

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

LTE Band 41(2535MHz-2655MHz)

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2537.5	40065	5	1	0	22.49
				1	24	22.47
				12	6	21.52
				25	0	21.49
	2595	40640		1	0	22.07
				1	24	22.02
				12	6	21.08
				25	0	21.11
	2652.5	41215		1	0	21.96
				1	24	21.94
				12	6	21.12
				25	0	21.14
16QAM	2537.5	40065	5	1	0	21.44
				1	24	21.47
				12	6	20.65
				25	0	20.61
	2595	40640		1	0	21.53
				1	24	21.47
				12	6	20.74
				25	0	20.70
	2652.5	41215		1	0	20.94
				1	24	20.99
				12	6	20.17
				25	0	20.12
64QAM	2537.5	40065	5	1	0	21.22
				1	24	21.19
				12	6	20.64
				25	0	20.67
	2595	40640		1	0	20.86
				1	24	20.82
				12	6	20.19
				25	0	20.13
	2652.5	41215		1	0	20.73
				1	24	20.69
				12	6	20.11
				25	0	20.08

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2540	40090	10	1	0	22.54
				1	49	22.47
				24	12	21.57
				50	0	21.54
	2595	40640		1	0	22.09
				1	49	22.07
				24	12	21.14
				50	0	21.09
	2650	41190		1	0	22.00
				1	49	21.93
				24	12	21.14
				50	0	21.13
16QAM	2540	40090	10	1	0	21.44
				1	49	21.43
				24	12	20.65
				50	0	20.62
	2595	40640		1	0	21.53
				1	49	21.44
				24	12	20.75
				50	0	20.74
	2650	41190		1	0	21.00
				1	49	20.97
				24	12	20.19
				50	0	20.13
64QAM	2540	40090	10	1	0	21.22
				1	49	21.20
				24	12	20.65
				50	0	20.67
	2595	40640		1	0	20.87
				1	49	20.81
				24	12	20.19
				50	0	20.11
	2650	41190		1	0	20.73
				1	49	20.68
				24	12	20.13
				50	0	20.00

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2562.5	40115	15	1	0	22.50
				1	74	22.45
				40	18	21.53
				75	0	21.52
	2595	40640		1	0	22.07
				1	74	22.02
				40	18	21.11
				75	0	21.09
	2647.5	41165		1	0	21.98
				1	74	21.97
				40	18	21.13
				75	0	21.13
16QAM	2562.5	40115	15	1	0	21.43
				1	74	21.43
				40	18	20.69
				75	0	20.59
	2595	40640		1	0	21.51
				1	74	21.48
				40	18	20.70
				75	0	20.69
	2647.5	41165		1	0	20.92
				1	74	21.00
				40	18	20.14
				75	0	20.09
64QAM	2562.5	40115	15	1	0	21.20
				1	74	21.15
				40	18	20.64
				75	0	20.65
	2595	40640		1	0	20.86
				1	74	20.84
				40	18	20.18
				75	0	20.10
	2647.5	41165		1	0	20.70
				1	74	20.68
				40	18	20.18
				75	0	20.04

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	2545	40140	20	1	0	22.59
				1	99	22.56
				50	25	21.62
				100	0	21.61
	2605	40640		1	0	22.15
				1	99	22.12
				50	25	21.20
				100	0	21.19
	2645	41140		1	0	22.08
				1	99	22.04
				50	25	21.22
				100	0	21.20
16QAM	2545	40140	20	1	0	21.55
				1	99	21.53
				50	25	20.74
				100	0	20.71
	2605	40640		1	0	21.59
				1	99	21.54
				50	25	20.85
				100	0	20.81
	2645	41140		1	0	21.06
				1	99	21.05
				50	25	20.25
				100	0	20.23
64QAM	2545	40140	20	1	0	21.28
				1	99	21.26
				50	25	20.74
				100	0	20.73
	2605	40640		1	0	20.92
				1	99	20.90
				50	25	20.26
				100	0	20.22
	2645	41140		1	0	20.82
				1	99	20.79
				50	25	20.23
				100	0	20.18

2 Occupied Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)					
						QPSK		16-QAM		64-QAM	
41	2537.5	40065	5	25	0	4.4852	Fig.1	4.4849	Fig.2	4.4867	Fig.3
	2695	40740		25	0	4.4682	Fig.4	4.4611	Fig.5	4.4662	Fig.6
	2652.5	41215		25	0	4.4682	Fig.7	4.4656	Fig.8	4.4650	Fig.9
	2540	40090	10	50	0	8.8978	Fig.10	8.9047	Fig.11	8.9088	Fig.12
	2695	40640		50	0	8.9028	Fig.13	8.9024	Fig.14	8.9135	Fig.15
	2650	41190		50	0	8.9023	Fig.16	8.9118	Fig.17	8.9050	Fig.18
	2542.5	40115	15	75	0	13.391	Fig.19	13.389	Fig.20	13.393	Fig.21
	2595	40640		75	0	13.382	Fig.22	13.385	Fig.23	13.396	Fig.24
	2647.5	41165		75	0	13.394	Fig.25	13.400	Fig.26	13.401	Fig.27
	2545	40140	20	100	0	17.846	Fig.28	17.807	Fig.29	17.817	Fig.30
	2595	40640		100	0	17.830	Fig.31	17.849	Fig.32	17.868	Fig.33
	2645	41140		100	0	17.870	Fig.34	17.829	Fig.35	17.849	Fig.36

3 Emission Bandwidth

Test result

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)					
						QPSK		16-QAM		64-QAM	
41	2537.5	40065	5	25	0	4.890	Fig.1	4.896	Fig.2	4.948	Fig.3
	2695	40740		25	0	4.835	Fig.4	4.818	Fig.5	4.839	Fig.6
	2652.5	41215		25	0	4.857	Fig.7	4.847	Fig.8	4.842	Fig.9
	2540	40090	10	50	0	9.569	Fig.10	9.508	Fig.11	9.548	Fig.12
	2695	40640		50	0	9.564	Fig.13	9.533	Fig.14	9.494	Fig.15
	2650	41190		50	0	9.574	Fig.16	9.510	Fig.17	9.567	Fig.18
	2542.5	40115	15	75	0	14.47	Fig.19	14.37	Fig.20	14.30	Fig.21
	2595	40640		75	0	14.43	Fig.22	14.35	Fig.23	14.31	Fig.24
	2647.5	41165		75	0	14.46	Fig.25	14.38	Fig.26	14.28	Fig.27
	2545	40140	20	100	0	19.23	Fig.28	19.05	Fig.29	19.02	Fig.30
	2595	40640		100	0	19.18	Fig.31	19.00	Fig.32	18.89	Fig.33
	2645	41140		100	0	19.16	Fig.34	19.11	Fig.35	18.90	Fig.36

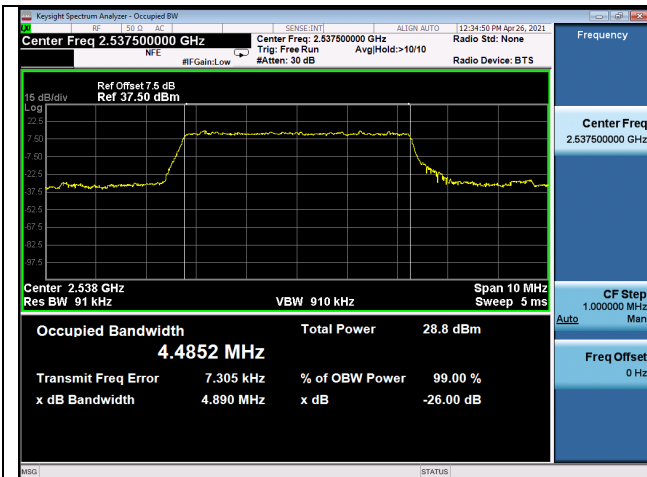


Fig.1

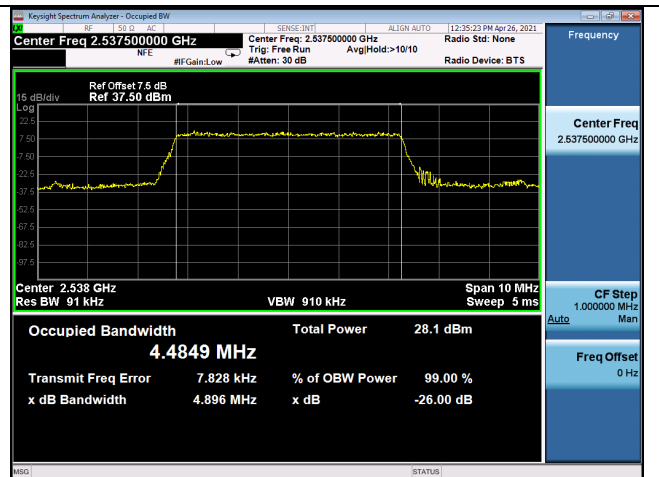


Fig.2

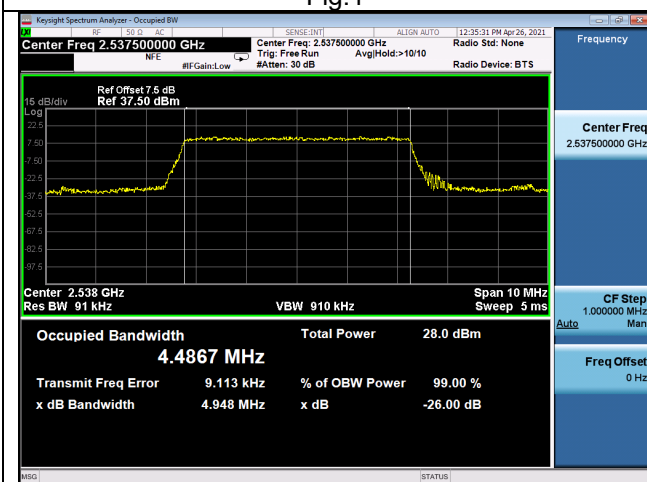


Fig.3

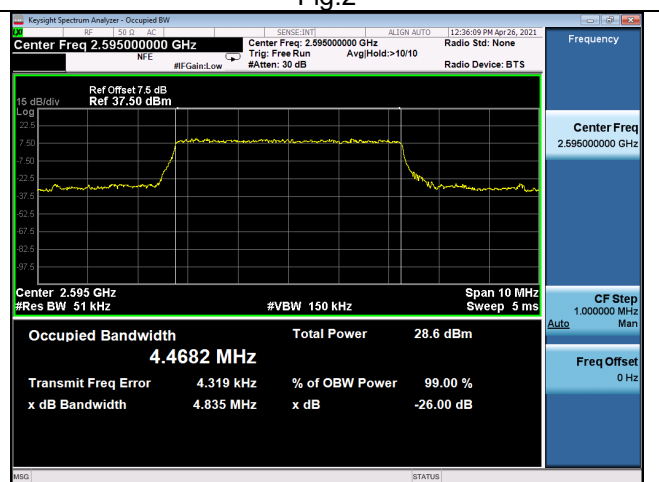


Fig.4

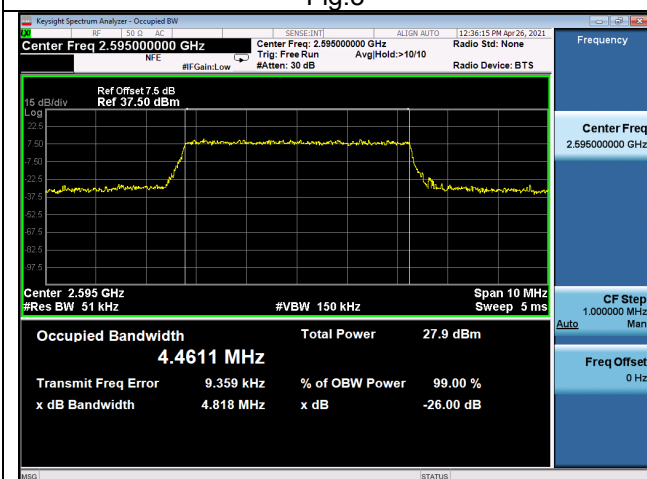


Fig.5

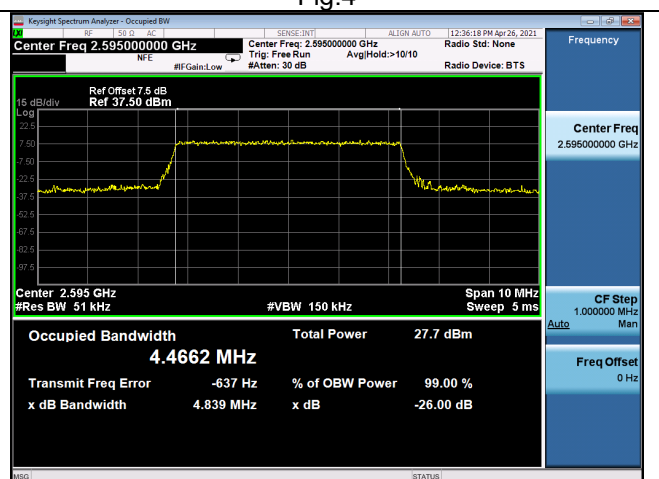


Fig.6

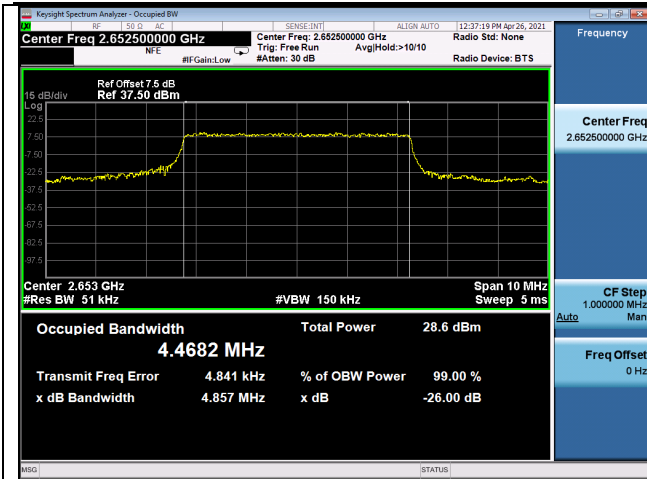


Fig.7

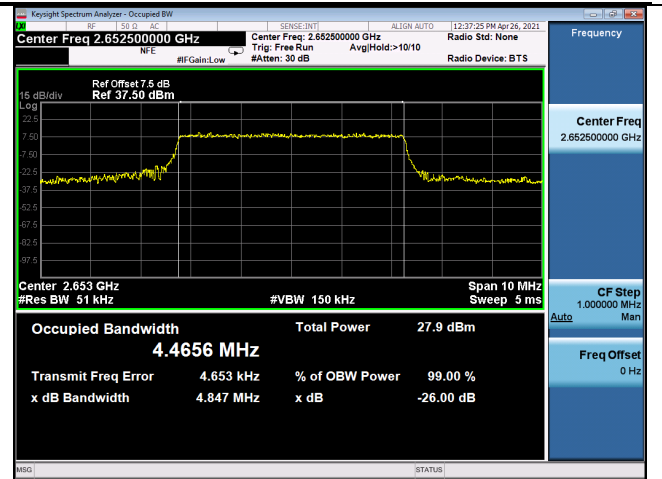


Fig.8

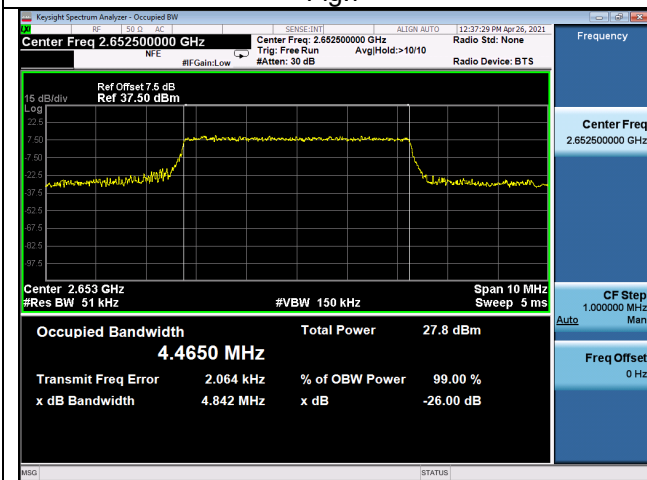


Fig.9

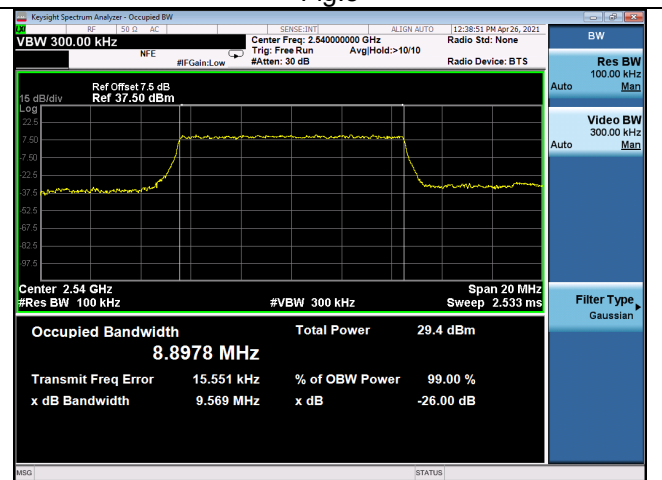


Fig.10

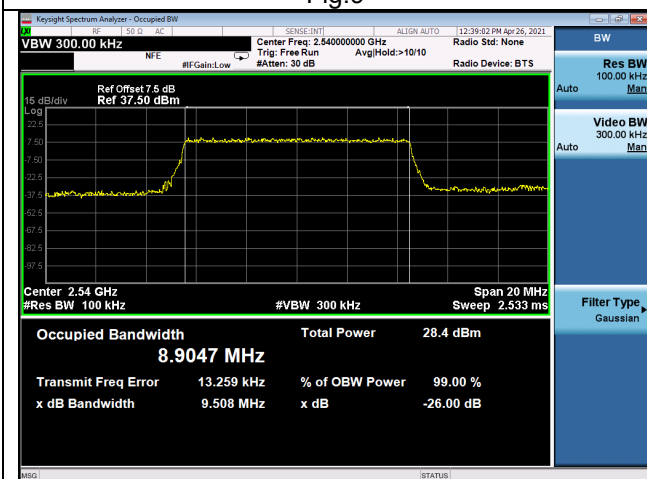


Fig.11

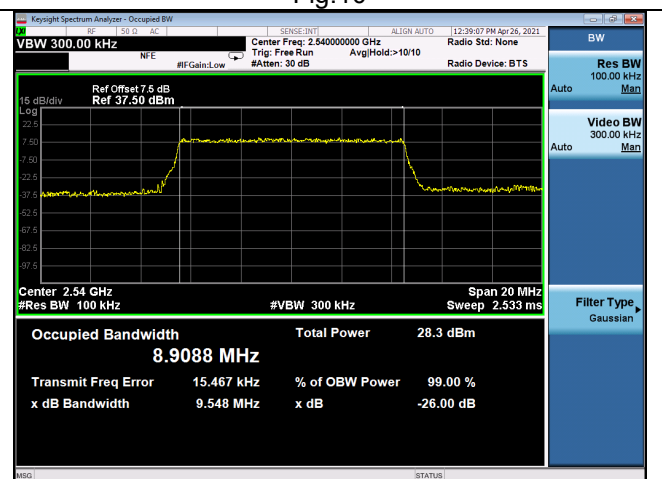


Fig.12

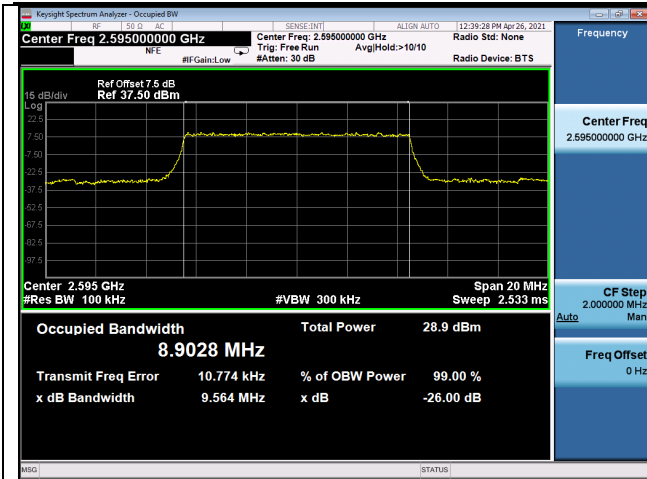


Fig.13

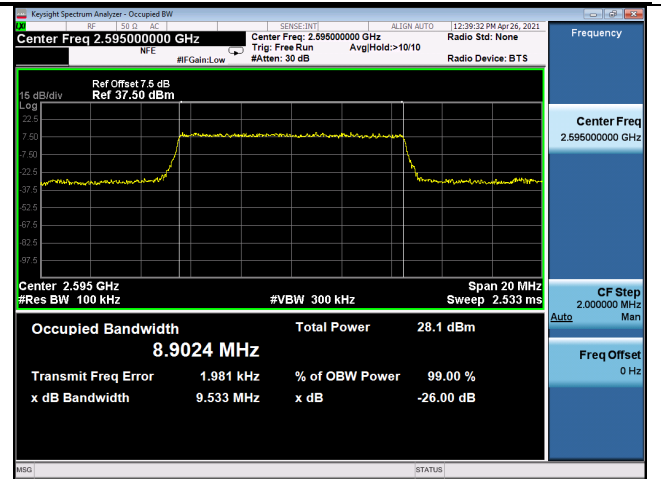


Fig.14

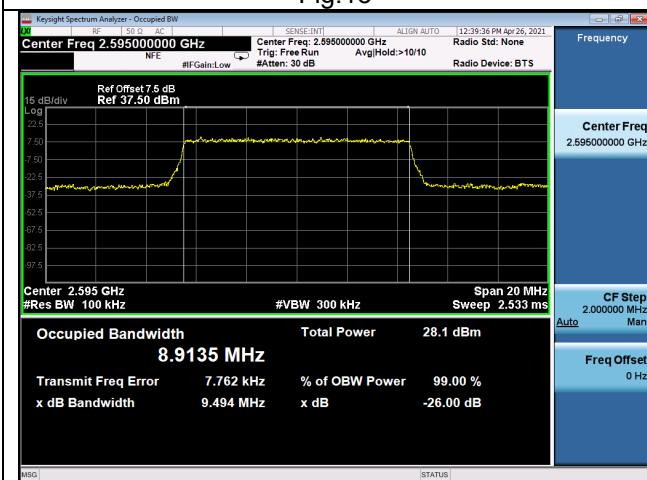


Fig.15

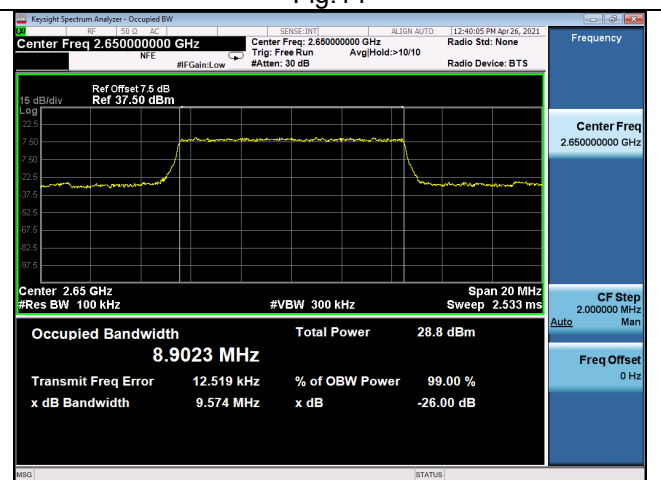


Fig.16

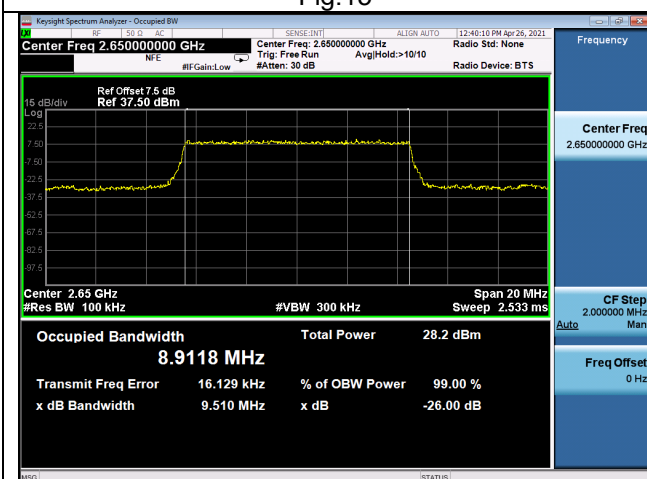


Fig.17

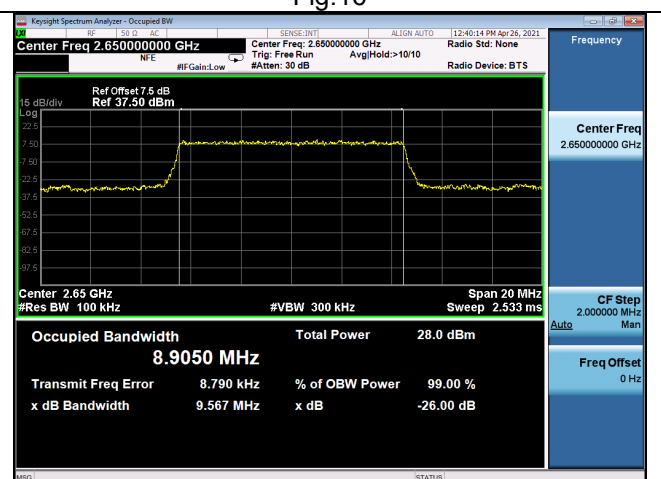


Fig.18

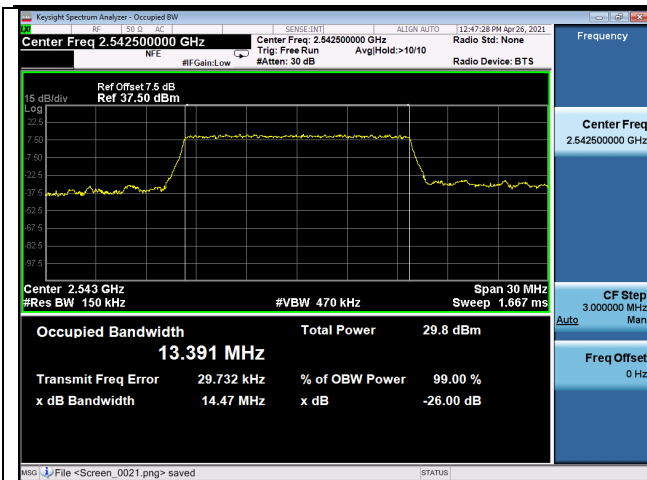


Fig.19

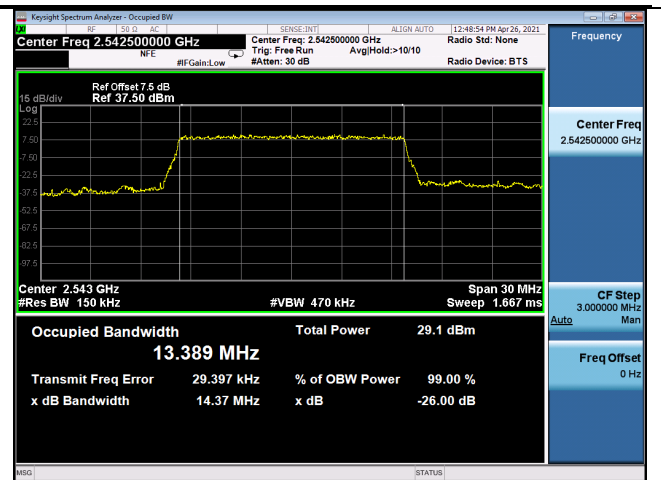


Fig.20

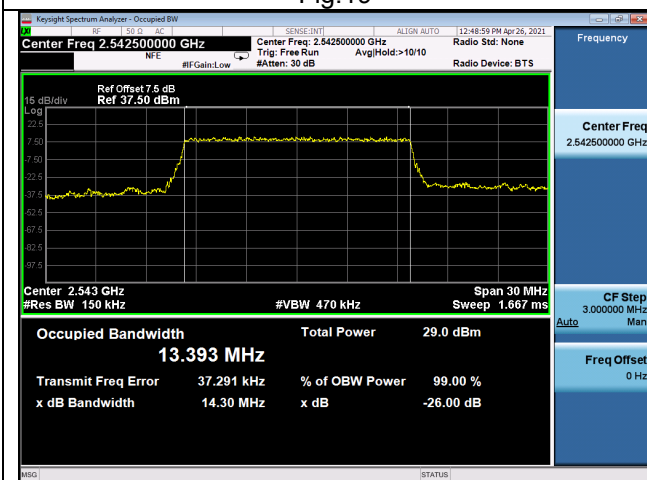


Fig.21

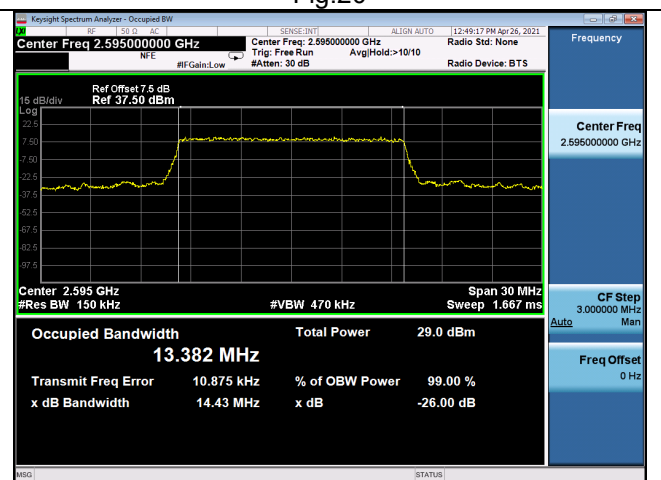


Fig.22

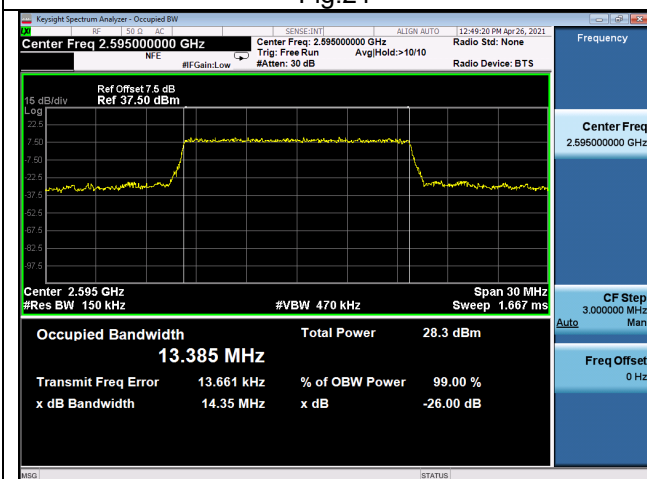


Fig.23

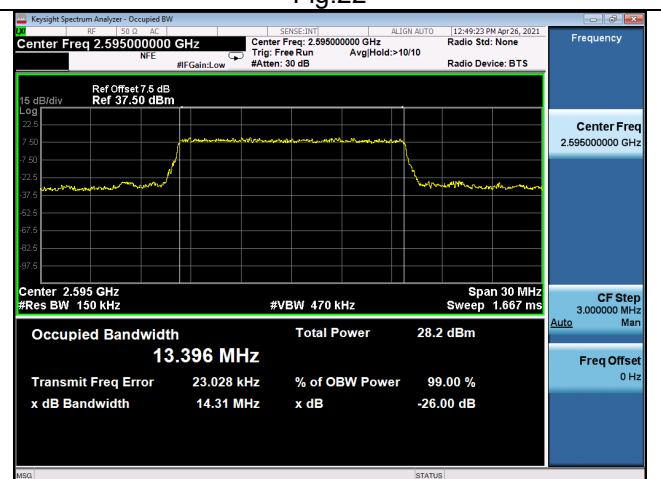


Fig.24

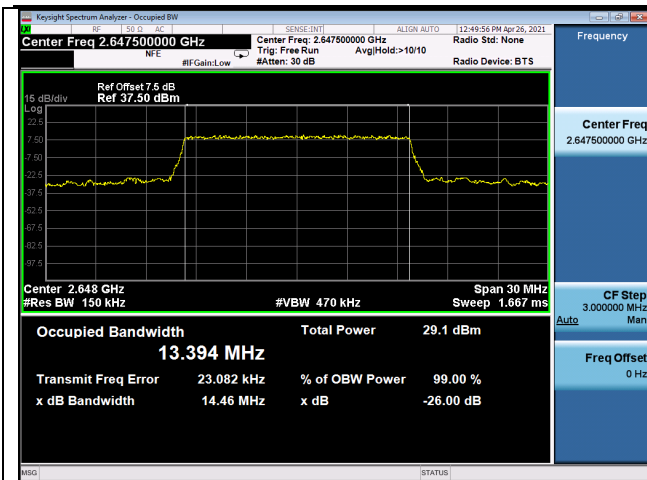


Fig.25

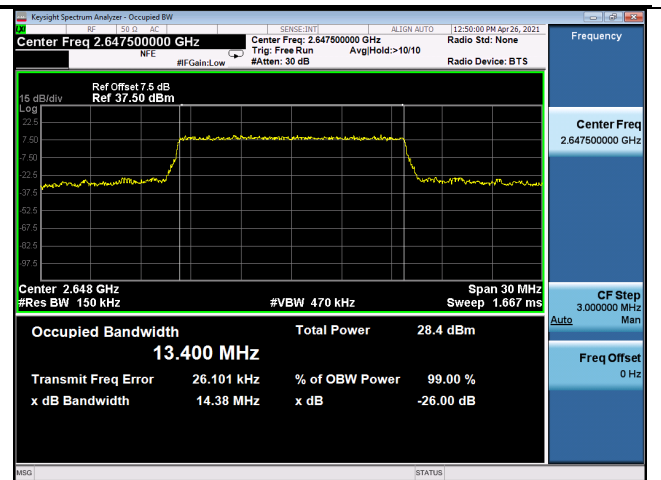


Fig.26

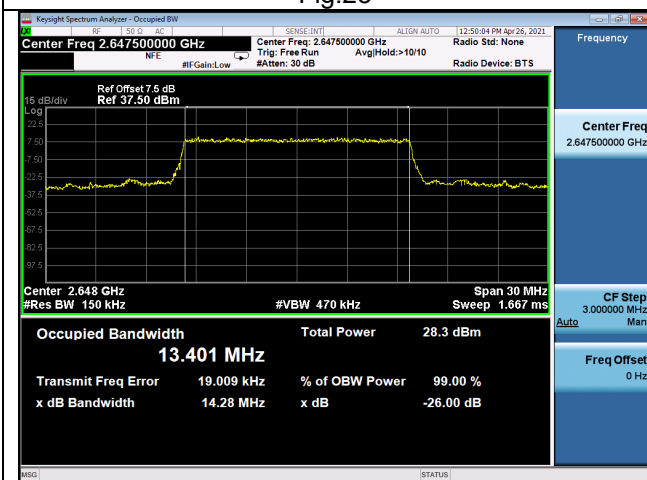


Fig.27

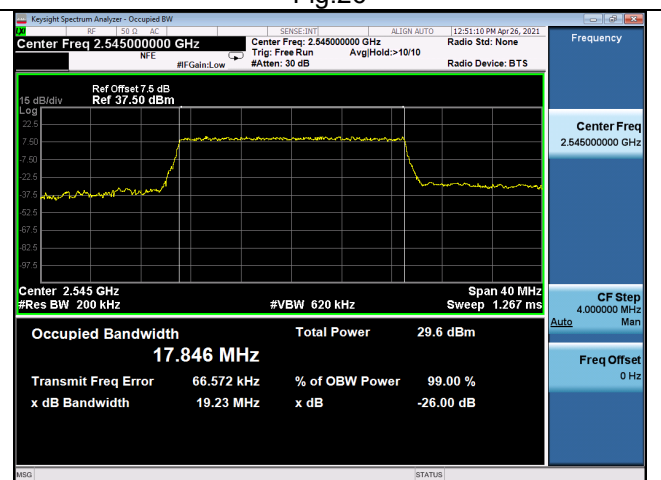


Fig.28

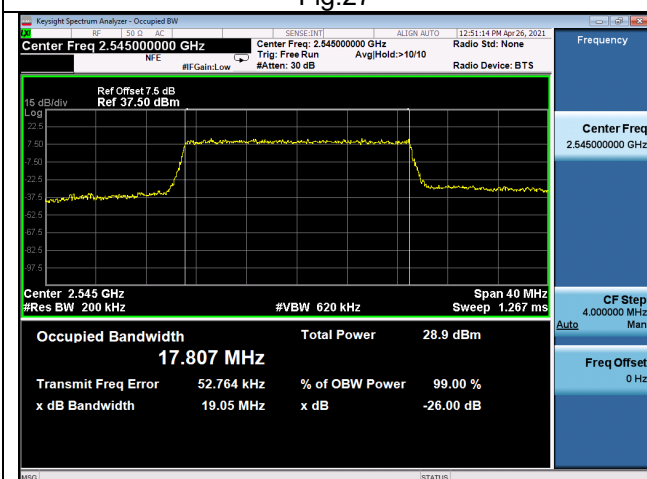


Fig.29

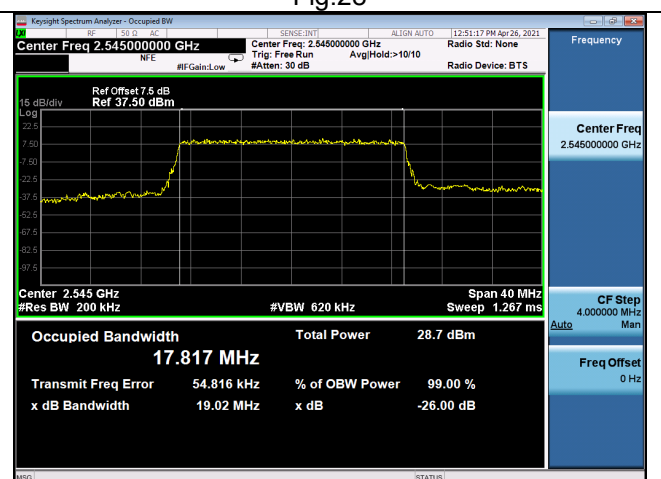


Fig.30

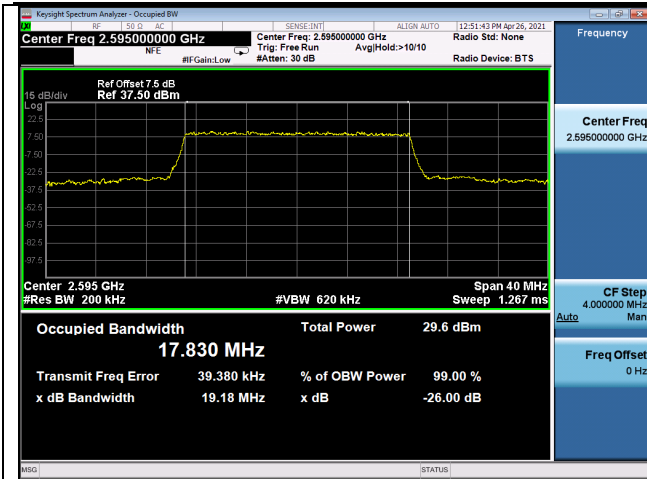


Fig.31

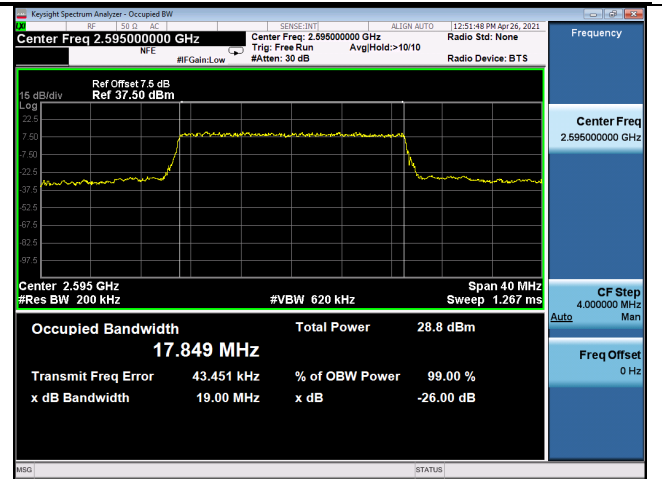


Fig.32

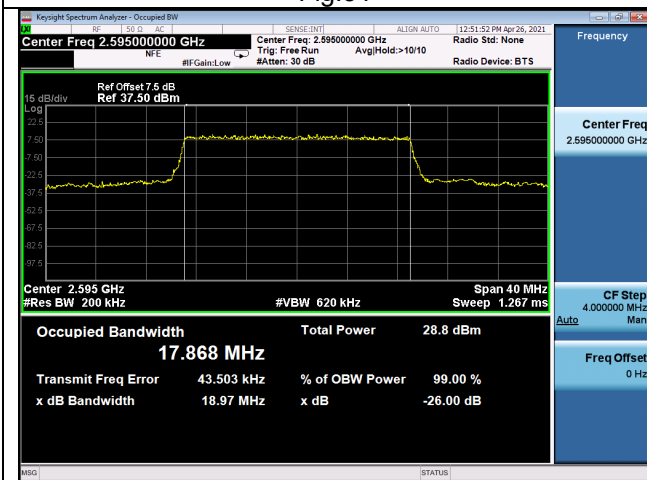


Fig.33

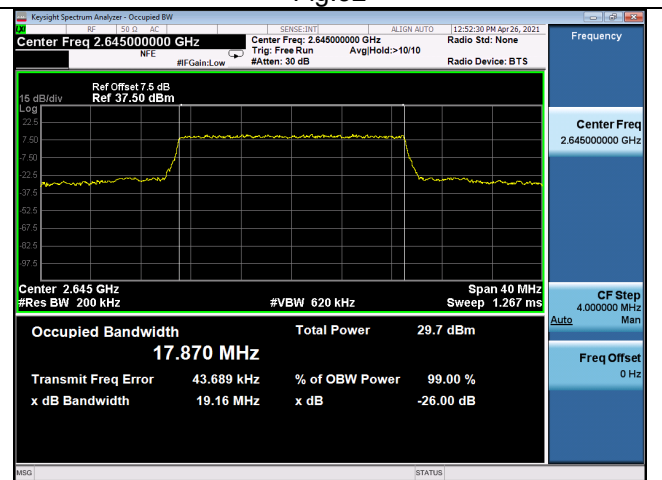


Fig.34

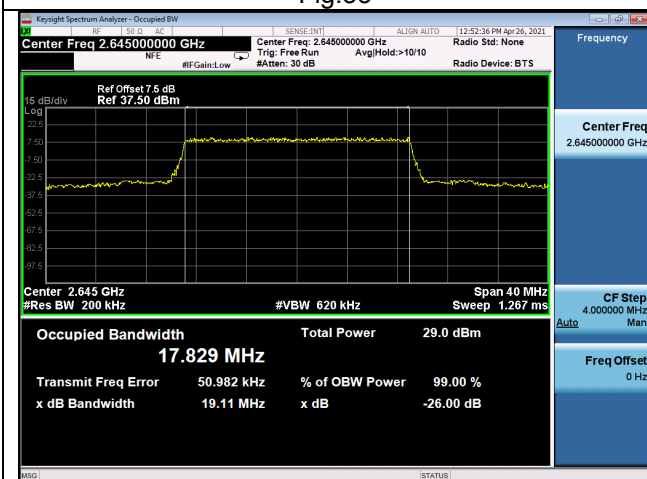


Fig.35

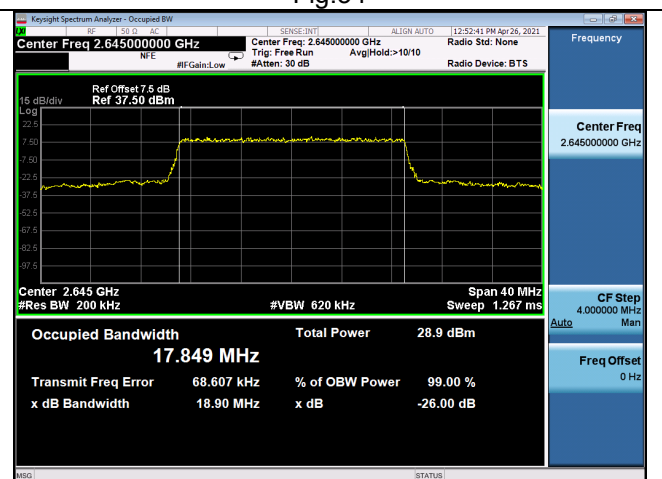


Fig.36

4 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM	64-QAM
41	2595	40640	5	1	0	Fig.1	Fig.2	Fig.3
			10	1	0	Fig.4	Fig.5	Fig.6
			15	1	0	Fig.7	Fig.8	Fig.9
			20	1	0	Fig.10	Fig.11	Fig.12

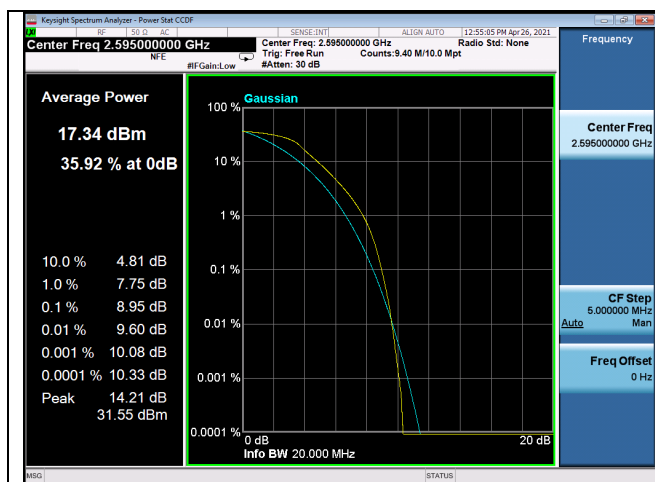


Fig.1

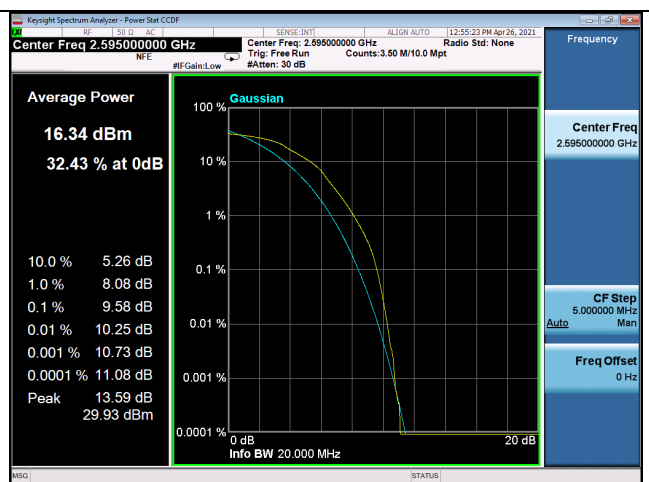


Fig.2

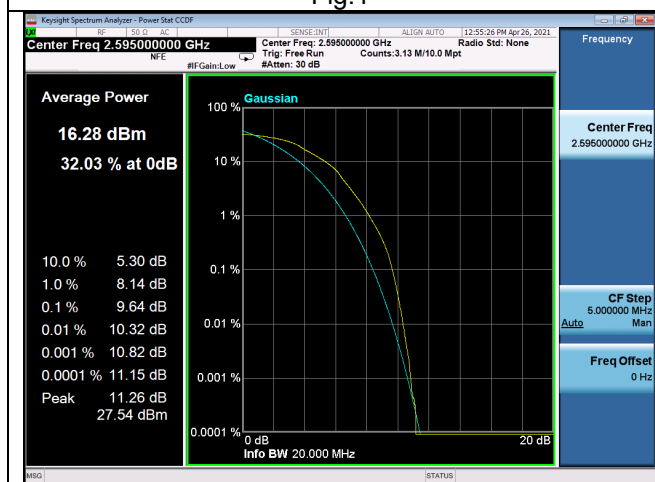


Fig.3



Fig.4

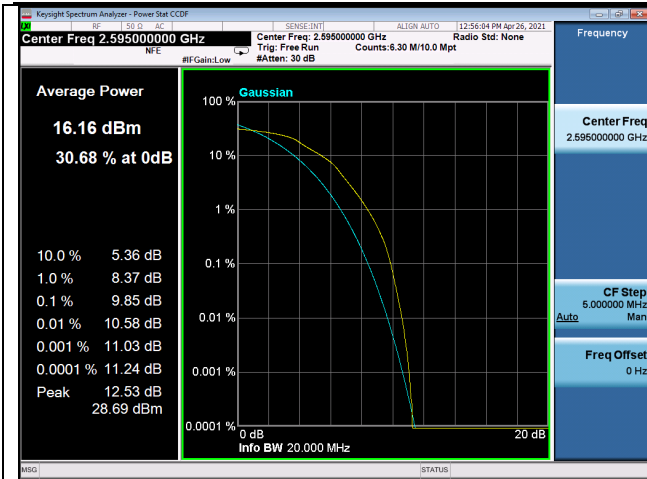


Fig.5

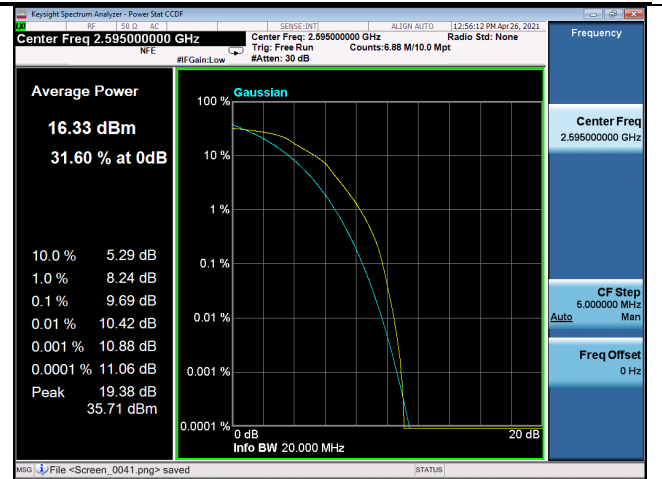


Fig.6

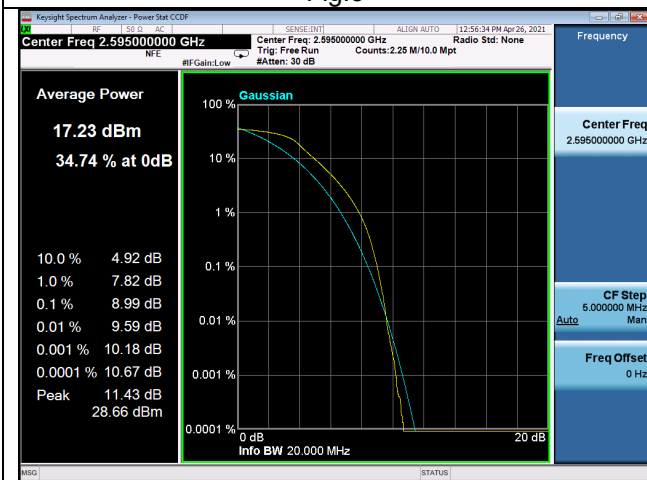


Fig.7

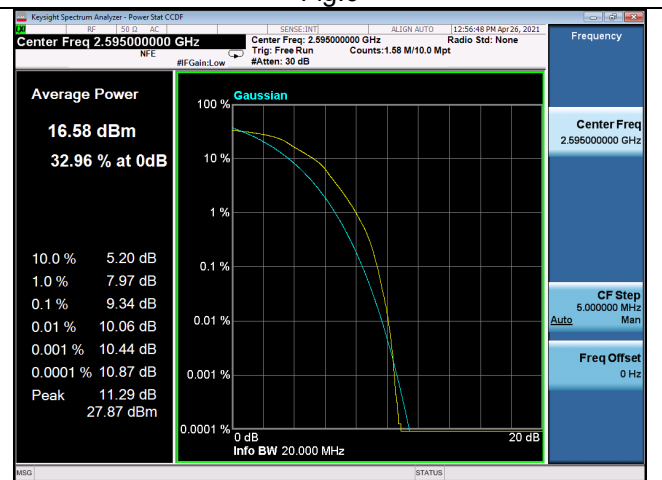


Fig.8

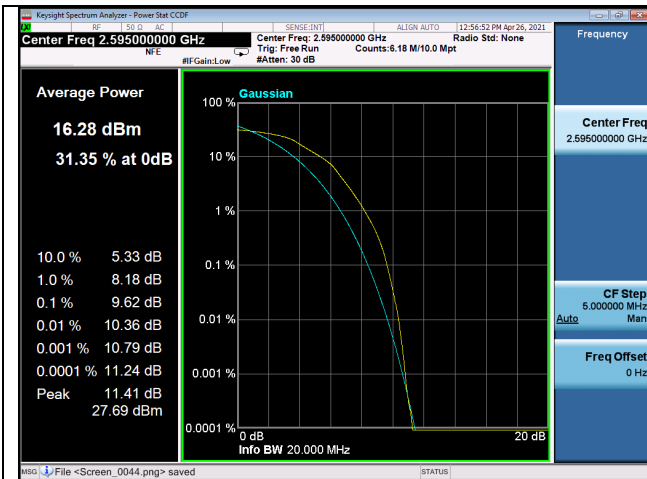


Fig.9

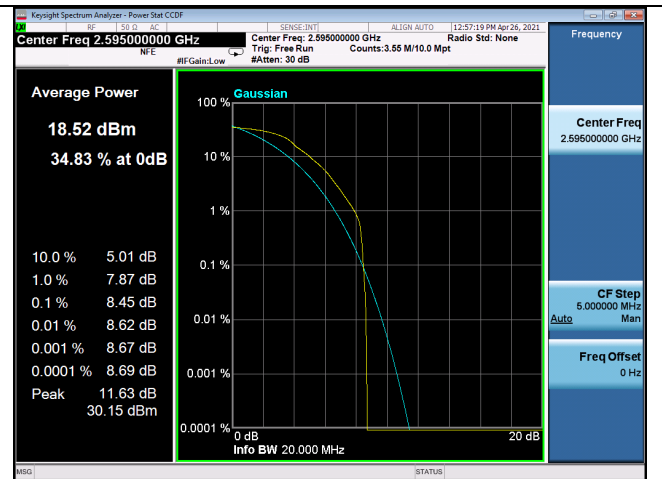


Fig.10

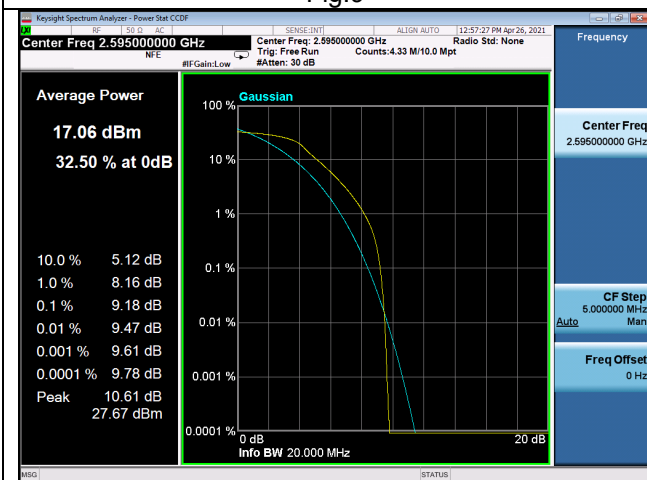


Fig.11



Fig.12

5 Spurious Emissions at antenna terminal

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
41	2545	40140	20	1	0	Fig.1
	2595	40640	20	1	0	Fig.2
	2645	41140	20	1	0	Fig.3

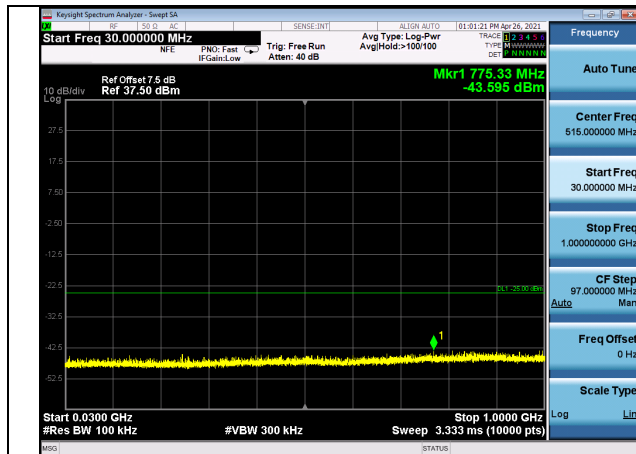


Fig.1

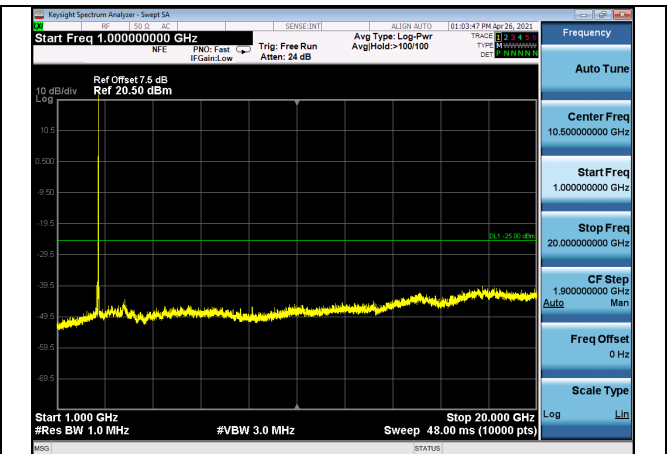


Fig.2

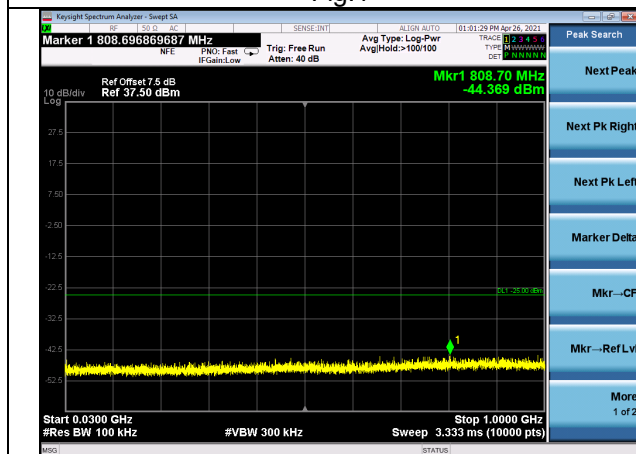


Fig.3

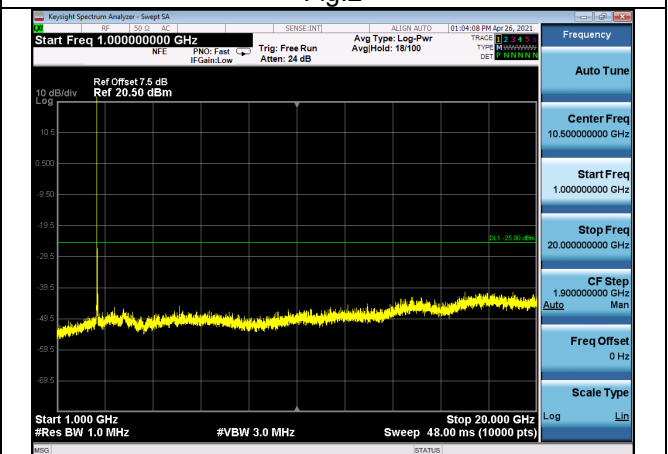


Fig.4

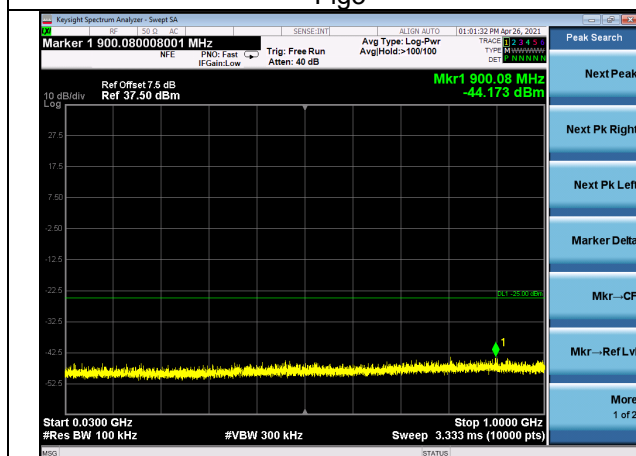


Fig.5

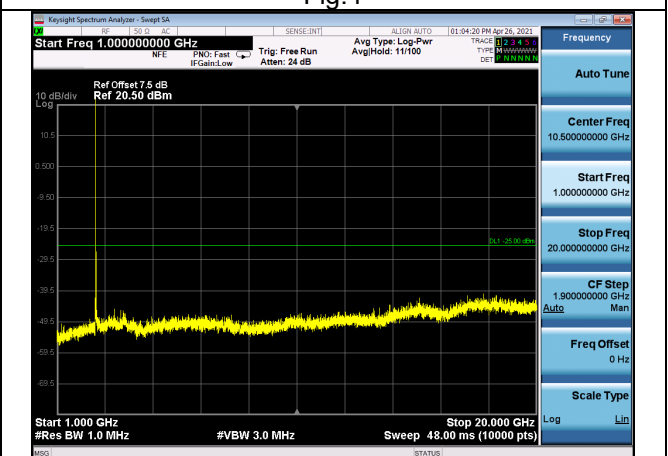


Fig.6

6 Band Edges Compliance

Test result

Band	Carrier frequency (MHz)	Channel	BW	RB Size	RB Offset	Band Edges Plot
						QPSK
41	2537.5	40065	5	1	0	Fig.1
				25	0	Fig.2
	2652.5	41215		1	24	Fig.3
				25	0	Fig.4
	2540	40090	10	1	0	Fig.5
				50	0	Fig.6
	2650	41190		1	49	Fig.7
				50	0	Fig.8
	2542.5	40115	15	1	0	Fig.9
				75	0	Fig.10
	2647.5	41165		1	74	Fig.11
				75	0	Fig.12
	2545	40140	20	1	0	Fig.13
				100	0	Fig.14
	2645	41140		1	99	Fig.15
				100	0	Fig.16

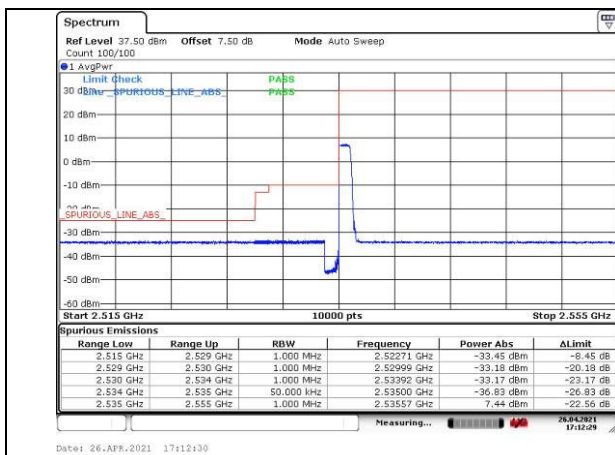


Fig.1

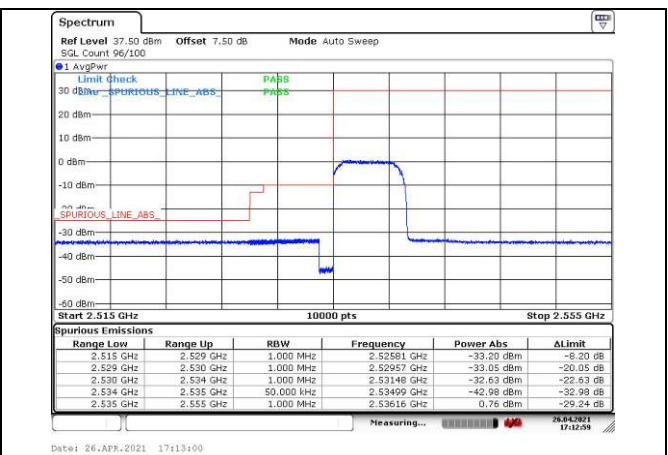


Fig.2

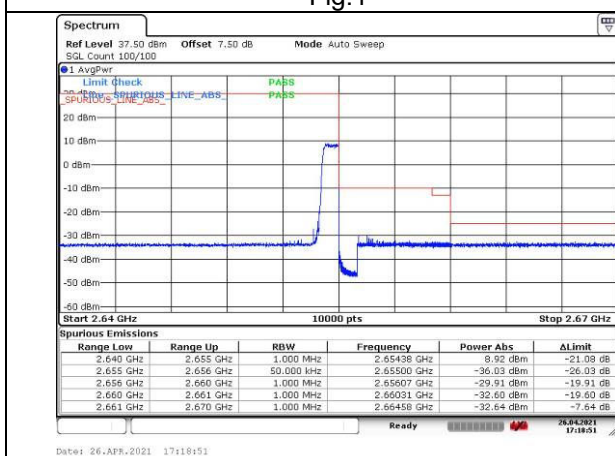


Fig.3

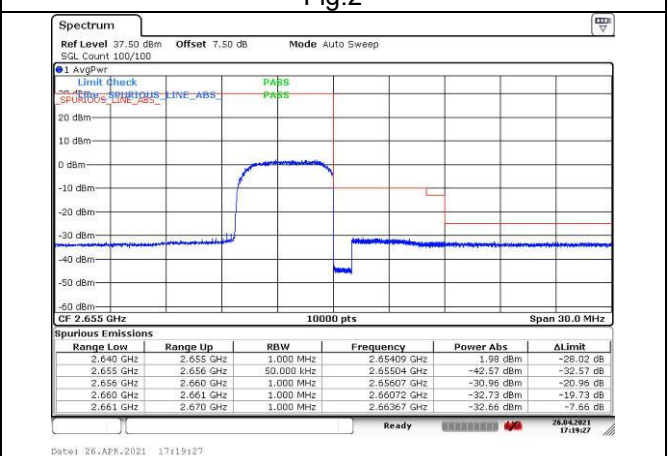


Fig.4

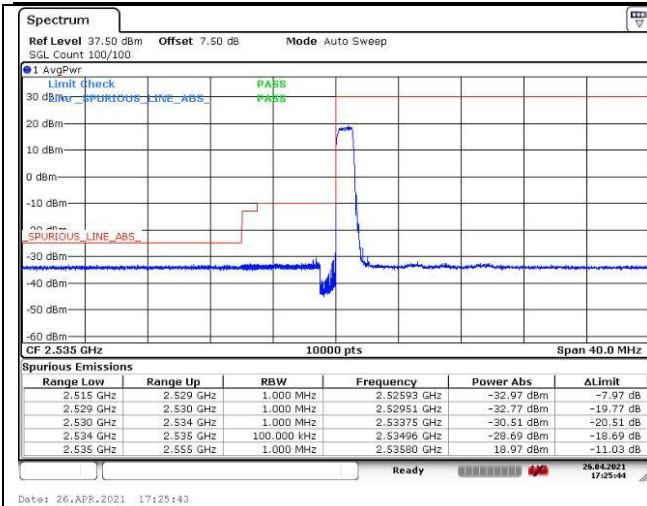


Fig.5

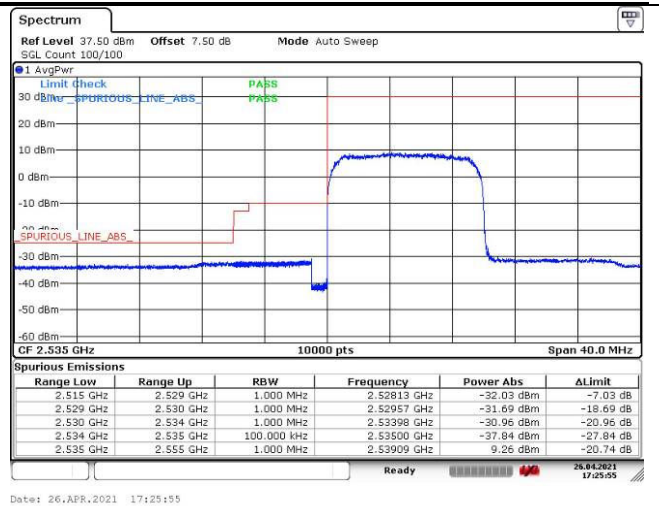


Fig.6

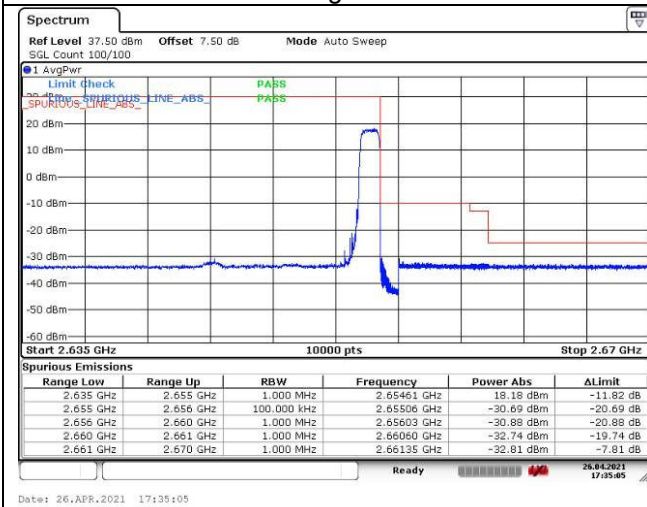


Fig.7

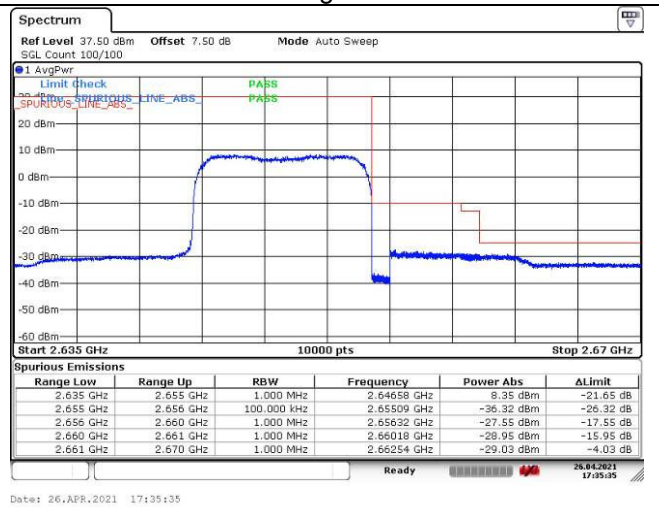


Fig.8

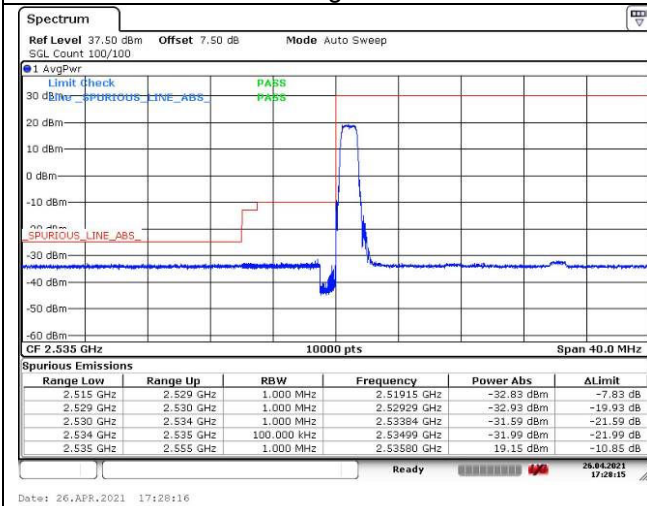


Fig.9

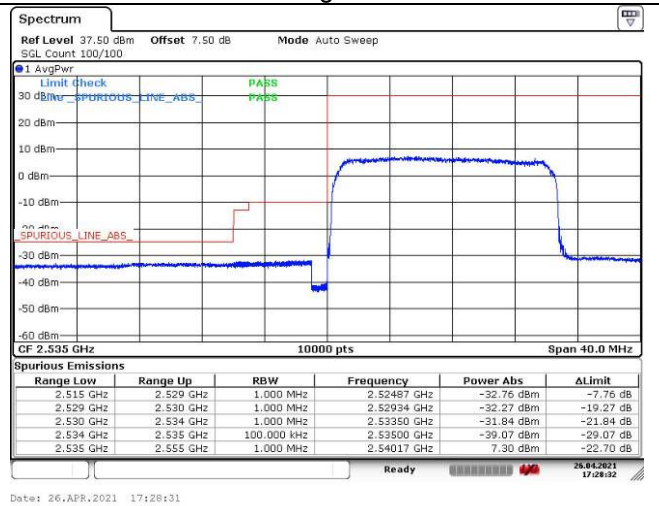


Fig.10

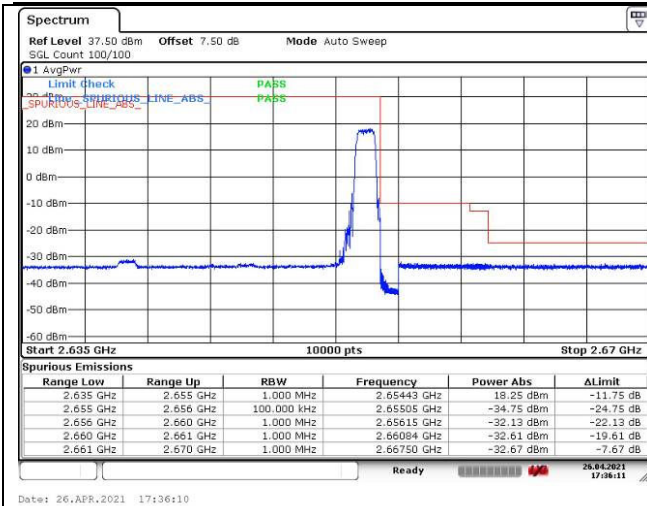


Fig.11

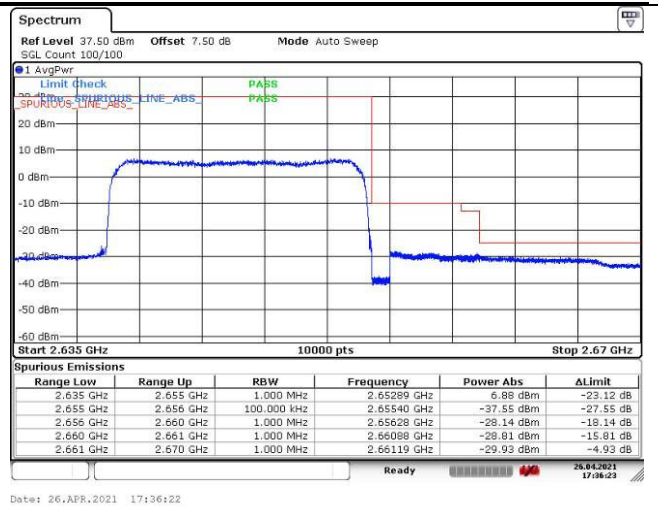


Fig.12

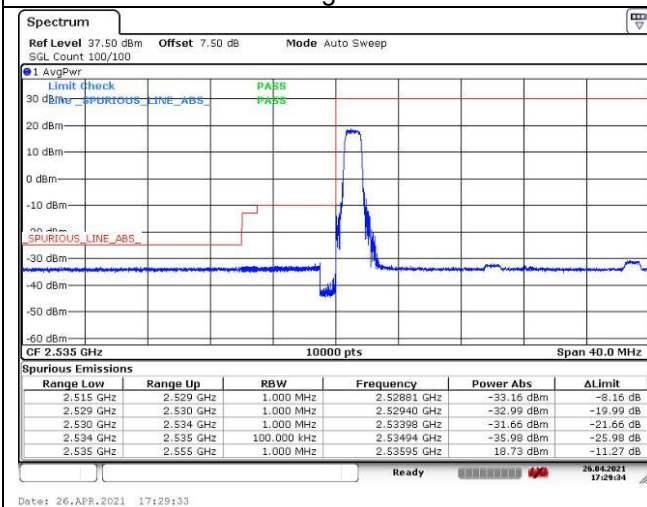


Fig.13

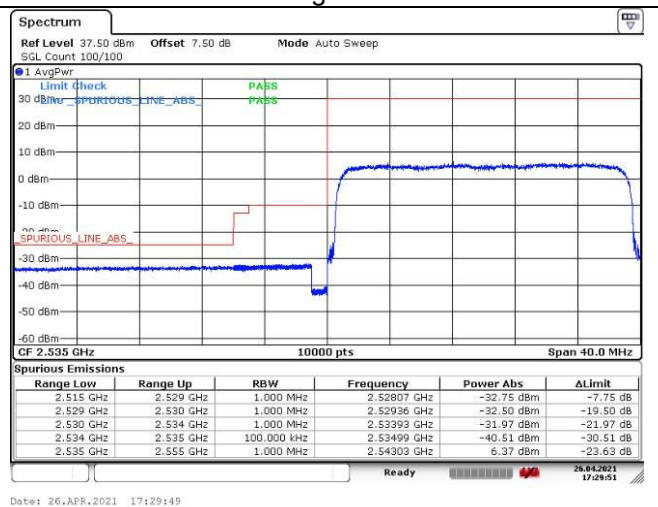


Fig.14

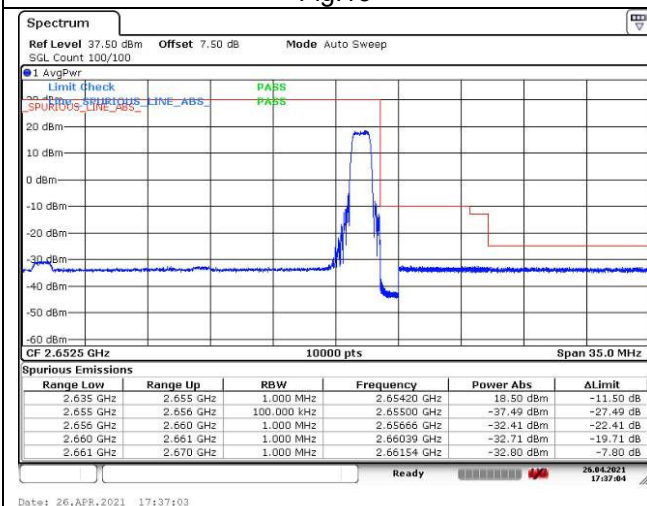


Fig.15

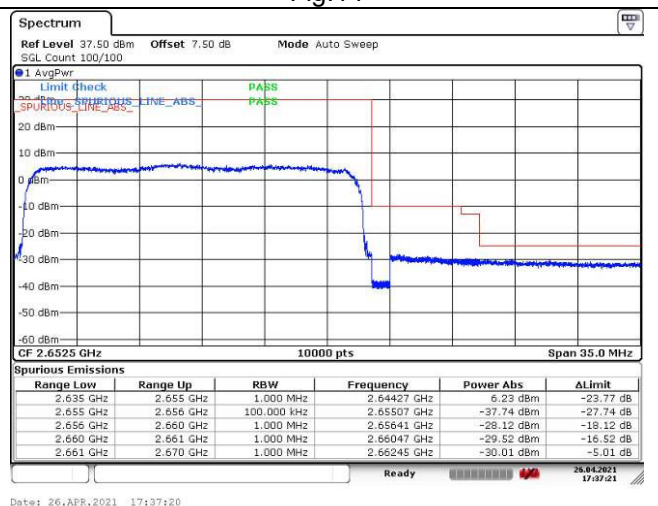


Fig.16

7 Frequency Stability

Test result:

Temperature(°C)	Voltage	Test Result (ppm) Band38 Low Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-40	NV	---	---	0.007	-0.003	-0.005	-0.017
-30	NV	---	---	0.009	-0.001	-0.002	-0.004
-20	NV	---	---	0.005	-0.004	-0.016	-0.005
-10	NV	---	---	0.004	0.013	0.005	0.003
0	NV	---	---	-0.001	0.002	-0.005	0.006
+10	NV	---	---	-0.001	-0.002	-0.002	0.001
+20	NV	---	---	0.000	0.000	0.000	0.000
+30	NV	---	---	0.004	-0.002	-0.002	0.005
+40	NV	---	---	0.001	0.005	-0.004	-0.003
+50	NV	---	---	0.011	-0.002	-0.001	-0.001
+55	NV	---	---	0.004	-0.002	-0.001	-0.001
+20	LV	---	---	0.006	0.002	-0.003	0.001
+20	HV	---	---	0.003	-0.002	0.000	-0.005

Temperature(°C)	Voltage	Test Result (ppm) Band38 High Channel QPSK					
		1.4M	3M	5M	10M	15M	20M
-40	NV	---	---	0.002	-0.002	-0.003	-0.006
-30	NV	---	---	0.004	-0.002	-0.001	-0.001
-20	NV	---	---	0.002	-0.006	-0.002	0.001
-10	NV	---	---	0.004	-0.004	0.007	0.007
0	NV	---	---	-0.003	-0.003	0.003	0.004
+10	NV	---	---	-0.001	-0.001	0.002	0.002
+20	NV	---	---	0.000	0.000	0.000	0.000
+30	NV	---	---	-0.001	0.001	0.009	-0.004
+40	NV	---	---	0.003	-0.004	0.002	-0.003
+50	NV	---	---	-0.001	-0.002	0.001	-0.002
+55	NV	---	---	-0.003	-0.005	0.003	-0.006
+20	LV	---	---	-0.003	-0.004	0.003	-0.002
+20	HV	---	---	-0.004	-0.002	-0.002	-0.002

**8 Effective Radiated Power and Effective Isotropic Radiated Power
(2555MHz-2655MHz)**

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2537.5	40065	5	1	0	22.49	28.49	0.706
				1	24	22.47	28.47	0.703
				12	6	21.52	27.52	0.565
				25	0	21.49	27.49	0.561
	2595	40640		1	0	22.07	28.07	0.641
				1	24	22.02	28.02	0.634
				12	6	21.08	27.08	0.511
				25	0	21.11	27.11	0.514
	2652.5	41215		1	0	21.96	27.96	0.625
				1	24	21.94	27.94	0.622
				12	6	21.12	27.12	0.515
				25	0	21.14	27.14	0.518
16QAM	2537.5	40065	5	1	0	21.44	27.44	0.555
				1	24	21.47	27.47	0.558
				12	6	20.65	26.65	0.462
				25	0	20.61	26.61	0.458
	2595	40640		1	0	21.53	27.53	0.566
				1	24	21.47	27.47	0.558
				12	6	20.74	26.74	0.472
				25	0	20.70	26.70	0.468
	2652.5	41215		1	0	20.94	26.94	0.494
				1	24	20.99	26.99	0.500
				12	6	20.17	26.17	0.414
				25	0	20.12	26.12	0.409
64QAM	2537.5	40065	5	1	0	21.22	27.22	0.527
				1	24	21.19	27.19	0.524
				12	6	20.64	26.64	0.461
				25	0	20.67	26.67	0.465
	2595	40640		1	0	20.86	26.86	0.485
				1	24	22.49	28.49	0.706
				12	6	22.47	28.47	0.703
				25	0	21.52	27.52	0.565
	2652.5	41215		1	0	21.49	27.49	0.561
				1	24	22.07	28.07	0.641
				12	6	22.02	28.02	0.634
				25	0	21.08	27.08	0.511

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2540	40090	10	1	0	22.54	28.54	0.714
				1	49	22.47	28.47	0.703
				24	12	21.57	27.57	0.571
				50	0	21.54	27.54	0.568
	2595	40640		1	0	22.09	28.09	0.644
				1	49	22.07	28.07	0.641
				24	12	21.14	27.14	0.518
				50	0	21.09	27.09	0.512
	2650	41190		1	0	22.00	28.00	0.631
				1	49	21.93	27.93	0.621
				24	12	21.14	27.14	0.518
				50	0	21.13	27.13	0.516
16QAM	2540	40090	10	1	0	21.44	27.44	0.555
				1	49	21.43	27.43	0.553
				24	12	20.65	26.65	0.462
				50	0	20.62	26.62	0.459
	2595	40640		1	0	21.53	27.53	0.566
				1	49	21.44	27.44	0.555
				24	12	20.75	26.75	0.473
				50	0	20.74	26.74	0.472
	2650	41190		1	0	21.00	27.00	0.501
				1	49	20.97	26.97	0.498
				24	12	20.19	26.19	0.416
				50	0	20.13	26.13	0.410
64QAM	2540	40090	10	1	0	21.22	27.22	0.527
				1	49	21.20	27.20	0.525
				24	12	20.65	26.65	0.462
				50	0	20.67	26.67	0.465
	2595	40640		1	0	20.87	26.87	0.486
				1	49	20.81	26.81	0.480
				24	12	20.19	26.19	0.416
				50	0	20.11	26.11	0.408
	2650	41190		1	0	20.73	26.73	0.471
				1	49	20.68	26.68	0.466
				24	12	20.13	26.13	0.410
				50	0	20.00	26.00	0.398

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2562.5	40115	15	1	0	22.50	28.50	0.708
				1	74	22.45	28.45	0.700
				40	18	21.53	27.53	0.566
				75	0	21.52	27.52	0.565
	2595	40640		1	0	22.07	28.07	0.641
				1	74	22.02	28.02	0.634
				40	18	21.11	27.11	0.514
				75	0	21.09	27.09	0.512
	2647.5	41165		1	0	21.98	27.98	0.628
				1	74	21.97	27.97	0.627
				40	18	21.13	27.13	0.516
				75	0	21.13	27.13	0.516
16QAM	2562.5	40115	15	1	0	21.43	27.43	0.553
				1	74	21.43	27.43	0.553
				40	18	20.69	26.69	0.467
				75	0	20.59	26.59	0.456
	2595	40640		1	0	21.51	27.51	0.564
				1	74	21.48	27.48	0.560
				40	18	20.70	26.70	0.468
				75	0	20.69	26.69	0.467
	2647.5	41165		1	0	20.92	26.92	0.492
				1	74	21.00	27.00	0.501
				40	18	20.14	26.14	0.411
				75	0	20.09	26.09	0.406
64QAM	2562.5	40115	15	1	0	21.20	27.20	0.525
				1	74	21.15	27.15	0.519
				40	18	20.64	26.64	0.461
				75	0	20.65	26.65	0.462
	2595	40640		1	0	20.86	26.86	0.485
				1	74	20.84	26.84	0.483
				40	18	20.18	26.18	0.415
				75	0	20.10	26.10	0.407
	2647.5	41165		1	0	20.70	26.70	0.468
				1	74	20.68	26.68	0.466
				40	18	20.18	26.18	0.415
				75	0	20.04	26.04	0.402

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)	ERP/ EIRP (dBm)	ERP/ EIRP (W)
QPSK	2545	40140	20	1	0	22.59	28.59	0.723
				1	99	22.56	28.56	0.718
				50	25	21.62	27.62	0.578
				100	0	21.61	27.61	0.577
	2605	40640		1	0	22.15	28.15	0.653
				1	99	22.12	28.12	0.649
				50	25	21.20	27.20	0.525
				100	0	21.19	27.19	0.524
	2645	41140		1	0	22.08	28.08	0.643
				1	99	22.04	28.04	0.637
				50	25	21.22	27.22	0.527
				100	0	21.20	27.20	0.525
16QAM	2545	40140	20	1	0	21.55	27.55	0.569
				1	99	21.53	27.53	0.566
				50	25	20.74	26.74	0.472
				100	0	20.71	26.71	0.469
	2605	40640		1	0	21.59	27.59	0.574
				1	99	21.54	27.54	0.568
				50	25	20.85	26.85	0.484
				100	0	20.81	26.81	0.480
	2645	41140		1	0	21.06	27.06	0.508
				1	99	21.05	27.05	0.507
				50	25	20.25	26.25	0.422
				100	0	20.23	26.23	0.420
64QAM	2545	40140	20	1	0	21.28	27.28	0.535
				1	99	21.26	27.26	0.532
				50	25	20.74	26.74	0.472
				100	0	20.73	26.73	0.471
	2605	40640		1	0	20.92	26.92	0.492
				1	99	20.90	26.90	0.490
				50	25	20.26	26.26	0.423
				100	0	20.22	26.22	0.419
	2645	41140		1	0	20.82	26.82	0.481
				1	99	20.79	26.79	0.478
				50	25	20.23	26.23	0.420
				100	0	20.18	26.18	0.415