

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	23.47
				1	12	23.51
				1	24	23.51
				12	0	22.51
				12	7	22.57
				12	13	22.55
	25	0		22.56		
	710	23790		1	0	23.38
				1	12	23.32
				1	24	23.31
				12	0	22.41
				12	7	22.47
				12	13	22.47
	25	0		22.39		
	713.5	23825		1	0	23.39
				1	12	23.33
				1	24	23.32
				12	0	22.39
				12	7	22.38
				12	13	22.38
	25	0		22.44		
16QAM	706.5	23755		1	0	22.54
				1	12	22.64
				1	24	22.57
				12	0	21.52
				12	7	21.50
				12	13	21.50
	25	0	21.56			
	710	23790	1	0	22.43	
			1	12	22.42	
			1	24	22.53	
			12	0	21.40	
			12	7	21.42	
			12	13	21.42	
	25	0	21.47			
	713.5	23825	1	0	22.70	
			1	12	22.67	
			1	24	22.67	
			12	0	21.49	
			12	7	21.46	
			12	13	21.46	
	25	0	21.39			

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	706.5	23755	5	1	0	21.55
				1	12	21.55
				1	24	21.57
				12	0	21.54
				12	7	21.60
				12	13	21.59
				25	0	21.54
	710	23790		1	0	21.51
				1	12	21.45
				1	24	21.46
				12	0	21.49
				12	7	21.47
				12	13	21.52
				25	0	21.54
	713.5	23825		1	0	21.39
				1	12	21.39
				1	24	21.39
				12	0	21.38
				12	7	21.39
				12	13	21.38
				25	0	21.38

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	709	23780	10	1	0	23.48	
				1	25	23.21	
				1	49	23.22	
				25	0	22.39	
				25	12	22.46	
				25	25	22.48	
	50	0		22.53			
	710	23790		1	0	23.37	
				1	25	23.22	
				1	49	23.31	
				25	0	22.49	
				25	12	22.47	
				25	25	22.38	
	50	0		22.44			
	711	23800		1	0	23.38	
				1	25	23.31	
				1	49	23.31	
				25	0	22.41	
				25	12	22.40	
				25	25	22.40	
	50	0		22.45			
	16QAM	709		23780	1	0	23.11
					1	25	22.98
					1	49	22.88
25					0	21.51	
25					12	21.50	
25					25	21.57	
50		0		21.43			
710		23790		1	0	22.60	
				1	25	22.52	
				1	49	22.49	
				25	0	21.49	
				25	12	21.46	
				25	25	21.47	
50		0		21.52			
711		23800		1	0	22.51	
				1	25	22.28	
				1	49	22.35	
				25	0	21.49	
				25	12	21.56	
				25	25	21.55	
				50	0	21.40	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	709	23780	10	1	0	21.48
				1	25	21.55
				1	49	21.50
				25	0	21.49
				25	12	21.50
				25	25	21.50
	710	23790		50	0	21.49
				1	0	21.41
				1	25	21.47
				1	49	21.40
				25	0	21.47
				25	12	21.45
	711	23800		25	25	21.50
				50	0	21.46
				1	0	21.45
				1	25	21.44
				1	49	21.41
				25	0	21.41
				25	12	21.44
				25	25	21.47
				50	0	21.44

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	4.515	Fig.4	4.472	Fig.5	4.472	Fig.6
	713.5	23825		25	0	4.493	Fig.7	4.472	Fig.8	4.472	Fig.9
	709	23780	10	50	0	8.900	Fig.10	8.900	Fig.11	8.944	Fig.12
	710	23790		50	0	8.944	Fig.13	8.900	Fig.14	8.944	Fig.15
	711	23800		50	0	8.900	Fig.16	8.857	Fig.17	8.857	Fig.18

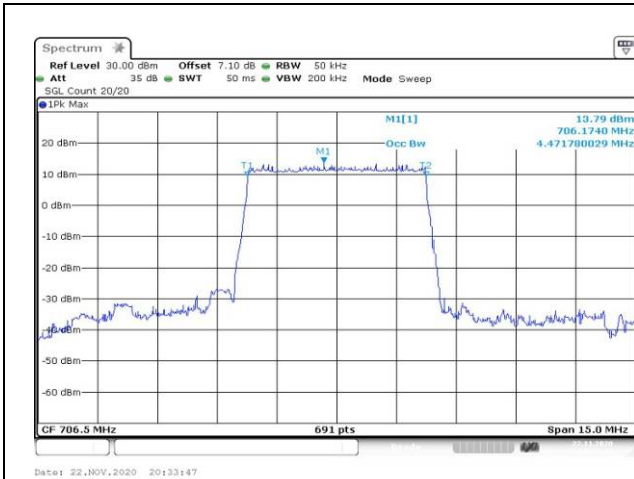


Fig.1

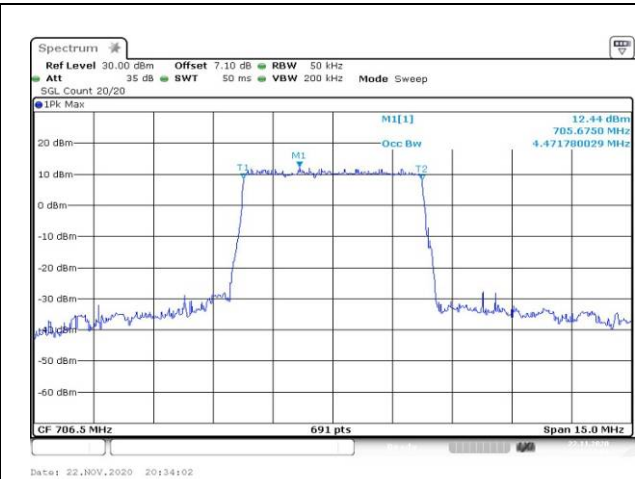


Fig.2

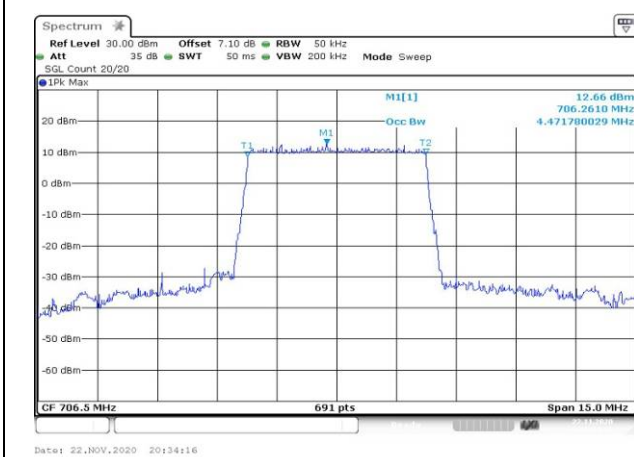


Fig.3

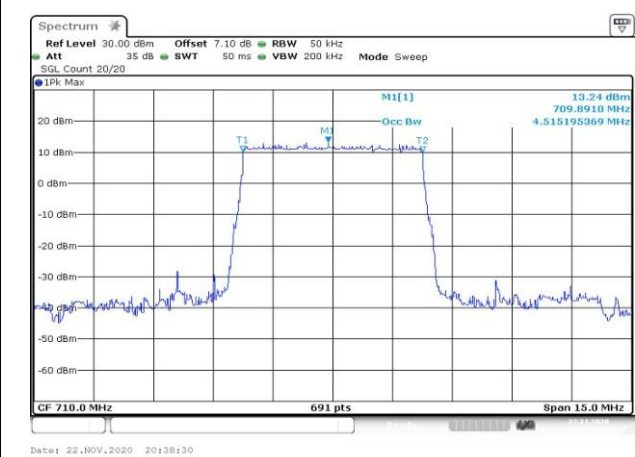


Fig.4

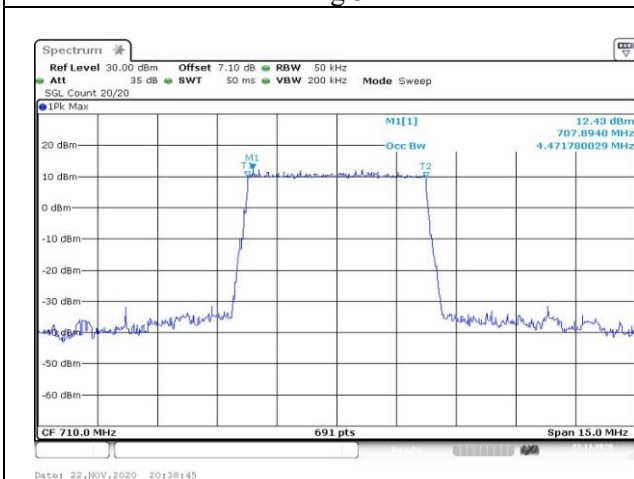


Fig.5

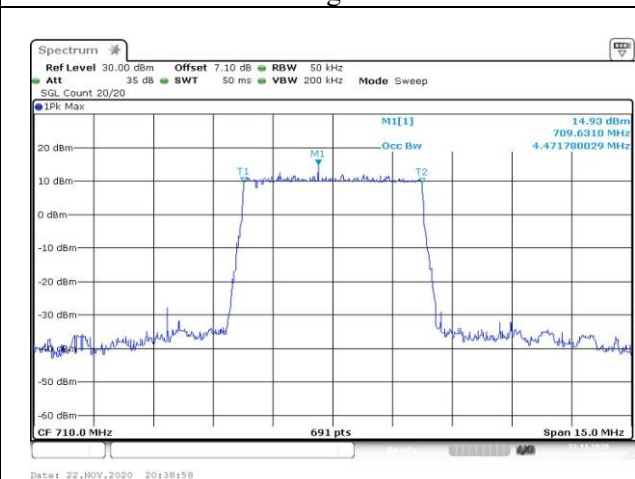


Fig.6

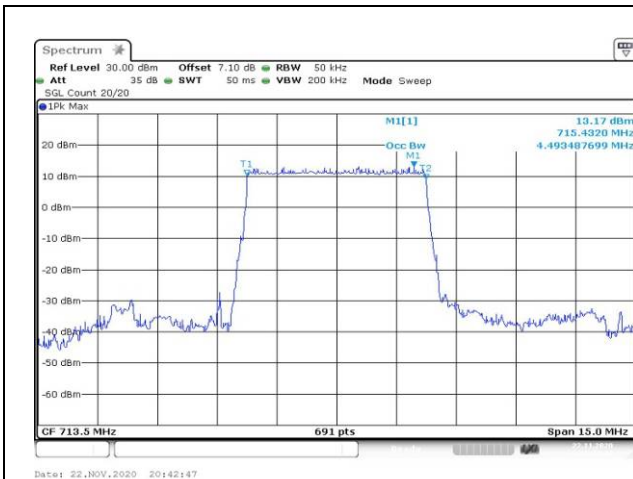


Fig.7

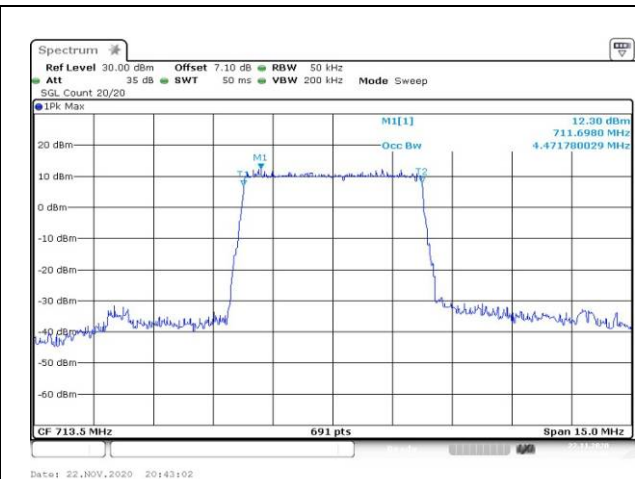


Fig.8

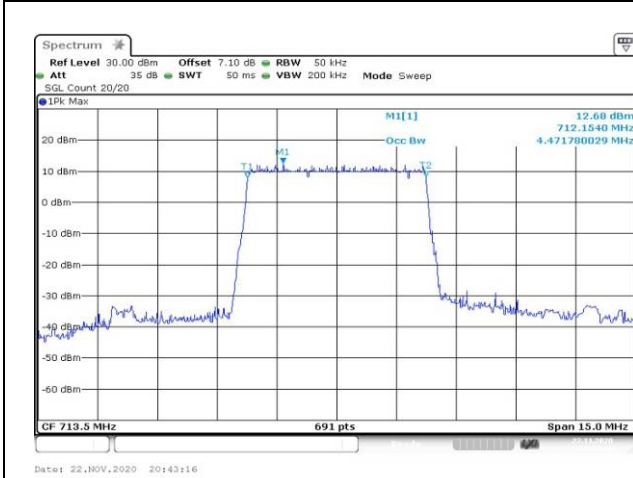


Fig.9

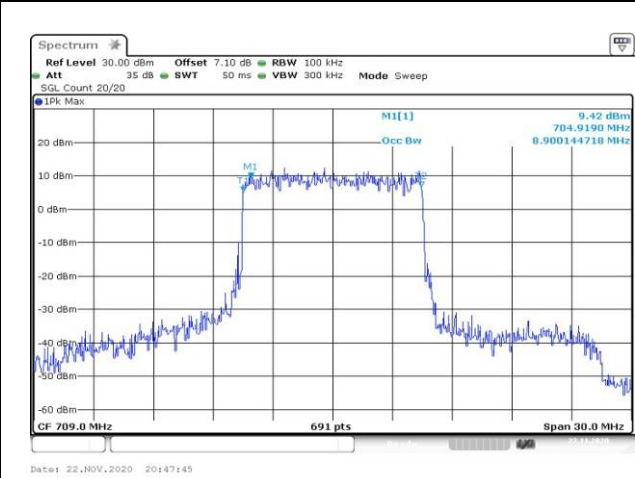


Fig.10

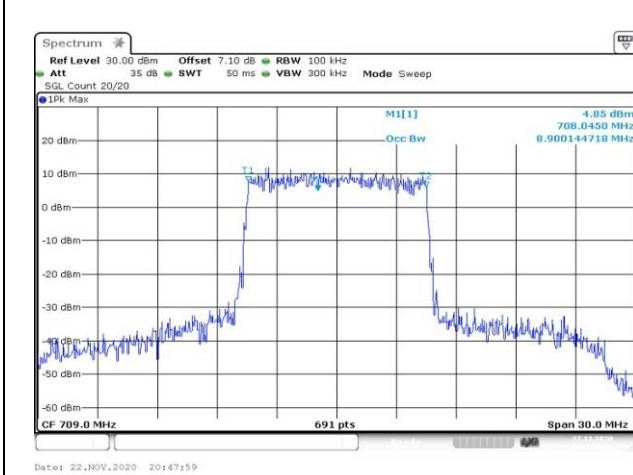


Fig.11

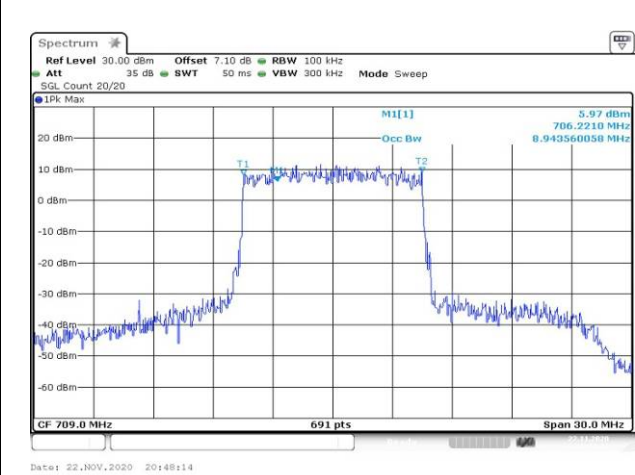
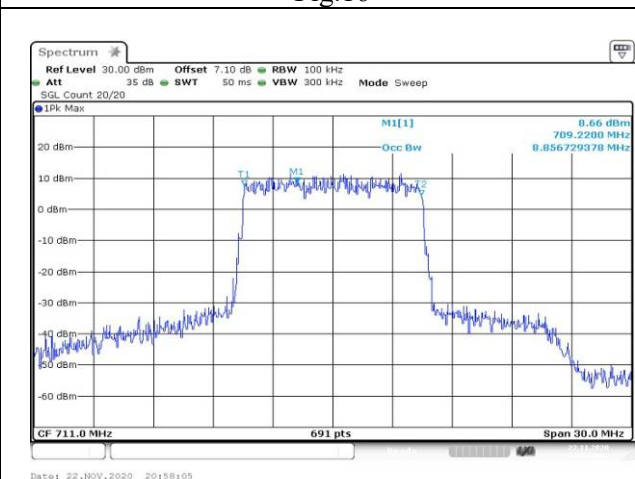
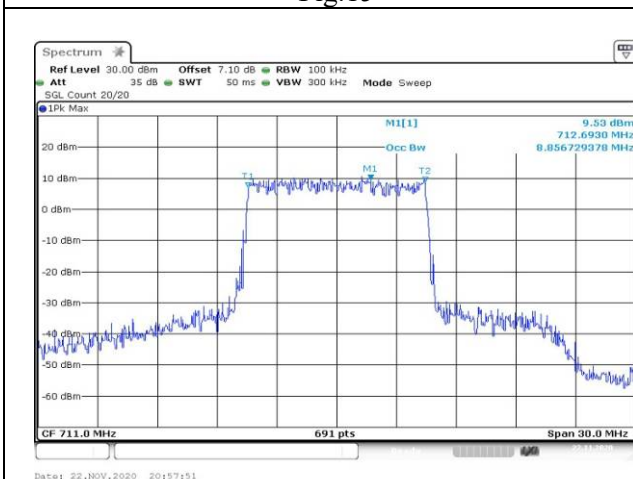
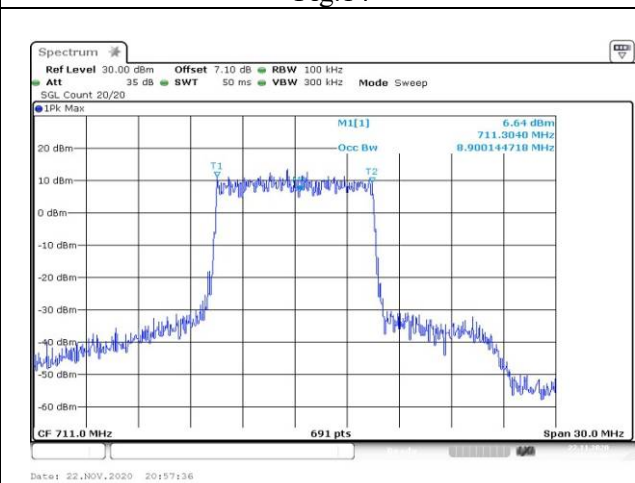
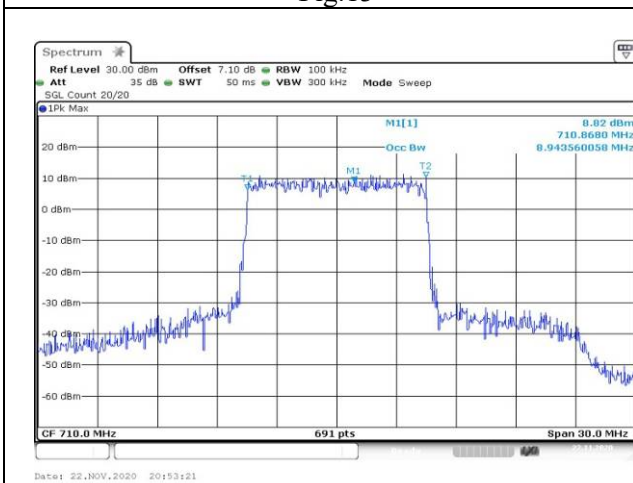
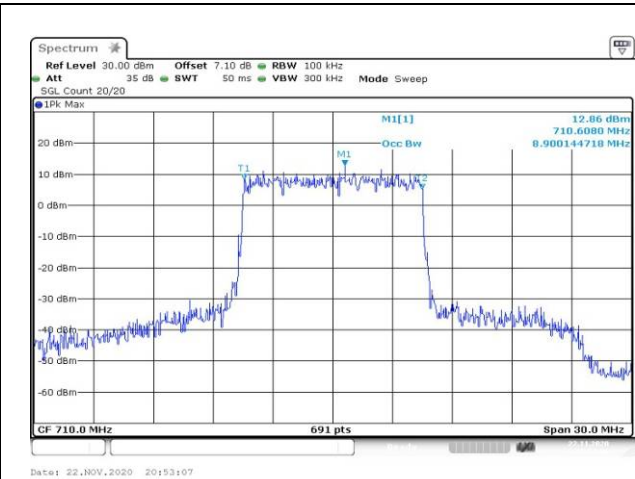
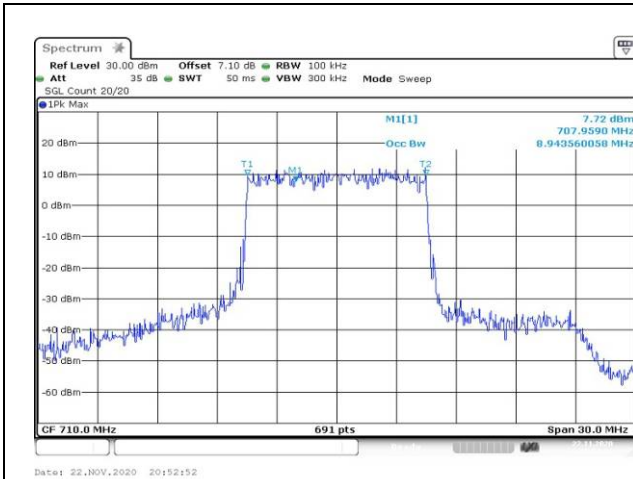


Fig.12



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	4.884	Fig.1	4.906	Fig.2	4.819	Fig.3
	710	23790		25	0	4.884	Fig.4	4.884	Fig.5	4.797	Fig.6
	713.5	23825		25	0	4.906	Fig.7	4.906	Fig.8	4.863	Fig.9
	709	23780	10	50	0	9.725	Fig.10	9.595	Fig.11	9.638	Fig.12
	710	23790		50	0	9.551	Fig.13	9.508	Fig.14	9.508	Fig.15
	711	23800		50	0	9.595	Fig.16	9.638	Fig.17	9.508	Fig.18

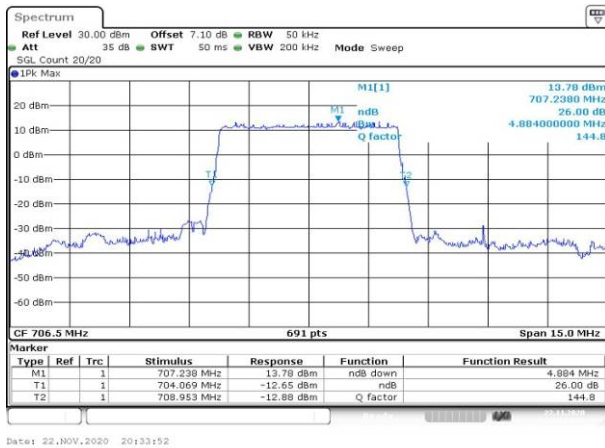


Fig.1

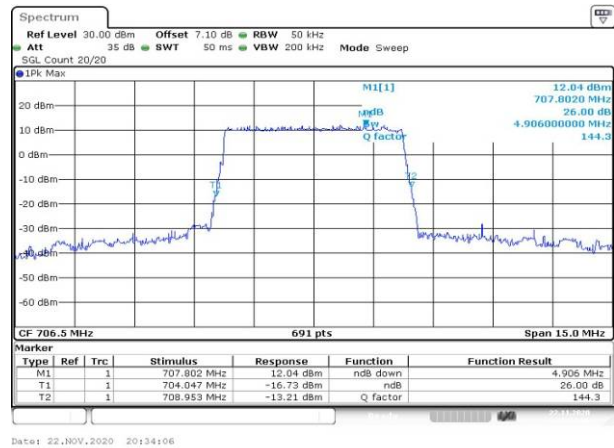


Fig.2

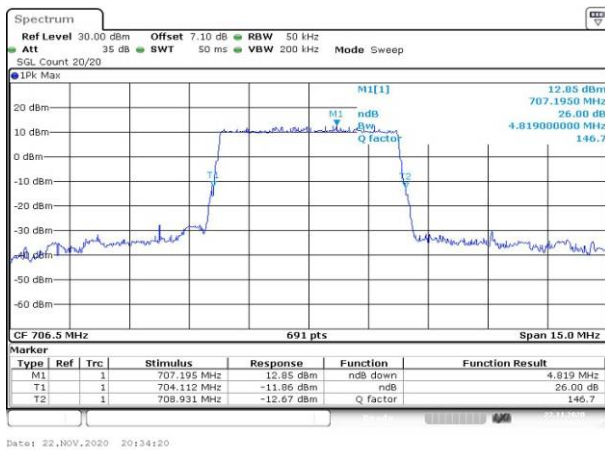


Fig.3

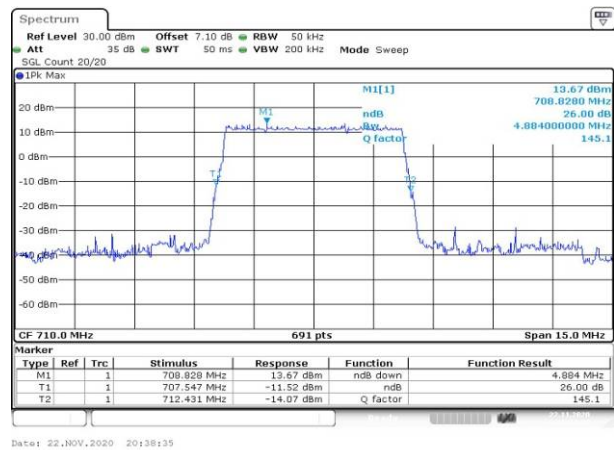


Fig.4

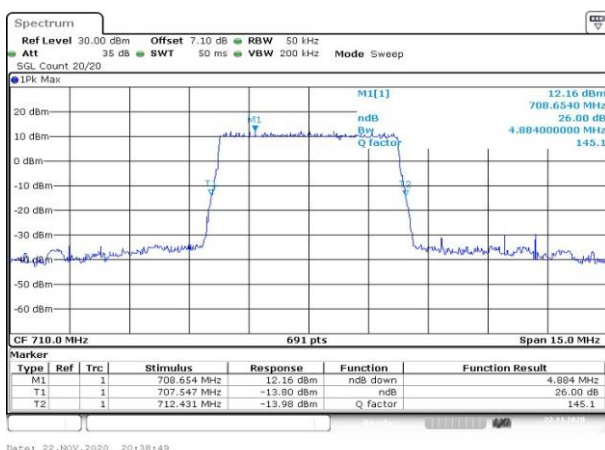


Fig.5

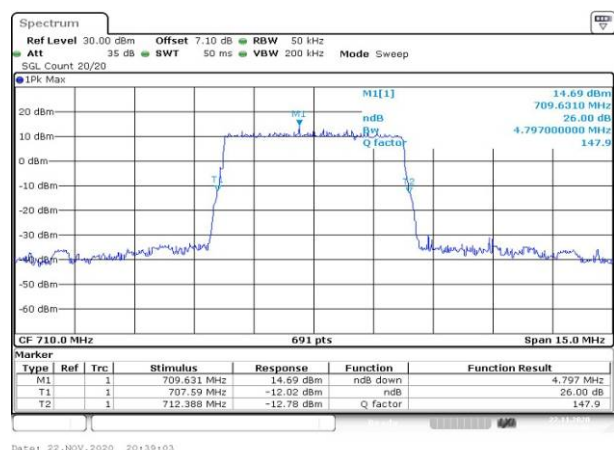


Fig.6

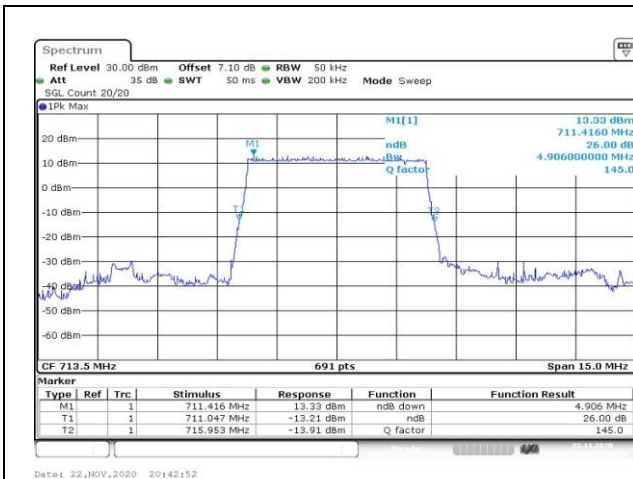


Fig.7

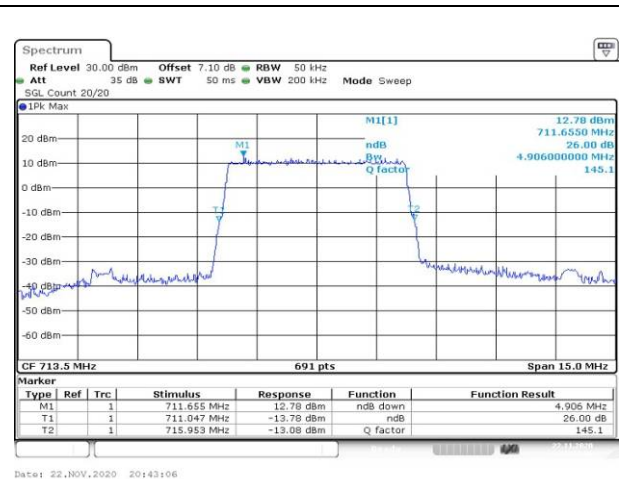


Fig.8

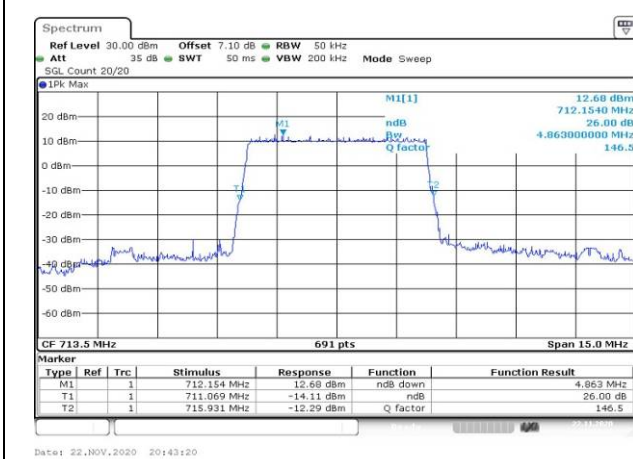


Fig.9

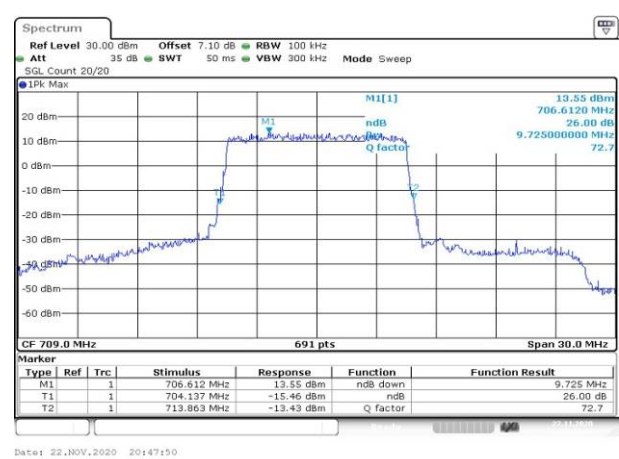


Fig.10

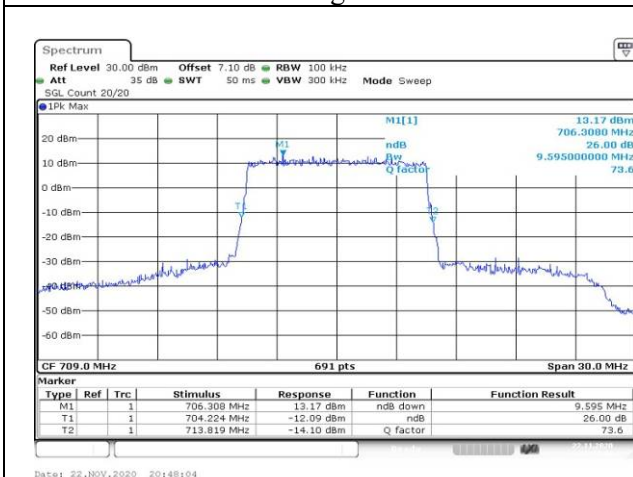


Fig.11

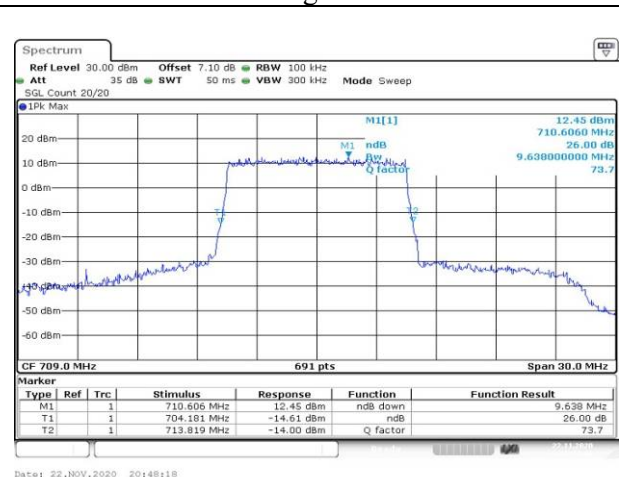


Fig.12

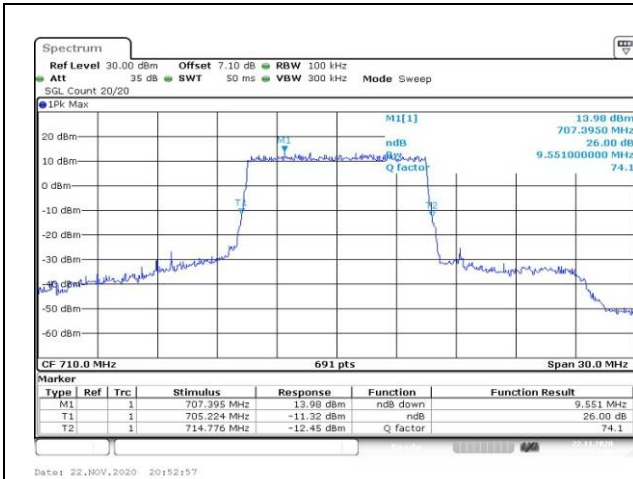


Fig.13



Fig.14

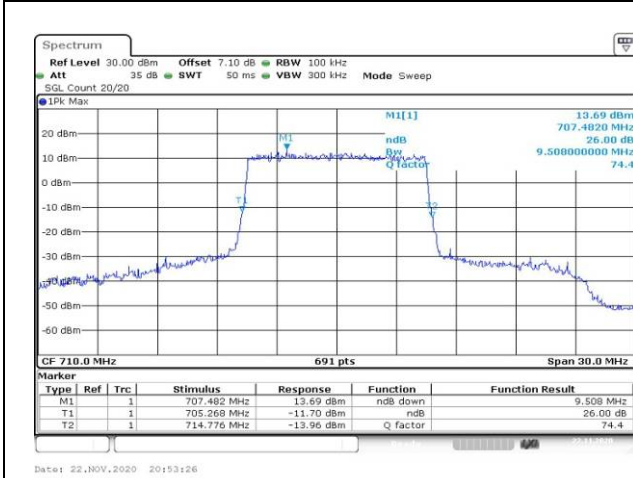


Fig.15

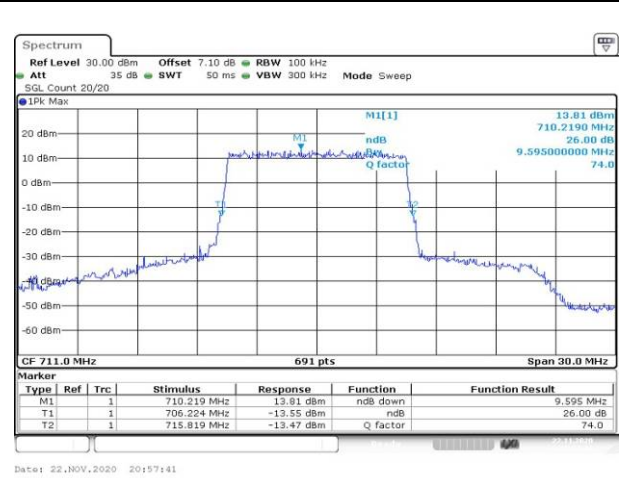


Fig.16

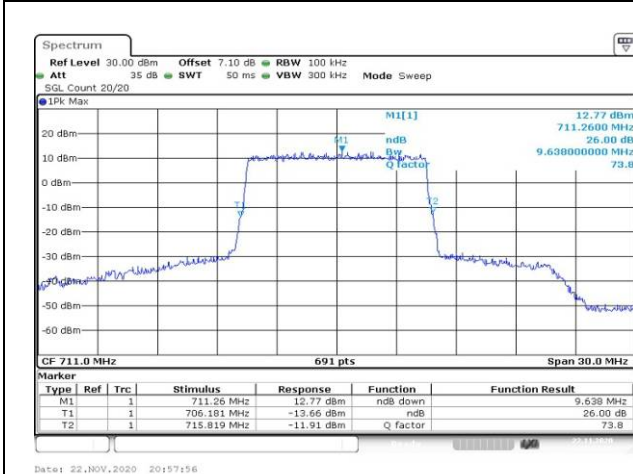


Fig.17



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

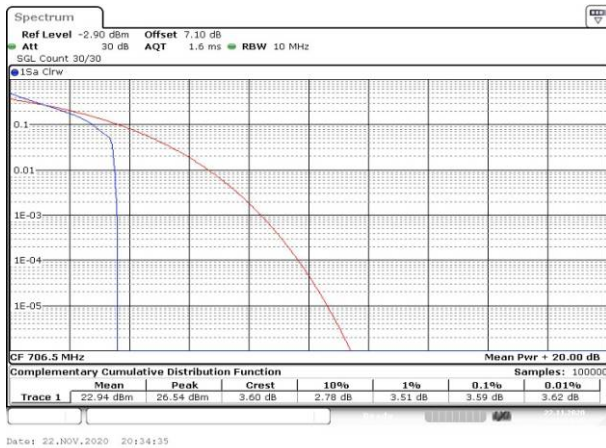


Fig.1

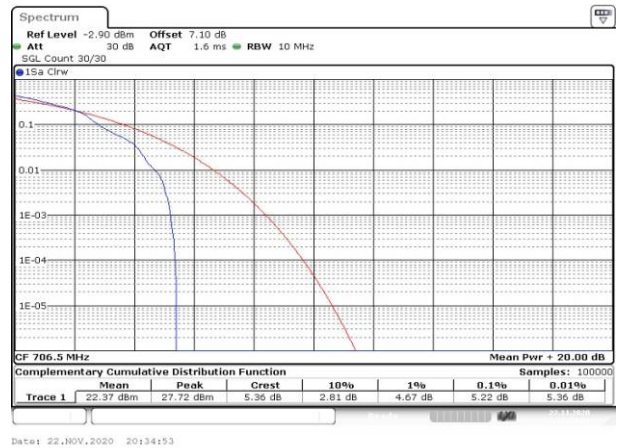


Fig.2

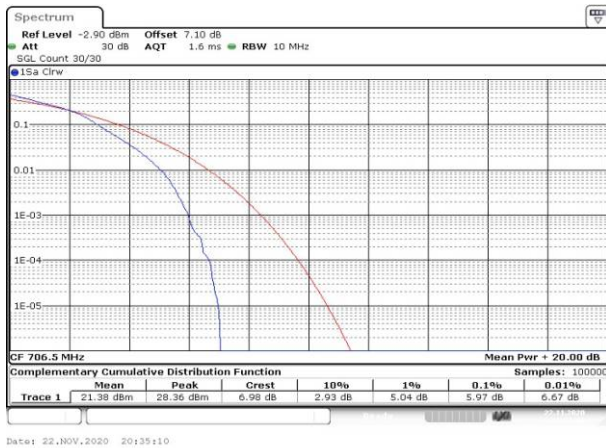


Fig.3

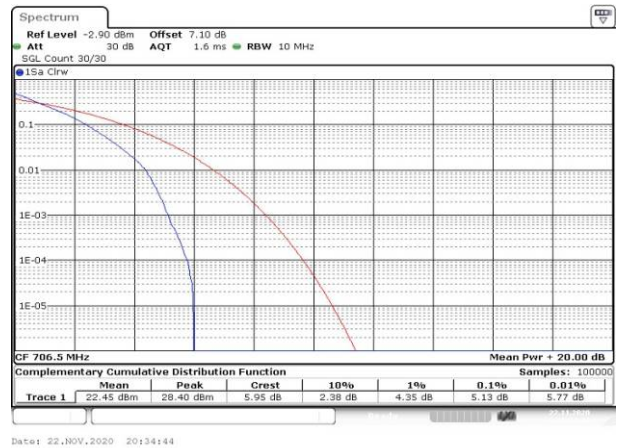


Fig.4

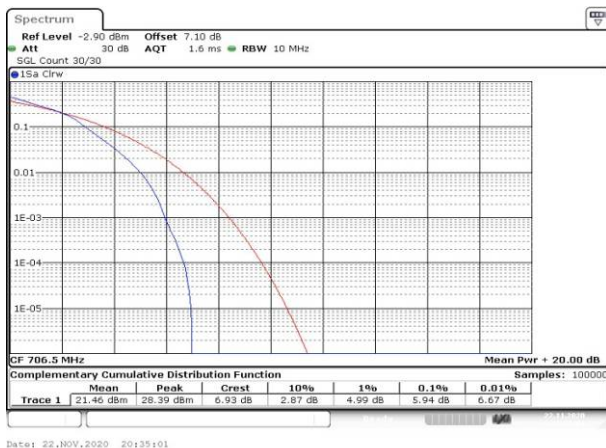


Fig.5

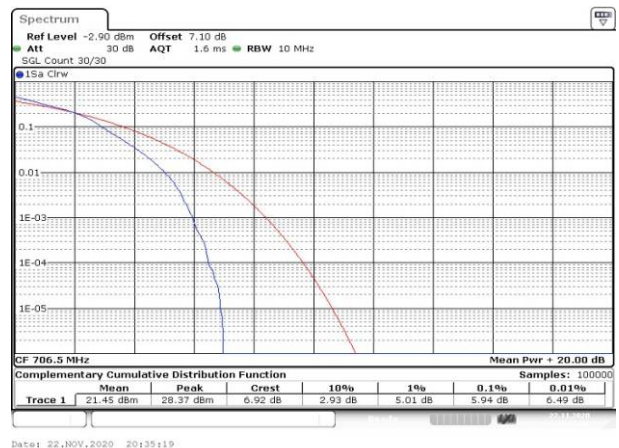


Fig.6

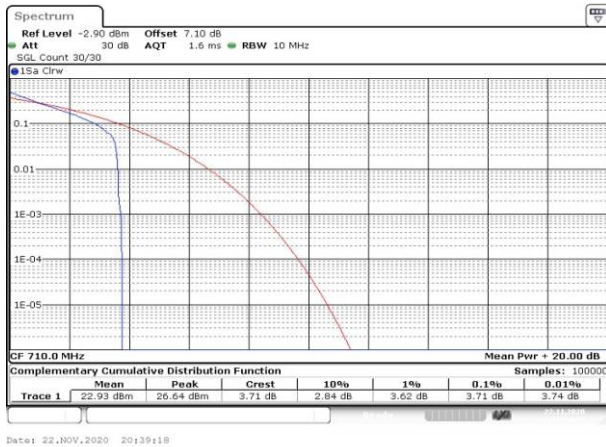


Fig.7

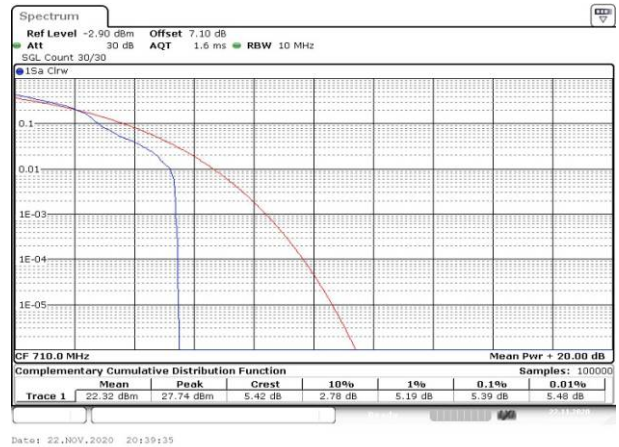


Fig.8

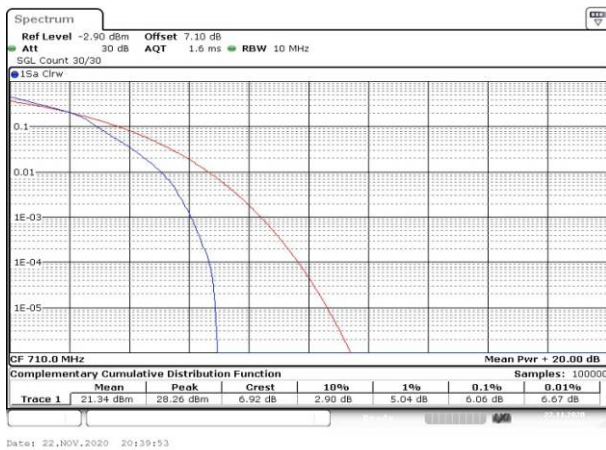


Fig.9

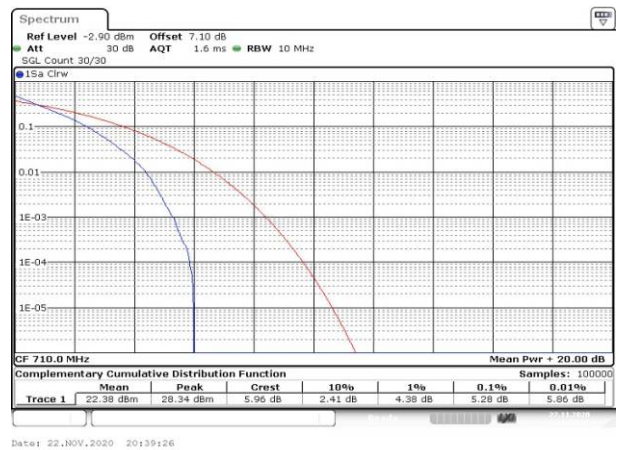


Fig.10

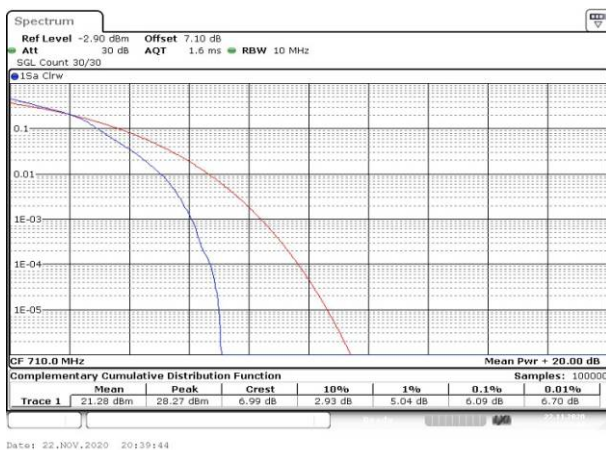


Fig.11

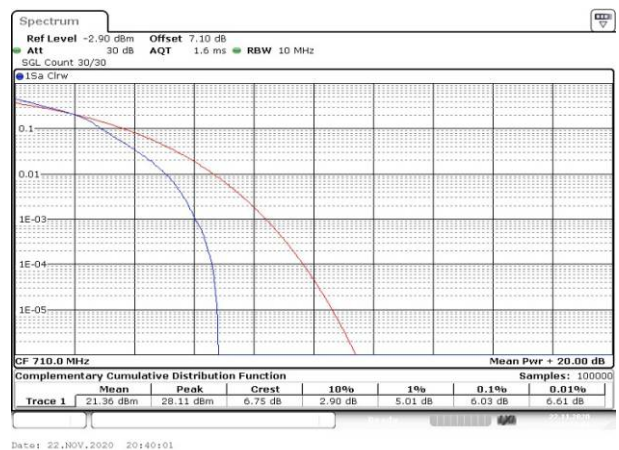


Fig.12

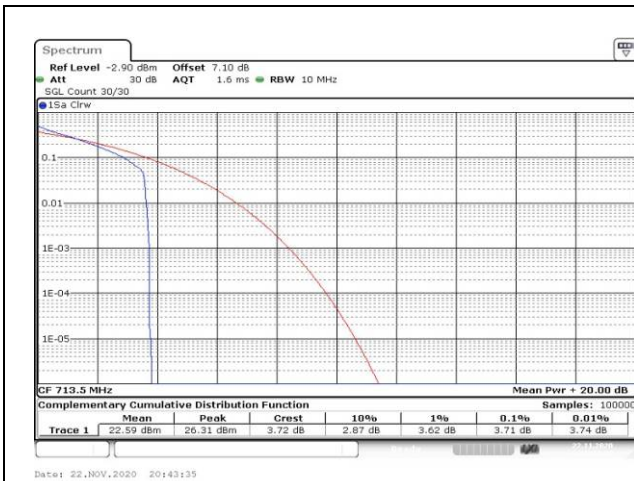


Fig.13

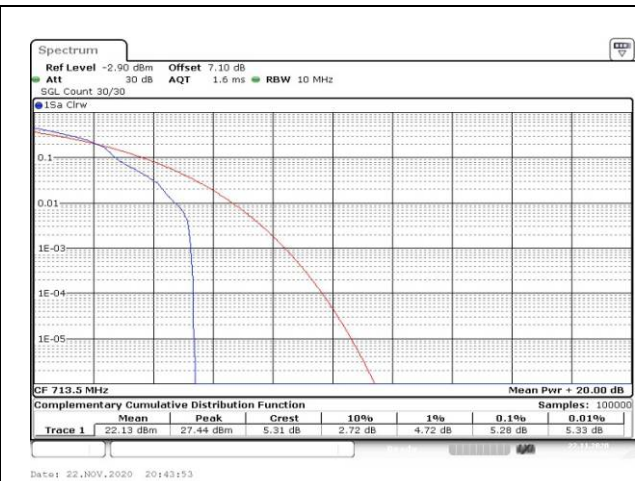


Fig.14



Fig.15



Fig.16



Fig.17

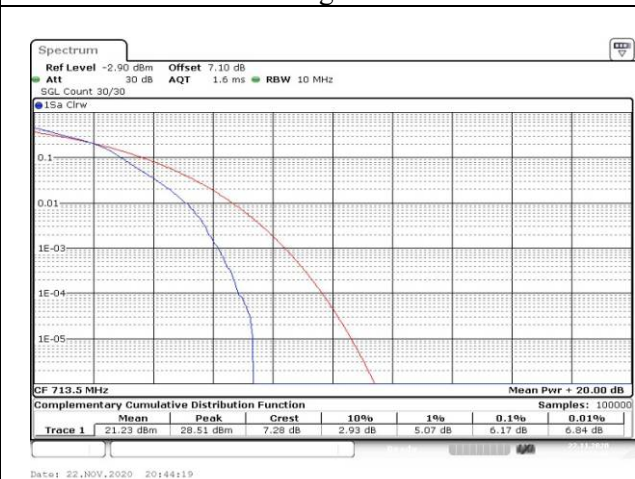


Fig.18

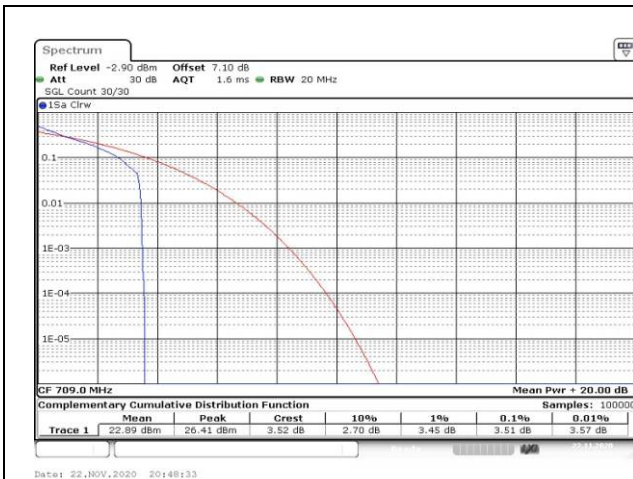


Fig.19

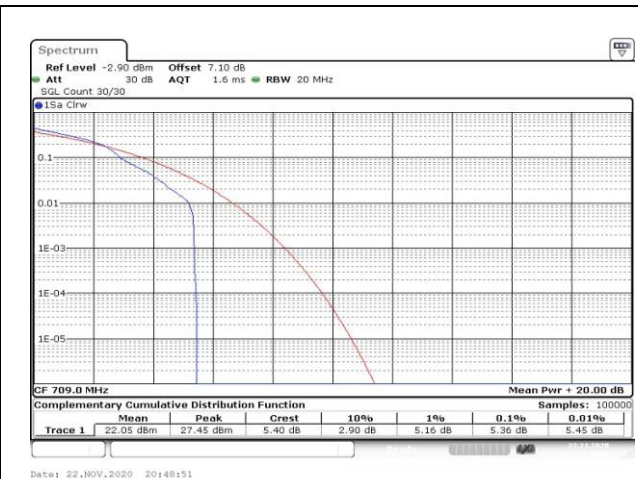


Fig.20



Fig.21

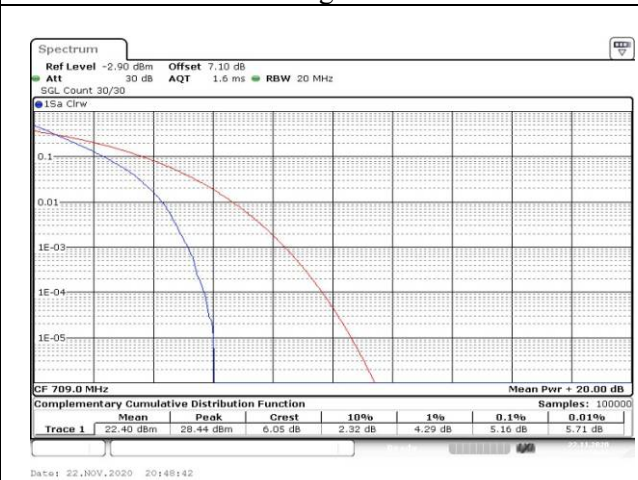


Fig.22

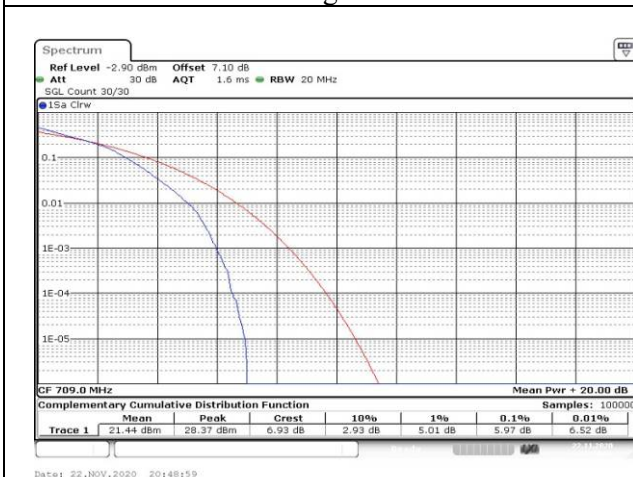


Fig.23

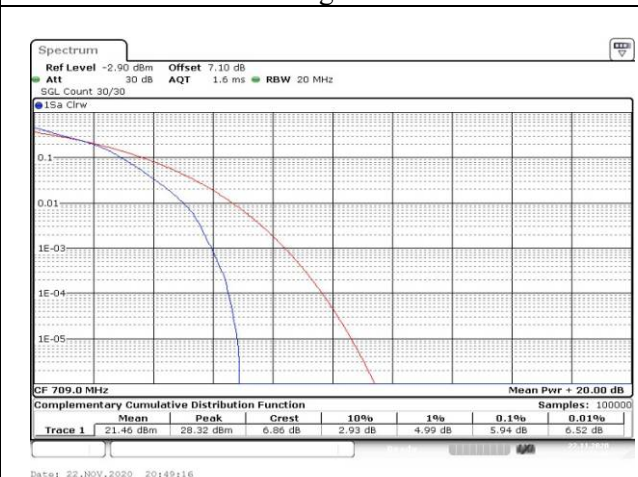


Fig.24

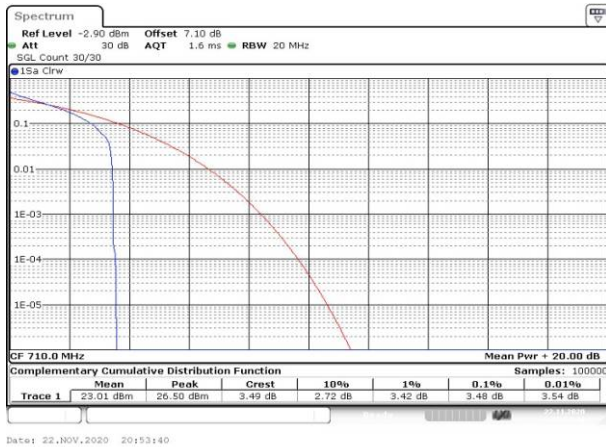


Fig.25

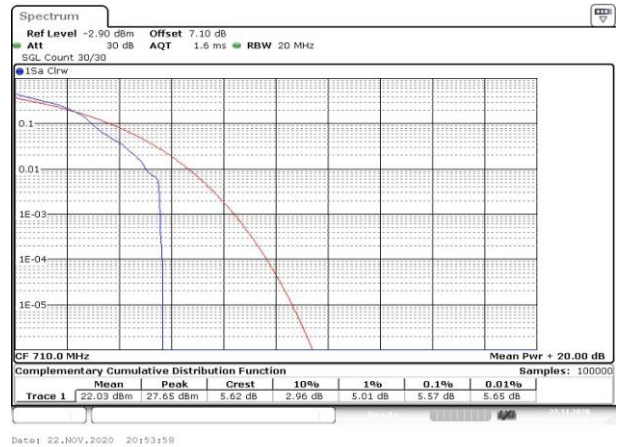


Fig.26

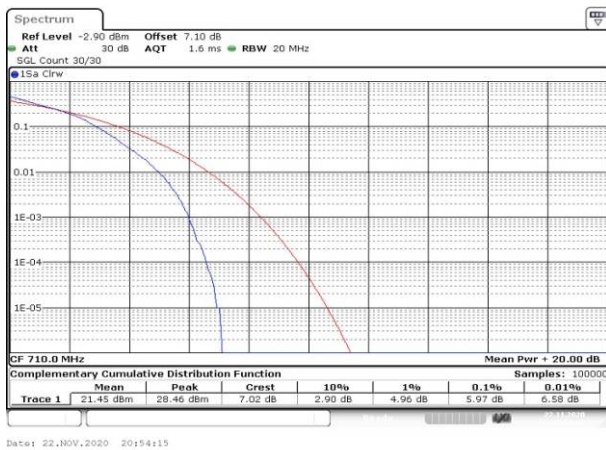


Fig.27

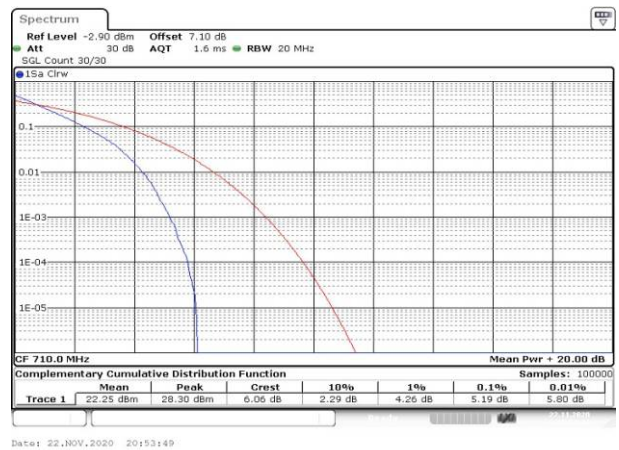


Fig.28

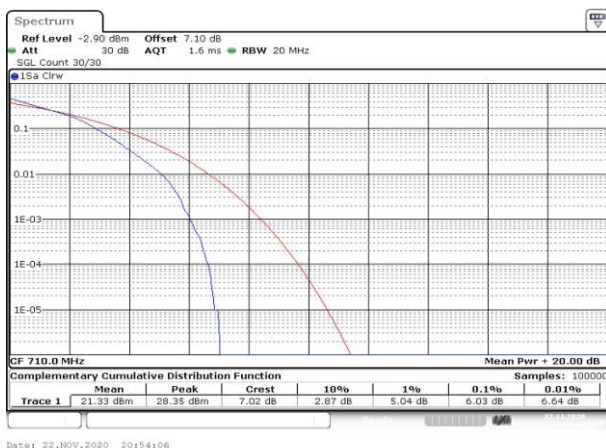


Fig.29

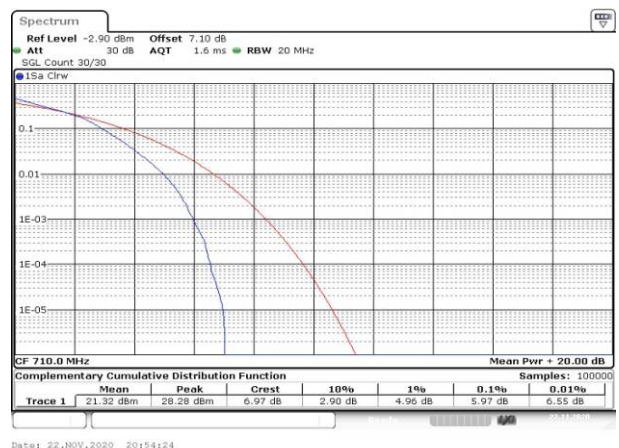


Fig.30

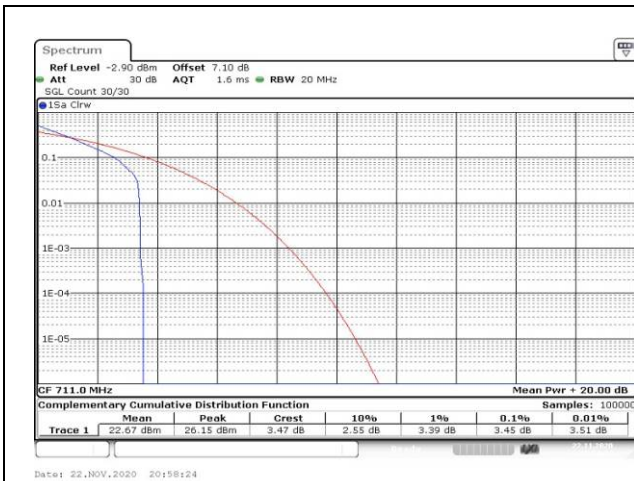


Fig.31

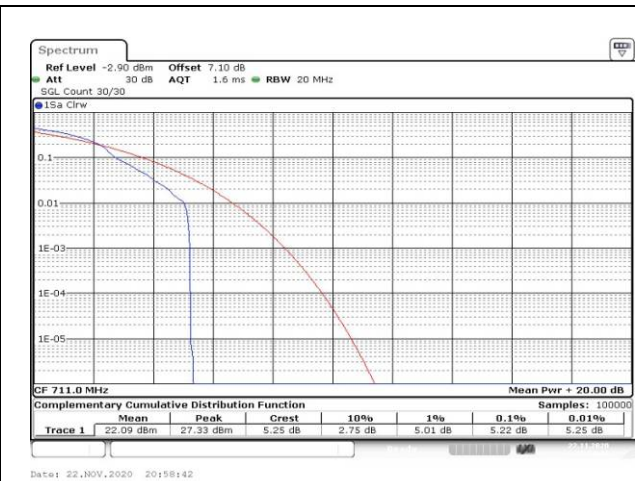


Fig.32



Fig.33



Fig.34

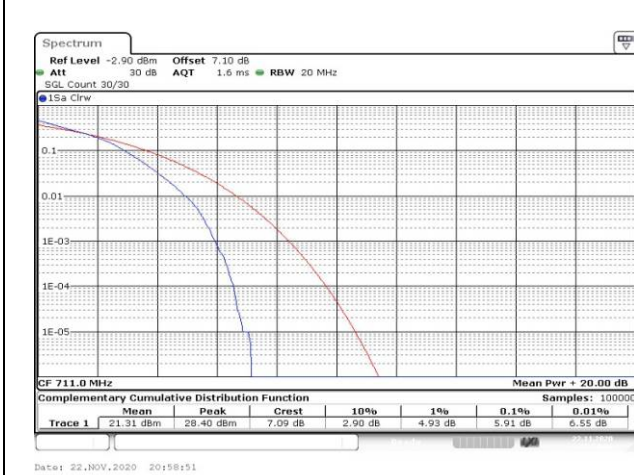


Fig.35

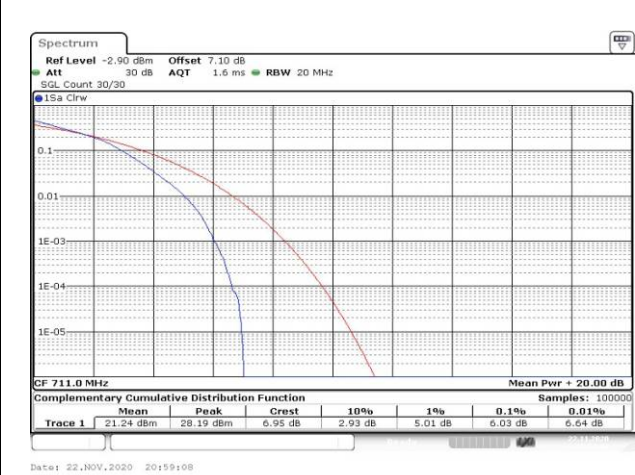


Fig.36

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	99	Fig.1
	710	23790		1	99	Fig.2
	711	23800		1	99	Fig.3

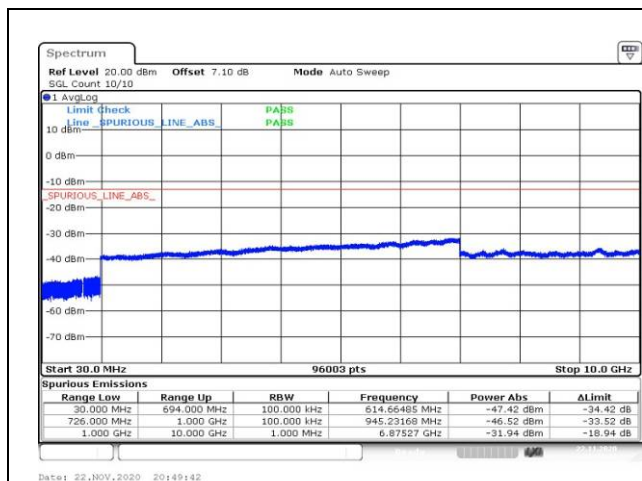


Fig.1

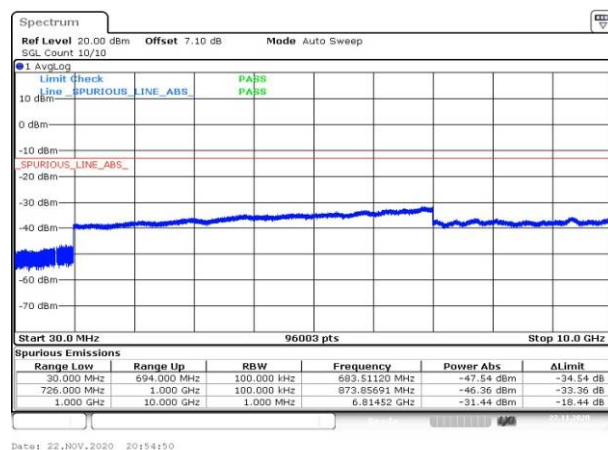


Fig.2

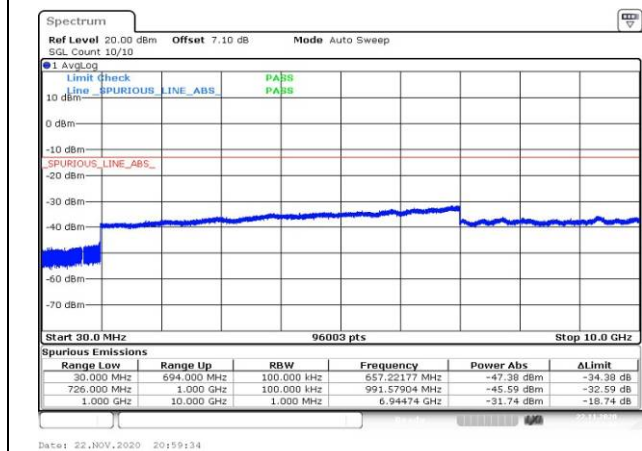


Fig.3

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

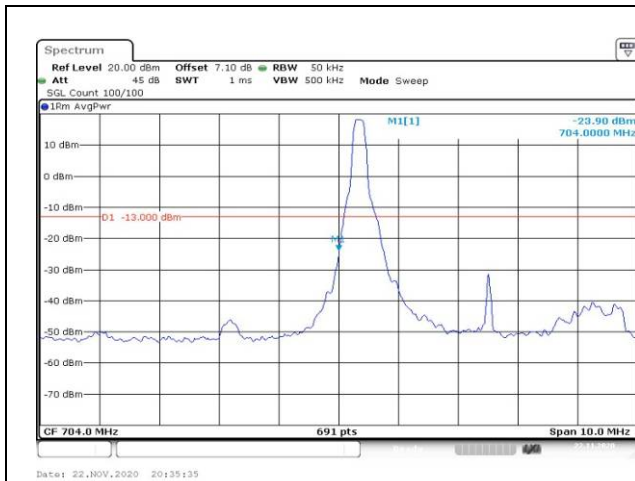


Fig.1

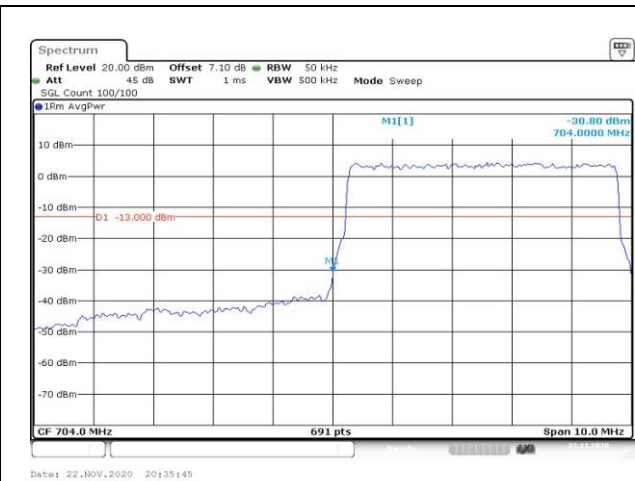


Fig.2

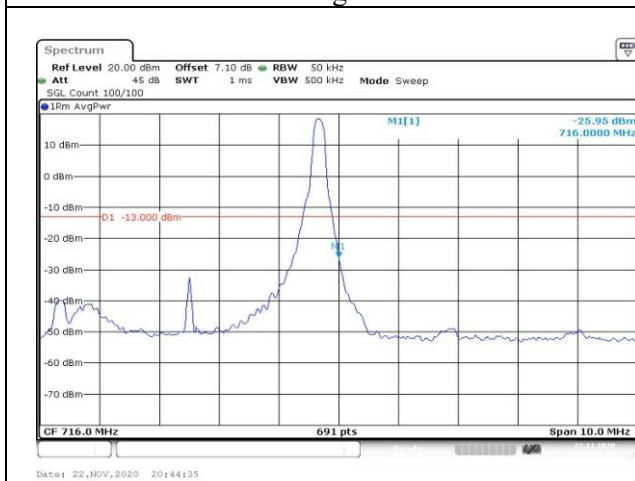


Fig.3

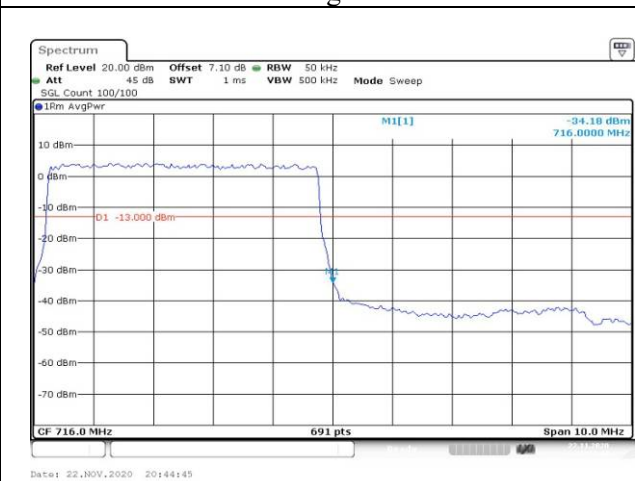


Fig.4

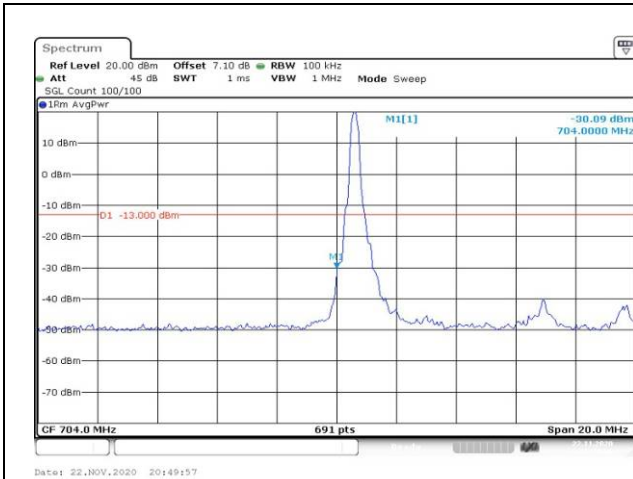


Fig.5

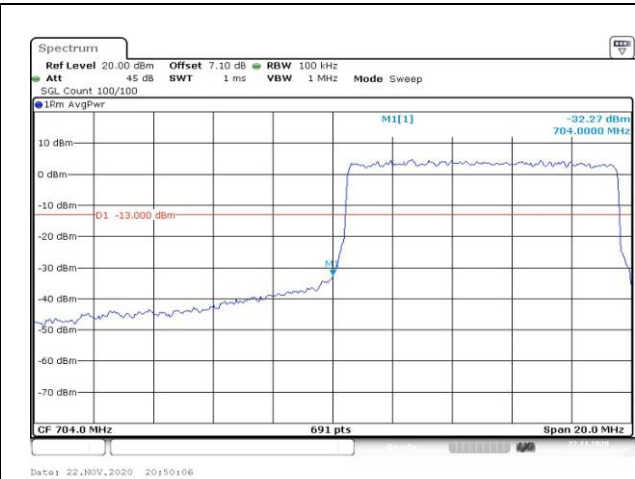


Fig.6

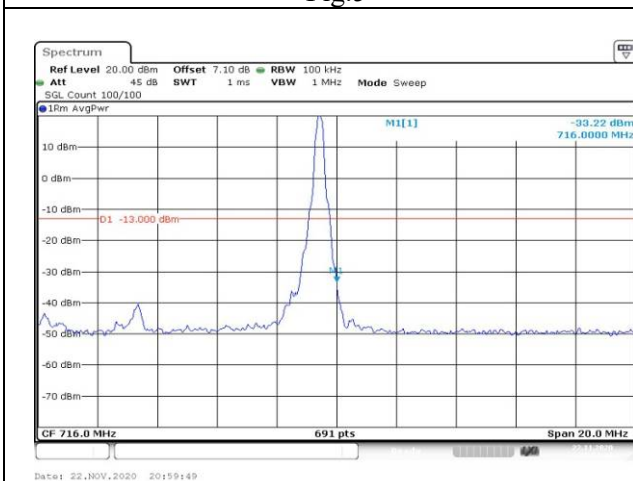


Fig.7

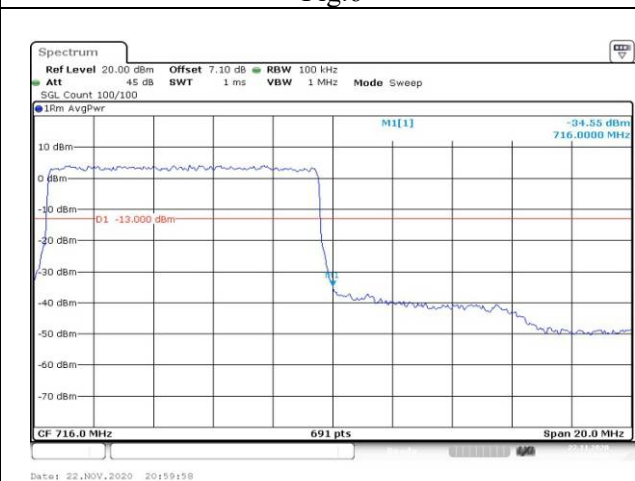


Fig.8

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band17 Low Channel QPSK	
		5M	10M
-20	NV	-0.004	0.004
-10	NV	0.005	0.004
0	NV	-0.003	0.007
+10	NV	0.003	0.006
+20	NV	0.000	0.000
+30	NV	0.006	0.007
+40	NV	-0.003	-0.003
+50	NV	-0.003	-0.002
+55	NV	-0.002	-0.001
+20	LV	0.000	0.000
+20	HV	-0.005	0.008

Temperature(°C)	Voltage	Test Result (ppm) Band17 High Channel QPSK	
		5M	10M
-20	NV	0.000	0.006
-10	NV	0.006	0.005
0	NV	-0.001	0.007
+10	NV	-0.001	0.007
+20	NV	0.000	0.000
+30	NV	0.000	0.011
+40	NV	-0.005	0.011
+50	NV	-0.001	0.008
+55	NV	0.003	0.002
+20	LV	0.000	0.000
+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	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	706.5	23755	5	1	0	23.47	22.32	0.171
				1	12	23.51	22.36	0.172
				1	24	23.51	22.36	0.172
				12	0	22.51	21.36	0.137
				12	7	22.57	21.42	0.139
				12	13	22.55	21.40	0.138
				25	0	22.56	21.41	0.138
	710	23790		1	0	23.38	22.23	0.167
				1	12	23.32	22.17	0.165
				1	24	23.31	22.16	0.164
				12	0	22.41	21.26	0.134
				12	7	22.47	21.32	0.136
				12	13	22.47	21.32	0.136
				25	0	22.39	21.24	0.133
	713.5	23825		1	0	23.39	22.24	0.167
				1	12	23.33	22.18	0.165
				1	24	23.32	22.17	0.165
				12	0	22.39	21.24	0.133
				12	7	22.38	21.23	0.133
				12	13	22.38	21.23	0.133
				25	0	22.44	21.29	0.135
16QAM	706.5	23755	1	0	22.54	21.39	0.138	
			1	12	22.64	21.49	0.141	
			1	24	22.57	21.42	0.139	
			12	0	21.52	20.37	0.109	
			12	7	21.50	20.35	0.108	
			12	13	21.50	20.35	0.108	
			25	0	21.56	20.41	0.110	
	710	23790	1	0	22.43	21.28	0.134	
			1	12	22.42	21.27	0.134	
			1	24	22.53	21.38	0.137	
			12	0	21.40	20.25	0.106	
			12	7	21.42	20.27	0.106	
			12	13	21.42	20.27	0.106	
			25	0	21.47	20.32	0.108	
	713.5	23825	1	0	22.70	21.55	0.143	
			1	12	22.67	21.52	0.142	
			1	24	22.67	21.52	0.142	
			12	0	21.49	20.34	0.108	
			12	7	21.46	20.31	0.107	
			12	13	21.46	20.31	0.107	
			25	0	21.39	20.24	0.106	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	706.5	23755	5	1	0	21.55	20.40	0.110
				1	12	21.55	20.40	0.110
				1	24	21.57	20.42	0.110
				12	0	21.54	20.39	0.109
				12	7	21.60	20.45	0.111
				12	13	21.59	20.44	0.111
				25	0	21.54	20.39	0.109
	710	23790		1	0	21.51	20.36	0.109
				1	12	21.45	20.30	0.107
				1	24	21.46	20.31	0.107
				12	0	21.49	20.34	0.108
				12	7	21.47	20.32	0.108
				12	13	21.52	20.37	0.109
				25	0	21.54	20.39	0.109
	713.5	23825		1	0	21.39	20.24	0.106
				1	12	21.39	20.24	0.106
				1	24	21.39	20.24	0.106
				12	0	21.38	20.23	0.105
				12	7	21.39	20.24	0.106
				12	13	21.38	20.23	0.105
				25	0	21.38	20.23	0.105

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	709	23780	10	1	0	23.48	22.33	0.171
				1	25	23.21	22.06	0.161
				1	49	23.22	22.07	0.161
				25	0	22.39	21.24	0.133
				25	12	22.46	21.31	0.135
				25	25	22.48	21.33	0.136
				50	0	22.53	21.38	0.137
	710	23790		1	0	23.37	22.22	0.167
				1	25	23.22	22.07	0.161
				1	49	23.31	22.16	0.164
				25	0	22.49	21.34	0.136
				25	12	22.47	21.32	0.136
				25	25	22.38	21.23	0.133
				50	0	22.44	21.29	0.135
	711	23800		1	0	23.38	22.23	0.167
				1	25	23.31	22.16	0.164
				1	49	23.31	22.16	0.164
				25	0	22.41	21.26	0.134
				25	12	22.40	21.25	0.133
				25	25	22.40	21.25	0.133
				50	0	22.45	21.30	0.135
16QAM	709	23780	1	0	23.11	21.96	0.157	
			1	25	22.98	21.83	0.152	
			1	49	22.88	21.73	0.149	
			25	0	21.51	20.36	0.109	
			25	12	21.50	20.35	0.108	
			25	25	21.57	20.42	0.110	
			50	0	21.43	20.28	0.107	
	710	23790	1	0	22.60	21.45	0.140	
			1	25	22.52	21.37	0.137	
			1	49	22.49	21.34	0.136	
			25	0	21.49	20.34	0.108	
			25	12	21.46	20.31	0.107	
			25	25	21.47	20.32	0.108	
			50	0	21.52	20.37	0.109	
	711	23800	1	0	22.51	21.36	0.137	
			1	25	22.28	21.13	0.130	
			1	49	22.35	21.20	0.132	
			25	0	21.49	20.34	0.108	
			25	12	21.56	20.41	0.110	
			25	25	21.55	20.40	0.110	
			50	0	21.40	20.25	0.106	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	709	23780	10	1	0	21.48	20.33	0.108
				1	25	21.55	20.40	0.110
				1	49	21.50	20.35	0.108
				25	0	21.49	20.34	0.108
				25	12	21.50	20.35	0.108
				25	25	21.50	20.35	0.108
	710	23790		50	0	21.49	20.34	0.108
				1	0	21.41	20.26	0.106
				1	25	21.47	20.32	0.108
				1	49	21.40	20.25	0.106
				25	0	21.47	20.32	0.108
				25	12	21.45	20.30	0.107
	711	23800		25	25	21.50	20.35	0.108
				50	0	21.46	20.31	0.107
				1	0	21.45	20.30	0.107
				1	25	21.44	20.29	0.107
				1	49	21.41	20.26	0.106
				25	0	21.41	20.26	0.106
				25	12	21.44	20.29	0.107
				25	25	21.47	20.32	0.108
				50	0	21.44	20.29	0.107