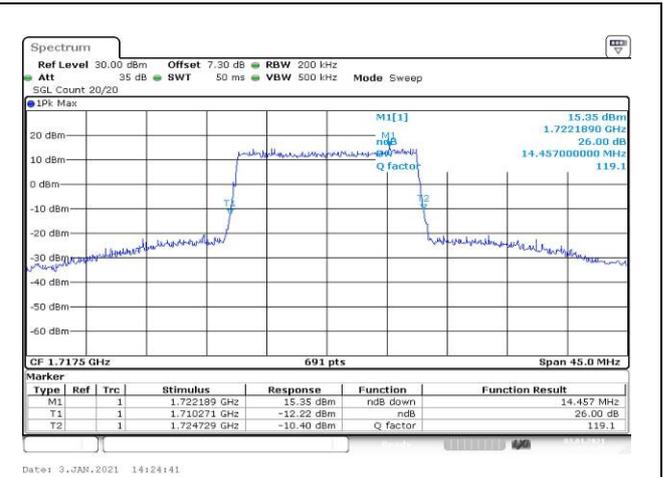


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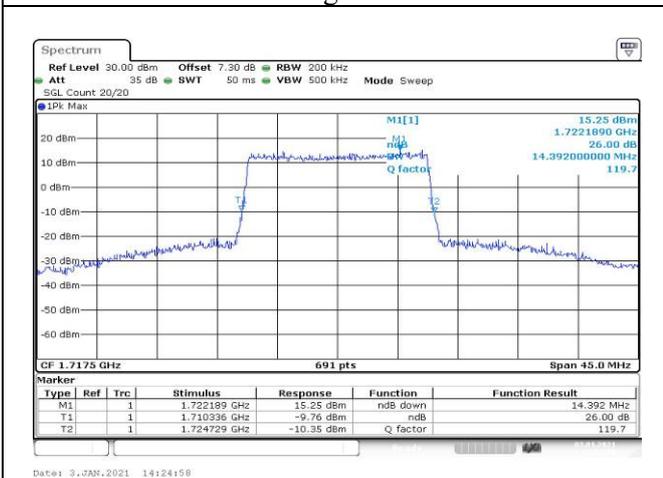


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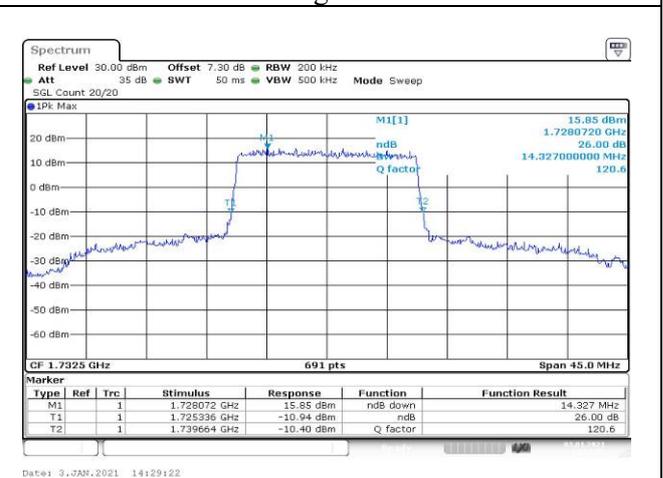


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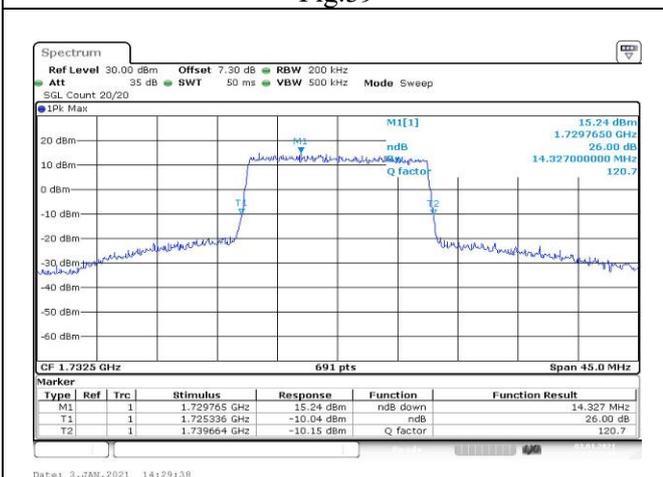


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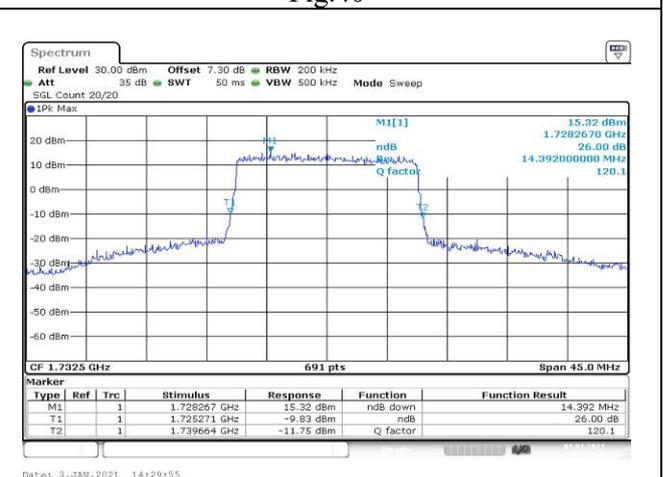


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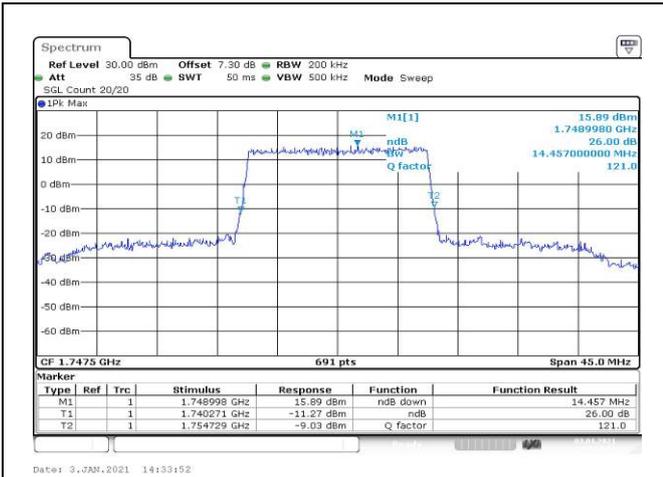


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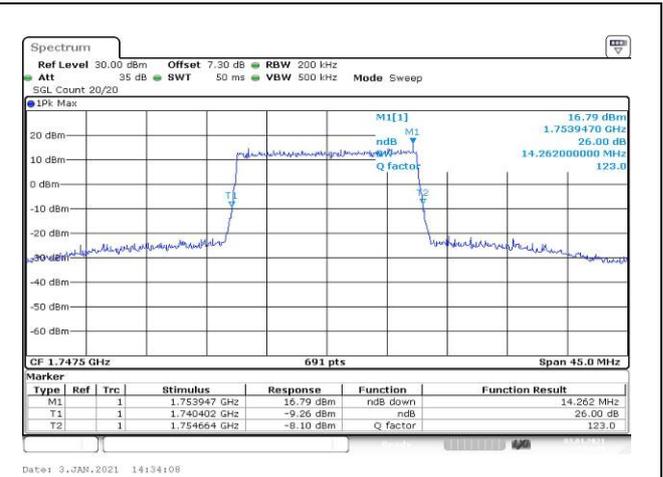


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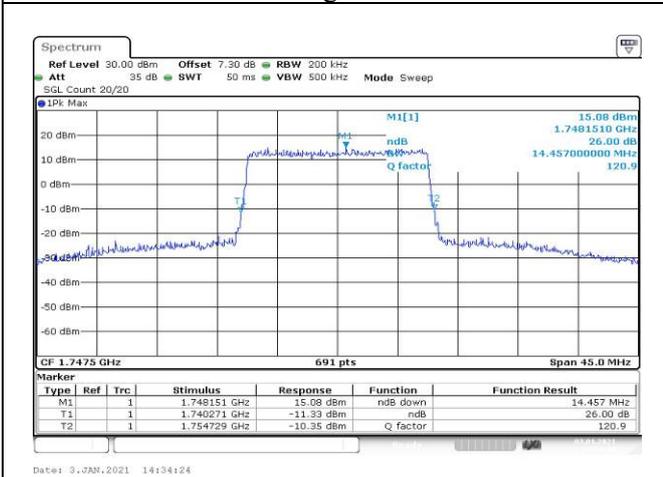


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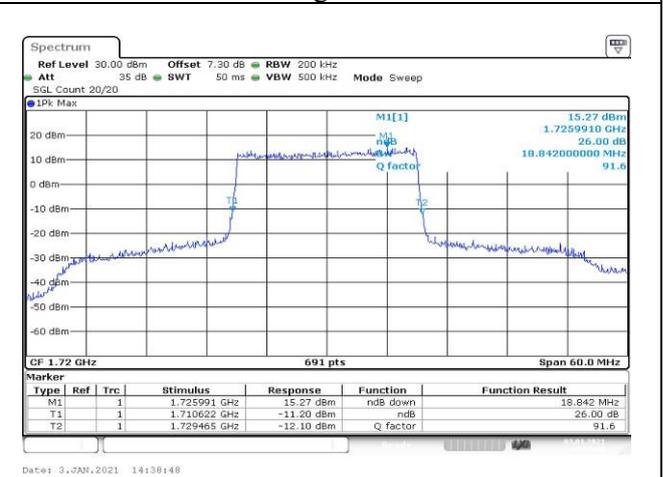


Fig.46



Fig.47

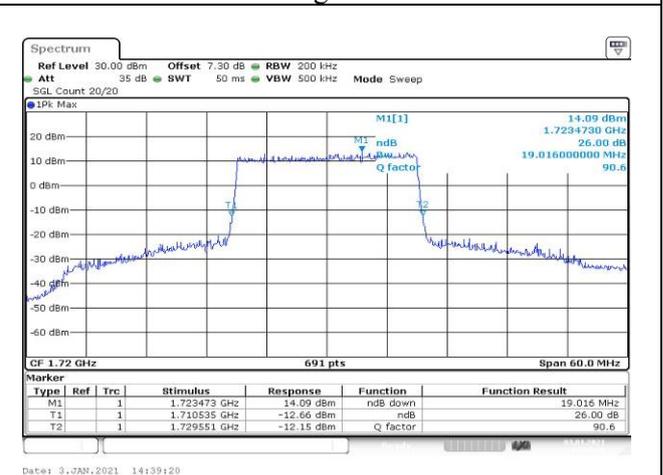


Fig.48

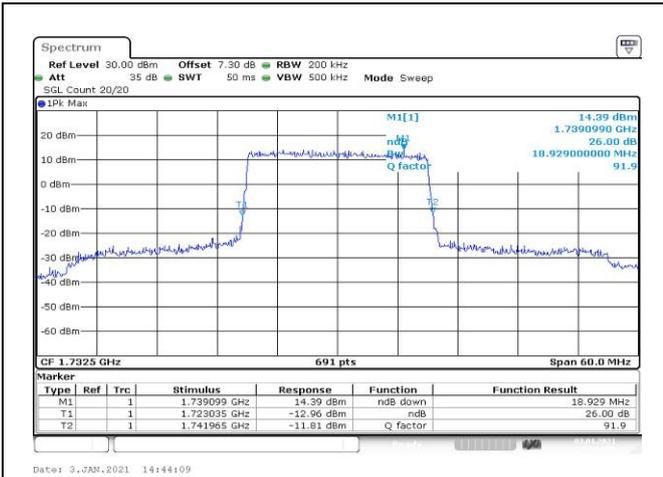


Fig.49

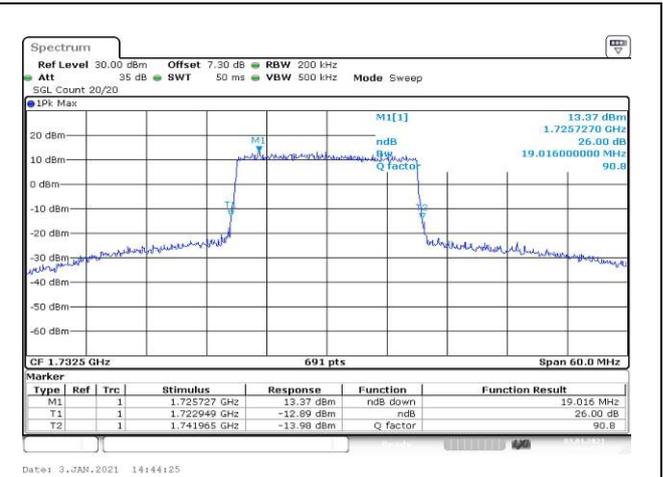


Fig.50

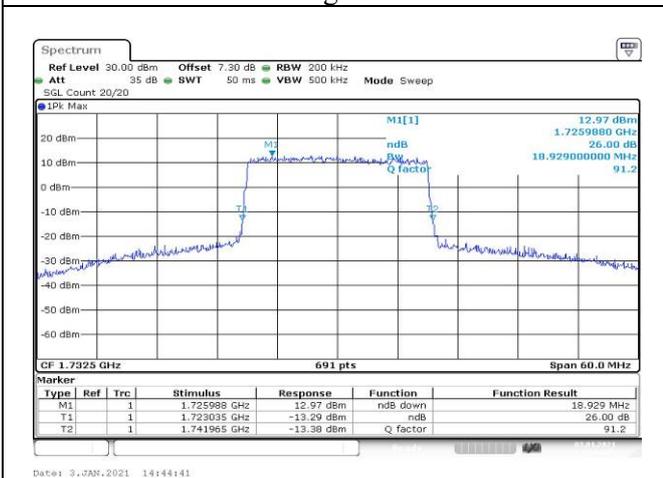


Fig.51

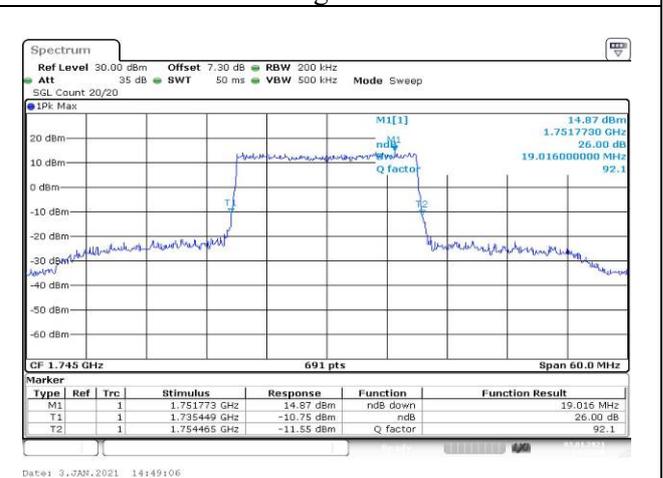


Fig.52

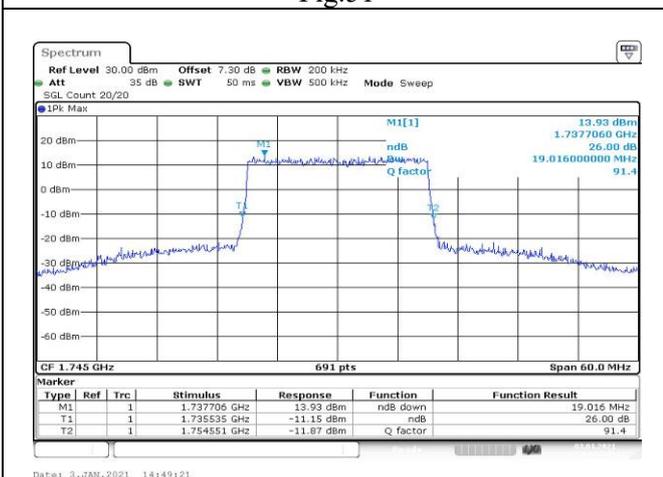


Fig.53

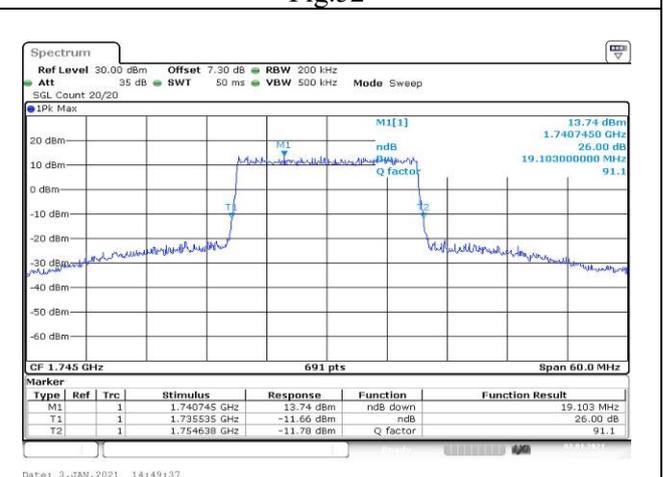


Fig.54

#### 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

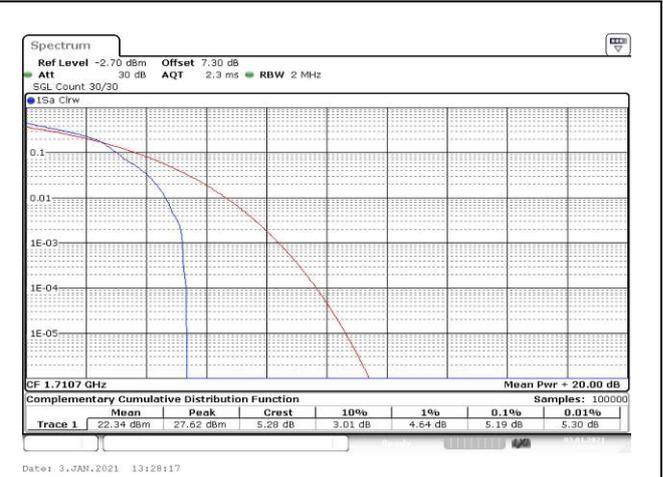


Fig.2



Fig.3

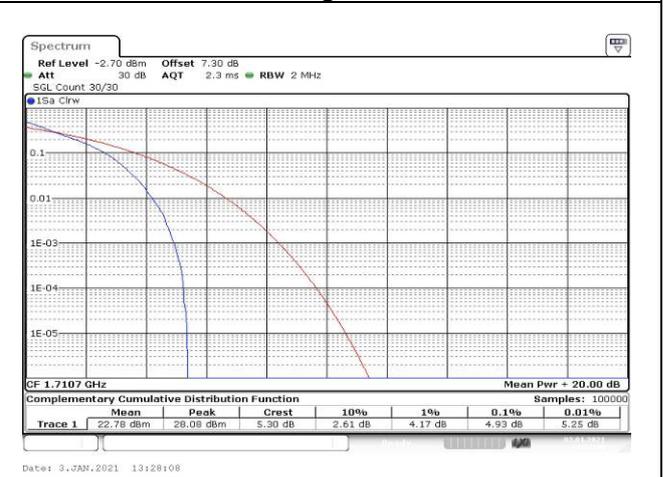


Fig.4

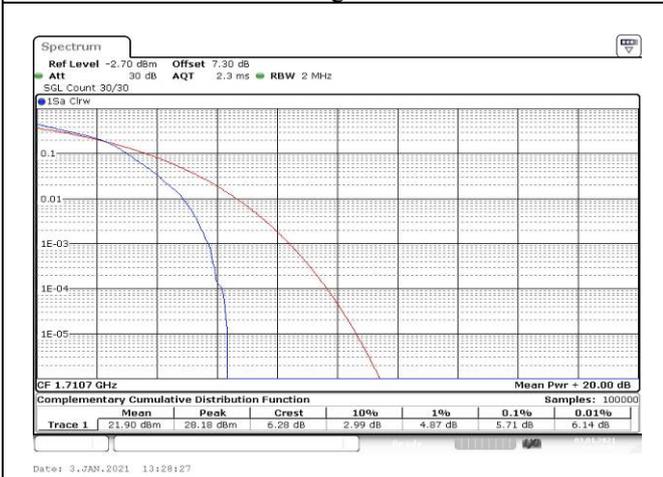


Fig.5

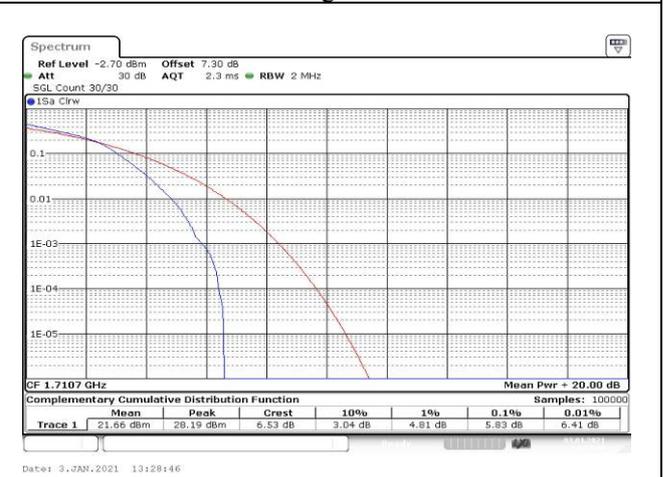


Fig.6