

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 17

1 RF Power Output

RR Power Output							
Modulation	Carrier frequency(MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power(dBm)	
QPSK	706.5	23755	5	1	0	23.19	
				1	12	23.00	
				1	24	22.99	
				12	0	22.21	
				12	7	22.13	
				12	13	22.13	
				25	0	22.17	
	710	23790		1	0	23.15	
				1	12	23.05	
				1	24	22.98	
				12	0	22.20	
				12	7	22.09	
				12	13	22.09	
				25	0	22.12	
	713.5	23825		1	0	23.10	
				1	12	22.98	
				1	24	22.98	
				12	0	22.18	
				12	7	22.08	
				12	13	22.07	
				25	0	22.08	
	16QAM	706.5		23755	1	0	22.17
					1	12	22.14
					1	24	22.14
12					0	21.20	
12					7	21.12	
12					13	21.13	
25					0	21.23	
710		23790	1	0	22.22		
			1	12	22.03		
			1	24	22.08		
			12	0	21.13		
			12	7	21.09		
			12	13	21.08		
			25	0	21.20		
713.5		23825	1	0	22.14		
			1	12	22.03		
			1	24	22.03		
			12	0	21.19		
			12	7	21.07		
			12	13	21.08		
			25	0	21.16		

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	706.5	23755	5	1	0	21.23
				1	12	21.21
				1	24	21.21
				12	0	21.21
				12	7	21.21
				12	13	21.21
				25	0	21.22
	710	23790		1	0	21.13
				1	12	21.20
				1	24	21.19
				12	0	21.12
				12	7	21.18
				12	13	21.18
				25	0	21.18
	713.5	23825		1	0	21.16
				1	12	21.15
				1	24	21.17
				12	0	21.17
				12	7	21.17
				12	13	21.16
				25	0	21.16

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	709	23780	10	1	0	23.25	
				1	25	23.00	
				1	49	23.10	
				25	0	22.16	
				25	12	22.05	
				25	25	22.14	
				50	0	22.18	
	710	23790		1	0	23.08	
				1	25	22.99	
				1	49	22.99	
				25	0	22.18	
				25	12	22.12	
				25	25	22.11	
				50	0	22.13	
	711	23800		1	0	23.14	
				1	25	22.91	
				1	49	23.00	
				25	0	22.18	
				25	12	22.15	
				25	25	22.17	
				50	0	22.11	
	16QAM	709		23780	1	0	22.81
					1	25	22.71
					1	49	22.61
25					0	21.15	
25					12	21.13	
25					25	21.19	
50					0	21.18	
710		23790		1	0	22.28	
				1	25	22.12	
				1	49	22.15	
				25	0	21.22	
				25	12	21.22	
				25	25	21.22	
				50	0	21.20	
711		23800		1	0	22.81	
				1	25	21.97	
				1	49	22.32	
				25	0	21.29	
				25	12	21.24	
				25	25	21.21	
				50	0	21.12	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	709	23780	10	1	0	21.18
				1	25	21.19
				1	49	21.19
				25	0	21.19
				25	12	21.17
				25	25	21.17
				50	0	21.08
	710	23790		1	0	21.16
				1	25	21.14
				1	49	21.21
				25	0	21.20
				25	12	21.16
				25	25	21.20
				50	0	21.16
	711	23800		1	0	21.15
				1	25	21.15
				1	49	21.08
				25	0	21.12
				25	12	21.11
				25	25	21.17
				50	0	21.11

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	4.472	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	8.944	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

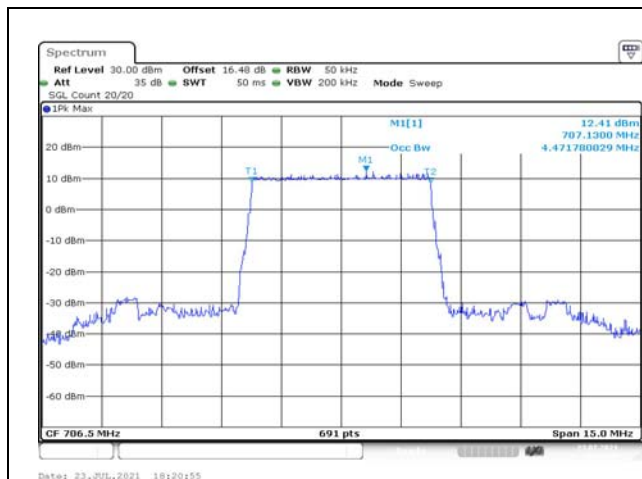


Fig.1

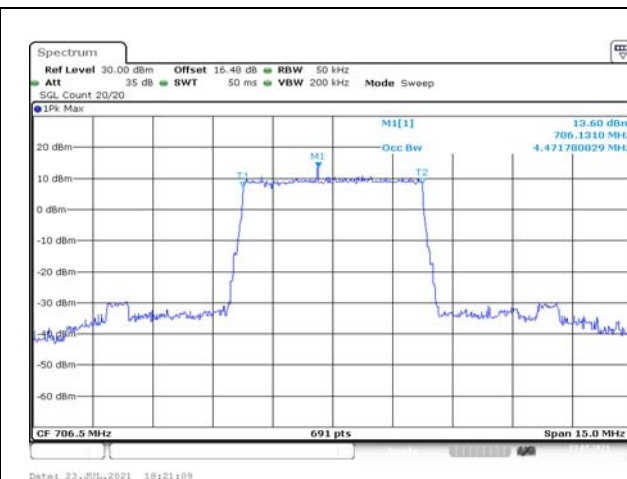


Fig.2

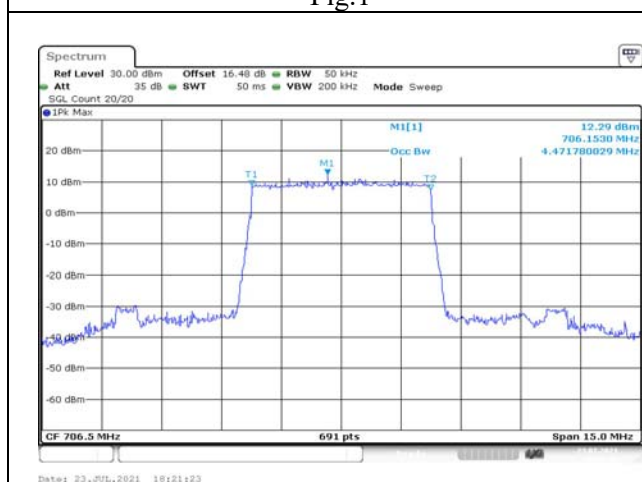


Fig.3

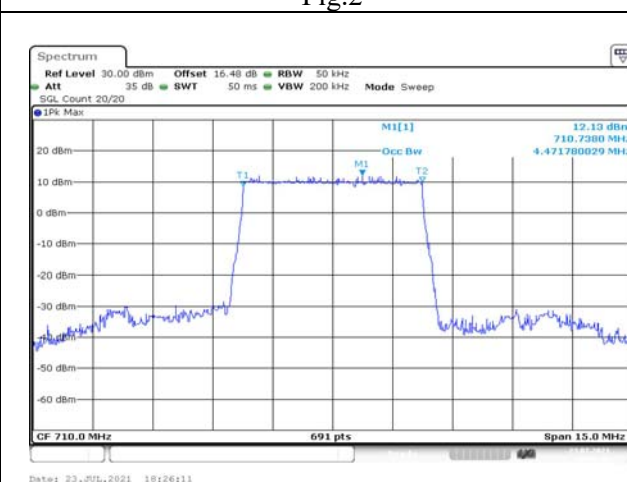


Fig.4

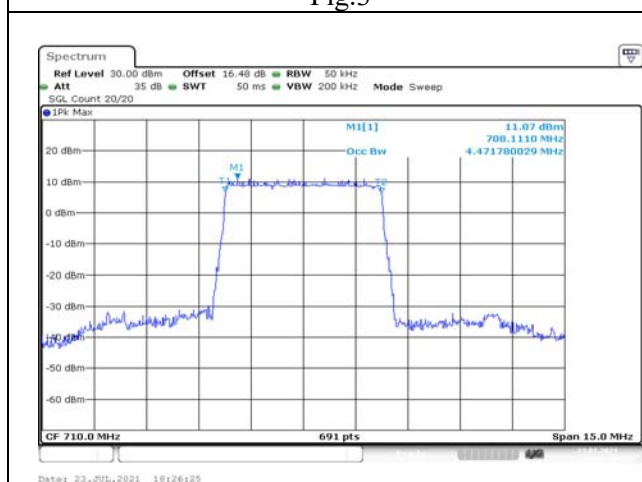


Fig.5

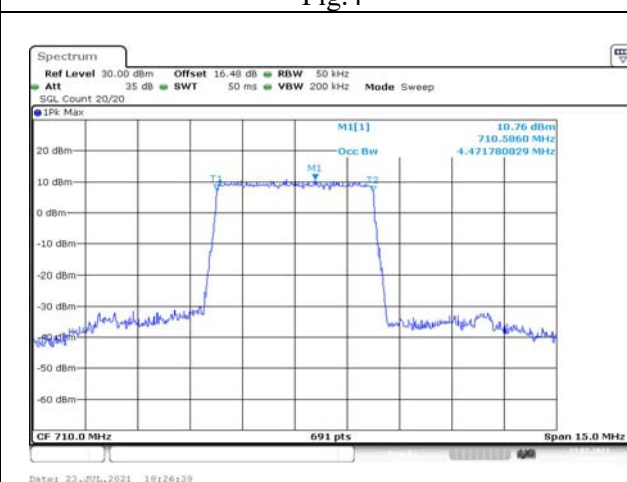


Fig.6

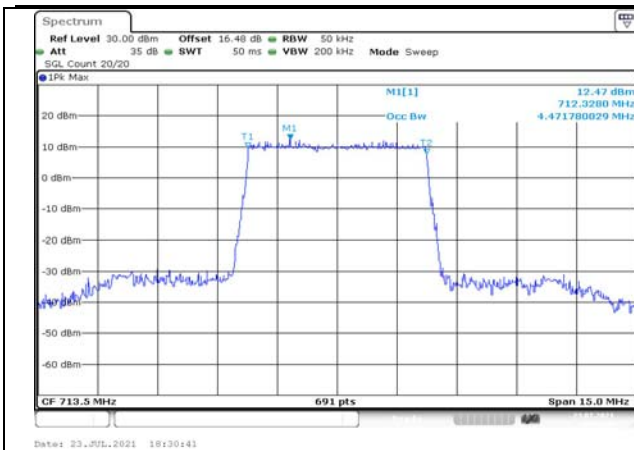


Fig.7

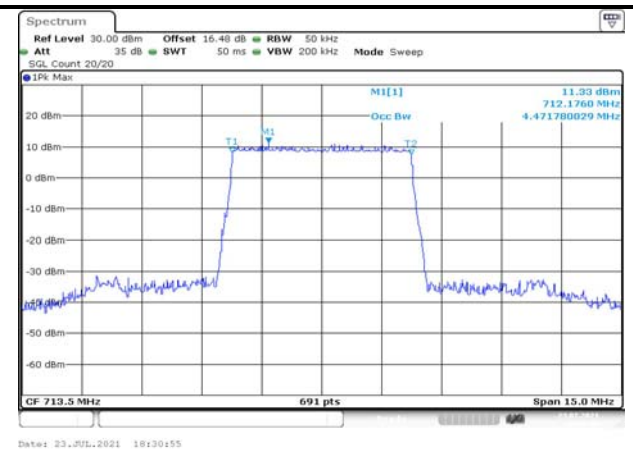


Fig.8

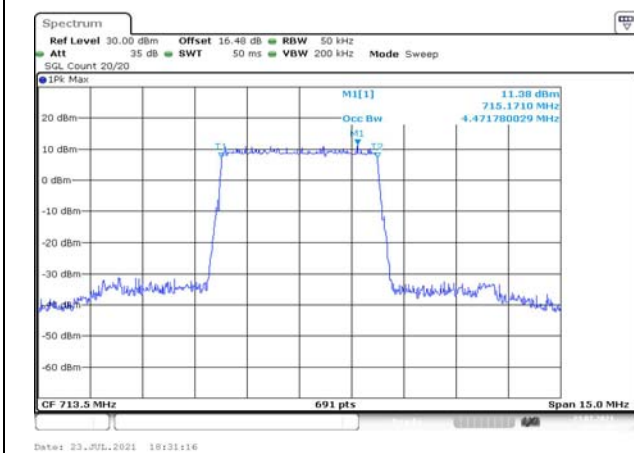


Fig.9

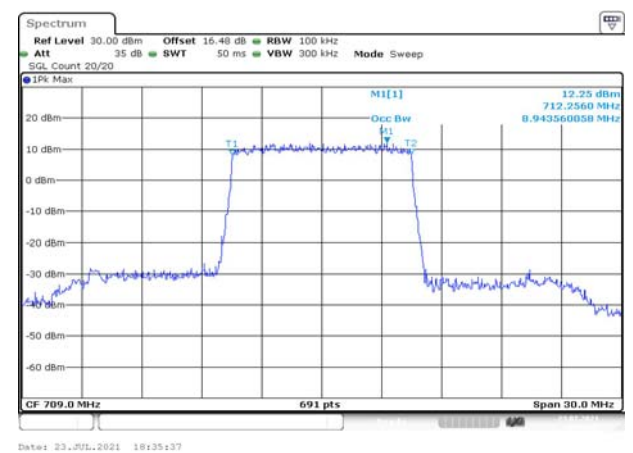


Fig.10

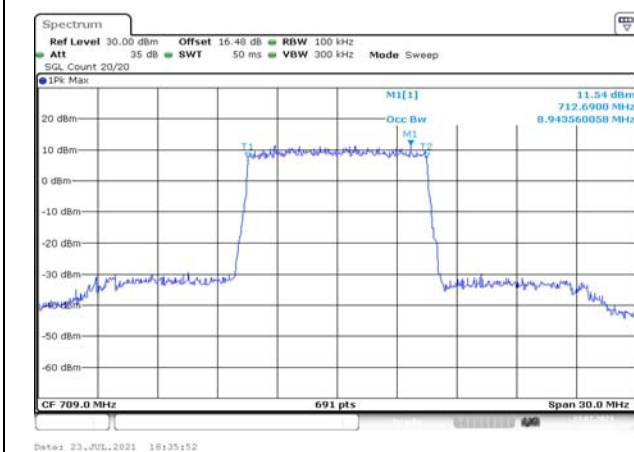


Fig.11

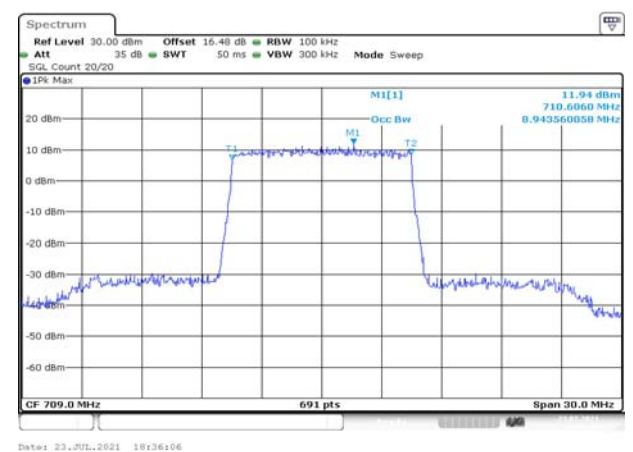
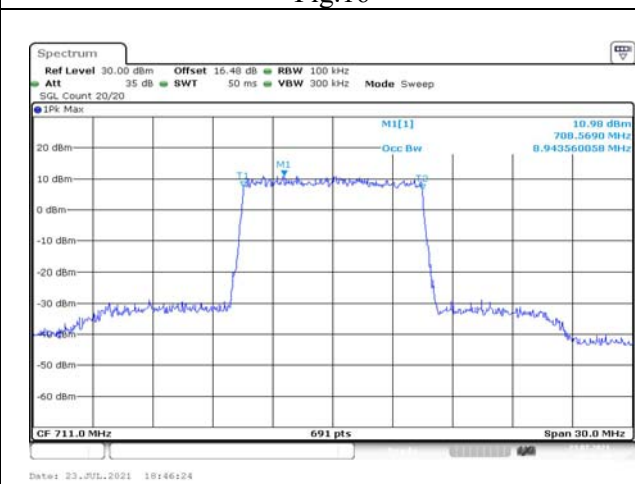
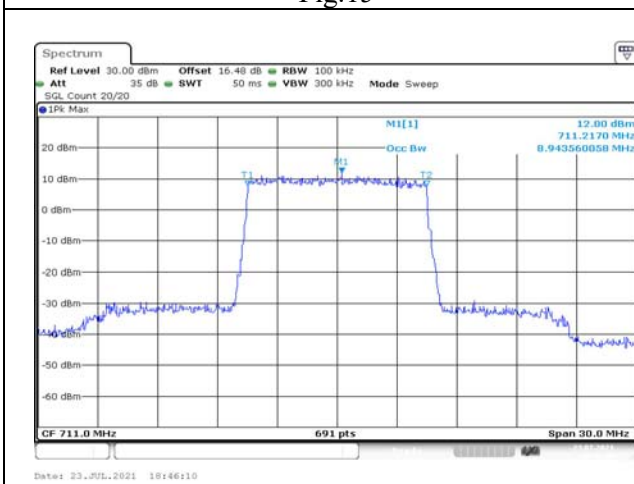
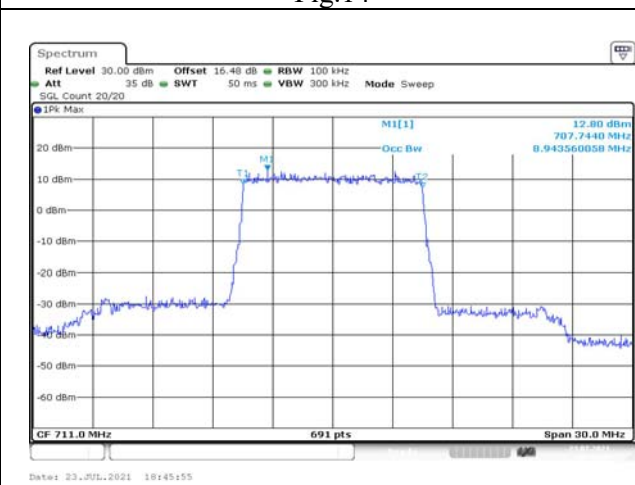
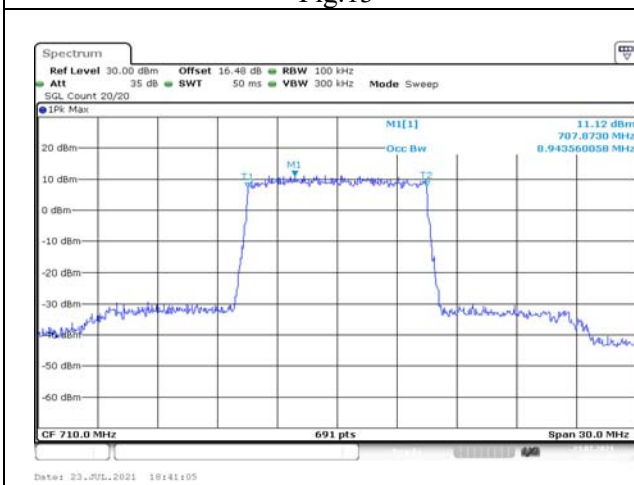
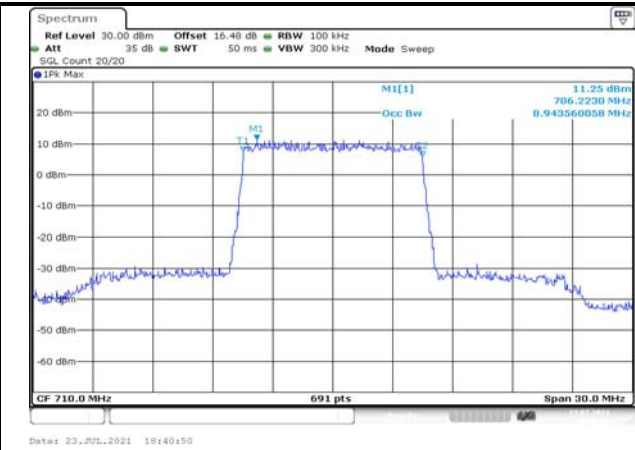
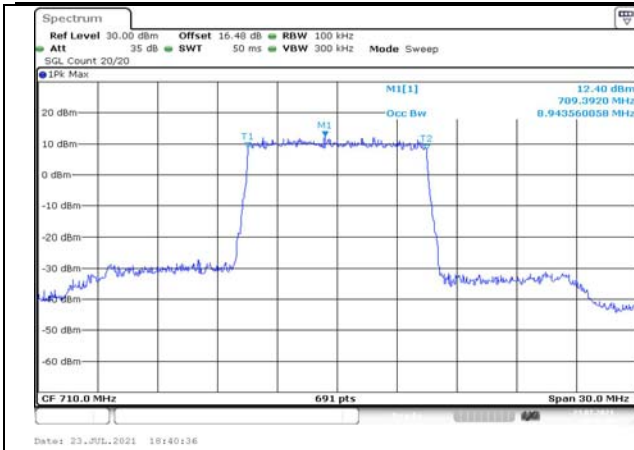


Fig.12



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	4.863	Fig.1	4.819	Fig.2	4.863	Fig.3
	710	23790		25	0	4.884	Fig.4	4.863	Fig.5	4.863	Fig.6
	713.5	23825		25	0	4.884	Fig.7	4.841	Fig.8	4.884	Fig.9
	709	23780	10	50	0	9.638	Fig.10	9.595	Fig.11	9.595	Fig.12
	710	23790		50	0	9.595	Fig.13	9.508	Fig.14	9.551	Fig.15
	711	23800		50	0	9.638	Fig.16	9.682	Fig.17	9.551	Fig.18

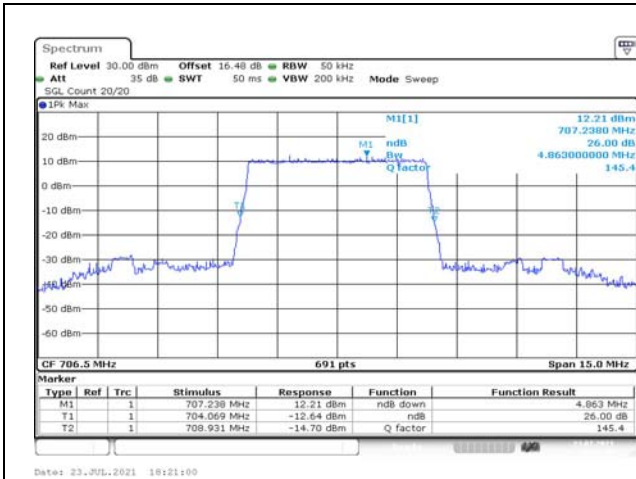


Fig.1

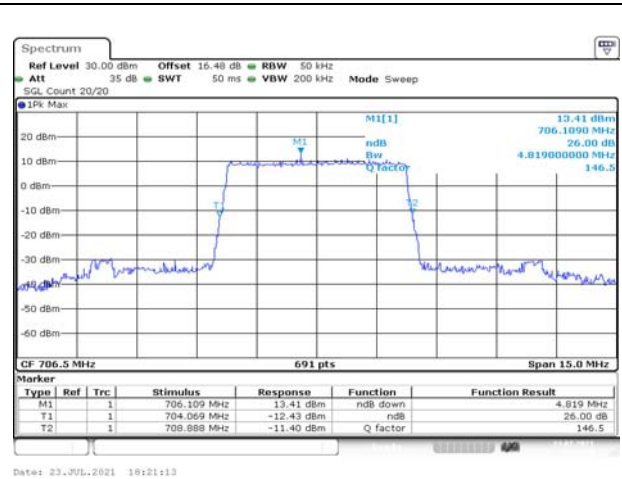


Fig.2



Fig.3

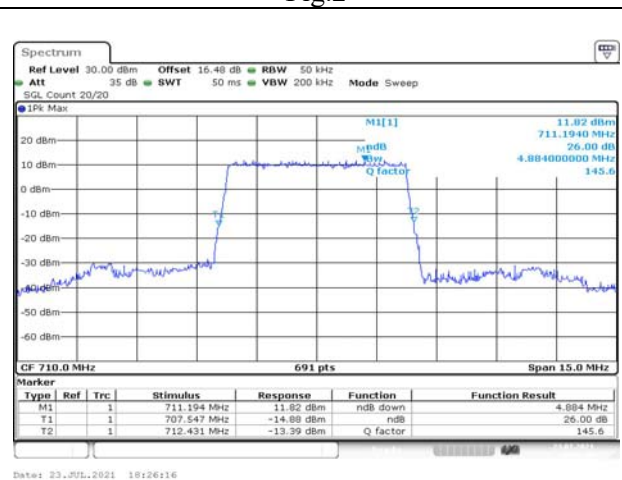


Fig.4

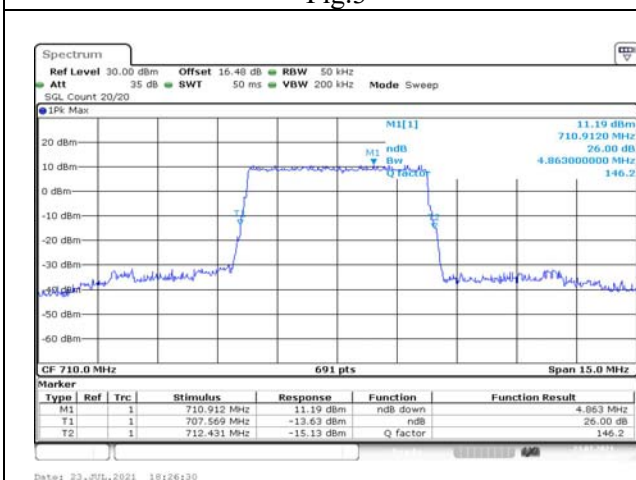


Fig.5



Fig.6



Fig.7

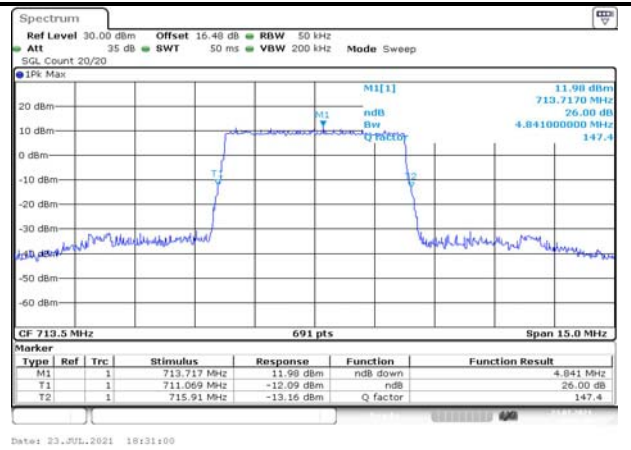


Fig.8

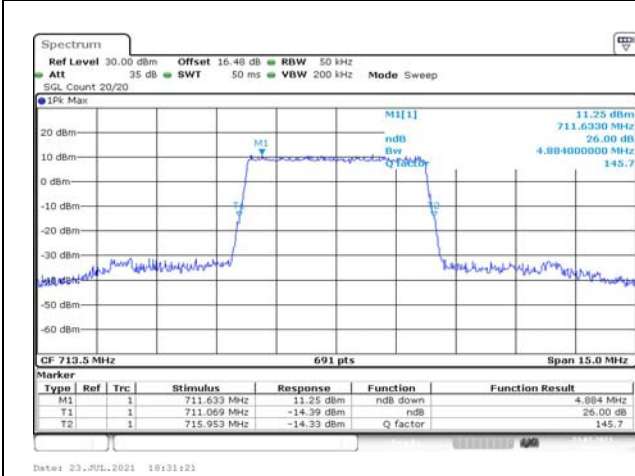


Fig.9

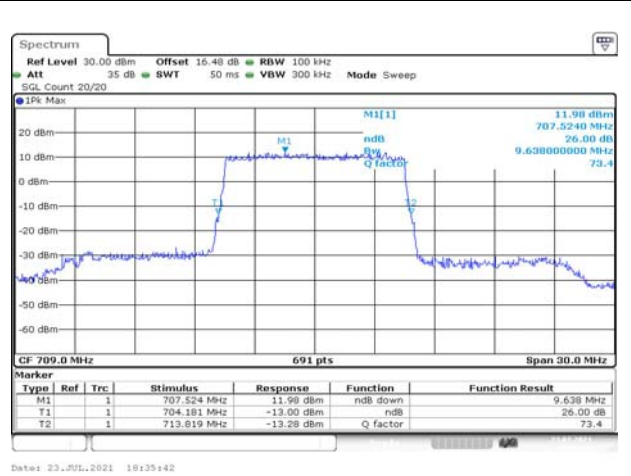


Fig.10

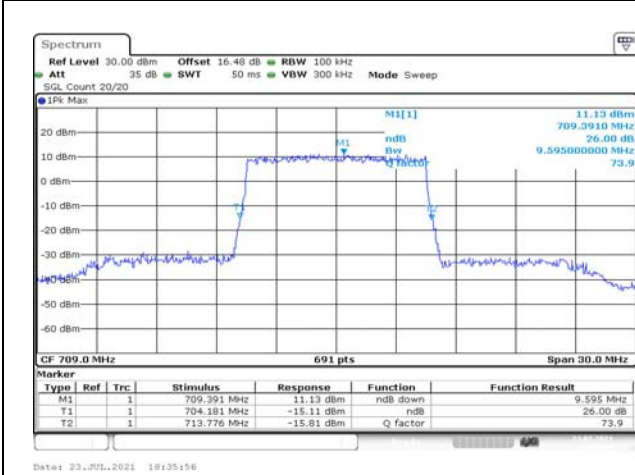


Fig.11

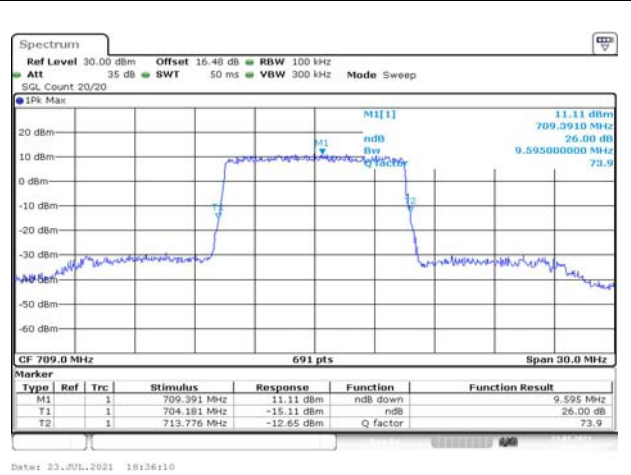


Fig.12

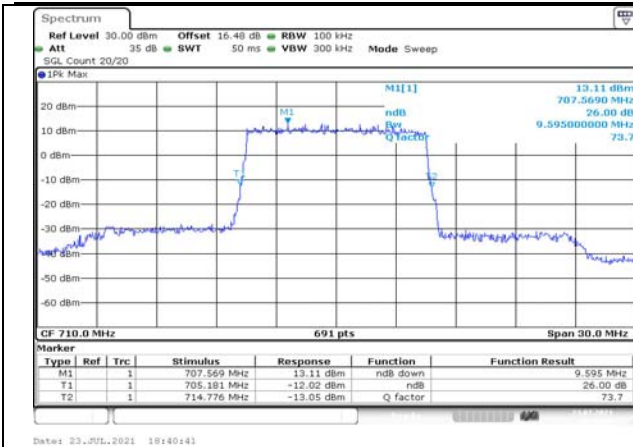


Fig.13

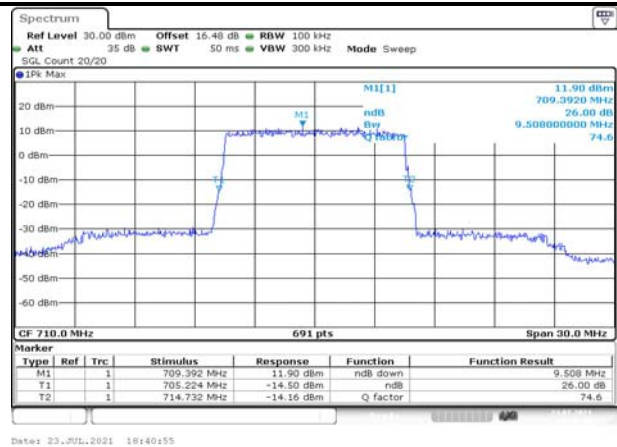


Fig.14

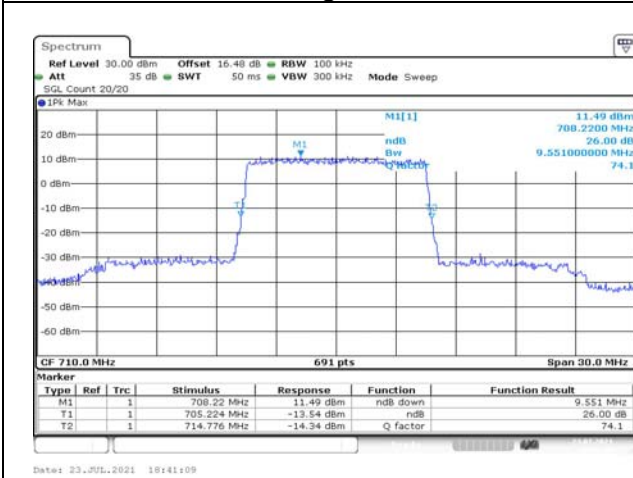


Fig.15

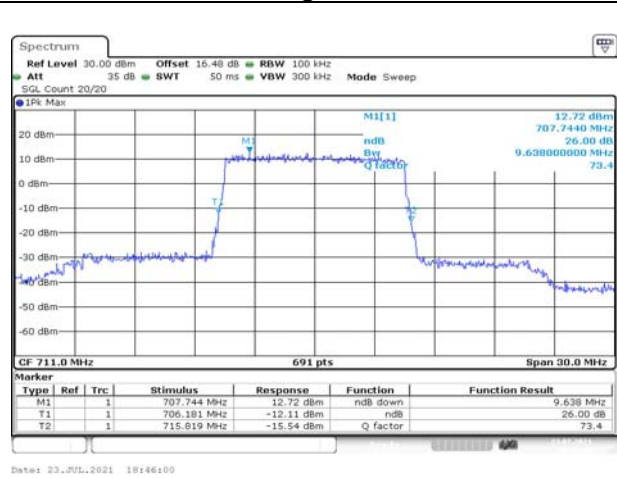


Fig.16

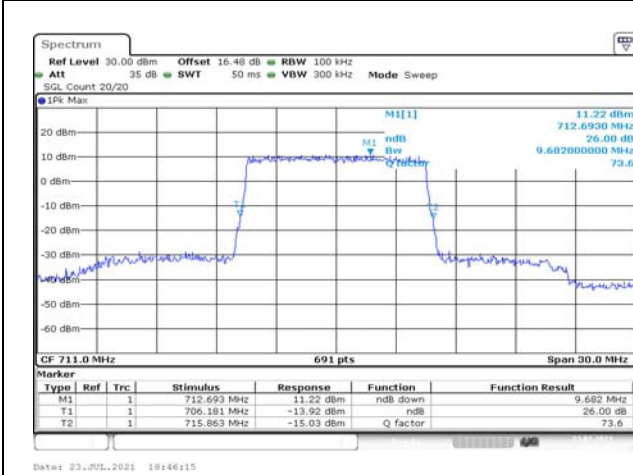


Fig.17

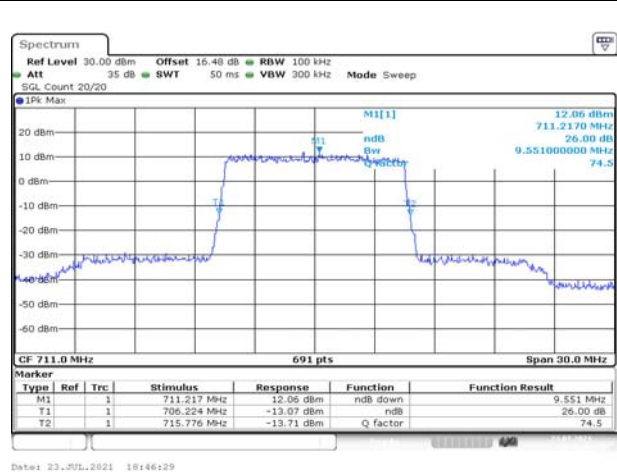


Fig.18

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

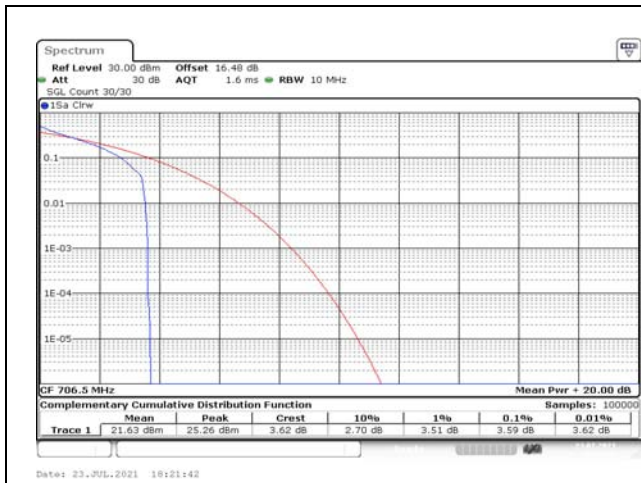


Fig.1

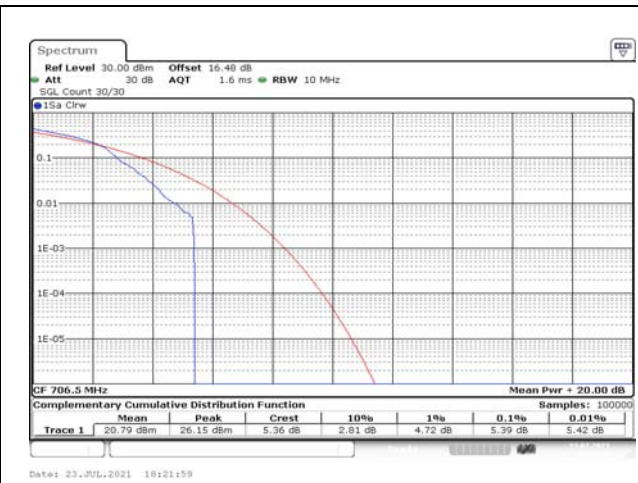


Fig.2

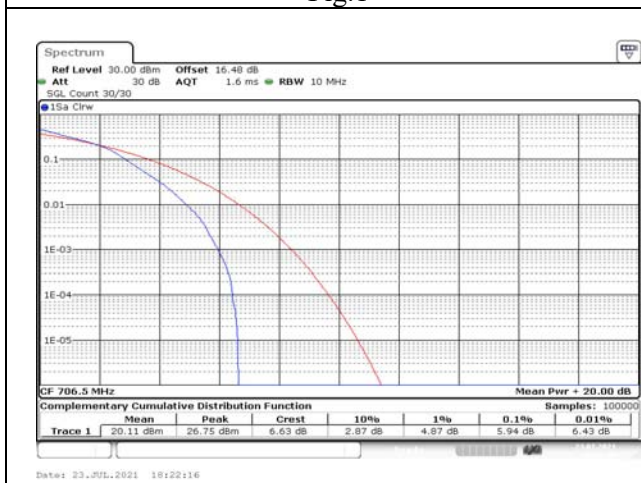


Fig.3

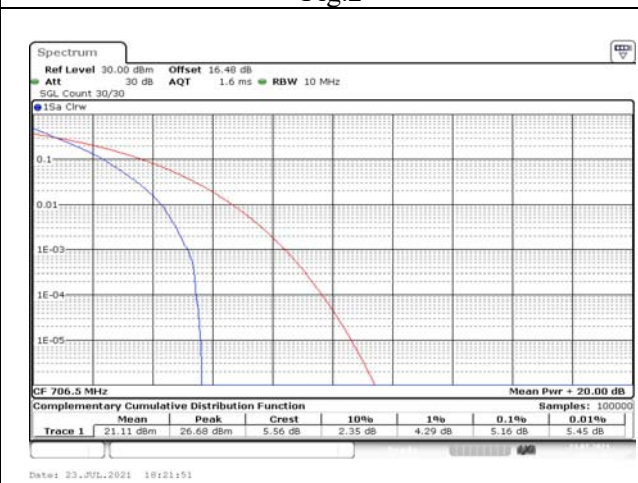


Fig.4

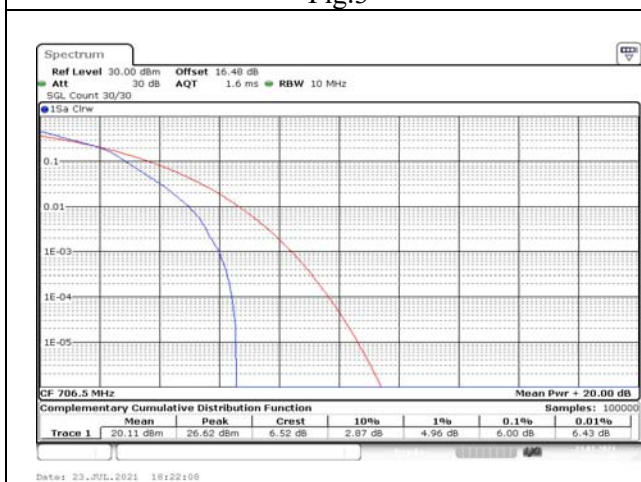


Fig.5

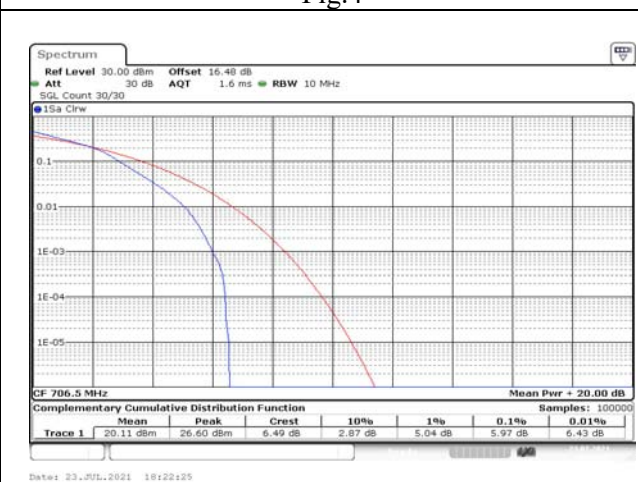


Fig.6

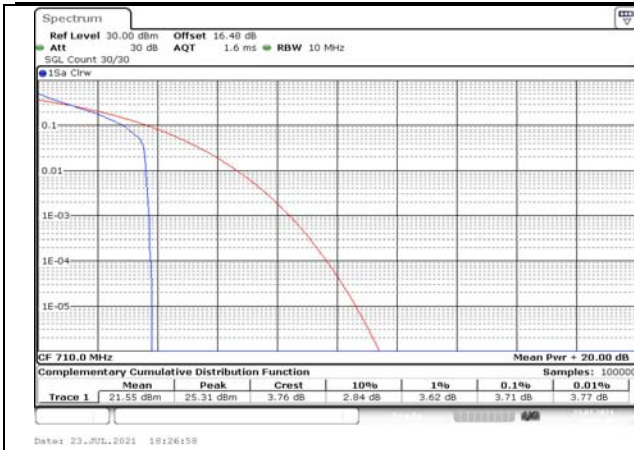


Fig.7

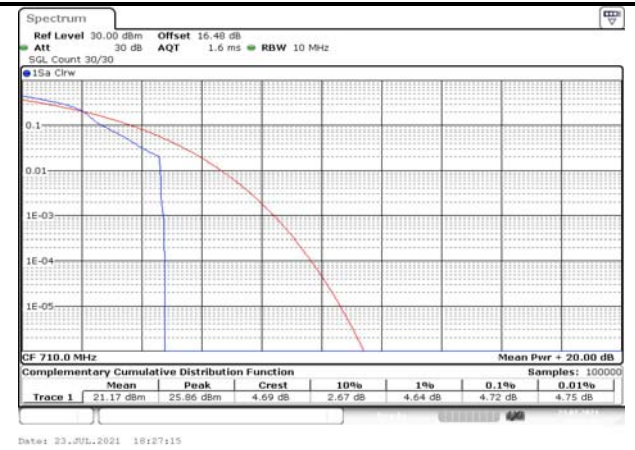


Fig.8

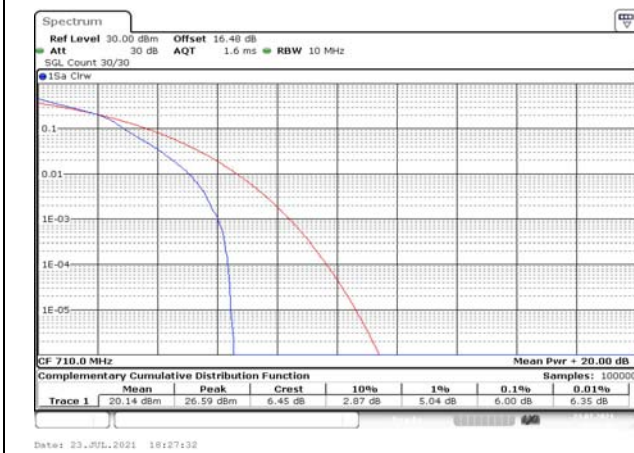


Fig.9

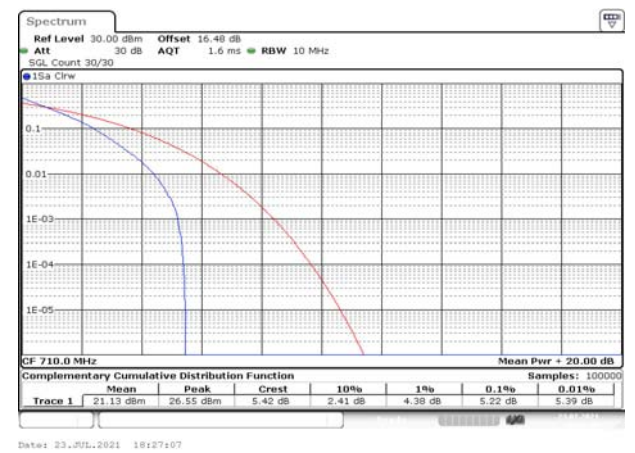


Fig.10

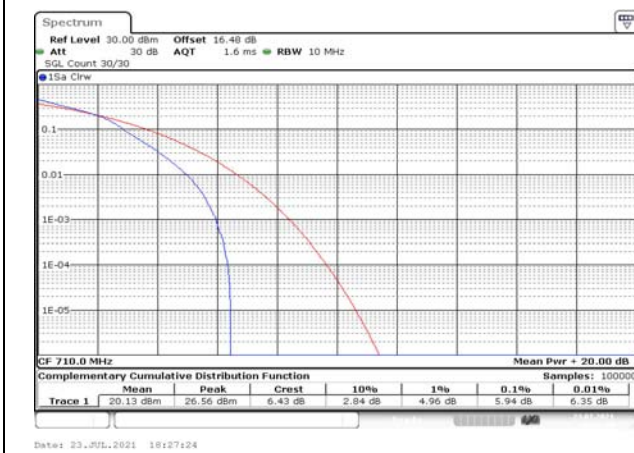


Fig.11

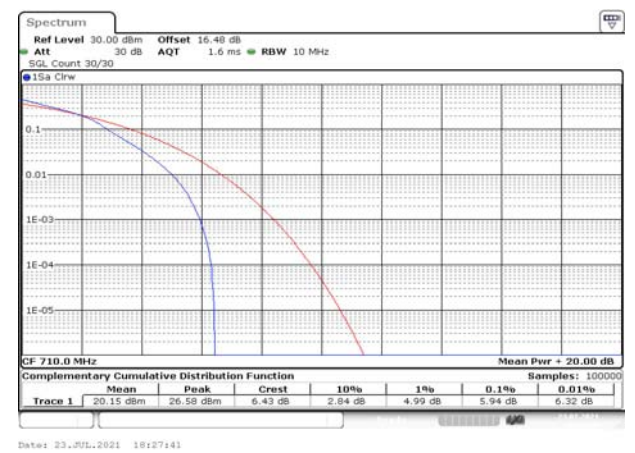


Fig.12

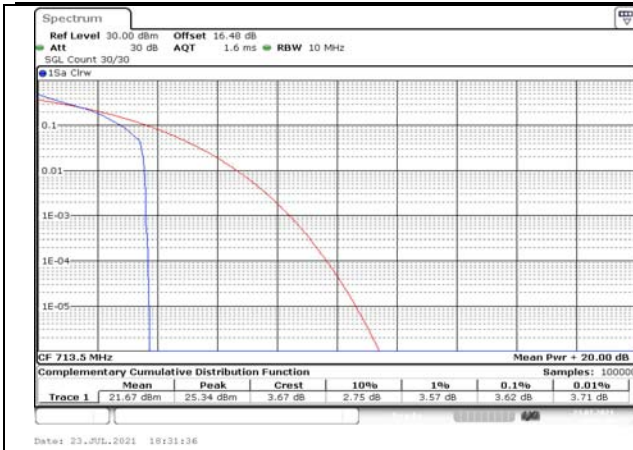


Fig.13

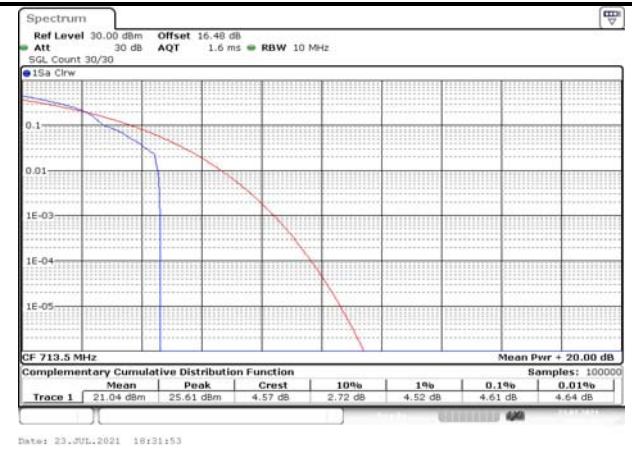


Fig.14

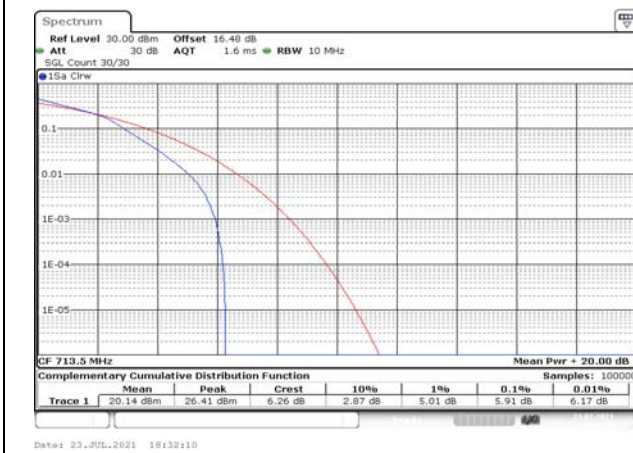


Fig.15

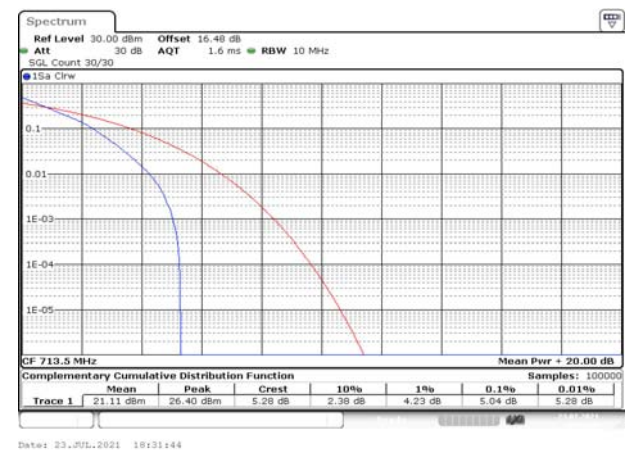


Fig.16

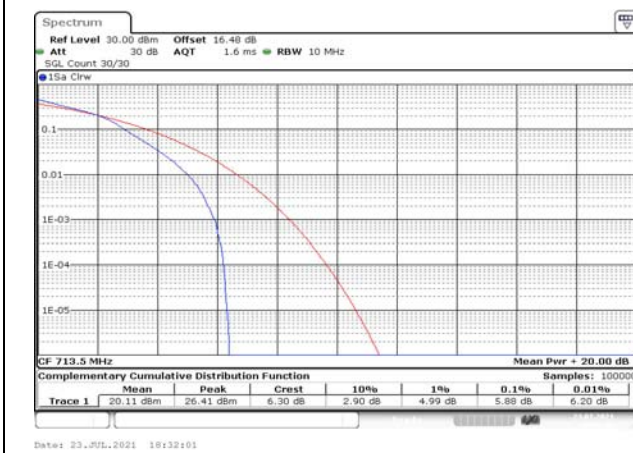


Fig.17

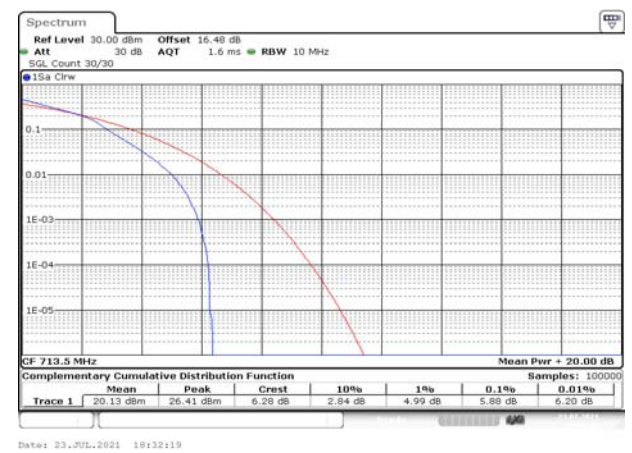


Fig.18

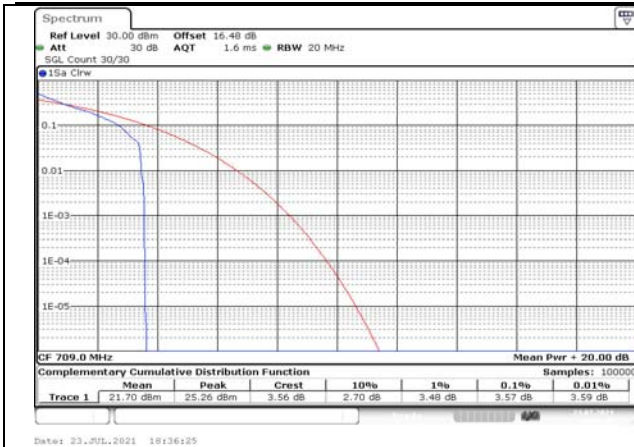


Fig.19

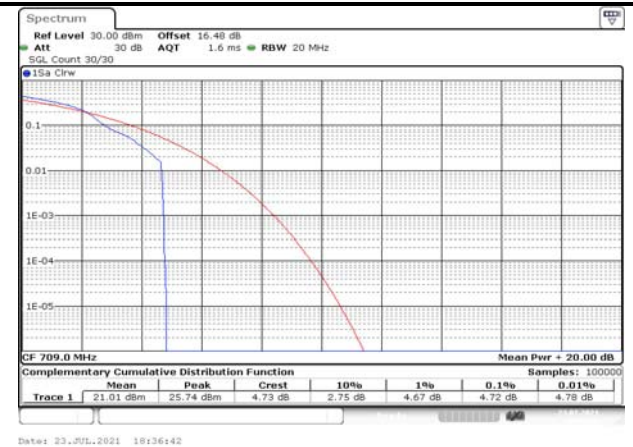


Fig.20

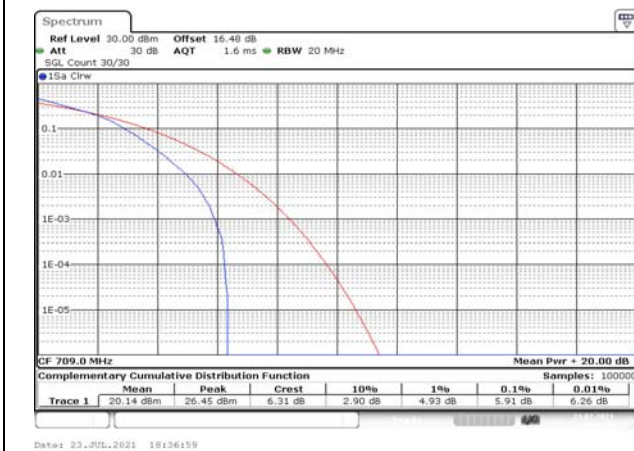


Fig.21

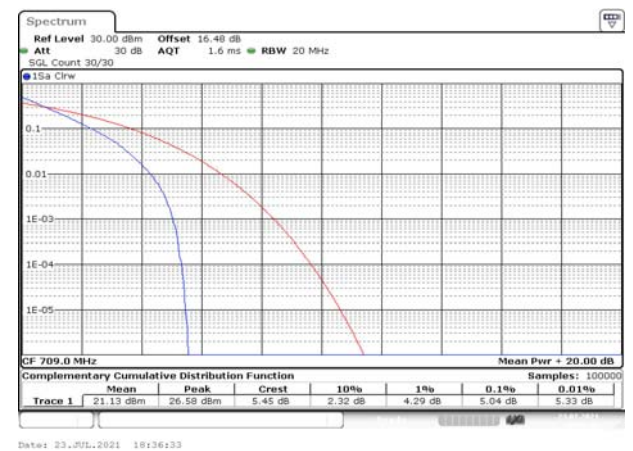


Fig.22

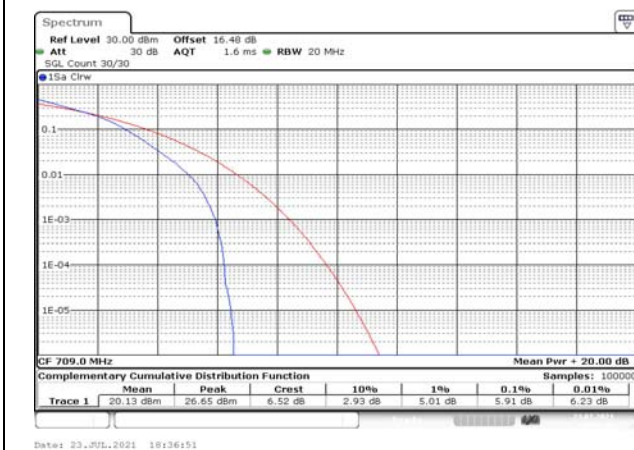


Fig.23

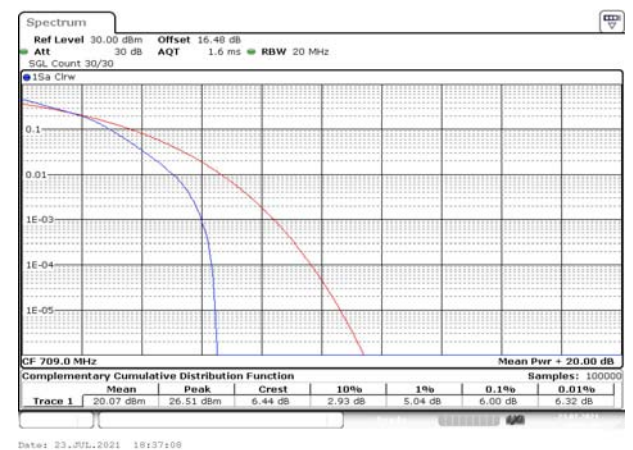


Fig.24

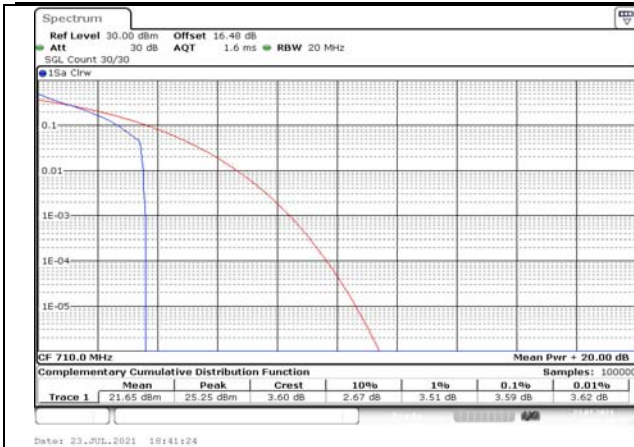


Fig.25

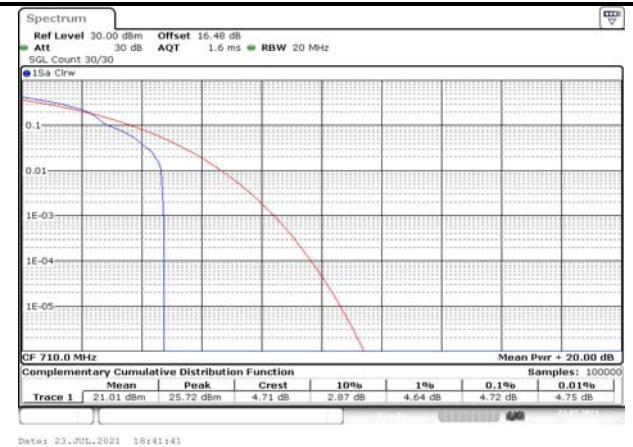


Fig.26

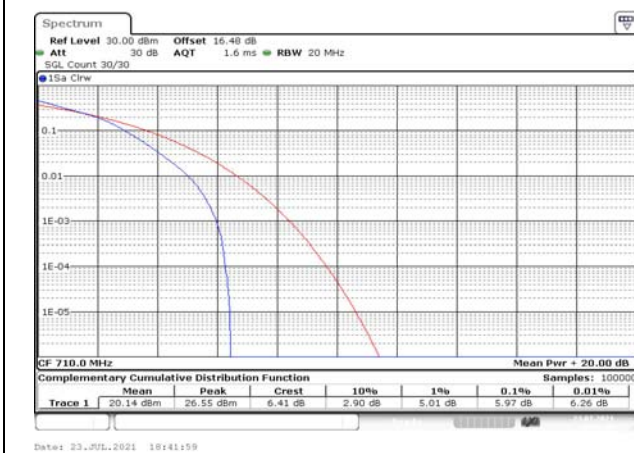


Fig.27

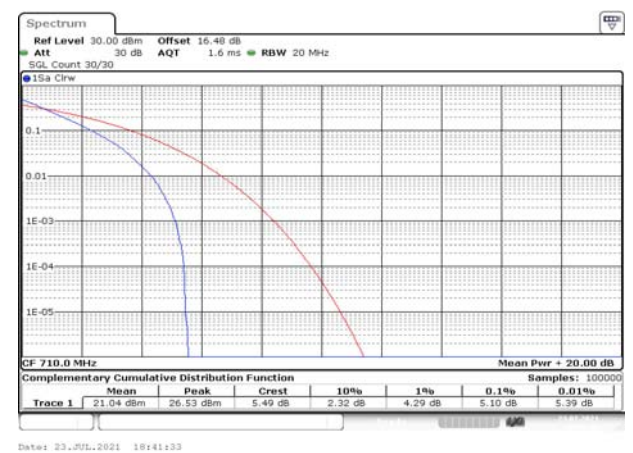


Fig.28

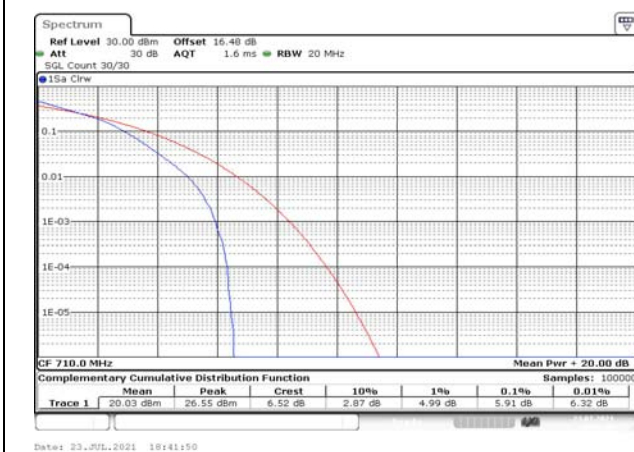


Fig.29

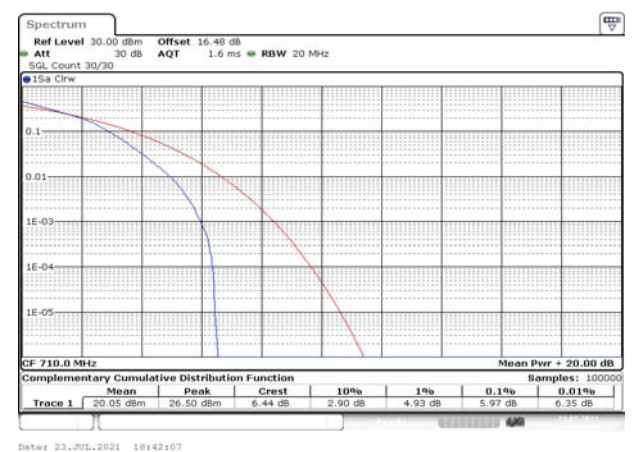


Fig.30

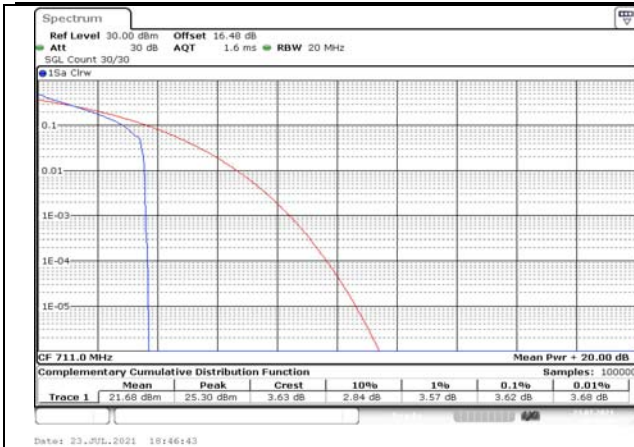


Fig.31

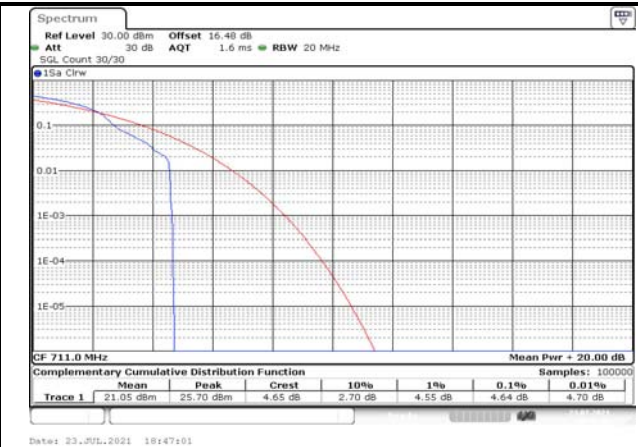


Fig.32

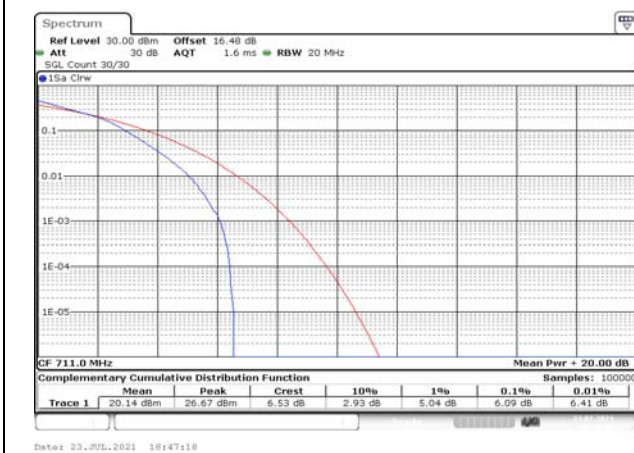


Fig.33

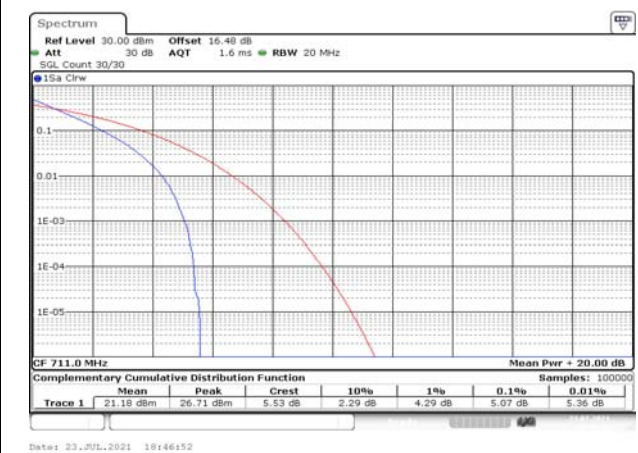


Fig.34

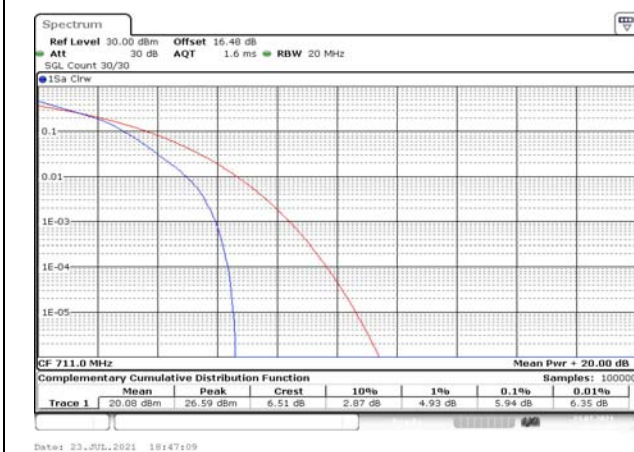


Fig.35

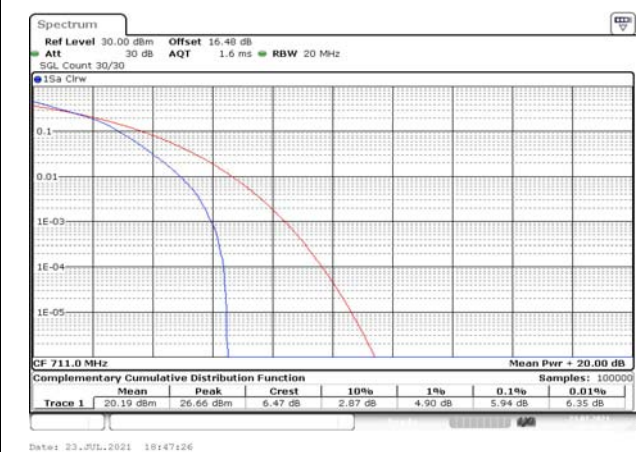


Fig.36

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

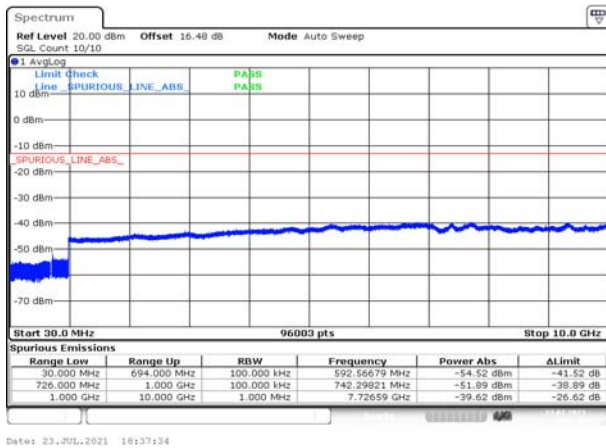


Fig.1

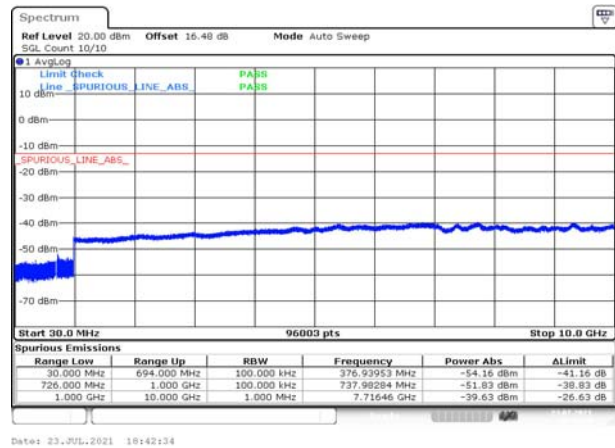


Fig.2

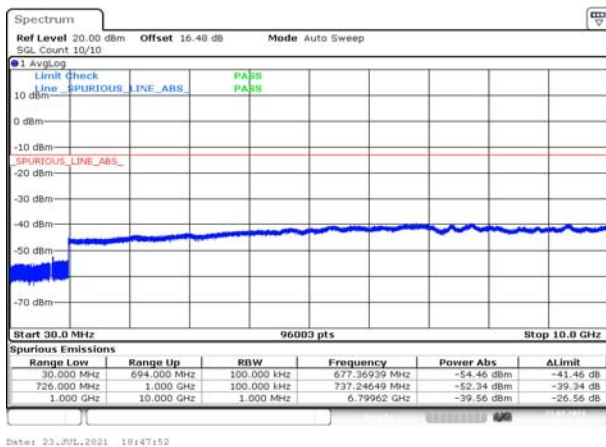
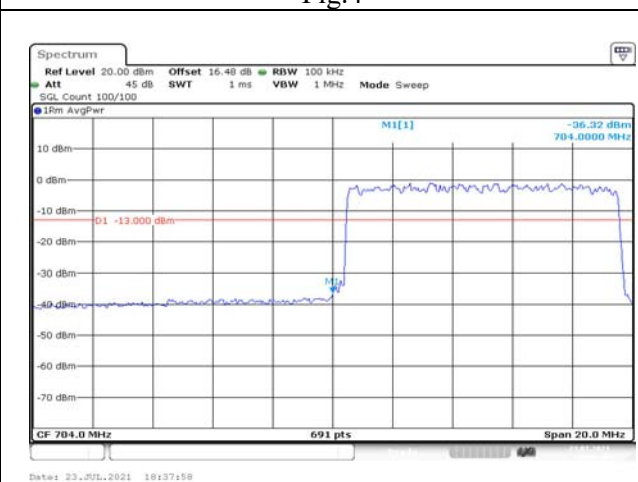
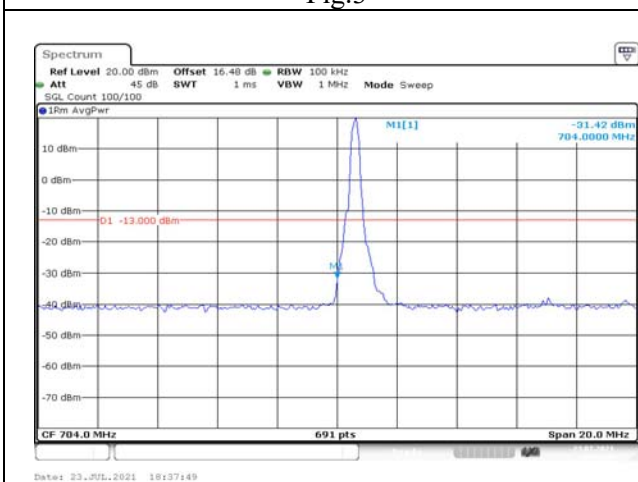
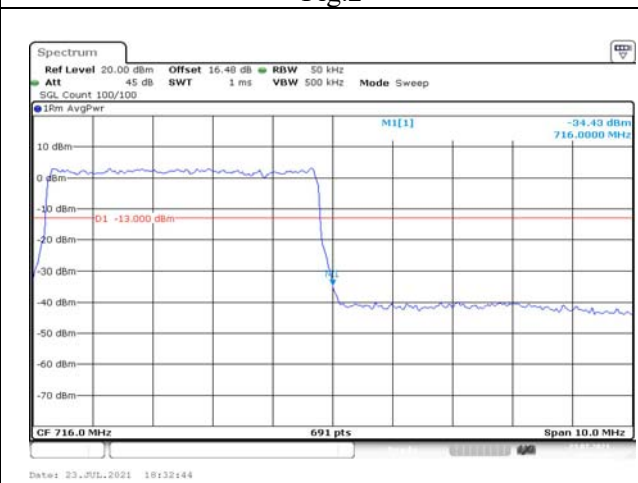
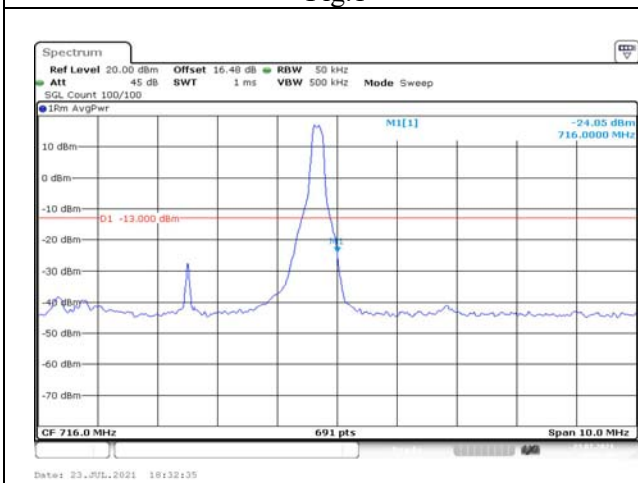
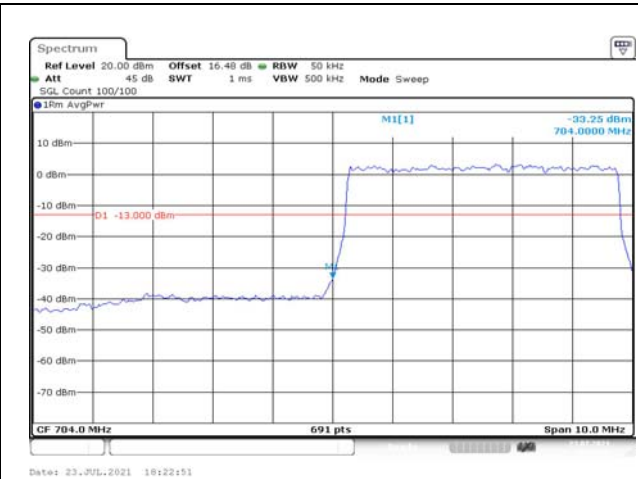
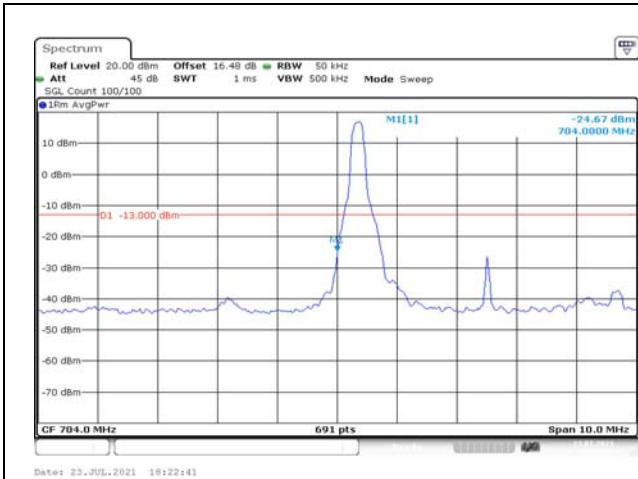


Fig.3

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



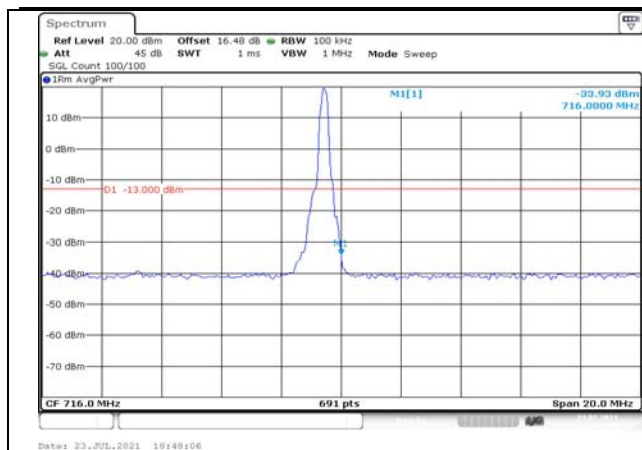


Fig.7

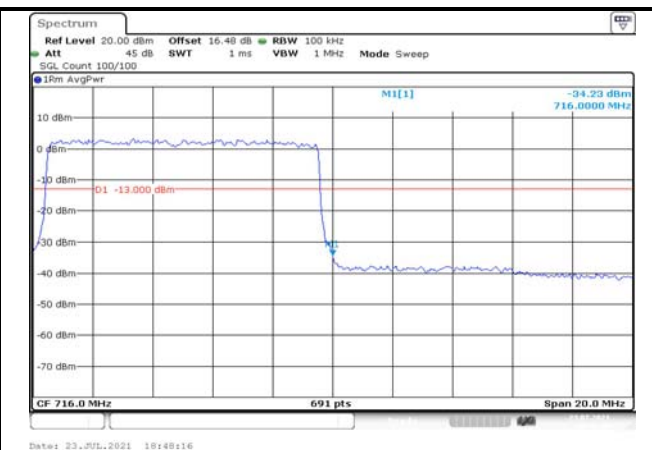


Fig.8

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band17 Low Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	---	---	0.001	0.006	---	---
-20	NV	---	---	0.002	0.007	---	---
-10	NV	---	---	0.002	0.007	---	---
0	NV	---	---	0.003	0.008	---	---
+10	NV	---	---	0.002	0.008	---	---
+20	NV	---	---	-0.002	0.006	---	---
+30	NV	---	---	-0.001	0.005	---	---
+40	NV	---	---	0.002	0.007	---	---
+50	NV	---	---	0.000	0.005	---	---
+20	LV	---	---	0.000	0.005	---	---
+20	HV	---	---	0.000	0.004	---	---

Temperature(°C)	Voltage	Test Result (ppm) Band17 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	---	---	0.002	0.009	---	---
-20	NV	---	---	0.003	0.007	---	---
-10	NV	---	---	0.004	0.007	---	---
0	NV	---	---	0.003	0.005	---	---
+10	NV	---	---	0.001	0.004	---	---
+20	NV	---	---	0.003	0.005	---	---
+30	NV	---	---	0.001	0.005	---	---
+40	NV	---	---	0.002	0.008	---	---
+50	NV	---	---	0.001	0.005	---	---
+20	LV	---	---	-0.001	0.007	---	---
+20	HV	---	---	-0.003	0.006	---	---

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	23.19	14.94	0.031
				1	12	23.00	14.75	0.030
				1	24	22.99	14.74	0.030
				12	0	22.21	13.96	0.025
				12	7	22.13	13.88	0.024
				12	13	22.13	13.88	0.024
				25	0	22.17	13.92	0.025
	710	23790		1	0	23.15	14.90	0.031
				1	12	23.05	14.80	0.030
				1	24	22.98	14.73	0.030
				12	0	22.20	13.95	0.025
				12	7	22.09	13.84	0.024
				12	13	22.09	13.84	0.024
				25	0	22.12	13.87	0.024
	713.5	23825		1	0	23.10	14.85	0.031
				1	12	22.98	14.73	0.030
				1	24	22.98	14.73	0.030
				12	0	22.18	13.93	0.025
				12	7	22.08	13.83	0.024
				12	13	22.07	13.82	0.024
				25	0	22.08	13.83	0.024
16QAM	706.5	23755	1	0	22.17	13.92	0.025	
			1	12	22.14	13.89	0.024	
			1	24	22.14	13.89	0.024	
			12	0	21.20	12.95	0.020	
			12	7	21.12	12.87	0.019	
			12	13	21.13	12.88	0.019	
			25	0	21.23	12.98	0.020	
	710	23790	1	0	22.22	13.97	0.025	
			1	12	22.03	13.78	0.024	
			1	24	22.08	13.83	0.024	
			12	0	21.13	12.88	0.019	
			12	7	21.09	12.84	0.019	
			12	13	21.08	12.83	0.019	
			25	0	21.20	12.95	0.020	
	713.5	23825	1	0	22.14	13.89	0.024	
			1	12	22.03	13.78	0.024	
			1	24	22.03	13.78	0.024	
			12	0	21.19	12.94	0.020	
			12	7	21.07	12.82	0.019	
			12	13	21.08	12.83	0.019	
			25	0	21.16	12.91	0.020	

Modulation	Carrier frequen cy (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	21.23	12.98	0.020
				1	12	21.21	12.96	0.020
				1	24	21.21	12.96	0.020
				12	0	21.21	12.96	0.020
				12	7	21.21	12.96	0.020
				12	13	21.21	12.96	0.020
				25	0	21.22	12.97	0.020
	710	23790		1	0	21.13	12.88	0.019
				1	12	21.20	12.95	0.020
				1	24	21.19	12.94	0.020
				12	0	21.12	12.87	0.019
				12	7	21.18	12.93	0.020
				12	13	21.18	12.93	0.020
				25	0	21.18	12.93	0.020
	713.5	23825		1	0	21.16	12.91	0.020
				1	12	21.15	12.90	0.019
				1	24	21.17	12.92	0.020
				12	0	21.17	12.92	0.020
				12	7	21.17	12.92	0.020
				12	13	21.16	12.91	0.020
				25	0	21.16	12.91	0.020

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	23.25	15.00	0.032
				1	25	23.00	14.75	0.030
				1	49	23.10	14.85	0.031
				25	0	22.16	13.91	0.025
				25	12	22.05	13.80	0.024
				25	25	22.14	13.89	0.024
				50	0	22.18	13.93	0.025
	710	23790		1	0	23.08	14.83	0.030
				1	25	22.99	14.74	0.030
				1	49	22.99	14.74	0.030
				25	0	22.18	13.93	0.025
				25	12	22.12	13.87	0.024
				25	25	22.11	13.86	0.024
				50	0	22.13	13.88	0.024
	711	23800		1	0	23.14	14.89	0.031
				1	25	22.91	14.66	0.029
				1	49	23.00	14.75	0.030
				25	0	22.18	13.93	0.025
				25	12	22.15	13.90	0.025
				25	25	22.17	13.92	0.025
				50	0	22.11	13.86	0.024
16QAM	709	23780	1	0	22.81	14.56	0.029	
			1	25	22.71	14.46	0.028	
			1	49	22.61	14.36	0.027	
			25	0	21.15	12.90	0.019	
			25	12	21.13	12.88	0.019	
			25	25	21.19	12.94	0.020	
			50	0	21.18	12.93	0.020	
	710	23790	1	0	22.28	14.03	0.025	
			1	25	22.12	13.87	0.024	
			1	49	22.15	13.90	0.025	
			25	0	21.22	12.97	0.020	
			25	12	21.22	12.97	0.020	
			25	25	21.22	12.97	0.020	
			50	0	21.20	12.95	0.020	
	711	23800	1	0	22.81	14.56	0.029	
			1	25	21.97	13.72	0.024	
			1	49	22.32	14.07	0.026	
			25	0	21.29	13.04	0.020	
			25	12	21.24	12.99	0.020	
			25	25	21.21	12.96	0.020	
			50	0	21.12	12.87	0.019	

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	21.18	12.93	0.020
				1	25	21.19	12.94	0.020
				1	49	21.19	12.94	0.020
				25	0	21.19	12.94	0.020
				25	12	21.17	12.92	0.020
				25	25	21.17	12.92	0.020
				50	0	21.08	12.83	0.019
	710	23790		1	0	21.16	12.91	0.020
				1	25	21.14	12.89	0.019
				1	49	21.21	12.96	0.020
				25	0	21.20	12.95	0.020
				25	12	21.16	12.91	0.020
				25	25	21.20	12.95	0.020
				50	0	21.16	12.91	0.020
	711	23800		1	0	21.15	12.90	0.019
				1	25	21.15	12.90	0.019
				1	49	21.08	12.83	0.019
				25	0	21.12	12.87	0.019
				25	12	21.11	12.86	0.019
				25	25	21.17	12.92	0.020
				50	0	21.11	12.86	0.019