

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

EUT	IG902-FQ39
SN/IMEI:	GL9022425014925/868517074320205
ANT	Sucker antenna ANT0

LTE Band 48

1 RF Power Output

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	3552.5	55265	5	1	0	23.69
QPSK	3552.5	55265	5	1	12	23.68
QPSK	3552.5	55265	5	1	24	23.63
QPSK	3552.5	55265	5	12	0	23.04
QPSK	3552.5	55265	5	12	7	23.03
QPSK	3552.5	55265	5	12	13	23.07
QPSK	3552.5	55265	5	25	0	22.99
QPSK	3625	55990	5	1	0	22.95
QPSK	3625	55990	5	1	12	22.93
QPSK	3625	55990	5	1	24	23.10
QPSK	3625	55990	5	12	0	22.38
QPSK	3625	55990	5	12	7	22.35
QPSK	3625	55990	5	12	13	22.35
QPSK	3625	55990	5	25	0	22.49
QPSK	3697.5	56715	5	1	0	23.80
QPSK	3697.5	56715	5	1	12	23.73
QPSK	3697.5	56715	5	1	24	23.74
QPSK	3697.5	56715	5	12	0	23.15
QPSK	3697.5	56715	5	12	7	23.01
QPSK	3697.5	56715	5	12	13	22.99
QPSK	3697.5	56715	5	25	0	23.06

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	3552.5	55265	5	1	0	23.12
16QAM	3552.5	55265	5	1	12	23.23
16QAM	3552.5	55265	5	1	24	23.07
16QAM	3552.5	55265	5	12	0	22.04
16QAM	3552.5	55265	5	12	7	22.04
16QAM	3552.5	55265	5	12	13	21.94
16QAM	3552.5	55265	5	25	0	21.98
16QAM	3625	55990	5	1	0	22.55
16QAM	3625	55990	5	1	12	22.56
16QAM	3625	55990	5	1	24	22.63
16QAM	3625	55990	5	12	0	21.46
16QAM	3625	55990	5	12	7	21.46
16QAM	3625	55990	5	12	13	21.46
16QAM	3625	55990	5	25	0	21.40
16QAM	3697.5	56715	5	1	0	23.26
16QAM	3697.5	56715	5	1	12	23.24
16QAM	3697.5	56715	5	1	24	23.27
16QAM	3697.5	56715	5	12	0	22.15
16QAM	3697.5	56715	5	12	7	22.14
16QAM	3697.5	56715	5	12	13	22.12
16QAM	3697.5	56715	5	25	0	22.19

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	3555	55290	10	1	0	23.39
QPSK	3555	55290	10	1	25	23.48
QPSK	3555	55290	10	1	49	23.66
QPSK	3555	55290	10	25	0	22.85
QPSK	3555	55290	10	25	12	22.90
QPSK	3555	55290	10	25	25	22.90
QPSK	3555	55290	10	50	0	22.94
QPSK	3625	55990	10	1	0	22.78
QPSK	3625	55990	10	1	25	22.96
QPSK	3625	55990	10	1	49	22.99
QPSK	3625	55990	10	25	0	22.29
QPSK	3625	55990	10	25	12	22.33
QPSK	3625	55990	10	25	25	22.29
QPSK	3625	55990	10	50	0	22.36
QPSK	3695	56690	10	1	0	23.52
QPSK	3695	56690	10	1	25	23.58
QPSK	3695	56690	10	1	49	23.68
QPSK	3695	56690	10	25	0	22.83
QPSK	3695	56690	10	25	12	22.84
QPSK	3695	56690	10	25	25	22.86
QPSK	3695	56690	10	50	0	22.96

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	3555	55290	10	1	0	22.95
16QAM	3555	55290	10	1	25	23.04
16QAM	3555	55290	10	1	49	23.09
16QAM	3555	55290	10	25	0	21.83
16QAM	3555	55290	10	25	12	21.92
16QAM	3555	55290	10	25	25	21.92
16QAM	3555	55290	10	50	0	21.99
16QAM	3625	55990	10	1	0	22.44
16QAM	3625	55990	10	1	25	22.48
16QAM	3625	55990	10	1	49	22.53
16QAM	3625	55990	10	25	0	21.25
16QAM	3625	55990	10	25	12	21.28
16QAM	3625	55990	10	25	25	21.43
16QAM	3625	55990	10	50	0	21.33
16QAM	3695	56690	10	1	0	23.09
16QAM	3695	56690	10	1	25	22.98
16QAM	3695	56690	10	1	49	23.09
16QAM	3695	56690	10	25	0	21.99
16QAM	3695	56690	10	25	12	21.92
16QAM	3695	56690	10	25	25	21.96
16QAM	3695	56690	10	50	0	22.00

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	3557.5	55315	15	1	0	23.43
QPSK	3557.5	55315	15	1	37	23.52
QPSK	3557.5	55315	15	1	74	23.62
QPSK	3557.5	55315	15	36	0	22.79
QPSK	3557.5	55315	15	36	29	22.96
QPSK	3557.5	55315	15	36	30	22.95
QPSK	3557.5	55315	15	75	0	22.96
QPSK	3625	55990	15	1	0	22.83
QPSK	3625	55990	15	1	37	23.03
QPSK	3625	55990	15	1	74	23.14
QPSK	3625	55990	15	36	0	22.17
QPSK	3625	55990	15	36	29	22.34
QPSK	3625	55990	15	36	30	22.33
QPSK	3625	55990	15	75	0	22.16
QPSK	3692.5	56665	15	1	0	23.39
QPSK	3692.5	56665	15	1	37	23.65
QPSK	3692.5	56665	15	1	74	23.62
QPSK	3692.5	56665	15	36	0	22.76
QPSK	3692.5	56665	15	36	29	22.93
QPSK	3692.5	56665	15	36	30	22.92
QPSK	3692.5	56665	15	75	0	22.76

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	3557.5	55315	15	1	0	22.93
16QAM	3557.5	55315	15	1	37	23.04
16QAM	3557.5	55315	15	1	74	23.14
16QAM	3557.5	55315	15	36	0	21.81
16QAM	3557.5	55315	15	36	29	21.98
16QAM	3557.5	55315	15	36	30	21.87
16QAM	3557.5	55315	15	75	0	21.91
16QAM	3625	55990	15	1	0	22.16
16QAM	3625	55990	15	1	37	22.34
16QAM	3625	55990	15	1	74	22.50
16QAM	3625	55990	15	36	0	21.07
16QAM	3625	55990	15	36	29	21.30
16QAM	3625	55990	15	36	30	21.30
16QAM	3625	55990	15	75	0	21.18
16QAM	3692.5	56665	15	1	0	22.79
16QAM	3692.5	56665	15	1	37	22.97
16QAM	3692.5	56665	15	1	74	23.28
16QAM	3692.5	56665	15	36	0	21.82
16QAM	3692.5	56665	15	36	29	21.90
16QAM	3692.5	56665	15	36	30	21.90
16QAM	3692.5	56665	15	75	0	22.01

Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
QPSK	3560	55340	20	1	0	23.44
QPSK	3560	55340	20	1	49	23.54
QPSK	3560	55340	20	1	99	23.66
QPSK	3560	55340	20	50	0	22.88
QPSK	3560	55340	20	50	24	22.93
QPSK	3560	55340	20	50	50	23.04
QPSK	3560	55340	20	100	0	22.92
QPSK	3625	55990	20	1	0	22.57
QPSK	3625	55990	20	1	49	22.96
QPSK	3625	55990	20	1	99	23.02
QPSK	3625	55990	20	50	0	22.10
QPSK	3625	55990	20	50	24	22.17
QPSK	3625	55990	20	50	50	22.31
QPSK	3625	55990	20	100	0	22.22
QPSK	3690	56640	20	1	0	23.23
QPSK	3690	56640	20	1	49	23.43
QPSK	3690	56640	20	1	99	23.58
QPSK	3690	56640	20	50	0	22.72
QPSK	3690	56640	20	50	24	22.79
QPSK	3690	56640	20	50	50	22.84
QPSK	3690	56640	20	100	0	22.88

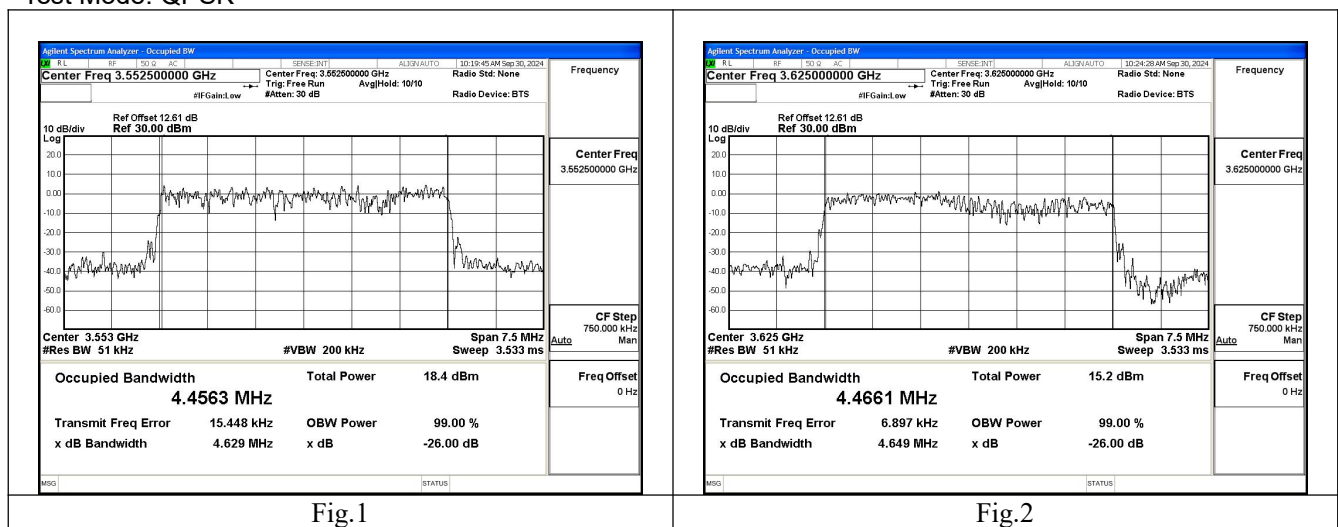
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
16QAM	3560	55340	20	1	0	22.95
16QAM	3560	55340	20	1	49	23.03
16QAM	3560	55340	20	1	99	23.07
16QAM	3560	55340	20	50	0	21.95
16QAM	3560	55340	20	50	24	21.97
16QAM	3560	55340	20	50	50	21.97
16QAM	3560	55340	20	100	0	21.92
16QAM	3625	55990	20	1	0	22.07
16QAM	3625	55990	20	1	49	22.30
16QAM	3625	55990	20	1	99	22.53
16QAM	3625	55990	20	50	0	21.17
16QAM	3625	55990	20	50	24	21.36
16QAM	3625	55990	20	50	50	21.32
16QAM	3625	55990	20	100	0	21.22
16QAM	3690	56640	20	1	0	22.89
16QAM	3690	56640	20	1	49	22.97
16QAM	3690	56640	20	1	99	23.09
16QAM	3690	56640	20	50	0	21.83
16QAM	3690	56640	20	50	24	21.92
16QAM	3690	56640	20	50	50	21.98
16QAM	3690	56640	20	100	0	21.81

2 Occupied Bandwidth

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)	
48	QPSK	3552.5	55265	5	25	0	4.456	Fig.1
48	QPSK	3625	55990	5	25	0	4.466	Fig.2
48	QPSK	3697.5	56715	5	25	0	4.464	Fig.3
48	QPSK	3555	55290	10	50	0	8.896	Fig.4
48	QPSK	3625	55990	10	50	0	8.896	Fig.5
48	QPSK	3695	56690	10	50	0	8.918	Fig.6
48	QPSK	3557.5	55315	15	75	0	13.379	Fig.7
48	QPSK	3625	55990	15	75	0	13.350	Fig.8
48	QPSK	3692.5	56665	15	75	0	13.399	Fig.9
48	QPSK	3560	55340	20	100	0	17.827	Fig.10
48	QPSK	3625	55990	20	100	0	17.866	Fig.11
48	QPSK	3690	56640	20	100	0	17.794	Fig.12

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of 99% Power (MHz)	
48	16QAM	3552.5	55265	5	25	0	4.477	Fig.13
48	16QAM	3625	55990	5	25	0	4.428	Fig.14
48	16QAM	3697.5	56715	5	25	0	4.423	Fig.15
48	16QAM	3555	55290	10	50	0	8.936	Fig.16
48	16QAM	3625	55990	10	50	0	8.957	Fig.17
48	16QAM	3695	56690	10	50	0	8.961	Fig.18
48	16QAM	3557.5	55315	15	75	0	13.387	Fig.19
48	16QAM	3625	55990	15	75	0	13.293	Fig.20
48	16QAM	3692.5	56665	15	75	0	13.258	Fig.21
48	16QAM	3560	55340	20	100	0	17.787	Fig.22
48	16QAM	3625	55990	20	100	0	17.879	Fig.23
48	16QAM	3690	56640	20	100	0	17.750	Fig.24

Test Mode: QPSK



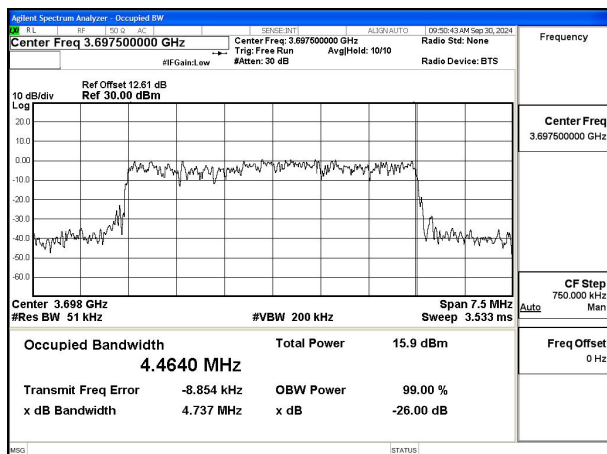


Fig.3

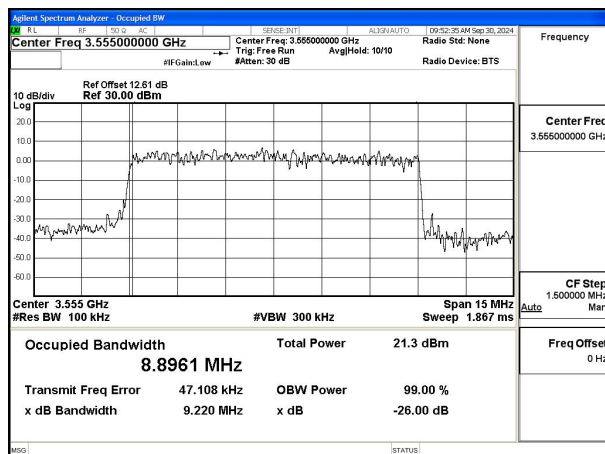


Fig.4

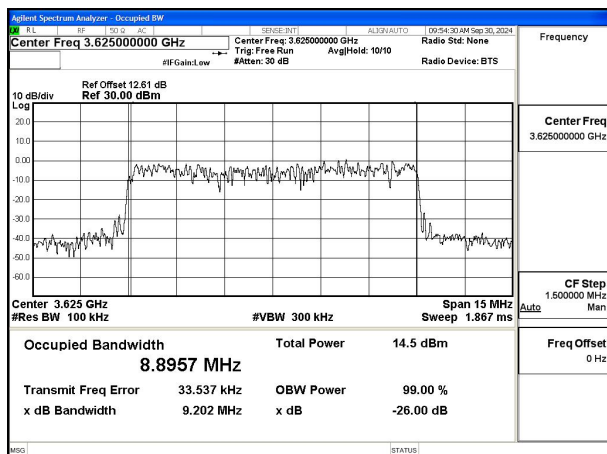


Fig.5

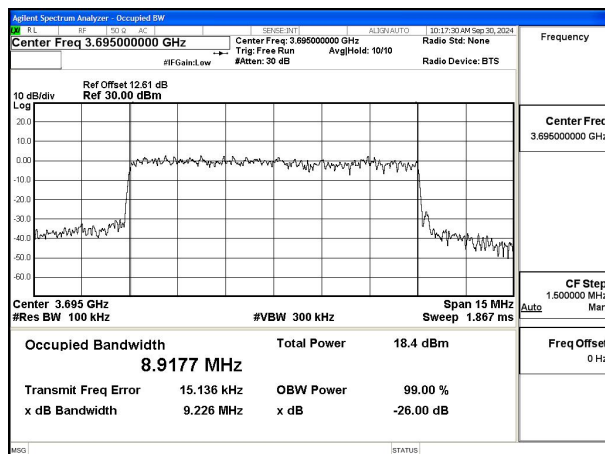


Fig.6

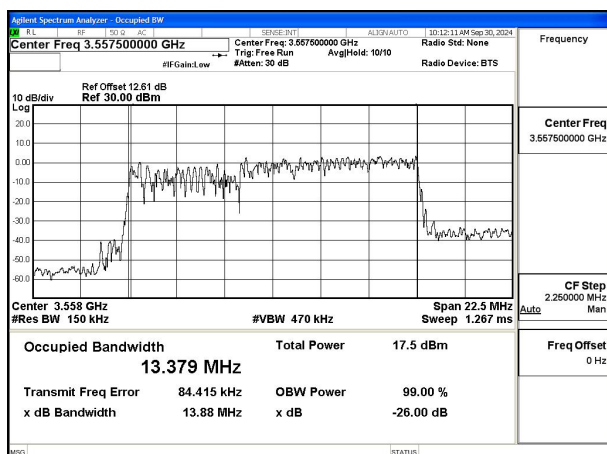


Fig.7

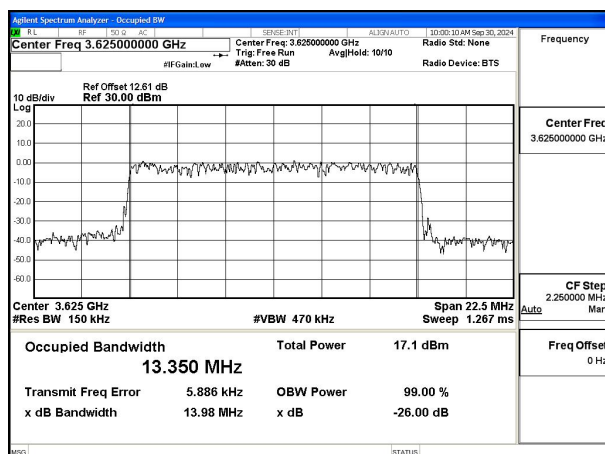


Fig.8

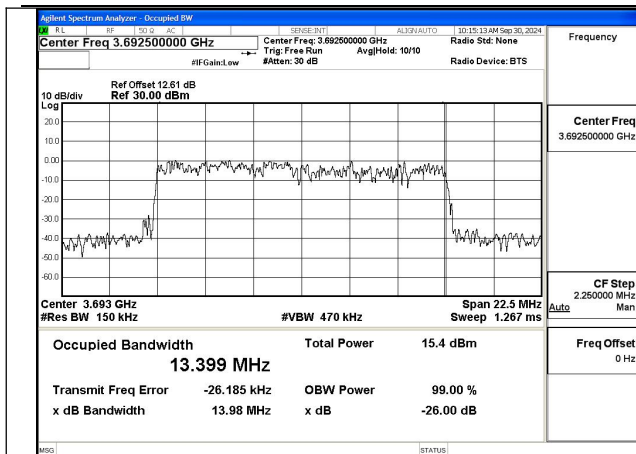


Fig.9

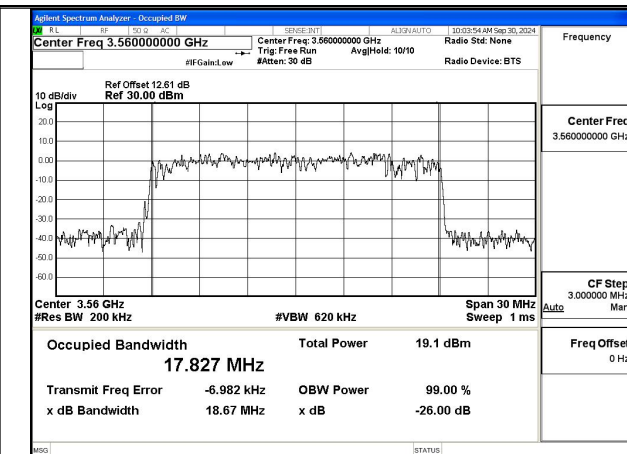


Fig.10

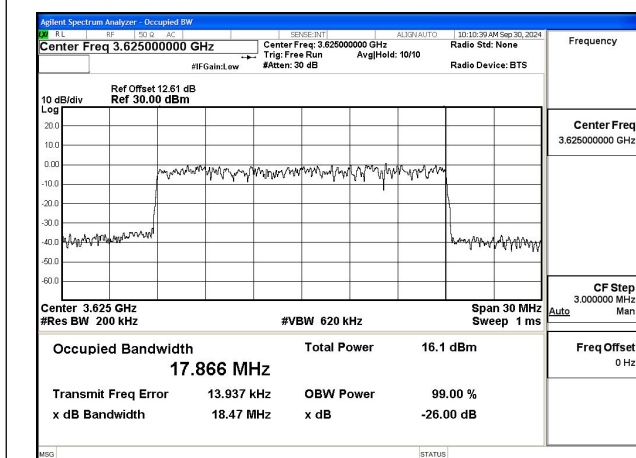


Fig.11

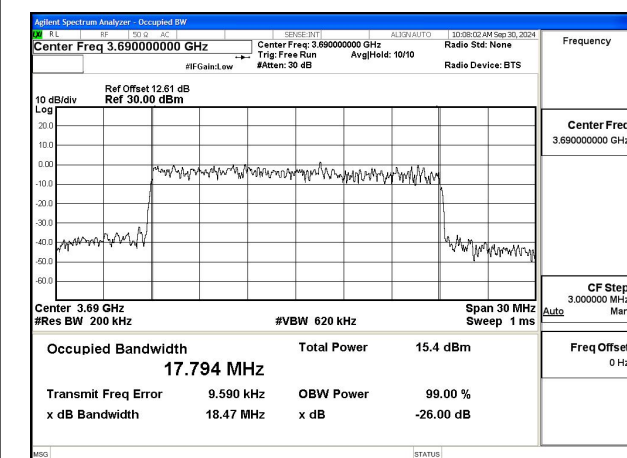


Fig.12

Test Mode: 16QAM

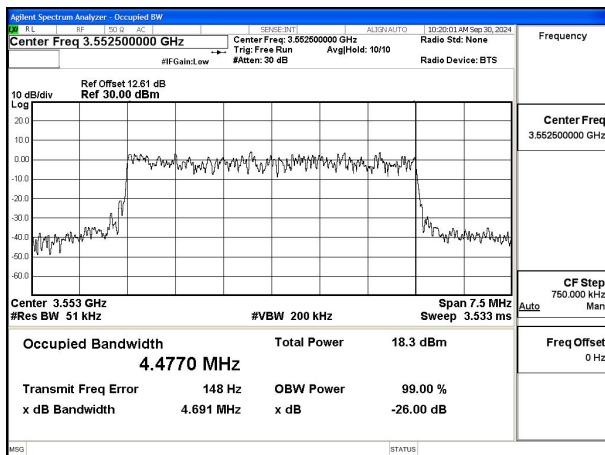


Fig.13

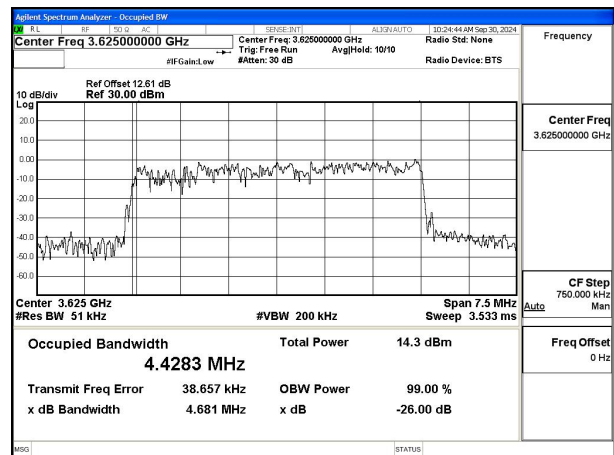


Fig.14

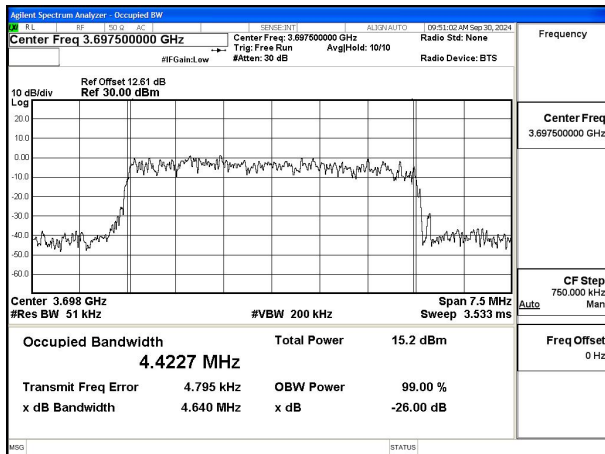


Fig.15

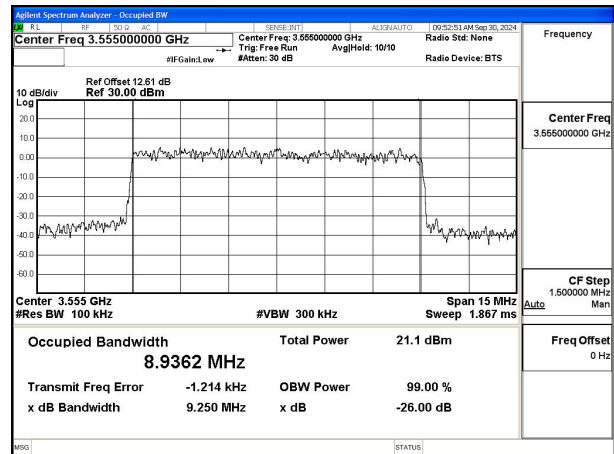


Fig.16

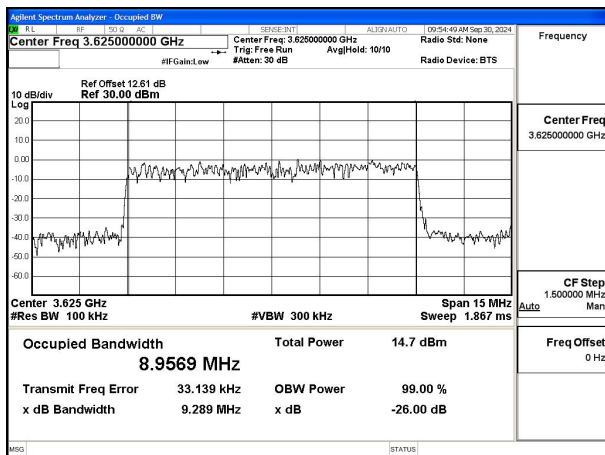


Fig.17

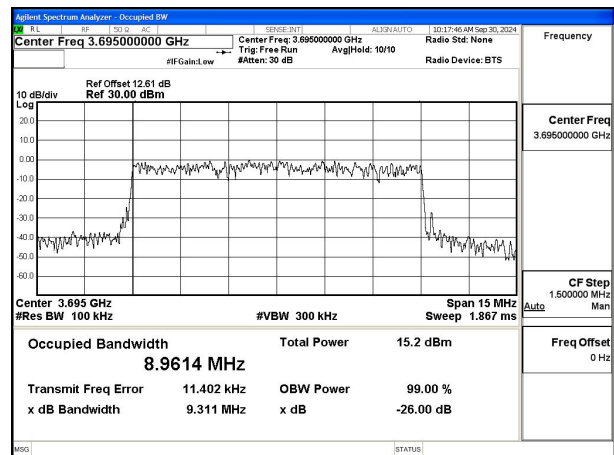


Fig.18

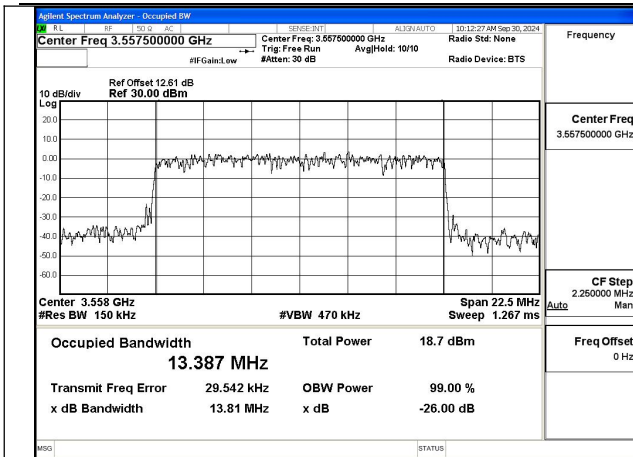


Fig.19

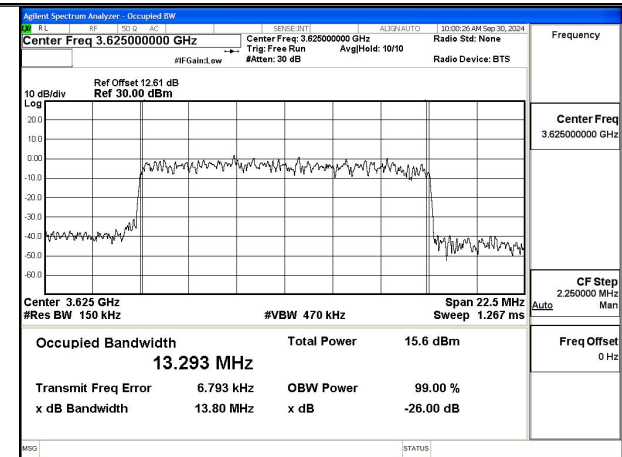


Fig.20

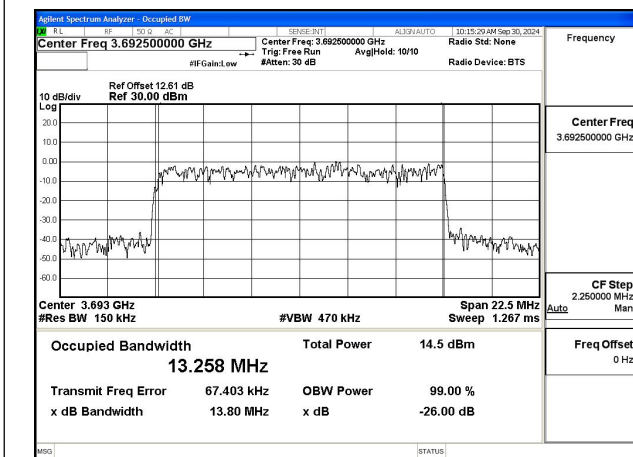


Fig.21

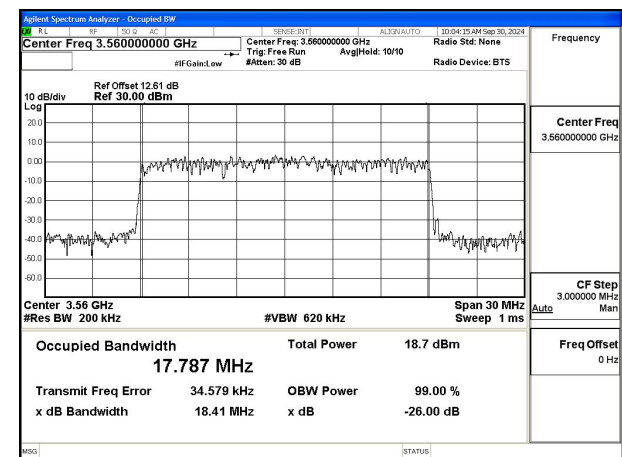


Fig.22

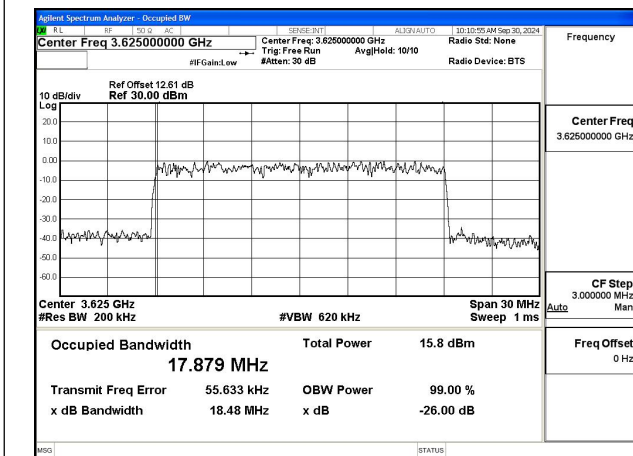


Fig.23

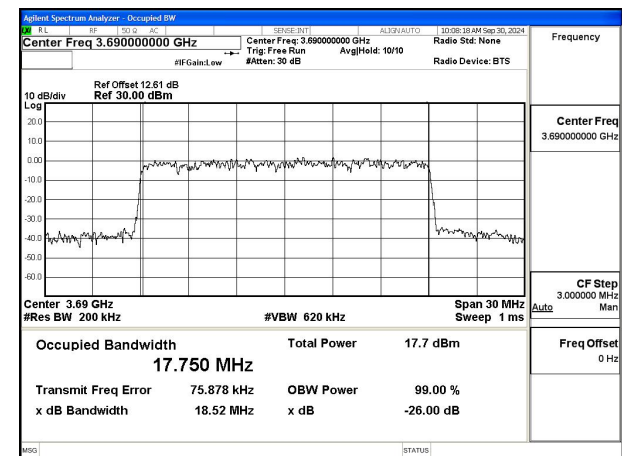


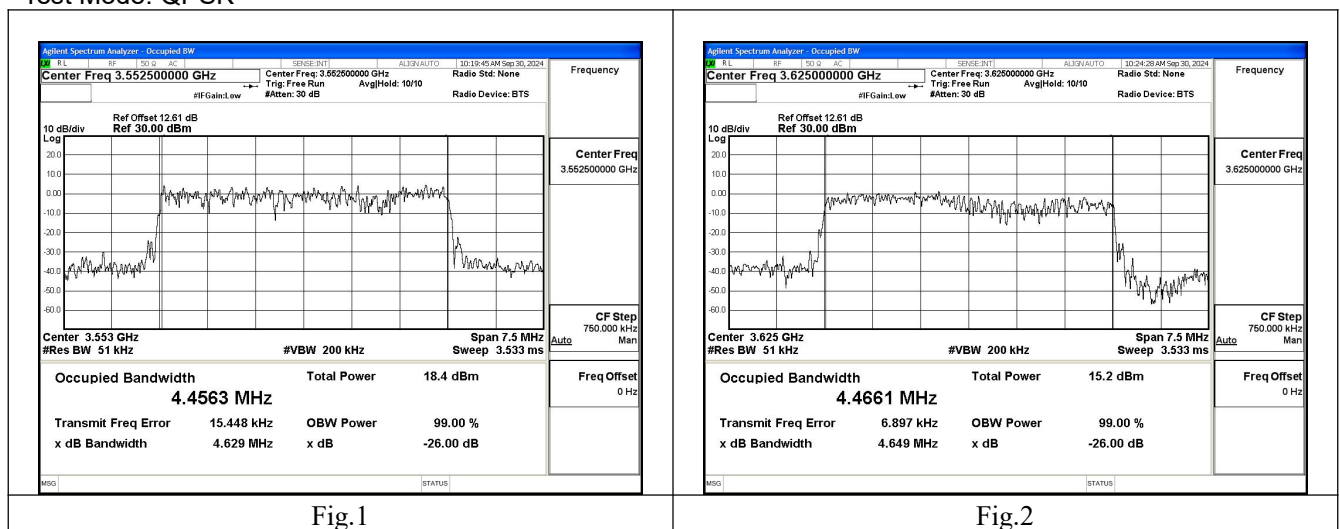
Fig.24

3 Emission Bandwidth

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)	
48	QPSK	3552.5	55265	5	25	0	4.629	Fig.1
48	QPSK	3625	55990	5	25	0	4.649	Fig.2
48	QPSK	3697.5	56715	5	25	0	4.737	Fig.3
48	QPSK	3555	55290	10	50	0	9.220	Fig.4
48	QPSK	3625	55990	10	50	0	9.202	Fig.5
48	QPSK	3695	56690	10	50	0	9.226	Fig.6
48	QPSK	3557.5	55315	15	75	0	13.880	Fig.7
48	QPSK	3625	55990	15	75	0	13.979	Fig.8
48	QPSK	3692.5	56665	15	75	0	13.980	Fig.9
48	QPSK	3560	55340	20	100	0	18.669	Fig.10
48	QPSK	3625	55990	20	100	0	18.469	Fig.11
48	QPSK	3690	56640	20	100	0	18.475	Fig.12

Band	Mode	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	Bandwidth of -26dB transmitter power (MHz)	
48	16QAM	3552.5	55265	5	25	0	4.691	Fig.13
48	16QAM	3625	55990	5	25	0	4.681	Fig.14
48	16QAM	3697.5	56715	5	25	0	4.640	Fig.15
48	16QAM	3555	55290	10	50	0	9.250	Fig.16
48	16QAM	3625	55990	10	50	0	9.289	Fig.17
48	16QAM	3695	56690	10	50	0	9.311	Fig.18
48	16QAM	3557.5	55315	15	75	0	13.810	Fig.19
48	16QAM	3625	55990	15	75	0	13.800	Fig.20
48	16QAM	3692.5	56665	15	75	0	13.804	Fig.21
48	16QAM	3560	55340	20	100	0	18.410	Fig.22
48	16QAM	3625	55990	20	100	0	18.481	Fig.23
48	16QAM	3690	56640	20	100	0	18.525	Fig.24

Test Mode: QPSK



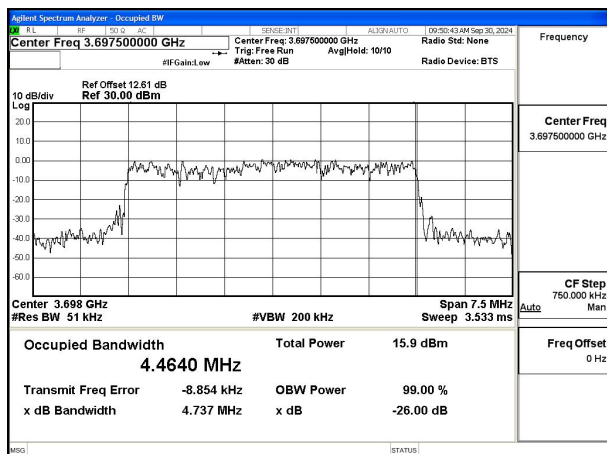


Fig.3

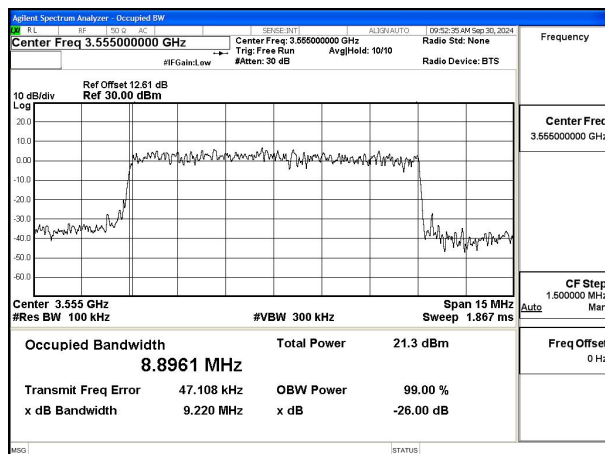


Fig.4

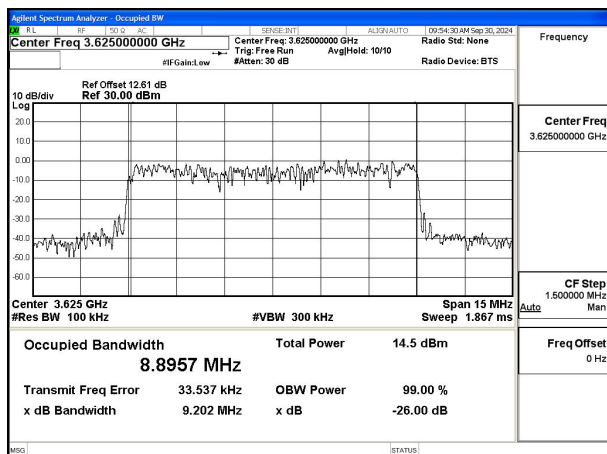


Fig.5

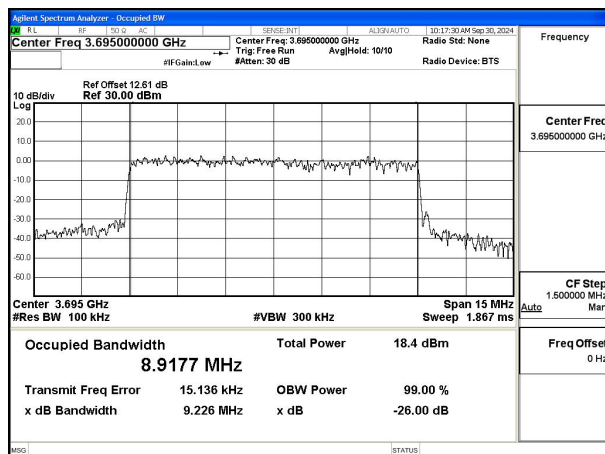


Fig.6

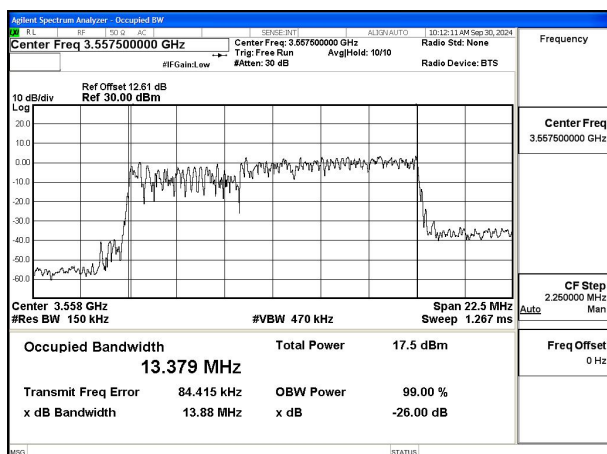


Fig.7

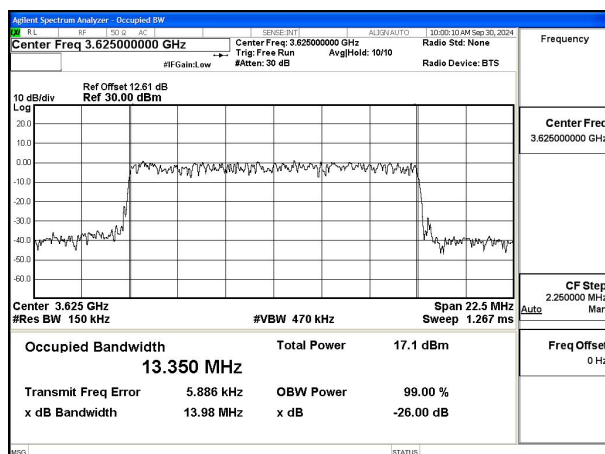


Fig.8

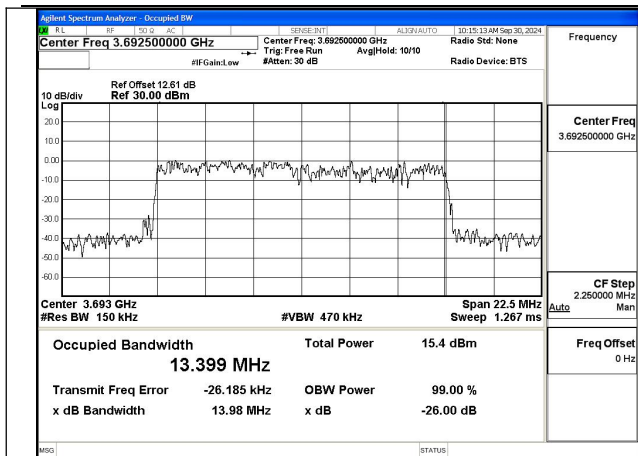


Fig.9

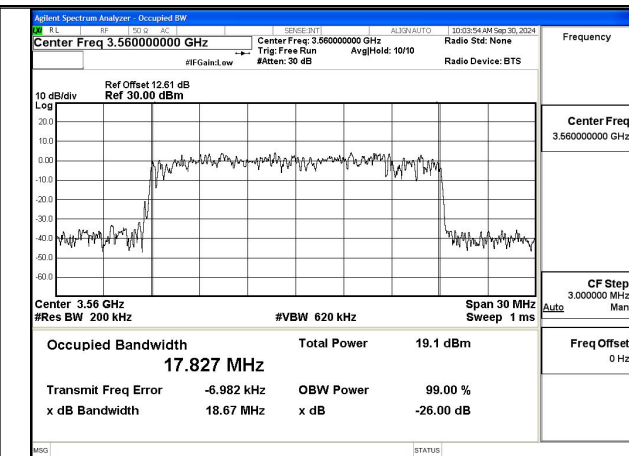


Fig.10

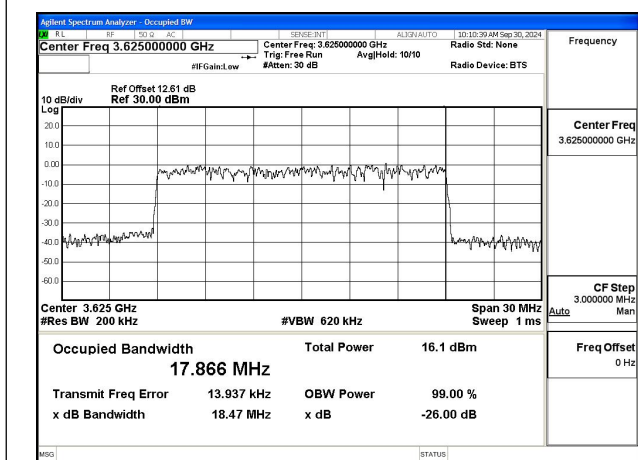


Fig.11

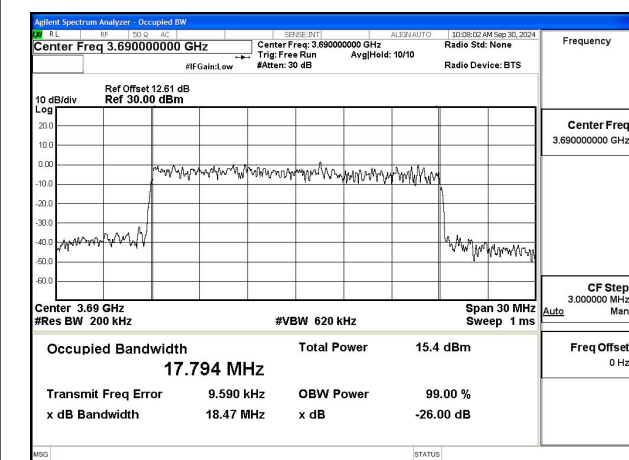


Fig.12

Test Mode: 16QAM

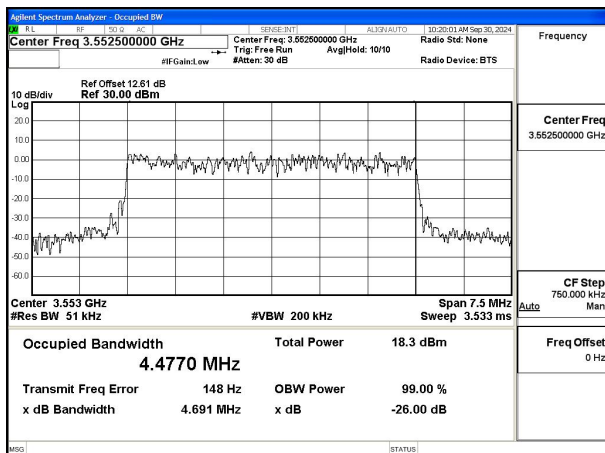


Fig.13

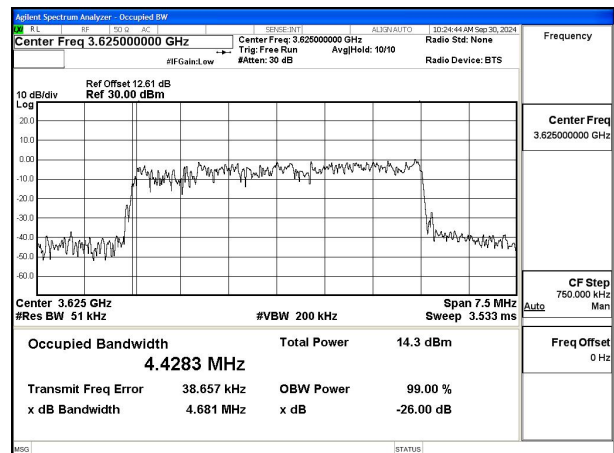


Fig.14

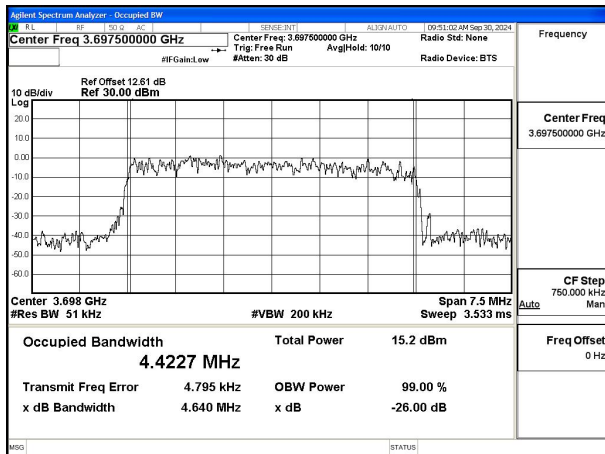


Fig.15

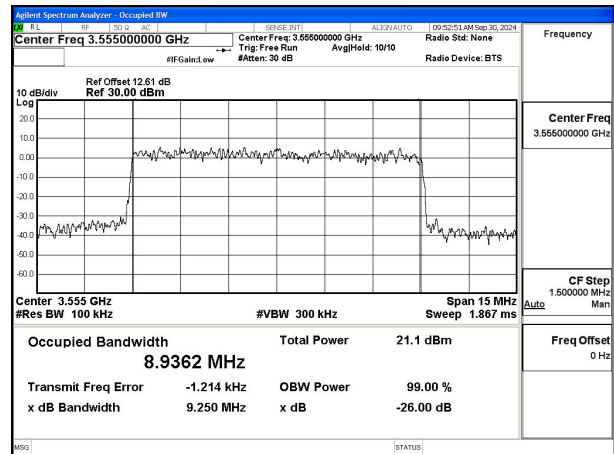


Fig.16

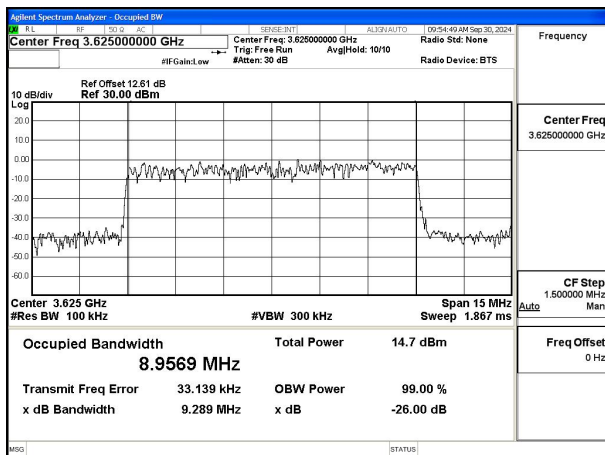


Fig.17

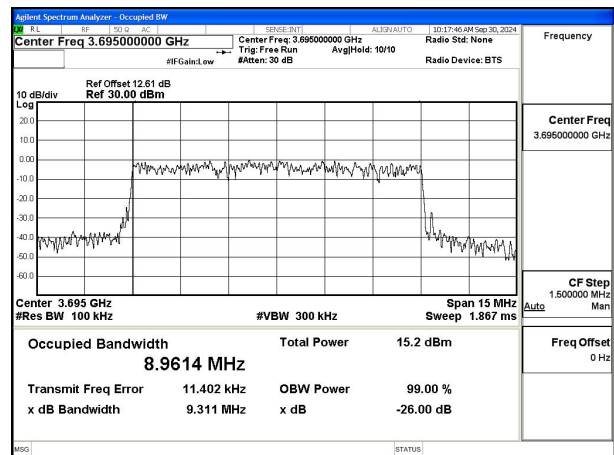


Fig.18

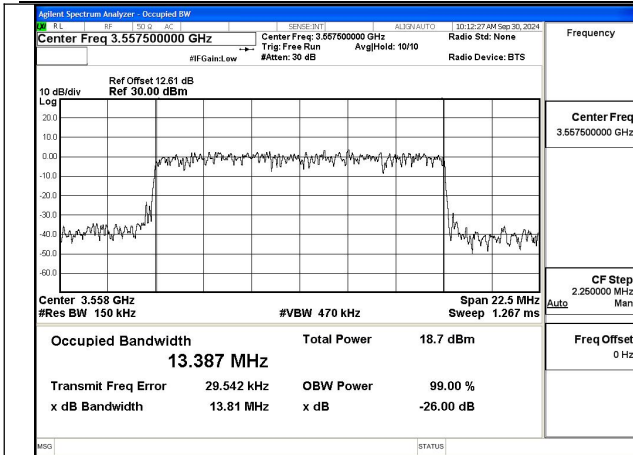


Fig.19

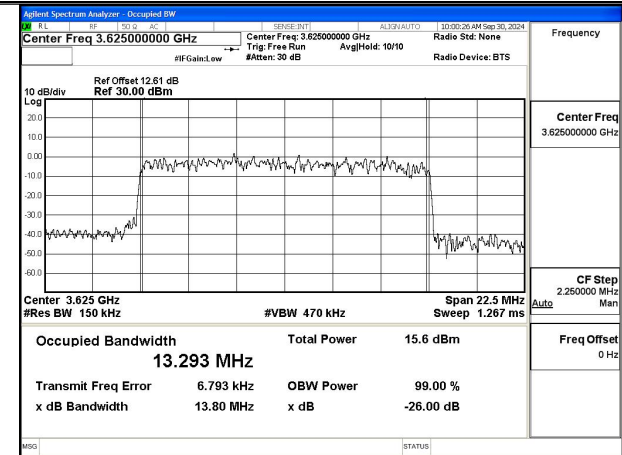


Fig.20

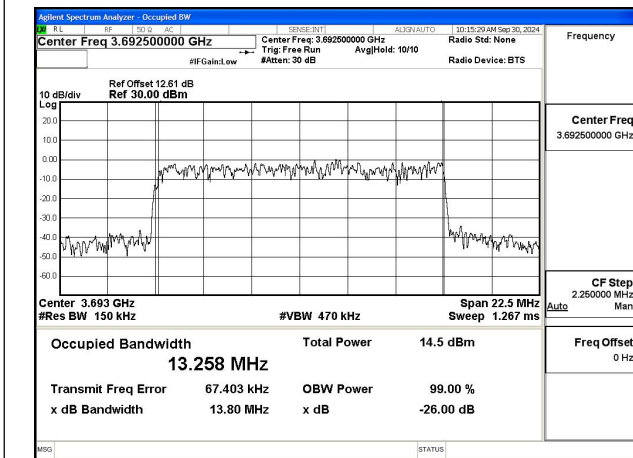


Fig.21

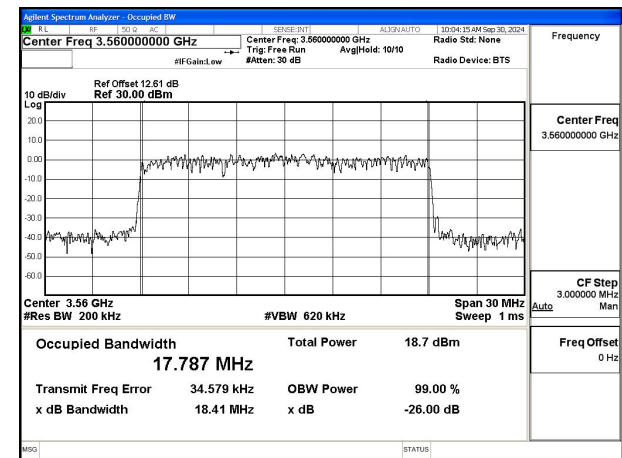


Fig.22

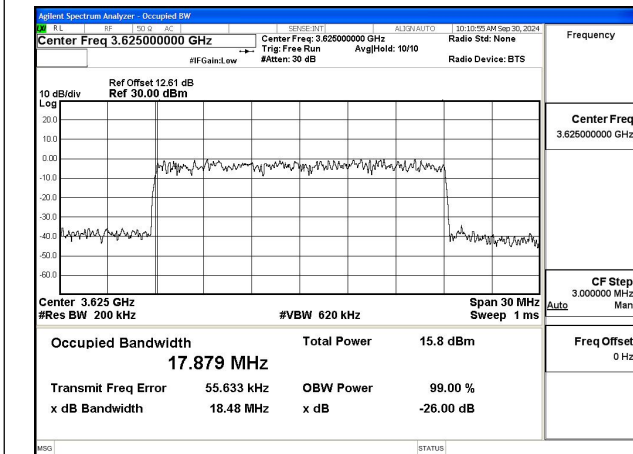


Fig.23

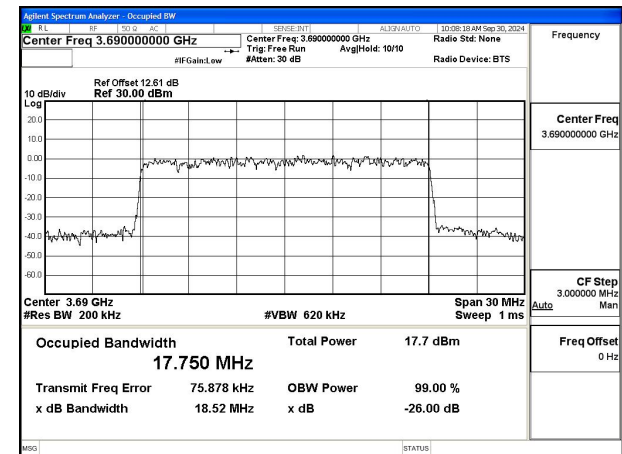


Fig.24

4 Peak-Average Ratio

Band	Carrier frequency (MHz)	Channel	BW (MHz)	RB Size	RB Offset	QPSK	16-QAM
48	3552.5	55265	5	1	24	Fig.1	Fig.2
48	3552.5	55265	5	25	0	Fig.4	Fig.5
48	3625	55990	5	1	24	Fig.7	Fig.8
48	3625	55990	5	25	0	Fig.10	Fig.11
48	3697.5	56715	5	1	24	Fig.13	Fig.14
48	3697.5	56715	5	25	0	Fig.16	Fig.17
48	3555	55290	10	1	49	Fig.19	Fig.20
48	3555	55290	10	50	0	Fig.22	Fig.23
48	3625	55990	10	1	49	Fig.25	Fig.26
48	3625	55990	10	50	0	Fig.28	Fig.29
48	3695	56690	10	1	49	Fig.31	Fig.32
48	3695	56690	10	50	0	Fig.34	Fig.35
48	3557.5	55315	15	1	74	Fig.37	Fig.38
48	3557.5	55315	15	75	0	Fig.40	Fig.41
48	3625	55990	15	1	74	Fig.43	Fig.44
48	3625	55990	15	75	0	Fig.46	Fig.47
48	3692.5	56665	15	1	74	Fig.49	Fig.50
48	3692.5	56665	15	75	0	Fig.52	Fig.53
48	3560	55340	20	1	99	Fig.55	Fig.56
48	3560	55340	20	100	0	Fig.58	Fig.59
48	3625	55990	20	1	99	Fig.61	Fig.62
48	3625	55990	20	100	0	Fig.64	Fig.65
48	3690	56640	20	1	99	Fig.67	Fig.68
48	3690	56640	20	100	0	Fig.70	Fig.71

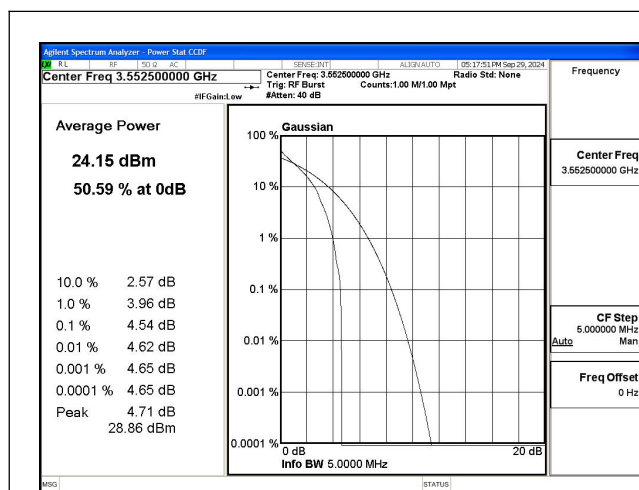


Fig.1

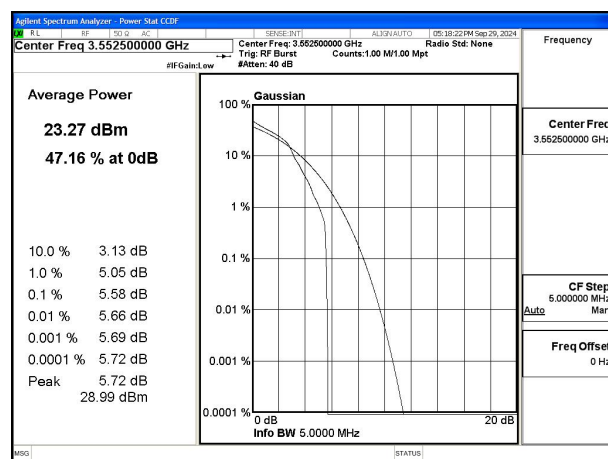


Fig.2

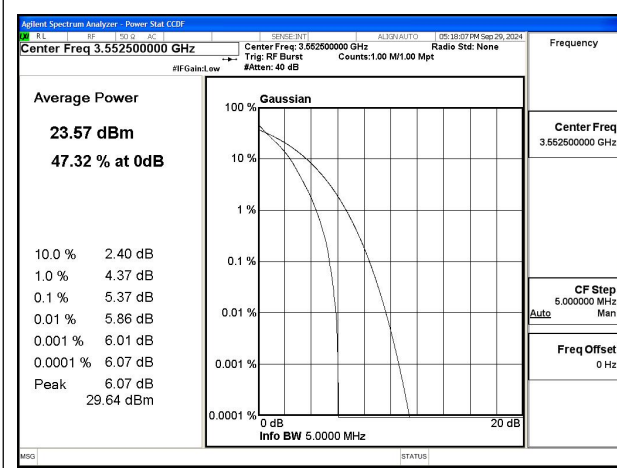


Fig.4

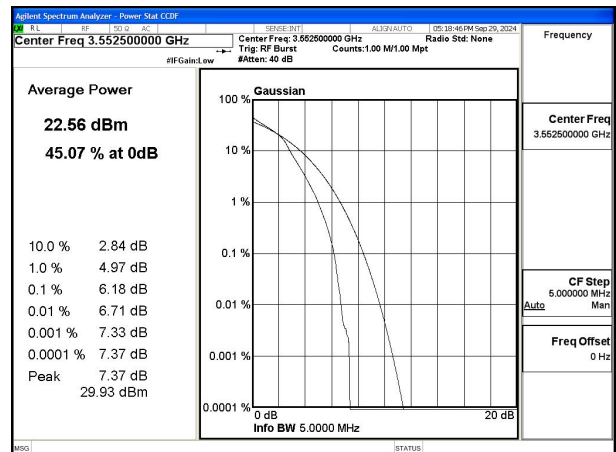


Fig.5

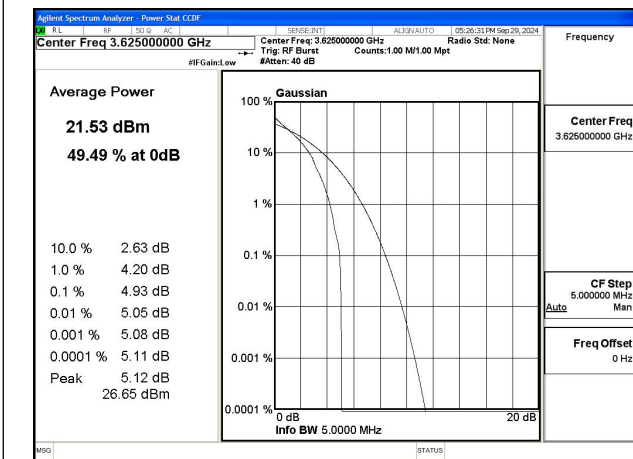


Fig.7

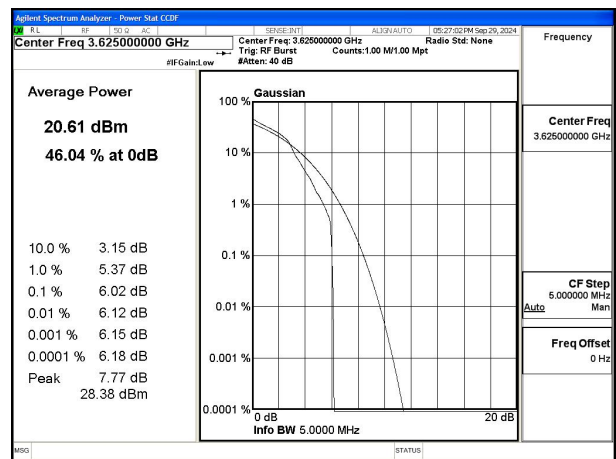


Fig.8

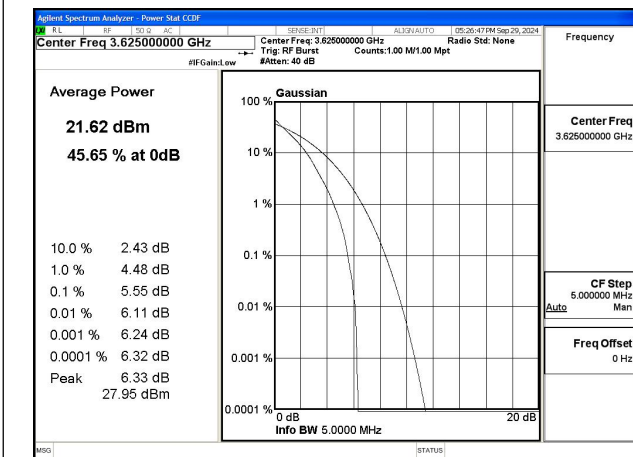


Fig.10

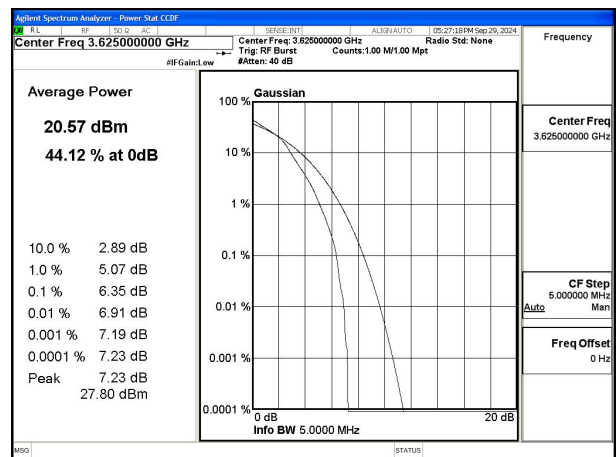


Fig.11