

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 17

1 RF Power Output

RB Power Output							
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	706.5	23755	5	1	0	23.08	
				1	12	23.18	
				1	24	23.16	
				12	0	22.18	
				12	7	22.19	
				12	13	22.19	
				25	0	22.23	
	710	23790		1	0	23.12	
				1	12	23.08	
				1	24	23.08	
				12	0	22.17	
				12	7	22.15	
				12	13	22.15	
				25	0	22.11	
	713.5	23825		1	0	23.16	
				1	12	23.15	
				1	24	23.04	
				12	0	22.13	
				12	7	22.16	
				12	13	22.11	
				25	0	22.14	
	16QAM	706.5		23755	1	0	22.30
					1	12	22.26
					1	24	22.35
12					0	21.18	
12					7	21.18	
12					13	21.17	
25					0	21.23	
710		23790		1	0	22.16	
				1	12	22.19	
				1	24	22.18	
				12	0	21.17	
				12	7	21.22	
				12	13	21.22	
				25	0	21.24	
713.5		23825		1	0	22.47	
				1	12	22.39	
				1	24	22.42	
				12	0	21.22	
				12	7	21.20	
				12	13	21.20	
				25	0	21.13	

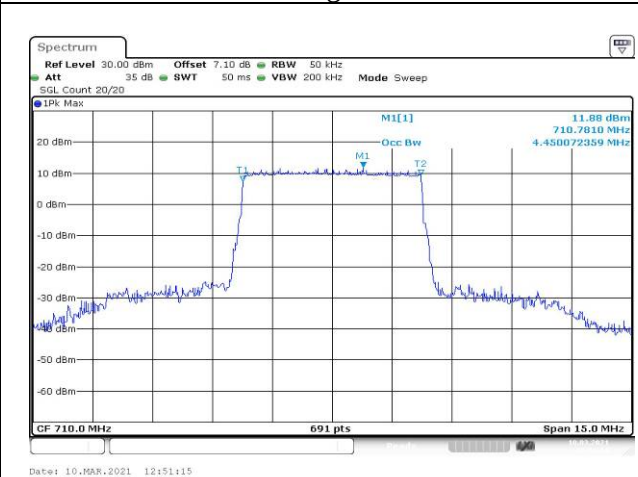
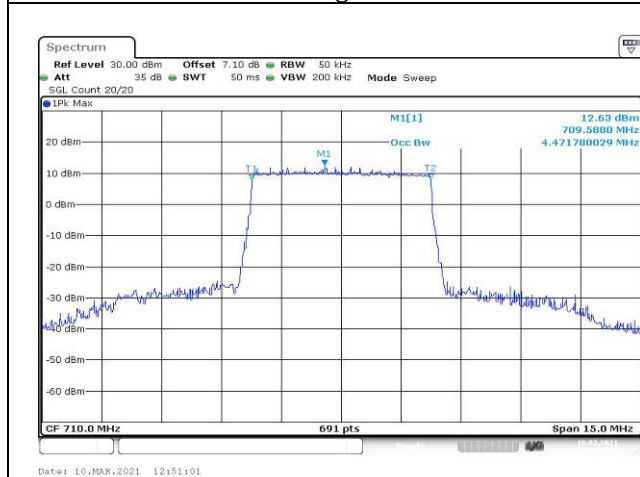
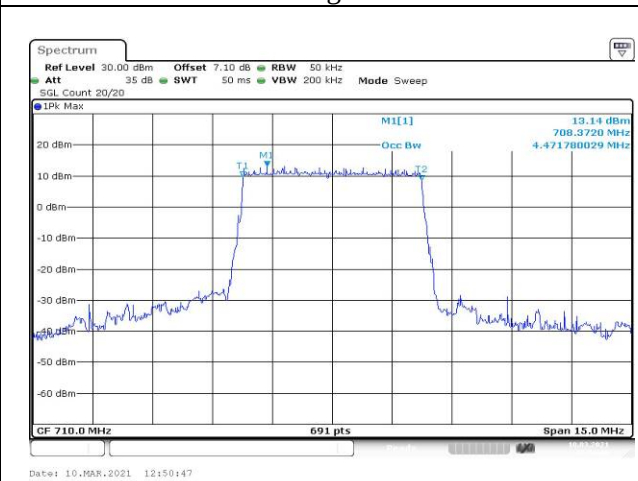
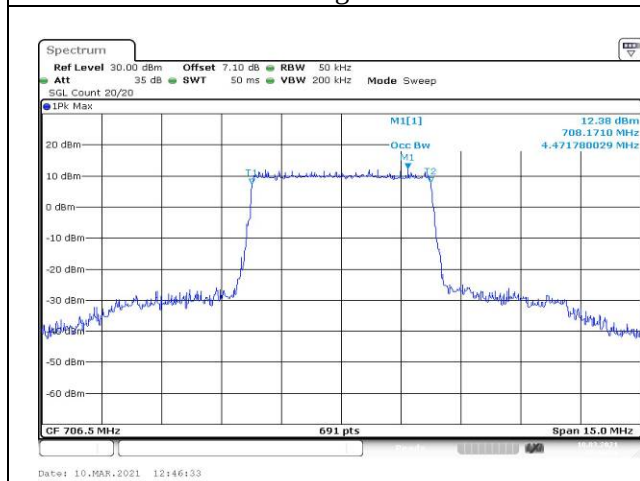
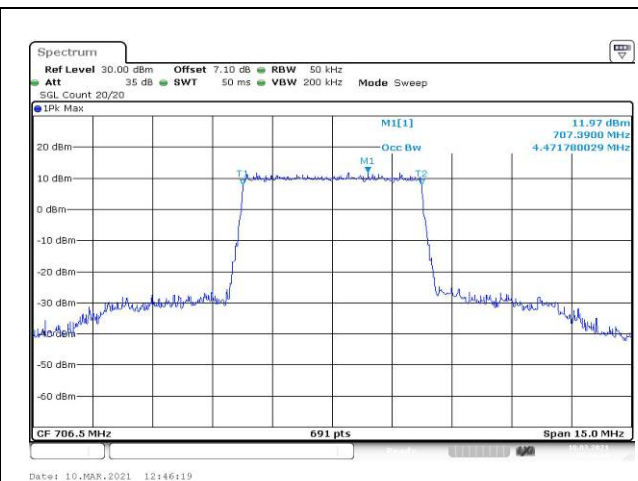
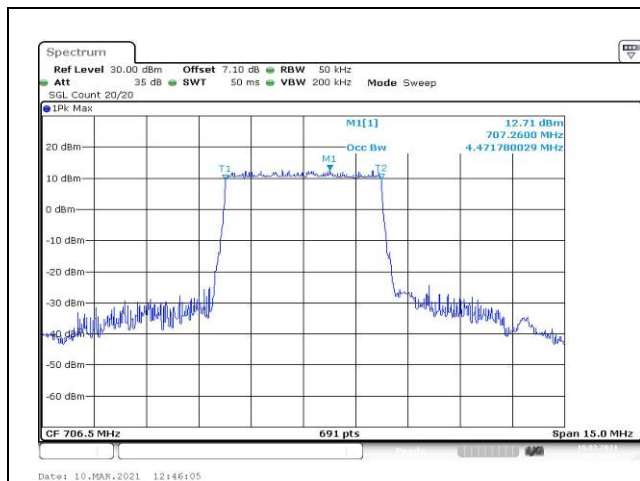
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	706.5	23755	5	1	0	21.28
				1	12	21.22
				1	24	21.22
				12	0	21.27
				12	7	21.28
				12	13	21.22
				25	0	21.27
	710	23790		1	0	21.22
				1	12	21.18
				1	24	21.23
				12	0	21.29
				12	7	21.25
				12	13	21.30
				25	0	21.23
	713.5	23825		1	0	21.17
				1	12	21.19
				1	24	21.16
				12	0	21.08
				12	7	21.13
				12	13	21.17
				25	0	21.18

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	709	23780	10	1	0	23.14	
				1	25	23.10	
				1	49	23.05	
				25	0	22.20	
				25	12	22.19	
				25	25	22.26	
				50	0	22.30	
	710	23790		1	0	23.06	
				1	25	23.06	
				1	49	23.09	
				25	0	22.09	
				25	12	22.16	
				25	25	22.16	
				50	0	22.17	
	711	23800		1	0	23.15	
				1	25	23.08	
				1	49	23.11	
				25	0	22.15	
				25	12	22.17	
				25	25	22.21	
				50	0	22.11	
	16QAM	709		23780	1	0	22.78
					1	25	22.68
					1	49	22.67
25					0	21.21	
25					12	21.31	
25					25	21.36	
50					0	21.27	
710		23790		1	0	22.28	
				1	25	22.28	
				1	49	22.28	
				25	0	21.19	
				25	12	21.21	
				25	25	21.18	
				50	0	21.23	
711		23800		1	0	22.30	
				1	25	22.20	
				1	49	22.26	
				25	0	21.27	
				25	12	21.33	
				25	25	21.17	
				50	0	21.18	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	709	23780	10	1	0	21.19
				1	25	21.21
				1	49	21.29
				25	0	21.26
				25	12	21.22
				25	25	21.25
				50	0	21.29
	710	23790		1	0	21.16
				1	25	21.20
				1	49	21.16
				25	0	21.17
				25	12	21.24
				25	25	21.21
				50	0	21.16
	711	23800		1	0	21.18
				1	25	21.20
				1	49	21.20
				25	0	21.25
				25	12	21.18
				25	25	21.18
				50	0	21.17

2 Occupied Bandwidth

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
17	706.5	23755	5	25	0	4.472	Fig.1	4.472	Fig.2	4.472	Fig.3
	710	23790		25	0	4.472	Fig.4	4.472	Fig.5	4.450	Fig.6
	713.5	23825		25	0	4.472	Fig.7	4.472	Fig.8	4.472	Fig.9
	709	23780	10	50	0	8.944	Fig.10	8.944	Fig.11	8.944	Fig.12
	710	23790		50	0	8.900	Fig.13	8.944	Fig.14	8.944	Fig.15
	711	23800		50	0	8.944	Fig.16	8.944	Fig.17	8.944	Fig.18



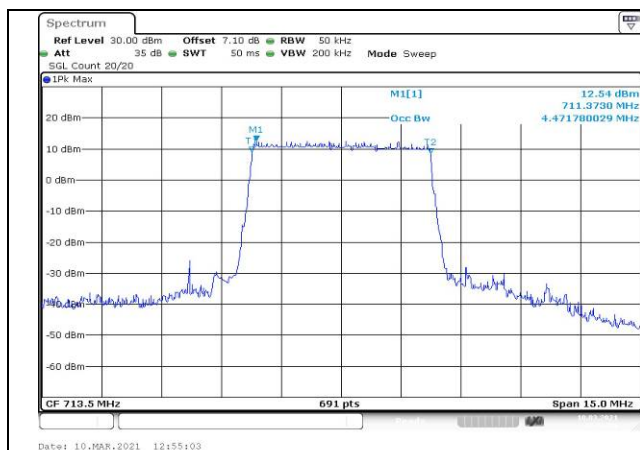


Fig.7

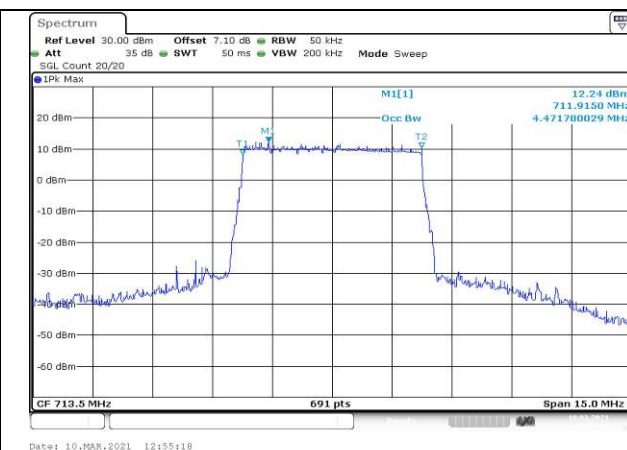


Fig.8

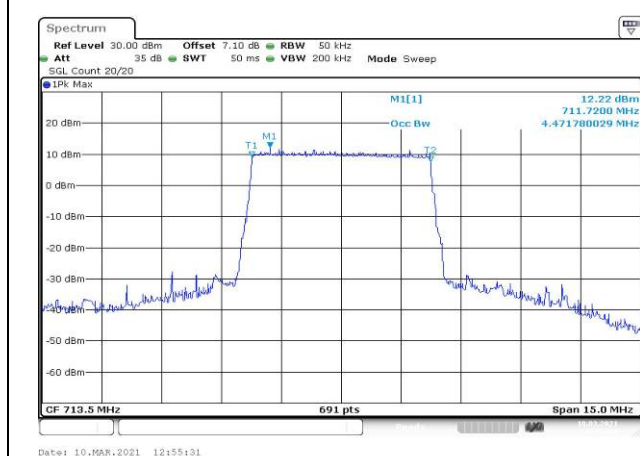


Fig.9

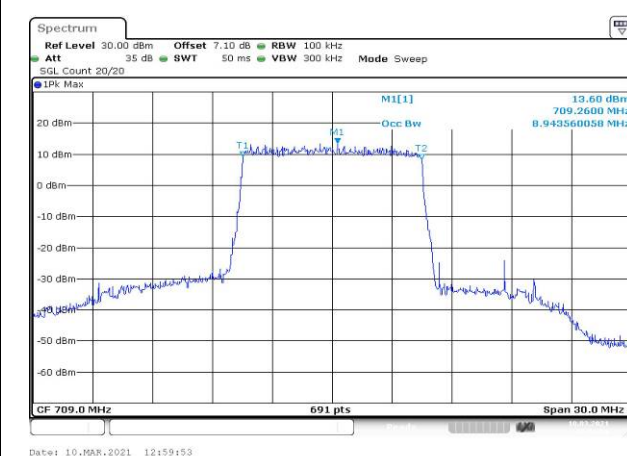


Fig.10

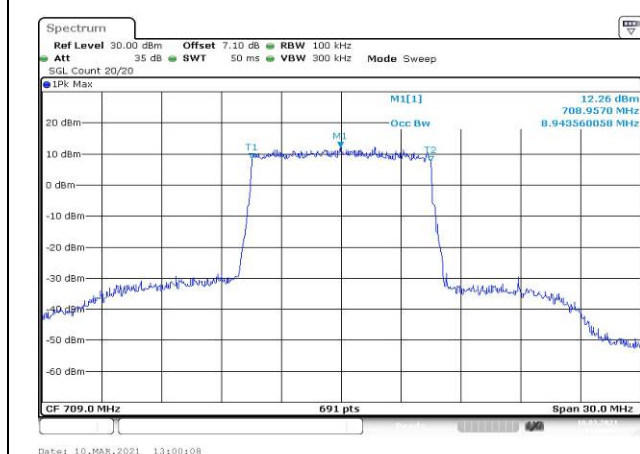


Fig.11

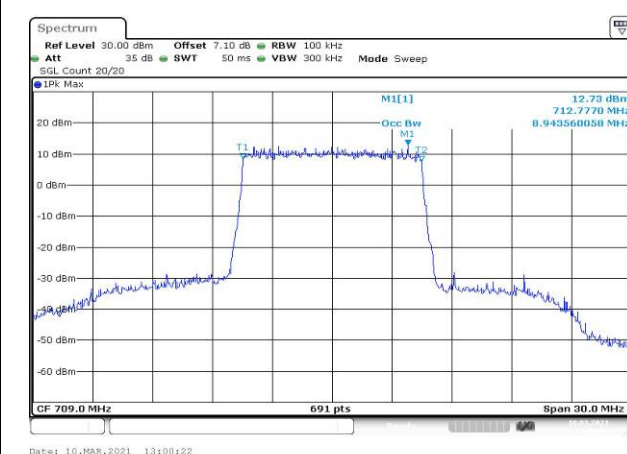
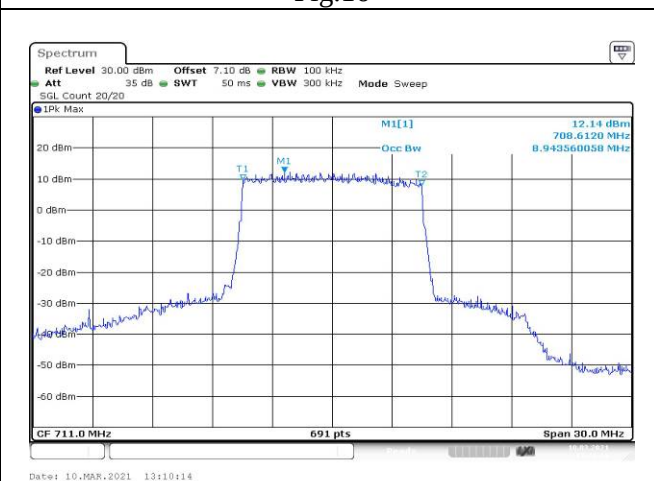
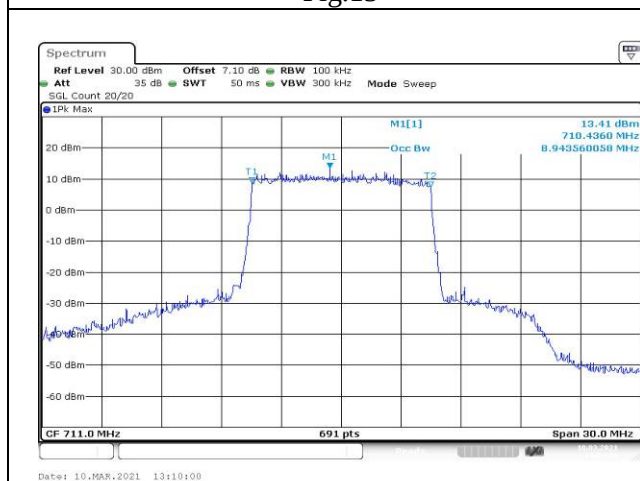
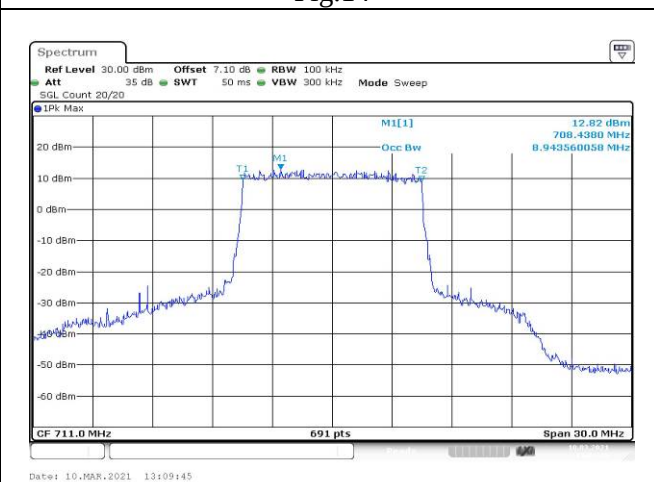
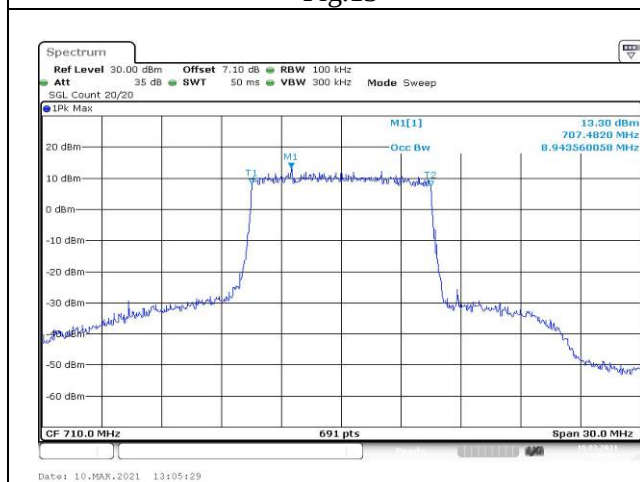
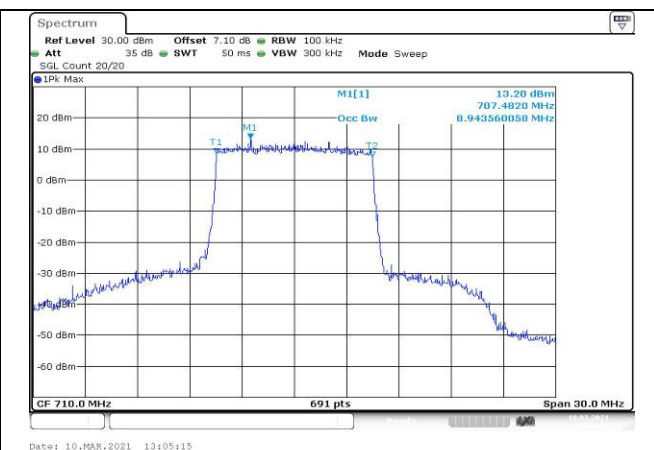
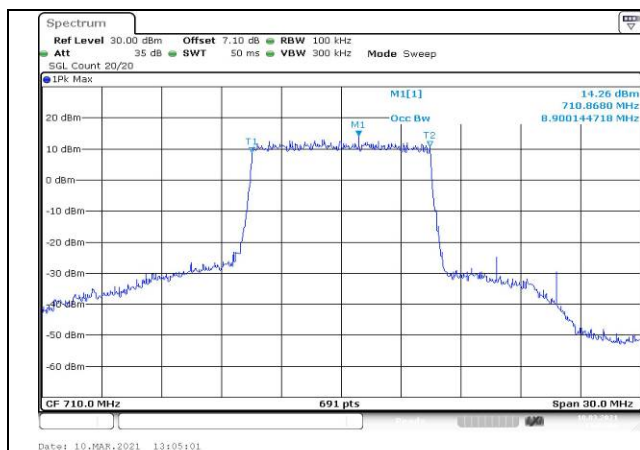


Fig.12



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	
17	706.5	23755	5	25	0	4.884	Fig.1	4.863	Fig.2	4.841	Fig.3
	710	23790		25	0	4.819	Fig.4	4.884	Fig.5	4.884	Fig.6
	713.5	23825		25	0	4.863	Fig.7	4.819	Fig.8	4.841	Fig.9
	709	23780	10	50	0	9.595	Fig.10	9.595	Fig.11	9.595	Fig.12
	710	23790		50	0	9.508	Fig.13	9.551	Fig.14	9.465	Fig.15
	711	23800		50	0	9.595	Fig.16	9.595	Fig.17	9.508	Fig.18

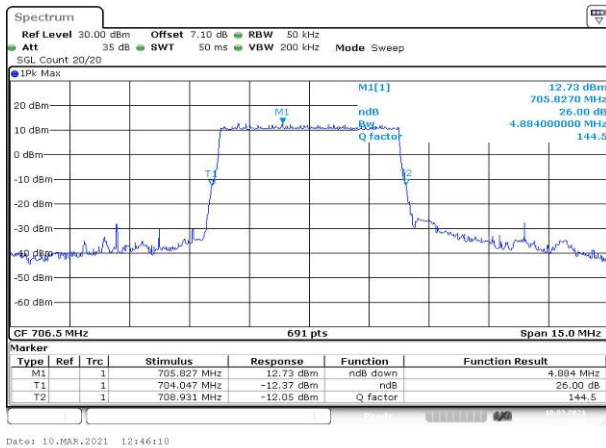


Fig.1

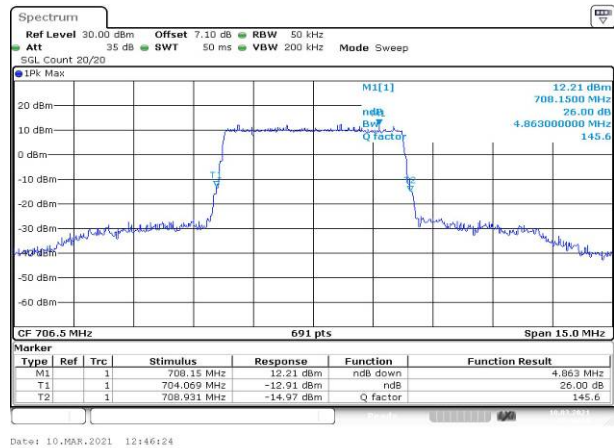


Fig.2

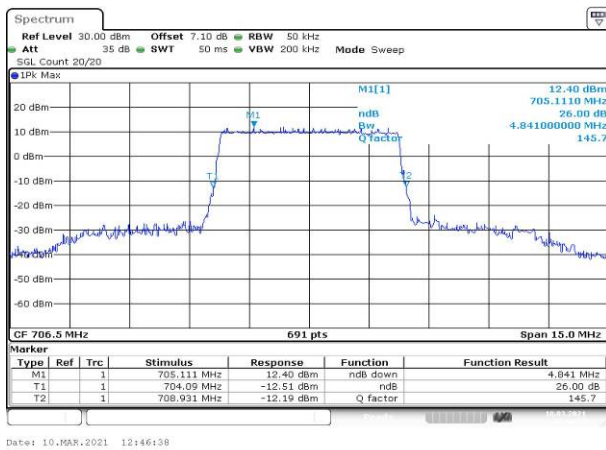


Fig.3

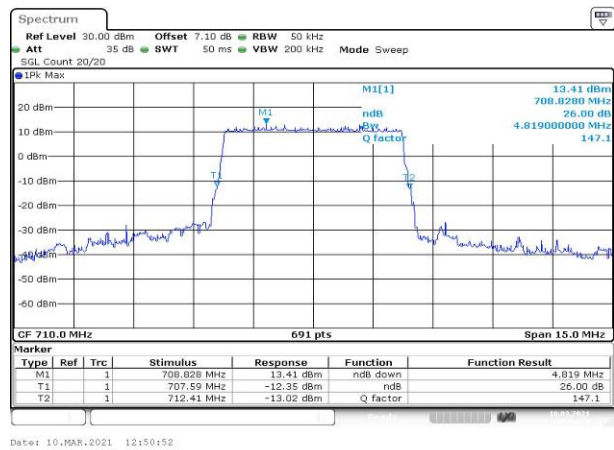


Fig.4

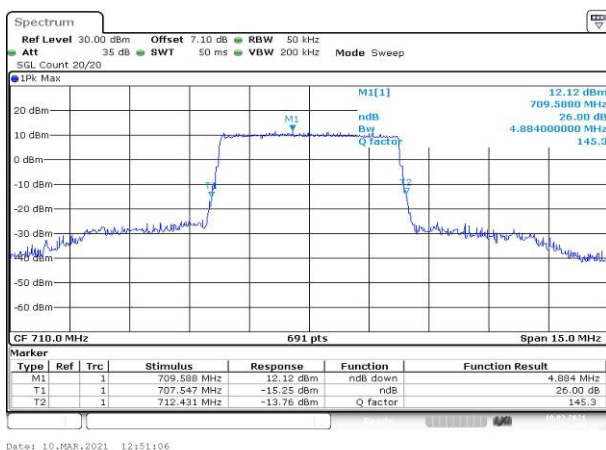


Fig.5

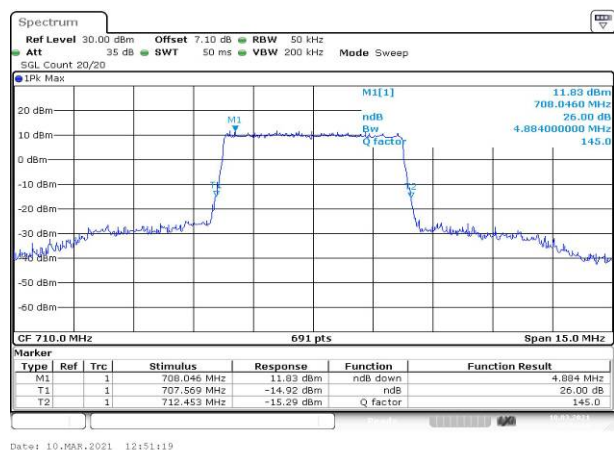


Fig.6

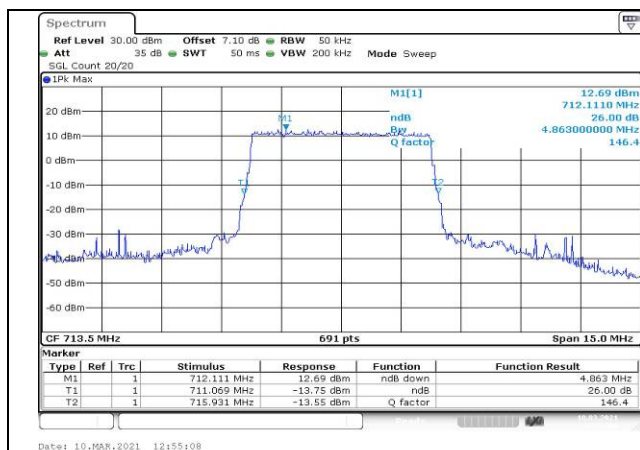


Fig.7

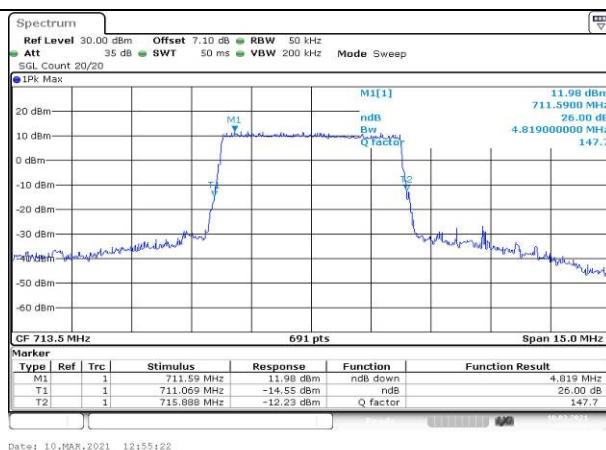


Fig.8

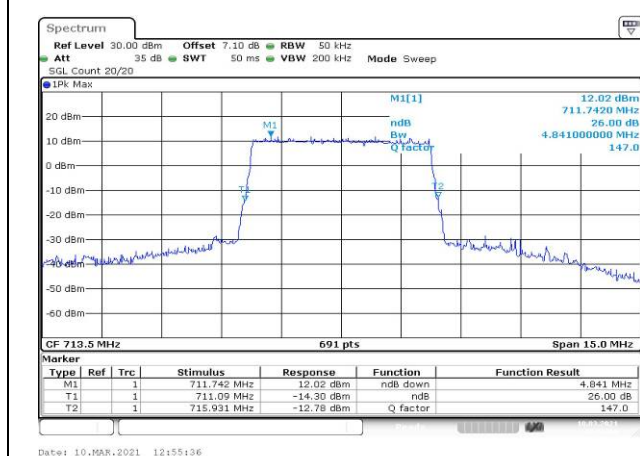


Fig.9

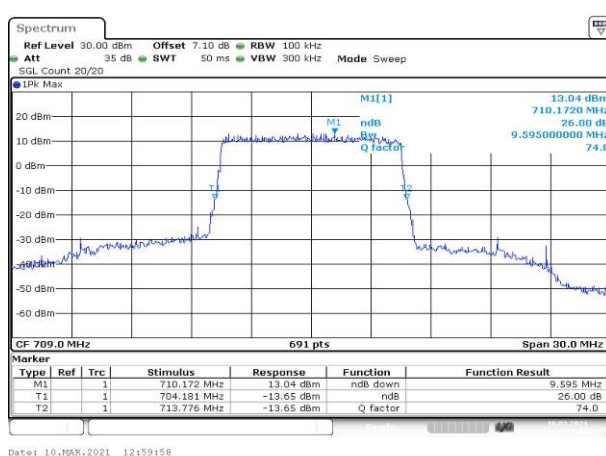


Fig.10

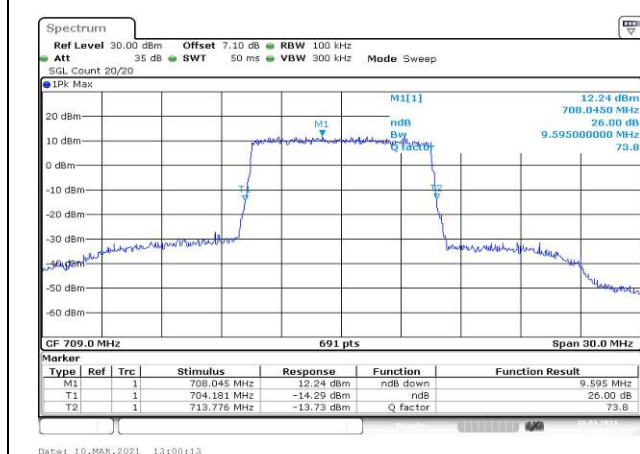


Fig.11

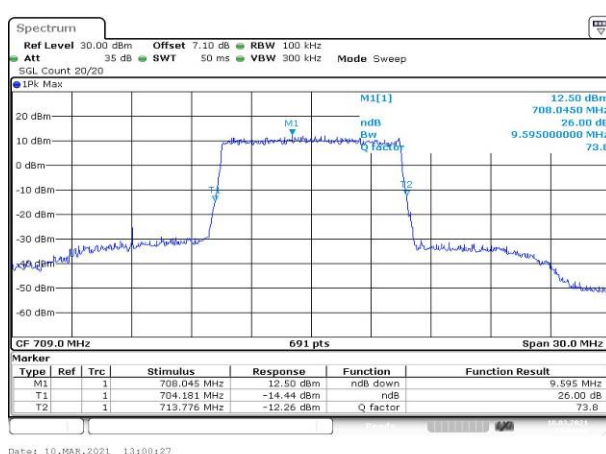


Fig.12

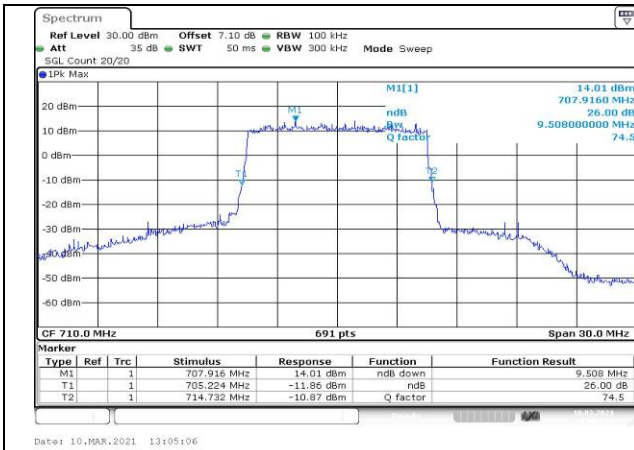


Fig.13

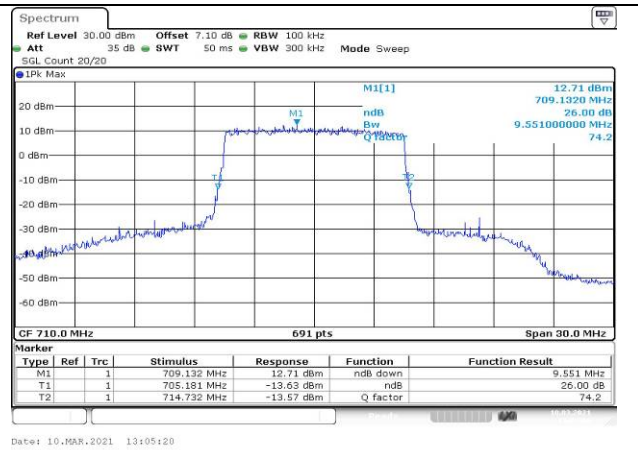


Fig.14

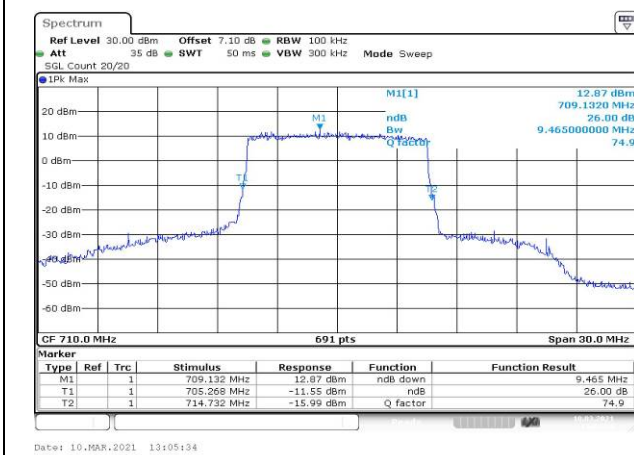


Fig.15

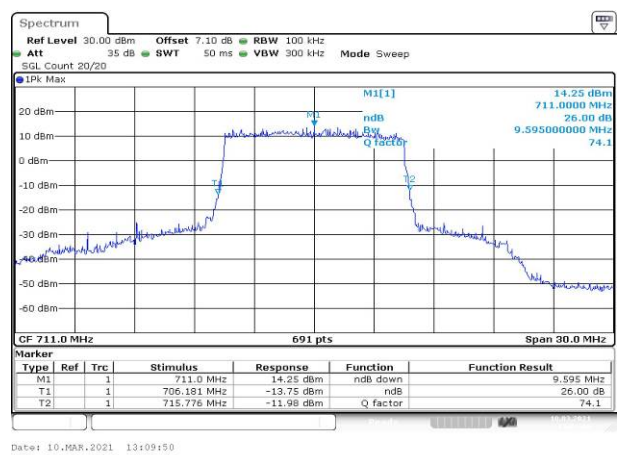


Fig.16

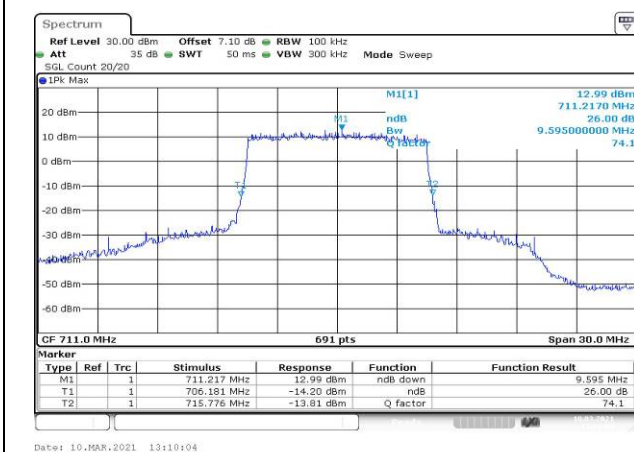


Fig.17

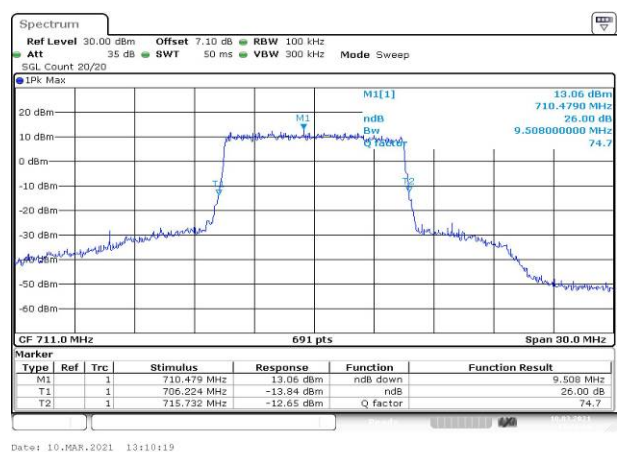


Fig.18

4 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
17	706.5	23755	5	1	24	Fig.1	Fig.2	Fig.3
	706.5	23755		25	0	Fig.4	Fig.5	Fig.6
	710	23790		1	24	Fig.7	Fig.8	Fig.9
	710	23790		25	0	Fig.10	Fig.11	Fig.12
	713.5	23825		1	24	Fig.13	Fig.14	Fig.15
	713.5	23825		25	0	Fig.16	Fig.17	Fig.18
	709	23780	10	1	49	Fig.19	Fig.20	Fig.21
	709	23780		50	0	Fig.22	Fig.23	Fig.24
	710	23790		1	49	Fig.25	Fig.26	Fig.27
	710	23790		50	0	Fig.28	Fig.29	Fig.30
	711	23800		1	49	Fig.31	Fig.32	Fig.33
	711	23800		50	0	Fig.34	Fig.35	Fig.36

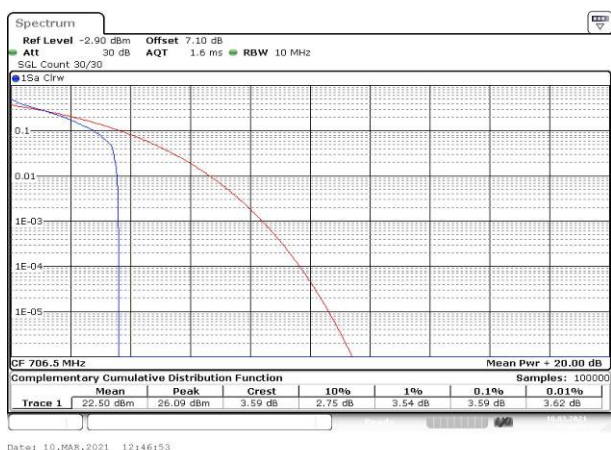


Fig.1

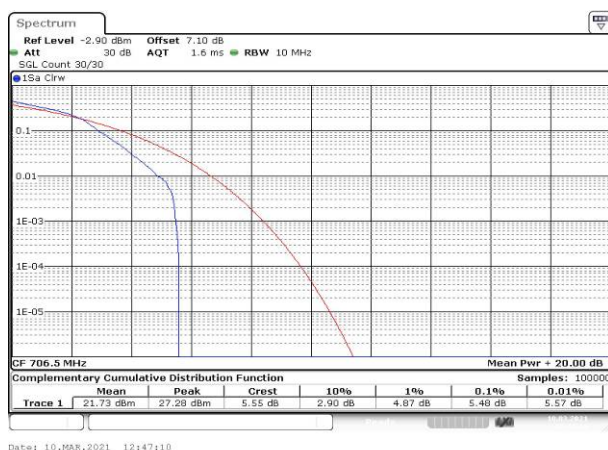


Fig.2

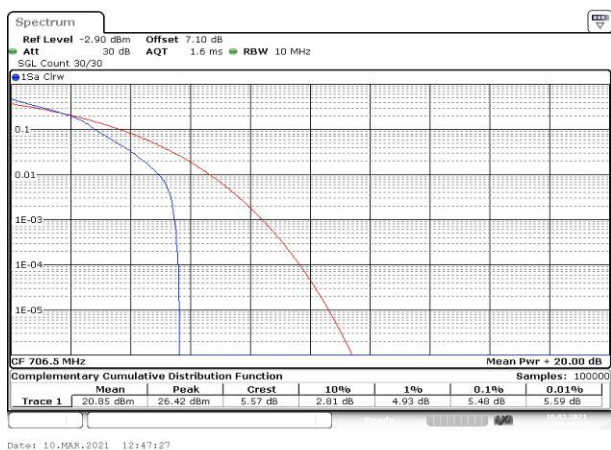


Fig.3

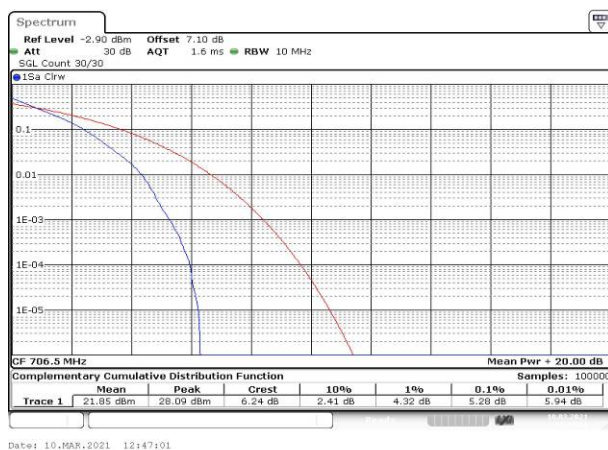


Fig.4

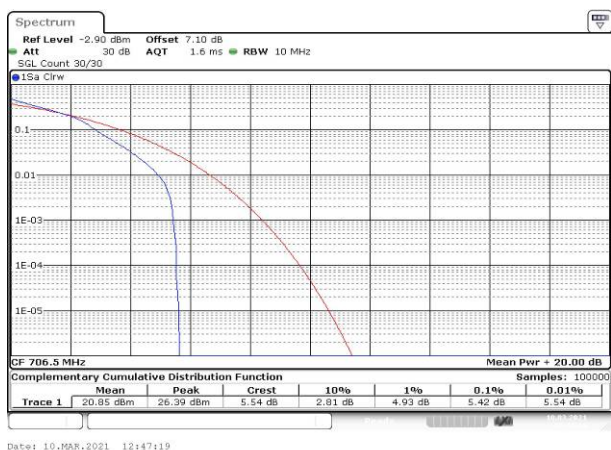


Fig.5

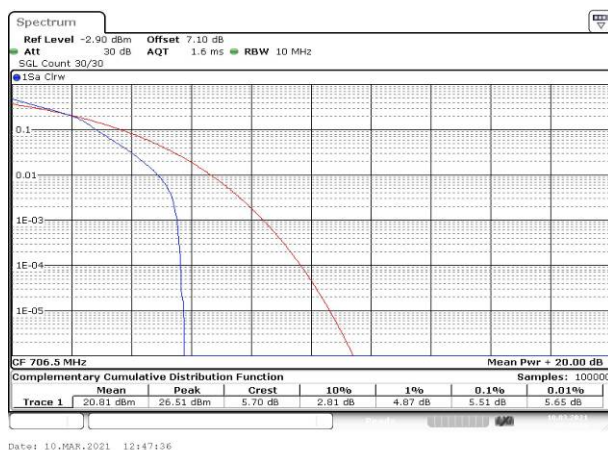


Fig.6

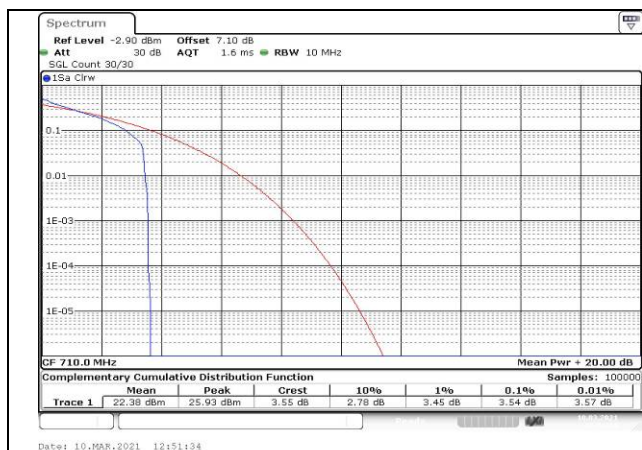


Fig.7

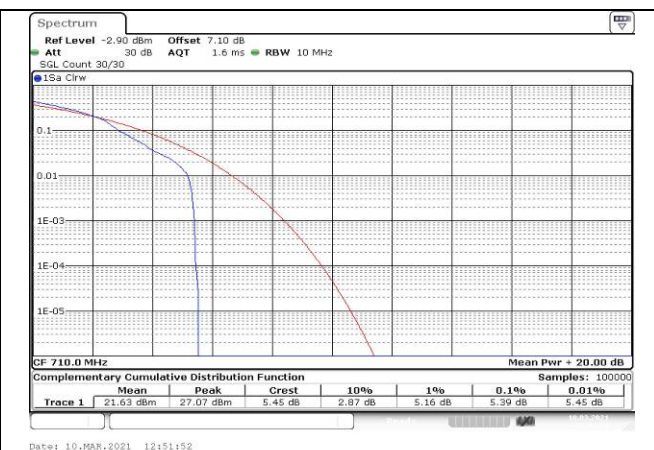


Fig.8

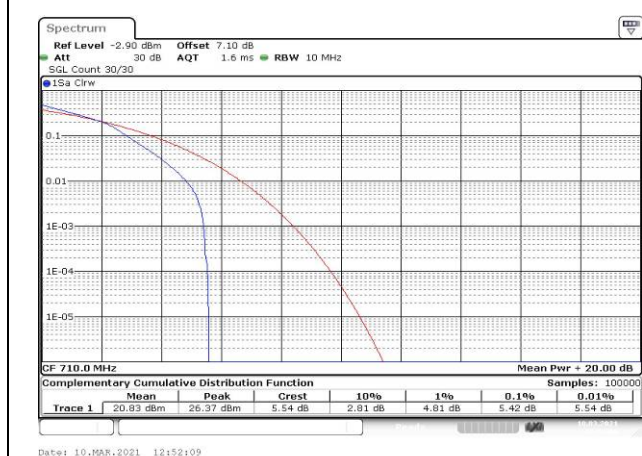


Fig.9

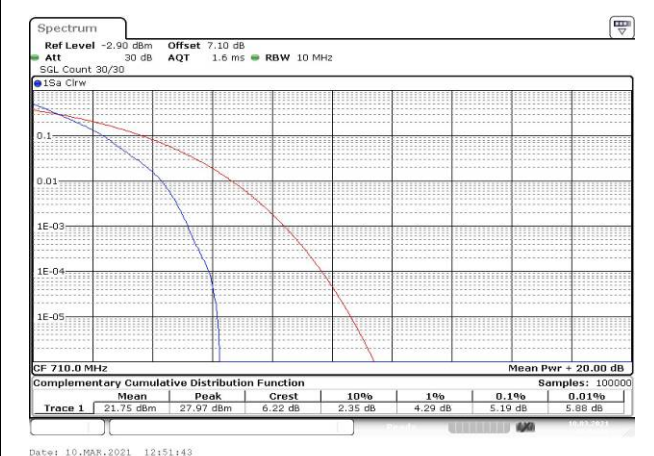


Fig.10

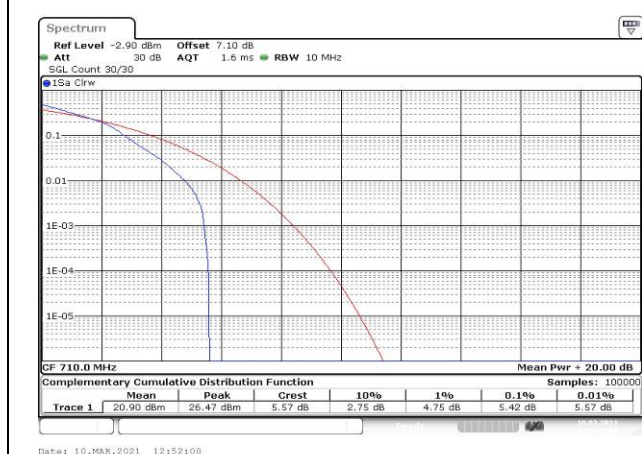


Fig.11

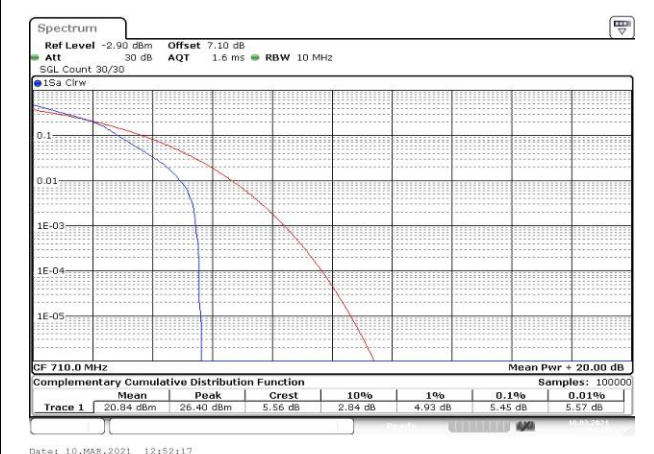


Fig.12

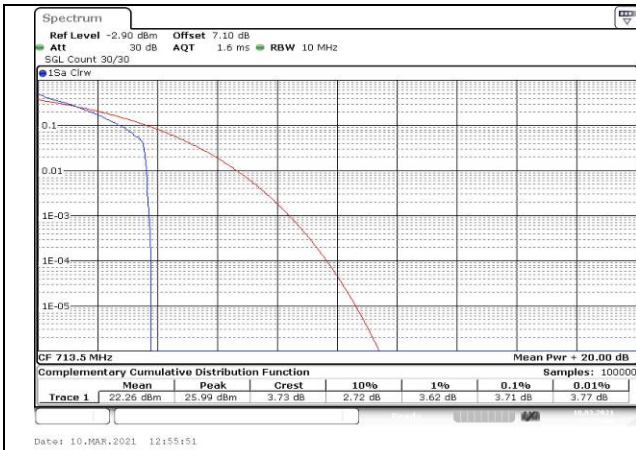


Fig.13

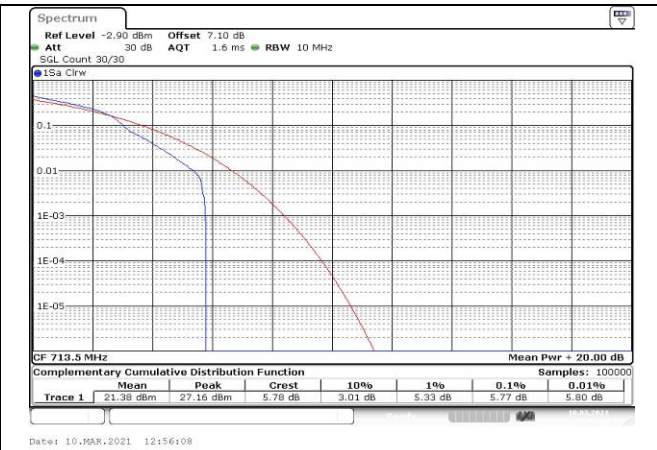


Fig.14

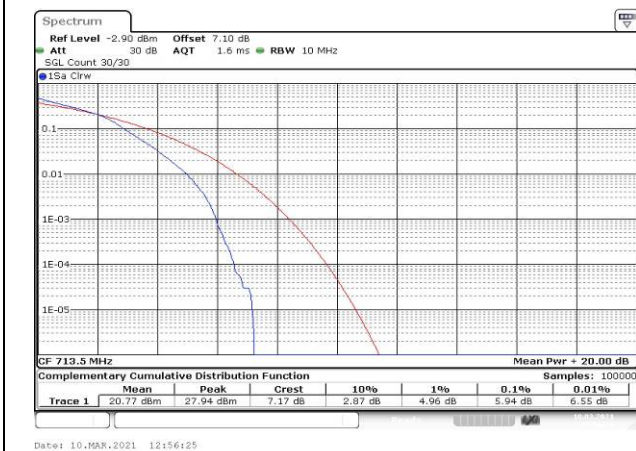


Fig.15

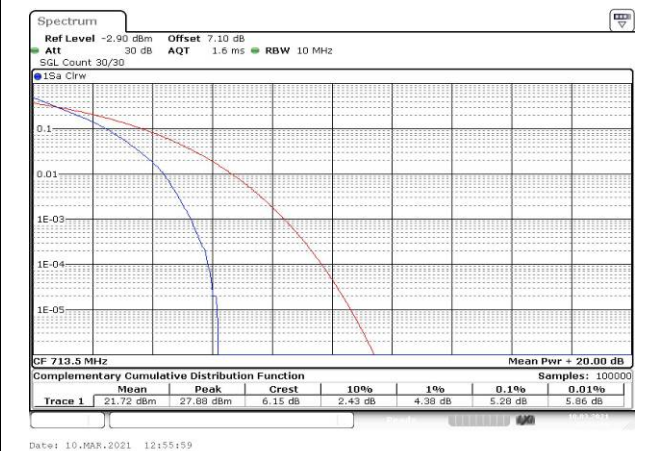


Fig.16

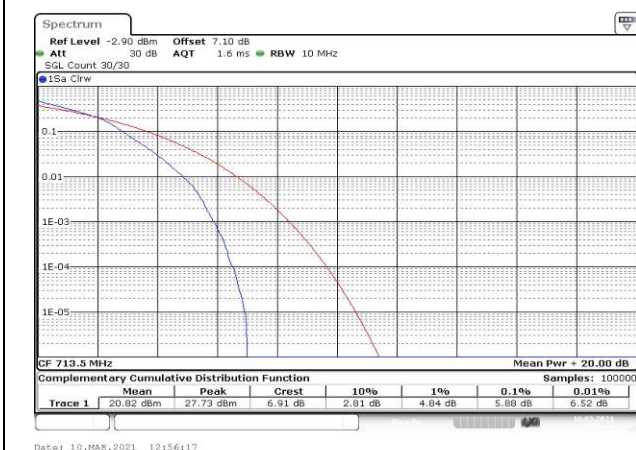


Fig.17

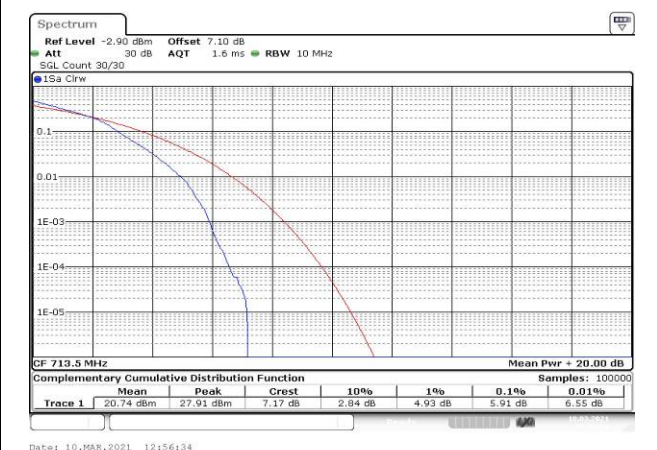


Fig.18

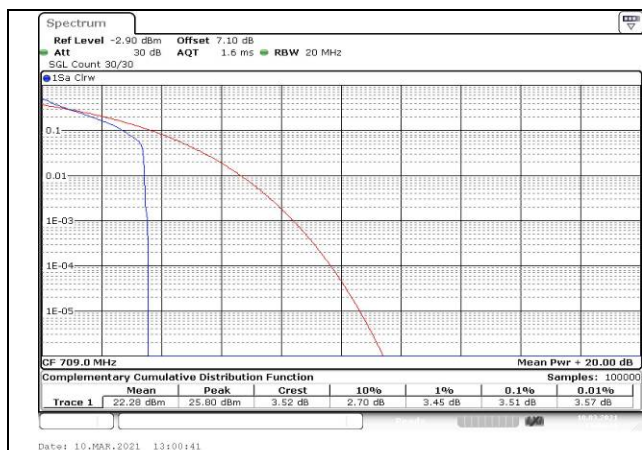


Fig.19

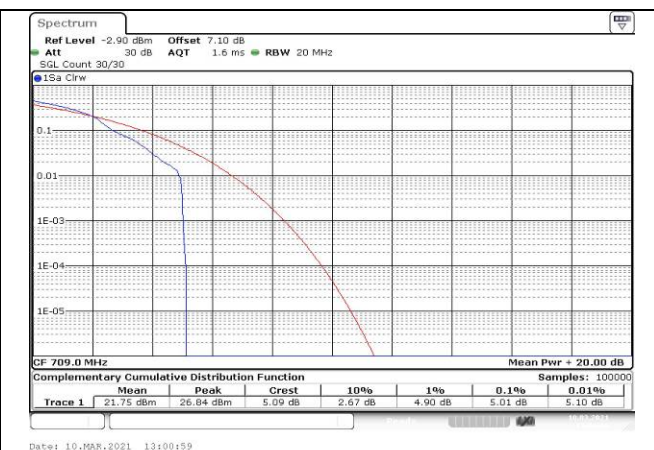


Fig.20

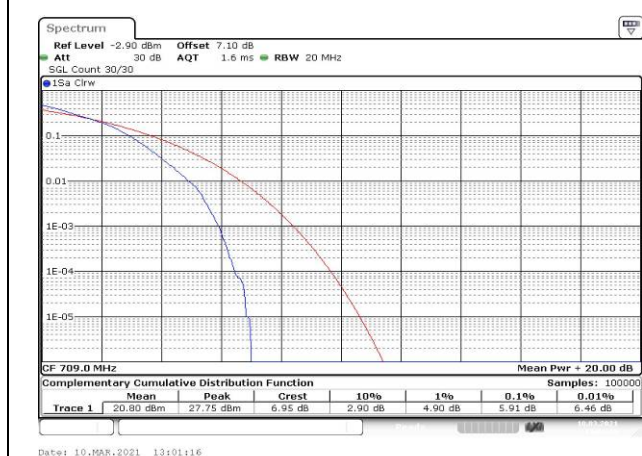


Fig.21

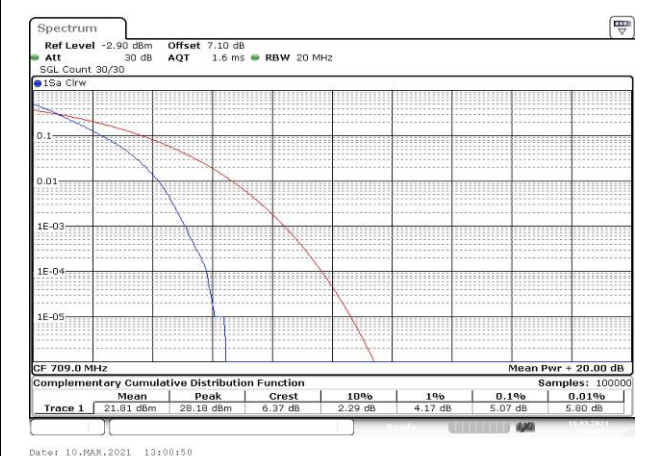


Fig.22

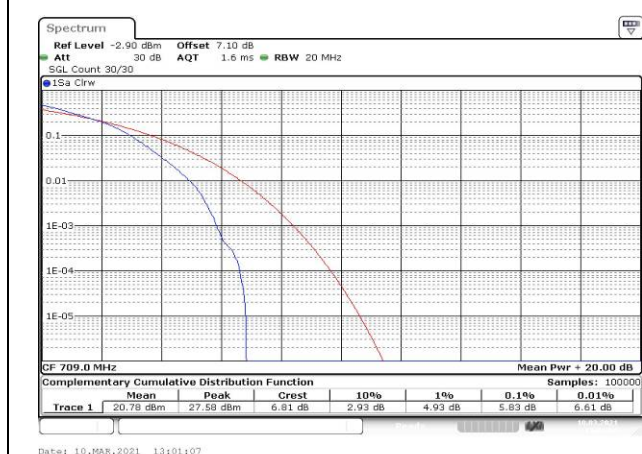


Fig.23

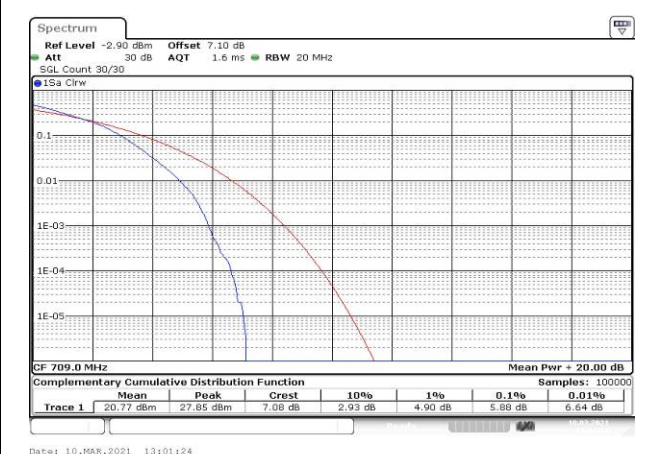


Fig.24

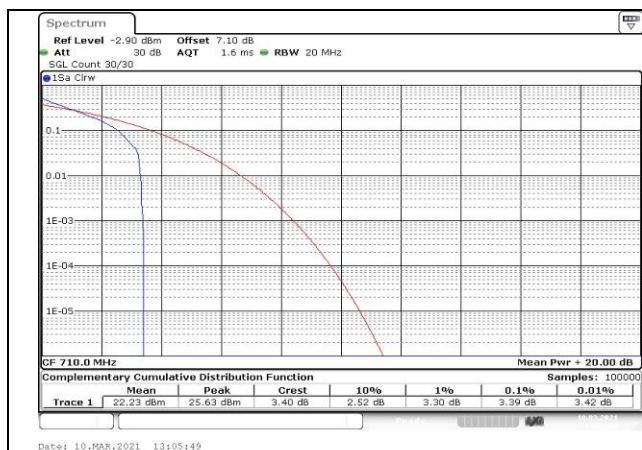


Fig.25

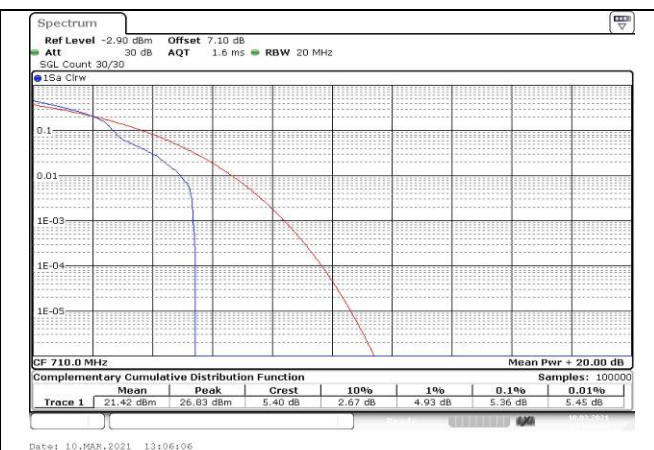


Fig.26

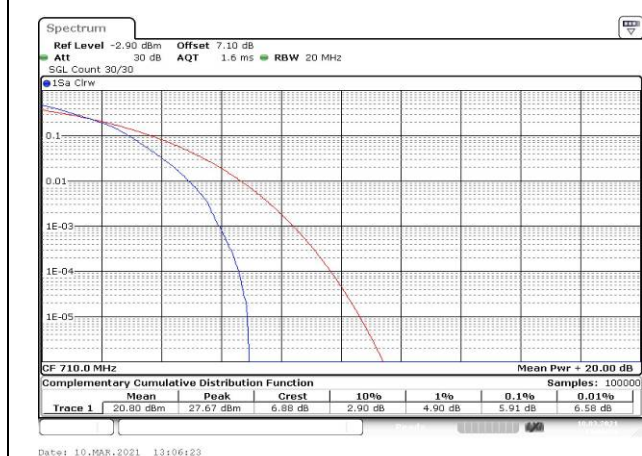


Fig.27

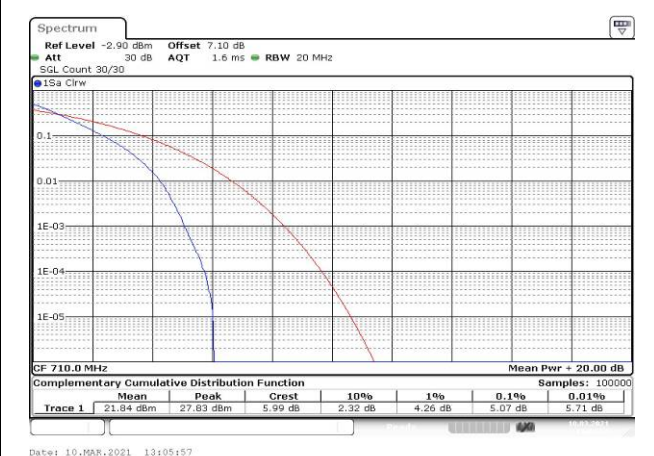


Fig.28

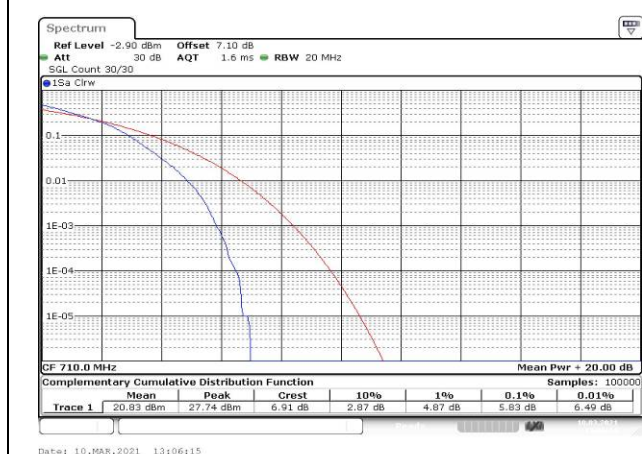


Fig.29

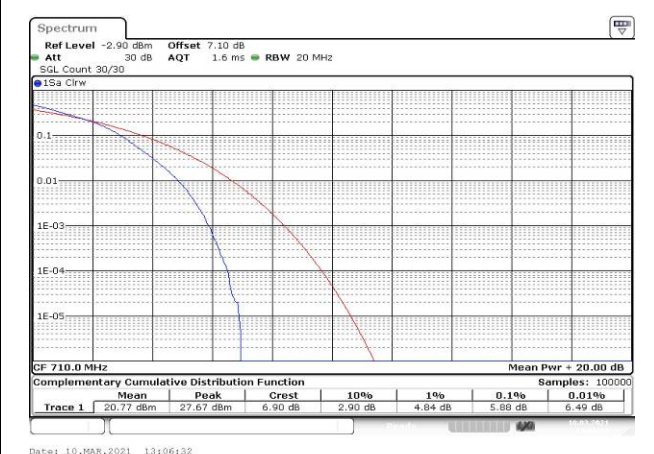


Fig.30

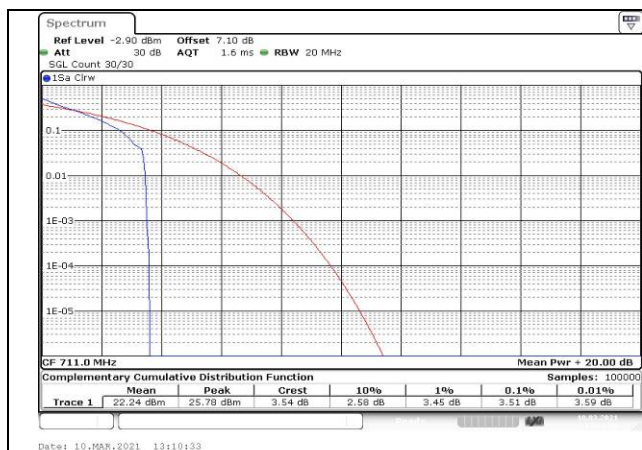


Fig.31

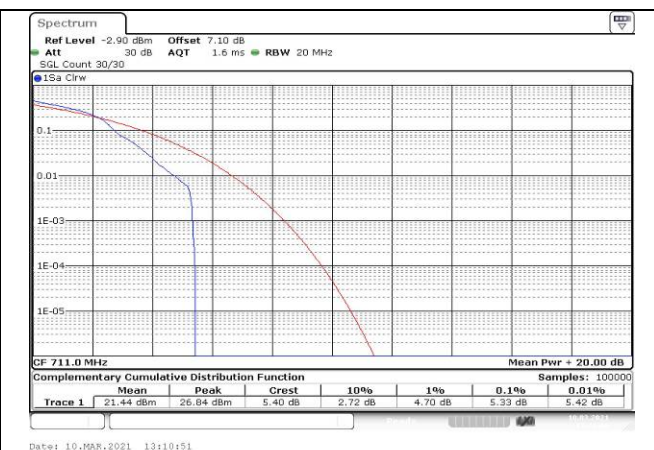


Fig.32

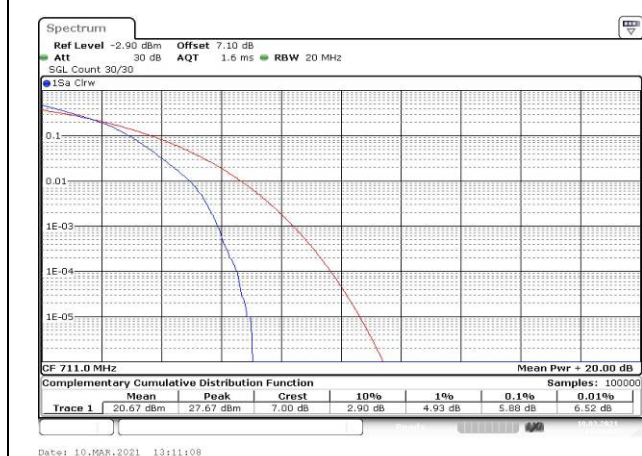


Fig.33

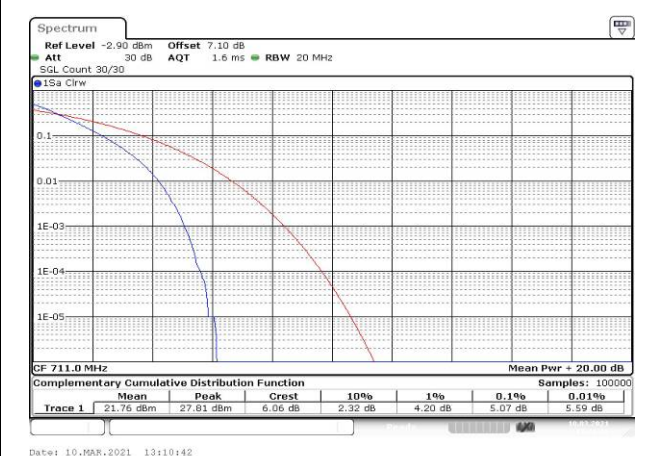


Fig.34

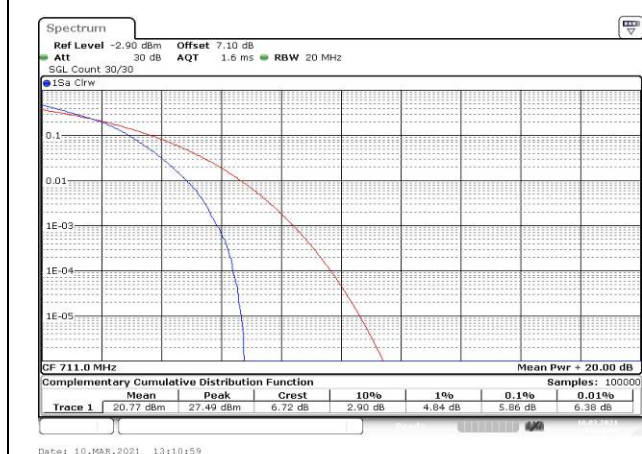


Fig.35



Fig.36

5 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
17	709	23780	10	1	0	Fig.1
	710	23790		1	0	Fig.2
	711	23800		1	0	Fig.3

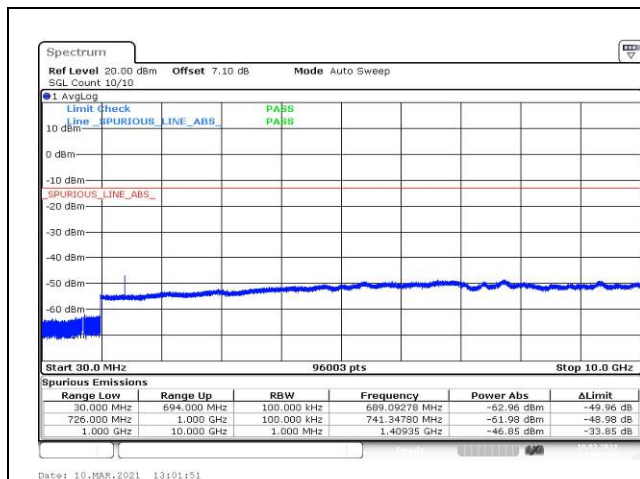


Fig.1

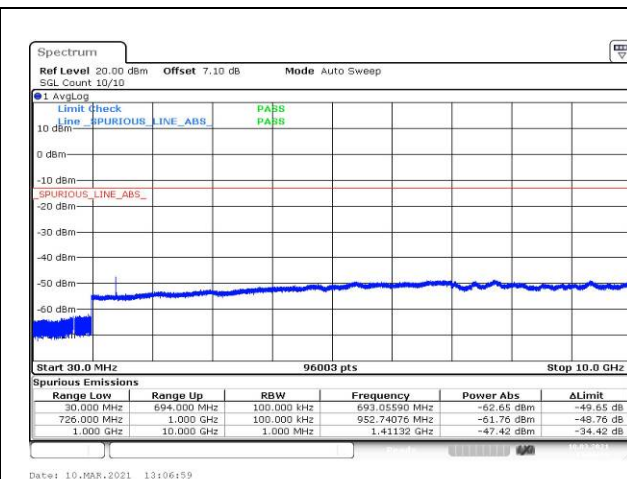


Fig.2

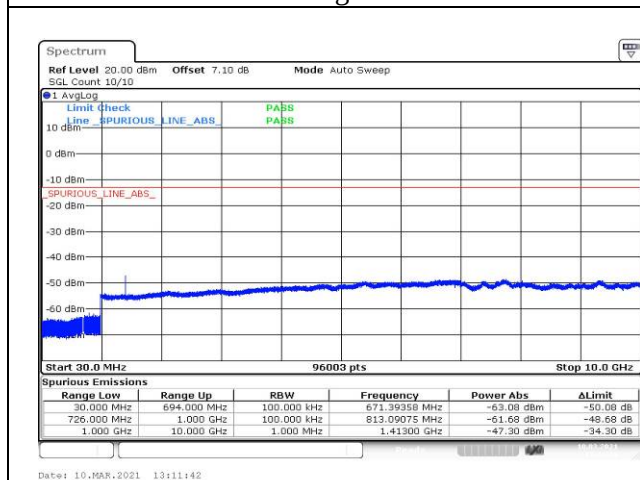
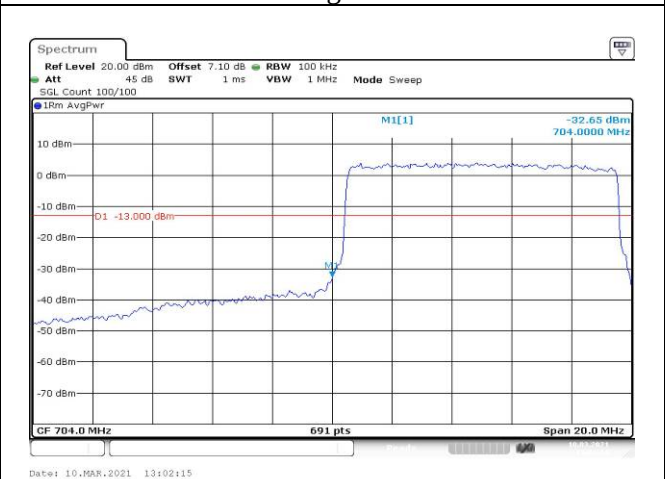
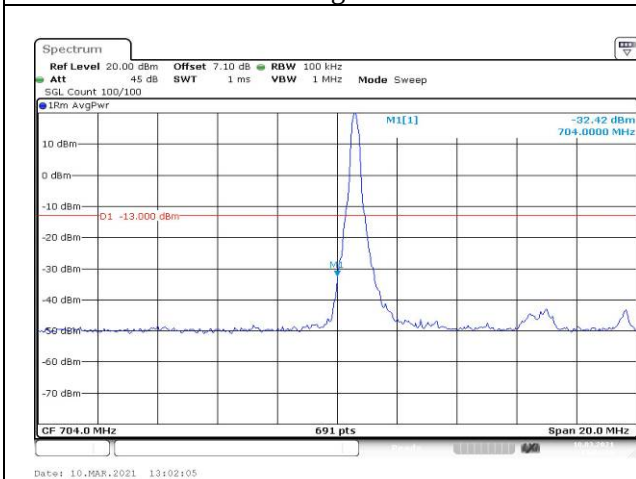
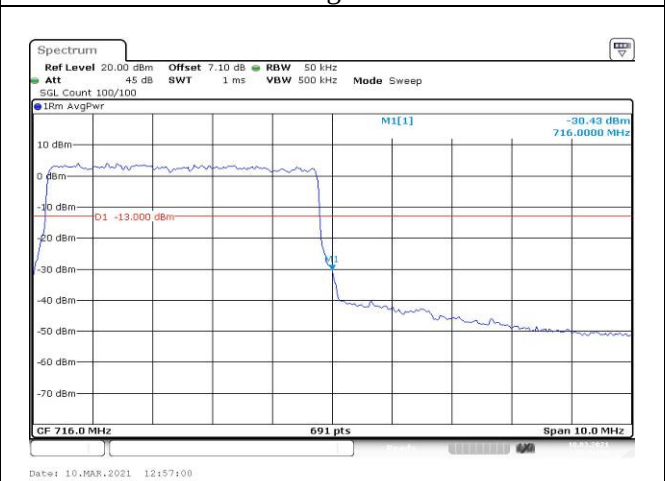
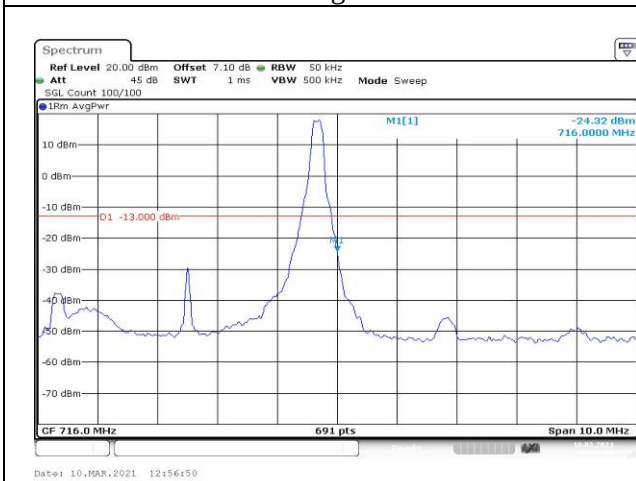
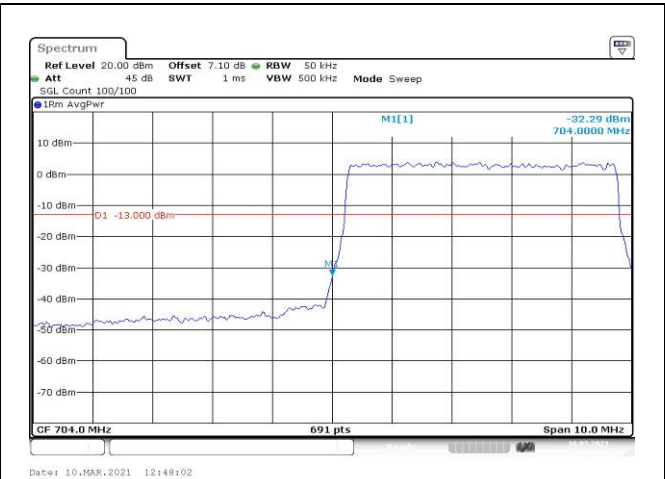
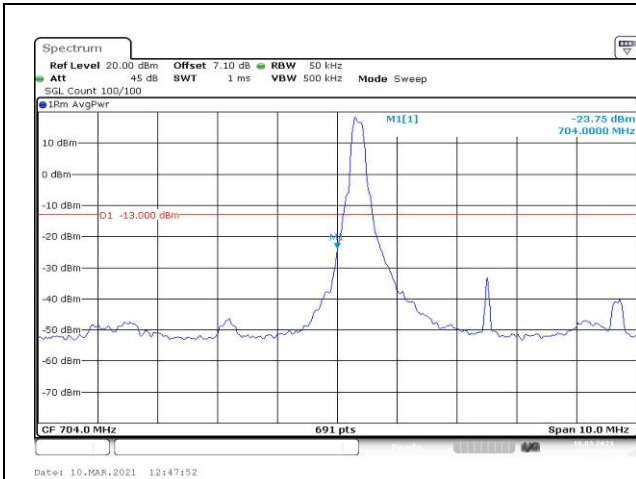


Fig.3

6 Band Edges Compliance

Band Edges Compliance						
Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
17	706.5	23755	5	1	0	Fig.1
				25	0	Fig.2
	713.5	23825		1	24	Fig.3
				25	0	Fig.4
	709	23780	10	1	0	Fig.5
				50	0	Fig.6
	711	23800		1	49	Fig.7
				50	0	Fig.8



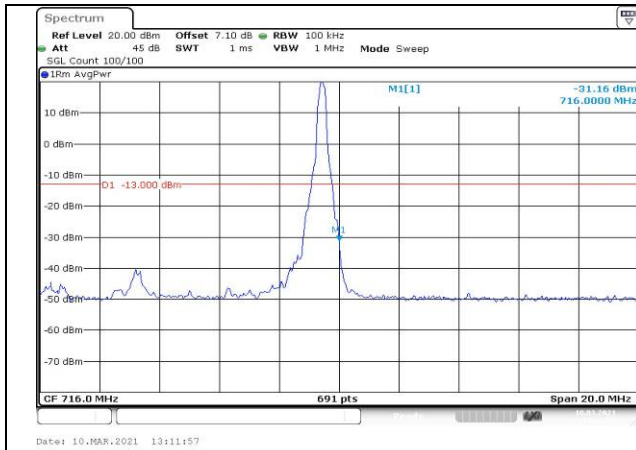


Fig.7



Fig.8

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band17 Low Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-10	NV	---	---	-0.007	0.006	---	---
0	NV	---	---	-0.003	0.005	---	---
+10	NV	---	---	-0.002	0.002	---	---
+20	NV	---	---	0.000	0.000	---	---
+30	NV	---	---	0.003	0.002	---	---
+40	NV	---	---	-0.002	0.006	---	---
+50	NV	---	---	0.003	0.004	---	---
+50	NV	---	---	0.005	0.004	---	---
+20	LV	---	---	0.002	0.003	---	---
+20	HV	---	---	0.004	0.002	---	---

Temperature(°C)	Voltage	Test Result (ppm) Band17 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-10	NV	---	---	0.007	0.003	---	---
0	NV	---	---	0.001	0.001	---	---
+10	NV	---	---	-0.002	0.004	---	---
+20	NV	---	---	0.000	0.000	---	---
+30	NV	---	---	-0.002	0.004	---	---
+40	NV	---	---	-0.002	0.005	---	---
+50	NV	---	---	0.008	0.001	---	---
+55	NV	---	---	0.002	-0.004	---	---
+20	LV	---	---	0.002	0.012	---	---
+20	HV	---	---	0.004	0.005	---	---

8 Effective Radiated Power and Effective Isotropic Radiated Power

Effective Radiated Power and Effective Isotropic Radiated Power									
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)	
QPSK	706.5	23755	5	1	0	23.08	21.13	0.130	
				1	12	23.18	21.23	0.133	
				1	24	23.16	21.21	0.132	
				12	0	22.18	20.23	0.105	
				12	7	22.19	20.24	0.106	
				12	13	22.19	20.24	0.106	
				25	0	22.23	20.28	0.107	
	710	23790		1	0	23.12	21.17	0.131	
				1	12	23.08	21.13	0.130	
				1	24	23.08	21.13	0.130	
				12	0	22.17	20.22	0.105	
				12	7	22.15	20.20	0.105	
				12	13	22.15	20.20	0.105	
				25	0	22.11	20.16	0.104	
	713.5	23825		1	0	23.16	21.21	0.132	
				1	12	23.15	21.20	0.132	
				1	24	23.04	21.09	0.129	
				12	0	22.13	20.18	0.104	
				12	7	22.16	20.21	0.105	
				12	13	22.11	20.16	0.104	
				25	0	22.14	20.19	0.104	
	16QAM	706.5		23755	1	0	22.30	20.35	0.108
					1	12	22.26	20.31	0.107
					1	24	22.35	20.40	0.110
12					0	21.18	19.23	0.084	
12					7	21.18	19.23	0.084	
12					13	21.17	19.22	0.084	
25					0	21.23	19.28	0.085	
710		23790		1	0	22.16	20.21	0.105	
				1	12	22.19	20.24	0.106	
				1	24	22.18	20.23	0.105	
				12	0	21.17	19.22	0.084	
				12	7	21.22	19.27	0.085	
				12	13	21.22	19.27	0.085	
				25	0	21.24	19.29	0.085	
713.5		23825		1	0	22.47	20.52	0.113	
				1	12	22.39	20.44	0.111	
				1	24	22.42	20.47	0.111	
				12	0	21.22	19.27	0.085	
				12	7	21.20	19.25	0.084	
				12	13	21.20	19.25	0.084	
				25	0	21.13	19.18	0.083	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	706.5	23755	5	1	0	21.28	19.33	0.086
				1	12	21.22	19.27	0.085
				1	24	21.22	19.27	0.085
				12	0	21.27	19.32	0.086
				12	7	21.28	19.33	0.086
				12	13	21.22	19.27	0.085
				25	0	21.27	19.32	0.086
	710	23790		1	0	21.22	19.27	0.085
				1	12	21.18	19.23	0.084
				1	24	21.23	19.28	0.085
				12	0	21.29	19.34	0.086
				12	7	21.25	19.30	0.085
				12	13	21.30	19.35	0.086
				25	0	21.23	19.28	0.085
	713.5	23825		1	0	21.17	19.22	0.084
				1	12	21.19	19.24	0.084
				1	24	21.16	19.21	0.083
				12	0	21.08	19.13	0.082
				12	7	21.13	19.18	0.083
				12	13	21.17	19.22	0.084
				25	0	21.18	19.23	0.084

Modulation	Carrier frequen cy (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	709	23780	10	1	0	23.14	21.19	0.132
				1	25	23.10	21.15	0.130
				1	49	23.05	21.10	0.129
				25	0	22.20	20.25	0.106
				25	12	22.19	20.24	0.106
				25	25	22.26	20.31	0.107
				50	0	22.30	20.35	0.108
	710	23790		1	0	23.06	21.11	0.129
				1	25	23.06	21.11	0.129
				1	49	23.09	21.14	0.130
				25	0	22.09	20.14	0.103
				25	12	22.16	20.21	0.105
				25	25	22.16	20.21	0.105
				50	0	22.17	20.22	0.105
	711	23800		1	0	23.15	21.20	0.132
				1	25	23.08	21.13	0.130
				1	49	23.11	21.16	0.131
				25	0	22.15	20.20	0.105
				25	12	22.17	20.22	0.105
				25	25	22.21	20.26	0.106
				50	0	22.11	20.16	0.104
16QAM	709	23780		1	0	22.78	20.83	0.121
				1	25	22.68	20.73	0.118
				1	49	22.67	20.72	0.118
				25	0	21.21	19.26	0.084
				25	12	21.31	19.36	0.086
				25	25	21.36	19.41	0.087
				50	0	21.27	19.32	0.086
	710	23790	1	0	22.28	20.33	0.108	
			1	25	22.28	20.33	0.108	
			1	49	22.28	20.33	0.108	
			25	0	21.19	19.24	0.084	
			25	12	21.21	19.26	0.084	
			25	25	21.18	19.23	0.084	
			50	0	21.23	19.28	0.085	
	711	23800	1	0	22.30	20.35	0.108	
			1	25	22.20	20.25	0.106	
			1	49	22.26	20.31	0.107	
			25	0	21.27	19.32	0.086	
			25	12	21.33	19.38	0.087	
			25	25	21.17	19.22	0.084	
			50	0	21.18	19.23	0.084	

Modulation	Carrier frequern cy (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	709	23780	10	1	0	21.19	19.24	0.084
				1	25	21.21	19.26	0.084
				1	49	21.29	19.34	0.086
				25	0	21.26	19.31	0.085
				25	12	21.22	19.27	0.085
				25	25	21.25	19.30	0.085
				50	0	21.29	19.34	0.086
	710	23790		1	0	21.16	19.21	0.083
				1	25	21.20	19.25	0.084
				1	49	21.16	19.21	0.083
				25	0	21.17	19.22	0.084
				25	12	21.24	19.29	0.085
				25	25	21.21	19.26	0.084
				50	0	21.16	19.21	0.083
	711	23800		1	0	21.18	19.23	0.084
				1	25	21.20	19.25	0.084
				1	49	21.20	19.25	0.084
				25	0	21.25	19.30	0.085
				25	12	21.18	19.23	0.084
				25	25	21.18	19.23	0.084
				50	0	21.17	19.22	0.084