

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 17 1 RF Power Output

Tx Power Output							
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	706.5	23755	5	1	0	23.31	
				1	12	23.12	
				1	24	23.18	
				12	0	22.32	
				12	7	22.35	
				12	13	22.28	
				25	0	22.46	
	710	23790		1	0	23.26	
				1	12	23.24	
				1	24	23.16	
				12	0	22.41	
				12	7	22.34	
				12	13	22.33	
				25	0	22.34	
	713.5	23825		1	0	23.28	
				1	12	23.17	
				1	24	23.24	
				12	0	22.35	
				12	7	22.36	
				12	13	22.26	
				25	0	22.37	
	16QAM	706.5		23755	1	0	22.57
					1	12	22.42
					1	24	22.39
12					0	21.34	
12					7	21.30	
12					13	21.21	
25					0	21.40	
710		23790		1	0	22.55	
				1	12	22.30	
				1	24	22.46	
				12	0	21.35	
				12	7	21.30	
				12	13	21.30	
				25	0	21.32	
713.5		23825		1	0	22.78	
				1	12	22.66	
				1	24	22.61	
				12	0	21.44	
				12	7	21.27	
				12	13	21.26	
				25	0	21.23	

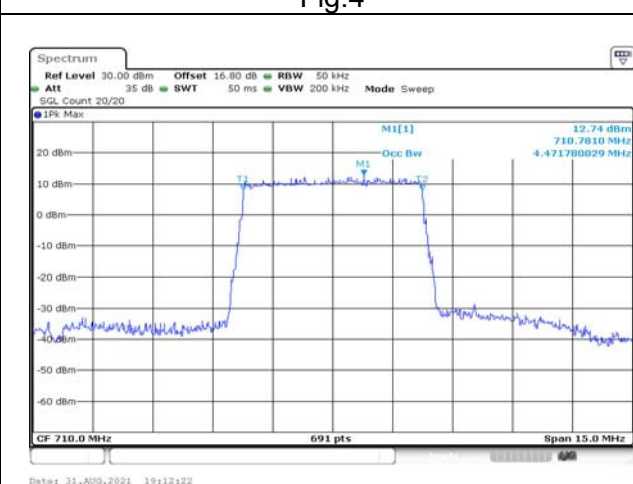
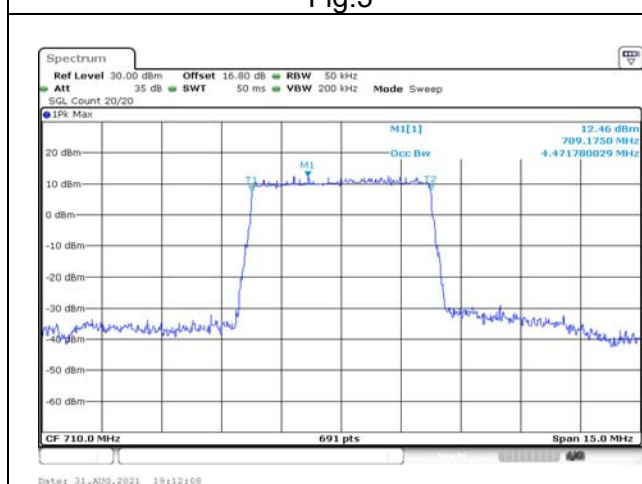
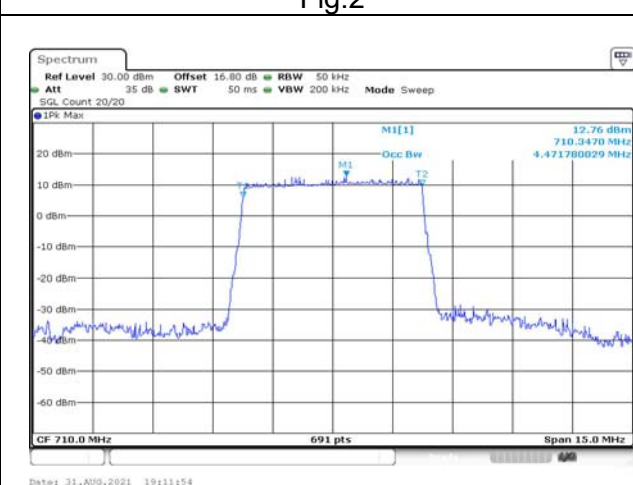
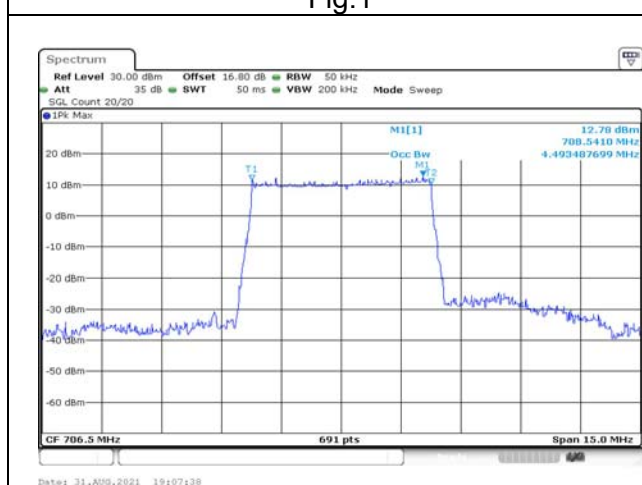
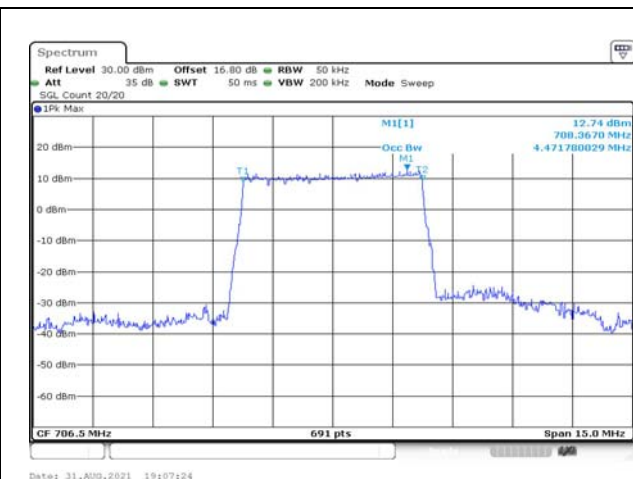
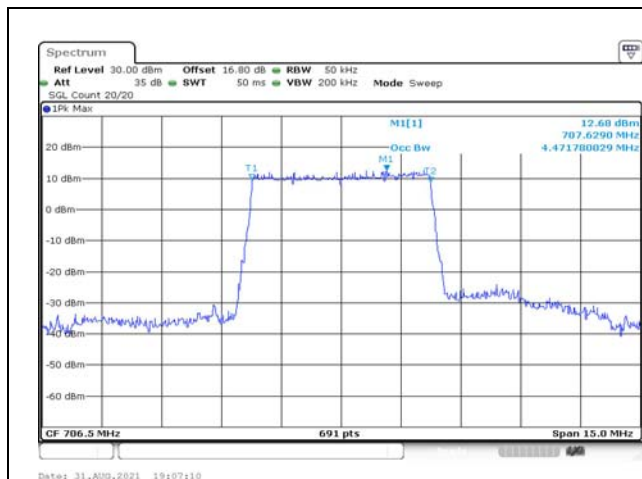
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	706.5	23755	5	1	0	21.31
				1	12	21.20
				1	24	21.17
				12	0	20.40
				12	7	20.36
				12	13	20.19
				25	0	20.37
	710	23790		1	0	21.21
				1	12	21.30
				1	24	21.13
				12	0	20.38
				12	7	20.31
				12	13	20.27
				25	0	20.31
	713.5	23825		1	0	21.64
				1	12	21.45
				1	24	21.46
				12	0	20.43
				12	7	20.49
				12	13	20.37
				25	0	20.47

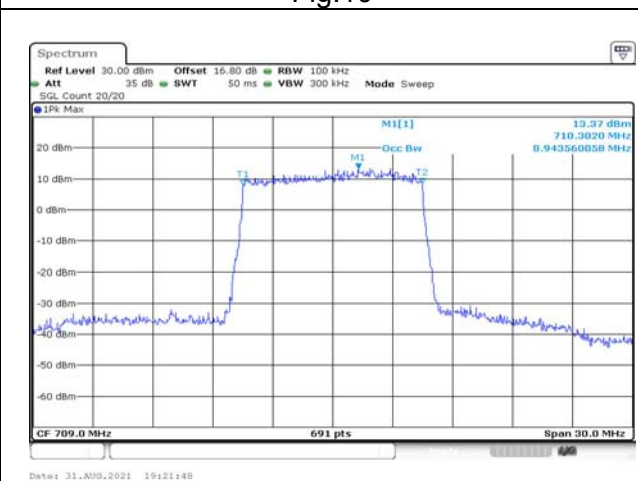
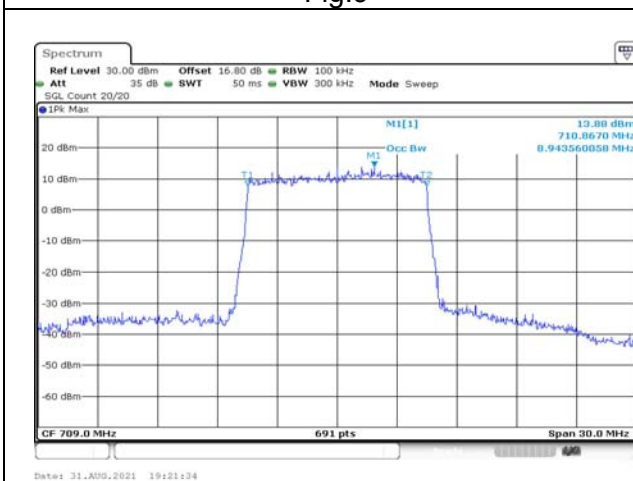
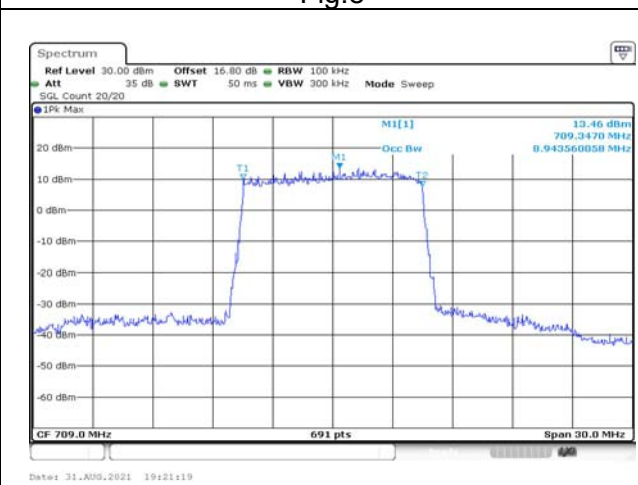
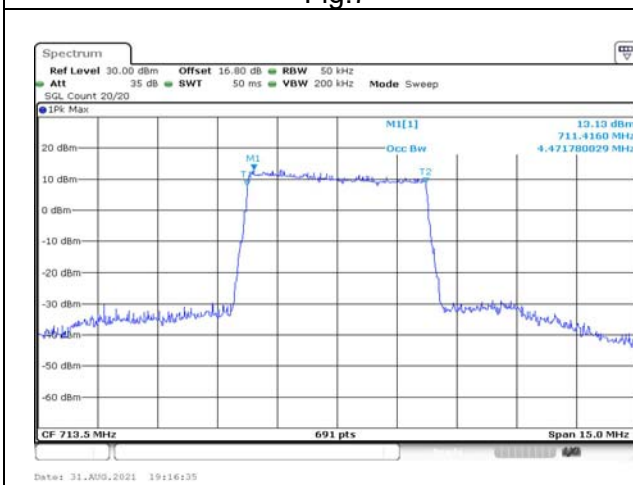
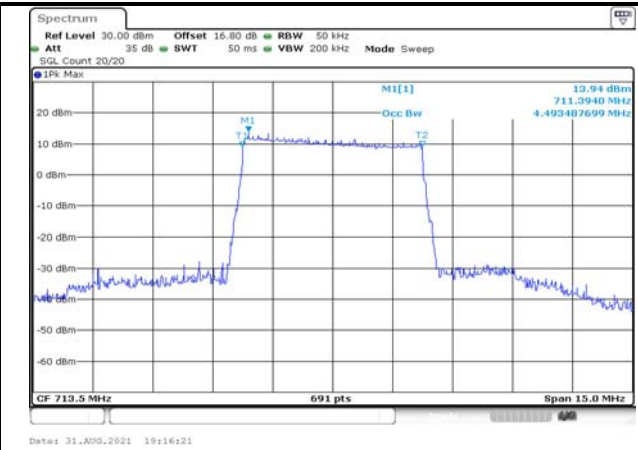
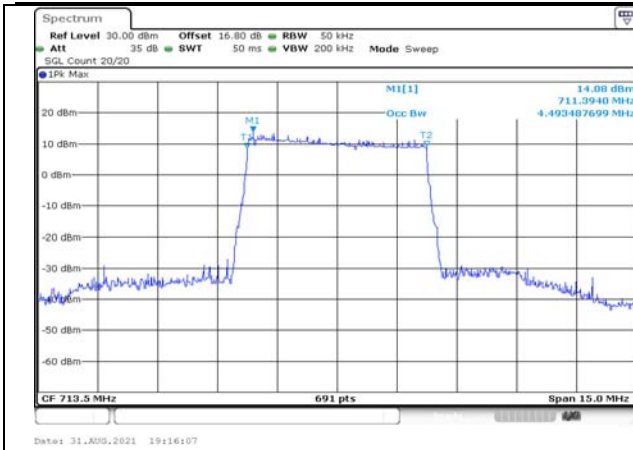
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	709	23780	10	1	0	23.31	
				1	25	23.20	
				1	49	22.97	
				25	0	22.38	
				25	12	22.39	
				25	25	22.26	
				50	0	22.43	
	710	23790		1	0	23.25	
				1	25	23.07	
				1	49	23.12	
				25	0	22.31	
				25	12	22.34	
				25	25	22.32	
				50	0	22.41	
	711	23800		1	0	23.39	
				1	25	23.28	
				1	49	23.16	
				25	0	22.33	
				25	12	22.23	
				25	25	22.28	
				50	0	22.40	
	16QAM	709		23780	1	0	23.30
					1	25	22.85
					1	49	22.66
25					0	21.40	
25					12	21.47	
25					25	21.28	
50					0	21.39	
710		23790		1	0	23.06	
				1	25	23.05	
				1	49	23.02	
				25	0	21.40	
				25	12	21.41	
				25	25	21.27	
				50	0	21.38	
711		23800		1	0	22.74	
				1	25	22.35	
				1	49	22.45	
				25	0	21.44	
				25	12	21.34	
				25	25	21.34	
				50	0	21.23	

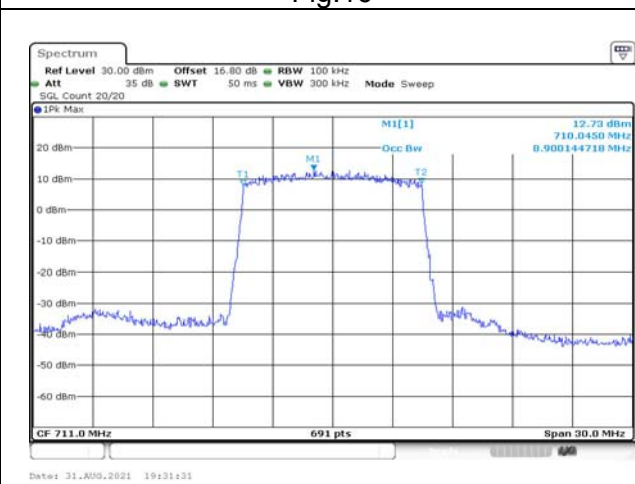
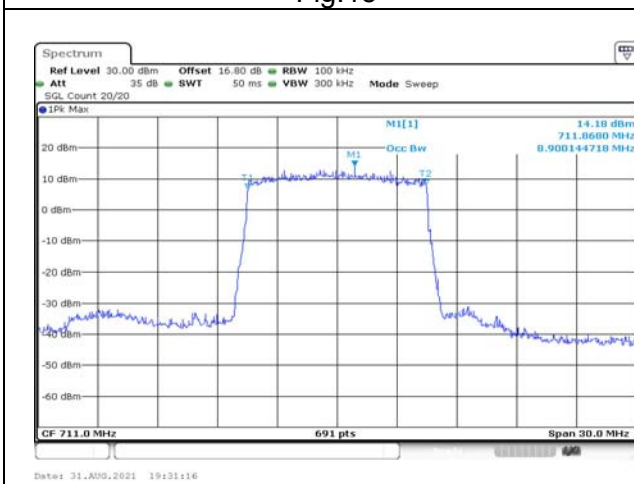
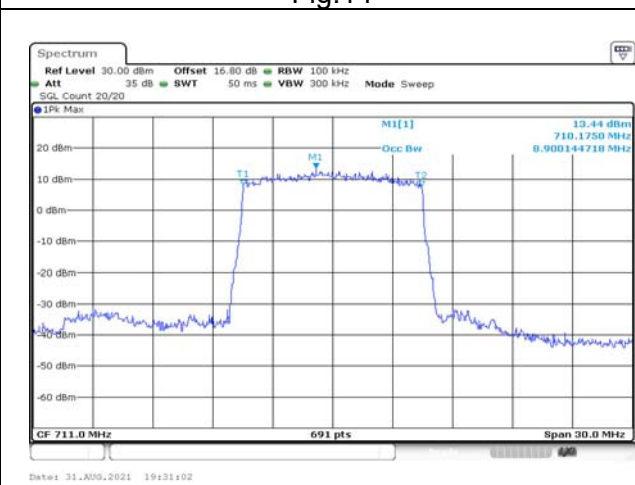
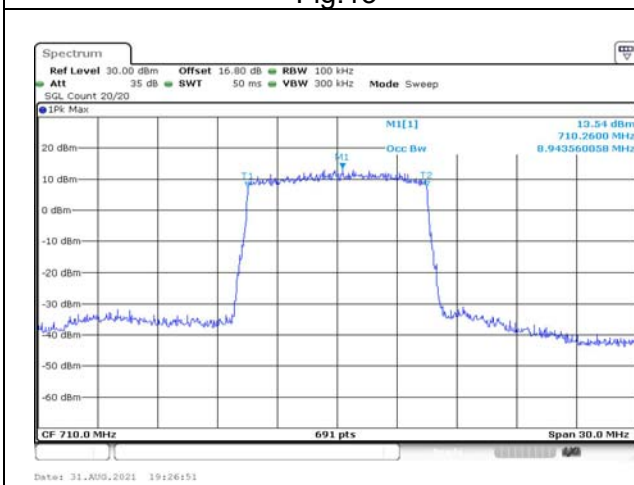
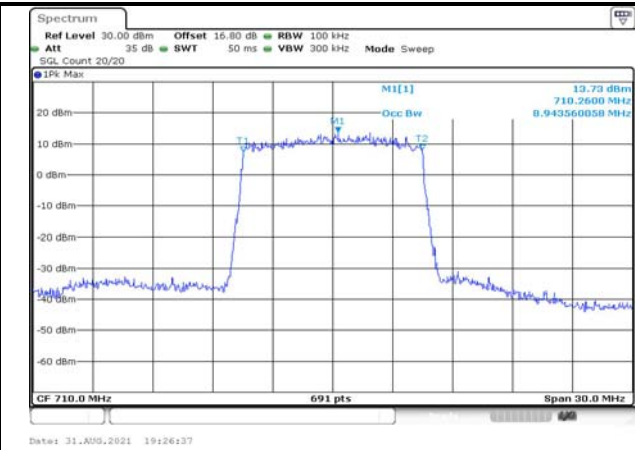
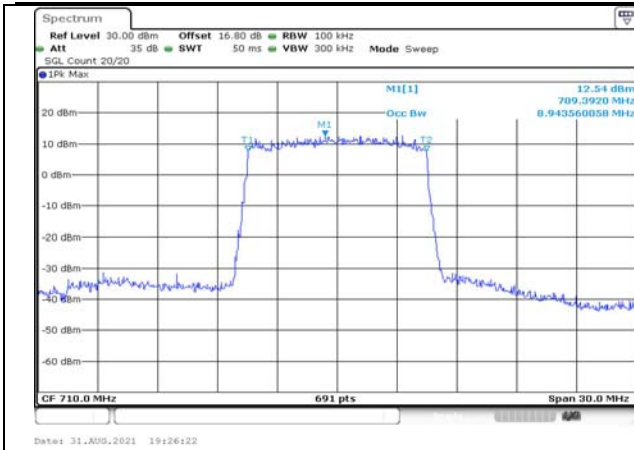
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	709	23780	10	1	0	21.91
				1	25	21.74
				1	49	21.76
				25	0	20.39
				25	12	20.36
				25	25	20.34
				50	0	20.46
	710	23790		1	0	21.59
				1	25	21.40
				1	49	21.39
				25	0	20.47
				25	12	20.43
				25	25	20.39
				50	0	20.45
	711	23800		1	0	21.13
				1	25	21.13
				1	49	21.08
				25	0	20.53
				25	12	20.36
				25	25	20.41
				50	0	20.37

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	4.493	Fig.3
	710	23790		25	0	4.472	Fig.4	4.472	Fig.5	4.472	Fig.6
	713.5	23825		25	0	4.493	Fig.7	4.493	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	8.900	Fig.16	8.900	Fig.17	8.900	Fig.18







3 Emission Bandwidth

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
17	706.5	23755	5	25	0	4.884	Fig.1	4.906	Fig.2	4.884	Fig.3
	710	23790		25	0	4.863	Fig.4	4.863	Fig.5	4.863	Fig.6
	713.5	23825		25	0	4.819	Fig.7	4.841	Fig.8	4.797	Fig.9
	709	23780	10	50	0	9.551	Fig.10	9.595	Fig.11	9.508	Fig.12
	710	23790		50	0	9.595	Fig.13	9.595	Fig.14	9.551	Fig.15
	711	23800		50	0	9.508	Fig.16	9.551	Fig.17	9.551	Fig.18

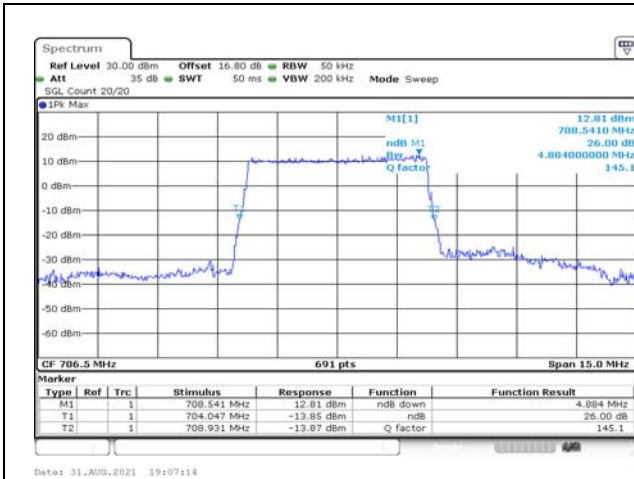


Fig.1

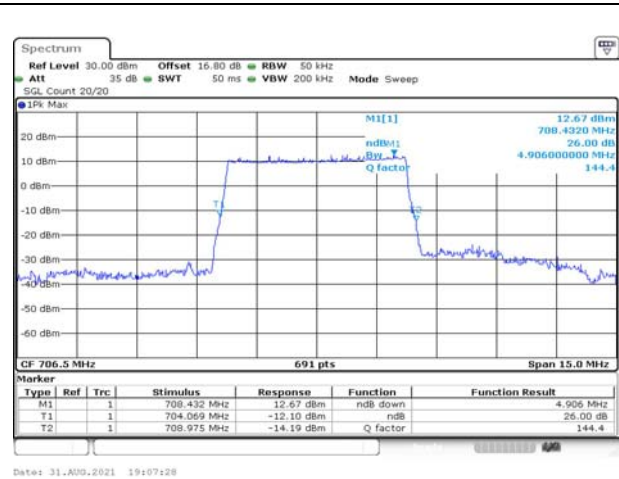


Fig.2

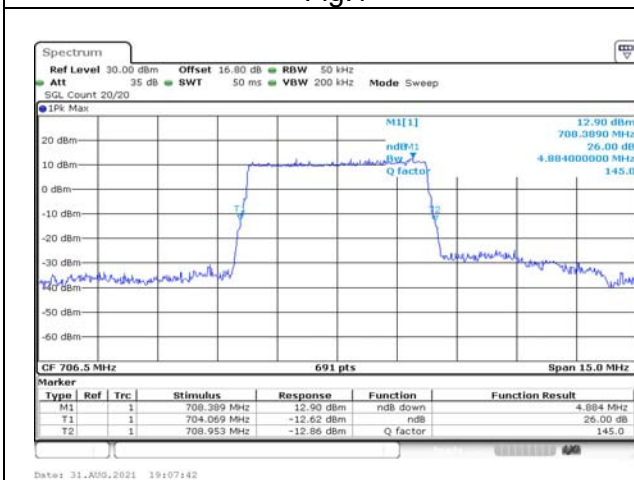


Fig.3

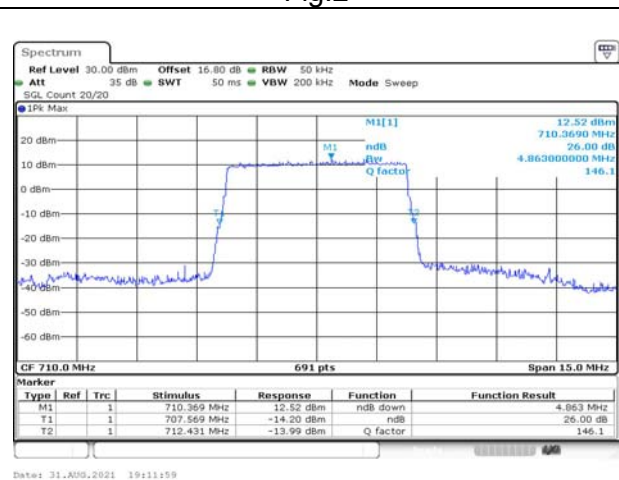


Fig.4

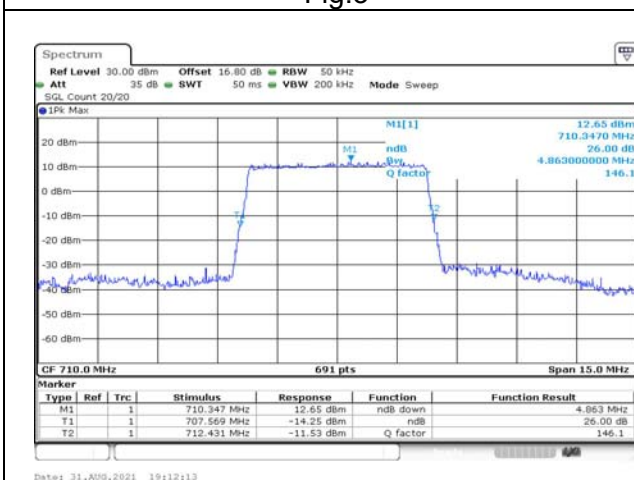


Fig.5

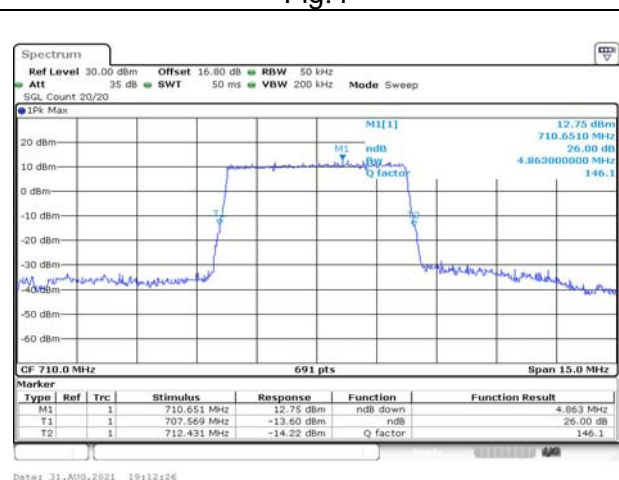


Fig.6

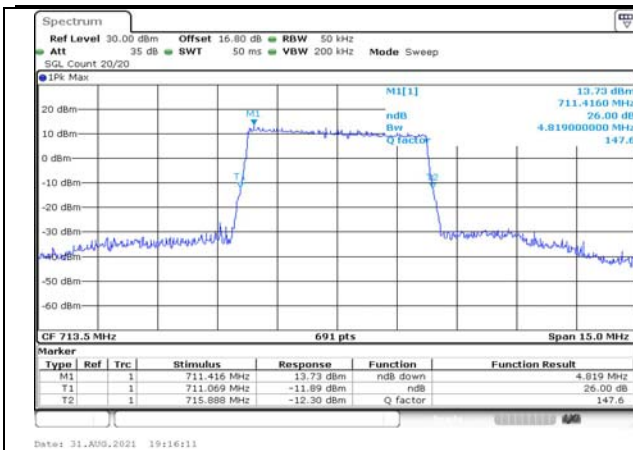


Fig.7

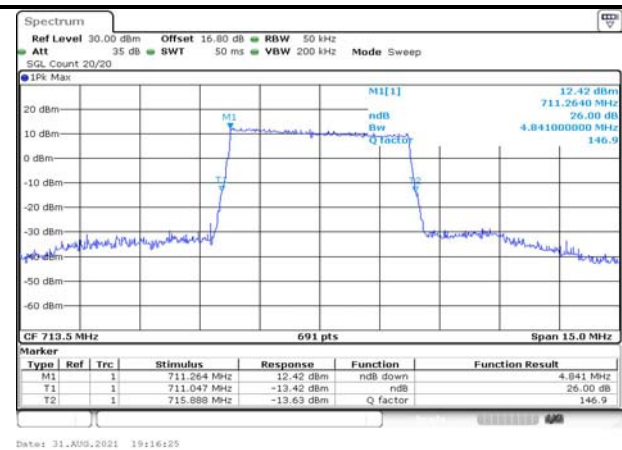


Fig.8

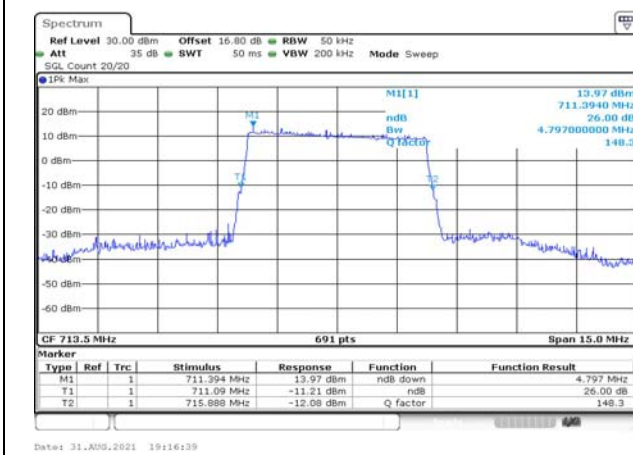


Fig.9

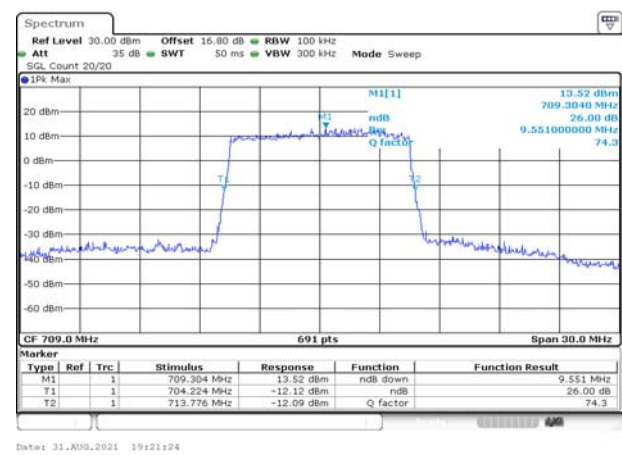


Fig.10

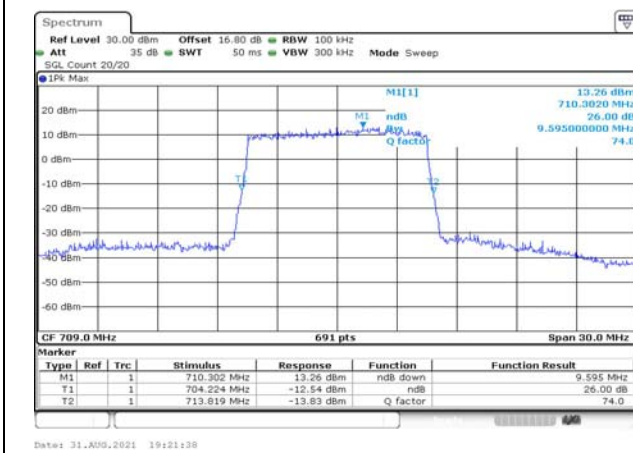


Fig.11

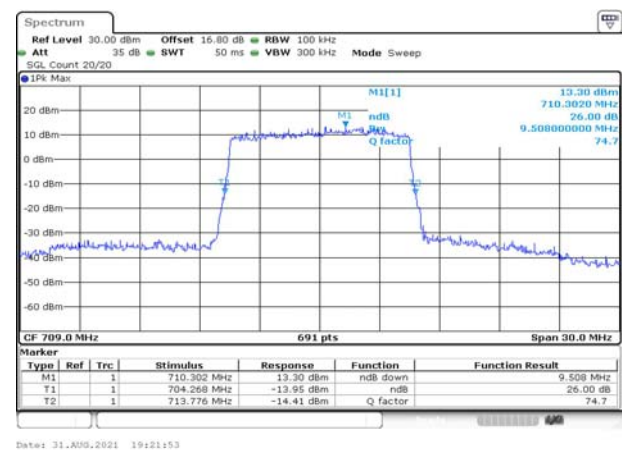


Fig.12

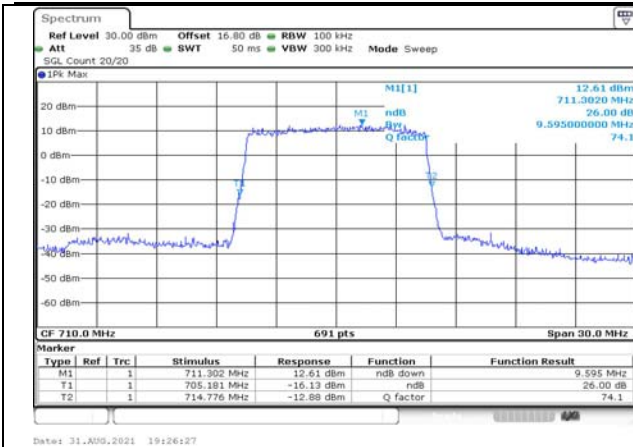


Fig.13

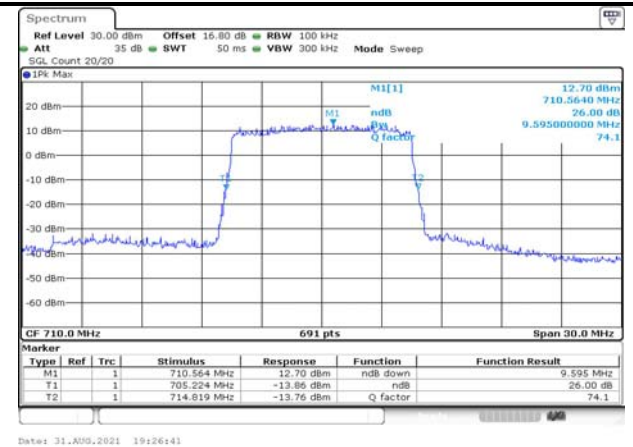


Fig.14

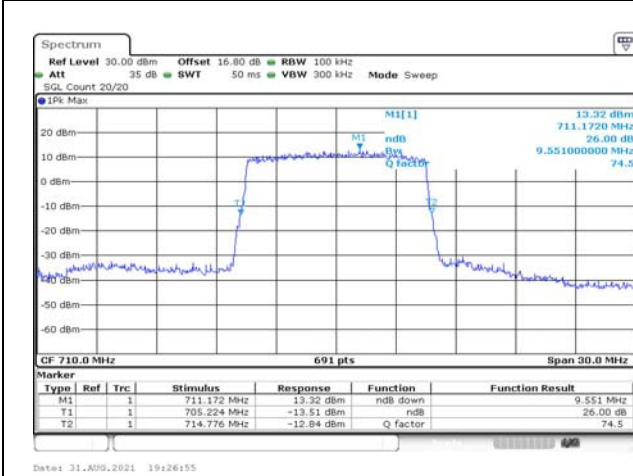


Fig.15

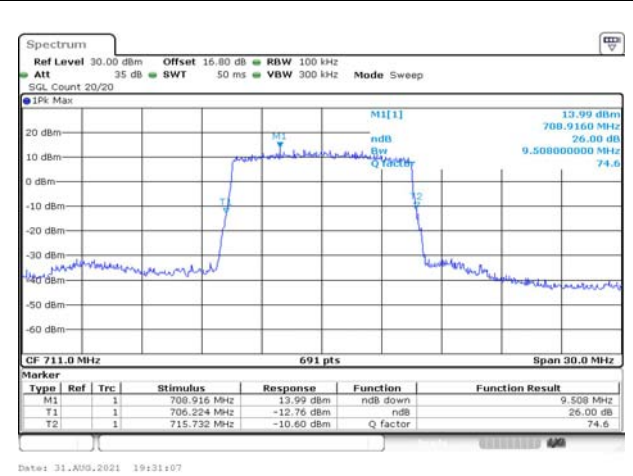


Fig.16

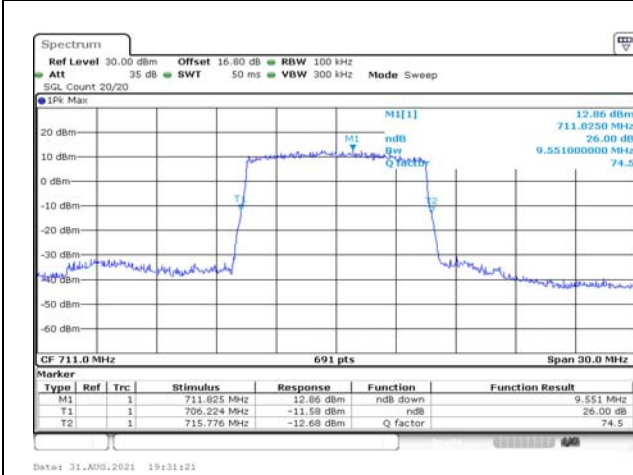


Fig.17

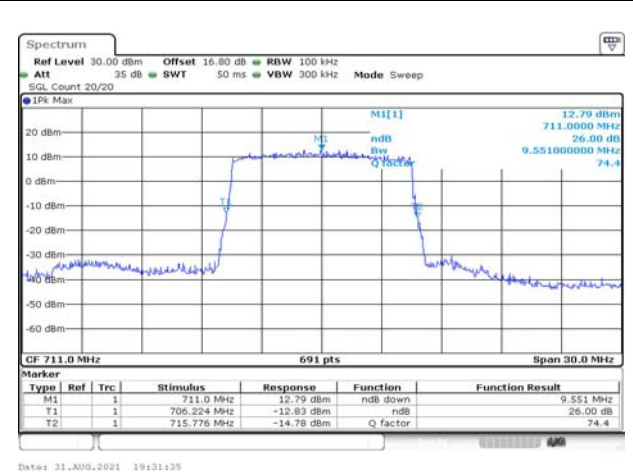


Fig.18

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

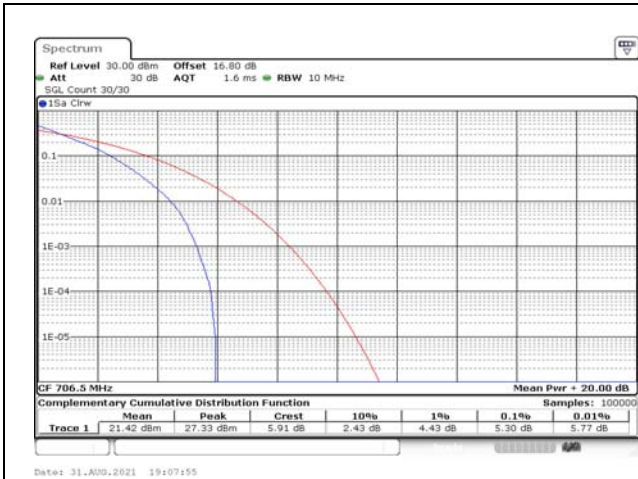


Fig.1

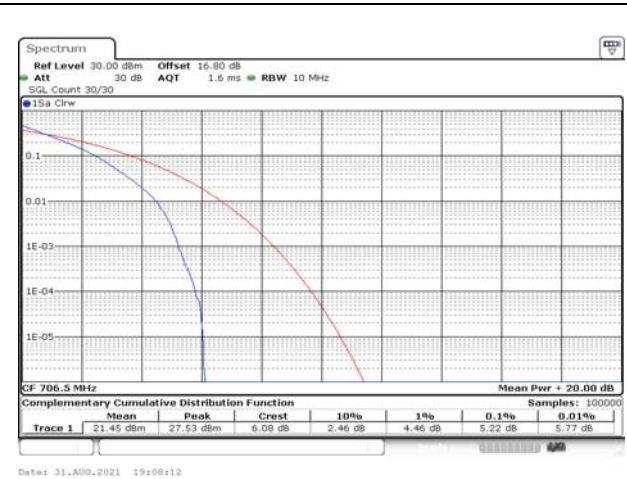


Fig.2

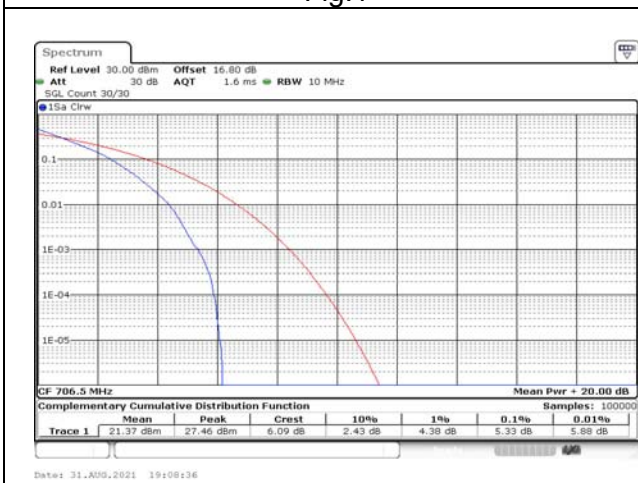


Fig.3

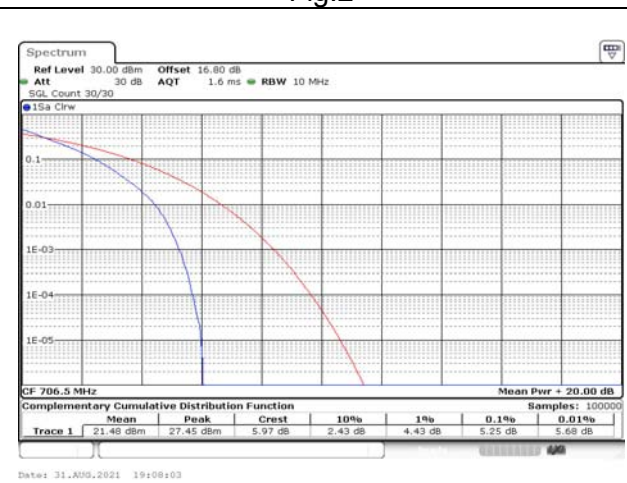


Fig.4

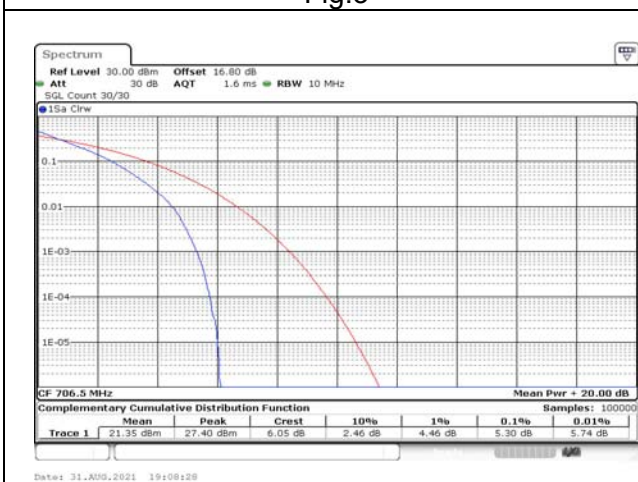


Fig.5

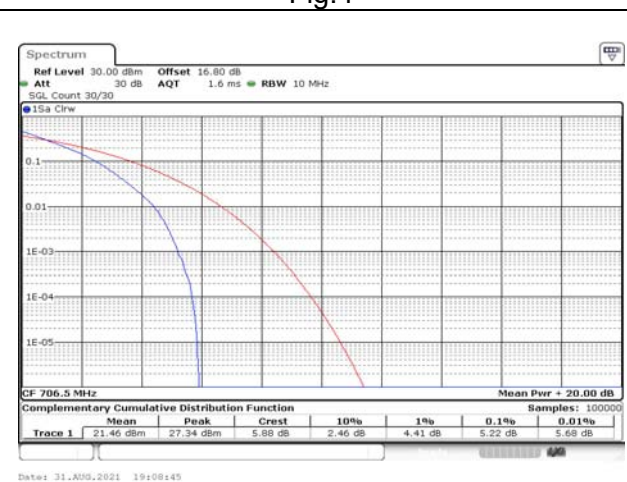


Fig.6



Fig.7

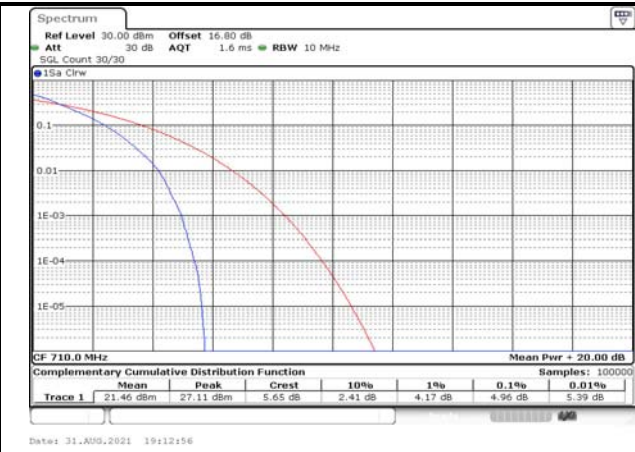


Fig.8

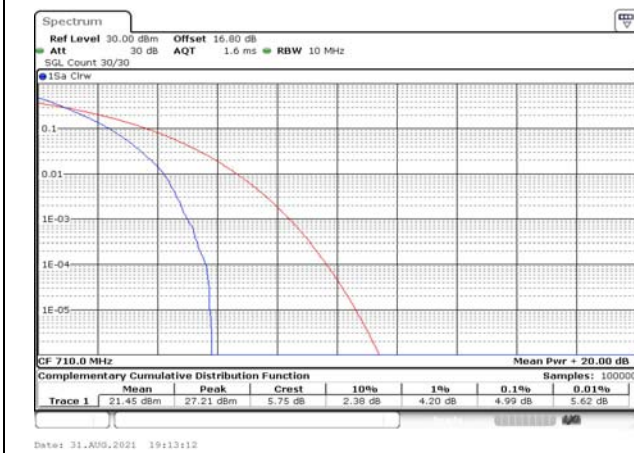


Fig.9

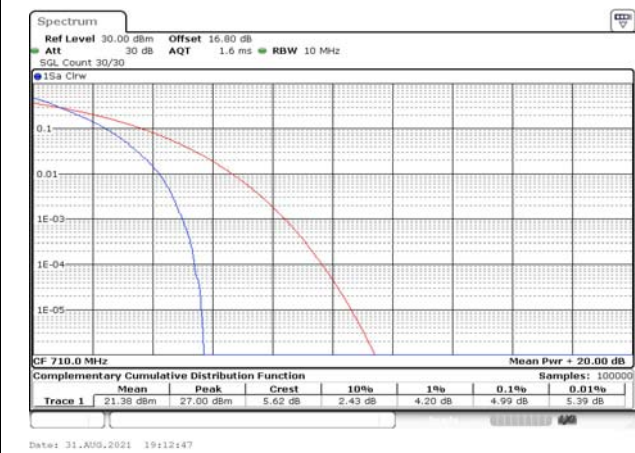


Fig.10

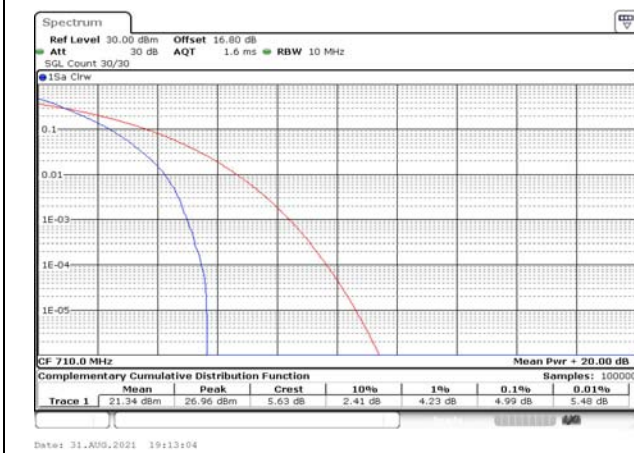


Fig.11

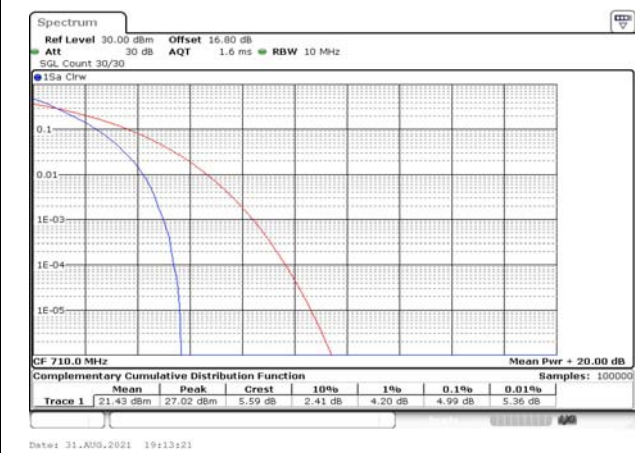


Fig.12



Fig.13

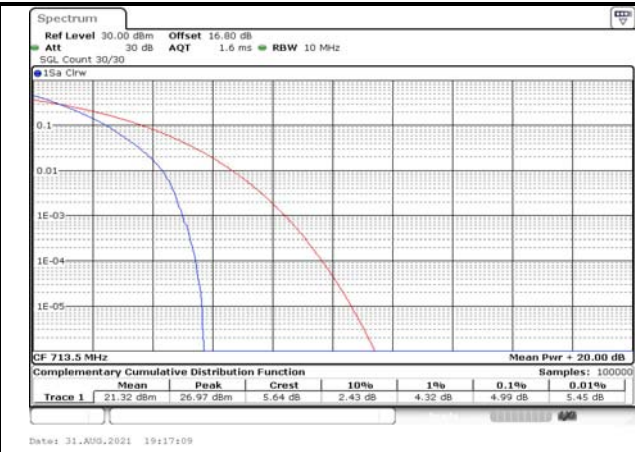


Fig.14

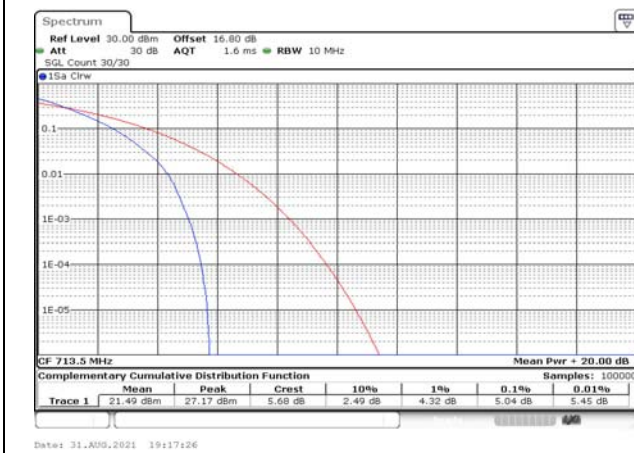


Fig.15

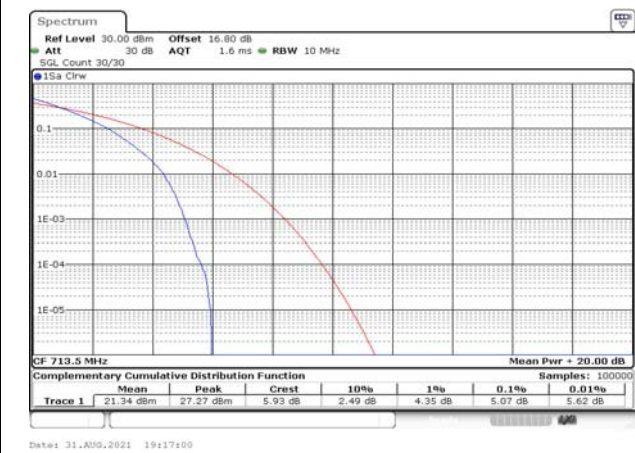


Fig.16

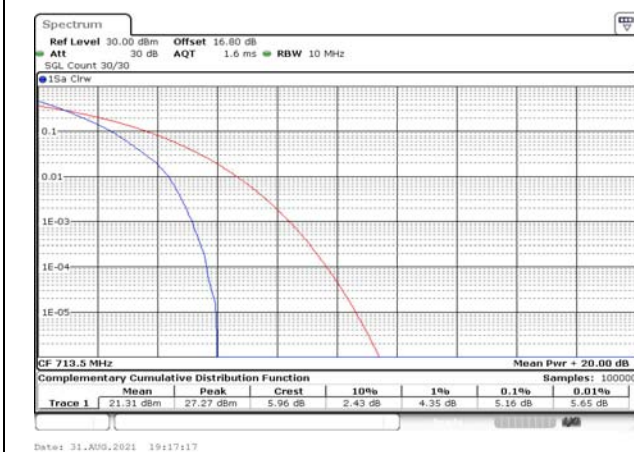


Fig.17

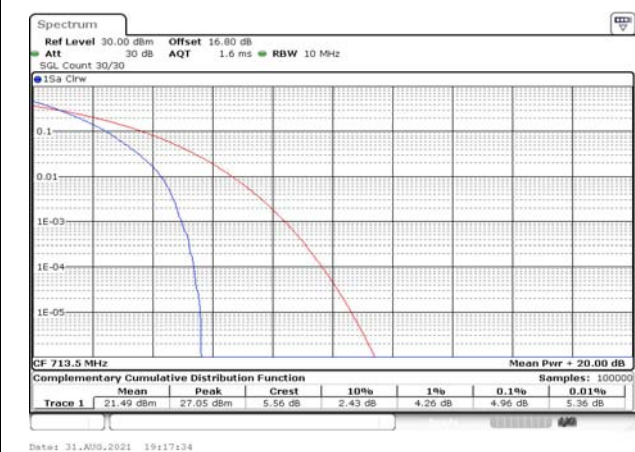


Fig.18

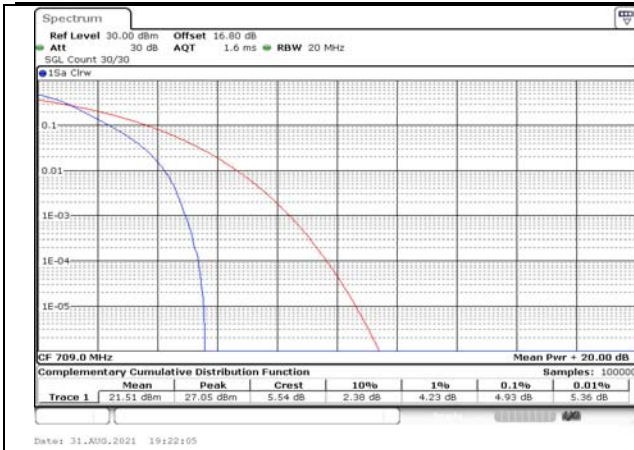


Fig.19

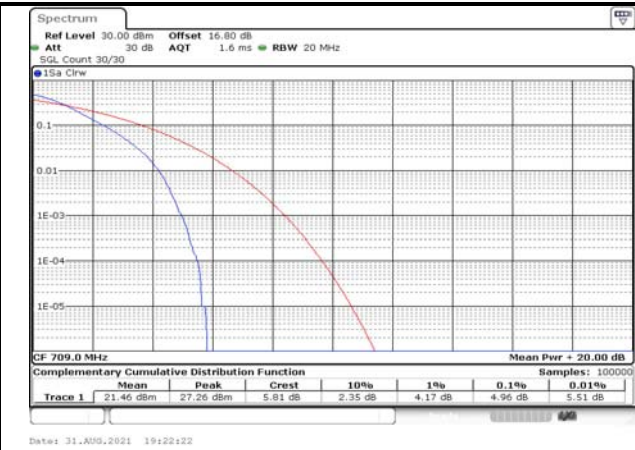


Fig.20

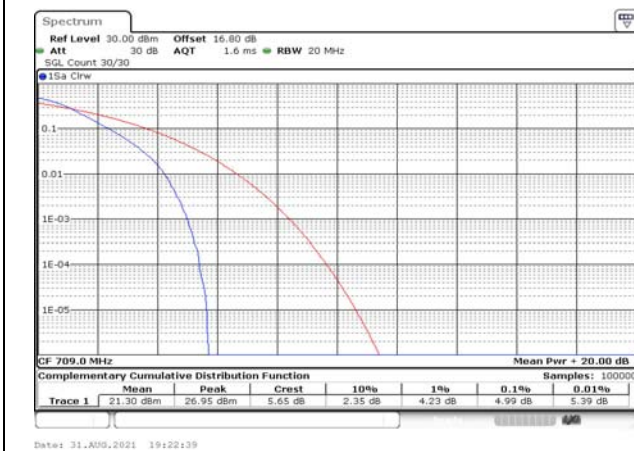


Fig.21

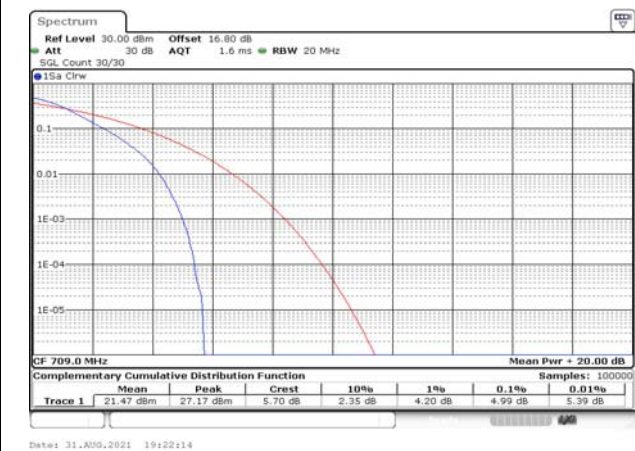


Fig.22

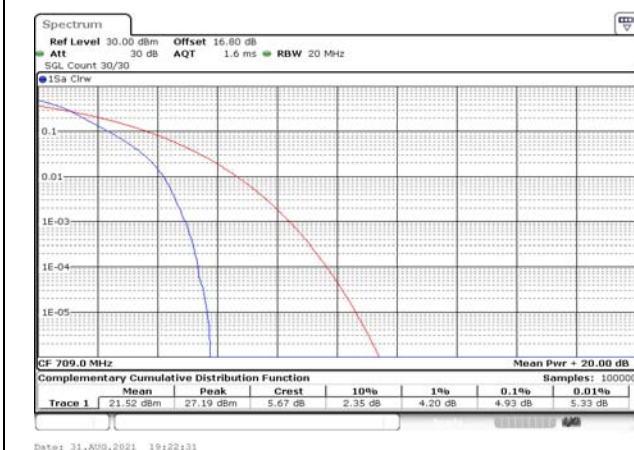


Fig.23

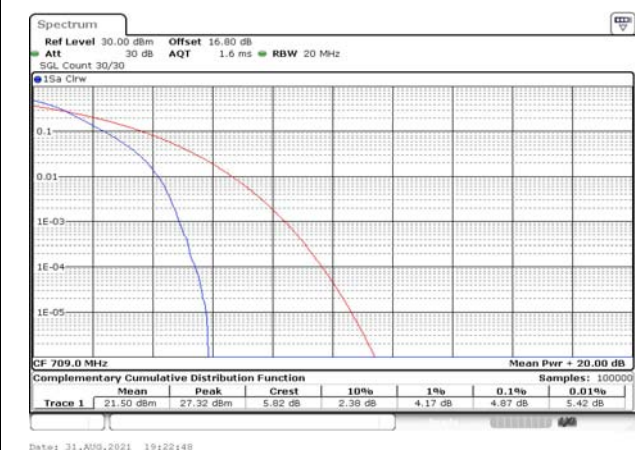


Fig.24



Fig.25

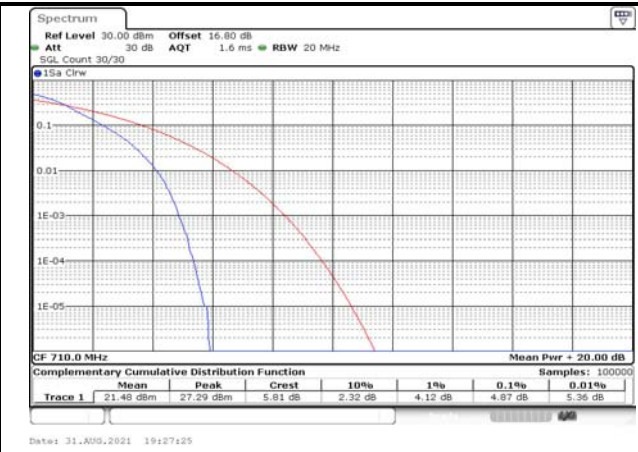


Fig.26

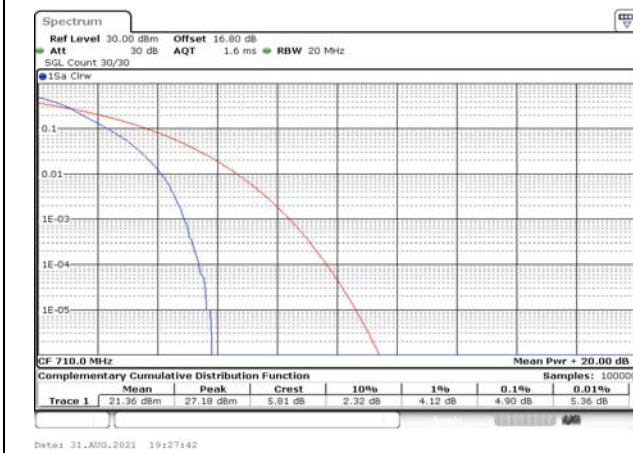


Fig.27

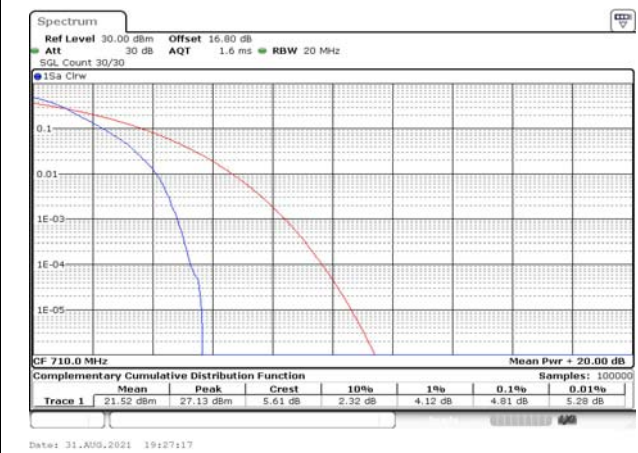


Fig.28

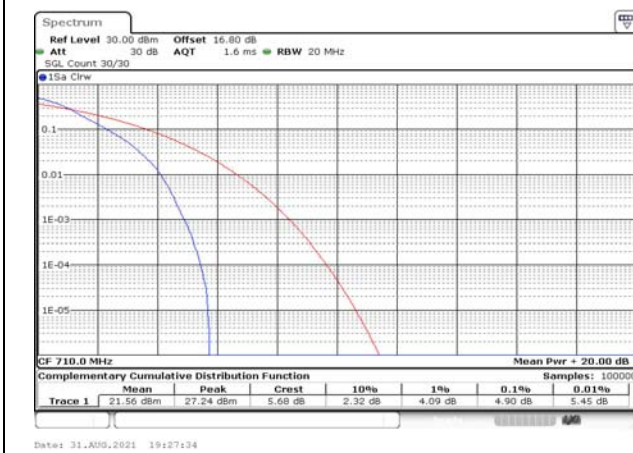


Fig.29

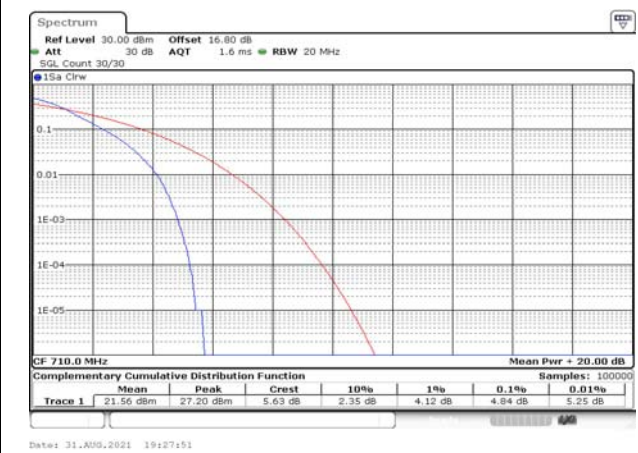


Fig.30

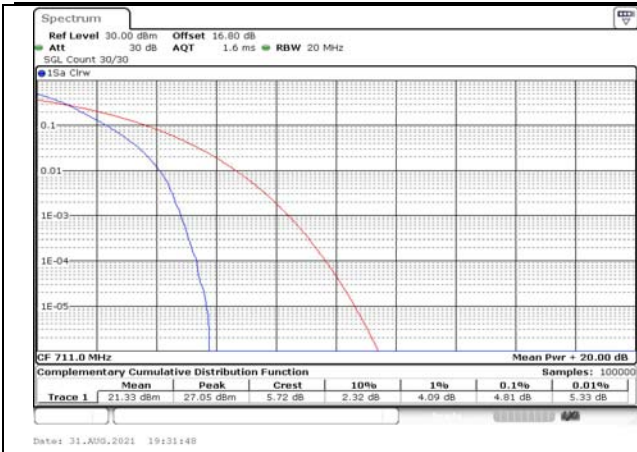


Fig.31

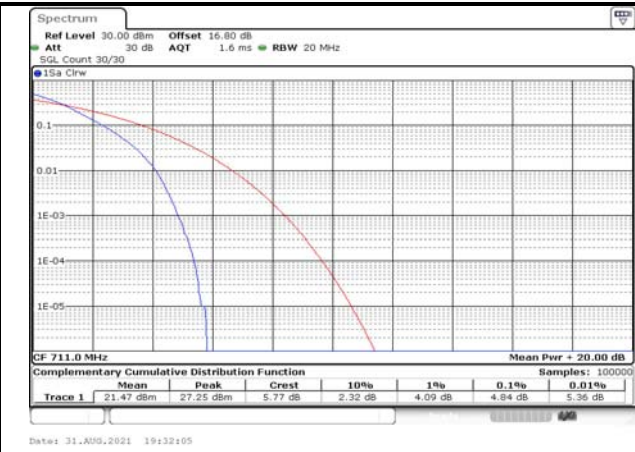


Fig.32

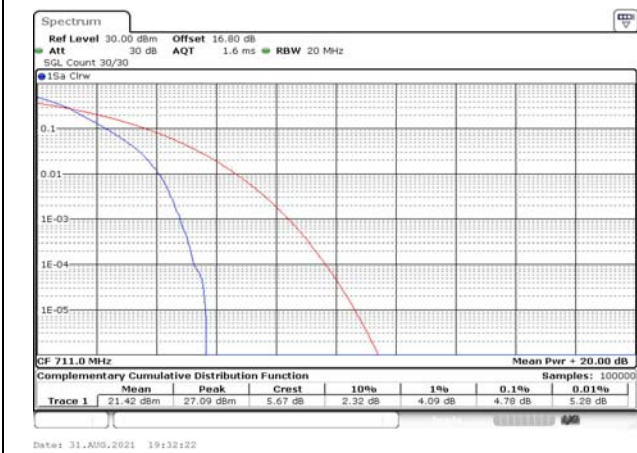


Fig.33

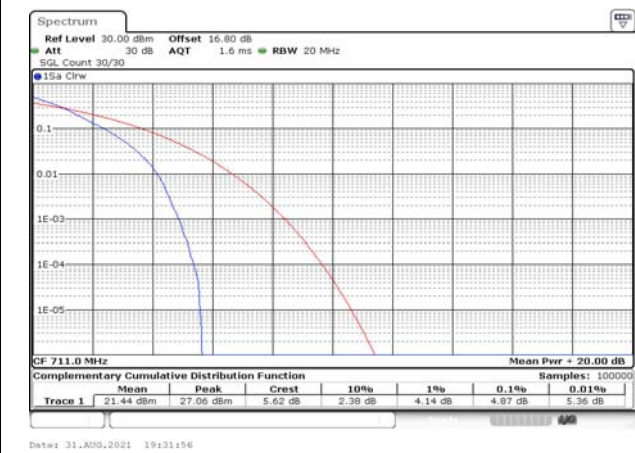


Fig.34

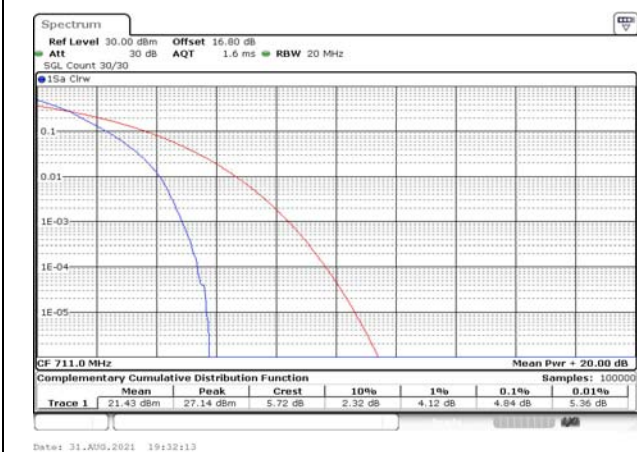


Fig.35

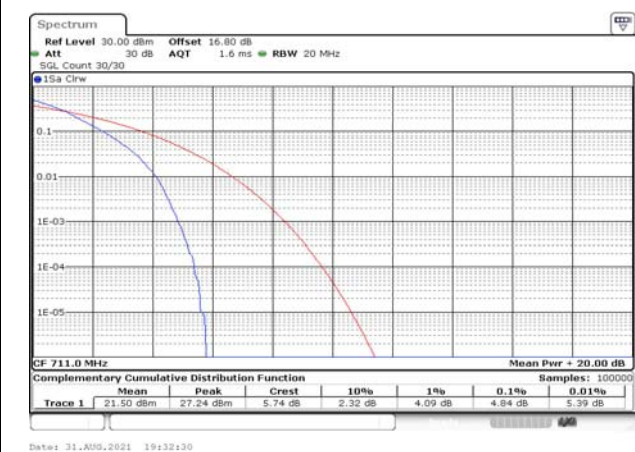


Fig.36

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

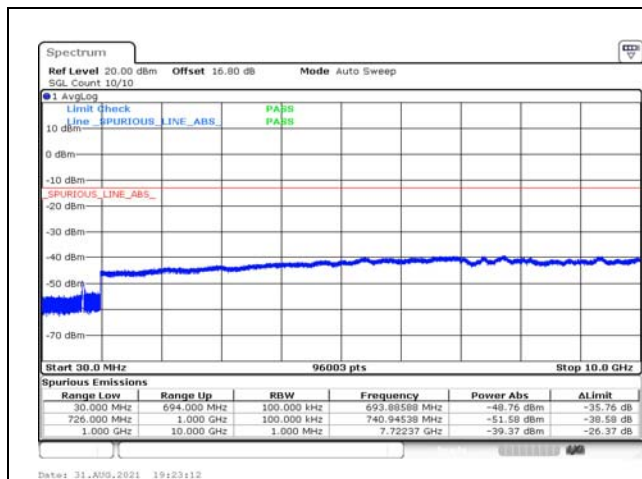


Fig.1

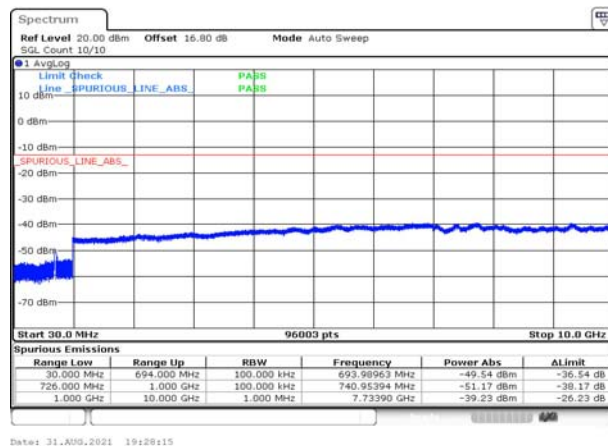


Fig.2

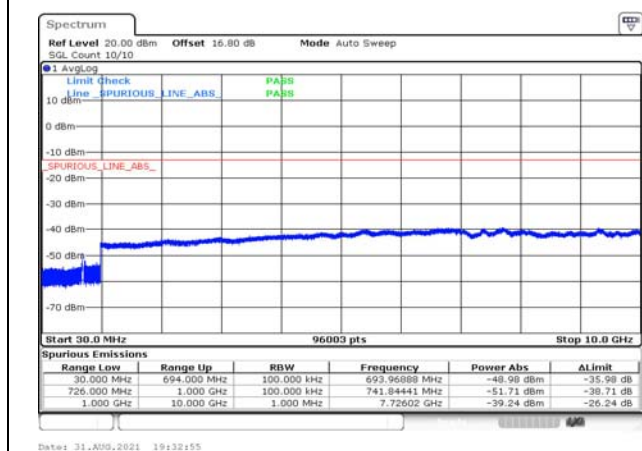


Fig.3

6 Band Edges Compliance

Band	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

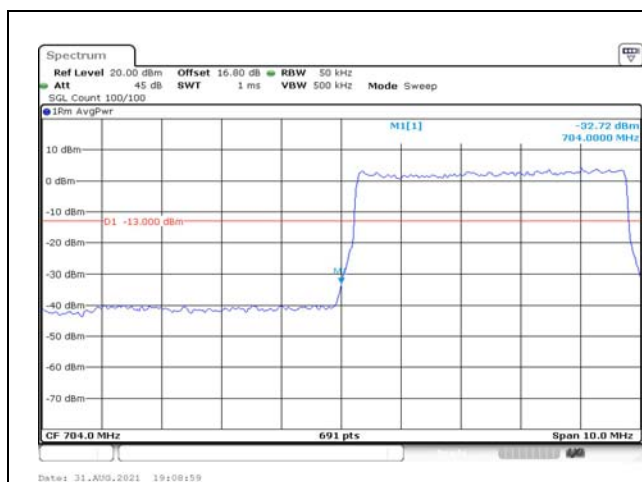


Fig.1

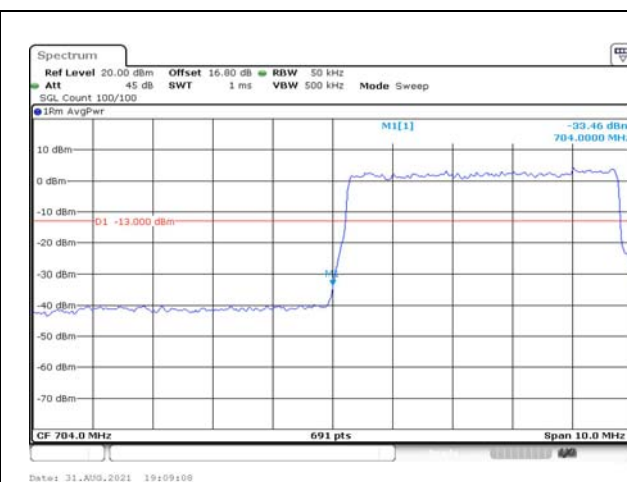


Fig.2

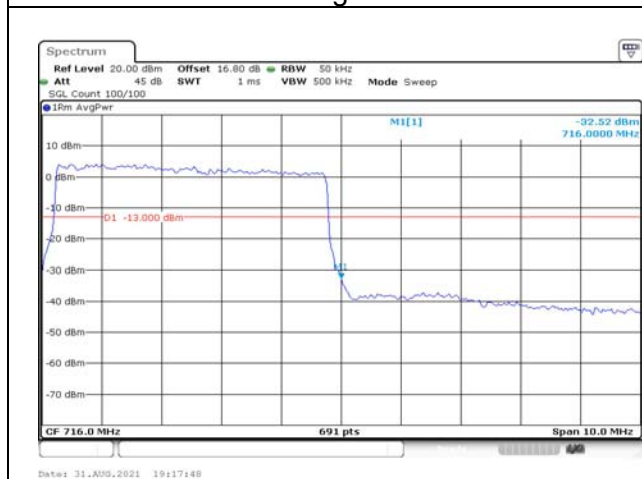


Fig.3

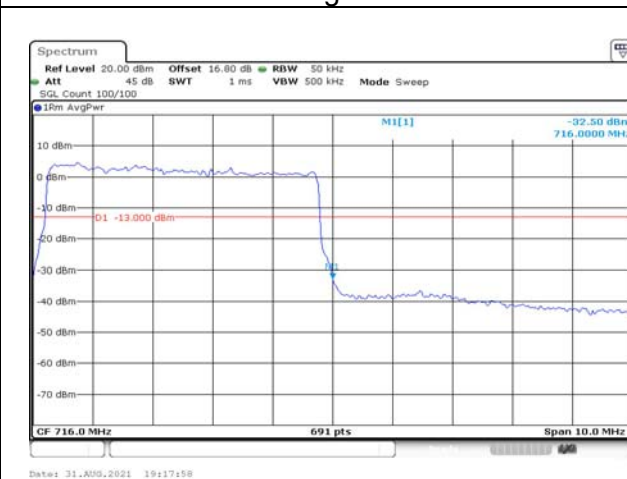


Fig.4

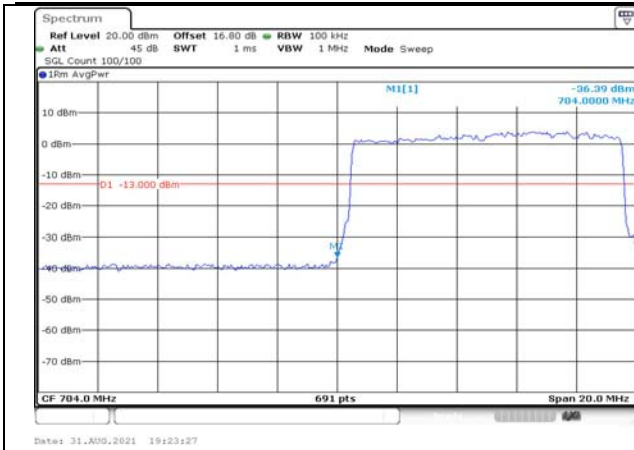


Fig.5

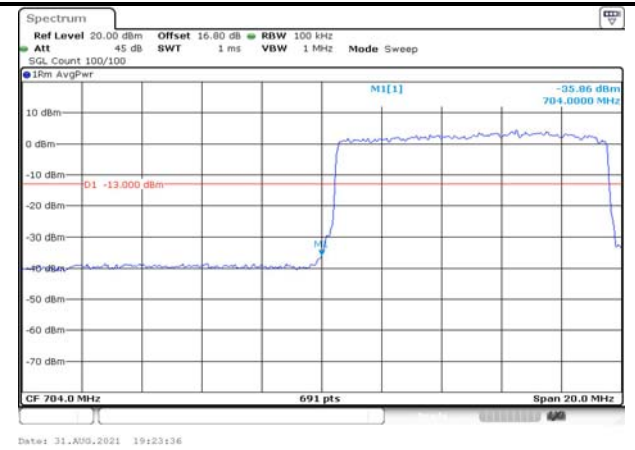


Fig.6

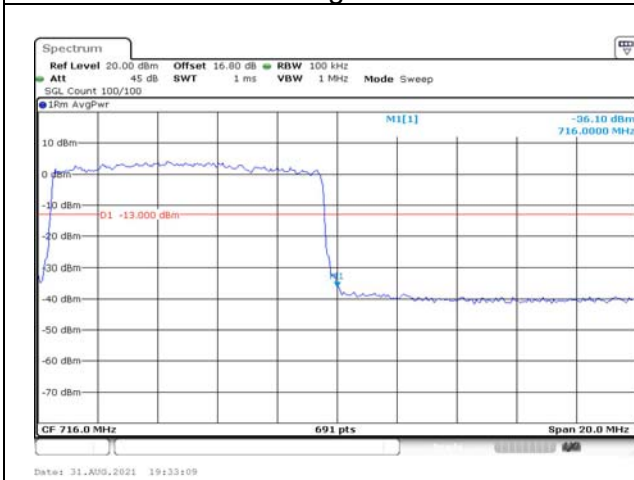


Fig.7

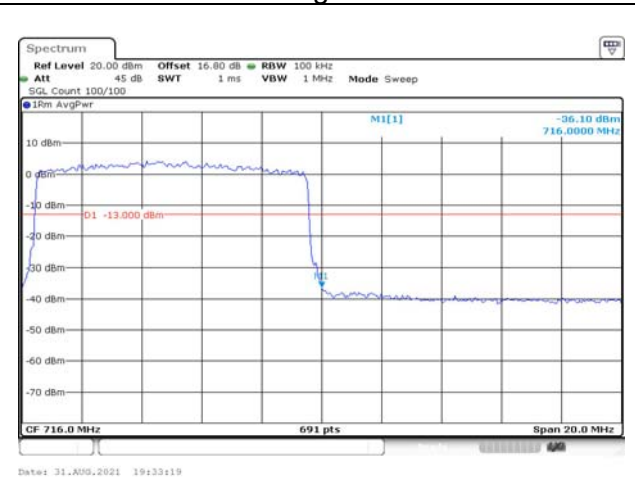


Fig.8

7 Frequency Stability

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

Temperature(°C)	Voltage	Test Result (ppm) Band17 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-10	NV	---	---	0.002	0.001	---	---
0	NV	---	---	0.006	0.005	---	---
+10	NV	---	---	0.000	0.003	---	---
+20	NV	---	---	0.002	-0.001	---	---
+30	NV	---	---	-0.002	0.002	---	---
+40	NV	---	---	-0.001	0.001	---	---
+50	NV	---	---	0.003	0.001	---	---
+20	LV	---	---	0.002	-0.002	---	---
+20	HV	---	---	0.001	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	23.31	9.66	0.009	
				1	12	23.12	9.47	0.009	
				1	24	23.18	9.53	0.009	
				12	0	22.32	8.67	0.007	
				12	7	22.35	8.70	0.007	
				12	13	22.28	8.63	0.007	
				25	0	22.46	8.81	0.008	
	710	23790		1	0	23.26	9.61	0.009	
				1	12	23.24	9.59	0.009	
				1	24	23.16	9.51	0.009	
				12	0	22.41	8.76	0.008	
				12	7	22.34	8.69	0.007	
				12	13	22.33	8.68	0.007	
				25	0	22.34	8.69	0.007	
	713.5	23825		1	0	23.28	9.63	0.009	
				1	12	23.17	9.52	0.009	
				1	24	23.24	9.59	0.009	
				12	0	22.35	8.70	0.007	
				12	7	22.36	8.71	0.007	
				12	13	22.26	8.61	0.007	
				25	0	22.37	8.72	0.007	
	16QAM	706.5		23755	1	0	22.57	8.92	0.008
					1	12	22.42	8.77	0.008
					1	24	22.39	8.74	0.007
12					0	21.34	7.69	0.006	
12					7	21.30	7.65	0.006	
12					13	21.21	7.56	0.006	
25					0	21.40	7.75	0.006	
710		23790		1	0	22.55	8.90	0.008	
				1	12	22.30	8.65	0.007	
				1	24	22.46	8.81	0.008	
				12	0	21.35	7.70	0.006	
				12	7	21.30	7.65	0.006	
				12	13	21.30	7.65	0.006	
				25	0	21.32	7.67	0.006	
713.5		23825		1	0	22.78	9.13	0.008	
				1	12	22.66	9.01	0.008	
				1	24	22.61	8.96	0.008	
				12	0	21.44	7.79	0.006	
				12	7	21.27	7.62	0.006	
				12	13	21.26	7.61	0.006	
				25	0	21.23	7.58	0.006	

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	21.31	7.66	0.006
				1	12	21.20	7.55	0.006
				1	24	21.17	7.52	0.006
				12	0	20.40	6.75	0.005
				12	7	20.36	6.71	0.005
				12	13	20.19	6.54	0.005
				25	0	20.37	6.72	0.005
	710	23790		1	0	21.21	7.56	0.006
				1	12	21.30	7.65	0.006
				1	24	21.13	7.48	0.006
				12	0	20.38	6.73	0.005
				12	7	20.31	6.66	0.005
				12	13	20.27	6.62	0.005
				25	0	20.31	6.66	0.005
	713.5	23825		1	0	21.64	7.99	0.006
				1	12	21.45	7.80	0.006
				1	24	21.46	7.81	0.006
				12	0	20.43	6.78	0.005
				12	7	20.49	6.84	0.005
				12	13	20.37	6.72	0.005
				25	0	20.47	6.82	0.005

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	23.31	9.66	0.009	
				1	25	23.20	9.55	0.009	
				1	49	22.97	9.32	0.009	
				25	0	22.38	8.73	0.007	
				25	12	22.39	8.74	0.007	
				25	25	22.26	8.61	0.007	
	50	0		22.43	8.78	0.008			
	710	23790		1	0	23.25	9.60	0.009	
				1	25	23.07	9.42	0.009	
				1	49	23.12	9.47	0.009	
				25	0	22.31	8.66	0.007	
				25	12	22.34	8.69	0.007	
				25	25	22.32	8.67	0.007	
	50	0		22.41	8.76	0.008			
	711	23800		1	0	23.39	9.74	0.009	
				1	25	23.28	9.63	0.009	
				1	49	23.16	9.51	0.009	
				25	0	22.33	8.68	0.007	
				25	12	22.23	8.58	0.007	
				25	25	22.28	8.63	0.007	
	50	0		22.40	8.75	0.007			
	16QAM	709		23780	1	0	23.30	9.65	0.009
					1	25	22.85	9.20	0.008
					1	49	22.66	9.01	0.008
25					0	21.40	7.75	0.006	
25					12	21.47	7.82	0.006	
25					25	21.28	7.63	0.006	
50		0		21.39	7.74	0.006			
710		23790		1	0	23.06	9.41	0.009	
				1	25	23.05	9.40	0.009	
				1	49	23.02	9.37	0.009	
				25	0	21.40	7.75	0.006	
				25	12	21.41	7.76	0.006	
				25	25	21.27	7.62	0.006	
50		0		21.38	7.73	0.006			
711		23800		1	0	22.74	9.09	0.008	
				1	25	22.35	8.70	0.007	
				1	49	22.45	8.80	0.008	
				25	0	21.44	7.79	0.006	
				25	12	21.34	7.69	0.006	
				25	25	21.34	7.69	0.006	
50		0		21.23	7.58	0.006			

Modulation	Carrier frequen 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	21.91	8.26	0.007
				1	25	21.74	8.09	0.006
				1	49	21.76	8.11	0.006
				25	0	20.39	6.74	0.005
				25	12	20.36	6.71	0.005
				25	25	20.34	6.69	0.005
				50	0	20.46	6.81	0.005
	710	23790		1	0	21.59	7.94	0.006
				1	25	21.40	7.75	0.006
				1	49	21.39	7.74	0.006
				25	0	20.47	6.82	0.005
				25	12	20.43	6.78	0.005
				25	25	20.39	6.74	0.005
				50	0	20.45	6.80	0.005
	711	23800		1	0	21.13	7.48	0.006
				1	25	21.13	7.48	0.006
				1	49	21.08	7.43	0.006
				25	0	20.53	6.88	0.005
				25	12	20.36	6.71	0.005
				25	25	20.41	6.76	0.005
				50	0	20.37	6.72	0.005