

**APPENDIX A – TEST DATA OF CONDUCTED EMISSION**

**LTE Band 17**

**1 RF 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
	710	23790		25	0	22.23
				1	0	23.12
				1	12	23.08
				1	24	23.08
				12	0	22.17
				12	7	22.15
	713.5	23825		12	13	22.15
				25	0	22.11
				1	0	23.16
				1	12	23.15
				1	24	23.04
				12	0	22.13
16QAM	706.5	23755	12	7	22.16	
			12	13	22.11	
			25	0	22.14	
			1	0	22.30	
			1	12	22.26	
			1	24	22.35	
	710	23790	12	0	21.18	
			12	7	21.18	
			12	13	21.17	
			25	0	21.23	
			1	0	22.16	
			1	12	22.19	
	713.5	23825	1	24	22.18	
			12	0	21.17	
			12	7	21.22	
			12	13	21.22	
			25	0	21.24	
			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
	710	23790		50	0	22.30
				1	0	23.06
				1	25	23.06
				1	49	23.09
				25	0	22.09
				25	12	22.16
	711	23800		25	25	22.16
				50	0	22.17
				1	0	23.15
				1	25	23.08
				1	49	23.11
				25	0	22.15
16QAM	709	23780	25	12	22.17	
			25	25	22.21	
			50	0	22.11	
			1	0	22.78	
			1	25	22.68	
			1	49	22.67	
	710	23790	25	0	21.21	
			25	12	21.31	
			25	25	21.36	
			50	0	21.27	
			1	0	22.28	
			1	25	22.28	
	711	23800	1	49	22.28	
			25	0	21.19	
			25	12	21.21	
			25	25	21.18	
			50	0	21.23	
			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

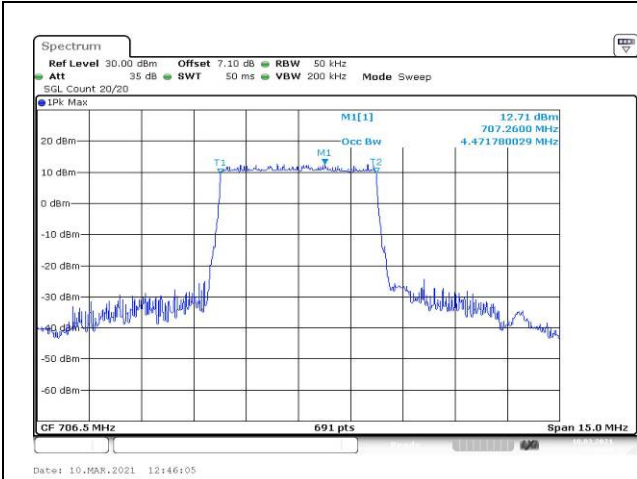


Fig.1

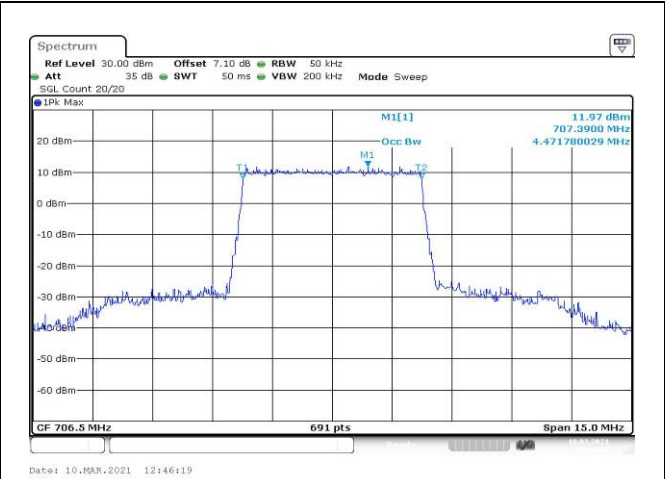


Fig.2

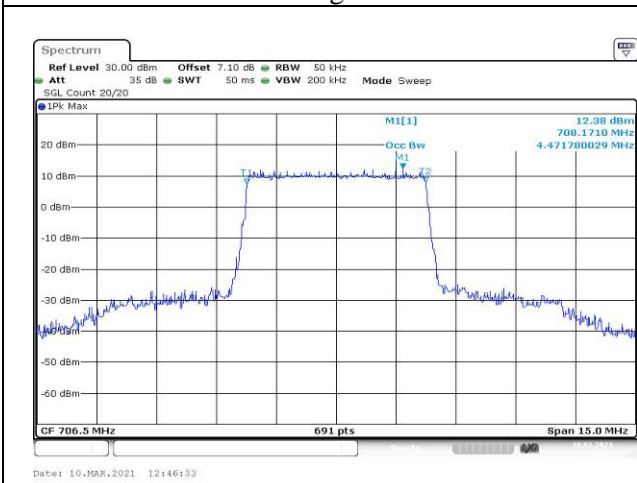


Fig.3

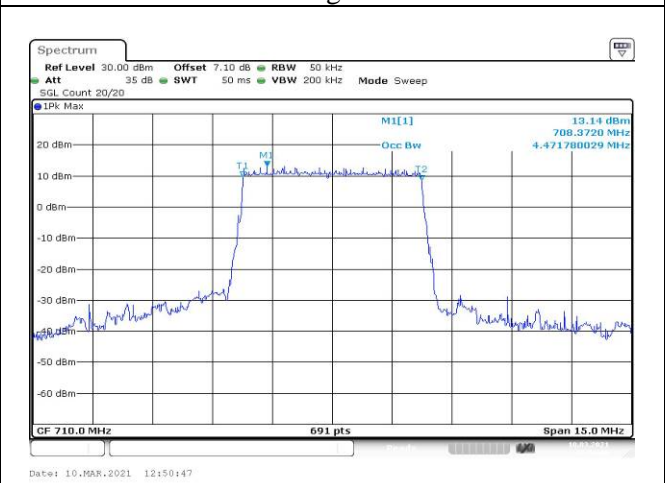


Fig.4

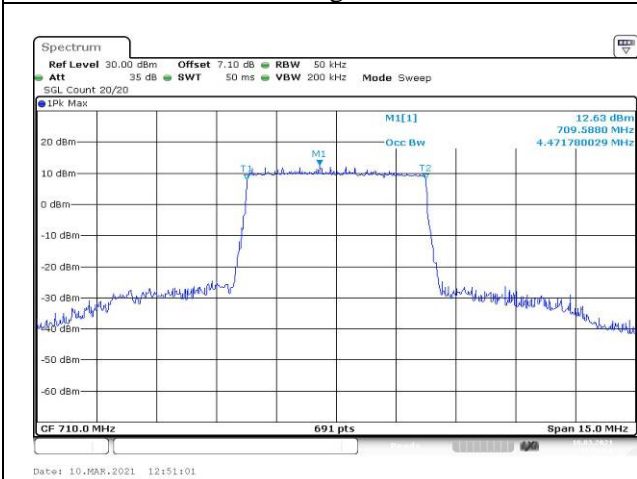


Fig.5

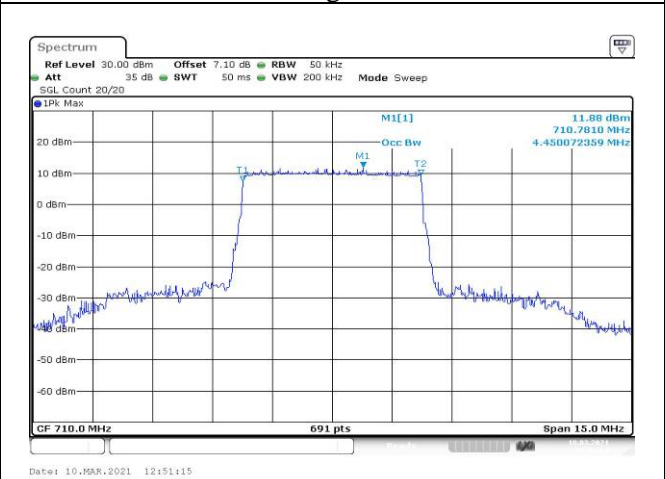


Fig.6

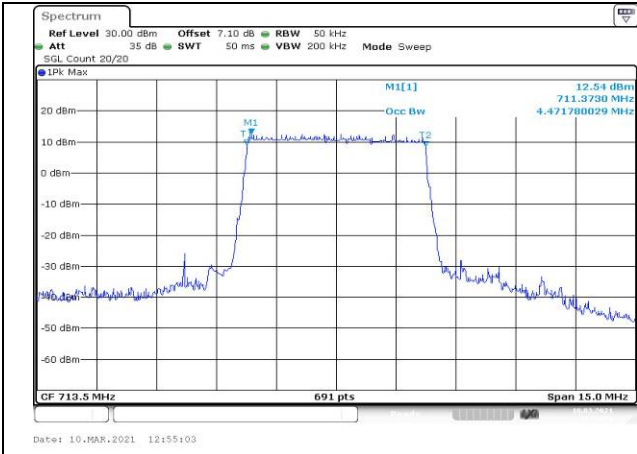


Fig.7

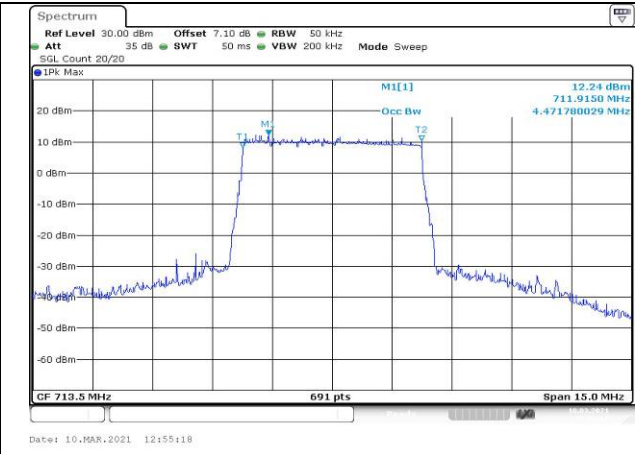


Fig.8

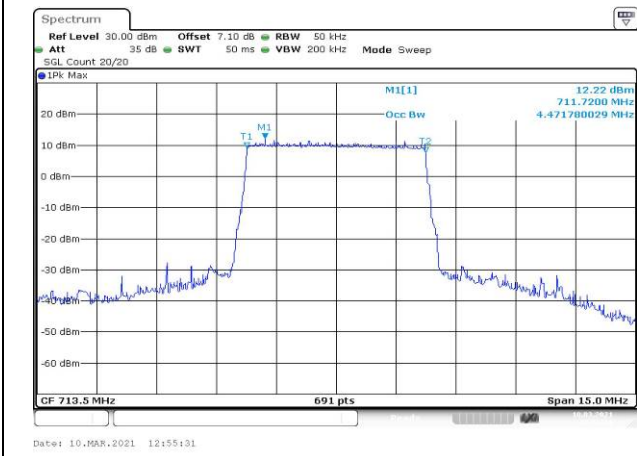


Fig.9

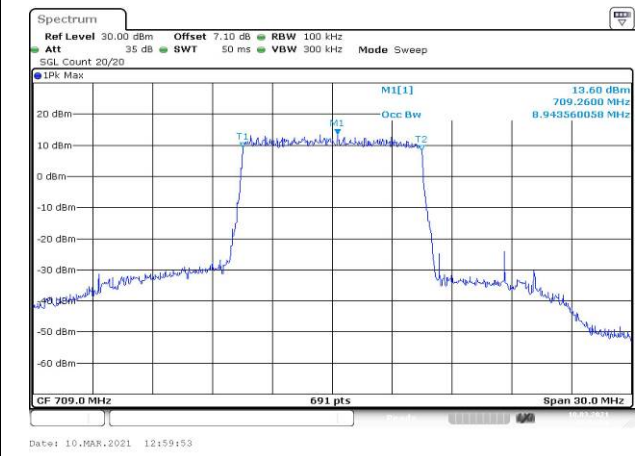


Fig.10

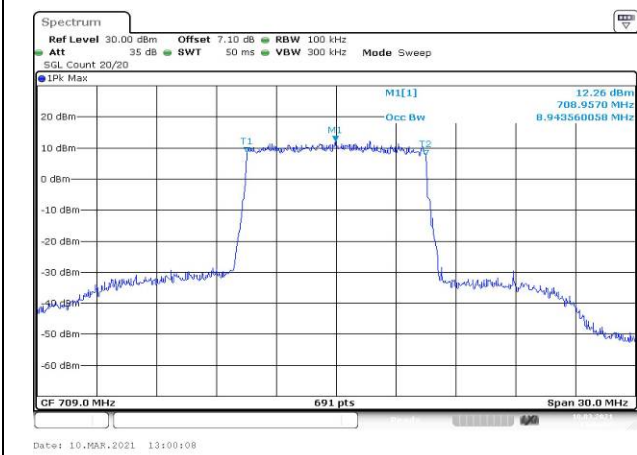


Fig.11

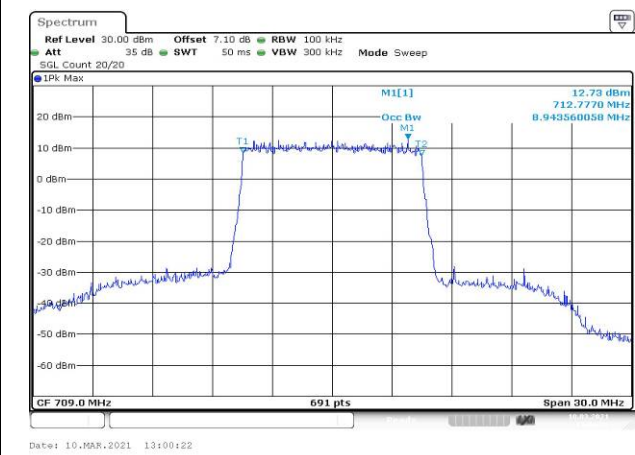


Fig.12

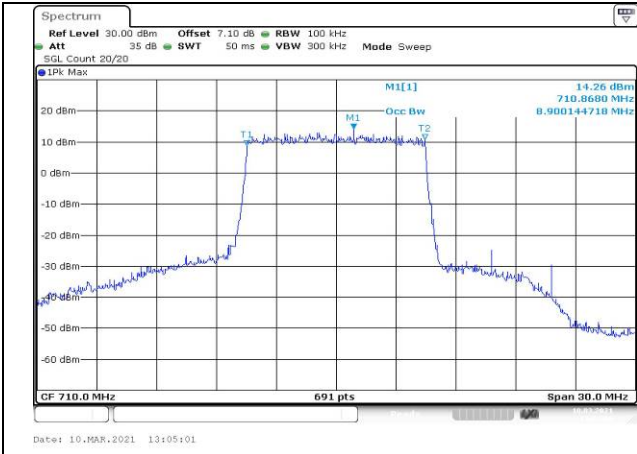


Fig.13

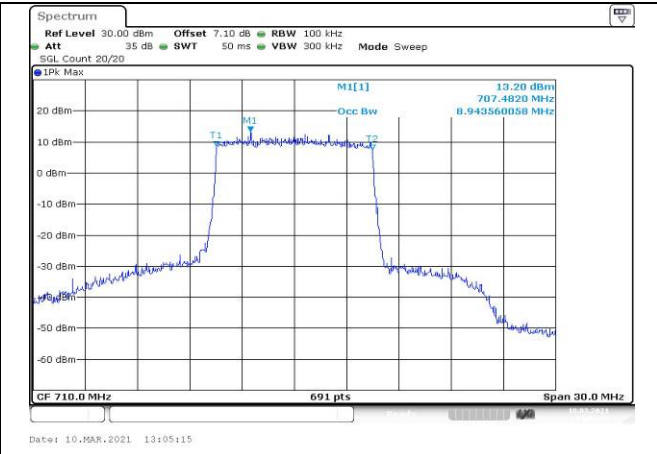


Fig.14

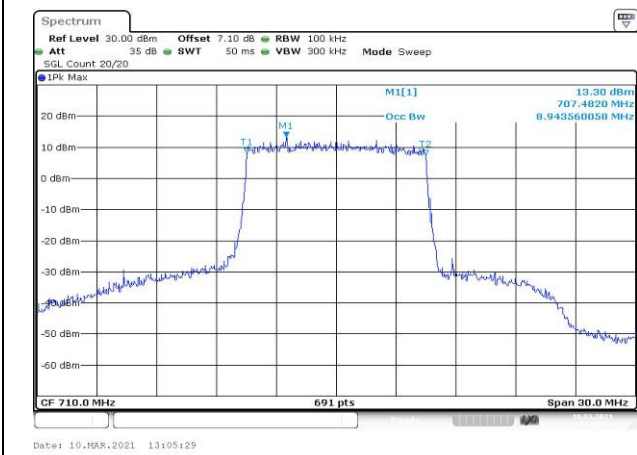


Fig.15

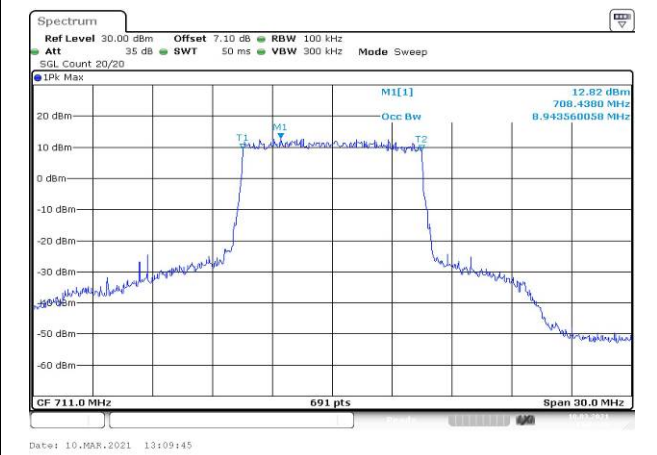


Fig.16

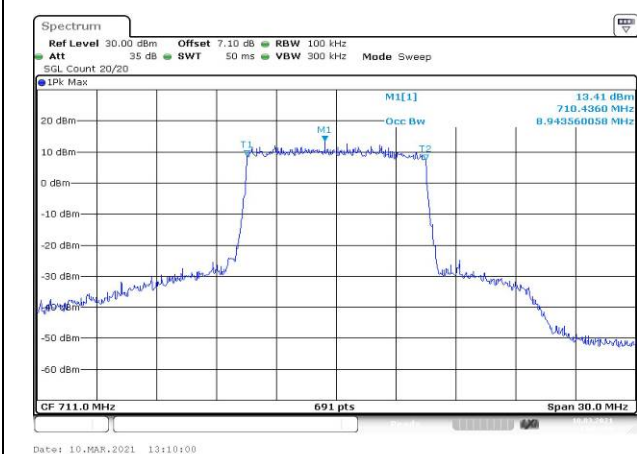


Fig.17

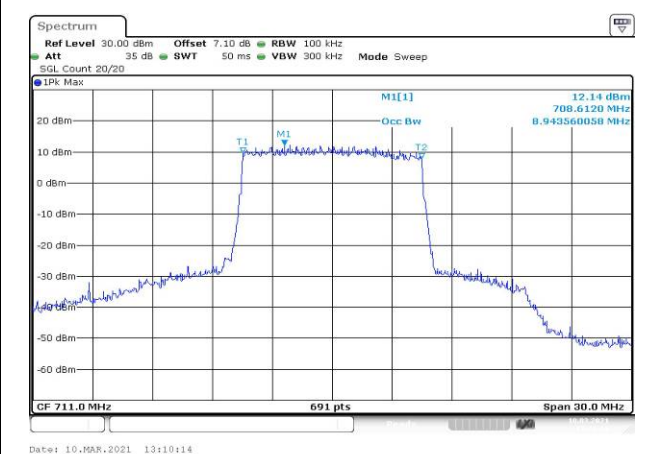


Fig.18



### 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

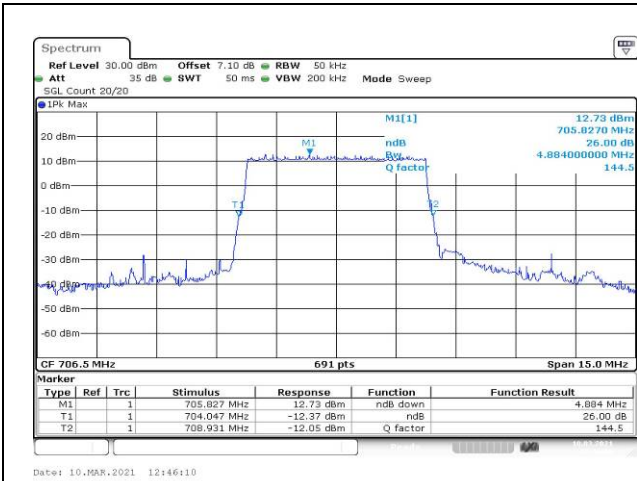


Fig.1

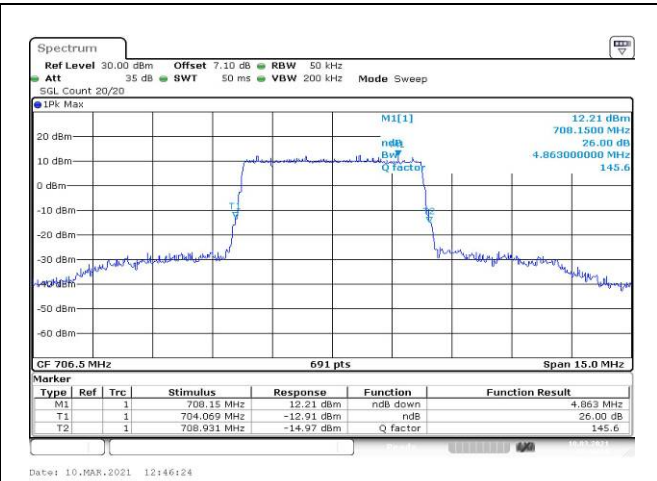


Fig.2

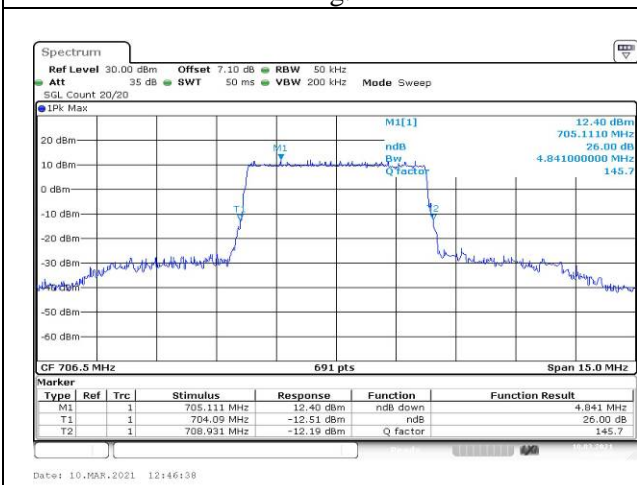


Fig.3

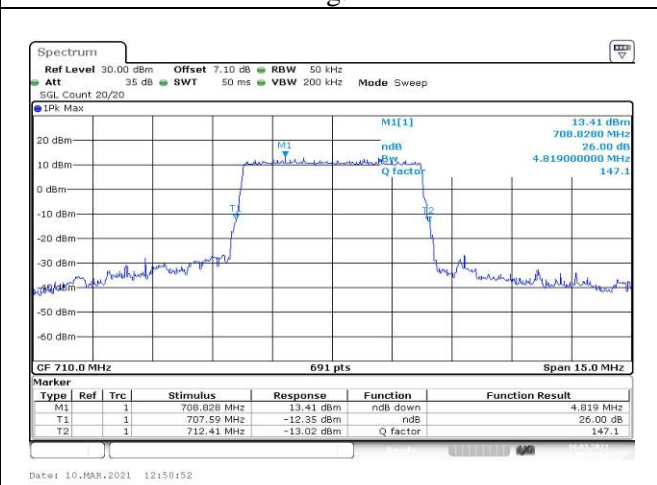


Fig.4

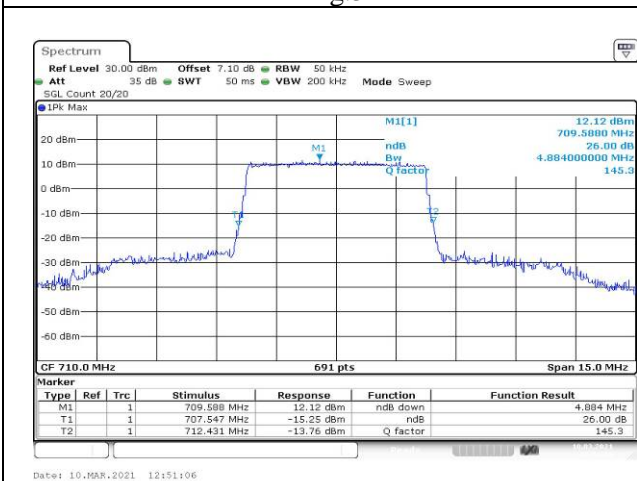


Fig.5

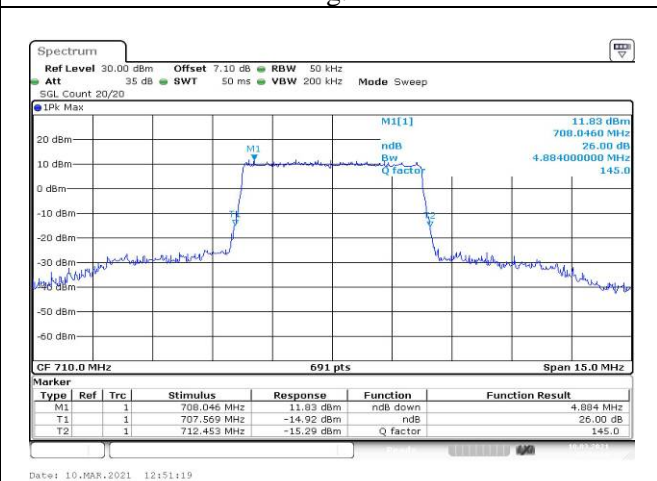


Fig.6

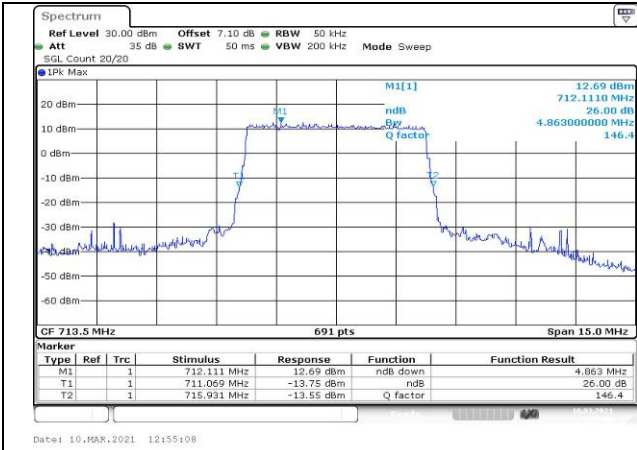


Fig.7

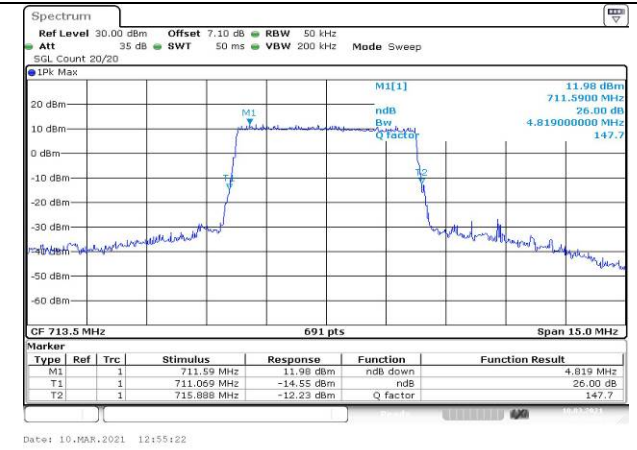


Fig.8

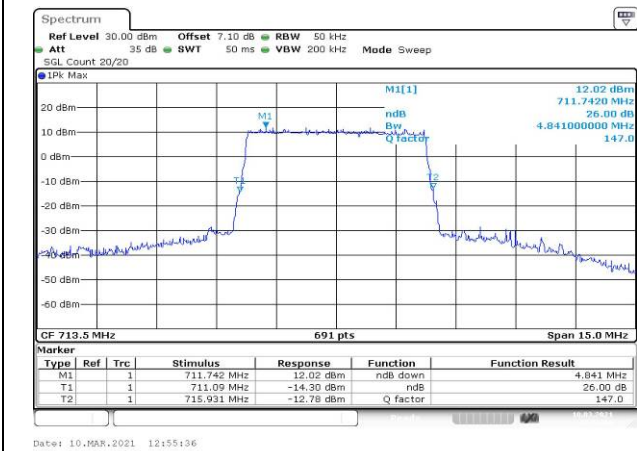


Fig.9

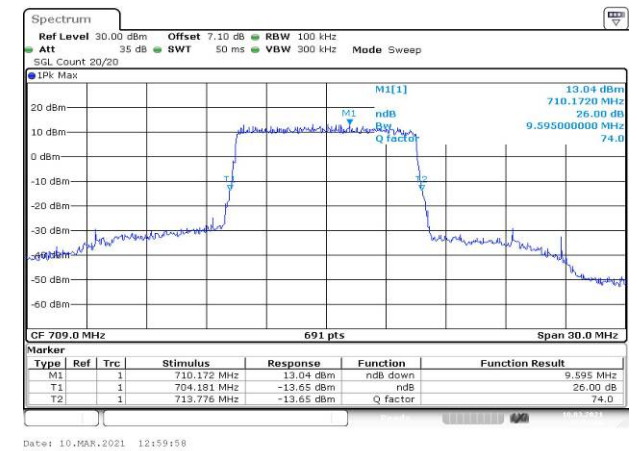


Fig.10

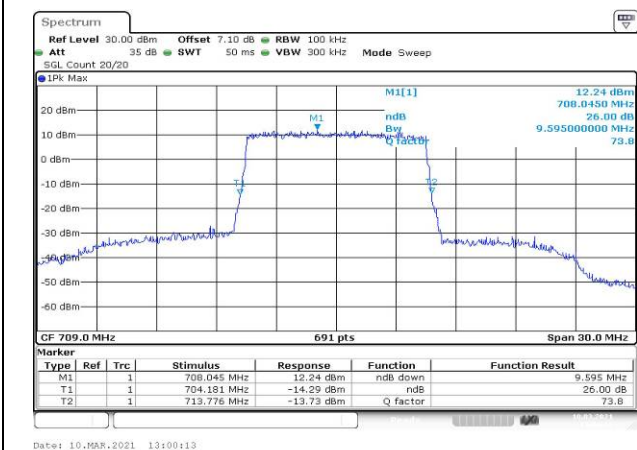


Fig.11

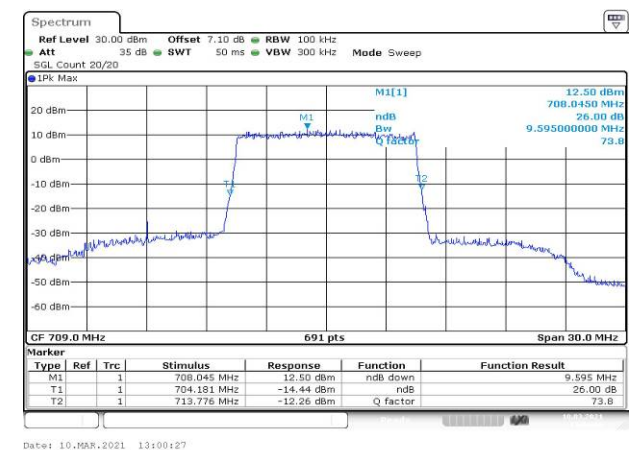


Fig.12

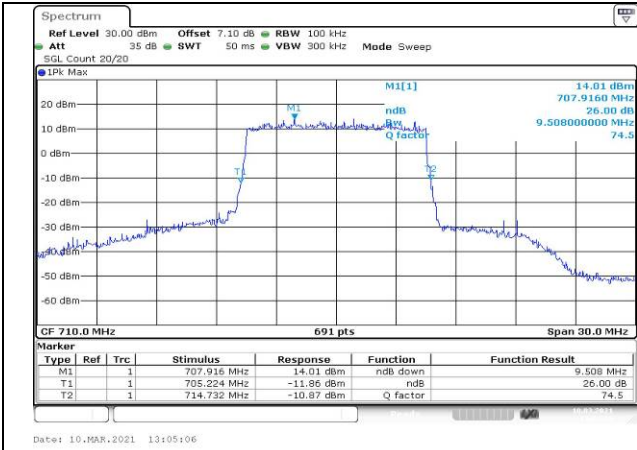


Fig.13

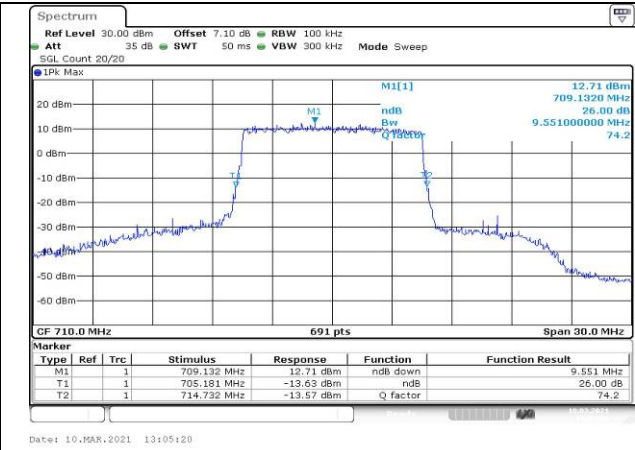


Fig.14

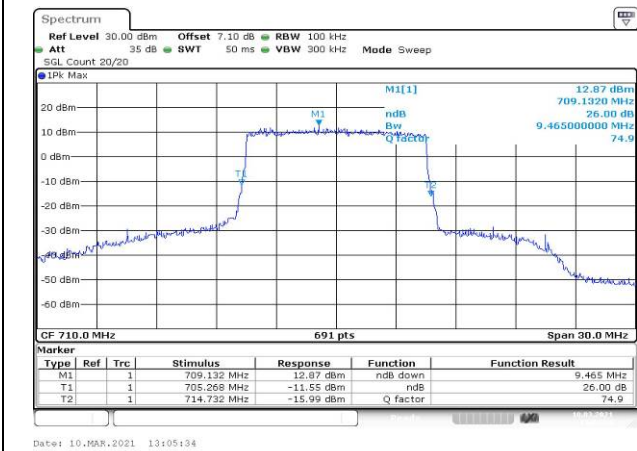


Fig.15

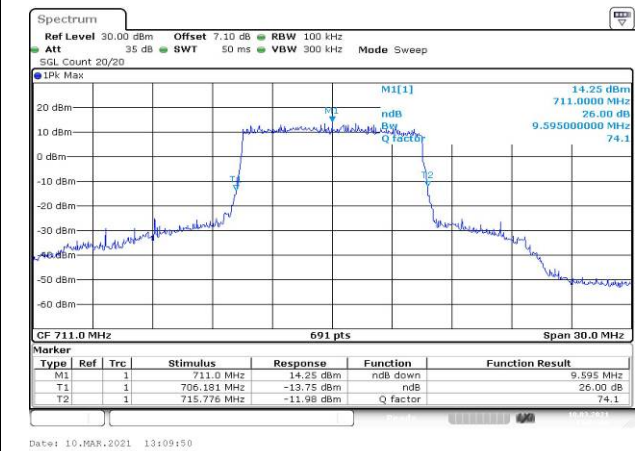


Fig.16

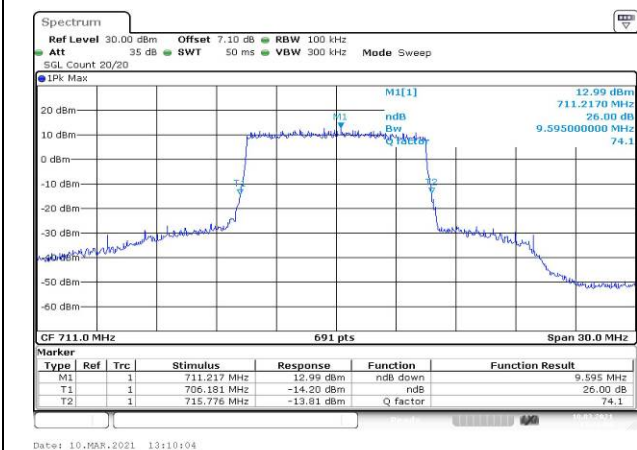


Fig.17

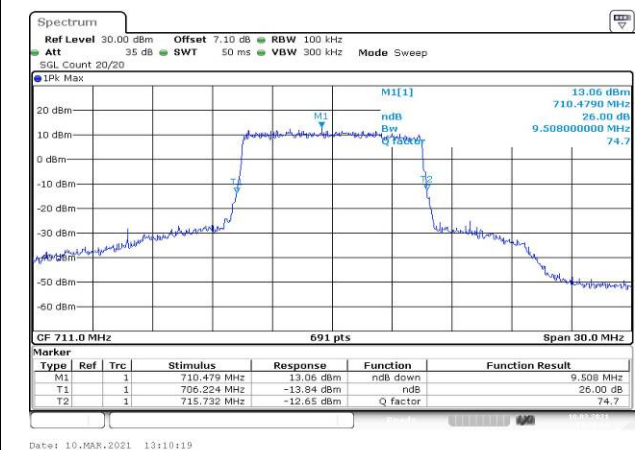


Fig.18

#### 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

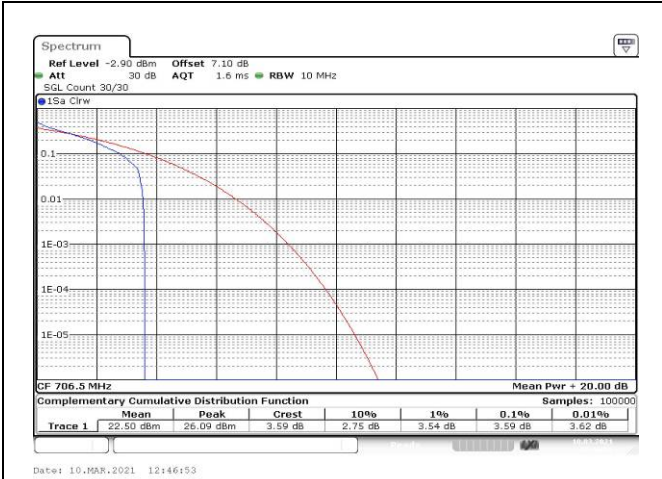


Fig.1

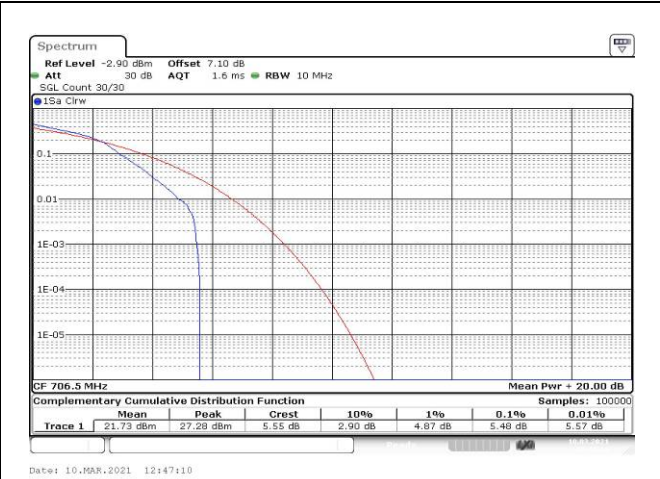


Fig.2

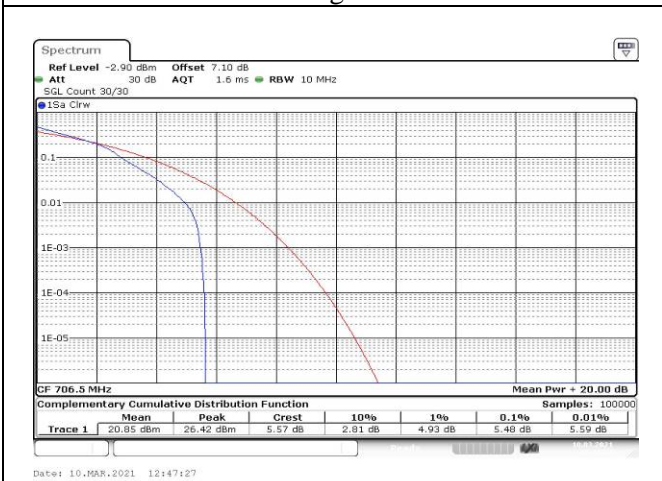


Fig.3

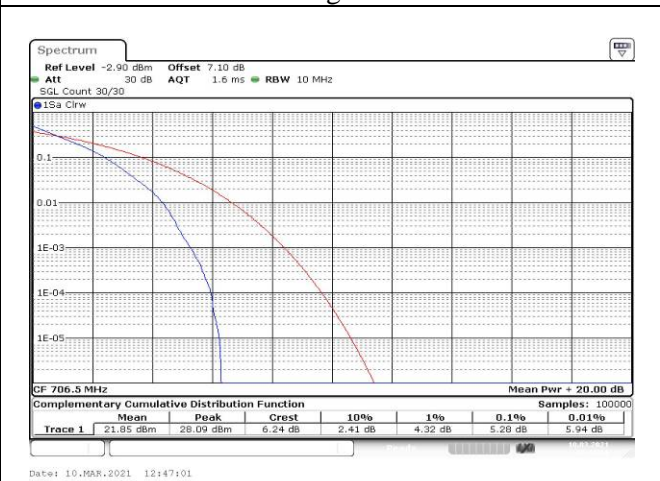


Fig.4

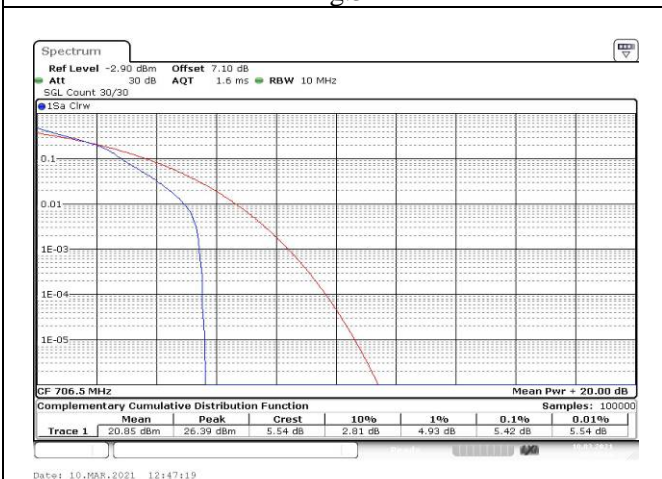


Fig.5

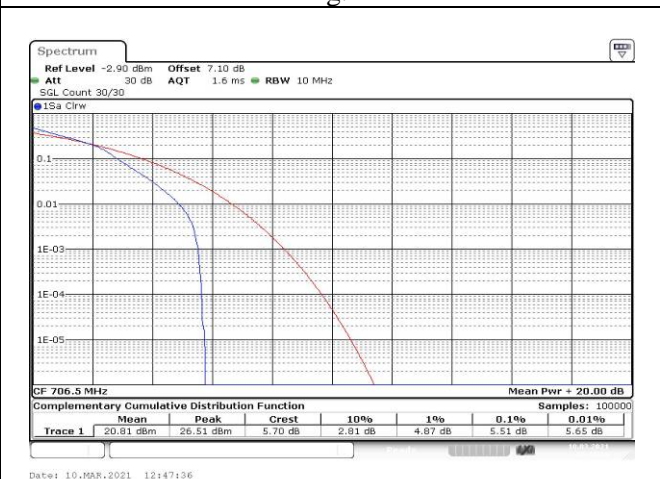


Fig.6





Fig.7

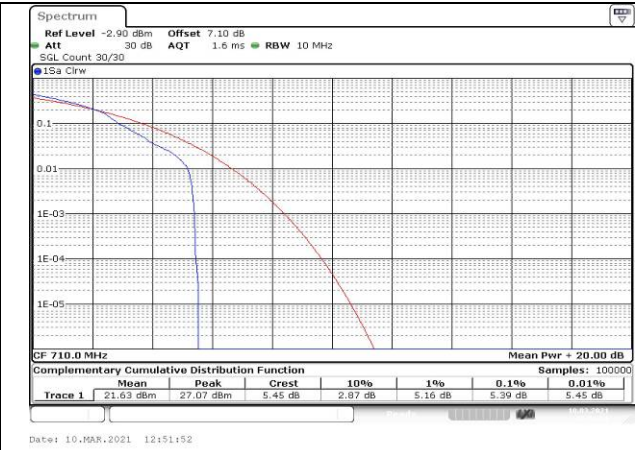


Fig.8

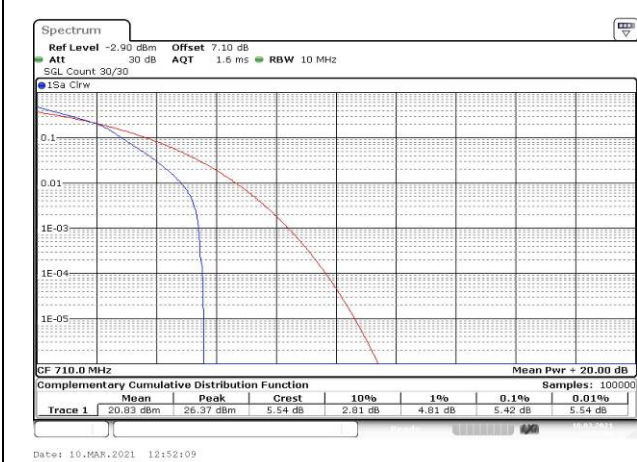


Fig.9

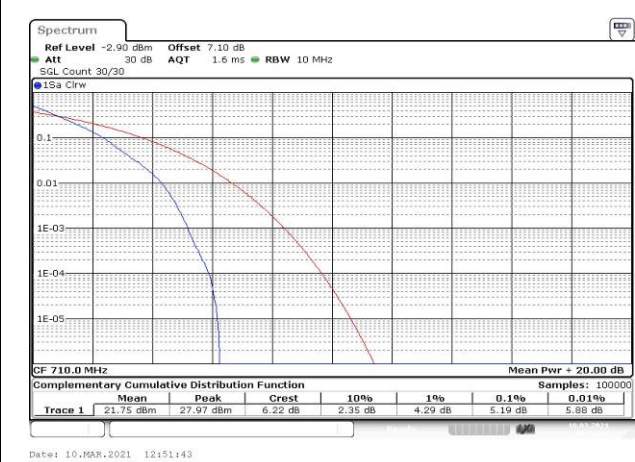


Fig.10

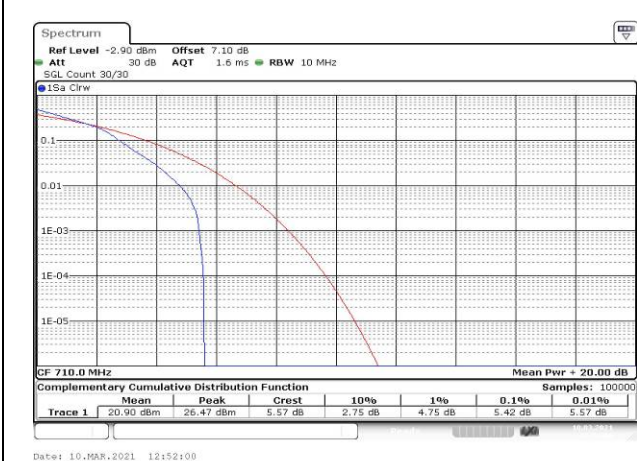


Fig.11

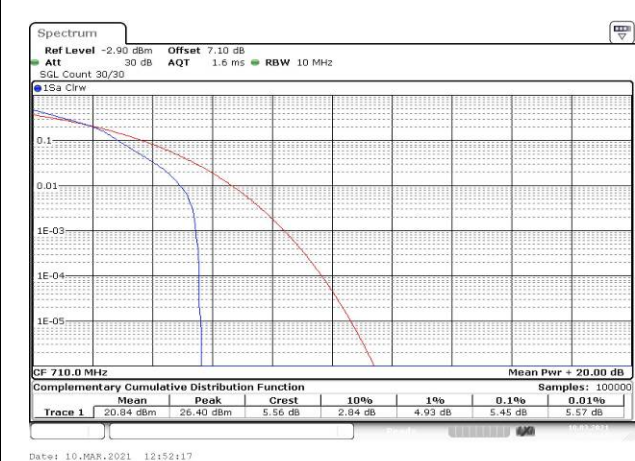


Fig.12

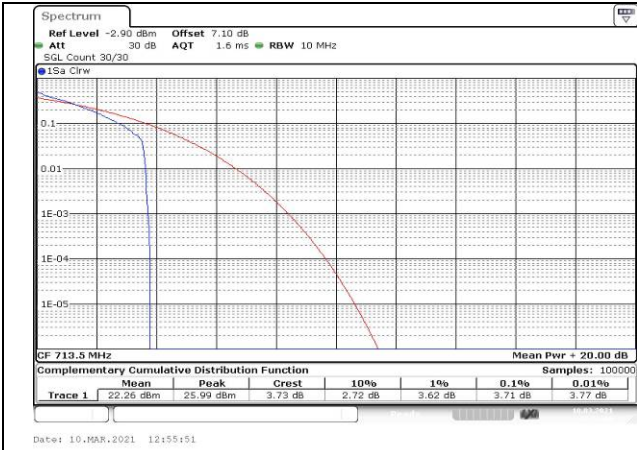


Fig.13

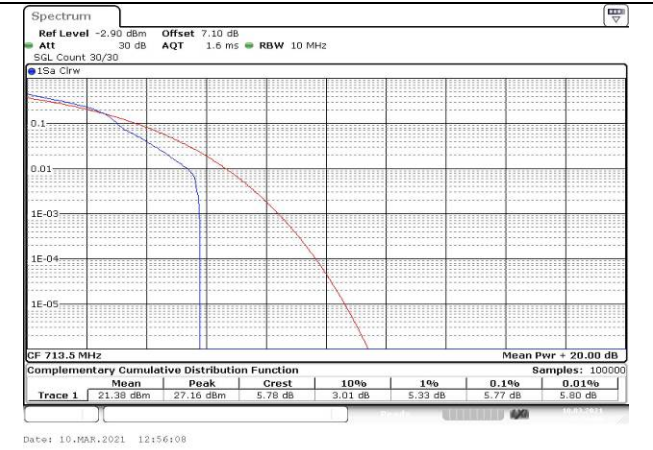


Fig.14

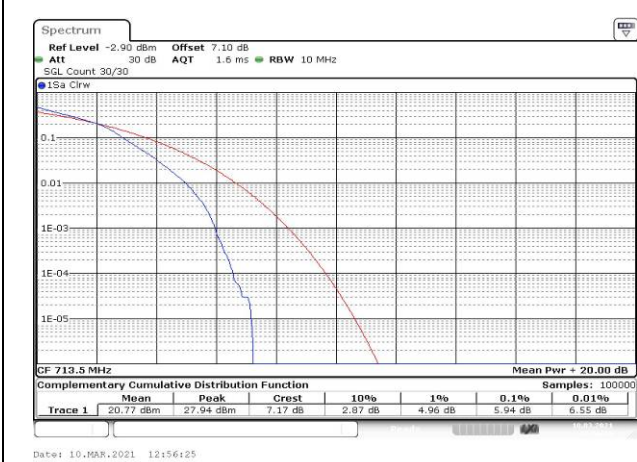


Fig.15

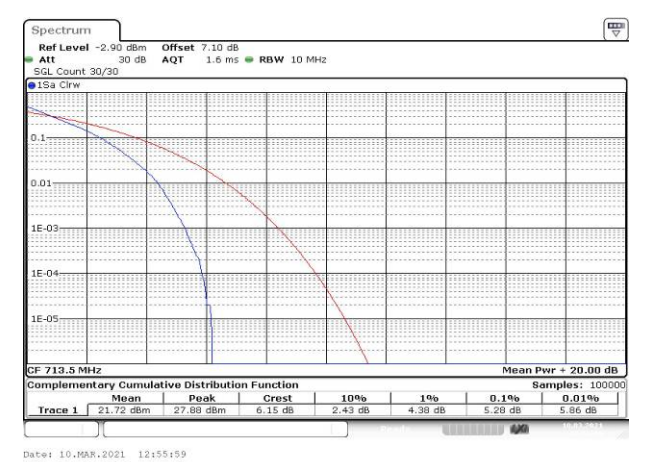


Fig.16

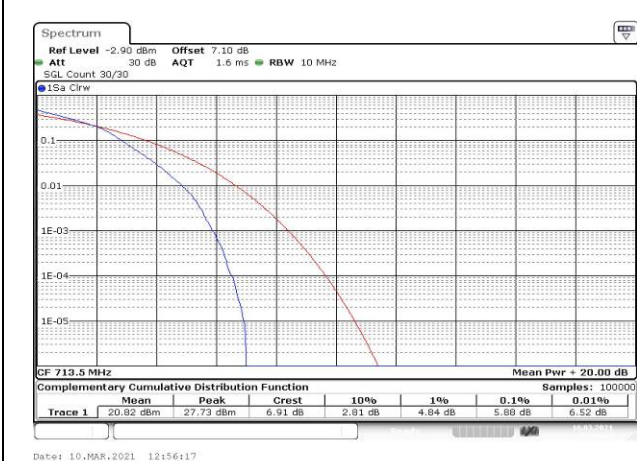


Fig.17

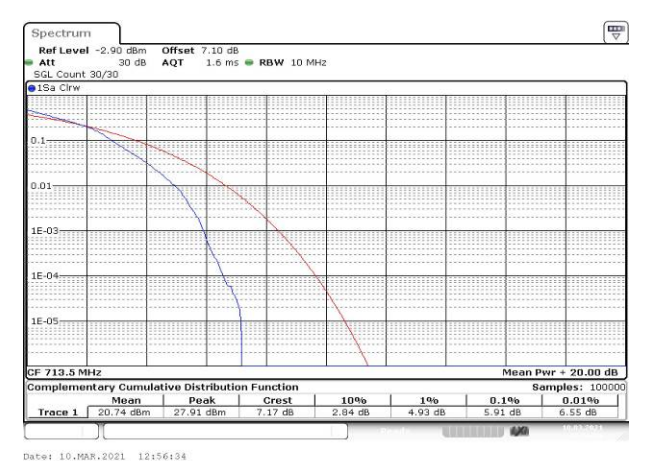


Fig.18



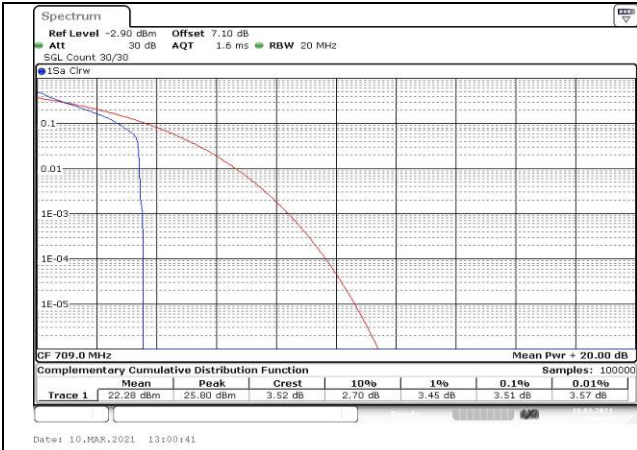


Fig.19

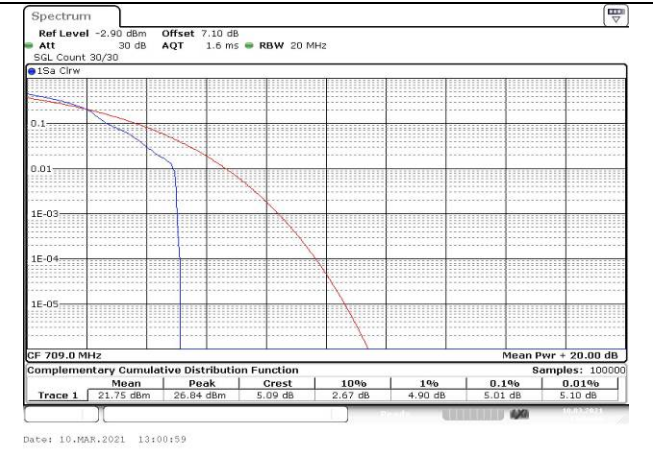


Fig.20

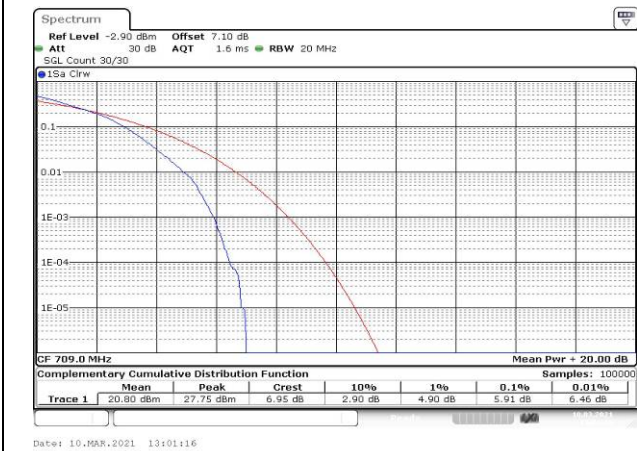


Fig.21

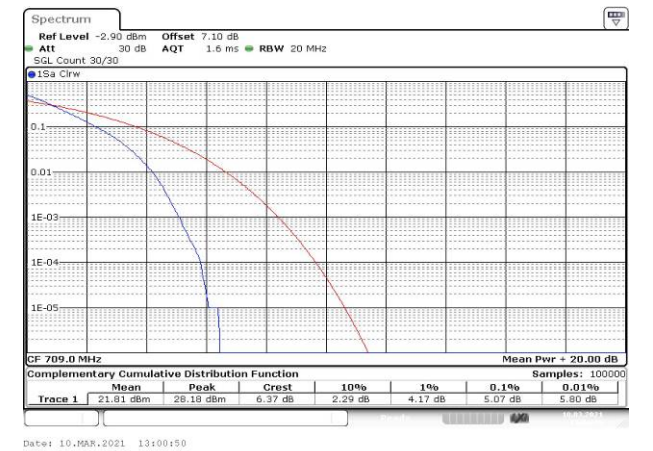


Fig.22

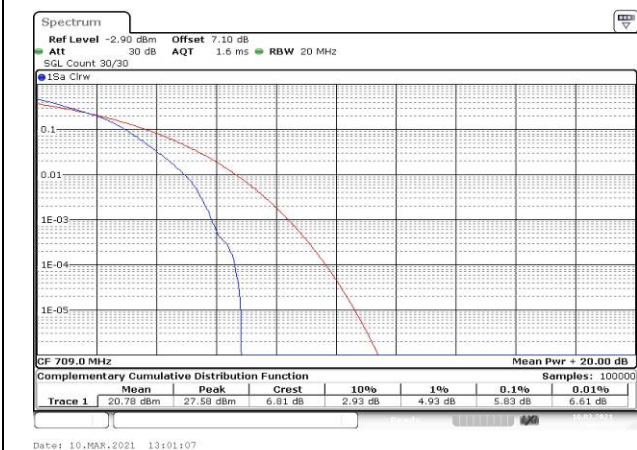


Fig.23

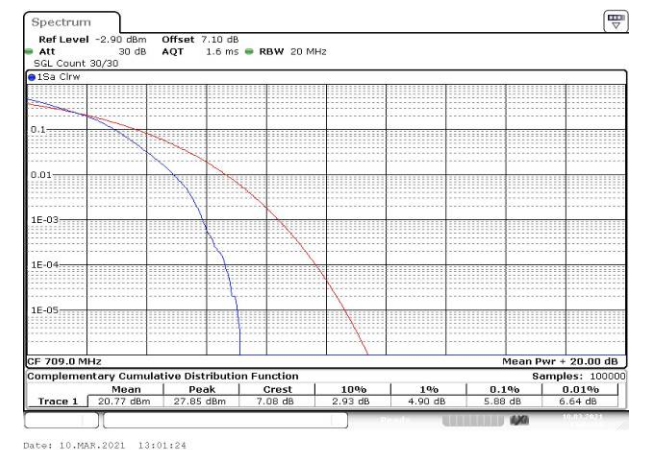


Fig.24



Fig.25

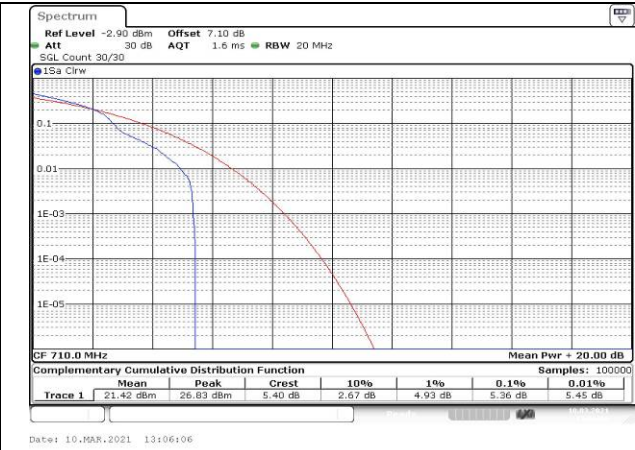


Fig.26

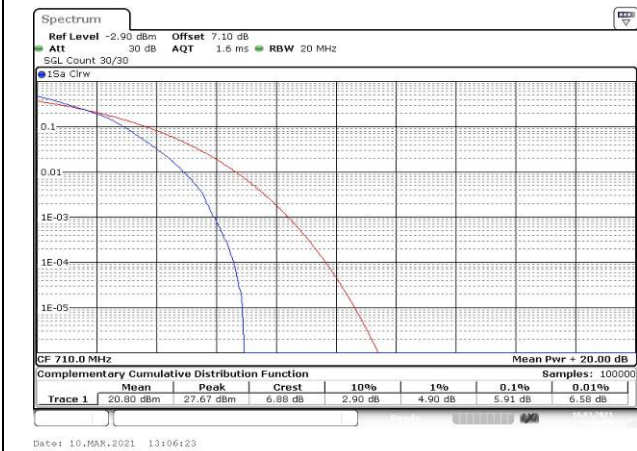


Fig.27

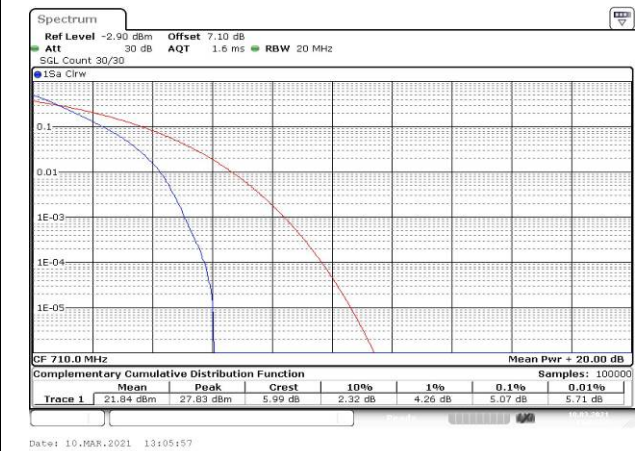


Fig.28

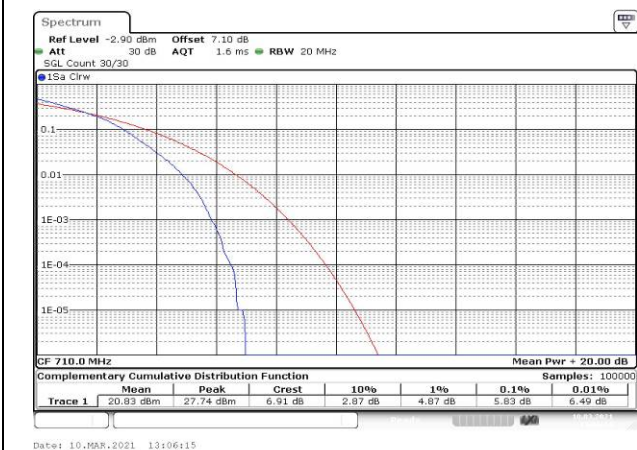


Fig.29

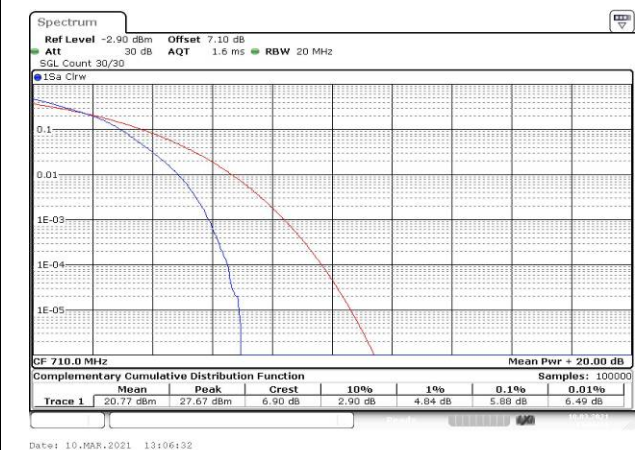


Fig.30



Fig.31

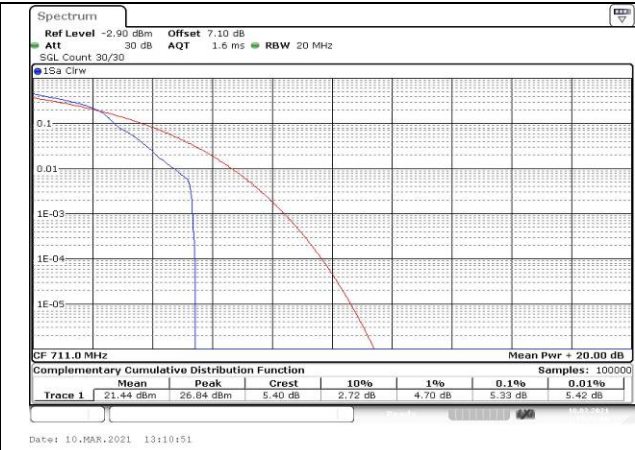


Fig.32

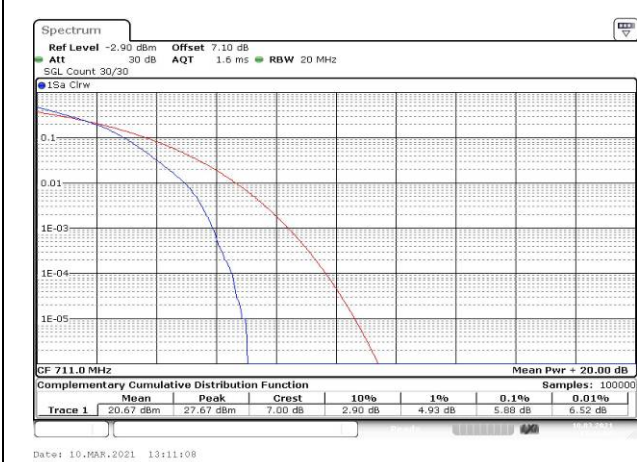


Fig.33

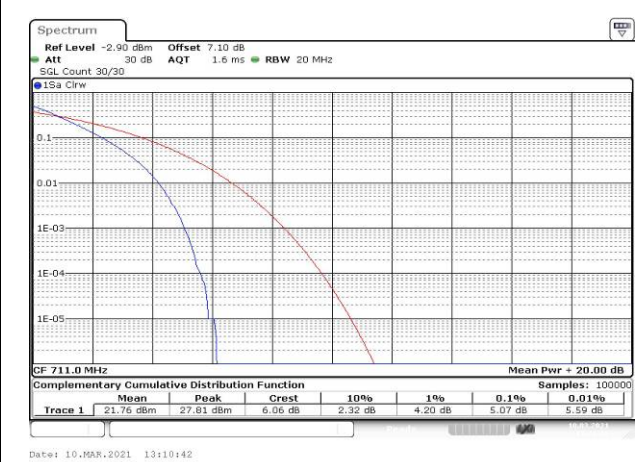


Fig.34

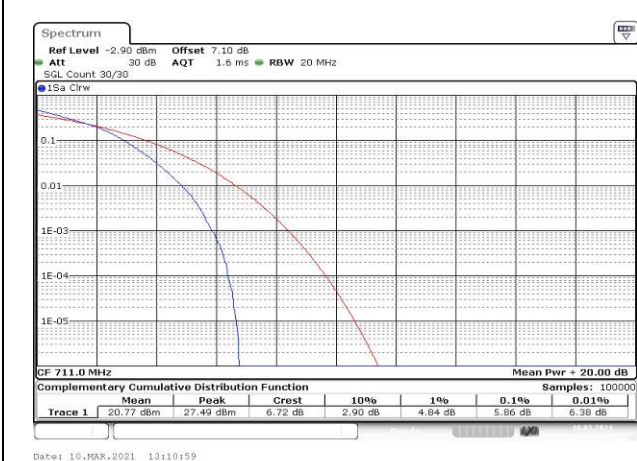


Fig.35

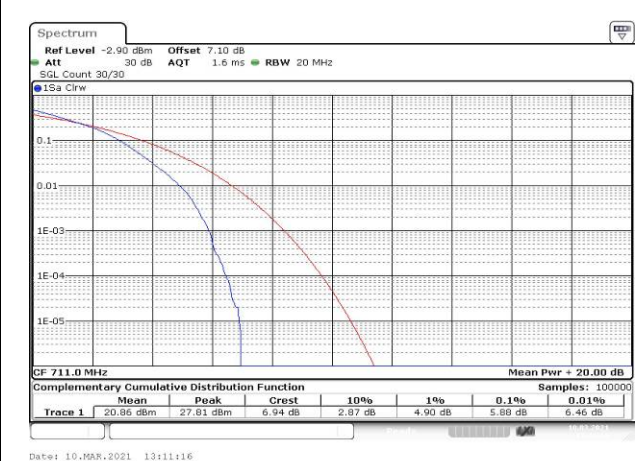


Fig.36

### 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

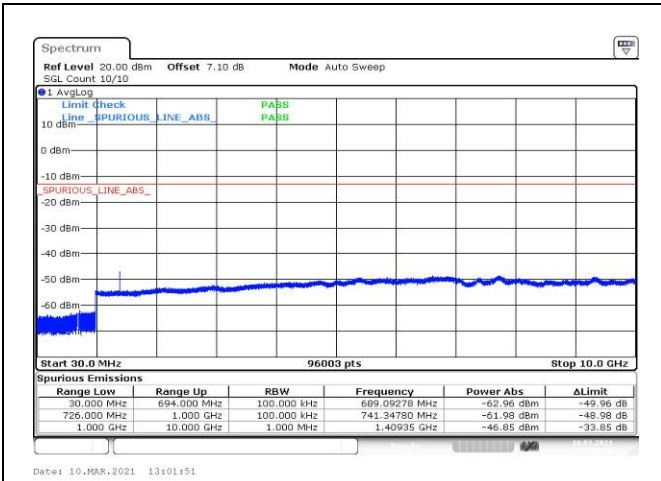


Fig.1

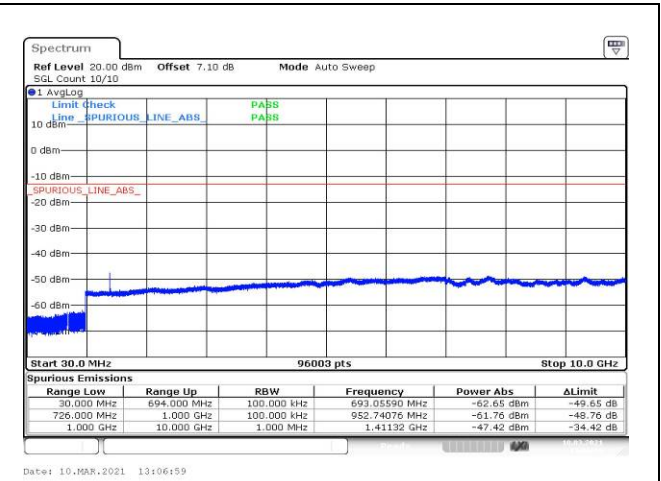


Fig.2

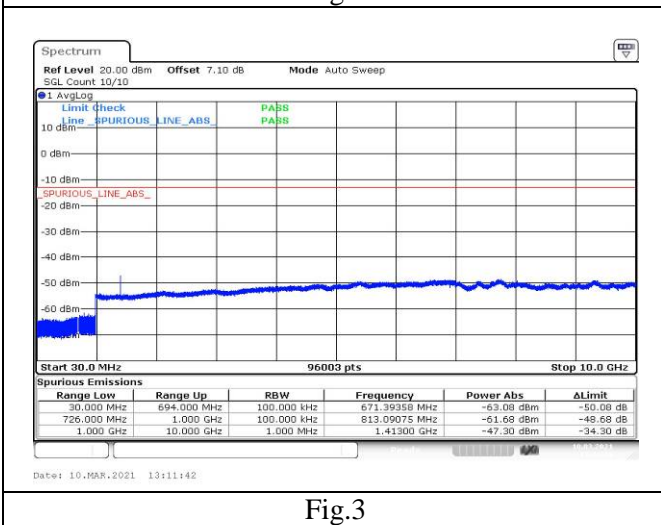


Fig.3

**6 Band Edges Compliance**

Band	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
	1	24		Fig.3		
	25	0		Fig.4		
	713.5	23825	10	1	0	Fig.5
				50	0	Fig.6
	1	49		Fig.7		
	50	0		Fig.8		
709	23780					
711	23800					



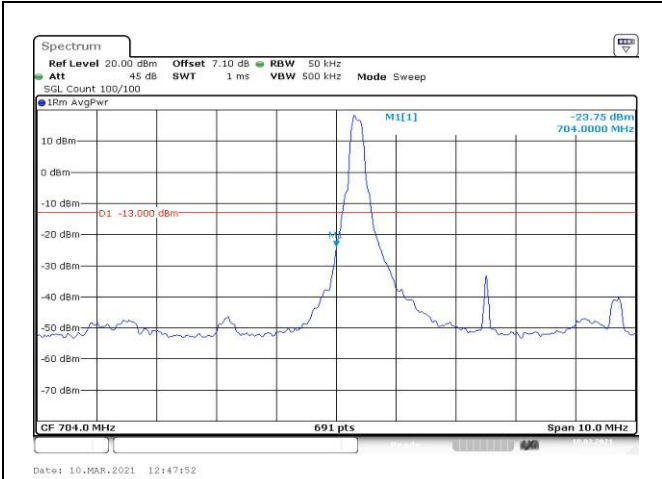


Fig.1

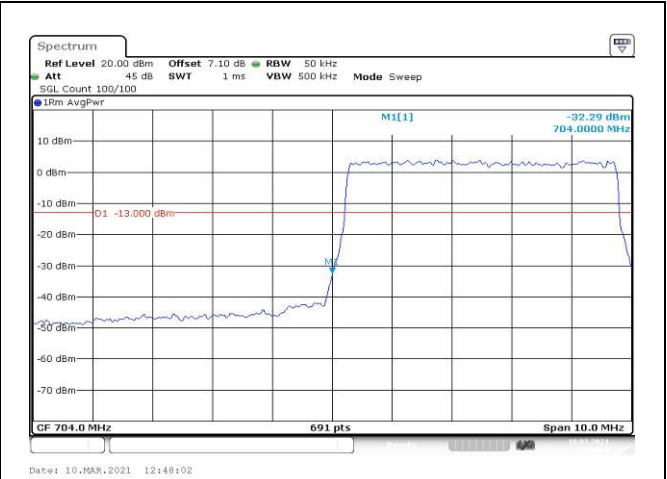


Fig.2

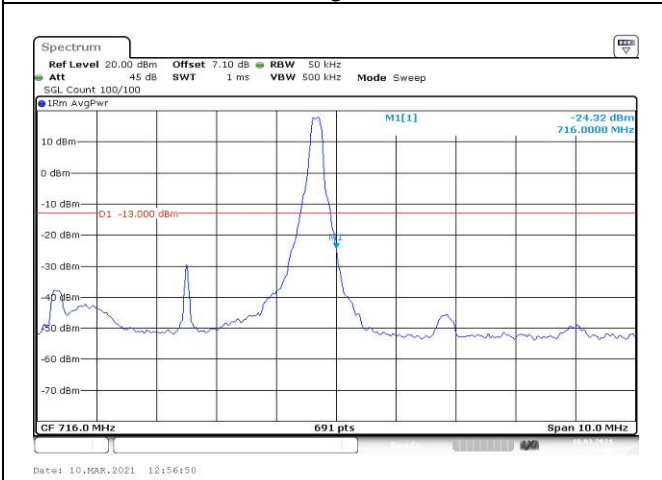


Fig.3

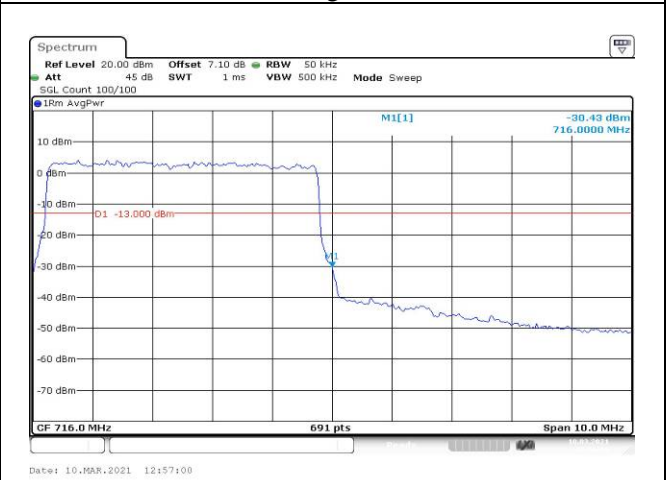


Fig.4

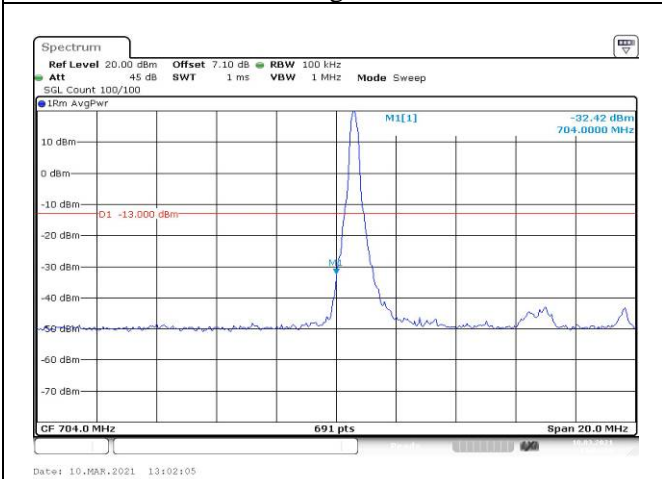


Fig.5

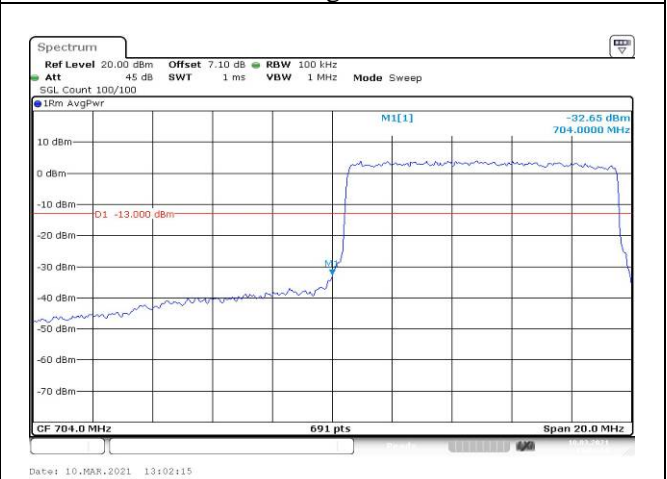


Fig.6

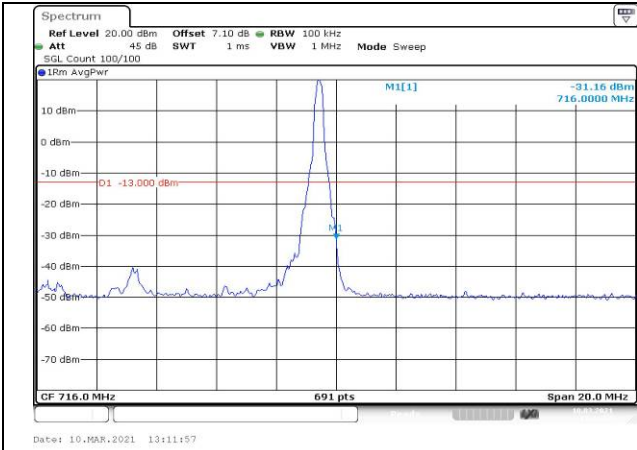


Fig.7

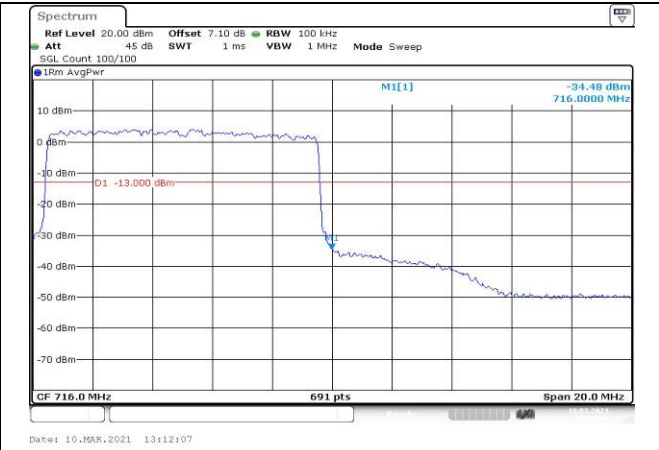


Fig.8

## 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

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 frequency (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		
16QAM	709	23780	50	0	22.11	20.16	0.104	
			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			
	710	23790	50	0	21.27	19.32	0.086	
			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			
	711	23800	50	0	21.23	19.28	0.085	
			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 frequency (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
	710	23790		50	0	21.29	19.34	0.086
				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
	711	23800		25	25	21.21	19.26	0.084
				50	0	21.16	19.21	0.083
				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