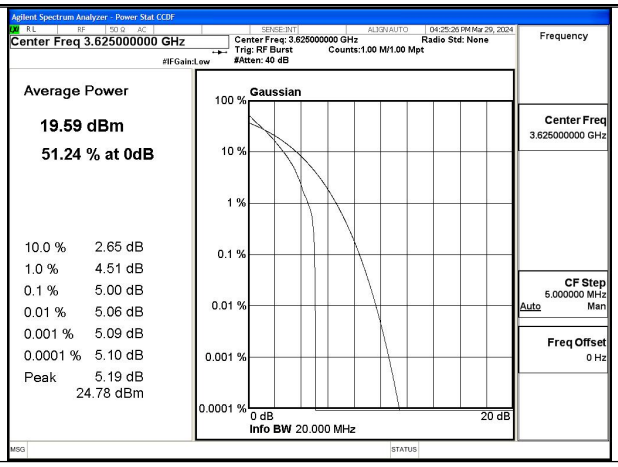

Fig.61

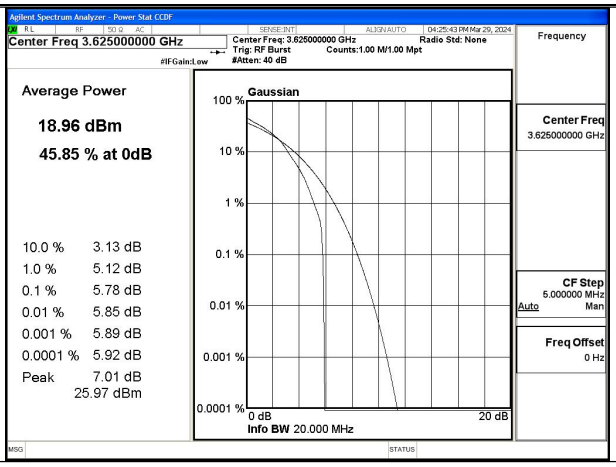

Fig.62

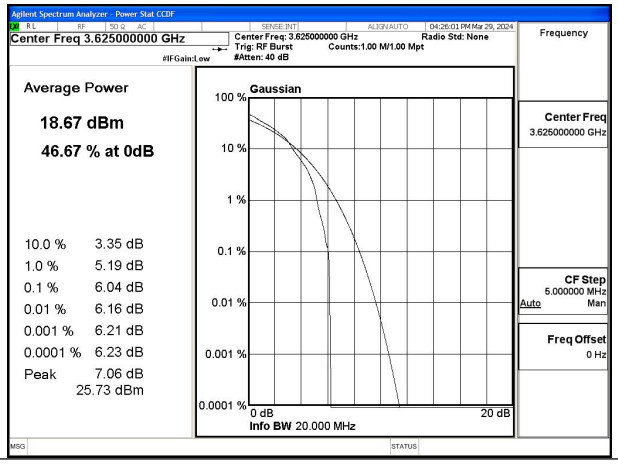

Fig.63

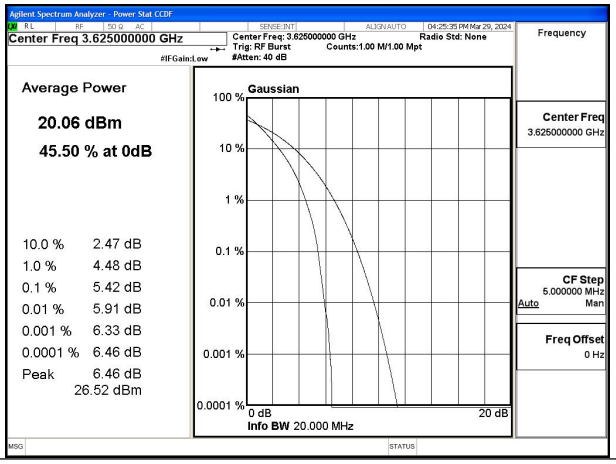

Fig.64

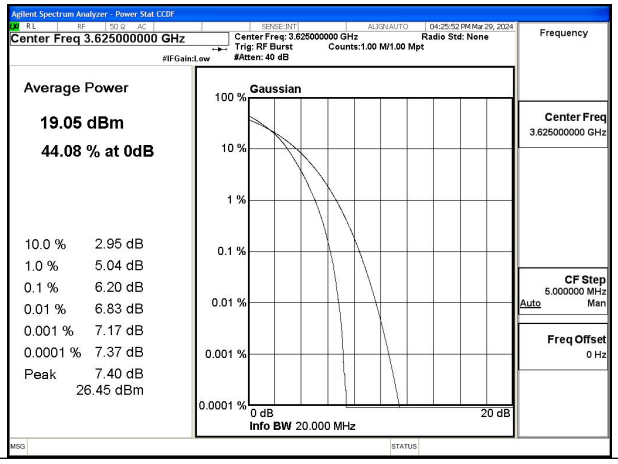

Fig.65

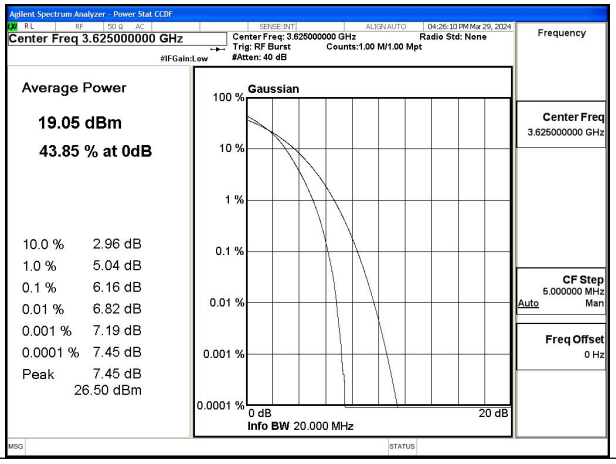

Fig.66

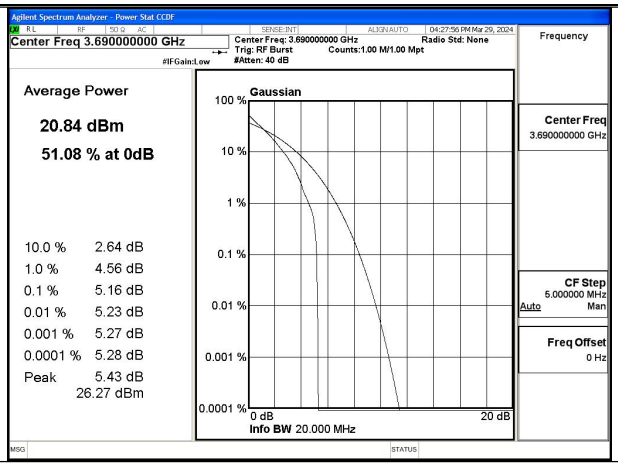

Fig.67

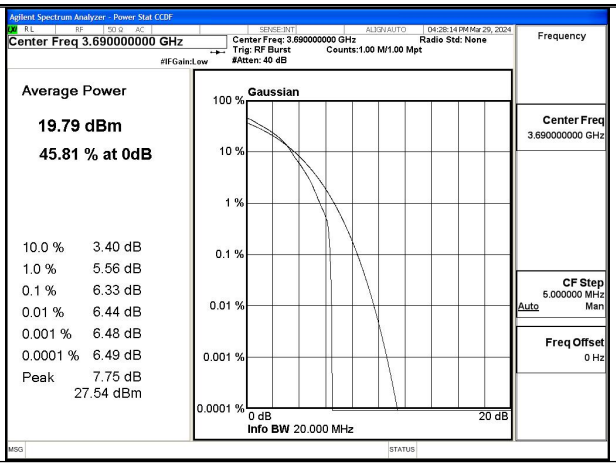

Fig.68

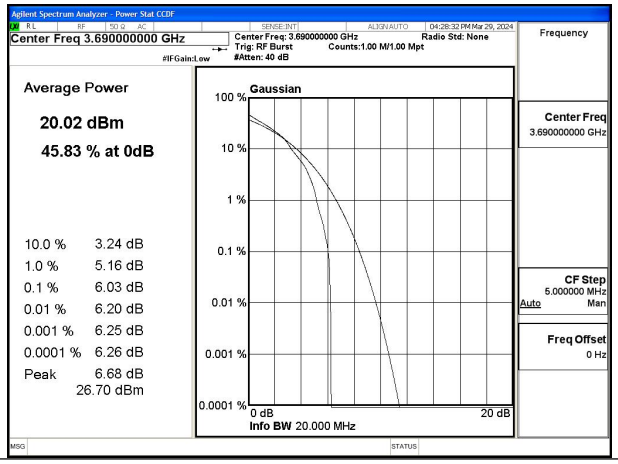

Fig.69

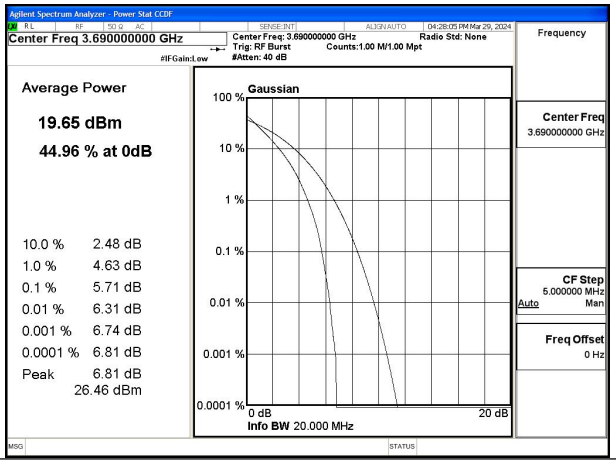

Fig.70

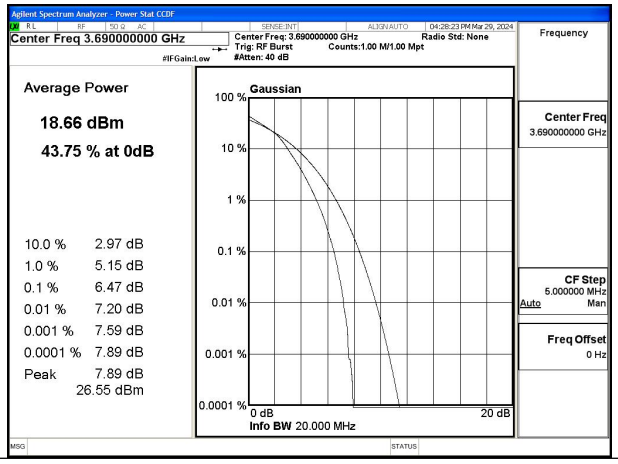

Fig.71

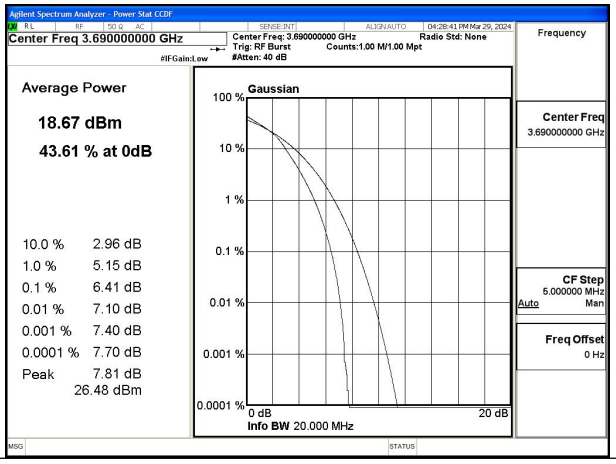

Fig.72

5 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
48	3560	55340	20	1	0	Fig.1
48	3625	55990	20	1	0	Fig.2
48	3690	56640	20	1	0	Fig.3

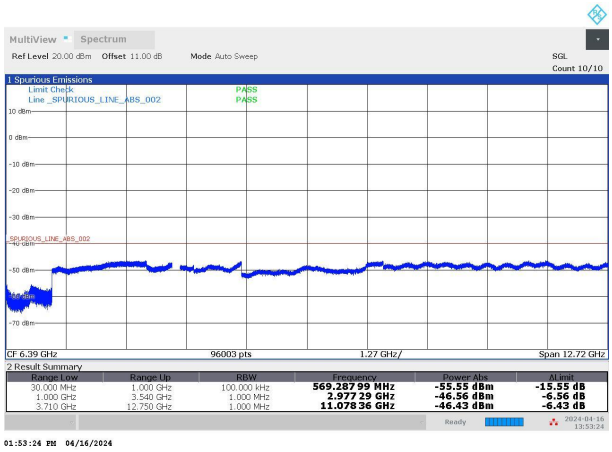

Fig.1

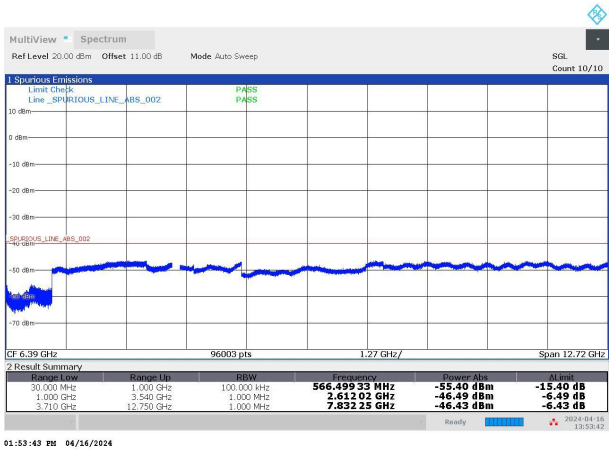

Fig.2

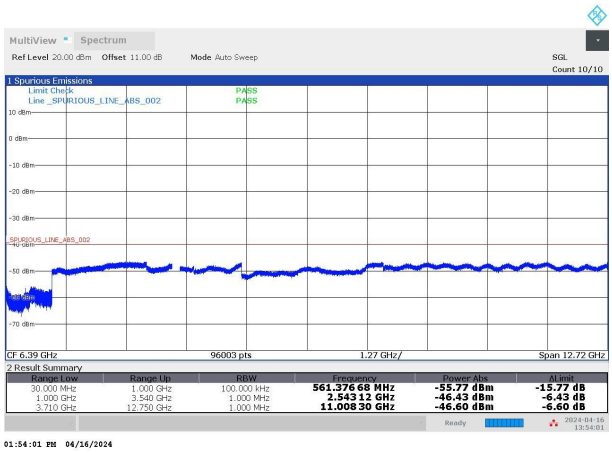

Fig.3

6 Band Edges Compliance

Band	Mode	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
48	QPSK	3552.5	55265	5	1	0	Fig.1
48	QPSK	3552.5	55265	5	25	0	Fig.2
48	QPSK	3697.5	56715	5	1	24	Fig.3
48	QPSK	3697.5	56715	5	25	0	Fig.4
48	QPSK	3555	55290	10	1	0	Fig.5
48	QPSK	3555	55290	10	50	0	Fig.6
48	QPSK	3695	56690	10	1	49	Fig.7
48	QPSK	3695	56690	10	50	0	Fig.8
48	QPSK	3557.5	55315	15	1	0	Fig.9
48	QPSK	3557.5	55315	15	75	0	Fig.10
48	QPSK	3692.5	56665	15	1	74	Fig.11
48	QPSK	3692.5	56665	15	75	0	Fig.12
48	QPSK	3560	55340	20	1	0	Fig.13
48	QPSK	3560	55340	20	100	0	Fig.14
48	QPSK	3690	56640	20	1	99	Fig.15
48	QPSK	3690	56640	20	100	0	Fig.16

Test Mode: QPSK

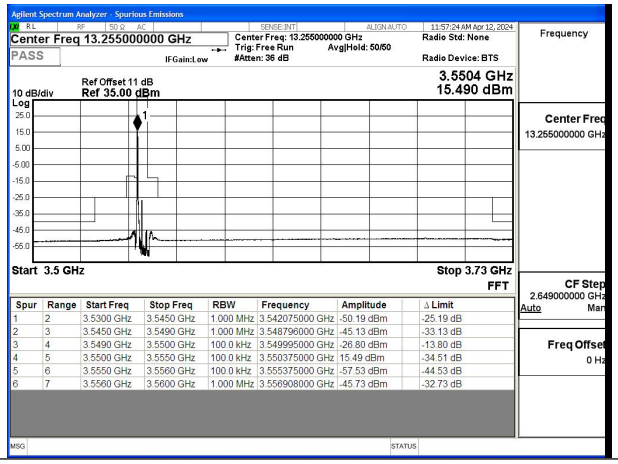

Fig.1

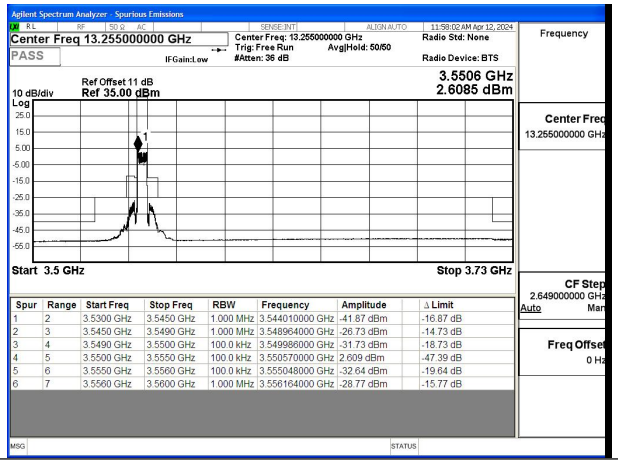

Fig.2

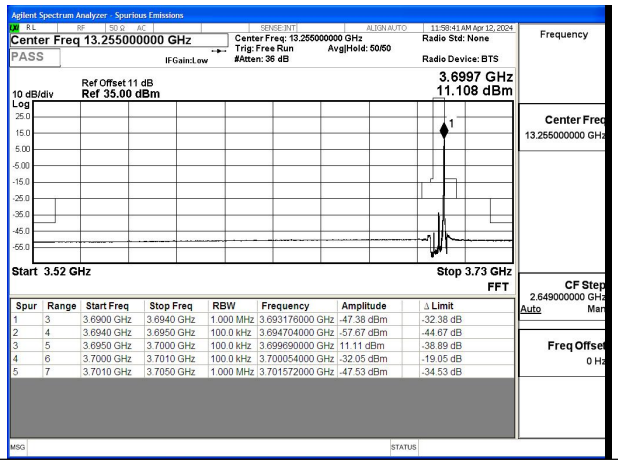

Fig.3

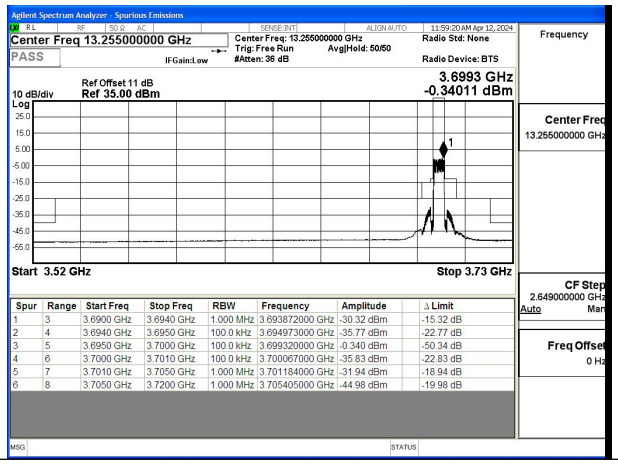

Fig.4

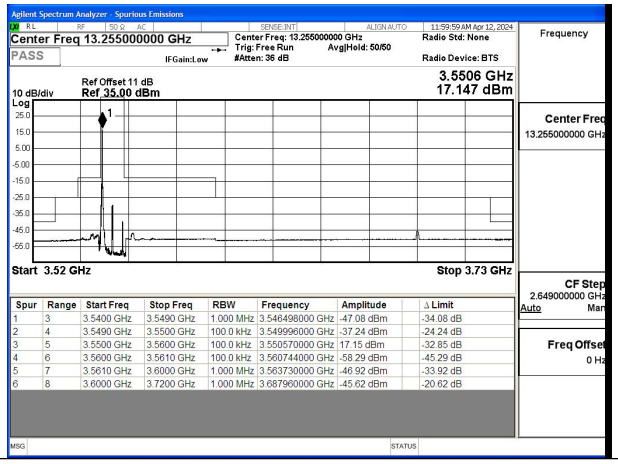

Fig.5

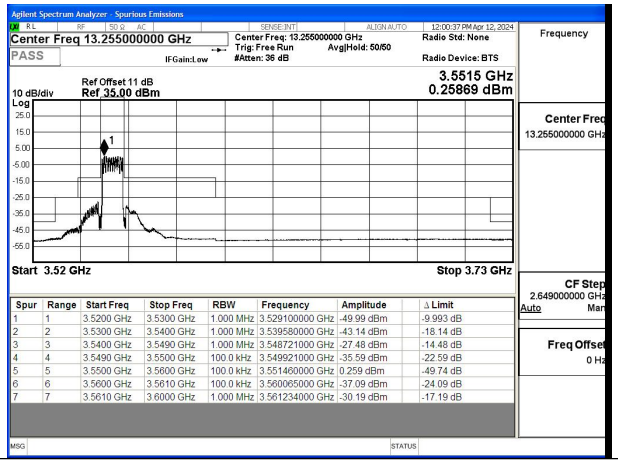

Fig.6

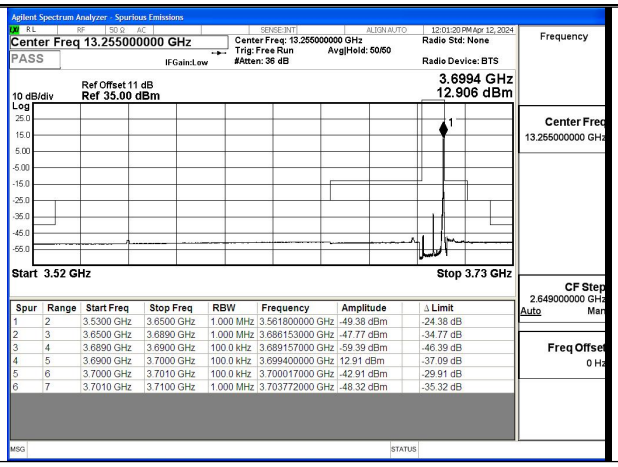

Fig.7

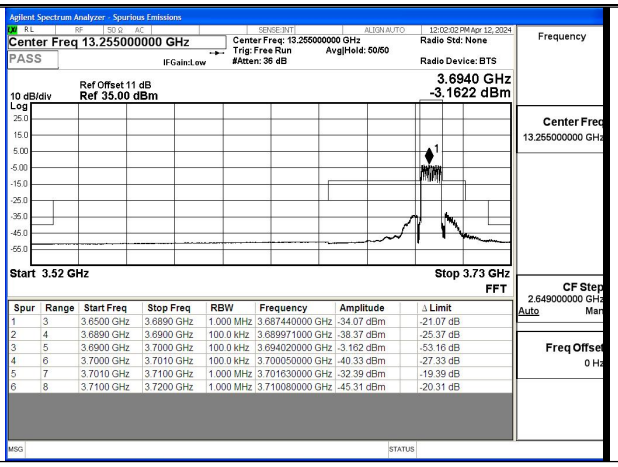

Fig.8

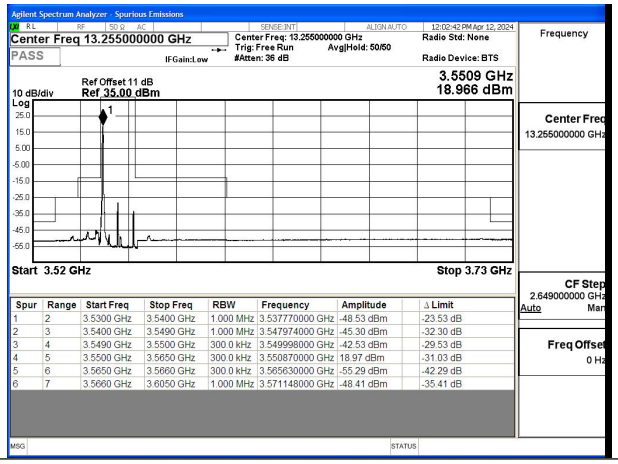

Fig.9

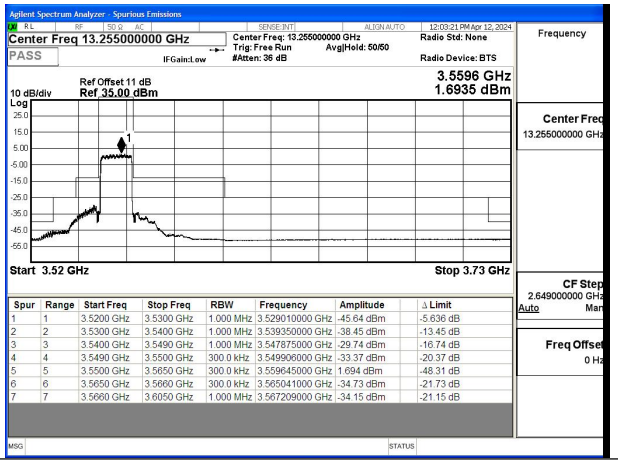

Fig.10

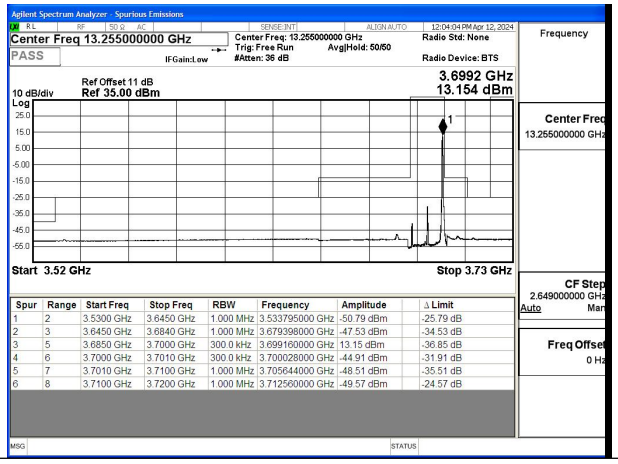

Fig.11

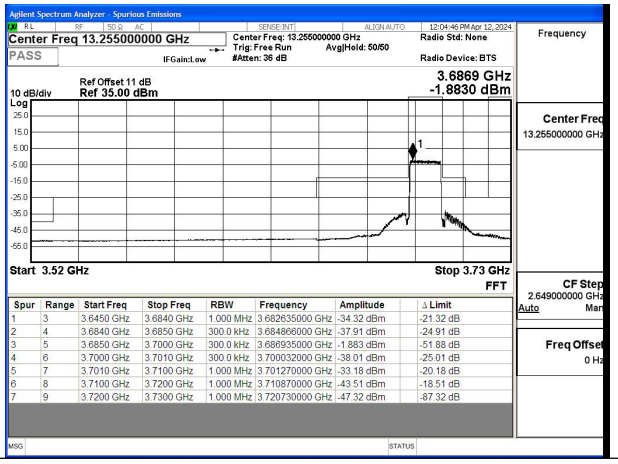

Fig.12

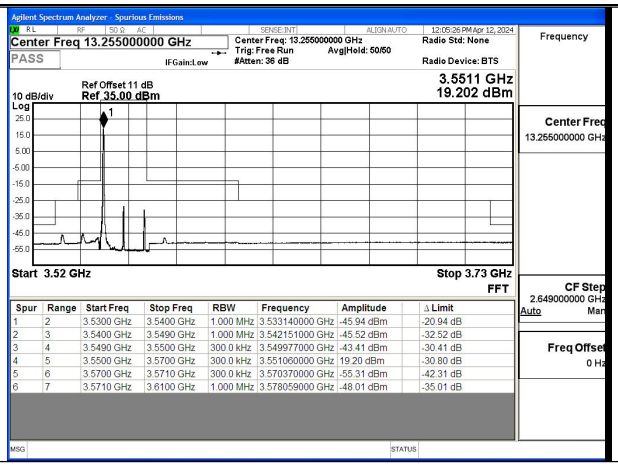

Fig.13

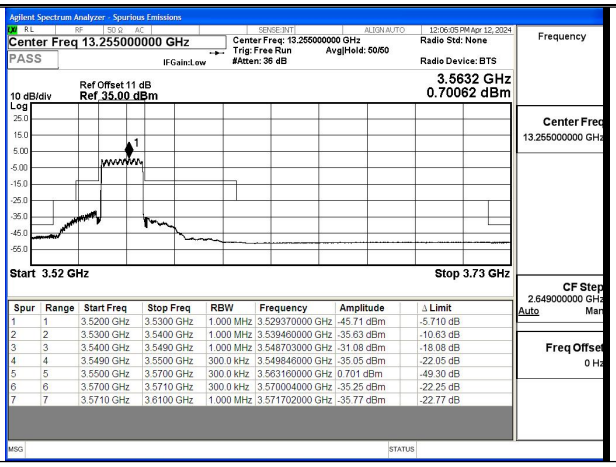

Fig.14

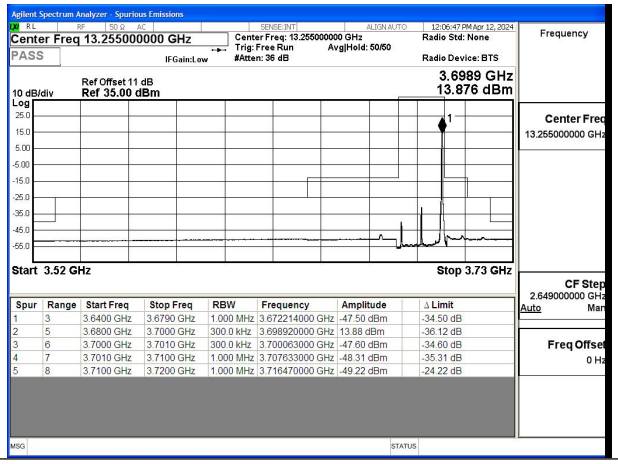

Fig.15

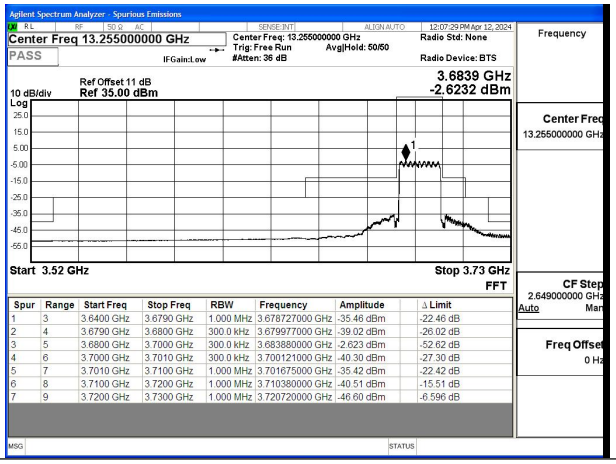

Fig.16

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 48 Low Channel QPSK			
		5M	10M	15M	20M
-30	NV	-0.004	-0.001	0.002	0.001
-20	NV	-0.003	-0.001	0.000	-0.002
-10	NV	0.002	-0.001	0.001	-0.001
0	NV	-0.003	0.001	-0.003	-0.001
+10	NV	0.002	-0.002	-0.001	-0.002
+20	NV	-0.001	0.002	-0.002	-0.001
+30	NV	-0.001	0.001	-0.002	-0.001
+40	NV	0.003	0.002	-0.002	-0.002
+50	NV	-0.001	-0.001	-0.002	-0.001
+20	LV	0.002	-0.001	-0.002	0.001
+20	HV	0.002	-0.001	-0.002	0.001

Temperature(°C)	Voltage	Test Result (ppm) Band 48 High Channel QPSK			
		5M	10M	15M	20M
-30	NV	0.002	-0.001	0.001	-0.001
-20	NV	-0.001	-0.001	-0.001	-0.001
-10	NV	-0.002	-0.003	-0.003	-0.001
0	NV	-0.001	-0.004	0.001	-0.001
+10	NV	0.000	-0.003	0.002	-0.001
+20	NV	0.002	0.002	-0.002	-0.002
+30	NV	0.000	-0.001	0.000	-0.001
+40	NV	-0.001	-0.003	0.001	-0.003
+50	NV	0.001	-0.001	-0.001	-0.003
+20	LV	0.001	-0.002	-0.002	-0.003
+20	HV	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	3552.5	55265	5	1	0	23.33	21.33	0.136
QPSK	3552.5	55265	5	1	12	23.37	21.37	0.137
QPSK	3552.5	55265	5	1	24	23.33	21.33	0.136
QPSK	3552.5	55265	5	12	0	22.76	20.76	0.119
QPSK	3552.5	55265	5	12	7	22.77	20.77	0.119
QPSK	3552.5	55265	5	12	13	22.69	20.69	0.117
QPSK	3552.5	55265	5	25	0	22.71	20.71	0.118
QPSK	3625	55990	5	1	0	22.62	20.62	0.115
QPSK	3625	55990	5	1	12	22.65	20.65	0.116
QPSK	3625	55990	5	1	24	22.67	20.67	0.117
QPSK	3625	55990	5	12	0	22.07	20.07	0.102
QPSK	3625	55990	5	12	7	22.15	20.15	0.104
QPSK	3625	55990	5	12	13	22.02	20.02	0.100
QPSK	3625	55990	5	25	0	22.00	20.00	0.100
QPSK	3697.5	56715	5	1	0	22.86	20.86	0.122
QPSK	3697.5	56715	5	1	12	23.00	21.00	0.126
QPSK	3697.5	56715	5	1	24	23.00	21.00	0.126
QPSK	3697.5	56715	5	12	0	22.28	20.28	0.107
QPSK	3697.5	56715	5	12	7	22.26	20.26	0.106
QPSK	3697.5	56715	5	12	13	22.24	20.24	0.106
QPSK	3697.5	56715	5	25	0	22.32	20.32	0.108

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	3552.5	55265	5	1	0	22.84	20.84	0.121
16QAM	3552.5	55265	5	1	12	22.82	20.82	0.121
16QAM	3552.5	55265	5	1	24	22.80	20.80	0.120
16QAM	3552.5	55265	5	12	0	21.70	19.70	0.093
16QAM	3552.5	55265	5	12	7	21.72	19.72	0.094
16QAM	3552.5	55265	5	12	13	21.74	19.74	0.094
16QAM	3552.5	55265	5	25	0	21.76	19.76	0.095
16QAM	3625	55990	5	1	0	22.19	20.19	0.104
16QAM	3625	55990	5	1	12	22.18	20.18	0.104
16QAM	3625	55990	5	1	24	22.19	20.19	0.104
16QAM	3625	55990	5	12	0	21.13	19.13	0.082
16QAM	3625	55990	5	12	7	21.12	19.12	0.082
16QAM	3625	55990	5	12	13	21.09	19.09	0.081
16QAM	3625	55990	5	25	0	21.06	19.06	0.081
16QAM	3697.5	56715	5	1	0	22.40	20.40	0.110
16QAM	3697.5	56715	5	1	12	22.40	20.40	0.110
16QAM	3697.5	56715	5	1	24	22.41	20.41	0.110
16QAM	3697.5	56715	5	12	0	21.45	19.45	0.088
16QAM	3697.5	56715	5	12	7	21.35	19.35	0.086
16QAM	3697.5	56715	5	12	13	21.24	19.24	0.084
16QAM	3697.5	56715	5	25	0	21.40	19.40	0.087
64QAM	3552.5	55265	5	1	0	22.78	20.78	0.120
64QAM	3552.5	55265	5	1	12	22.71	20.71	0.118
64QAM	3552.5	55265	5	1	24	22.79	20.79	0.120
64QAM	3552.5	55265	5	12	0	21.75	19.75	0.094
64QAM	3552.5	55265	5	12	7	21.78	19.78	0.095
64QAM	3552.5	55265	5	12	13	21.69	19.69	0.093
64QAM	3552.5	55265	5	25	0	21.68	19.68	0.093
64QAM	3625	55990	5	1	0	22.19	20.19	0.104
64QAM	3625	55990	5	1	12	22.05	20.05	0.101
64QAM	3625	55990	5	1	24	22.07	20.07	0.102
64QAM	3625	55990	5	12	0	21.09	19.09	0.081
64QAM	3625	55990	5	12	7	21.09	19.09	0.081
64QAM	3625	55990	5	12	13	21.06	19.06	0.081
64QAM	3625	55990	5	25	0	20.99	18.99	0.079
64QAM	3697.5	56715	5	1	0	22.38	20.38	0.109
64QAM	3697.5	56715	5	1	12	22.34	20.34	0.108
64QAM	3697.5	56715	5	1	24	22.27	20.27	0.106
64QAM	3697.5	56715	5	12	0	21.22	19.22	0.084
64QAM	3697.5	56715	5	12	7	21.32	19.32	0.086
64QAM	3697.5	56715	5	12	13	21.40	19.40	0.087
64QAM	3697.5	56715	5	25	0	21.23	19.23	0.084

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	3555	55290	10	1	0	23.28	21.28	0.134
QPSK	3555	55290	10	1	25	23.31	21.31	0.135
QPSK	3555	55290	10	1	49	23.25	21.25	0.133
QPSK	3555	55290	10	25	0	22.71	20.71	0.118
QPSK	3555	55290	10	25	12	22.77	20.77	0.119
QPSK	3555	55290	10	25	25	22.71	20.71	0.118
QPSK	3555	55290	10	50	0	22.81	20.81	0.121
QPSK	3625	55990	10	1	0	22.55	20.55	0.114
QPSK	3625	55990	10	1	25	22.51	20.51	0.112
QPSK	3625	55990	10	1	49	22.65	20.65	0.116
QPSK	3625	55990	10	25	0	22.09	20.09	0.102
QPSK	3625	55990	10	25	12	22.08	20.08	0.102
QPSK	3625	55990	10	25	25	21.97	19.97	0.099
QPSK	3625	55990	10	50	0	21.92	19.92	0.098
QPSK	3695	56690	10	1	0	22.86	20.86	0.122
QPSK	3695	56690	10	1	25	22.92	20.92	0.124
QPSK	3695	56690	10	1	49	23.08	21.08	0.128
QPSK	3695	56690	10	25	0	22.24	20.24	0.106
QPSK	3695	56690	10	25	12	22.36	20.36	0.109
QPSK	3695	56690	10	25	25	22.35	20.35	0.108
QPSK	3695	56690	10	50	0	22.30	20.30	0.107

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	3555	55290	10	1	0	22.58	20.58	0.114
16QAM	3555	55290	10	1	25	22.79	20.79	0.120
16QAM	3555	55290	10	1	49	22.76	20.76	0.119
16QAM	3555	55290	10	25	0	21.79	19.79	0.095
16QAM	3555	55290	10	25	12	21.77	19.77	0.095
16QAM	3555	55290	10	25	25	21.71	19.71	0.094
16QAM	3555	55290	10	50	0	21.81	19.81	0.096
16QAM	3625	55990	10	1	0	22.18	20.18	0.104
16QAM	3625	55990	10	1	25	22.06	20.06	0.101
16QAM	3625	55990	10	1	49	22.13	20.13	0.103
16QAM	3625	55990	10	25	0	21.04	19.04	0.080
16QAM	3625	55990	10	25	12	20.96	18.96	0.079
16QAM	3625	55990	10	25	25	20.94	18.94	0.078
16QAM	3625	55990	10	50	0	21.11	19.11	0.081
16QAM	3695	56690	10	1	0	22.39	20.39	0.109
16QAM	3695	56690	10	1	25	22.52	20.52	0.113
16QAM	3695	56690	10	1	49	22.42	20.42	0.110
16QAM	3695	56690	10	25	0	21.31	19.31	0.085
16QAM	3695	56690	10	25	12	21.34	19.34	0.086
16QAM	3695	56690	10	25	25	21.43	19.43	0.088
16QAM	3695	56690	10	50	0	21.30	19.30	0.085
64QAM	3555	55290	10	1	0	22.77	20.77	0.119
64QAM	3555	55290	10	1	25	22.71	20.71	0.118
64QAM	3555	55290	10	1	49	22.66	20.66	0.116
64QAM	3555	55290	10	25	0	21.74	19.74	0.094
64QAM	3555	55290	10	25	12	21.72	19.72	0.094
64QAM	3555	55290	10	25	25	21.50	19.50	0.089
64QAM	3555	55290	10	50	0	21.59	19.59	0.091
64QAM	3625	55990	10	1	0	21.98	19.98	0.100
64QAM	3625	55990	10	1	25	21.93	19.93	0.098
64QAM	3625	55990	10	1	49	22.10	20.10	0.102
64QAM	3625	55990	10	25	0	20.98	18.98	0.079
64QAM	3625	55990	10	25	12	21.00	19.00	0.079
64QAM	3625	55990	10	25	25	20.98	18.98	0.079
64QAM	3625	55990	10	50	0	20.95	18.95	0.079
64QAM	3695	56690	10	1	0	22.28	20.28	0.107
64QAM	3695	56690	10	1	25	22.27	20.27	0.106
64QAM	3695	56690	10	1	49	22.44	20.44	0.111
64QAM	3695	56690	10	25	0	21.23	19.23	0.084
64QAM	3695	56690	10	25	12	21.37	19.37	0.086
64QAM	3695	56690	10	25	25	21.37	19.37	0.086
64QAM	3695	56690	10	50	0	21.33	19.33	0.086

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	3557.5	55315	15	1	0	23.27	21.27	0.134
QPSK	3557.5	55315	15	1	37	23.19	21.19	0.132
QPSK	3557.5	55315	15	1	74	23.05	21.05	0.127
QPSK	3557.5	55315	15	36	0	22.63	20.63	0.116
QPSK	3557.5	55315	15	36	29	22.60	20.60	0.115
QPSK	3557.5	55315	15	36	30	22.61	20.61	0.115
QPSK	3557.5	55315	15	75	0	22.45	20.45	0.111
QPSK	3625	55990	15	1	0	22.62	20.62	0.115
QPSK	3625	55990	15	1	37	22.59	20.59	0.115
QPSK	3625	55990	15	1	74	22.58	20.58	0.114
QPSK	3625	55990	15	36	0	22.01	20.01	0.100
QPSK	3625	55990	15	36	29	21.95	19.95	0.099
QPSK	3625	55990	15	36	30	22.06	20.06	0.101
QPSK	3625	55990	15	75	0	21.97	19.97	0.099
QPSK	3692.5	56665	15	1	0	22.94	20.94	0.124
QPSK	3692.5	56665	15	1	37	22.92	20.92	0.124
QPSK	3692.5	56665	15	1	74	23.04	21.04	0.127
QPSK	3692.5	56665	15	36	0	22.33	20.33	0.108
QPSK	3692.5	56665	15	36	29	22.22	20.22	0.105
QPSK	3692.5	56665	15	36	30	22.41	20.41	0.110
QPSK	3692.5	56665	15	75	0	22.19	20.19	0.104

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	3557.5	55315	15	1	0	22.69	20.69	0.117
16QAM	3557.5	55315	15	1	37	22.62	20.62	0.115
16QAM	3557.5	55315	15	1	74	22.55	20.55	0.114
16QAM	3557.5	55315	15	36	0	21.67	19.67	0.093
16QAM	3557.5	55315	15	36	29	21.56	19.56	0.090
16QAM	3557.5	55315	15	36	30	21.56	19.56	0.090
16QAM	3557.5	55315	15	75	0	21.54	19.54	0.090
16QAM	3625	55990	15	1	0	22.12	20.12	0.103
16QAM	3625	55990	15	1	37	22.04	20.04	0.101
16QAM	3625	55990	15	1	74	22.14	20.14	0.103
16QAM	3625	55990	15	36	0	20.93	18.93	0.078
16QAM	3625	55990	15	36	29	20.98	18.98	0.079
16QAM	3625	55990	15	36	30	21.09	19.09	0.081
16QAM	3625	55990	15	75	0	21.05	19.05	0.080
16QAM	3692.5	56665	15	1	0	22.33	20.33	0.108
16QAM	3692.5	56665	15	1	37	22.39	20.39	0.109
16QAM	3692.5	56665	15	1	74	22.50	20.50	0.112
16QAM	3692.5	56665	15	36	0	21.35	19.35	0.086
16QAM	3692.5	56665	15	36	29	21.27	19.27	0.085
16QAM	3692.5	56665	15	36	30	21.27	19.27	0.085
16QAM	3692.5	56665	15	75	0	21.38	19.38	0.087
64QAM	3557.5	55315	15	1	0	22.62	20.62	0.115
64QAM	3557.5	55315	15	1	37	22.54	20.54	0.113
64QAM	3557.5	55315	15	1	74	22.47	20.47	0.111
64QAM	3557.5	55315	15	36	0	21.60	19.60	0.091
64QAM	3557.5	55315	15	36	29	21.67	19.67	0.093
64QAM	3557.5	55315	15	36	30	21.66	19.66	0.092
64QAM	3557.5	55315	15	75	0	21.54	19.54	0.090
64QAM	3625	55990	15	1	0	22.02	20.02	0.100
64QAM	3625	55990	15	1	37	21.91	19.91	0.098
64QAM	3625	55990	15	1	74	22.01	20.01	0.100
64QAM	3625	55990	15	36	0	20.93	18.93	0.078
64QAM	3625	55990	15	36	29	20.98	18.98	0.079
64QAM	3625	55990	15	36	30	21.09	19.09	0.081
64QAM	3625	55990	15	75	0	20.94	18.94	0.078
64QAM	3692.5	56665	15	1	0	22.21	20.21	0.105
64QAM	3692.5	56665	15	1	37	22.34	20.34	0.108
64QAM	3692.5	56665	15	1	74	22.45	20.45	0.111
64QAM	3692.5	56665	15	36	0	21.35	19.35	0.086
64QAM	3692.5	56665	15	36	29	21.27	19.27	0.085
64QAM	3692.5	56665	15	36	30	21.26	19.26	0.084
64QAM	3692.5	56665	15	75	0	21.27	19.27	0.085

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	3560	55340	20	1	0	23.36	21.36	0.137
QPSK	3560	55340	20	1	49	23.24	21.24	0.133
QPSK	3560	55340	20	1	99	23.00	21.00	0.126
QPSK	3560	55340	20	50	0	22.82	20.82	0.121
QPSK	3560	55340	20	50	24	22.60	20.60	0.115
QPSK	3560	55340	20	50	50	22.45	20.45	0.111
QPSK	3560	55340	20	100	0	22.52	20.52	0.113
QPSK	3625	55990	20	1	0	22.65	20.65	0.116
QPSK	3625	55990	20	1	49	22.57	20.57	0.114
QPSK	3625	55990	20	1	99	22.75	20.75	0.119
QPSK	3625	55990	20	50	0	22.09	20.09	0.102
QPSK	3625	55990	20	50	24	22.02	20.02	0.100
QPSK	3625	55990	20	50	50	22.03	20.03	0.101
QPSK	3625	55990	20	100	0	22.07	20.07	0.102
QPSK	3690	56640	20	1	0	22.79	20.79	0.120
QPSK	3690	56640	20	1	49	22.89	20.89	0.123
QPSK	3690	56640	20	1	99	22.98	20.98	0.125
QPSK	3690	56640	20	50	0	22.09	20.09	0.102
QPSK	3690	56640	20	50	24	22.22	20.22	0.105
QPSK	3690	56640	20	50	50	22.38	20.38	0.109
QPSK	3690	56640	20	100	0	22.30	20.30	0.107

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	3560	55340	20	1	0	22.73	20.73	0.118
16QAM	3560	55340	20	1	49	22.63	20.63	0.116
16QAM	3560	55340	20	1	99	22.38	20.38	0.109
16QAM	3560	55340	20	50	0	21.70	19.70	0.093
16QAM	3560	55340	20	50	24	21.58	19.58	0.091
16QAM	3560	55340	20	50	50	21.43	19.43	0.088
16QAM	3560	55340	20	100	0	21.50	19.50	0.089
16QAM	3625	55990	20	1	0	22.09	20.09	0.102
16QAM	3625	55990	20	1	49	22.08	20.08	0.102
16QAM	3625	55990	20	1	99	22.15	20.15	0.104
16QAM	3625	55990	20	50	0	20.99	18.99	0.079
16QAM	3625	55990	20	50	24	21.01	19.01	0.080
16QAM	3625	55990	20	50	50	21.03	19.03	0.080
16QAM	3625	55990	20	100	0	21.05	19.05	0.080
16QAM	3690	56640	20	1	0	22.31	20.31	0.107
16QAM	3690	56640	20	1	49	22.50	20.50	0.112
16QAM	3690	56640	20	1	99	22.49	20.49	0.112
16QAM	3690	56640	20	50	0	21.30	19.30	0.085
16QAM	3690	56640	20	50	24	21.22	19.22	0.084
16QAM	3690	56640	20	50	50	21.36	19.36	0.086
16QAM	3690	56640	20	100	0	21.18	19.18	0.083
64QAM	3560	55340	20	1	0	22.58	20.58	0.114
64QAM	3560	55340	20	1	49	22.52	20.52	0.113
64QAM	3560	55340	20	1	99	22.18	20.18	0.104
64QAM	3560	55340	20	50	0	21.64	19.64	0.092
64QAM	3560	55340	20	50	24	21.52	19.52	0.090
64QAM	3560	55340	20	50	50	21.37	19.37	0.086
64QAM	3560	55340	20	100	0	21.52	19.52	0.090
64QAM	3625	55990	20	1	0	22.09	20.09	0.102
64QAM	3625	55990	20	1	49	21.95	19.95	0.099
64QAM	3625	55990	20	1	99	22.02	20.02	0.100
64QAM	3625	55990	20	50	0	21.02	19.02	0.080
64QAM	3625	55990	20	50	24	21.05	19.05	0.080
64QAM	3625	55990	20	50	50	20.97	18.97	0.079
64QAM	3625	55990	20	100	0	21.07	19.07	0.081
64QAM	3690	56640	20	1	0	22.31	20.31	0.107
64QAM	3690	56640	20	1	49	22.24	20.24	0.106
64QAM	3690	56640	20	1	99	22.44	20.44	0.111
64QAM	3690	56640	20	50	0	21.12	19.12	0.082
64QAM	3690	56640	20	50	24	21.26	19.26	0.084
64QAM	3690	56640	20	50	50	21.30	19.30	0.085
64QAM	3690	56640	20	100	0	21.29	19.29	0.085