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	23.76
				1	3	23.76
				1	5	23.82
				3	0	23.89
				3	1	23.90
				3	3	23.92
				6	0	22.81
	1732.5	20175		1	0	23.77
				1	3	23.78
				1	5	23.77
				3	0	23.82
				3	1	23.85
				3	3	23.84
				6	0	22.73
	1754.3	20393		1	0	23.80
				1	3	23.79
				1	5	23.78
				3	0	23.74
				3	1	23.70
				3	3	23.68
				6	0	22.63
16QAM	1710.7	19957		1	0	22.81
				1	3	22.85
				1	5	22.84
				3	0	22.88
				3	1	22.84
				3	3	22.84
				6	0	21.95
	1732.5	20175		1	0	23.45
				1	3	23.34
				1	5	23.34
				3	0	22.76
				3	1	22.76
				3	3	22.77
				6	0	21.84
	1754.3	20393		1	0	22.73
				1	3	22.80
				1	5	22.79
				3	0	22.67
				3	1	22.63
				3	3	22.62
				6	0	21.92

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1710.7	19957	1.4	1	0	21.95
				1	3	22.00
				1	5	21.95
				3	0	21.94
				3	1	21.95
				3	3	21.94
				6	0	21.94
	1732.5	20175		1	0	21.85
				1	3	21.84
				1	5	21.85
				3	0	21.84
				3	1	21.85
				3	3	21.84
				6	0	21.84
	1754.3	20393		1	0	21.92
				1	3	21.91
				1	5	21.91
				3	0	21.91
				3	1	22.01
				3	3	21.95
				6	0	22.00

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	19965	3	1	0	23.78
				1	8	23.81
				1	14	23.79
				8	0	22.80
				8	4	22.72
				8	7	22.76
				15	0	22.85
	1732.5	20175		1	0	23.68
				1	8	23.70
				1	14	23.78
				8	0	22.88
				8	4	22.77
				8	7	22.76
				15	0	22.71
	1753.5	20385		1	0	23.55
				1	8	23.50
				1	14	23.49
				8	0	22.70
				8	4	22.61
				8	7	22.60
				15	0	22.66
16QAM	1711.5	19965		1	0	22.87
				1	8	22.80
				1	14	22.80
				8	0	22.04
				8	4	21.98
				8	7	21.98
				15	0	22.00
	1732.5	20175		1	0	22.73
				1	8	22.69
				1	14	22.69
				8	0	22.06
				8	4	22.07
				8	7	22.07
				15	0	21.95
	1753.5	20385		1	0	22.79
				1	8	22.76
				1	14	22.75
				8	0	21.99
				8	4	22.01
				8	7	22.00
				15	0	21.83

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1711.5	19965	3	1	0	22.00
				1	8	21.99
				1	14	21.99
				8	0	21.99
				8	4	21.99
				8	7	21.98
				15	0	21.98
	1732.5	20175		1	0	21.95
				1	8	21.94
				1	14	21.93
				8	0	21.94
				8	4	21.93
				8	7	21.92
				15	0	21.92
	1753.5	20385		1	0	21.77
				1	8	21.82
				1	14	21.82
				8	0	21.81
				8	4	21.79
				8	7	21.80
				15	0	21.80

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	19975	5	1	0	23.80
				1	12	23.73
				1	24	23.72
				12	0	22.92
				12	7	22.84
				12	13	22.84
				25	0	22.79
	1732.5	20175		1	0	23.93
				1	12	23.91
				1	24	23.75
				12	0	22.92
				12	7	22.79
				12	13	22.79
				25	0	22.74
	1752.5	20375		1	0	23.65
				1	12	23.56
				1	24	23.55
				12	0	22.72
				12	7	22.69
				12	13	22.69
				25	0	22.69
16QAM	1712.5	19975		1	0	22.44
				1	12	22.25
				1	24	22.28
				12	0	22.05
				12	7	21.94
				12	13	22.01
				25	0	22.03
	1732.5	20175		1	0	22.81
				1	12	22.81
				1	24	22.81
				12	0	21.84
				12	7	21.78
				12	13	21.78
				25	0	21.82
	1752.5	20375		1	0	22.36
				1	12	22.28
				1	24	22.28
				12	0	21.68
				12	7	21.61
				12	13	21.62
				25	0	21.63

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1712.5	19975	5	1	0	22.02
				1	12	22.03
				1	24	22.03
				12	0	22.02
				12	7	22.02
				12	13	22.02
				25	0	22.02
	1732.5	20175		1	0	21.81
				1	12	21.83
				1	24	21.83
				12	0	21.82
				12	7	21.83
				12	13	21.83
				25	0	21.83
	1752.5	20375		1	0	21.64
				1	12	21.64
				1	24	21.64
				12	0	21.65
				12	7	21.64
				12	13	21.64
				25	0	21.64

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1715	20000	10	1	0	23.75
				1	25	23.78
				1	49	23.76
				25	0	22.89
				25	12	22.90
				25	25	22.90
				50	0	22.91
	1732.5	20175		1	0	23.78
				1	25	23.86
				1	49	23.84
				25	0	22.76
				25	12	22.77
				25	25	22.77
				50	0	22.86
	1750	20350		1	0	23.82
				1	25	23.69
				1	49	23.83
				25	0	22.70
				25	12	22.66
				25	25	22.66
				50	0	22.78
16QAM	1715	20000		1	0	23.20
				1	25	23.27
				1	49	23.34
				25	0	22.00
				25	12	22.05
				25	25	22.05
				50	0	21.85
	1732.5	20175		1	0	23.57
				1	25	23.55
				1	49	23.54
				25	0	21.99
				25	12	21.99
				25	25	21.98
				50	0	21.96
	1750	20350		1	0	22.50
				1	25	22.31
				1	49	22.29
				25	0	21.94
				25	12	21.86
				25	25	21.86
				50	0	21.76

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1715	20000	10	1	0	21.86
				1	25	21.86
				1	49	21.91
				25	0	21.85
				25	12	21.86
				25	25	21.86
				50	0	21.85
	1732.5	20175		1	0	21.96
				1	25	21.96
				1	49	21.96
				25	0	21.96
				25	12	21.96
				25	25	21.96
				50	0	21.96
	1750	20350		1	0	21.77
				1	25	21.77
				1	49	21.77
				25	0	21.77
				25	12	21.77
				25	25	21.77
				50	0	21.77

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1717.5	20025	15	1	0	23.78
				1	37	23.75
				1	74	23.73
				36	0	22.82
				36	29	22.87
				36	30	22.86
				75	0	22.94
	1732.5	20175		1	0	23.82
				1	37	23.89
				1	74	23.88
				36	0	22.74
				36	29	22.95
				36	30	22.95
				75	0	22.83
	1747.5	20325		1	0	23.95
				1	37	23.71
				1	74	23.70
				36	0	22.77
				36	29	22.60
				36	30	22.60
				75	0	22.64
16QAM	1717.5	20025		1	0	23.15
				1	37	23.38
				1	74	23.08
				36	0	22.00
				36	29	21.90
				36	30	22.10
				75	0	21.95
	1732.5	20175		1	0	23.64
				1	37	23.56
				1	74	23.46
				36	0	21.89
				36	29	22.01
				36	30	22.02
				75	0	21.89
	1747.5	20325		1	0	23.31
				1	37	23.06
				1	74	23.06
				36	0	21.85
				36	29	21.73
				36	30	21.73
				75	0	21.86

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1717.5	20025	15	1	0	21.86
				1	37	21.92
				1	74	22.03
				36	0	21.92
				36	29	21.96
				36	30	21.93
				75	0	21.92
	1732.5	20175		1	0	21.89
				1	37	21.90
				1	74	21.89
				36	0	21.89
				36	29	21.89
				36	30	21.89
				75	0	21.89
	1747.5	20325		1	0	21.86
				1	37	21.86
				1	74	21.86
				36	0	21.86
				36	29	21.75
				36	30	21.86
				75	0	21.86

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	20050	20	1	0	23.92
				1	49	23.82
				1	99	23.92
				50	0	22.94
				50	24	22.82
				50	50	22.82
				100	0	22.86
	1732.5	20175		1	0	24.04
				1	49	23.97
				1	99	23.97
				50	0	22.86
				50	24	22.95
				50	50	22.95
				100	0	22.73
	1745	20300		1	0	23.91
				1	49	23.65
				1	99	23.73
				50	0	22.91
				50	24	22.71
				50	50	22.71
				100	0	22.85
16QAM	1720	20050		1	0	23.08
				1	49	22.97
				1	99	22.95
				50	0	21.97
				50	24	22.00
				50	50	22.00
				100	0	21.92
	1732.5	20175		1	0	23.36
				1	49	23.12
				1	99	22.85
				50	0	22.02
				50	24	22.04
				50	50	22.04
				100	0	21.95
	1745	20300		1	0	23.60
				1	49	23.36
				1	99	23.45
				50	0	21.97
				50	24	21.81
				50	50	21.83
				100	0	21.83

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	1720	20050	20	1	0	21.92
				1	49	21.93
				1	99	21.93
				50	0	21.93
				50	24	21.93
				50	50	21.93
				100	0	21.93
	1732.5	20175		1	0	21.95
				1	49	21.94
				1	99	21.95
				50	0	21.95
				50	24	21.95
				50	50	21.95
				100	0	21.95
	1745	20300		1	0	21.83
				1	49	21.83
				1	99	21.83
				50	0	21.83
				50	24	21.83
				50	50	21.84
				100	0	21.83

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	1.100	Fig.1	1.106	Fig.2	1.106	Fig.3
	1732.5	20175		6	0	1.082	Fig.4	1.094	Fig.5	1.094	Fig.6
	1754.3	20393		6	0	1.088	Fig.7	1.094	Fig.8	1.082	Fig.9
	1711.5	19965	3	15	0	2.709	Fig.10	2.709	Fig.11	2.709	Fig.12
	1732.5	20175		15	0	2.696	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	4.493	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	4.493	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	8.987	Fig.32	8.944	Fig.33
	1750	20350		50	0	8.944	Fig.34	8.987	Fig.35	8.987	Fig.36
	1717.5	20025	15	75	0	13.415	Fig.37	13.480	Fig.38	13.415	Fig.39
	1732.5	20175		75	0	13.415	Fig.40	13.415	Fig.41	13.480	Fig.42
	1747.5	20325		75	0	13.480	Fig.43	13.480	Fig.44	13.480	Fig.45
	1720	20050	20	100	0	17.887	Fig.46	17.887	Fig.47	17.887	Fig.48
	1732.5	20175		100	0	17.800	Fig.49	17.974	Fig.50	17.974	Fig.51
	1745	20300		100	0	17.974	Fig.52	17.887	Fig.53	17.887	Fig.54

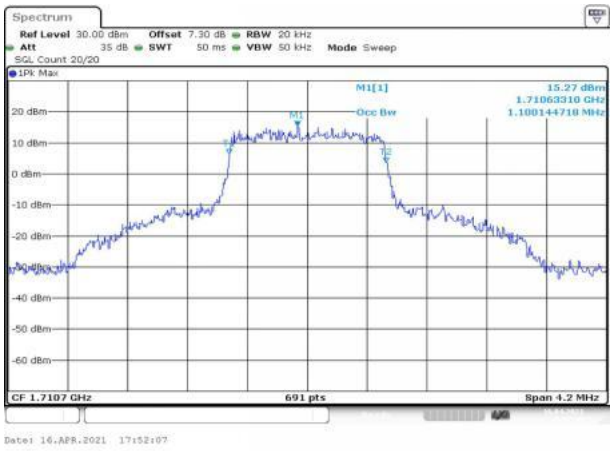

Fig.1

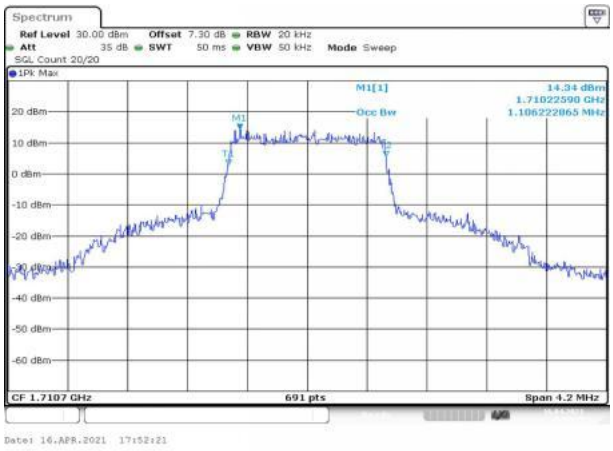

Fig.2

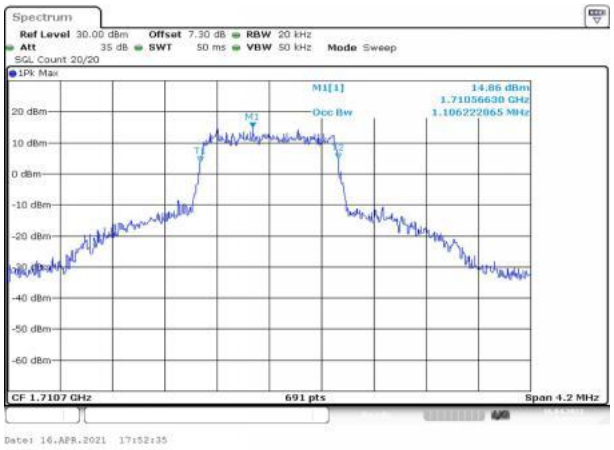

Fig.3

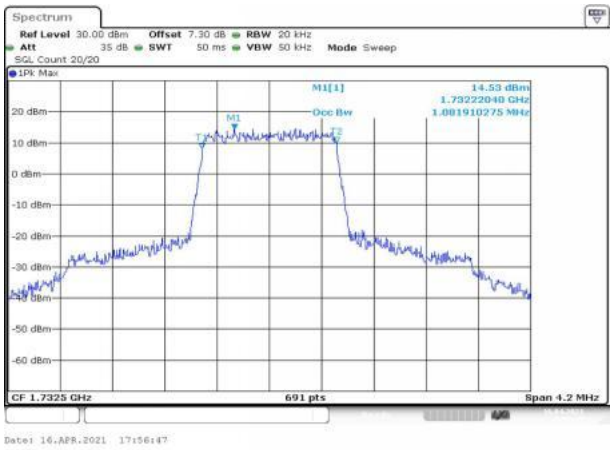

Fig.4

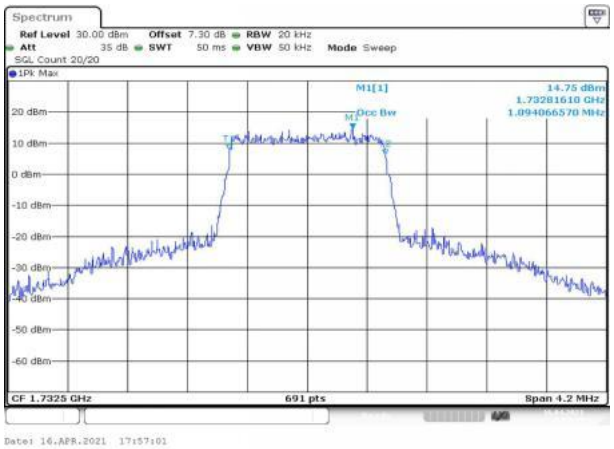

Fig.5

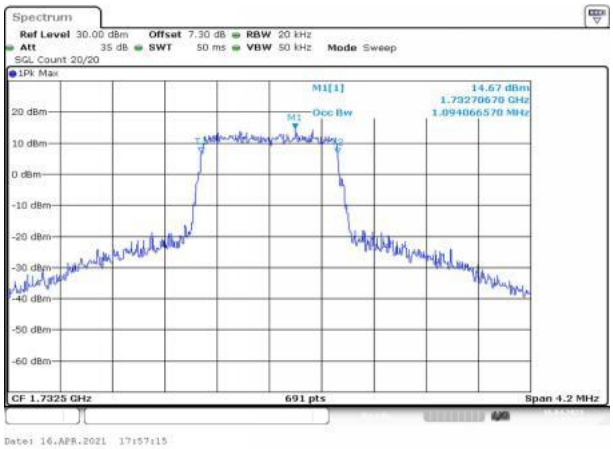

Fig.6

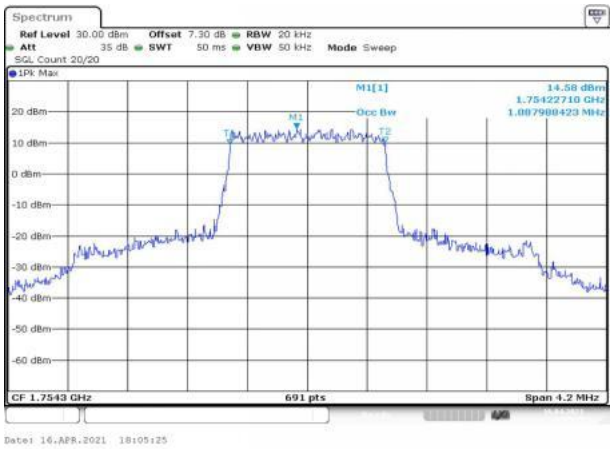

Fig.7

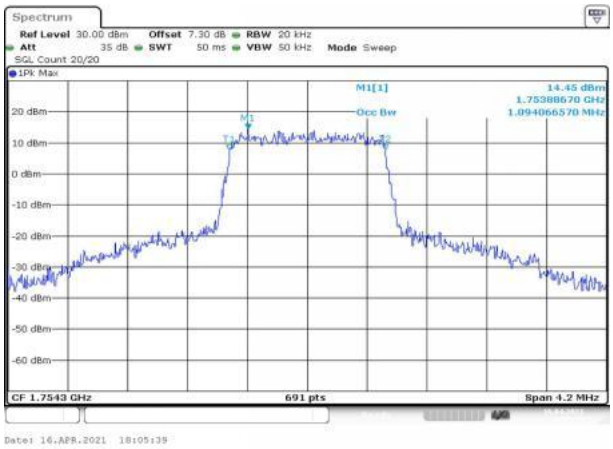

Fig.8

Fig.9

Fig.10

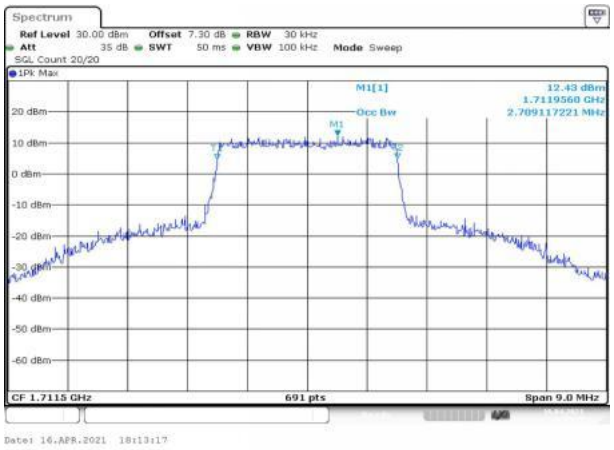

Fig.11

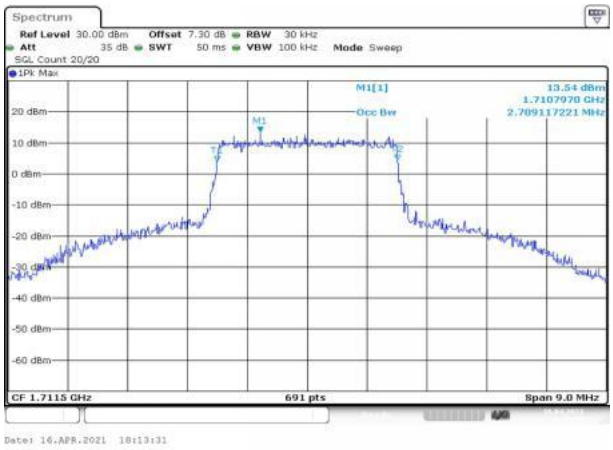

Fig.12

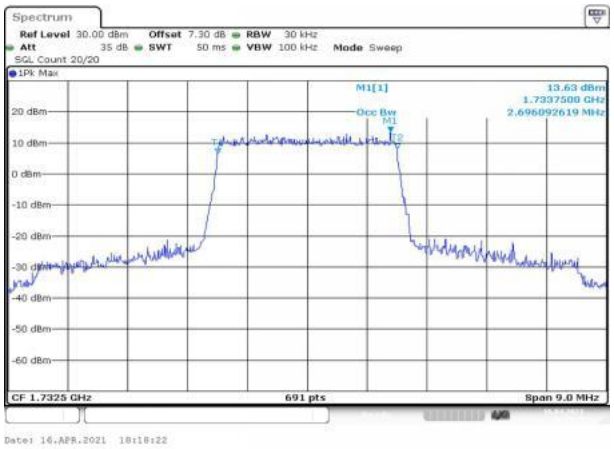

Fig.13

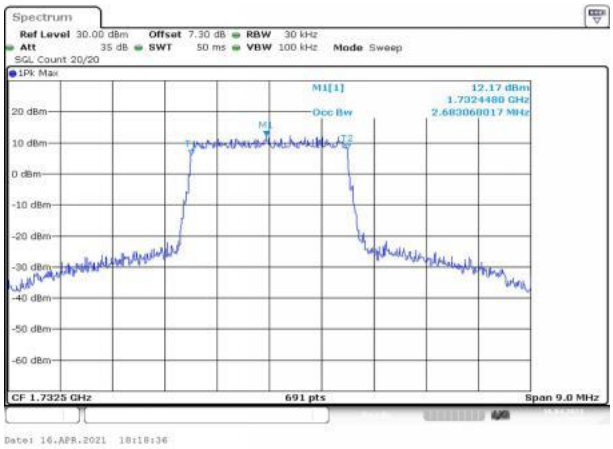

Fig.14

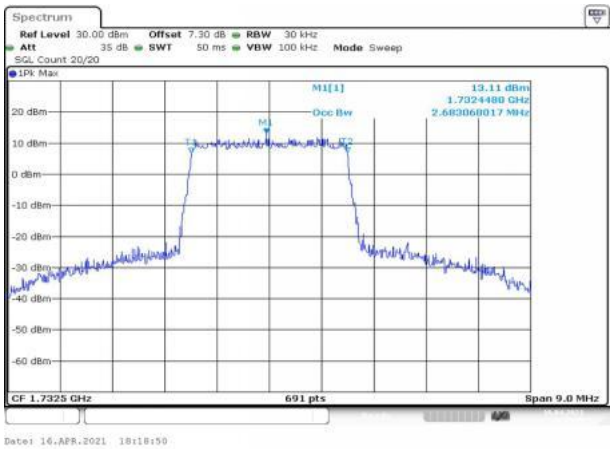

Fig.15

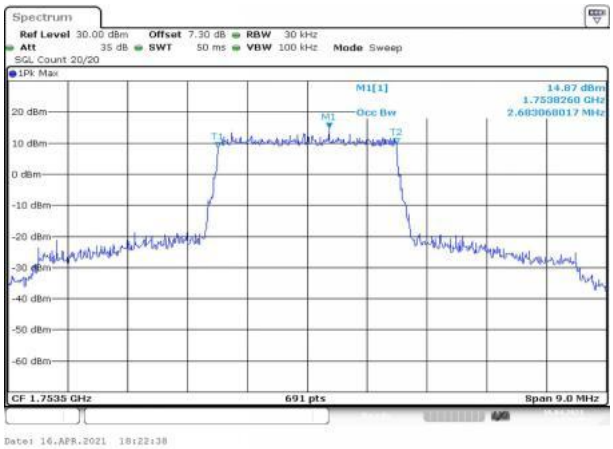

Fig.16

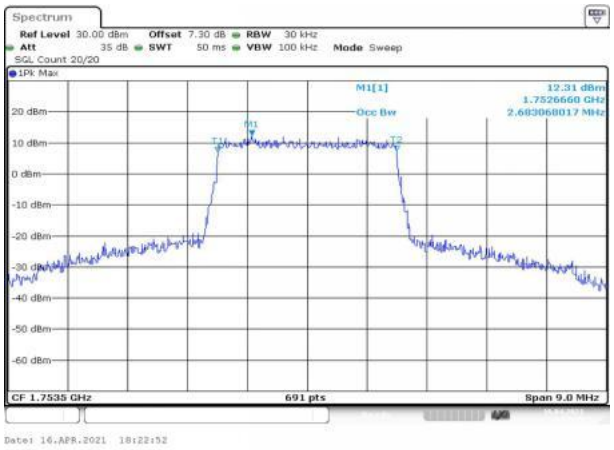

Fig.17

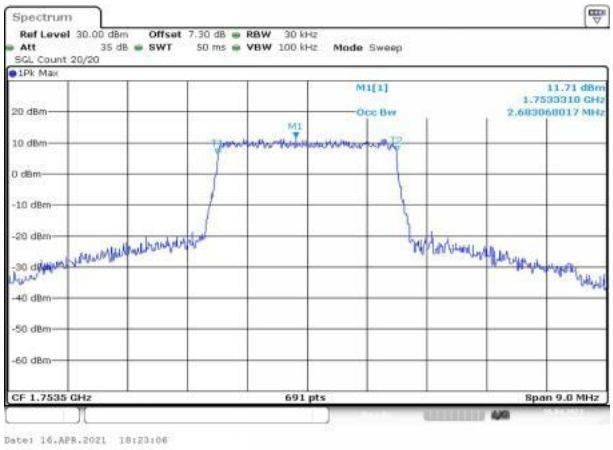

Fig.18

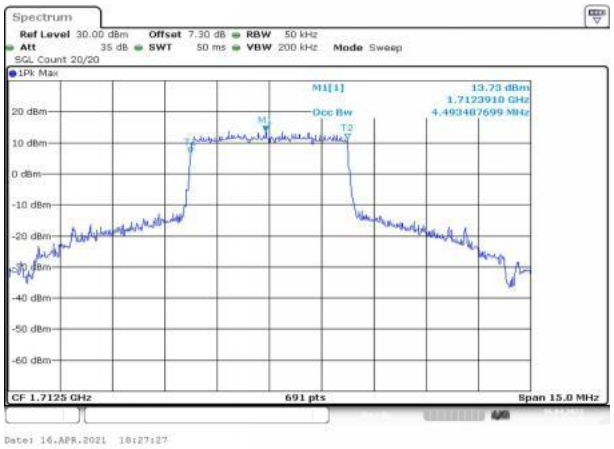

Fig.19

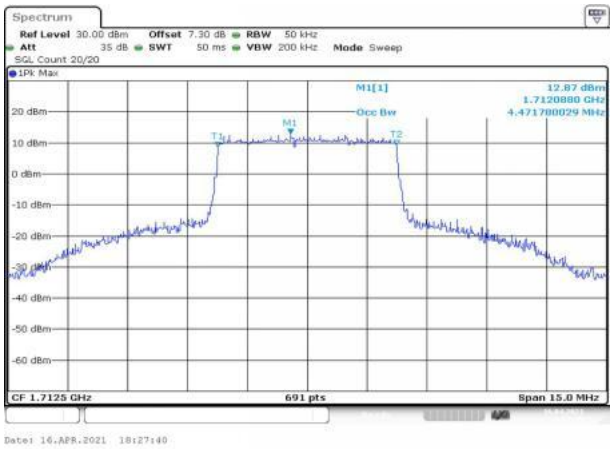

Fig.20

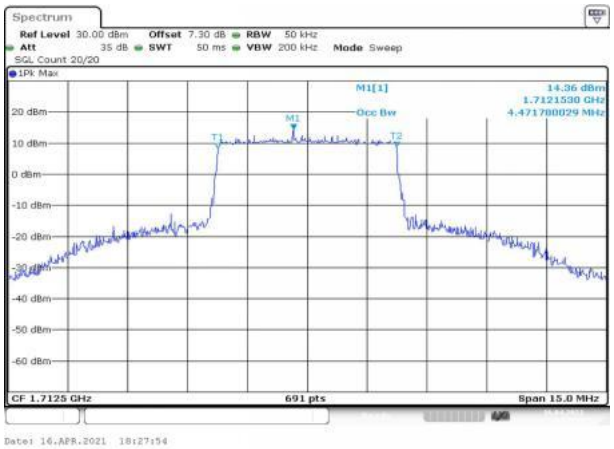

Fig.21

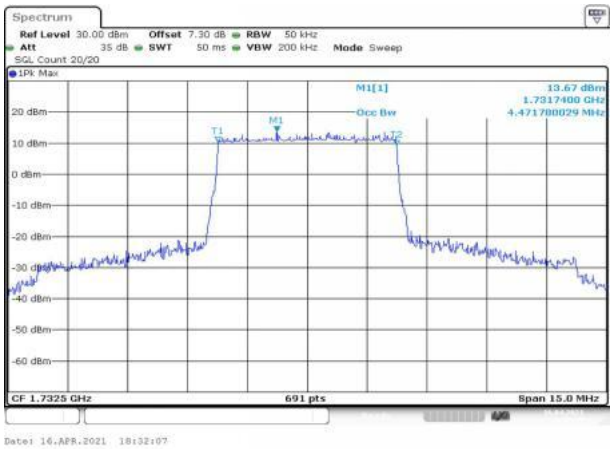

Fig.22

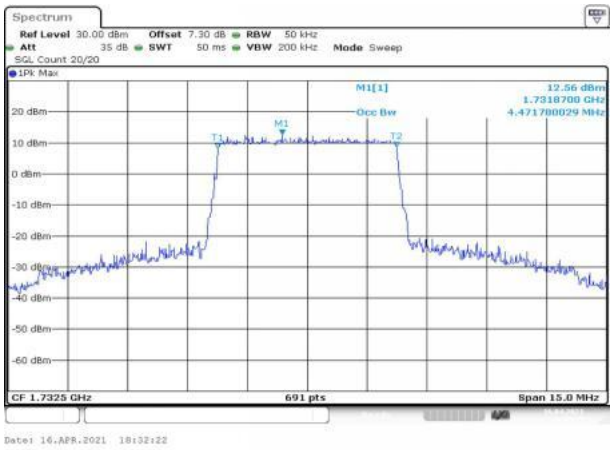

Fig.23

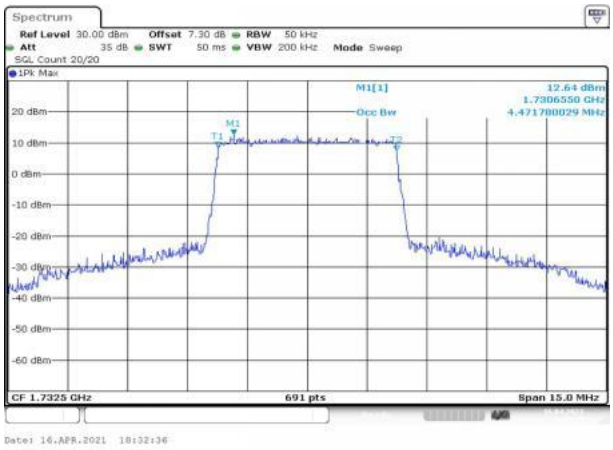

Fig.24

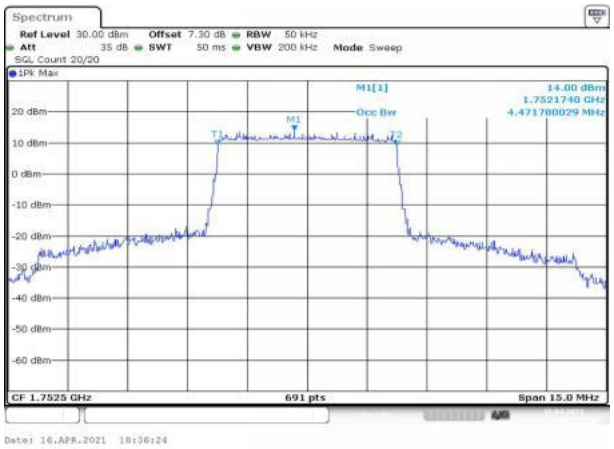

Fig.25

Fig.26

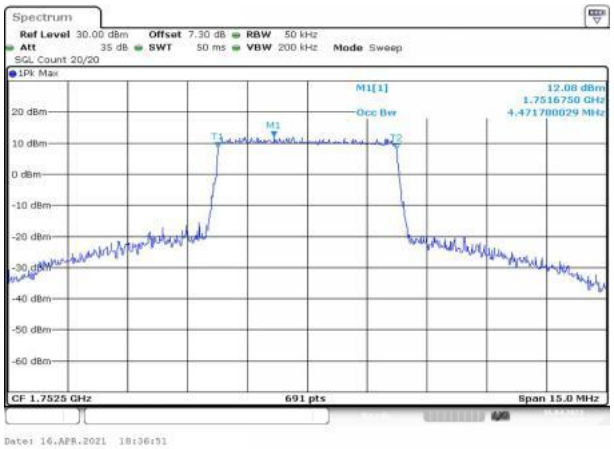

Fig.27

Fig.28

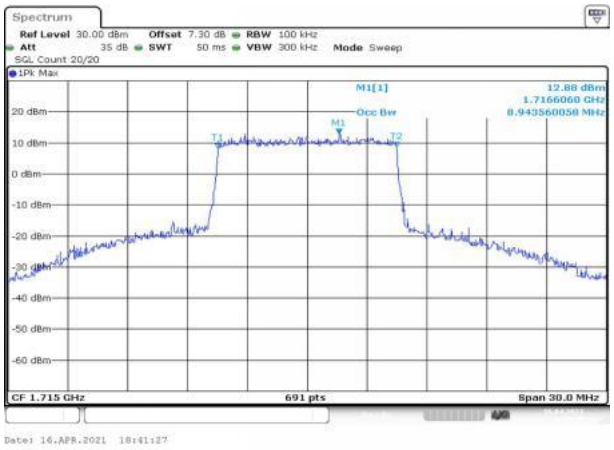

Fig.29

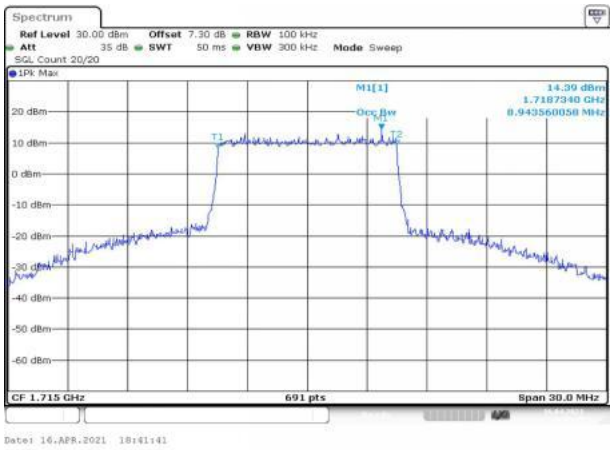

Fig.30

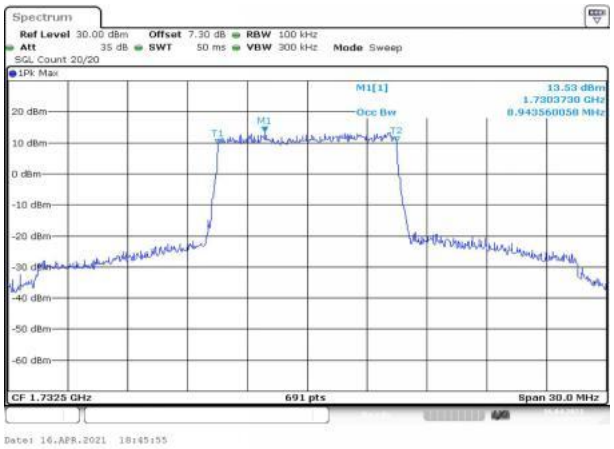

Fig.31

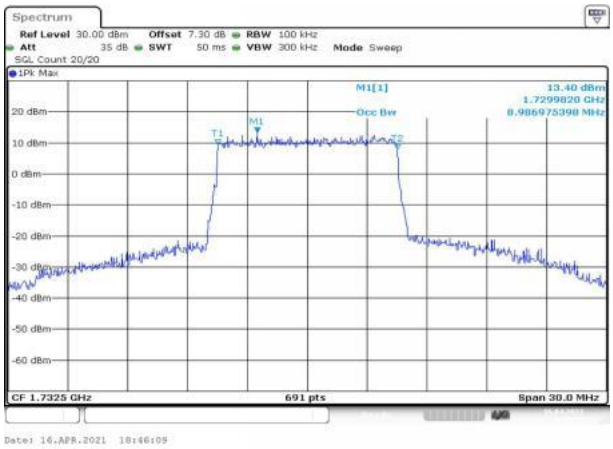

Fig.32

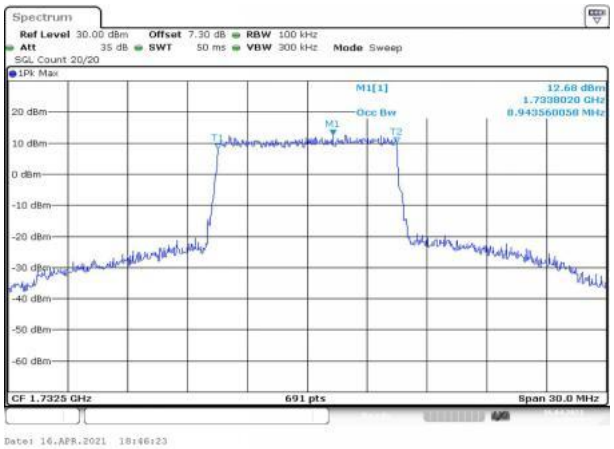

Fig.33

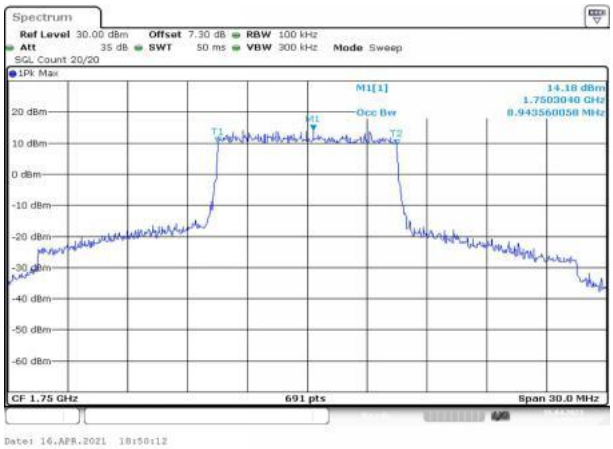

Fig.34

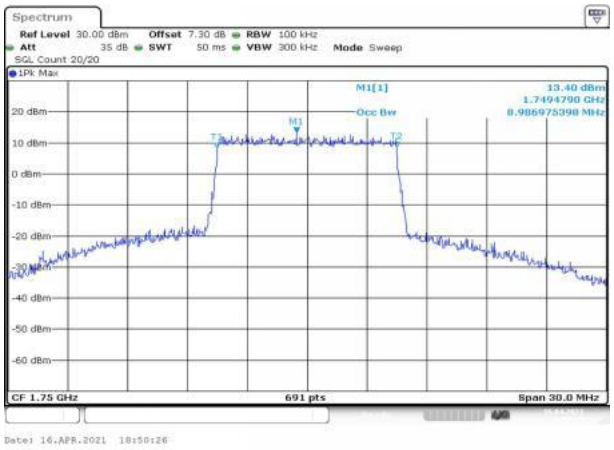

Fig.35

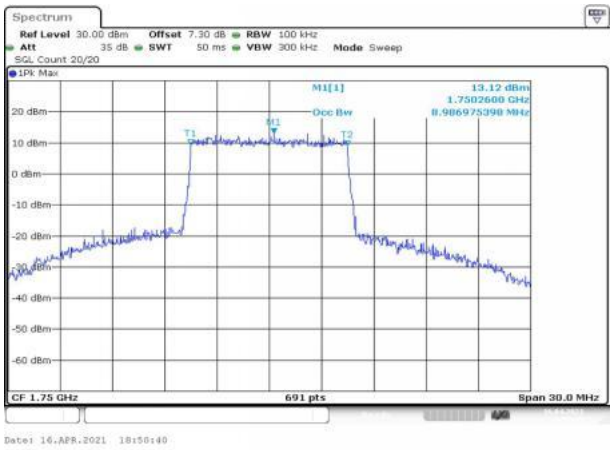

Fig.36

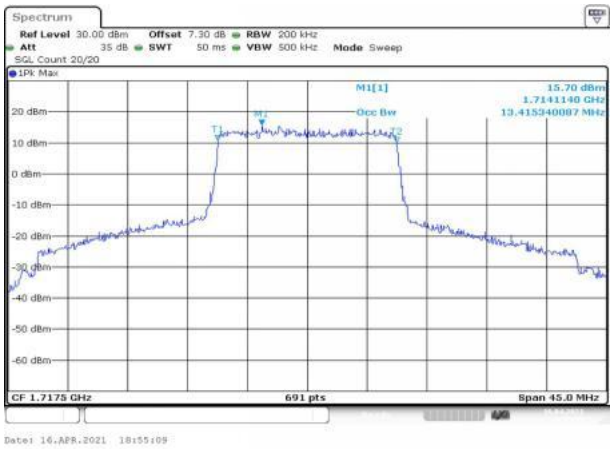

Fig.37

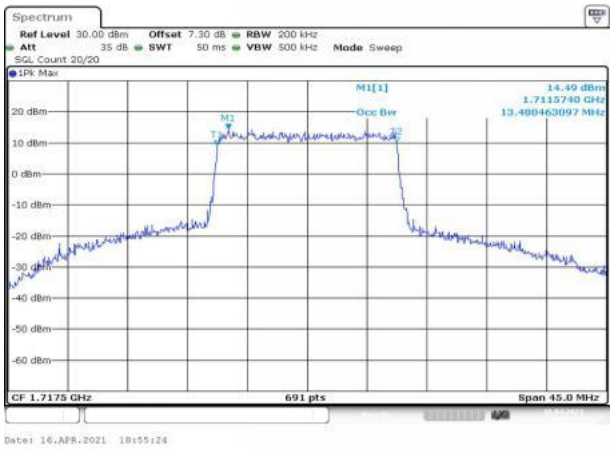

Fig.38

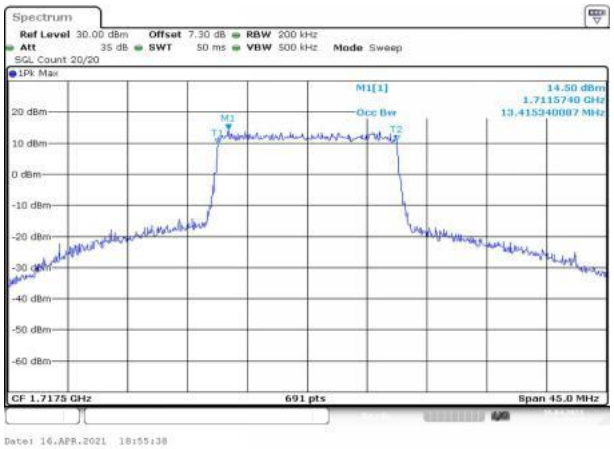

Fig.39

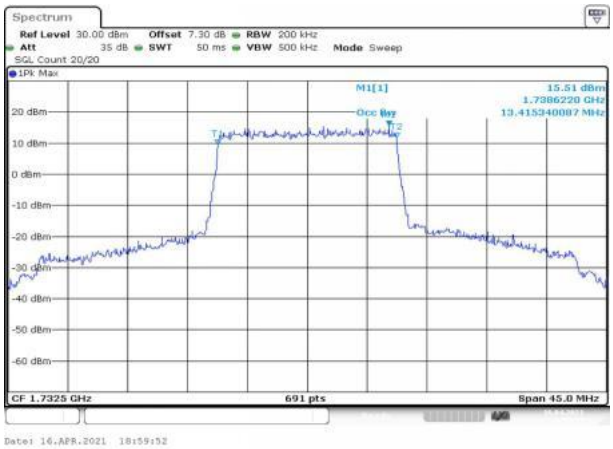

Fig.40

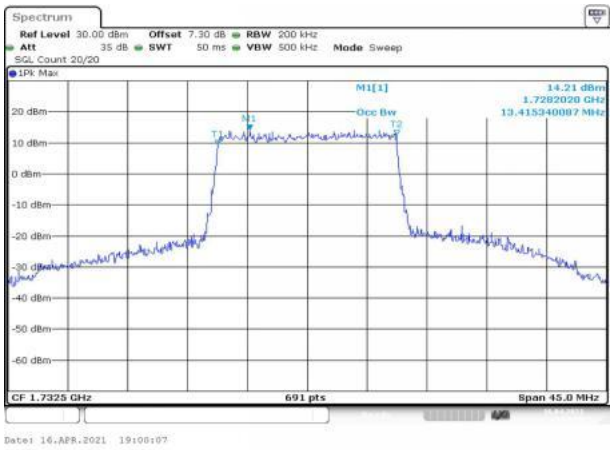

Fig.41

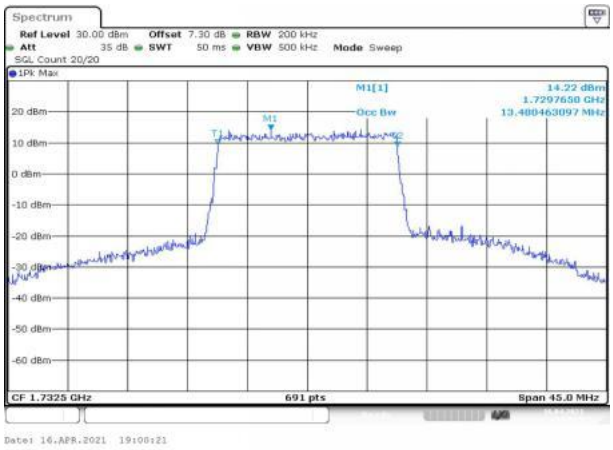

Fig.42

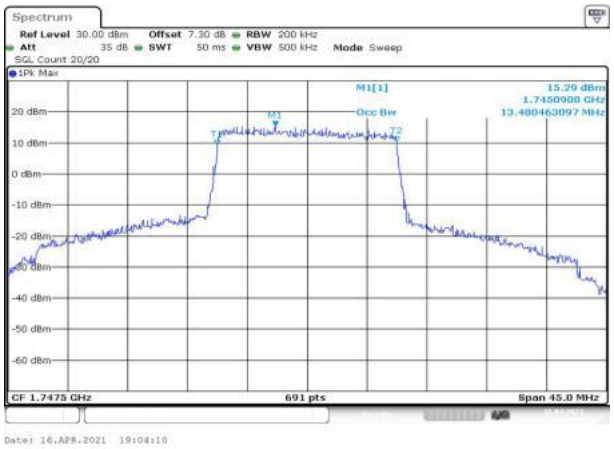

Fig.43

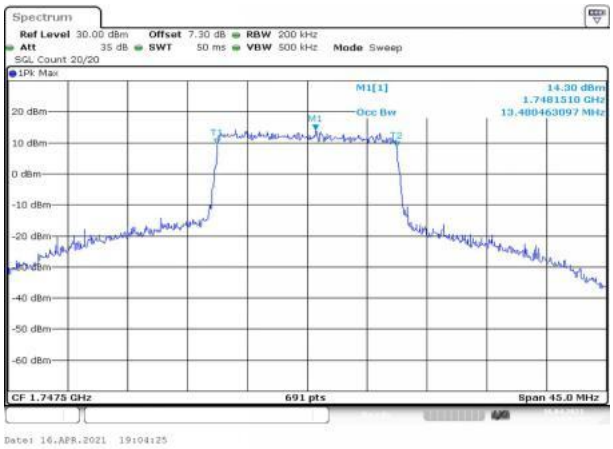

Fig.44

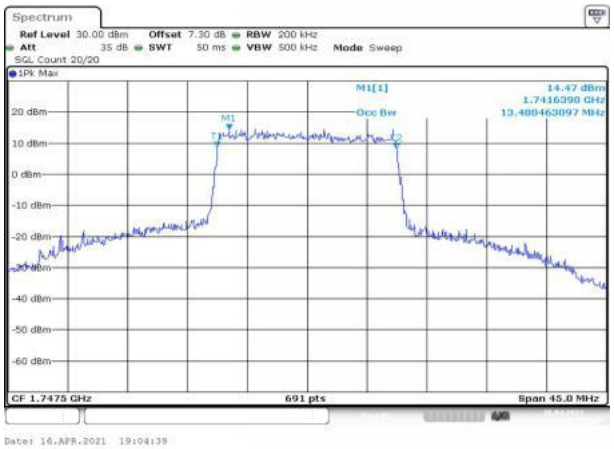

Fig.45

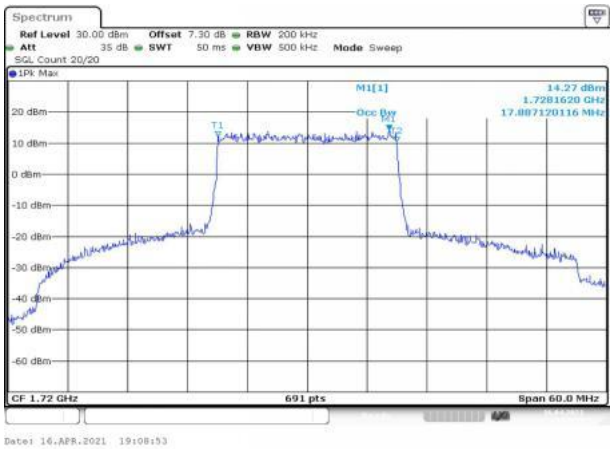

Fig.46

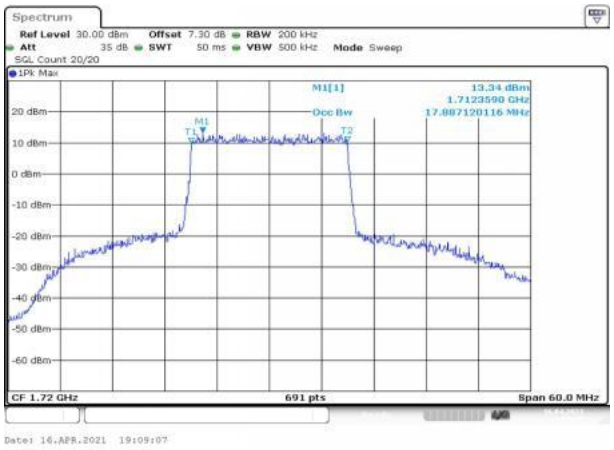

Fig.47

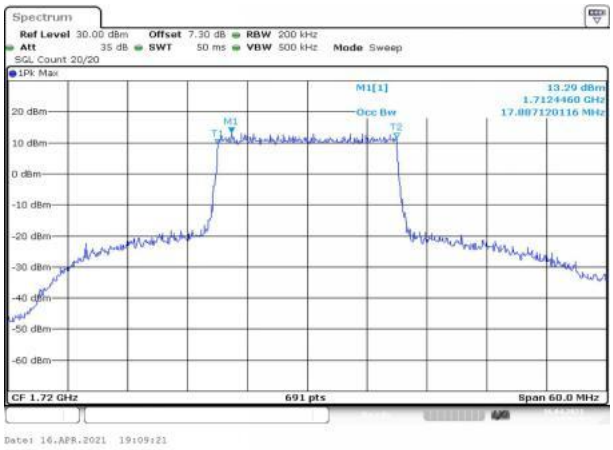

Fig.48

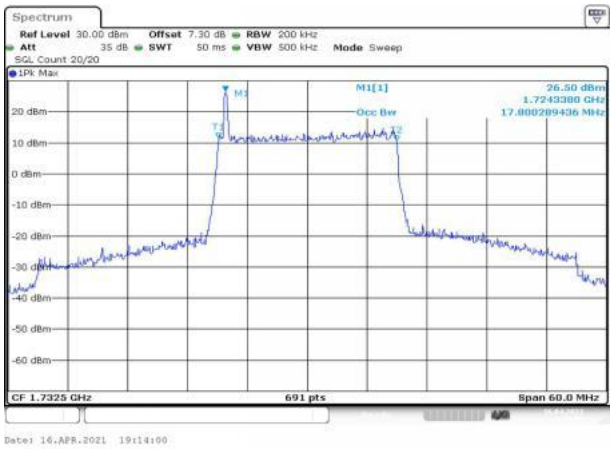

Fig.49

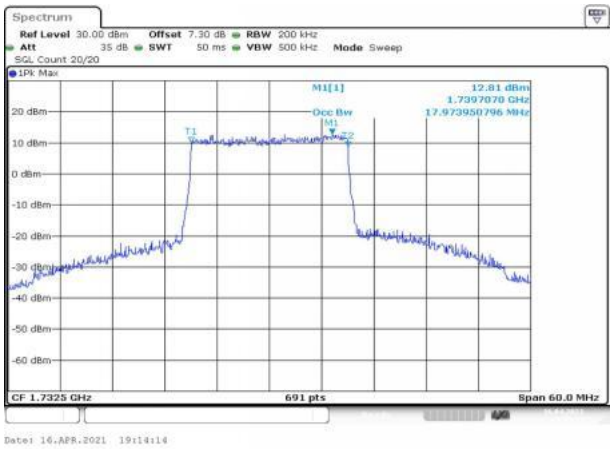

Fig.50

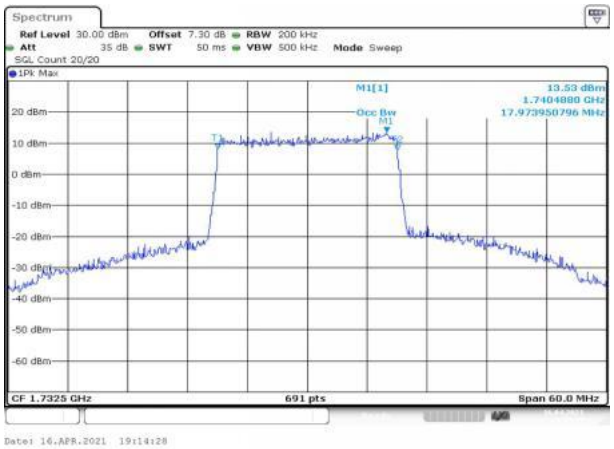

Fig.51

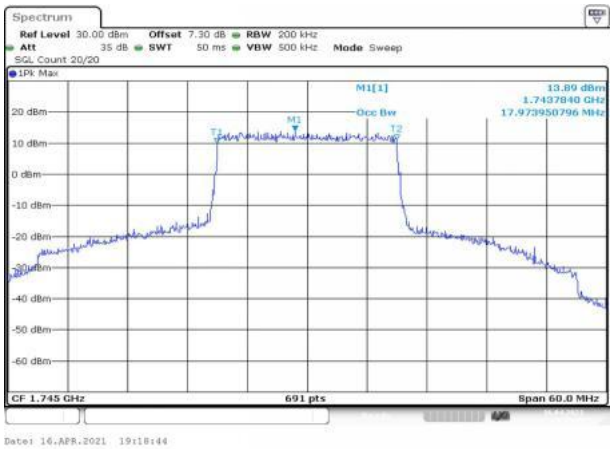

Fig.52

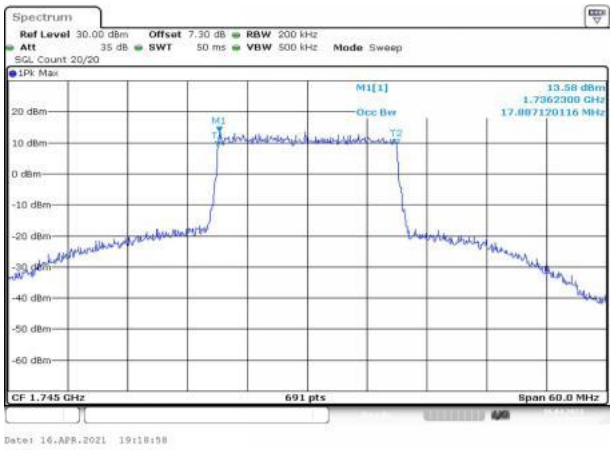

Fig.53

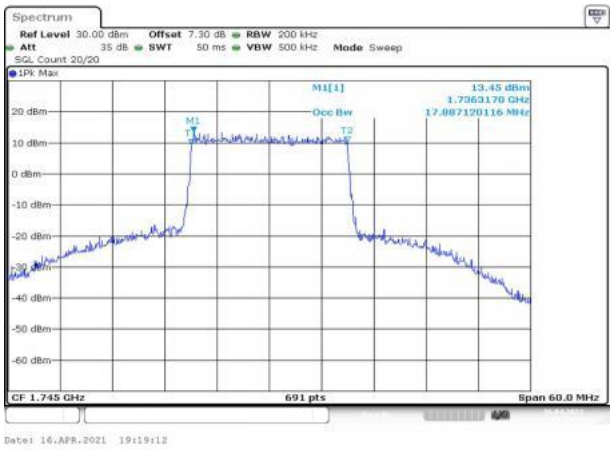

Fig.54

3 Emission Bandwidth

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
4	1710.7	19957	1.4	6	0	1.270	Fig.1	1.295	Fig.2	1.246	Fig.3
	1732.5	20175		6	0	1.216	Fig.4	1.240	Fig.5	1.234	Fig.6
	1754.3	20393		6	0	1.234	Fig.7	1.228	Fig.8	1.228	Fig.9
	1711.5	19965	3	15	0	3.100	Fig.10	3.009	Fig.11	3.035	Fig.12
	1732.5	20175		15	0	2.970	Fig.13	2.996	Fig.14	3.022	Fig.15
	1753.5	20385		15	0	2.996	Fig.16	2.983	Fig.17	2.957	Fig.18
	1712.5	19975	5	25	0	4.906	Fig.19	4.949	Fig.20	4.906	Fig.21
	1732.5	20175		25	0	4.906	Fig.22	4.884	Fig.23	4.884	Fig.24
	1752.5	20375		25	0	4.906	Fig.25	4.949	Fig.26	4.949	Fig.27
	1715	20000	10	50	0	9.812	Fig.28	9.725	Fig.29	9.725	Fig.30
	1732.5	20175		50	0	9.725	Fig.31	9.725	Fig.32	9.725	Fig.33
	1750	20350		50	0	9.768	Fig.34	9.768	Fig.35	9.725	Fig.36
	1717.5	20025	15	75	0	14.783	Fig.37	14.783	Fig.38	14.848	Fig.39
	1732.5	20175		75	0	14.848	Fig.40	14.848	Fig.41	14.783	Fig.42
	1747.5	20325		75	0	14.913	Fig.43	14.783	Fig.44	14.718	Fig.45
	1720	20050	20	100	0	19.363	Fig.46	19.363	Fig.47	19.537	Fig.48
	1732.5	20175		100	0	19.276	Fig.49	19.363	Fig.50	19.363	Fig.51
	1745	20300		100	0	19.537	Fig.52	19.450	Fig.53	19.450	Fig.54

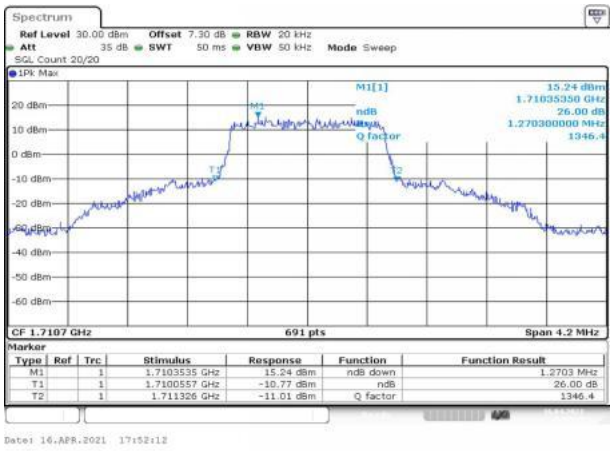

Fig.1

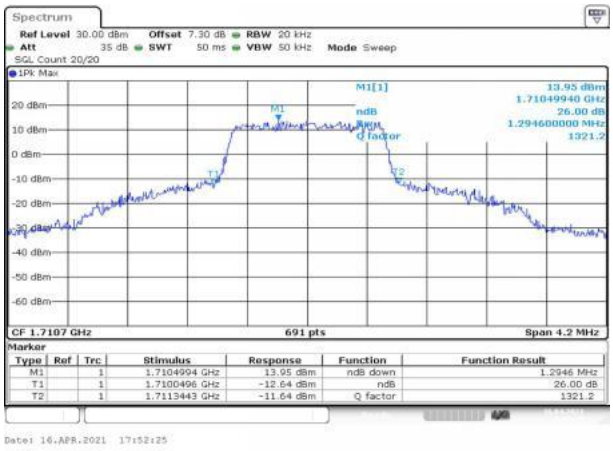

Fig.2

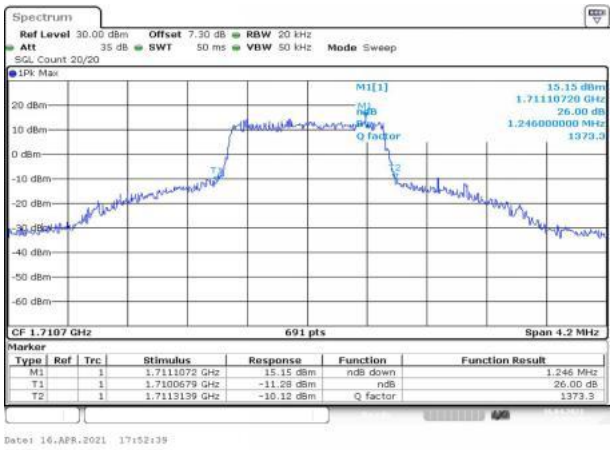

Fig.3

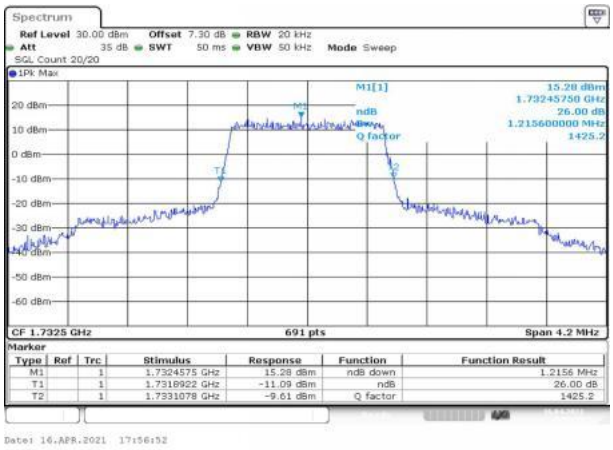

Fig.4

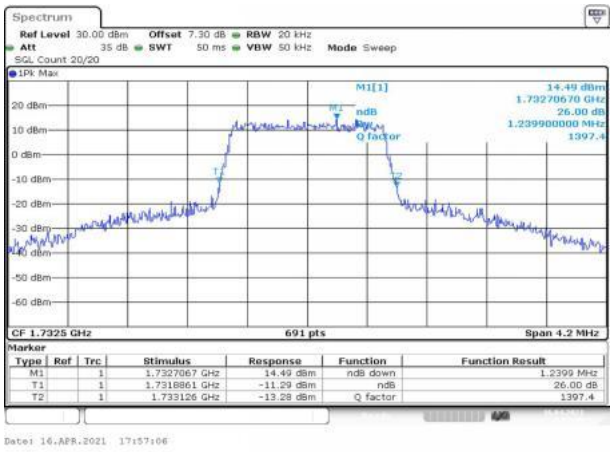

Fig.5

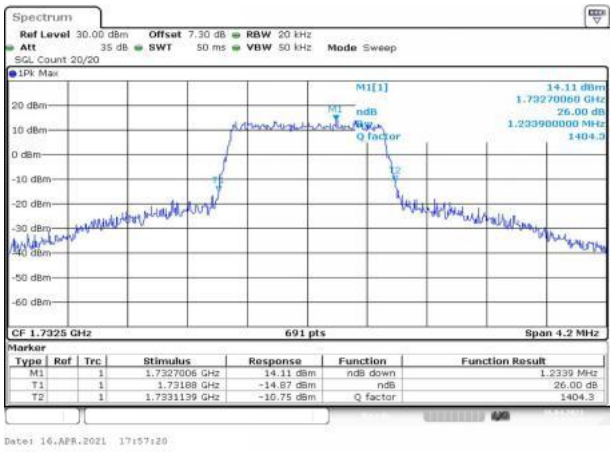

Fig.6

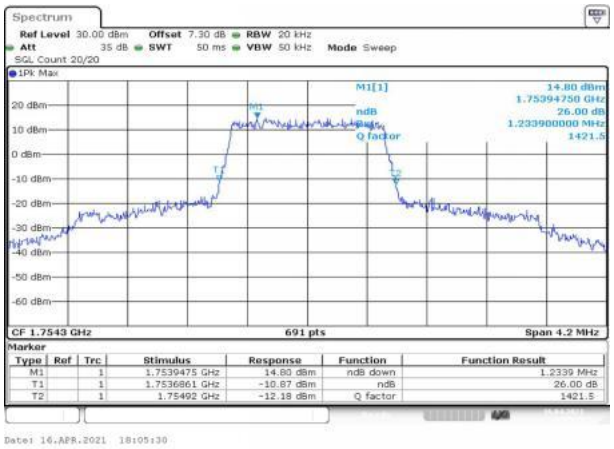

Fig.7

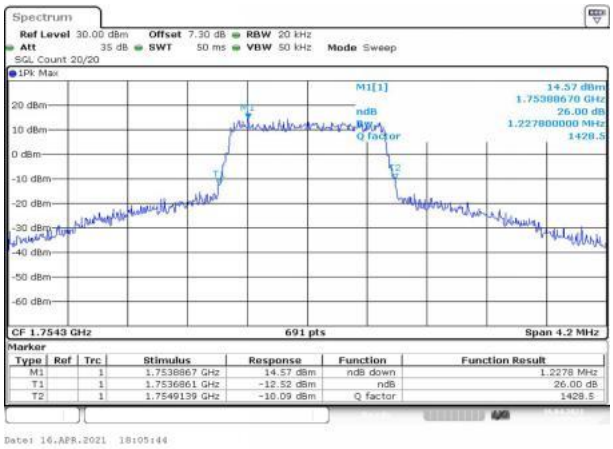

Fig.8

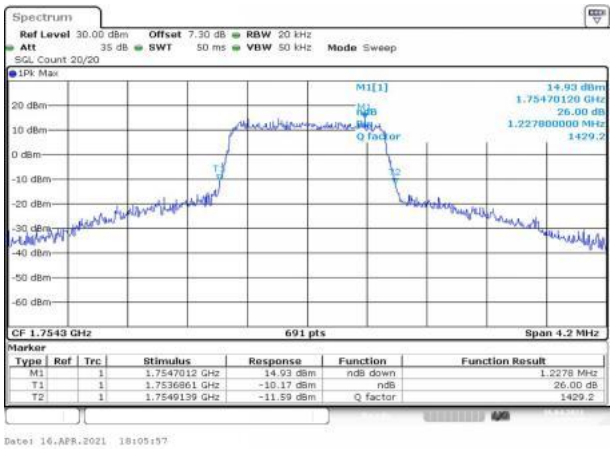

Fig.9

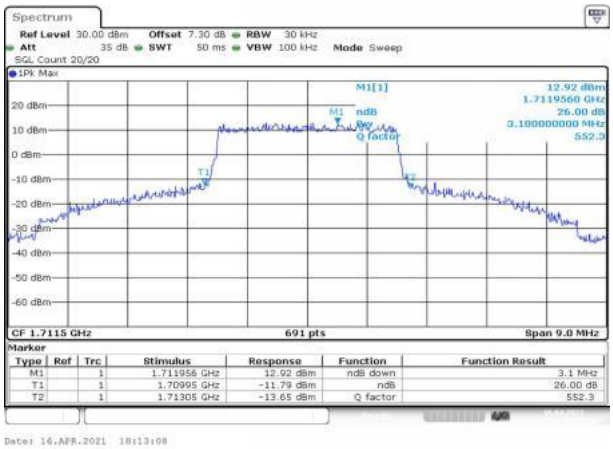

Fig.10

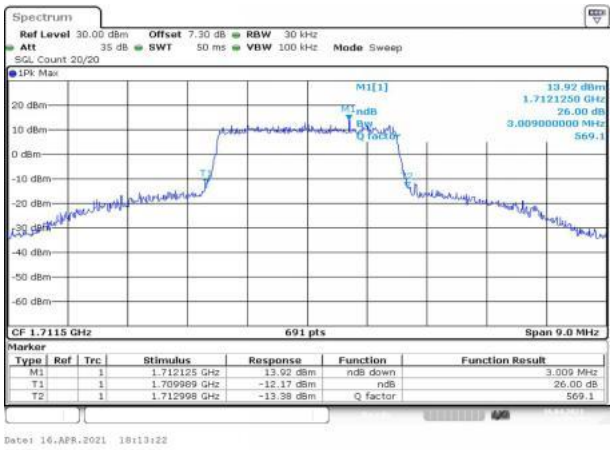

Fig.11

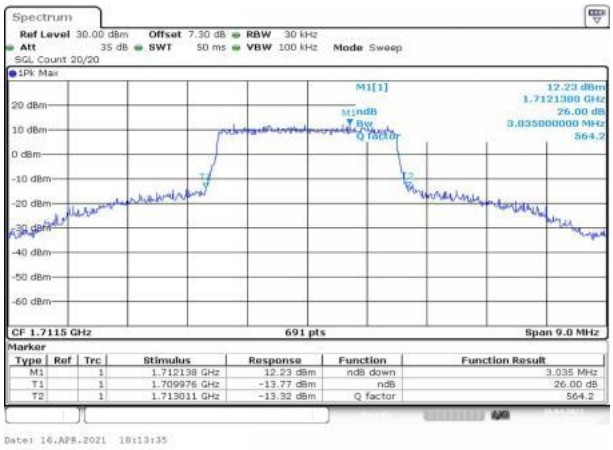

Fig.12

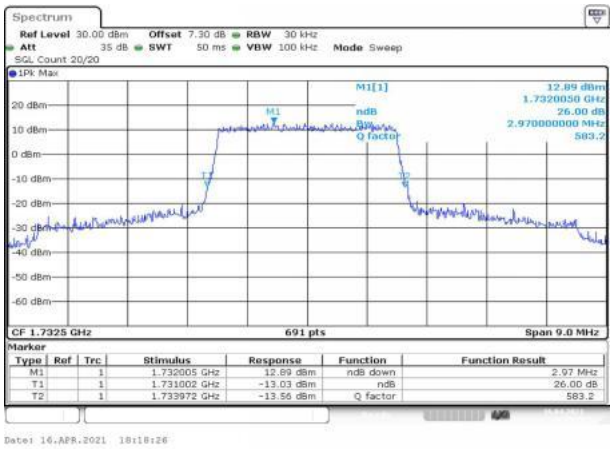

Fig.13

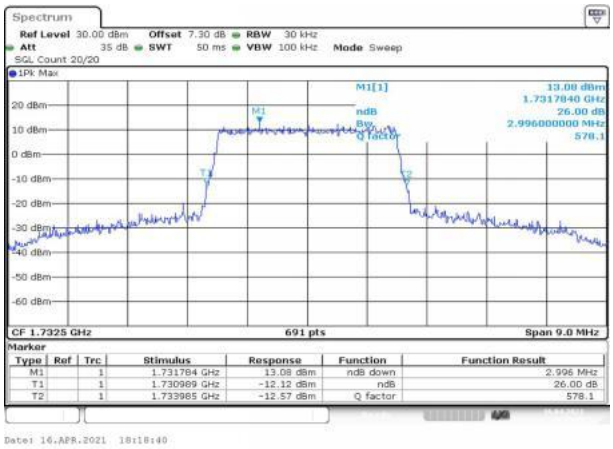

Fig.14

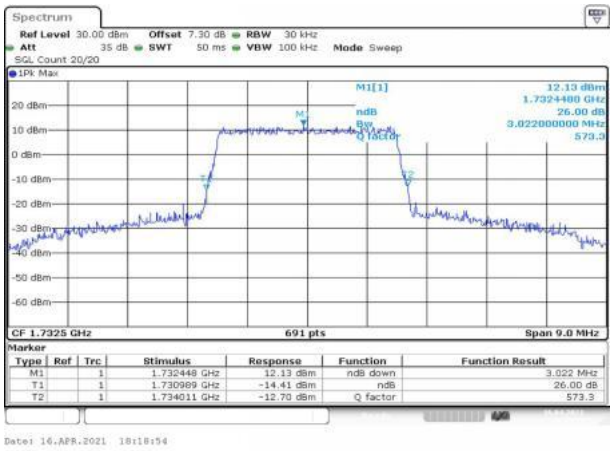

Fig.15

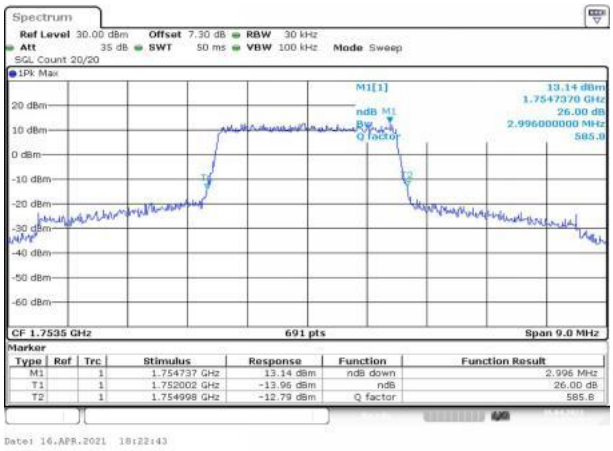

Fig.16

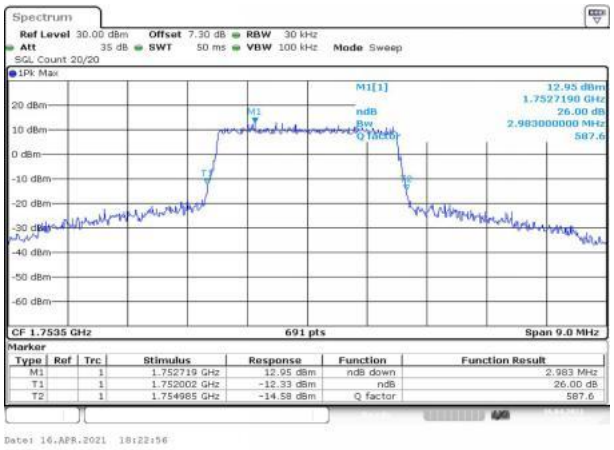

Fig.17

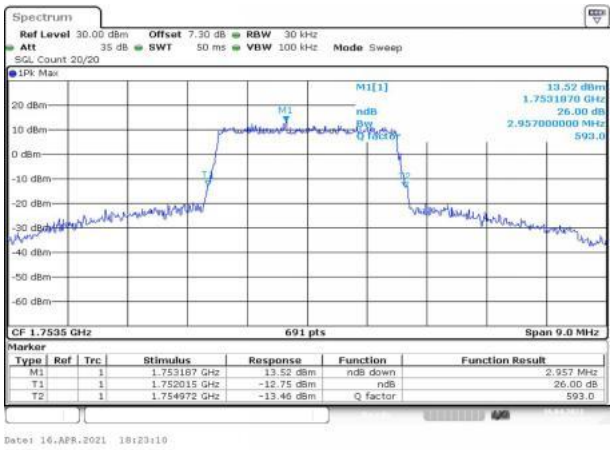

Fig.18

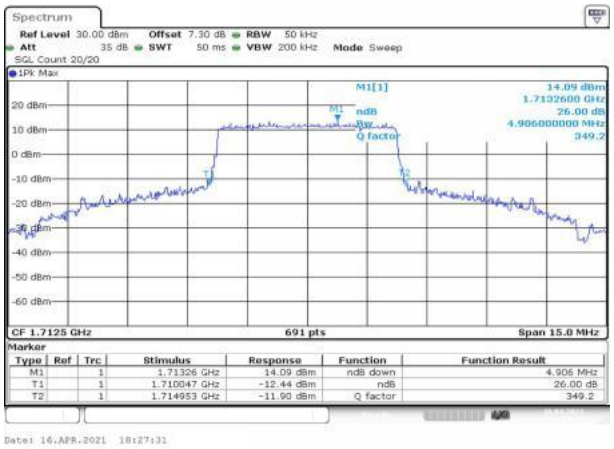

Fig.19

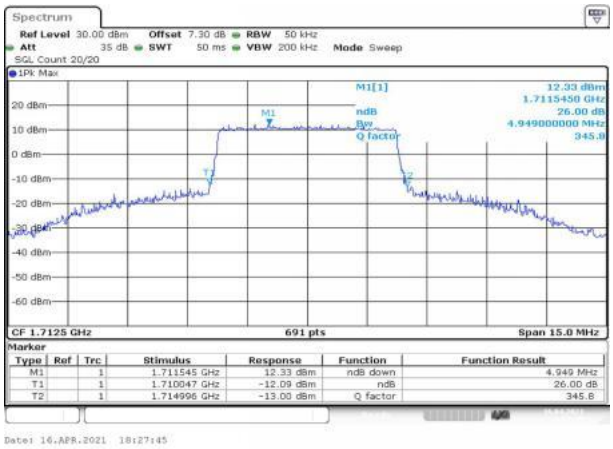

Fig.20

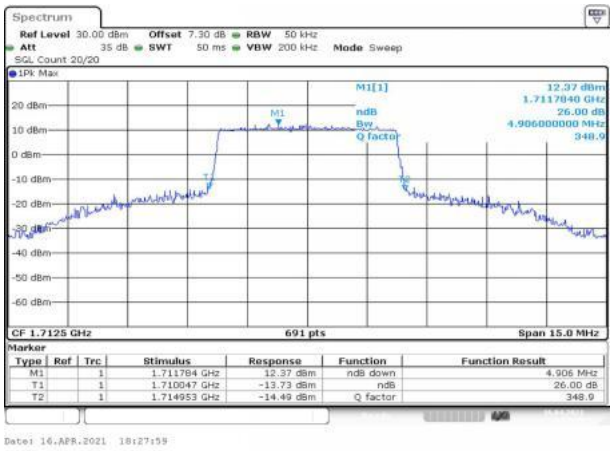

Fig.21

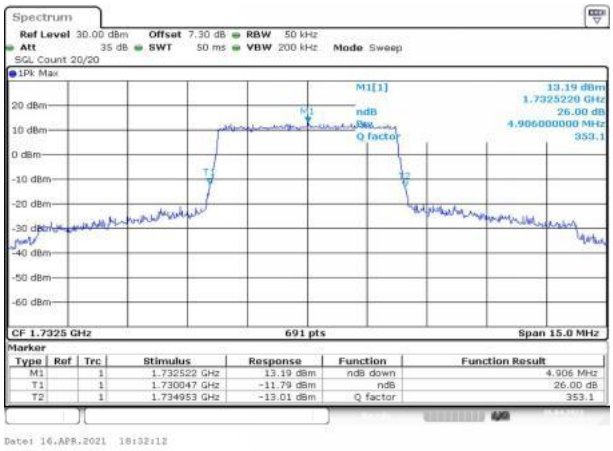

Fig.22

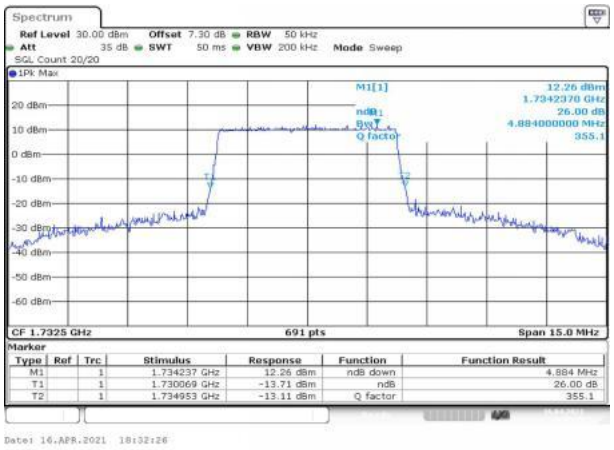

Fig.23

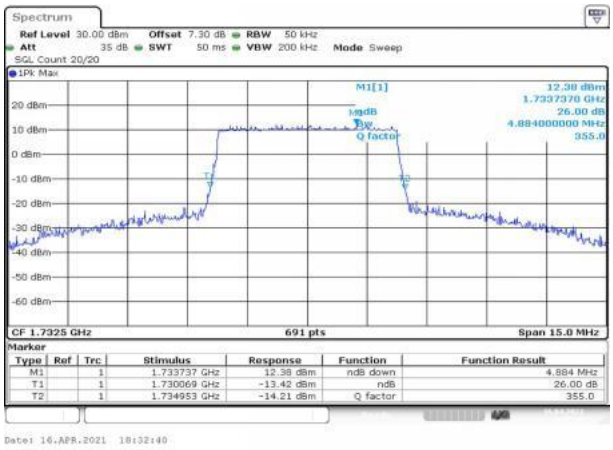

Fig.24

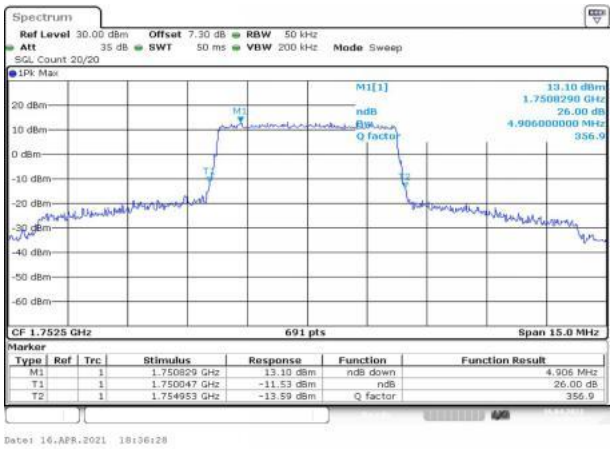

Fig.25

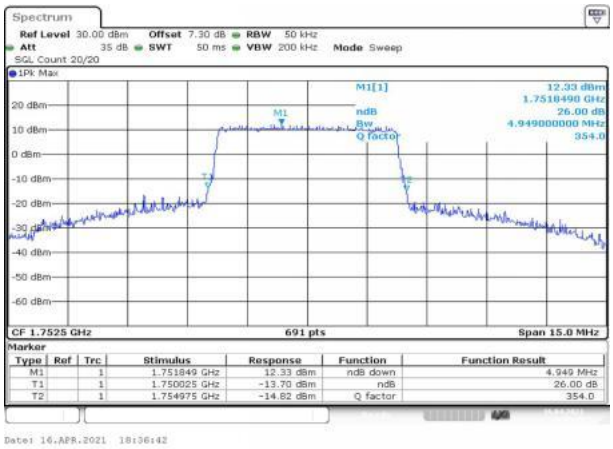

Fig.26

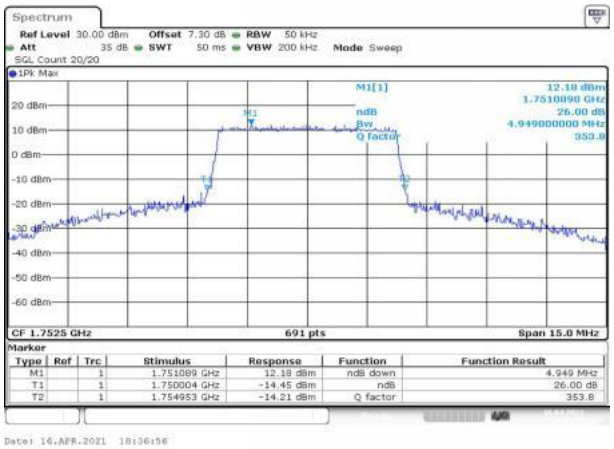

Fig.27

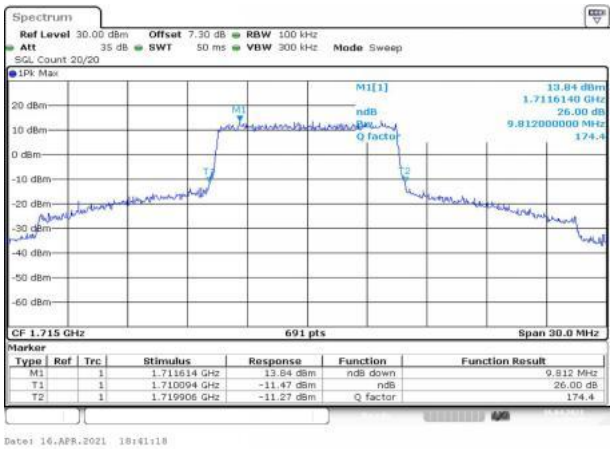

Fig.28

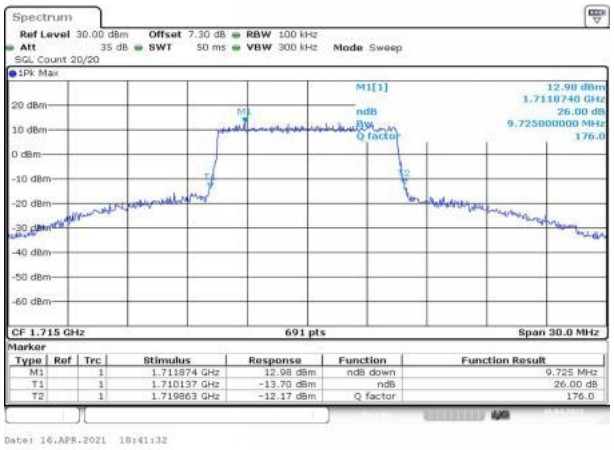

Fig.29

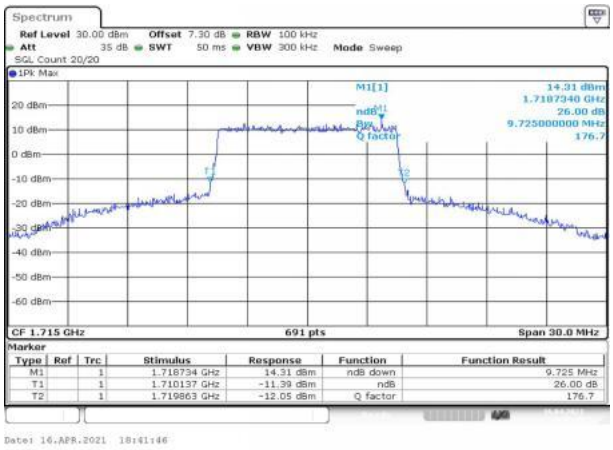

Fig.30

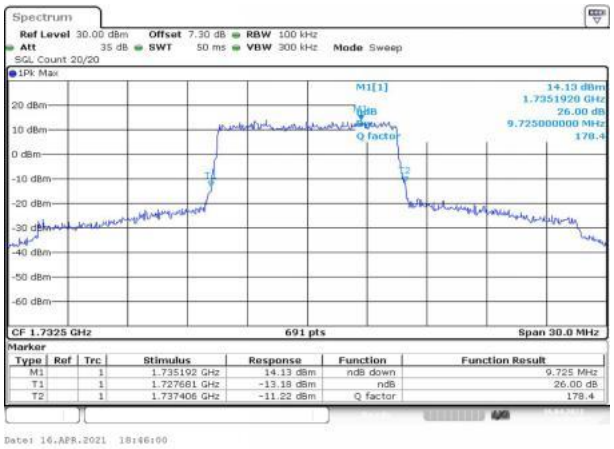

Fig.31

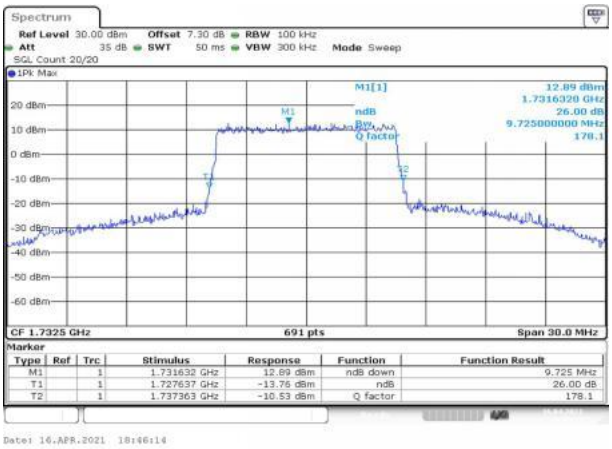

Fig.32

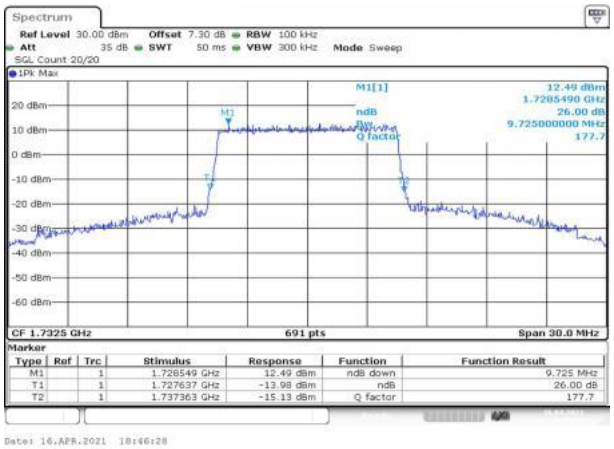

Fig.33

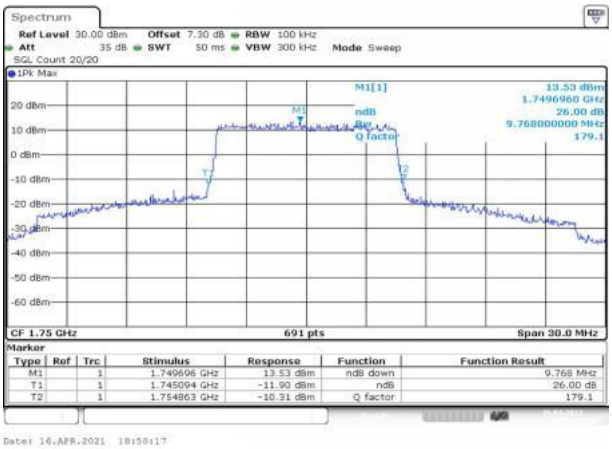

Fig.34

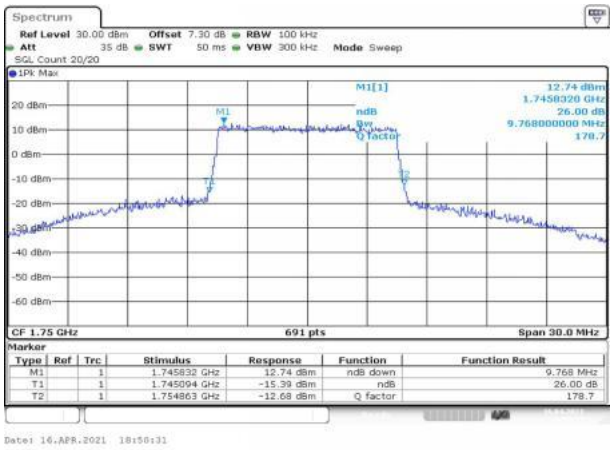

Fig.35

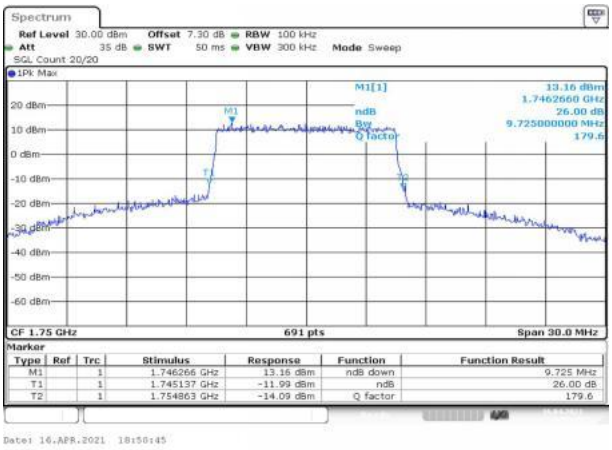

Fig.36

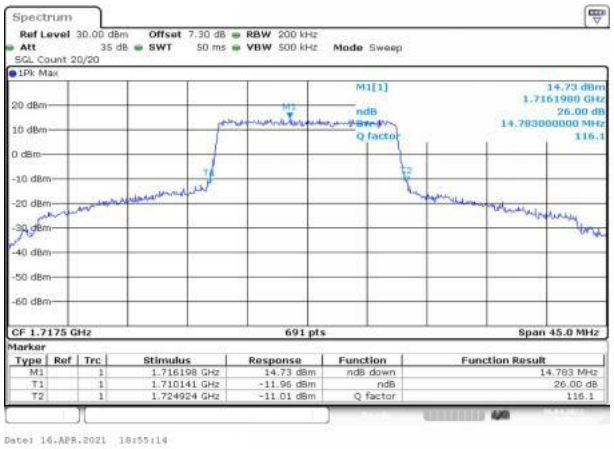

Fig.37

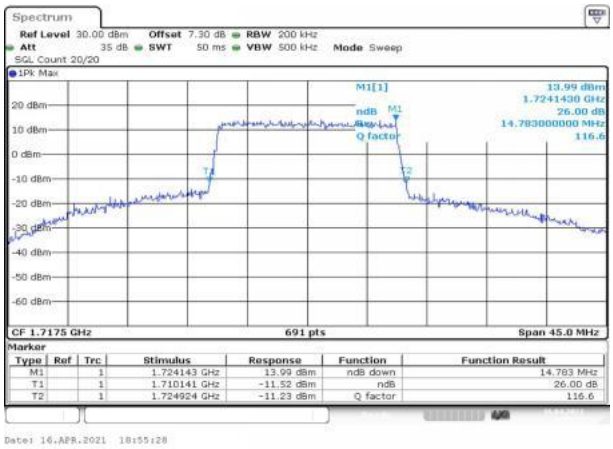

Fig.38

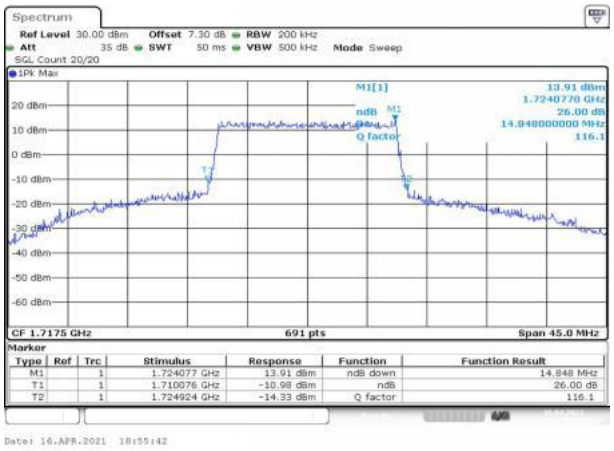

Fig.39

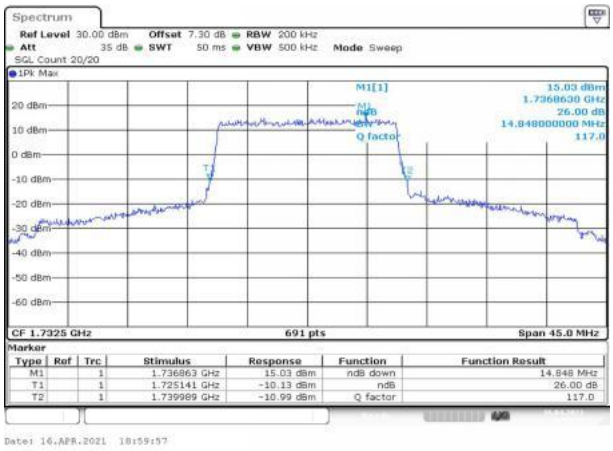

Fig.40

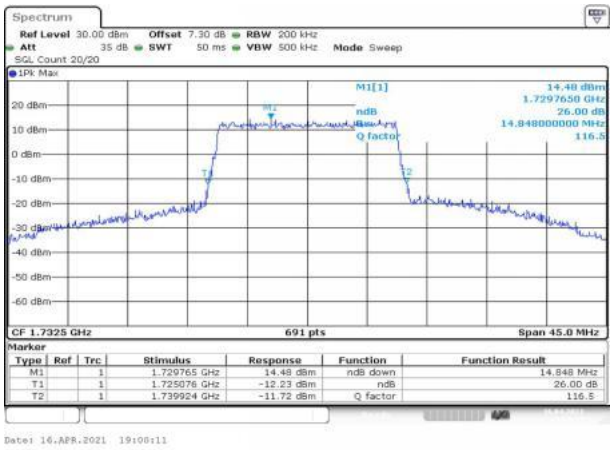

Fig.41

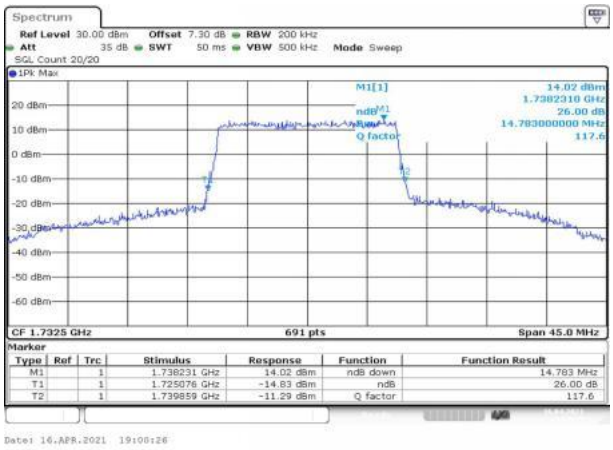

Fig.42

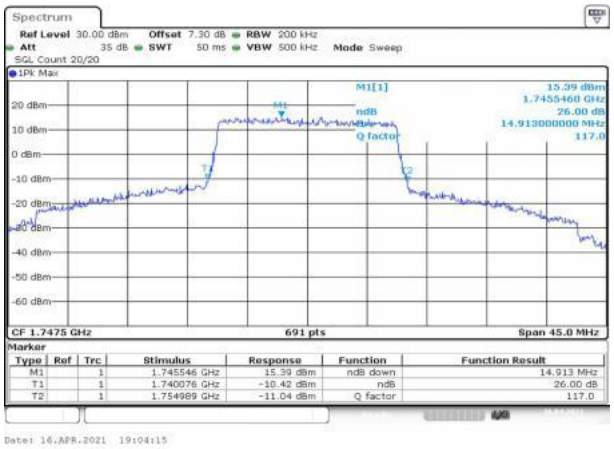

Fig.43

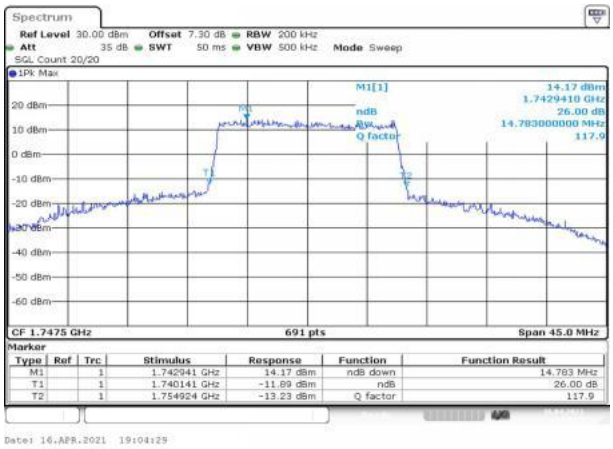

Fig.44

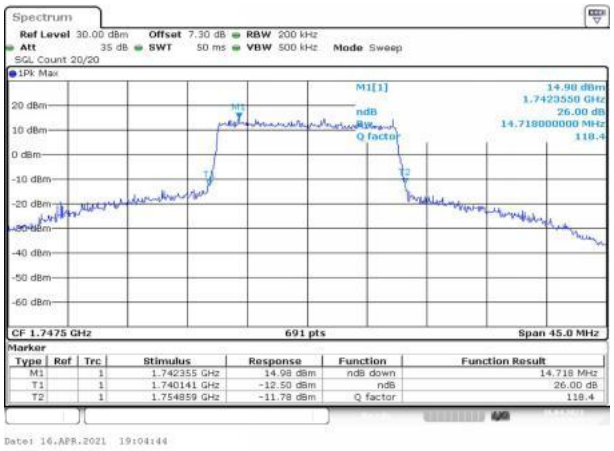

Fig.45

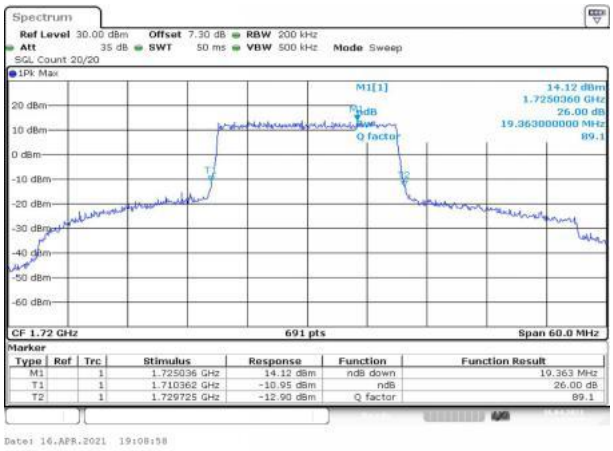

Fig.46

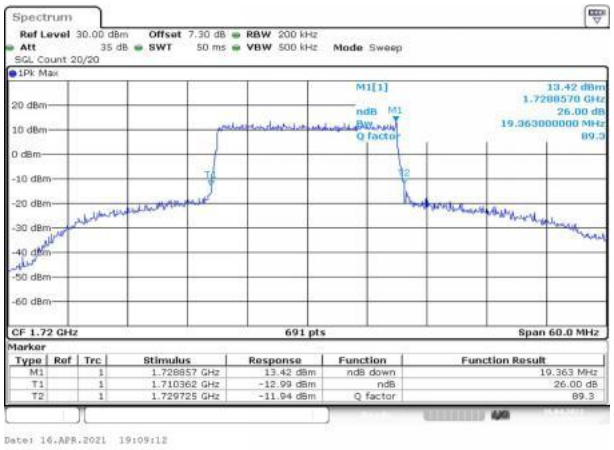

Fig.47

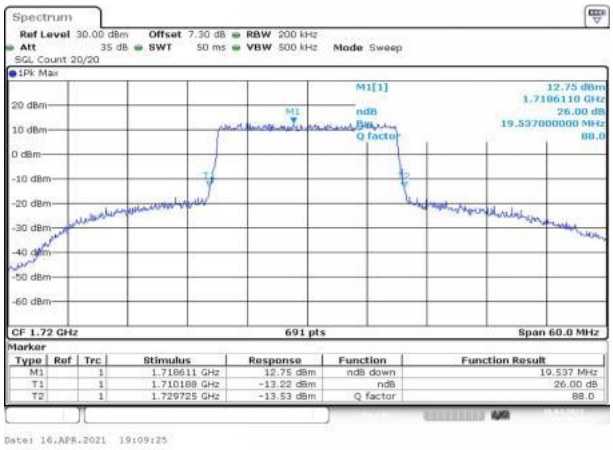

Fig.48

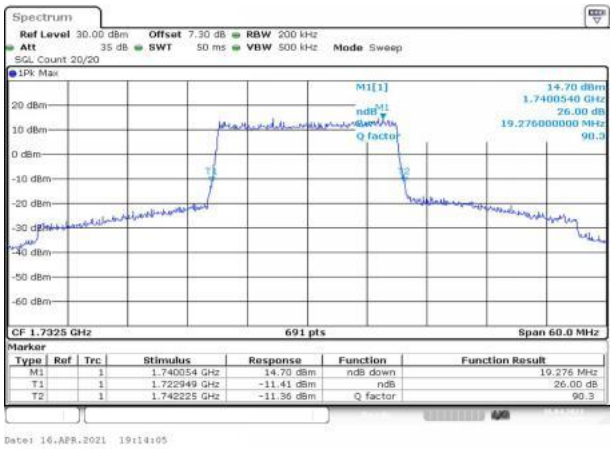

Fig.49

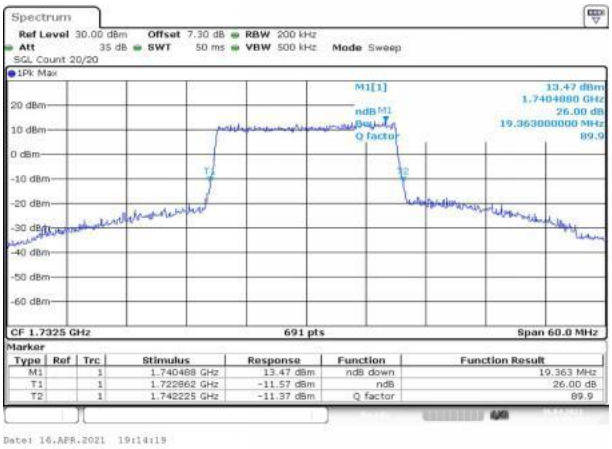

Fig.50

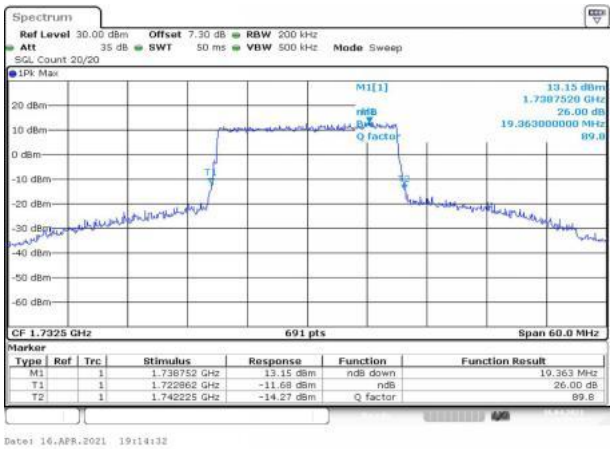

Fig.51

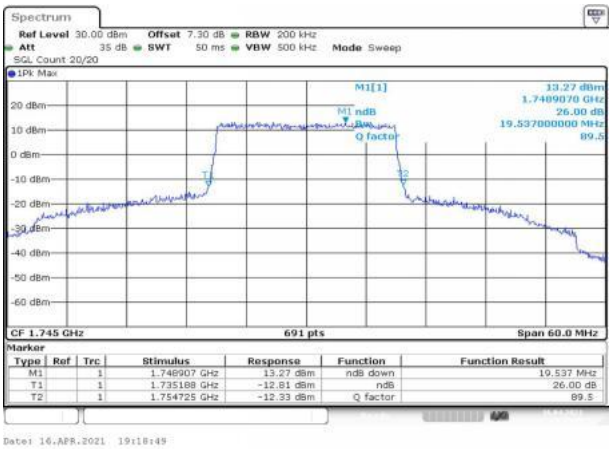

Fig.52

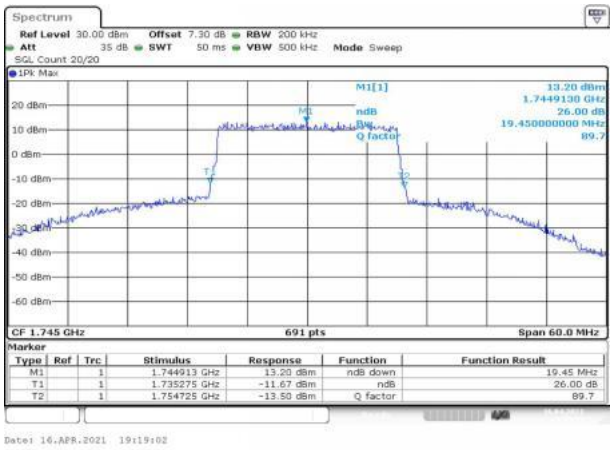

Fig.53

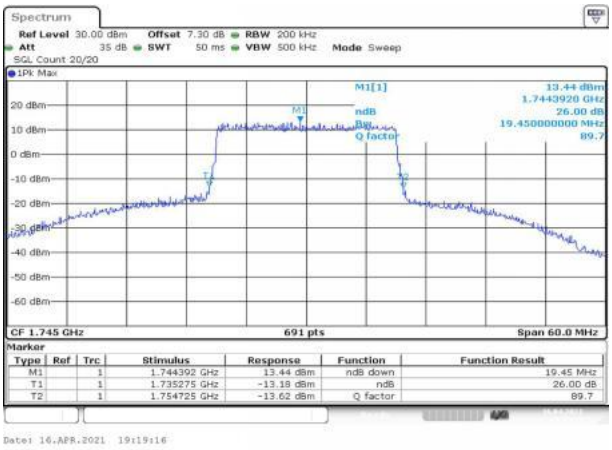

Fig.54

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

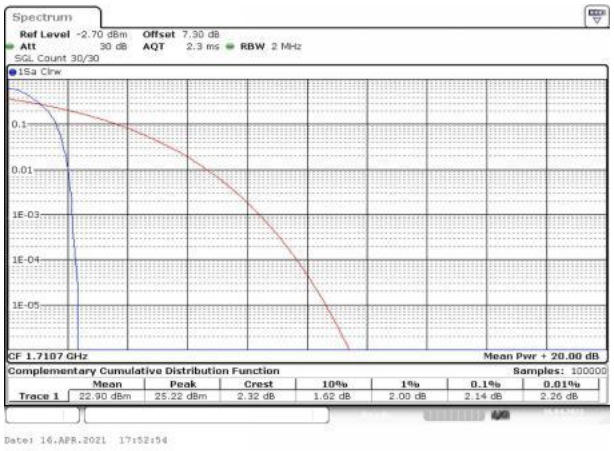

Fig.1

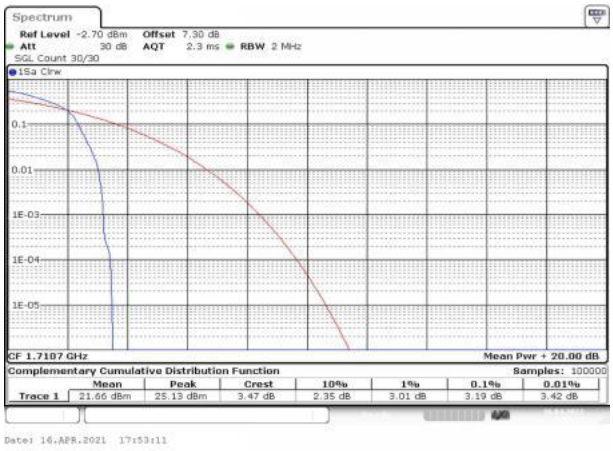

Fig.2

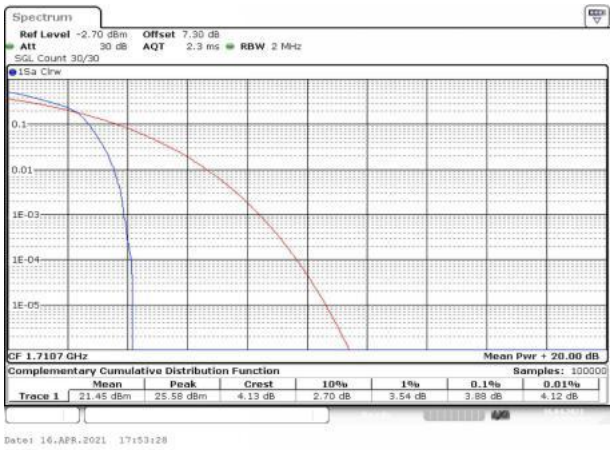

Fig.3

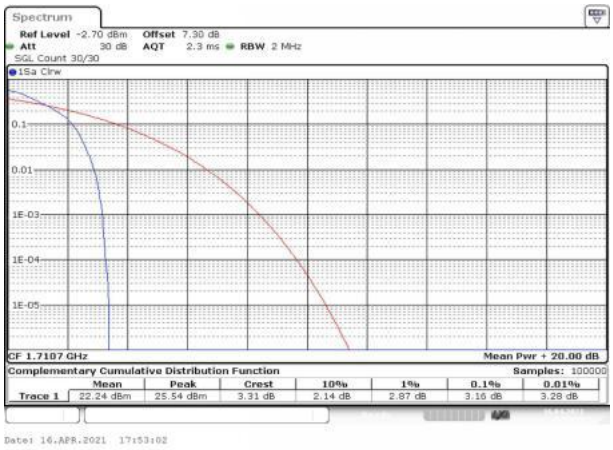

Fig.4

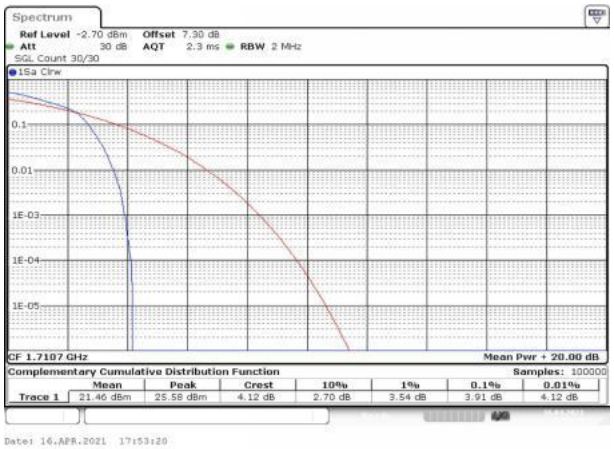

Fig.5

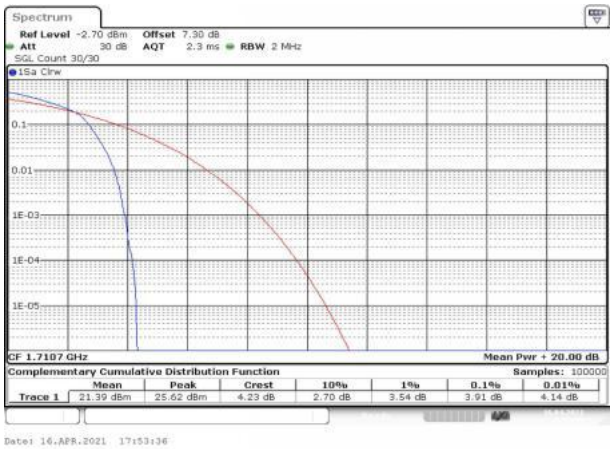

Fig.6

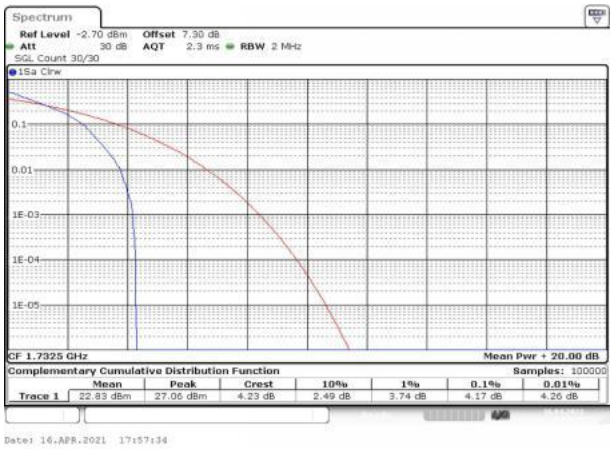

Fig.7

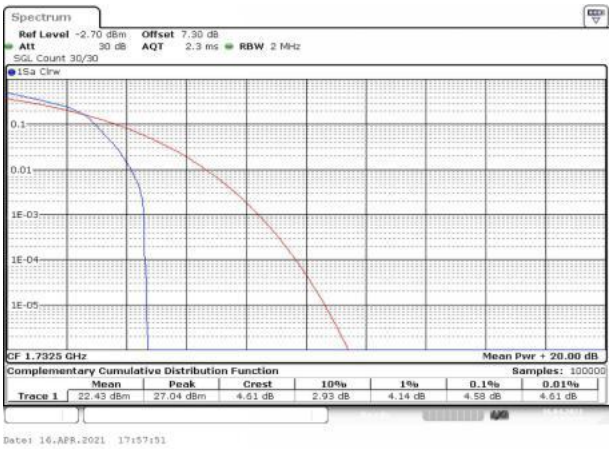

Fig.8

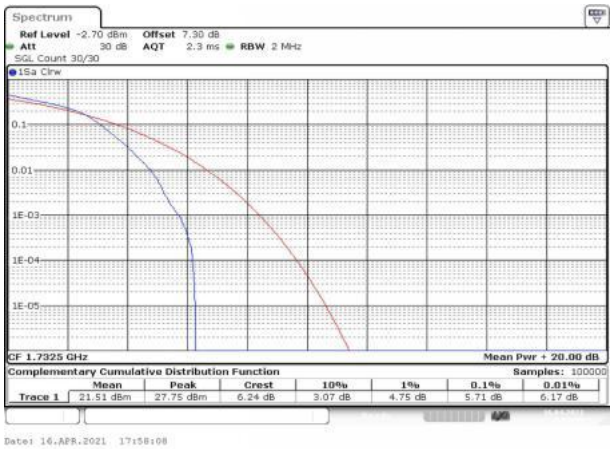

Fig.9

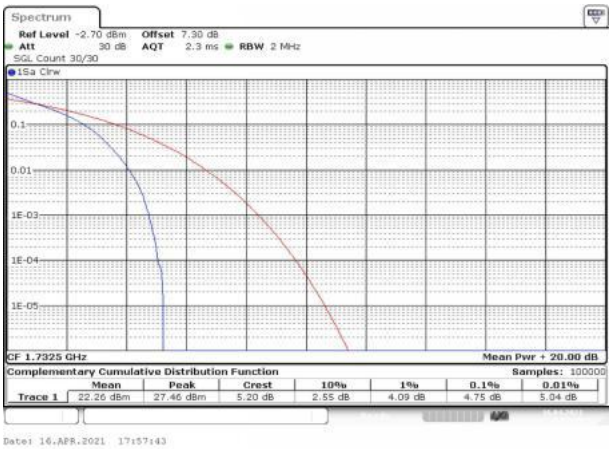

Fig.10

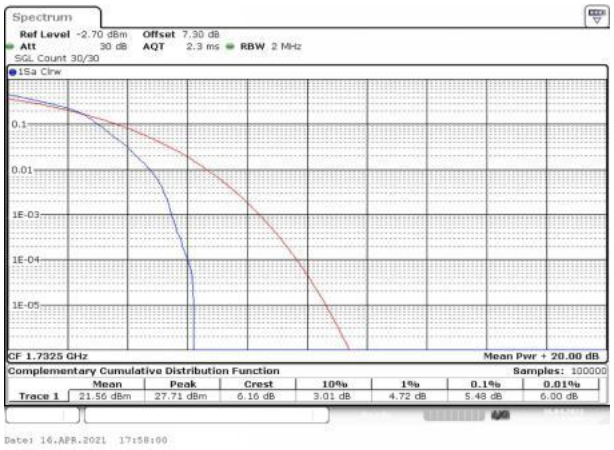

Fig.11

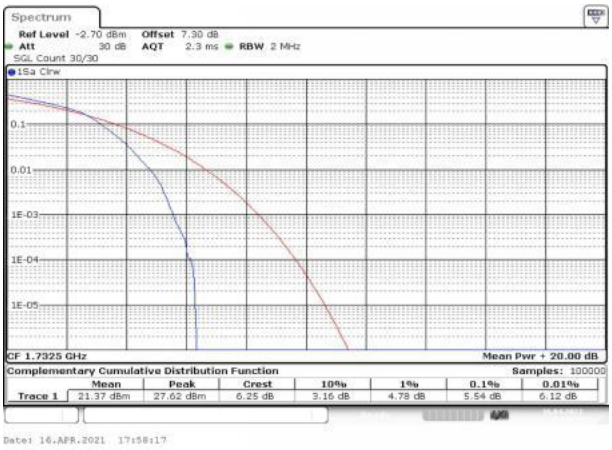

Fig.12

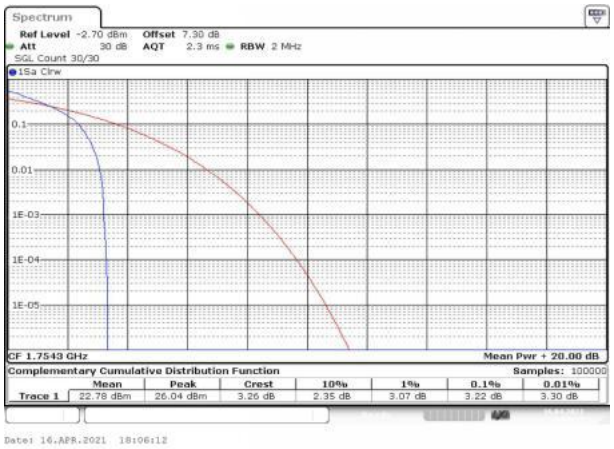

Fig.13

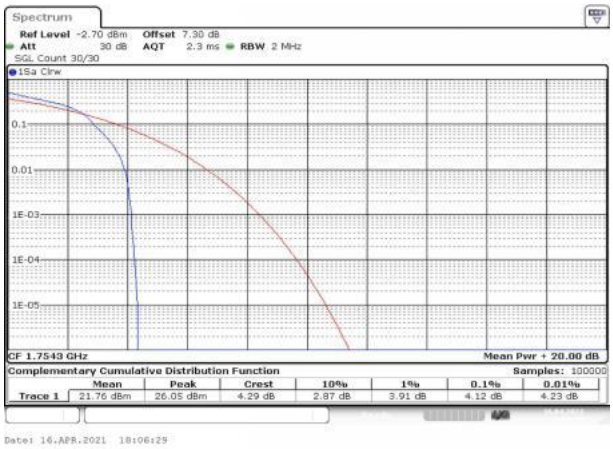

Fig.14

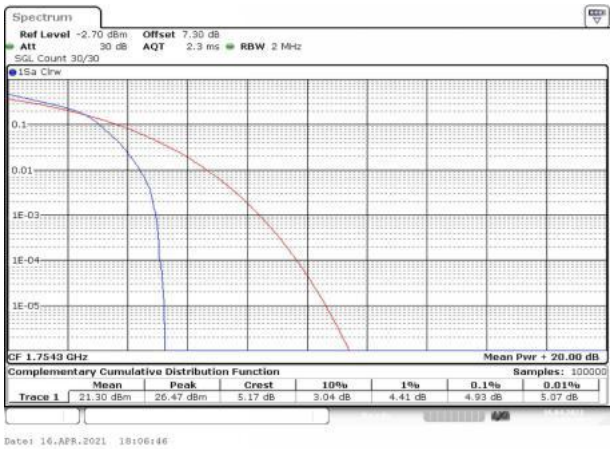

Fig.15

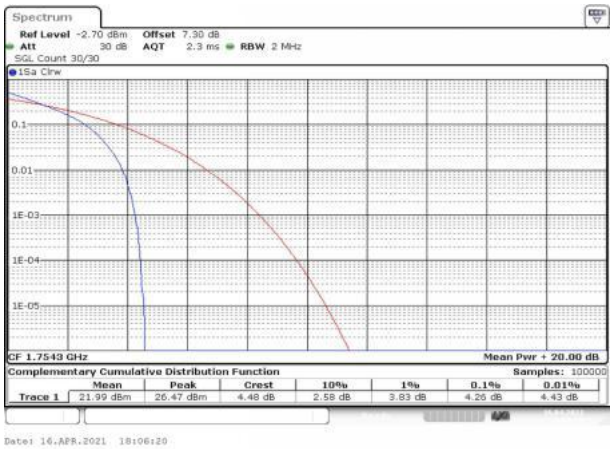

Fig.16

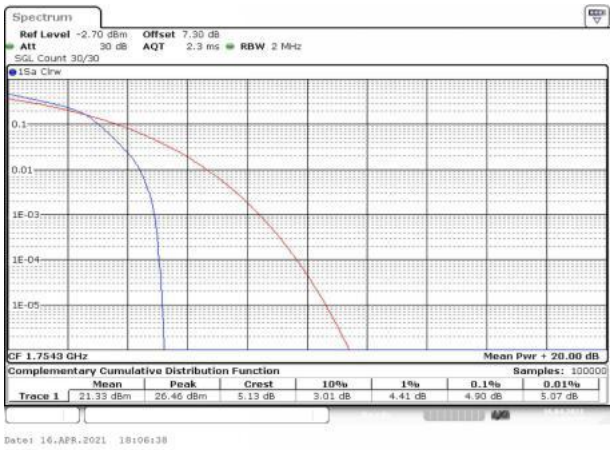

Fig.17

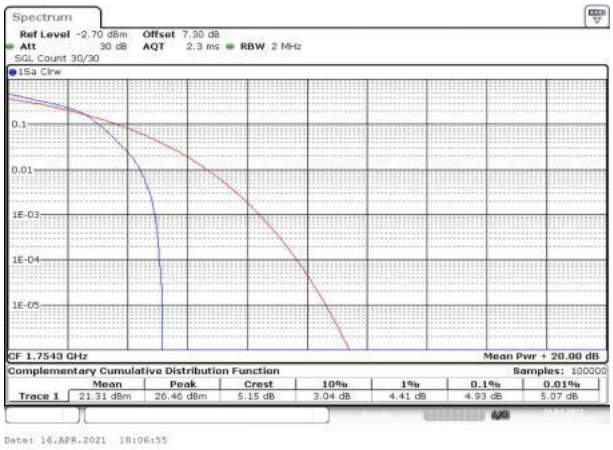

Fig.18

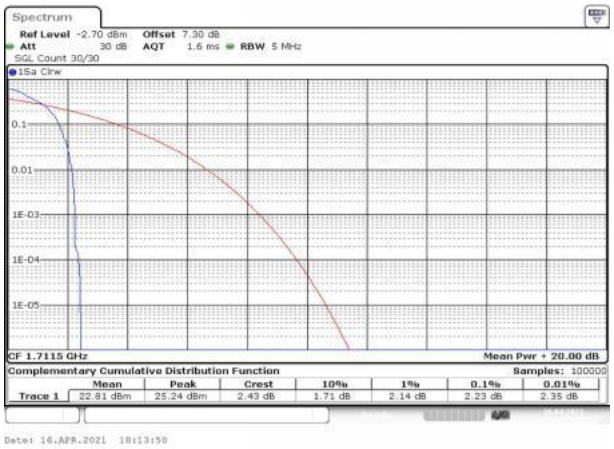

Fig.19

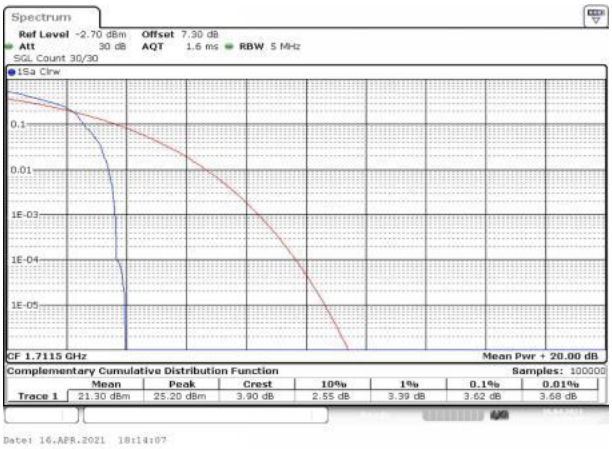

Fig.20

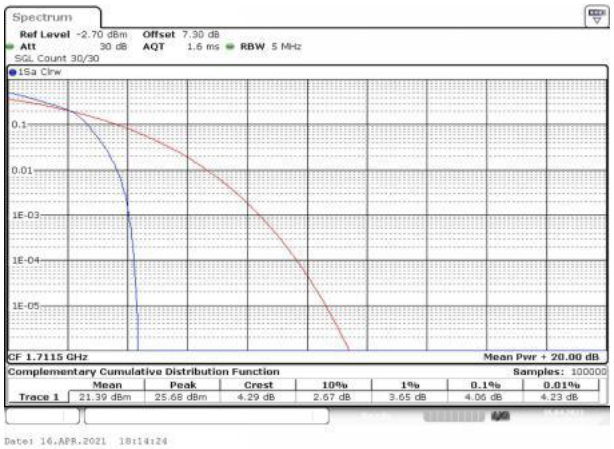

Fig.21

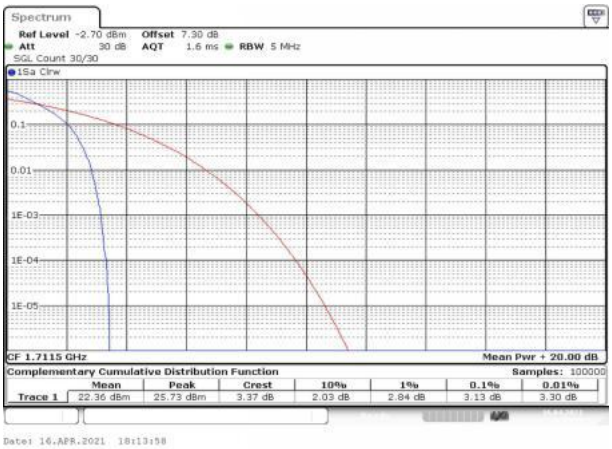

Fig.22

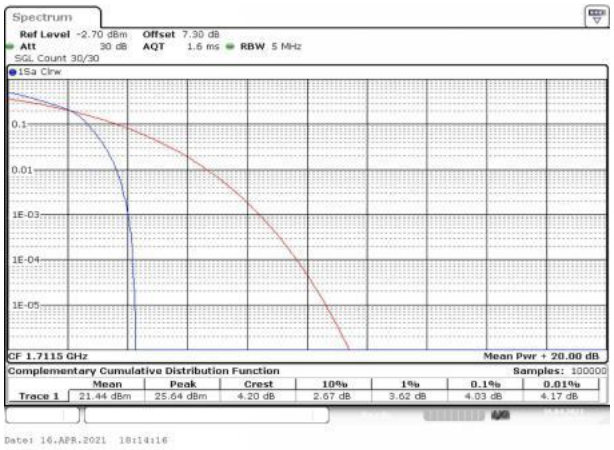

Fig.23

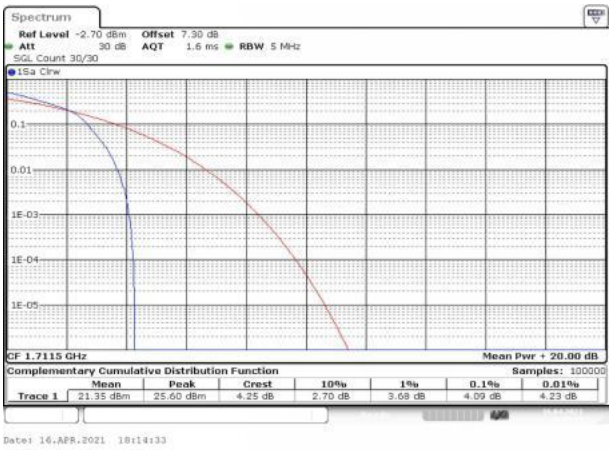

Fig.24

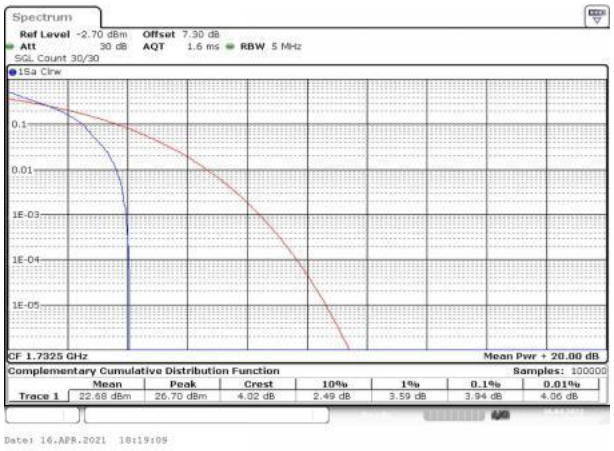

Fig.25

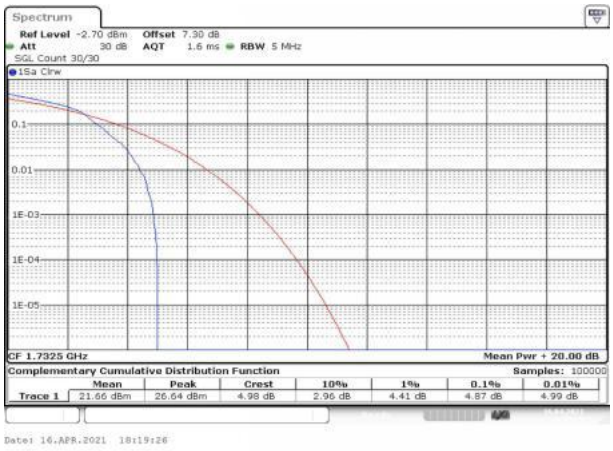

Fig.26

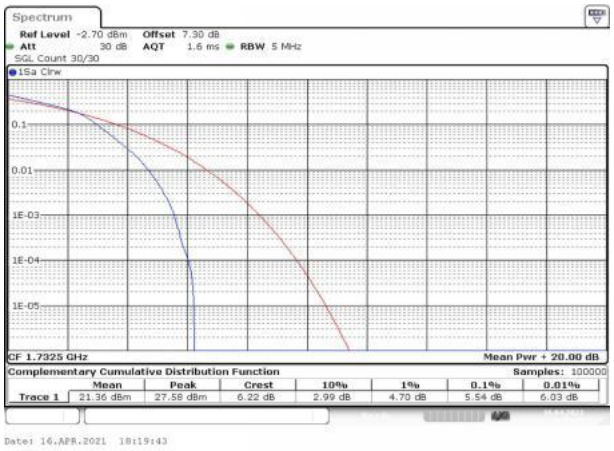

Fig.27

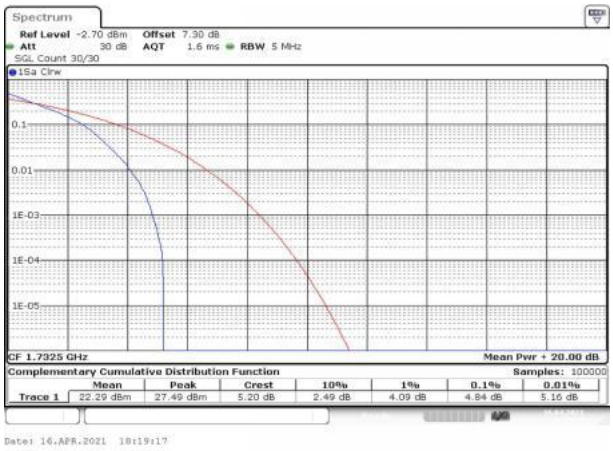

Fig.28

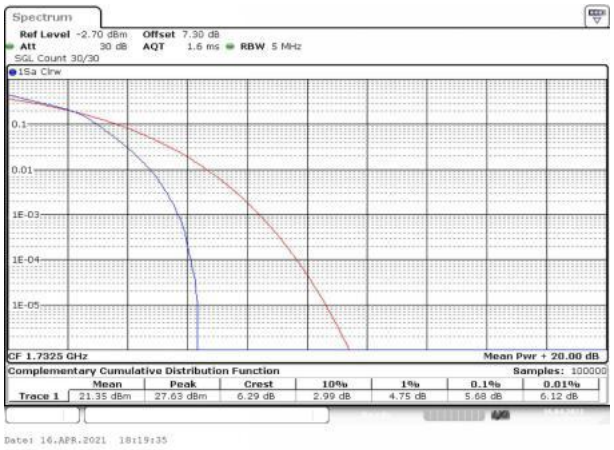

Fig.29

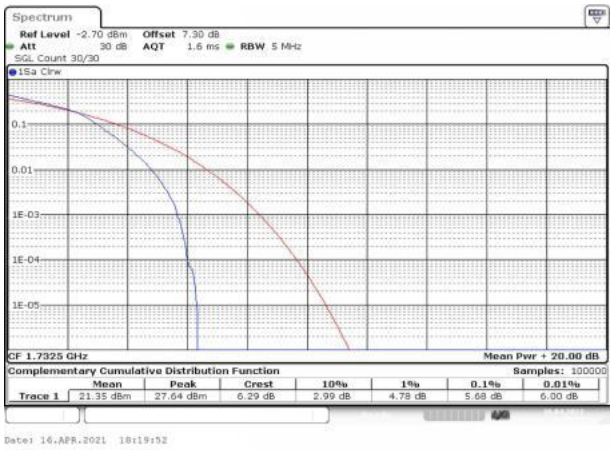

Fig.30

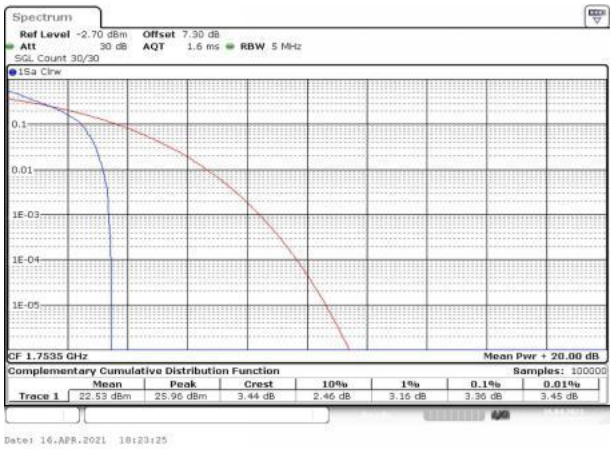

Fig.31

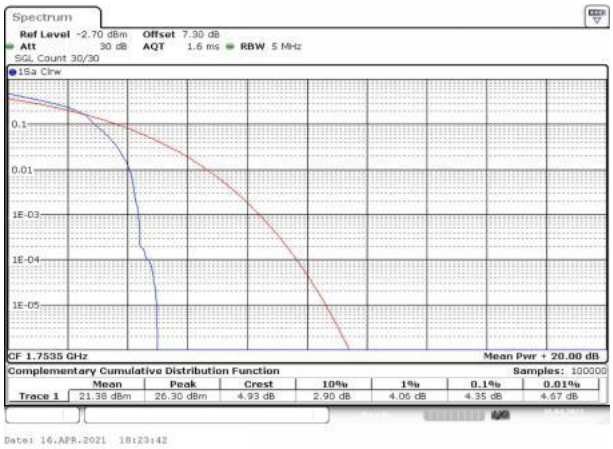

Fig.32

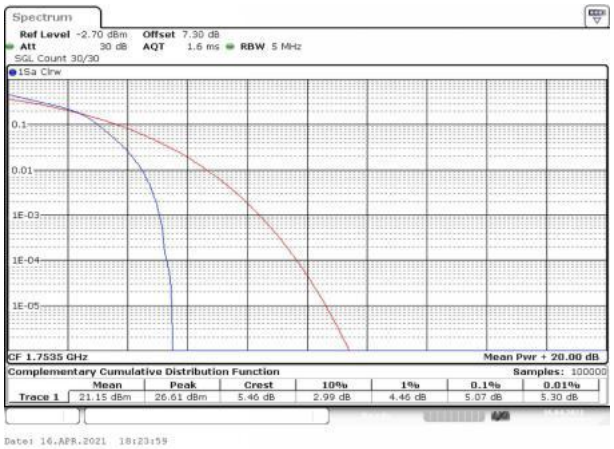

Fig.33

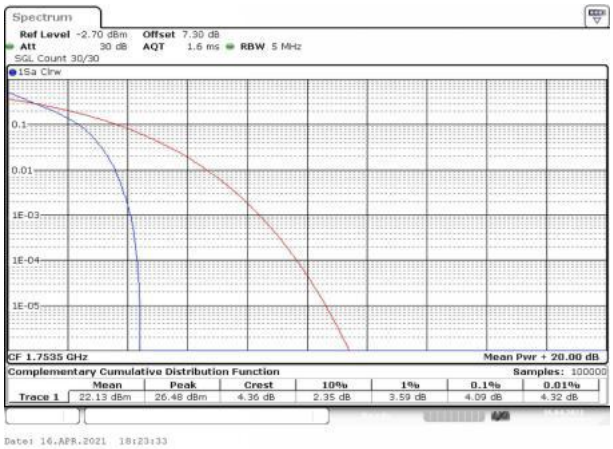

Fig.34

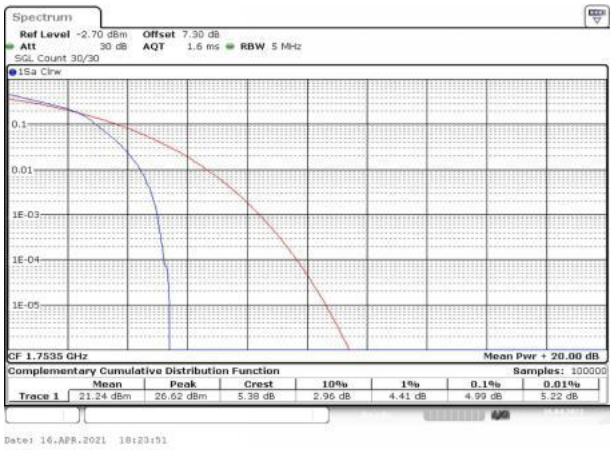

Fig.35

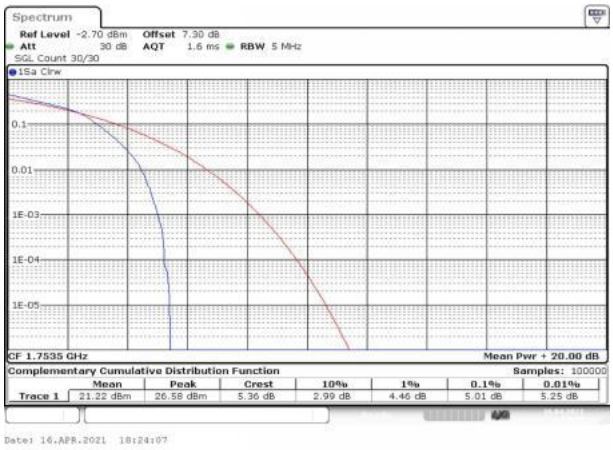

Fig.36

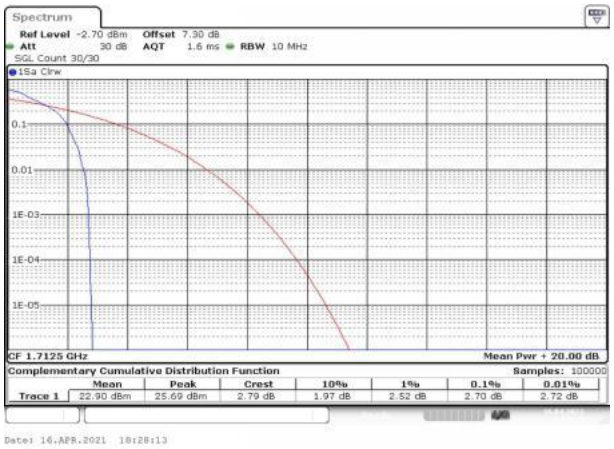

Fig.37

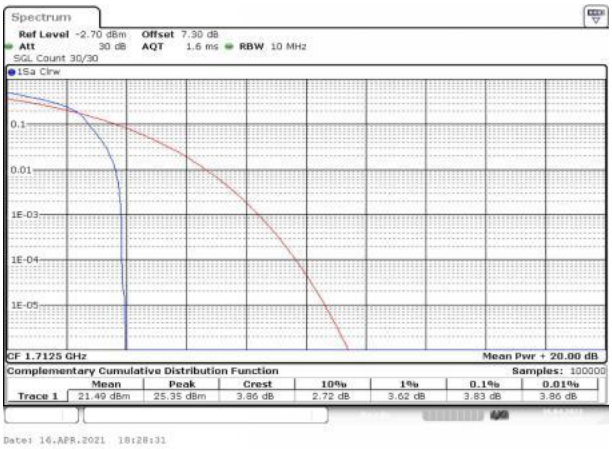

Fig.38

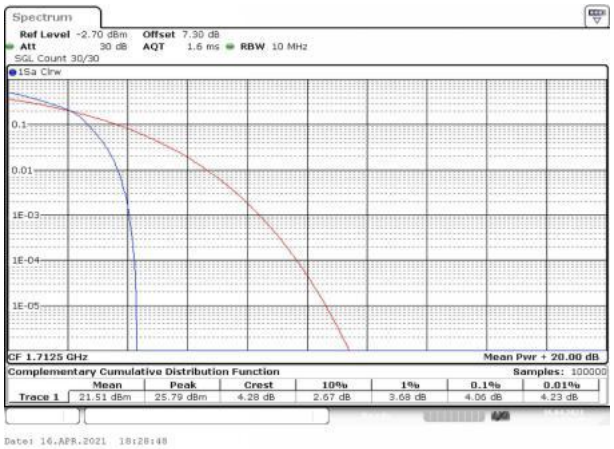

Fig.39

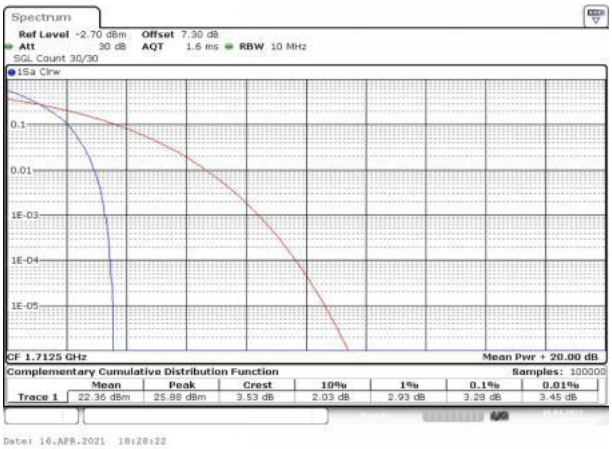

Fig.40

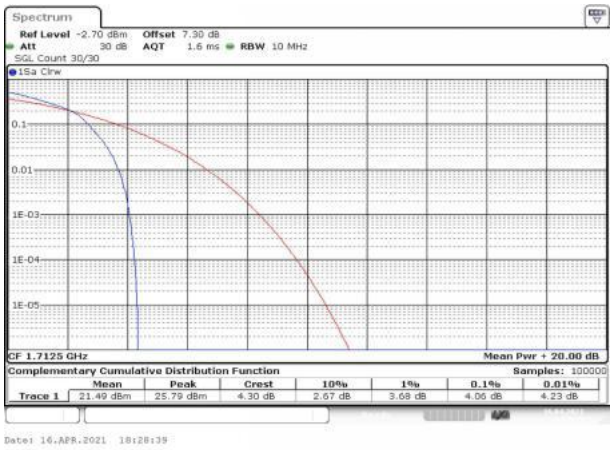

Fig.41

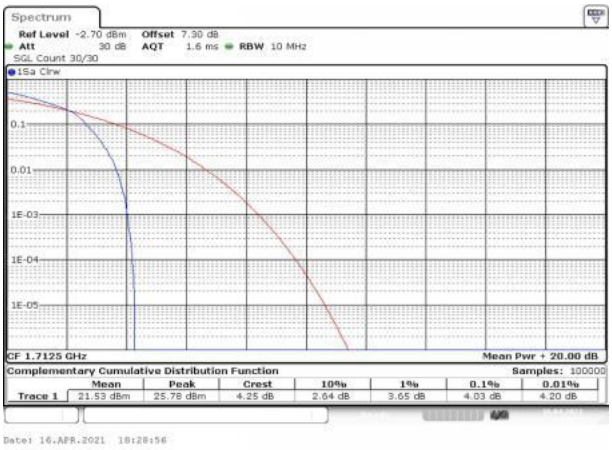

Fig.42

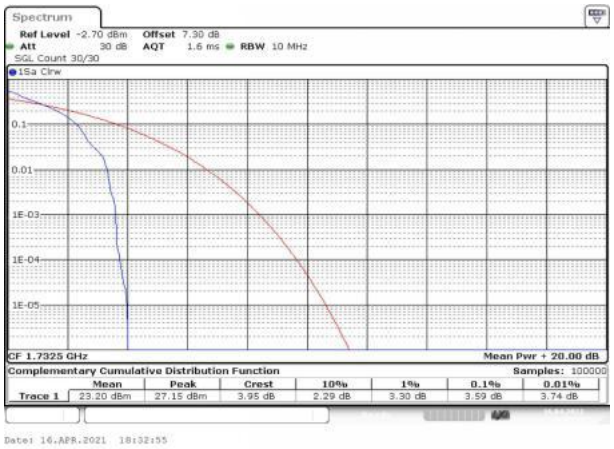

Fig.43

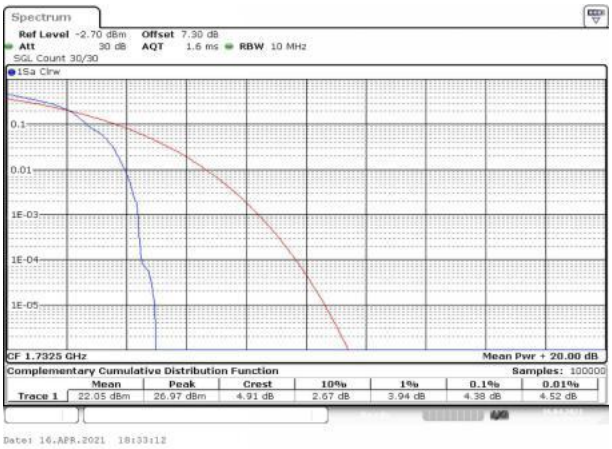

Fig.44

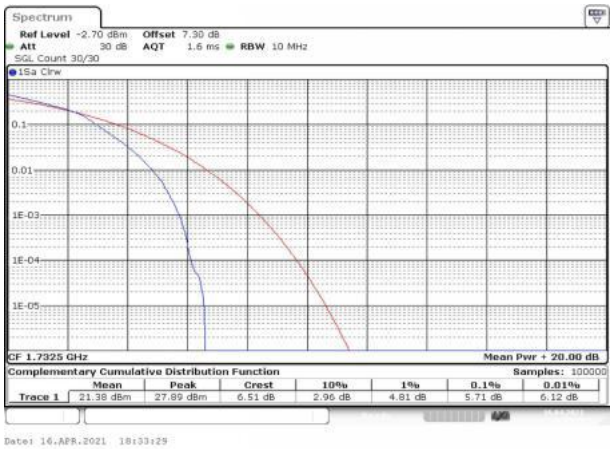

Fig.45

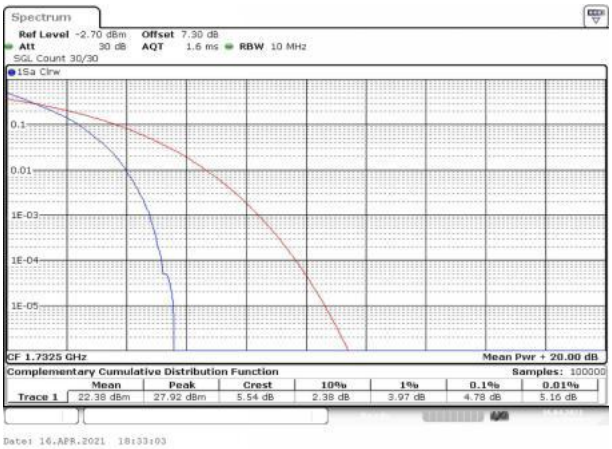

Fig.46

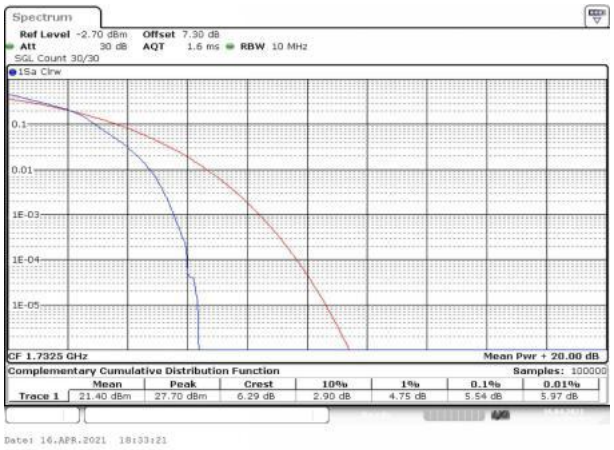

Fig.47

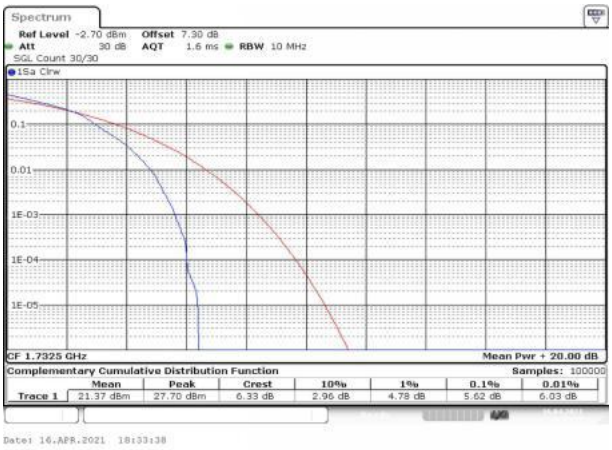

Fig.48