APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 13

1 RF Power Output

Modulation	Carrier	UL Channel	BW	RB Size	RB Offset	Conducted
QPSK	779.5	23205	5	1	0	23.31
				1	12	23.41
				1	24	23.61
				12	0	22.82
				12	7	22.95
				12	13	22.93
				25	0	22.85
	782	23230		1	0	23.47
				1	12	23.64
				1	24	23.63
				12	0	22.98
				12	7	23.06
				12	13	23.01
				25	0	23.03
	784.5	23255		1	0	23.66
				1	12	23.48
				1	24	23.46
				12	0	23.03
				12	7	22.98
				12	13	22.96
				25	0	23.01
16QAM	779.5	23205		1	0	22.13
				1	12	22.48
				1	24	22.31
				12	0	22.01
				12	7	22.16
				12	13	22.04
				25	0	22.14
	782	23230		1	0	23.27
				1	12	23.27
				1	24	23.27
				12	0	22.06
				12	7	22.16
				12	13	22.01
				25	0	22.11
	784.5	23255		1	0	23.32
				1	12	22.76
				1	24	22.71
				12	0	22.08
				12	7	21.91
				12	13	22.08
				25	0	22.12

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
64QAM	779.5	23205	5	1	0	22.26
				1	12	22.17
				1	24	22.16
				12	0	22.24
				12	7	22.23
				12	13	22.23
				25	0	22.22
	782	23230		1	0	22.14
				1	12	22.14
				1	24	22.14
				12	0	22.14
				12	7	22.35
				12	13	22.24
				25	0	22.18
	784.5	23255		1	0	22.02
				1	12	22.13
				1	24	22.02
				12	0	22.13
				12	7	22.07
				12	13	22.13
				25	0	22.19

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	782	23230	10	1	0	23.23
				1	25	23.50
				1	49	23.56
				25	0	22.95
				25	12	23.07
				25	25	23.06
				50	0	23.03
16QAM				1	0	23.42
				1	25	23.34
				1	49	23.29
				25	0	22.18
				25	12	22.21
				25	25	22.18
				50	0	22.30
64QAM				1	0	22.30
				1	25	22.25
				1	49	22.29
				25	0	22.29
				25	12	22.29
				25	25	22.29
				50	0	22.30

2 Occupied Bandwidth

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
13	779.5	23205	5	25	0	4.472	Fig.1	4.472	Fig.2	4.472	Fig.3
	782	23230		25	0	4.472	Fig.4	4.472	Fig.5	4.472	Fig.6
	784.5	23255		25	0	4.472	Fig.7	4.472	Fig.8	4.472	Fig.9
	782	23230	10	50	0	8.944	Fig.10	8.944	Fig.11	8.944	Fig.12

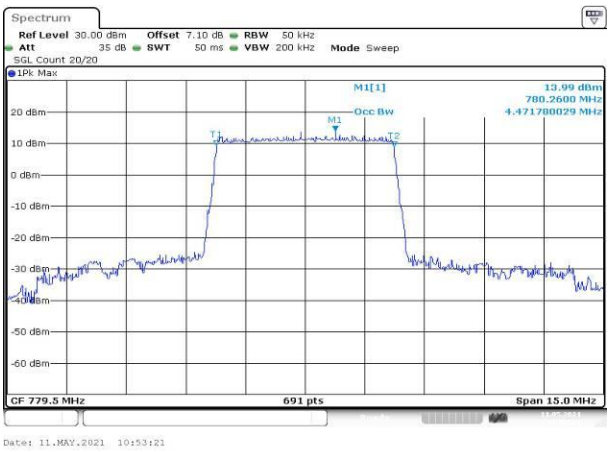

Fig.1

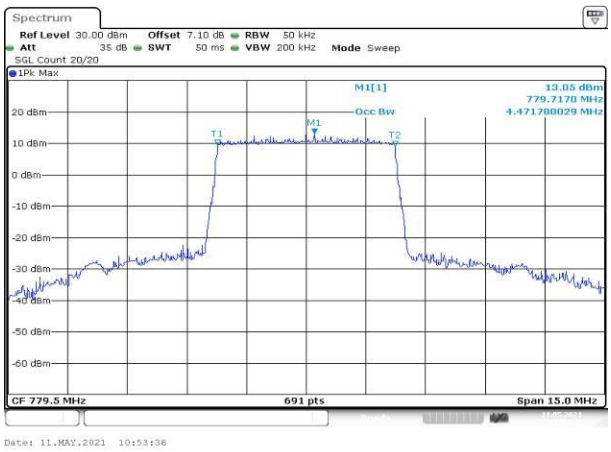

Fig.2

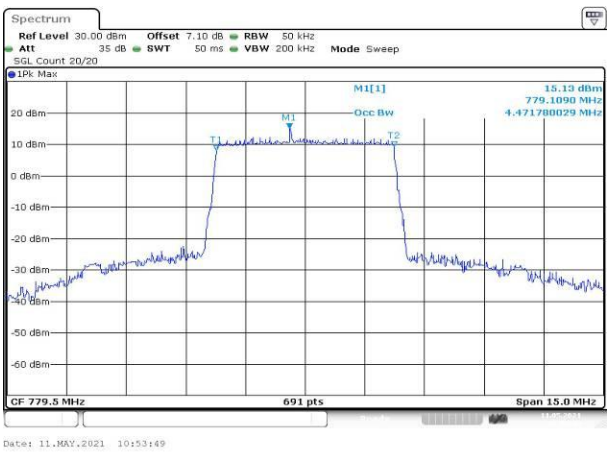

Fig.3

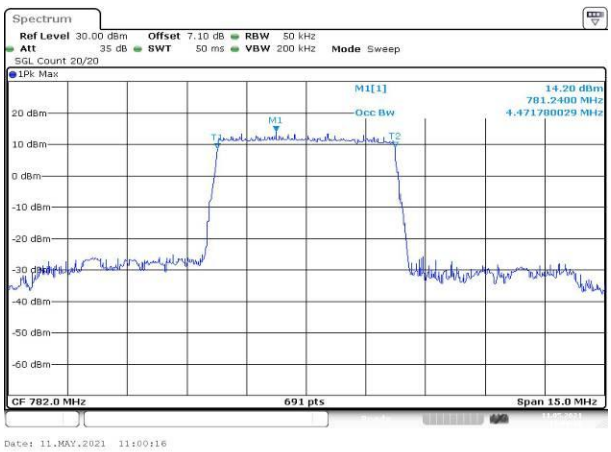

Fig.4

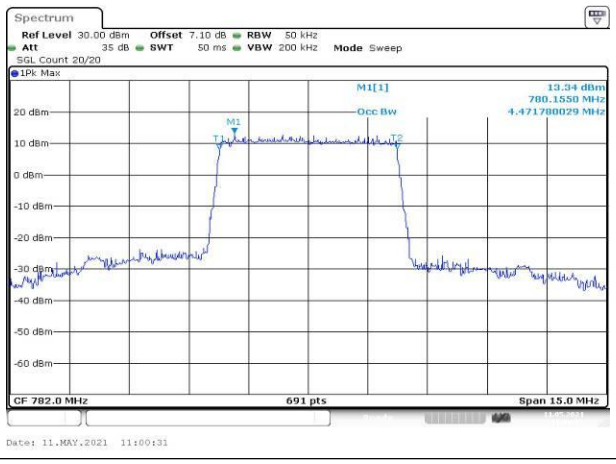

Fig.5

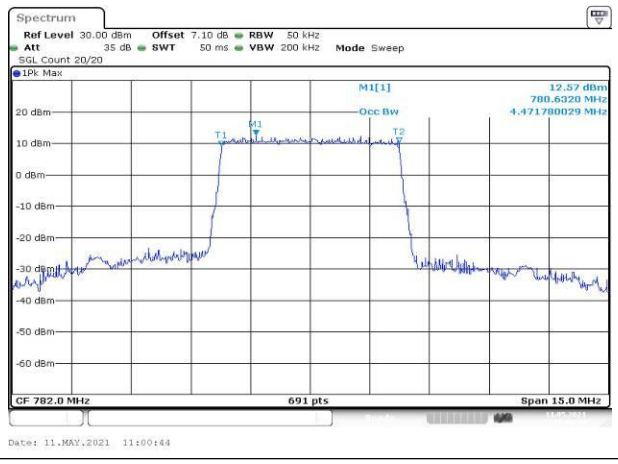

Fig.6

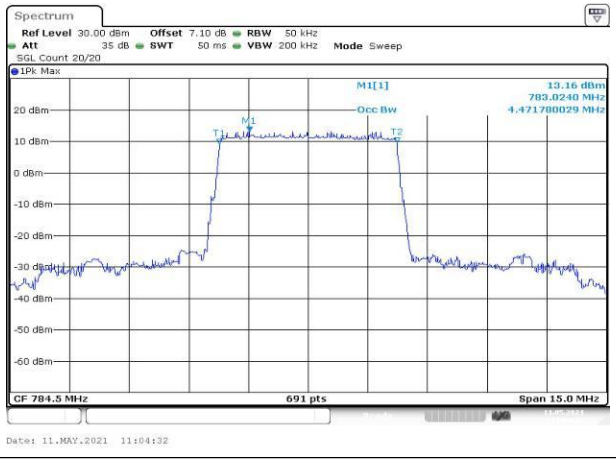

Fig.7

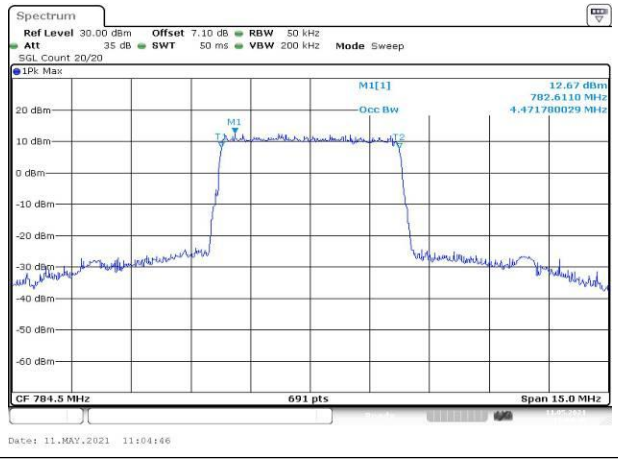

Fig.8

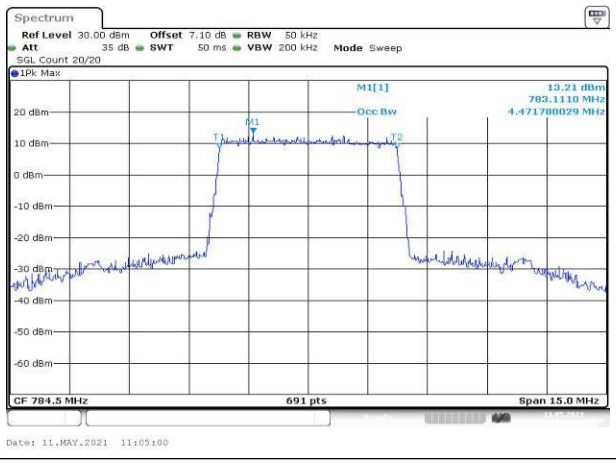

Fig.9

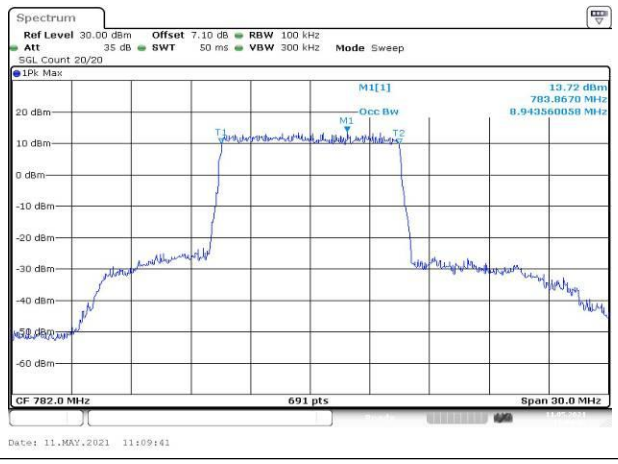

Fig.10

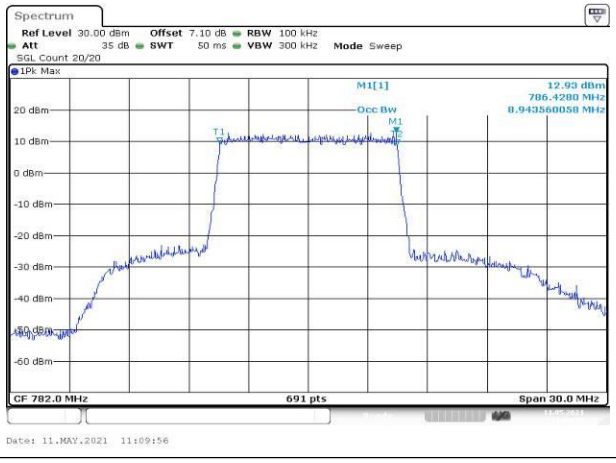

Fig.11

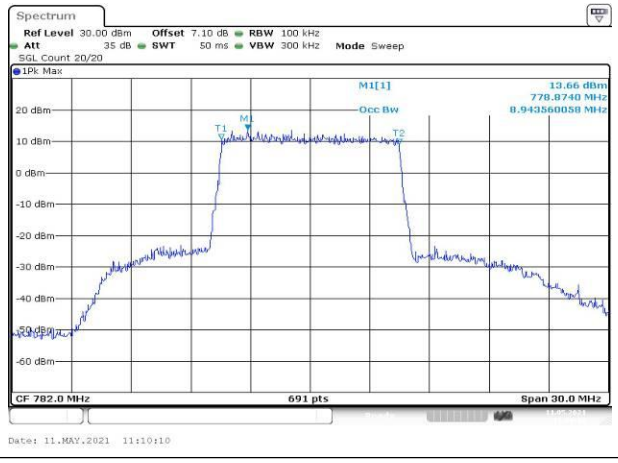

Fig.12

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	
13	779.5	23205	5	25	0	4.884	Fig.1	4.841	Fig.2	4.906	Fig.3
	782	23230		25	0	4.906	Fig.4	4.928	Fig.5	4.906	Fig.6
	784.5	23255		25	0	4.884	Fig.7	4.884	Fig.8	4.928	Fig.9
	782	23230	10	50	0	9.725	Fig.10	9.638	Fig.11	9.812	Fig.12

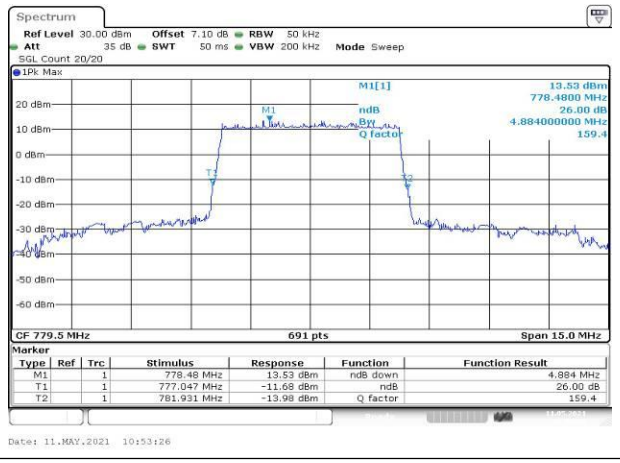

Fig.1

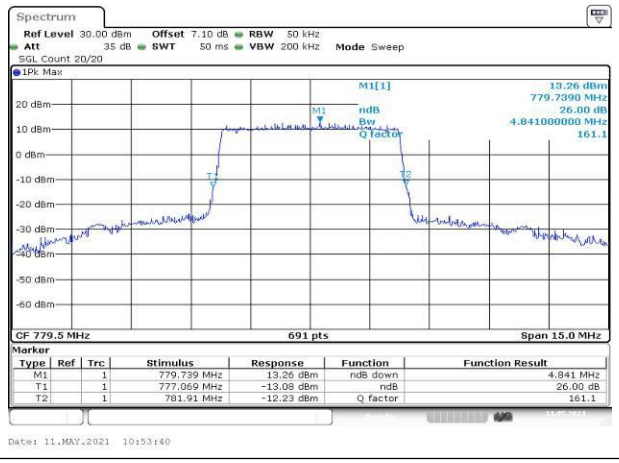

Fig.2

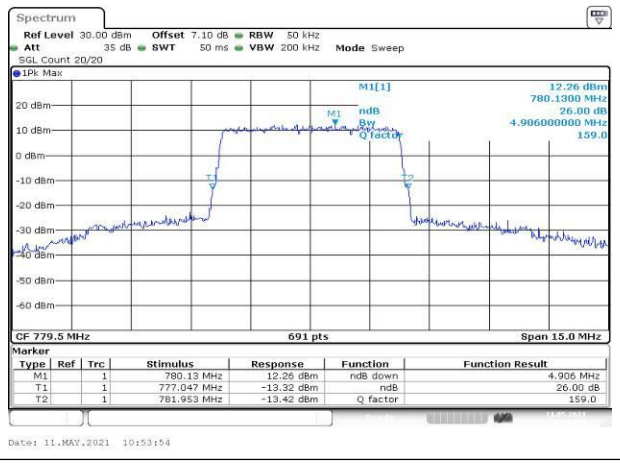

Fig.3

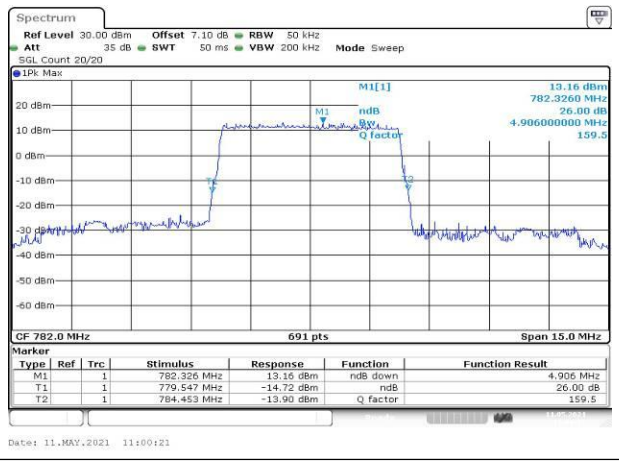

Fig.4

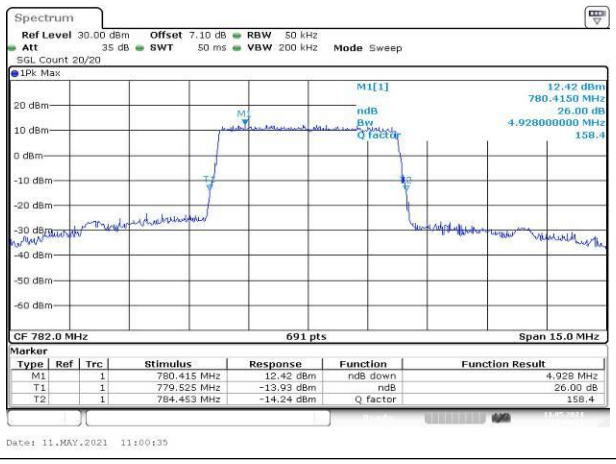

Fig.5

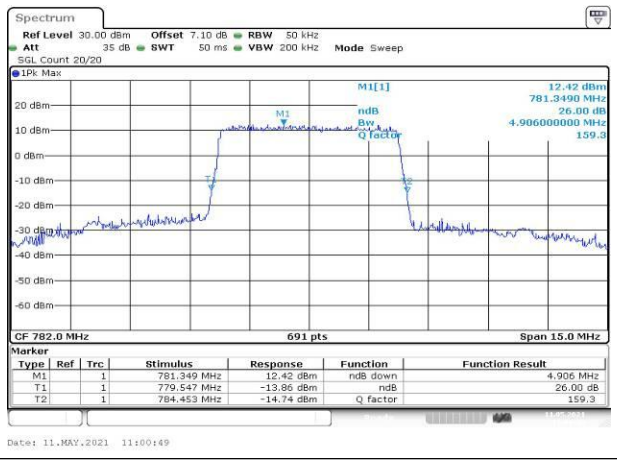

Fig.6

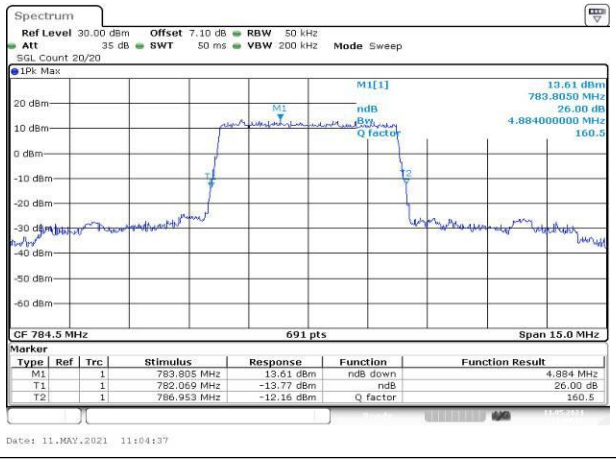

Fig.7

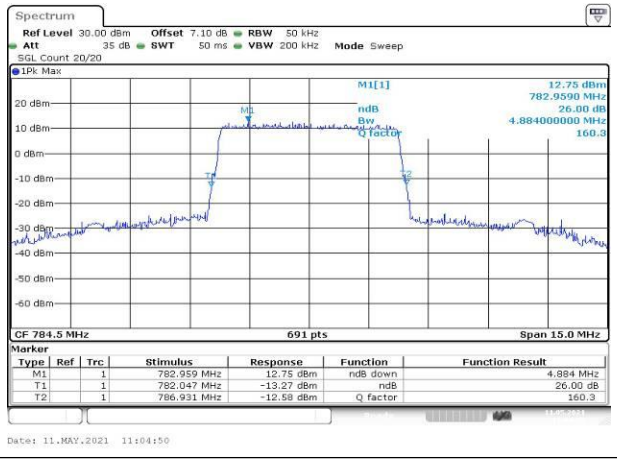

Fig.8

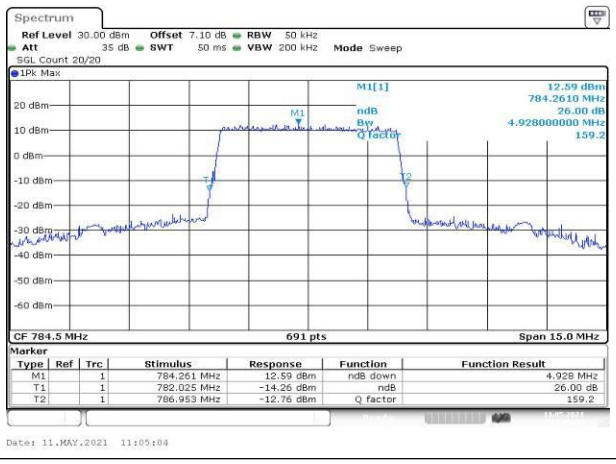

Fig.9

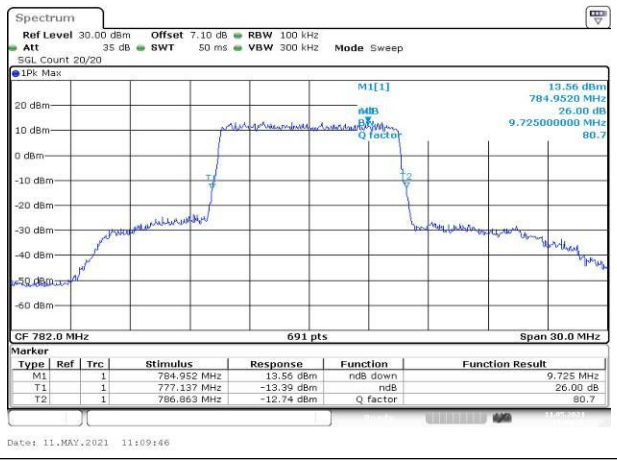

Fig.10

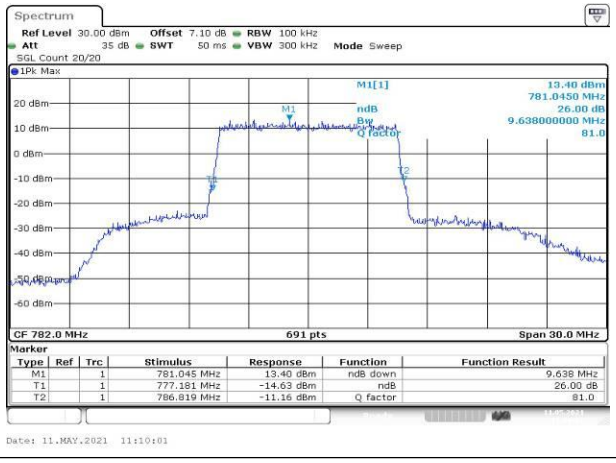

Fig.11

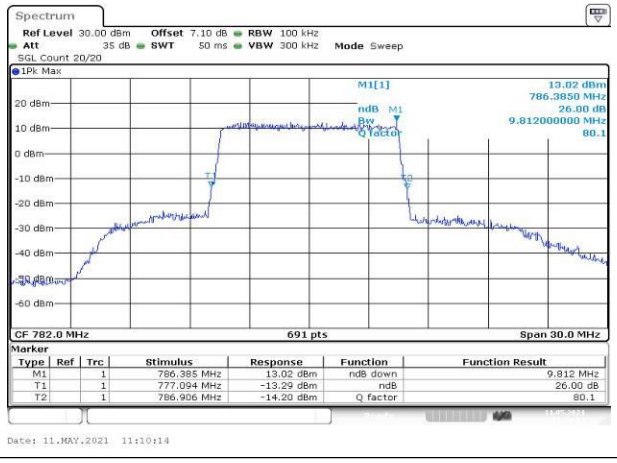

Fig.12

4 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
13	779.5	23205	5	1	24	Fig.1	Fig.2	Fig.3
	779.5	23205		25	0	Fig.4	Fig.5	Fig.6
	782	23230		1	24	Fig.7	Fig.8	Fig.9
	782	23230		25	0	Fig.10	Fig.11	Fig.12
	784.5	23255		1	24	Fig.13	Fig.14	Fig.15
	784.5	23255		25	0	Fig.16	Fig.17	Fig.18
	782	23230	10	1	49	Fig.19	Fig.20	Fig.21
	782	23230		50	0	Fig.22	Fig.23	Fig.24

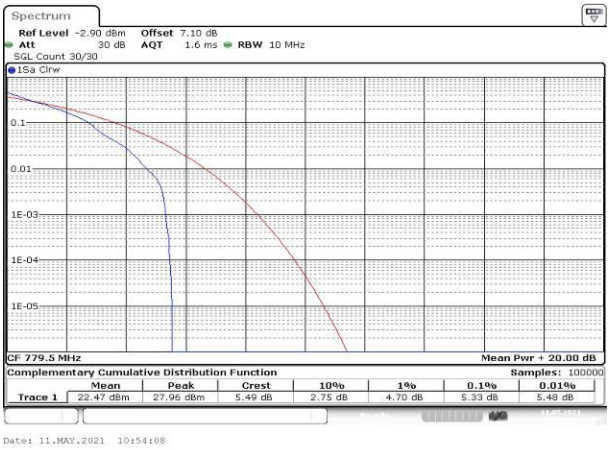

Fig.1

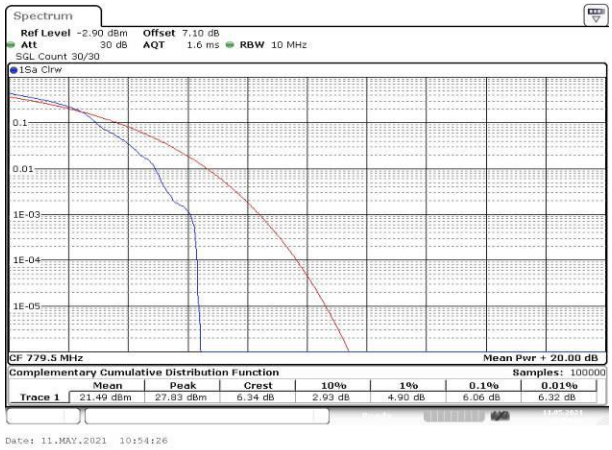

Fig.2

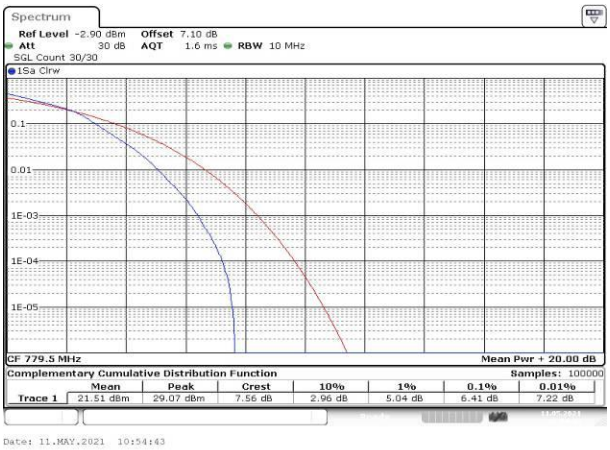

Fig.3

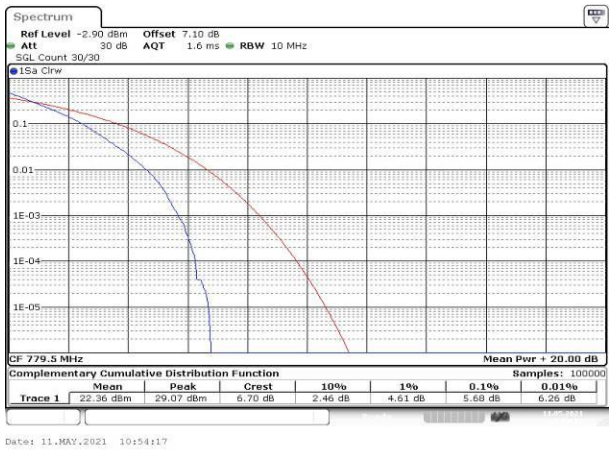

Fig.4

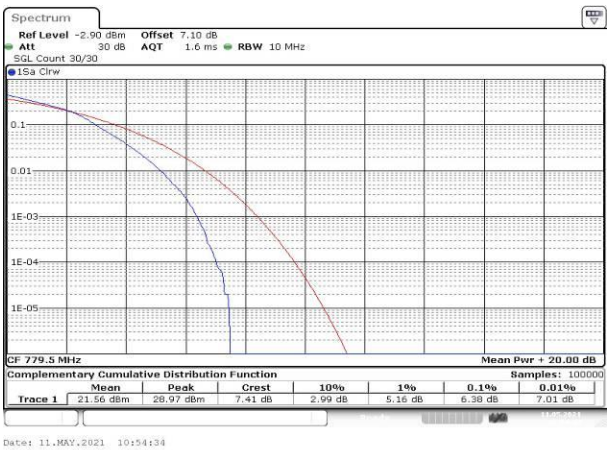

Fig.5

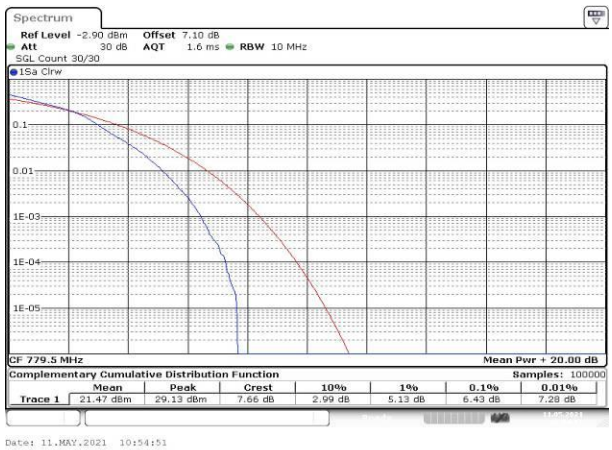

Fig.6

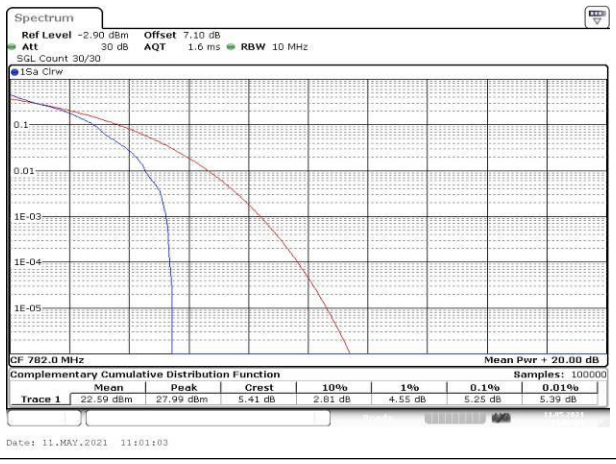

Fig.7

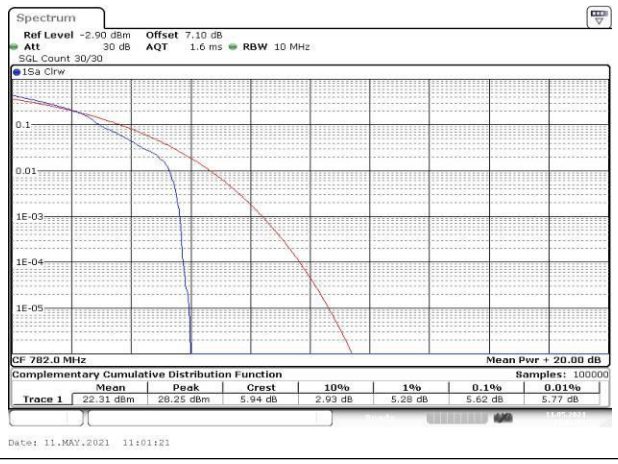

Fig.8

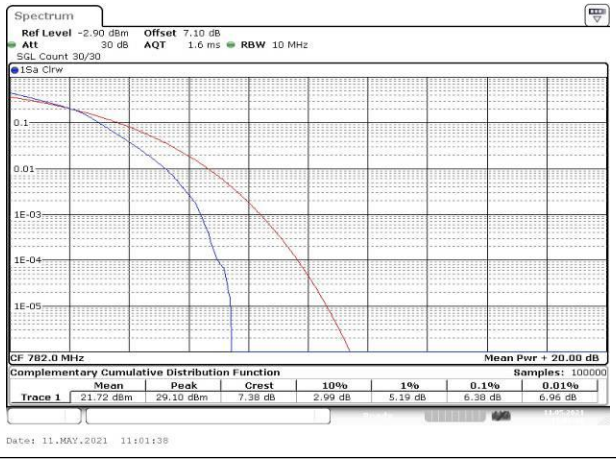

Fig.9

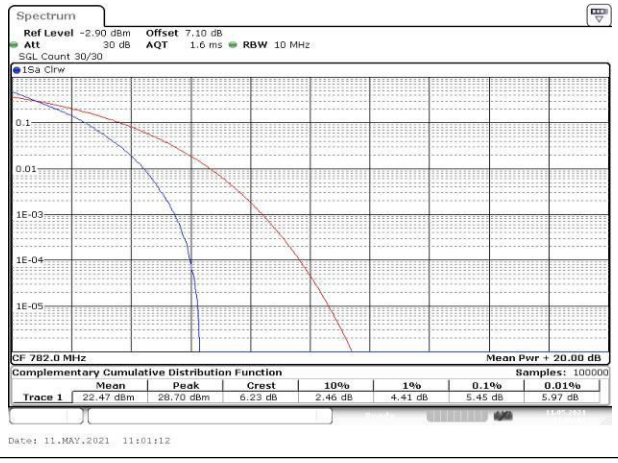

Fig.10

Fig.11

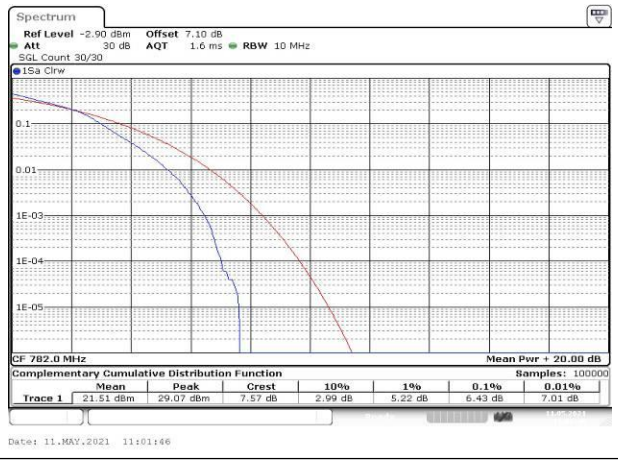

Fig.12

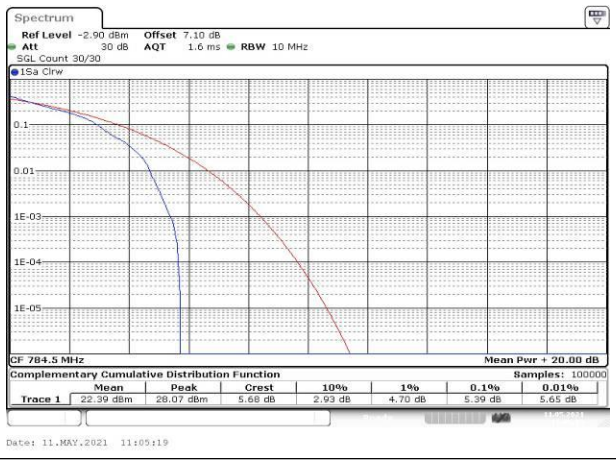

Fig.13

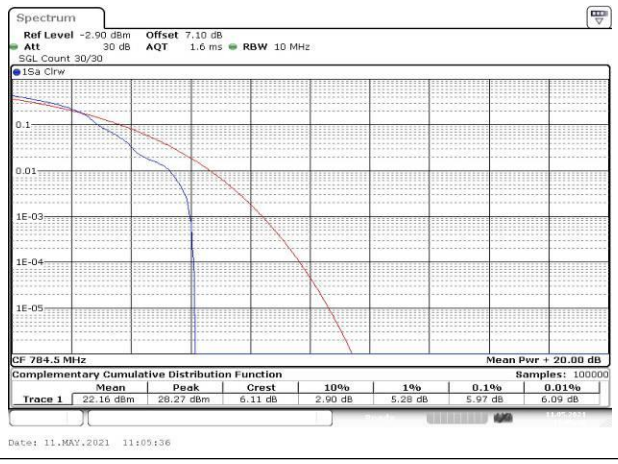

Fig.14

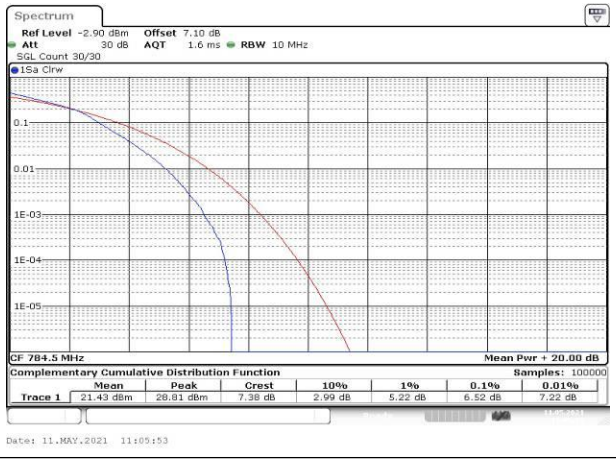

Fig.15

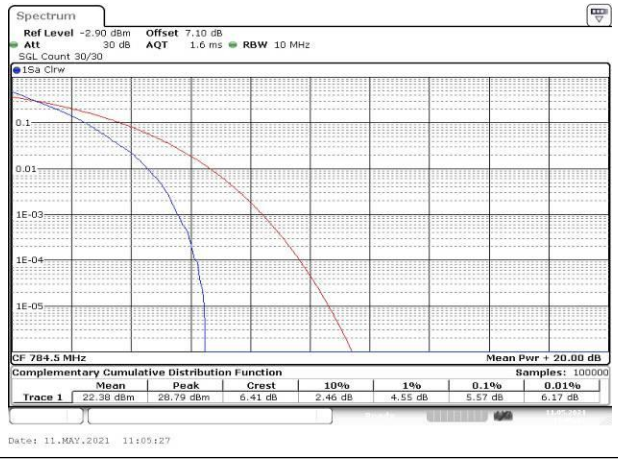

Fig.16

Fig.17

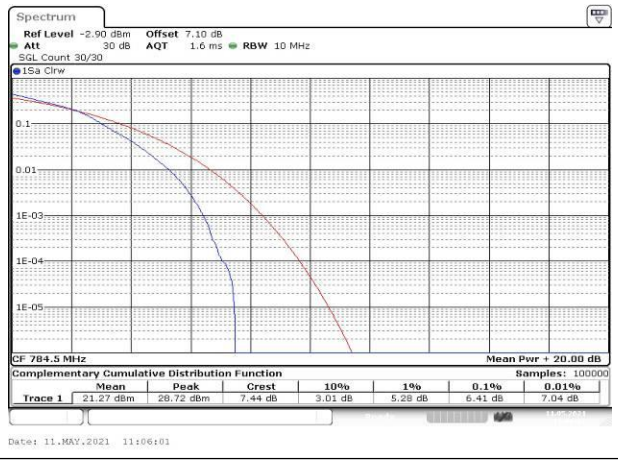

Fig.18

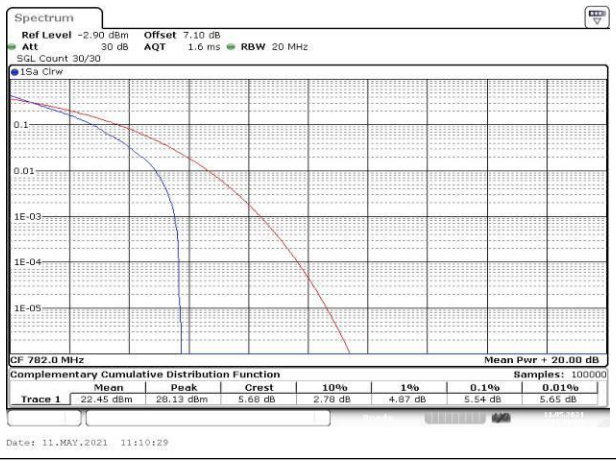

Fig.19

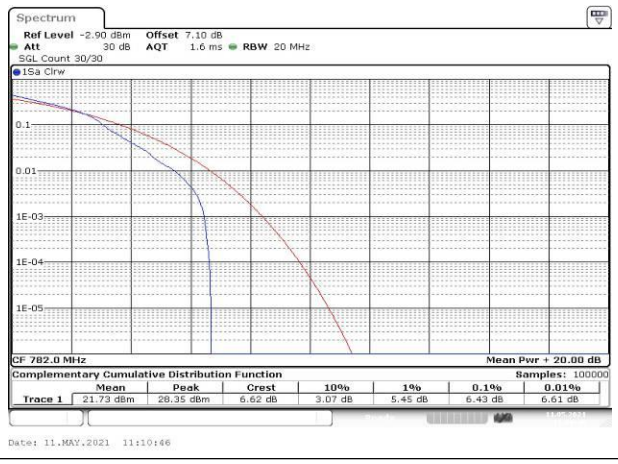

Fig.20

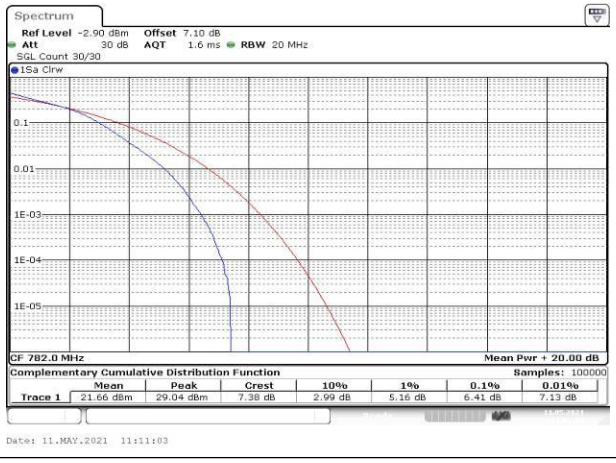

Fig.21

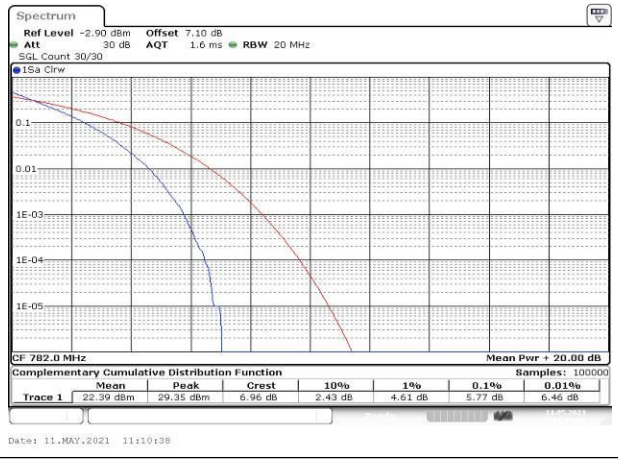

Fig.22

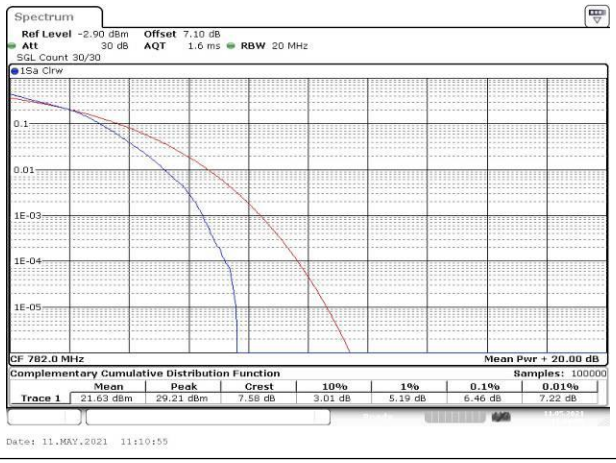

Fig.23

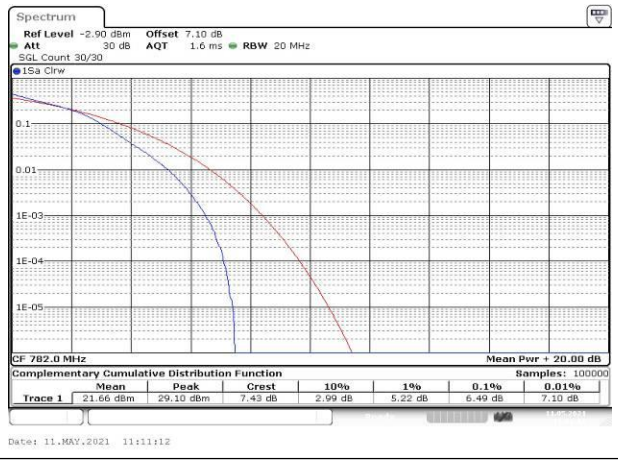

Fig.24

5 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
13	782	23230	10	1	0	Fig.1

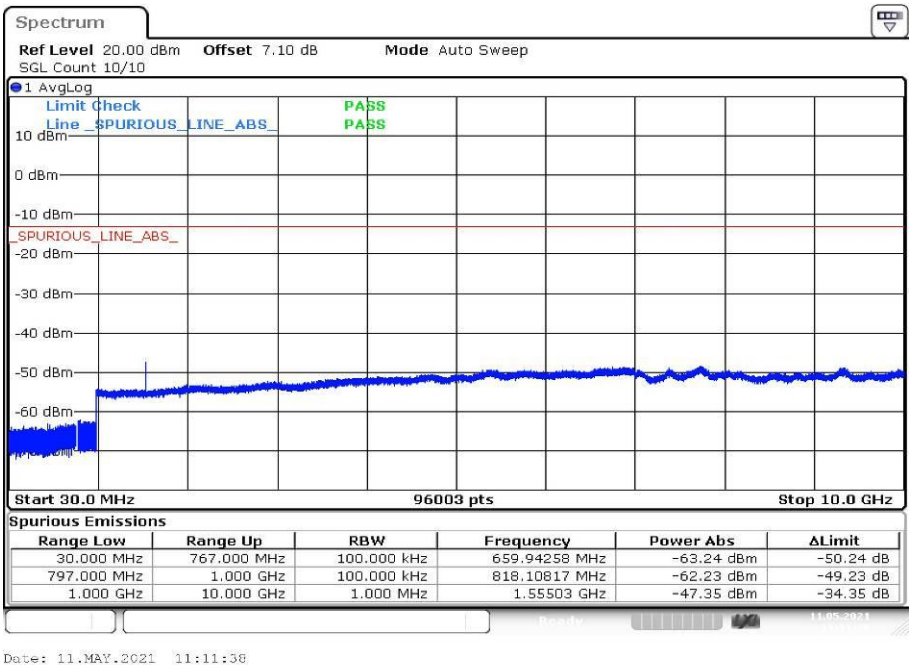

Fig.1

6 Band Edges Compliance

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
13	779.5	23205	5	1	0	Fig.1
				25	0	Fig.2
	784.5	23255		1	24	Fig.3
				25	0	Fig.4
	782	23230	10	1	0	Fig.5
				50	0	Fig.6
				1	49	Fig.7
				50	0	Fig.8

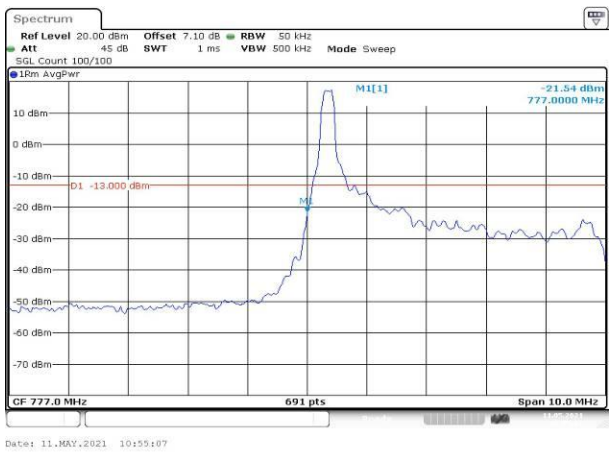

Fig.1

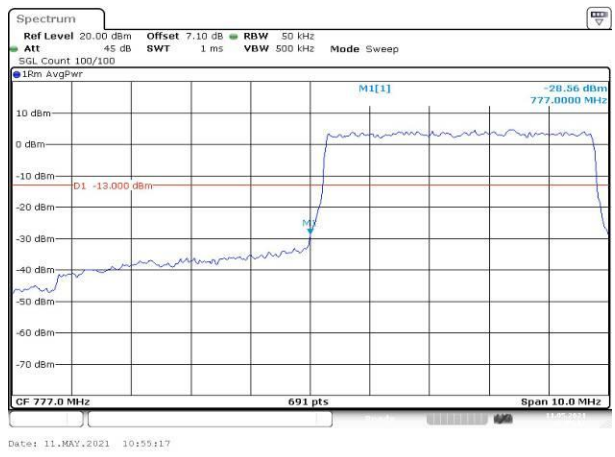

Fig.2

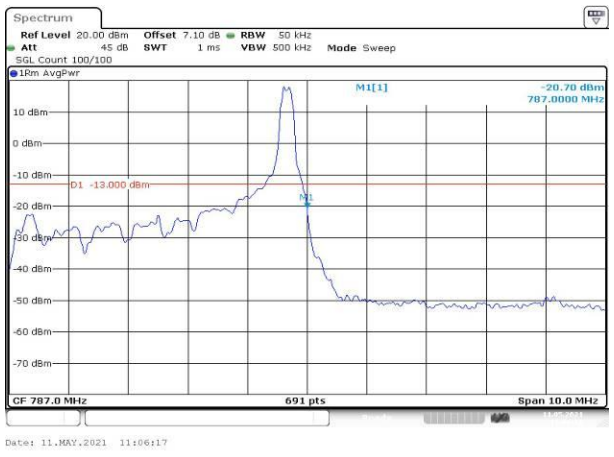

Fig.3

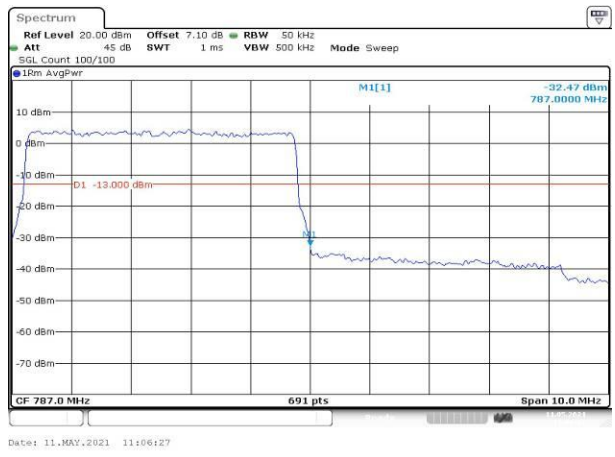

Fig.4

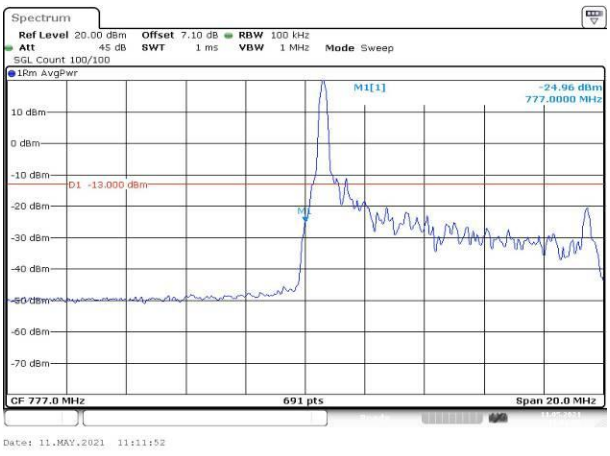

Fig.5

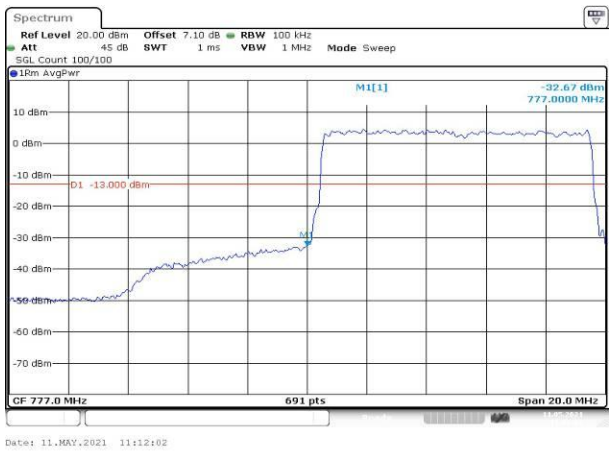

Fig.6

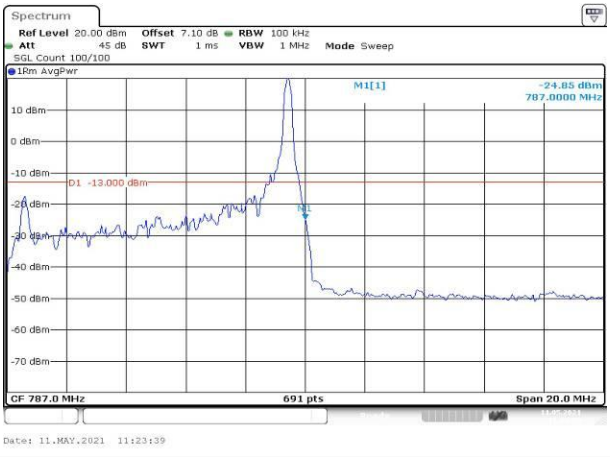

Fig.7

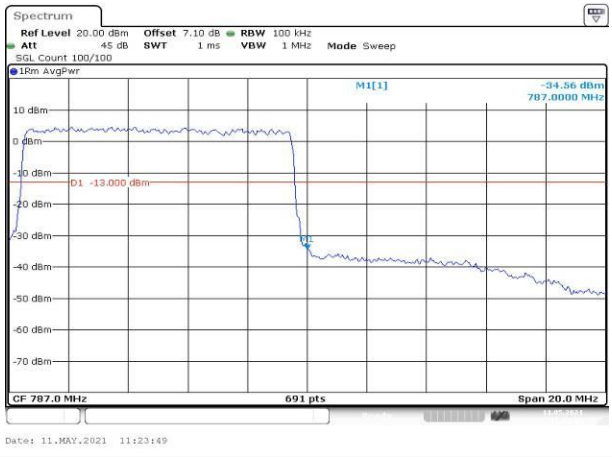

Fig.8

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band13 Low Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-10	NV	---	---	-0.015	-0.032	---	---
0	NV	---	---	-0.022	-0.005	---	---
+10	NV	---	---	0.000	-0.048	---	---
+20	NV	---	---	0.000	0.000	---	---
+30	NV	---	---	-0.066	-0.026	---	---
+40	NV	---	---	-0.005	-0.020	---	---
+50	NV	---	---	-0.039	-0.020	---	---
+55	NV	---	---	-0.026	-0.014	---	---
+20	LV	---	---	-0.011	-0.025	---	---
+20	HV	---	---	-0.027	-0.016	---	---

Temperature(°C)	Voltage	Test Result (ppm) Band13 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-10	NV	---	---	-0.020	-0.020	---	---
0	NV	---	---	-0.019	0.000	---	---
+10	NV	---	---	-0.018	0.053	---	---
+20	NV	---	---	0.000	0.000	---	---
+30	NV	---	---	-0.038	-0.009	---	---
+40	NV	---	---	-0.019	-0.012	---	---
+50	NV	---	---	-0.012	-0.004	---	---
+55	NV	---	---	-0.008	0.004	---	---
+20	LV	---	---	-0.014	0.046	---	---
+20	HV	---	---	-0.029	-0.009	---	---

8 Effective Radiated Power and Effective Isotropic Radiated Power

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	779.5	23205	5	1	0	23.31	13.56	0.023
				1	12	23.41	13.66	0.023
				1	24	23.61	13.86	0.024
				12	0	22.82	13.07	0.020
				12	7	22.95	13.20	0.021
				12	13	22.93	13.18	0.021
				25	0	22.85	13.10	0.020
	782	23230		1	0	23.47	13.72	0.024
				1	12	23.64	13.89	0.024
				1	24	23.63	13.88	0.024
				12	0	22.98	13.23	0.021
				12	7	23.06	13.31	0.021
				12	13	23.01	13.26	0.021
				25	0	23.03	13.28	0.021
	784.5	23255		1	0	23.66	13.91	0.025
				1	12	23.48	13.73	0.024
				1	24	23.46	13.71	0.023
				12	0	23.03	13.28	0.021
				12	7	22.98	13.23	0.021
				12	13	22.96	13.21	0.021
				25	0	23.01	13.26	0.021
16QAM	779.5	23205		1	0	22.13	12.38	0.017
				1	12	22.48	12.73	0.019
				1	24	22.31	12.56	0.018
				12	0	22.01	12.26	0.017
				12	7	22.16	12.41	0.017
				12	13	22.04	12.29	0.017
				25	0	22.14	12.39	0.017
	782	23230		1	0	23.27	13.52	0.022
				1	12	23.27	13.52	0.022
				1	24	23.27	13.52	0.022
				12	0	22.06	12.31	0.017
				12	7	22.16	12.41	0.017
				12	13	22.01	12.26	0.017
				25	0	22.11	12.36	0.017
	784.5	23255		1	0	23.32	13.57	0.023
				1	12	22.76	13.01	0.020
				1	24	22.71	12.96	0.020
				12	0	22.08	12.33	0.017
				12	7	21.91	12.16	0.016
				12	13	22.08	12.33	0.017
				25	0	22.12	12.37	0.017

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	779.5	23205	5	1	0	22.26	12.51	0.018
				1	12	22.17	12.42	0.017
				1	24	22.16	12.41	0.017
				12	0	22.24	12.49	0.018
				12	7	22.23	12.48	0.018
				12	13	22.23	12.48	0.018
				25	0	22.22	12.47	0.018
	782	23230		1	0	22.14	12.39	0.017
				1	12	22.14	12.39	0.017
				1	24	22.14	12.39	0.017
				12	0	22.14	12.39	0.017
				12	7	22.35	12.60	0.018
				12	13	22.24	12.49	0.018
				25	0	22.18	12.43	0.017
	784.5	23255		1	0	22.02	12.27	0.017
				1	12	22.13	12.38	0.017
				1	24	22.02	12.27	0.017
				12	0	22.13	12.38	0.017
				12	7	22.07	12.32	0.017
				12	13	22.13	12.38	0.017
				25	0	22.19	12.44	0.018

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	782	23230	10	1	0	23.23	13.48	0.022
				1	25	23.50	13.75	0.024
				1	49	23.56	13.81	0.024
				25	0	22.95	13.20	0.021
				25	12	23.07	13.32	0.021
				25	25	23.06	13.31	0.021
				50	0	23.03	13.28	0.021
16QAM				1	0	23.42	13.67	0.023
				1	25	23.34	13.59	0.023
				1	49	23.29	13.54	0.023
				25	0	22.18	12.43	0.017
				25	12	22.21	12.46	0.018
				25	25	22.18	12.43	0.017
				50	0	22.30	12.55	0.018
64QAM				1	0	22.30	12.55	0.018
				1	25	22.25	12.50	0.018
				1	49	22.29	12.54	0.018
				25	0	22.29	12.54	0.018
				25	12	22.29	12.54	0.018
				25	25	22.29	12.54	0.018
				50	0	22.30	12.55	0.018