

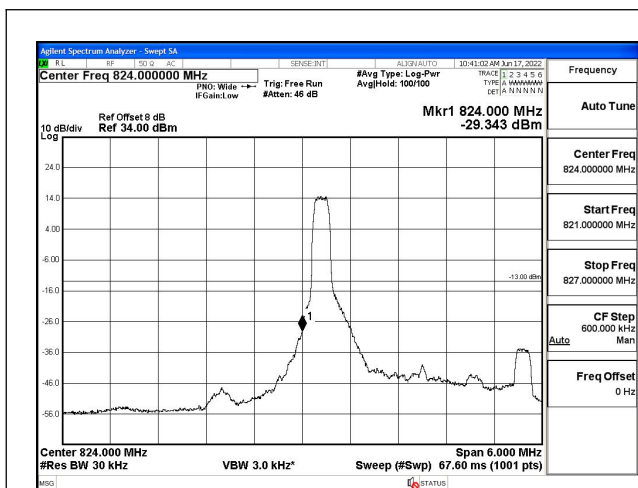


Fig.5

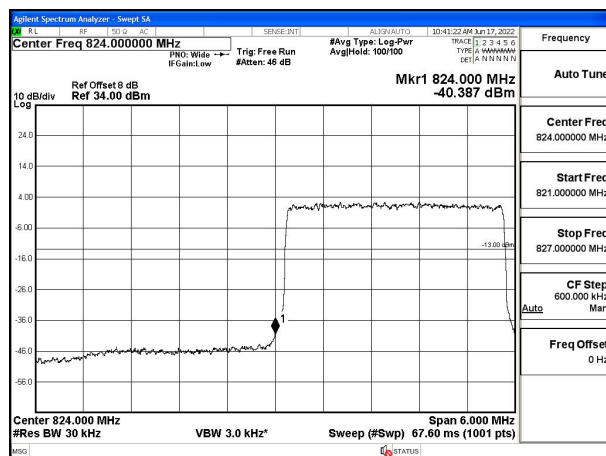


Fig.6

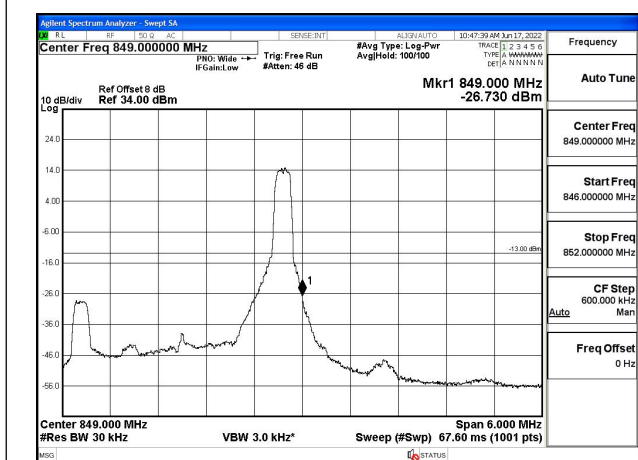


Fig.7

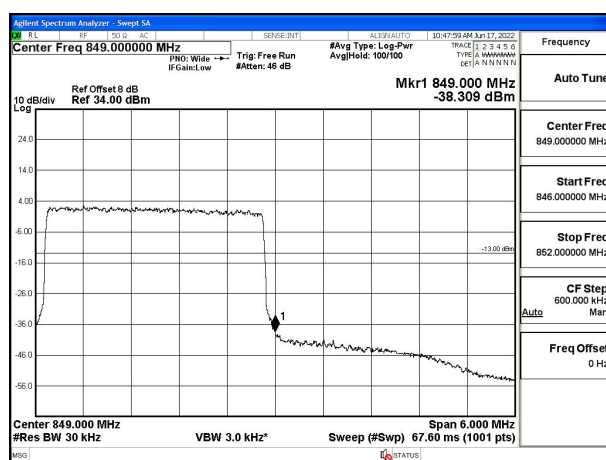


Fig.8

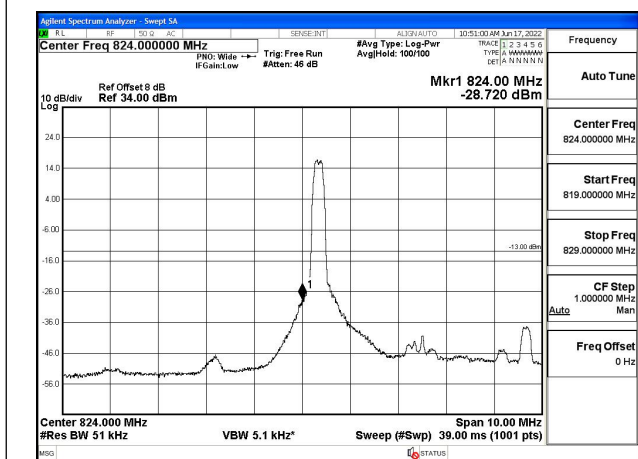


Fig.9

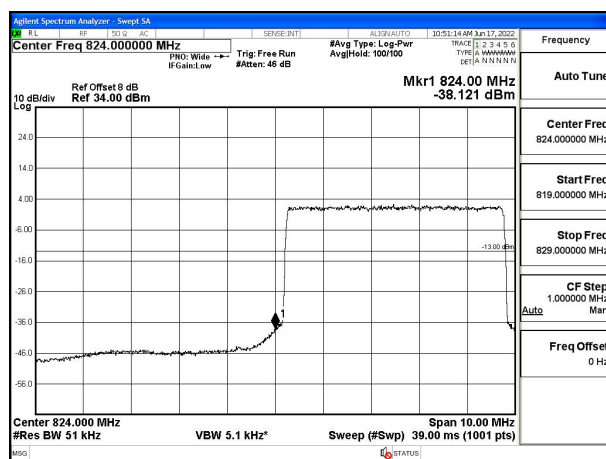


Fig.10

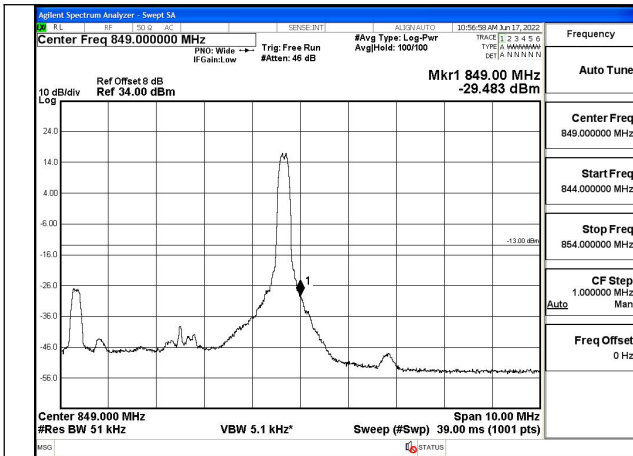


Fig.11

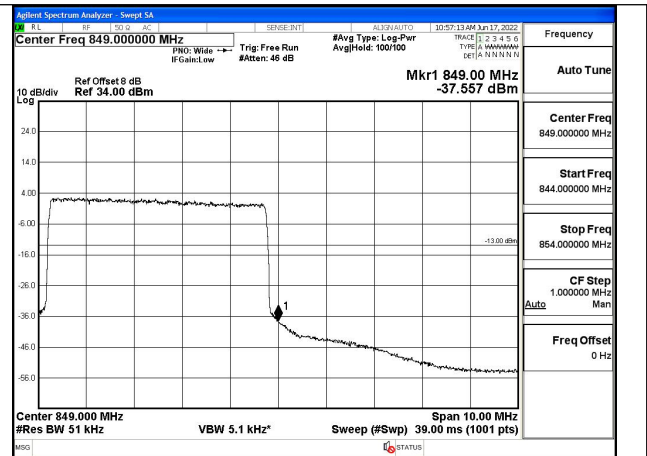


Fig.12

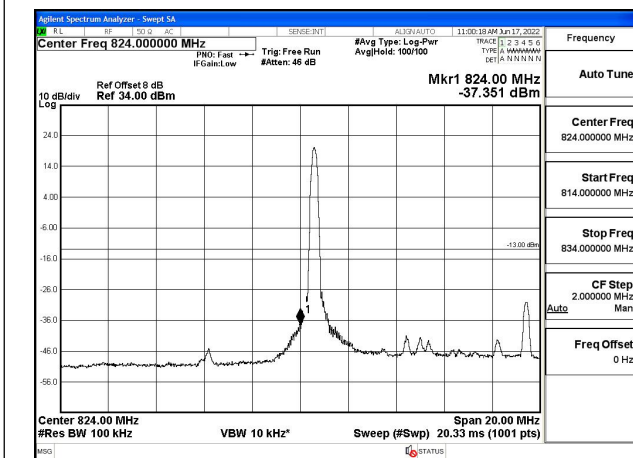


Fig.13

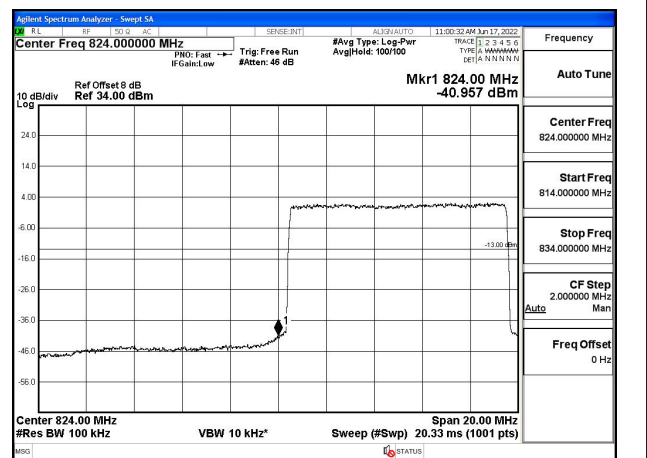


Fig.14

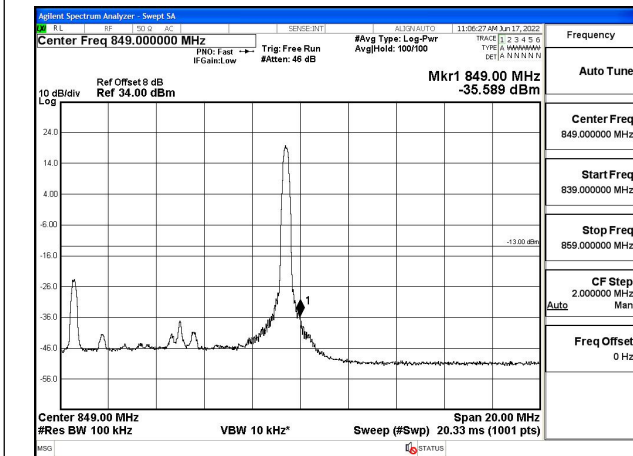


Fig.15

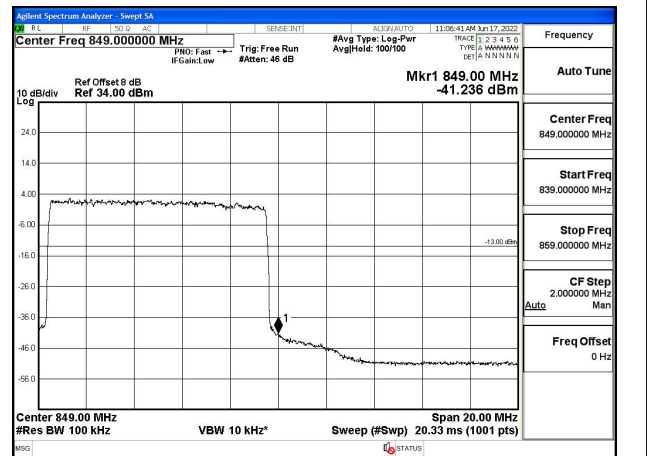


Fig.16

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 5 Low Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	-0.006	-0.012	-0.010	-0.012
0	NV	-0.008	-0.010	-0.009	-0.011
+10	NV	-0.011	0.009	-0.009	-0.011
+20	NV	-0.009	-0.008	-0.011	-0.012
+30	NV	-0.010	-0.010	-0.011	-0.011
+40	NV	-0.007	-0.004	-0.008	-0.009
+50	NV	-0.012	-0.006	-0.015	-0.007
+55	NV	-0.007	-0.008	-0.014	-0.006
+20	LV	-0.012	-0.012	-0.008	-0.008
+20	HV	-0.004	-0.012	-0.012	-0.012

Temperature(°C)	Voltage	Test Result (ppm) Band 5 High Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	-0.008	-0.009	-0.009	-0.007
0	NV	-0.012	-0.016	-0.009	-0.011
+10	NV	-0.010	-0.006	-0.012	-0.010
+20	NV	-0.010	-0.003	-0.011	-0.008
+30	NV	-0.007	-0.004	-0.011	-0.008
+40	NV	-0.012	-0.007	-0.016	-0.008
+50	NV	-0.009	-0.009	-0.010	-0.013
+55	NV	-0.010	-0.009	-0.009	-0.010
+20	LV	-0.004	-0.010	-0.011	-0.013
+20	HV	-0.010	-0.012	-0.011	-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	824.7	20407	1.4	1	0	23.36	18.86	0.077
QPSK	824.7	20407	1.4	1	3	23.37	18.87	0.077
QPSK	824.7	20407	1.4	1	5	23.38	18.88	0.077
QPSK	824.7	20407	1.4	3	0	23.41	18.91	0.078
QPSK	824.7	20407	1.4	3	1	23.45	18.95	0.079
QPSK	824.7	20407	1.4	3	3	23.48	18.98	0.079
QPSK	824.7	20407	1.4	6	0	22.50	18.00	0.063
QPSK	836.5	20525	1.4	1	0	23.58	19.08	0.081
QPSK	836.5	20525	1.4	1	3	23.73	19.23	0.084
QPSK	836.5	20525	1.4	1	5	23.55	19.05	0.080
QPSK	836.5	20525	1.4	3	0	23.58	19.08	0.081
QPSK	836.5	20525	1.4	3	1	23.66	19.16	0.082
QPSK	836.5	20525	1.4	3	3	23.57	19.07	0.081
QPSK	836.5	20525	1.4	6	0	22.68	18.18	0.066
QPSK	848.3	20643	1.4	1	0	23.49	18.99	0.079
QPSK	848.3	20643	1.4	1	3	23.46	18.96	0.079
QPSK	848.3	20643	1.4	1	5	23.53	19.03	0.080
QPSK	848.3	20643	1.4	3	0	23.50	19.00	0.079
QPSK	848.3	20643	1.4	3	1	23.61	19.11	0.081
QPSK	848.3	20643	1.4	3	3	23.41	18.91	0.078
QPSK	848.3	20643	1.4	6	0	22.51	18.01	0.063

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	824.7	20407	1.4	1	0	22.47	17.97	0.063
16QAM	824.7	20407	1.4	1	3	22.69	18.19	0.066
16QAM	824.7	20407	1.4	1	5	22.68	18.18	0.066
16QAM	824.7	20407	1.4	3	0	22.51	18.01	0.063
16QAM	824.7	20407	1.4	3	1	22.36	17.86	0.061
16QAM	824.7	20407	1.4	3	3	22.72	18.22	0.066
16QAM	824.7	20407	1.4	6	0	21.45	16.95	0.050
16QAM	836.5	20525	1.4	1	0	23.29	18.79	0.076
16QAM	836.5	20525	1.4	1	3	23.22	18.72	0.074
16QAM	836.5	20525	1.4	1	5	22.85	18.35	0.068
16QAM	836.5	20525	1.4	3	0	22.56	18.06	0.064
16QAM	836.5	20525	1.4	3	1	22.48	17.98	0.063
16QAM	836.5	20525	1.4	3	3	22.75	18.25	0.067
16QAM	836.5	20525	1.4	6	0	21.55	17.05	0.051
16QAM	848.3	20643	1.4	1	0	22.57	18.07	0.064
16QAM	848.3	20643	1.4	1	3	22.67	18.17	0.066
16QAM	848.3	20643	1.4	1	5	22.62	18.12	0.065
16QAM	848.3	20643	1.4	3	0	22.60	18.10	0.065
16QAM	848.3	20643	1.4	3	1	22.58	18.08	0.064
16QAM	848.3	20643	1.4	3	3	22.41	17.91	0.062
16QAM	848.3	20643	1.4	6	0	21.77	17.27	0.053
64QAM	824.7	20407	1.4	1	0	21.66	17.16	0.052
64QAM	824.7	20407	1.4	1	3	21.64	17.14	0.052
64QAM	824.7	20407	1.4	1	5	21.56	17.06	0.051
64QAM	824.7	20407	1.4	3	0	21.74	17.24	0.053
64QAM	824.7	20407	1.4	3	1	21.64	17.14	0.052
64QAM	824.7	20407	1.4	3	3	21.74	17.24	0.053
64QAM	824.7	20407	1.4	6	0	20.51	16.01	0.040
64QAM	836.5	20525	1.4	1	0	21.76	17.26	0.053
64QAM	836.5	20525	1.4	1	3	21.64	17.14	0.052
64QAM	836.5	20525	1.4	1	5	21.52	17.02	0.050
64QAM	836.5	20525	1.4	3	0	21.83	17.33	0.054
64QAM	836.5	20525	1.4	3	1	21.60	17.10	0.051
64QAM	836.5	20525	1.4	3	3	21.61	17.11	0.051
64QAM	836.5	20525	1.4	6	0	20.57	16.07	0.040
64QAM	848.3	20643	1.4	1	0	21.84	17.34	0.054
64QAM	848.3	20643	1.4	1	3	21.40	16.90	0.049
64QAM	848.3	20643	1.4	1	5	21.58	17.08	0.051
64QAM	848.3	20643	1.4	3	0	21.61	17.11	0.051
64QAM	848.3	20643	1.4	3	1	21.71	17.21	0.053
64QAM	848.3	20643	1.4	3	3	21.55	17.05	0.051
64QAM	848.3	20643	1.4	6	0	20.67	16.17	0.041

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	825.5	20415	3	1	0	23.45	18.95	0.079
QPSK	825.5	20415	3	1	8	23.40	18.90	0.078
QPSK	825.5	20415	3	1	14	23.53	19.03	0.080
QPSK	825.5	20415	3	8	0	22.48	17.98	0.063
QPSK	825.5	20415	3	8	4	22.47	17.97	0.063
QPSK	825.5	20415	3	8	7	22.53	18.03	0.064
QPSK	825.5	20415	3	15	0	22.47	17.97	0.063
QPSK	836.5	20525	3	1	0	23.67	19.17	0.083
QPSK	836.5	20525	3	1	8	23.53	19.03	0.080
QPSK	836.5	20525	3	1	14	23.64	19.14	0.082
QPSK	836.5	20525	3	8	0	22.61	18.11	0.065
QPSK	836.5	20525	3	8	4	22.71	18.21	0.066
QPSK	836.5	20525	3	8	7	22.61	18.11	0.065
QPSK	836.5	20525	3	15	0	22.63	18.13	0.065
QPSK	847.5	20635	3	1	0	23.54	19.04	0.080
QPSK	847.5	20635	3	1	8	23.46	18.96	0.079
QPSK	847.5	20635	3	1	14	23.41	18.91	0.078
QPSK	847.5	20635	3	8	0	22.54	18.04	0.064
QPSK	847.5	20635	3	8	4	22.49	17.99	0.063
QPSK	847.5	20635	3	8	7	22.41	17.91	0.062
QPSK	847.5	20635	3	15	0	22.55	18.05	0.064

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	825.5	20415	3	1	0	23.01	18.51	0.071
16QAM	825.5	20415	3	1	8	22.82	18.32	0.068
16QAM	825.5	20415	3	1	14	22.89	18.39	0.069
16QAM	825.5	20415	3	8	0	21.55	17.05	0.051
16QAM	825.5	20415	3	8	4	21.58	17.08	0.051
16QAM	825.5	20415	3	8	7	21.55	17.05	0.051
16QAM	825.5	20415	3	15	0	21.60	17.10	0.051
16QAM	836.5	20525	3	1	0	22.48	17.98	0.063
16QAM	836.5	20525	3	1	8	22.79	18.29	0.067
16QAM	836.5	20525	3	1	14	22.98	18.48	0.070
16QAM	836.5	20525	3	8	0	21.81	17.31	0.054
16QAM	836.5	20525	3	8	4	21.76	17.26	0.053
16QAM	836.5	20525	3	8	7	21.58	17.08	0.051
16QAM	836.5	20525	3	15	0	21.73	17.23	0.053
16QAM	847.5	20635	3	1	0	22.43	17.93	0.062
16QAM	847.5	20635	3	1	8	22.49	17.99	0.063
16QAM	847.5	20635	3	1	14	22.73	18.23	0.067
16QAM	847.5	20635	3	8	0	21.69	17.19	0.052
16QAM	847.5	20635	3	8	4	21.74	17.24	0.053
16QAM	847.5	20635	3	8	7	21.72	17.22	0.053
16QAM	847.5	20635	3	15	0	21.67	17.17	0.052
64QAM	825.5	20415	3	1	0	21.69	17.19	0.052
64QAM	825.5	20415	3	1	8	21.81	17.31	0.054
64QAM	825.5	20415	3	1	14	21.81	17.31	0.054
64QAM	825.5	20415	3	8	0	20.47	15.97	0.040
64QAM	825.5	20415	3	8	4	20.50	16.00	0.040
64QAM	825.5	20415	3	8	7	20.57	16.07	0.040
64QAM	825.5	20415	3	15	0	20.49	15.99	0.040
64QAM	836.5	20525	3	1	0	21.85	17.35	0.054
64QAM	836.5	20525	3	1	8	21.68	17.18	0.052
64QAM	836.5	20525	3	1	14	21.83	17.33	0.054
64QAM	836.5	20525	3	8	0	20.50	16.00	0.040
64QAM	836.5	20525	3	8	4	20.74	16.24	0.042
64QAM	836.5	20525	3	8	7	20.57	16.07	0.040
64QAM	836.5	20525	3	15	0	20.47	15.97	0.040
64QAM	847.5	20635	3	1	0	21.82	17.32	0.054
64QAM	847.5	20635	3	1	8	22.05	17.55	0.057
64QAM	847.5	20635	3	1	14	21.75	17.25	0.053
64QAM	847.5	20635	3	8	0	20.72	16.22	0.042
64QAM	847.5	20635	3	8	4	20.55	16.05	0.040
64QAM	847.5	20635	3	8	7	20.47	15.97	0.040
64QAM	847.5	20635	3	15	0	20.52	16.02	0.040

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	826.5	20425	5	1	0	23.42	18.92	0.078
QPSK	826.5	20425	5	1	12	23.39	18.89	0.077
QPSK	826.5	20425	5	1	24	23.40	18.90	0.078
QPSK	826.5	20425	5	12	0	22.55	18.05	0.064
QPSK	826.5	20425	5	12	7	22.60	18.10	0.065
QPSK	826.5	20425	5	12	13	22.55	18.05	0.064
QPSK	826.5	20425	5	25	0	22.55	18.05	0.064
QPSK	836.5	20525	5	1	0	23.49	18.99	0.079
QPSK	836.5	20525	5	1	12	24.07	19.57	0.091
QPSK	836.5	20525	5	1	24	23.45	18.95	0.079
QPSK	836.5	20525	5	12	0	22.55	18.05	0.064
QPSK	836.5	20525	5	12	7	22.66	18.16	0.065
QPSK	836.5	20525	5	12	13	22.67	18.17	0.066
QPSK	836.5	20525	5	25	0	22.71	18.21	0.066
QPSK	846.5	20625	5	1	0	23.44	18.94	0.078
QPSK	846.5	20625	5	1	12	23.79	19.29	0.085
QPSK	846.5	20625	5	1	24	23.39	18.89	0.077
QPSK	846.5	20625	5	12	0	22.64	18.14	0.065
QPSK	846.5	20625	5	12	7	22.51	18.01	0.063
QPSK	846.5	20625	5	12	13	22.36	17.86	0.061
QPSK	846.5	20625	5	25	0	22.58	18.08	0.064

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	826.5	20425	5	1	0	22.67	18.17	0.066
16QAM	826.5	20425	5	1	12	22.88	18.38	0.069
16QAM	826.5	20425	5	1	24	22.75	18.25	0.067
16QAM	826.5	20425	5	12	0	21.54	17.04	0.051
16QAM	826.5	20425	5	12	7	21.65	17.15	0.052
16QAM	826.5	20425	5	12	13	21.49	16.99	0.050
16QAM	826.5	20425	5	25	0	21.47	16.97	0.050
16QAM	836.5	20525	5	1	0	22.81	18.31	0.068
16QAM	836.5	20525	5	1	12	23.20	18.70	0.074
16QAM	836.5	20525	5	1	24	22.61	18.11	0.065
16QAM	836.5	20525	5	12	0	21.73	17.23	0.053
16QAM	836.5	20525	5	12	7	21.69	17.19	0.052
16QAM	836.5	20525	5	12	13	21.70	17.20	0.052
16QAM	836.5	20525	5	25	0	21.63	17.13	0.052
16QAM	846.5	20625	5	1	0	22.62	18.12	0.065
16QAM	846.5	20625	5	1	12	23.09	18.59	0.072
16QAM	846.5	20625	5	1	24	22.41	17.91	0.062
16QAM	846.5	20625	5	12	0	21.60	17.10	0.051
16QAM	846.5	20625	5	12	7	21.46	16.96	0.050
16QAM	846.5	20625	5	12	13	21.39	16.89	0.049
16QAM	846.5	20625	5	25	0	21.59	17.09	0.051
64QAM	826.5	20425	5	1	0	21.89	17.39	0.055
64QAM	826.5	20425	5	1	12	21.89	17.39	0.055
64QAM	826.5	20425	5	1	24	21.39	16.89	0.049
64QAM	826.5	20425	5	12	0	20.47	15.97	0.040
64QAM	826.5	20425	5	12	7	20.45	15.95	0.039
64QAM	826.5	20425	5	12	13	20.61	16.11	0.041
64QAM	826.5	20425	5	25	0	20.50	16.00	0.040
64QAM	836.5	20525	5	1	0	21.66	17.16	0.052
64QAM	836.5	20525	5	1	12	22.23	17.73	0.059
64QAM	836.5	20525	5	1	24	21.71	17.21	0.053
64QAM	836.5	20525	5	12	0	20.58	16.08	0.041
64QAM	836.5	20525	5	12	7	20.74	16.24	0.042
64QAM	836.5	20525	5	12	13	20.55	16.05	0.040
64QAM	836.5	20525	5	25	0	20.62	16.12	0.041
64QAM	846.5	20625	5	1	0	21.69	17.19	0.052
64QAM	846.5	20625	5	1	12	21.67	17.17	0.052
64QAM	846.5	20625	5	1	24	21.52	17.02	0.050
64QAM	846.5	20625	5	12	0	20.72	16.22	0.042
64QAM	846.5	20625	5	12	7	20.60	16.10	0.041
64QAM	846.5	20625	5	12	13	20.45	15.95	0.039
64QAM	846.5	20625	5	25	0	20.43	15.93	0.039

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	829	20450	10	1	0	23.42	18.92	0.078
QPSK	829	20450	10	1	25	23.61	19.11	0.081
QPSK	829	20450	10	1	49	23.41	18.91	0.078
QPSK	829	20450	10	25	0	22.49	17.99	0.063
QPSK	829	20450	10	25	12	22.58	18.08	0.064
QPSK	829	20450	10	25	25	22.69	18.19	0.066
QPSK	829	20450	10	50	0	22.61	18.11	0.065
QPSK	836.5	20525	10	1	0	23.51	19.01	0.080
QPSK	836.5	20525	10	1	25	23.79	19.29	0.085
QPSK	836.5	20525	10	1	49	23.66	19.16	0.082
QPSK	836.5	20525	10	25	0	22.69	18.19	0.066
QPSK	836.5	20525	10	25	12	22.67	18.17	0.066
QPSK	836.5	20525	10	25	25	22.63	18.13	0.065
QPSK	836.5	20525	10	50	0	22.64	18.14	0.065
QPSK	844	20600	10	1	0	23.56	19.06	0.081
QPSK	844	20600	10	1	25	23.64	19.14	0.082
QPSK	844	20600	10	1	49	23.38	18.88	0.077
QPSK	844	20600	10	25	0	22.69	18.19	0.066
QPSK	844	20600	10	25	12	22.67	18.17	0.066
QPSK	844	20600	10	25	25	22.29	17.79	0.060
QPSK	844	20600	10	50	0	22.53	18.03	0.064

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	829	20450	10	1	0	22.49	17.99	0.063
16QAM	829	20450	10	1	25	22.61	18.11	0.065
16QAM	829	20450	10	1	49	22.63	18.13	0.065
16QAM	829	20450	10	25	0	21.53	17.03	0.050
16QAM	829	20450	10	25	12	21.60	17.10	0.051
16QAM	829	20450	10	25	25	21.67	17.17	0.052
16QAM	829	20450	10	50	0	21.54	17.04	0.051
16QAM	836.5	20525	10	1	0	23.41	18.91	0.078
16QAM	836.5	20525	10	1	25	22.92	18.42	0.070
16QAM	836.5	20525	10	1	49	22.96	18.46	0.070
16QAM	836.5	20525	10	25	0	21.72	17.22	0.053
16QAM	836.5	20525	10	25	12	21.57	17.07	0.051
16QAM	836.5	20525	10	25	25	21.58	17.08	0.051
16QAM	836.5	20525	10	50	0	21.65	17.15	0.052
16QAM	844	20600	10	1	0	22.79	18.29	0.067
16QAM	844	20600	10	1	25	22.69	18.19	0.066
16QAM	844	20600	10	1	49	22.48	17.98	0.063
16QAM	844	20600	10	25	0	21.58	17.08	0.051
16QAM	844	20600	10	25	12	21.57	17.07	0.051
16QAM	844	20600	10	25	25	21.40	16.90	0.049
16QAM	844	20600	10	50	0	21.53	17.03	0.050
64QAM	829	20450	10	1	0	21.67	17.17	0.052
64QAM	829	20450	10	1	25	21.98	17.48	0.056
64QAM	829	20450	10	1	49	21.55	17.05	0.051
64QAM	829	20450	10	25	0	20.60	16.10	0.041
64QAM	829	20450	10	25	12	20.54	16.04	0.040
64QAM	829	20450	10	25	25	20.68	16.18	0.041
64QAM	829	20450	10	50	0	20.65	16.15	0.041
64QAM	836.5	20525	10	1	0	21.47	16.97	0.050
64QAM	836.5	20525	10	1	25	21.89	17.39	0.055
64QAM	836.5	20525	10	1	49	21.61	17.11	0.051
64QAM	836.5	20525	10	25	0	20.57	16.07	0.040
64QAM	836.5	20525	10	25	12	20.64	16.14	0.041
64QAM	836.5	20525	10	25	25	20.58	16.08	0.041
64QAM	836.5	20525	10	50	0	20.69	16.19	0.042
64QAM	844	20600	10	1	0	21.49	16.99	0.050
64QAM	844	20600	10	1	25	21.55	17.05	0.051
64QAM	844	20600	10	1	49	21.85	17.35	0.054
64QAM	844	20600	10	25	0	20.68	16.18	0.041
64QAM	844	20600	10	25	12	20.56	16.06	0.040
64QAM	844	20600	10	25	25	20.42	15.92	0.039
64QAM	844	20600	10	50	0	20.43	15.93	0.039