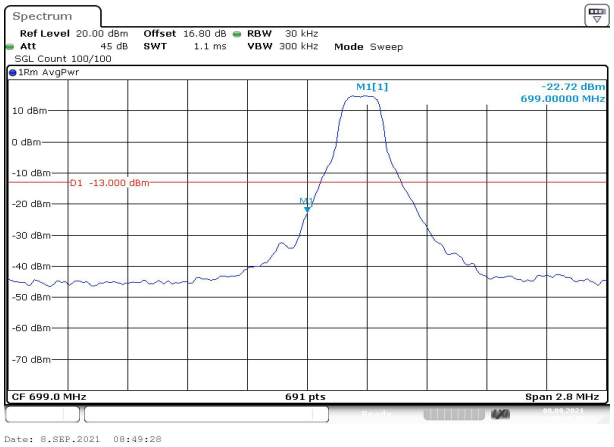

Fig.1

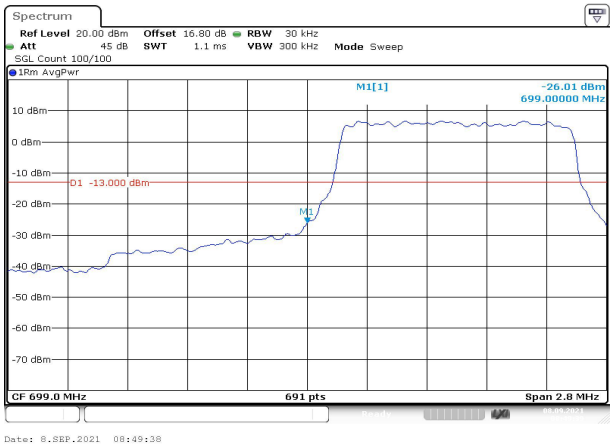

Fig.2

Fig.3

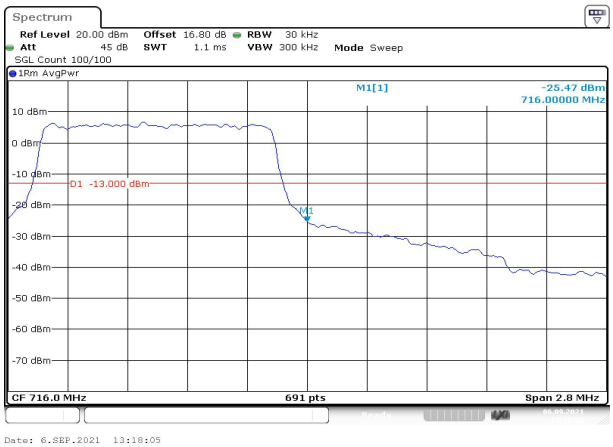

Fig.4

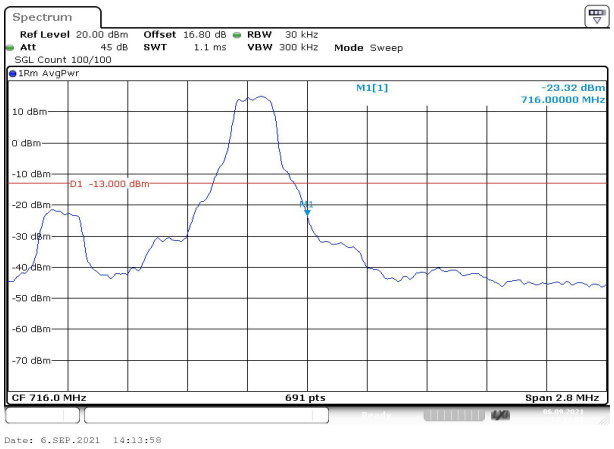

Fig.5

Fig.6

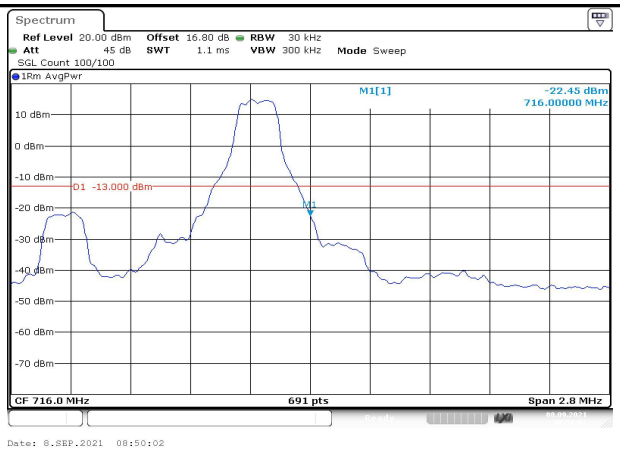

Fig.7

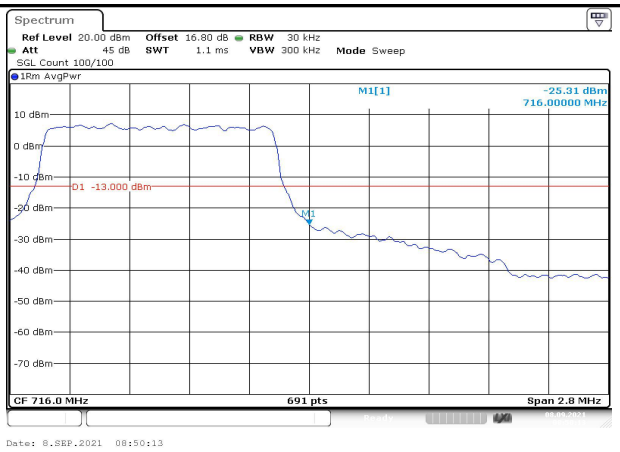

Fig.8

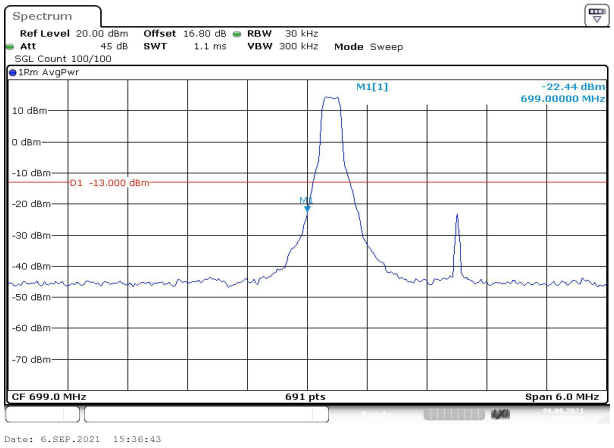

Fig.9

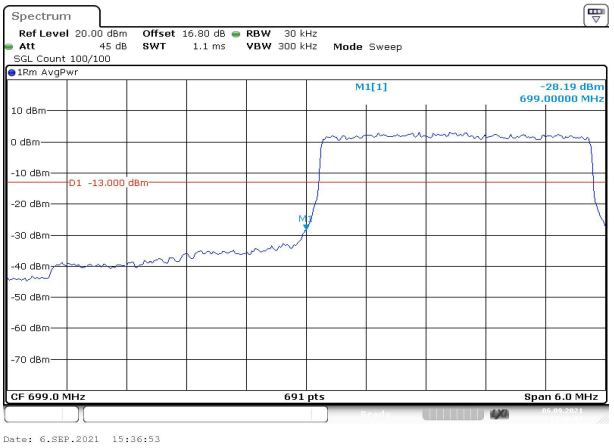

Fig.10

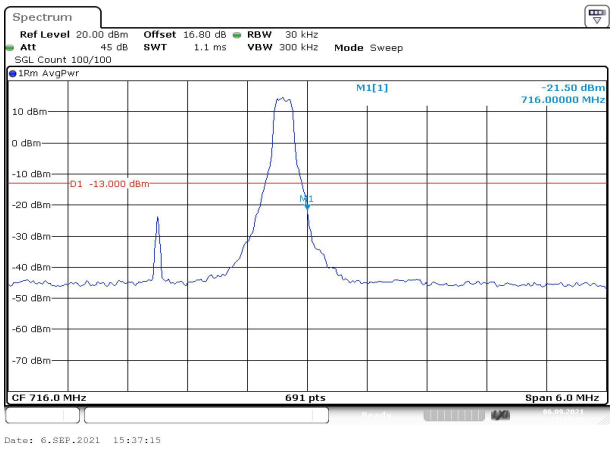

Fig.11

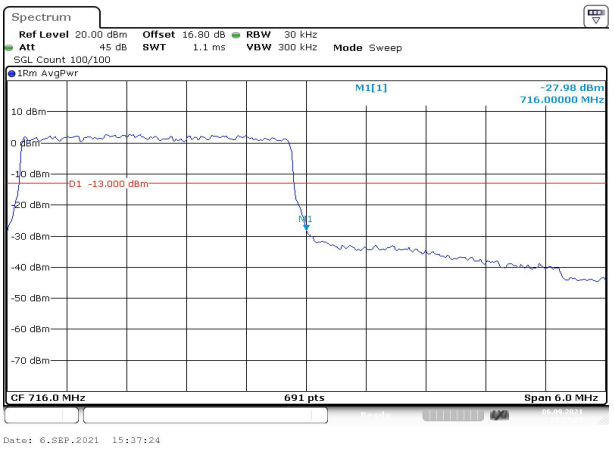

Fig.12

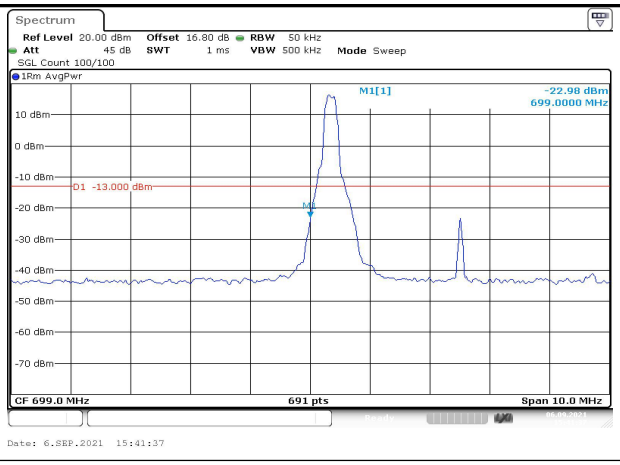

Fig.13

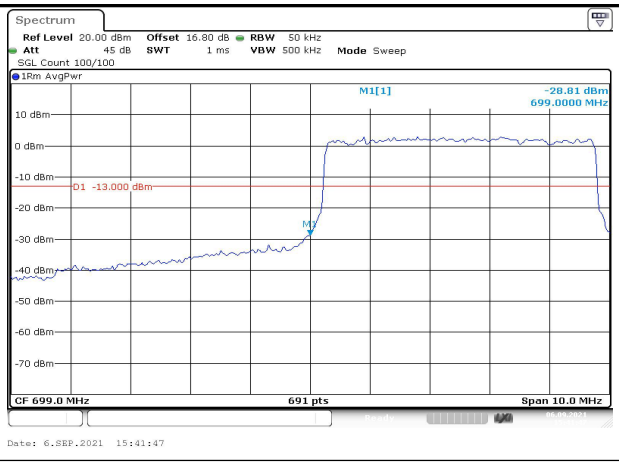

Fig.14

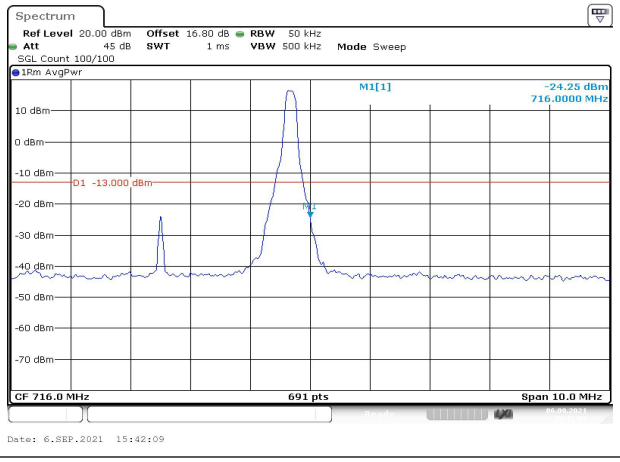

Fig.15

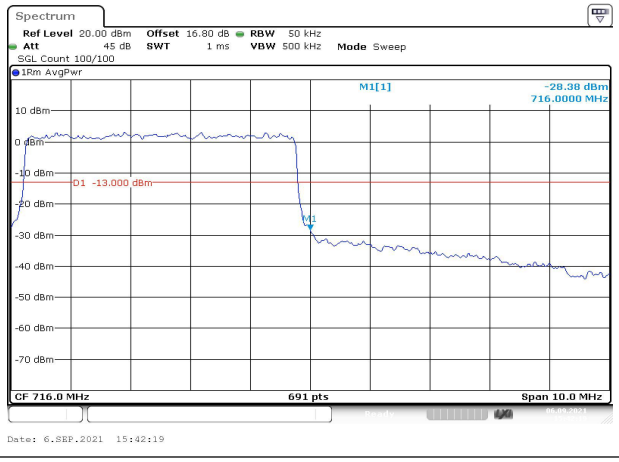

Fig.16

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band12 Low Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	-0.001	-0.005	0.001	0.001	---	---
-20	NV	-0.003	0.002	0.004	0.003	---	---
-10	NV	0.001	0.004	0.002	0.001	---	---
0	NV	0.001	-0.001	0.000	0.003	---	---
+10	NV	0.000	0.000	0.003	0.002	---	---
+20	NV	-0.003	0.001	-0.001	-0.001	---	---
+30	NV	-0.002	-0.002	0.000	0.001	---	---
+40	NV	-0.002	0.000	-0.002	0.002	---	---
+50	NV	-0.001	-0.002	0.001	-0.001	---	---
+20	LV	-0.004	-0.003	0.001	0.001	---	---
+20	HV	-0.001	0.001	0.000	0.001	---	---

Temperature(°C)	Voltage	Test Result (ppm) Band12 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	-0.003	-0.001	0.001	-0.001	---	---
-20	NV	-0.001	-0.001	0.001	-0.001	---	---
-10	NV	0.001	-0.001	0.001	-0.002	---	---
0	NV	-0.001	-0.002	-0.001	-0.002	---	---
+10	NV	0.000	0.000	-0.001	-0.003	---	---
+20	NV	-0.002	-0.001	-0.003	-0.002	---	---
+30	NV	-0.003	0.000	-0.001	-0.004	---	---
+40	NV	-0.002	-0.003	-0.001	-0.002	---	---
+50	NV	-0.001	0.002	-0.001	-0.003	---	---
+20	LV	-0.004	-0.002	-0.003	-0.003	---	---
+20	HV	-0.003	-0.001	-0.002	-0.003	---	---

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	22.99	21.34	0.136
				1	3	23.15	21.50	0.141
				1	5	23.09	21.44	0.139
				3	0	23.04	21.39	0.138
				3	1	23.19	21.54	0.143
				3	3	23.00	21.35	0.136
				6	0	22.06	20.41	0.110
	707.5	23095		1	0	23.05	21.40	0.138
				1	3	23.08	21.43	0.139
				1	5	22.93	21.28	0.134
				3	0	23.17	21.52	0.142
				3	1	23.08	21.43	0.139
				3	3	23.04	21.39	0.138
				6	0	22.05	20.40	0.110
	715.3	23173		1	0	22.74	21.09	0.129
				1	3	22.90	21.25	0.133
				1	5	22.90	21.25	0.133
				3	0	22.94	21.29	0.135
				3	1	22.96	21.31	0.135
				3	3	23.11	21.46	0.140
				6	0	22.08	20.43	0.110
16QAM	699.7	23017		1	0	22.41	20.76	0.119
				1	3	22.44	20.79	0.120
				1	5	22.52	20.87	0.122
				3	0	21.84	20.19	0.104
				3	1	22.16	20.51	0.112
				3	3	21.88	20.23	0.105
				6	0	21.22	19.57	0.091
	707.5	23095		1	0	21.83	20.18	0.104
				1	3	21.92	20.27	0.106
				1	5	21.91	20.26	0.106
				3	0	22.22	20.57	0.114
				3	1	22.22	20.57	0.114
				3	3	22.24	20.59	0.115
				6	0	21.30	19.65	0.092
	715.3	23173		1	0	22.34	20.69	0.117
				1	3	22.63	20.98	0.125
				1	5	22.55	20.90	0.123
				3	0	21.80	20.15	0.104
				3	1	21.77	20.12	0.103
				3	3	21.66	20.01	0.100
				6	0	21.22	19.57	0.091

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	699.7	23017	1.4	1	0	21.94	20.29	0.107
				1	3	22.54	20.89	0.123
				1	5	22.49	20.84	0.121
				3	0	21.78	20.13	0.103
				3	1	21.79	20.14	0.103
				3	3	21.68	20.03	0.101
				6	0	21.06	19.41	0.087
	707.5	23095		1	0	22.01	20.36	0.109
				1	3	22.25	20.60	0.115
				1	5	22.15	20.50	0.112
				3	0	22.13	20.48	0.112
				3	1	22.02	20.37	0.109
				3	3	21.85	20.20	0.105
				6	0	20.97	19.32	0.086
	715.3	23173		1	0	22.17	20.52	0.113
				1	3	22.52	20.87	0.122
				1	5	22.24	20.59	0.115
				3	0	21.72	20.07	0.102
				3	1	21.81	20.16	0.104
				3	3	21.57	19.92	0.098
				6	0	20.76	19.11	0.081

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	23.20	21.55	0.143
				1	8	23.27	21.62	0.145
				1	14	23.32	21.67	0.147
				8	0	22.23	20.58	0.114
				8	4	22.17	20.52	0.113
				8	7	22.09	20.44	0.111
				15	0	22.20	20.55	0.114
	707.5	23095		1	0	22.80	21.15	0.130
				1	8	22.70	21.05	0.127
				1	14	22.62	20.97	0.125
				8	0	21.55	19.90	0.098
				8	4	21.58	19.93	0.098
				8	7	21.54	19.89	0.097
				15	0	21.46	19.81	0.096
	714.5	23165		1	0	22.75	21.10	0.129
				1	8	22.63	20.98	0.125
				1	14	22.75	21.10	0.129
				8	0	21.58	19.93	0.098
				8	4	21.52	19.87	0.097
				8	7	21.54	19.89	0.097
				15	0	21.52	19.87	0.097
16QAM	700.5	23025		1	0	22.49	20.84	0.121
				1	8	22.60	20.95	0.124
				1	14	22.62	20.97	0.125
				8	0	21.47	19.82	0.096
				8	4	21.43	19.78	0.095
				8	7	21.29	19.64	0.092
				15	0	21.02	19.37	0.086
	707.5	23095		1	0	21.89	20.24	0.106
				1	8	21.99	20.34	0.108
				1	14	21.65	20.00	0.100
				8	0	20.47	18.82	0.076
				8	4	20.33	18.68	0.074
				8	7	20.32	18.67	0.074
				15	0	20.32	18.67	0.074
	714.5	23165		1	0	21.42	19.77	0.095
				1	8	21.25	19.60	0.091
				1	14	21.28	19.63	0.092
				8	0	20.35	18.70	0.074
				8	4	20.30	18.65	0.073
				8	7	20.19	18.54	0.071
				15	0	20.46	18.81	0.076

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	700.5	23025	3	1	0	21.53	19.88	0.097
				1	8	21.40	19.75	0.094
				1	14	21.35	19.70	0.093
				8	0	20.89	19.24	0.084
				8	4	21.03	19.38	0.087
				8	7	20.97	19.32	0.086
				15	0	20.81	19.16	0.082
	707.5	23095		1	0	21.72	20.07	0.102
				1	8	22.26	20.61	0.115
				1	14	21.90	20.25	0.106
				8	0	21.02	19.37	0.086
				8	4	20.98	19.33	0.086
				8	7	20.89	19.24	0.084
				15	0	20.89	19.24	0.084
	714.5	23165		1	0	21.51	19.86	0.097
				1	8	22.50	20.85	0.122
				1	14	22.40	20.75	0.119
				8	0	20.96	19.31	0.085
				8	4	21.17	19.52	0.090
				8	7	21.16	19.51	0.089
				15	0	20.70	19.05	0.080

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	22.58	20.93	0.124
				1	12	22.70	21.05	0.127
				1	24	22.45	20.80	0.120
				12	0	21.68	20.03	0.101
				12	7	21.74	20.09	0.102
				12	13	21.53	19.88	0.097
				25	0	21.56	19.91	0.098
	707.5	23095		1	0	23.08	21.43	0.139
				1	12	23.07	21.42	0.139
				1	24	22.61	20.96	0.125
				12	0	21.88	20.23	0.105
				12	7	21.90	20.25	0.106
				12	13	21.81	20.16	0.104
				25	0	21.72	20.07	0.102
	713.5	23155		1	0	22.79	21.14	0.130
				1	12	22.65	21.00	0.126
				1	24	22.56	20.91	0.123
				12	0	21.97	20.32	0.108
				12	7	21.93	20.28	0.107
				12	13	21.82	20.17	0.104
				25	0	21.97	20.32	0.108
16QAM	701.5	23035		1	0	21.39	19.74	0.094
				1	12	21.30	19.65	0.092
				1	24	21.16	19.51	0.089
				12	0	20.54	18.89	0.077
				12	7	20.57	18.92	0.078
				12	13	20.63	18.98	0.079
				25	0	20.57	18.92	0.078
	707.5	23095		1	0	21.66	20.01	0.100
				1	12	21.98	20.33	0.108
				1	24	21.47	19.82	0.096
				12	0	20.79	19.14	0.082
				12	7	20.75	19.10	0.081
				12	13	20.69	19.04	0.080
				25	0	20.84	19.19	0.083
	713.5	23155		1	0	21.93	20.28	0.107
				1	12	22.35	20.70	0.117
				1	24	21.80	20.15	0.104
				12	0	21.00	19.35	0.086
				12	7	21.01	19.36	0.086
				12	13	20.78	19.13	0.082
				25	0	20.89	19.24	0.084

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	701.5	23035	5	1	0	21.01	19.36	0.086
				1	12	22.17	20.52	0.113
				1	24	21.94	20.29	0.107
				12	0	20.61	18.96	0.079
				12	7	20.63	18.98	0.079
				12	13	20.52	18.87	0.077
				25	0	20.59	18.94	0.078
	707.5	23095		1	0	21.71	20.06	0.101
				1	12	22.09	20.44	0.111
				1	24	21.73	20.08	0.102
				12	0	20.72	19.07	0.081
				12	7	20.76	19.11	0.081
				12	13	20.68	19.03	0.080
				25	0	20.81	19.16	0.082
	713.5	23155		1	0	22.36	20.71	0.118
				1	12	22.28	20.63	0.116
				1	24	21.99	20.34	0.108
				12	0	20.91	19.26	0.084
				12	7	20.73	19.08	0.081
				12	13	20.86	19.21	0.083
				25	0	21.02	19.37	0.086

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	22.93	21.28	0.134
				1	25	23.24	21.59	0.144
				1	49	23.23	21.58	0.144
				25	0	21.93	20.28	0.107
				25	12	22.12	20.47	0.111
				25	25	22.04	20.39	0.109
				50	0	22.05	20.40	0.110
	707.5	23095		1	0	22.79	21.14	0.130
				1	25	22.87	21.22	0.132
				1	49	22.59	20.94	0.124
				25	0	21.67	20.02	0.100
				25	12	21.78	20.13	0.103
				25	25	21.68	20.03	0.101
				50	0	21.71	20.06	0.101
	711	23130		1	0	23.46	21.81	0.152
				1	25	23.36	21.71	0.148
				1	49	23.08	21.43	0.139
				25	0	22.23	20.58	0.114
				25	12	22.16	20.51	0.112
				25	25	21.97	20.32	0.108
				50	0	22.02	20.37	0.109
16QAM	704	23060		1	0	22.05	20.40	0.110
				1	25	22.28	20.63	0.116
				1	49	22.06	20.41	0.110
				25	0	21.05	19.40	0.087
				25	12	20.99	19.34	0.086
				25	25	20.86	19.21	0.083
				50	0	20.79	19.14	0.082
	707.5	23095		1	0	22.16	20.51	0.112
				1	25	22.18	20.53	0.113
				1	49	21.85	20.20	0.105
				25	0	20.60	18.95	0.079
				25	12	20.85	19.20	0.083
				25	25	20.70	19.05	0.080
				50	0	20.54	18.89	0.077
	711	23130		1	0	22.19	20.54	0.113
				1	25	22.17	20.52	0.113
				1	49	21.72	20.07	0.102
				25	0	21.02	19.37	0.086
				25	12	20.97	19.32	0.086
				25	25	20.89	19.24	0.084
				50	0	20.80	19.15	0.082

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	704	23060	10	1	0	21.93	20.28	0.107
				1	25	22.01	20.36	0.109
				1	49	21.87	20.22	0.105
				25	0	21.00	19.35	0.086
				25	12	21.21	19.56	0.090
				25	25	20.97	19.32	0.086
				50	0	20.99	19.34	0.086
	707.5	23095		1	0	21.76	20.11	0.103
				1	25	22.15	20.50	0.112
				1	49	21.42	19.77	0.095
				25	0	20.93	19.28	0.085
				25	12	21.02	19.37	0.086
				25	25	21.08	19.43	0.088
				50	0	20.80	19.15	0.082
	711	23130		1	0	21.91	20.26	0.106
				1	25	22.01	20.36	0.109
				1	49	21.99	20.34	0.108
				25	0	21.12	19.47	0.089
				25	12	21.08	19.43	0.088
				25	25	21.11	19.46	0.088
				50	0	21.09	19.44	0.088