

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	23.42	
				1	12	23.46	
				1	24	23.51	
				12	0	22.40	
				12	7	22.47	
				12	13	22.54	
				25	0	21.54	
	710	23790		1	0	23.41	
				1	12	23.39	
				1	24	23.38	
				12	0	22.46	
				12	7	22.54	
				12	13	22.47	
				25	0	21.48	
	713.5	23825		1	0	23.41	
				1	12	23.38	
				1	24	23.44	
				12	0	22.49	
				12	7	22.47	
				12	13	22.47	
				25	0	21.37	
	16QAM	706.5		23755	1	0	22.57
					1	12	22.61
					1	24	22.44
					12	0	21.54
					12	7	21.42
					12	13	21.53
25			0		20.56		
710		23790	1	0	22.79		
			1	12	22.81		
			1	24	22.77		
			12	0	21.51		
			12	7	21.64		
			12	13	21.54		
			25	0	20.46		
713.5		23825	1	0	22.56		
			1	12	22.58		
			1	24	22.61		
			12	0	21.45		
			12	7	21.46		
			12	13	21.42		
			25	0	20.43		

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	706.5	23755	5	1	0	21.62
				1	12	21.58
				1	24	21.55
				12	0	20.62
				12	7	20.61
				12	13	20.61
				25	0	19.62
	710	23790		1	0	21.47
				1	12	21.47
				1	24	21.42
				12	0	20.47
				12	7	20.44
				12	13	20.51
				25	0	19.47
	713.5	23825		1	0	21.45
				1	12	21.49
				1	24	21.48
				12	0	20.41
				12	7	20.45
				12	13	20.44
				25	0	19.30

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	709	23780	10	1	0	23.58
				1	25	23.48
				1	49	23.33
				25	0	22.49
				25	12	22.54
				25	25	22.54
	710	23790		50	0	21.60
				1	0	23.45
				1	25	23.48
				1	49	23.41
				25	0	22.50
				25	12	22.57
	711	23800		25	25	22.61
				50	0	21.50
				1	0	23.54
				1	25	23.45
				1	49	23.53
				25	0	22.45
16QAM	709	23780	25	12	22.50	
			25	25	22.55	
			50	0	21.49	
			1	0	23.30	
			1	25	23.11	
			1	49	22.97	
	710	23790	25	0	21.54	
			25	12	21.68	
			25	25	21.72	
			50	0	20.54	
			1	0	22.64	
			1	25	22.60	
	711	23800	1	49	22.60	
			25	0	21.52	
			25	12	21.59	
			25	25	21.59	
			50	0	20.46	
			1	0	22.58	
			1	25	22.53	
			1	49	22.57	
			25	0	21.59	
			25	12	21.71	
			25	25	21.67	
			50	0	20.54	

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	709	23780	10	1	0	21.64
				1	25	21.59
				1	49	21.58
				25	0	20.58
				25	12	20.59
				25	25	20.59
				50	0	19.59
	710	23790		1	0	21.50
				1	25	21.49
				1	49	21.56
				25	0	20.49
				25	12	20.56
				25	25	20.49
				50	0	19.48
	711	23800		1	0	21.54
				1	25	21.56
				1	49	21.49
				25	0	20.47
				25	12	20.49
				25	25	20.48
				50	0	19.48

2 Occupied Bandwidth

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
17	706.5	23755	5	25	0	4.472	Fig.1	4.472	Fig.2	4.472	Fig.3
	710	23790		25	0	4.472	Fig.4	4.472	Fig.5	4.472	Fig.6
	713.5	23825		25	0	4.472	Fig.7	4.472	Fig.8	4.493	Fig.9
	709	23780	10	50	0	8.944	Fig.10	8.944	Fig.11	8.944	Fig.12
	710	23790		50	0	8.944	Fig.13	8.944	Fig.14	8.944	Fig.15
	711	23800		50	0	8.944	Fig.16	8.944	Fig.17	8.944	Fig.18

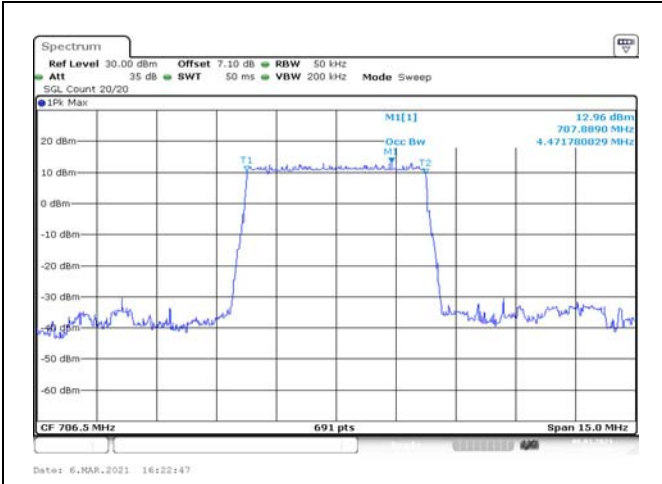


Fig.1

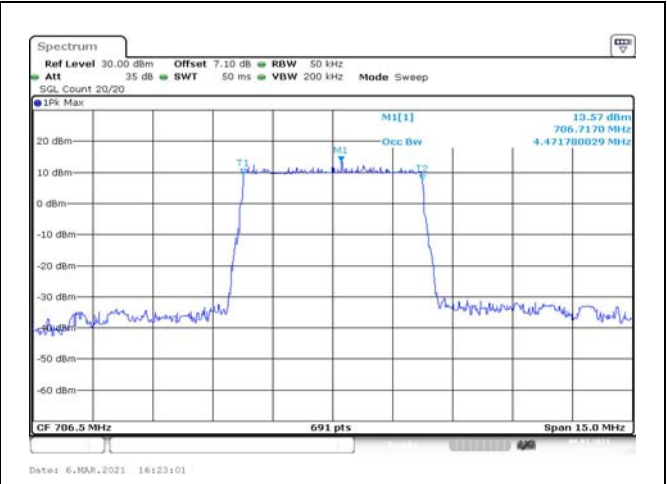


Fig.2

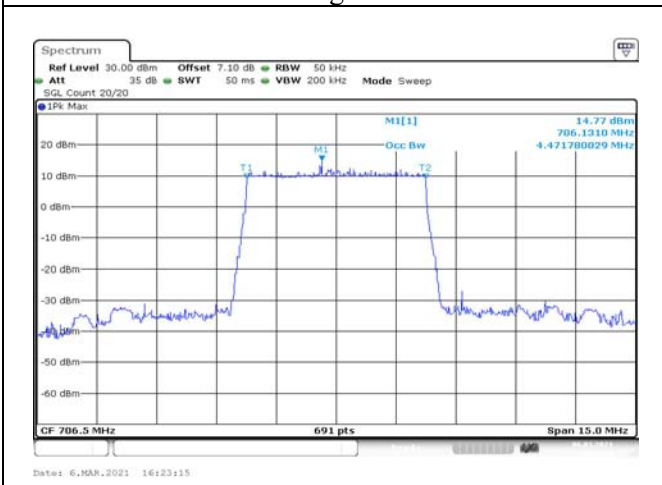


Fig.3

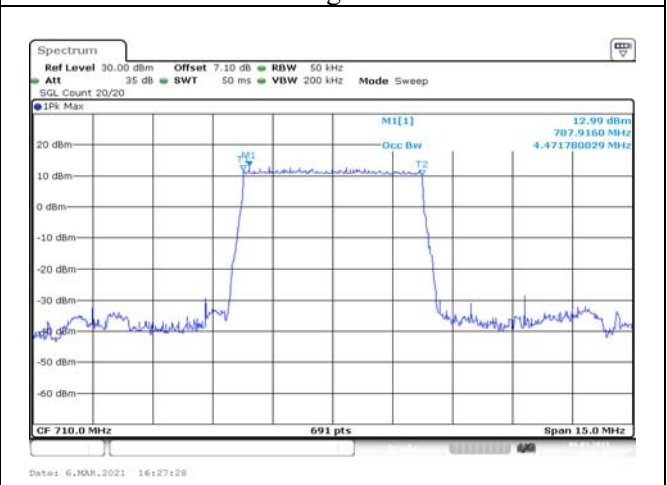


Fig.4

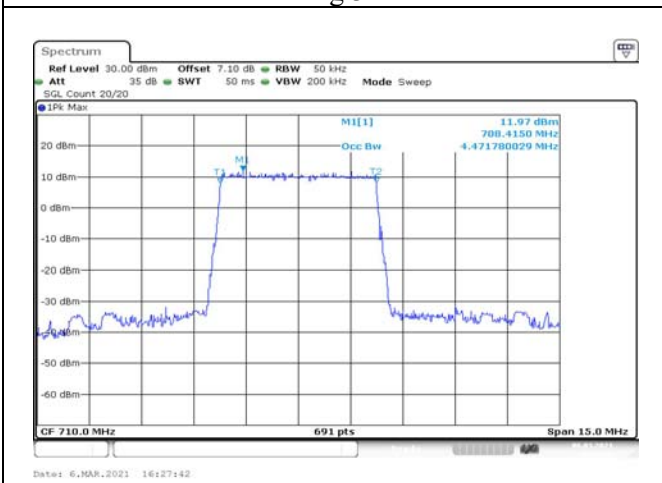


Fig.5

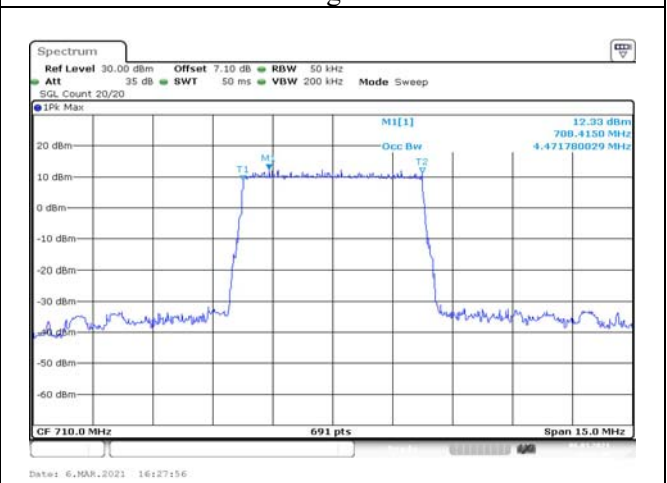


Fig.6

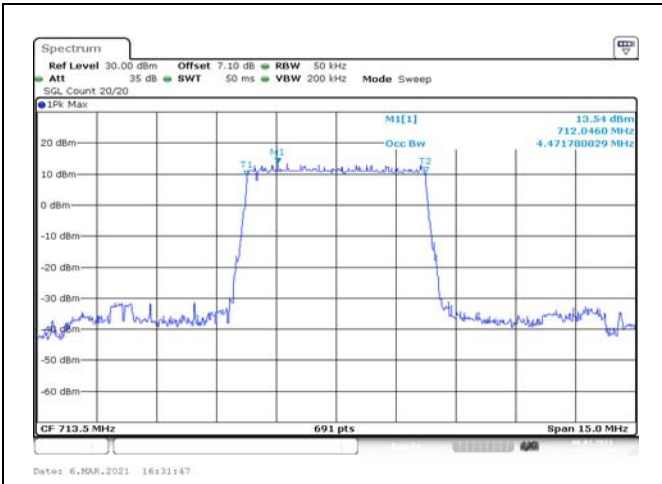


Fig.7

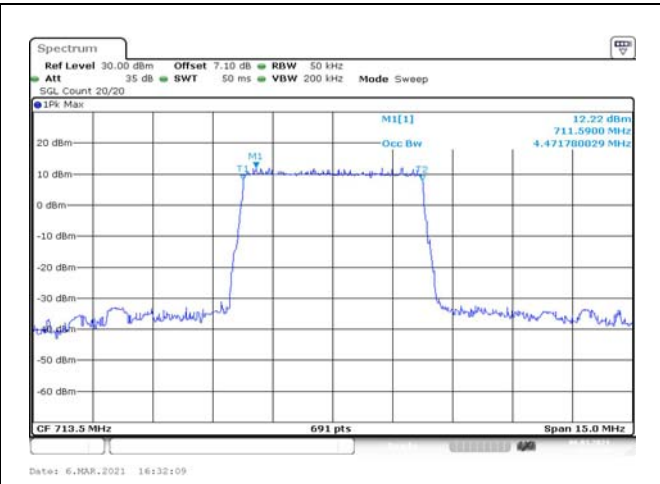


Fig.8

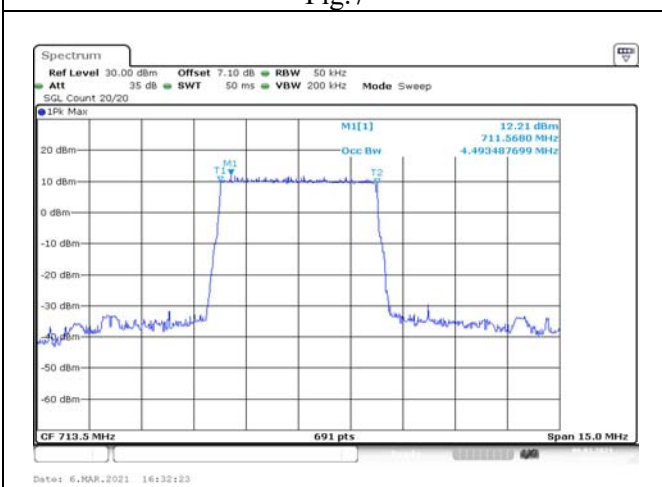


Fig.9

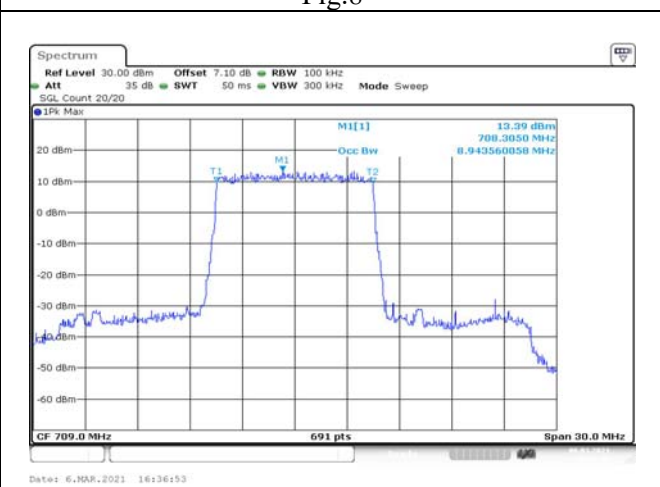


Fig.10

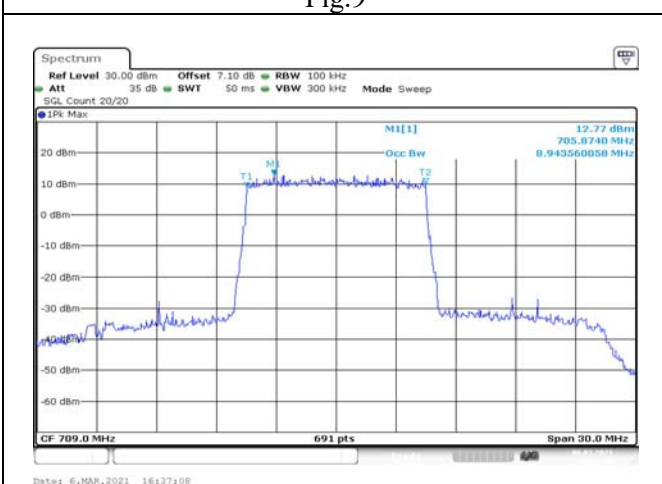


Fig.11

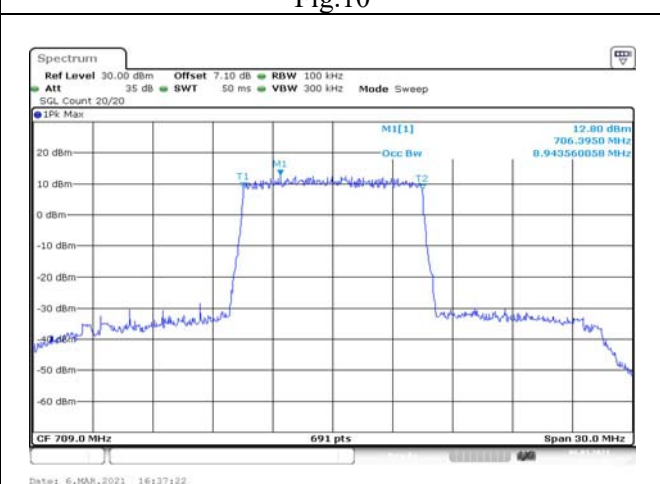


Fig.12

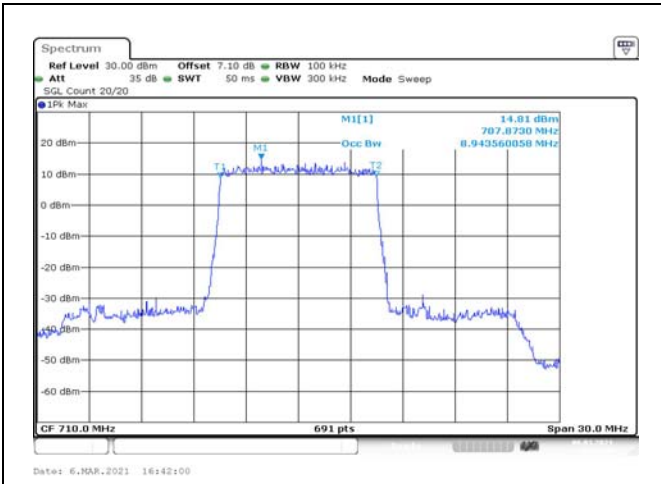


Fig.13

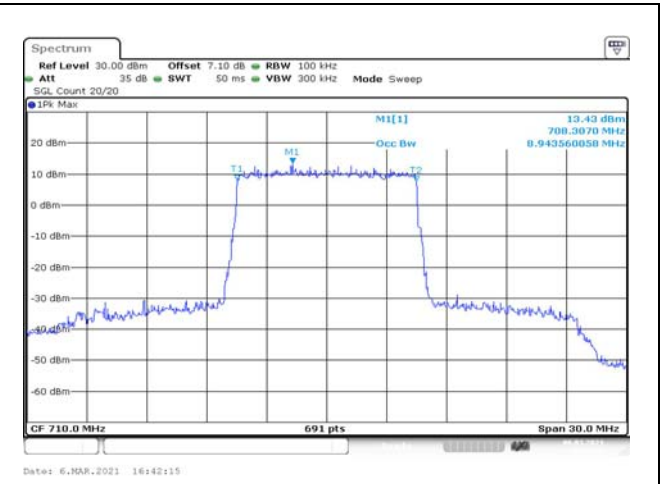


Fig.14

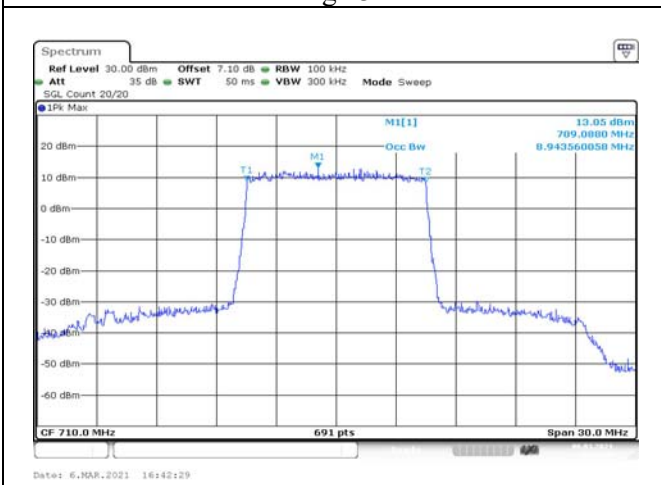


Fig.15

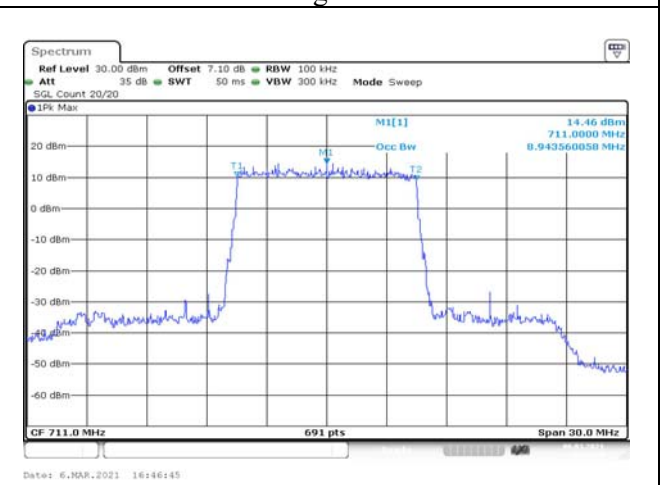


Fig.16

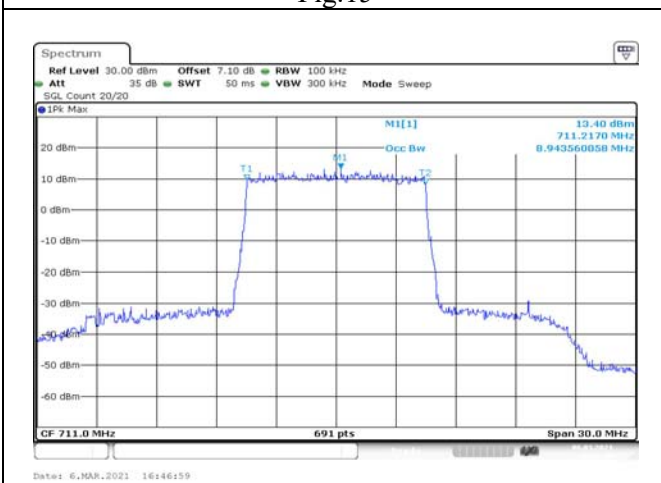


Fig.17

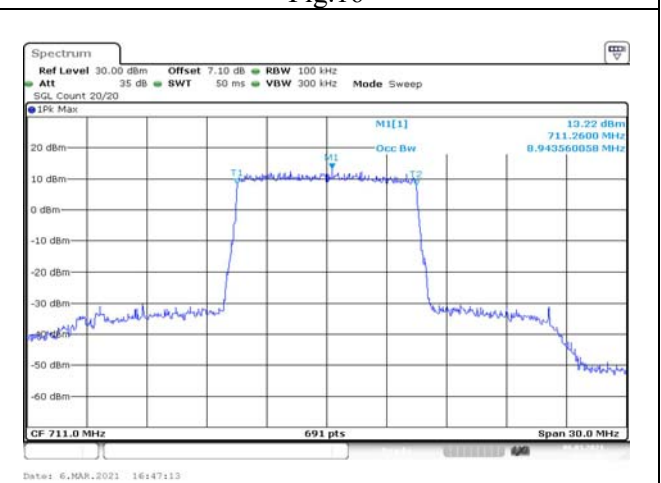


Fig.18

3 Emission Bandwidth

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
17	706.5	23755	5	25	0	4.841	Fig.1	4.884	Fig.2	4.819	Fig.3
	710	23790		25	0	4.841	Fig.4	4.884	Fig.5	4.884	Fig.6
	713.5	23825		25	0	4.884	Fig.7	4.863	Fig.8	4.863	Fig.9
	709	23780	10	50	0	9.595	Fig.10	9.682	Fig.11	9.638	Fig.12
	710	23790		50	0	9.595	Fig.13	9.465	Fig.14	9.551	Fig.15
	711	23800		50	0	9.638	Fig.16	9.595	Fig.17	9.551	Fig.18

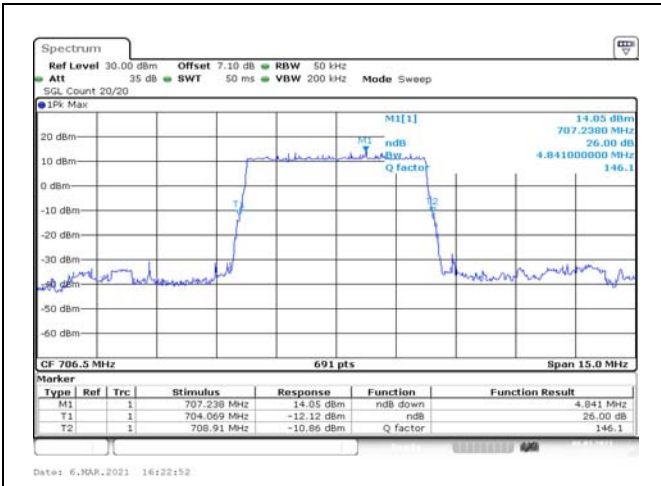


Fig.1

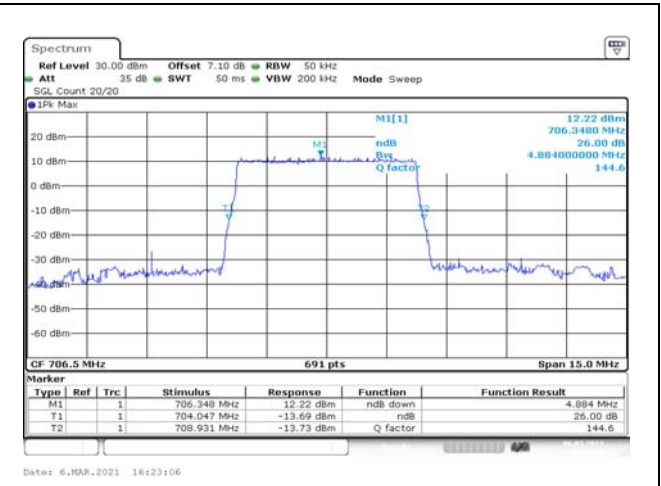


Fig.2

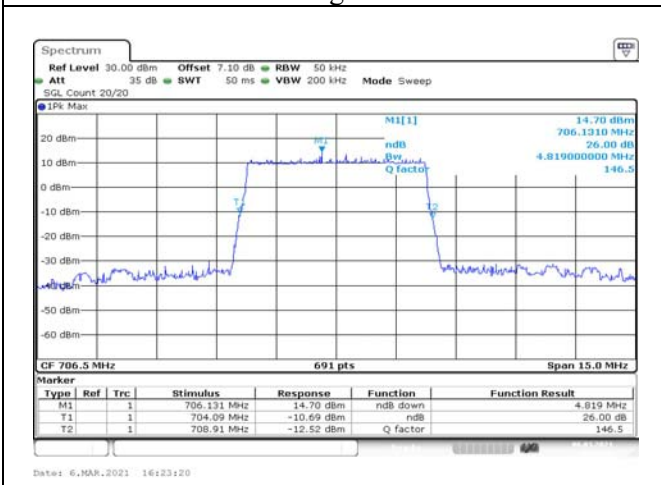


Fig.3

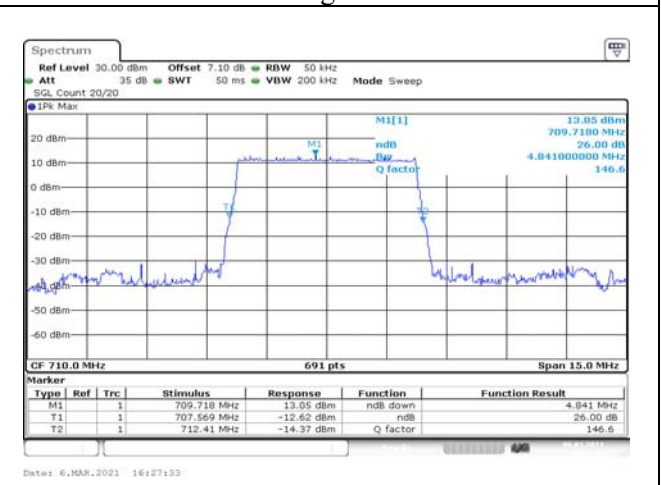


Fig.4

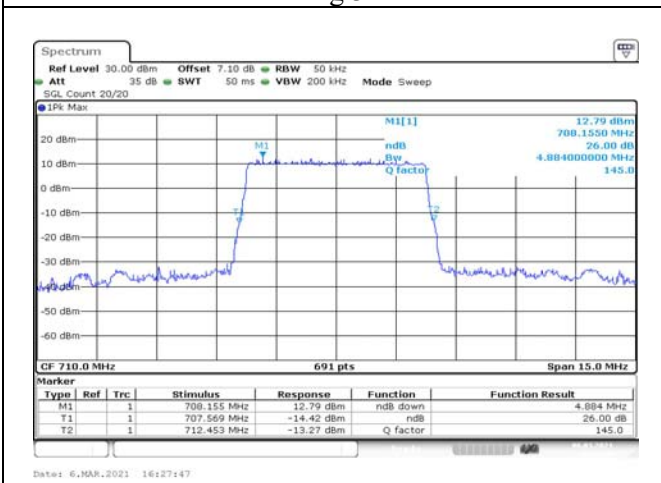


Fig.5

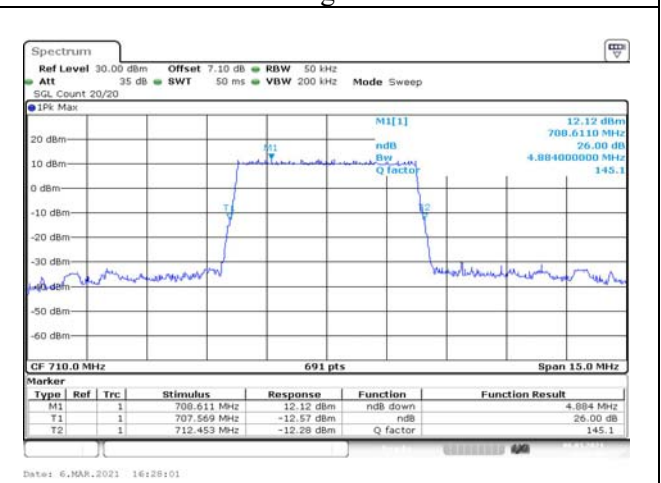


Fig.6

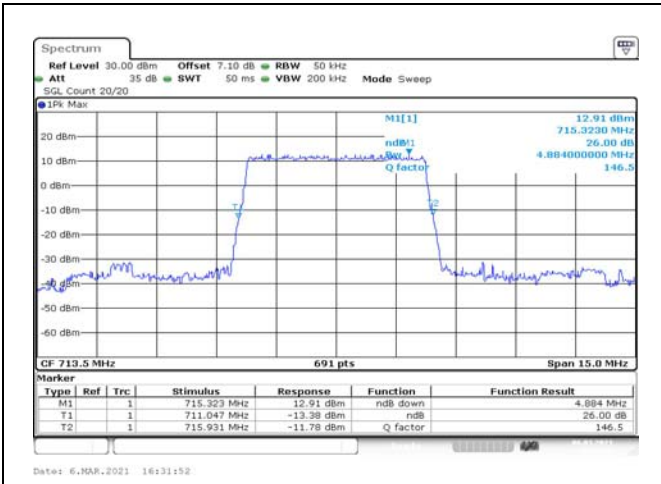


Fig.7

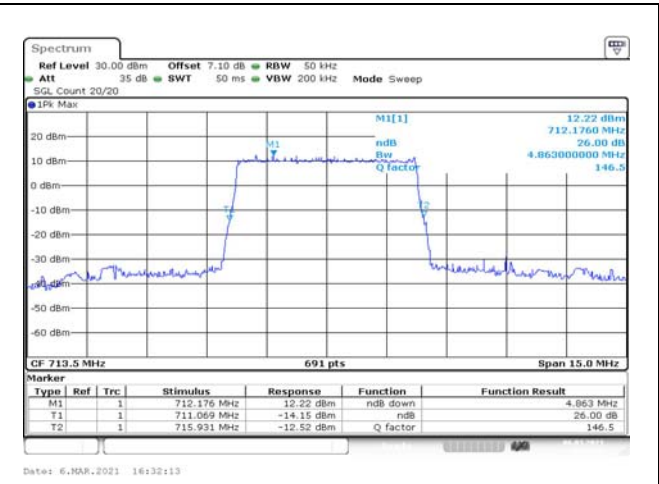


Fig.8

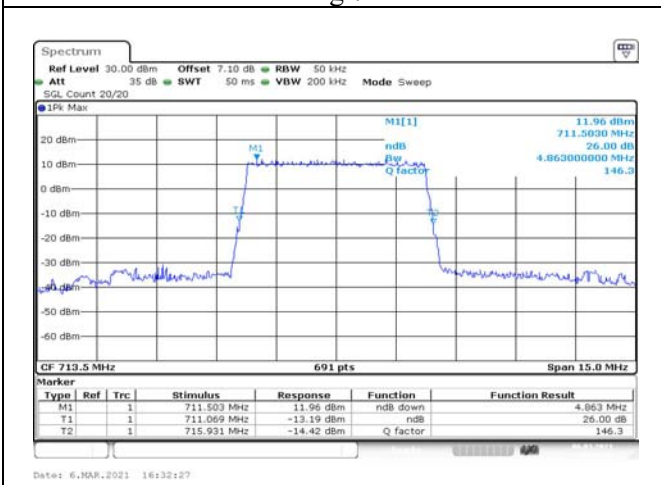


Fig.9

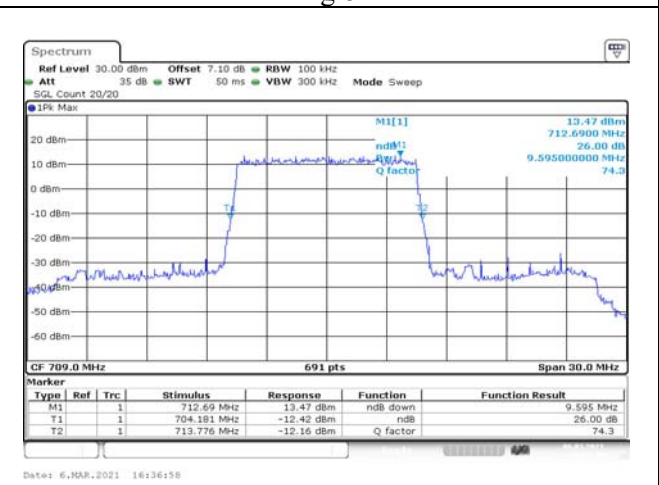


Fig.10



Fig.11

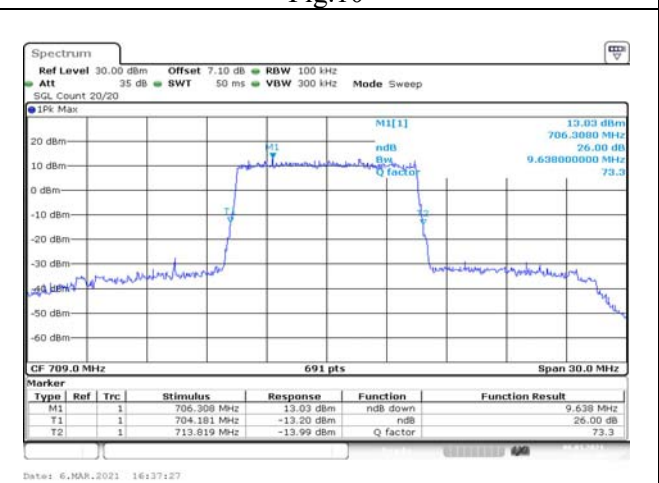


Fig.12

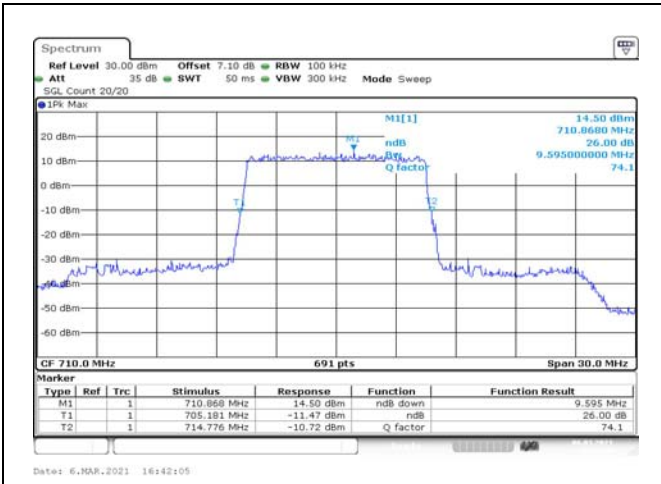


Fig.13

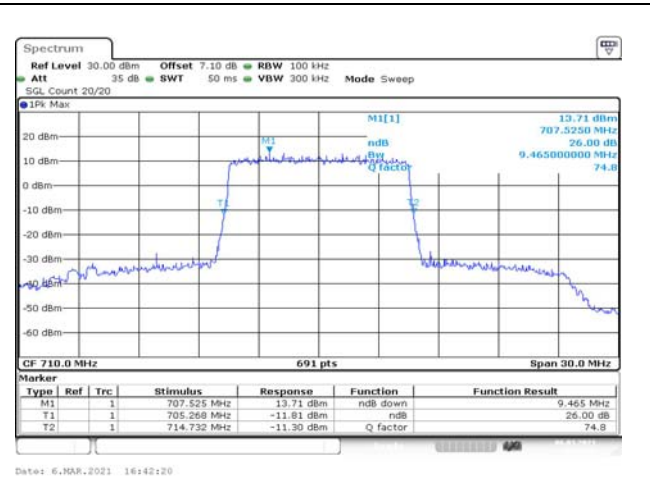


Fig.14

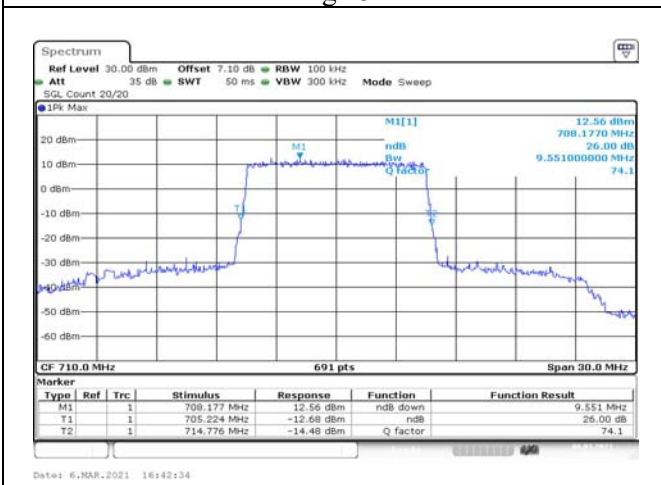


Fig.15

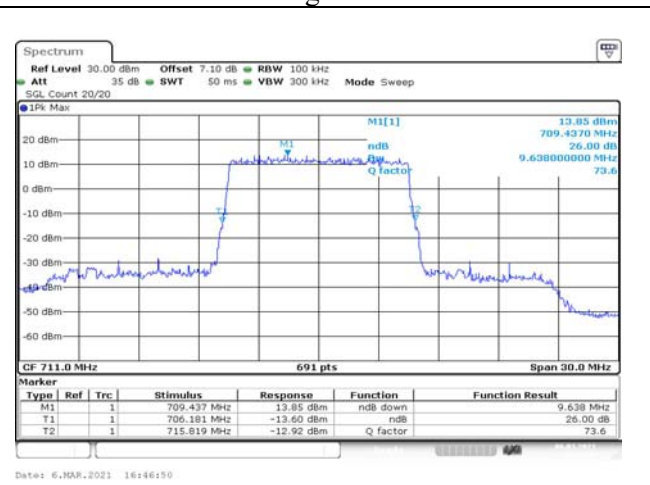


Fig.16



Fig.17

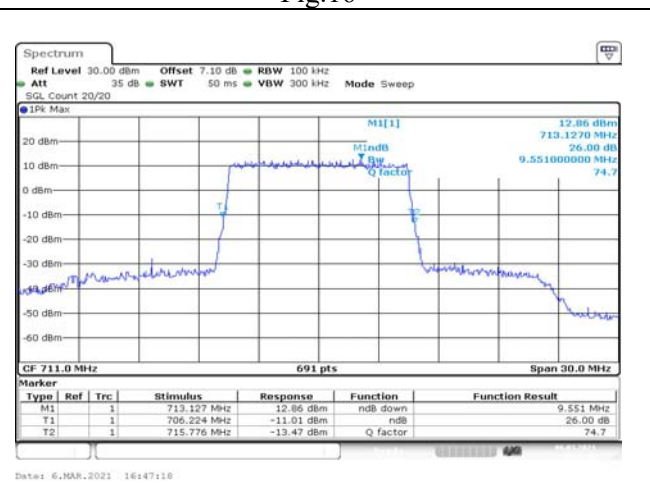


Fig.18

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

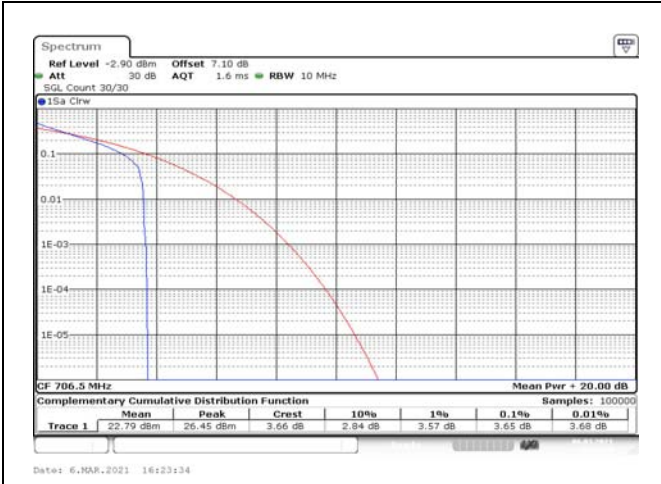


Fig.1

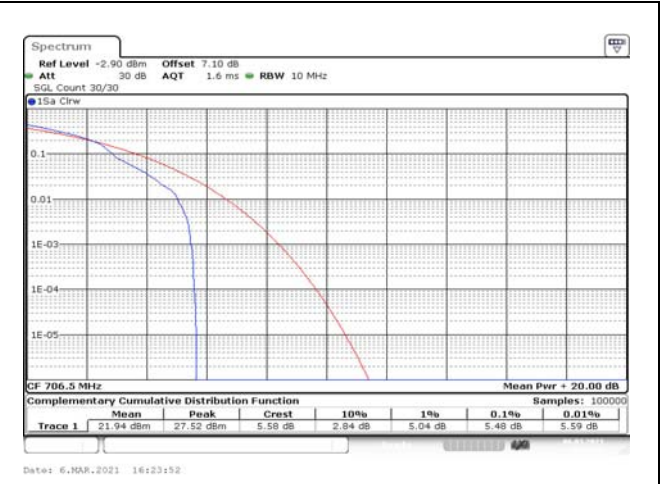


Fig.2

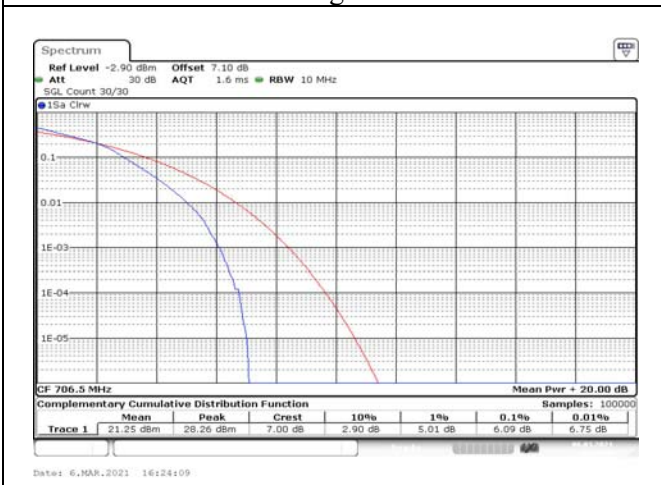


Fig.3

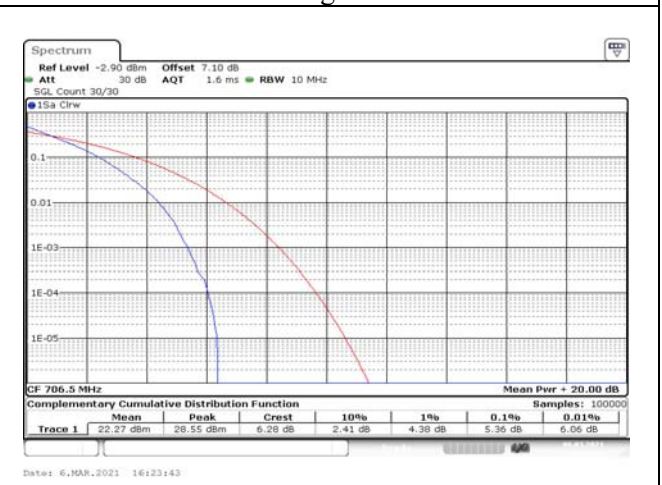


Fig.4

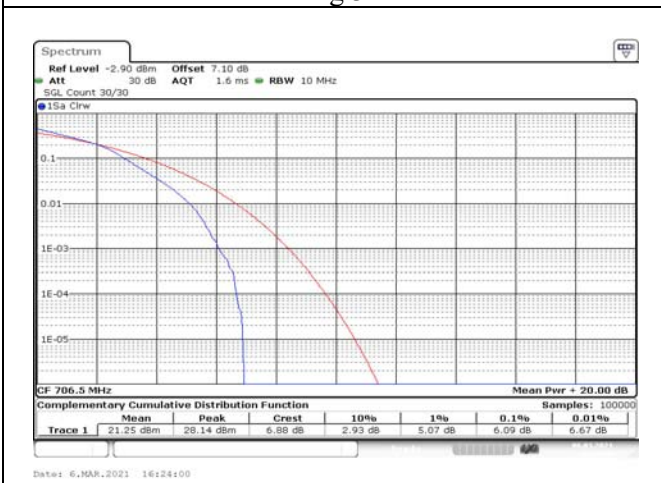


Fig.5

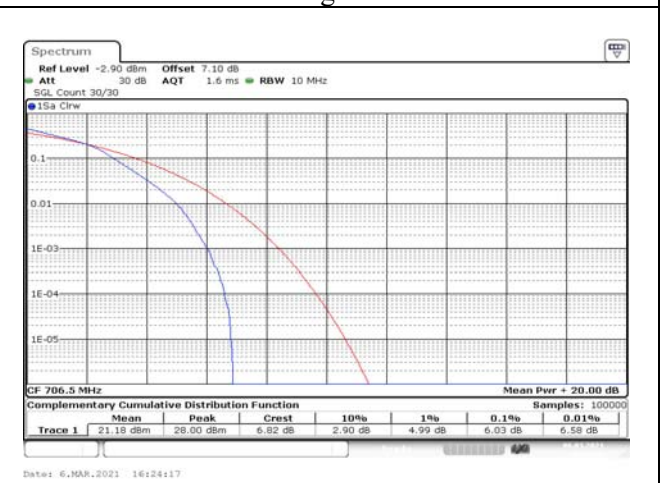


Fig.6

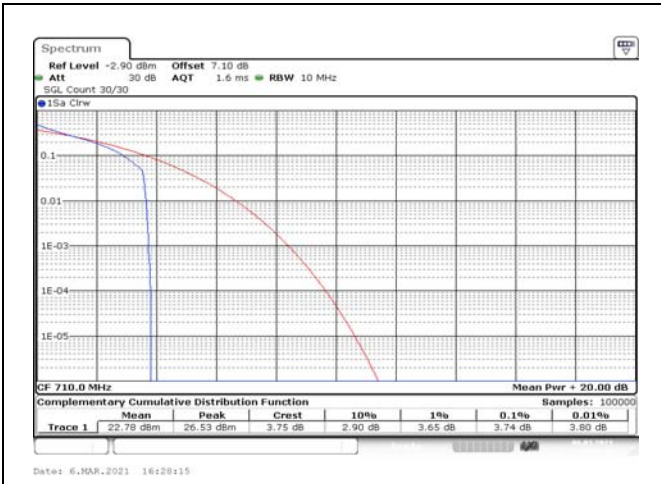


Fig.7

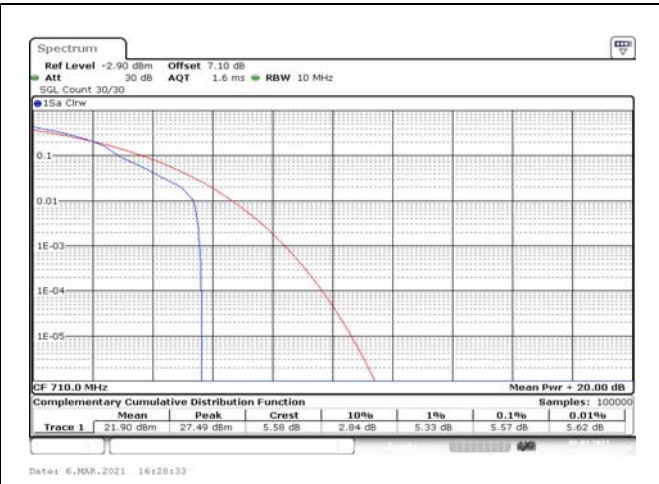


Fig.8

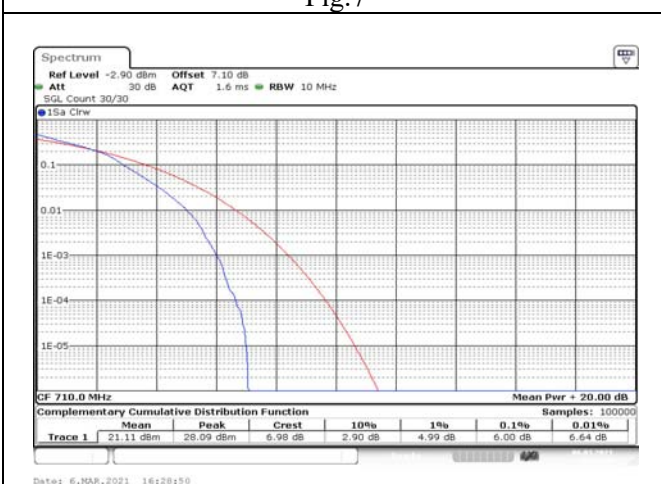


Fig.9

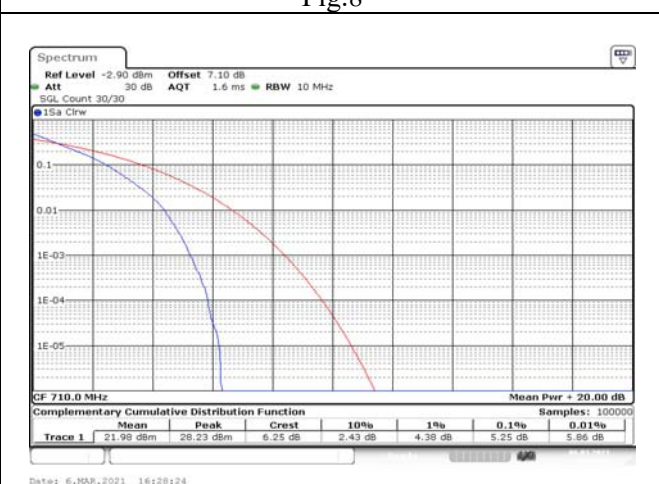


Fig.10

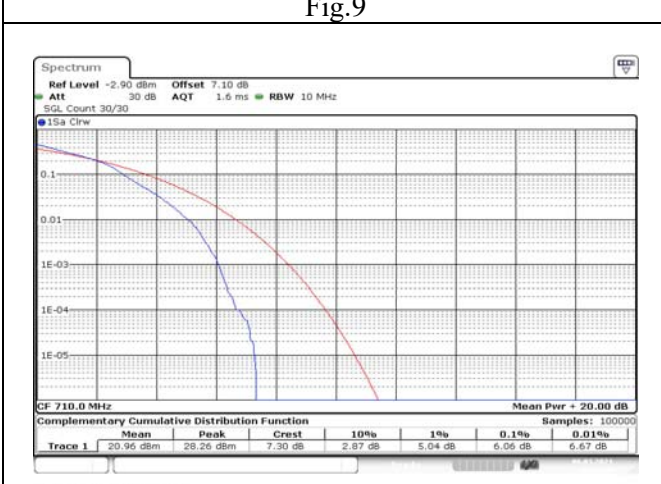


Fig.11

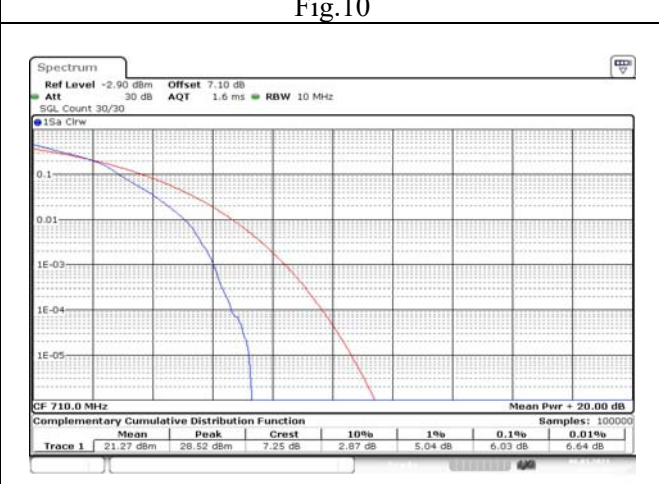


Fig.12

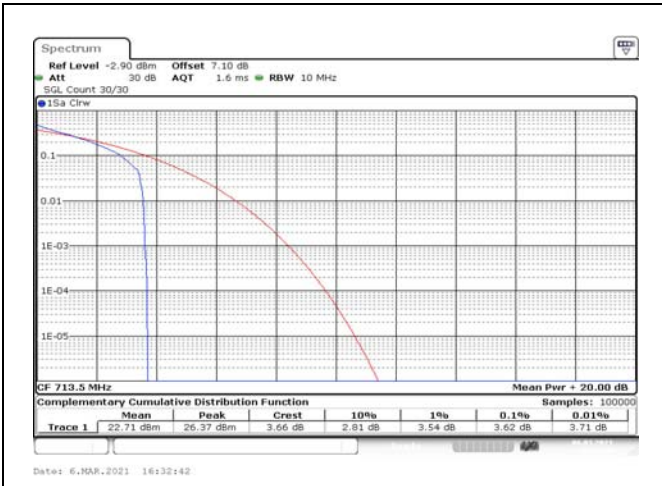


Fig.13

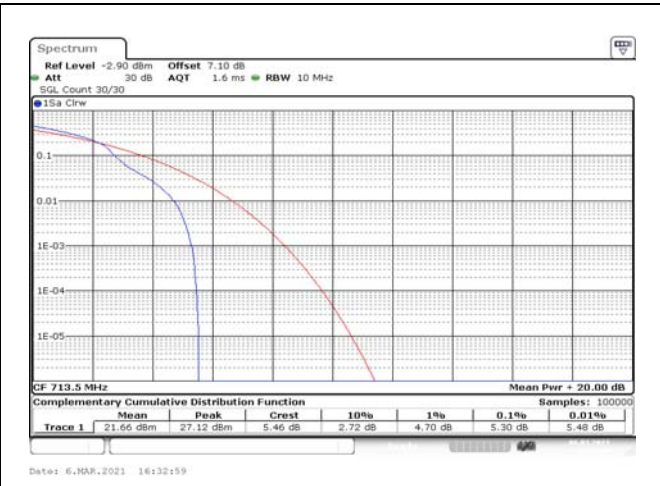


Fig.14

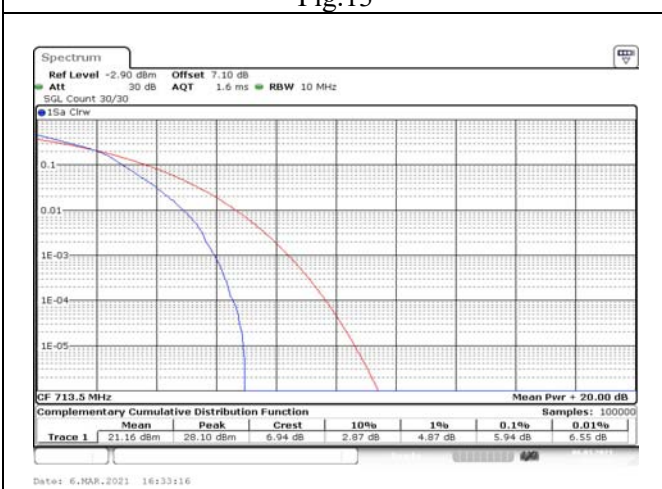


Fig.15

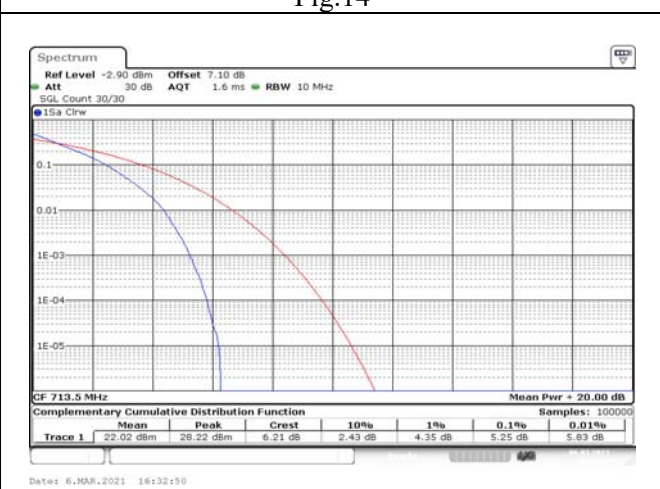


Fig.16

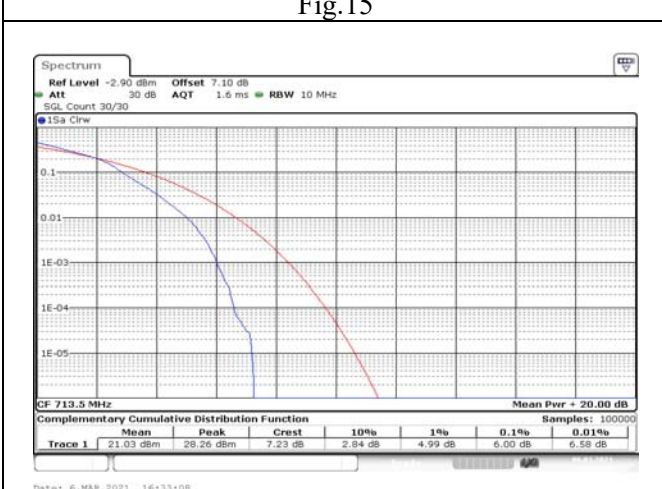


Fig.17

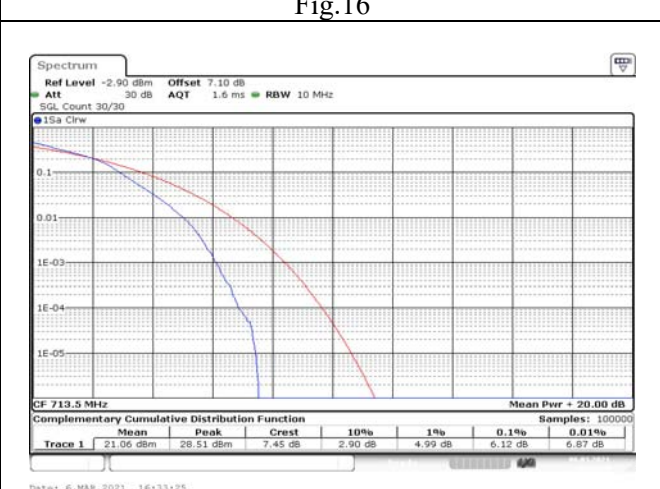


Fig.18

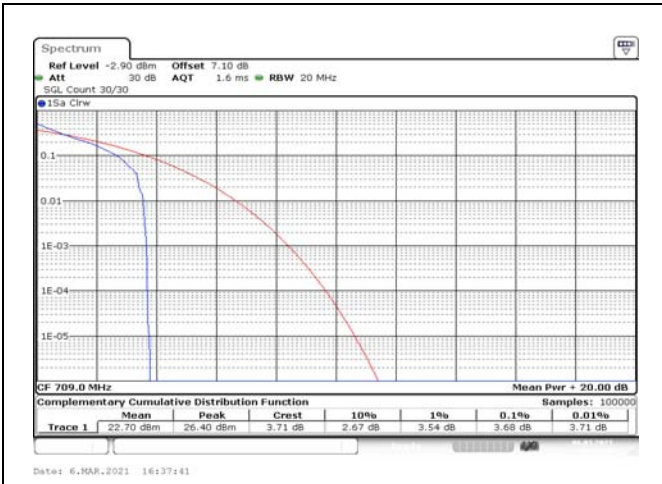


Fig.19

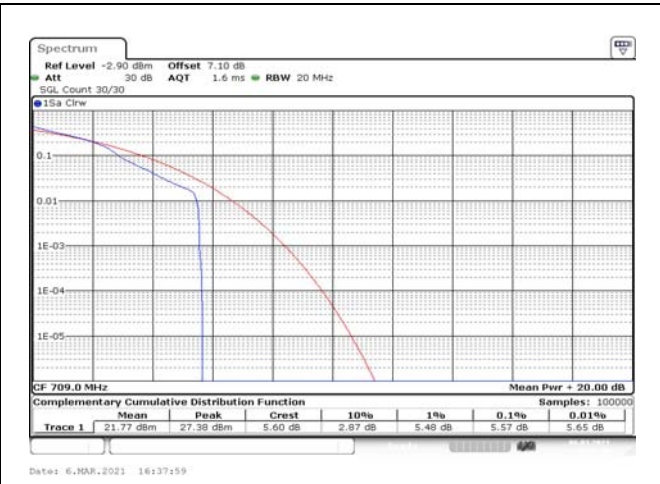


Fig.20

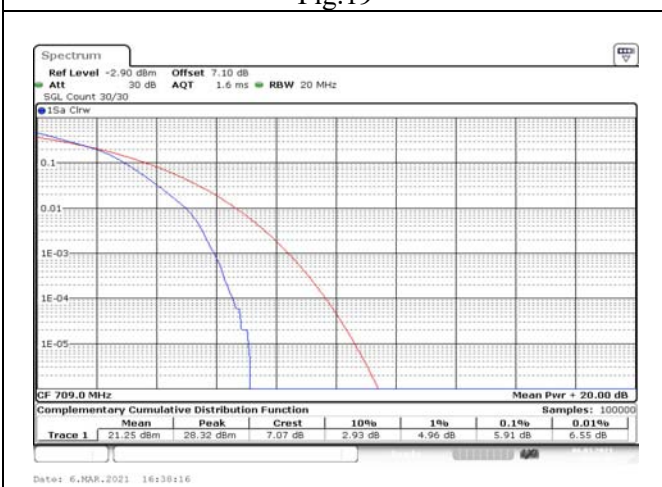


Fig.21

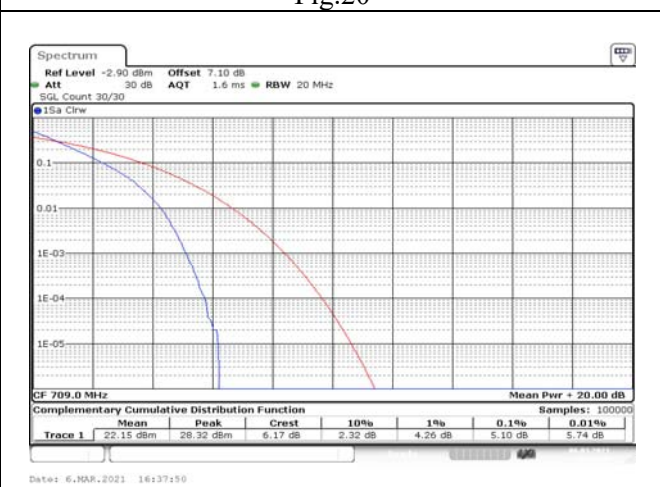


Fig.22

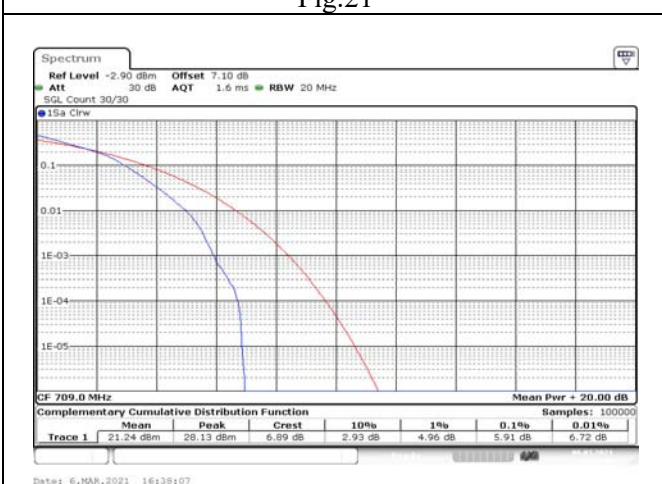


Fig.23

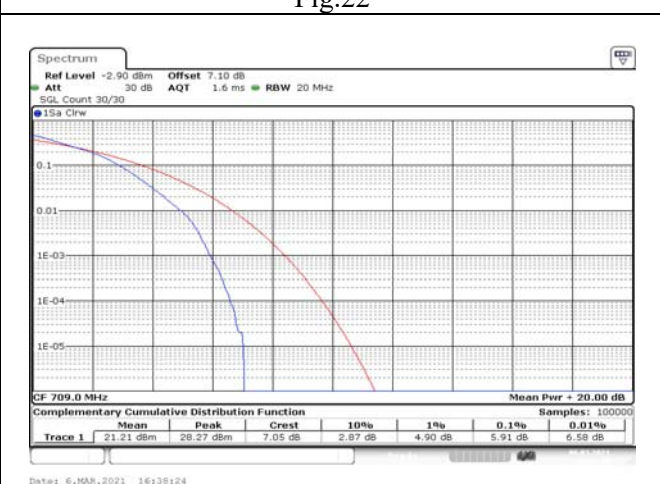


Fig.24

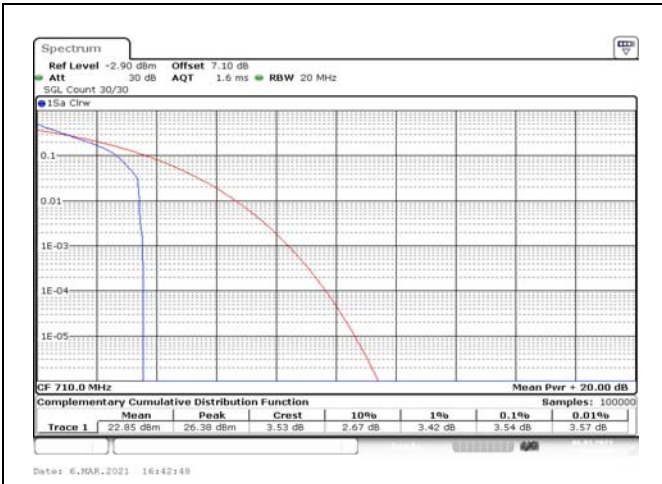


Fig.25

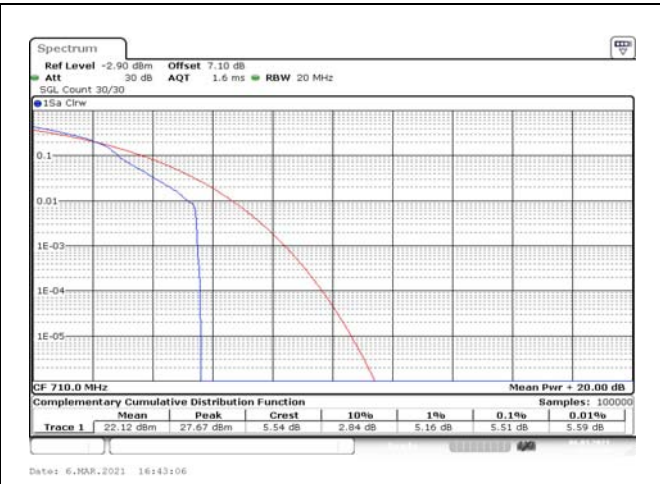


Fig.26

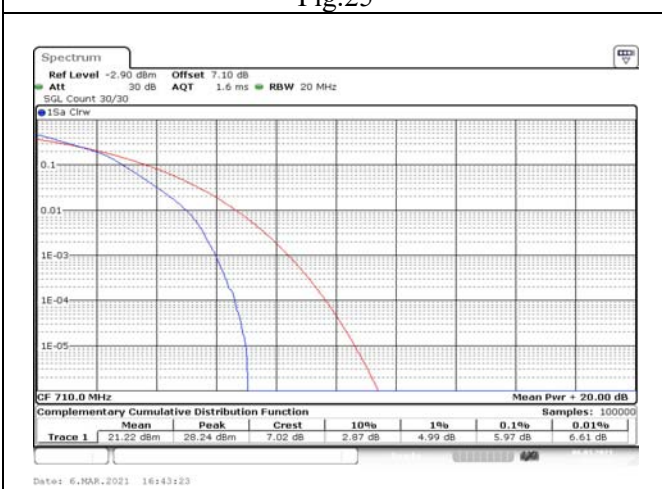


Fig.27

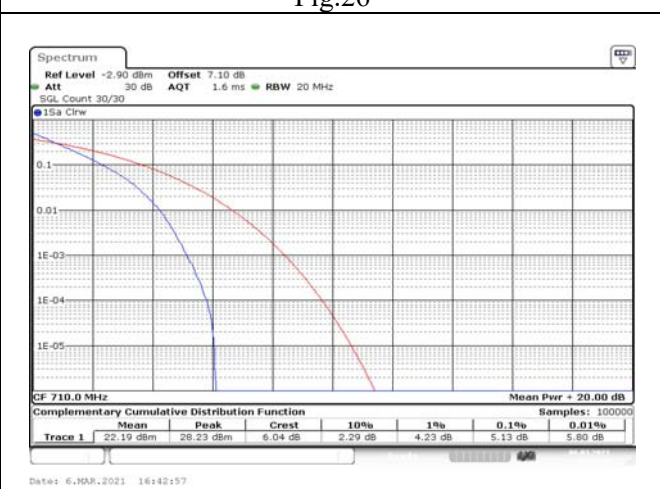


Fig.28

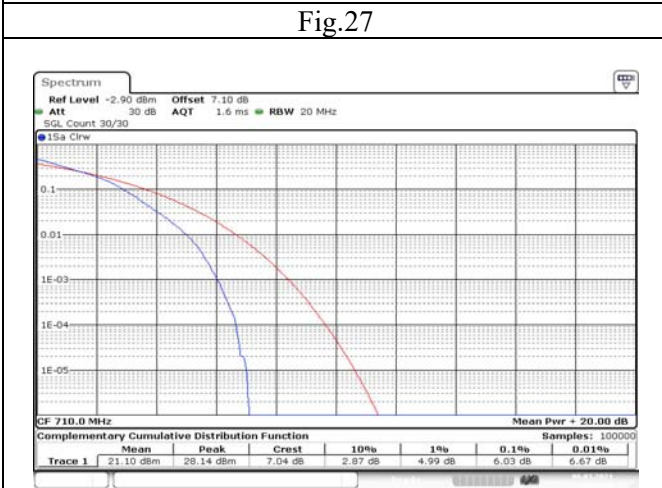


Fig.29

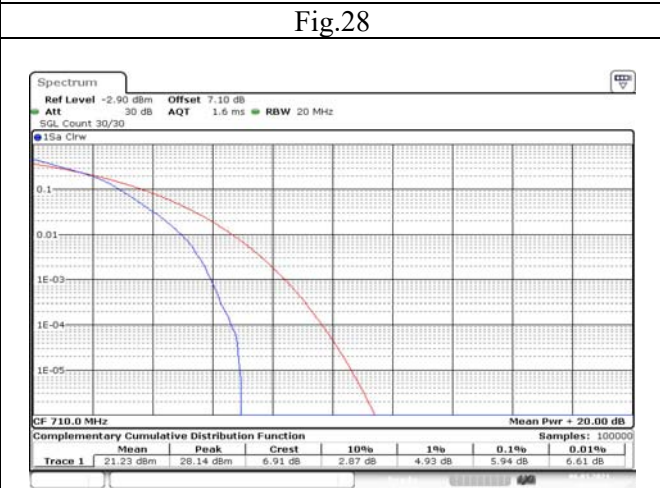


Fig.30

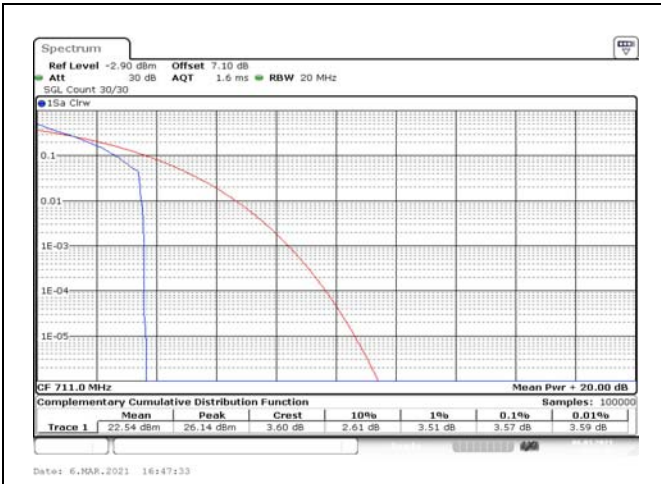


Fig.31

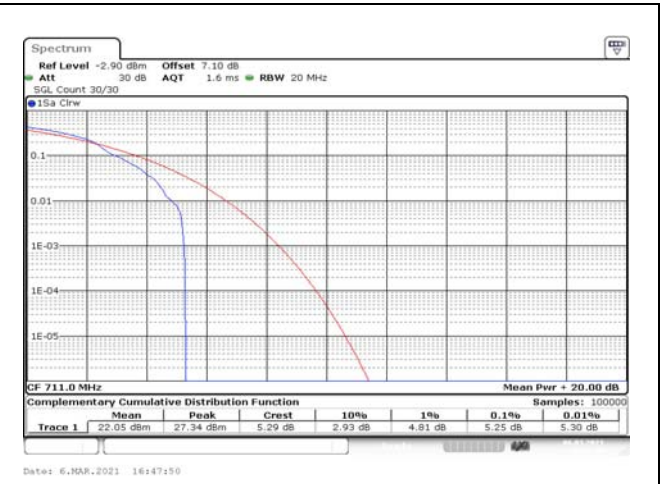


Fig.32

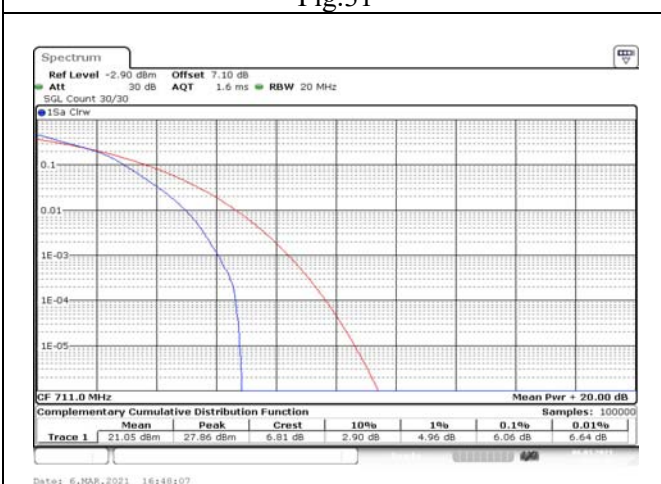


Fig.33



Fig.34

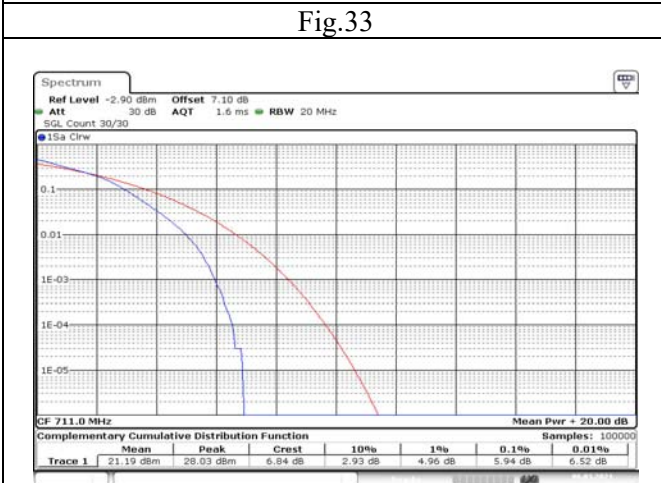


Fig.35

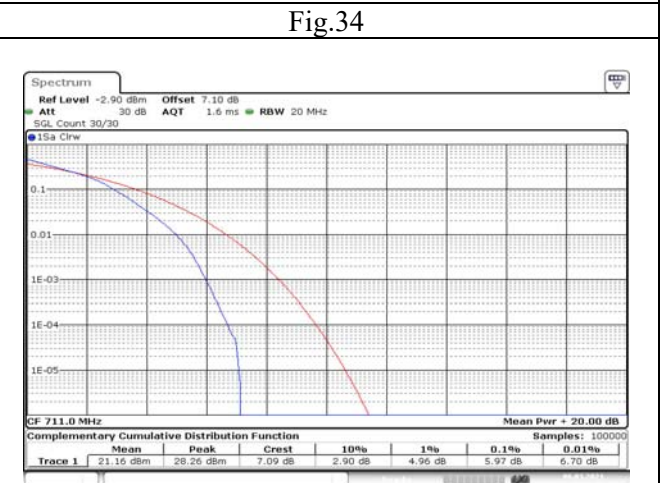


Fig.36

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

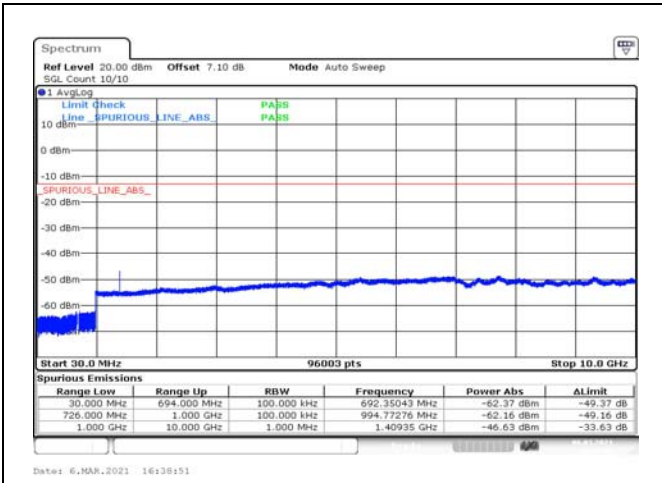


Fig.1

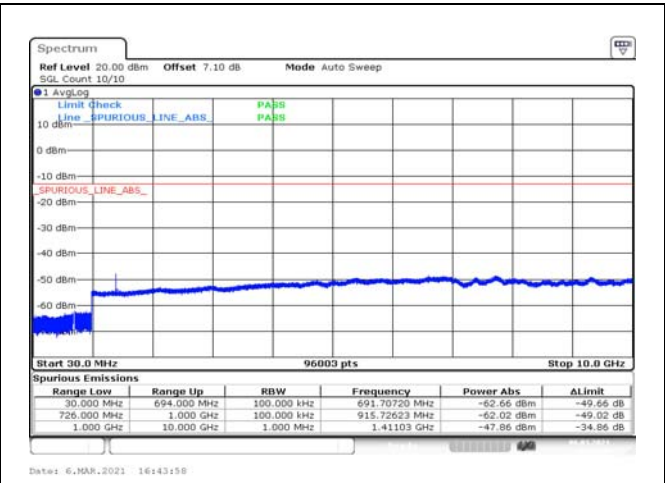


Fig.2

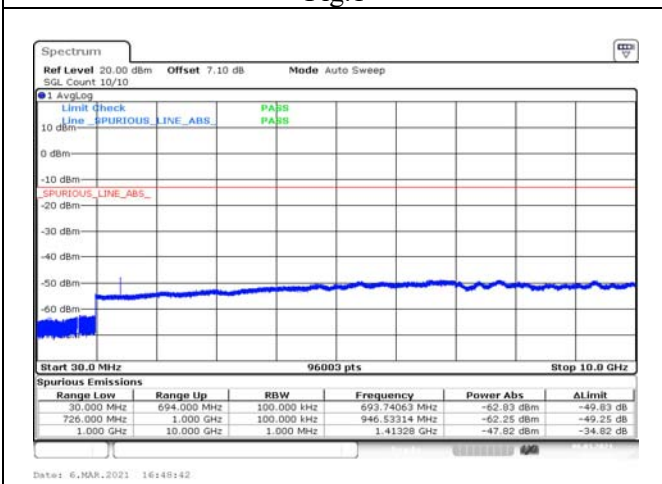


Fig.3

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

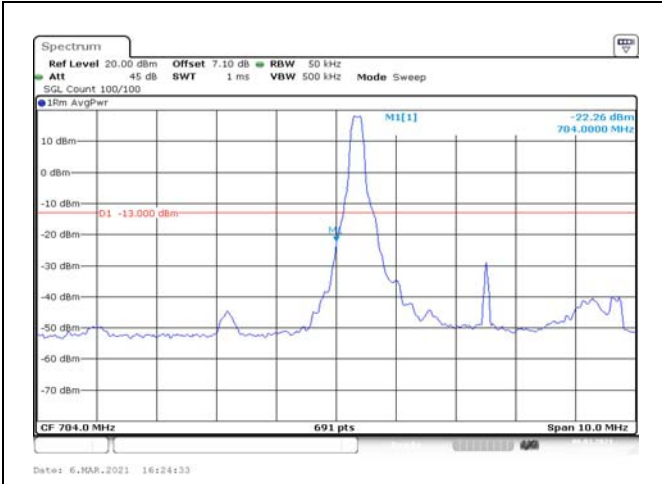


Fig.1

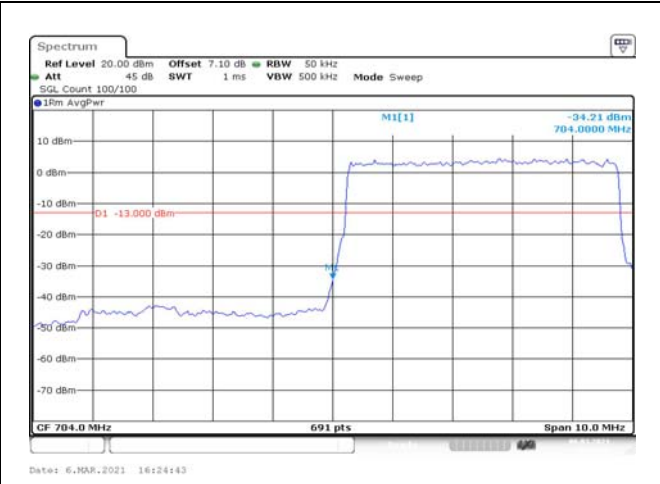


Fig.2

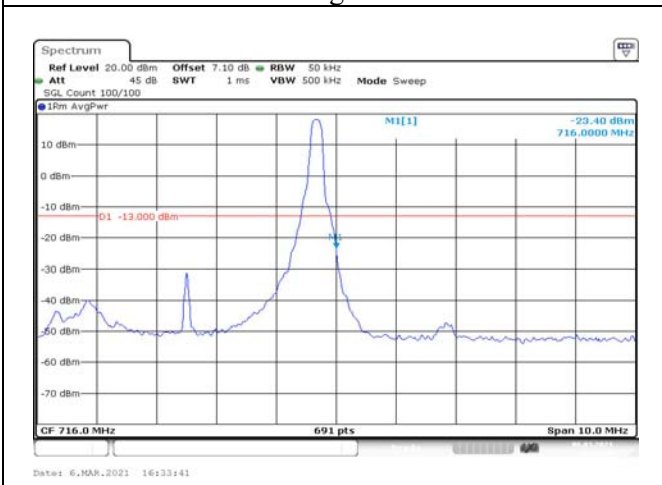


Fig.3

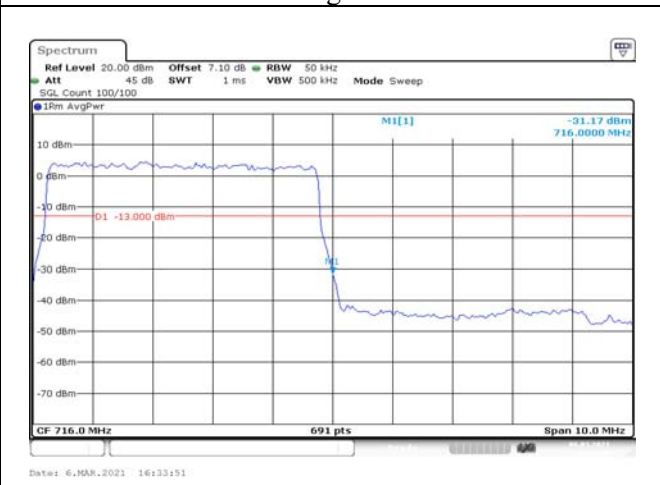


Fig.4

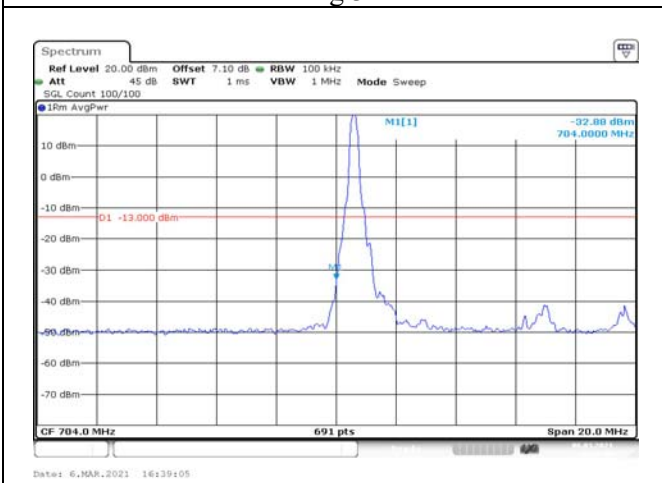


Fig.5

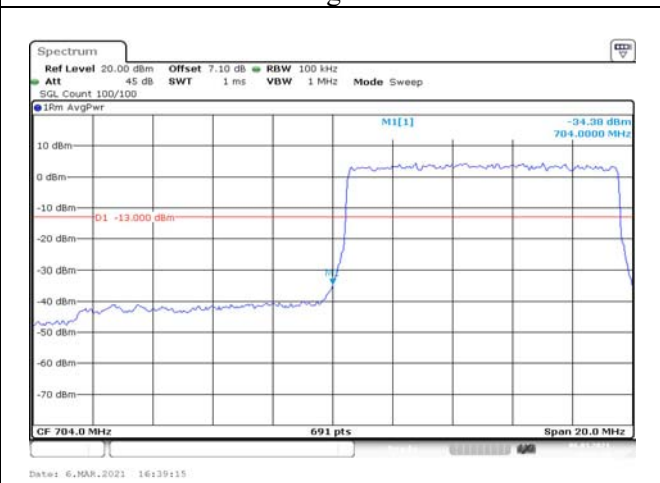
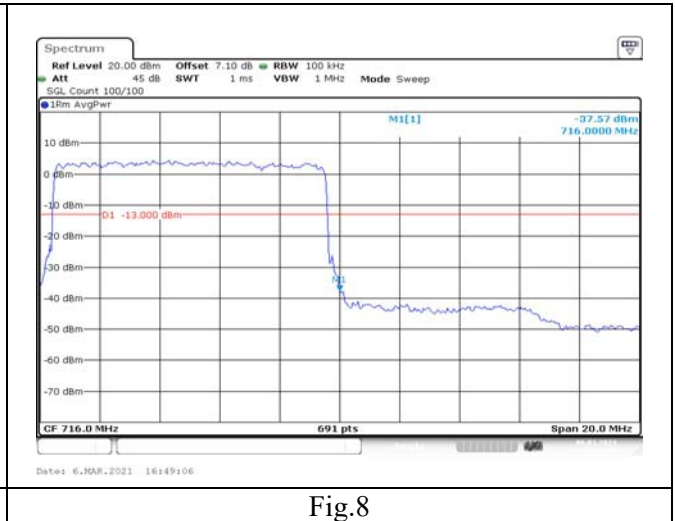
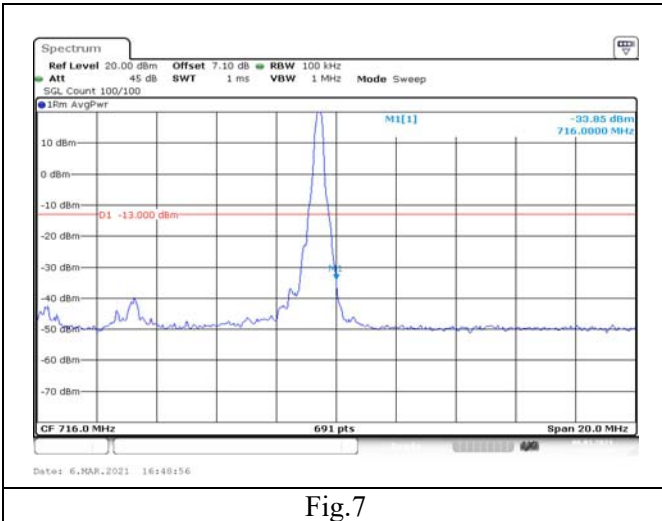


Fig.6



7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band17 Low Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	---	---	0.002	0.010	---	---
-20	NV	---	---	0.002	0.002	---	---
-10	NV	---	---	0.006	0.004	---	---
0	NV	---	---	0.003	0.004	---	---
+10	NV	---	---	0.002	0.000	---	---
+20	NV	---	---	0.000	0.000	---	---
+30	NV	---	---	-0.002	0.009	---	---
+40	NV	---	---	0.002	0.002	---	---
+50	NV	---	---	-0.002	0.005	---	---
+20	LV	---	---	0.002	-0.001	---	---
+20	HV	---	---	0.009	0.009	---	---

Temperature(°C)	Voltage	Test Result (ppm) Band17 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	---	---	-0.002	0.010	---	---
-20	NV	---	---	0.000	0.001	---	---
-10	NV	---	---	0.002	0.008	---	---
0	NV	---	---	-0.002	0.002	---	---
+10	NV	---	---	0.000	0.001	---	---
+20	NV	---	---	0.000	0.000	---	---
+30	NV	---	---	0.008	0.008	---	---
+40	NV	---	---	-0.008	0.006	---	---
+50	NV	---	---	0.006	0.004	---	---
+20	LV	---	---	-0.002	0.009	---	---
+20	HV	---	---	-0.004	0.006	---	---

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	23.42	16.87	0.049
				1	12	23.46	16.91	0.049
				1	24	23.51	16.96	0.050
				12	0	22.40	15.85	0.038
				12	7	22.47	15.92	0.039
				12	13	22.54	15.99	0.040
	25	0		21.54	14.99	0.032		
	710	23790		1	0	23.41	16.86	0.049
				1	12	23.39	16.84	0.048
				1	24	23.38	16.83	0.048
				12	0	22.46	15.91	0.039
				12	7	22.54	15.99	0.040
				12	13	22.47	15.92	0.039
	25	0		21.48	14.93	0.031		
	713.5	23825		1	0	23.41	16.86	0.049
				1	12	23.38	16.83	0.048
				1	24	23.44	16.89	0.049
				12	0	22.49	15.94	0.039
12			7	22.47	15.92	0.039		
12			13	22.47	15.92	0.039		
25	0	21.37	14.82	0.030				
16QAM	706.5	23755	1	0	22.57	16.02	0.040	
			1	12	22.61	16.06	0.040	
			1	24	22.44	15.89	0.039	
			12	0	21.54	14.99	0.032	
			12	7	21.42	14.87	0.031	
			12	13	21.53	14.98	0.031	
	25	0	20.56	14.01	0.025			
	710	23790	1	0	22.79	16.24	0.042	
			1	12	22.81	16.26	0.042	
			1	24	22.77	16.22	0.042	
			12	0	21.51	14.96	0.031	
			12	7	21.64	15.09	0.032	
			12	13	21.54	14.99	0.032	
	25	0	20.46	13.91	0.025			
	713.5	23825	1	0	22.56	16.01	0.040	
			1	12	22.58	16.03	0.040	
			1	24	22.61	16.06	0.040	
			12	0	21.45	14.90	0.031	
12			7	21.46	14.91	0.031		
12			13	21.42	14.87	0.031		
25	0	20.43	13.88	0.024				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	706.5	23755	5	1	0	21.62	15.07	0.032
				1	12	21.58	15.03	0.032
				1	24	21.55	15.00	0.032
				12	0	20.62	14.07	0.026
				12	7	20.61	14.06	0.025
				12	13	20.61	14.06	0.025
				25	0	19.62	13.07	0.020
	710	23790		1	0	21.47	14.92	0.031
				1	12	21.47	14.92	0.031
				1	24	21.42	14.87	0.031
				12	0	20.47	13.92	0.025
				12	7	20.44	13.89	0.024
				12	13	20.51	13.96	0.025
				25	0	19.47	12.92	0.020
	713.5	23825		1	0	21.45	14.90	0.031
				1	12	21.49	14.94	0.031
				1	24	21.48	14.93	0.031
				12	0	20.41	13.86	0.024
				12	7	20.45	13.90	0.025
				12	13	20.44	13.89	0.024
				25	0	19.30	12.75	0.019

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	23.58	17.03	0.050
				1	25	23.48	16.93	0.049
				1	49	23.33	16.78	0.048
				25	0	22.49	15.94	0.039
				25	12	22.54	15.99	0.040
				25	25	22.54	15.99	0.040
	50	0		21.60	15.05	0.032		
	710	23790		1	0	23.45	16.90	0.049
				1	25	23.48	16.93	0.049
				1	49	23.41	16.86	0.049
				25	0	22.50	15.95	0.039
				25	12	22.57	16.02	0.040
				25	25	22.61	16.06	0.040
	50	0		21.50	14.95	0.031		
	711	23800		1	0	23.54	16.99	0.050
1			25	23.45	16.90	0.049		
1			49	23.53	16.98	0.050		
25			0	22.45	15.90	0.039		
25			12	22.50	15.95	0.039		
25			25	22.55	16.00	0.040		
50	0	21.49	14.94	0.031				
16QAM	709	23780	1	0	23.30	16.75	0.047	
			1	25	23.11	16.56	0.045	
			1	49	22.97	16.42	0.044	
			25	0	21.54	14.99	0.032	
			25	12	21.68	15.13	0.033	
			25	25	21.72	15.17	0.033	
	50	0	20.54	13.99	0.025			
	710	23790	1	0	22.64	16.09	0.041	
			1	25	22.60	16.05	0.040	
			1	49	22.60	16.05	0.040	
			25	0	21.52	14.97	0.031	
			25	12	21.59	15.04	0.032	
			25	25	21.59	15.04	0.032	
	50	0	20.46	13.91	0.025			
	711	23800	1	0	22.58	16.03	0.040	
			1	25	22.53	15.98	0.040	
			1	49	22.57	16.02	0.040	
			25	0	21.59	15.04	0.032	
25			12	21.71	15.16	0.033		
25			25	21.67	15.12	0.033		
50	0	20.54	13.99	0.025				

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conduct ed power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	709	23780	10	1	0	21.64	15.09	0.032
				1	25	21.59	15.04	0.032
				1	49	21.58	15.03	0.032
				25	0	20.58	14.03	0.025
				25	12	20.59	14.04	0.025
				25	25	20.59	14.04	0.025
	710	23790		50	0	19.59	13.04	0.020
				1	0	21.50	14.95	0.031
				1	25	21.49	14.94	0.031
				1	49	21.56	15.01	0.032
				25	0	20.49	13.94	0.025
				25	12	20.56	14.01	0.025
	711	23800		25	25	20.49	13.94	0.025
				50	0	19.48	12.93	0.020
				1	0	21.54	14.99	0.032
				1	25	21.56	15.01	0.032
				1	49	21.49	14.94	0.031
				25	0	20.47	13.92	0.025
				25	12	20.49	13.94	0.025
				25	25	20.48	13.93	0.025
				50	0	19.48	12.93	0.020