

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	23.55
				1	12	23.61
				1	24	23.63
				12	0	22.61
				12	7	22.64
				12	13	22.67
	25	0		22.70		
	710	23790		1	0	23.61
				1	12	23.56
				1	24	23.55
				12	0	22.66
				12	7	22.66
				12	13	22.70
	25	0		22.65		
	713.5	23825		1	0	23.59
				1	12	23.48
				1	24	23.61
				12	0	22.63
12			7	22.66		
12			13	22.63		
25	0	22.67				
16QAM	706.5	23755	1	0	22.63	
			1	12	22.88	
			1	24	22.83	
			12	0	21.54	
			12	7	21.58	
			12	13	21.65	
	25	0	21.70			
	710	23790	1	0	22.65	
			1	12	22.55	
			1	24	22.49	
			12	0	21.62	
			12	7	21.65	
			12	13	21.56	
	25	0	21.72			
	713.5	23825	1	0	22.87	
			1	12	22.87	
			1	24	22.92	
			12	0	21.71	
12			7	21.73		
12			13	21.70		
25	0	21.68				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	706.5	23755	5	1	0	21.58
				1	12	21.69
				1	24	21.79
				12	0	20.68
				12	7	20.80
				12	13	20.75
				25	0	20.70
	710	23790		1	0	21.14
				1	12	21.69
				1	24	21.80
				12	0	20.65
				12	7	20.67
				12	13	20.56
				25	0	20.66
	713.5	23825		1	0	21.76
				1	12	21.75
				1	24	21.76
				12	0	20.66
				12	7	20.72
				12	13	20.68
				25	0	20.66

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	709	23780	10	1	0	23.43
				1	25	23.55
				1	49	23.42
				25	0	22.62
				25	12	22.69
				25	25	22.70
	710	23790		50	0	22.60
				1	0	23.65
				1	25	23.60
				1	49	23.58
				25	0	22.65
				25	12	22.72
	711	23800		25	25	22.66
				50	0	22.59
				1	0	23.74
				1	25	23.56
				1	49	23.53
				25	0	22.65
16QAM	709	23780	25	12	22.72	
			25	25	22.65	
			50	0	22.68	
			1	0	23.40	
			1	25	23.40	
			1	49	23.11	
	710	23790	25	0	21.60	
			25	12	21.76	
			25	25	21.76	
			50	0	21.60	
			1	0	22.74	
			1	25	22.83	
	711	23800	1	49	22.61	
			25	0	21.69	
			25	12	21.74	
			25	25	21.74	
			50	0	21.61	
			1	0	23.44	
			1	25	23.09	
			1	49	23.09	
			25	0	21.73	
			25	12	21.84	
			25	25	21.85	
			50	0	21.74	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	709	23780	10	1	0	22.04
				1	25	21.85
				1	49	21.92
				25	0	20.70
				25	12	20.73
				25	25	20.70
				50	0	20.76
	710	23790		1	0	21.79
				1	25	21.80
				1	49	21.75
				25	0	20.77
				25	12	20.70
				25	25	20.81
				50	0	20.75
	711	23800		1	0	21.63
				1	25	21.55
				1	49	21.58
				25	0	20.68
				25	12	20.83
				25	25	20.91
				50	0	20.70

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	4.493	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

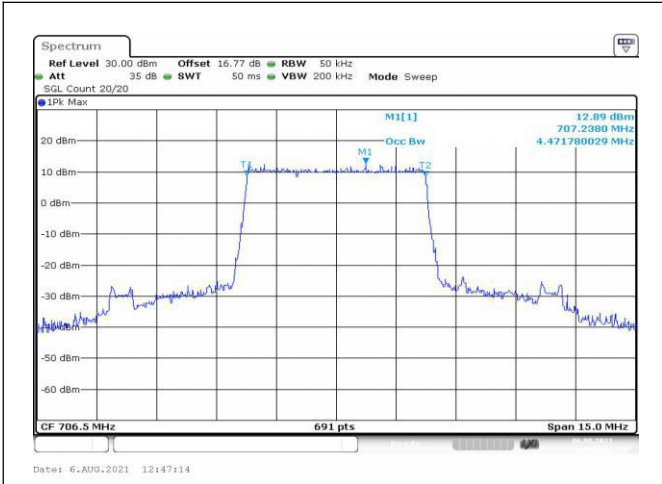


Fig.1

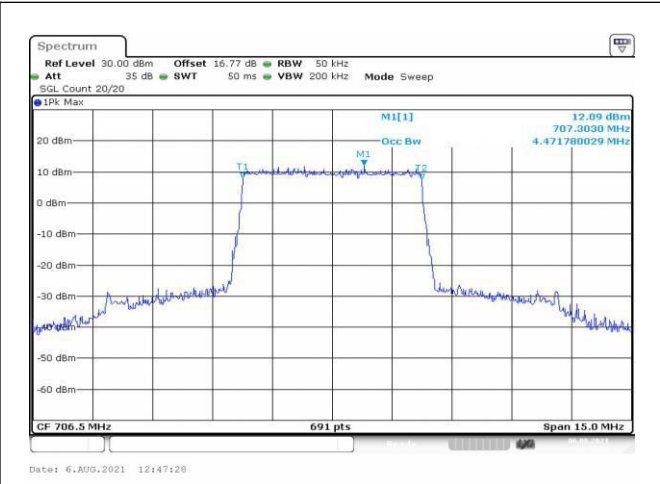


Fig.2

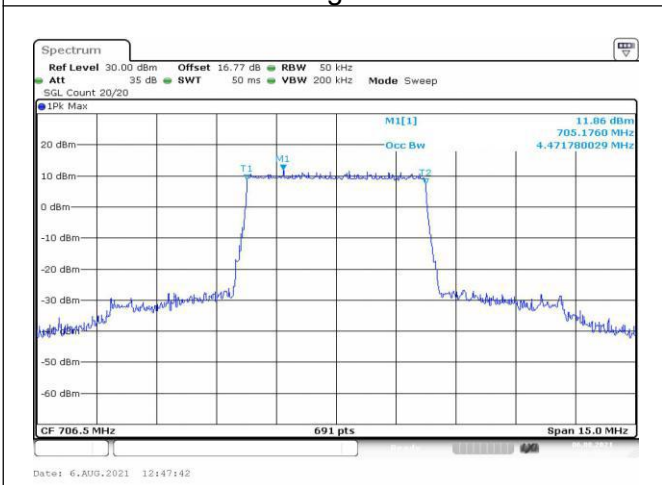


Fig.3

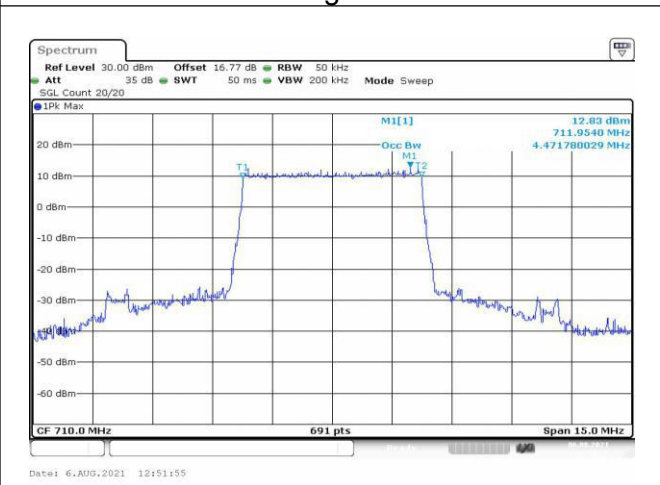


Fig.4

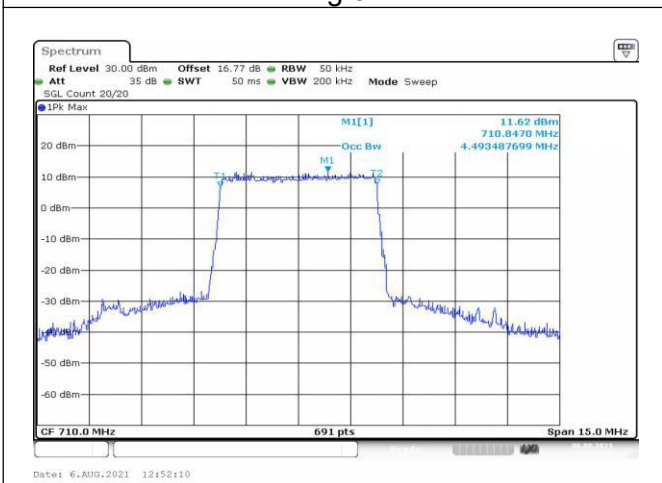


Fig.5

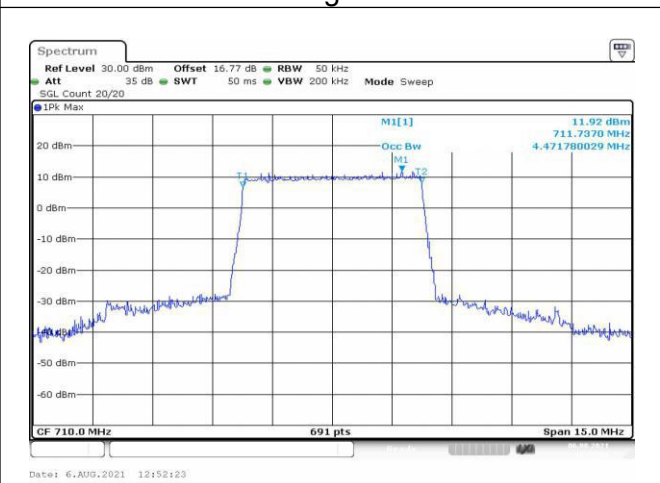


Fig.6

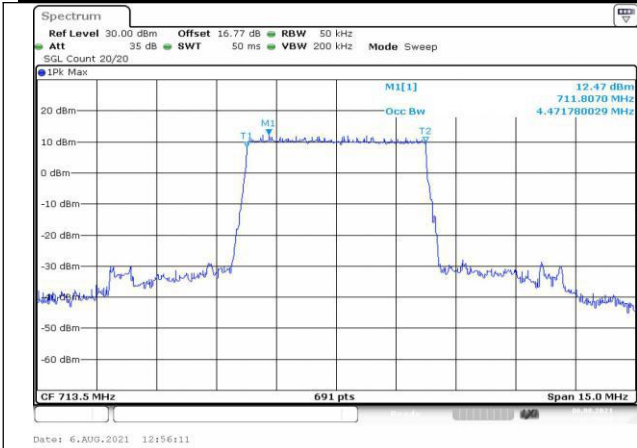


Fig.7

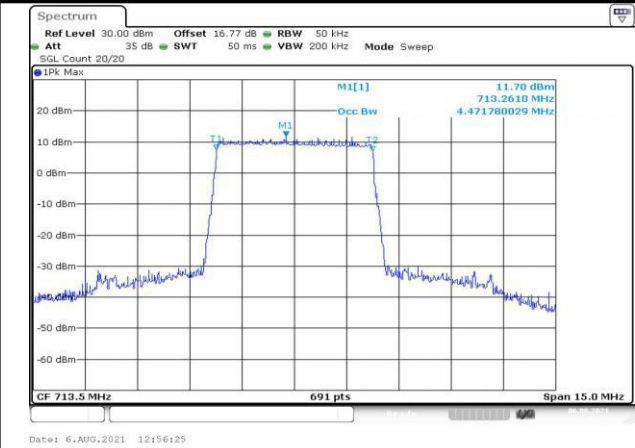


Fig.8

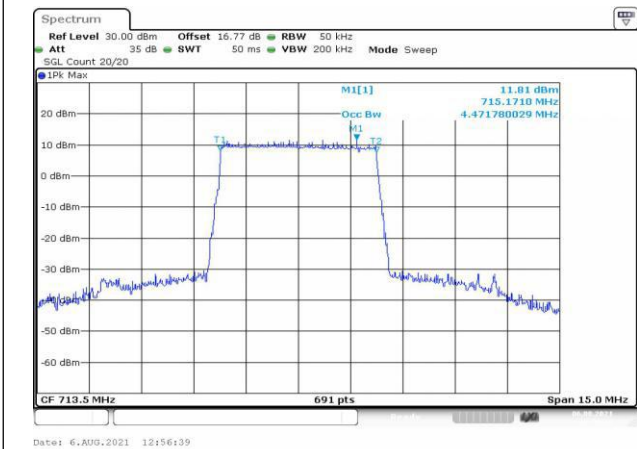


Fig.9

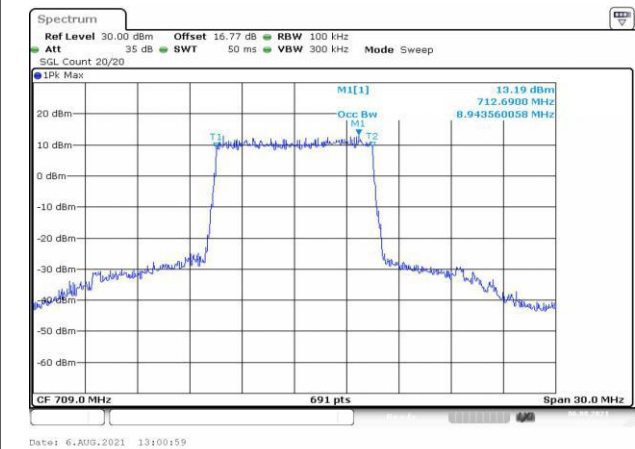


Fig.10

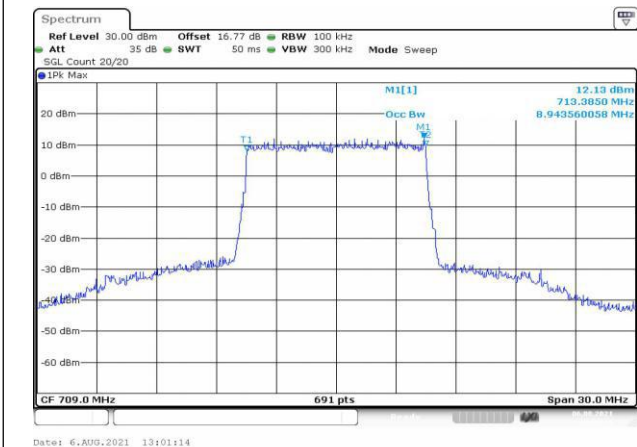


Fig.11

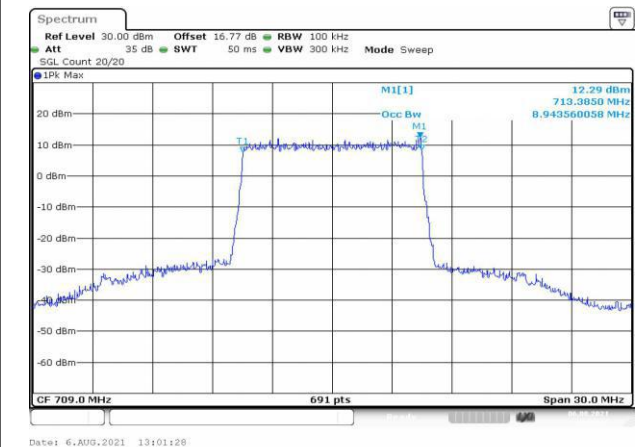


Fig.12

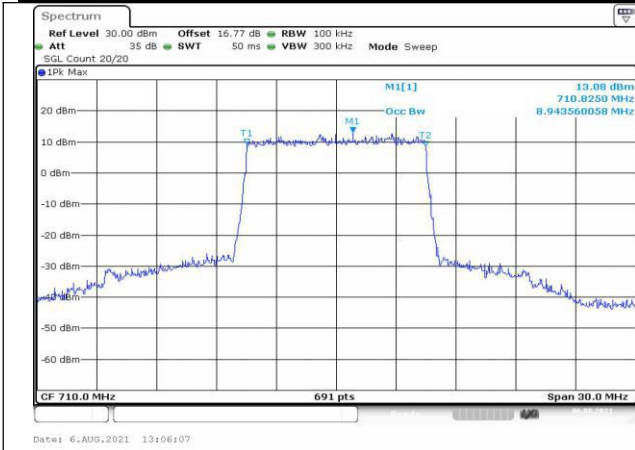


Fig. 13



Fig. 14

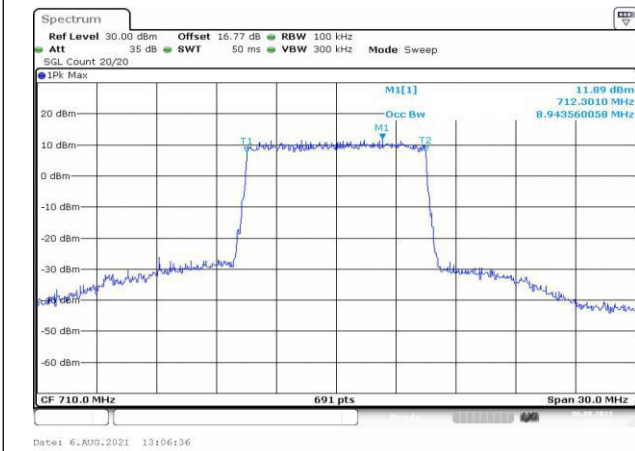


Fig. 15

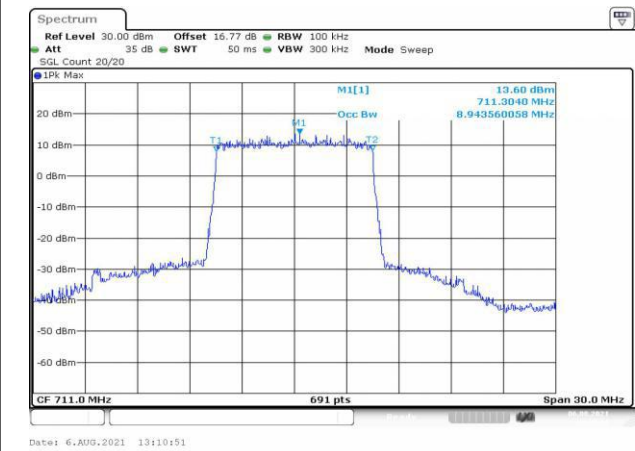


Fig. 16

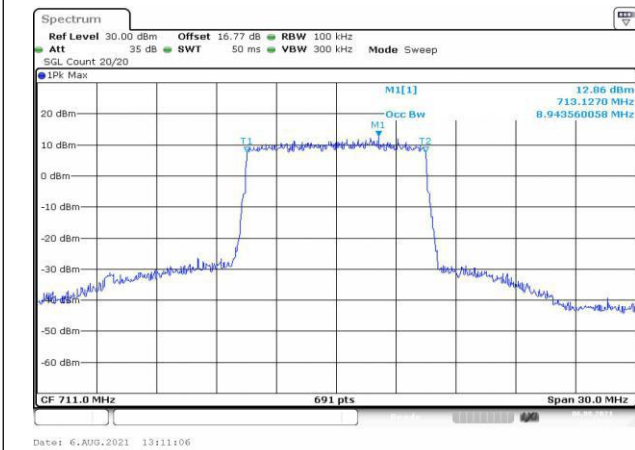


Fig. 17

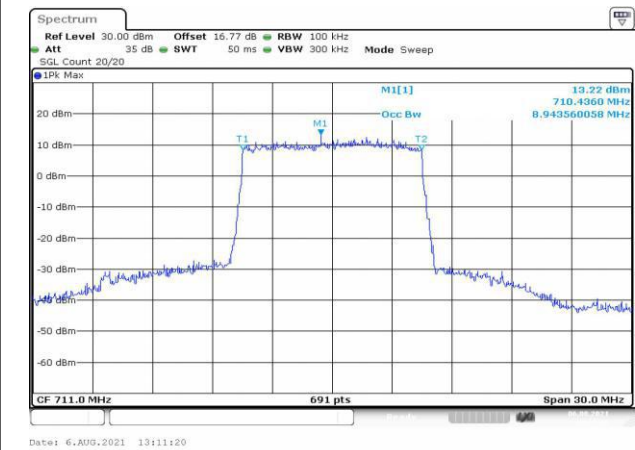


Fig. 18

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	4.863	Fig.1	4.863	Fig.2	4.841	Fig.3
	710	23790		25	0	4.863	Fig.4	4.884	Fig.5	4.906	Fig.6
	713.5	23825		25	0	4.884	Fig.7	4.863	Fig.8	4.906	Fig.9
	709	23780	10	50	0	9.595	Fig.10	9.551	Fig.11	9.638	Fig.12
	710	23790		50	0	9.638	Fig.13	9.551	Fig.14	9.551	Fig.15
	711	23800		50	0	9.551	Fig.16	9.595	Fig.17	9.638	Fig.18

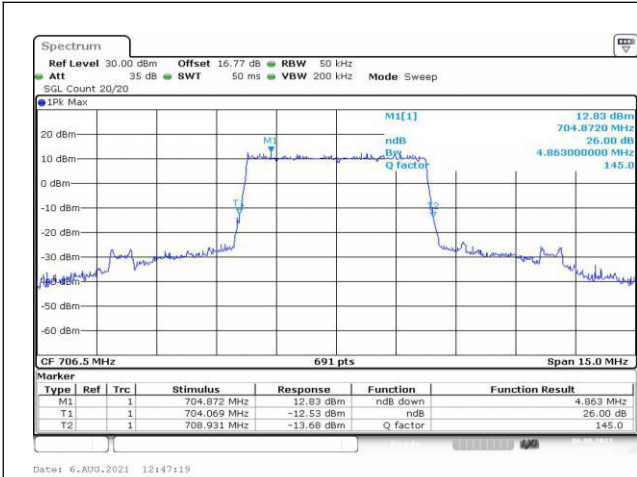


Fig.1

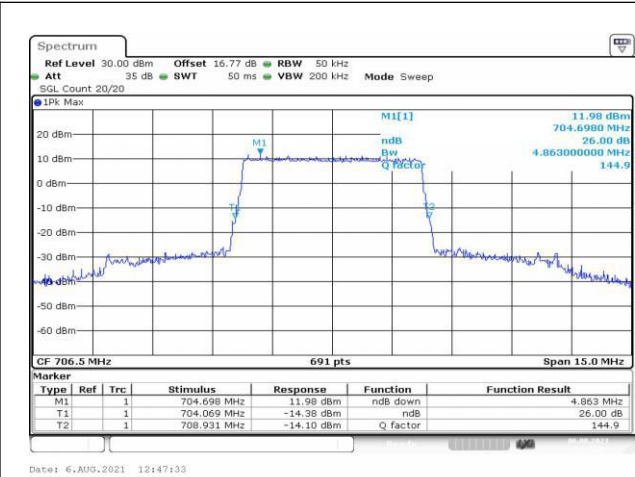


Fig.2

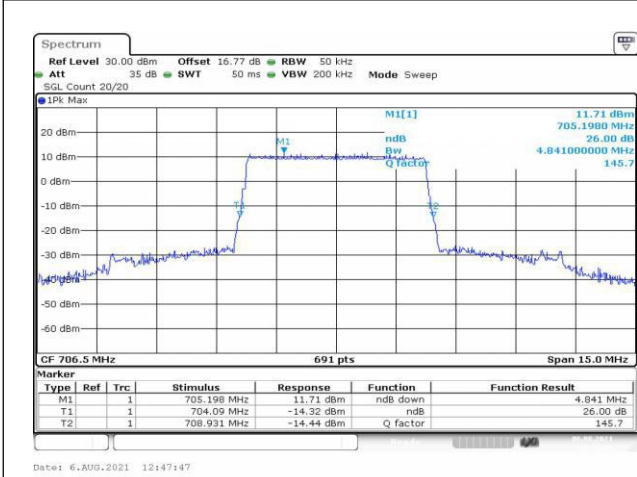


Fig.3

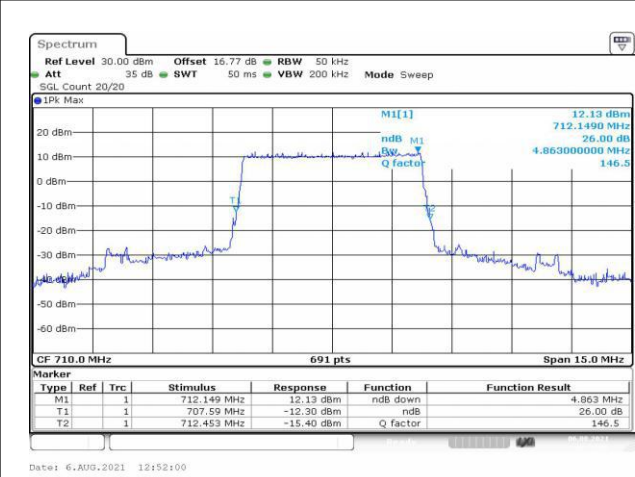


Fig.4

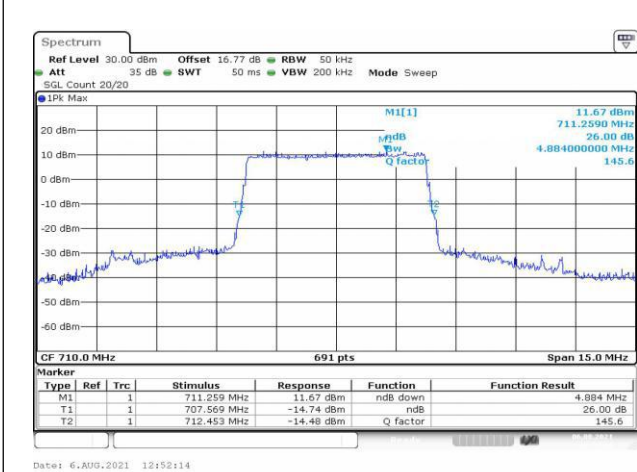


Fig.5

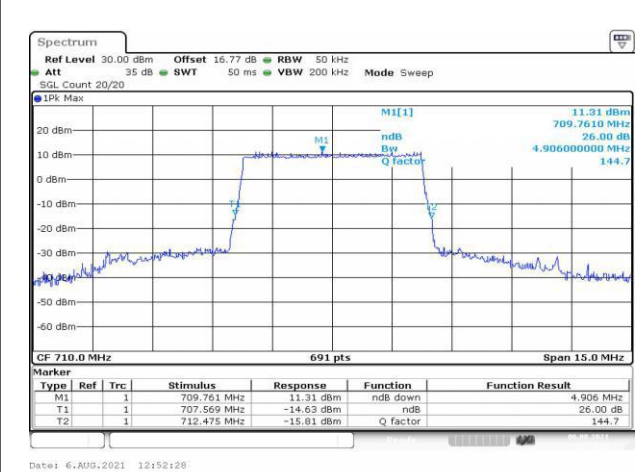


Fig.6

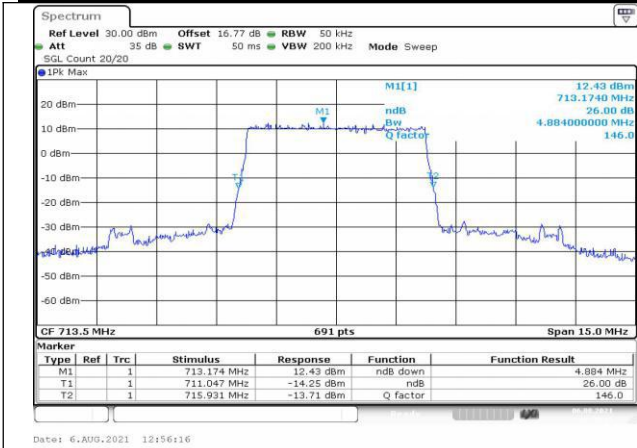


Fig.7

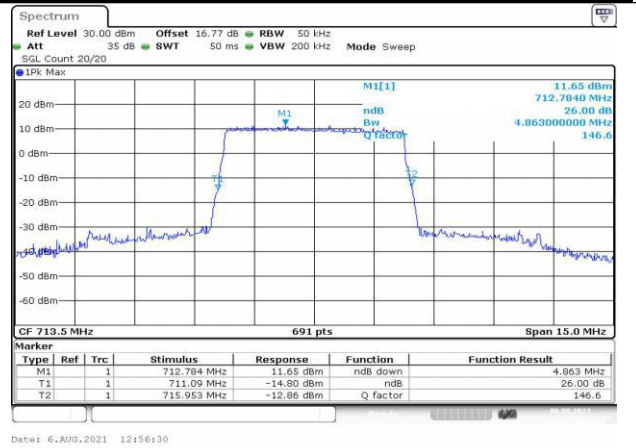


Fig.8

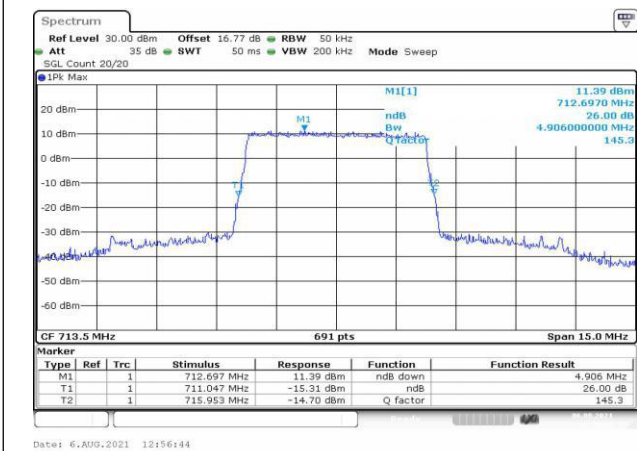


Fig.9

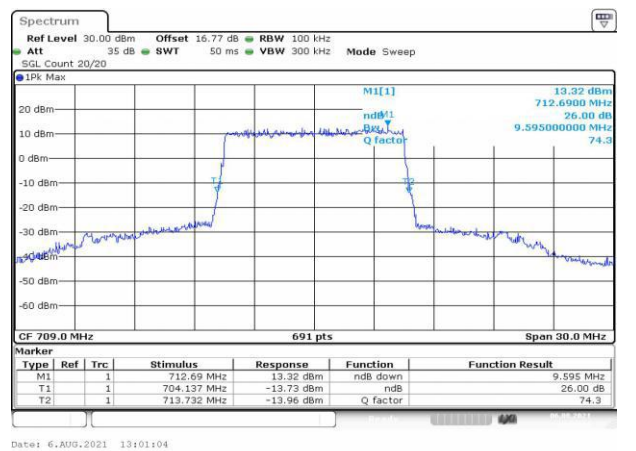


Fig.10

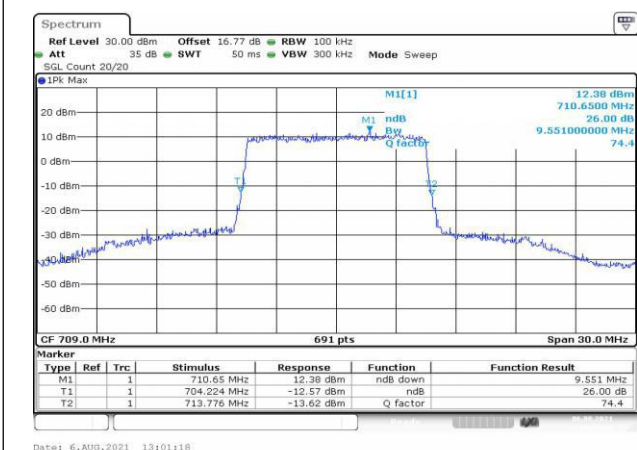


Fig.11

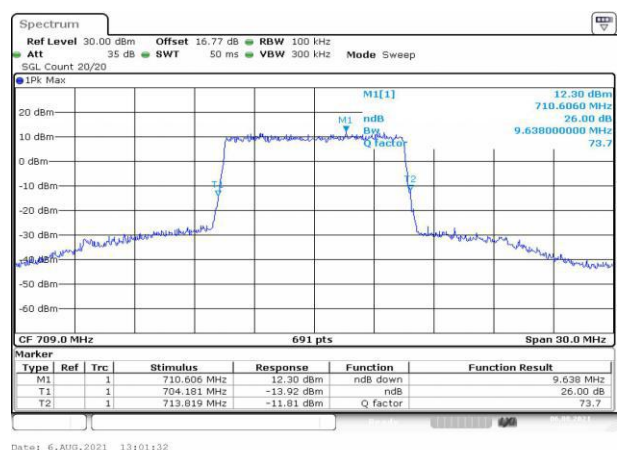


Fig.12



Fig.13

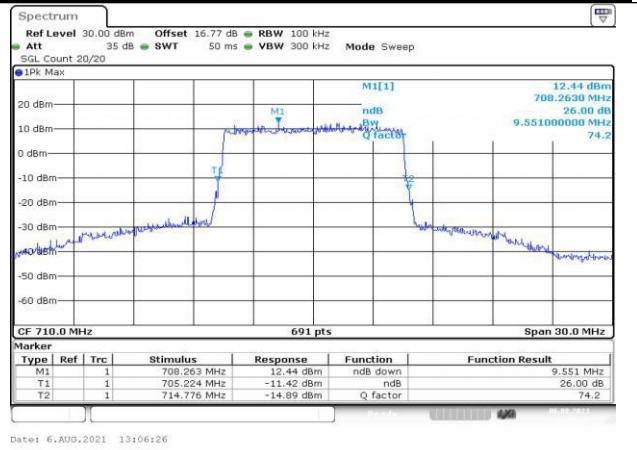


Fig.14

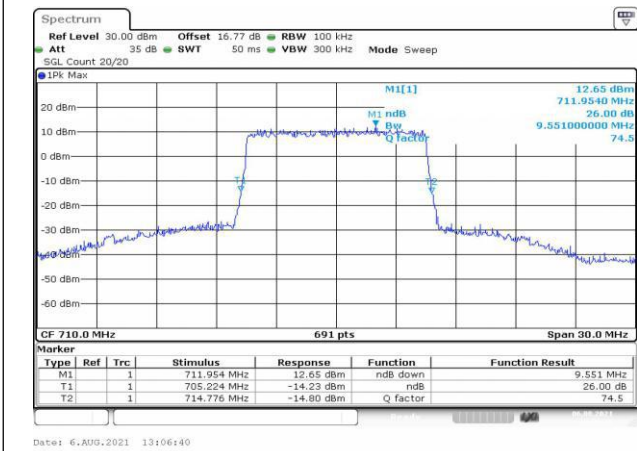


Fig.15

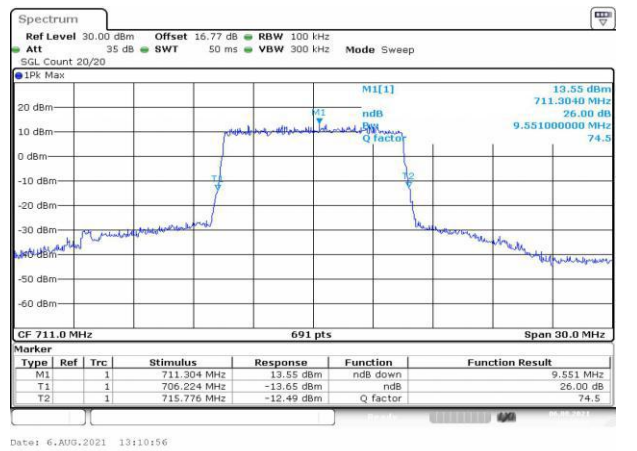


Fig.16

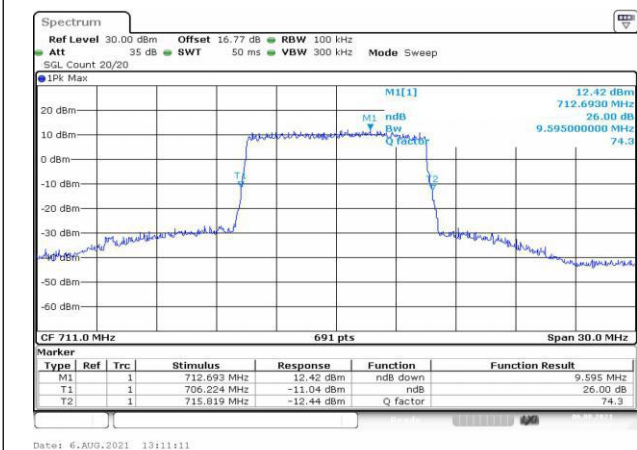


Fig.17

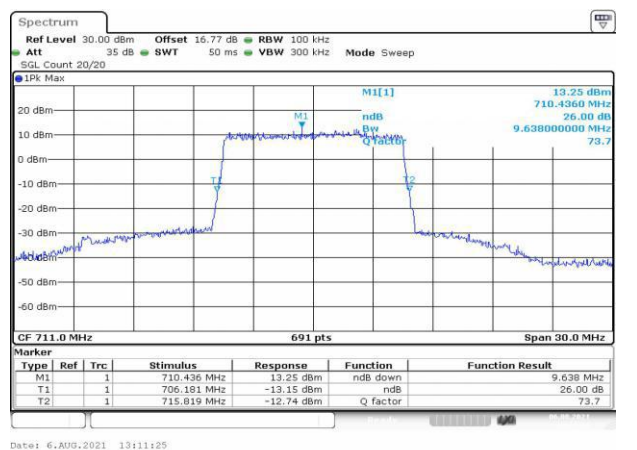


Fig.18

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

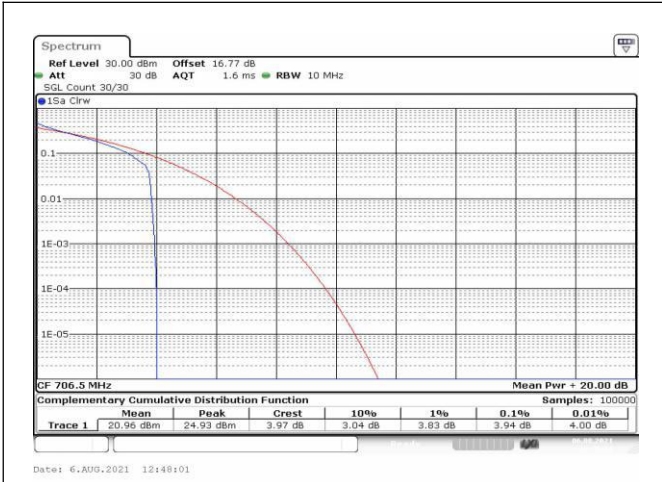


Fig.1

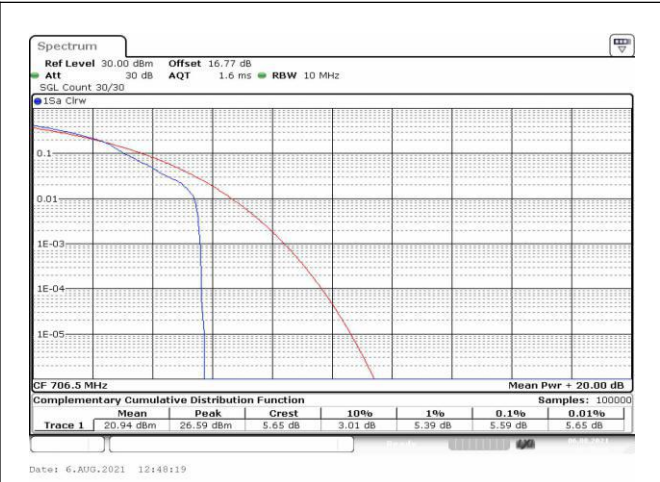


Fig.2

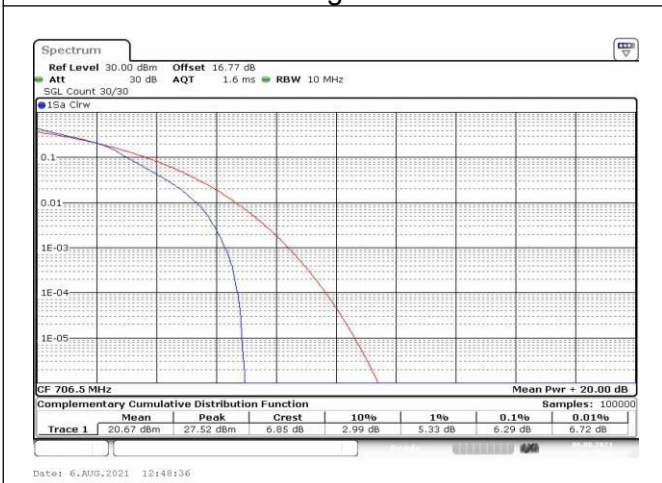


Fig.3

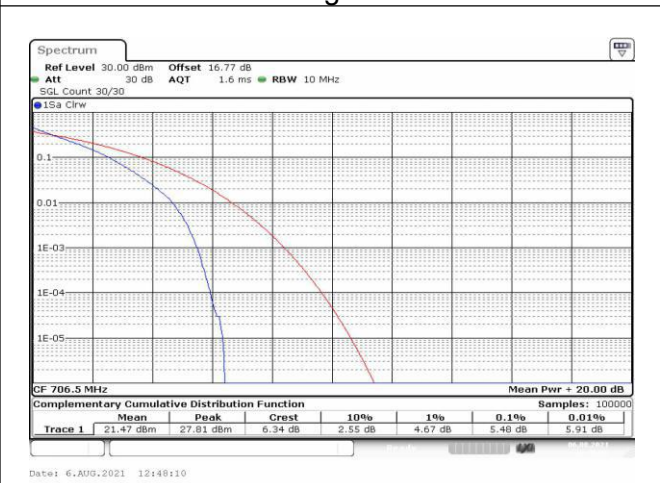


Fig.4

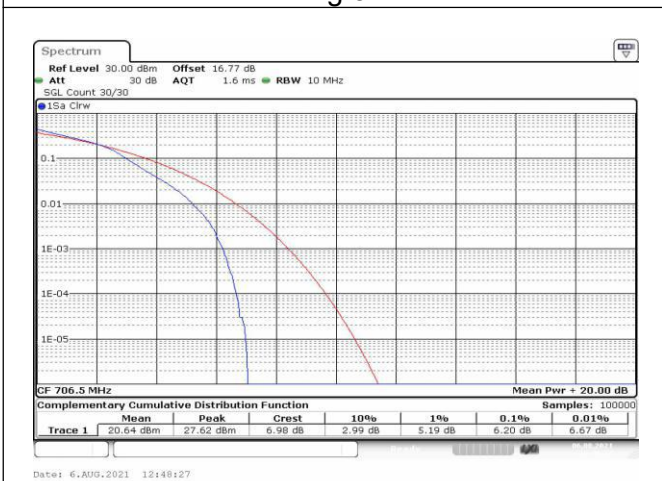


Fig.5

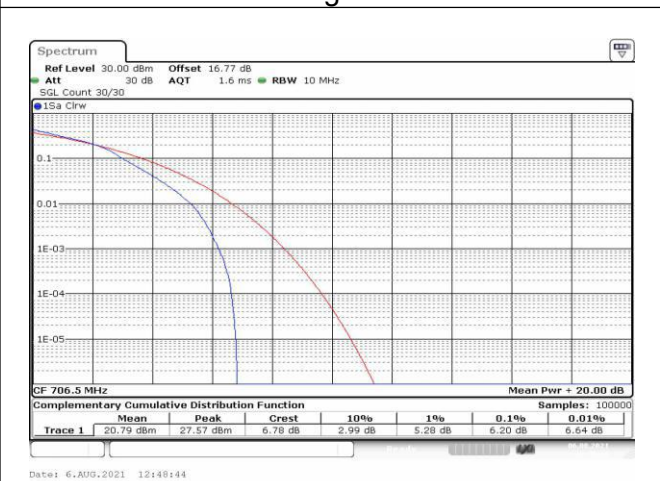


Fig.6



Fig.7



Fig.8

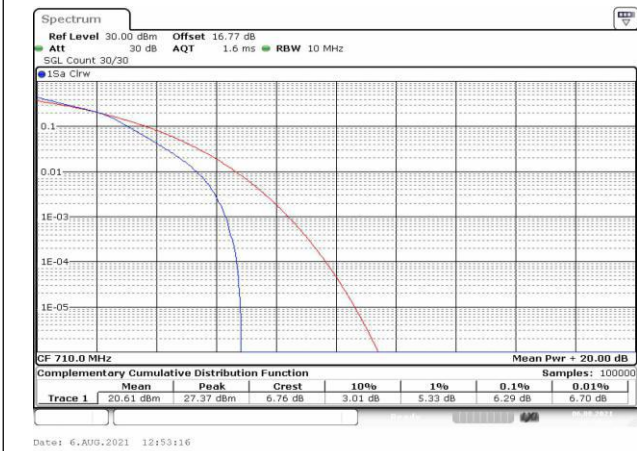


Fig.9

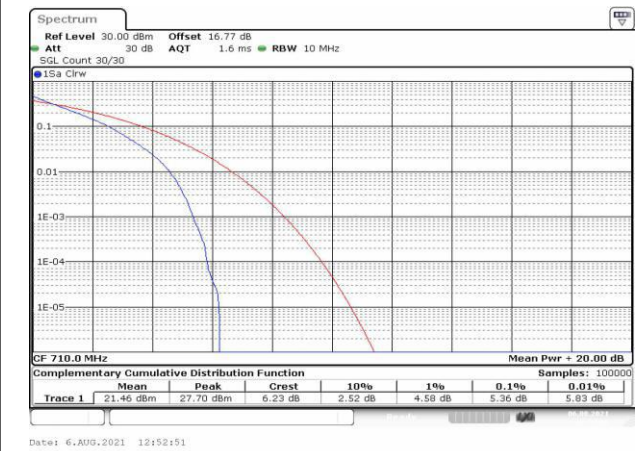


Fig.10

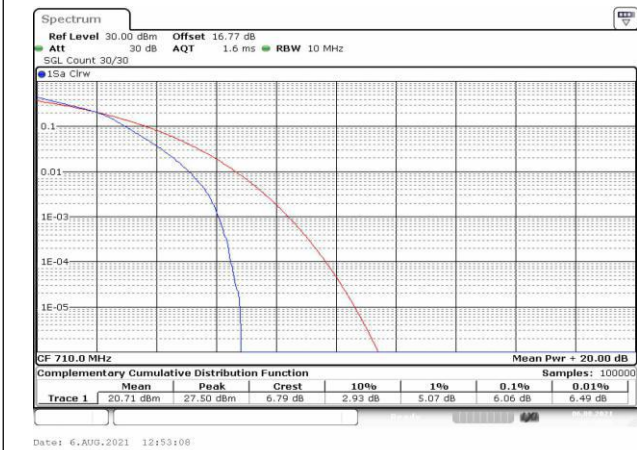


Fig.11

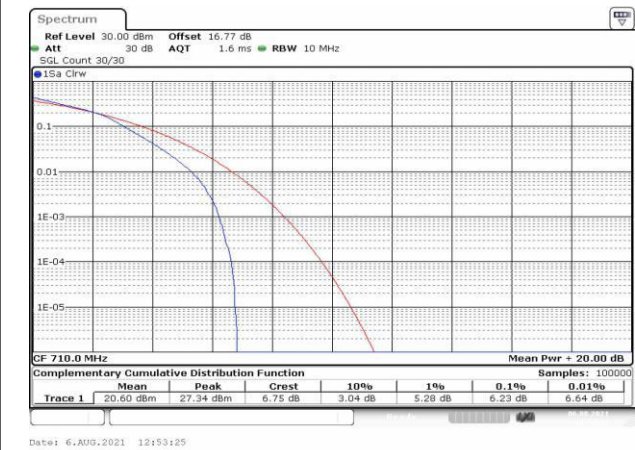


Fig.12



Fig.13

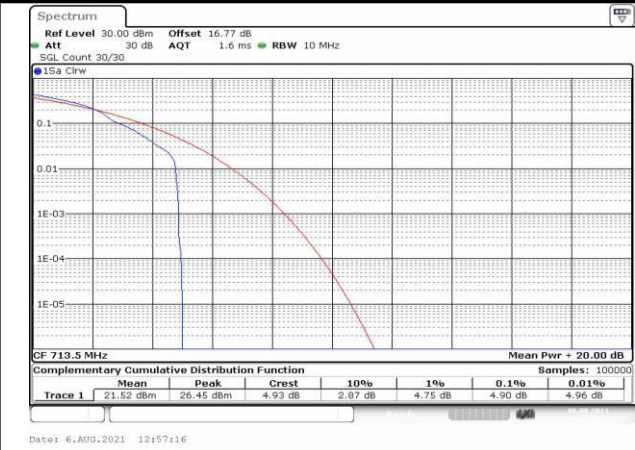


Fig.14

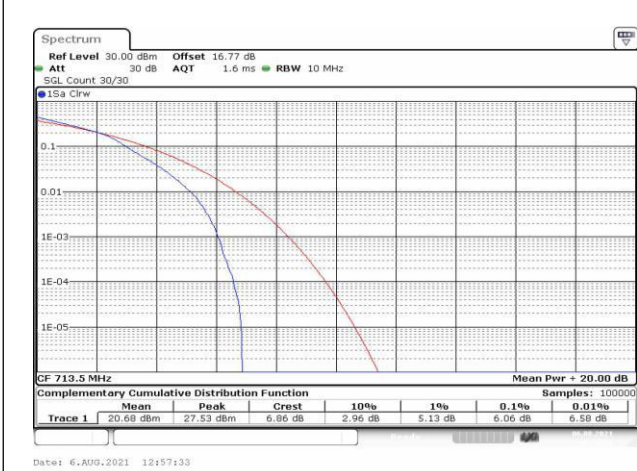


Fig.15

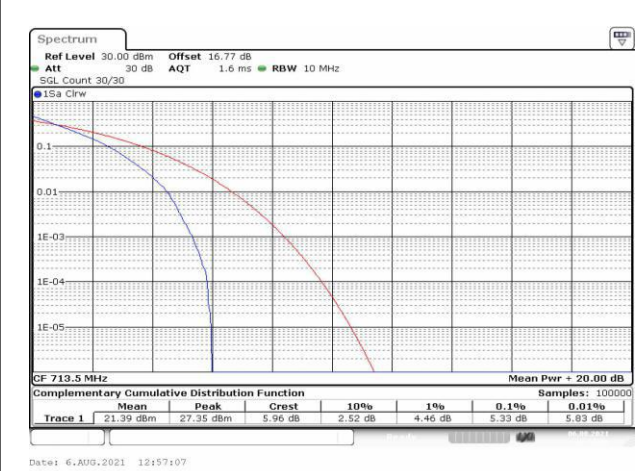


Fig.16

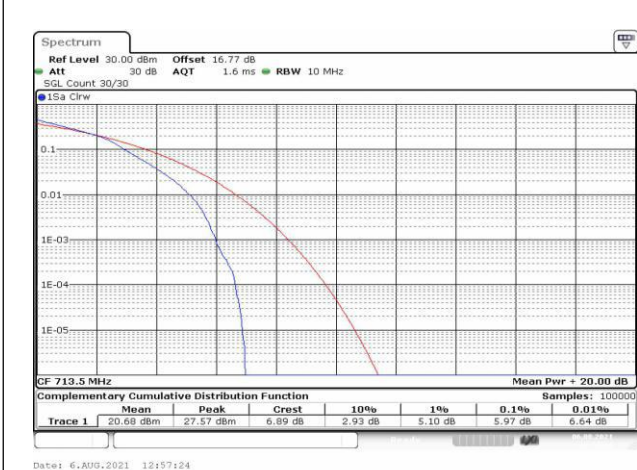


Fig.17

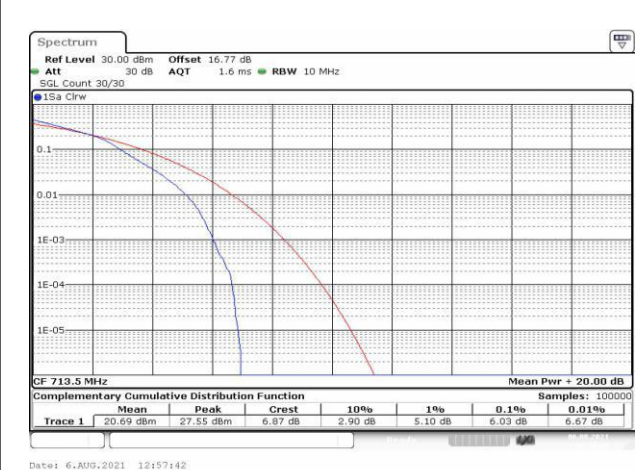


Fig.18



Fig.19



Fig.20

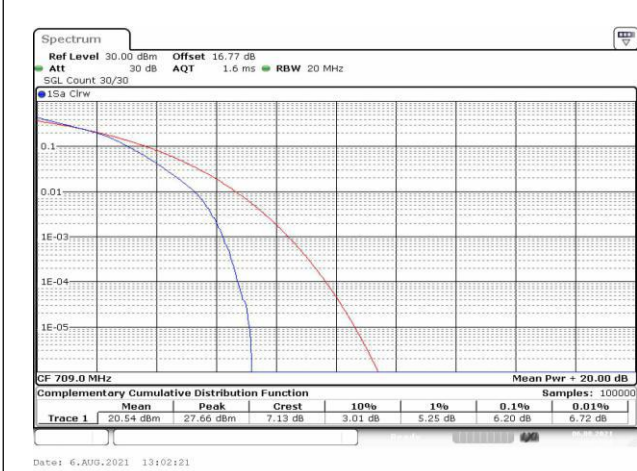


Fig.21

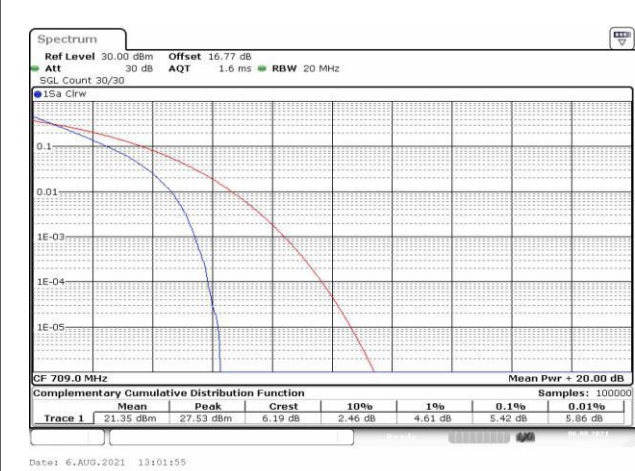


Fig.22

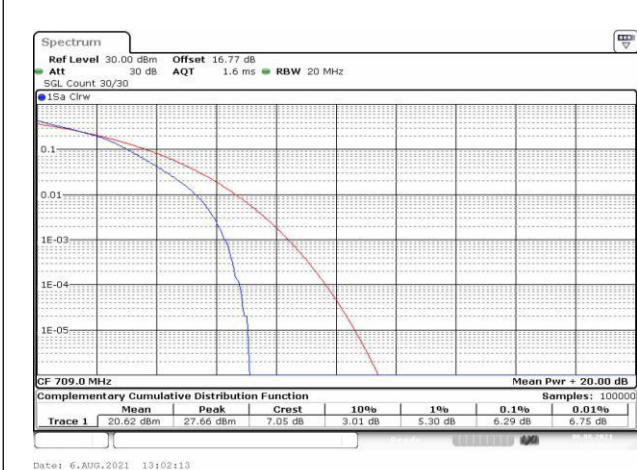


Fig.23

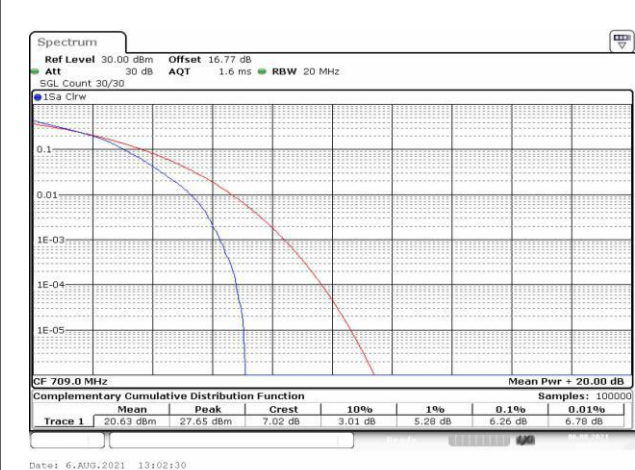


Fig.24



Fig.25

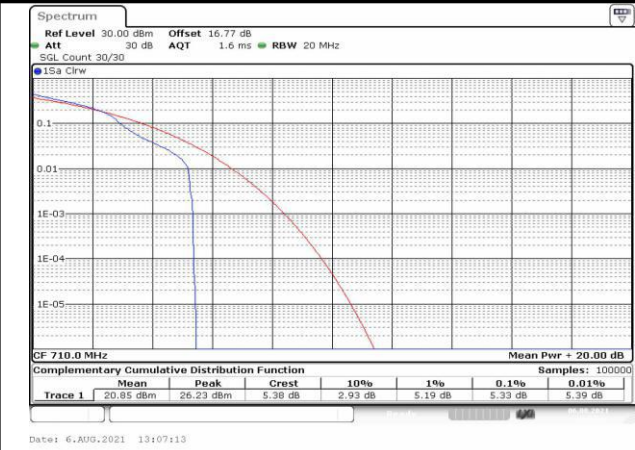


Fig.26

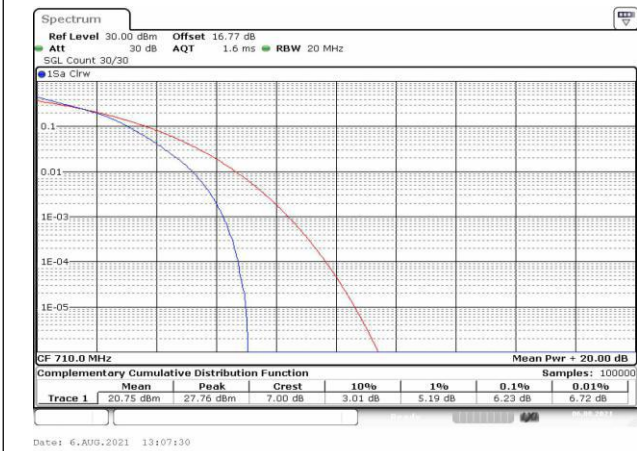


Fig.27

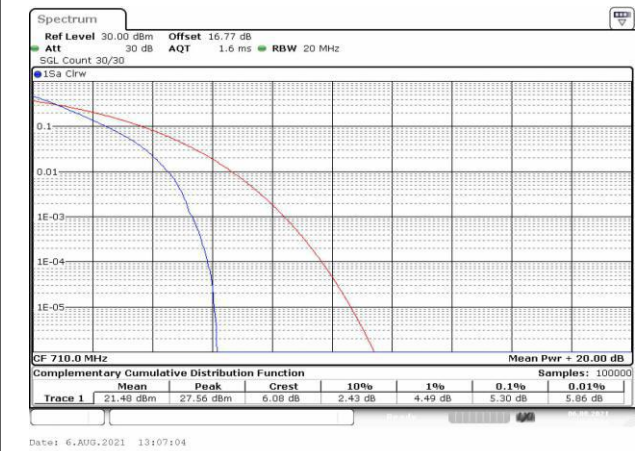


Fig.28

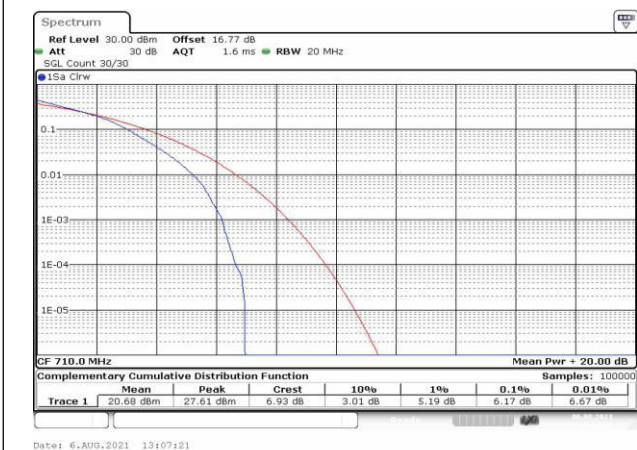


Fig.29

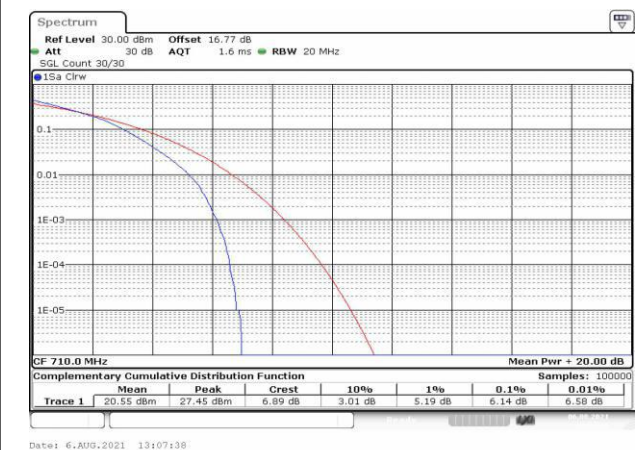


Fig.30



Fig.31



Fig.32

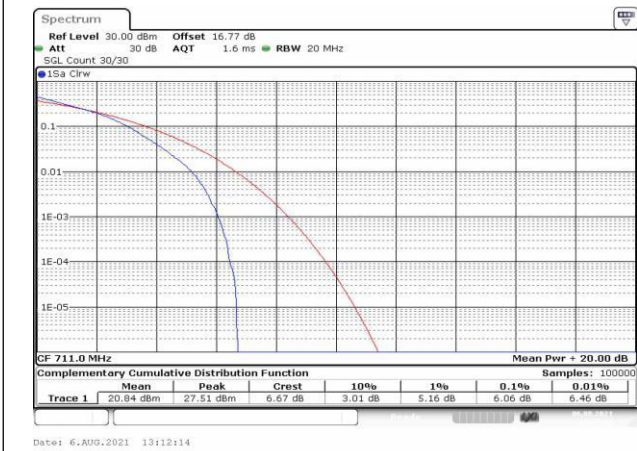


Fig.33

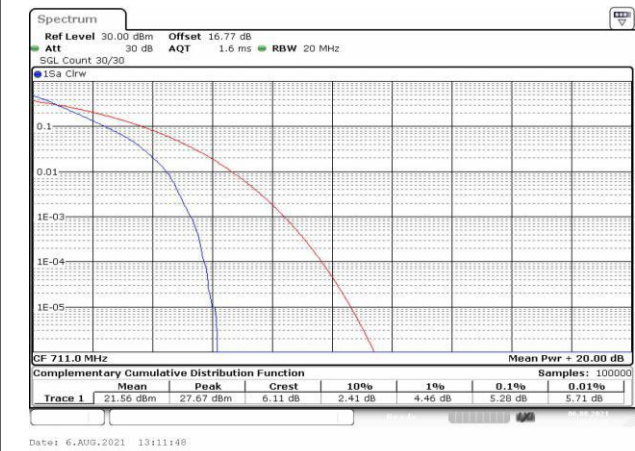


Fig.34

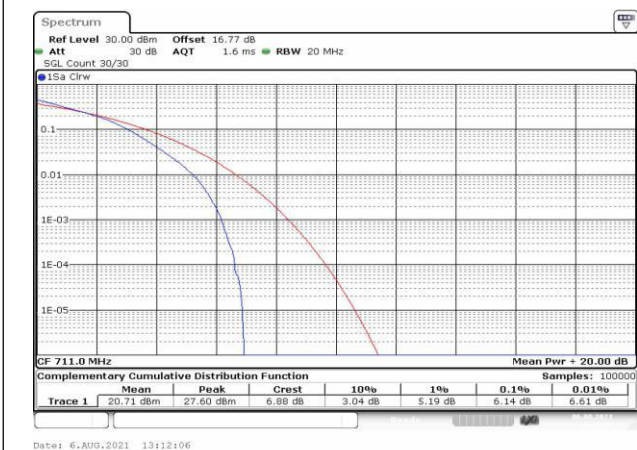


Fig.35

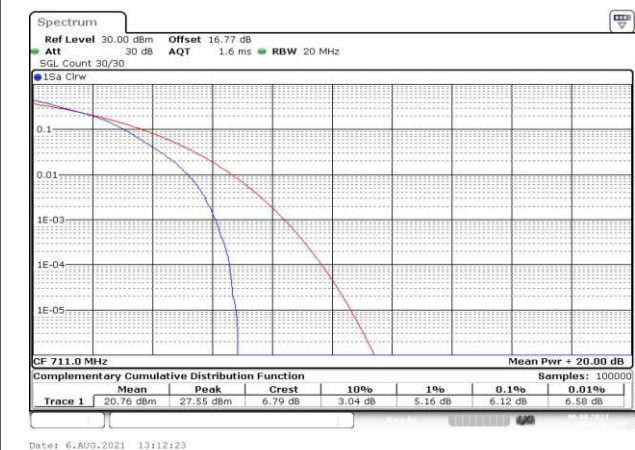


Fig.36

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

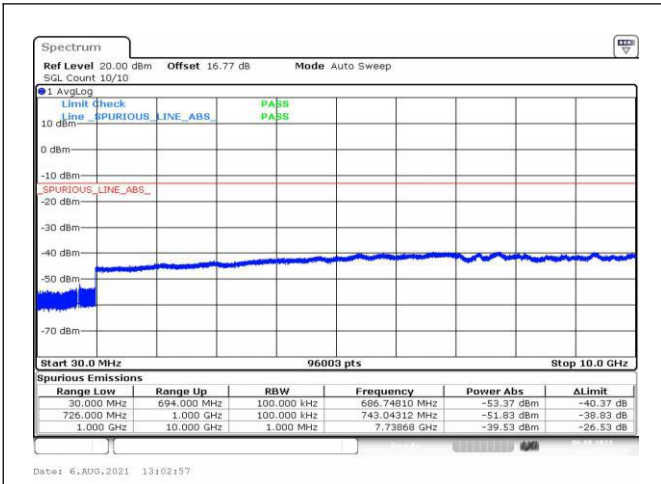


Fig.1

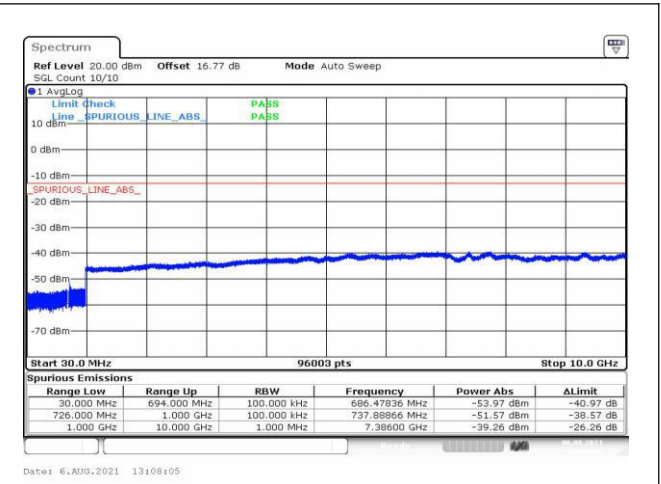


Fig.2

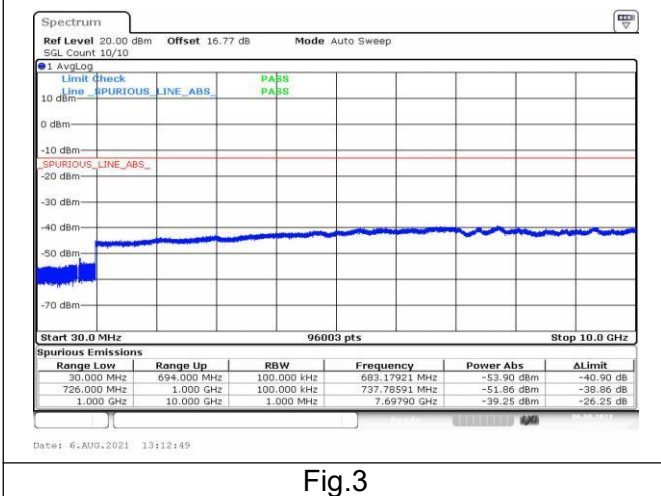


Fig.3

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		
	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

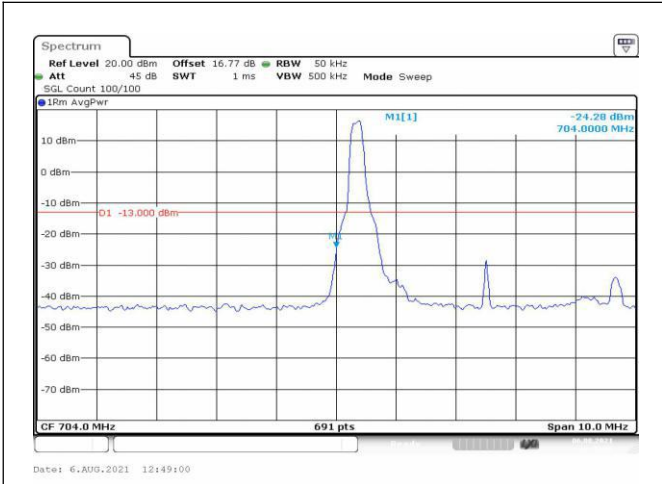


Fig.1

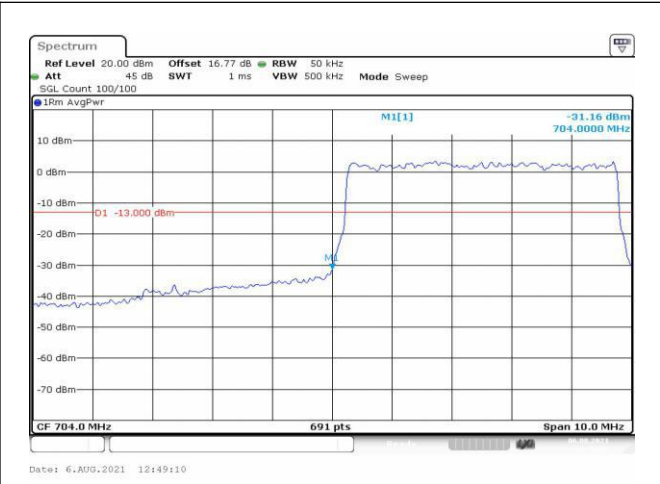


Fig.2

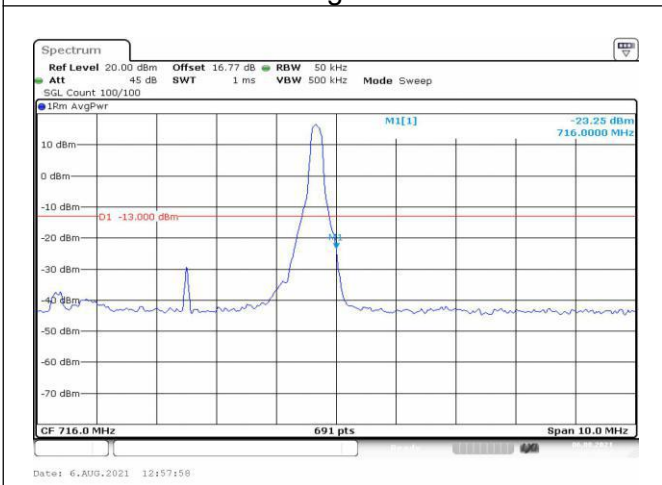


Fig.3

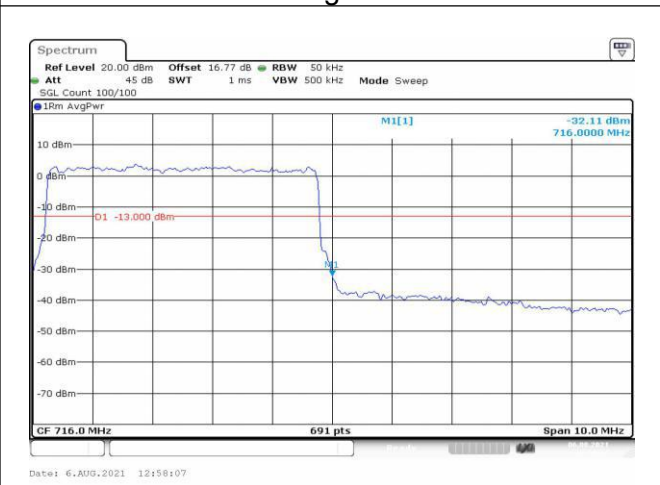


Fig.4

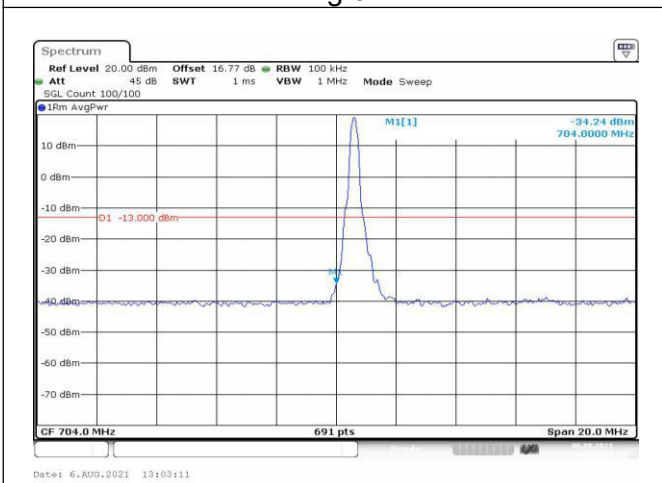


Fig.5

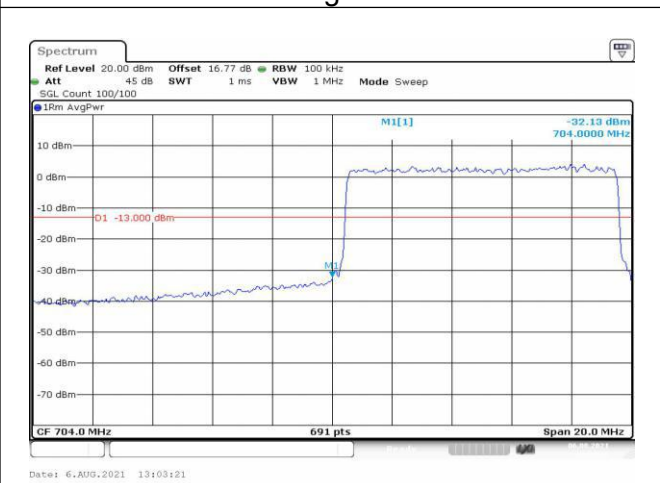


Fig.6

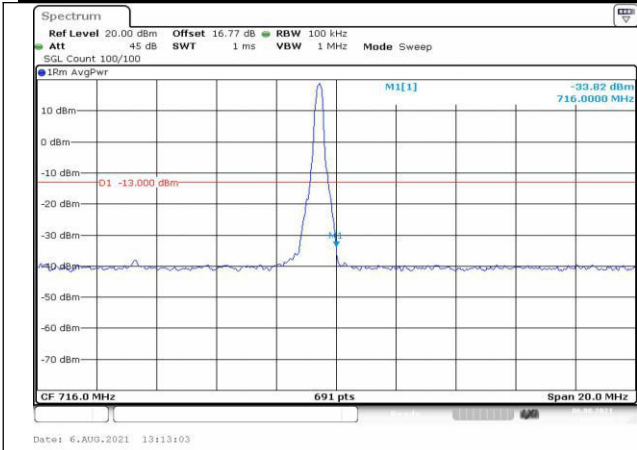


Fig.7



Fig.8

7 Frequency Stability

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

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

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	23.55	17.70	0.059
				1	12	23.61	17.76	0.060
				1	24	23.63	17.78	0.060
				12	0	22.61	16.76	0.047
				12	7	22.64	16.79	0.048
				12	13	22.67	16.82	0.048
	25	0		22.70	16.85	0.048		
	1	0		23.61	17.76	0.060		
	1	12		23.56	17.71	0.059		
	1	24		23.55	17.70	0.059		
	12	0		22.66	16.81	0.048		
	12	7		22.66	16.81	0.048		
	12	13		22.70	16.85	0.048		
	25	0		22.65	16.80	0.048		
	1	0		23.59	17.74	0.059		
	1	12		23.48	17.63	0.058		
	1	24		23.61	17.76	0.060		
	12	0		22.63	16.78	0.048		
12	7	22.66	16.81	0.048				
12	13	22.63	16.78	0.048				
25	0	22.67	16.82	0.048				
16QAM	706.5	23755	5	1	0	22.63	16.78	0.048
				1	12	22.88	17.03	0.050
				1	24	22.83	16.98	0.050
				12	0	21.54	15.69	0.037
				12	7	21.58	15.73	0.037
				12	13	21.65	15.80	0.038
	25	0		21.70	15.85	0.038		
	1	0		22.65	16.80	0.048		
	1	12		22.55	16.70	0.047		
	1	24		22.49	16.64	0.046		
	12	0		21.62	15.77	0.038		
	12	7		21.65	15.80	0.038		
	12	13		21.56	15.71	0.037		
	25	0		21.72	15.87	0.039		
	1	0		22.87	17.02	0.050		
	1	12		22.87	17.02	0.050		
	1	24		22.92	17.07	0.051		
	12	0		21.71	15.86	0.039		
12	7	21.73	15.88	0.039				
12	13	21.70	15.85	0.038				
25	0	21.68	15.83	0.038				

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	21.58	15.73	0.037
				1	12	21.69	15.84	0.038
				1	24	21.79	15.94	0.039
				12	0	20.68	14.83	0.030
				12	7	20.80	14.95	0.031
				12	13	20.75	14.90	0.031
	710	23790		25	0	20.70	14.85	0.031
				1	0	21.14	15.29	0.034
				1	12	21.69	15.84	0.038
				1	24	21.80	15.95	0.039
				12	0	20.65	14.80	0.030
				12	7	20.67	14.82	0.030
	713.5	23825		12	13	20.56	14.71	0.030
				25	0	20.66	14.81	0.030
				1	0	21.76	15.91	0.039
				1	12	21.75	15.90	0.039
				1	24	21.76	15.91	0.039
				12	0	20.66	14.81	0.030
				12	7	20.72	14.87	0.031
				12	13	20.68	14.83	0.030
				25	0	20.66	14.81	0.030

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	23.43	17.58	0.057
				1	25	23.55	17.70	0.059
				1	49	23.42	17.57	0.057
				25	0	22.62	16.77	0.048
				25	12	22.69	16.84	0.048
				25	25	22.70	16.85	0.048
	710	23790		50	0	22.60	16.75	0.047
				1	0	23.65	17.80	0.060
				1	25	23.60	17.75	0.060
				1	49	23.58	17.73	0.059
				25	0	22.65	16.80	0.048
				25	12	22.72	16.87	0.049
	711	23800		25	25	22.66	16.81	0.048
				50	0	22.59	16.74	0.047
				1	0	23.74	17.89	0.062
1			25	23.56	17.71	0.059		
1			49	23.53	17.68	0.059		
25			0	22.65	16.80	0.048		
16QAM	709	23780	25	12	22.72	16.87	0.049	
			25	25	22.65	16.80	0.048	
			50	0	22.68	16.83	0.048	
			1	0	23.40	17.55	0.057	
			1	25	23.40	17.55	0.057	
			1	49	23.11	17.26	0.053	
	710	23790	25	0	21.60	15.75	0.038	
			25	12	21.76	15.91	0.039	
			25	25	21.76	15.91	0.039	
			50	0	21.60	15.75	0.038	
			1	0	22.74	16.89	0.049	
			1	25	22.83	16.98	0.050	
	711	23800	1	49	22.61	16.76	0.047	
			25	0	21.69	15.84	0.038	
			25	12	21.74	15.89	0.039	
25			25	21.74	15.89	0.039		
50			0	21.61	15.76	0.038		
1			0	23.44	17.59	0.057		
			1	25	23.09	17.24	0.053	
			1	49	23.09	17.24	0.053	
			25	0	21.73	15.88	0.039	
			25	12	21.84	15.99	0.040	
			25	25	21.85	16.00	0.040	
			50	0	21.74	15.89	0.039	

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	22.04	16.19	0.042
				1	25	21.85	16.00	0.040
				1	49	21.92	16.07	0.040
				25	0	20.70	14.85	0.031
				25	12	20.73	14.88	0.031
				25	25	20.70	14.85	0.031
				50	0	20.76	14.91	0.031
	710	23790		1	0	21.79	15.94	0.039
				1	25	21.80	15.95	0.039
				1	49	21.75	15.90	0.039
				25	0	20.77	14.92	0.031
				25	12	20.70	14.85	0.031
				25	25	20.81	14.96	0.031
				50	0	20.75	14.90	0.031
	711	23800		1	0	21.63	15.78	0.038
				1	25	21.55	15.70	0.037
				1	49	21.58	15.73	0.037
				25	0	20.68	14.83	0.030
				25	12	20.83	14.98	0.031
				25	25	20.91	15.06	0.032
				50	0	20.70	14.85	0.031