

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

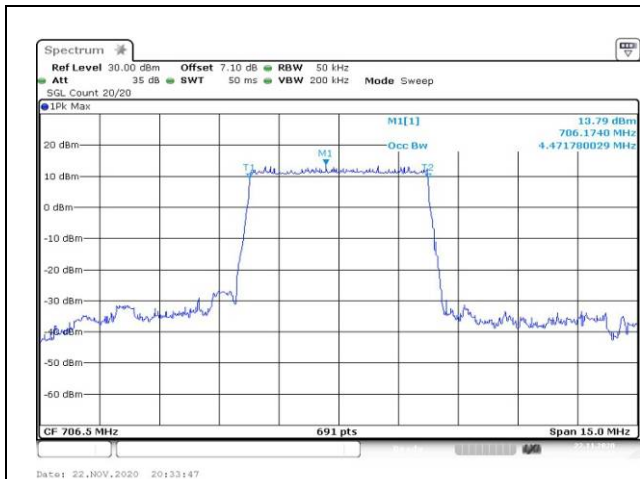


Fig.1

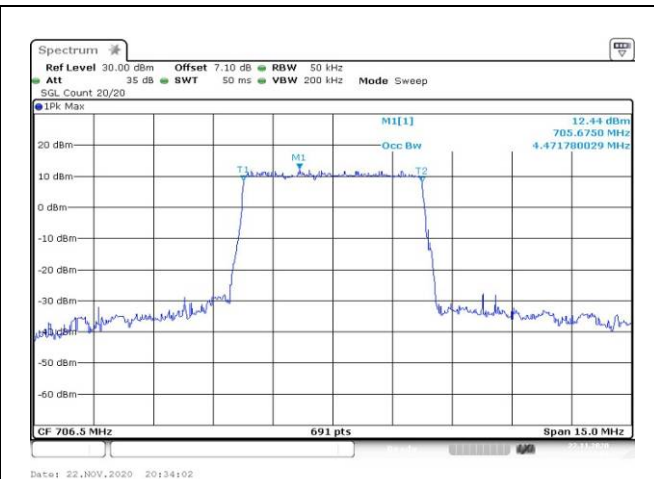


Fig.2

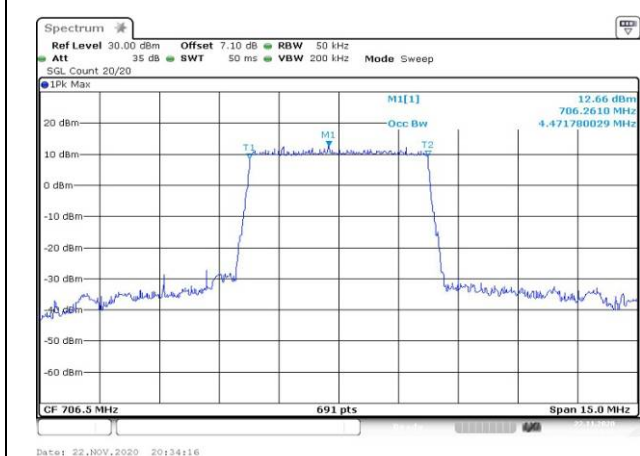


Fig.3

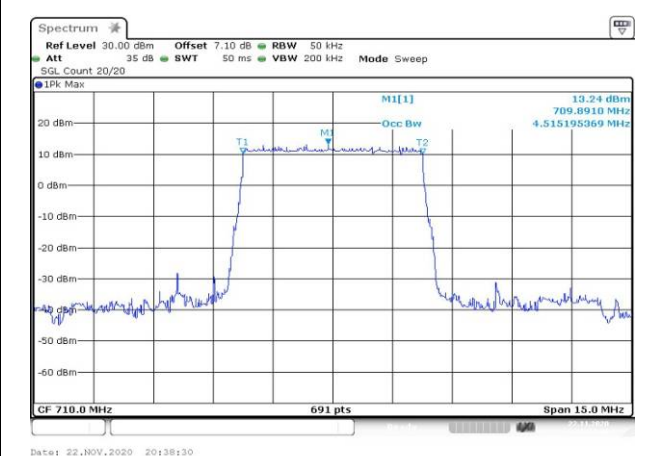


Fig.4

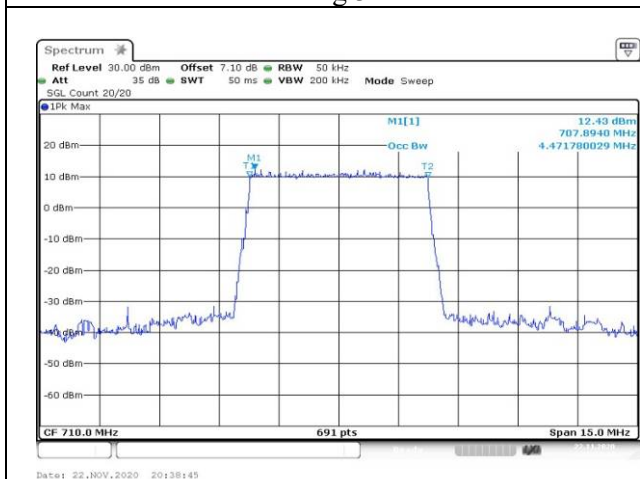


Fig.5

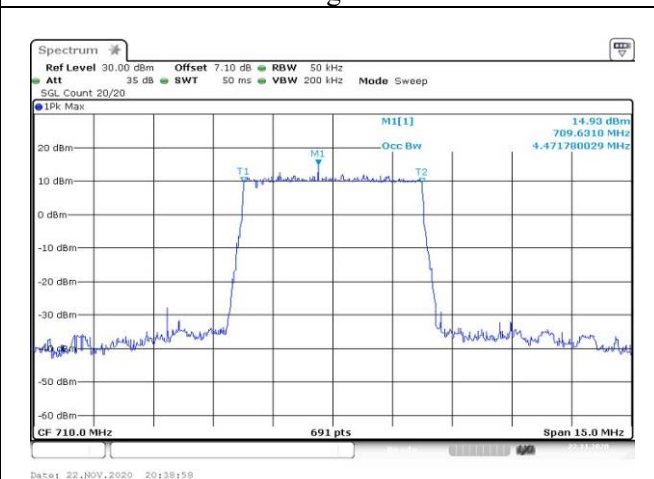


Fig.6

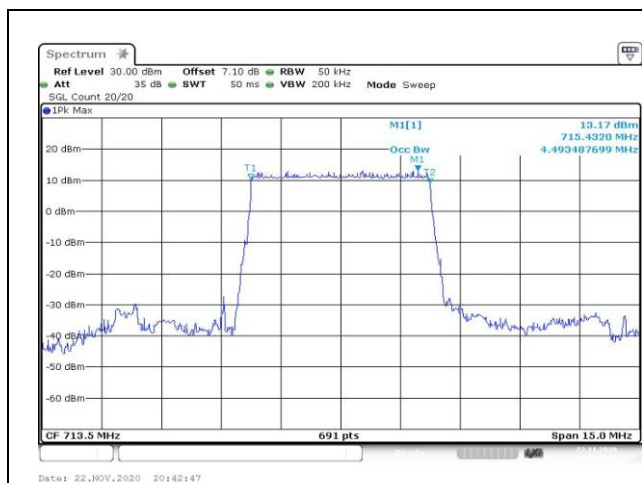


Fig.7

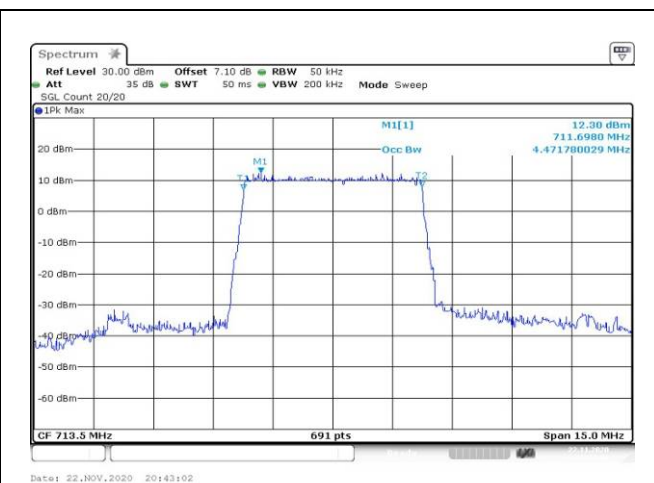


Fig.8

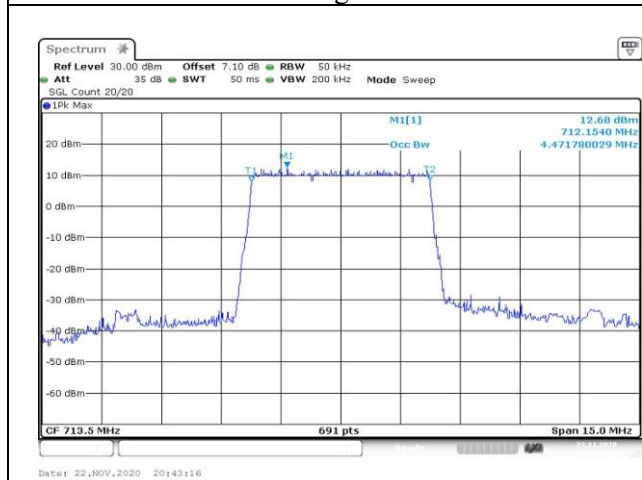


Fig.9

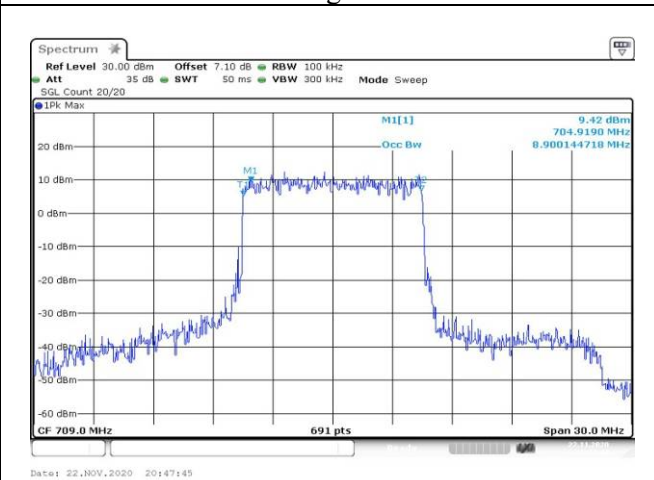


Fig.10

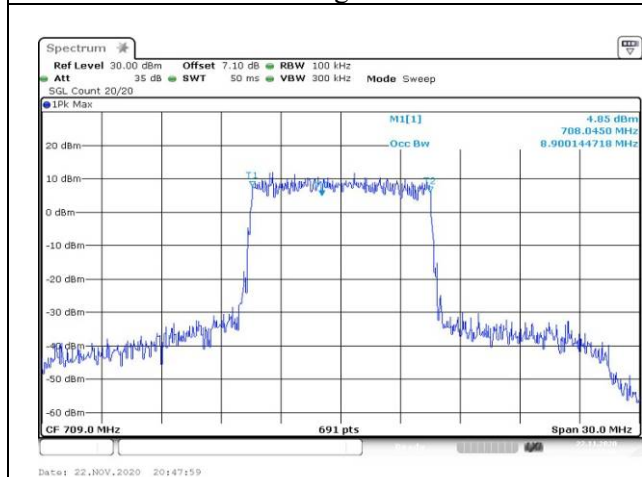


Fig.11

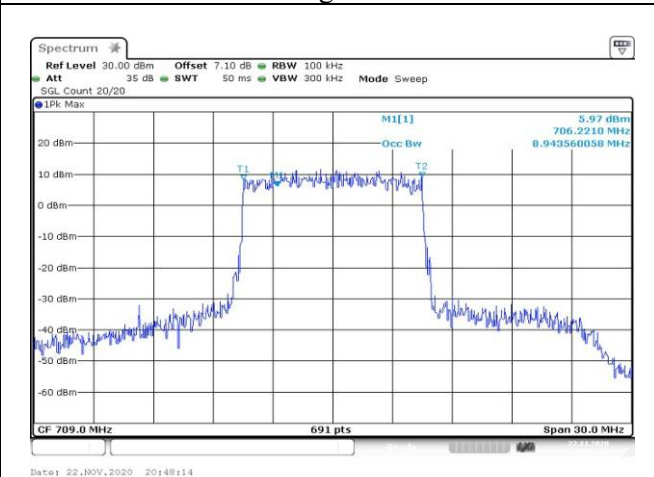
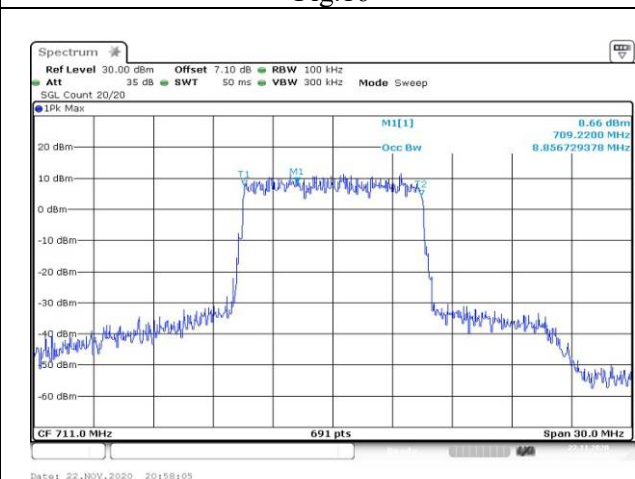
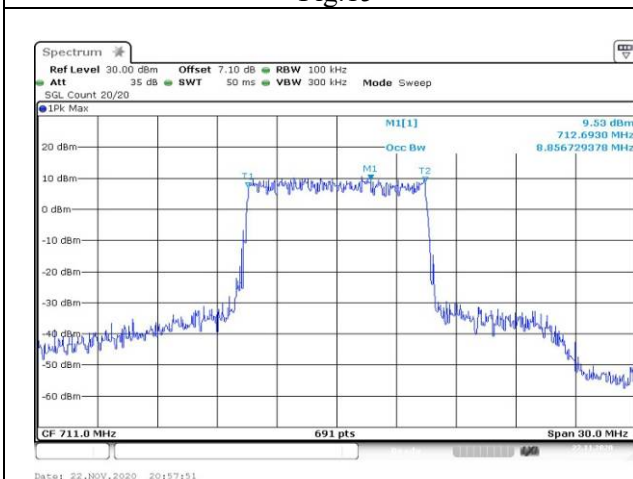
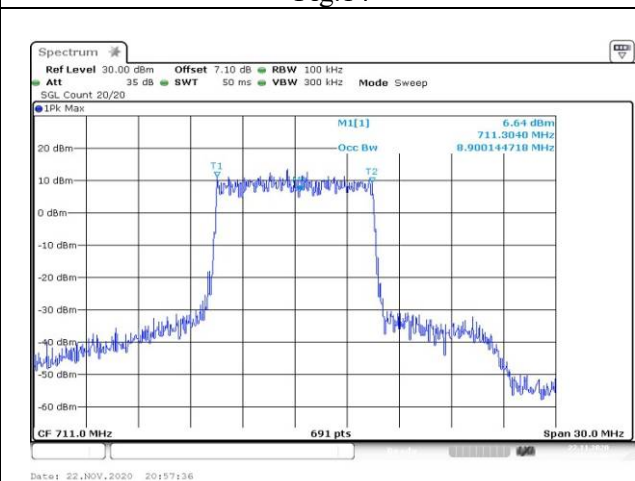
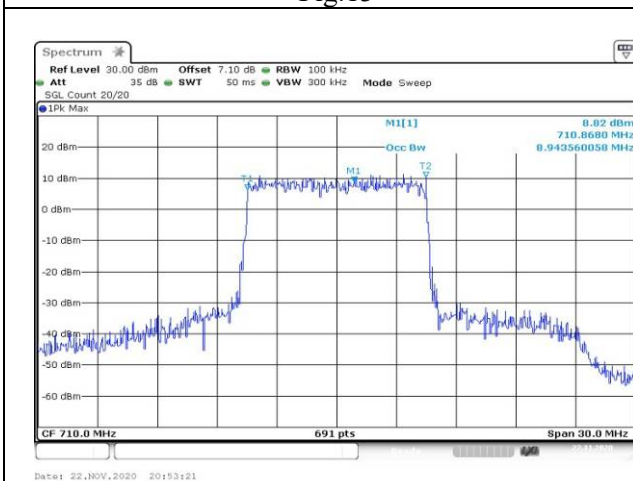
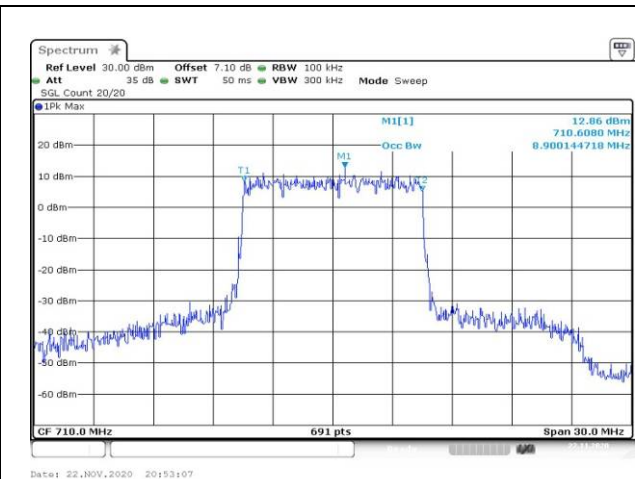
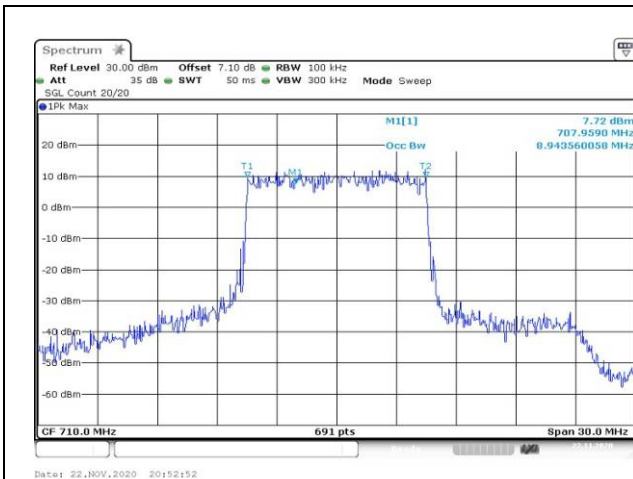


Fig.12



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

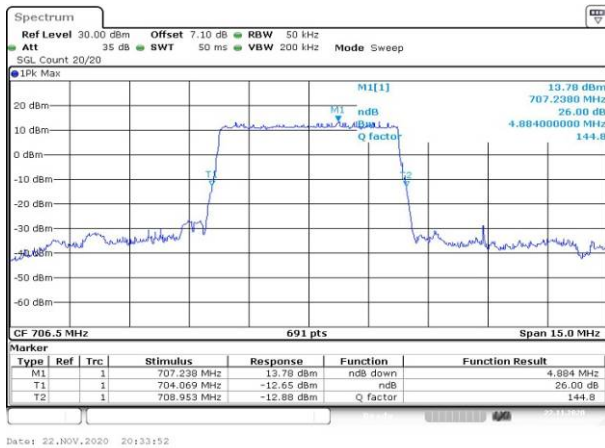


Fig.1

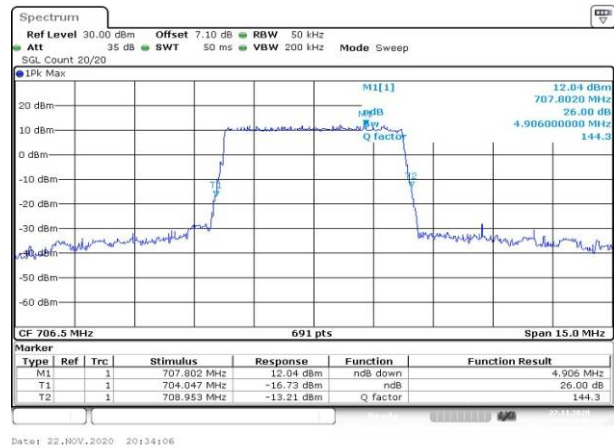


Fig.2

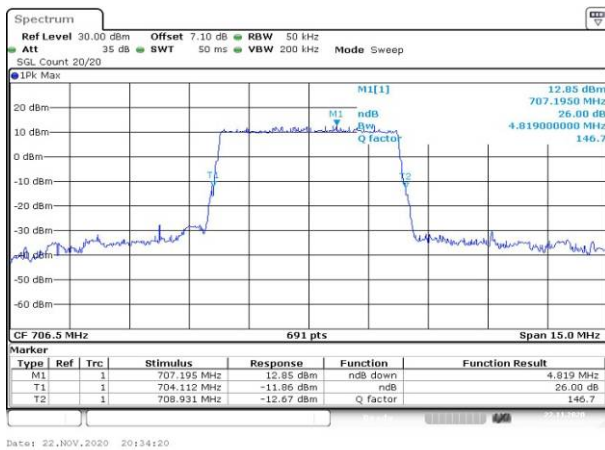


Fig.3

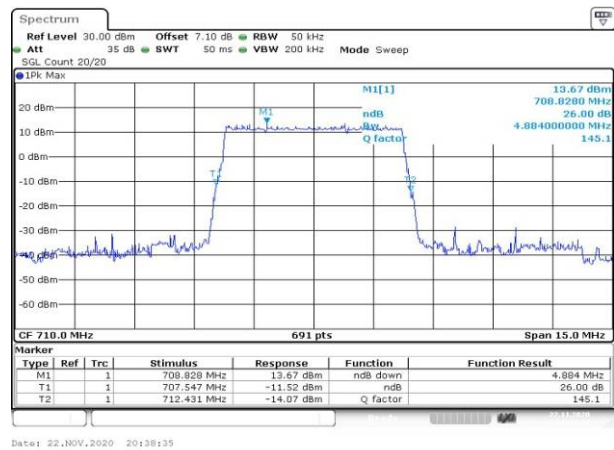


Fig.4

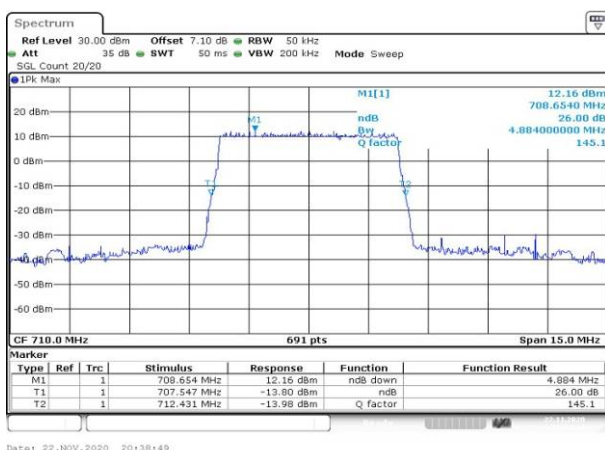


Fig.5

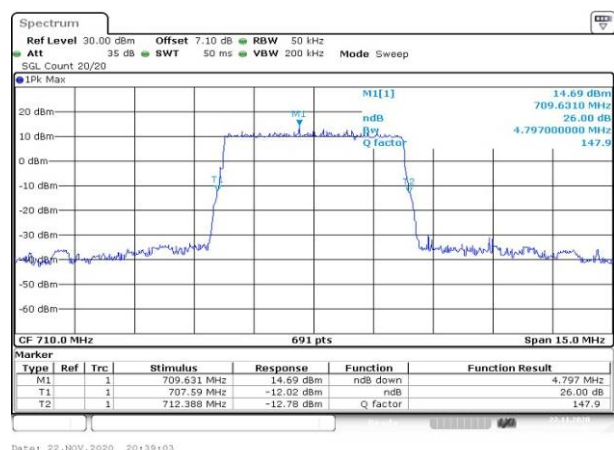


Fig.6

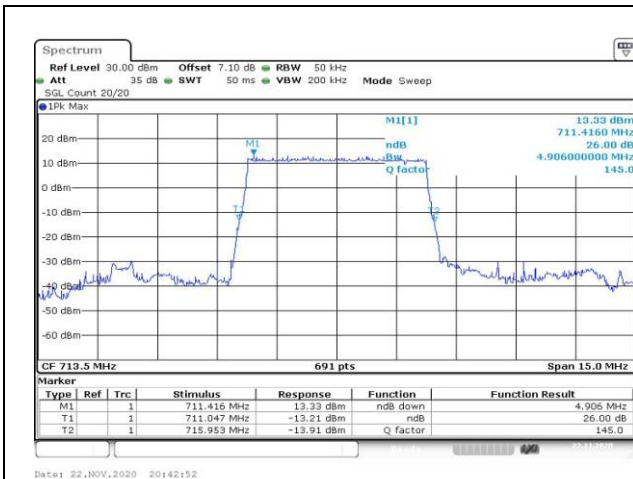


Fig.7

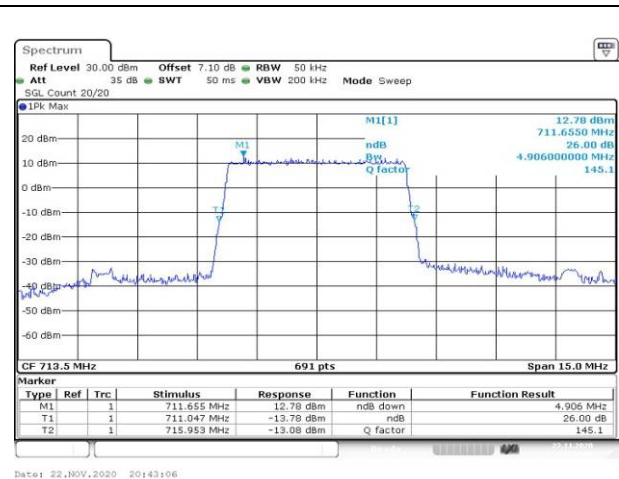


Fig.8

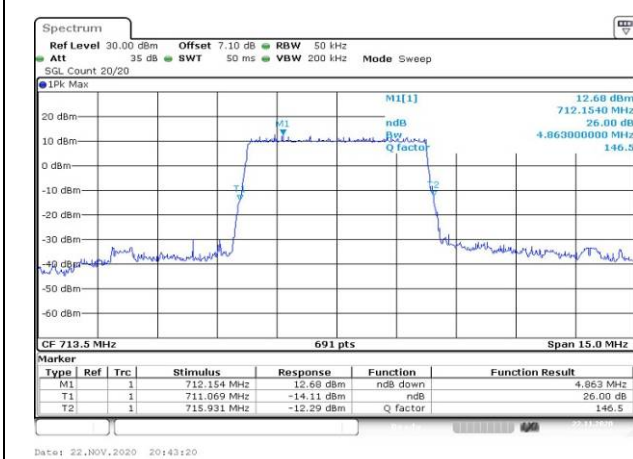


Fig.9

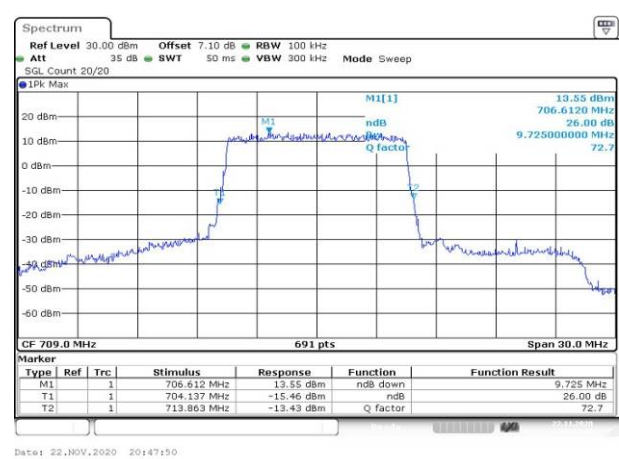


Fig.10

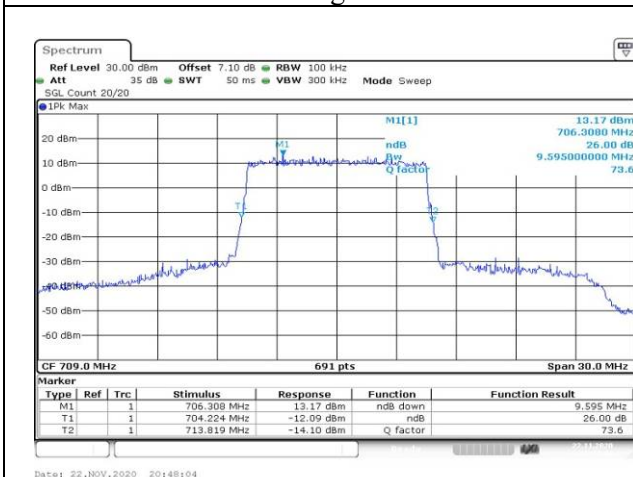


Fig.11

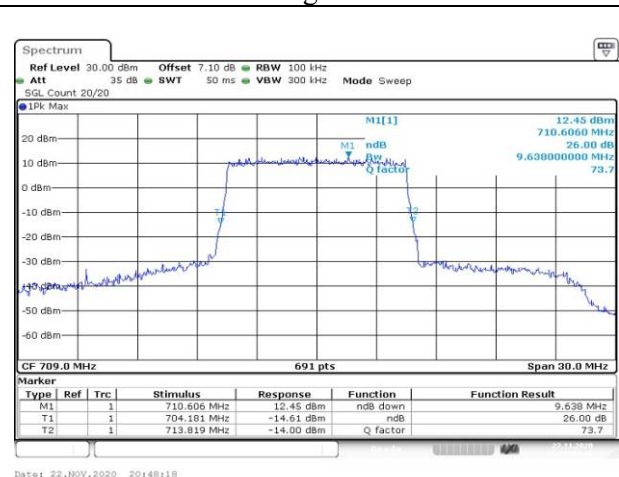


Fig.12

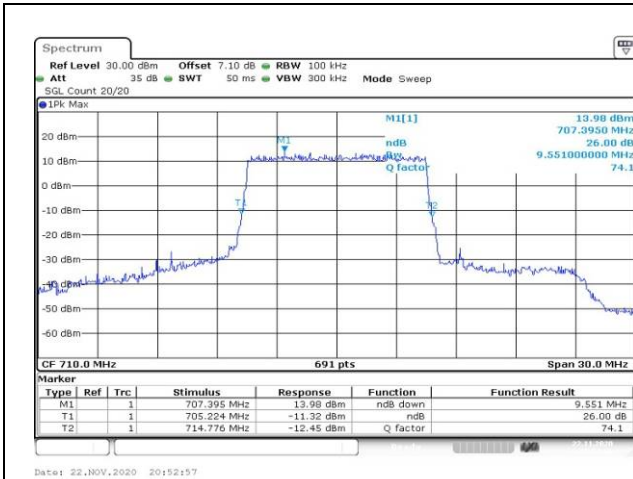


Fig.13



Fig.14

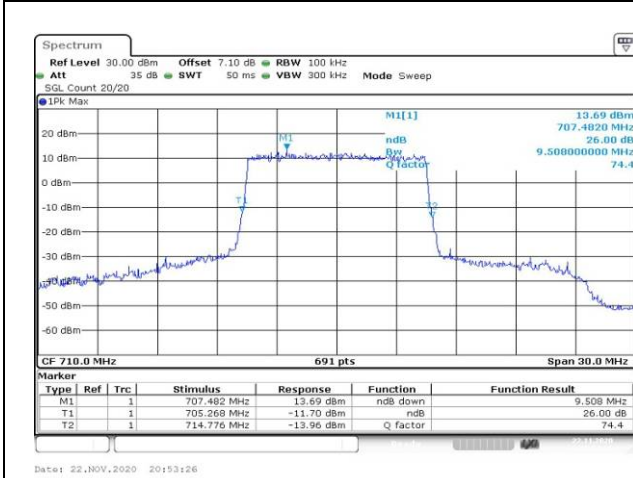


Fig.15

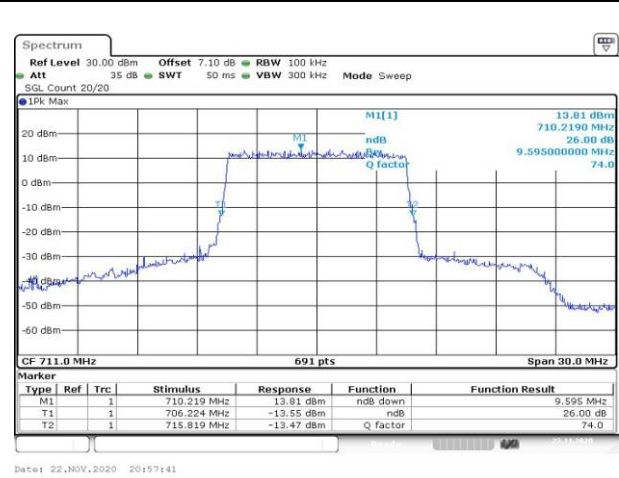


Fig.16

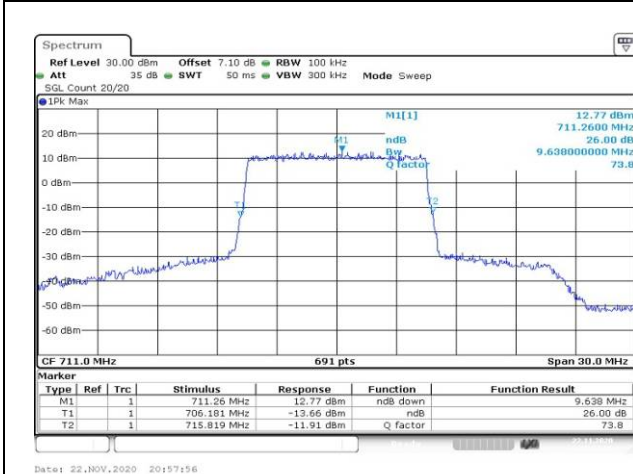


Fig.17



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

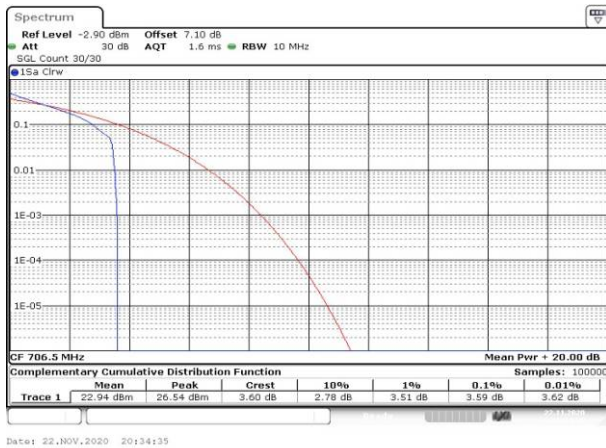


Fig.1

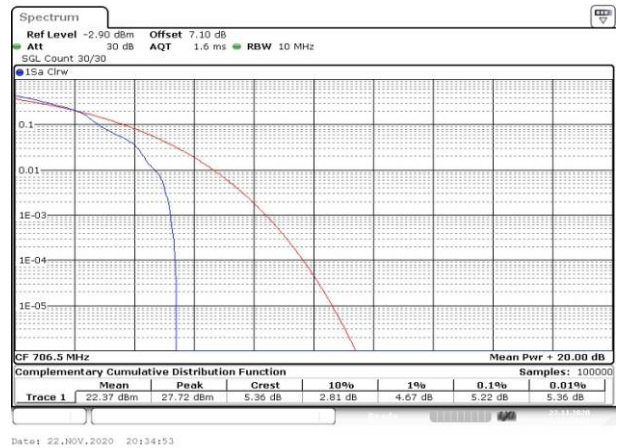


Fig.2

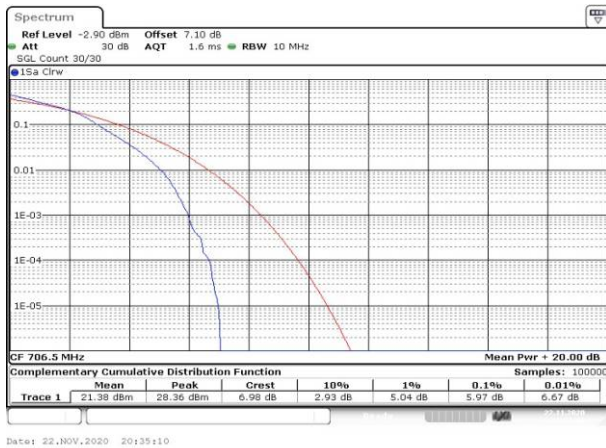


Fig.3

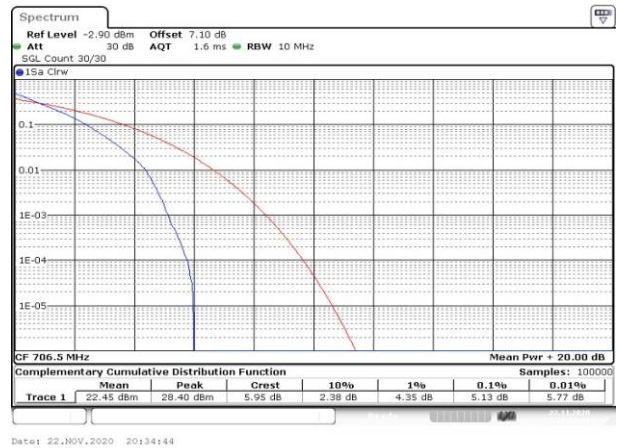


Fig.4

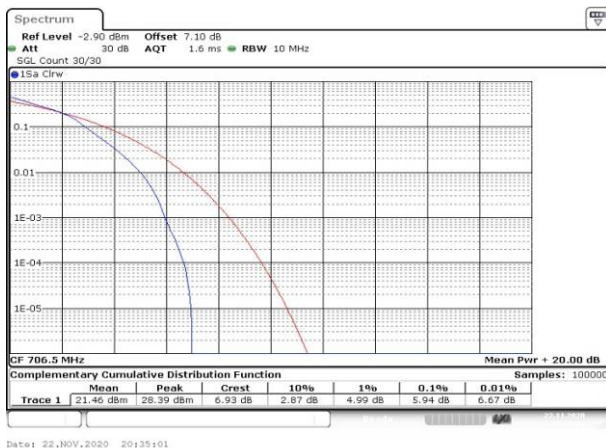


Fig.5

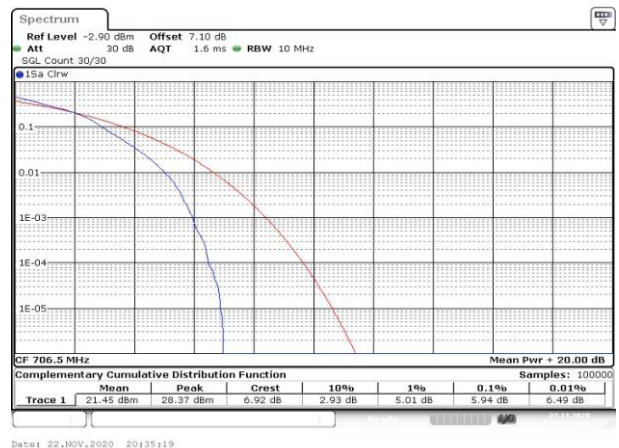


Fig.6

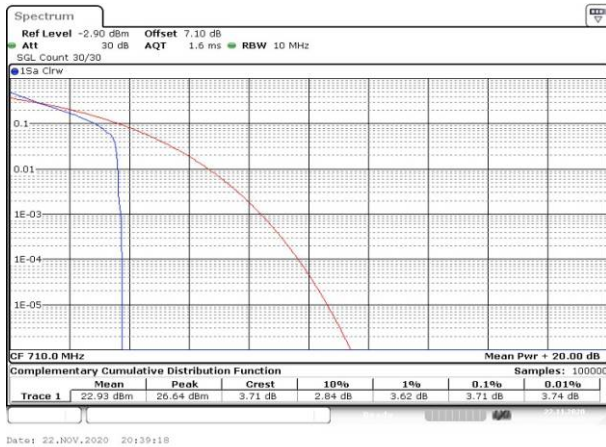


Fig.7

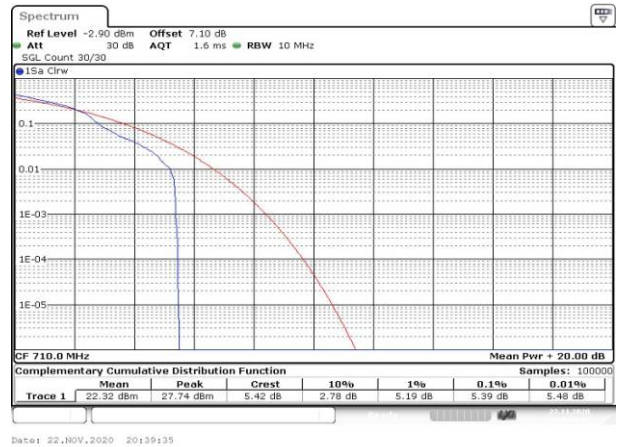


Fig.8

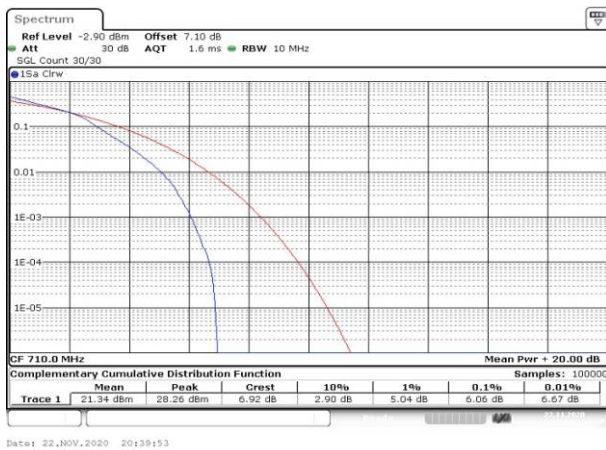


Fig.9

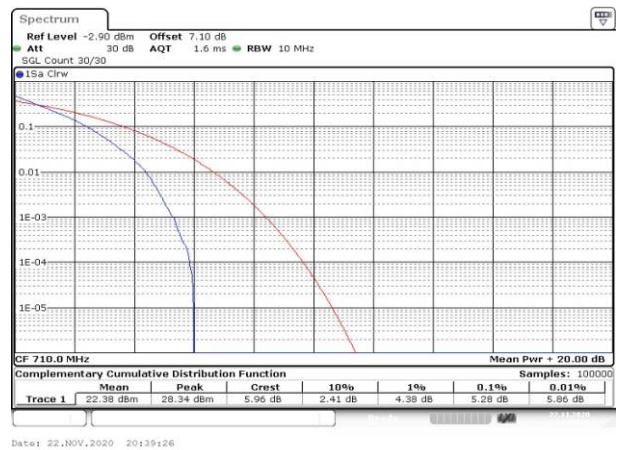


Fig.10

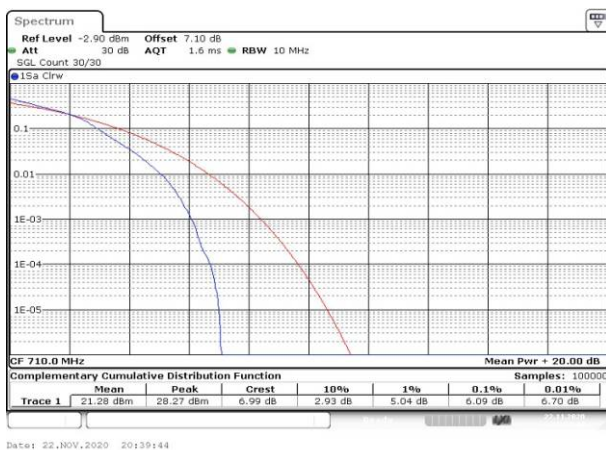


Fig.11

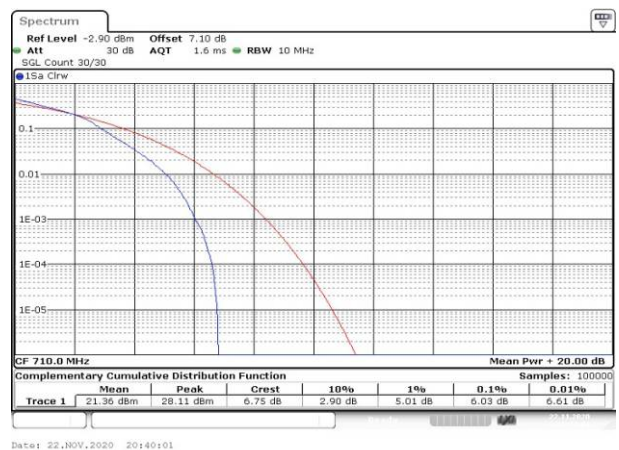


Fig.12

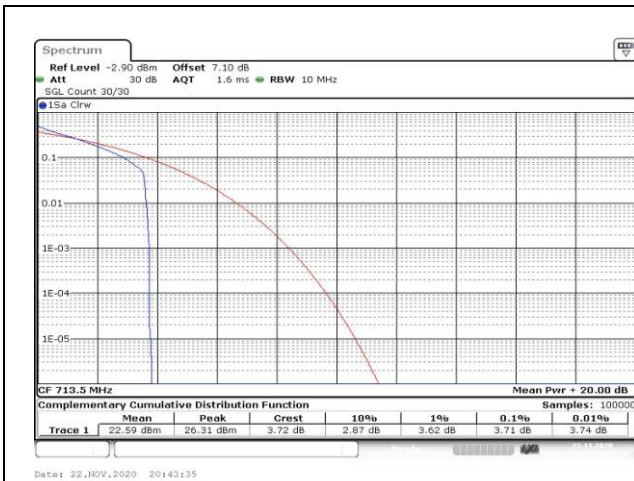


Fig.13

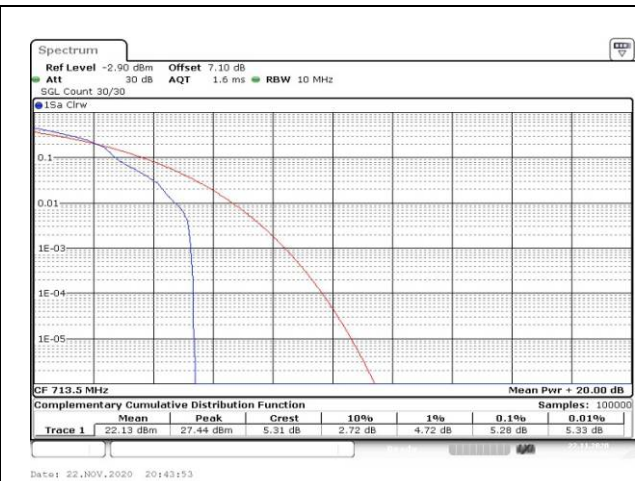


Fig.14



Fig.15



Fig.16



Fig.17

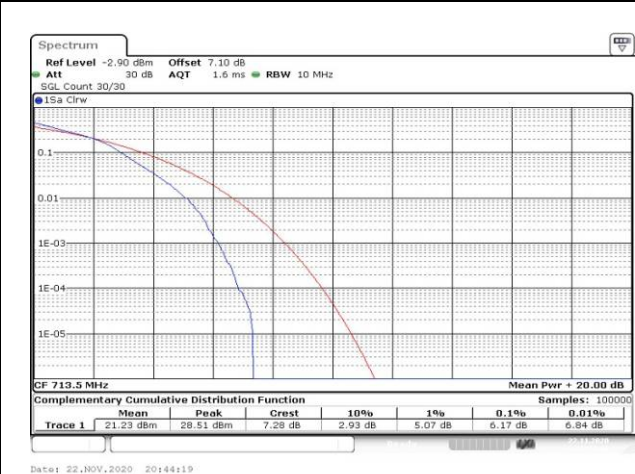


Fig.18

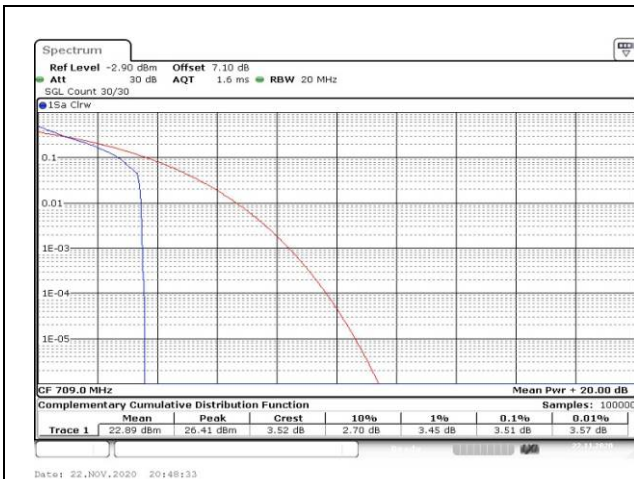


Fig.19

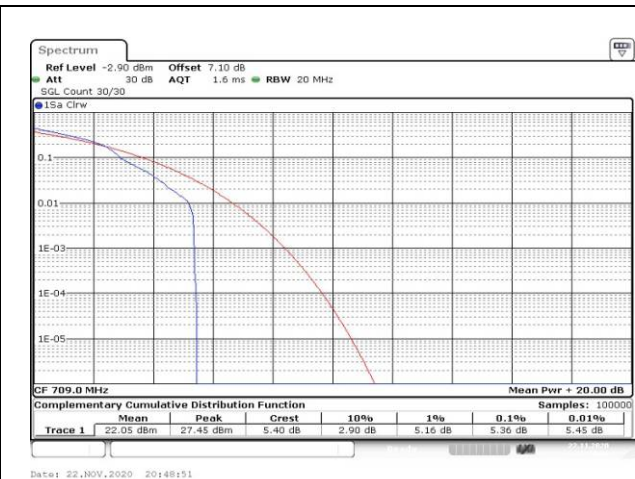


Fig.20



Fig.21

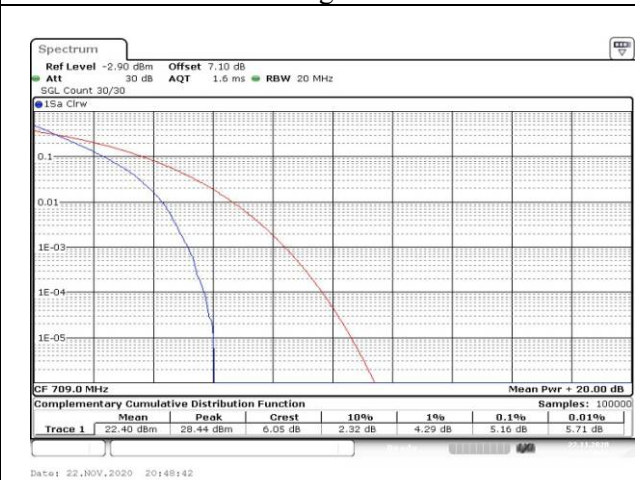


Fig.22

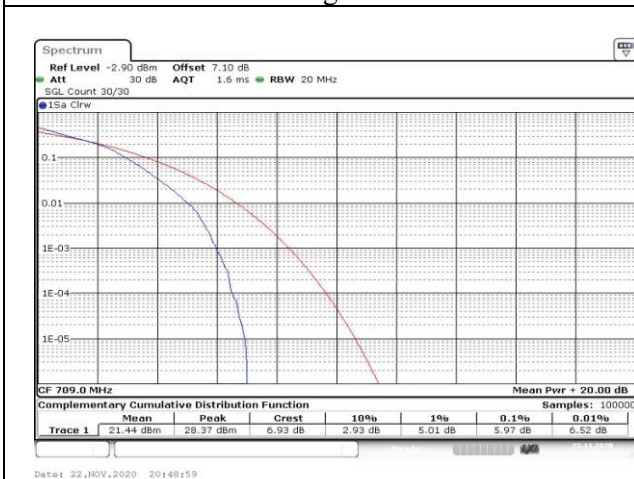


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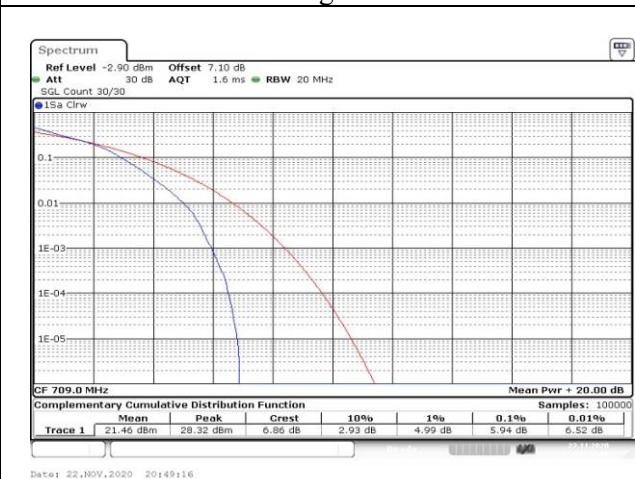


Fig.24

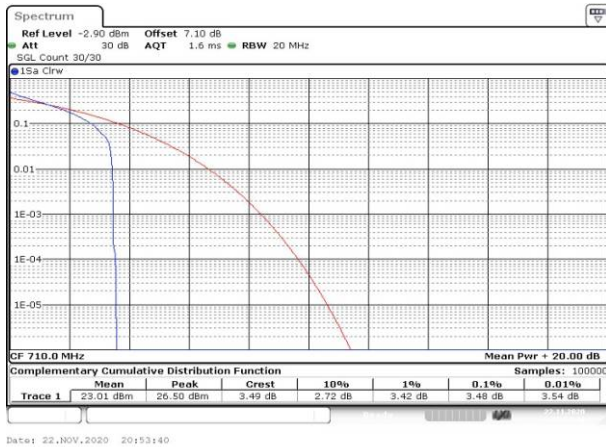


Fig.25

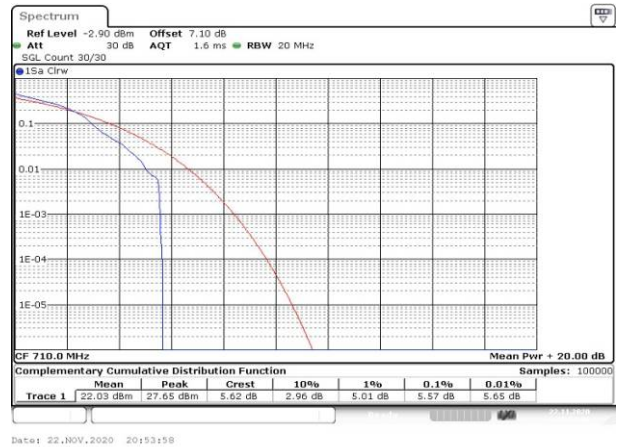


Fig.26

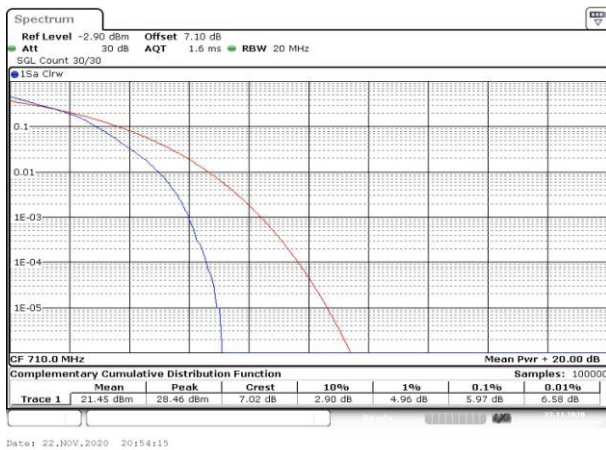


Fig.27

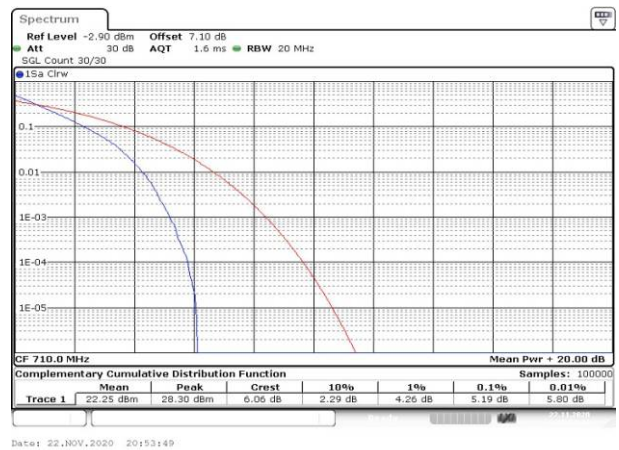


Fig.28

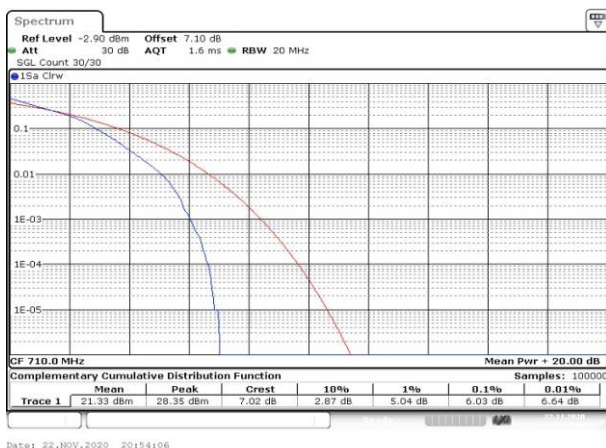


Fig.29

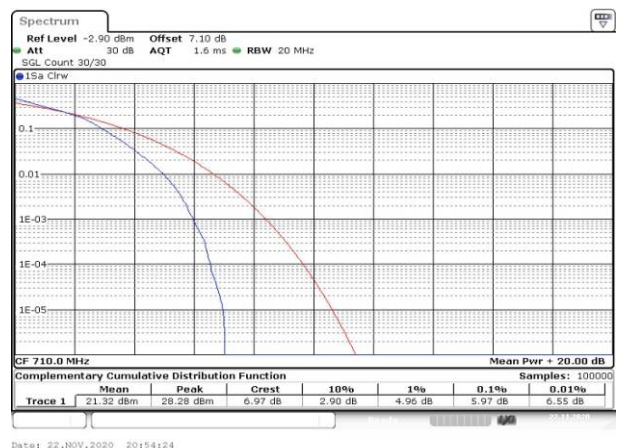


Fig.30

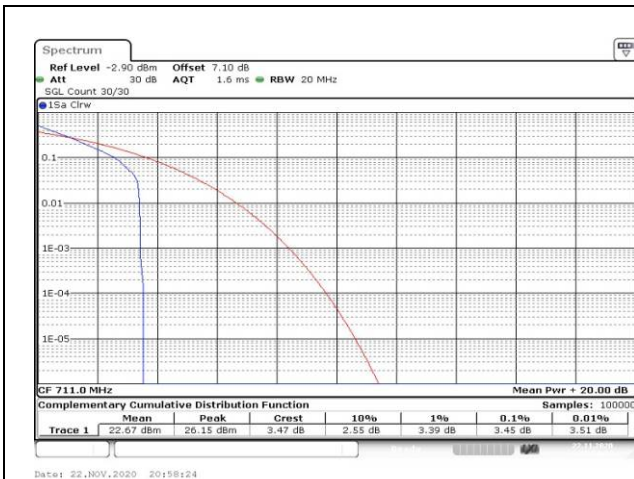


Fig.31

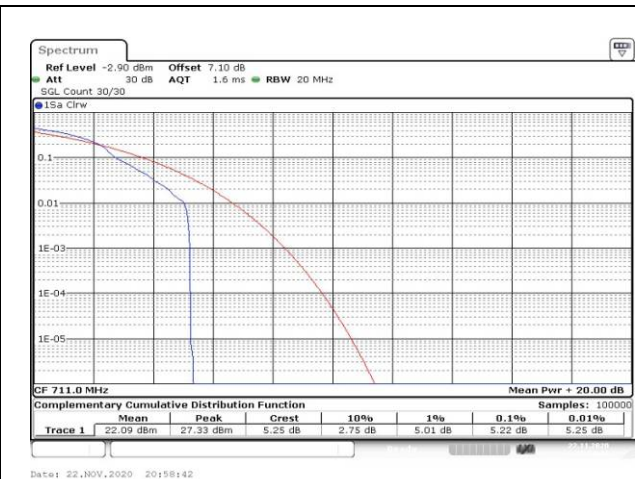


Fig.32



Fig.33

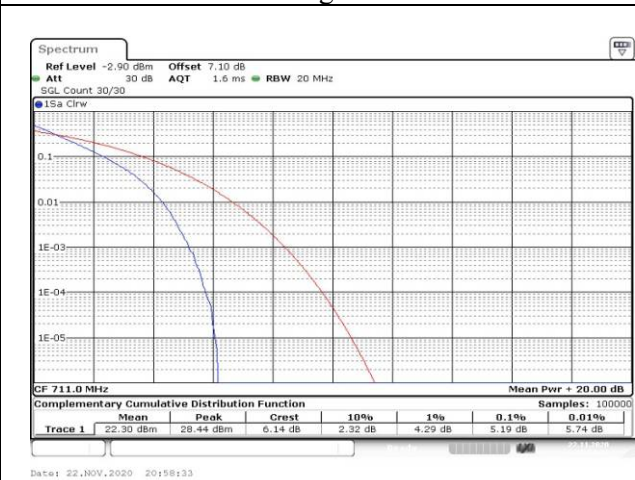


Fig.34

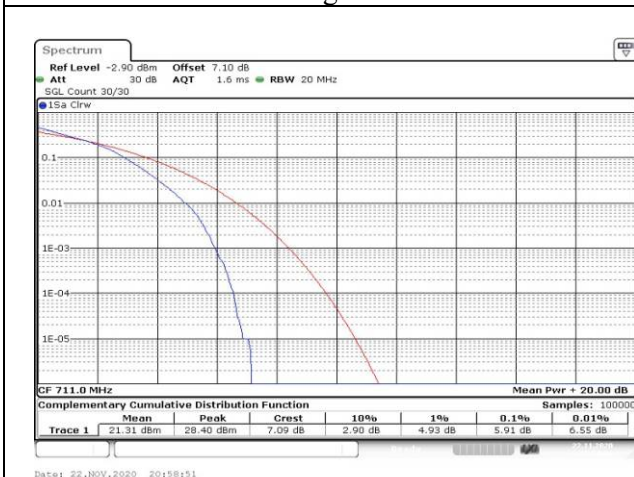


Fig.35

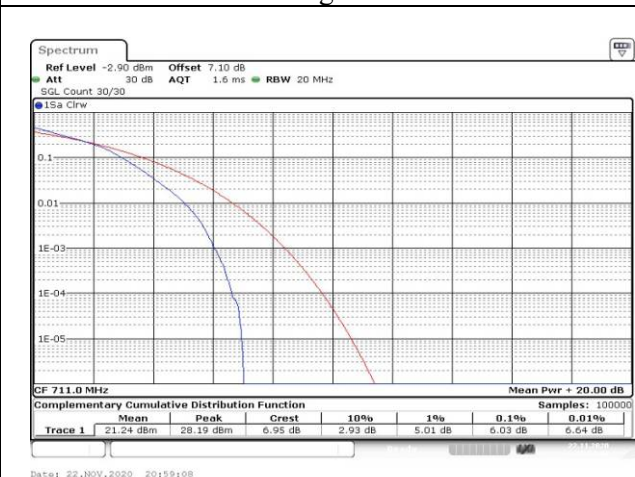


Fig.36

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

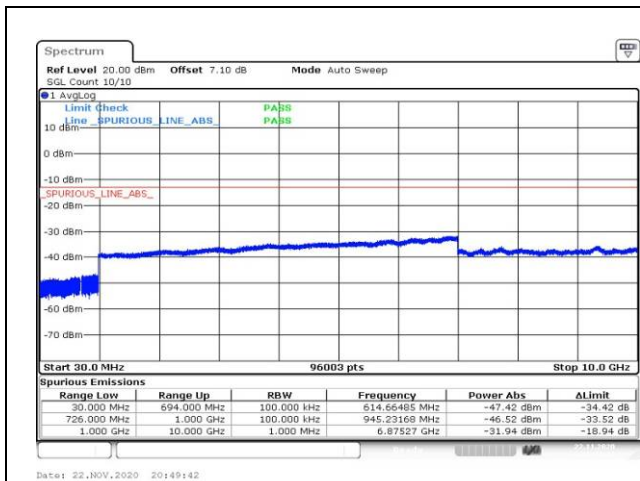


Fig.1

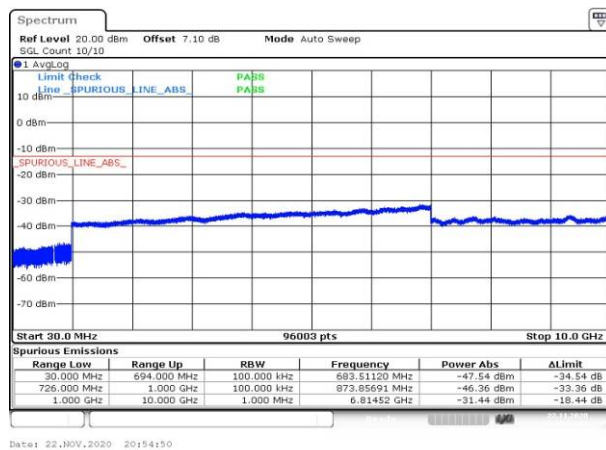


Fig.2

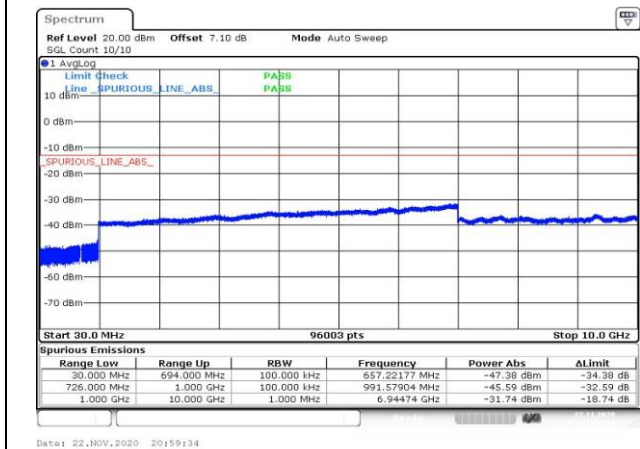


Fig.3

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

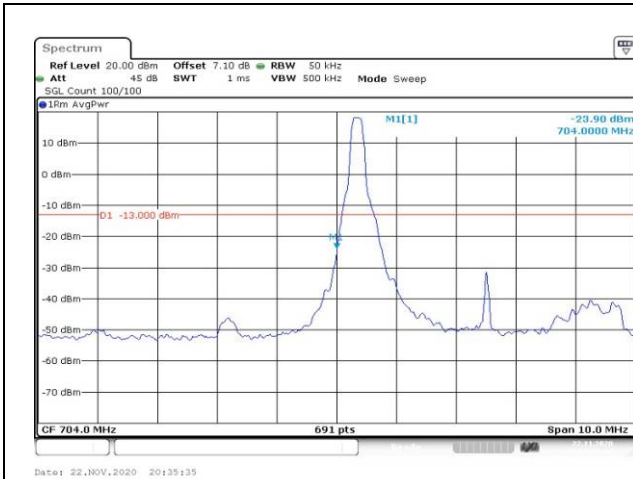


Fig.1

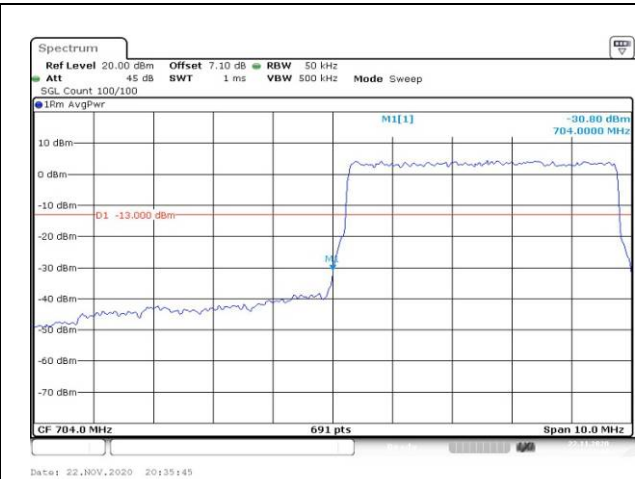


Fig.2

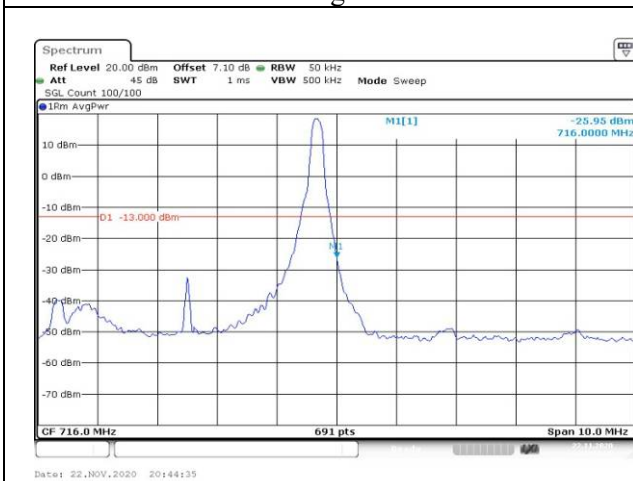


Fig.3

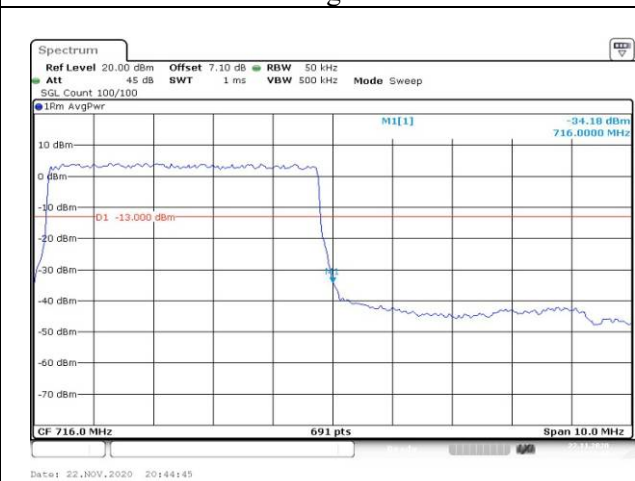


Fig.4

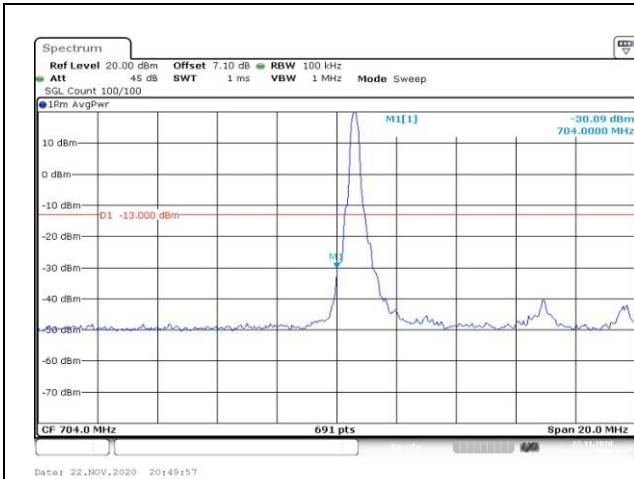


Fig.5

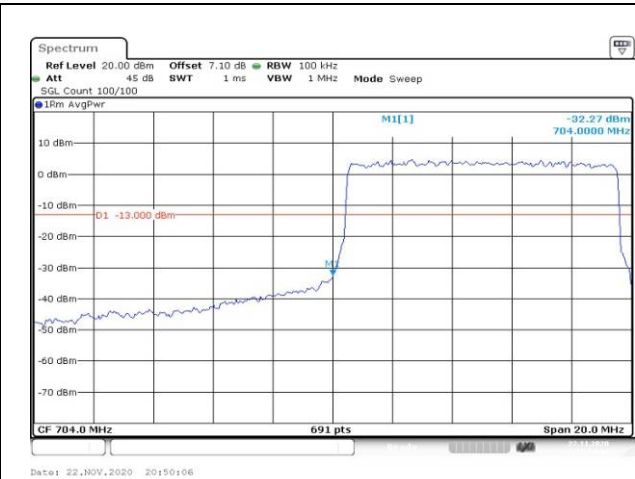


Fig.6

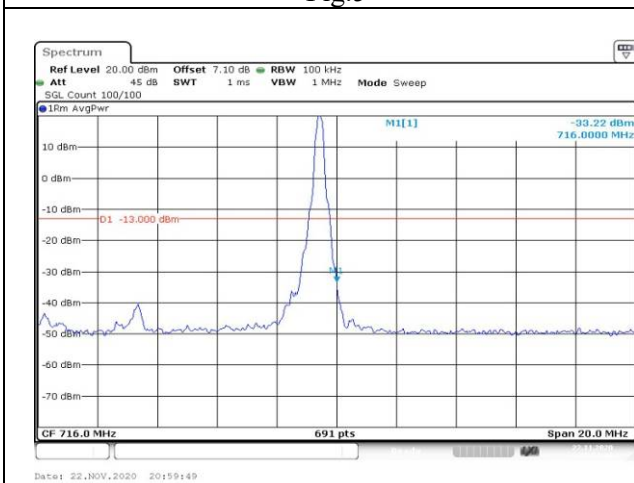


Fig.7

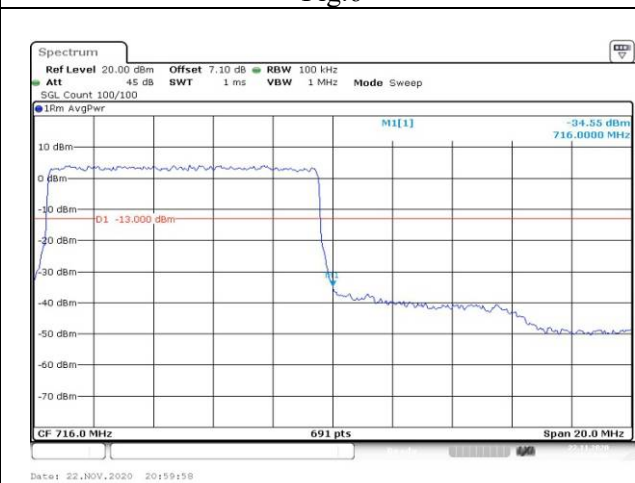


Fig.8

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

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		