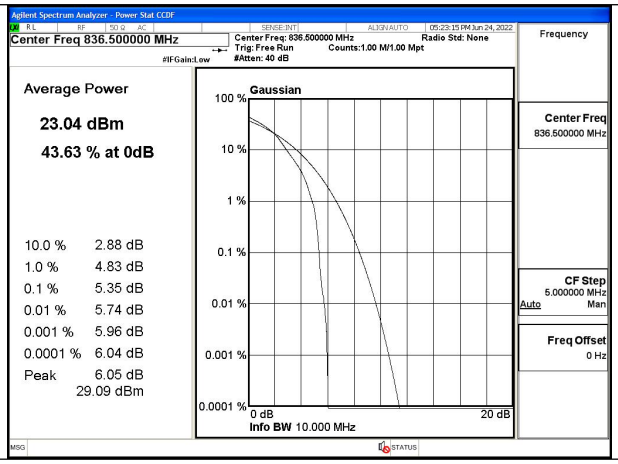

Fig.61

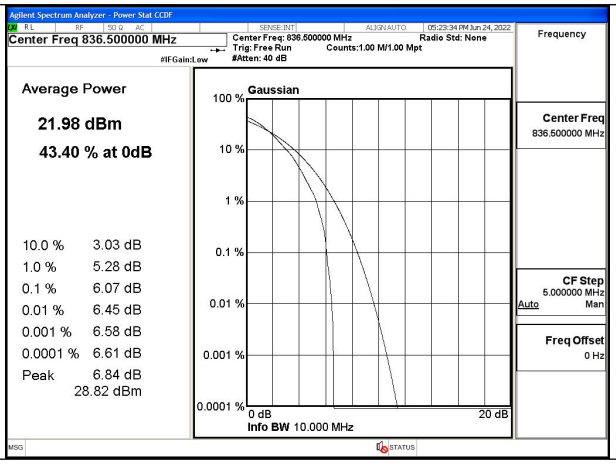

Fig.62

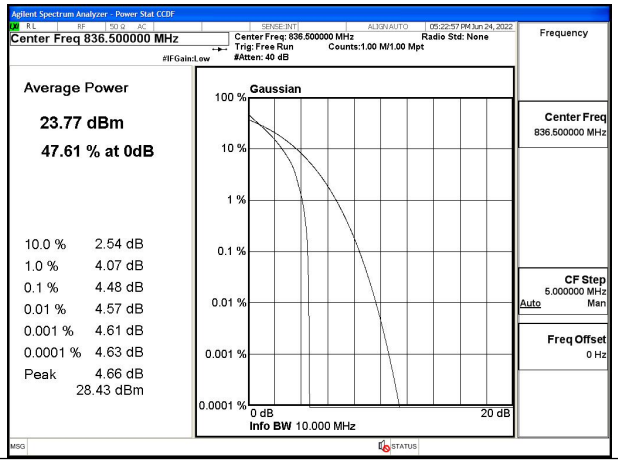

Fig.63

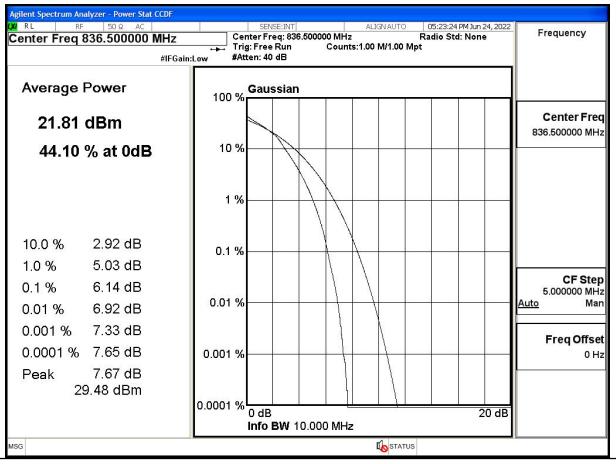

Fig.64

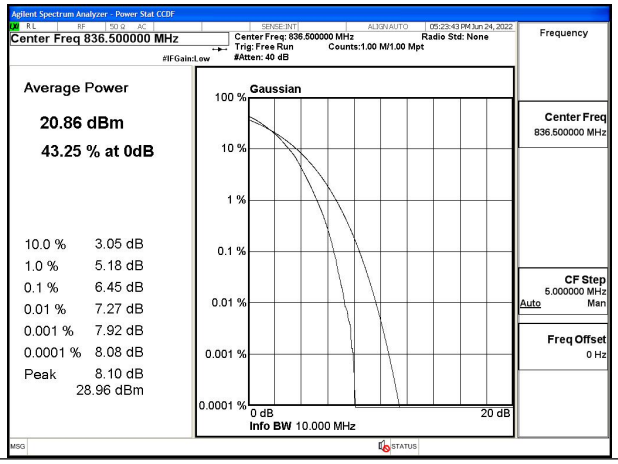

Fig.65

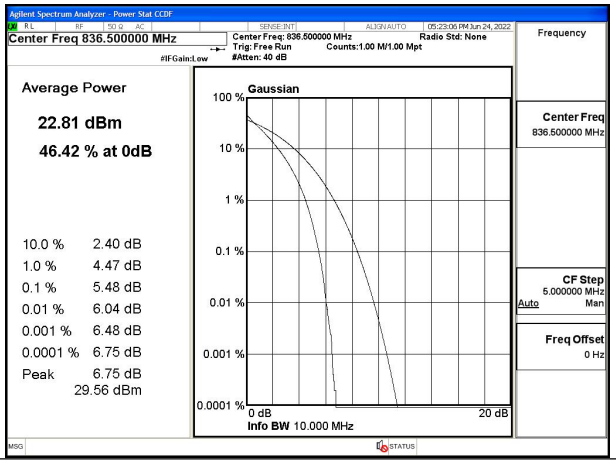

Fig.66

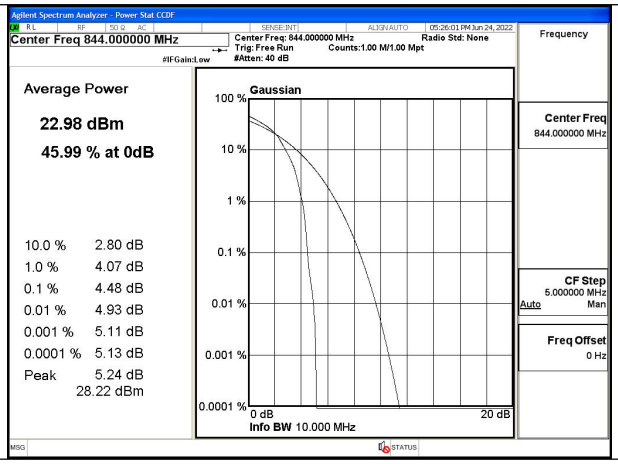

Fig.67

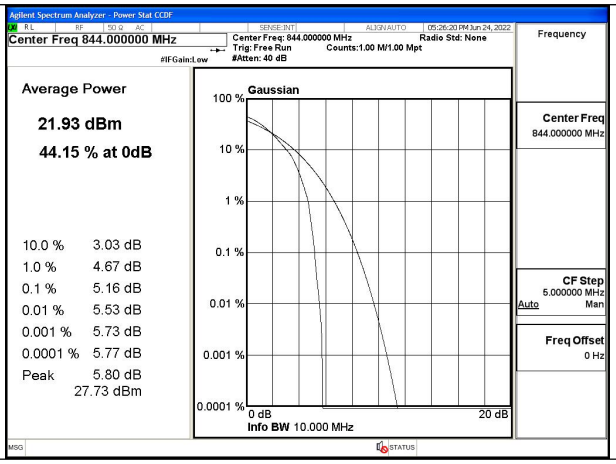

Fig.68

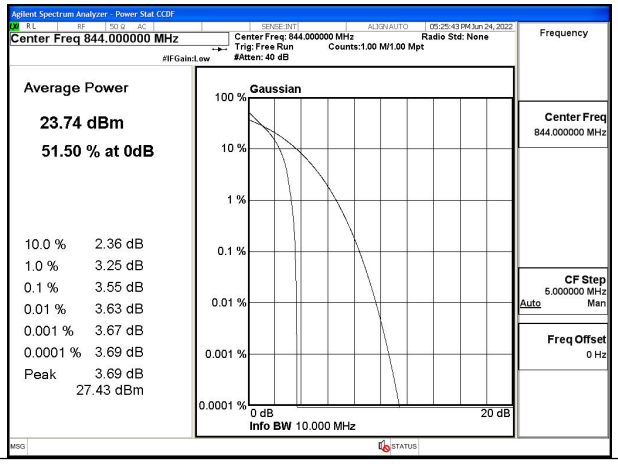

Fig.69

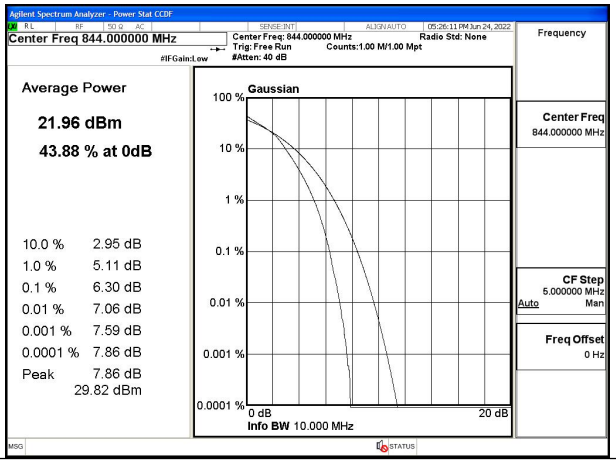

Fig.70

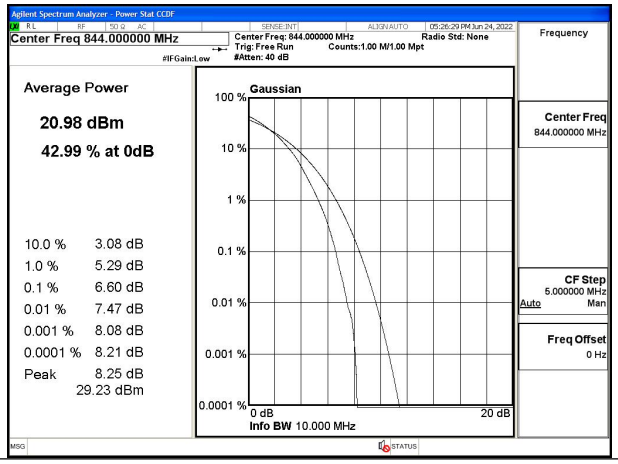

Fig.71

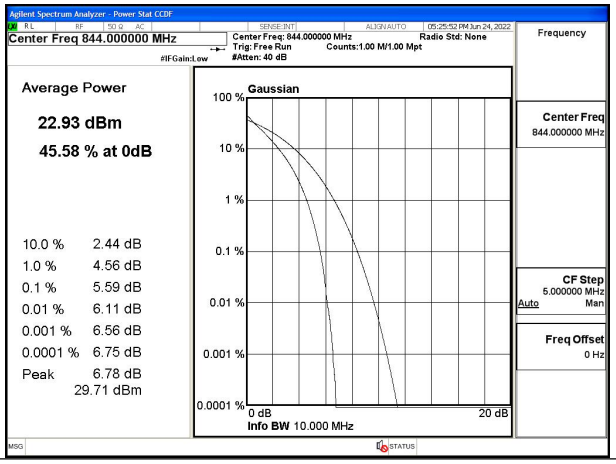

Fig.72

5 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
5	829	20450	10	1	0	Fig.1
5	836.5	20525	10	1	0	Fig.2
5	844	20600	10	1	0	Fig.3

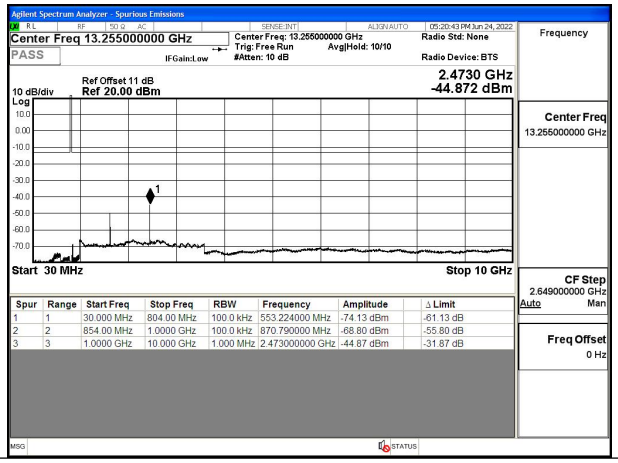

Fig.1

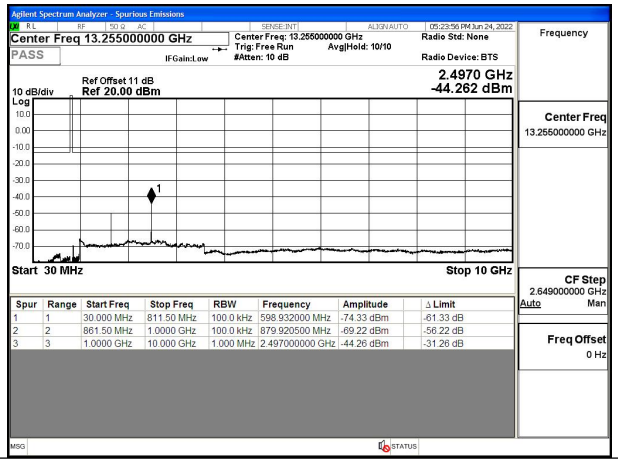

Fig.2

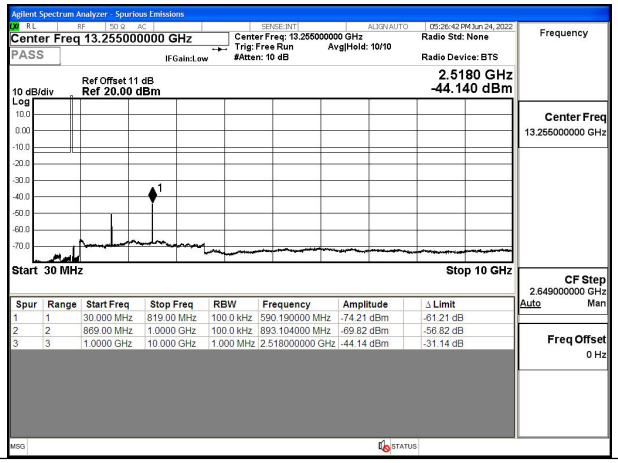

Fig.3

6 Band Edges Compliance

Band	Mode	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
5	QPSK	824.7	20407	1.4	1	0	Fig.1
5	QPSK	824.7	20407	1.4	6	0	Fig.2
5	QPSK	848.3	20643	1.4	1	5	Fig.3
5	QPSK	848.3	20643	1.4	6	0	Fig.4
5	QPSK	825.5	20415	3	1	0	Fig.5
5	QPSK	825.5	20415	3	15	0	Fig.6
5	QPSK	847.5	20635	3	1	14	Fig.7
5	QPSK	847.5	20635	3	15	0	Fig.8
5	QPSK	826.5	20425	5	1	0	Fig.9
5	QPSK	826.5	20425	5	25	0	Fig.10
5	QPSK	846.5	20625	5	1	24	Fig.11
5	QPSK	846.5	20625	5	25	0	Fig.12
5	QPSK	829	20450	10	1	0	Fig.13
5	QPSK	829	20450	10	50	0	Fig.14
5	QPSK	844	20600	10	1	49	Fig.15
5	QPSK	844	20600	10	50	0	Fig.16

Test Mode: QPSK

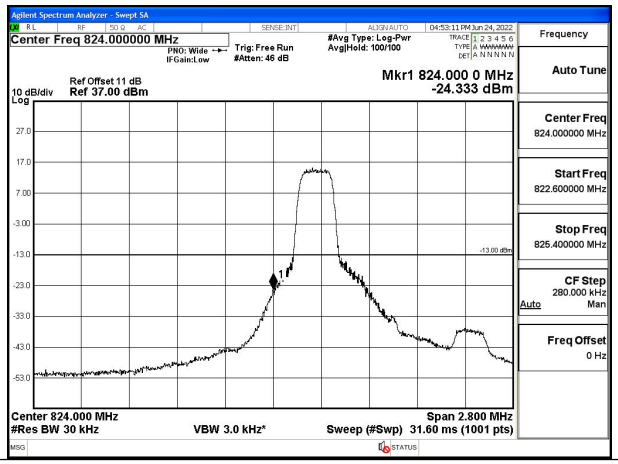

Fig.1

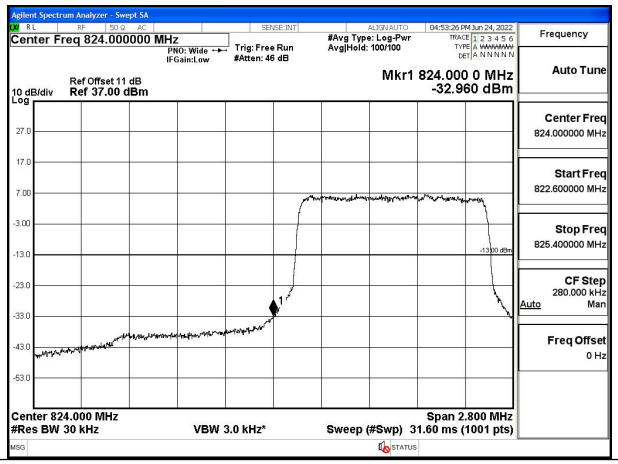

Fig.2

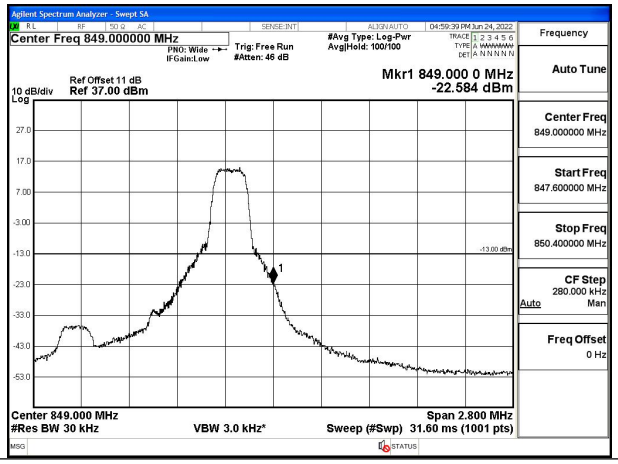

Fig.3

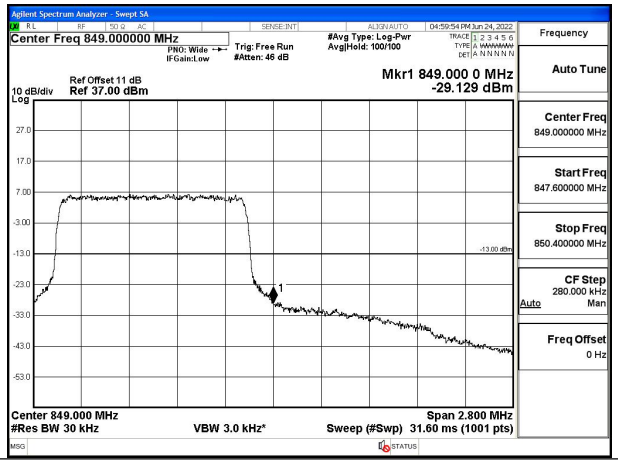

Fig.4

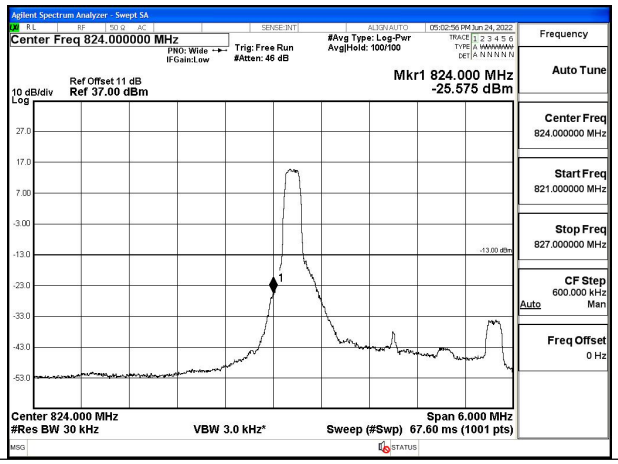

Fig.5

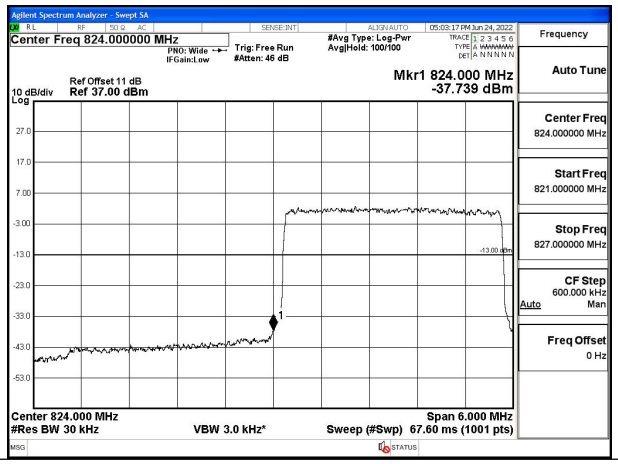

Fig.6

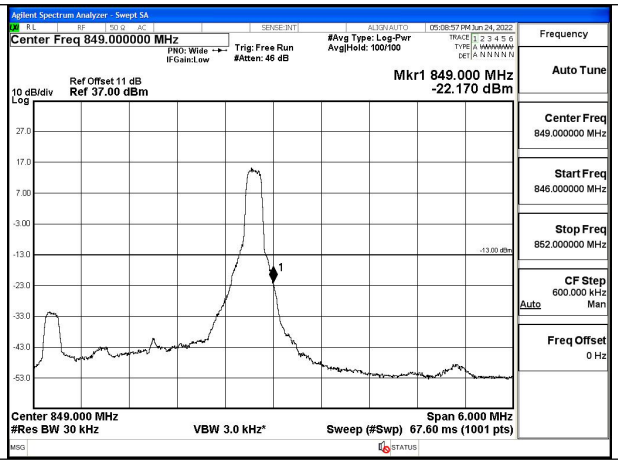

Fig.7

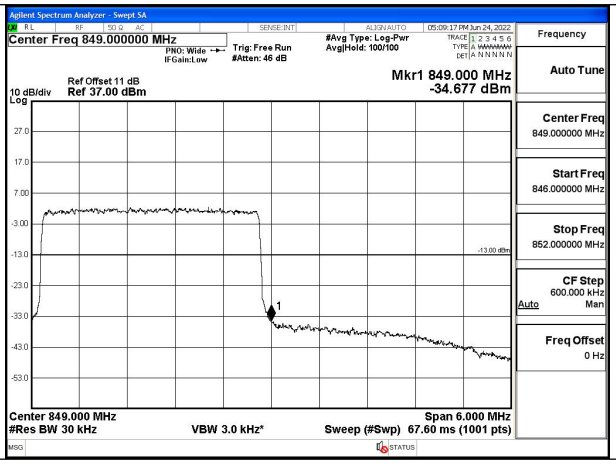

Fig.8

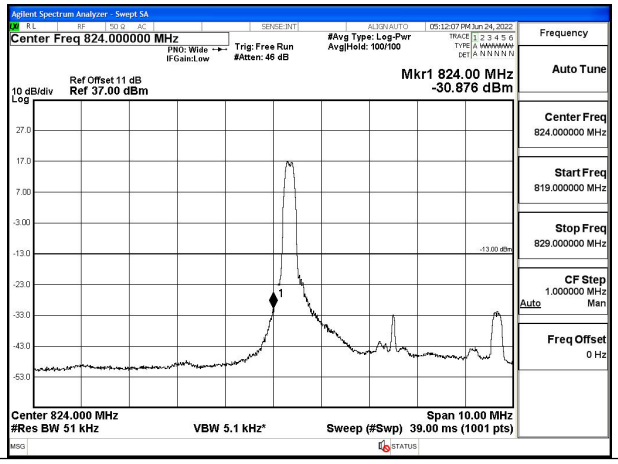

Fig.9

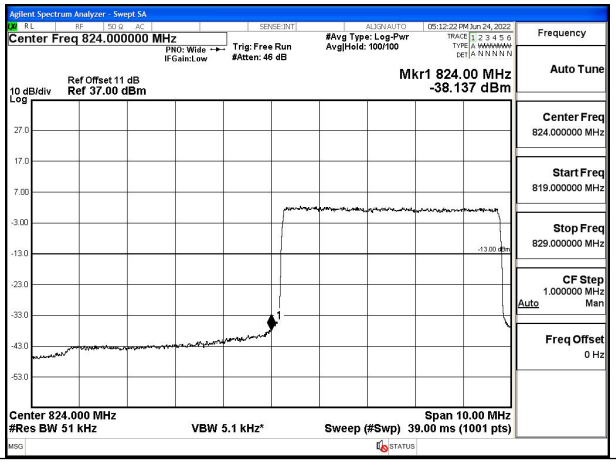

Fig.10

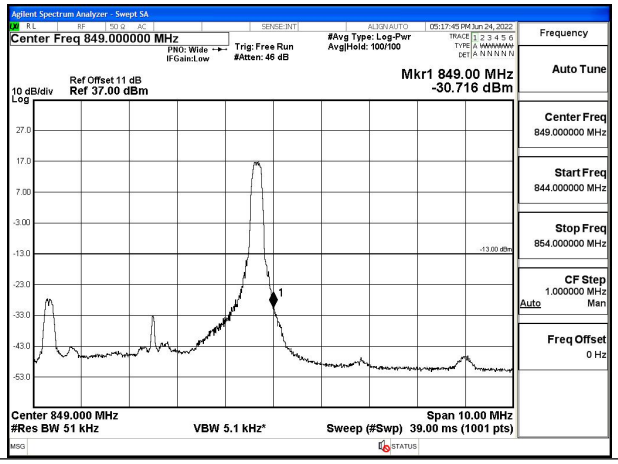

Fig.11

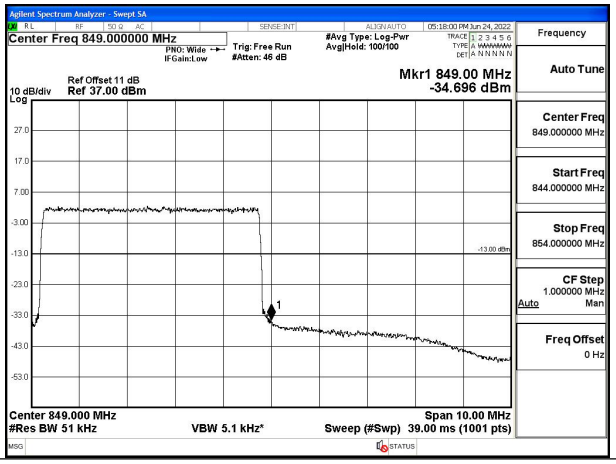

Fig.12

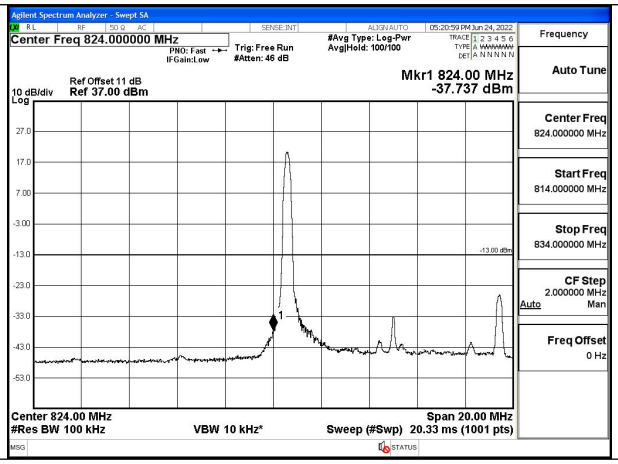

Fig.13

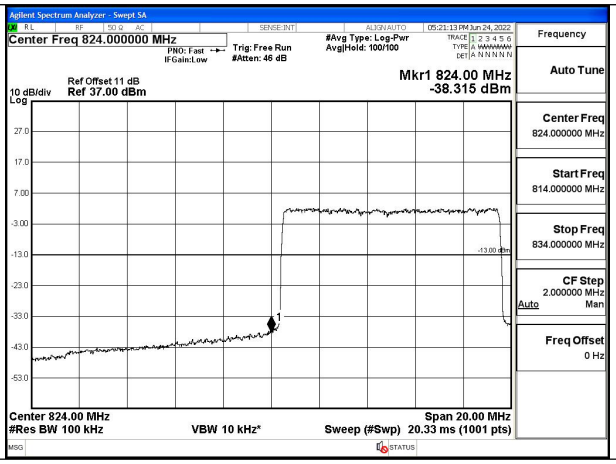

Fig.14

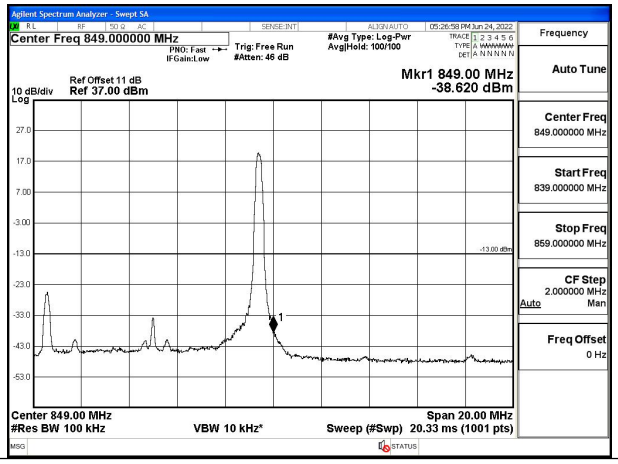

Fig.15

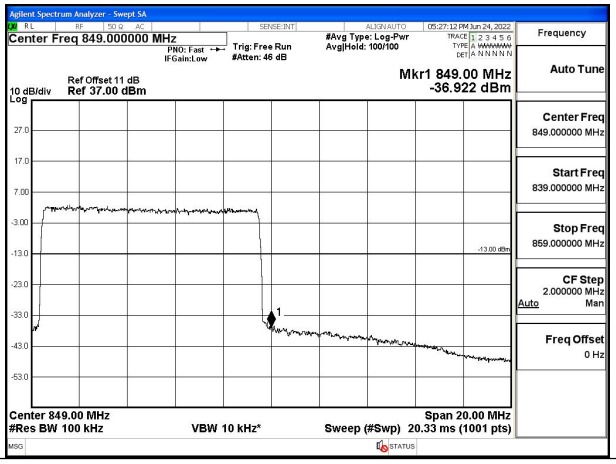

Fig.16

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 5 Low Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	-0.011	-0.009	-0.010	-0.012
0	NV	-0.013	-0.012	-0.009	-0.008
+10	NV	-0.014	-0.005	-0.004	-0.009
+20	NV	-0.012	-0.006	-0.012	-0.010
+30	NV	-0.016	-0.008	-0.009	-0.008
+40	NV	-0.016	-0.011	-0.008	-0.006
+50	NV	-0.013	-0.005	-0.008	-0.013
+55	NV	-0.015	-0.011	-0.006	-0.014
+20	LV	-0.012	-0.005	-0.005	-0.008
+20	HV	-0.015	-0.009	-0.010	-0.010

Temperature(°C)	Voltage	Test Result (ppm) Band 5 High Channel QPSK			
		1.4M	3M	5M	10M
-10	NV	-0.006	-0.017	-0.013	-0.005
0	NV	-0.010	-0.009	-0.013	-0.010
+10	NV	-0.008	-0.011	-0.008	-0.010
+20	NV	-0.007	-0.006	-0.013	-0.010
+30	NV	-0.005	-0.008	-0.013	-0.004
+40	NV	-0.006	-0.009	-0.007	-0.007
+50	NV	-0.008	-0.006	-0.003	-0.008
+55	NV	-0.008	-0.012	-0.005	-0.011
+20	LV	-0.008	-0.013	-0.009	-0.006
+20	HV	-0.007	0.003	-0.012	-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	824.7	20407	1.4	1	0	24.11	20.46	0.111
QPSK	824.7	20407	1.4	1	3	24.34	20.69	0.117
QPSK	824.7	20407	1.4	1	5	24.12	20.47	0.111
QPSK	824.7	20407	1.4	3	0	24.17	20.52	0.113
QPSK	824.7	20407	1.4	3	1	24.14	20.49	0.112
QPSK	824.7	20407	1.4	3	3	24.24	20.59	0.115
QPSK	824.7	20407	1.4	6	0	23.28	19.63	0.092
QPSK	836.5	20525	1.4	1	0	23.80	20.15	0.104
QPSK	836.5	20525	1.4	1	3	23.92	20.27	0.106
QPSK	836.5	20525	1.4	1	5	23.85	20.20	0.105
QPSK	836.5	20525	1.4	3	0	23.94	20.29	0.107
QPSK	836.5	20525	1.4	3	1	23.99	20.34	0.108
QPSK	836.5	20525	1.4	3	3	23.99	20.34	0.108
QPSK	836.5	20525	1.4	6	0	23.05	19.40	0.087
QPSK	848.3	20643	1.4	1	0	24.11	20.46	0.111
QPSK	848.3	20643	1.4	1	3	23.95	20.30	0.107
QPSK	848.3	20643	1.4	1	5	23.88	20.23	0.105
QPSK	848.3	20643	1.4	3	0	24.13	20.48	0.112
QPSK	848.3	20643	1.4	3	1	24.16	20.51	0.112
QPSK	848.3	20643	1.4	3	3	24.09	20.44	0.111
QPSK	848.3	20643	1.4	6	0	23.06	19.41	0.087

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	23.15	19.50	0.089
16QAM	824.7	20407	1.4	1	3	23.86	20.21	0.105
16QAM	824.7	20407	1.4	1	5	23.29	19.64	0.092
16QAM	824.7	20407	1.4	3	0	23.18	19.53	0.090
16QAM	824.7	20407	1.4	3	1	23.17	19.52	0.090
16QAM	824.7	20407	1.4	3	3	23.15	19.50	0.089
16QAM	824.7	20407	1.4	6	0	22.37	18.72	0.074
16QAM	836.5	20525	1.4	1	0	23.27	19.62	0.092
16QAM	836.5	20525	1.4	1	3	23.27	19.62	0.092
16QAM	836.5	20525	1.4	1	5	23.19	19.54	0.090
16QAM	836.5	20525	1.4	3	0	22.98	19.33	0.086
16QAM	836.5	20525	1.4	3	1	23.00	19.35	0.086
16QAM	836.5	20525	1.4	3	3	23.02	19.37	0.086
16QAM	836.5	20525	1.4	6	0	22.22	18.57	0.072
16QAM	848.3	20643	1.4	1	0	23.26	19.61	0.091
16QAM	848.3	20643	1.4	1	3	23.44	19.79	0.095
16QAM	848.3	20643	1.4	1	5	23.02	19.37	0.086
16QAM	848.3	20643	1.4	3	0	23.08	19.43	0.088
16QAM	848.3	20643	1.4	3	1	23.13	19.48	0.089
16QAM	848.3	20643	1.4	3	3	23.12	19.47	0.089
16QAM	848.3	20643	1.4	6	0	22.33	18.68	0.074
64QAM	824.7	20407	1.4	1	0	21.89	18.24	0.067
64QAM	824.7	20407	1.4	1	3	21.88	18.23	0.067
64QAM	824.7	20407	1.4	1	5	22.06	18.41	0.069
64QAM	824.7	20407	1.4	3	0	22.43	18.78	0.076
64QAM	824.7	20407	1.4	3	1	22.24	18.59	0.072
64QAM	824.7	20407	1.4	3	3	22.32	18.67	0.074
64QAM	824.7	20407	1.4	6	0	21.19	17.54	0.057
64QAM	836.5	20525	1.4	1	0	22.16	18.51	0.071
64QAM	836.5	20525	1.4	1	3	22.01	18.36	0.069
64QAM	836.5	20525	1.4	1	5	22.05	18.40	0.069
64QAM	836.5	20525	1.4	3	0	22.00	18.35	0.068
64QAM	836.5	20525	1.4	3	1	22.15	18.50	0.071
64QAM	836.5	20525	1.4	3	3	22.13	18.48	0.070
64QAM	836.5	20525	1.4	6	0	21.07	17.42	0.055
64QAM	848.3	20643	1.4	1	0	22.09	18.44	0.070
64QAM	848.3	20643	1.4	1	3	22.22	18.57	0.072
64QAM	848.3	20643	1.4	1	5	21.98	18.33	0.068
64QAM	848.3	20643	1.4	3	0	22.09	18.44	0.070
64QAM	848.3	20643	1.4	3	1	22.25	18.60	0.072
64QAM	848.3	20643	1.4	3	3	22.27	18.62	0.073
64QAM	848.3	20643	1.4	6	0	21.21	17.56	0.057

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	24.21	20.56	0.114
QPSK	825.5	20415	3	1	8	24.17	20.52	0.113
QPSK	825.5	20415	3	1	14	24.01	20.36	0.109
QPSK	825.5	20415	3	8	0	23.19	19.54	0.090
QPSK	825.5	20415	3	8	4	23.26	19.61	0.091
QPSK	825.5	20415	3	8	7	23.08	19.43	0.088
QPSK	825.5	20415	3	15	0	23.15	19.50	0.089
QPSK	836.5	20525	3	1	0	24.06	20.41	0.110
QPSK	836.5	20525	3	1	8	23.95	20.30	0.107
QPSK	836.5	20525	3	1	14	24.02	20.37	0.109
QPSK	836.5	20525	3	8	0	23.06	19.41	0.087
QPSK	836.5	20525	3	8	4	23.11	19.46	0.088
QPSK	836.5	20525	3	8	7	23.08	19.43	0.088
QPSK	836.5	20525	3	15	0	22.99	19.34	0.086
QPSK	847.5	20635	3	1	0	24.06	20.41	0.110
QPSK	847.5	20635	3	1	8	23.98	20.33	0.108
QPSK	847.5	20635	3	1	14	24.05	20.40	0.110
QPSK	847.5	20635	3	8	0	23.08	19.43	0.088
QPSK	847.5	20635	3	8	4	23.15	19.50	0.089
QPSK	847.5	20635	3	8	7	23.08	19.43	0.088
QPSK	847.5	20635	3	15	0	23.17	19.52	0.090

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	23.24	19.59	0.091
16QAM	825.5	20415	3	1	8	23.58	19.93	0.098
16QAM	825.5	20415	3	1	14	23.07	19.42	0.087
16QAM	825.5	20415	3	8	0	22.19	18.54	0.071
16QAM	825.5	20415	3	8	4	22.31	18.66	0.073
16QAM	825.5	20415	3	8	7	22.14	18.49	0.071
16QAM	825.5	20415	3	15	0	22.17	18.52	0.071
16QAM	836.5	20525	3	1	0	23.58	19.93	0.098
16QAM	836.5	20525	3	1	8	23.47	19.82	0.096
16QAM	836.5	20525	3	1	14	23.14	19.49	0.089
16QAM	836.5	20525	3	8	0	22.11	18.46	0.070
16QAM	836.5	20525	3	8	4	22.16	18.51	0.071
16QAM	836.5	20525	3	8	7	22.12	18.47	0.070
16QAM	836.5	20525	3	15	0	21.93	18.28	0.067
16QAM	847.5	20635	3	1	0	23.21	19.56	0.090
16QAM	847.5	20635	3	1	8	23.17	19.52	0.090
16QAM	847.5	20635	3	1	14	23.64	19.99	0.100
16QAM	847.5	20635	3	8	0	22.19	18.54	0.071
16QAM	847.5	20635	3	8	4	22.08	18.43	0.070
16QAM	847.5	20635	3	8	7	22.21	18.56	0.072
16QAM	847.5	20635	3	15	0	22.11	18.46	0.070
64QAM	825.5	20415	3	1	0	22.51	18.86	0.077
64QAM	825.5	20415	3	1	8	22.33	18.68	0.074
64QAM	825.5	20415	3	1	14	22.12	18.47	0.070
64QAM	825.5	20415	3	8	0	21.34	17.69	0.059
64QAM	825.5	20415	3	8	4	21.40	17.75	0.060
64QAM	825.5	20415	3	8	7	21.19	17.54	0.057
64QAM	825.5	20415	3	15	0	21.19	17.54	0.057
64QAM	836.5	20525	3	1	0	22.49	18.84	0.077
64QAM	836.5	20525	3	1	8	22.20	18.55	0.072
64QAM	836.5	20525	3	1	14	22.14	18.49	0.071
64QAM	836.5	20525	3	8	0	21.01	17.36	0.054
64QAM	836.5	20525	3	8	4	21.24	17.59	0.057
64QAM	836.5	20525	3	8	7	20.99	17.34	0.054
64QAM	836.5	20525	3	15	0	21.20	17.55	0.057
64QAM	847.5	20635	3	1	0	22.28	18.63	0.073
64QAM	847.5	20635	3	1	8	22.22	18.57	0.072
64QAM	847.5	20635	3	1	14	21.94	18.29	0.067
64QAM	847.5	20635	3	8	0	21.29	17.64	0.058
64QAM	847.5	20635	3	8	4	21.25	17.60	0.058
64QAM	847.5	20635	3	8	7	21.20	17.55	0.057
64QAM	847.5	20635	3	15	0	21.28	17.63	0.058

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	23.96	20.31	0.107
QPSK	826.5	20425	5	1	12	24.25	20.60	0.115
QPSK	826.5	20425	5	1	24	24.02	20.37	0.109
QPSK	826.5	20425	5	12	0	23.29	19.64	0.092
QPSK	826.5	20425	5	12	7	23.16	19.51	0.089
QPSK	826.5	20425	5	12	13	23.16	19.51	0.089
QPSK	826.5	20425	5	25	0	23.24	19.59	0.091
QPSK	836.5	20525	5	1	0	23.85	20.20	0.105
QPSK	836.5	20525	5	1	12	24.15	20.50	0.112
QPSK	836.5	20525	5	1	24	23.92	20.27	0.106
QPSK	836.5	20525	5	12	0	23.00	19.35	0.086
QPSK	836.5	20525	5	12	7	23.10	19.45	0.088
QPSK	836.5	20525	5	12	13	23.01	19.36	0.086
QPSK	836.5	20525	5	25	0	23.08	19.43	0.088
QPSK	846.5	20625	5	1	0	23.96	20.31	0.107
QPSK	846.5	20625	5	1	12	24.04	20.39	0.109
QPSK	846.5	20625	5	1	24	23.84	20.19	0.104
QPSK	846.5	20625	5	12	0	23.06	19.41	0.087
QPSK	846.5	20625	5	12	7	23.11	19.46	0.088
QPSK	846.5	20625	5	12	13	23.05	19.40	0.087
QPSK	846.5	20625	5	25	0	23.06	19.41	0.087

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	23.04	19.39	0.087
16QAM	826.5	20425	5	1	12	23.62	19.97	0.099
16QAM	826.5	20425	5	1	24	22.78	19.13	0.082
16QAM	826.5	20425	5	12	0	22.23	18.58	0.072
16QAM	826.5	20425	5	12	7	22.19	18.54	0.071
16QAM	826.5	20425	5	12	13	22.16	18.51	0.071
16QAM	826.5	20425	5	25	0	22.19	18.54	0.071
16QAM	836.5	20525	5	1	0	23.52	19.87	0.097
16QAM	836.5	20525	5	1	12	23.47	19.82	0.096
16QAM	836.5	20525	5	1	24	23.12	19.47	0.089
16QAM	836.5	20525	5	12	0	21.99	18.34	0.068
16QAM	836.5	20525	5	12	7	22.10	18.45	0.070
16QAM	836.5	20525	5	12	13	21.95	18.30	0.068
16QAM	836.5	20525	5	25	0	22.18	18.53	0.071
16QAM	846.5	20625	5	1	0	23.15	19.50	0.089
16QAM	846.5	20625	5	1	12	23.29	19.64	0.092
16QAM	846.5	20625	5	1	24	23.19	19.54	0.090
16QAM	846.5	20625	5	12	0	22.07	18.42	0.070
16QAM	846.5	20625	5	12	7	22.22	18.57	0.072
16QAM	846.5	20625	5	12	13	22.13	18.48	0.070
16QAM	846.5	20625	5	25	0	22.07	18.42	0.070
64QAM	826.5	20425	5	1	0	22.22	18.57	0.072
64QAM	826.5	20425	5	1	12	22.59	18.94	0.078
64QAM	826.5	20425	5	1	24	22.25	18.60	0.072
64QAM	826.5	20425	5	12	0	21.23	17.58	0.057
64QAM	826.5	20425	5	12	7	21.30	17.65	0.058
64QAM	826.5	20425	5	12	13	21.14	17.49	0.056
64QAM	826.5	20425	5	25	0	21.19	17.54	0.057
64QAM	836.5	20525	5	1	0	22.07	18.42	0.070
64QAM	836.5	20525	5	1	12	21.98	18.33	0.068
64QAM	836.5	20525	5	1	24	22.38	18.73	0.075
64QAM	836.5	20525	5	12	0	21.18	17.53	0.057
64QAM	836.5	20525	5	12	7	21.12	17.47	0.056
64QAM	836.5	20525	5	12	13	21.07	17.42	0.055
64QAM	836.5	20525	5	25	0	21.09	17.44	0.055
64QAM	846.5	20625	5	1	0	22.27	18.62	0.073
64QAM	846.5	20625	5	1	12	22.15	18.50	0.071
64QAM	846.5	20625	5	1	24	22.02	18.37	0.069
64QAM	846.5	20625	5	12	0	21.17	17.52	0.056
64QAM	846.5	20625	5	12	7	21.18	17.53	0.057
64QAM	846.5	20625	5	12	13	21.12	17.47	0.056
64QAM	846.5	20625	5	25	0	21.29	17.64	0.058

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	24.11	20.46	0.111
QPSK	829	20450	10	1	25	24.21	20.56	0.114
QPSK	829	20450	10	1	49	24.03	20.38	0.109
QPSK	829	20450	10	25	0	23.21	19.56	0.090
QPSK	829	20450	10	25	12	23.18	19.53	0.090
QPSK	829	20450	10	25	25	23.19	19.54	0.090
QPSK	829	20450	10	50	0	23.13	19.48	0.089
QPSK	836.5	20525	10	1	0	23.98	20.33	0.108
QPSK	836.5	20525	10	1	25	24.15	20.50	0.112
QPSK	836.5	20525	10	1	49	24.05	20.40	0.110
QPSK	836.5	20525	10	25	0	23.01	19.36	0.086
QPSK	836.5	20525	10	25	12	23.07	19.42	0.087
QPSK	836.5	20525	10	25	25	23.05	19.40	0.087
QPSK	836.5	20525	10	50	0	23.05	19.40	0.087
QPSK	844	20600	10	1	0	23.94	20.29	0.107
QPSK	844	20600	10	1	25	24.05	20.40	0.110
QPSK	844	20600	10	1	49	24.03	20.38	0.109
QPSK	844	20600	10	25	0	23.21	19.56	0.090
QPSK	844	20600	10	25	12	23.11	19.46	0.088
QPSK	844	20600	10	25	25	23.12	19.47	0.089
QPSK	844	20600	10	50	0	23.09	19.44	0.088

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	23.38	19.73	0.094
16QAM	829	20450	10	1	25	23.28	19.63	0.092
16QAM	829	20450	10	1	49	23.65	20.00	0.100
16QAM	829	20450	10	25	0	22.28	18.63	0.073
16QAM	829	20450	10	25	12	22.14	18.49	0.071
16QAM	829	20450	10	25	25	22.15	18.50	0.071
16QAM	829	20450	10	50	0	22.25	18.60	0.072
16QAM	836.5	20525	10	1	0	23.55	19.90	0.098
16QAM	836.5	20525	10	1	25	23.05	19.40	0.087
16QAM	836.5	20525	10	1	49	23.51	19.86	0.097
16QAM	836.5	20525	10	25	0	22.05	18.40	0.069
16QAM	836.5	20525	10	25	12	22.00	18.35	0.068
16QAM	836.5	20525	10	25	25	21.95	18.30	0.068
16QAM	836.5	20525	10	50	0	22.03	18.38	0.069
16QAM	844	20600	10	1	0	23.81	20.16	0.104
16QAM	844	20600	10	1	25	23.25	19.60	0.091
16QAM	844	20600	10	1	49	23.36	19.71	0.094
16QAM	844	20600	10	25	0	22.24	18.59	0.072
16QAM	844	20600	10	25	12	22.20	18.55	0.072
16QAM	844	20600	10	25	25	22.18	18.53	0.071
16QAM	844	20600	10	50	0	22.15	18.50	0.071
64QAM	829	20450	10	1	0	22.43	18.78	0.076
64QAM	829	20450	10	1	25	22.52	18.87	0.077
64QAM	829	20450	10	1	49	22.54	18.89	0.077
64QAM	829	20450	10	25	0	21.30	17.65	0.058
64QAM	829	20450	10	25	12	21.26	17.61	0.058
64QAM	829	20450	10	25	25	21.23	17.58	0.057
64QAM	829	20450	10	50	0	21.18	17.53	0.057
64QAM	836.5	20525	10	1	0	22.24	18.59	0.072
64QAM	836.5	20525	10	1	25	22.26	18.61	0.073
64QAM	836.5	20525	10	1	49	22.22	18.57	0.072
64QAM	836.5	20525	10	25	0	21.09	17.44	0.055
64QAM	836.5	20525	10	25	12	21.19	17.54	0.057
64QAM	836.5	20525	10	25	25	21.09	17.44	0.055
64QAM	836.5	20525	10	50	0	21.12	17.47	0.056
64QAM	844	20600	10	1	0	22.02	18.37	0.069
64QAM	844	20600	10	1	25	22.62	18.97	0.079
64QAM	844	20600	10	1	49	22.21	18.56	0.072
64QAM	844	20600	10	25	0	21.28	17.63	0.058
64QAM	844	20600	10	25	12	21.26	17.61	0.058
64QAM	844	20600	10	25	25	21.10	17.45	0.056
64QAM	844	20600	10	50	0	21.20	17.55	0.057