

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 4

1 RF Power Output

Rx Power Output						
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1710.7	19957	1.4	1	0	23.44
				1	3	23.34
				1	5	23.41
				3	0	23.49
				3	1	23.43
				3	3	23.41
				6	0	22.44
	1732.5	20175		1	0	23.79
				1	3	23.78
				1	5	23.83
				3	0	23.26
				3	1	23.32
				3	3	23.26
				6	0	22.51
	1754.3	20393		1	0	23.29
				1	3	23.35
				1	5	23.27
				3	0	23.20
				3	1	23.26
				3	3	23.17
				6	0	22.33

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1710.7	19957	1.4	1	0	23.60
				1	3	23.61
				1	5	23.47
				3	0	23.76
				3	1	23.63
				3	3	23.72
				6	0	23.21
	1732.5	20175		1	0	23.71
				1	3	23.73
				1	5	23.73
				3	0	23.76
				3	1	23.71
				3	3	23.74
				6	0	23.13
	1754.3	20393		1	0	24.14
				1	3	24.17
				1	5	24.15
				3	0	23.84
				3	1	23.86
				3	3	23.79
				6	0	23.26

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1711.5	19965	3	1	0	23.39
				1	8	23.37
				1	14	23.36
				8	0	22.34
				8	4	22.33
				8	7	22.30
				15	0	22.26
	1732.5	20175		1	0	23.80
				1	8	23.73
				1	14	23.75
				8	0	22.27
				8	4	22.21
				8	7	22.29
				15	0	22.36
	1753.5	20385		1	0	23.30
				1	8	23.33
				1	14	23.36
				8	0	22.18
				8	4	22.19
				8	7	22.23
				15	0	22.44

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1711.5	19965	3	1	0	23.65
				1	8	23.62
				1	14	23.72
				8	0	23.16
				8	4	23.24
				8	7	23.16
				15	0	23.19
	1732.5	20175		1	0	23.68
				1	8	23.62
				1	14	23.70
				8	0	23.21
				8	4	23.07
				8	7	23.13
				15	0	23.12
	1753.5	20385		1	0	24.13
				1	8	24.06
				1	14	24.18
				8	0	23.27
				8	4	23.27
				8	7	23.33
				15	0	23.38

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1712.5	19975	5	1	0	22.85
				1	12	22.85
				1	24	22.68
				12	0	22.20
				12	7	22.12
				12	13	22.17
				25	0	22.32
	1732.5	20175		1	0	23.35
				1	12	23.23
				1	24	23.24
				12	0	22.04
				12	7	21.99
				12	13	22.02
				25	0	22.18
	1752.5	20375		1	0	23.48
				1	12	23.55
				1	24	23.58
				12	0	22.18
				12	7	22.30
				12	13	22.23
				25	0	22.46

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1712.5	19975	5	1	0	23.83
				1	12	23.69
				1	24	23.71
				12	0	23.19
				12	7	23.11
				12	13	23.17
				25	0	23.19
	1732.5	20175		1	0	23.54
				1	12	23.40
				1	24	23.58
				12	0	23.21
				12	7	23.24
				12	13	23.08
				25	0	23.08
	1752.5	20375		1	0	23.87
				1	12	23.93
				1	24	23.93
				12	0	23.24
				12	7	23.33
				12	13	23.34
				25	0	23.42

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1715	20000	10	1	0	24.12
				1	25	24.09
				1	49	24.10
				25	0	22.35
				25	12	22.36
				25	25	22.29
				50	0	22.25
	1732.5	20175		1	0	23.60
				1	25	23.67
				1	49	23.66
				25	0	22.30
				25	12	22.27
				25	25	22.28
				50	0	22.33
	1750	20350		1	0	23.58
				1	25	23.58
				1	49	23.62
				25	0	22.44
				25	12	22.42
				25	25	22.44
				50	0	22.43

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1715	20000	10	1	0	23.87
				1	25	23.78
				1	49	23.78
				25	0	23.29
				25	12	23.12
				25	25	23.26
				50	0	23.11
	1732.5	20175		1	0	23.79
				1	25	23.78
				1	49	23.79
				25	0	23.19
				25	12	23.22
				25	25	23.14
				50	0	23.08
	1750	20350		1	0	23.78
				1	25	23.79
				1	49	23.81
				25	0	23.23
				25	12	23.29
				25	25	23.32
				50	0	23.27

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1732.5	20175	15	1	0	23.93
				1	37	23.94
				1	74	23.92
				36	0	22.47
				36	29	22.50
				36	30	22.51
				75	0	22.45
	1747.5	20325		1	0	23.80
				1	37	23.78
				1	74	23.80
				36	0	22.53
				36	29	22.45
				36	30	22.45
				75	0	22.50
	1717.5	20025		1	0	24.37
				1	37	24.14
				1	74	24.13
				36	0	22.47
				36	29	22.44
				36	30	22.34
				75	0	22.41

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1732.5	20175	15	1	0	23.88
				1	37	23.83
				1	74	23.89
				36	0	23.34
				36	29	23.24
				36	30	23.24
				75	0	23.38
	1747.5	20325		1	0	23.74
				1	37	23.87
				1	74	23.85
				36	0	23.49
				36	29	23.39
				36	30	23.39
				75	0	23.38
	1717.5	20025		1	0	23.90
				1	37	23.68
				1	74	23.88
				36	0	23.30
				36	29	23.26
				36	30	23.38
				75	0	23.30

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	1720	20050	20	1	0	23.72
				1	49	23.73
				1	99	23.76
				50	0	22.29
				50	24	22.31
				50	50	22.25
				100	0	22.22
	1732.5	20175		1	0	23.46
				1	49	23.37
				1	99	23.50
				50	0	22.31
				50	24	22.35
				50	50	22.37
				100	0	22.24
	1745	20300		1	0	23.37
				1	49	23.45
				1	99	23.51
				50	0	22.21
				50	24	22.35
				50	50	22.37
				100	0	22.41

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	1720	20050	20	1	0	23.65
				1	49	23.47
				1	99	23.58
				50	0	23.09
				50	24	23.13
				50	50	23.02
				100	0	23.18
	1732.5	20175		1	0	23.67
				1	49	23.63
				1	99	23.80
				50	0	23.18
				50	24	23.10
				50	50	23.23
				100	0	23.25
	1745	20300		1	0	23.60
				1	49	23.66
				1	99	23.78
				50	0	23.20
				50	24	23.24
				50	50	23.34
				100	0	23.25

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	---	---
	1732.5	20175		6	0	1.088	Fig.3	1.082	Fig.4	---	---
	1754.3	20393		6	0	1.082	Fig.5	1.082	Fig.6	---	---
	1711.5	19965	3	15	0	2.683	Fig.7	2.683	Fig.8	---	---
	1732.5	20175		15	0	2.683	Fig.9	2.696	Fig.10	---	---
	1753.5	20385		15	0	2.683	Fig.11	2.696	Fig.12	---	---
	1712.5	19975	5	25	0	4.472	Fig.13	4.472	Fig.14	---	---
	1732.5	20175		25	0	4.472	Fig.15	4.472	Fig.16	---	---
	1752.5	20375		25	0	4.472	Fig.17	4.472	Fig.18	---	---
	1715	20000	10	50	0	8.944	Fig.19	8.944	Fig.20	---	---
	1732.5	20175		50	0	8.944	Fig.21	8.944	Fig.22	---	---
	1750	20350		50	0	8.944	Fig.23	8.944	Fig.24	---	---
	1717.5	20025	15	75	0	13.415	Fig.25	13.480	Fig.26	---	---
	1732.5	20175		75	0	13.415	Fig.27	13.415	Fig.28	---	---
	1747.5	20325		75	0	13.415	Fig.29	13.415	Fig.30	---	---
	1720	20050	20	100	0	17.887	Fig.31	17.887	Fig.32	---	---
	1732.5	20175		100	0	17.887	Fig.33	17.887	Fig.34	---	---
	1745	20300		100	0	17.887	Fig.35	17.887	Fig.36	---	---

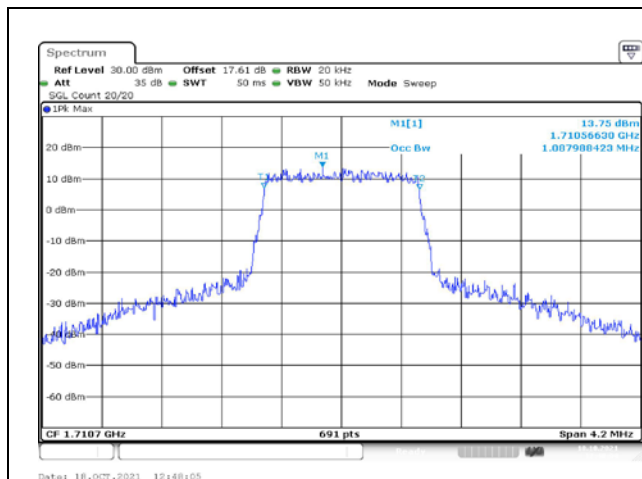


Fig.1

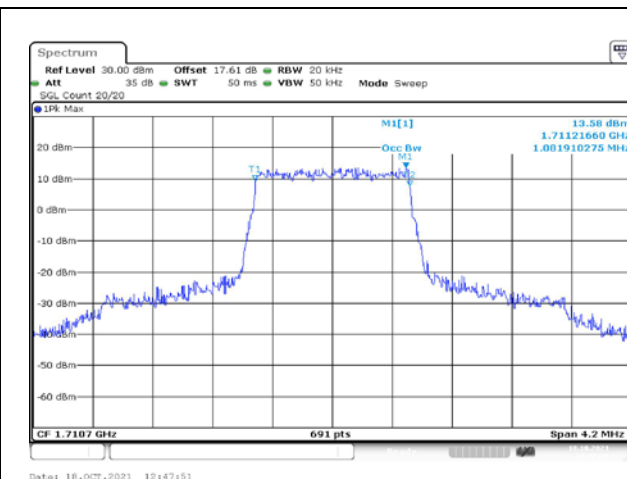


Fig.2

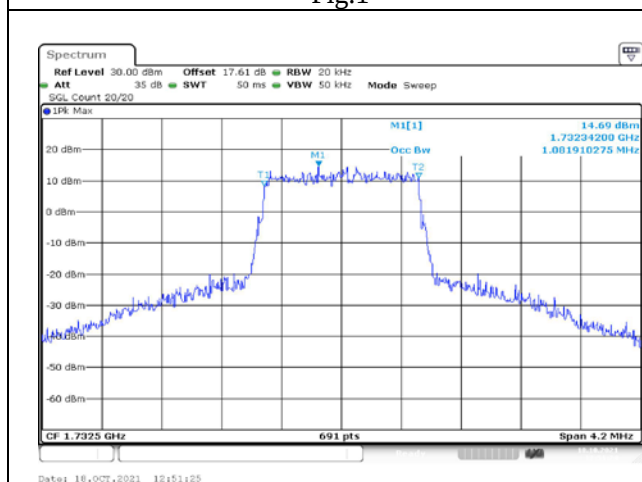


Fig.3

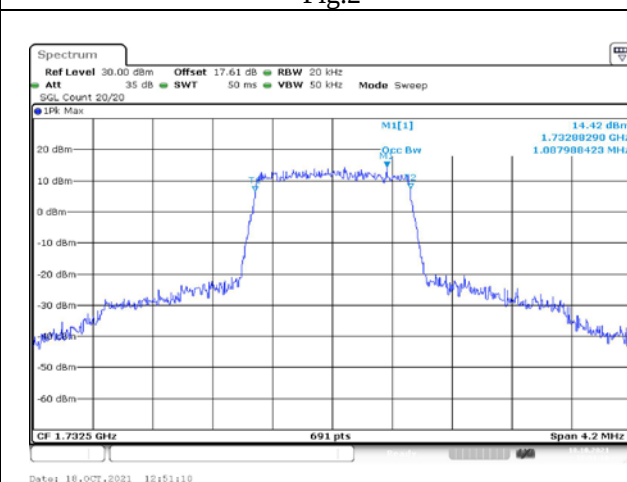


Fig.4

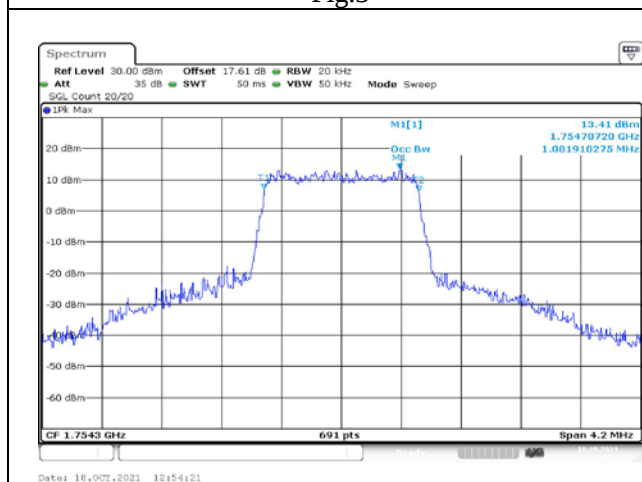


Fig.5

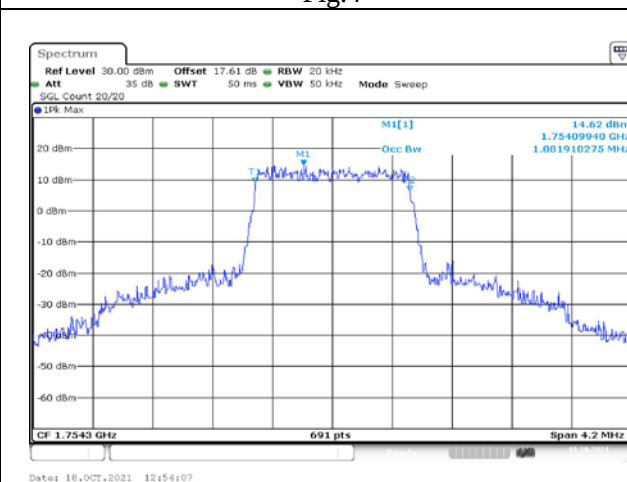
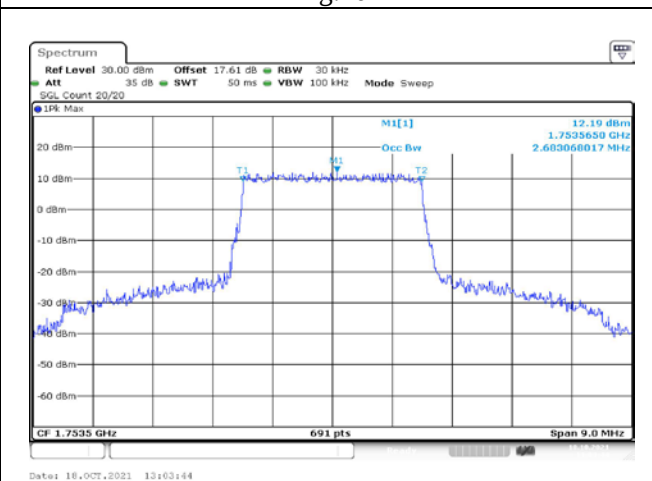
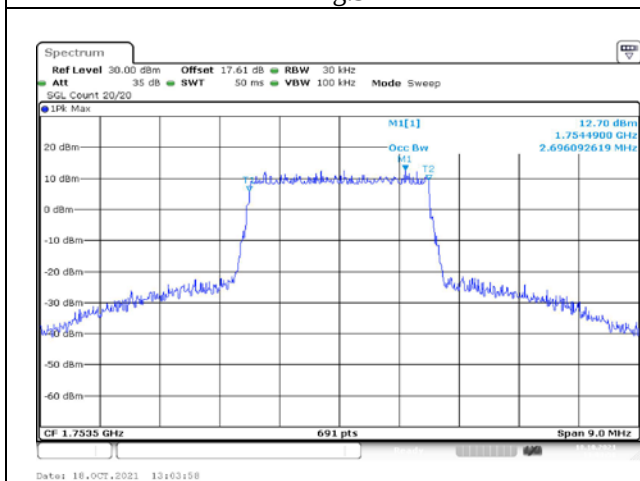
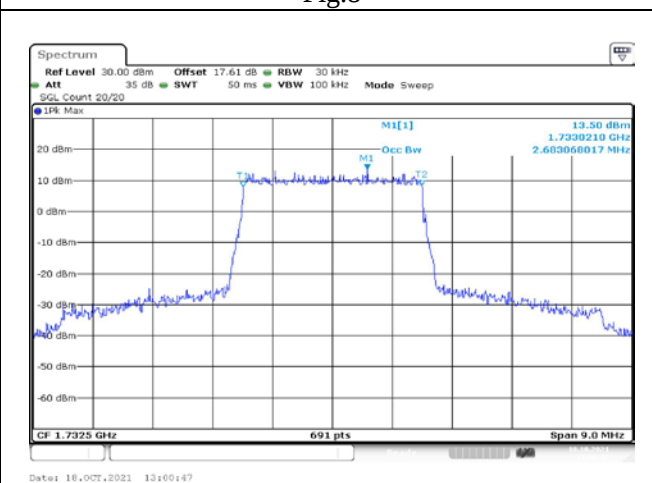
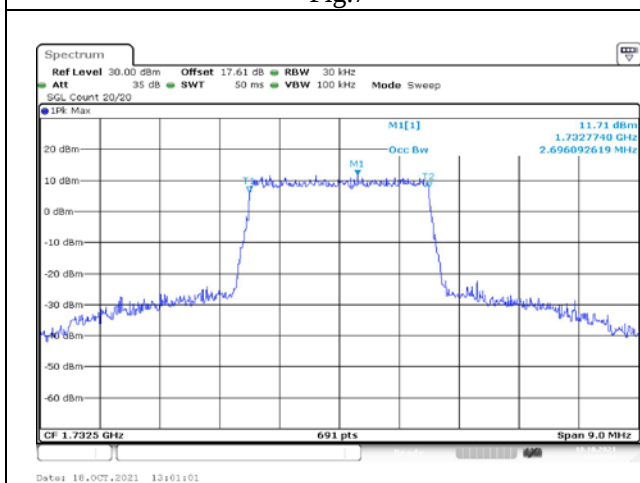
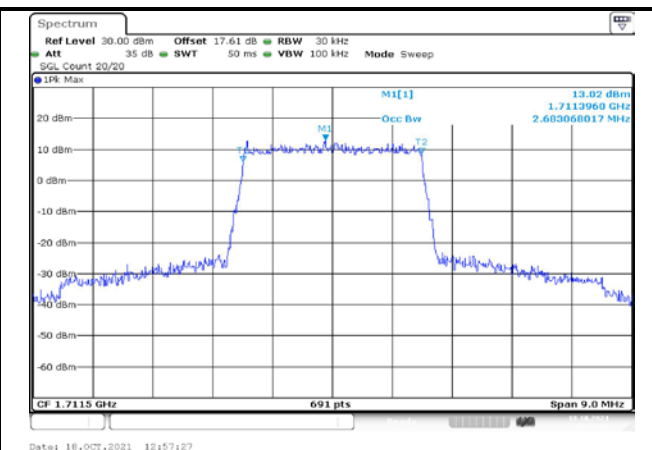
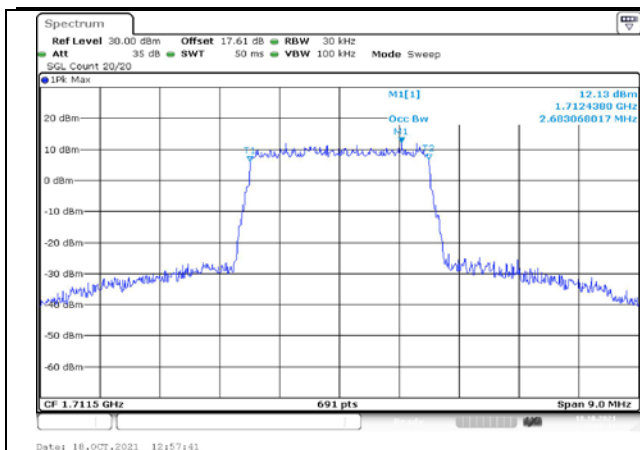
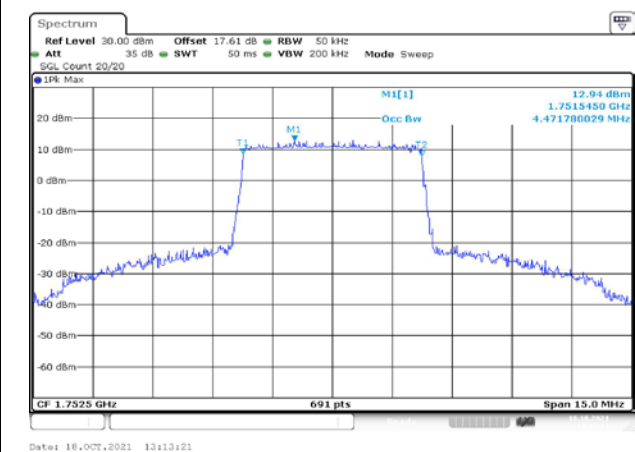
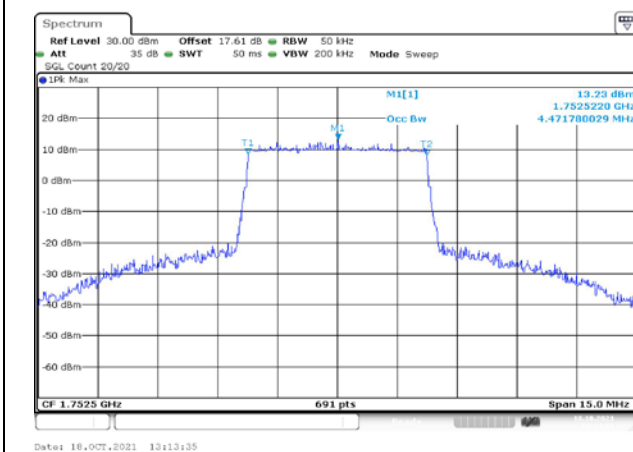
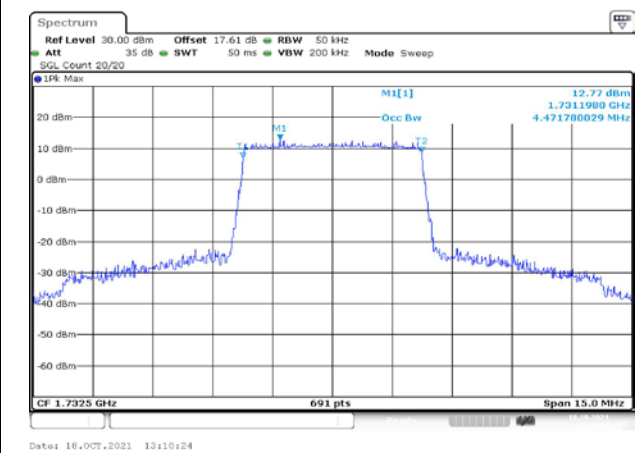
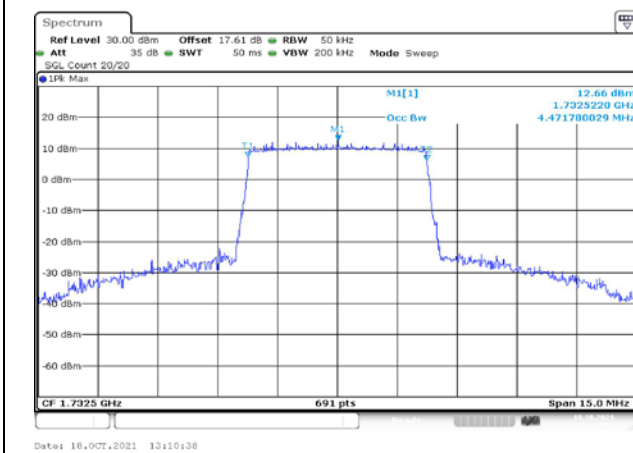
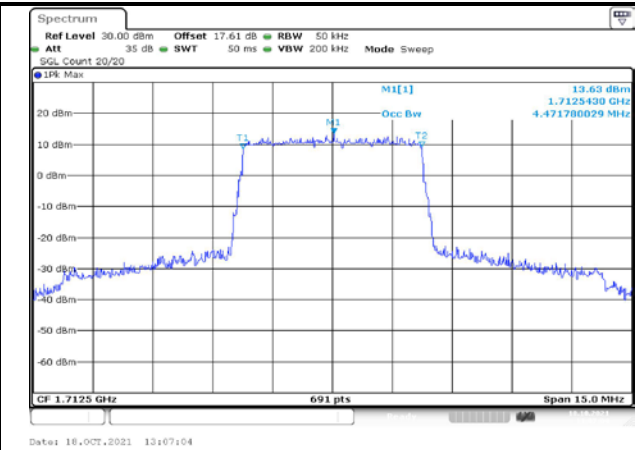
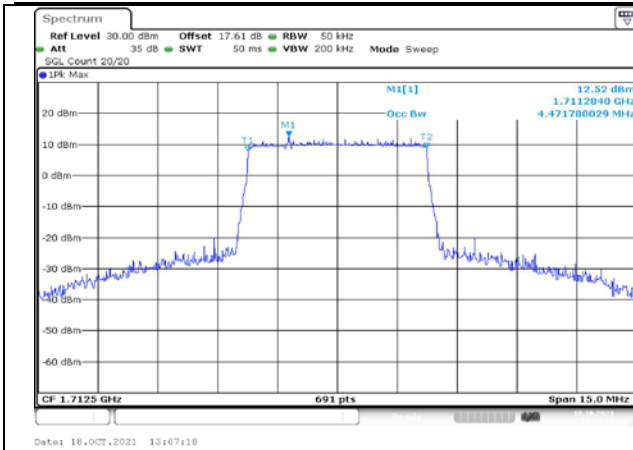
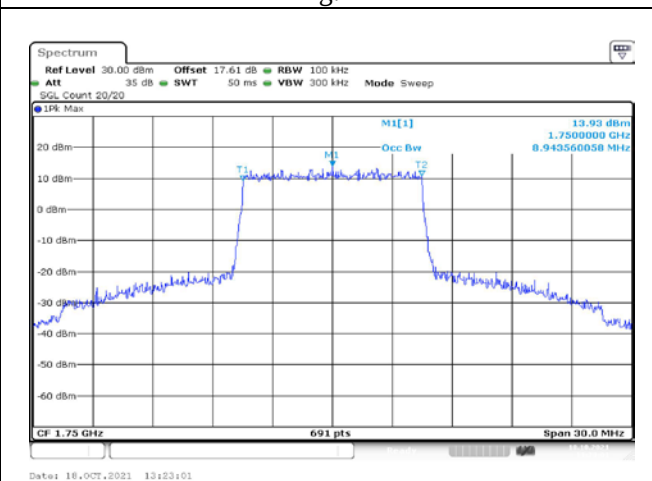
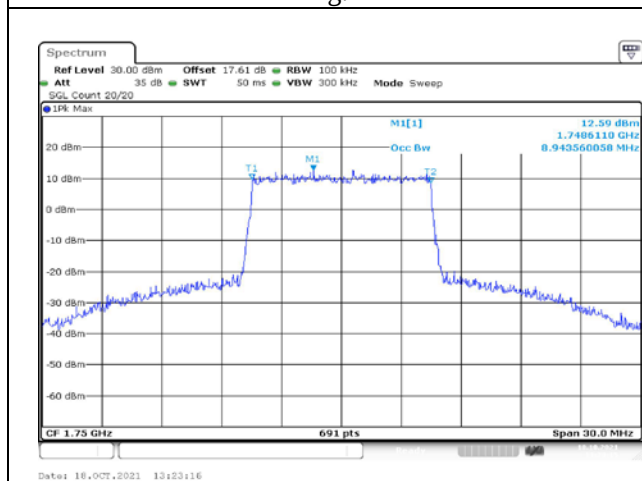
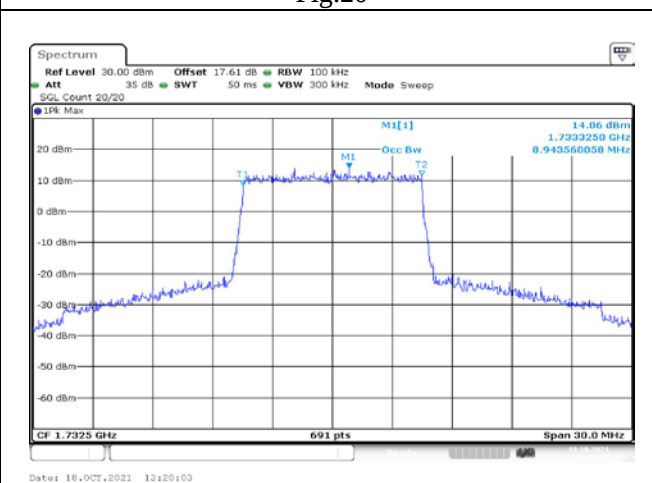
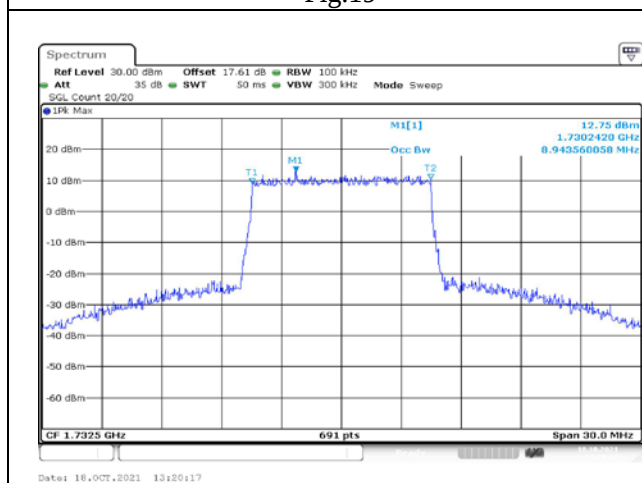
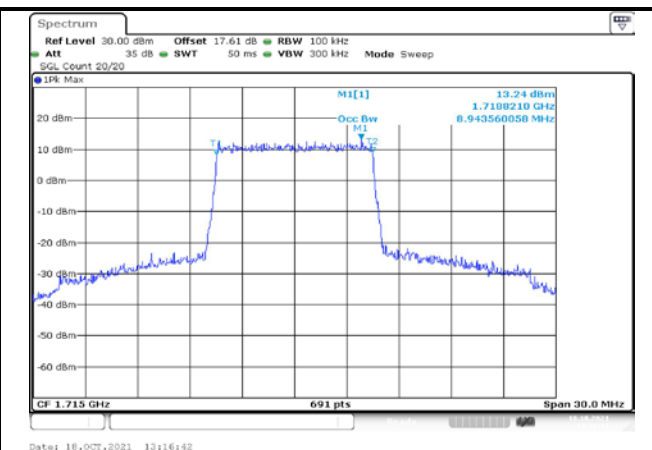
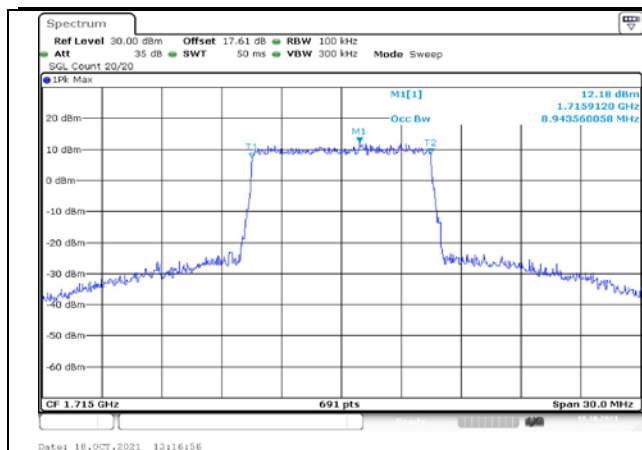
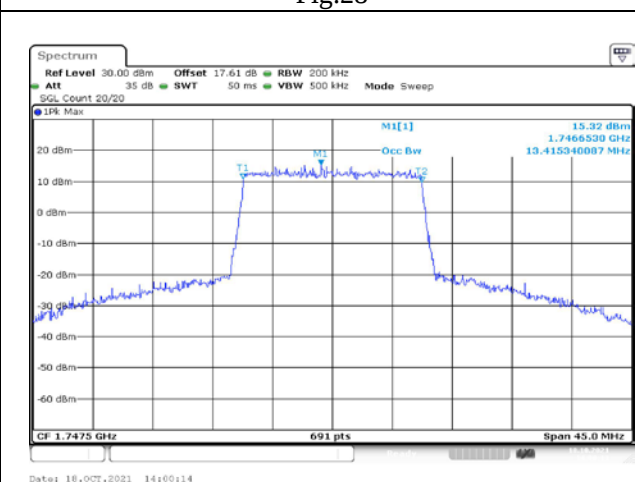
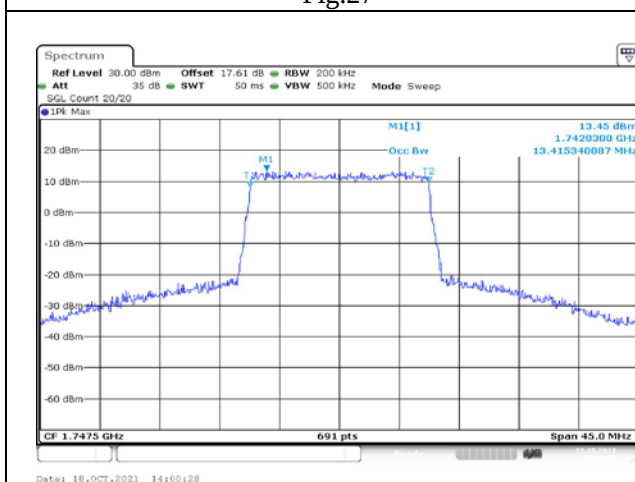
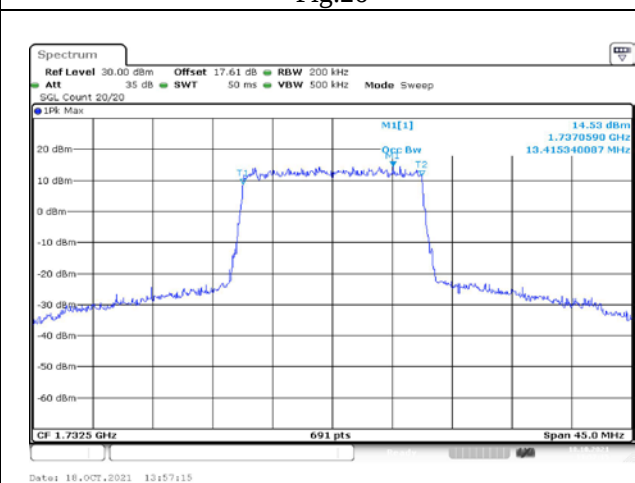
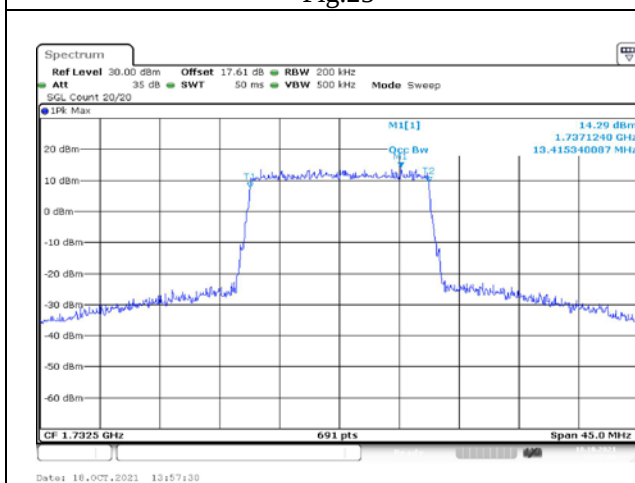
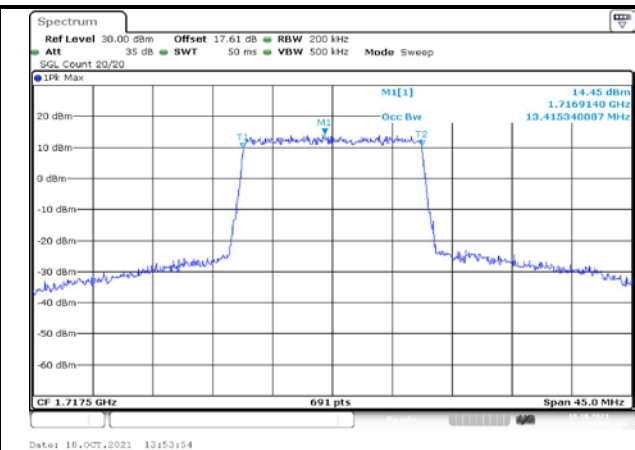
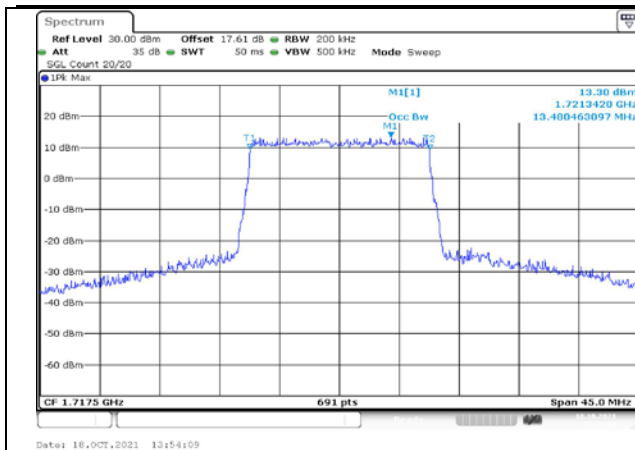


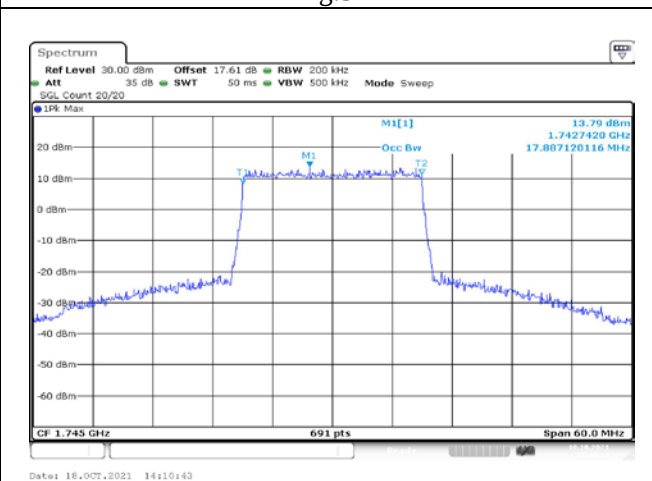
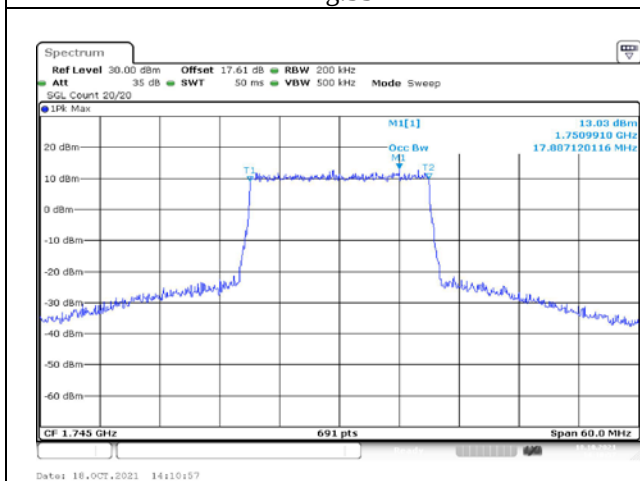
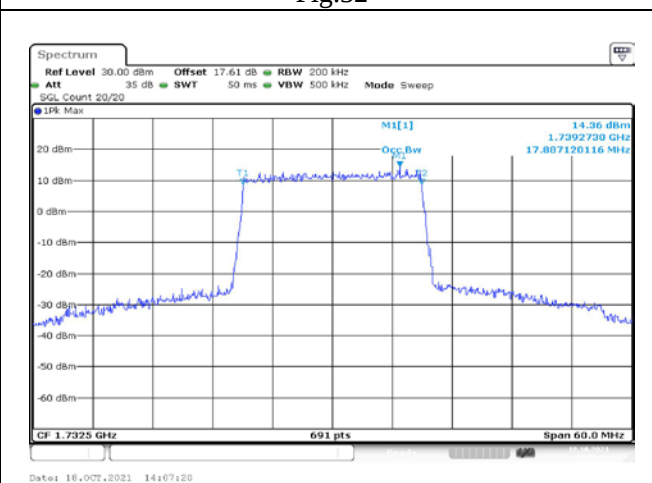
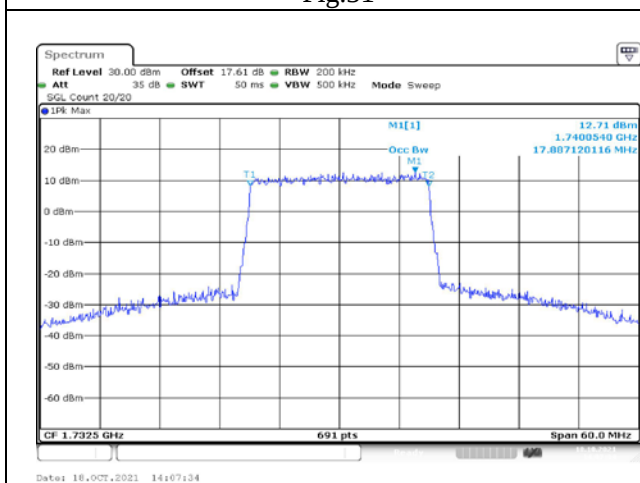
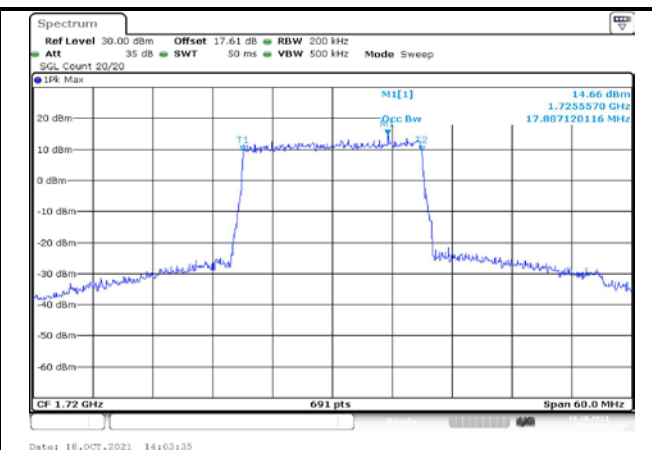
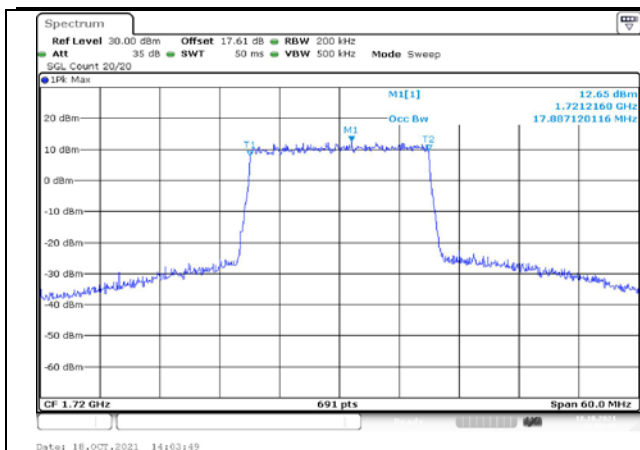
Fig.6











3 Emission Bandwidth

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
4	1710.7	19957	1.4	6	0	1.228	Fig.1	1.234	Fig.2	---	---
	1732.5	20175		6	0	1.228	Fig.3	1.228	Fig.4	---	---
	1754.3	20393		6	0	1.234	Fig.5	1.228	Fig.6	---	---
	1711.5	19965	3	15	0	2.944	Fig.7	3.009	Fig.8	---	---
	1732.5	20175		15	0	2.957	Fig.9	2.983	Fig.10	---	---
	1753.5	20385		15	0	3.009	Fig.11	2.957	Fig.12	---	---
	1712.5	19975	5	25	0	4.928	Fig.13	4.863	Fig.14	---	---
	1732.5	20175		25	0	4.906	Fig.15	4.863	Fig.16	---	---
	1752.5	20375		25	0	4.906	Fig.17	4.884	Fig.18	---	---
	1715	20000	10	50	0	9.682	Fig.19	9.682	Fig.20	---	---
	1732.5	20175		50	0	9.682	Fig.21	9.725	Fig.22	---	---
	1750	20350		50	0	9.725	Fig.23	9.638	Fig.24	---	---
	1717.5	20025	15	75	0	14.718	Fig.25	14.848	Fig.26	---	---
	1732.5	20175		75	0	14.522	Fig.27	14.588	Fig.28	---	---
	1747.5	20325		75	0	14.653	Fig.29	14.718	Fig.30	---	---
	1720	20050	20	100	0	19.363	Fig.31	19.363	Fig.32	---	---
	1732.5	20175		100	0	19.363	Fig.33	19.276	Fig.34	---	---
	1745	20300		100	0	19.450	Fig.35	19.450	Fig.36	---	---

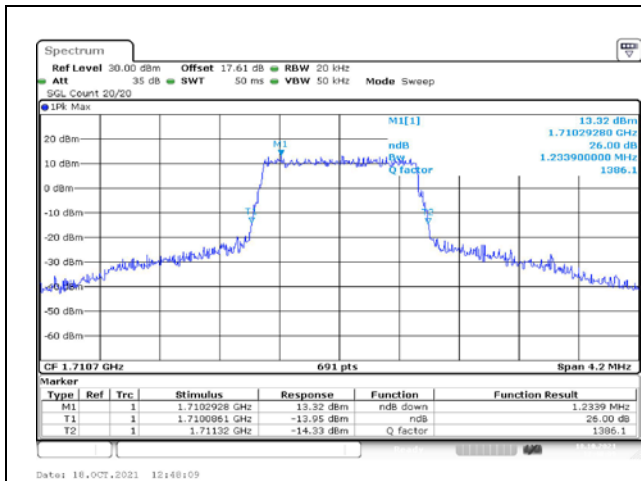


Fig.1

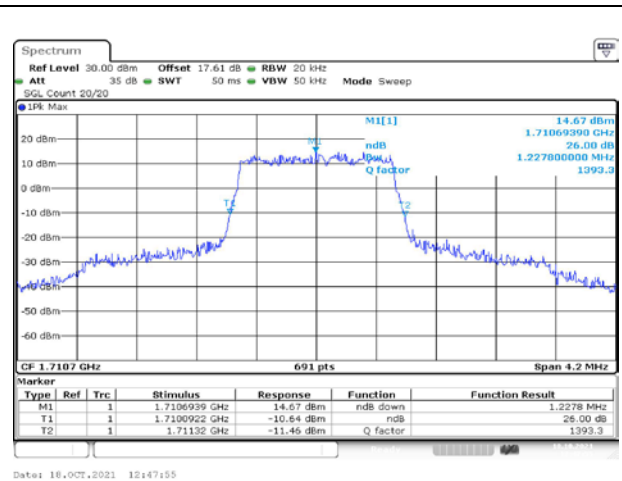


Fig.2

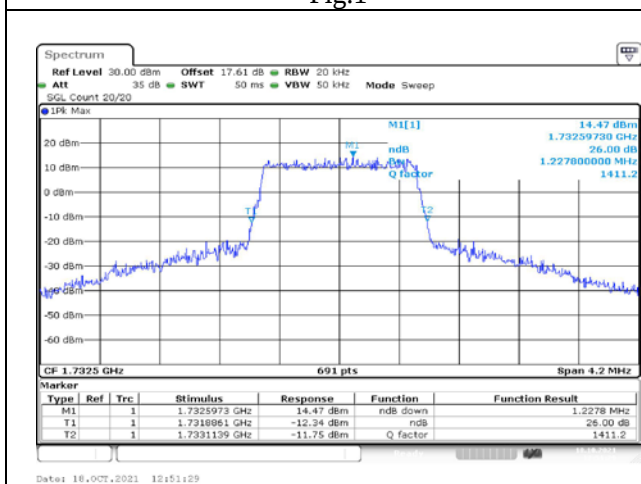


Fig.3

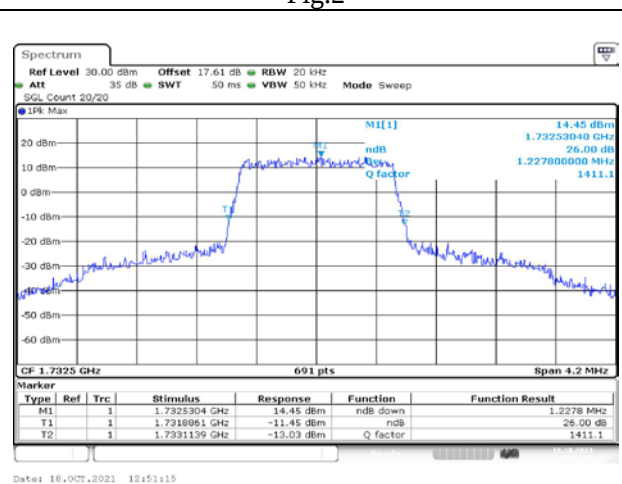


Fig.4

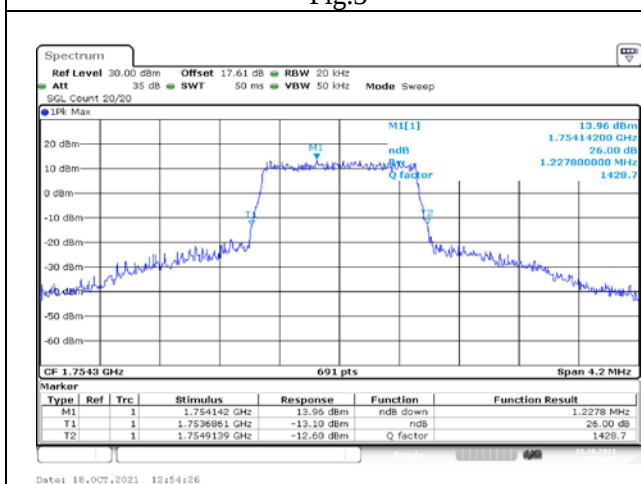


Fig.5

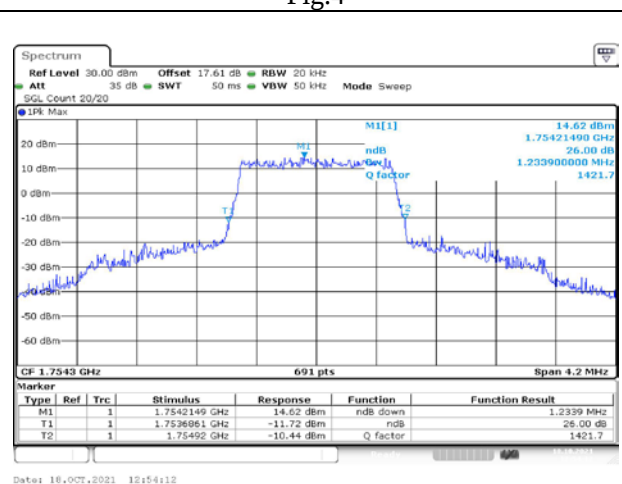


Fig.6

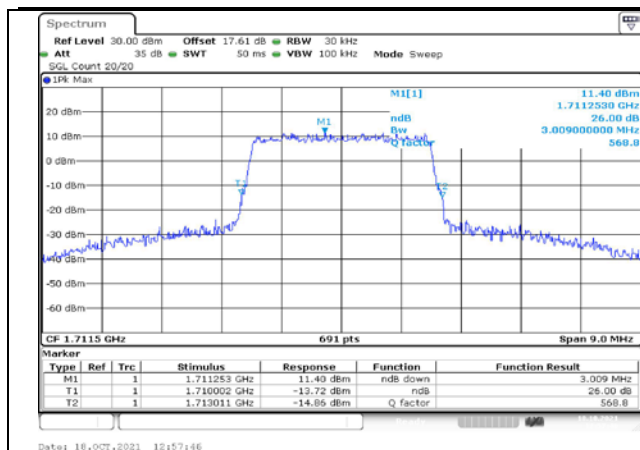


Fig.7

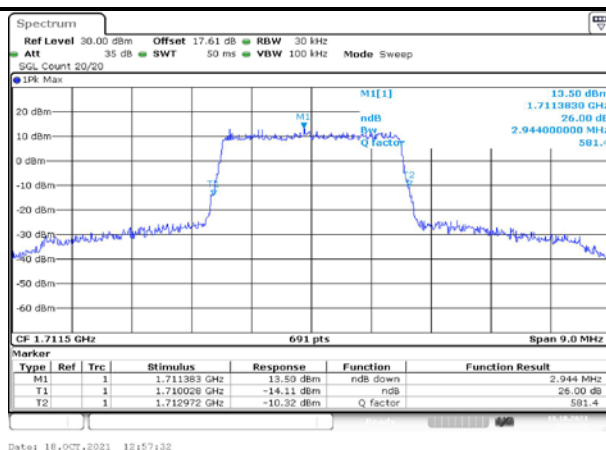


Fig.8

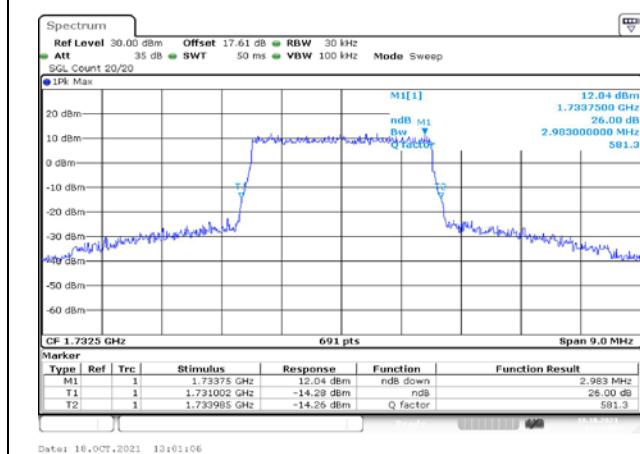


Fig.9

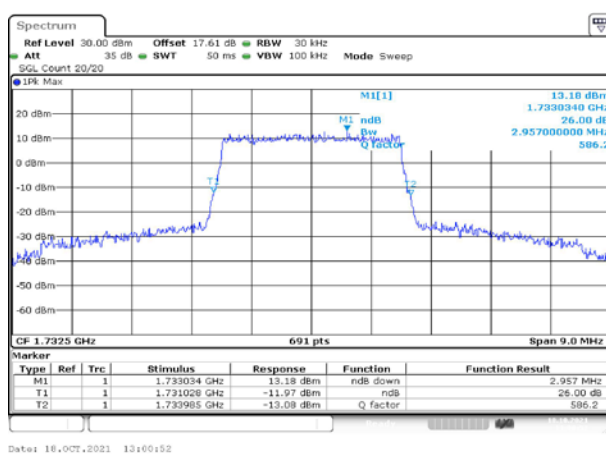


Fig.10

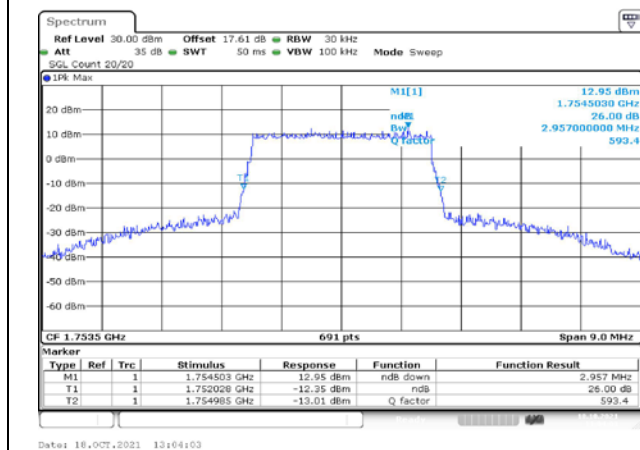


Fig.11

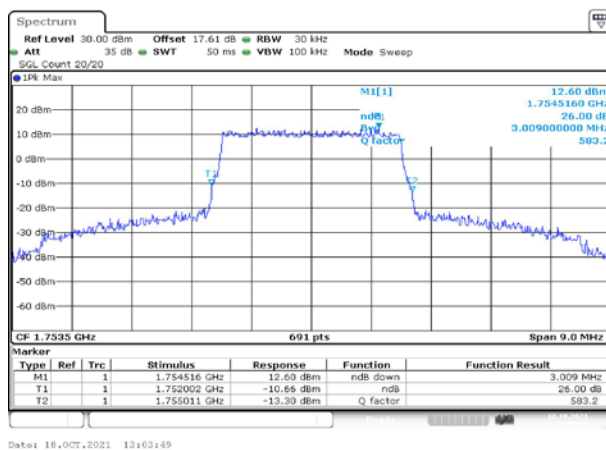


Fig.12

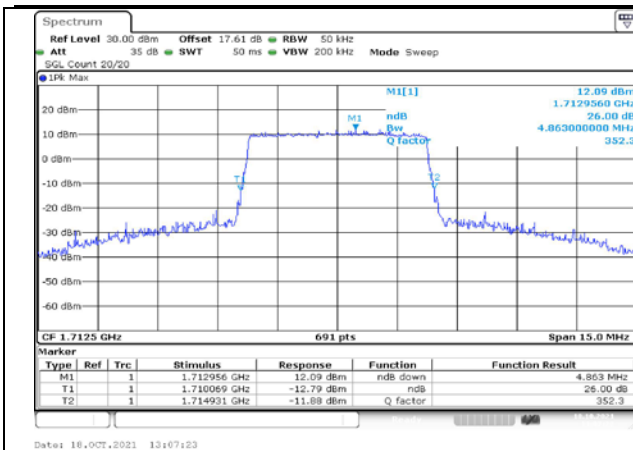


Fig.13

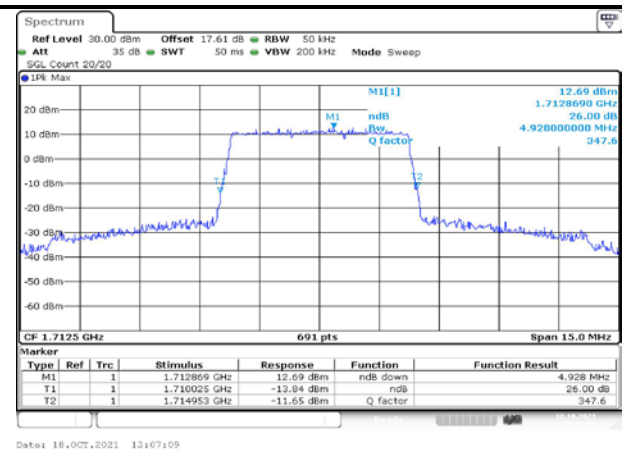


Fig.14

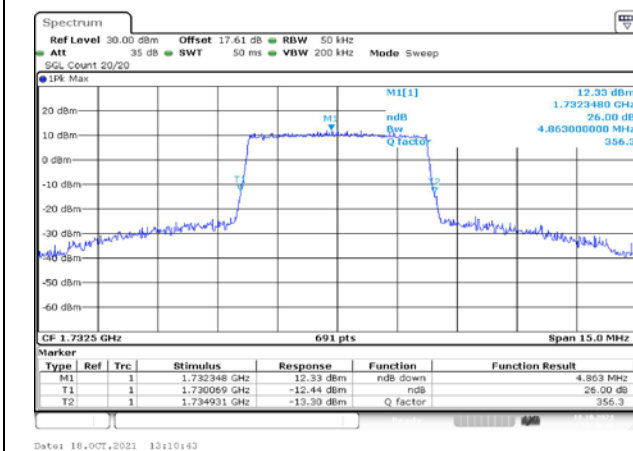


Fig.15

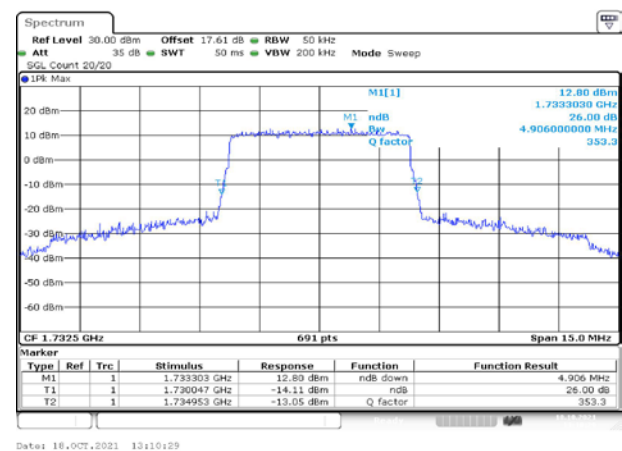


Fig.16

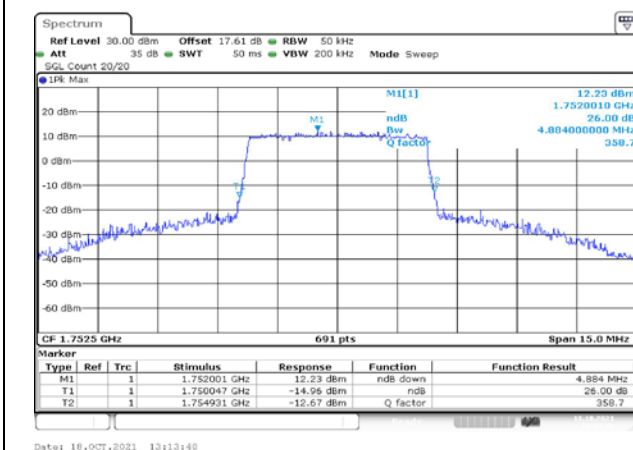


Fig.17

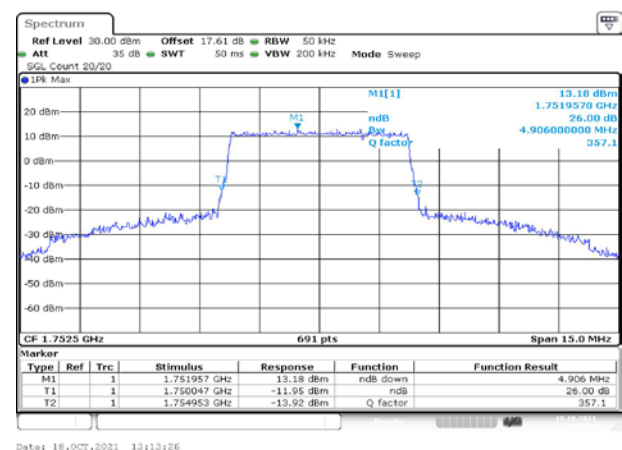


Fig.18

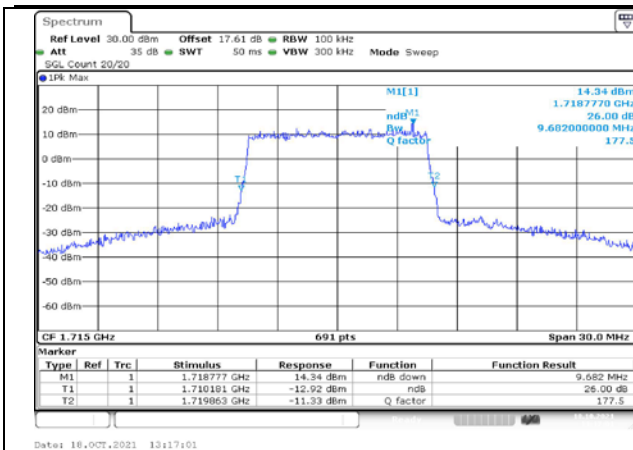


Fig.19

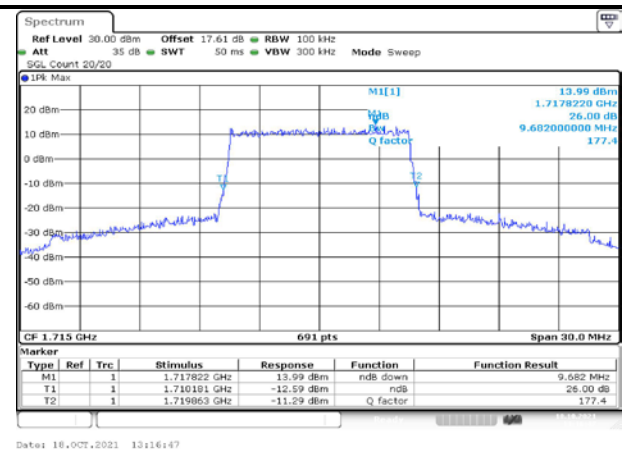


Fig.20

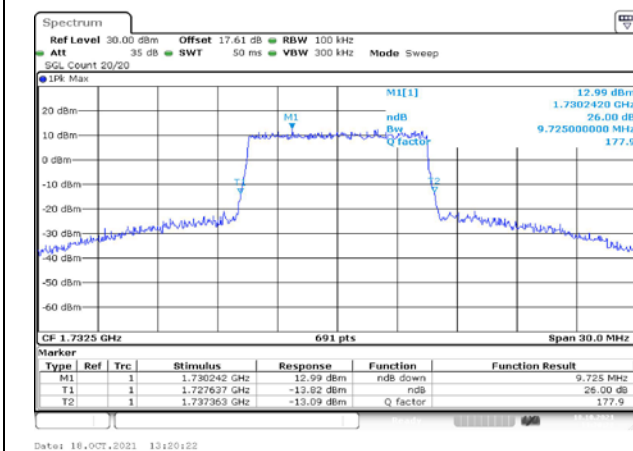


Fig.21

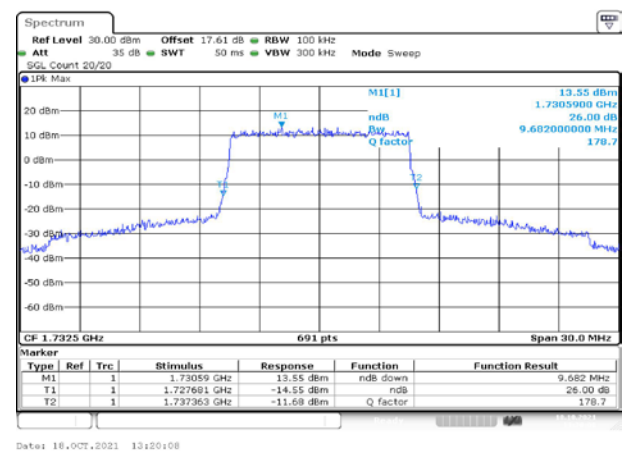


Fig.22

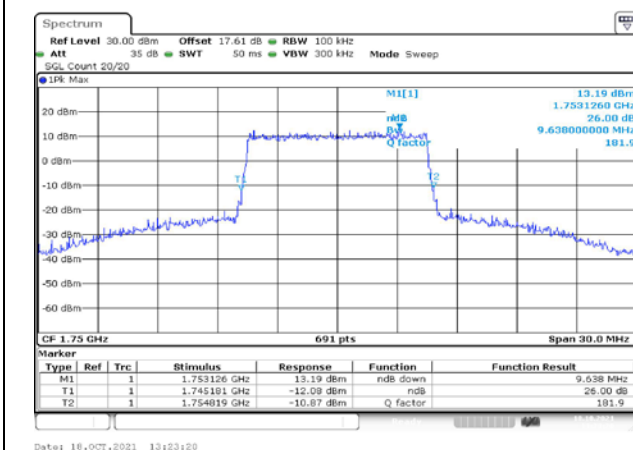


Fig.23

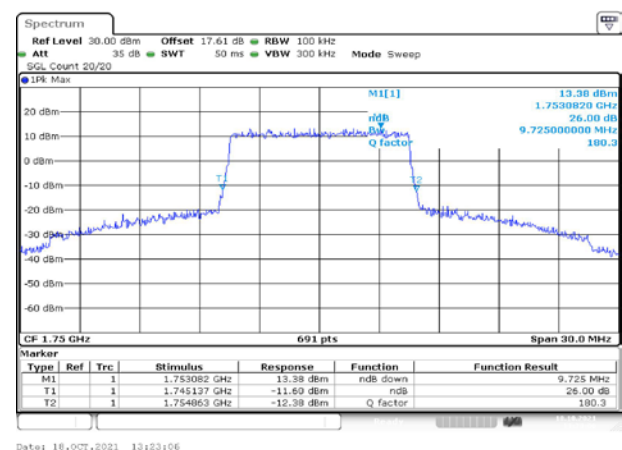


Fig.24

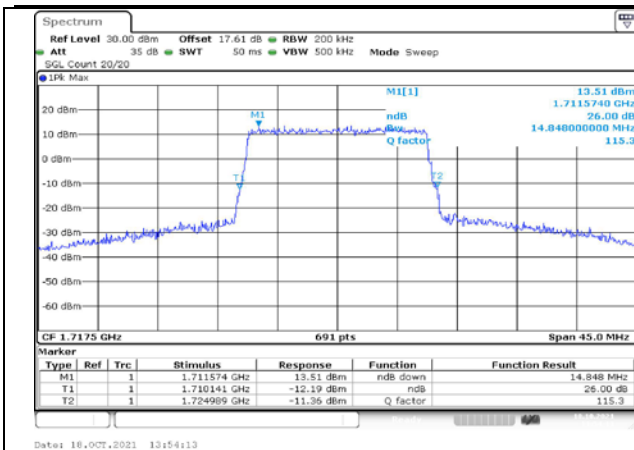


Fig.25

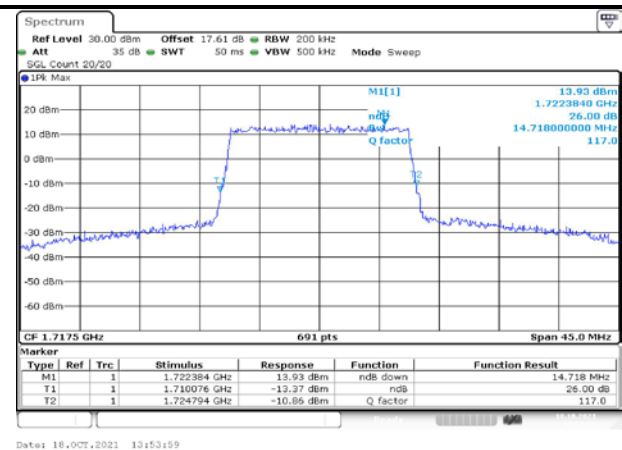


Fig.26

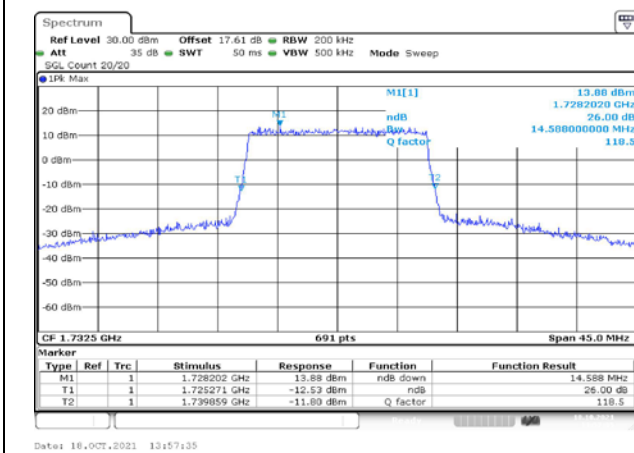


Fig.27

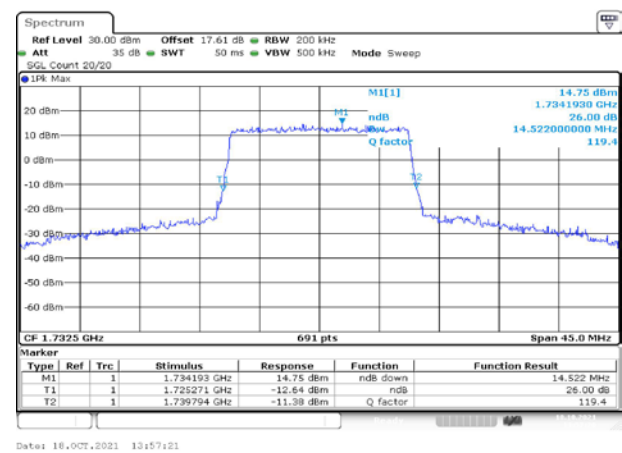


Fig.28

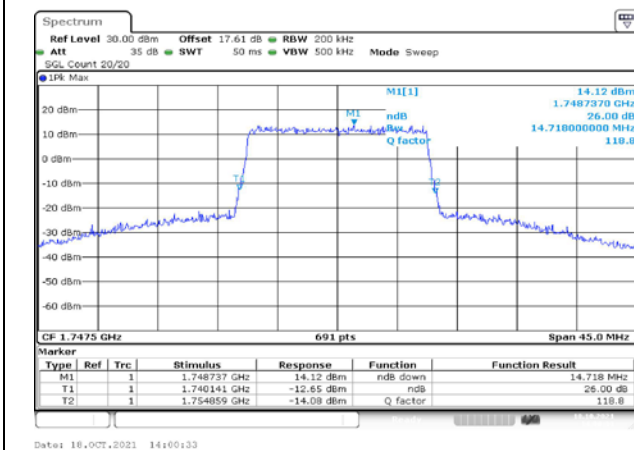


Fig.29

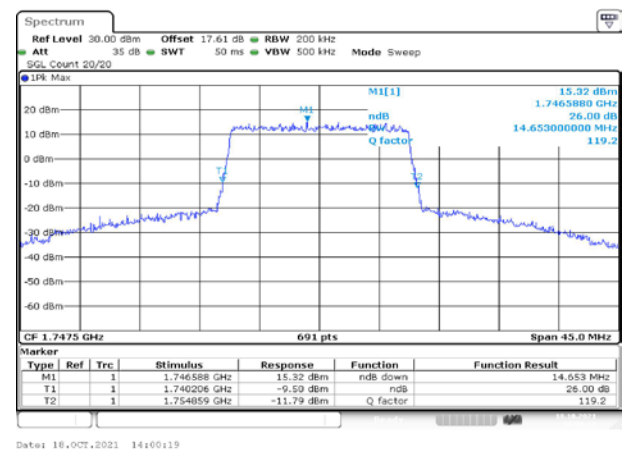


Fig.30

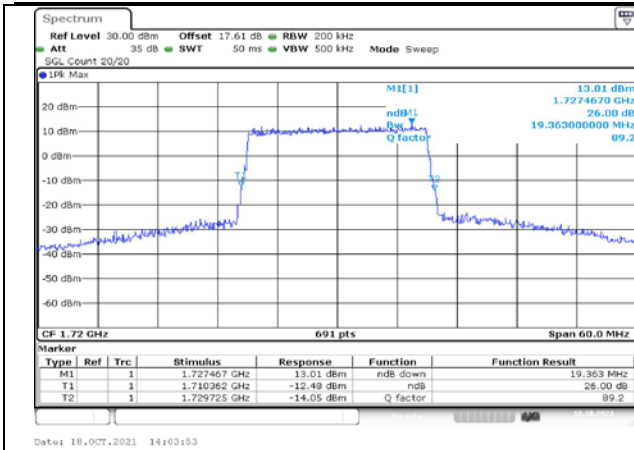


Fig.31

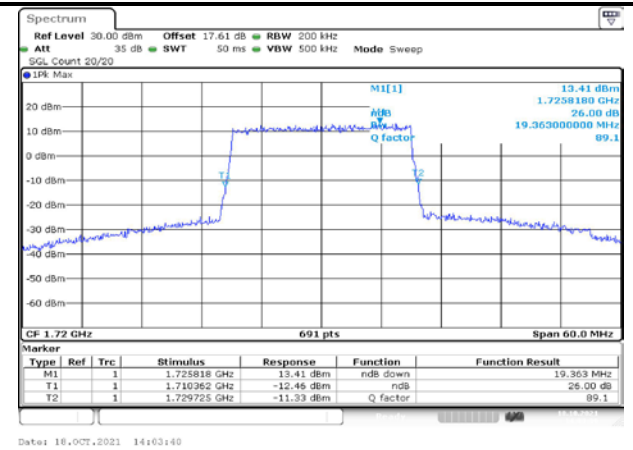


Fig.32

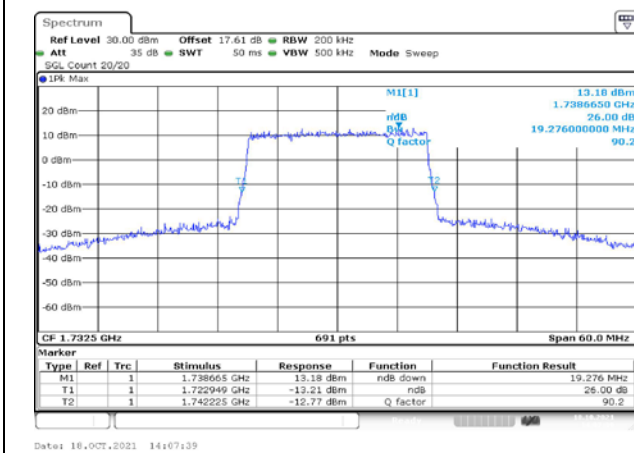


Fig.33

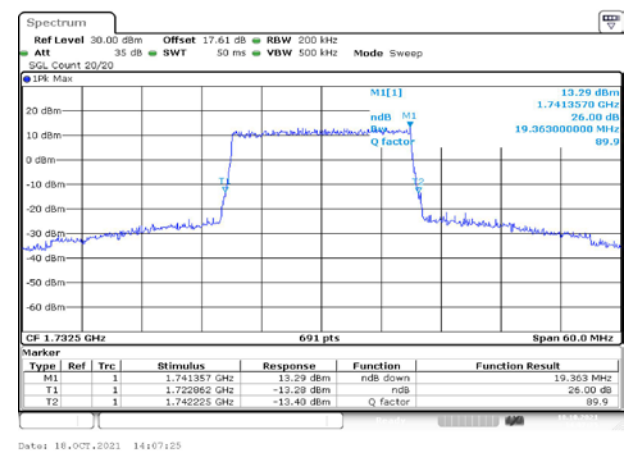


Fig.34

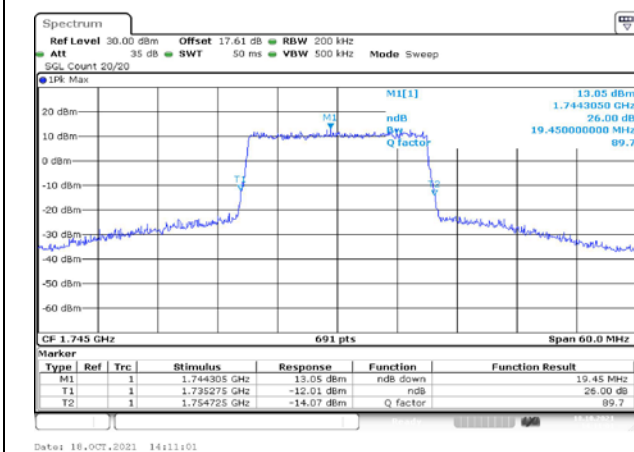


Fig.35

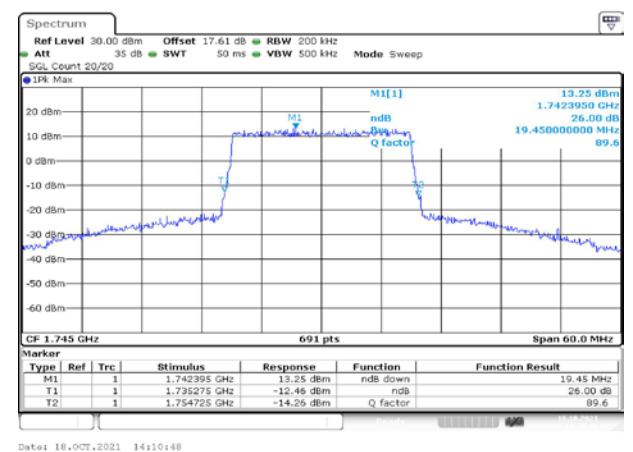


Fig.36

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	---
	1710.7	19957		6	0	Fig.3	Fig.4	---
	1732.5	20175		1	5	Fig.5	Fig.6	---
	1732.5	20175		6	0	Fig.7	Fig.8	---
	1754.3	20393		1	5	Fig.9	Fig.10	---
	1754.3	20393		6	0	Fig.11	Fig.12	---
	1711.5	19965	3	1	14	Fig.13	Fig.14	---
	1711.5	19965		15	0	Fig.15	Fig.16	---
	1732.5	20175		1	14	Fig.17	Fig.18	---
	1732.5	20175		15	0	Fig.19	Fig.20	---
	1753.5	20385		1	14	Fig.21	Fig.22	---
	1753.5	20385		15	0	Fig.23	Fig.24	---
	1712.5	19975	5	1	24	Fig.25	Fig.26	---
	1712.5	19975		25	0	Fig.27	Fig.28	---
	1732.5	20175		1	24	Fig.29	Fig.30	---
	1732.5	20175		25	0	Fig.31	Fig.32	---
	1752.5	20375		1	24	Fig.33	Fig.34	---
	1752.5	20375		25	0	Fig.35	Fig.36	---
	1715	20000	10	1	49	Fig.37	Fig.38	---
	1715	20000		50	0	Fig.39	Fig.40	---
	1732.5	20175		1	49	Fig.41	Fig.42	---
	1732.5	20175		50	0	Fig.43	Fig.44	---
	1750	20350		1	49	Fig.45	Fig.46	---
	1750	20350		50	0	Fig.47	Fig.48	---
	1717.5	20025	15	1	74	Fig.49	Fig.50	---
	1717.5	20025		75	0	Fig.51	Fig.52	---
	1732.5	20175		1	74	Fig.53	Fig.54	---
	1732.5	20175		75	0	Fig.55	Fig.56	---
	1747.5	20325		1	74	Fig.57	Fig.58	---
	1747.5	20325		75	0	Fig.59	Fig.60	---
	1720	20050	20	1	99	Fig.61	Fig.62	---
	1720	20050		100	0	Fig.63	Fig.64	---
	1732.5	20175		1	99	Fig.65	Fig.66	---
	1732.5	20175		100	0	Fig.67	Fig.68	---
	1745	20300		1	99	Fig.69	Fig.70	---
	1745	20300		100	0	Fig.71	Fig.72	---

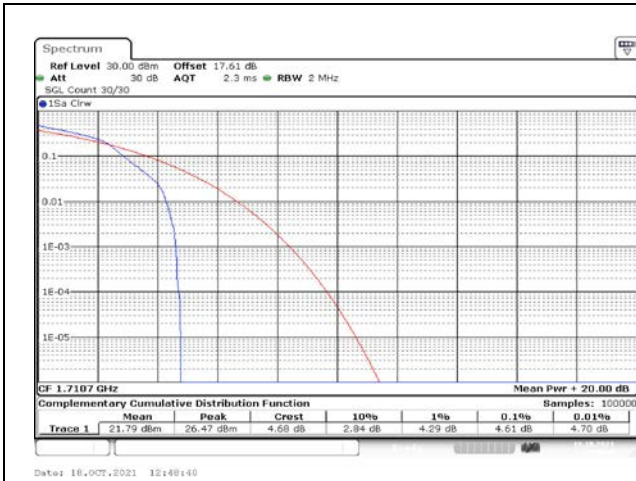


Fig.1

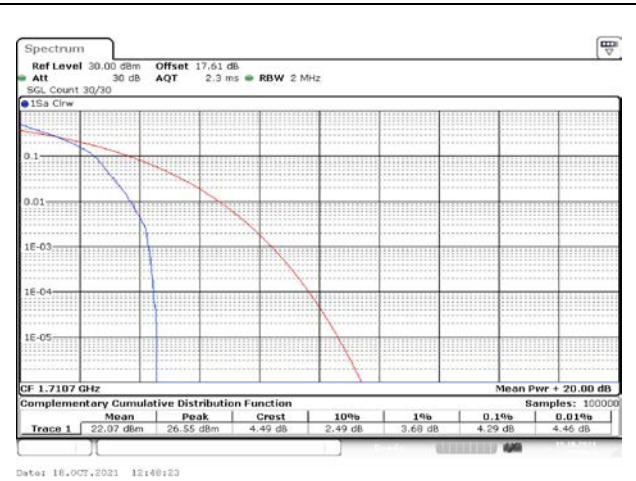


Fig.2

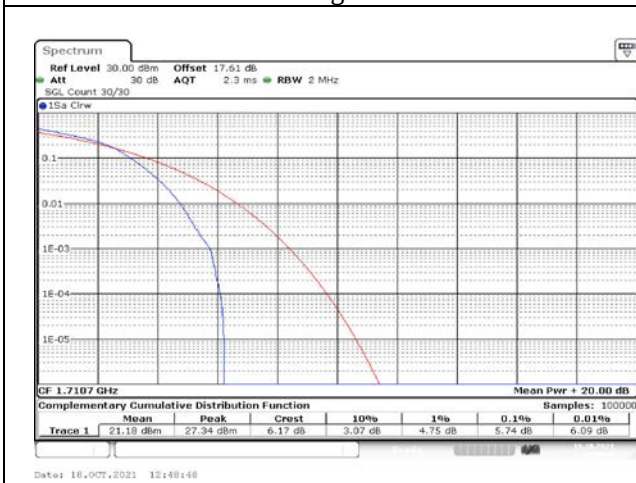


Fig.3

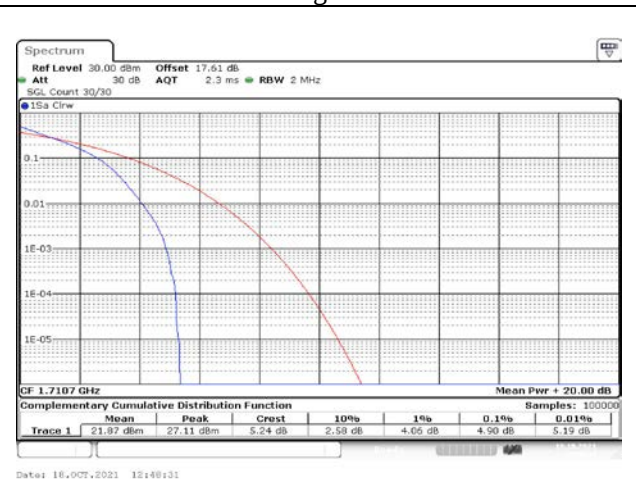


Fig.4

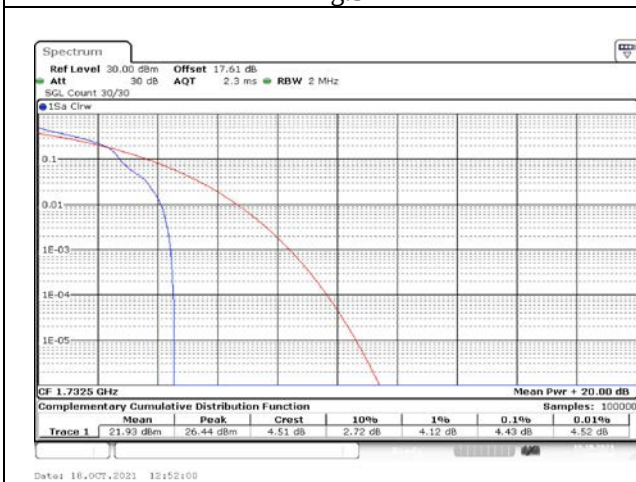


Fig.5

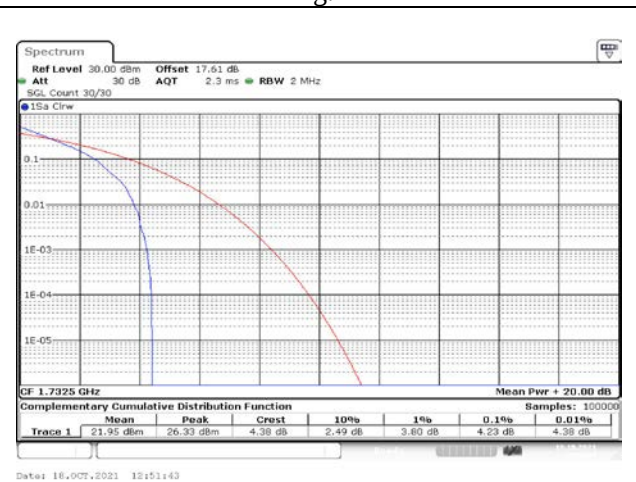


Fig.6

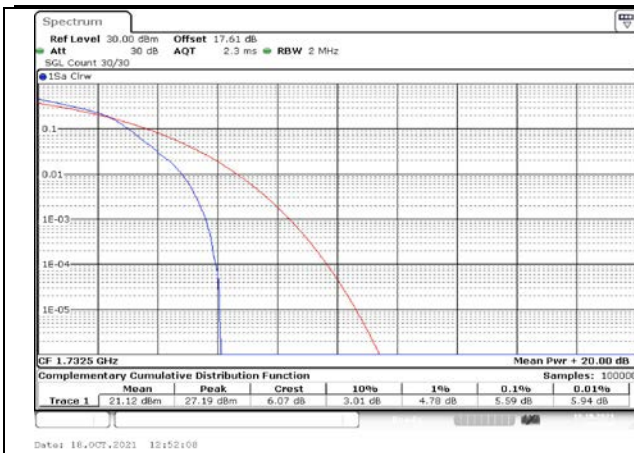


Fig.7

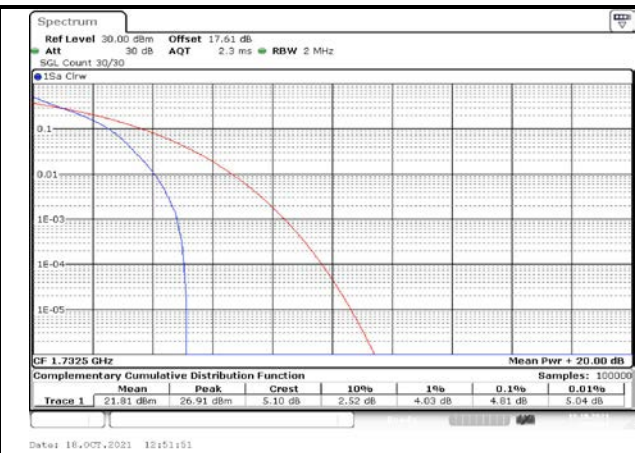


Fig.8

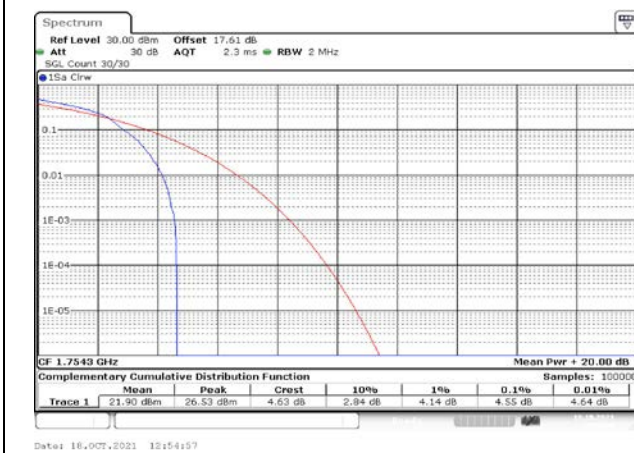


Fig.9

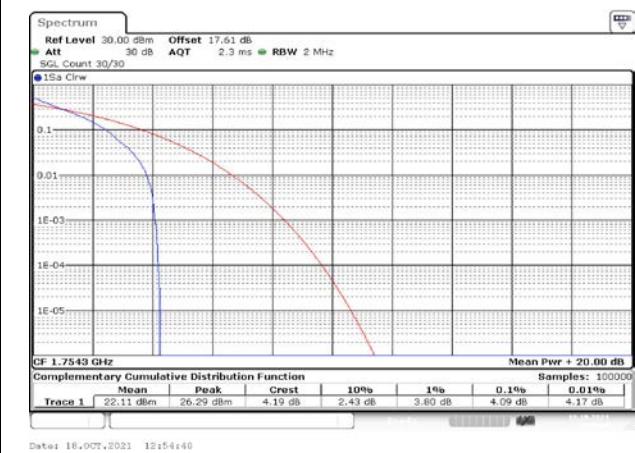


Fig.10

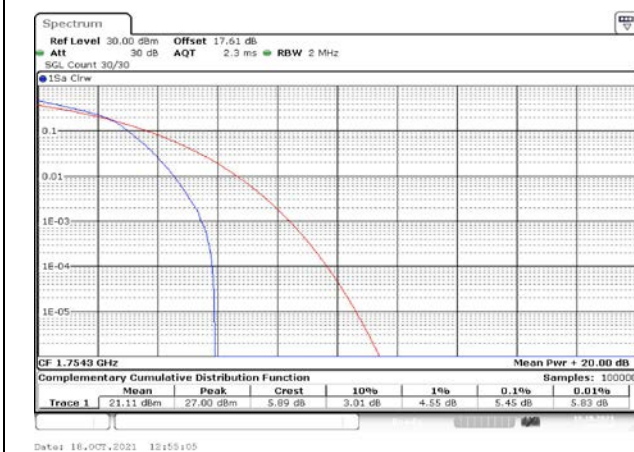


Fig.11

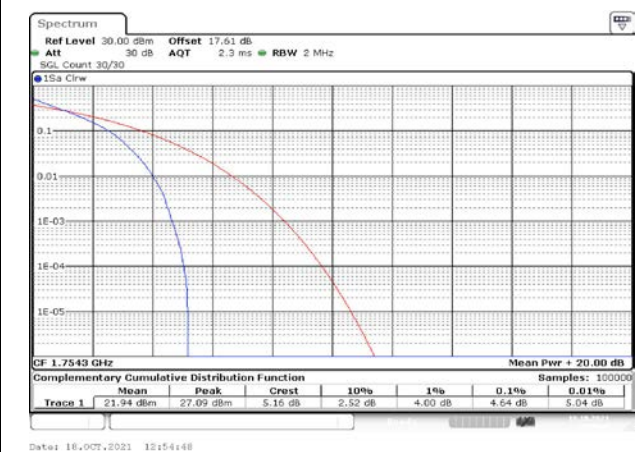


Fig.12

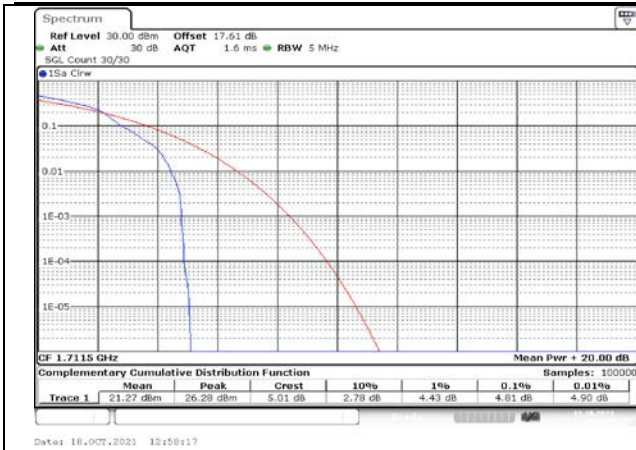


Fig.13

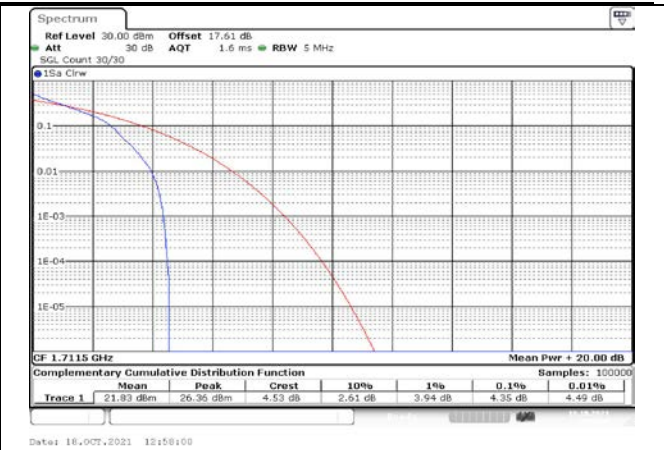


Fig.14

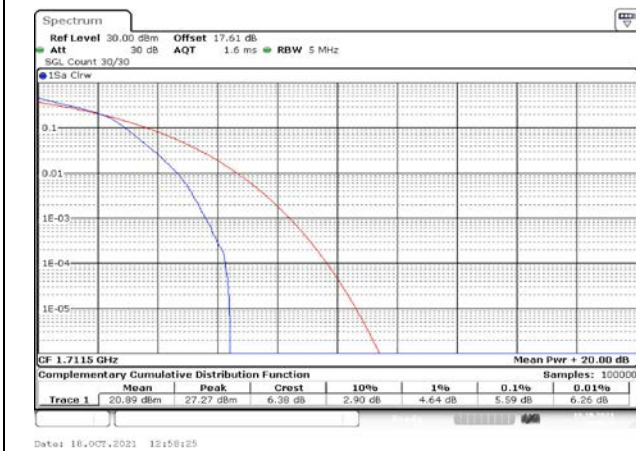


Fig.15

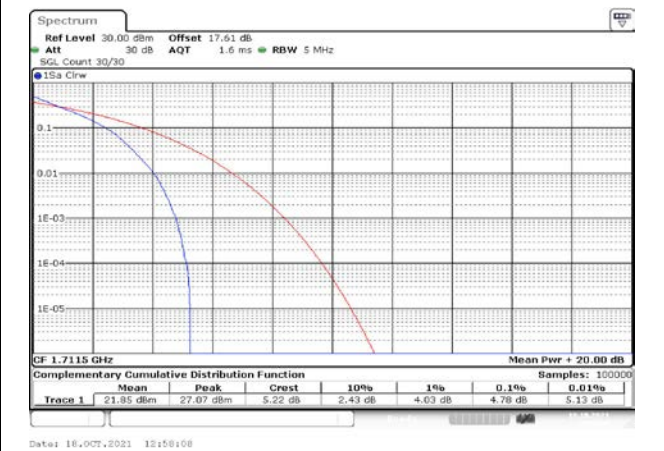


Fig.16

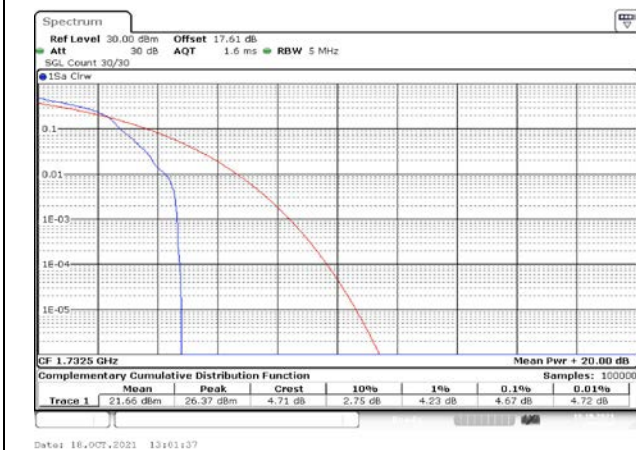


Fig.17

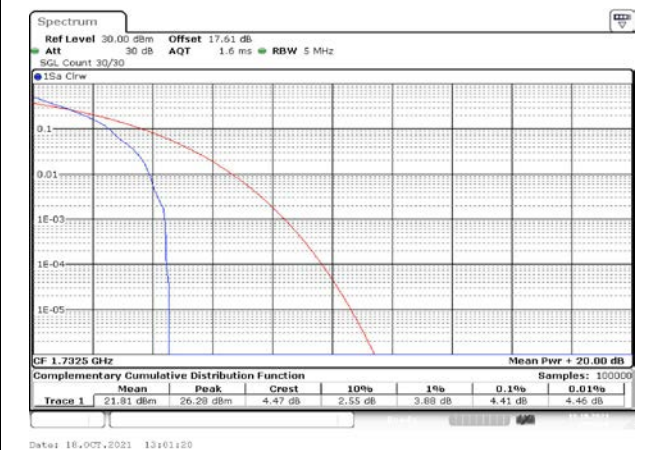


Fig.18