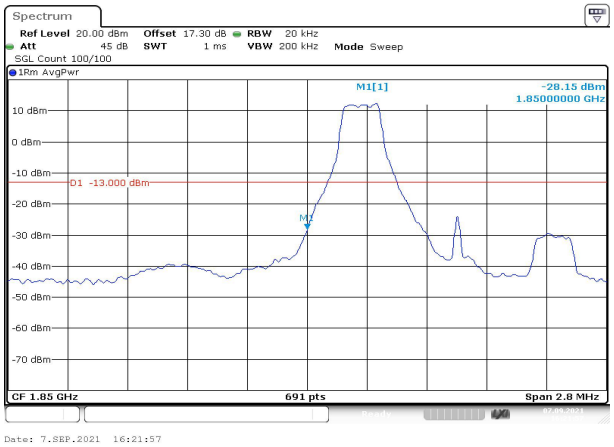

Fig.1

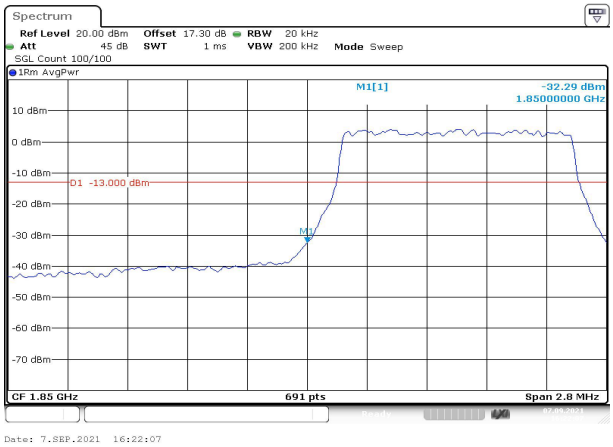

Fig.2

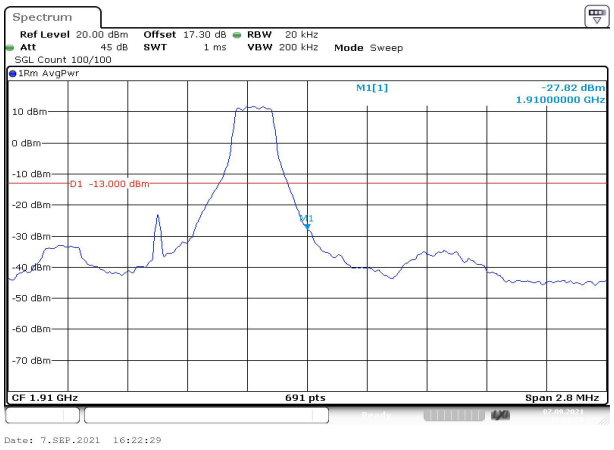

Fig.3

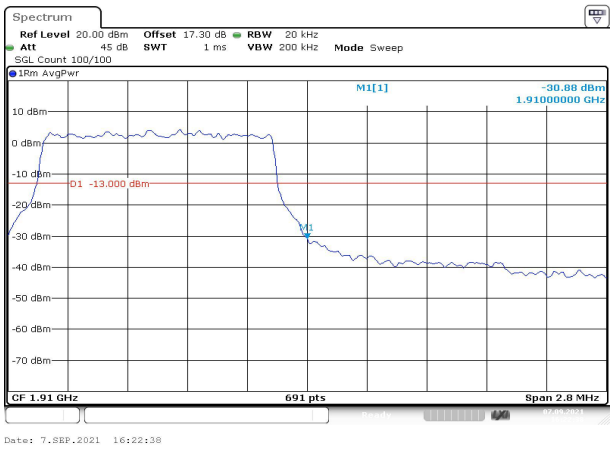

Fig.4

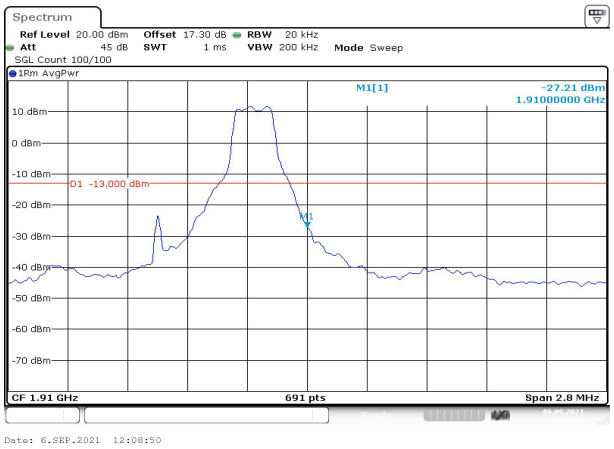

Fig.5

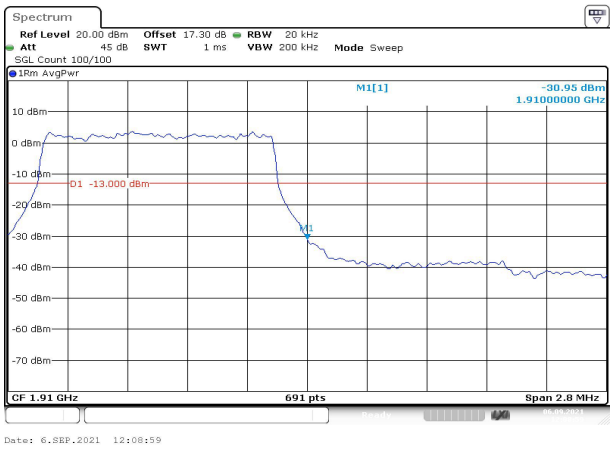

Fig.6

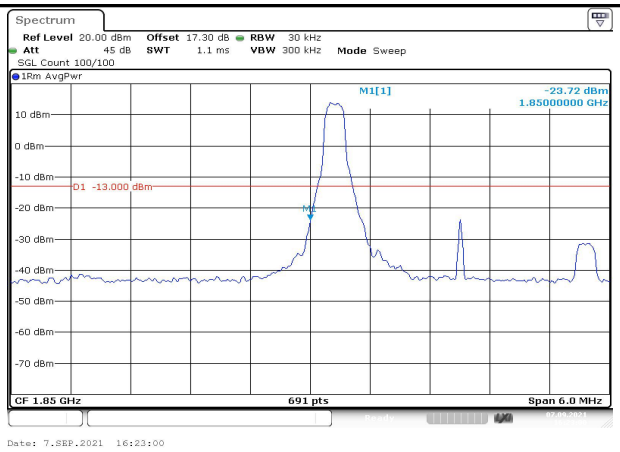

Fig.7

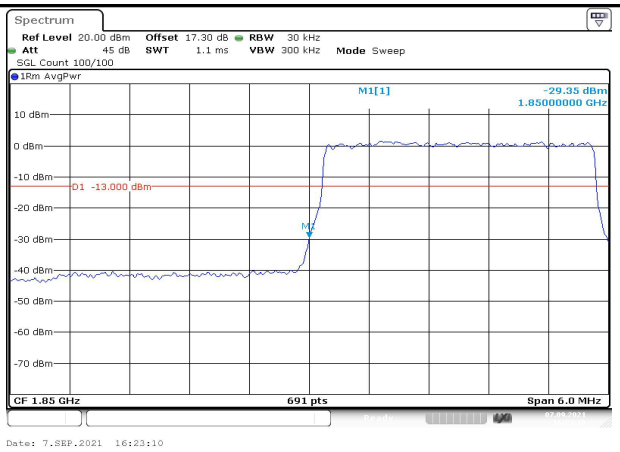

Fig.8

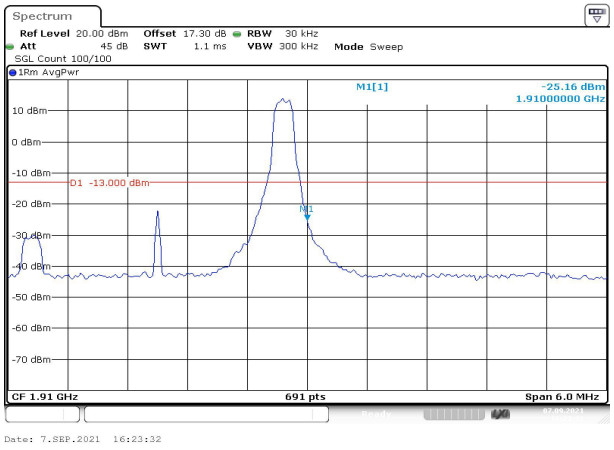

Fig.9

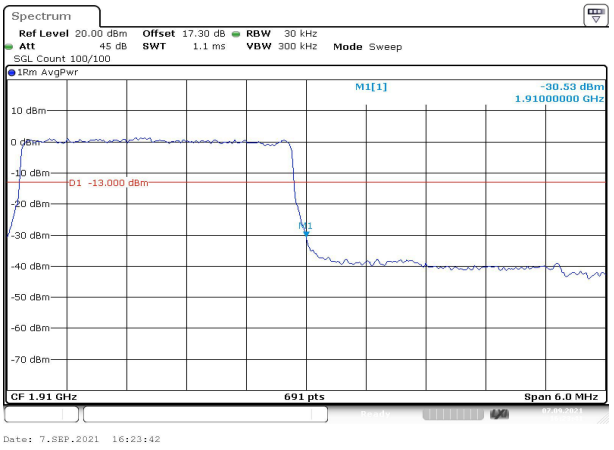

Fig.10

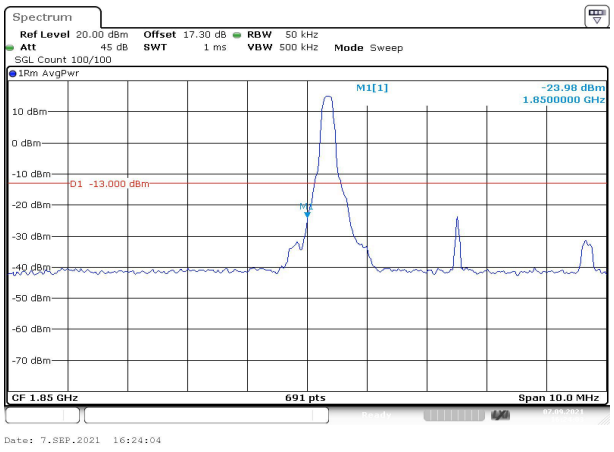

Fig.11

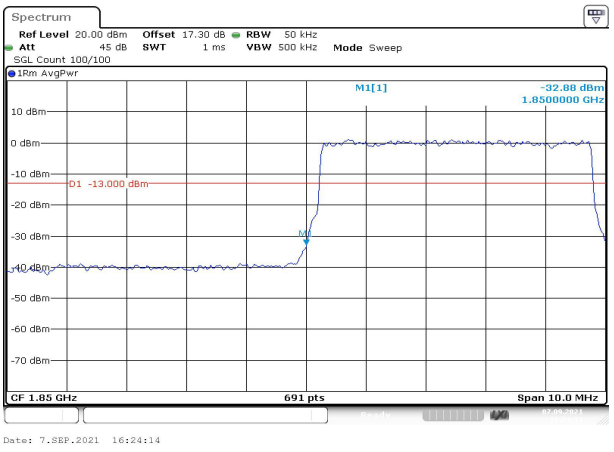

Fig.12

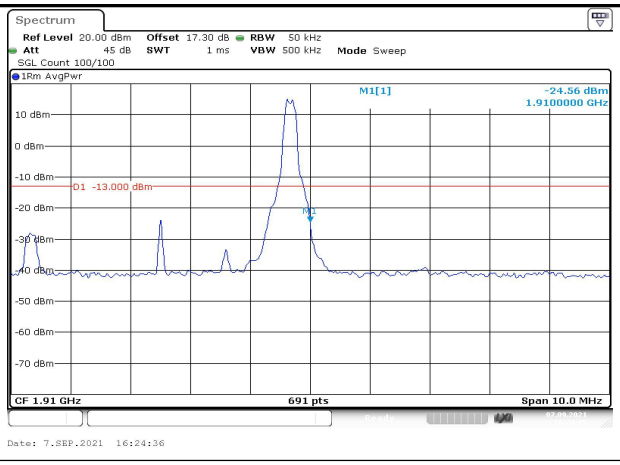

Fig.13

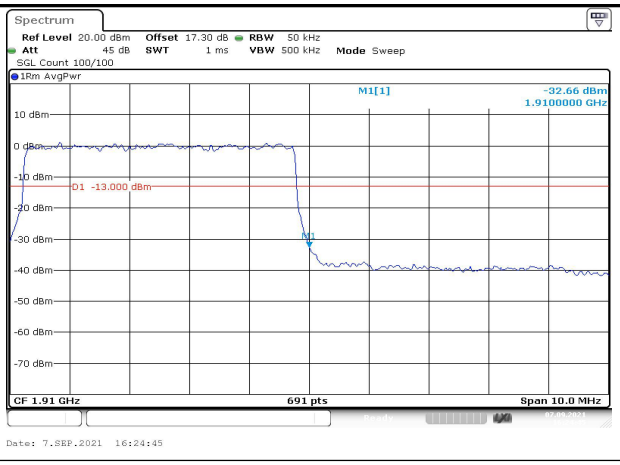

Fig.14

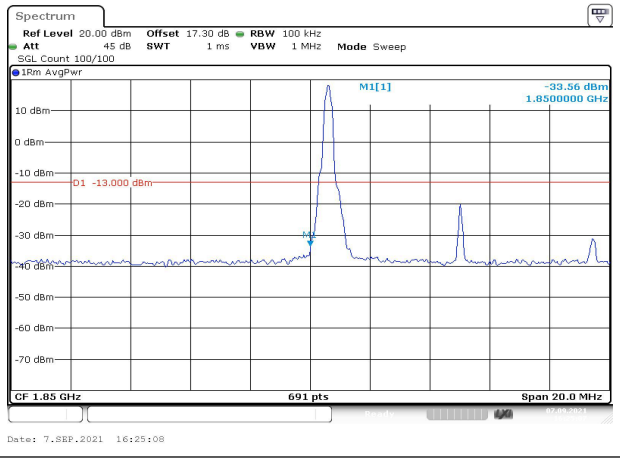

Fig.15

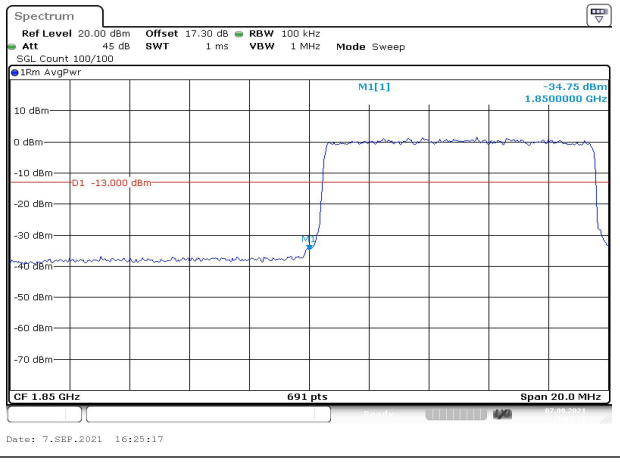

Fig.16

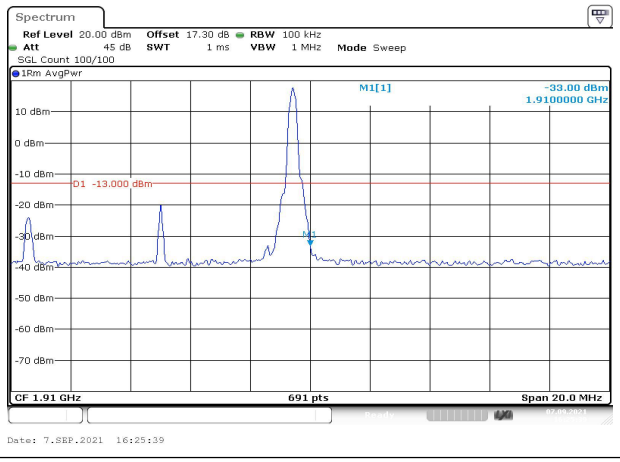

Fig.17

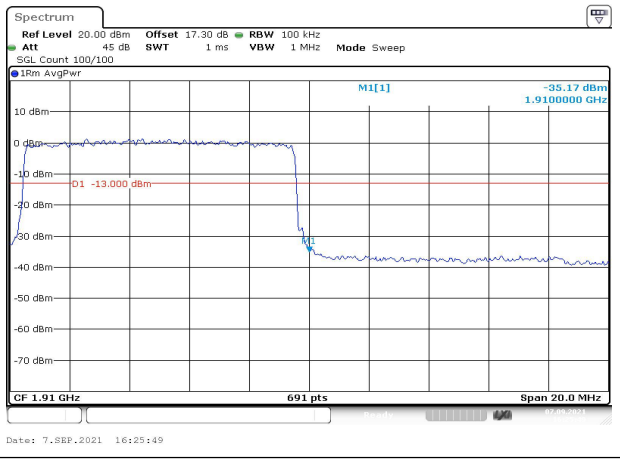

Fig.18

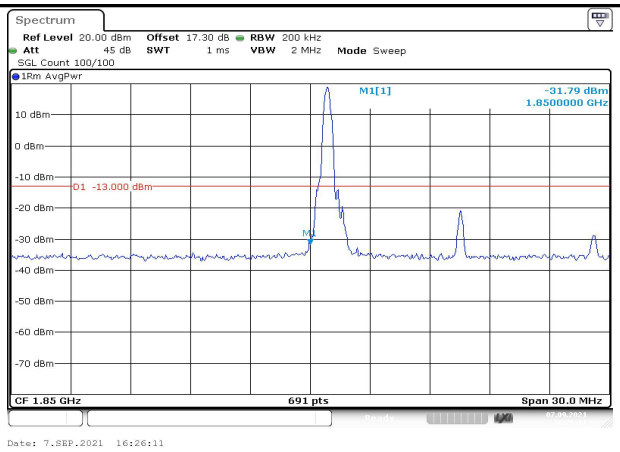

Fig.19

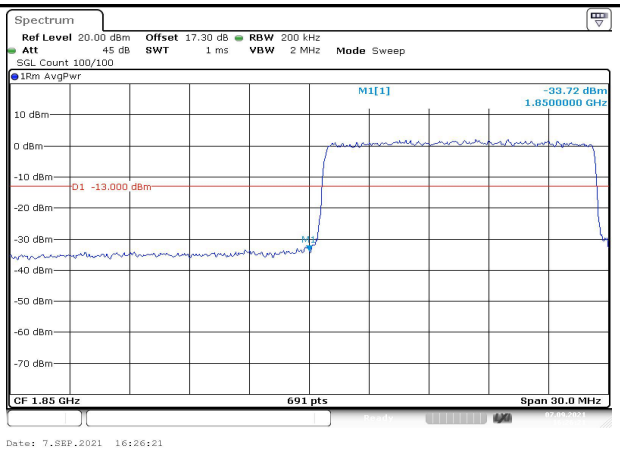

Fig.20

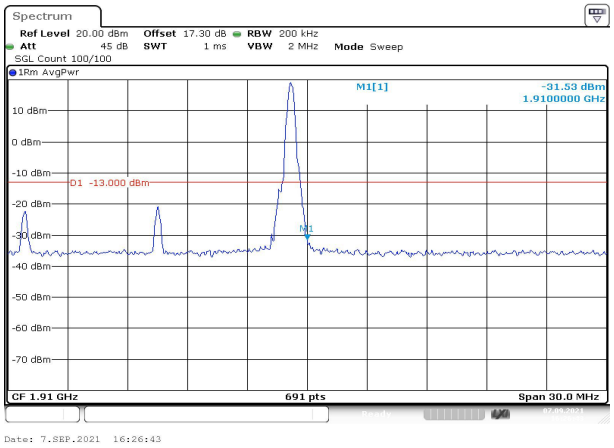

Fig.21

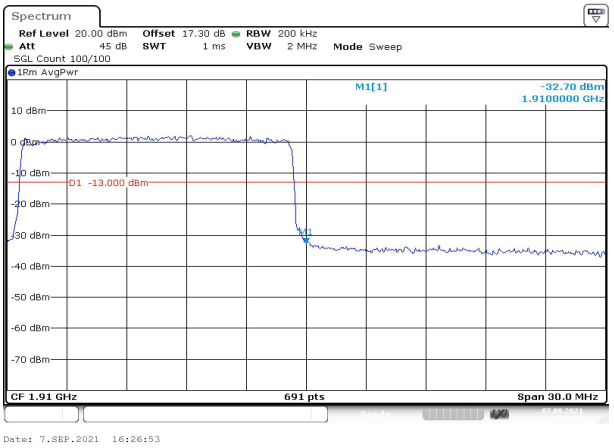

Fig.22

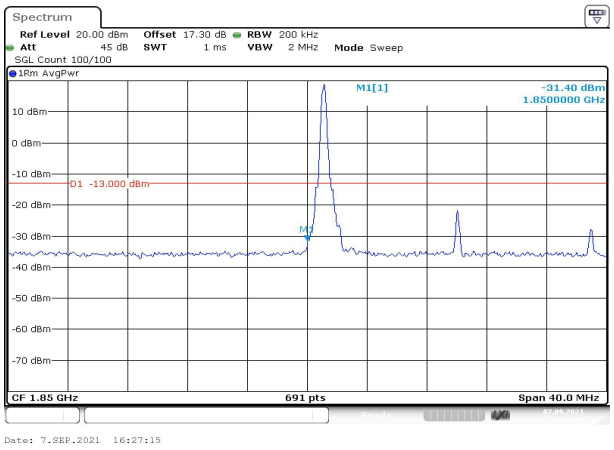

Fig.23

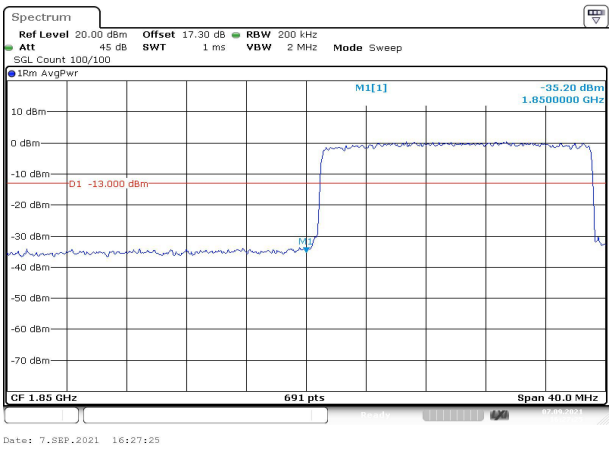

Fig.24

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band2 Low Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	-0.001	-0.001	-0.001	-0.001	-0.001	0.001
-20	NV	0.000	0.000	0.000	-0.539	-0.001	0.001
-10	NV	-0.001	0.000	0.000	-0.001	-0.001	0.001
0	NV	0.001	0.000	0.000	0.000	-0.001	0.001
+10	NV	-0.001	-0.001	-0.001	-0.001	-0.002	0.000
+20	NV	-0.002	-0.001	-0.002	-0.002	-0.002	0.000
+30	NV	-0.001	-0.001	-0.001	-0.002	-0.001	0.001
+40	NV	-0.001	-0.001	0.000	-0.002	-0.002	0.000
+50	NV	-0.001	-0.001	-0.001	-0.001	-0.002	0.000
+20	LV	0.000	-0.002	-0.001	-0.001	0.001	0.000
+20	HV	-0.002	-0.001	-0.001	-0.001	-0.001	0.000

Temperature(°C)	Voltage	Test Result (ppm) Band2 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-30	NV	0.000	0.000	0.000	0.001	-0.003	-0.002
-20	NV	-0.001	0.000	0.000	0.002	-0.002	-0.001
-10	NV	0.000	0.001	0.000	0.000	-0.002	-0.002
0	NV	0.000	0.001	0.000	0.001	-0.001	-0.002
+10	NV	0.000	0.000	0.001	0.000	-0.003	-0.001
+20	NV	-0.001	-0.003	0.001	-0.001	-0.002	-0.001
+30	NV	0.000	0.000	0.000	0.000	-0.001	-0.001
+40	NV	0.000	0.000	0.000	0.001	-0.004	-0.001
+50	NV	0.000	0.000	-0.001	-0.001	-0.002	-0.001
+20	LV	-0.001	0.001	0.001	0.001	-0.002	-0.001
+20	HV	-0.001	0.001	0.001	0.002	-0.001	-0.002

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	1850.7	18607	1.4	1	0	21.61	21.61	0.145
				1	3	21.60	21.60	0.145
				1	5	21.40	21.40	0.138
				3	0	21.59	21.59	0.144
				3	1	21.58	21.58	0.144
				3	3	21.30	21.30	0.135
				6	0	20.39	20.39	0.109
	1880	18900		1	0	21.32	21.32	0.136
				1	3	21.38	21.38	0.137
				1	5	21.18	21.18	0.131
				3	0	21.22	21.22	0.132
				3	1	21.23	21.23	0.133
				3	3	21.07	21.07	0.128
				6	0	20.18	20.18	0.104
	1909.3	19193		1	0	21.27	21.27	0.134
				1	3	21.27	21.27	0.134
				1	5	21.15	21.15	0.130
				3	0	21.00	21.00	0.126
				3	1	21.11	21.11	0.129
				3	3	21.13	21.13	0.130
				6	0	20.11	20.11	0.103
16QAM	1850.7	18607		1	0	20.00	20.00	0.100
				1	3	19.97	19.97	0.099
				1	5	20.28	20.28	0.107
				3	0	20.19	20.19	0.104
				3	1	20.13	20.13	0.103
				3	3	20.10	20.10	0.102
				6	0	19.36	19.36	0.086
	1880	18900		1	0	20.16	20.16	0.104
				1	3	20.28	20.28	0.107
				1	5	20.12	20.12	0.103
				3	0	20.18	20.18	0.104
				3	1	20.22	20.22	0.105
				3	3	20.20	20.20	0.105
				6	0	19.27	19.27	0.085
	1909.3	19193		1	0	20.02	20.02	0.100
				1	3	20.36	20.36	0.109
				1	5	20.29	20.29	0.107
				3	0	19.99	19.99	0.100
				3	1	20.02	20.02	0.100
				3	3	19.95	19.95	0.099
				6	0	19.16	19.16	0.082

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	1850.7	18607	1.4	1	0	20.02	20.02	0.100
				1	3	21.11	21.11	0.129
				1	5	21.00	21.00	0.126
				3	0	20.54	20.54	0.113
				3	1	20.44	20.44	0.111
				3	3	20.36	20.36	0.109
				6	0	19.39	19.39	0.087
	1880	18900		1	0	20.40	20.40	0.110
				1	3	20.59	20.59	0.115
				1	5	20.51	20.51	0.112
				3	0	20.00	20.00	0.100
				3	1	19.82	19.82	0.096
				3	3	19.77	19.77	0.095
				6	0	18.76	18.76	0.075
	1909.3	19193		1	0	19.99	19.99	0.100
				1	3	20.79	20.79	0.120
				1	5	20.59	20.59	0.115
				3	0	20.52	20.52	0.113
				3	1	20.42	20.42	0.110
				3	3	19.87	19.87	0.097
				6	0	19.08	19.08	0.081

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1851.5	18615	3	1	0	21.91	21.91	0.155
				1	8	21.89	21.89	0.155
				1	14	21.98	21.98	0.158
				8	0	20.87	20.87	0.122
				8	4	20.68	20.68	0.117
				8	7	20.63	20.63	0.116
				15	0	20.75	20.75	0.119
	1880	18900		1	0	21.30	21.30	0.135
				1	8	21.35	21.35	0.136
				1	14	21.31	21.31	0.135
				8	0	20.03	20.03	0.101
				8	4	19.98	19.98	0.100
				8	7	19.94	19.94	0.099
				15	0	19.92	19.92	0.098
	1908.5	19185		1	0	21.36	21.36	0.137
				1	8	21.41	21.41	0.138
				1	14	21.38	21.38	0.137
				8	0	20.16	20.16	0.104
				8	4	20.17	20.17	0.104
				8	7	20.18	20.18	0.104
				15	0	20.21	20.21	0.105
16QAM	1851.5	18615		1	0	21.20	21.20	0.132
				1	8	21.17	21.17	0.131
				1	14	21.30	21.30	0.135
				8	0	19.62	19.62	0.092
				8	4	19.63	19.63	0.092
				8	7	19.60	19.60	0.091
				15	0	19.43	19.43	0.088
	1880	18900		1	0	19.97	19.97	0.099
				1	8	20.02	20.02	0.100
				1	14	19.74	19.74	0.094
				8	0	18.46	18.46	0.070
				8	4	18.50	18.50	0.071
				8	7	18.49	18.49	0.071
				15	0	18.69	18.69	0.074
	1908.5	19185		1	0	20.33	20.33	0.108
				1	8	20.29	20.29	0.107
				1	14	20.10	20.10	0.102
				8	0	18.79	18.79	0.076
				8	4	18.79	18.79	0.076
				8	7	18.86	18.86	0.077
				15	0	18.91	18.91	0.078

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	1851.5	18615	3	1	0	20.25	20.25	0.106
				1	8	20.76	20.76	0.119
				1	14	20.77	20.77	0.119
				8	0	19.52	19.52	0.090
				8	4	19.63	19.63	0.092
				8	7	19.69	19.69	0.093
				15	0	19.30	19.30	0.085
	1880	18900		1	0	19.53	19.53	0.090
				1	8	20.34	20.34	0.108
				1	14	20.01	20.01	0.100
				8	0	18.91	18.91	0.078
				8	4	18.92	18.92	0.078
				8	7	18.87	18.87	0.077
				15	0	18.89	18.89	0.077
	1908.5	19185		1	0	20.26	20.26	0.106
				1	8	20.72	20.72	0.118
				1	14	20.79	20.79	0.120
				8	0	19.58	19.58	0.091
				8	4	19.53	19.53	0.090
				8	7	19.43	19.43	0.088
				15	0	19.04	19.04	0.080

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1852.5	18625	5	1	0	21.48	21.48	0.141
				1	12	21.58	21.58	0.144
				1	24	21.46	21.46	0.140
				12	0	20.44	20.44	0.111
				12	7	20.45	20.45	0.111
				12	13	20.41	20.41	0.110
				25	0	20.36	20.36	0.109
	1880	18900		1	0	21.12	21.12	0.129
				1	12	21.25	21.25	0.133
				1	24	20.87	20.87	0.122
				12	0	20.06	20.06	0.101
				12	7	20.11	20.11	0.103
				12	13	19.99	19.99	0.100
				25	0	20.01	20.01	0.100
	1907.5	19175		1	0	21.39	21.39	0.138
				1	12	21.20	21.20	0.132
				1	24	21.20	21.20	0.132
				12	0	20.16	20.16	0.104
				12	7	20.15	20.15	0.104
				12	13	20.06	20.06	0.101
				25	0	20.08	20.08	0.102
16QAM	1852.5	18625		1	0	20.09	20.09	0.102
				1	12	19.84	19.84	0.096
				1	24	19.73	19.73	0.094
				12	0	19.17	19.17	0.083
				12	7	19.29	19.29	0.085
				12	13	19.27	19.27	0.085
				25	0	19.22	19.22	0.084
	1880	18900		1	0	19.75	19.75	0.094
				1	12	20.29	20.29	0.107
				1	24	19.69	19.69	0.093
				12	0	18.69	18.69	0.074
				12	7	18.86	18.86	0.077
				12	13	18.73	18.73	0.075
				25	0	18.60	18.60	0.072
	1907.5	19175		1	0	19.96	19.96	0.099
				1	12	20.18	20.18	0.104
				1	24	19.82	19.82	0.096
				12	0	18.94	18.94	0.078
				12	7	19.04	19.04	0.080
				12	13	19.05	19.05	0.080
				25	0	19.01	19.01	0.080

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	1852.5	18625	5	1	0	20.07	20.07	0.102
				1	12	20.89	20.89	0.123
				1	24	20.75	20.75	0.119
				12	0	19.22	19.22	0.084
				12	7	19.15	19.15	0.082
				12	13	19.11	19.11	0.081
				25	0	19.28	19.28	0.085
	1880	18900		1	0	19.80	19.80	0.095
				1	12	20.54	20.54	0.113
				1	24	20.45	20.45	0.111
				12	0	18.91	18.91	0.078
				12	7	19.12	19.12	0.082
				12	13	19.01	19.01	0.080
				25	0	19.07	19.07	0.081
	1907.5	19175		1	0	20.19	20.19	0.104
				1	12	20.63	20.63	0.116
				1	24	20.42	20.42	0.110
				12	0	18.93	18.93	0.078
				12	7	18.93	18.93	0.078
				12	13	18.86	18.86	0.077
				25	0	19.09	19.09	0.081

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1855	18650	10	1	0	21.55	21.55	0.143
				1	25	21.51	21.51	0.142
				1	49	21.05	21.05	0.127
				25	0	20.04	20.04	0.101
				25	12	20.16	20.16	0.104
				25	25	19.94	19.94	0.099
				50	0	20.00	20.00	0.100
	1880	18900		1	0	20.77	20.77	0.119
				1	25	21.07	21.07	0.128
				1	49	20.88	20.88	0.122
				25	0	19.62	19.62	0.092
				25	12	19.70	19.70	0.093
				25	25	19.64	19.64	0.092
				50	0	19.65	19.65	0.092
	1905	19150		1	0	21.25	21.25	0.133
				1	25	21.52	21.52	0.142
				1	49	21.27	21.27	0.134
				25	0	20.24	20.24	0.106
				25	12	20.25	20.25	0.106
				25	25	20.09	20.09	0.102
				50	0	20.18	20.18	0.104
16QAM	1855	18650		1	0	20.78	20.78	0.120
				1	25	20.73	20.73	0.118
				1	49	20.37	20.37	0.109
				25	0	19.05	19.05	0.080
				25	12	18.98	18.98	0.079
				25	25	18.78	18.78	0.076
				50	0	18.86	18.86	0.077
	1880	18900		1	0	19.85	19.85	0.097
				1	25	19.77	19.77	0.095
				1	49	19.55	19.55	0.090
				25	0	18.78	18.78	0.076
				25	12	18.87	18.87	0.077
				25	25	18.71	18.71	0.074
				50	0	18.66	18.66	0.073
	1905	19150		1	0	20.41	20.41	0.110
				1	25	20.41	20.41	0.110
				1	49	20.06	20.06	0.101
				25	0	19.20	19.20	0.083
				25	12	19.21	19.21	0.083
				25	25	19.06	19.06	0.081
				50	0	19.05	19.05	0.080

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	1855	18650	10	1	0	20.45	20.45	0.111
				1	25	20.17	20.17	0.104
				1	49	19.99	19.99	0.100
				25	0	18.99	18.99	0.079
				25	12	19.00	19.00	0.079
				25	25	18.78	18.78	0.076
				50	0	18.96	18.96	0.079
	1880	18900		1	0	19.90	19.90	0.098
				1	25	20.48	20.48	0.112
				1	49	20.03	20.03	0.101
				25	0	18.78	18.78	0.076
				25	12	18.75	18.75	0.075
				25	25	18.93	18.93	0.078
				50	0	18.86	18.86	0.077
	1905	19150		1	0	20.24	20.24	0.106
				1	25	21.06	21.06	0.128
				1	49	20.68	20.68	0.117
				25	0	19.37	19.37	0.086
				25	12	19.50	19.50	0.089
				25	25	19.31	19.31	0.085
				50	0	19.19	19.19	0.083

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1857.5	18675	15	1	0	21.85	21.85	0.153
				1	37	21.69	21.69	0.148
				1	74	21.17	21.17	0.131
				36	0	20.37	20.37	0.109
				36	29	19.99	19.99	0.100
				36	30	19.94	19.94	0.099
				75	0	20.01	20.01	0.100
	1880	18900		1	0	20.42	20.42	0.110
				1	37	21.16	21.16	0.131
				1	74	20.54	20.54	0.113
				36	0	19.38	19.38	0.087
				36	29	19.51	19.51	0.089
				36	30	19.50	19.50	0.089
				75	0	19.34	19.34	0.086
	1902.5	19125		1	0	20.78	20.78	0.120
				1	37	21.31	21.31	0.135
				1	74	20.78	20.78	0.120
				36	0	19.91	19.91	0.098
				36	29	19.85	19.85	0.097
				36	30	19.82	19.82	0.096
				75	0	19.68	19.68	0.093
16QAM	1857.5	18675		1	0	20.95	20.95	0.124
				1	37	20.77	20.77	0.119
				1	74	20.43	20.43	0.110
				36	0	18.90	18.90	0.078
				36	29	18.71	18.71	0.074
				36	30	18.62	18.62	0.073
				75	0	18.78	18.78	0.076
	1880	18900		1	0	19.76	19.76	0.095
				1	37	20.03	20.03	0.101
				1	74	19.82	19.82	0.096
				36	0	18.31	18.31	0.068
				36	29	18.34	18.34	0.068
				36	30	18.34	18.34	0.068
				75	0	18.43	18.43	0.070
	1902.5	19125		1	0	20.13	20.13	0.103
				1	37	20.22	20.22	0.105
				1	74	19.98	19.98	0.100
				36	0	18.63	18.63	0.073
				36	29	18.61	18.61	0.073
				36	30	18.67	18.67	0.074
				75	0	18.79	18.79	0.076

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	1857.5	18675	15	1	0	20.63	20.63	0.116
				1	37	20.64	20.64	0.116
				1	74	19.82	19.82	0.096
				36	0	19.11	19.11	0.081
				36	29	18.82	18.82	0.076
				36	30	18.78	18.78	0.076
				75	0	18.98	18.98	0.079
	1880	18900		1	0	19.45	19.45	0.088
				1	37	20.59	20.59	0.115
				1	74	20.09	20.09	0.102
				36	0	18.82	18.82	0.076
				36	29	18.76	18.76	0.075
				36	30	18.72	18.72	0.074
				75	0	18.64	18.64	0.073
	1902.5	19125		1	0	19.81	19.81	0.096
				1	37	20.59	20.59	0.115
				1	74	20.20	20.20	0.105
				36	0	18.89	18.89	0.077
				36	29	18.92	18.92	0.078
				36	30	18.89	18.89	0.077
				75	0	18.84	18.84	0.077

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1860	18700	20	1	0	21.72	21.72	0.149
				1	49	21.34	21.34	0.136
				1	99	21.03	21.03	0.127
				50	0	20.60	20.60	0.115
				50	24	20.31	20.31	0.107
				50	50	20.21	20.21	0.105
				100	0	20.33	20.33	0.108
	1880	18900		1	0	21.24	21.24	0.133
				1	49	21.47	21.47	0.140
				1	99	21.15	21.15	0.130
				50	0	19.98	19.98	0.100
				50	24	20.10	20.10	0.102
				50	50	19.94	19.94	0.099
				100	0	19.91	19.91	0.098
	1900	19100		1	0	21.10	21.10	0.129
				1	49	21.21	21.21	0.132
				1	99	21.12	21.12	0.129
				50	0	20.33	20.33	0.108
				50	24	20.41	20.41	0.110
				50	50	20.28	20.28	0.107
				100	0	20.23	20.23	0.105
16QAM	1860	18700		1	0	20.70	20.70	0.117
				1	49	20.44	20.44	0.111
				1	99	20.21	20.21	0.105
				50	0	19.30	19.30	0.085
				50	24	19.15	19.15	0.082
				50	50	18.89	18.89	0.077
				100	0	19.04	19.04	0.080
	1880	18900		1	0	19.77	19.77	0.095
				1	49	20.23	20.23	0.105
				1	99	19.70	19.70	0.093
				50	0	18.77	18.77	0.075
				50	24	18.80	18.80	0.076
				50	50	18.82	18.82	0.076
				100	0	18.73	18.73	0.075
	1900	19100		1	0	20.86	20.86	0.122
				1	49	20.88	20.88	0.122
				1	99	20.72	20.72	0.118
				50	0	18.91	18.91	0.078
				50	24	18.86	18.86	0.077
				50	50	18.86	18.86	0.077
				100	0	18.93	18.93	0.078

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
64QAM	1860	18700	20	1	0	20.27	20.27	0.106
				1	49	20.15	20.15	0.104
				1	99	19.90	19.90	0.098
				50	0	19.39	19.39	0.087
				50	24	19.18	19.18	0.083
				50	50	19.09	19.09	0.081
				100	0	19.30	19.30	0.085
	1880	18900		1	0	19.88	19.88	0.097
				1	49	20.48	20.48	0.112
				1	99	19.65	19.65	0.092
				50	0	18.81	18.81	0.076
				50	24	18.81	18.81	0.076
				50	50	18.75	18.75	0.075
				100	0	18.91	18.91	0.078
	1900	19100		1	0	19.87	19.87	0.097
				1	49	20.18	20.18	0.104
				1	99	19.93	19.93	0.098
				50	0	19.21	19.21	0.083
				50	24	19.12	19.12	0.082
				50	50	19.09	19.09	0.081
				100	0	19.43	19.43	0.088