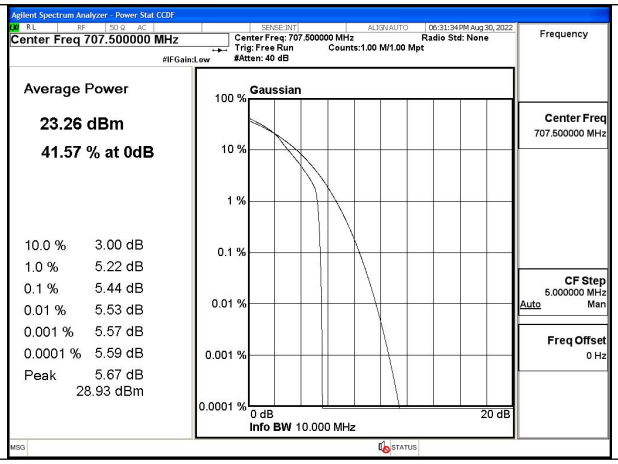

Fig.61

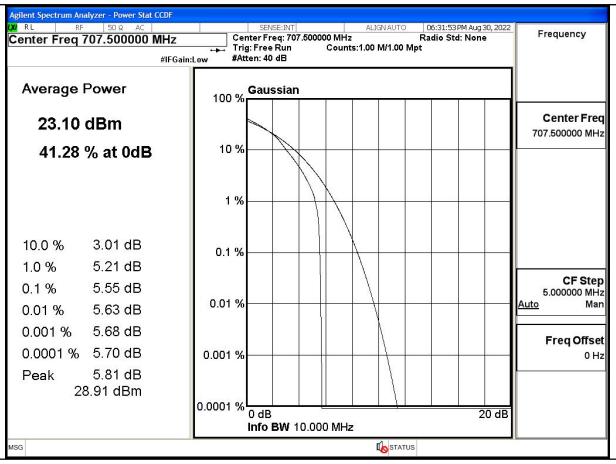

Fig.62

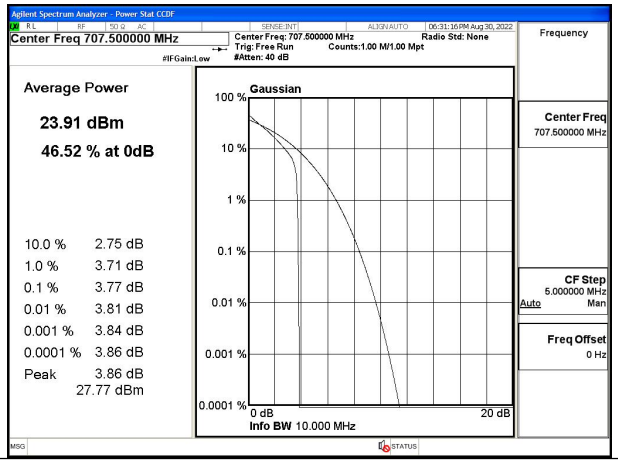

Fig.63

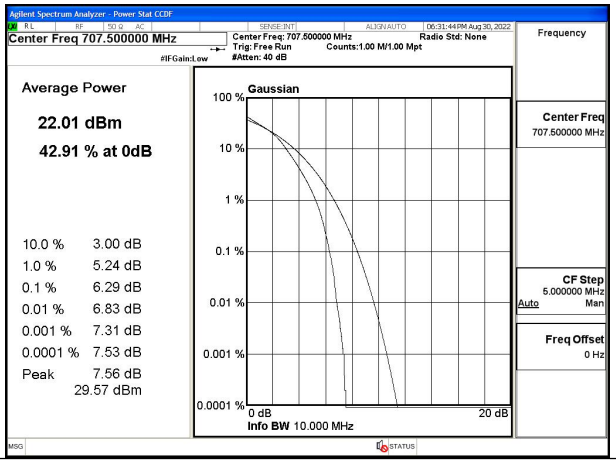

Fig.64

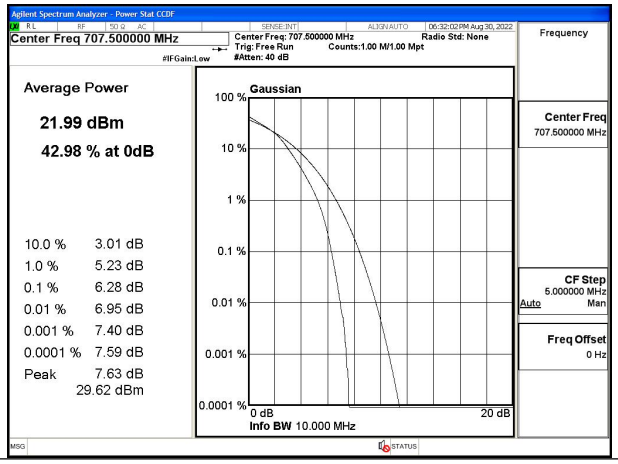

Fig.65

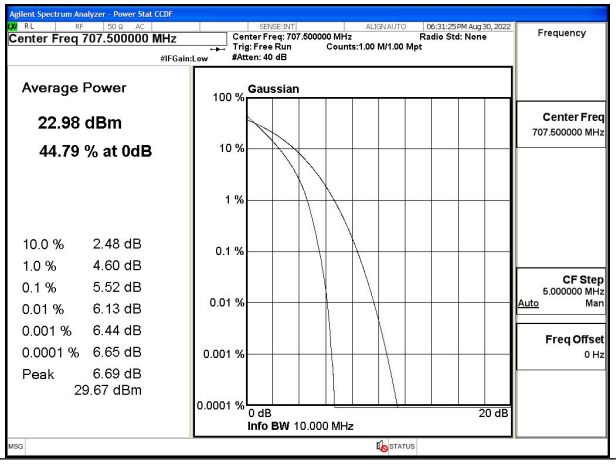

Fig.66

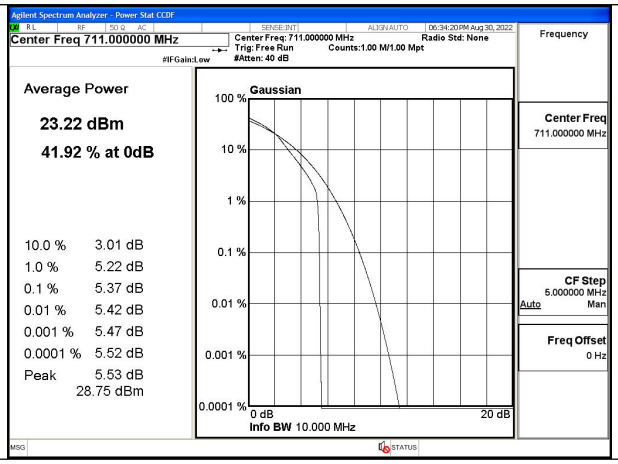

Fig.67

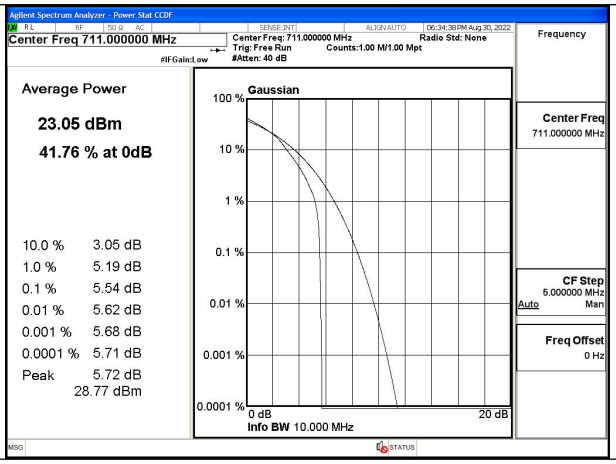

Fig.68

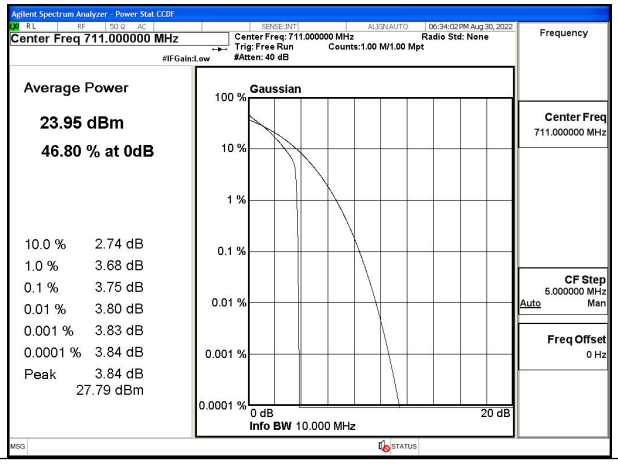

Fig.69

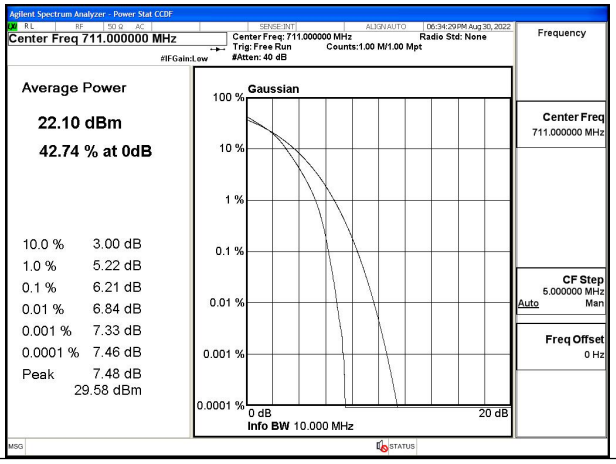

Fig.70

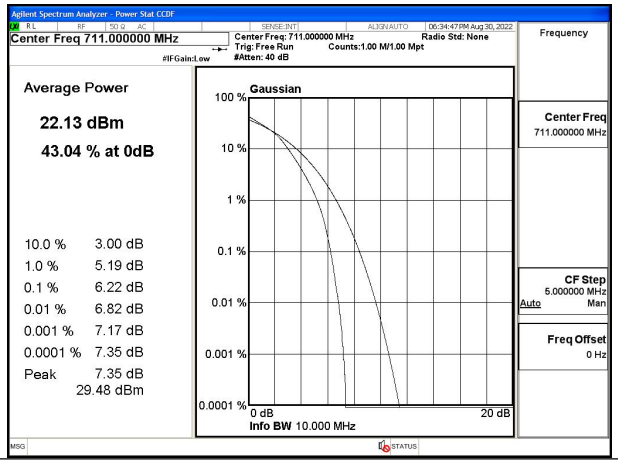

Fig.71

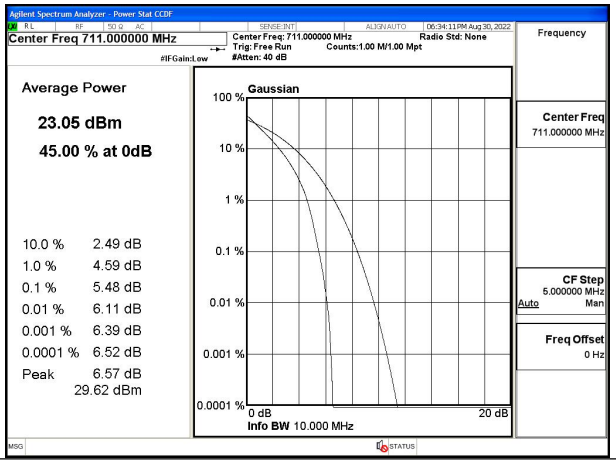

Fig.72

5 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
12	704	23060	10	1	0	Fig.1
12	707.5	23095	10	1	0	Fig.2
12	711	23130	10	1	0	Fig.3

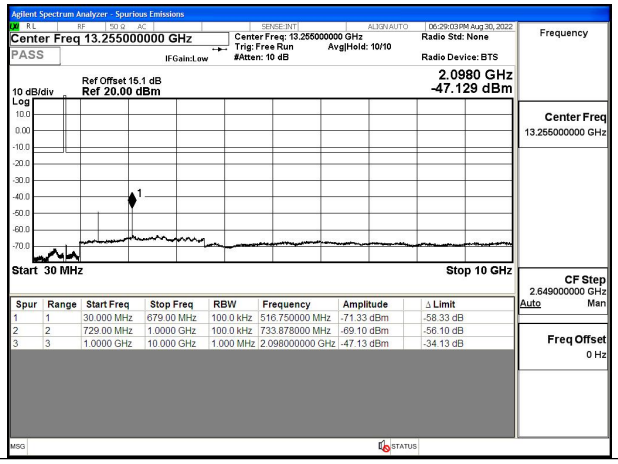

Fig.1

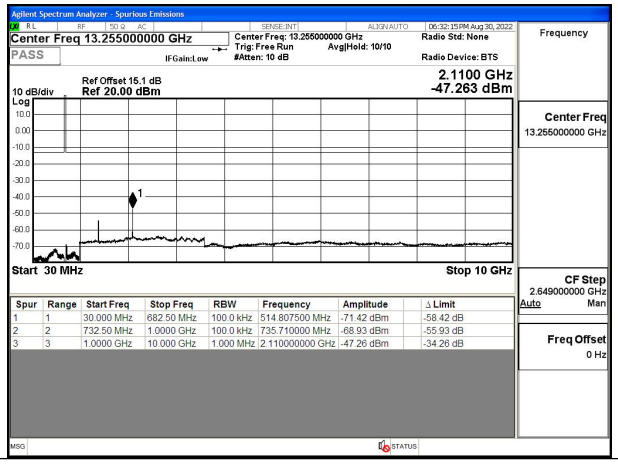

Fig.2

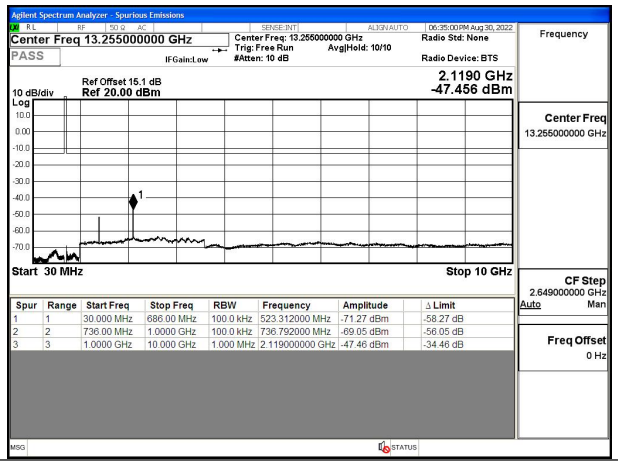

Fig.3

6 Band Edges Compliance

Band	Mode	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
12	QPSK	699.7	23017	1.4	1	0	Fig.1
12	QPSK	699.7	23017	1.4	6	0	Fig.2
12	QPSK	715.3	23173	1.4	1	5	Fig.3
12	QPSK	715.3	23173	1.4	6	0	Fig.4
12	QPSK	700.5	23025	3	1	0	Fig.5
12	QPSK	700.5	23025	3	15	0	Fig.6
12	QPSK	714.5	23165	3	1	14	Fig.7
12	QPSK	714.5	23165	3	15	0	Fig.8
12	QPSK	701.5	23035	5	1	0	Fig.9
12	QPSK	701.5	23035	5	25	0	Fig.10
12	QPSK	713.5	23155	5	1	24	Fig.11
12	QPSK	713.5	23155	5	25	0	Fig.12
12	QPSK	704	23060	10	1	0	Fig.13
12	QPSK	704	23060	10	50	0	Fig.14
12	QPSK	711	23130	10	1	49	Fig.15
12	QPSK	711	23130	10	50	0	Fig.16

Test Mode: QPSK

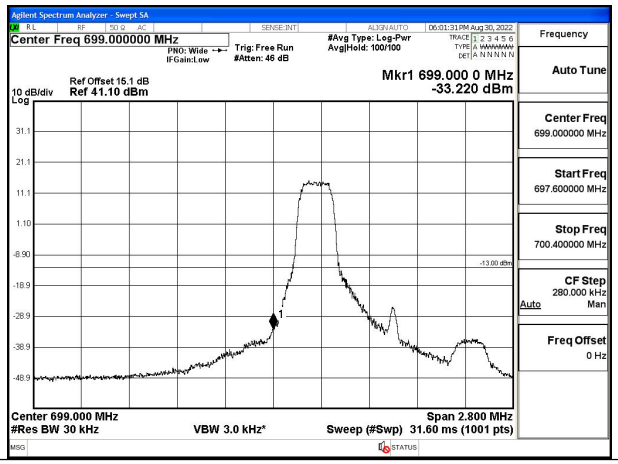

Fig.1

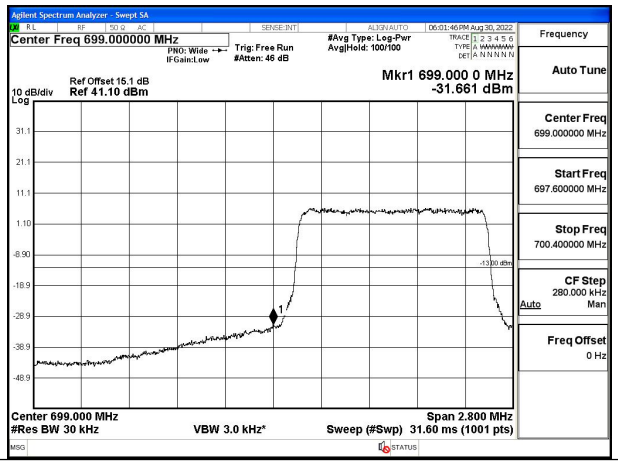

Fig.2

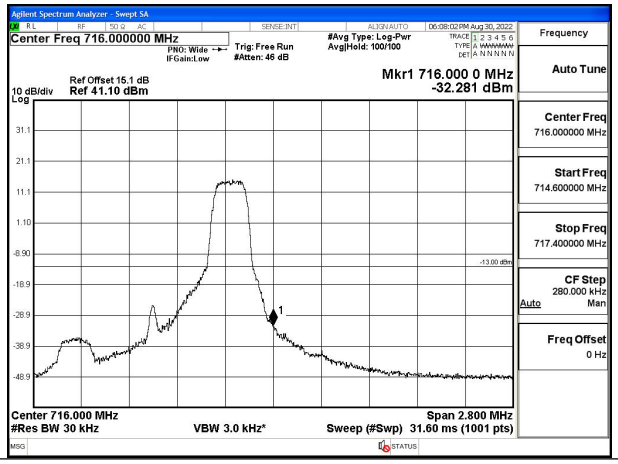

Fig.3

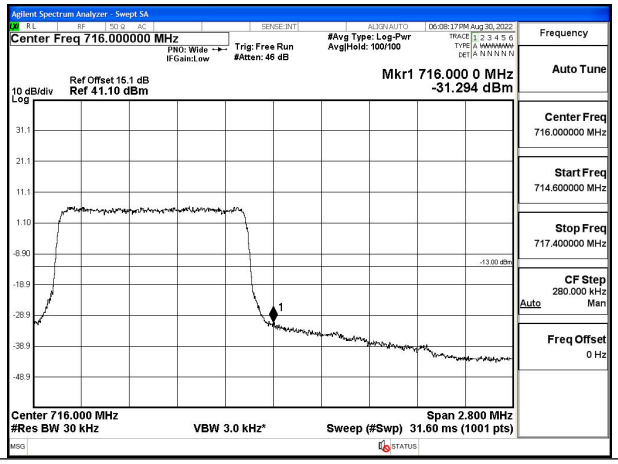

Fig.4

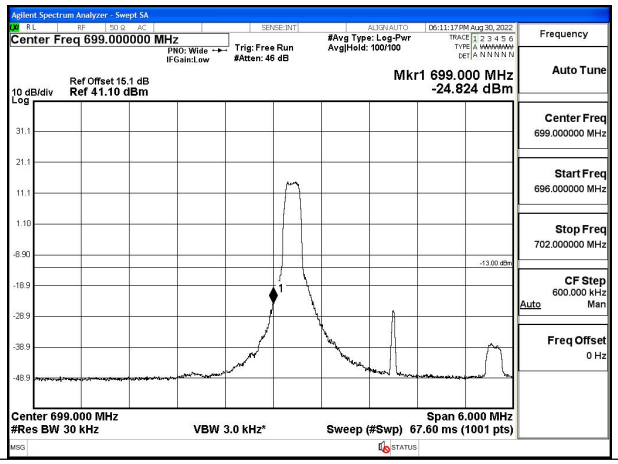

Fig.5

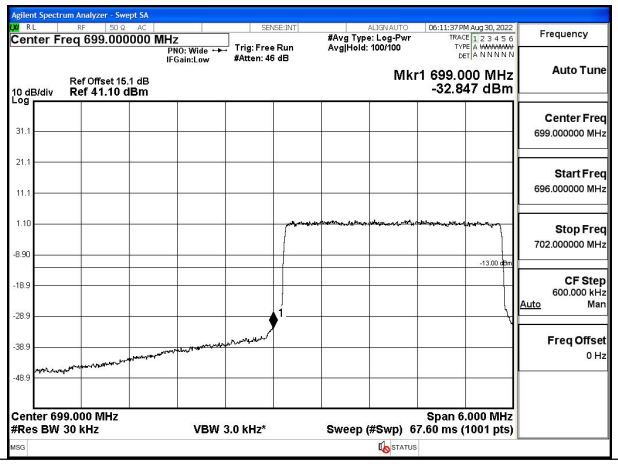

Fig.6

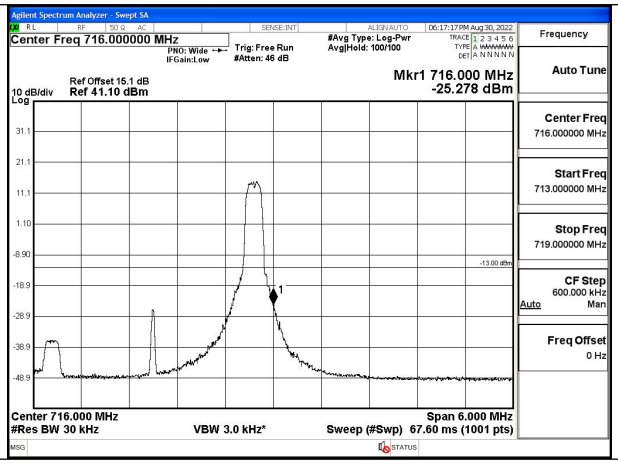

Fig.7

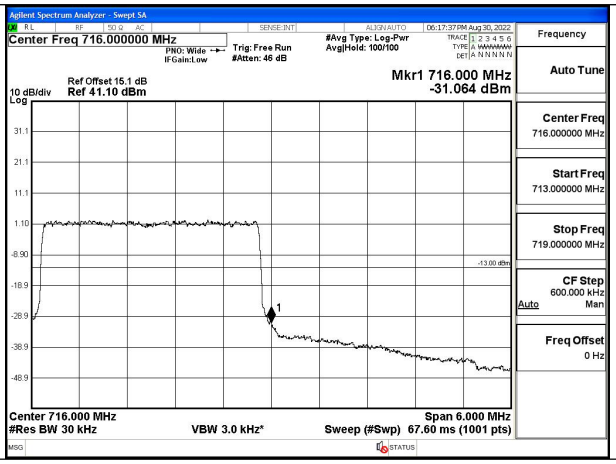

Fig.8

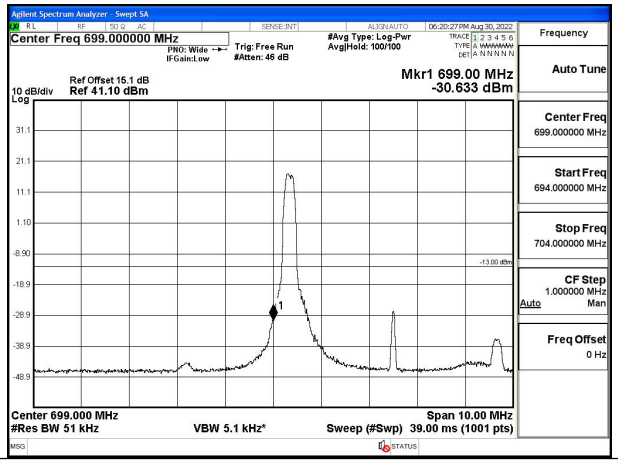

Fig.9

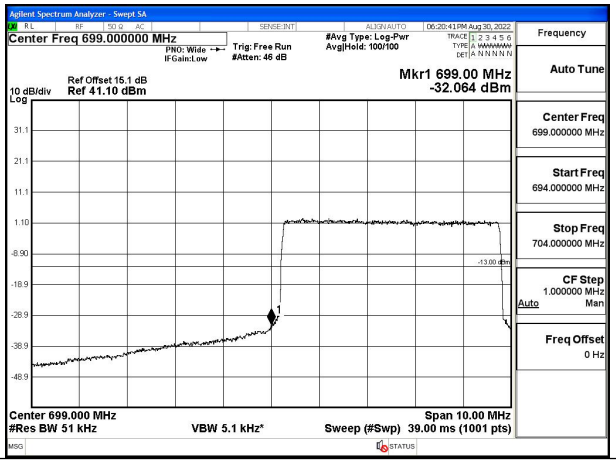

Fig.10

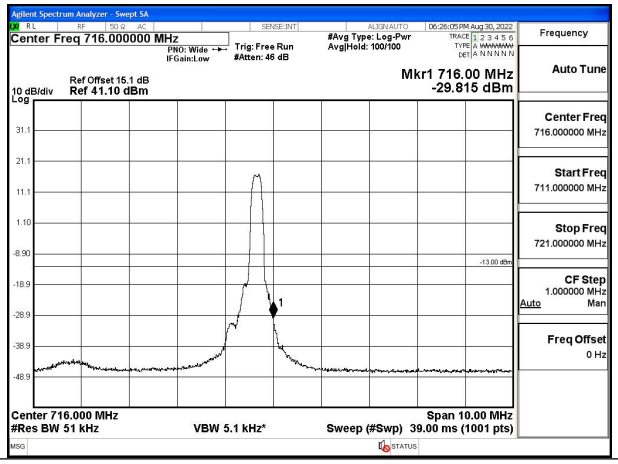

Fig.11

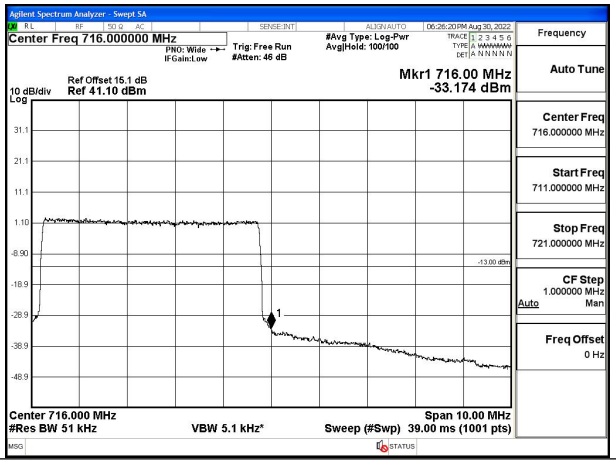

Fig.12

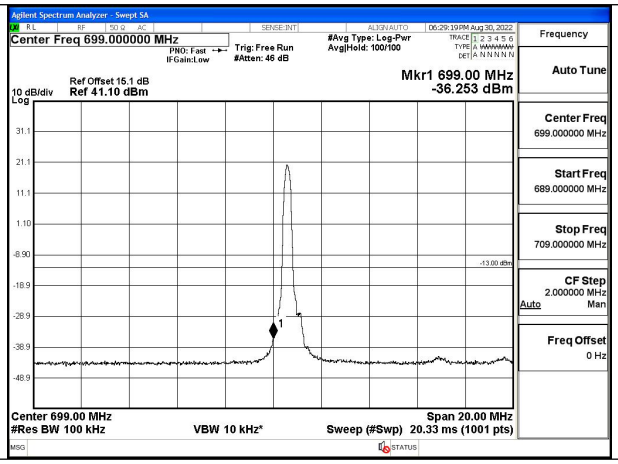

Fig.13

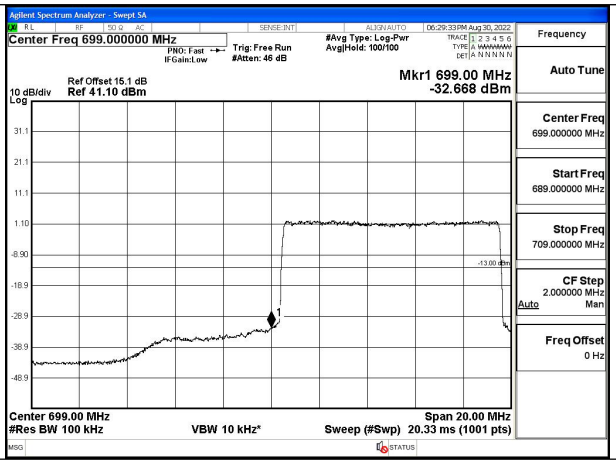

Fig.14

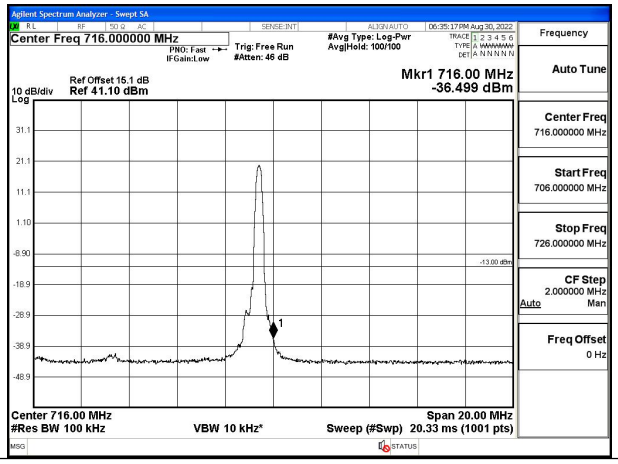

Fig.15

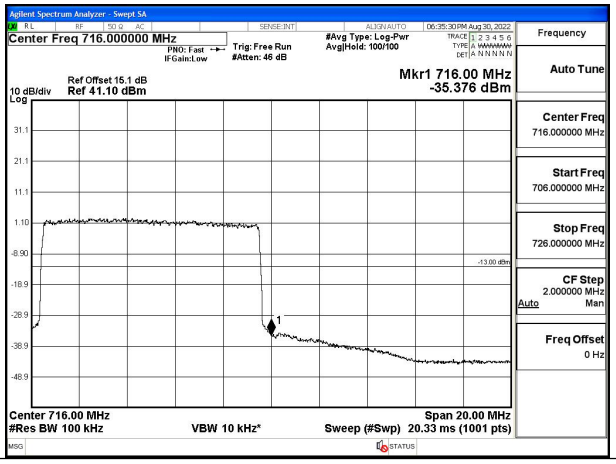

Fig.16

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 12 Low Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	-0.009	-0.002	-0.002	0.005
0	NV	0.015	0.006	0.002	0.005
+10	NV	0.015	0.002	0.002	0.004
+20	NV	0.015	0.002	-0.002	-0.004
+30	NV	0.028	0.002	0.004	0.006
+40	NV	0.015	-0.003	-0.002	0.005
+50	NV	0.014	-0.002	-0.002	0.004
+55	NV	-0.005	-0.004	0.003	0.003
+20	LV	0.019	0.004	0.003	-0.006
+20	HV	0.017	0.002	-0.002	0.006

Temperature(°C)	Voltage	Test Result (ppm) Band 12 High Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	0.015	0.001	0.004	0.005
0	NV	-0.022	0.005	0.008	-0.008
+10	NV	0.019	-0.003	0.010	-0.004
+20	NV	-0.025	-0.002	0.006	-0.007
+30	NV	0.028	-0.005	0.009	-0.007
+40	NV	-0.026	0.004	0.005	0.007
+50	NV	-0.023	0.000	-0.006	-0.008
+55	NV	-0.025	-0.005	-0.006	0.006
+20	LV	0.020	0.004	0.008	0.005
+20	HV	0.025	0.001	-0.005	0.006

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	699.7	23017	1.4	1	0	22.59	15.24	0.033
QPSK	699.7	23017	1.4	1	3	23.67	16.32	0.043
QPSK	699.7	23017	1.4	1	5	23.43	16.08	0.041
QPSK	699.7	23017	1.4	3	0	23.60	16.25	0.042
QPSK	699.7	23017	1.4	3	1	23.64	16.29	0.043
QPSK	699.7	23017	1.4	3	3	23.51	16.16	0.041
QPSK	699.7	23017	1.4	6	0	22.64	15.29	0.034
QPSK	707.5	23095	1.4	1	0	23.75	16.40	0.044
QPSK	707.5	23095	1.4	1	3	23.63	16.28	0.042
QPSK	707.5	23095	1.4	1	5	23.49	16.14	0.041
QPSK	707.5	23095	1.4	3	0	23.64	16.29	0.043
QPSK	707.5	23095	1.4	3	1	23.65	16.30	0.043
QPSK	707.5	23095	1.4	3	3	23.66	16.31	0.043
QPSK	707.5	23095	1.4	6	0	22.73	15.38	0.035
QPSK	715.3	23173	1.4	1	0	23.65	16.30	0.043
QPSK	715.3	23173	1.4	1	3	23.69	16.34	0.043
QPSK	715.3	23173	1.4	1	5	23.65	16.30	0.043
QPSK	715.3	23173	1.4	3	0	23.68	16.33	0.043
QPSK	715.3	23173	1.4	3	1	23.69	16.34	0.043
QPSK	715.3	23173	1.4	3	3	23.56	16.21	0.042
QPSK	715.3	23173	1.4	6	0	22.71	15.36	0.034

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	699.7	23017	1.4	1	0	23.25	15.90	0.039
16QAM	699.7	23017	1.4	1	3	23.26	15.91	0.039
16QAM	699.7	23017	1.4	1	5	23.19	15.84	0.038
16QAM	699.7	23017	1.4	3	0	22.68	15.33	0.034
16QAM	699.7	23017	1.4	3	1	22.85	15.50	0.035
16QAM	699.7	23017	1.4	3	3	22.62	15.27	0.034
16QAM	699.7	23017	1.4	6	0	21.64	14.29	0.027
16QAM	707.5	23095	1.4	1	0	23.37	16.02	0.040
16QAM	707.5	23095	1.4	1	3	22.94	15.59	0.036
16QAM	707.5	23095	1.4	1	5	22.80	15.45	0.035
16QAM	707.5	23095	1.4	3	0	22.93	15.58	0.036
16QAM	707.5	23095	1.4	3	1	22.96	15.61	0.036
16QAM	707.5	23095	1.4	3	3	22.81	15.46	0.035
16QAM	707.5	23095	1.4	6	0	21.72	14.37	0.027
16QAM	715.3	23173	1.4	1	0	23.23	15.88	0.039
16QAM	715.3	23173	1.4	1	3	22.87	15.52	0.036
16QAM	715.3	23173	1.4	1	5	22.90	15.55	0.036
16QAM	715.3	23173	1.4	3	0	22.80	15.45	0.035
16QAM	715.3	23173	1.4	3	1	22.74	15.39	0.035
16QAM	715.3	23173	1.4	3	3	22.72	15.37	0.034
16QAM	715.3	23173	1.4	6	0	21.86	14.51	0.028
64QAM	699.7	23017	1.4	1	0	22.58	15.23	0.033
64QAM	699.7	23017	1.4	1	3	22.86	15.51	0.036
64QAM	699.7	23017	1.4	1	5	22.68	15.33	0.034
64QAM	699.7	23017	1.4	3	0	23.03	15.68	0.037
64QAM	699.7	23017	1.4	3	1	22.90	15.55	0.036
64QAM	699.7	23017	1.4	3	3	23.06	15.71	0.037
64QAM	699.7	23017	1.4	6	0	21.64	14.29	0.027
64QAM	707.5	23095	1.4	1	0	23.19	15.84	0.038
64QAM	707.5	23095	1.4	1	3	22.63	15.28	0.034
64QAM	707.5	23095	1.4	1	5	23.27	15.92	0.039
64QAM	707.5	23095	1.4	3	0	22.64	15.29	0.034
64QAM	707.5	23095	1.4	3	1	22.98	15.63	0.037
64QAM	707.5	23095	1.4	3	3	22.41	15.06	0.032
64QAM	707.5	23095	1.4	6	0	22.04	14.69	0.029
64QAM	715.3	23173	1.4	1	0	22.71	15.36	0.034
64QAM	715.3	23173	1.4	1	3	22.67	15.32	0.034
64QAM	715.3	23173	1.4	1	5	23.06	15.71	0.037
64QAM	715.3	23173	1.4	3	0	22.72	15.37	0.034
64QAM	715.3	23173	1.4	3	1	22.89	15.54	0.036
64QAM	715.3	23173	1.4	3	3	22.96	15.61	0.036
64QAM	715.3	23173	1.4	6	0	21.60	14.25	0.027

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	700.5	23025	3	1	0	23.77	16.42	0.044
QPSK	700.5	23025	3	1	8	23.82	16.47	0.044
QPSK	700.5	23025	3	1	14	23.64	16.29	0.043
QPSK	700.5	23025	3	8	0	22.80	15.45	0.035
QPSK	700.5	23025	3	8	4	22.69	15.34	0.034
QPSK	700.5	23025	3	8	7	22.70	15.35	0.034
QPSK	700.5	23025	3	15	0	22.78	15.43	0.035
QPSK	707.5	23095	3	1	0	23.71	16.36	0.043
QPSK	707.5	23095	3	1	8	23.77	16.42	0.044
QPSK	707.5	23095	3	1	14	23.86	16.51	0.045
QPSK	707.5	23095	3	8	0	22.71	15.36	0.034
QPSK	707.5	23095	3	8	4	22.71	15.36	0.034
QPSK	707.5	23095	3	8	7	22.70	15.35	0.034
QPSK	707.5	23095	3	15	0	22.68	15.33	0.034
QPSK	714.5	23165	3	1	0	23.79	16.44	0.044
QPSK	714.5	23165	3	1	8	23.74	16.39	0.044
QPSK	714.5	23165	3	1	14	23.68	16.33	0.043
QPSK	714.5	23165	3	8	0	22.74	15.39	0.035
QPSK	714.5	23165	3	8	4	22.82	15.47	0.035
QPSK	714.5	23165	3	8	7	22.77	15.42	0.035
QPSK	714.5	23165	3	15	0	22.67	15.32	0.034

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	700.5	23025	3	1	0	23.26	15.91	0.039
16QAM	700.5	23025	3	1	8	23.06	15.71	0.037
16QAM	700.5	23025	3	1	14	22.49	15.14	0.033
16QAM	700.5	23025	3	8	0	21.69	14.34	0.027
16QAM	700.5	23025	3	8	4	21.81	14.46	0.028
16QAM	700.5	23025	3	8	7	21.41	14.06	0.025
16QAM	700.5	23025	3	15	0	21.76	14.41	0.028
16QAM	707.5	23095	3	1	0	22.76	15.41	0.035
16QAM	707.5	23095	3	1	8	23.06	15.71	0.037
16QAM	707.5	23095	3	1	14	23.21	15.86	0.039
16QAM	707.5	23095	3	8	0	21.67	14.32	0.027
16QAM	707.5	23095	3	8	4	21.89	14.54	0.028
16QAM	707.5	23095	3	8	7	21.99	14.64	0.029
16QAM	707.5	23095	3	15	0	21.69	14.34	0.027
16QAM	714.5	23165	3	1	0	22.81	15.46	0.035
16QAM	714.5	23165	3	1	8	22.76	15.41	0.035
16QAM	714.5	23165	3	1	14	22.94	15.59	0.036
16QAM	714.5	23165	3	8	0	21.71	14.36	0.027
16QAM	714.5	23165	3	8	4	21.97	14.62	0.029
16QAM	714.5	23165	3	8	7	21.74	14.39	0.027
16QAM	714.5	23165	3	15	0	21.88	14.53	0.028
64QAM	700.5	23025	3	1	0	22.58	15.23	0.033
64QAM	700.5	23025	3	1	8	23.65	16.30	0.043
64QAM	700.5	23025	3	1	14	23.05	15.70	0.037
64QAM	700.5	23025	3	8	0	21.73	14.38	0.027
64QAM	700.5	23025	3	8	4	21.60	14.25	0.027
64QAM	700.5	23025	3	8	7	21.74	14.39	0.027
64QAM	700.5	23025	3	15	0	21.82	14.47	0.028
64QAM	707.5	23095	3	1	0	22.48	15.13	0.033
64QAM	707.5	23095	3	1	8	23.77	16.42	0.044
64QAM	707.5	23095	3	1	14	23.04	15.69	0.037
64QAM	707.5	23095	3	8	0	21.72	14.37	0.027
64QAM	707.5	23095	3	8	4	21.85	14.50	0.028
64QAM	707.5	23095	3	8	7	21.73	14.38	0.027
64QAM	707.5	23095	3	15	0	21.66	14.31	0.027
64QAM	714.5	23165	3	1	0	22.86	15.51	0.036
64QAM	714.5	23165	3	1	8	23.47	16.12	0.041
64QAM	714.5	23165	3	1	14	22.90	15.55	0.036
64QAM	714.5	23165	3	8	0	21.70	14.35	0.027
64QAM	714.5	23165	3	8	4	21.90	14.55	0.029
64QAM	714.5	23165	3	8	7	21.72	14.37	0.027
64QAM	714.5	23165	3	15	0	21.70	14.35	0.027

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	701.5	23035	5	1	0	23.64	16.29	0.043
QPSK	701.5	23035	5	1	12	23.72	16.37	0.043
QPSK	701.5	23035	5	1	24	23.47	16.12	0.041
QPSK	701.5	23035	5	12	0	22.76	15.41	0.035
QPSK	701.5	23035	5	12	7	22.79	15.44	0.035
QPSK	701.5	23035	5	12	13	22.74	15.39	0.035
QPSK	701.5	23035	5	25	0	22.68	15.33	0.034
QPSK	707.5	23095	5	1	0	23.63	16.28	0.042
QPSK	707.5	23095	5	1	12	23.76	16.41	0.044
QPSK	707.5	23095	5	1	24	23.66	16.31	0.043
QPSK	707.5	23095	5	12	0	22.78	15.43	0.035
QPSK	707.5	23095	5	12	7	22.65	15.30	0.034
QPSK	707.5	23095	5	12	13	22.85	15.50	0.035
QPSK	707.5	23095	5	25	0	22.73	15.38	0.035
QPSK	713.5	23155	5	1	0	23.75	16.40	0.044
QPSK	713.5	23155	5	1	12	23.56	16.21	0.042
QPSK	713.5	23155	5	1	24	23.68	16.33	0.043
QPSK	713.5	23155	5	12	0	22.75	15.40	0.035
QPSK	713.5	23155	5	12	7	22.87	15.52	0.036
QPSK	713.5	23155	5	12	13	22.64	15.29	0.034
QPSK	713.5	23155	5	25	0	22.64	15.29	0.034

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	701.5	23035	5	1	0	22.96	15.61	0.036
16QAM	701.5	23035	5	1	12	23.08	15.73	0.037
16QAM	701.5	23035	5	1	24	22.76	15.41	0.035
16QAM	701.5	23035	5	12	0	21.72	14.37	0.027
16QAM	701.5	23035	5	12	7	21.76	14.41	0.028
16QAM	701.5	23035	5	12	13	21.73	14.38	0.027
16QAM	701.5	23035	5	25	0	21.81	14.46	0.028
16QAM	707.5	23095	5	1	0	22.92	15.57	0.036
16QAM	707.5	23095	5	1	12	23.26	15.91	0.039
16QAM	707.5	23095	5	1	24	23.01	15.66	0.037
16QAM	707.5	23095	5	12	0	21.72	14.37	0.027
16QAM	707.5	23095	5	12	7	21.73	14.38	0.027
16QAM	707.5	23095	5	12	13	21.74	14.39	0.027
16QAM	707.5	23095	5	25	0	21.74	14.39	0.027
16QAM	713.5	23155	5	1	0	23.18	15.83	0.038
16QAM	713.5	23155	5	1	12	23.27	15.92	0.039
16QAM	713.5	23155	5	1	24	22.87	15.52	0.036
16QAM	713.5	23155	5	12	0	21.78	14.43	0.028
16QAM	713.5	23155	5	12	7	21.96	14.61	0.029
16QAM	713.5	23155	5	12	13	21.73	14.38	0.027
16QAM	713.5	23155	5	25	0	21.76	14.41	0.028
64QAM	701.5	23035	5	1	0	23.17	15.82	0.038
64QAM	701.5	23035	5	1	12	23.52	16.17	0.041
64QAM	701.5	23035	5	1	24	22.87	15.52	0.036
64QAM	701.5	23035	5	12	0	21.85	14.50	0.028
64QAM	701.5	23035	5	12	7	21.59	14.24	0.027
64QAM	701.5	23035	5	12	13	21.69	14.34	0.027
64QAM	701.5	23035	5	25	0	21.65	14.30	0.027
64QAM	707.5	23095	5	1	0	22.77	15.42	0.035
64QAM	707.5	23095	5	1	12	23.97	16.62	0.046
64QAM	707.5	23095	5	1	24	23.61	16.26	0.042
64QAM	707.5	23095	5	12	0	21.80	14.45	0.028
64QAM	707.5	23095	5	12	7	21.87	14.52	0.028
64QAM	707.5	23095	5	12	13	21.61	14.26	0.027
64QAM	707.5	23095	5	25	0	21.63	14.28	0.027
64QAM	713.5	23155	5	1	0	22.58	15.23	0.033
64QAM	713.5	23155	5	1	12	23.52	16.17	0.041
64QAM	713.5	23155	5	1	24	23.49	16.14	0.041
64QAM	713.5	23155	5	12	0	21.86	14.51	0.028
64QAM	713.5	23155	5	12	7	21.74	14.39	0.027
64QAM	713.5	23155	5	12	13	21.73	14.38	0.027
64QAM	713.5	23155	5	25	0	21.73	14.38	0.027

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	704	23060	10	1	0	23.73	16.38	0.043
QPSK	704	23060	10	1	25	23.72	16.37	0.043
QPSK	704	23060	10	1	49	23.59	16.24	0.042
QPSK	704	23060	10	25	0	22.77	15.42	0.035
QPSK	704	23060	10	25	12	22.75	15.40	0.035
QPSK	704	23060	10	25	25	22.84	15.49	0.035
QPSK	704	23060	10	50	0	22.75	15.40	0.035
QPSK	707.5	23095	10	1	0	23.62	16.27	0.042
QPSK	707.5	23095	10	1	25	23.69	16.34	0.043
QPSK	707.5	23095	10	1	49	23.75	16.40	0.044
QPSK	707.5	23095	10	25	0	22.77	15.42	0.035
QPSK	707.5	23095	10	25	12	22.78	15.43	0.035
QPSK	707.5	23095	10	25	25	22.84	15.49	0.035
QPSK	707.5	23095	10	50	0	22.71	15.36	0.034
QPSK	711	23130	10	1	0	23.78	16.43	0.044
QPSK	711	23130	10	1	25	23.92	16.57	0.045
QPSK	711	23130	10	1	49	23.62	16.27	0.042
QPSK	711	23130	10	25	0	22.83	15.48	0.035
QPSK	711	23130	10	25	12	22.85	15.50	0.035
QPSK	711	23130	10	25	25	22.77	15.42	0.035
QPSK	711	23130	10	50	0	22.79	15.44	0.035

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	704	23060	10	1	0	23.04	15.69	0.037
16QAM	704	23060	10	1	25	22.97	15.62	0.036
16QAM	704	23060	10	1	49	23.00	15.65	0.037
16QAM	704	23060	10	25	0	21.86	14.51	0.028
16QAM	704	23060	10	25	12	21.72	14.37	0.027
16QAM	704	23060	10	25	25	21.94	14.59	0.029
16QAM	704	23060	10	50	0	21.86	14.51	0.028
16QAM	707.5	23095	10	1	0	23.02	15.67	0.037
16QAM	707.5	23095	10	1	25	22.79	15.44	0.035
16QAM	707.5	23095	10	1	49	22.91	15.56	0.036
16QAM	707.5	23095	10	25	0	21.83	14.48	0.028
16QAM	707.5	23095	10	25	12	21.76	14.41	0.028
16QAM	707.5	23095	10	25	25	21.86	14.51	0.028
16QAM	707.5	23095	10	50	0	21.89	14.54	0.028
16QAM	711	23130	10	1	0	23.08	15.73	0.037
16QAM	711	23130	10	1	25	22.71	15.36	0.034
16QAM	711	23130	10	1	49	23.13	15.78	0.038
16QAM	711	23130	10	25	0	21.67	14.32	0.027
16QAM	711	23130	10	25	12	21.89	14.54	0.028
16QAM	711	23130	10	25	25	21.84	14.49	0.028
16QAM	711	23130	10	50	0	22.00	14.65	0.029
64QAM	704	23060	10	1	0	22.70	15.35	0.034
64QAM	704	23060	10	1	25	22.81	15.46	0.035
64QAM	704	23060	10	1	49	23.54	16.19	0.042
64QAM	704	23060	10	25	0	21.62	14.27	0.027
64QAM	704	23060	10	25	12	21.75	14.40	0.028
64QAM	704	23060	10	25	25	21.56	14.21	0.026
64QAM	704	23060	10	50	0	21.88	14.53	0.028
64QAM	707.5	23095	10	1	0	22.93	15.58	0.036
64QAM	707.5	23095	10	1	25	22.59	15.24	0.033
64QAM	707.5	23095	10	1	49	22.89	15.54	0.036
64QAM	707.5	23095	10	25	0	21.72	14.37	0.027
64QAM	707.5	23095	10	25	12	21.90	14.55	0.029
64QAM	707.5	23095	10	25	25	21.79	14.44	0.028
64QAM	707.5	23095	10	50	0	21.80	14.45	0.028
64QAM	711	23130	10	1	0	23.13	15.78	0.038
64QAM	711	23130	10	1	25	23.20	15.85	0.038
64QAM	711	23130	10	1	49	22.16	14.81	0.030
64QAM	711	23130	10	25	0	21.86	14.51	0.028
64QAM	711	23130	10	25	12	21.74	14.39	0.027
64QAM	711	23130	10	25	25	21.80	14.45	0.028
64QAM	711	23130	10	50	0	21.91	14.56	0.029