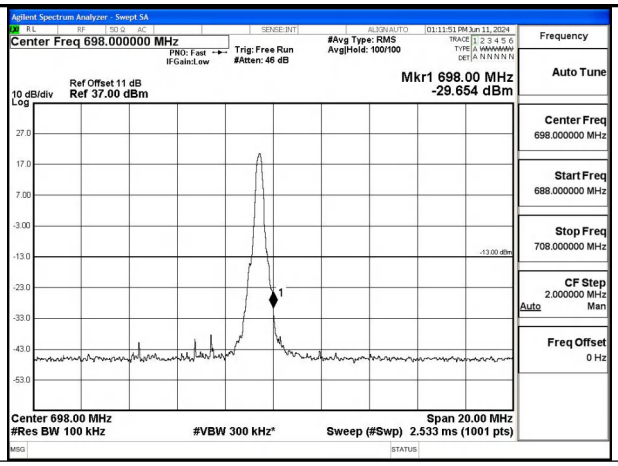

Fig.23

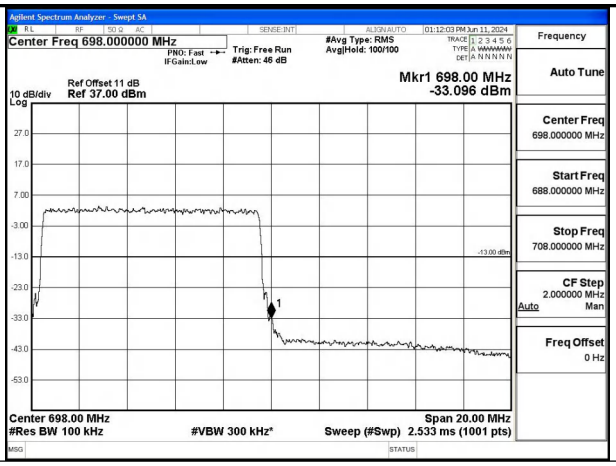

Fig.24

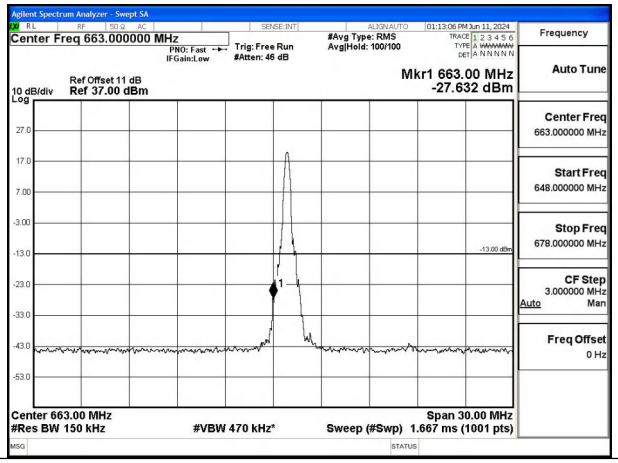

Fig.25

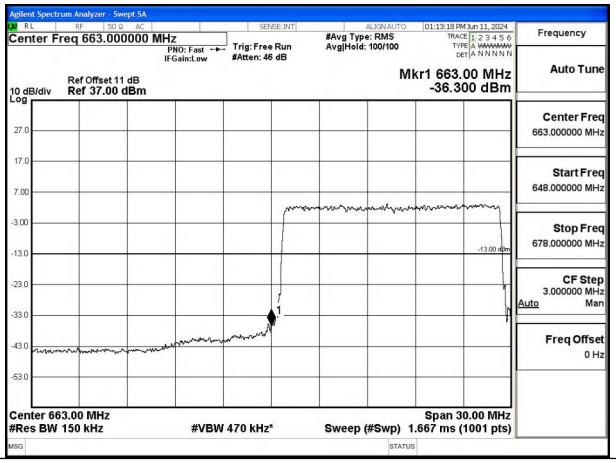

Fig.26

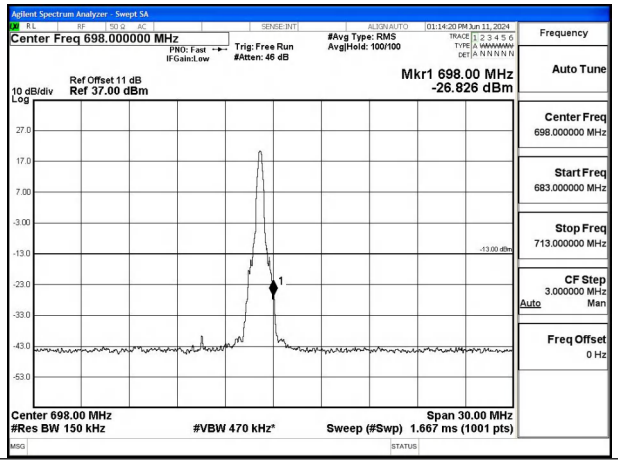

Fig.27

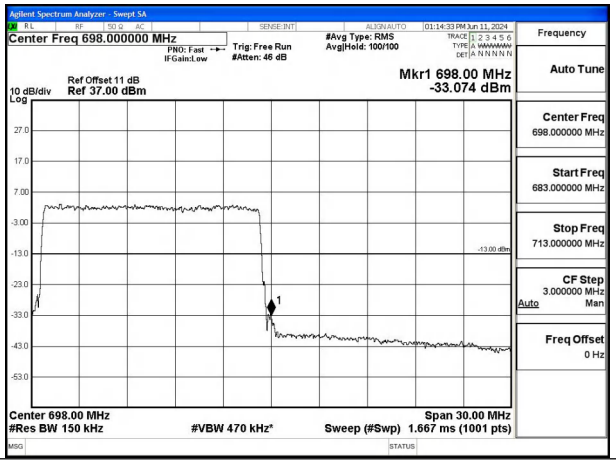

Fig.28

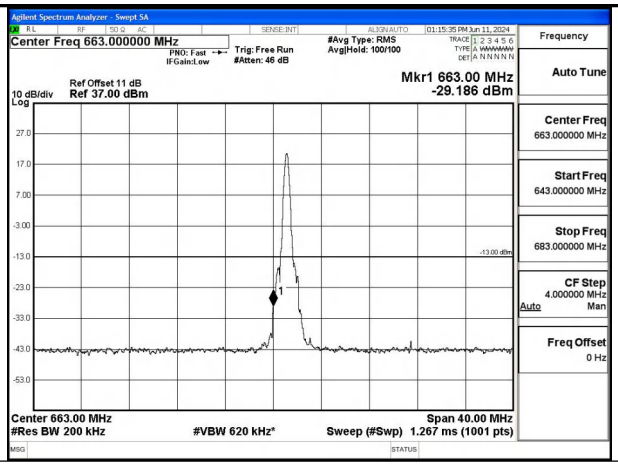

Fig.29

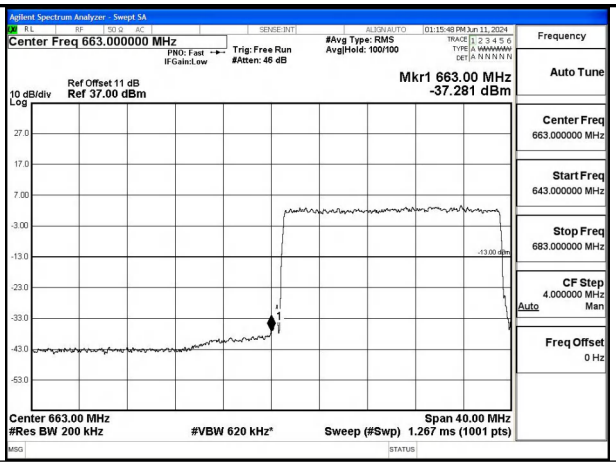

Fig.30

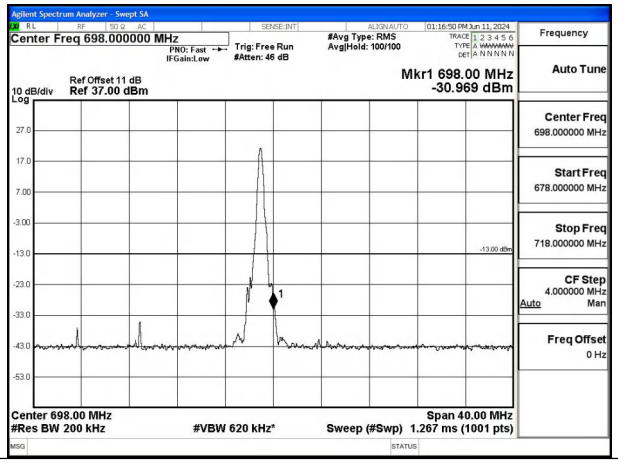

Fig.31

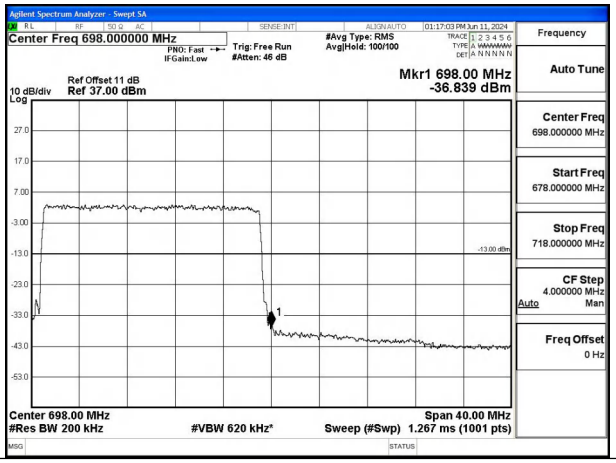

Fig.32

Test Mode: 64QAM

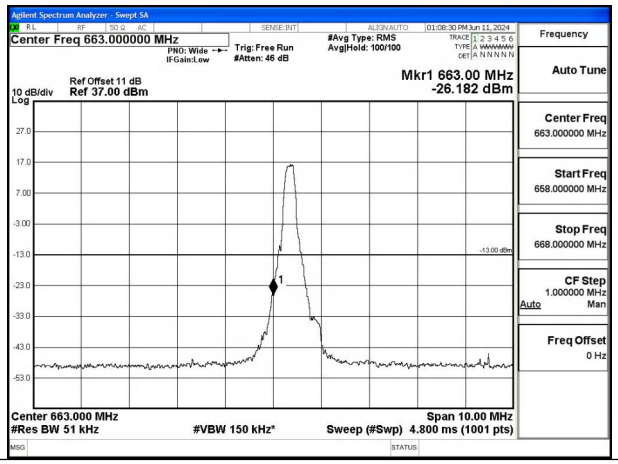

Fig.33

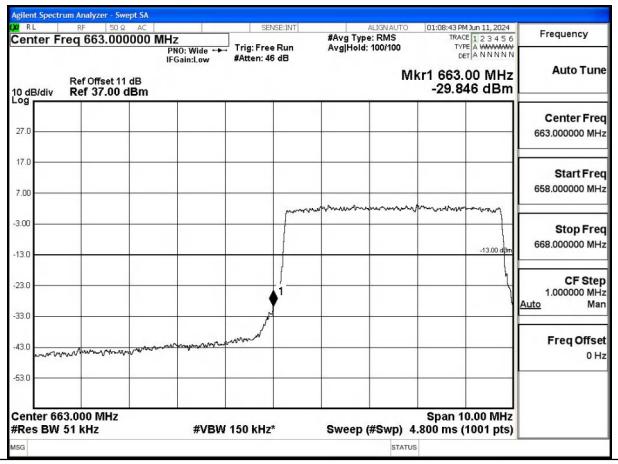

Fig.34

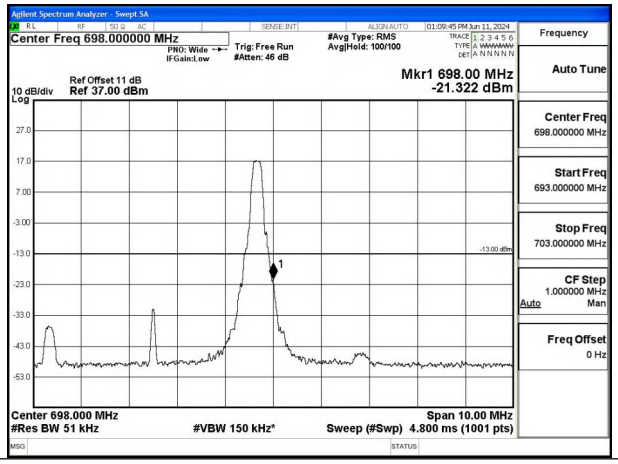

Fig.35

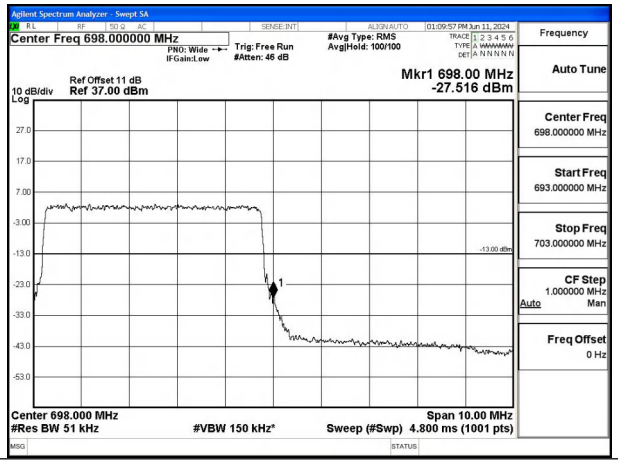

Fig.36

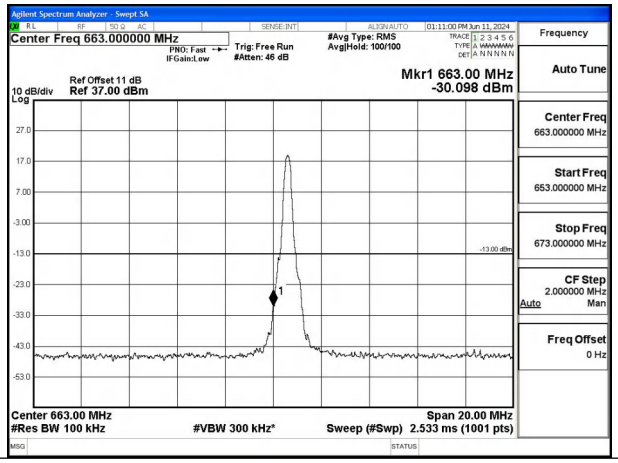

Fig.37

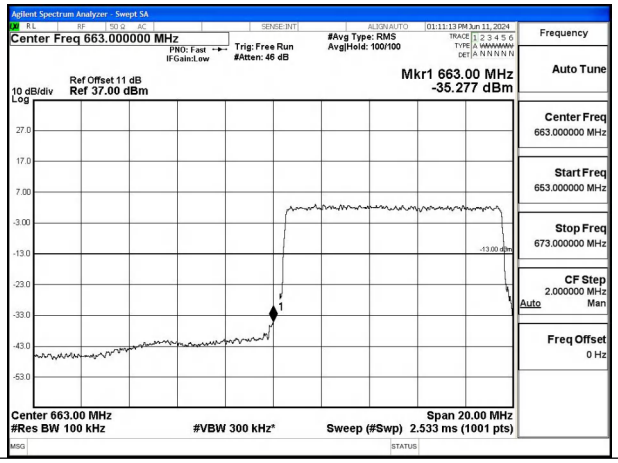

Fig.38

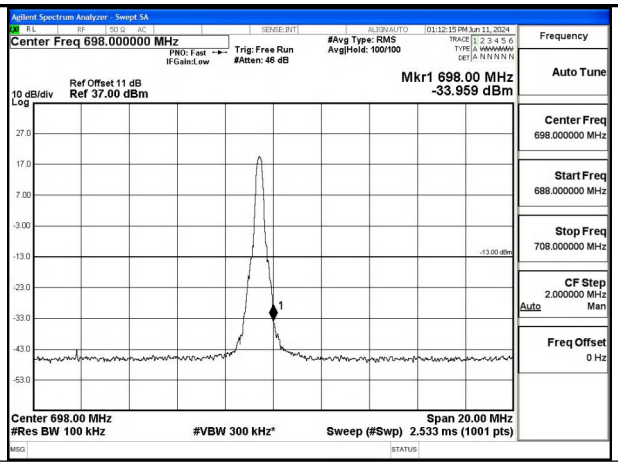

Fig.39

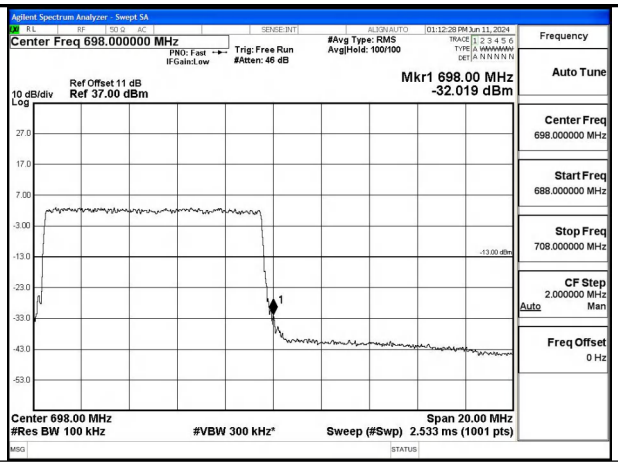

Fig.40

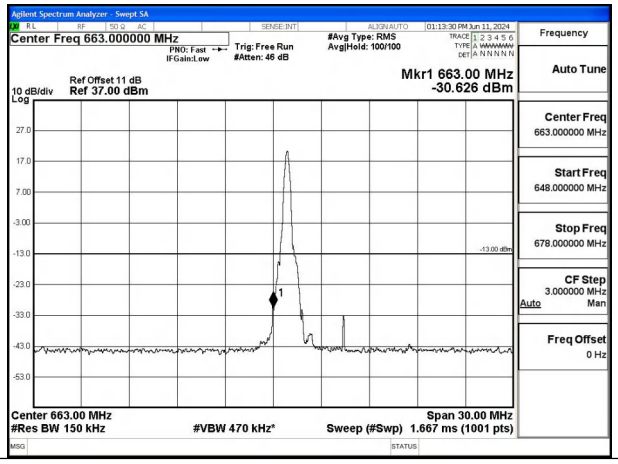

Fig.41

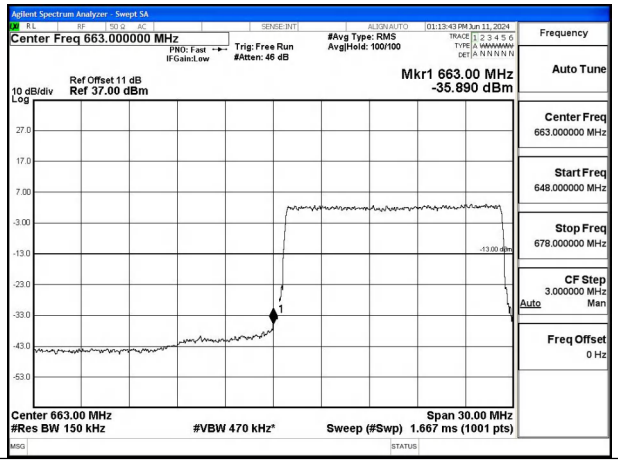

Fig.42

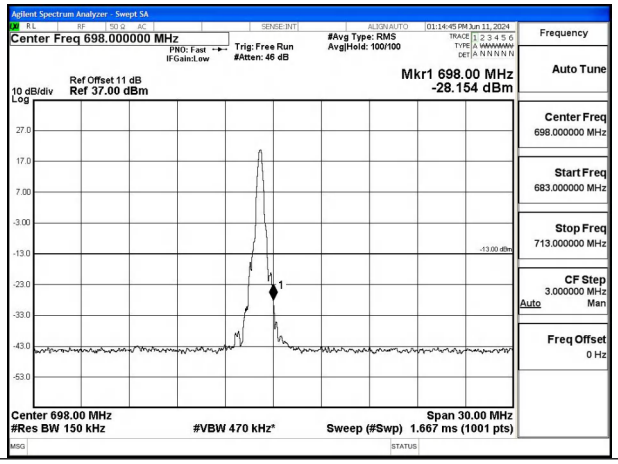

Fig.43

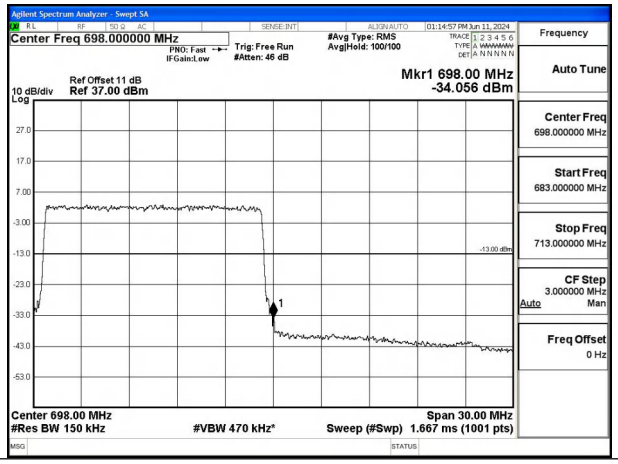

Fig.44

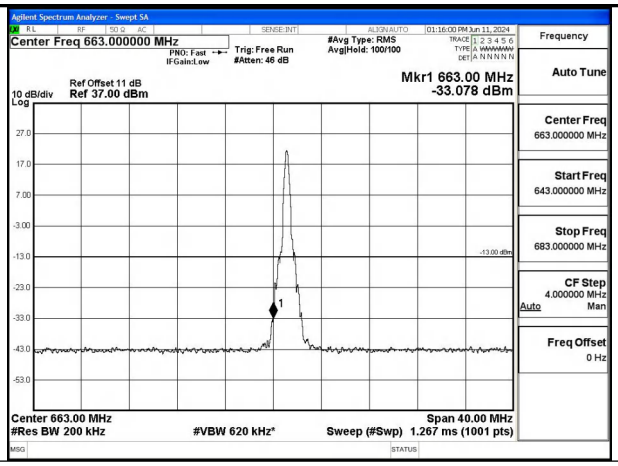

Fig.45

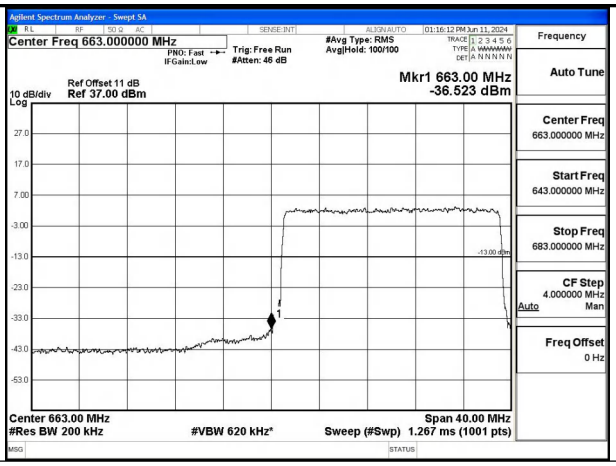

Fig.46

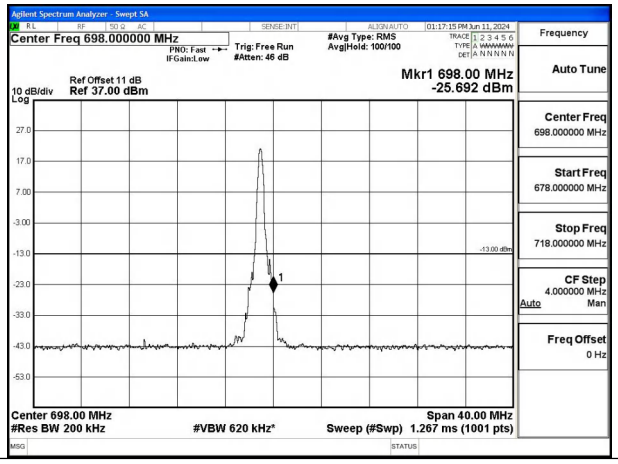

Fig.47

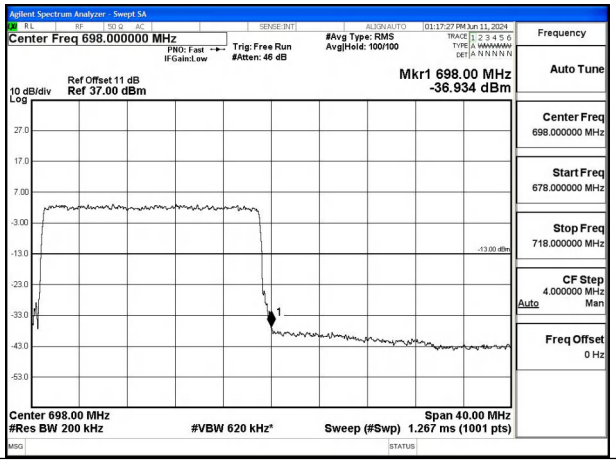

Fig.48

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 71 Low Channel QPSK			
		5M	10M	15M	20M
-30	NV	-0.007	-0.011	-0.006	-0.007
-20	NV	0.013	0.007	0.005	-0.009
-10	NV	0.010	-0.006	-0.006	-0.008
0	NV	0.008	-0.008	-0.006	-0.009
+10	NV	0.005	0.008	-0.005	-0.011
+20	NV	0.002	0.003	-0.006	-0.009
+30	NV	-0.008	0.004	-0.006	0.006
+40	NV	0.010	0.004	-0.009	-0.011
+50	NV	0.007	-0.006	-0.008	-0.009
+20	LV	-0.006	-0.008	0.006	-0.010
+20	HV	-0.009	-0.005	-0.010	-0.009

Temperature(°C)	Voltage	Test Result (ppm) Band 71 High Channel QPSK			
		5M	10M	15M	20M
-30	NV	0.005	0.004	-0.006	0.006
-20	NV	0.001	-0.006	-0.007	0.005
-10	NV	0.004	0.007	-0.008	0.004
0	NV	-0.002	0.005	-0.010	0.005
+10	NV	0.003	0.004	-0.004	0.008
+20	NV	0.009	0.008	-0.009	0.004
+30	NV	-0.001	0.006	-0.005	0.006
+40	NV	0.001	0.006	-0.006	-0.007
+50	NV	0.000	-0.006	-0.009	0.005
+20	LV	0.004	-0.004	0.005	0.004
+20	HV	-0.001	-0.005	-0.004	0.005

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	665.5	133147	5	1	0	22.67	25.02	0.318
QPSK	665.5	133147	5	1	12	23.33	25.68	0.370
QPSK	665.5	133147	5	1	24	23.05	25.40	0.347
QPSK	665.5	133147	5	12	0	22.11	24.46	0.279
QPSK	665.5	133147	5	12	7	22.33	24.68	0.294
QPSK	665.5	133147	5	12	13	22.14	24.49	0.281
QPSK	665.5	133147	5	25	0	22.12	24.47	0.280
QPSK	680.5	133297	5	1	0	23.93	26.28	0.425
QPSK	680.5	133297	5	1	12	23.55	25.90	0.389
QPSK	680.5	133297	5	1	24	23.16	25.51	0.356
QPSK	680.5	133297	5	12	0	22.70	25.05	0.320
QPSK	680.5	133297	5	12	7	22.48	24.83	0.304
QPSK	680.5	133297	5	12	13	22.24	24.59	0.288
QPSK	680.5	133297	5	25	0	22.48	24.83	0.304
QPSK	695.5	133447	5	1	0	23.21	25.56	0.360
QPSK	695.5	133447	5	1	12	22.90	25.25	0.335
QPSK	695.5	133447	5	1	24	22.75	25.10	0.324
QPSK	695.5	133447	5	12	0	22.13	24.48	0.281
QPSK	695.5	133447	5	12	7	21.93	24.28	0.268
QPSK	695.5	133447	5	12	13	21.74	24.09	0.256
QPSK	695.5	133447	5	25	0	21.92	24.27	0.267

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	665.5	133147	5	1	0	21.74	24.09	0.256
16QAM	665.5	133147	5	1	12	22.44	24.79	0.301
16QAM	665.5	133147	5	1	24	22.45	24.80	0.302
16QAM	665.5	133147	5	12	0	21.09	23.44	0.221
16QAM	665.5	133147	5	12	7	21.31	23.66	0.232
16QAM	665.5	133147	5	12	13	21.22	23.57	0.228
16QAM	665.5	133147	5	25	0	21.04	23.39	0.218
16QAM	680.5	133297	5	1	0	23.38	25.73	0.374
16QAM	680.5	133297	5	1	12	22.74	25.09	0.323
16QAM	680.5	133297	5	1	24	21.99	24.34	0.272
16QAM	680.5	133297	5	12	0	21.73	24.08	0.256
16QAM	680.5	133297	5	12	7	21.53	23.88	0.244
16QAM	680.5	133297	5	12	13	21.36	23.71	0.235
16QAM	680.5	133297	5	25	0	21.54	23.89	0.245
16QAM	695.5	133447	5	1	0	22.65	25.00	0.316
16QAM	695.5	133447	5	1	12	21.82	24.17	0.261
16QAM	695.5	133447	5	1	24	21.78	24.13	0.259
16QAM	695.5	133447	5	12	0	21.12	23.47	0.222
16QAM	695.5	133447	5	12	7	21.14	23.49	0.223
16QAM	695.5	133447	5	12	13	20.77	23.12	0.205
16QAM	695.5	133447	5	25	0	21.03	23.38	0.218
64QAM	665.5	133147	5	1	0	21.60	23.95	0.248
64QAM	665.5	133147	5	1	12	22.40	24.75	0.299
64QAM	665.5	133147	5	1	24	21.95	24.30	0.269
64QAM	665.5	133147	5	12	0	21.02	23.37	0.217
64QAM	665.5	133147	5	12	7	21.24	23.59	0.229
64QAM	665.5	133147	5	12	13	21.00	23.35	0.216
64QAM	665.5	133147	5	25	0	21.11	23.46	0.222
64QAM	680.5	133297	5	1	0	23.34	25.69	0.371
64QAM	680.5	133297	5	1	12	22.63	24.98	0.315
64QAM	680.5	133297	5	1	24	22.07	24.42	0.277
64QAM	680.5	133297	5	12	0	21.69	24.04	0.254
64QAM	680.5	133297	5	12	7	21.51	23.86	0.243
64QAM	680.5	133297	5	12	13	21.27	23.62	0.230
64QAM	680.5	133297	5	25	0	21.49	23.84	0.242
64QAM	695.5	133447	5	1	0	21.94	24.29	0.269
64QAM	695.5	133447	5	1	12	22.19	24.54	0.284
64QAM	695.5	133447	5	1	24	21.62	23.97	0.249
64QAM	695.5	133447	5	12	0	21.13	23.48	0.223
64QAM	695.5	133447	5	12	7	21.05	23.40	0.219
64QAM	695.5	133447	5	12	13	20.80	23.15	0.207
64QAM	695.5	133447	5	25	0	21.02	23.37	0.217

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	668	133172	10	1	0	22.52	24.87	0.307
QPSK	668	133172	10	1	25	22.68	25.03	0.318
QPSK	668	133172	10	1	49	23.08	25.43	0.349
QPSK	668	133172	10	25	0	21.89	24.24	0.265
QPSK	668	133172	10	25	12	21.80	24.15	0.260
QPSK	668	133172	10	25	25	21.79	24.14	0.259
QPSK	668	133172	10	50	0	21.85	24.20	0.263
QPSK	680.5	133297	10	1	0	23.78	26.13	0.410
QPSK	680.5	133297	10	1	25	23.32	25.67	0.369
QPSK	680.5	133297	10	1	49	22.94	25.29	0.338
QPSK	680.5	133297	10	25	0	22.72	25.07	0.321
QPSK	680.5	133297	10	25	12	22.45	24.80	0.302
QPSK	680.5	133297	10	25	25	22.11	24.46	0.279
QPSK	680.5	133297	10	50	0	22.42	24.77	0.300
QPSK	693	133422	10	1	0	23.21	25.56	0.360
QPSK	693	133422	10	1	25	23.00	25.35	0.343
QPSK	693	133422	10	1	49	22.58	24.93	0.311
QPSK	693	133422	10	25	0	22.25	24.60	0.288
QPSK	693	133422	10	25	12	22.15	24.50	0.282
QPSK	693	133422	10	25	25	21.92	24.27	0.267
QPSK	693	133422	10	50	0	22.07	24.42	0.277

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	668	133172	10	1	0	21.66	24.01	0.252
16QAM	668	133172	10	1	25	21.89	24.24	0.265
16QAM	668	133172	10	1	49	22.61	24.96	0.313
16QAM	668	133172	10	25	0	20.94	23.29	0.213
16QAM	668	133172	10	25	12	20.82	23.17	0.207
16QAM	668	133172	10	25	25	20.87	23.22	0.210
16QAM	668	133172	10	50	0	20.86	23.21	0.209
16QAM	680.5	133297	10	1	0	23.04	25.39	0.346
16QAM	680.5	133297	10	1	25	22.77	25.12	0.325
16QAM	680.5	133297	10	1	49	22.54	24.89	0.308
16QAM	680.5	133297	10	25	0	21.75	24.10	0.257
16QAM	680.5	133297	10	25	12	21.52	23.87	0.244
16QAM	680.5	133297	10	25	25	21.16	23.51	0.224
16QAM	680.5	133297	10	50	0	21.49	23.84	0.242
16QAM	693	133422	10	1	0	21.88	24.23	0.265
16QAM	693	133422	10	1	25	22.46	24.81	0.303
16QAM	693	133422	10	1	49	22.00	24.35	0.272
16QAM	693	133422	10	25	0	21.33	23.68	0.233
16QAM	693	133422	10	25	12	21.23	23.58	0.228
16QAM	693	133422	10	25	25	20.97	23.32	0.215
16QAM	693	133422	10	50	0	21.14	23.49	0.223
64QAM	668	133172	10	1	0	21.68	24.03	0.253
64QAM	668	133172	10	1	25	21.48	23.83	0.242
64QAM	668	133172	10	1	49	22.37	24.72	0.296
64QAM	668	133172	10	25	0	20.86	23.21	0.209
64QAM	668	133172	10	25	12	20.82	23.17	0.207
64QAM	668	133172	10	25	25	20.85	23.20	0.209
64QAM	668	133172	10	50	0	20.81	23.16	0.207
64QAM	680.5	133297	10	1	0	22.99	25.34	0.342
64QAM	680.5	133297	10	1	25	22.60	24.95	0.313
64QAM	680.5	133297	10	1	49	22.03	24.38	0.274
64QAM	680.5	133297	10	25	0	21.69	24.04	0.254
64QAM	680.5	133297	10	25	12	21.46	23.81	0.240
64QAM	680.5	133297	10	25	25	21.16	23.51	0.224
64QAM	680.5	133297	10	50	0	21.46	23.81	0.240
64QAM	693	133422	10	1	0	22.30	24.65	0.292
64QAM	693	133422	10	1	25	22.51	24.86	0.306
64QAM	693	133422	10	1	49	21.87	24.22	0.264
64QAM	693	133422	10	25	0	21.32	23.67	0.233
64QAM	693	133422	10	25	12	21.22	23.57	0.228
64QAM	693	133422	10	25	25	20.99	23.34	0.216
64QAM	693	133422	10	50	0	21.17	23.52	0.225

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	670.5	133197	15	1	0	22.69	25.04	0.319
QPSK	670.5	133197	15	1	37	22.70	25.05	0.320
QPSK	670.5	133197	15	1	74	23.63	25.98	0.396
QPSK	670.5	133197	15	36	0	21.80	24.15	0.260
QPSK	670.5	133197	15	36	29	22.10	24.45	0.279
QPSK	670.5	133197	15	36	30	22.12	24.47	0.280
QPSK	670.5	133197	15	75	0	22.09	24.44	0.278
QPSK	680.5	133297	15	1	0	23.44	25.79	0.379
QPSK	680.5	133297	15	1	37	23.28	25.63	0.366
QPSK	680.5	133297	15	1	74	22.69	25.04	0.319
QPSK	680.5	133297	15	36	0	22.67	25.02	0.318
QPSK	680.5	133297	15	36	29	22.17	24.52	0.283
QPSK	680.5	133297	15	36	30	22.13	24.48	0.281
QPSK	680.5	133297	15	75	0	22.37	24.72	0.296
QPSK	690.5	133397	15	1	0	22.92	25.27	0.337
QPSK	690.5	133397	15	1	37	23.21	25.56	0.360
QPSK	690.5	133397	15	1	74	22.57	24.92	0.310
QPSK	690.5	133397	15	36	0	22.03	24.38	0.274
QPSK	690.5	133397	15	36	29	22.08	24.43	0.277
QPSK	690.5	133397	15	36	30	22.09	24.44	0.278
QPSK	690.5	133397	15	75	0	22.01	24.36	0.273

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	670.5	133197	15	1	0	22.14	24.49	0.281
16QAM	670.5	133197	15	1	37	21.86	24.21	0.264
16QAM	670.5	133197	15	1	74	23.03	25.38	0.345
16QAM	670.5	133197	15	36	0	20.83	23.18	0.208
16QAM	670.5	133197	15	36	29	21.15	23.50	0.224
16QAM	670.5	133197	15	36	30	21.20	23.55	0.226
16QAM	670.5	133197	15	75	0	21.16	23.51	0.224
16QAM	680.5	133297	15	1	0	22.59	24.94	0.312
16QAM	680.5	133297	15	1	37	22.40	24.75	0.299
16QAM	680.5	133297	15	1	74	22.10	24.45	0.279
16QAM	680.5	133297	15	36	0	21.71	24.06	0.255
16QAM	680.5	133297	15	36	29	21.20	23.55	0.226
16QAM	680.5	133297	15	36	30	21.22	23.57	0.228
16QAM	680.5	133297	15	75	0	21.36	23.71	0.235
16QAM	690.5	133397	15	1	0	22.47	24.82	0.303
16QAM	690.5	133397	15	1	37	22.82	25.17	0.329
16QAM	690.5	133397	15	1	74	22.06	24.41	0.276
16QAM	690.5	133397	15	36	0	21.16	23.51	0.224
16QAM	690.5	133397	15	36	29	21.18	23.53	0.225
16QAM	690.5	133397	15	36	30	21.17	23.52	0.225
16QAM	690.5	133397	15	75	0	21.04	23.39	0.218
64QAM	670.5	133197	15	1	0	21.97	24.32	0.270
64QAM	670.5	133197	15	1	37	21.97	24.32	0.270
64QAM	670.5	133197	15	1	74	22.91	25.26	0.336
64QAM	670.5	133197	15	36	0	20.84	23.19	0.208
64QAM	670.5	133197	15	36	29	21.11	23.46	0.222
64QAM	670.5	133197	15	36	30	21.18	23.53	0.225
64QAM	670.5	133197	15	75	0	21.16	23.51	0.224
64QAM	680.5	133297	15	1	0	22.62	24.97	0.314
64QAM	680.5	133297	15	1	37	22.47	24.82	0.303
64QAM	680.5	133297	15	1	74	21.72	24.07	0.255
64QAM	680.5	133297	15	36	0	21.68	24.03	0.253
64QAM	680.5	133297	15	36	29	21.21	23.56	0.227
64QAM	680.5	133297	15	36	30	21.18	23.53	0.225
64QAM	680.5	133297	15	75	0	21.40	23.75	0.237
64QAM	690.5	133397	15	1	0	21.99	24.34	0.272
64QAM	690.5	133397	15	1	37	22.65	25.00	0.316
64QAM	690.5	133397	15	1	74	21.89	24.24	0.265
64QAM	690.5	133397	15	36	0	21.08	23.43	0.220
64QAM	690.5	133397	15	36	29	21.14	23.49	0.223
64QAM	690.5	133397	15	36	30	21.15	23.50	0.224
64QAM	690.5	133397	15	75	0	21.06	23.41	0.219

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	673	133222	20	1	0	22.86	25.21	0.332
QPSK	673	133222	20	1	49	23.17	25.52	0.356
QPSK	673	133222	20	1	99	22.94	25.29	0.338
QPSK	673	133222	20	50	0	21.84	24.19	0.262
QPSK	673	133222	20	50	24	22.24	24.59	0.288
QPSK	673	133222	20	50	50	22.52	24.87	0.307
QPSK	673	133222	20	100	0	22.17	24.52	0.283
QPSK	680.5	133297	20	1	0	22.94	25.29	0.338
QPSK	680.5	133297	20	1	49	23.29	25.64	0.366
QPSK	680.5	133297	20	1	99	23.11	25.46	0.352
QPSK	680.5	133297	20	50	0	22.56	24.91	0.310
QPSK	680.5	133297	20	50	24	22.41	24.76	0.299
QPSK	680.5	133297	20	50	50	22.03	24.38	0.274
QPSK	680.5	133297	20	100	0	22.28	24.63	0.290
QPSK	688	133372	20	1	0	23.63	25.98	0.396
QPSK	688	133372	20	1	49	23.02	25.37	0.344
QPSK	688	133372	20	1	99	22.47	24.82	0.303
QPSK	688	133372	20	50	0	22.12	24.47	0.280
QPSK	688	133372	20	50	24	22.09	24.44	0.278
QPSK	688	133372	20	50	50	22.02	24.37	0.274
QPSK	688	133372	20	100	0	22.04	24.39	0.275

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	673	133222	20	1	0	22.13	24.48	0.281
16QAM	673	133222	20	1	49	22.42	24.77	0.300
16QAM	673	133222	20	1	99	21.88	24.23	0.265
16QAM	673	133222	20	50	0	20.87	23.22	0.210
16QAM	673	133222	20	50	24	21.20	23.55	0.226
16QAM	673	133222	20	50	50	21.58	23.93	0.247
16QAM	673	133222	20	100	0	21.22	23.57	0.228
16QAM	680.5	133297	20	1	0	21.92	24.27	0.267
16QAM	680.5	133297	20	1	49	22.64	24.99	0.316
16QAM	680.5	133297	20	1	99	22.45	24.80	0.302
16QAM	680.5	133297	20	50	0	21.59	23.94	0.248
16QAM	680.5	133297	20	50	24	21.42	23.77	0.238
16QAM	680.5	133297	20	50	50	21.09	23.44	0.221
16QAM	680.5	133297	20	100	0	21.29	23.64	0.231
16QAM	688	133372	20	1	0	22.73	25.08	0.322
16QAM	688	133372	20	1	49	22.19	24.54	0.284
16QAM	688	133372	20	1	99	21.48	23.83	0.242
16QAM	688	133372	20	50	0	21.17	23.52	0.225
16QAM	688	133372	20	50	24	21.13	23.48	0.223
16QAM	688	133372	20	50	50	21.10	23.45	0.221
16QAM	688	133372	20	100	0	21.09	23.44	0.221
64QAM	673	133222	20	1	0	21.60	23.95	0.248
64QAM	673	133222	20	1	49	22.36	24.71	0.296
64QAM	673	133222	20	1	99	22.03	24.38	0.274
64QAM	673	133222	20	50	0	20.85	23.20	0.209
64QAM	673	133222	20	50	24	21.27	23.62	0.230
64QAM	673	133222	20	50	50	21.58	23.93	0.247
64QAM	673	133222	20	100	0	21.22	23.57	0.228
64QAM	680.5	133297	20	1	0	22.02	24.37	0.274
64QAM	680.5	133297	20	1	49	22.00	24.35	0.272
64QAM	680.5	133297	20	1	99	22.23	24.58	0.287
64QAM	680.5	133297	20	50	0	21.60	23.95	0.248
64QAM	680.5	133297	20	50	24	21.48	23.83	0.242
64QAM	680.5	133297	20	50	50	21.09	23.44	0.221
64QAM	680.5	133297	20	100	0	21.32	23.67	0.233
64QAM	688	133372	20	1	0	23.05	25.40	0.347
64QAM	688	133372	20	1	49	22.04	24.39	0.275
64QAM	688	133372	20	1	99	21.61	23.96	0.249
64QAM	688	133372	20	50	0	21.19	23.54	0.226
64QAM	688	133372	20	50	24	21.10	23.45	0.221
64QAM	688	133372	20	50	50	21.02	23.37	0.217
64QAM	688	133372	20	100	0	21.09	23.44	0.221