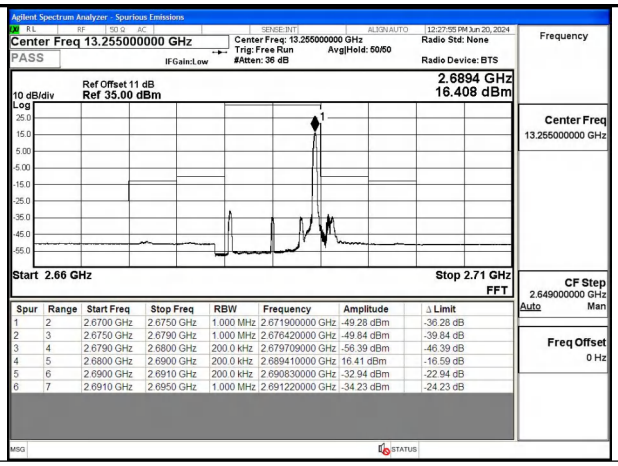

Fig.23

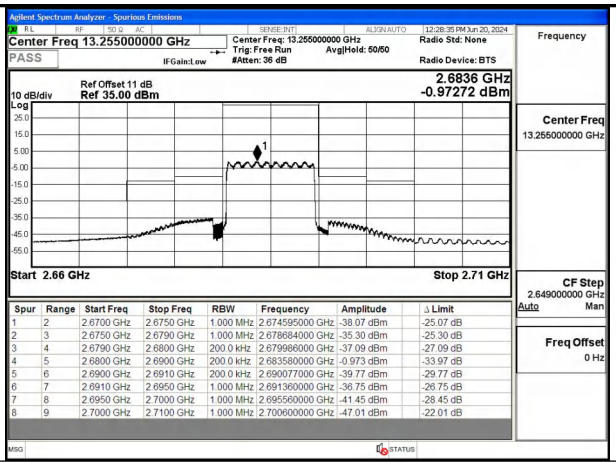

Fig.24

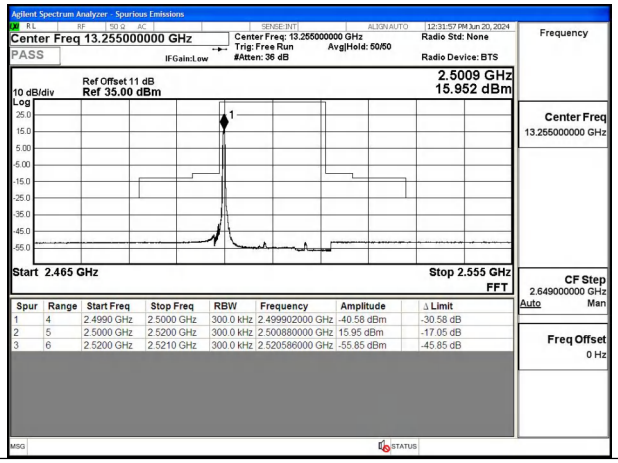

Fig.25

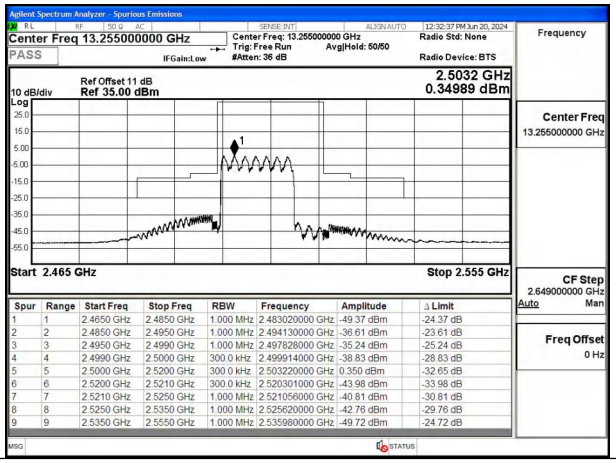

Fig.26

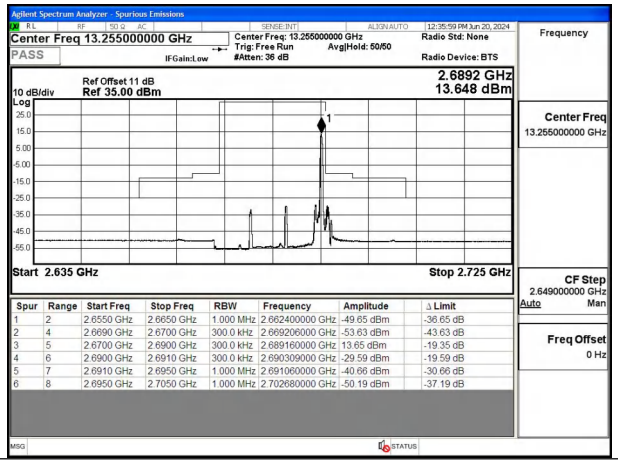

Fig.27

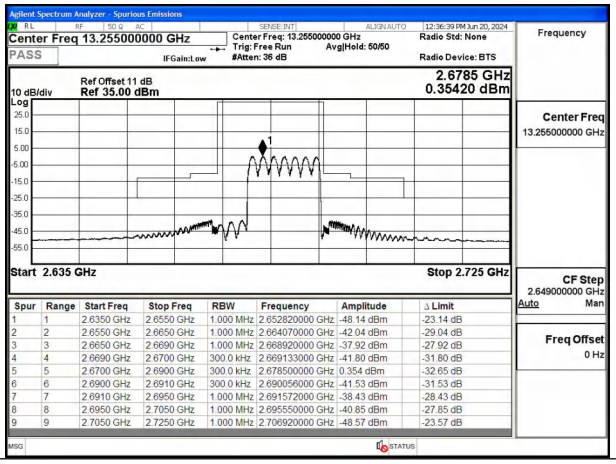

Fig.28

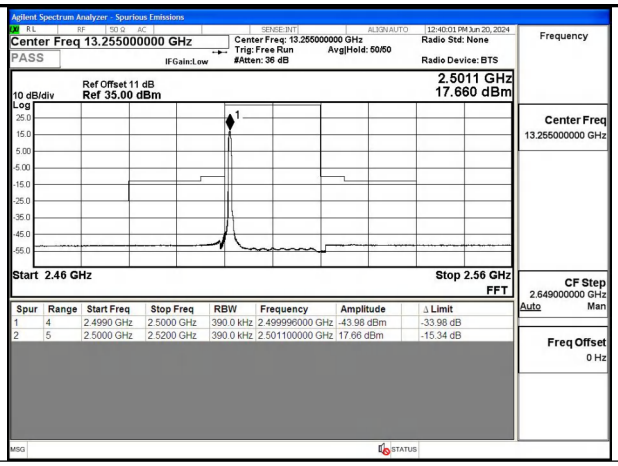

Fig.29

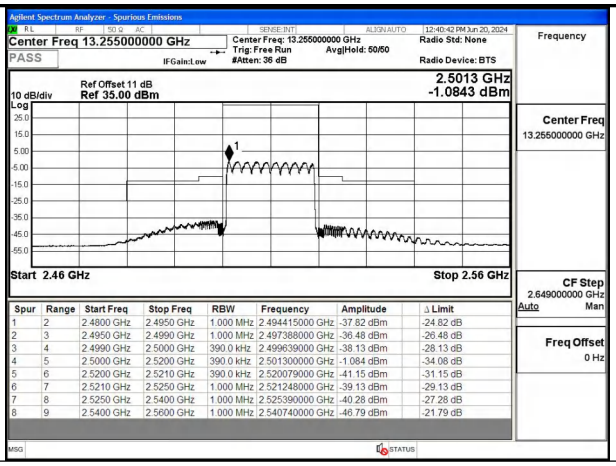

Fig.30

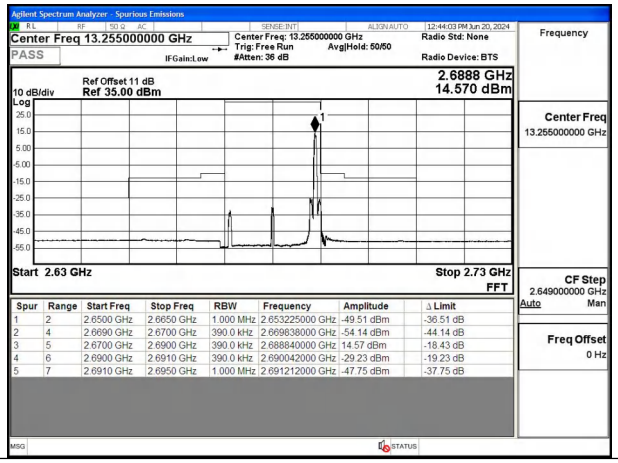

Fig.31

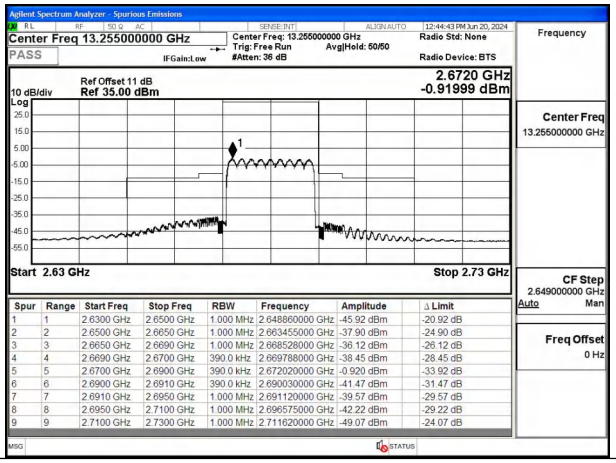

Fig.32

Test Mode: 64QAM

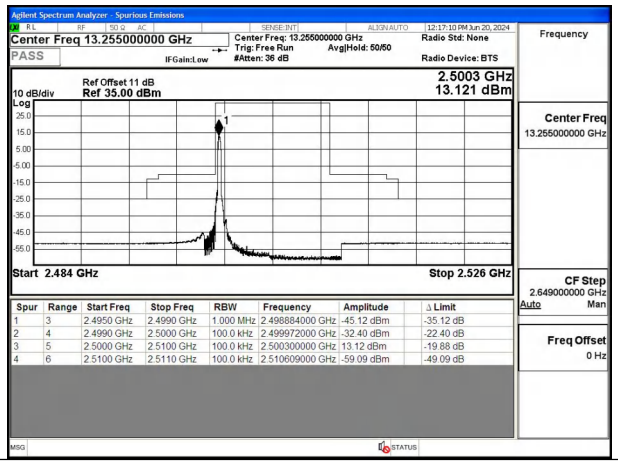

Fig.33

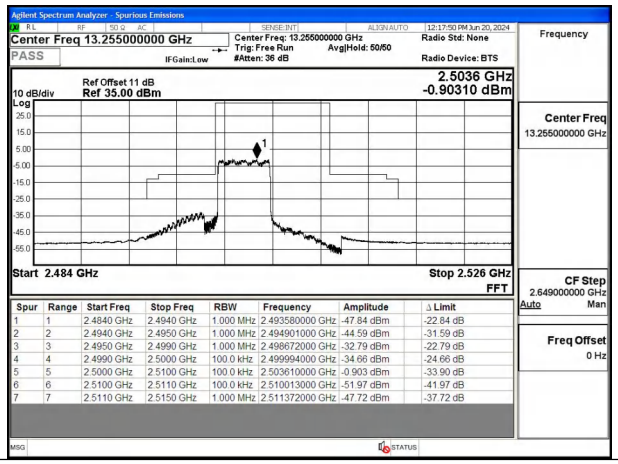

Fig.34

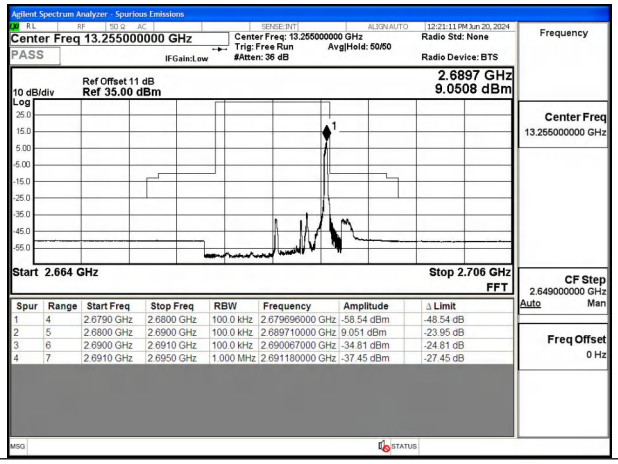

Fig.35

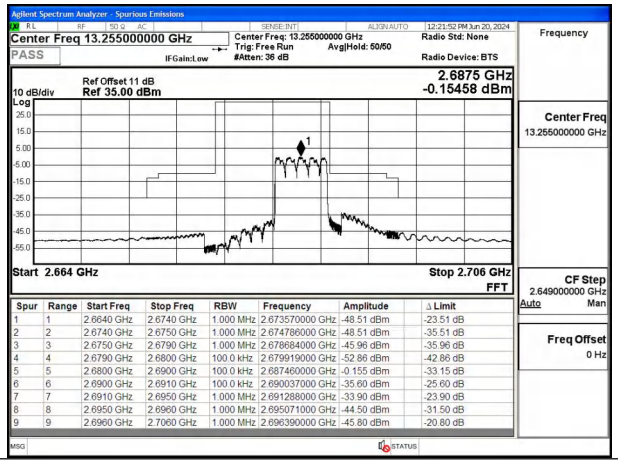

Fig.36

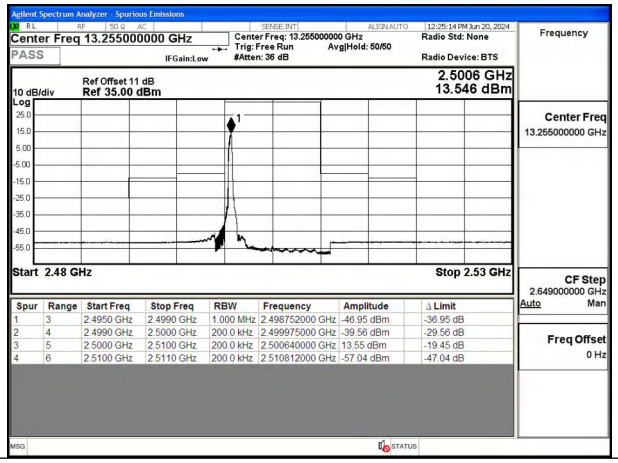

Fig.37

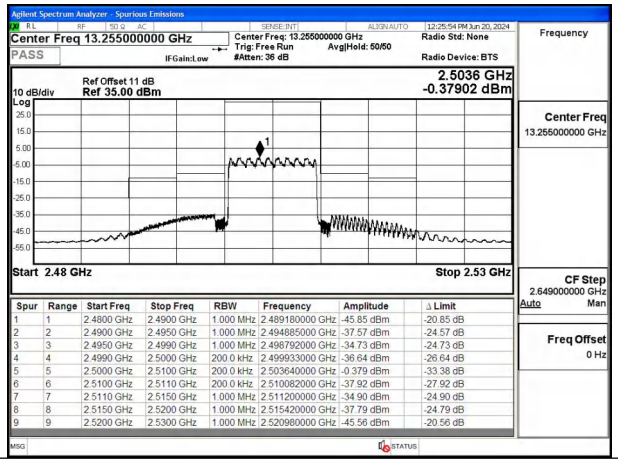

Fig.38

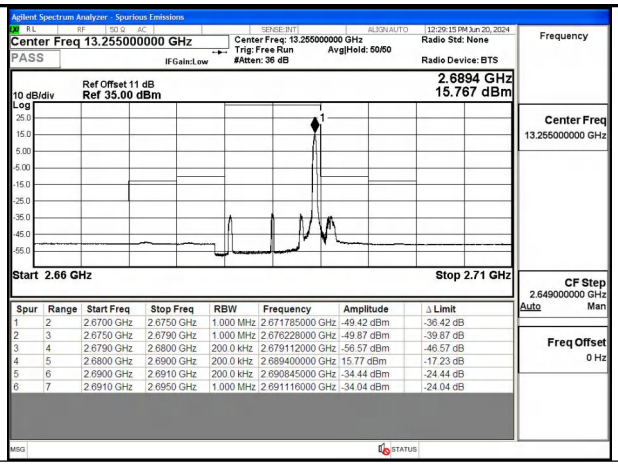

Fig.39

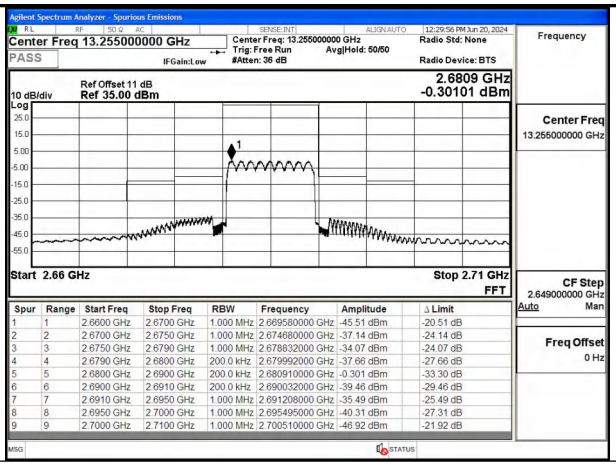

Fig.40

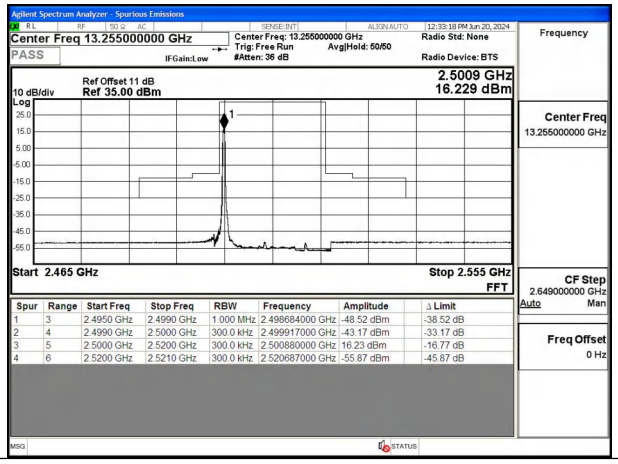

Fig.41

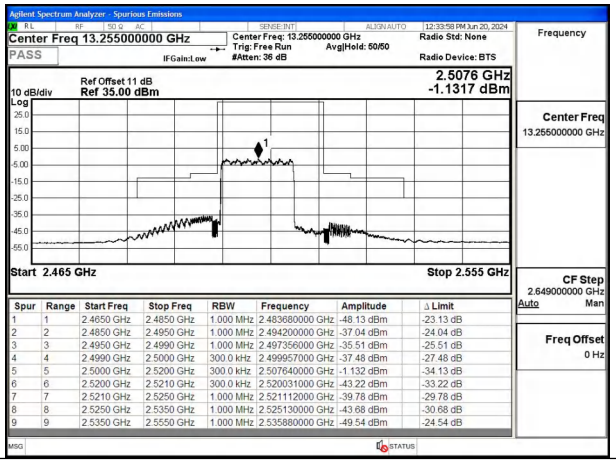

Fig.42

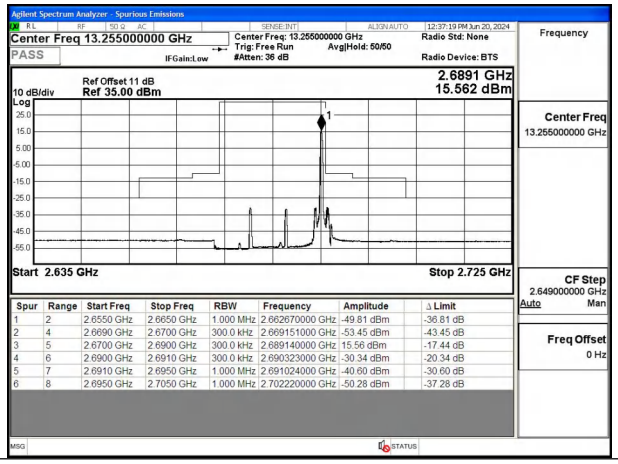

Fig.43

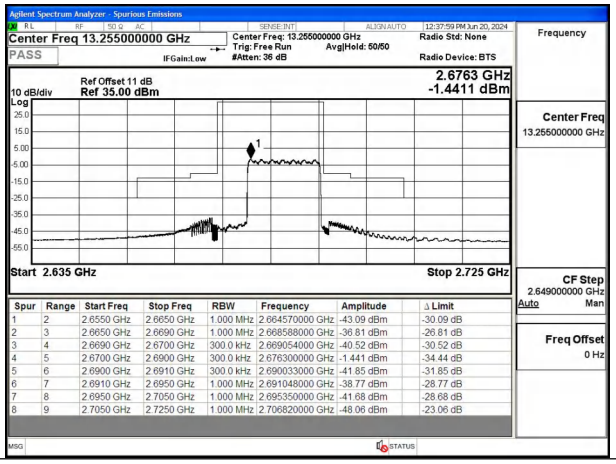

Fig.44

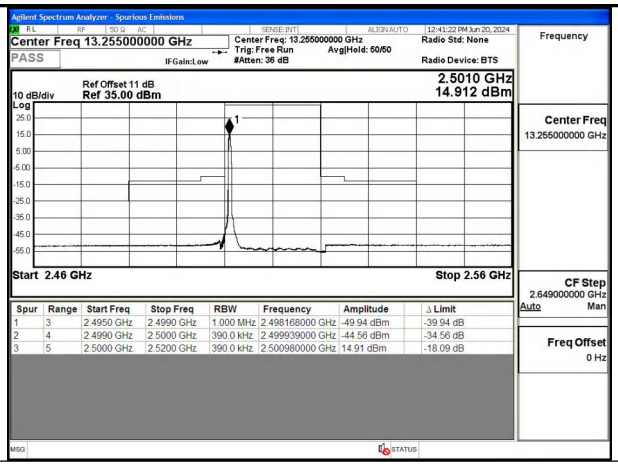

Fig.45

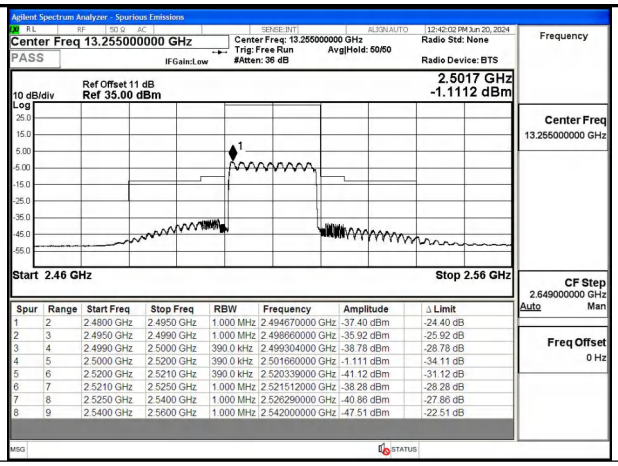

Fig.46

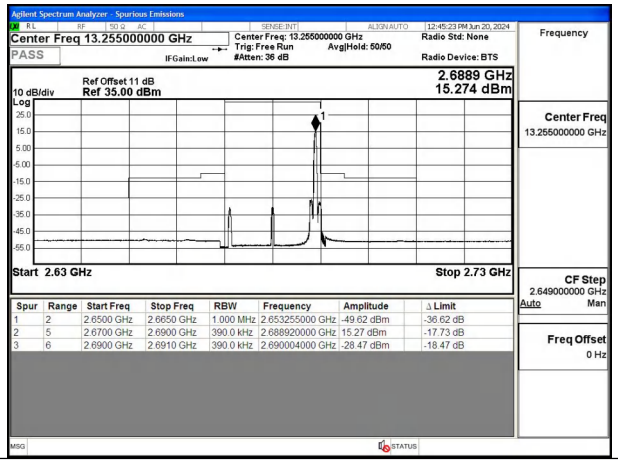

Fig.47

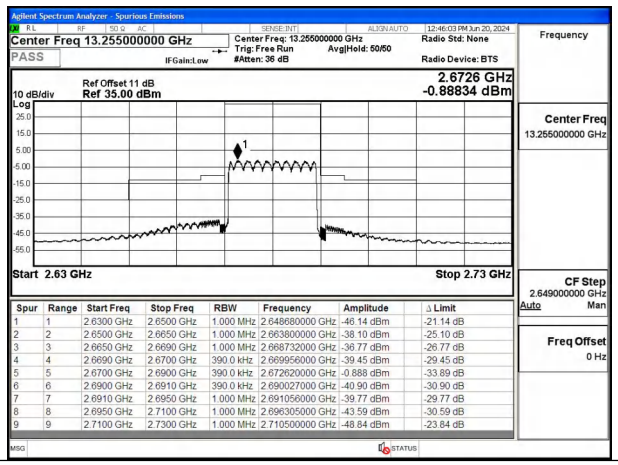

Fig.48

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 41 Low Channel QPSK			
		5M	10M	15M	20M
-30	NV	0.002	0.001	-0.002	-0.002
-20	NV	0.002	-0.002	0.002	0.002
-10	NV	-0.002	0.002	0.002	0.001
0	NV	0.001	0.002	0.001	0.001
+10	NV	0.002	-0.002	0.001	0.002
+20	NV	-0.002	0.002	-0.002	-0.002
+30	NV	0.002	0.003	-0.002	0.001
+40	NV	-0.002	0.002	-0.002	-0.003
+50	NV	0.003	0.002	0.002	-0.002
+20	LV	-0.001	0.002	0.002	-0.001
+20	HV	0.002	0.002	0.001	-0.003

Temperature(°C)	Voltage	Test Result (ppm) Band 41 High Channel QPSK			
		5M	10M	15M	20M
-30	NV	-0.004	0.001	-0.001	-0.001
-20	NV	-0.005	0.001	-0.001	-0.001
-10	NV	-0.003	0.002	0.000	0.000
0	NV	-0.002	0.000	0.000	-0.001
+10	NV	-0.003	-0.001	0.000	-0.001
+20	NV	-0.003	0.000	0.001	0.001
+30	NV	-0.003	0.001	0.000	-0.001
+40	NV	-0.003	0.001	-0.001	-0.001
+50	NV	-0.002	0.000	0.000	-0.001
+20	LV	-0.003	0.001	0.000	0.000
+20	HV	-0.003	0.001	0.000	0.001

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	2498.5	39675	5	1	0	21.81	26.31	0.428
QPSK	2498.5	39675	5	1	12	22.11	26.61	0.458
QPSK	2498.5	39675	5	1	24	22.02	26.52	0.449
QPSK	2498.5	39675	5	12	0	21.06	25.56	0.360
QPSK	2498.5	39675	5	12	7	21.04	25.54	0.358
QPSK	2498.5	39675	5	12	13	20.97	25.47	0.352
QPSK	2498.5	39675	5	25	0	20.96	25.46	0.352
QPSK	2593	40620	5	1	0	21.86	26.36	0.433
QPSK	2593	40620	5	1	12	21.98	26.48	0.445
QPSK	2593	40620	5	1	24	21.91	26.41	0.438
QPSK	2593	40620	5	12	0	20.97	25.47	0.352
QPSK	2593	40620	5	12	7	20.92	25.42	0.348
QPSK	2593	40620	5	12	13	20.87	25.37	0.344
QPSK	2593	40620	5	25	0	20.89	25.39	0.346
QPSK	2687.5	41565	5	1	0	22.45	26.95	0.495
QPSK	2687.5	41565	5	1	12	22.46	26.96	0.497
QPSK	2687.5	41565	5	1	24	22.47	26.97	0.498
QPSK	2687.5	41565	5	12	0	21.56	26.06	0.404
QPSK	2687.5	41565	5	12	7	21.59	26.09	0.406
QPSK	2687.5	41565	5	12	13	21.48	25.98	0.396
QPSK	2687.5	41565	5	25	0	21.53	26.03	0.401

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	2498.5	39675	5	1	0	21.34	25.84	0.384
16QAM	2498.5	39675	5	1	12	21.46	25.96	0.394
16QAM	2498.5	39675	5	1	24	21.48	25.98	0.396
16QAM	2498.5	39675	5	12	0	20.14	24.64	0.291
16QAM	2498.5	39675	5	12	7	20.08	24.58	0.287
16QAM	2498.5	39675	5	12	13	20.06	24.56	0.286
16QAM	2498.5	39675	5	25	0	19.95	24.45	0.279
16QAM	2593	40620	5	1	0	21.08	25.58	0.361
16QAM	2593	40620	5	1	12	21.17	25.67	0.369
16QAM	2593	40620	5	1	24	21.17	25.67	0.369
16QAM	2593	40620	5	12	0	20.06	24.56	0.286
16QAM	2593	40620	5	12	7	19.98	24.48	0.281
16QAM	2593	40620	5	12	13	19.82	24.32	0.270
16QAM	2593	40620	5	25	0	20.02	24.52	0.283
16QAM	2687.5	41565	5	1	0	21.56	26.06	0.404
16QAM	2687.5	41565	5	1	12	21.75	26.25	0.422
16QAM	2687.5	41565	5	1	24	21.43	25.93	0.392
16QAM	2687.5	41565	5	12	0	20.63	25.13	0.326
16QAM	2687.5	41565	5	12	7	20.63	25.13	0.326
16QAM	2687.5	41565	5	12	13	20.55	25.05	0.320
16QAM	2687.5	41565	5	25	0	20.51	25.01	0.317
64QAM	2498.5	39675	5	1	0	21.21	25.71	0.372
64QAM	2498.5	39675	5	1	12	21.15	25.65	0.367
64QAM	2498.5	39675	5	1	24	21.23	25.73	0.374
64QAM	2498.5	39675	5	12	0	20.05	24.55	0.285
64QAM	2498.5	39675	5	12	7	20.03	24.53	0.284
64QAM	2498.5	39675	5	12	13	20.01	24.51	0.282
64QAM	2498.5	39675	5	25	0	19.97	24.47	0.280
64QAM	2593	40620	5	1	0	21.14	25.64	0.366
64QAM	2593	40620	5	1	12	21.03	25.53	0.357
64QAM	2593	40620	5	1	24	21.08	25.58	0.361
64QAM	2593	40620	5	12	0	19.96	24.46	0.279
64QAM	2593	40620	5	12	7	19.96	24.46	0.279
64QAM	2593	40620	5	12	13	19.87	24.37	0.274
64QAM	2593	40620	5	25	0	19.82	24.32	0.270
64QAM	2687.5	41565	5	1	0	21.74	26.24	0.421
64QAM	2687.5	41565	5	1	12	21.72	26.22	0.419
64QAM	2687.5	41565	5	1	24	21.49	25.99	0.397
64QAM	2687.5	41565	5	12	0	20.49	24.99	0.316
64QAM	2687.5	41565	5	12	7	20.60	25.10	0.324
64QAM	2687.5	41565	5	12	13	20.52	25.02	0.318
64QAM	2687.5	41565	5	25	0	20.61	25.11	0.324

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2501	39700	10	1	0	22.03	26.53	0.450
QPSK	2501	39700	10	1	25	22.08	26.58	0.455
QPSK	2501	39700	10	1	49	22.08	26.58	0.455
QPSK	2501	39700	10	25	0	21.09	25.59	0.362
QPSK	2501	39700	10	25	12	21.01	25.51	0.356
QPSK	2501	39700	10	25	25	21.09	25.59	0.362
QPSK	2501	39700	10	50	0	21.03	25.53	0.357
QPSK	2593	40620	10	1	0	21.99	26.49	0.446
QPSK	2593	40620	10	1	25	22.02	26.52	0.449
QPSK	2593	40620	10	1	49	22.01	26.51	0.448
QPSK	2593	40620	10	25	0	20.95	25.45	0.351
QPSK	2593	40620	10	25	12	20.95	25.45	0.351
QPSK	2593	40620	10	25	25	20.93	25.43	0.349
QPSK	2593	40620	10	50	0	20.96	25.46	0.352
QPSK	2685	41540	10	1	0	22.45	26.95	0.495
QPSK	2685	41540	10	1	25	22.58	27.08	0.511
QPSK	2685	41540	10	1	49	22.54	27.04	0.506
QPSK	2685	41540	10	25	0	21.52	26.02	0.400
QPSK	2685	41540	10	25	12	21.53	26.03	0.401
QPSK	2685	41540	10	25	25	21.53	26.03	0.401
QPSK	2685	41540	10	50	0	21.53	26.03	0.401

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	2501	39700	10	1	0	21.35	25.85	0.385
16QAM	2501	39700	10	1	25	21.52	26.02	0.400
16QAM	2501	39700	10	1	49	21.54	26.04	0.402
16QAM	2501	39700	10	25	0	20.07	24.57	0.286
16QAM	2501	39700	10	25	12	20.04	24.54	0.284
16QAM	2501	39700	10	25	25	20.05	24.55	0.285
16QAM	2501	39700	10	50	0	19.92	24.42	0.277
16QAM	2593	40620	10	1	0	21.22	25.72	0.373
16QAM	2593	40620	10	1	25	21.01	25.51	0.356
16QAM	2593	40620	10	1	49	20.95	25.45	0.351
16QAM	2593	40620	10	25	0	19.95	24.45	0.279
16QAM	2593	40620	10	25	12	20.00	24.50	0.282
16QAM	2593	40620	10	25	25	19.95	24.45	0.279
16QAM	2593	40620	10	50	0	19.90	24.40	0.275
16QAM	2685	41540	10	1	0	21.40	25.90	0.389
16QAM	2685	41540	10	1	25	21.64	26.14	0.411
16QAM	2685	41540	10	1	49	21.53	26.03	0.401
16QAM	2685	41540	10	25	0	20.54	25.04	0.319
16QAM	2685	41540	10	25	12	20.63	25.13	0.326
16QAM	2685	41540	10	25	25	20.57	25.07	0.321
16QAM	2685	41540	10	50	0	20.34	24.84	0.305
64QAM	2501	39700	10	1	0	20.78	25.28	0.337
64QAM	2501	39700	10	1	25	21.47	25.97	0.395
64QAM	2501	39700	10	1	49	21.41	25.91	0.390
64QAM	2501	39700	10	25	0	19.94	24.44	0.278
64QAM	2501	39700	10	25	12	19.90	24.40	0.275
64QAM	2501	39700	10	25	25	20.05	24.55	0.285
64QAM	2501	39700	10	50	0	20.07	24.57	0.286
64QAM	2593	40620	10	1	0	21.03	25.53	0.357
64QAM	2593	40620	10	1	25	21.51	26.01	0.399
64QAM	2593	40620	10	1	49	21.18	25.68	0.370
64QAM	2593	40620	10	25	0	19.99	24.49	0.281
64QAM	2593	40620	10	25	12	19.99	24.49	0.281
64QAM	2593	40620	10	25	25	20.01	24.51	0.282
64QAM	2593	40620	10	50	0	19.96	24.46	0.279
64QAM	2685	41540	10	1	0	21.46	25.96	0.394
64QAM	2685	41540	10	1	25	21.56	26.06	0.404
64QAM	2685	41540	10	1	49	21.59	26.09	0.406
64QAM	2685	41540	10	25	0	20.44	24.94	0.312
64QAM	2685	41540	10	25	12	20.54	25.04	0.319
64QAM	2685	41540	10	25	25	20.57	25.07	0.321
64QAM	2685	41540	10	50	0	20.34	24.84	0.305

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2503.5	39725	15	1	0	21.61	26.11	0.408
QPSK	2503.5	39725	15	1	37	22.22	26.72	0.470
QPSK	2503.5	39725	15	1	74	21.89	26.39	0.436
QPSK	2503.5	39725	15	36	0	20.89	25.39	0.346
QPSK	2503.5	39725	15	36	29	20.89	25.39	0.346
QPSK	2503.5	39725	15	36	30	20.81	25.31	0.340
QPSK	2503.5	39725	15	75	0	20.94	25.44	0.350
QPSK	2593	40620	15	1	0	21.77	26.27	0.424
QPSK	2593	40620	15	1	37	21.95	26.45	0.442
QPSK	2593	40620	15	1	74	21.98	26.48	0.445
QPSK	2593	40620	15	36	0	20.78	25.28	0.337
QPSK	2593	40620	15	36	29	20.78	25.28	0.337
QPSK	2593	40620	15	36	30	20.78	25.28	0.337
QPSK	2593	40620	15	75	0	20.79	25.29	0.338
QPSK	2682.5	41515	15	1	0	22.22	26.72	0.470
QPSK	2682.5	41515	15	1	37	22.48	26.98	0.499
QPSK	2682.5	41515	15	1	74	22.51	27.01	0.502
QPSK	2682.5	41515	15	36	0	21.40	25.90	0.389
QPSK	2682.5	41515	15	36	29	21.40	25.90	0.389
QPSK	2682.5	41515	15	36	30	21.38	25.88	0.387
QPSK	2682.5	41515	15	75	0	21.27	25.77	0.378

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	2503.5	39725	15	1	0	20.98	25.48	0.353
16QAM	2503.5	39725	15	1	37	21.14	25.64	0.366
16QAM	2503.5	39725	15	1	74	21.23	25.73	0.374
16QAM	2503.5	39725	15	36	0	19.87	24.37	0.274
16QAM	2503.5	39725	15	36	29	19.80	24.30	0.269
16QAM	2503.5	39725	15	36	30	20.00	24.50	0.282
16QAM	2503.5	39725	15	75	0	19.97	24.47	0.280
16QAM	2593	40620	15	1	0	20.62	25.12	0.325
16QAM	2593	40620	15	1	37	20.85	25.35	0.343
16QAM	2593	40620	15	1	74	20.84	25.34	0.342
16QAM	2593	40620	15	36	0	19.85	24.35	0.272
16QAM	2593	40620	15	36	29	19.90	24.40	0.275
16QAM	2593	40620	15	36	30	19.89	24.39	0.275
16QAM	2593	40620	15	75	0	19.71	24.21	0.264
16QAM	2682.5	41515	15	1	0	21.71	26.21	0.418
16QAM	2682.5	41515	15	1	37	21.71	26.21	0.418
16QAM	2682.5	41515	15	1	74	22.02	26.52	0.449
16QAM	2682.5	41515	15	36	0	20.34	24.84	0.305
16QAM	2682.5	41515	15	36	29	20.36	24.86	0.306
16QAM	2682.5	41515	15	36	30	20.33	24.83	0.304
16QAM	2682.5	41515	15	75	0	20.33	24.83	0.304
64QAM	2503.5	39725	15	1	0	21.11	25.61	0.364
64QAM	2503.5	39725	15	1	37	21.22	25.72	0.373
64QAM	2503.5	39725	15	1	74	21.24	25.74	0.375
64QAM	2503.5	39725	15	36	0	19.95	24.45	0.279
64QAM	2503.5	39725	15	36	29	19.88	24.38	0.274
64QAM	2503.5	39725	15	36	30	19.85	24.35	0.272
64QAM	2503.5	39725	15	75	0	19.96	24.46	0.279
64QAM	2593	40620	15	1	0	21.22	25.72	0.373
64QAM	2593	40620	15	1	37	20.71	25.21	0.332
64QAM	2593	40620	15	1	74	21.21	25.71	0.372
64QAM	2593	40620	15	36	0	19.86	24.36	0.273
64QAM	2593	40620	15	36	29	19.73	24.23	0.265
64QAM	2593	40620	15	36	30	19.80	24.30	0.269
64QAM	2593	40620	15	75	0	19.81	24.31	0.270
64QAM	2682.5	41515	15	1	0	21.39	25.89	0.388
64QAM	2682.5	41515	15	1	37	21.12	25.62	0.365
64QAM	2682.5	41515	15	1	74	21.16	25.66	0.368
64QAM	2682.5	41515	15	36	0	20.33	24.83	0.304
64QAM	2682.5	41515	15	36	29	20.31	24.81	0.303
64QAM	2682.5	41515	15	36	30	20.34	24.84	0.305
64QAM	2682.5	41515	15	75	0	20.27	24.77	0.300

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2506	39750	20	1	0	21.84	26.34	0.431
QPSK	2506	39750	20	1	49	21.85	26.35	0.432
QPSK	2506	39750	20	1	99	22.15	26.65	0.462
QPSK	2506	39750	20	50	0	20.89	25.39	0.346
QPSK	2506	39750	20	50	24	20.94	25.44	0.350
QPSK	2506	39750	20	50	50	21.02	25.52	0.356
QPSK	2506	39750	20	100	0	20.89	25.39	0.346
QPSK	2593	40620	20	1	0	21.93	26.43	0.440
QPSK	2593	40620	20	1	49	21.97	26.47	0.444
QPSK	2593	40620	20	1	99	22.00	26.50	0.447
QPSK	2593	40620	20	50	0	20.84	25.34	0.342
QPSK	2593	40620	20	50	24	20.83	25.33	0.341
QPSK	2593	40620	20	50	50	20.75	25.25	0.335
QPSK	2593	40620	20	100	0	20.80	25.30	0.339
QPSK	2680	41490	20	1	0	22.15	26.65	0.462
QPSK	2680	41490	20	1	49	22.59	27.09	0.512
QPSK	2680	41490	20	1	99	22.46	26.96	0.497
QPSK	2680	41490	20	50	0	21.42	25.92	0.391
QPSK	2680	41490	20	50	24	21.41	25.91	0.390
QPSK	2680	41490	20	50	50	21.32	25.82	0.382
QPSK	2680	41490	20	100	0	21.34	25.84	0.384

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
16QAM	2506	39750	20	1	0	21.41	25.91	0.390
16QAM	2506	39750	20	1	49	21.20	25.70	0.372
16QAM	2506	39750	20	1	99	21.36	25.86	0.385
16QAM	2506	39750	20	50	0	19.91	24.41	0.276
16QAM	2506	39750	20	50	24	19.98	24.48	0.281
16QAM	2506	39750	20	50	50	19.93	24.43	0.277
16QAM	2506	39750	20	100	0	19.89	24.39	0.275
16QAM	2593	40620	20	1	0	21.21	25.71	0.372
16QAM	2593	40620	20	1	49	21.21	25.71	0.372
16QAM	2593	40620	20	1	99	21.16	25.66	0.368
16QAM	2593	40620	20	50	0	19.85	24.35	0.272
16QAM	2593	40620	20	50	24	19.73	24.23	0.265
16QAM	2593	40620	20	50	50	19.76	24.26	0.267
16QAM	2593	40620	20	100	0	19.84	24.34	0.272
16QAM	2680	41490	20	1	0	21.92	26.42	0.439
16QAM	2680	41490	20	1	49	21.66	26.16	0.413
16QAM	2680	41490	20	1	99	21.57	26.07	0.405
16QAM	2680	41490	20	50	0	20.40	24.90	0.309
16QAM	2680	41490	20	50	24	20.43	24.93	0.311
16QAM	2680	41490	20	50	50	20.41	24.91	0.310
16QAM	2680	41490	20	100	0	20.37	24.87	0.307
64QAM	2506	39750	20	1	0	20.99	25.49	0.354
64QAM	2506	39750	20	1	49	21.03	25.53	0.357
64QAM	2506	39750	20	1	99	21.17	25.67	0.369
64QAM	2506	39750	20	50	0	19.99	24.49	0.281
64QAM	2506	39750	20	50	24	19.93	24.43	0.277
64QAM	2506	39750	20	50	50	19.97	24.47	0.280
64QAM	2506	39750	20	100	0	19.89	24.39	0.275
64QAM	2593	40620	20	1	0	21.20	25.70	0.372
64QAM	2593	40620	20	1	49	20.72	25.22	0.333
64QAM	2593	40620	20	1	99	21.15	25.65	0.367
64QAM	2593	40620	20	50	0	19.84	24.34	0.272
64QAM	2593	40620	20	50	24	19.82	24.32	0.270
64QAM	2593	40620	20	50	50	19.76	24.26	0.267
64QAM	2593	40620	20	100	0	19.80	24.30	0.269
64QAM	2680	41490	20	1	0	21.51	26.01	0.399
64QAM	2680	41490	20	1	49	21.55	26.05	0.403
64QAM	2680	41490	20	1	99	21.28	25.78	0.378
64QAM	2680	41490	20	50	0	20.44	24.94	0.312
64QAM	2680	41490	20	50	24	20.48	24.98	0.315
64QAM	2680	41490	20	50	50	20.37	24.87	0.307
64QAM	2680	41490	20	100	0	20.34	24.84	0.305