

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	

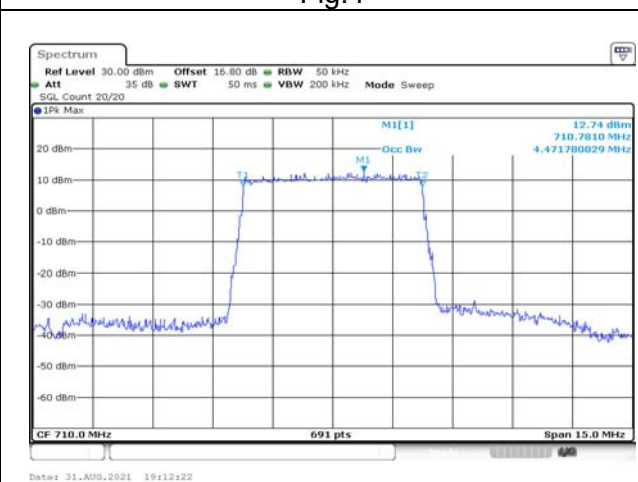
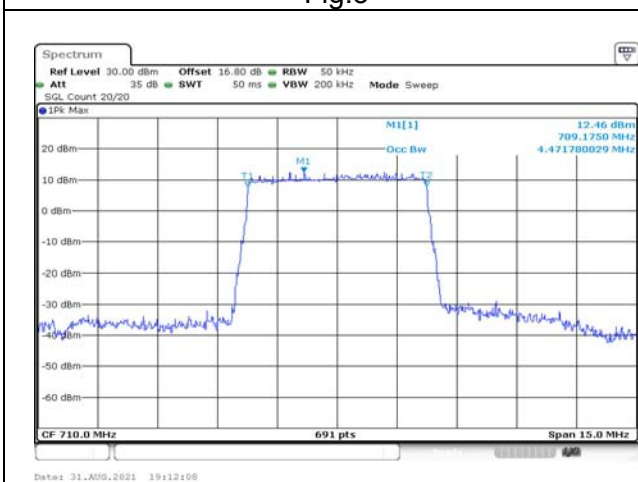
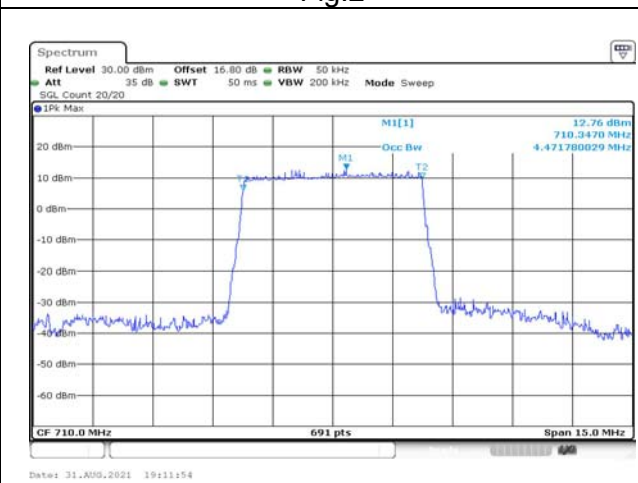
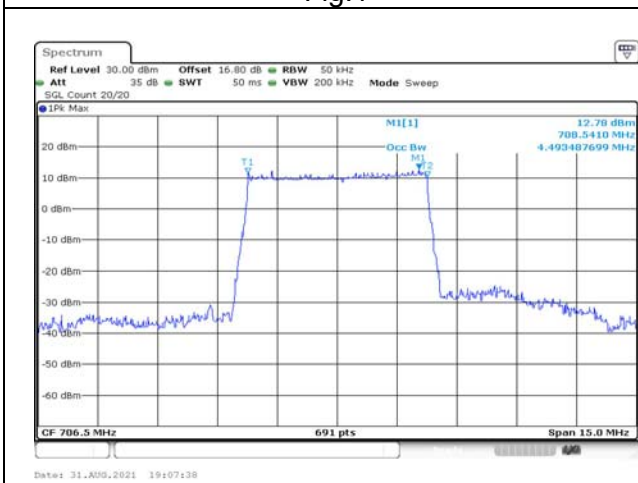
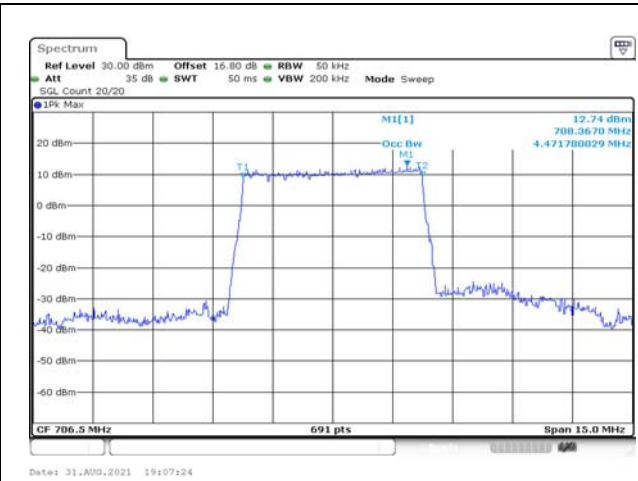
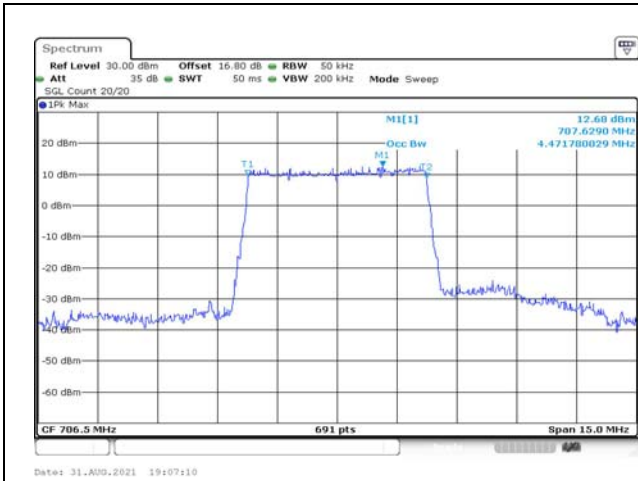
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	706.5	23755	5	1	0	21.31
				1	12	21.20
				1	24	21.17
				12	0	20.40
				12	7	20.36
				12	13	20.19
				25	0	20.37
	710	23790		1	0	21.21
				1	12	21.30
				1	24	21.13
				12	0	20.38
				12	7	20.31
				12	13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

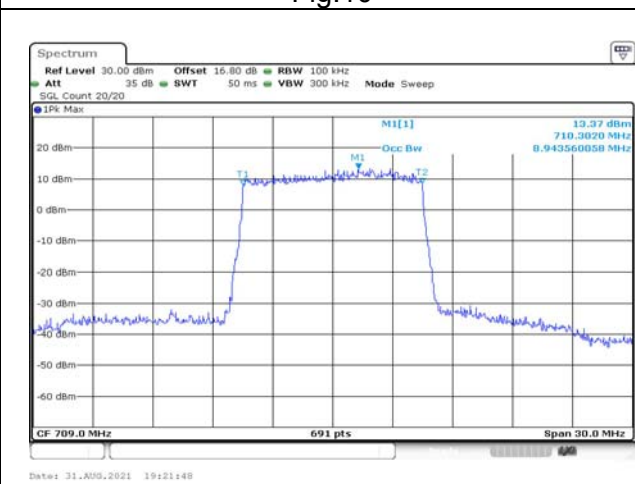
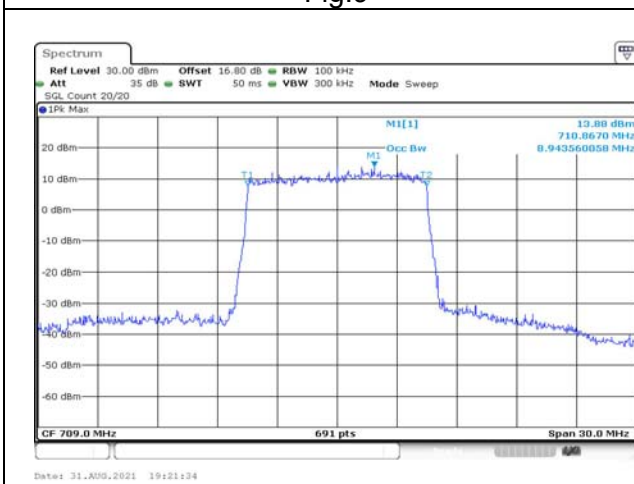
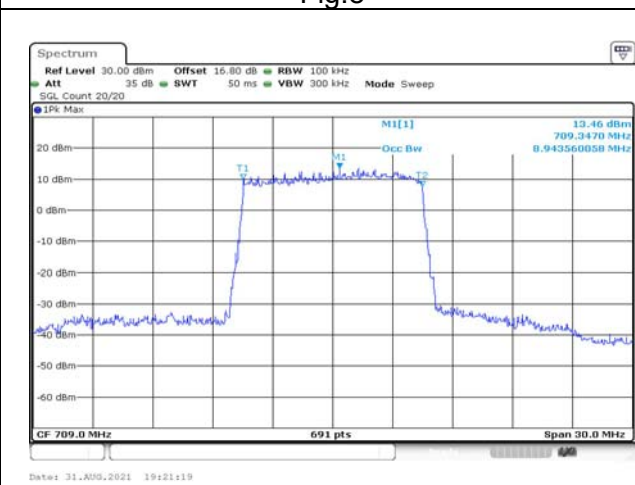
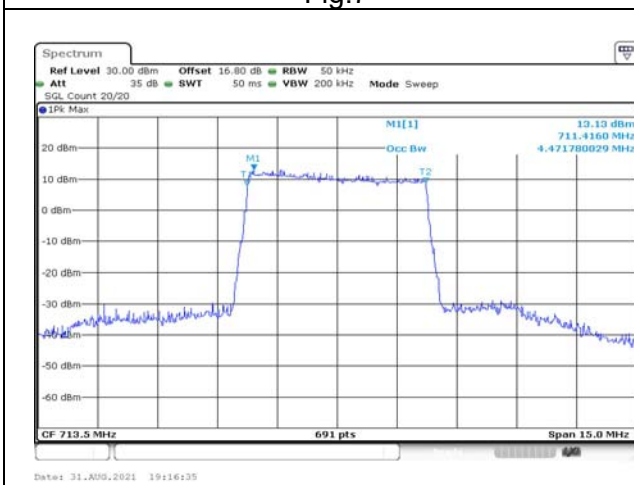
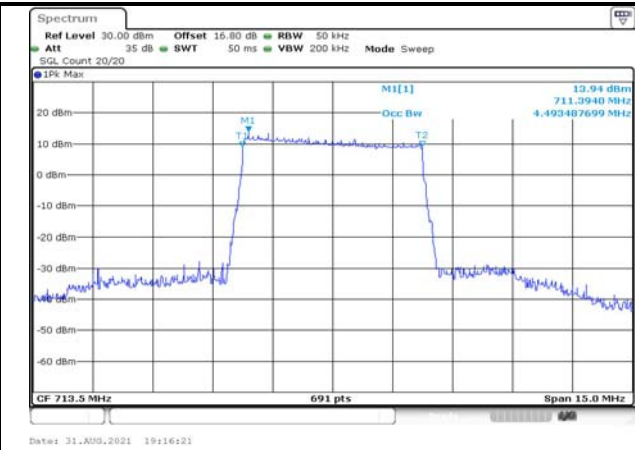
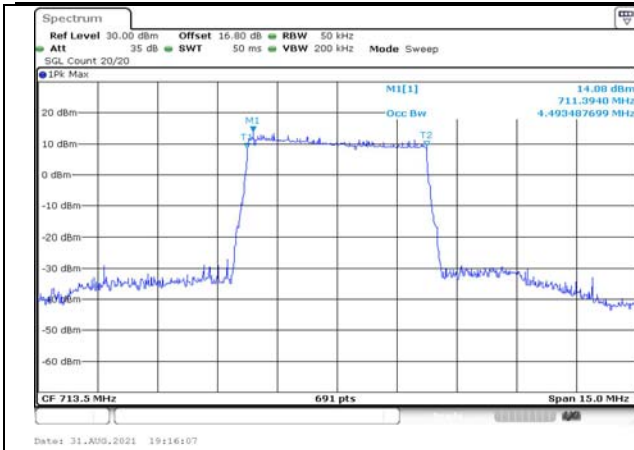
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	
QPSK	709	23780	10	1	0	23.31	
				1	25	23.20	
				1	49	22.97	
				25	0	22.38	
				25	12	22.39	
				25	25	22.26	
				50	0	22.43	
	710	23790		1	0	23.25	
				1	25	23.07	
				1	49	23.12	
				25	0	22.31	
				25	12	22.34	
				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	

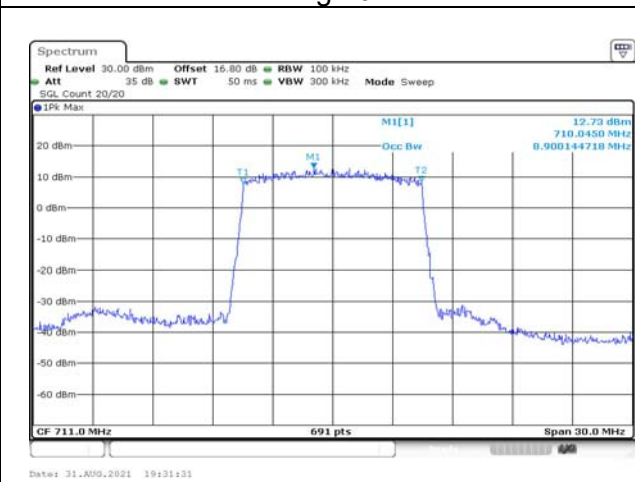
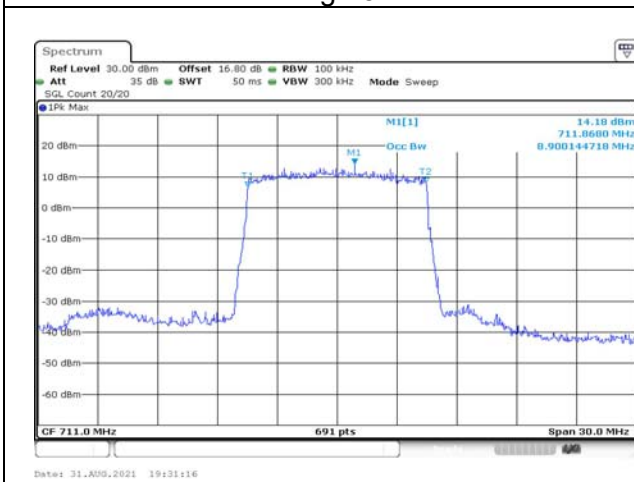
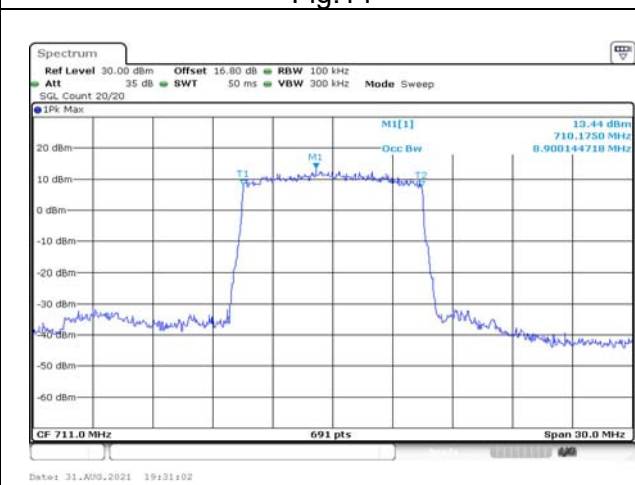
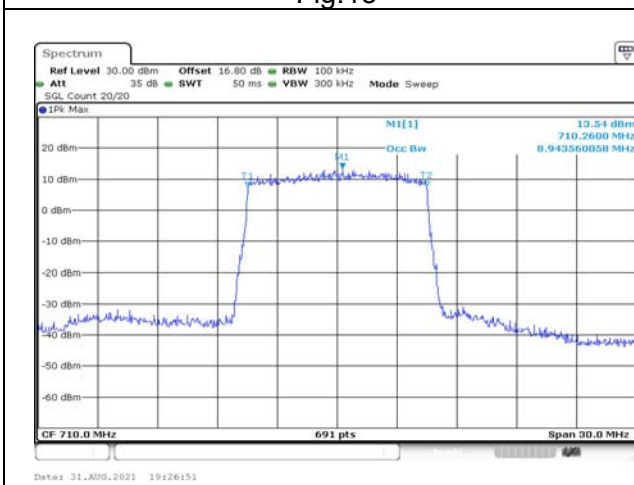
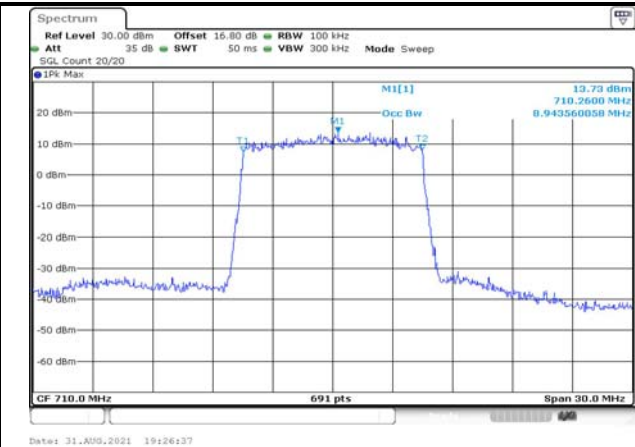
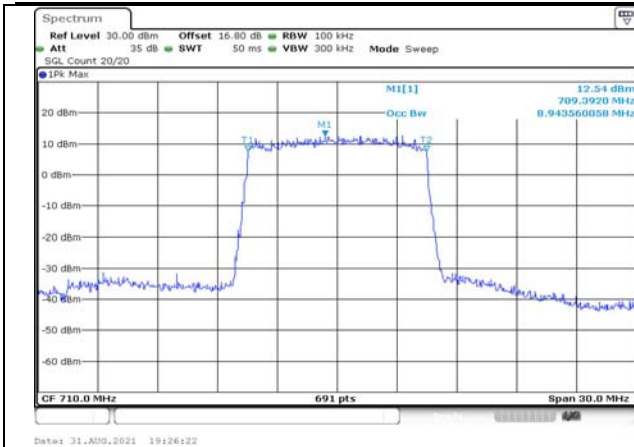
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	709	23780	10	1	0	21.91
				1	25	21.74
				1	49	21.76
				25	0	20.39
				25	12	20.36
				25	25	20.34
				50	0	20.46
	710	23790		1	0	21.59
				1	25	21.40
				1	49	21.39
				25	0	20.47
				25	12	20.43
				25	25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

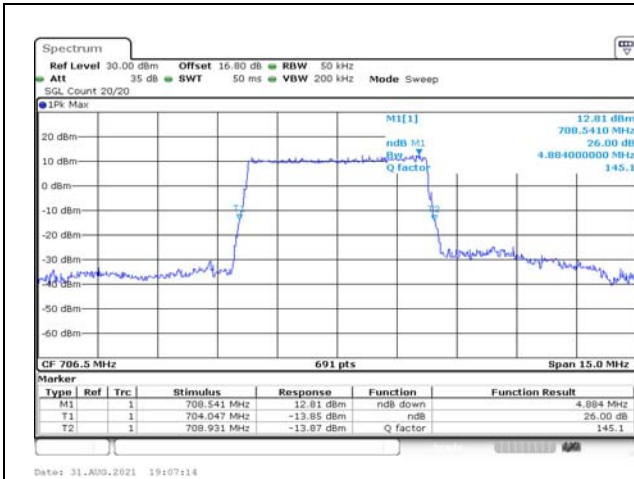


Fig.1

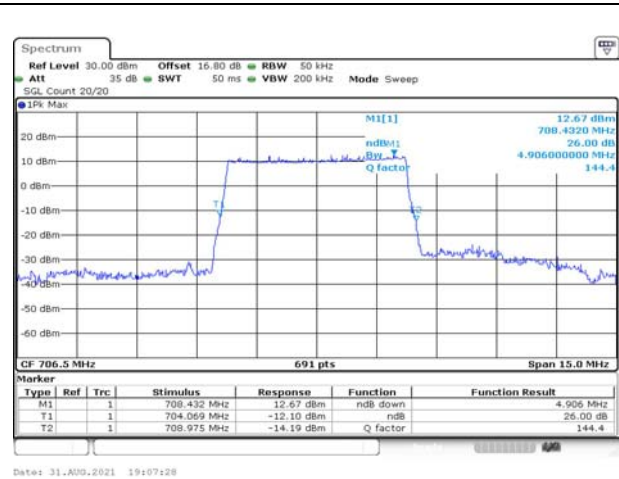


Fig.2

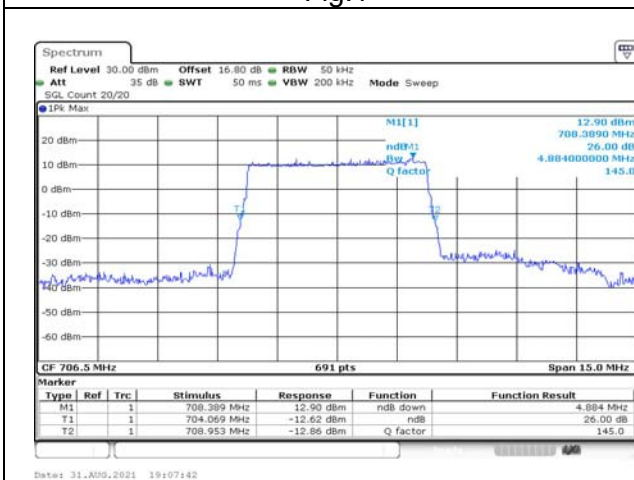


Fig.3

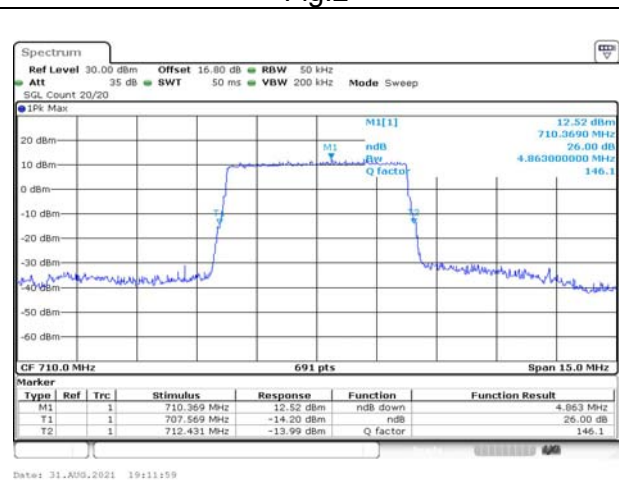


Fig.4

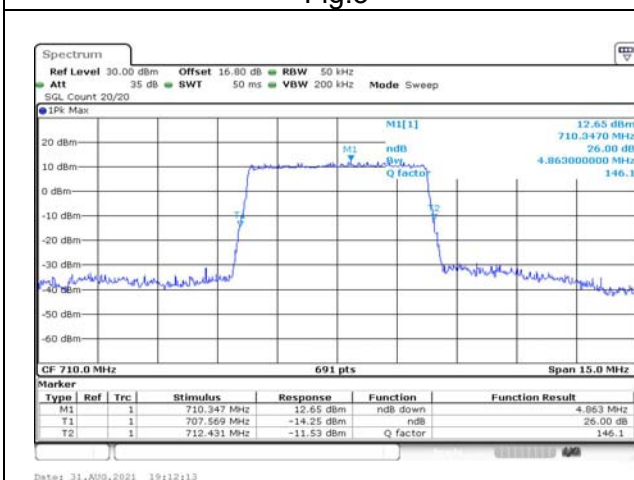


Fig.5

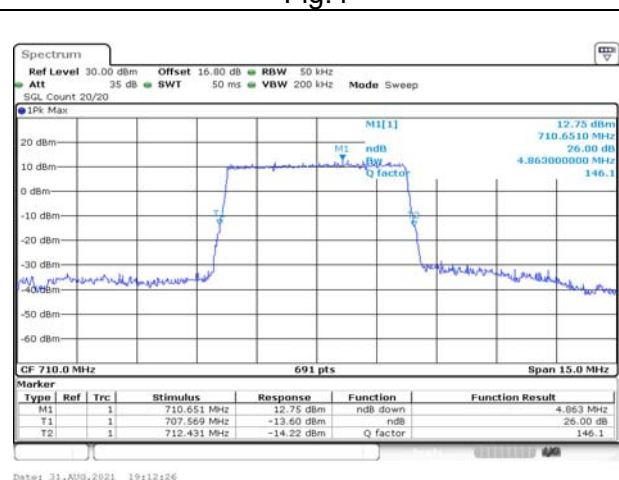


Fig.6

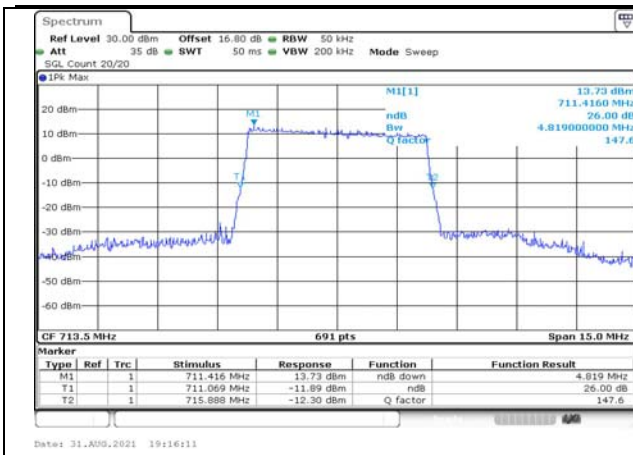


Fig.7

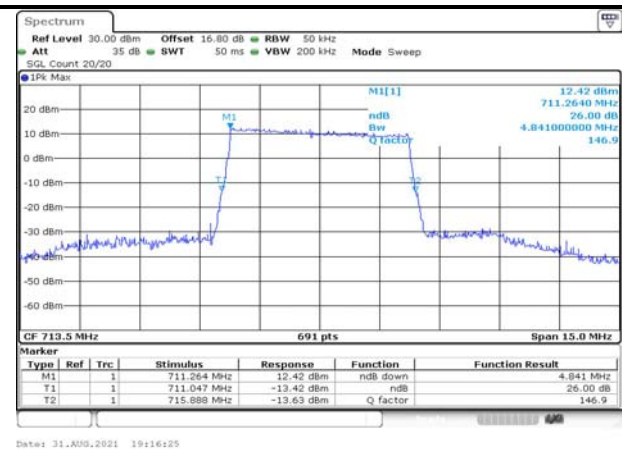


Fig.8

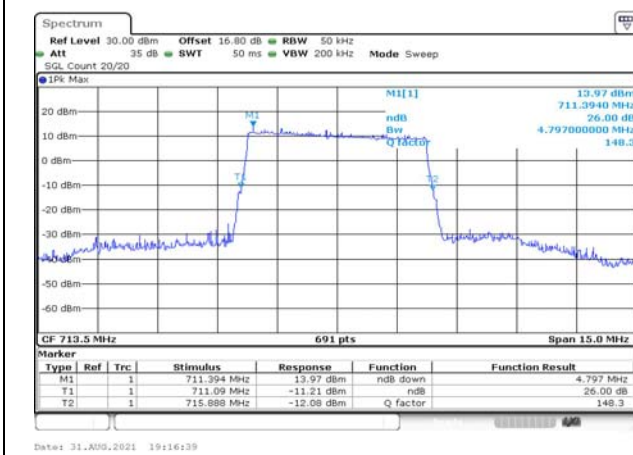


Fig.9

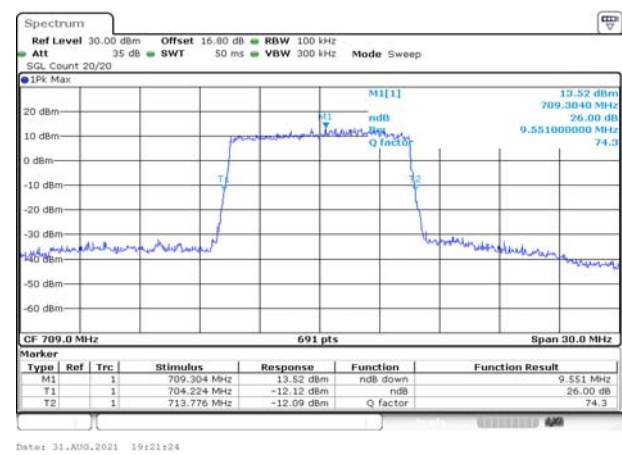


Fig.10

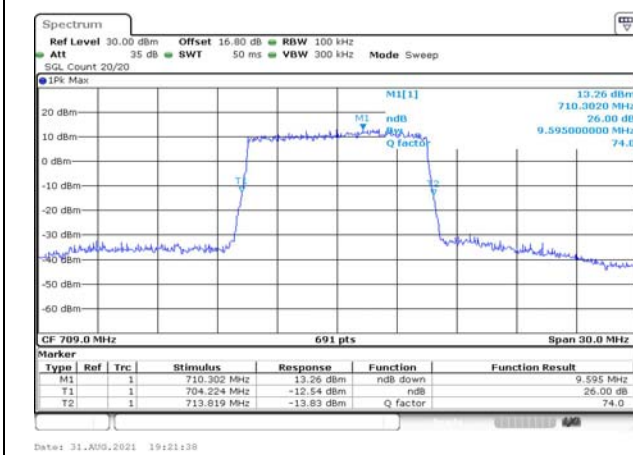


Fig.11

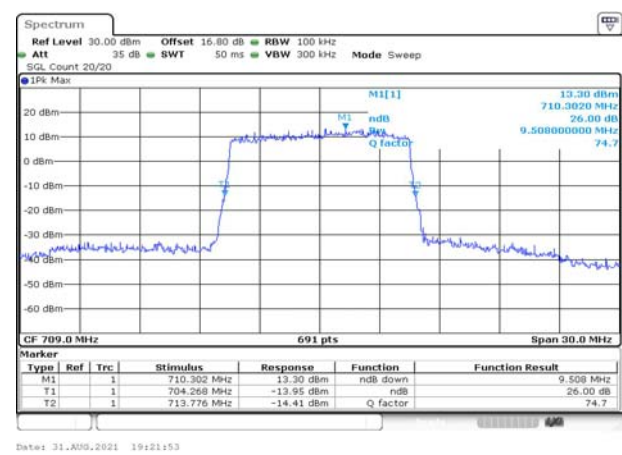


Fig.12

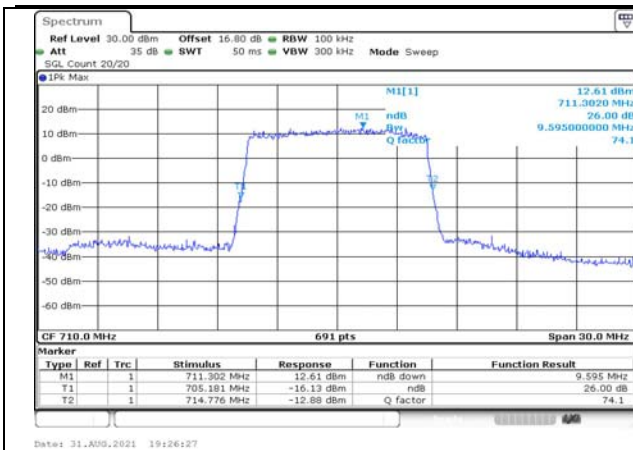


Fig.13

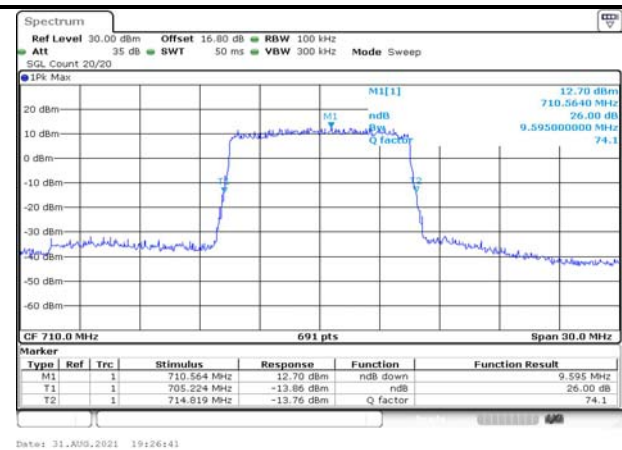


Fig.14

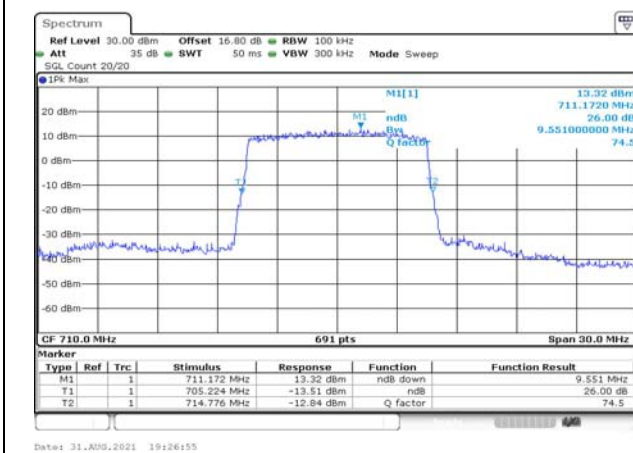


Fig.15

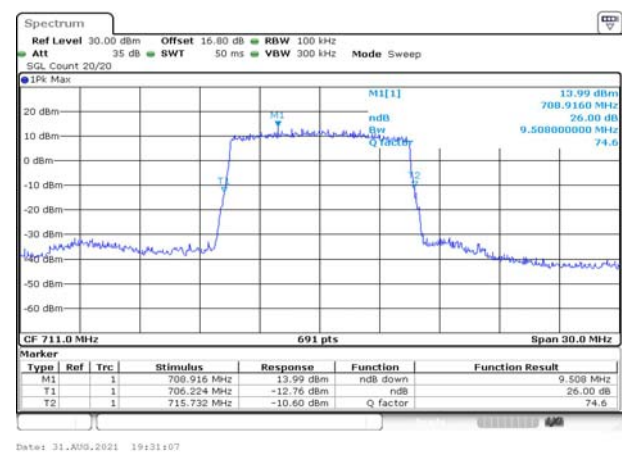


Fig.16

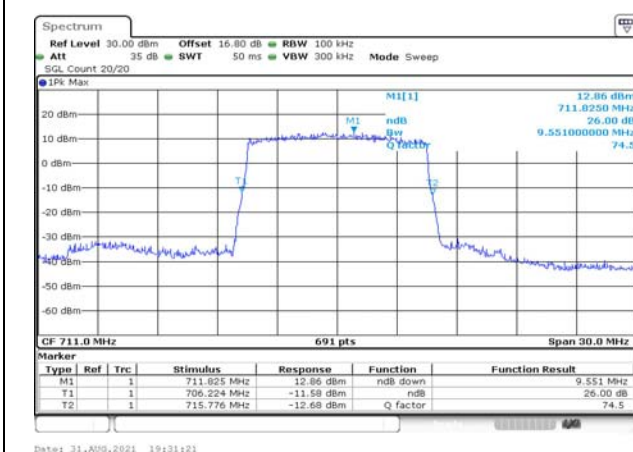


Fig.17

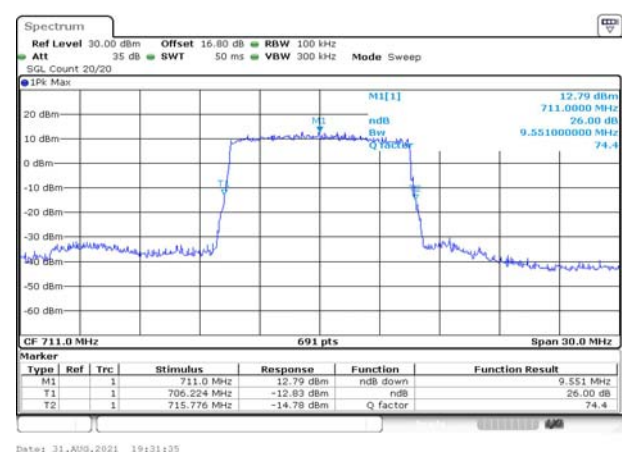


Fig.18

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

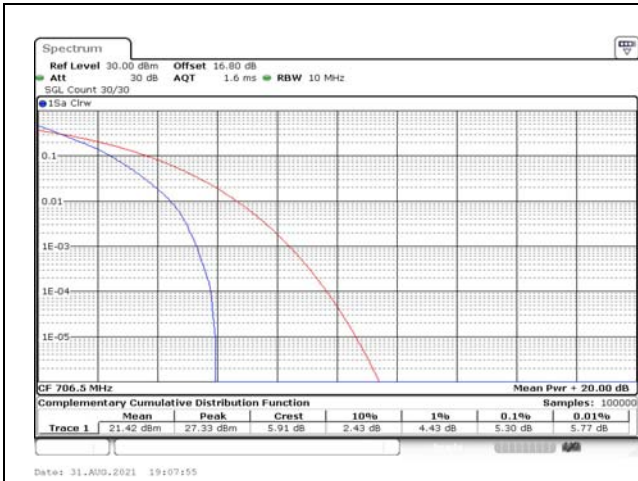


Fig.1

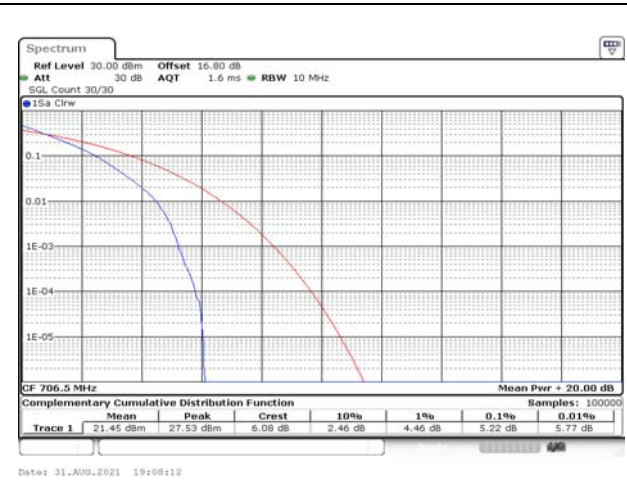


Fig.2

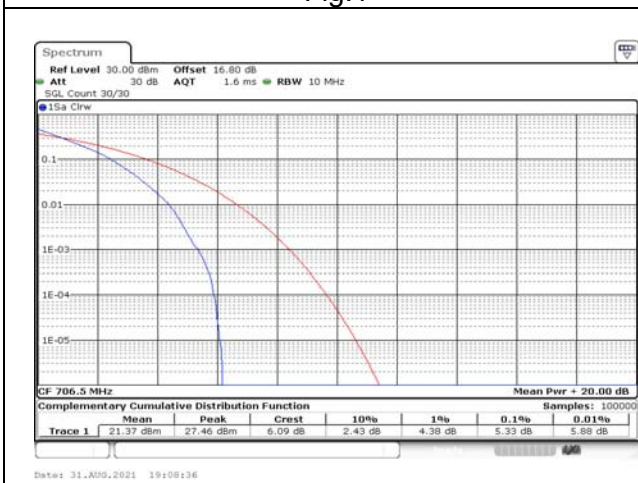


Fig.3

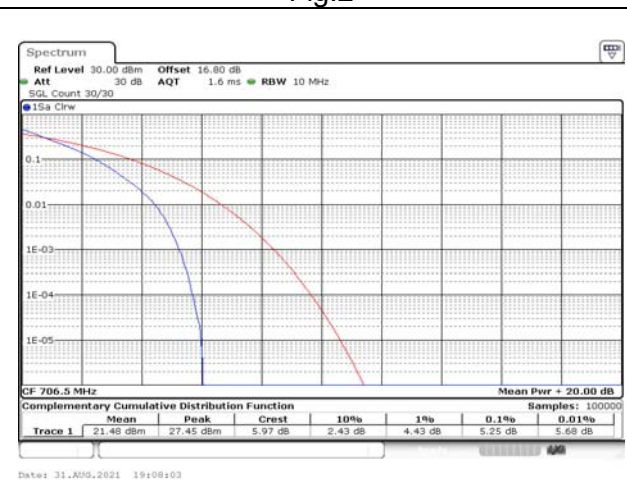


Fig.4

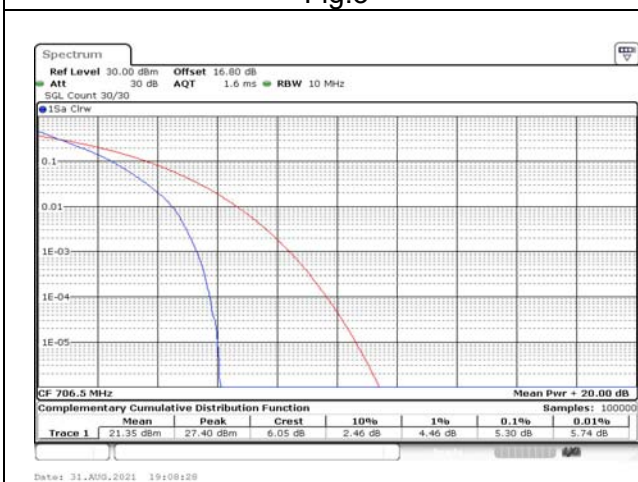


Fig.5

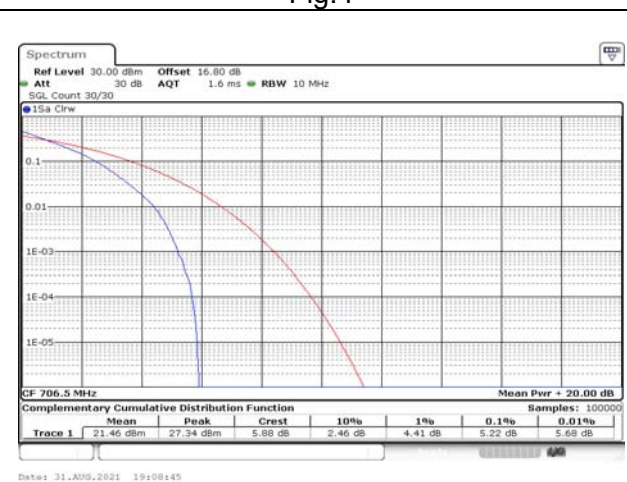


Fig.6

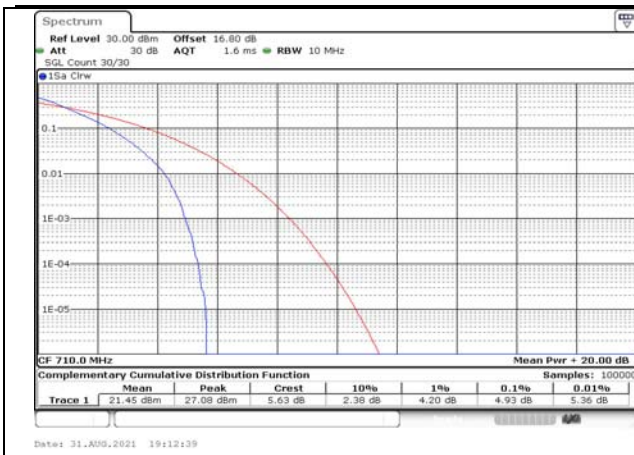


Fig.7

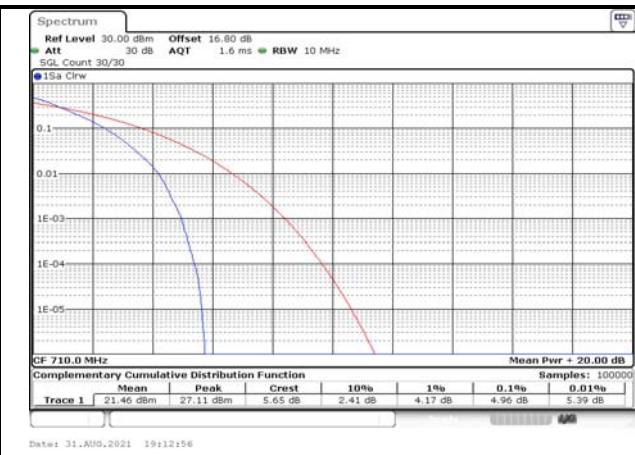


Fig.8

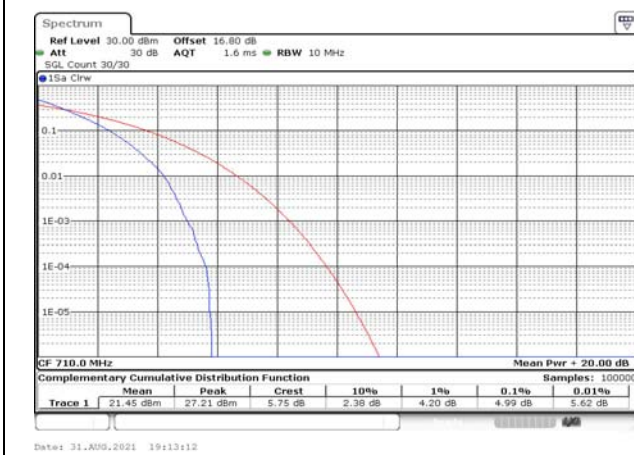


Fig.9

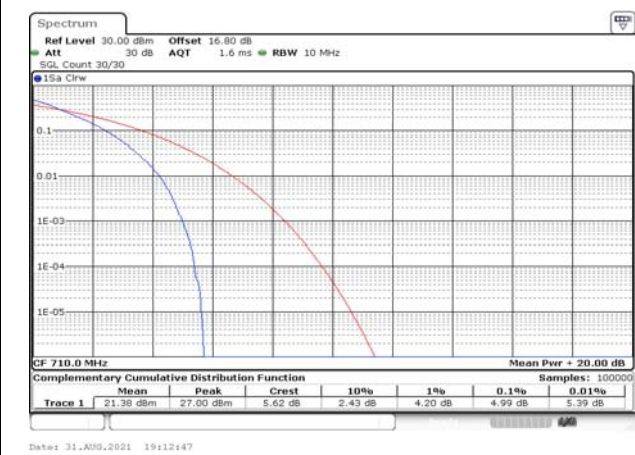


Fig.10

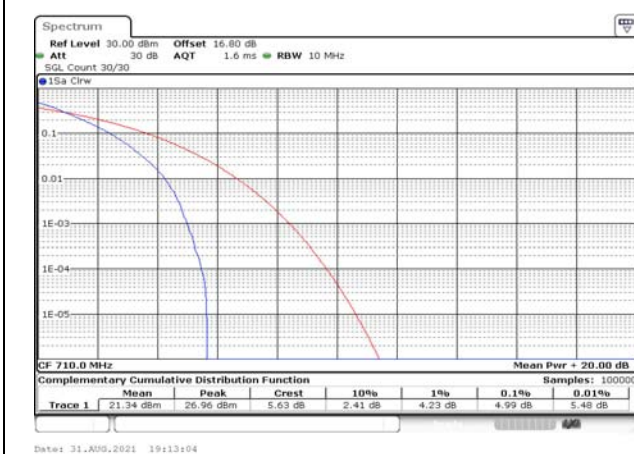


Fig.11

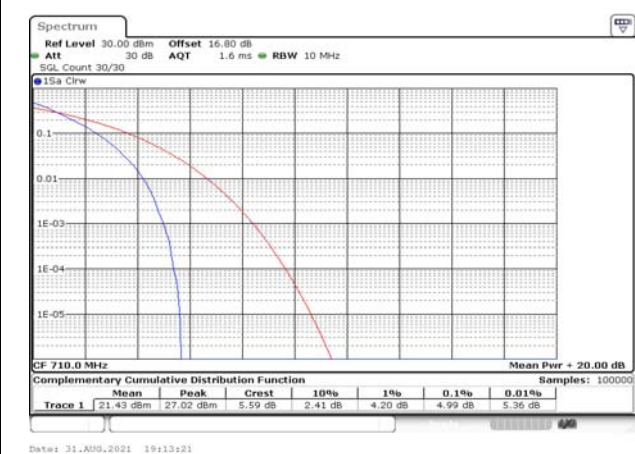


Fig.12



Fig.13

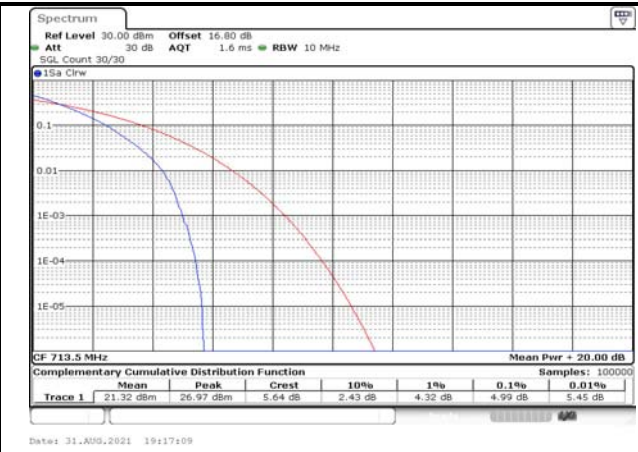


Fig.14

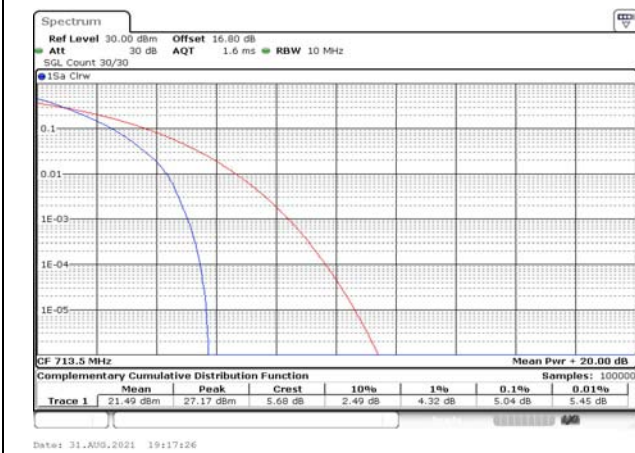


Fig.15

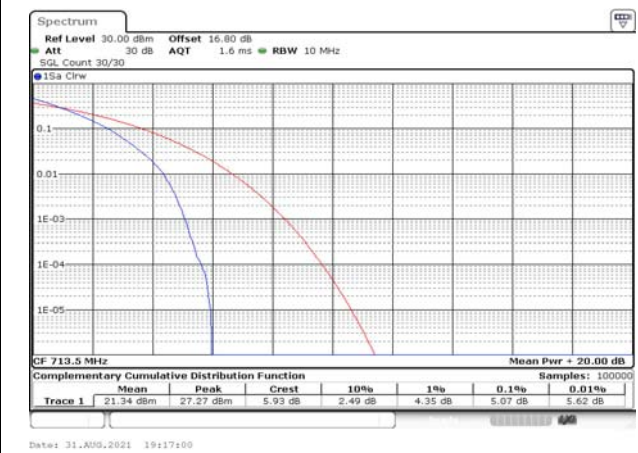


Fig.16

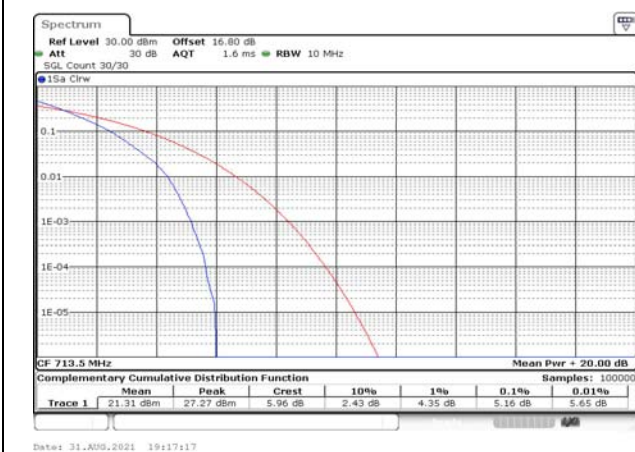


Fig.17

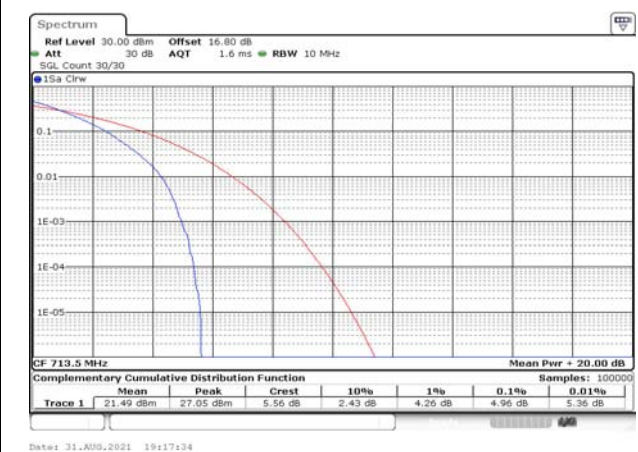


Fig.18

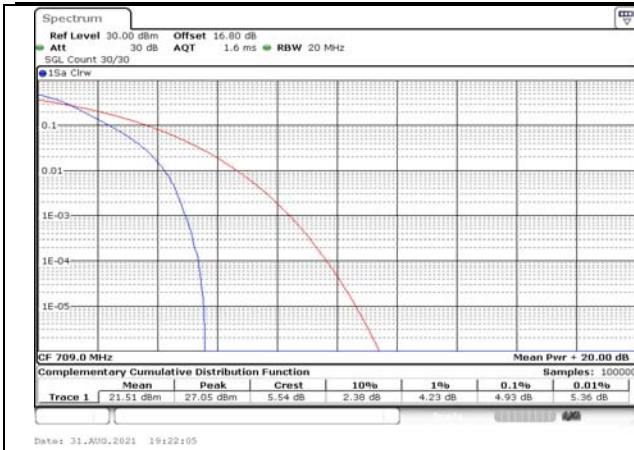


Fig.19

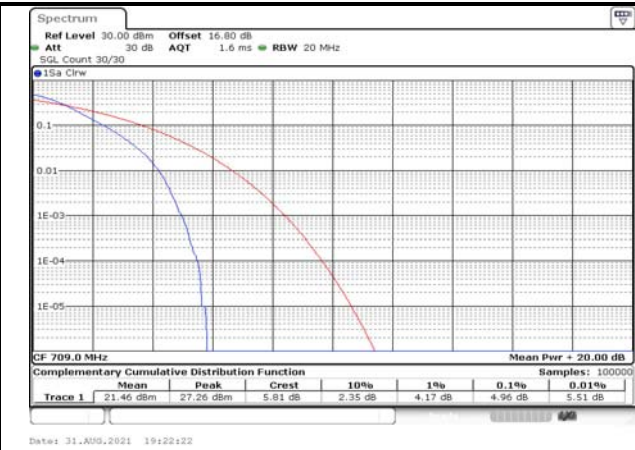


Fig.20

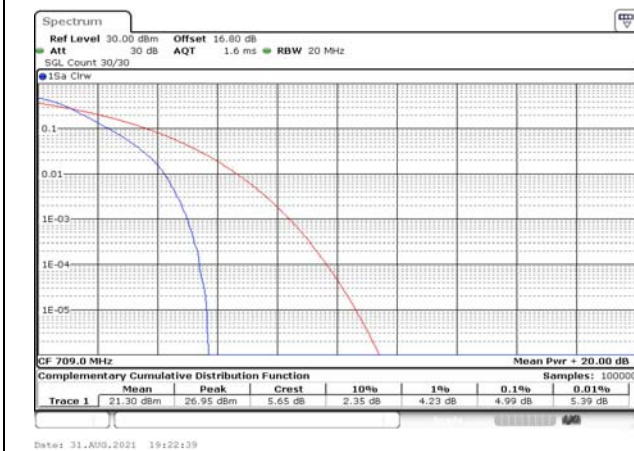


Fig.21

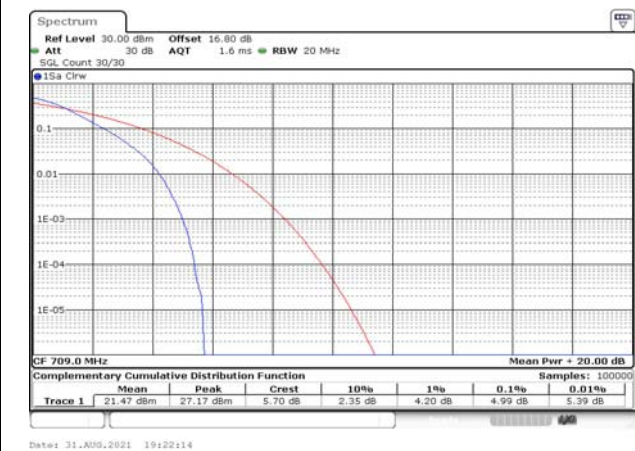


Fig.22

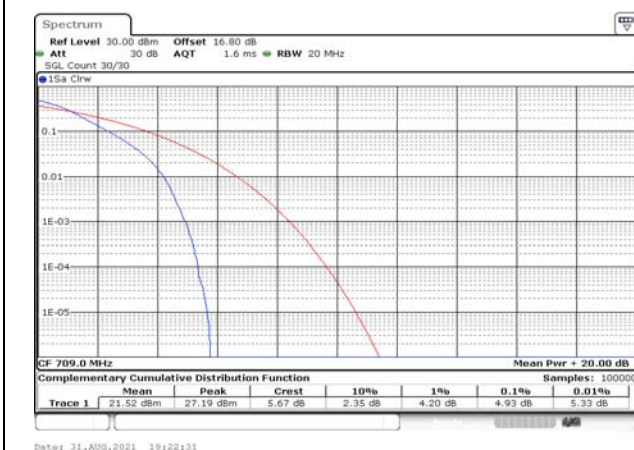


Fig.23

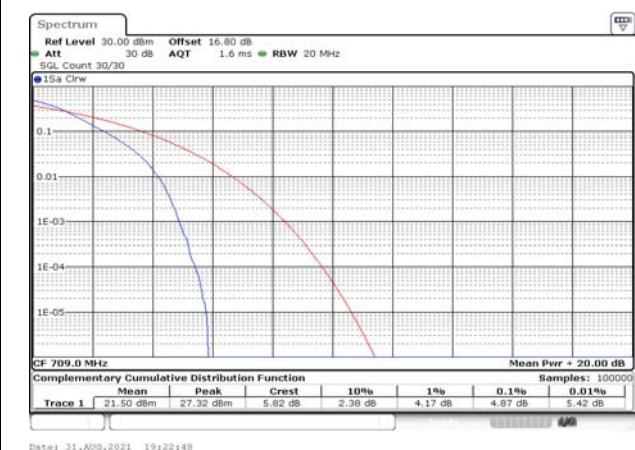


Fig.24



Fig.25

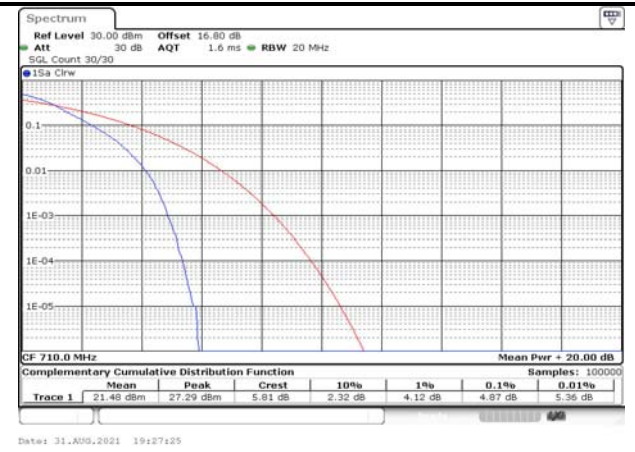


Fig.26

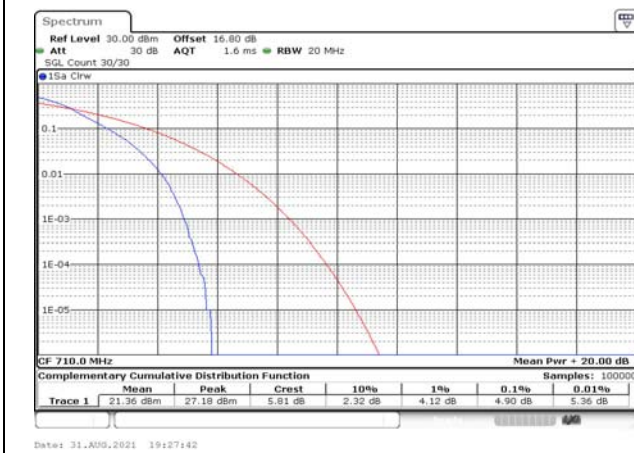


Fig.27

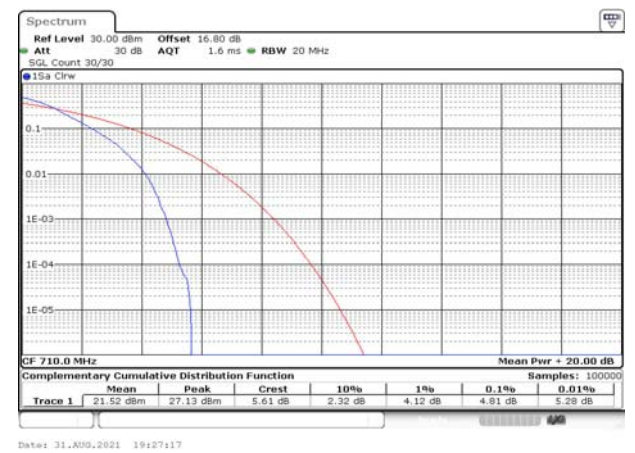


Fig.28

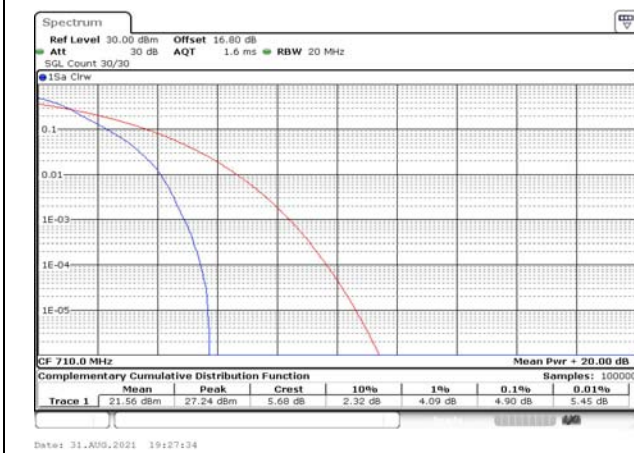


Fig.29

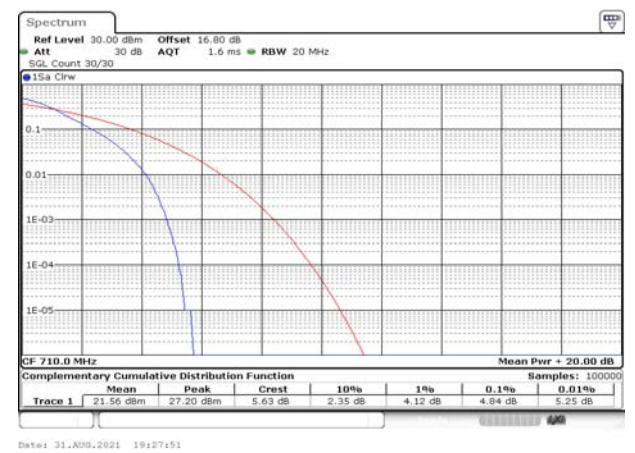


Fig.30



Fig.31

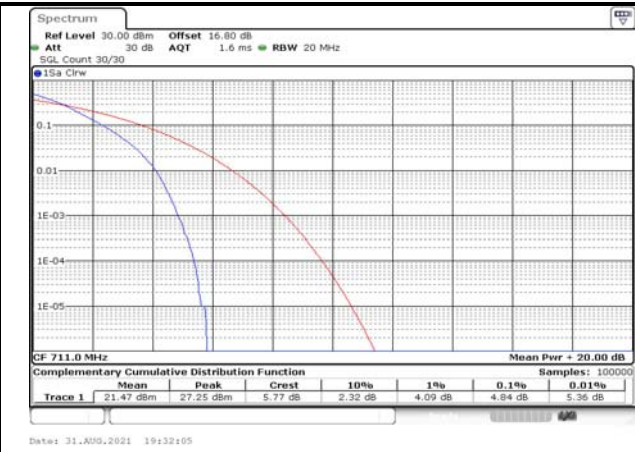


Fig.32

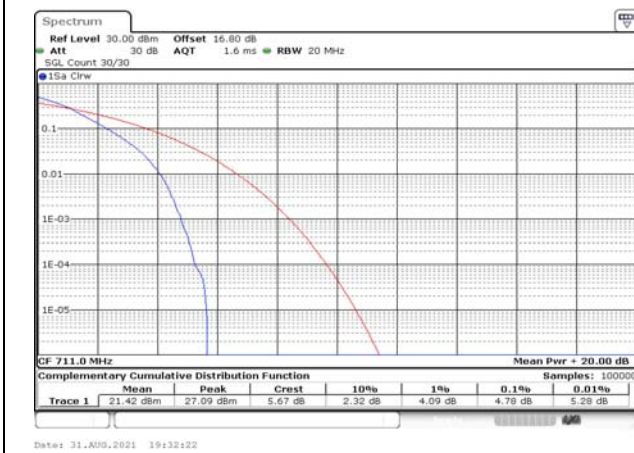


Fig.33

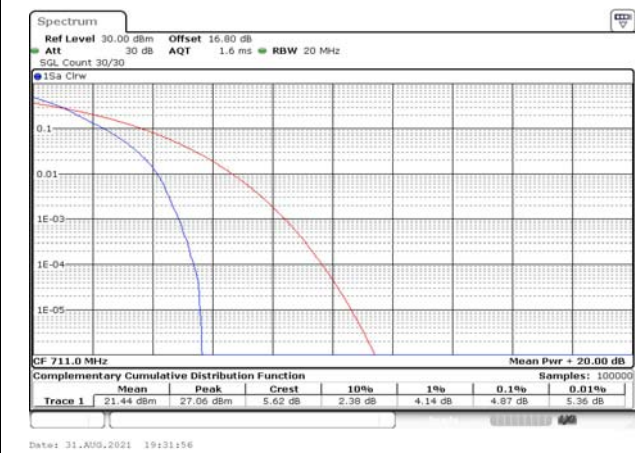


Fig.34

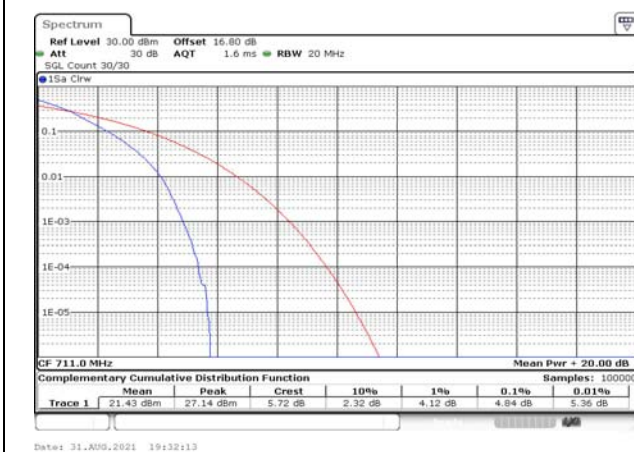


Fig.35

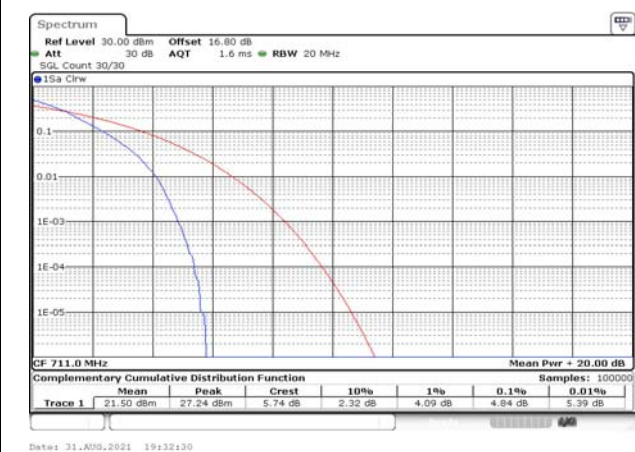


Fig.36

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

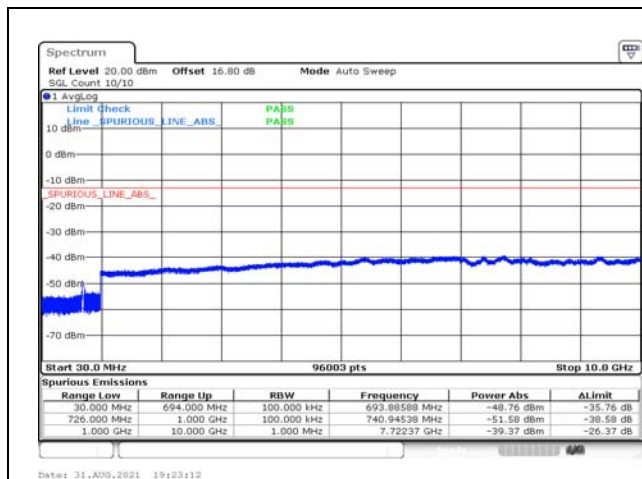


Fig.1

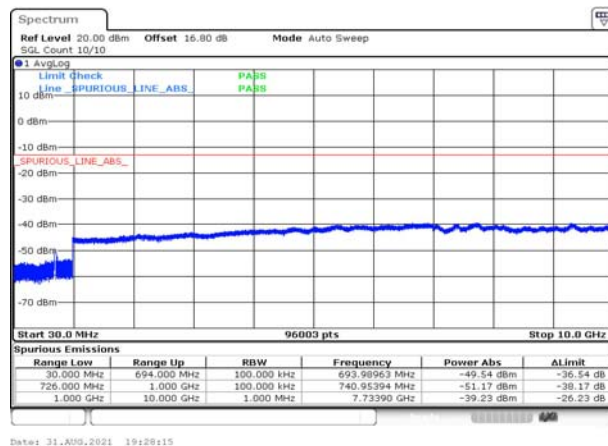


Fig.2

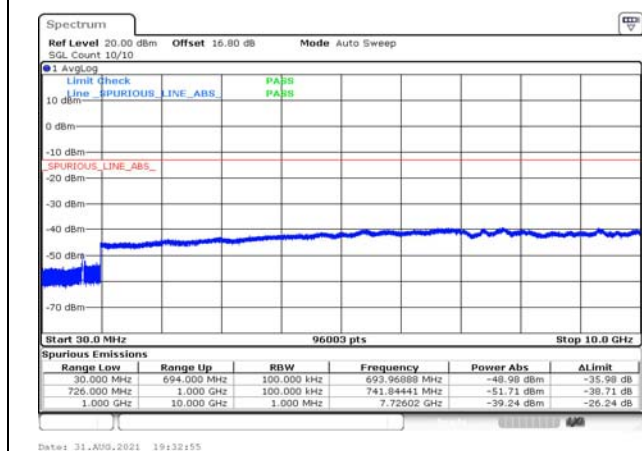


Fig.3

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

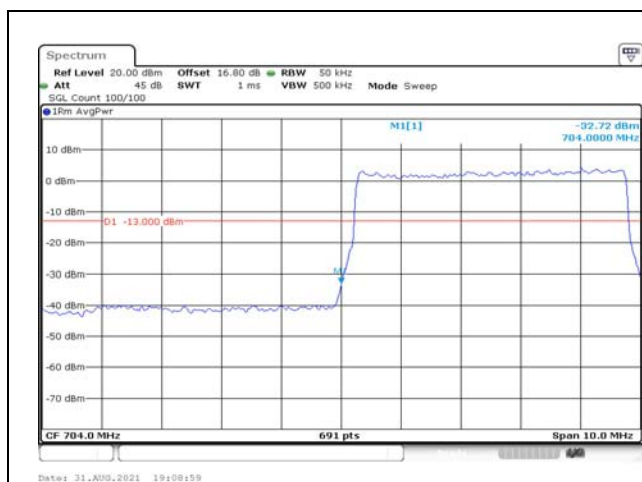


Fig.1

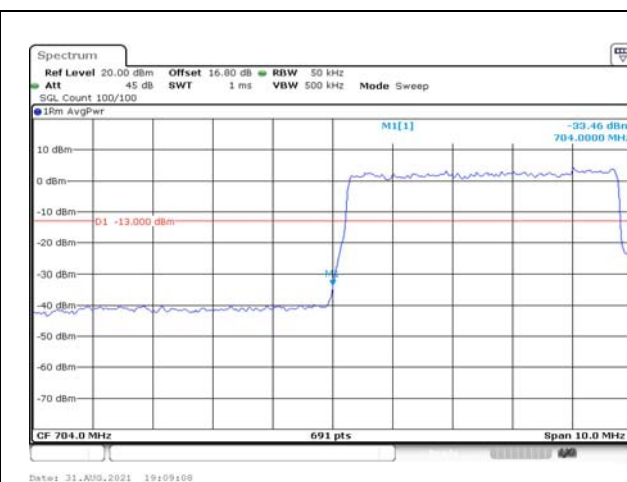


Fig.2

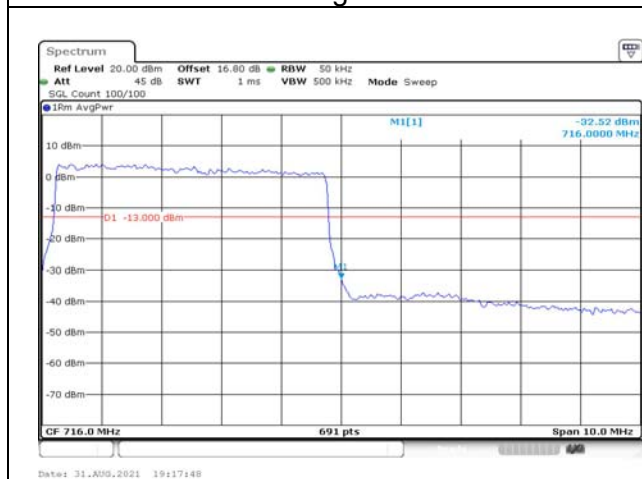


Fig.3

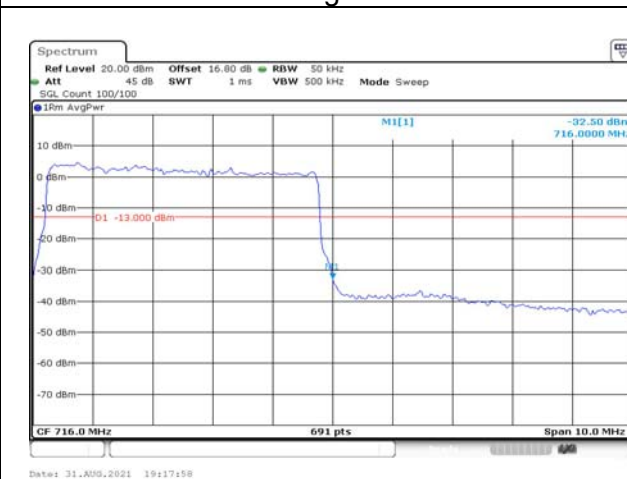


Fig.4

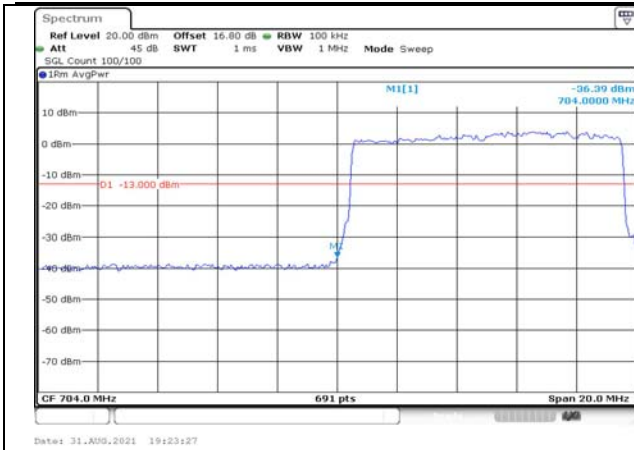


Fig.5

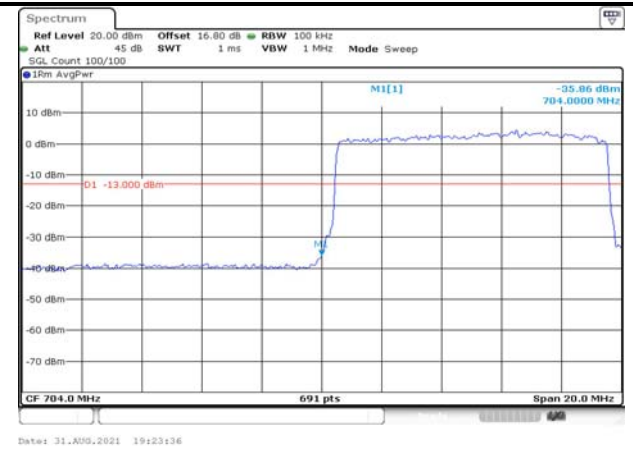


Fig.6

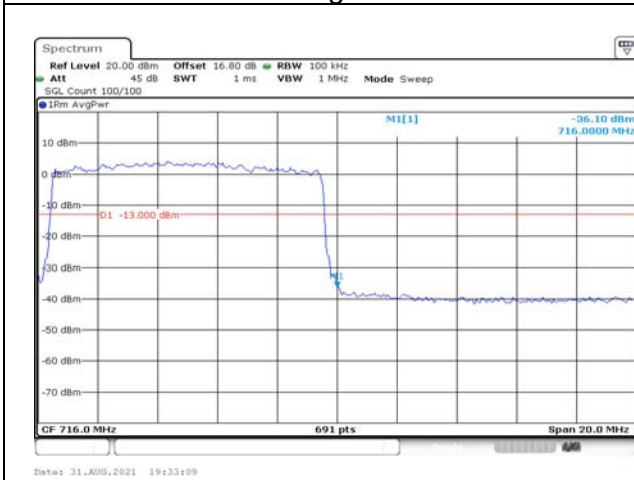


Fig.7

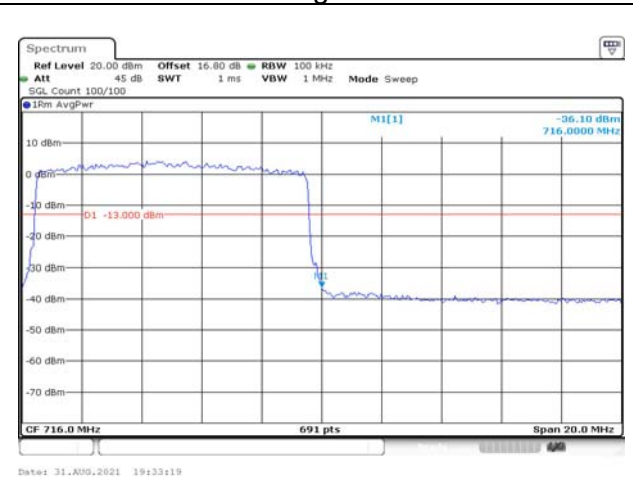


Fig.8

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	13.76	0.024	
				1	12	23.12	13.57	0.023	
				1	24	23.18	13.63	0.023	
				12	0	22.32	12.77	0.019	
				12	7	22.35	12.80	0.019	
				12	13	22.28	12.73	0.019	
	25	0		22.46	12.91	0.020			
	710	23790		1	0	23.26	13.71	0.023	
				1	12	23.24	13.69	0.023	
				1	24	23.16	13.61	0.023	
				12	0	22.41	12.86	0.019	
				12	7	22.34	12.79	0.019	
				12	13	22.33	12.78	0.019	
	25	0		22.34	12.79	0.019			
	713.5	23825		1	0	23.28	13.73	0.024	
				1	12	23.17	13.62	0.023	
				1	24	23.24	13.69	0.023	
				12	0	22.35	12.80	0.019	
				12	7	22.36	12.81	0.019	
				12	13	22.26	12.71	0.019	
	25	0		22.37	12.82	0.019			
	16QAM	706.5		23755	1	0	22.57	13.02	0.020
					1	12	22.42	12.87	0.019
					1	24	22.39	12.84	0.019
12					0	21.34	11.79	0.015	
12					7	21.30	11.75	0.015	
12					13	21.21	11.66	0.015	
25		0		21.40	11.85	0.015			
710		23790		1	0	22.55	13.00	0.020	
				1	12	22.30	12.75	0.019	
				1	24	22.46	12.91	0.020	
				12	0	21.35	11.80	0.015	
				12	7	21.30	11.75	0.015	
				12	13	21.30	11.75	0.015	
25		0		21.32	11.77	0.015			
713.5		23825		1	0	22.78	13.23	0.021	
				1	12	22.66	13.11	0.020	
				1	24	22.61	13.06	0.020	
				12	0	21.44	11.89	0.015	
				12	7	21.27	11.72	0.015	
				12	13	21.26	11.71	0.015	
25		0		21.23	11.68	0.015			

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	11.76	0.015
				1	12	21.20	11.65	0.015
				1	24	21.17	11.62	0.015
				12	0	20.40	10.85	0.012
				12	7	20.36	10.81	0.012
				12	13	20.19	10.64	0.012
				25	0	20.37	10.82	0.012
	710	23790		1	0	21.21	11.66	0.015
				1	12	21.30	11.75	0.015
				1	24	21.13	11.58	0.014
				12	0	20.38	10.83	0.012
				12	7	20.31	10.76	0.012
				12	13	20.27	10.72	0.012
				25	0	20.31	10.76	0.012
	713.5	23825		1	0	21.64	12.09	0.016
				1	12	21.45	11.90	0.015
				1	24	21.46	11.91	0.016
				12	0	20.43	10.88	0.012
				12	7	20.49	10.94	0.012
				12	13	20.37	10.82	0.012
				25	0	20.47	10.92	0.012

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	13.76	0.024	
				1	25	23.20	13.65	0.023	
				1	49	22.97	13.42	0.022	
				25	0	22.38	12.83	0.019	
				25	12	22.39	12.84	0.019	
				25	25	22.26	12.71	0.019	
	50	0		22.43	12.88	0.019			
	710	23790		1	0	23.25	13.70	0.023	
				1	25	23.07	13.52	0.022	
				1	49	23.12	13.57	0.023	
				25	0	22.31	12.76	0.019	
				25	12	22.34	12.79	0.019	
				25	25	22.32	12.77	0.019	
	50	0		22.41	12.86	0.019			
	711	23800		1	0	23.39	13.84	0.024	
				1	25	23.28	13.73	0.024	
				1	49	23.16	13.61	0.023	
				25	0	22.33	12.78	0.019	
				25	12	22.23	12.68	0.019	
				25	25	22.28	12.73	0.019	
	50	0		22.40	12.85	0.019			
	16QAM	709		23780	1	0	23.30	13.75	0.024
					1	25	22.85	13.30	0.021
					1	49	22.66	13.11	0.020
25					0	21.40	11.85	0.015	
25					12	21.47	11.92	0.016	
25					25	21.28	11.73	0.015	
50		0		21.39	11.84	0.015			
710		23790		1	0	23.06	13.51	0.022	
				1	25	23.05	13.50	0.022	
				1	49	23.02	13.47	0.022	
				25	0	21.40	11.85	0.015	
				25	12	21.41	11.86	0.015	
				25	25	21.27	11.72	0.015	
50		0		21.38	11.83	0.015			
711		23800		1	0	22.74	13.19	0.021	
				1	25	22.35	12.80	0.019	
				1	49	22.45	12.90	0.019	
				25	0	21.44	11.89	0.015	
				25	12	21.34	11.79	0.015	
				25	25	21.34	11.79	0.015	
50		0		21.23	11.68	0.015			

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	12.36	0.017
				1	25	21.74	12.19	0.017
				1	49	21.76	12.21	0.017
				25	0	20.39	10.84	0.012
				25	12	20.36	10.81	0.012
				25	25	20.34	10.79	0.012
				50	0	20.46	10.91	0.012
	710	23790		1	0	21.59	12.04	0.016
				1	25	21.40	11.85	0.015
				1	49	21.39	11.84	0.015
				25	0	20.47	10.92	0.012
				25	12	20.43	10.88	0.012
				25	25	20.39	10.84	0.012
				50	0	20.45	10.90	0.012
	711	23800		1	0	21.13	11.58	0.014
				1	25	21.13	11.58	0.014
				1	49	21.08	11.53	0.014
				25	0	20.53	10.98	0.013
				25	12	20.36	10.81	0.012
				25	25	20.41	10.86	0.012
				50	0	20.37	10.82	0.012