

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 17

1 RF Power Output

BW	Modulation	RB Size	RB Offset	Conducted power(dBm)		
				23755.000	23790.000	23825.000
				706.500	710.000	713.500
5.000	QPSK	1.000	0.000	23.170	23.270	23.320
		1.000	12.000	23.070	23.270	23.400
		1.000	24.000	23.060	23.160	23.250
		12.000	0.000	22.330	22.370	22.360
		12.000	7.000	22.370	22.230	22.390
		12.000	13.000	22.310	22.280	22.310
		25.000	0.000	22.370	22.300	22.310
	16QAM	1.000	0.000	22.390	22.940	22.780
		1.000	12.000	22.410	22.880	22.580
		1.000	24.000	22.430	22.840	22.490
		12.000	0.000	21.310	21.300	21.470
		12.000	7.000	21.310	21.310	21.320
		12.000	13.000	21.240	21.140	21.200
		25.000	0.000	21.270	21.240	21.300
	64QAM	1.000	0.000	21.440	21.610	21.720
		1.000	12.000	21.470	21.700	21.440
		1.000	24.000	21.300	21.630	21.390
		12.000	0.000	20.360	20.320	20.490
		12.000	7.000	20.480	20.390	20.360
		12.000	13.000	20.280	20.340	20.420
		25.000	0.000	20.010	20.190	20.270

BW	Modulation	RB Size	RB Offset	Conducted power(dBm)		
				23780.000	23790.000	23800.000
				709.000	710.000	711.000
10.000	QPSK	1.000	0.000	23.300	23.280	23.240
		1.000	25.000	23.200	23.190	23.200
		1.000	49.000	23.200	23.220	23.160
		25.000	0.000	22.240	22.290	22.350
		25.000	12.000	22.370	22.330	22.370
		25.000	25.000	22.330	22.290	22.370
		50.000	0.000	22.350	22.340	22.280
	16QAM	1.000	0.000	22.350	22.430	22.510
		1.000	25.000	22.890	22.470	22.530
		1.000	49.000	22.690	22.490	22.500
		25.000	0.000	21.410	21.400	21.410
		25.000	12.000	21.400	21.360	21.370
		25.000	25.000	21.300	21.420	21.490
		50.000	0.000	21.310	21.300	21.450
	64QAM	1.000	0.000	21.690	21.340	21.310
		1.000	25.000	21.680	21.450	21.680
		1.000	49.000	21.660	21.490	21.200
		25.000	0.000	20.340	20.400	20.490
		25.000	12.000	20.490	20.420	20.520
		25.000	25.000	20.340	20.390	20.540
		50.000	0.000	20.400	20.280	20.320

2 Occupied Bandwidth

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)	
17	QPSK	706.5	23755	5	25	0	4.460	Fig.1
17	QPSK	710	23790	5	25	0	4.470	Fig.2
17	QPSK	713.5	23825	5	25	0	4.470	Fig.3
17	QPSK	709	23780	10	50	0	8.900	Fig.4
17	QPSK	710	23790	10	50	0	8.880	Fig.5
17	QPSK	711	23800	10	50	0	8.900	Fig.6

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)	
17	16QAM	706.5	23755	5	25	0	4.450	Fig.7
17	16QAM	710	23790	5	25	0	4.460	Fig.8
17	16QAM	713.5	23825	5	25	0	4.460	Fig.9
17	16QAM	709	23780	10	50	0	8.890	Fig.10
17	16QAM	710	23790	10	50	0	8.870	Fig.11
17	16QAM	711	23800	10	50	0	8.870	Fig.12

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)	
17	64QAM	706.5	23755	5	25	0	4.460	Fig.13
17	64QAM	710	23790	5	25	0	4.450	Fig.14
17	64QAM	713.5	23825	5	25	0	4.460	Fig.15
17	64QAM	709	23780	10	50	0	8.890	Fig.16
17	64QAM	710	23790	10	50	0	8.880	Fig.17
17	64QAM	711	23800	10	50	0	8.880	Fig.18

Test Mode: QPSK

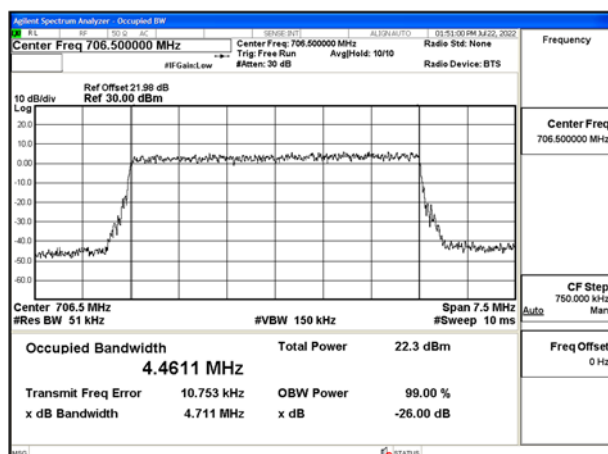


Fig.1

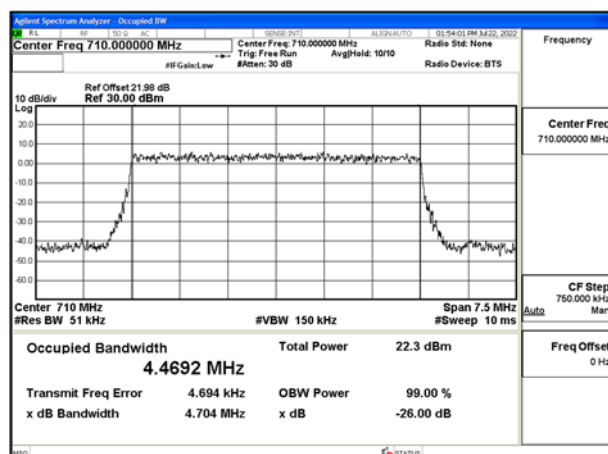


Fig.2

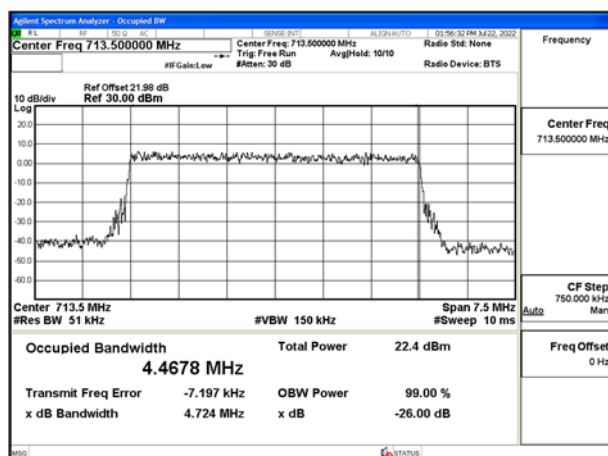


Fig.3

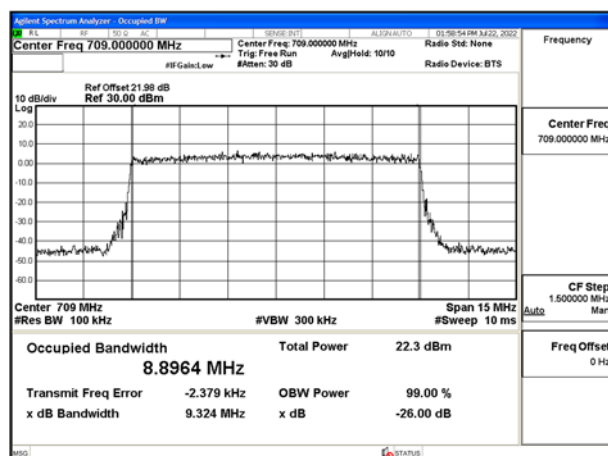


Fig.4

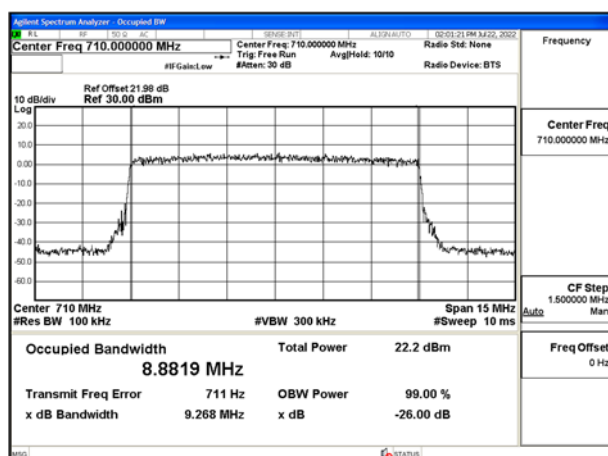


Fig.5

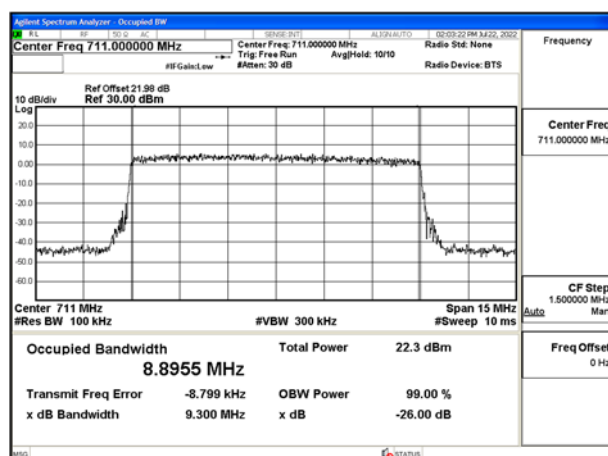


Fig.6

Test Mode: 16QAM

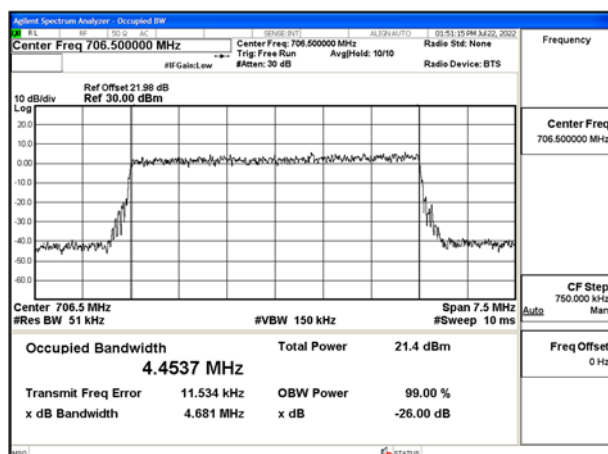


Fig.7

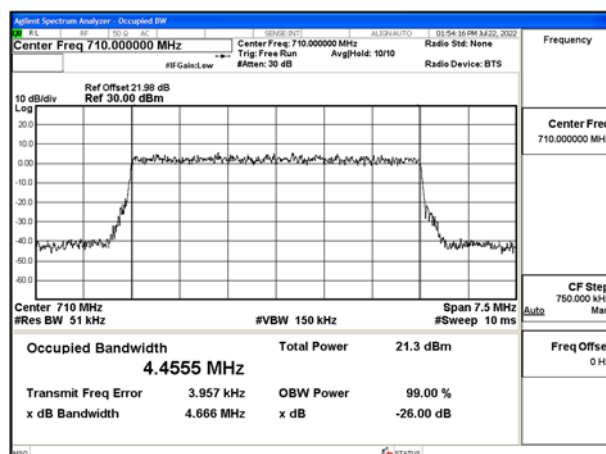


Fig.8

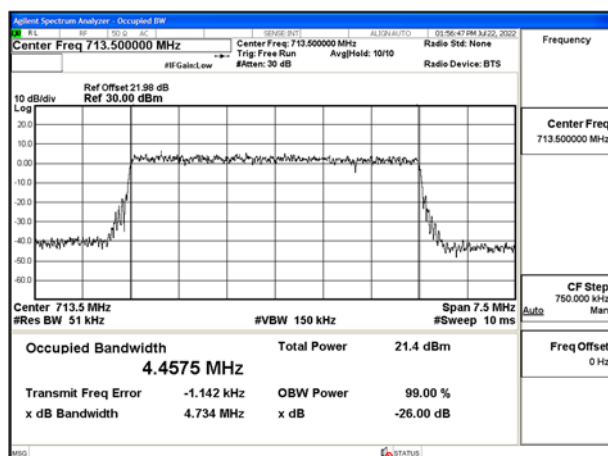


Fig.9

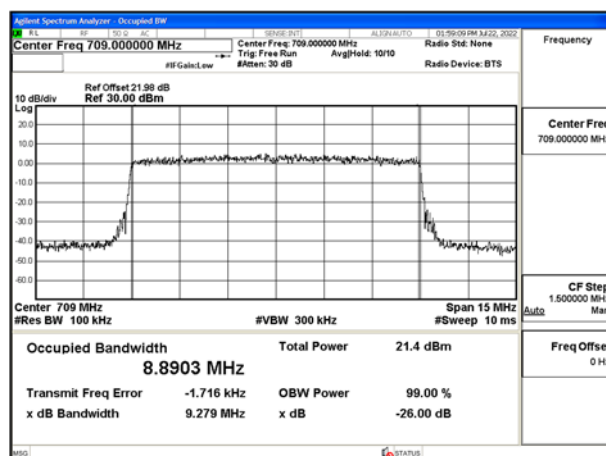


Fig.10

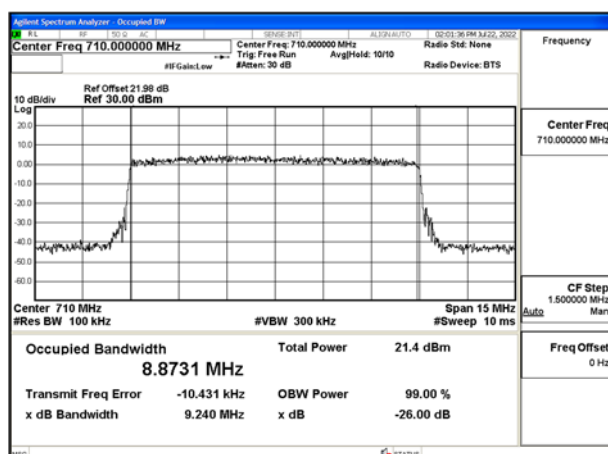


Fig.11

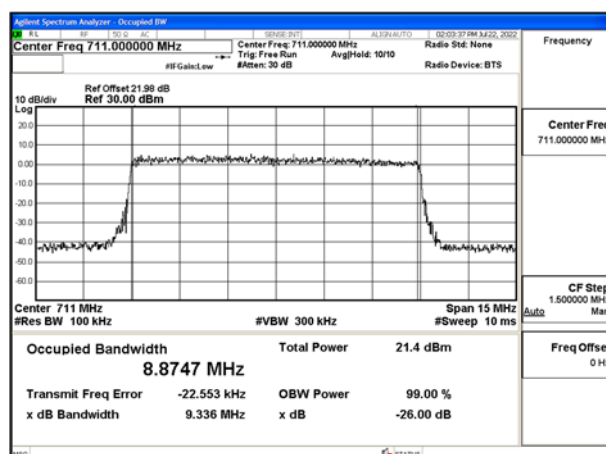


Fig.12

Test Mode: 64QAM

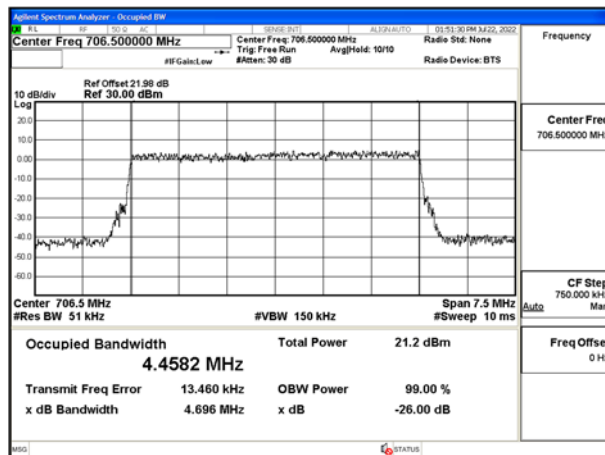


Fig.13

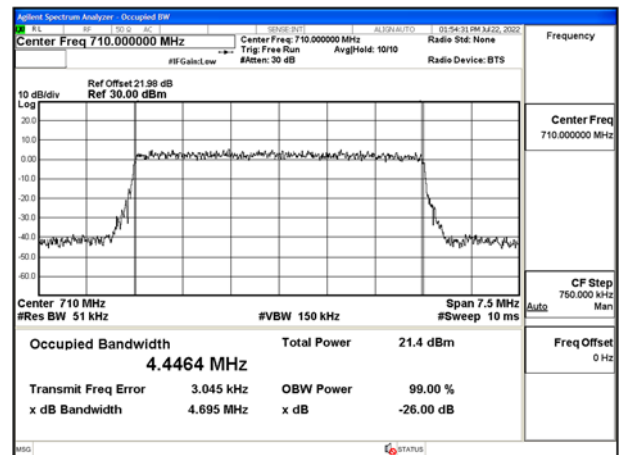


Fig.14

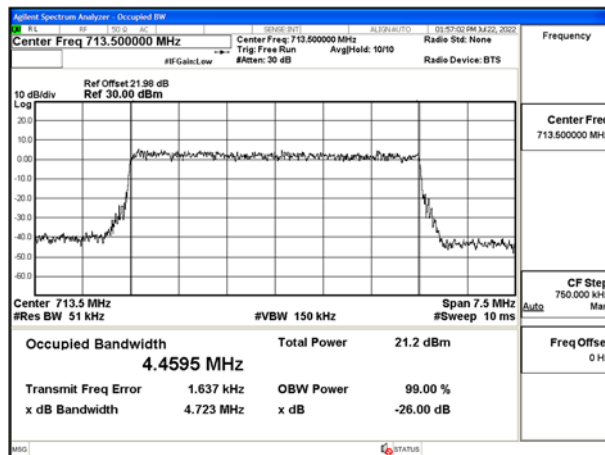


Fig.15

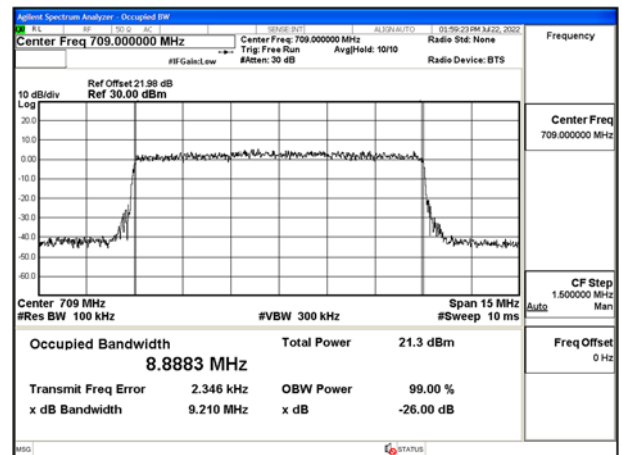


Fig.16

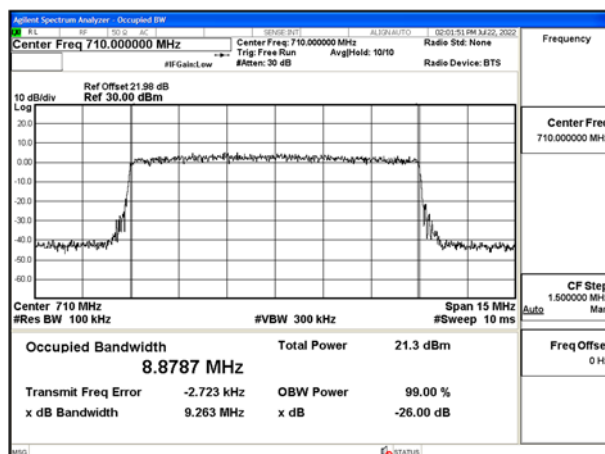


Fig.17

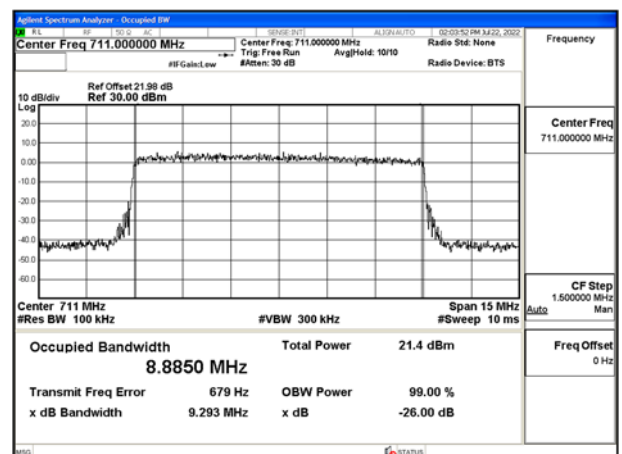


Fig.18

3 Emission Bandwidth

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)	
17	QPSK	706.5	23755	5	25	0	4.710	Fig.1
17	QPSK	710	23790	5	25	0	4.700	Fig.2
17	QPSK	713.5	23825	5	25	0	4.720	Fig.3
17	QPSK	709	23780	10	50	0	9.320	Fig.4
17	QPSK	710	23790	10	50	0	9.270	Fig.5
17	QPSK	711	23800	10	50	0	9.300	Fig.6

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)	
17	16QAM	706.5	23755	5	25	0	4.680	Fig.7
17	16QAM	710	23790	5	25	0	4.670	Fig.8
17	16QAM	713.5	23825	5	25	0	4.730	Fig.9
17	16QAM	709	23780	10	50	0	9.280	Fig.10
17	16QAM	710	23790	10	50	0	9.240	Fig.11
17	16QAM	711	23800	10	50	0	9.340	Fig.12

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)	
17	64QAM	706.5	23755	5	25	0	4.700	Fig.13
17	64QAM	710	23790	5	25	0	4.690	Fig.14
17	64QAM	713.5	23825	5	25	0	4.720	Fig.15
17	64QAM	709	23780	10	50	0	9.210	Fig.16
17	64QAM	710	23790	10	50	0	9.260	Fig.17
17	64QAM	711	23800	10	50	0	9.290	Fig.18

Test Mode: QPSK

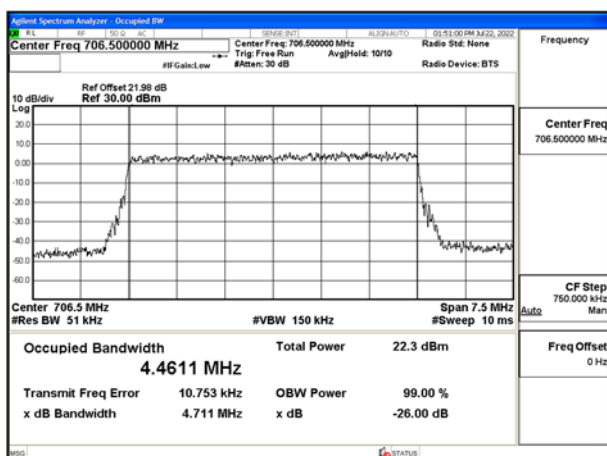


Fig.1

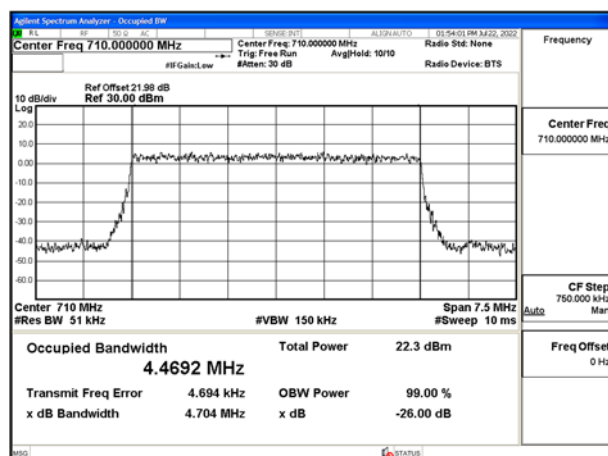


Fig.2

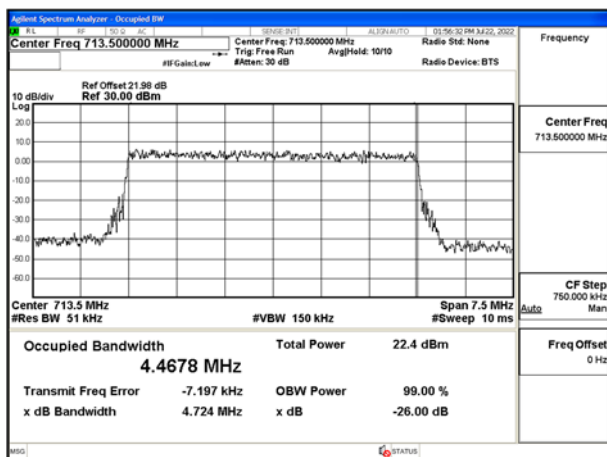


Fig.3

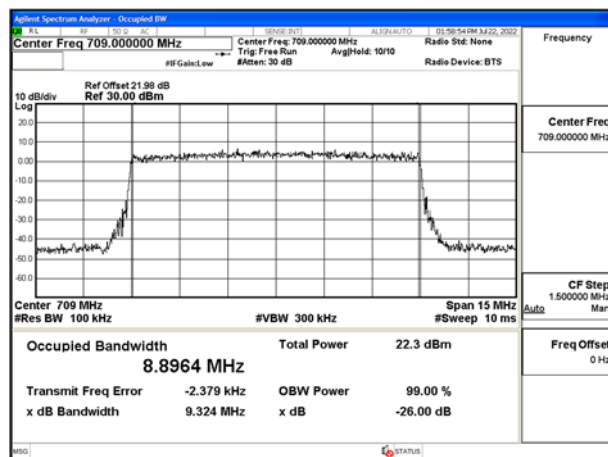


Fig.4

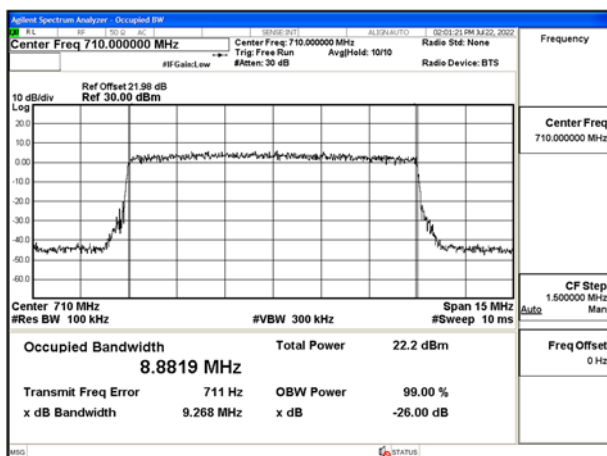


Fig.5

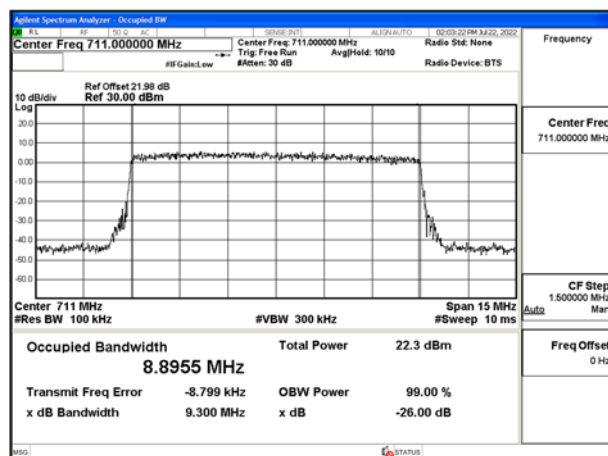


Fig.6

Test Mode: 16QAM

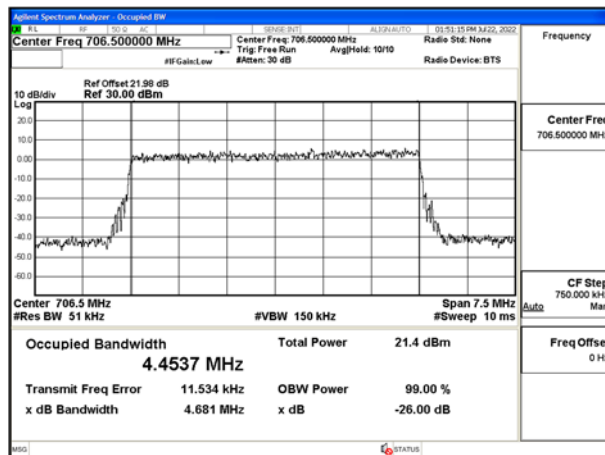


Fig.7

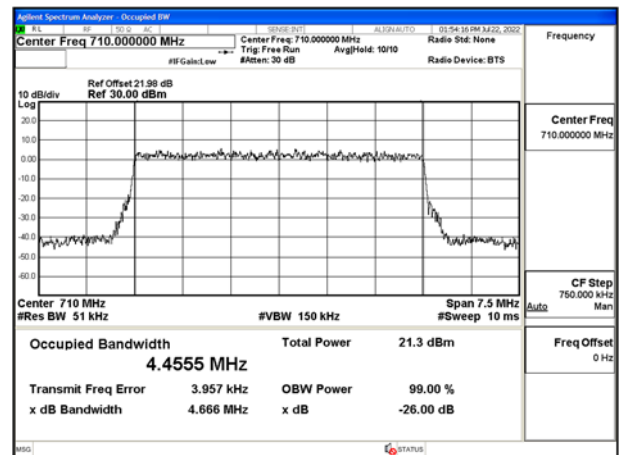


Fig.8

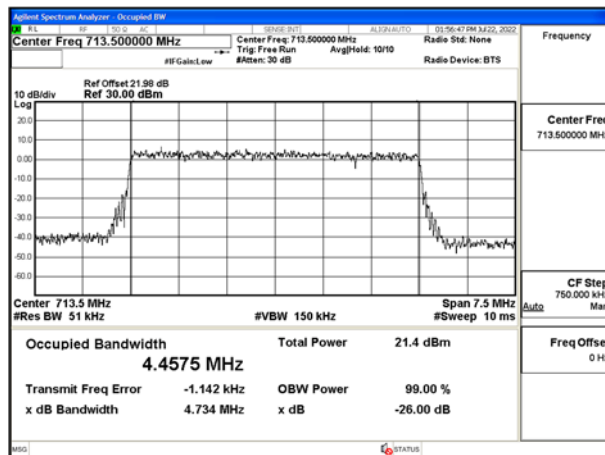


Fig.9

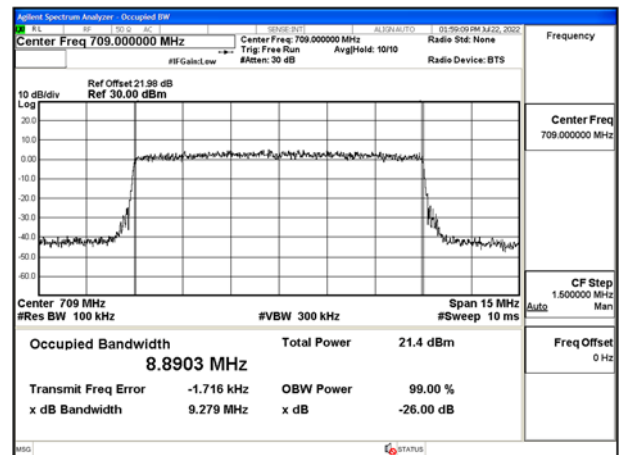


Fig.10

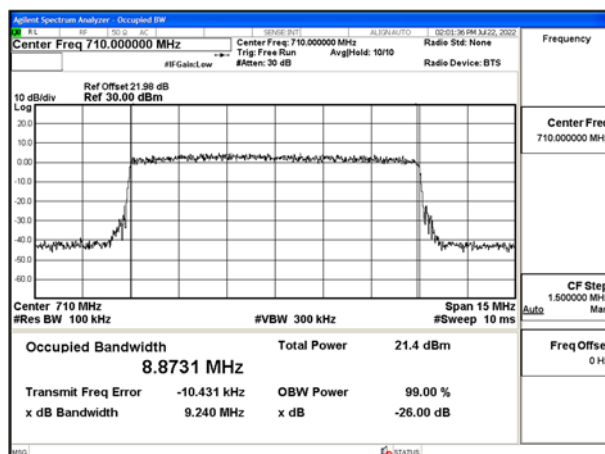


Fig.11

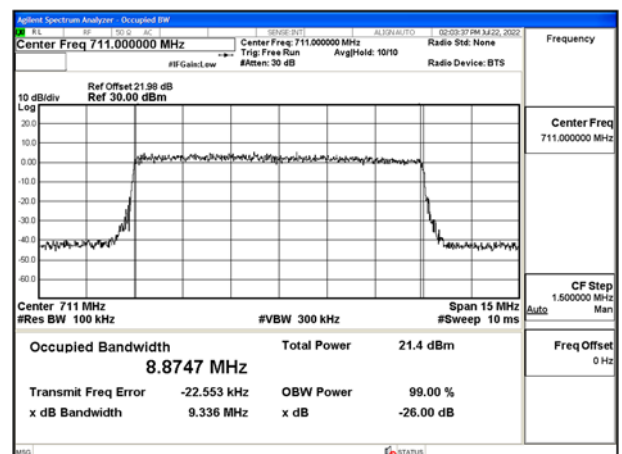


Fig.12

Test Mode: 64QAM

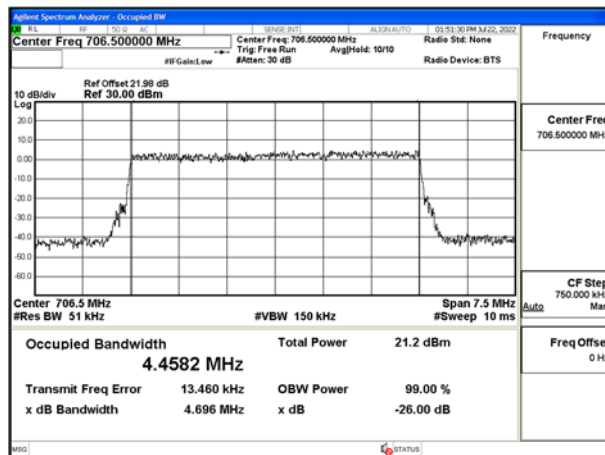


Fig.13

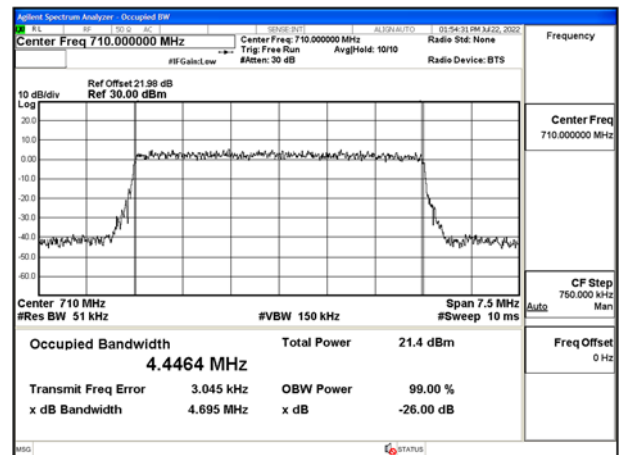


Fig.14

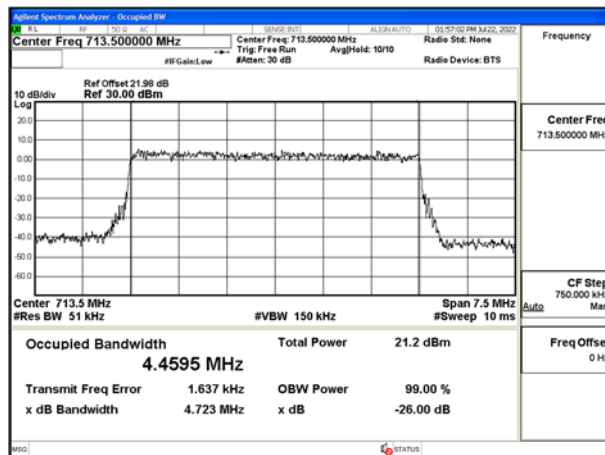


Fig.15

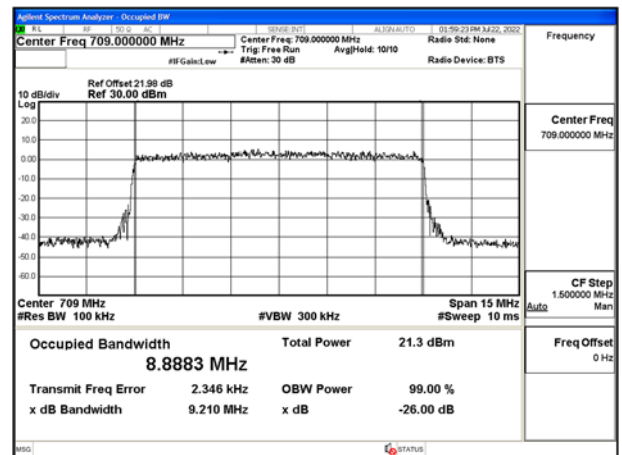


Fig.16

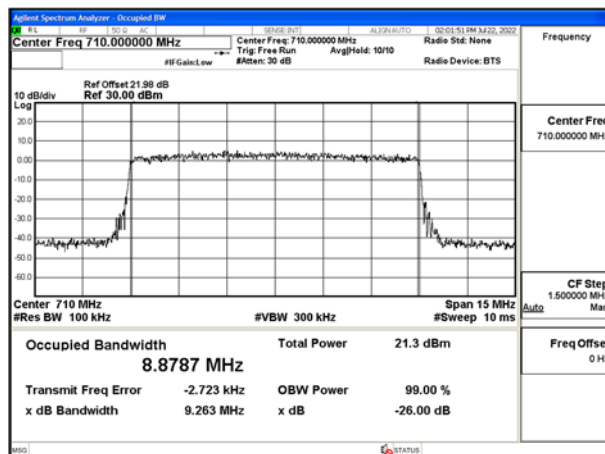


Fig.17

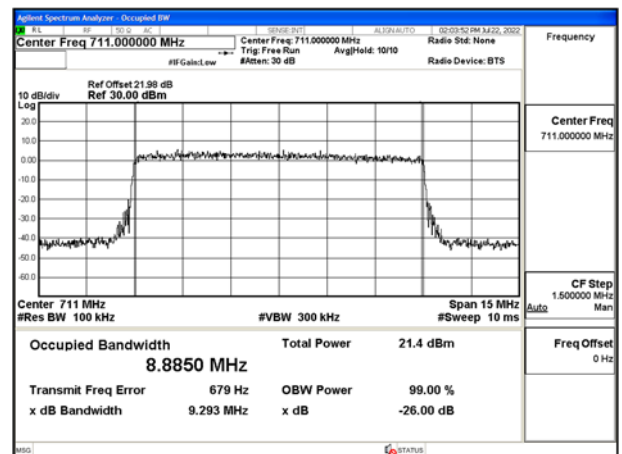


Fig.18

4 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
17	706.5	23755	5	1	24	Fig.1	Fig.2	Fig.3
17	706.5	23755	5	25	0	Fig.4	Fig.5	Fig.6
17	710	23790	5	1	24	Fig.7	Fig.8	Fig.9
17	710	23790	5	25	0	Fig.10	Fig.11	Fig.12
17	713.5	23825	5	1	24	Fig.13	Fig.14	Fig.15
17	713.5	23825	5	25	0	Fig.16	Fig.17	Fig.18
17	709	23780	10	1	49	Fig.19	Fig.20	Fig.21
17	709	23780	10	50	0	Fig.22	Fig.23	Fig.24
17	710	23790	10	1	49	Fig.25	Fig.26	Fig.27
17	710	23790	10	50	0	Fig.28	Fig.29	Fig.30
17	711	23800	10	1	49	Fig.31	Fig.32	Fig.33
17	711	23800	10	50	0	Fig.34	Fig.35	Fig.36

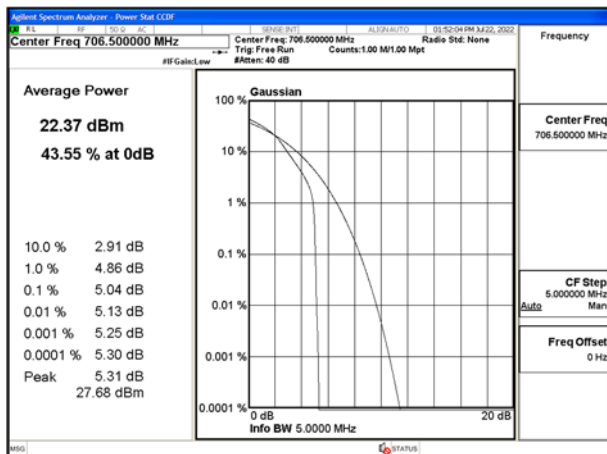


Fig.1

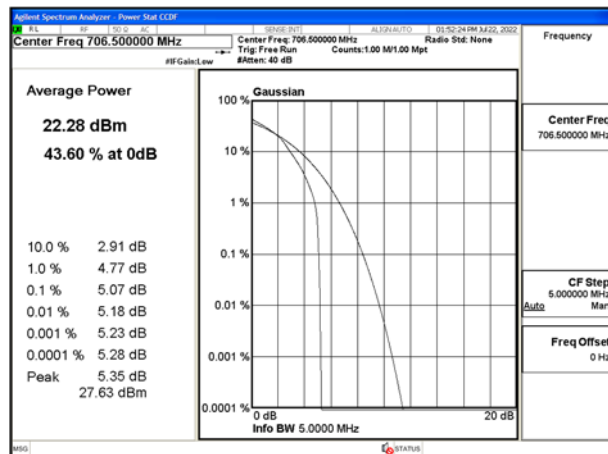


Fig.2

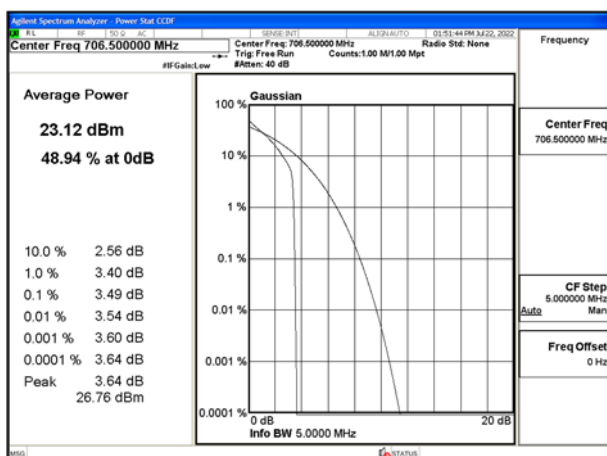


Fig.3

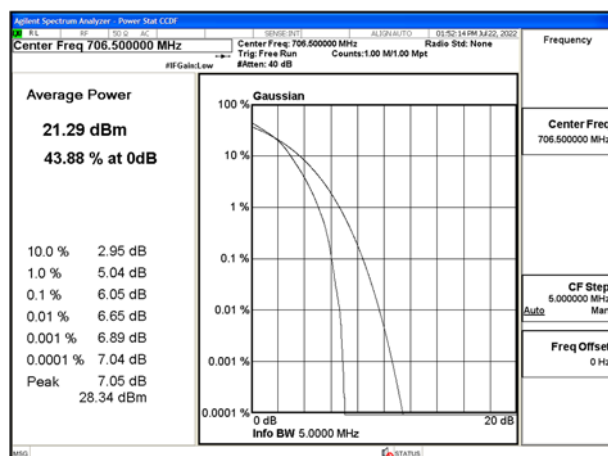


Fig.4

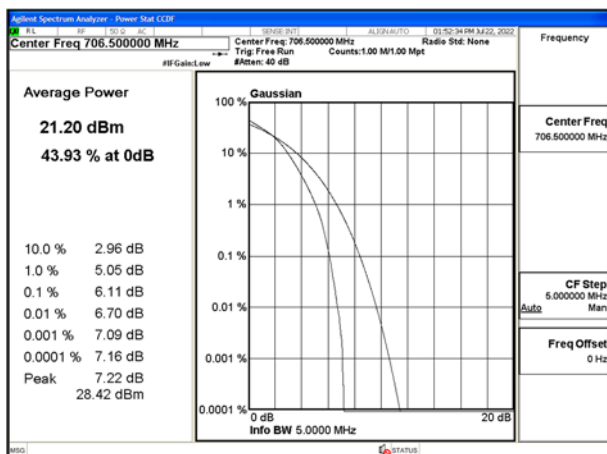


Fig.5

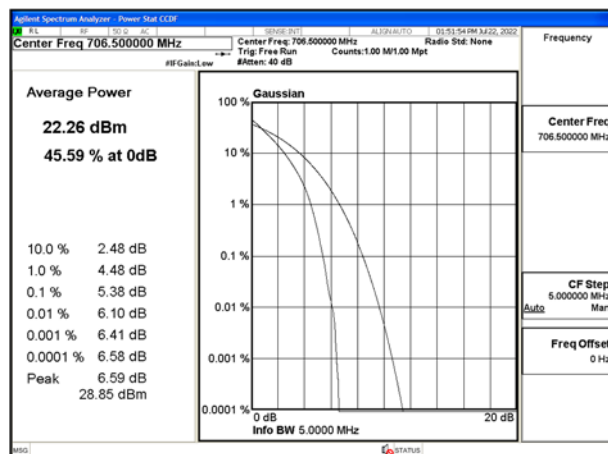


Fig.6

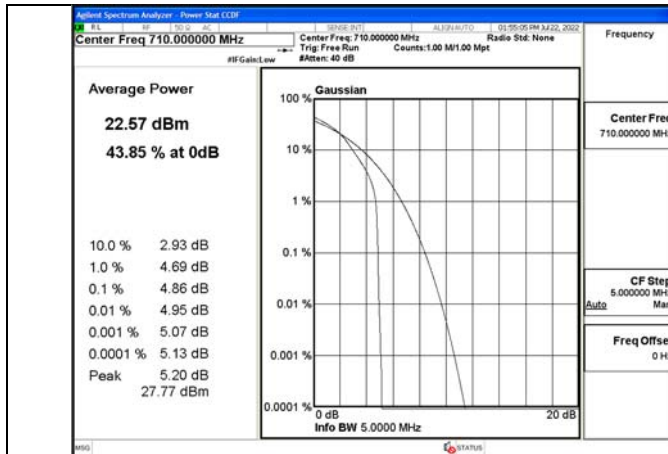


Fig.7

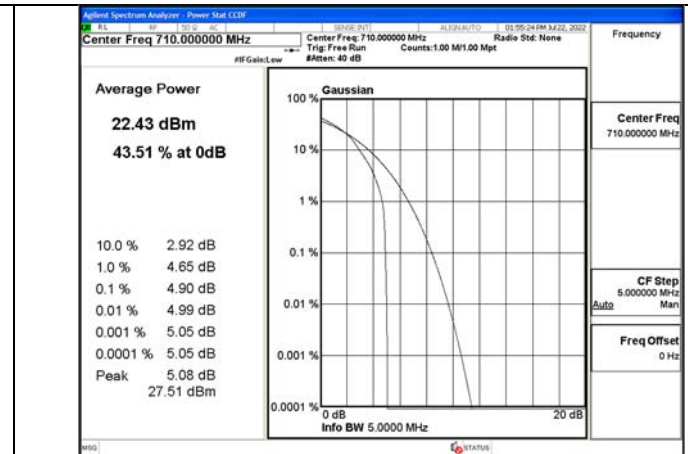


Fig.8

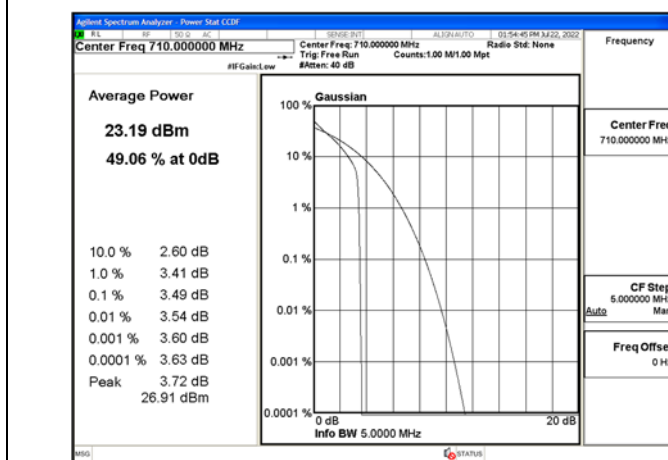


Fig.9

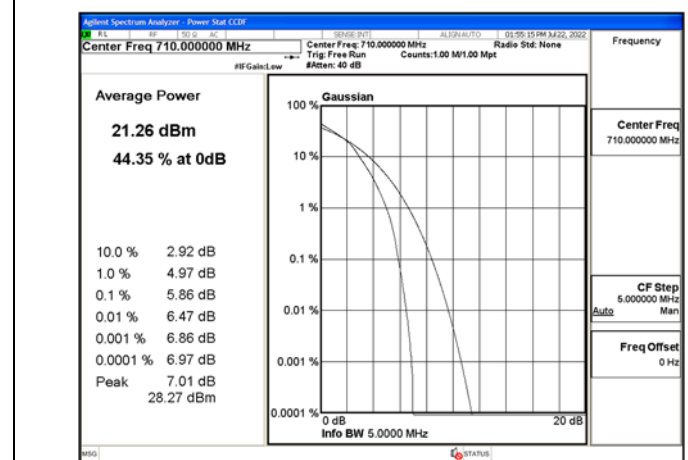


Fig.10

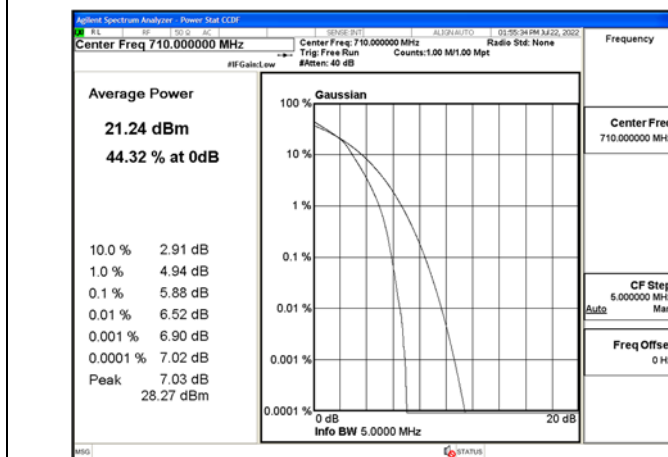


Fig.11

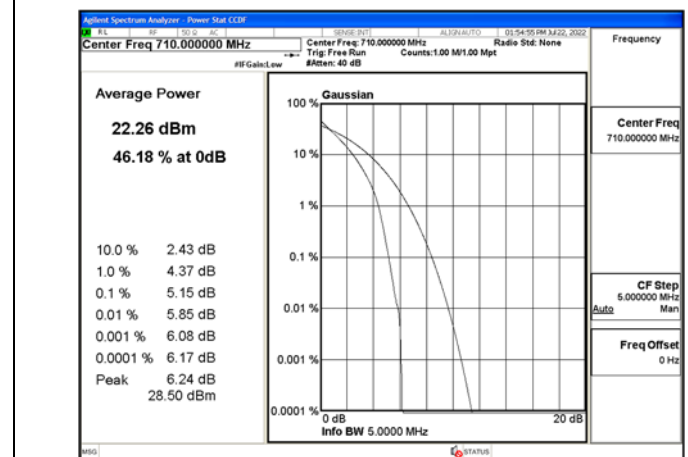


Fig.12

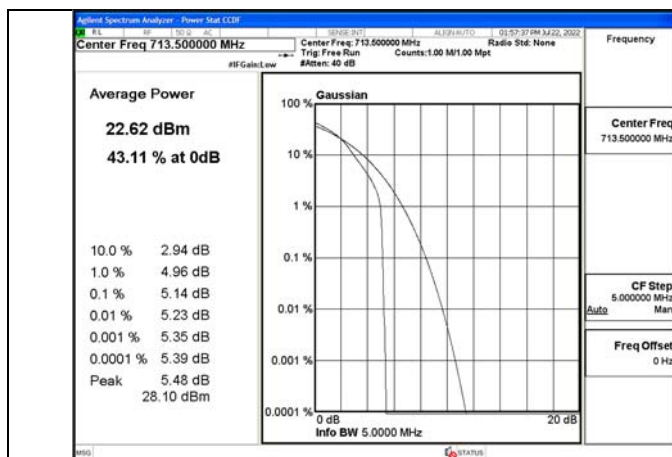


Fig.13

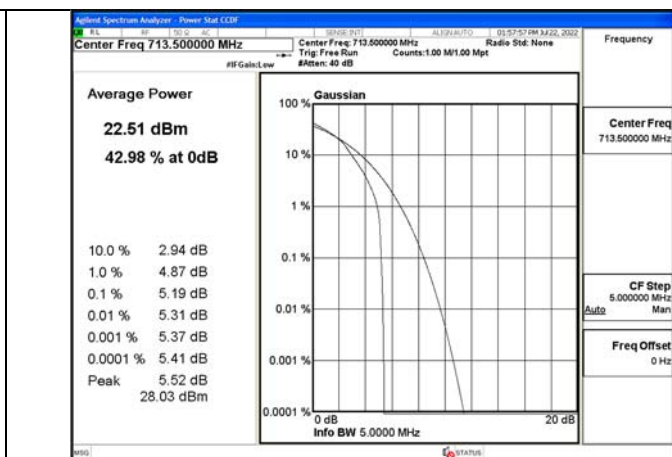


Fig.14

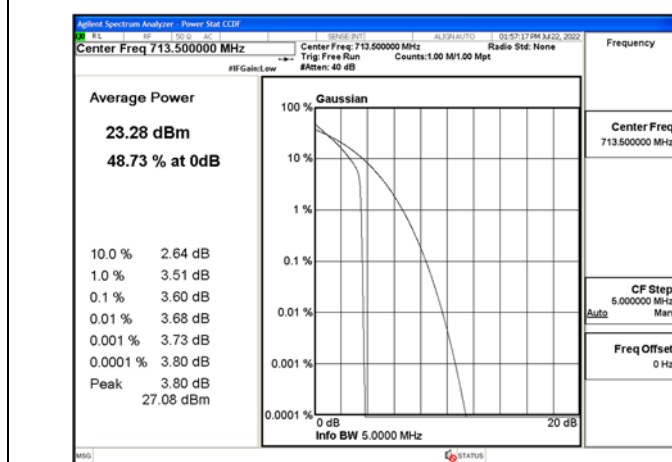


Fig.15

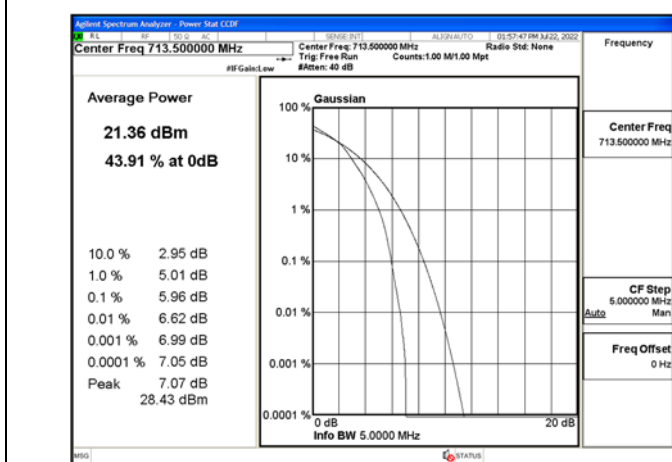


Fig.16

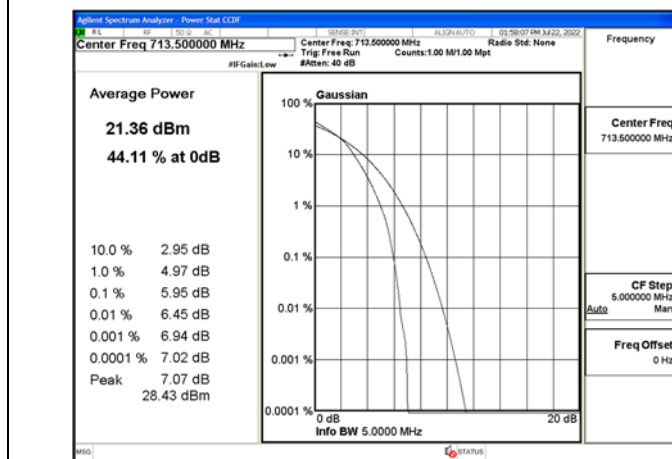


Fig.17

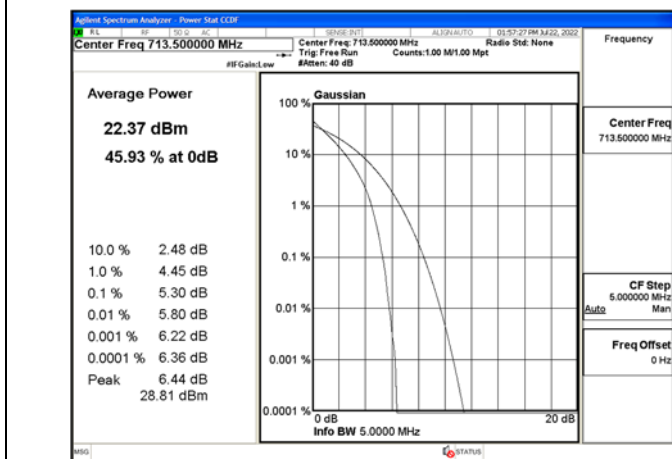


Fig.18

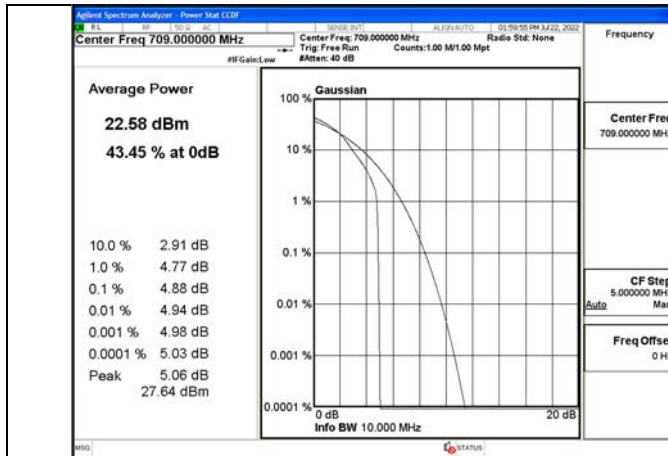


Fig.19

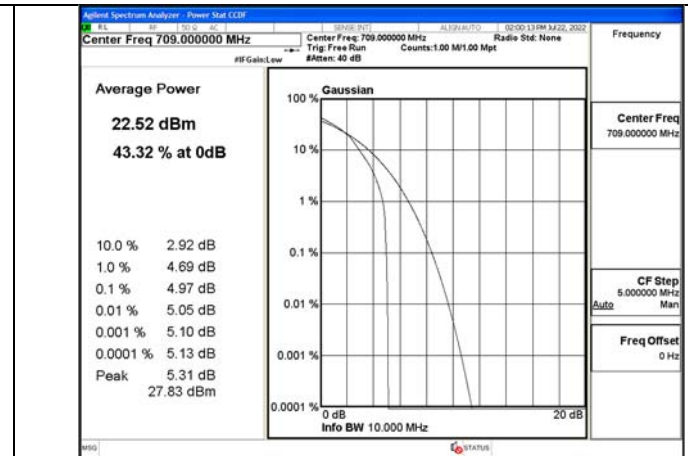


Fig.20

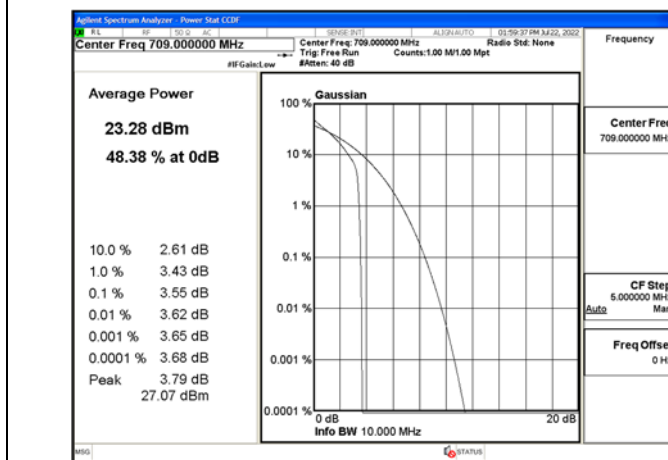


Fig.21

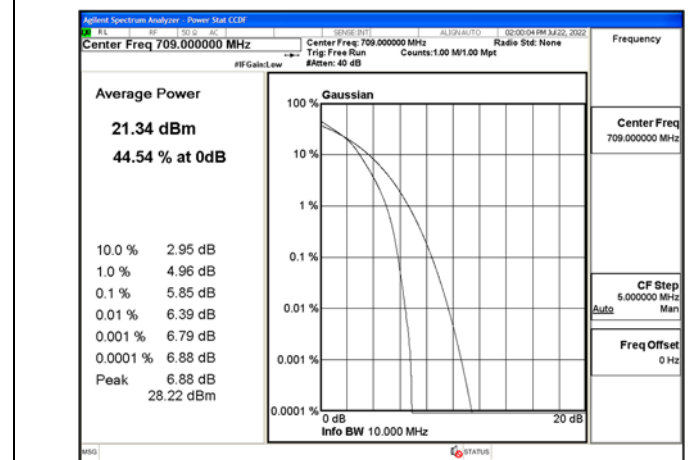


Fig.22

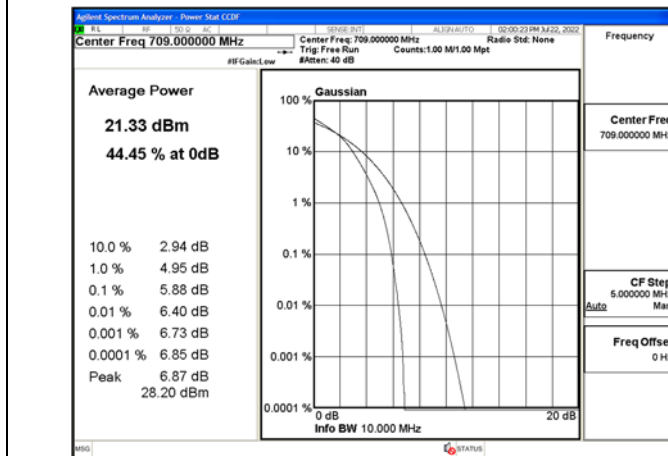


Fig.23

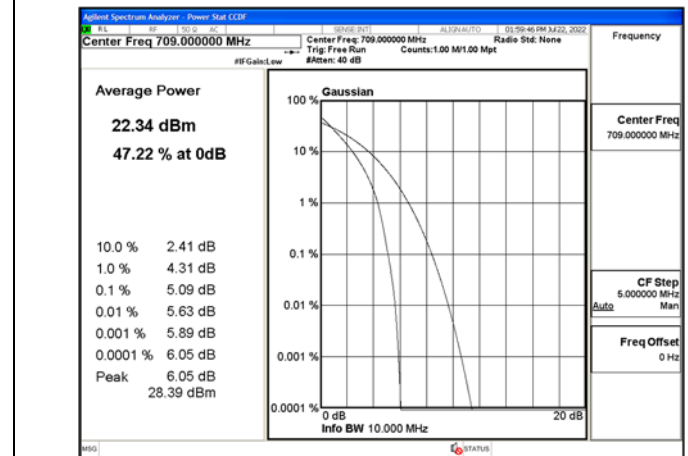


Fig.24

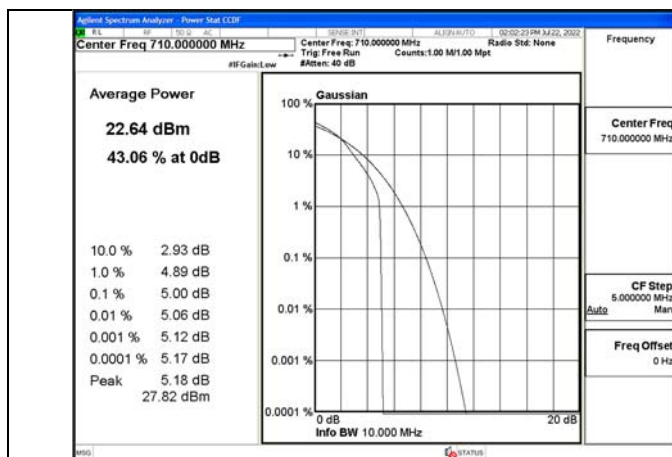


Fig.25

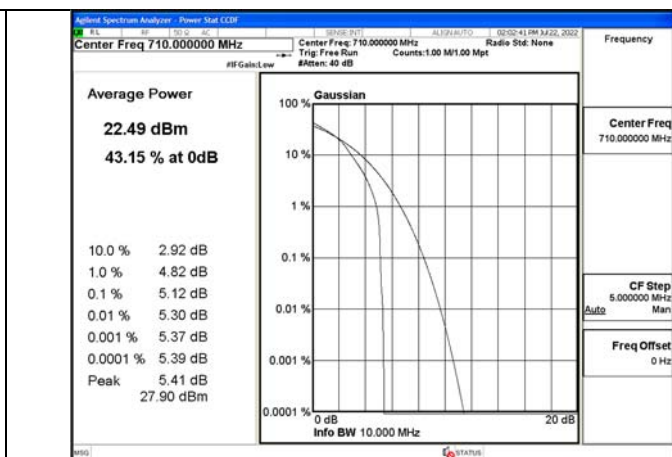


Fig.26

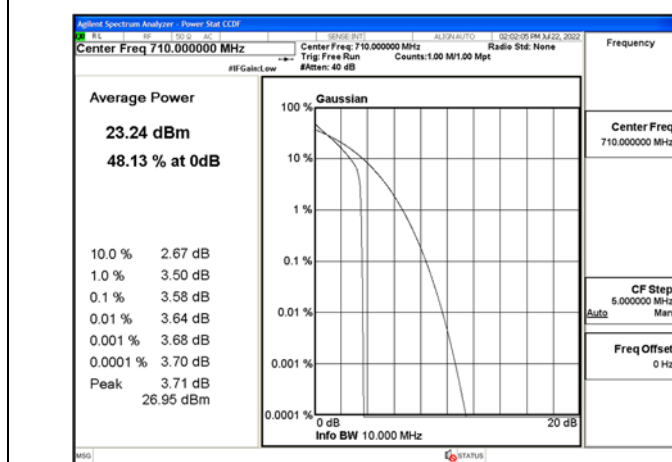


Fig.27

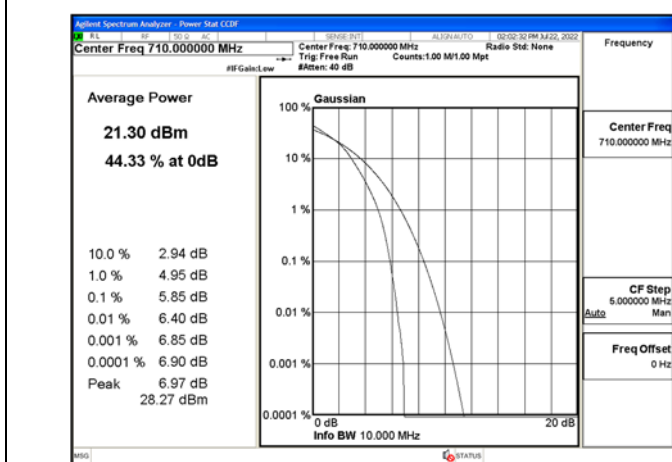


Fig.28

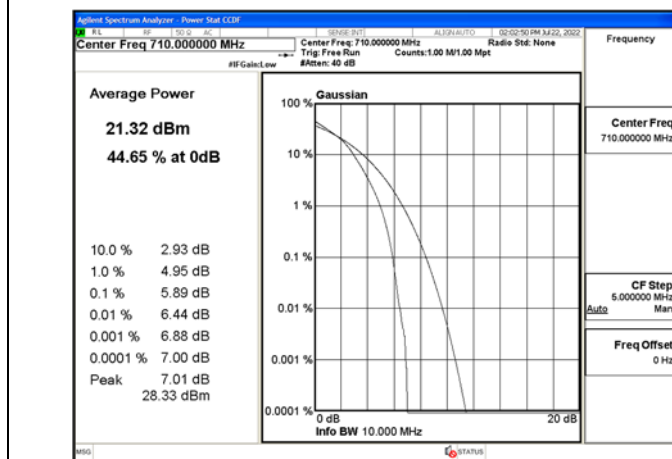


Fig.29

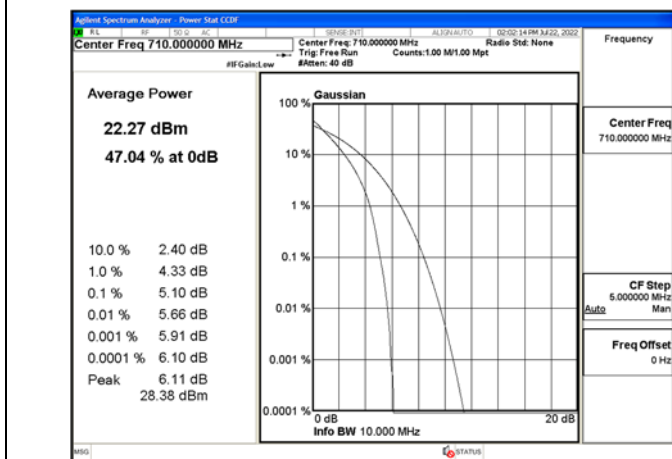


Fig.30

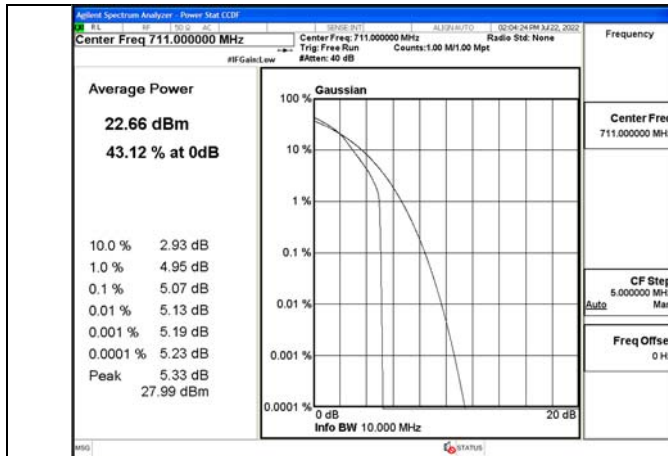


Fig.31

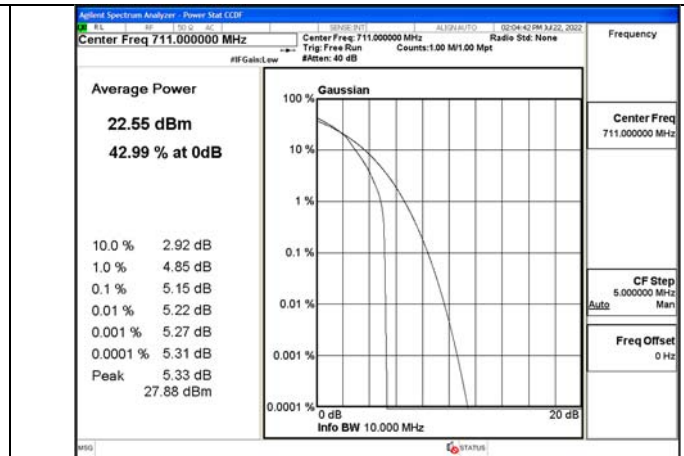


Fig.32

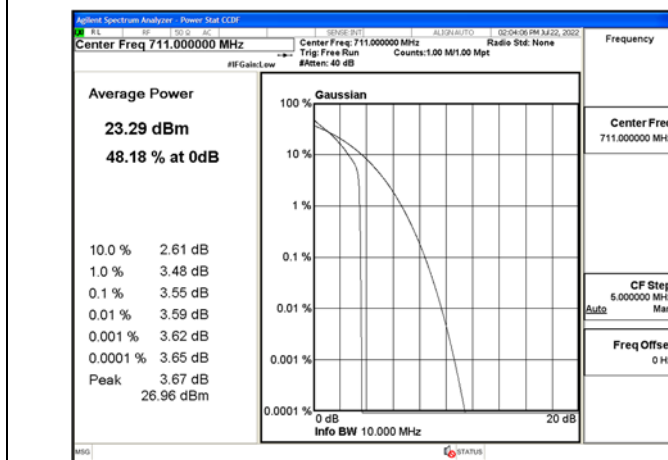


Fig.33

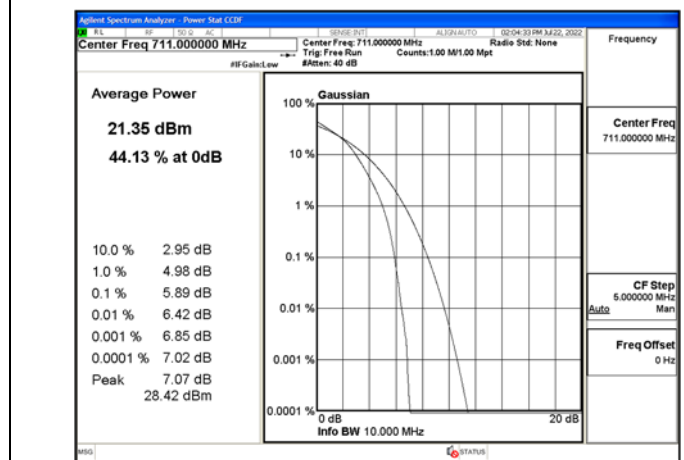


Fig.34

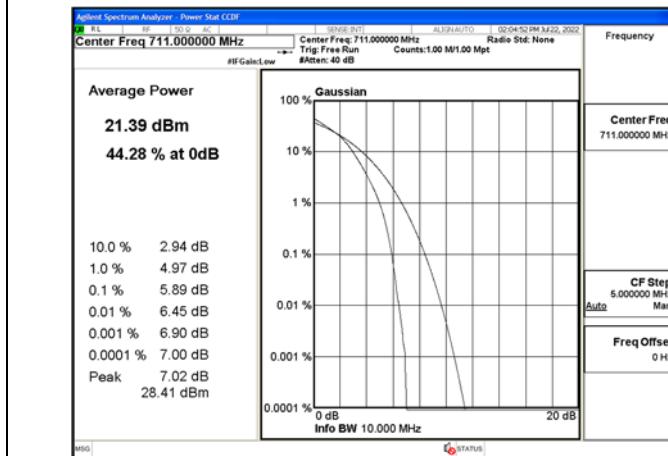


Fig.35

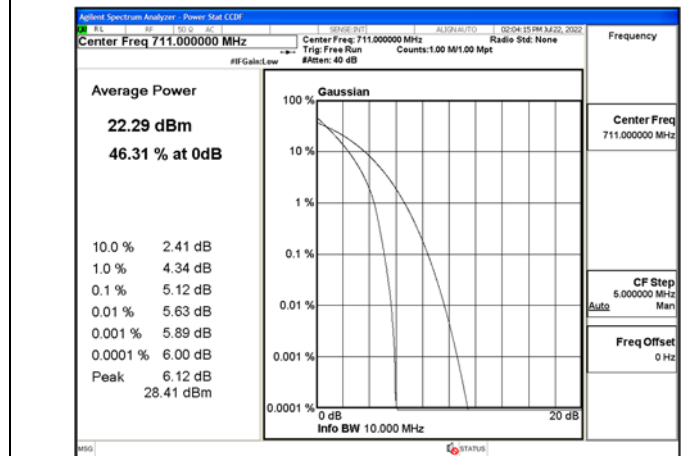


Fig.36

5 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
17	709	23780	10	1	0	Fig.1
17	710	23790	10	1	0	Fig.2
17	711	23800	10	1	0	Fig.3

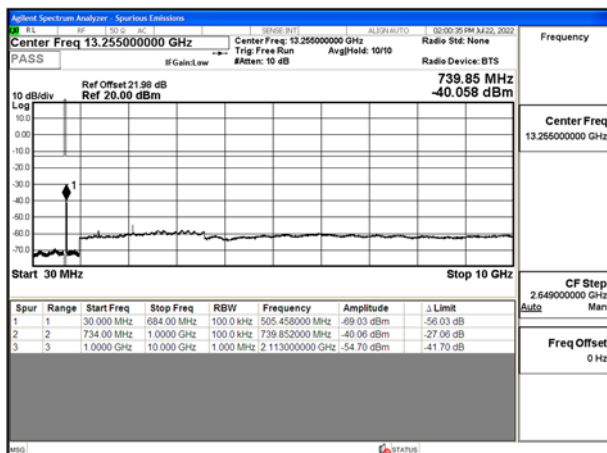


Fig.1

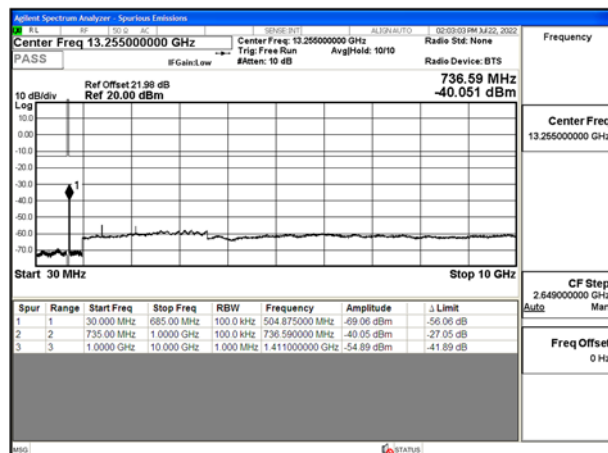


Fig.2

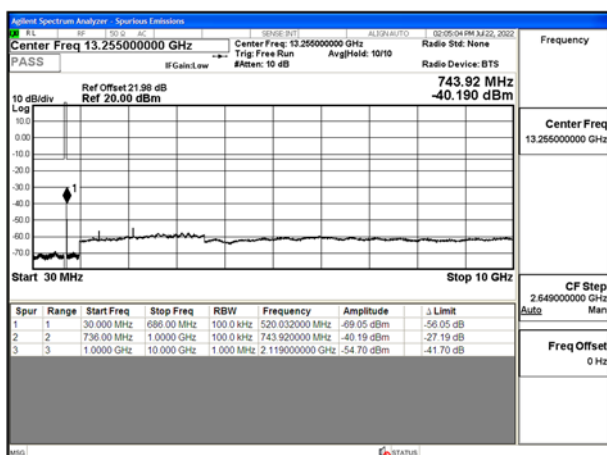


Fig.3

6 Band Edges Compliance

Band	Mode	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
17	QPSK	706.5	23755	5	1	0	Fig.1
17	QPSK	706.5	23755	5	25	0	Fig.2
17	QPSK	713.5	23825	5	1	24	Fig.3
17	QPSK	713.5	23825	5	25	0	Fig.4
17	QPSK	709	23780	10	1	0	Fig.5
17	QPSK	709	23780	10	50	0	Fig.6
17	QPSK	711	23800	10	1	49	Fig.7
17	QPSK	711	23800	10	50	0	Fig.8

Test Mode: QPSK

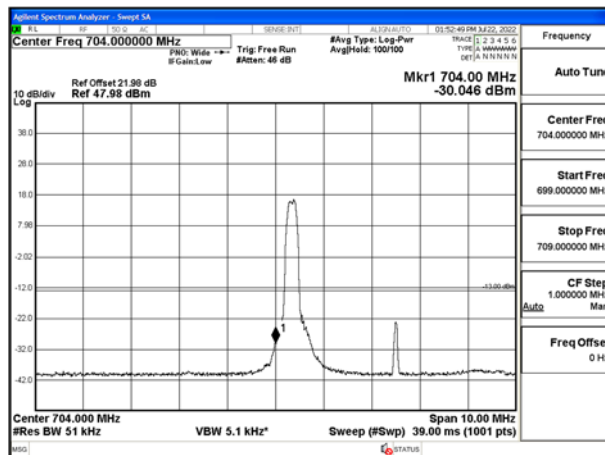


Fig.1

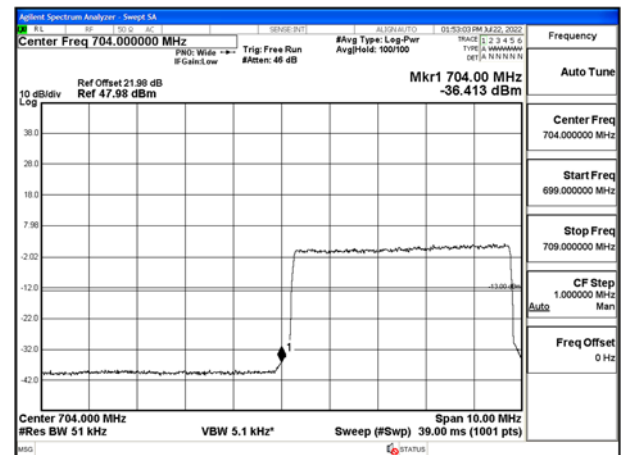


Fig.2

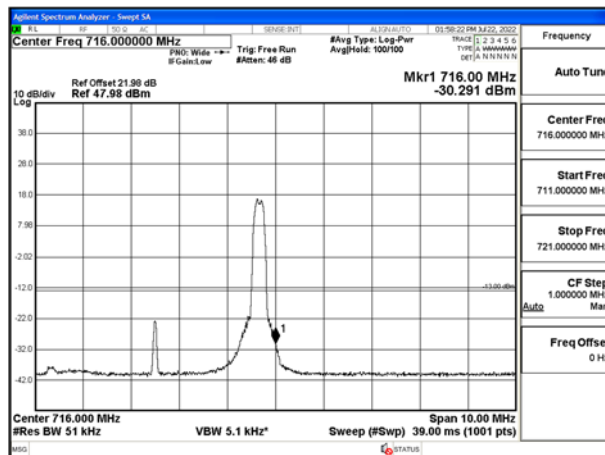


Fig.3

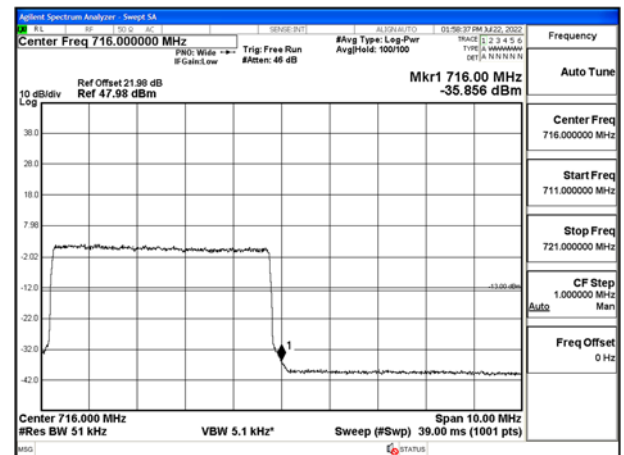


Fig.4

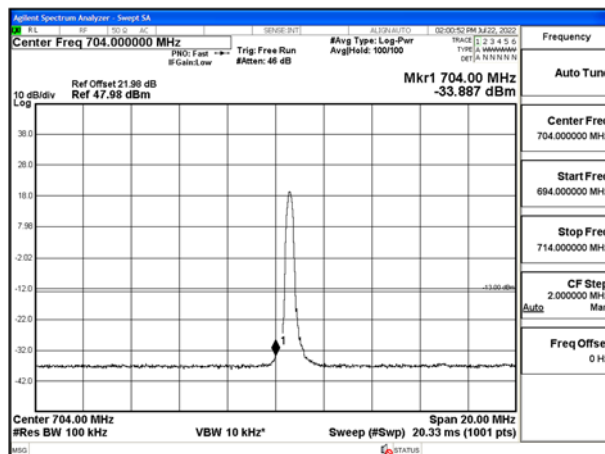


Fig.5

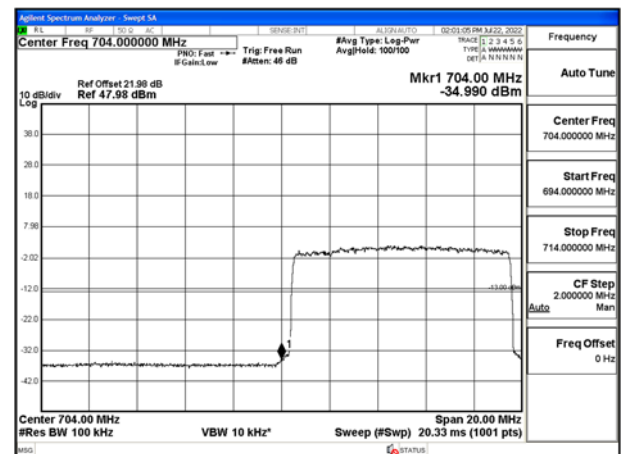


Fig.6

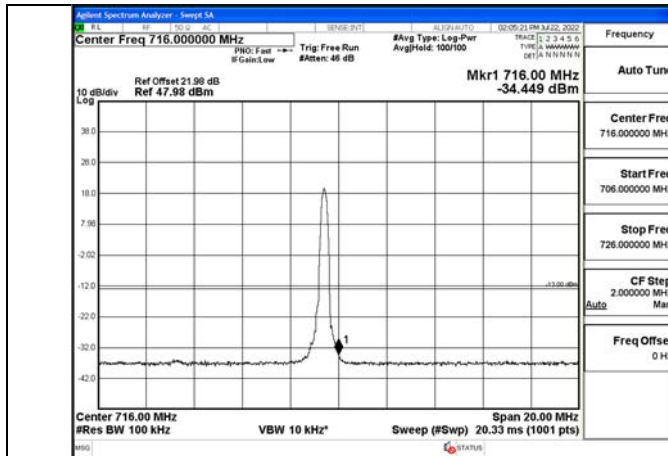


Fig.7

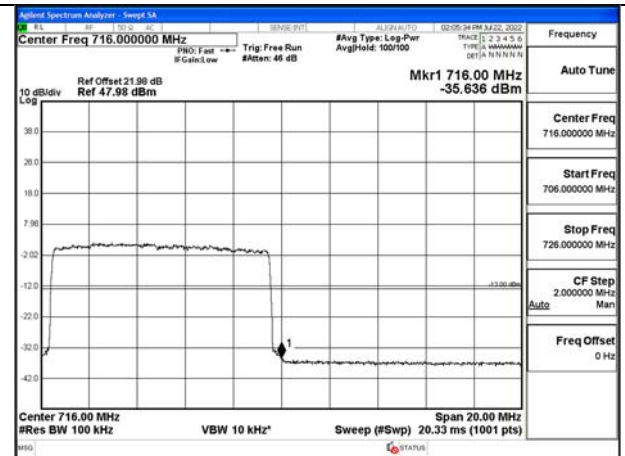


Fig.8

7 Frequency Stability

Temperature(°C)	Voltage	Test Result (ppm) Band 17 Low Channel QPSK	
		5M	10M
-10	NV	0.001	0.004
0	NV	0.001	0.009
+10	NV	0.002	0.007
+20	NV	0.003	0.008
+30	NV	-0.002	0.006
+40	NV	0.001	-0.004
+50	NV	0.001	0.006
+55	NV	0.002	0.005
+20	LV	-0.003	-0.007
+20	HV	0.003	-0.005

Temperature(°C)	Voltage	Test Result (ppm) Band 17 Low Channel QPSK	
		5M	10M
-10	NV	0.003	0.009
0	NV	0.003	0.008
+10	NV	0.005	0.003
+20	NV	0.001	0.008
+30	NV	0.002	-0.008
+40	NV	0.004	0.005
+50	NV	0.005	0.006
+55	NV	0.001	0.007
+20	LV	0.004	0.007
+20	HV	0.002	0.006

8 Effective Radiated Power and Effective Isotropic Radiated Power

BW	Modulation	RB Size	RB Offset	ERP/EIRP(W)		
				23755.000	23790.000	23825.000
				706.500	710.000	713.500
5.000	QPSK	1.000	0.000	0.011	0.011	0.011
		1.000	12.000	0.011	0.011	0.012
		1.000	24.000	0.011	0.011	0.011
		12.000	0.000	0.009	0.009	0.009
		12.000	7.000	0.009	0.009	0.009
		12.000	13.000	0.009	0.009	0.009
		25.000	0.000	0.009	0.009	0.009
	16QAM	1.000	0.000	0.009	0.010	0.010
		1.000	12.000	0.009	0.010	0.010
		1.000	24.000	0.009	0.010	0.009
		12.000	0.000	0.007	0.007	0.007
		12.000	7.000	0.007	0.007	0.007
		12.000	13.000	0.007	0.007	0.007
		25.000	0.000	0.007	0.007	0.007
	64QAM	1.000	0.000	0.007	0.008	0.008
		1.000	12.000	0.007	0.008	0.007
		1.000	24.000	0.007	0.008	0.007
		12.000	0.000	0.006	0.006	0.006
		12.000	7.000	0.006	0.006	0.006
		12.000	13.000	0.006	0.006	0.006
		25.000	0.000	0.005	0.006	0.006

BW	Modulation	RB Size	RB Offset	ERP/EIRP(W)		
				23780.000	23790.000	23800.000
				709.000	710.000	711.000
10.000	QPSK	1.000	0.000	0.011	0.011	0.011
		1.000	25.000	0.011	0.011	0.011
		1.000	49.000	0.011	0.011	0.011
		25.000	0.000	0.009	0.009	0.009
		25.000	12.000	0.009	0.009	0.009
		25.000	25.000	0.009	0.009	0.009
		50.000	0.000	0.009	0.009	0.009
	16QAM	1.000	0.000	0.009	0.009	0.009
		1.000	25.000	0.010	0.009	0.010
		1.000	49.000	0.010	0.009	0.009
		25.000	0.000	0.007	0.007	0.007
		25.000	12.000	0.007	0.007	0.007
		25.000	25.000	0.007	0.007	0.007
		50.000	0.000	0.007	0.007	0.007
	64QAM	1.000	0.000	0.008	0.007	0.007
		1.000	25.000	0.008	0.007	0.008
		1.000	49.000	0.008	0.007	0.007
		25.000	0.000	0.006	0.006	0.006
		25.000	12.000	0.006	0.006	0.006
		25.000	25.000	0.006	0.006	0.006
		50.000	0.000	0.006	0.006	0.006