

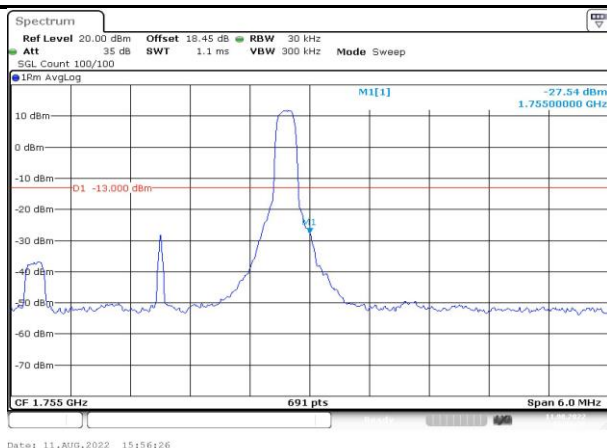


Fig.7

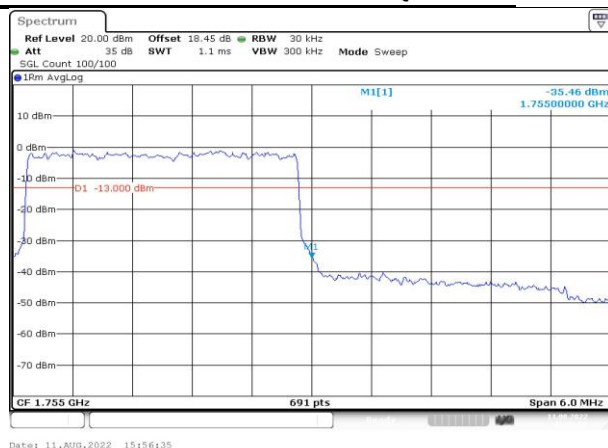


Fig.8

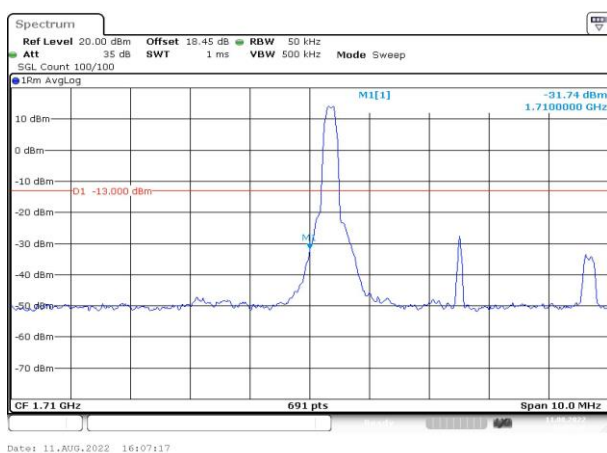


Fig.9

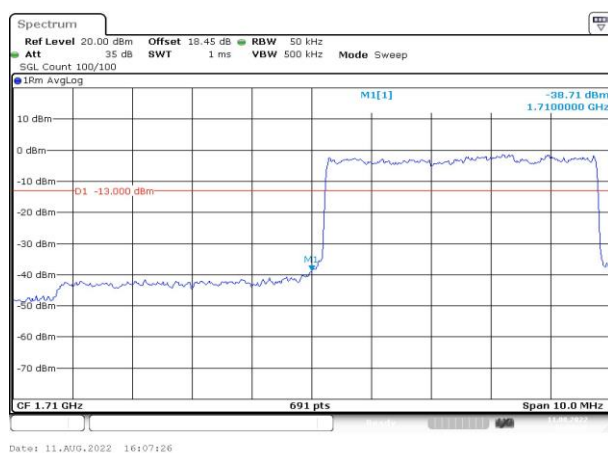


Fig.10

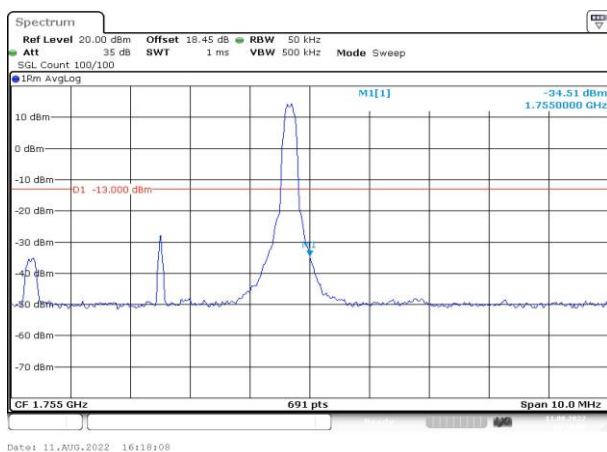


Fig.11

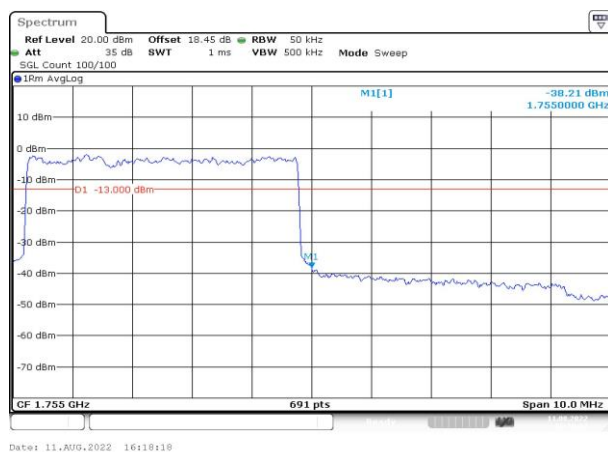


Fig.12

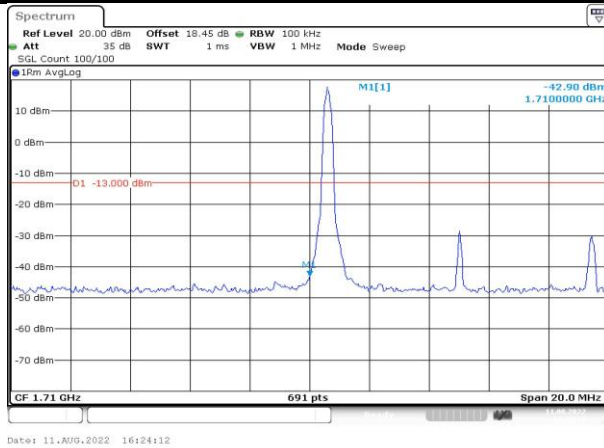


Fig.13

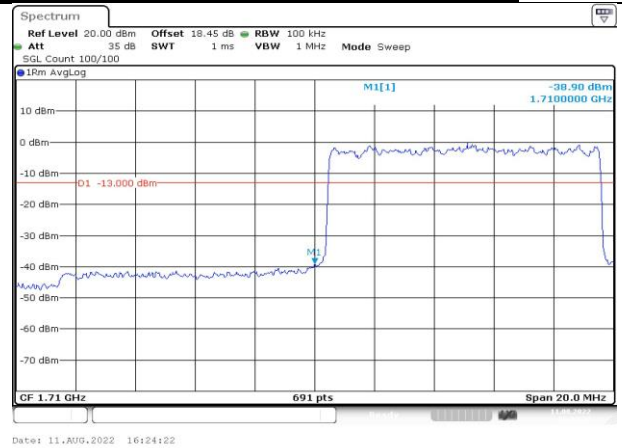


Fig.14

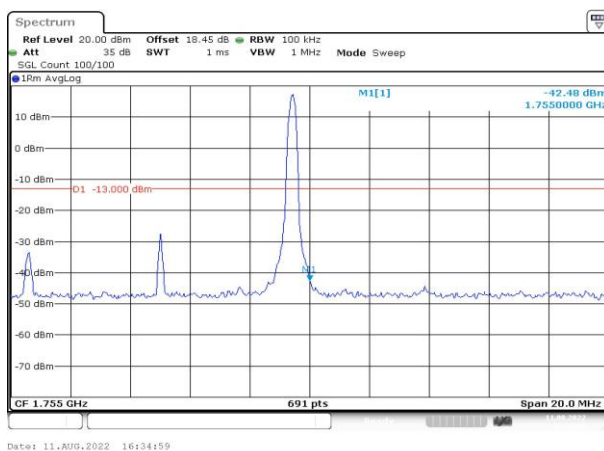


Fig.15

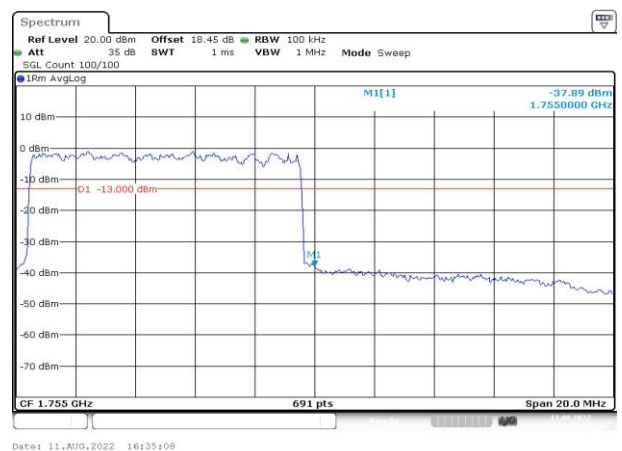


Fig.16

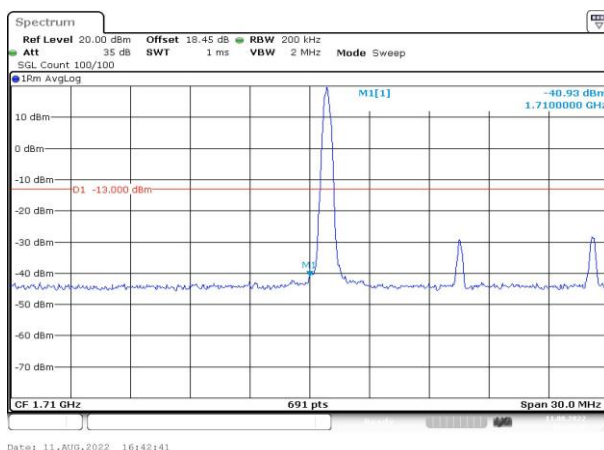


Fig.17

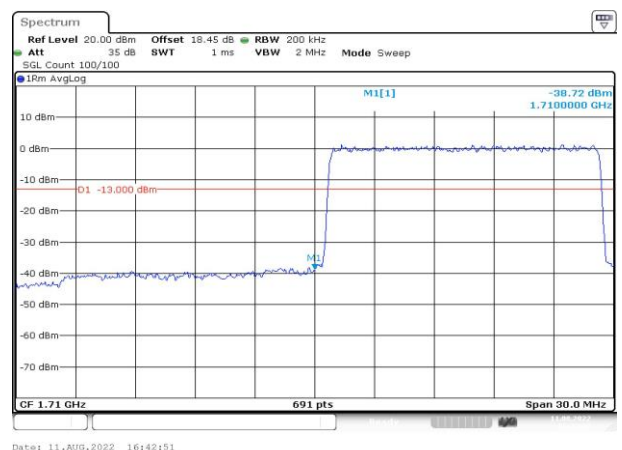


Fig.18

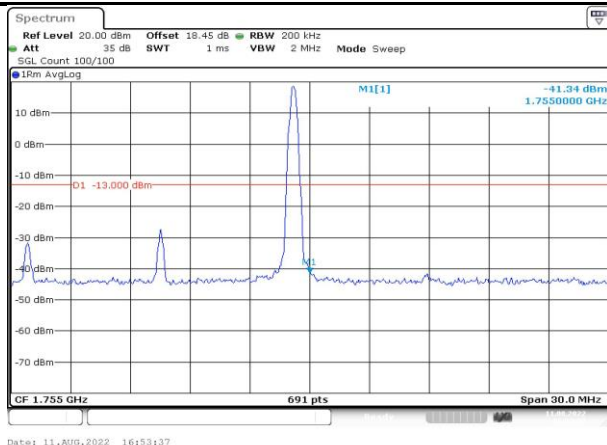


Fig.19

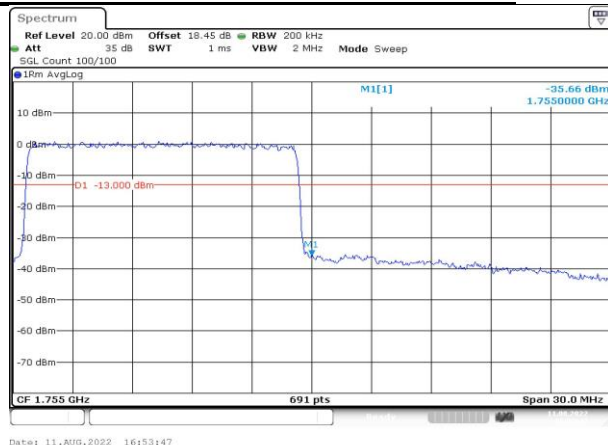


Fig.20

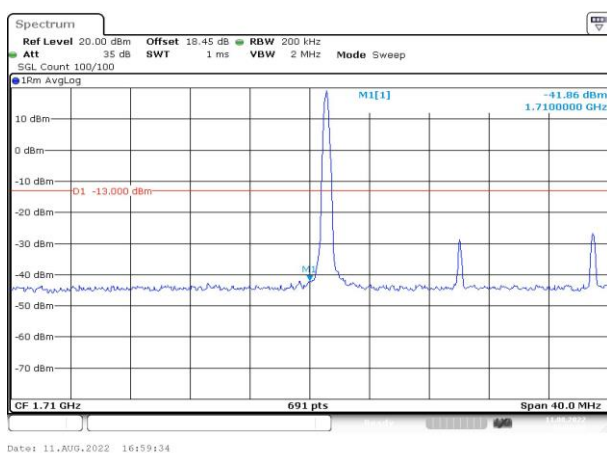


Fig.21

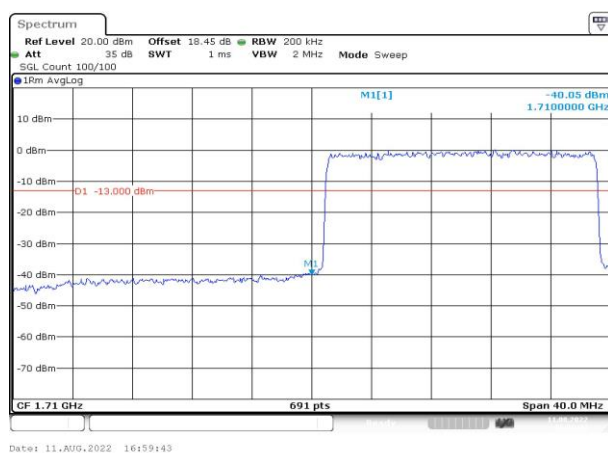


Fig.22

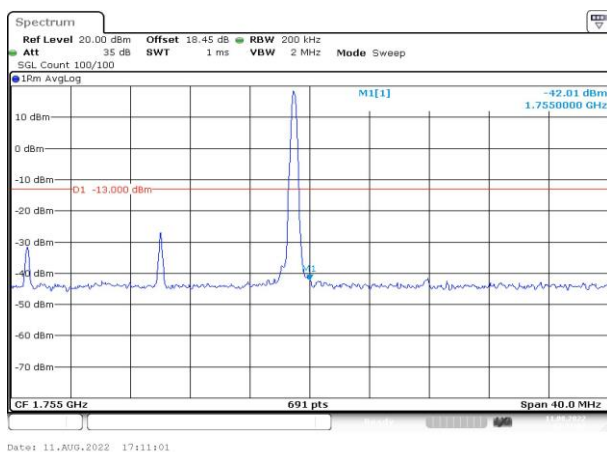


Fig.23

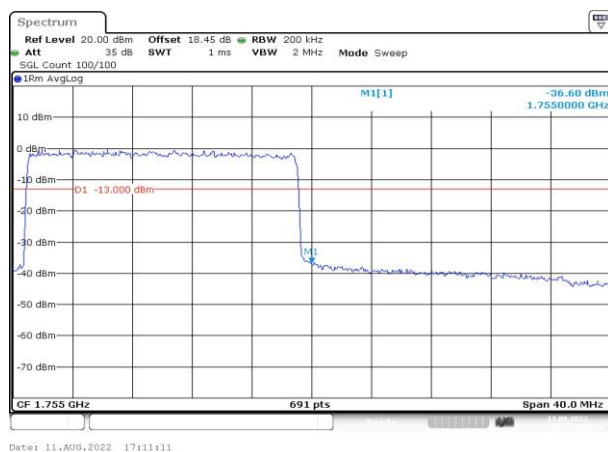


Fig.24

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 4 Low Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-20	NV	0.014	-0.040	-0.009	-0.003	0.007	-0.577
-10	NV	0.012	-0.049	0.002	-0.010	-0.007	-0.567
0	NV	0.016	-0.054	0.016	0.023	0.007	-0.565
+10	NV	0.003	-0.055	-0.014	-0.013	0.002	-0.573
+30	NV	0.005	-0.039	0.007	-0.013	-0.006	-0.565
+40	NV	0.012	-0.054	-0.002	-0.001	0.004	-0.569
+55	NV	0.012	-0.047	-0.007	-0.012	0.008	-0.570
+20	LV	-0.002	-0.044	0.002	-0.005	-0.005	-0.569
+20	HV	0.010	-0.018	0.008	-0.005	0.000	-0.562

Temperature(°C)	Voltage	Test Result (ppm) Band 4 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-20	NV	0.012	-0.008	0.010	0.009	0.003	-0.005
-10	NV	0.005	0.007	0.000	0.006	-0.009	-0.006
0	NV	0.004	-0.008	0.003	0.008	0.002	-0.011
+10	NV	0.007	0.000	-0.001	0.009	-0.010	-0.020
+30	NV	0.008	0.002	-0.008	-0.003	-0.007	-0.019
+40	NV	0.008	-0.005	0.004	0.001	-0.008	-0.016
+55	NV	-0.003	-0.013	-0.001	-0.009	0.000	-0.021
+20	LV	-0.001	0.000	-0.008	0.008	0.002	-0.007
+20	HV	-0.008	0.013	-0.005	-0.004	0.007	-0.020

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	1732.5	20175	1.4	1	0	21.06	22.76	0.189
QPSK	1732.5	20175	1.4	1	3	21.04	22.74	0.188
QPSK	1732.5	20175	1.4	1	5	20.97	22.67	0.185
QPSK	1732.5	20175	1.4	3	0	21.00	22.70	0.186
QPSK	1732.5	20175	1.4	3	1	21.06	22.76	0.189
QPSK	1732.5	20175	1.4	3	3	21.03	22.73	0.187
QPSK	1732.5	20175	1.4	6	0	20.07	21.77	0.150
QPSK	1754.3	20393	1.4	1	0	21.02	22.72	0.187
QPSK	1754.3	20393	1.4	1	3	21.16	22.86	0.193
QPSK	1754.3	20393	1.4	1	5	21.02	22.72	0.187
QPSK	1754.3	20393	1.4	3	0	21.10	22.80	0.191
QPSK	1754.3	20393	1.4	3	1	21.14	22.84	0.192
QPSK	1754.3	20393	1.4	3	3	21.08	22.78	0.190
QPSK	1754.3	20393	1.4	6	0	20.17	21.87	0.154

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	1710.7	19957	1.4	1	0	20.75	22.45	0.176
16QAM	1710.7	19957	1.4	1	3	20.93	22.63	0.183
16QAM	1710.7	19957	1.4	1	5	20.73	22.43	0.175
16QAM	1710.7	19957	1.4	3	0	20.70	22.40	0.174
16QAM	1710.7	19957	1.4	3	1	20.81	22.51	0.178
16QAM	1710.7	19957	1.4	3	3	20.71	22.41	0.174
16QAM	1710.7	19957	1.4	6	0	19.62	21.32	0.136
16QAM	1732.5	20175	1.4	1	0	20.25	21.95	0.157
16QAM	1732.5	20175	1.4	1	3	20.35	22.05	0.160
16QAM	1732.5	20175	1.4	1	5	20.32	22.02	0.159
16QAM	1732.5	20175	1.4	3	0	19.91	21.61	0.145
16QAM	1732.5	20175	1.4	3	1	19.95	21.65	0.146
16QAM	1732.5	20175	1.4	3	3	19.96	21.66	0.147
16QAM	1732.5	20175	1.4	6	0	19.16	20.86	0.122
16QAM	1754.3	20393	1.4	1	0	20.11	21.81	0.152
16QAM	1754.3	20393	1.4	1	3	20.28	21.98	0.158
16QAM	1754.3	20393	1.4	1	5	20.11	21.81	0.152
16QAM	1754.3	20393	1.4	3	0	20.15	21.85	0.153
16QAM	1754.3	20393	1.4	3	1	20.24	21.94	0.156
16QAM	1754.3	20393	1.4	3	3	20.16	21.86	0.153
16QAM	1754.3	20393	1.4	6	0	19.27	20.97	0.125

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1711.5	19965	3	1	0	22.47	24.17	0.261
QPSK	1711.5	19965	3	1	8	21.70	23.40	0.219
QPSK	1711.5	19965	3	1	14	21.63	23.33	0.215
QPSK	1711.5	19965	3	8	0	20.71	22.41	0.174
QPSK	1711.5	19965	3	8	4	20.75	22.45	0.176
QPSK	1711.5	19965	3	8	7	20.65	22.35	0.172
QPSK	1711.5	19965	3	15	0	20.68	22.38	0.173
QPSK	1732.5	20175	3	1	0	21.00	22.70	0.186
QPSK	1732.5	20175	3	1	8	21.01	22.71	0.187
QPSK	1732.5	20175	3	1	14	21.03	22.73	0.187
QPSK	1732.5	20175	3	8	0	20.11	21.81	0.152
QPSK	1732.5	20175	3	8	4	20.09	21.79	0.151
QPSK	1732.5	20175	3	8	7	20.12	21.82	0.152
QPSK	1732.5	20175	3	15	0	20.10	21.80	0.151
QPSK	1753.5	20385	3	1	0	21.01	22.71	0.187
QPSK	1753.5	20385	3	1	8	21.06	22.76	0.189
QPSK	1753.5	20385	3	1	14	21.04	22.74	0.188
QPSK	1753.5	20385	3	8	0	20.12	21.82	0.152
QPSK	1753.5	20385	3	8	4	20.19	21.89	0.155
QPSK	1753.5	20385	3	8	7	20.18	21.88	0.154
QPSK	1753.5	20385	3	15	0	20.18	21.88	0.154

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	1711.5	19965	3	1	0	20.99	22.69	0.186
16QAM	1711.5	19965	3	1	8	20.79	22.49	0.177
16QAM	1711.5	19965	3	1	14	20.80	22.50	0.178
16QAM	1711.5	19965	3	8	0	19.76	21.46	0.140
16QAM	1711.5	19965	3	8	4	19.79	21.49	0.141
16QAM	1711.5	19965	3	8	7	19.67	21.37	0.137
16QAM	1711.5	19965	3	15	0	19.66	21.36	0.137
16QAM	1732.5	20175	3	1	0	20.62	22.32	0.171
16QAM	1732.5	20175	3	1	8	20.61	22.31	0.170
16QAM	1732.5	20175	3	1	14	20.58	22.28	0.169
16QAM	1732.5	20175	3	8	0	19.12	20.82	0.121
16QAM	1732.5	20175	3	8	4	19.15	20.85	0.122
16QAM	1732.5	20175	3	8	7	19.14	20.84	0.121
16QAM	1732.5	20175	3	15	0	19.17	20.87	0.122
16QAM	1753.5	20385	3	1	0	20.27	21.97	0.157
16QAM	1753.5	20385	3	1	8	20.42	22.12	0.163
16QAM	1753.5	20385	3	1	14	20.30	22.00	0.158
16QAM	1753.5	20385	3	8	0	19.13	20.83	0.121
16QAM	1753.5	20385	3	8	4	19.16	20.86	0.122
16QAM	1753.5	20385	3	8	7	19.16	20.86	0.122
16QAM	1753.5	20385	3	15	0	19.14	20.84	0.121

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1712.5	19975	5	1	0	22.72	24.42	0.277
QPSK	1712.5	19975	5	1	12	21.77	23.47	0.222
QPSK	1712.5	19975	5	1	24	21.57	23.27	0.212
QPSK	1712.5	19975	5	12	0	20.72	22.42	0.175
QPSK	1712.5	19975	5	12	7	20.73	22.43	0.175
QPSK	1712.5	19975	5	12	13	20.71	22.41	0.174
QPSK	1712.5	19975	5	25	0	20.70	22.40	0.174
QPSK	1732.5	20175	5	1	0	21.15	22.85	0.193
QPSK	1732.5	20175	5	1	12	21.04	22.74	0.188
QPSK	1732.5	20175	5	1	24	21.06	22.76	0.189
QPSK	1732.5	20175	5	12	0	20.19	21.89	0.155
QPSK	1732.5	20175	5	12	7	20.11	21.81	0.152
QPSK	1732.5	20175	5	12	13	20.10	21.80	0.151
QPSK	1732.5	20175	5	25	0	20.09	21.79	0.151
QPSK	1752.5	20375	5	1	0	21.16	22.86	0.193
QPSK	1752.5	20375	5	1	12	21.15	22.85	0.193
QPSK	1752.5	20375	5	1	24	21.22	22.92	0.196
QPSK	1752.5	20375	5	12	0	20.17	21.87	0.154
QPSK	1752.5	20375	5	12	7	20.21	21.91	0.155
QPSK	1752.5	20375	5	12	13	20.19	21.89	0.155
QPSK	1752.5	20375	5	25	0	20.16	21.86	0.153

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	1712.5	19975	5	1	0	20.83	22.53	0.179
16QAM	1712.5	19975	5	1	12	20.83	22.53	0.179
16QAM	1712.5	19975	5	1	24	20.84	22.54	0.179
16QAM	1712.5	19975	5	12	0	19.80	21.50	0.141
16QAM	1712.5	19975	5	12	7	19.72	21.42	0.139
16QAM	1712.5	19975	5	12	13	19.78	21.48	0.141
16QAM	1712.5	19975	5	25	0	19.75	21.45	0.140
16QAM	1732.5	20175	5	1	0	20.24	21.94	0.156
16QAM	1732.5	20175	5	1	12	20.24	21.94	0.156
16QAM	1732.5	20175	5	1	24	20.16	21.86	0.153
16QAM	1732.5	20175	5	12	0	19.11	20.81	0.121
16QAM	1732.5	20175	5	12	7	19.15	20.85	0.122
16QAM	1732.5	20175	5	12	13	19.03	20.73	0.118
16QAM	1732.5	20175	5	25	0	19.14	20.84	0.121
16QAM	1752.5	20375	5	1	0	20.44	22.14	0.164
16QAM	1752.5	20375	5	1	12	20.55	22.25	0.168
16QAM	1752.5	20375	5	1	24	20.57	22.27	0.169
16QAM	1752.5	20375	5	12	0	19.06	20.76	0.119
16QAM	1752.5	20375	5	12	7	19.17	20.87	0.122
16QAM	1752.5	20375	5	12	13	19.15	20.85	0.122
16QAM	1752.5	20375	5	25	0	19.14	20.84	0.121

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1715	20000	10	1	0	21.73	23.43	0.220
QPSK	1715	20000	10	1	25	21.59	23.29	0.213
QPSK	1715	20000	10	1	49	21.44	23.14	0.206
QPSK	1715	20000	10	25	0	20.67	22.37	0.173
QPSK	1715	20000	10	25	12	20.68	22.38	0.173
QPSK	1715	20000	10	25	25	20.55	22.25	0.168
QPSK	1715	20000	10	50	0	20.64	22.34	0.171
QPSK	1732.5	20175	10	1	0	21.15	22.85	0.193
QPSK	1732.5	20175	10	1	25	21.08	22.78	0.190
QPSK	1732.5	20175	10	1	49	21.05	22.75	0.188
QPSK	1732.5	20175	10	25	0	20.15	21.85	0.153
QPSK	1732.5	20175	10	25	12	20.14	21.84	0.153
QPSK	1732.5	20175	10	25	25	20.04	21.74	0.149
QPSK	1732.5	20175	10	50	0	20.10	21.80	0.151
QPSK	1750	20350	10	1	0	20.99	22.69	0.186
QPSK	1750	20350	10	1	25	21.02	22.72	0.187
QPSK	1750	20350	10	1	49	21.18	22.88	0.194
QPSK	1750	20350	10	25	0	20.06	21.76	0.150
QPSK	1750	20350	10	25	12	20.13	21.83	0.152
QPSK	1750	20350	10	25	25	20.13	21.83	0.152
QPSK	1750	20350	10	50	0	20.09	21.79	0.151

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	1715	20000	10	1	0	20.92	22.62	0.183
16QAM	1715	20000	10	1	25	20.83	22.53	0.179
16QAM	1715	20000	10	1	49	20.68	22.38	0.173
16QAM	1715	20000	10	25	0	19.70	21.40	0.138
16QAM	1715	20000	10	25	12	19.67	21.37	0.137
16QAM	1715	20000	10	25	25	19.63	21.33	0.136
16QAM	1715	20000	10	50	0	19.67	21.37	0.137
16QAM	1732.5	20175	10	1	0	20.75	22.45	0.176
16QAM	1732.5	20175	10	1	25	20.65	22.35	0.172
16QAM	1732.5	20175	10	1	49	20.65	22.35	0.172
16QAM	1732.5	20175	10	25	0	19.22	20.92	0.124
16QAM	1732.5	20175	10	25	12	19.15	20.85	0.122
16QAM	1732.5	20175	10	25	25	19.08	20.78	0.120
16QAM	1732.5	20175	10	50	0	19.09	20.79	0.120
16QAM	1750	20350	10	1	0	20.22	21.92	0.156
16QAM	1750	20350	10	1	25	20.21	21.91	0.155
16QAM	1750	20350	10	1	49	20.29	21.99	0.158
16QAM	1750	20350	10	25	0	19.10	20.80	0.120
16QAM	1750	20350	10	25	12	19.18	20.88	0.122
16QAM	1750	20350	10	25	25	19.15	20.85	0.122
16QAM	1750	20350	10	50	0	19.13	20.83	0.121

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1717.5	20025	15	1	0	21.69	23.39	0.218
QPSK	1717.5	20025	15	1	37	21.51	23.21	0.209
QPSK	1717.5	20025	15	1	74	21.22	22.92	0.196
QPSK	1717.5	20025	15	36	0	20.63	22.33	0.171
QPSK	1717.5	20025	15	36	29	20.53	22.23	0.167
QPSK	1717.5	20025	15	36	30	20.52	22.22	0.167
QPSK	1717.5	20025	15	75	0	20.55	22.25	0.168
QPSK	1732.5	20175	15	1	0	21.21	22.91	0.195
QPSK	1732.5	20175	15	1	37	20.95	22.65	0.184
QPSK	1732.5	20175	15	1	74	20.91	22.61	0.182
QPSK	1732.5	20175	15	36	0	20.21	21.91	0.155
QPSK	1732.5	20175	15	36	29	20.05	21.75	0.150
QPSK	1732.5	20175	15	36	30	20.03	21.73	0.149
QPSK	1732.5	20175	15	75	0	20.08	21.78	0.151
QPSK	1747.5	20325	15	1	0	20.96	22.66	0.185
QPSK	1747.5	20325	15	1	37	20.97	22.67	0.185
QPSK	1747.5	20325	15	1	74	21.02	22.72	0.187
QPSK	1747.5	20325	15	36	0	19.95	21.65	0.146
QPSK	1747.5	20325	15	36	29	20.08	21.78	0.151
QPSK	1747.5	20325	15	36	30	20.12	21.82	0.152
QPSK	1747.5	20325	15	75	0	19.93	21.63	0.146

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	1717.5	20025	15	1	0	21.27	22.97	0.198
16QAM	1717.5	20025	15	1	37	21.12	22.82	0.191
16QAM	1717.5	20025	15	1	74	20.85	22.55	0.180
16QAM	1717.5	20025	15	36	0	19.67	21.37	0.137
16QAM	1717.5	20025	15	36	29	19.52	21.22	0.132
16QAM	1717.5	20025	15	36	30	19.50	21.20	0.132
16QAM	1717.5	20025	15	75	0	19.55	21.25	0.133
16QAM	1732.5	20175	15	1	0	20.46	22.16	0.164
16QAM	1732.5	20175	15	1	37	20.27	21.97	0.157
16QAM	1732.5	20175	15	1	74	20.12	21.82	0.152
16QAM	1732.5	20175	15	36	0	19.15	20.85	0.122
16QAM	1732.5	20175	15	36	29	19.09	20.79	0.120
16QAM	1732.5	20175	15	36	30	19.08	20.78	0.120
16QAM	1732.5	20175	15	75	0	19.18	20.88	0.122
16QAM	1747.5	20325	15	1	0	20.37	22.07	0.161
16QAM	1747.5	20325	15	1	37	20.33	22.03	0.160
16QAM	1747.5	20325	15	1	74	20.49	22.19	0.166
16QAM	1747.5	20325	15	36	0	18.99	20.69	0.117
16QAM	1747.5	20325	15	36	29	19.11	20.81	0.121
16QAM	1747.5	20325	15	36	30	19.13	20.83	0.121
16QAM	1747.5	20325	15	75	0	18.95	20.65	0.116

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	1720	20050	20	1	0	21.63	23.33	0.215
QPSK	1720	20050	20	1	49	21.46	23.16	0.207
QPSK	1720	20050	20	1	99	21.13	22.83	0.192
QPSK	1720	20050	20	50	0	20.59	22.29	0.169
QPSK	1720	20050	20	50	24	20.53	22.23	0.167
QPSK	1720	20050	20	50	50	20.34	22.04	0.160
QPSK	1720	20050	20	100	0	20.43	22.13	0.163
QPSK	1732.5	20175	20	1	0	21.34	23.04	0.201
QPSK	1732.5	20175	20	1	49	21.03	22.73	0.187
QPSK	1732.5	20175	20	1	99	20.91	22.61	0.182
QPSK	1732.5	20175	20	50	0	20.20	21.90	0.155
QPSK	1732.5	20175	20	50	24	20.15	21.85	0.153
QPSK	1732.5	20175	20	50	50	19.98	21.68	0.147
QPSK	1732.5	20175	20	100	0	20.10	21.80	0.151
QPSK	1745	20300	20	1	0	20.89	22.59	0.182
QPSK	1745	20300	20	1	49	20.97	22.67	0.185
QPSK	1745	20300	20	1	99	21.09	22.79	0.190
QPSK	1745	20300	20	50	0	19.96	21.66	0.147
QPSK	1745	20300	20	50	24	19.99	21.69	0.148
QPSK	1745	20300	20	50	50	20.11	21.81	0.152
QPSK	1745	20300	20	100	0	20.00	21.70	0.148

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	1720	20050	20	1	0	20.99	22.69	0.186
16QAM	1720	20050	20	1	49	20.82	22.52	0.179
16QAM	1720	20050	20	1	99	20.57	22.27	0.169
16QAM	1720	20050	20	50	0	19.58	21.28	0.134
16QAM	1720	20050	20	50	24	19.54	21.24	0.133
16QAM	1720	20050	20	50	50	19.32	21.02	0.126
16QAM	1720	20050	20	100	0	19.46	21.16	0.131
16QAM	1732.5	20175	20	1	0	20.60	22.30	0.170
16QAM	1732.5	20175	20	1	49	20.30	22.00	0.158
16QAM	1732.5	20175	20	1	99	20.25	21.95	0.157
16QAM	1732.5	20175	20	50	0	19.19	20.89	0.123
16QAM	1732.5	20175	20	50	24	19.12	20.82	0.121
16QAM	1732.5	20175	20	50	50	18.98	20.68	0.117
16QAM	1732.5	20175	20	100	0	19.15	20.85	0.122
16QAM	1745	20300	20	1	0	20.21	21.91	0.155
16QAM	1745	20300	20	1	49	20.33	22.03	0.160
16QAM	1745	20300	20	1	99	20.42	22.12	0.163
16QAM	1745	20300	20	50	0	18.94	20.64	0.116
16QAM	1745	20300	20	50	24	18.95	20.65	0.116
16QAM	1745	20300	20	50	50	19.08	20.78	0.120
16QAM	1745	20300	20	100	0	18.97	20.67	0.117