

Occupied Bandwidth

LTE Mode Test Data

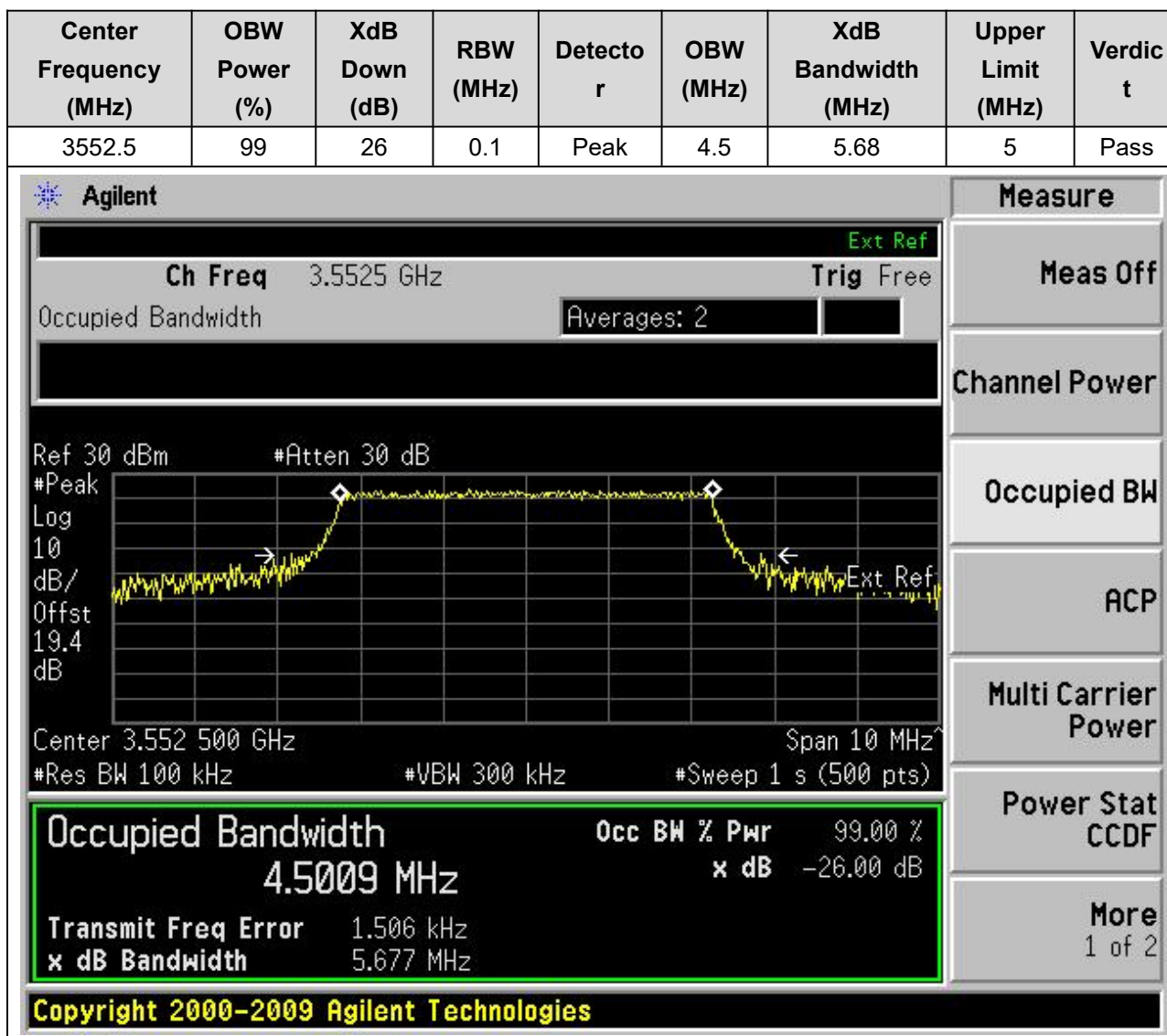
Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	OBW (MHz)	XdB Bandwidth (MHz)	Verdict
Band 48	5 MHz	LCH	QPSK	RB25#0	4.5	5.68	PASS
			16-QAM	RB25#0	4.48	5.22	PASS
			64-QAM	RB25#0	4.49	5.31	PASS
		MCH	QPSK	RB25#0	4.48	5.19	PASS
			16-QAM	RB25#0	4.49	5.13	PASS
			64-QAM	RB25#0	4.5	5.37	PASS
		HCH	QPSK	RB25#0	4.48	5.5	PASS
			16-QAM	RB25#0	4.48	5.23	PASS
			64-QAM	RB25#0	4.5	5.27	PASS
	10 MHz	LCH	QPSK	RB50#0	8.99	10.83	PASS
			16-QAM	RB50#0	8.97	10.44	PASS
			64-QAM	RB50#0	8.98	10.17	PASS
		MCH	QPSK	RB50#0	9	10.51	PASS
			16-QAM	RB50#0	8.96	10.31	PASS
			64-QAM	RB50#0	9	11.37	PASS
		HCH	QPSK	RB50#0	8.95	10.34	PASS
			16-QAM	RB50#0	9	10.44	PASS
			64-QAM	RB50#0	9	10.38	PASS
	15 MHz	LCH	QPSK	RB75#0	13.52	14.38	PASS
			16-QAM	RB75#0	13.48	14.51	PASS
			64-QAM	RB75#0	13.47	14.41	PASS
		MCH	QPSK	RB75#0	13.5	14.47	PASS
			16-QAM	RB75#0	13.46	14.5	PASS
			64-QAM	RB75#0	13.48	14.42	PASS
		HCH	QPSK	RB75#0	13.56	14.36	PASS
			16-QAM	RB75#0	13.48	14.45	PASS
			64-QAM	RB75#0	13.54	14.44	PASS
	20 MHz	LCH	QPSK	RB100#0	17.99	19.31	PASS
			16-QAM	RB100#0	17.96	19.39	PASS
			64-QAM	RB100#0	17.9	19.51	PASS
		MCH	QPSK	RB100#0	17.97	19.87	PASS
			16-QAM	RB100#0	18	19.49	PASS
			64-QAM	RB100#0	17.95	19.63	PASS
		HCH	QPSK	RB100#0	17.98	19.43	PASS
			16-QAM	RB100#0	17.92	19.46	PASS
			64-QAM	RB100#0	17.97	19.61	PASS

NR Mode Test Data

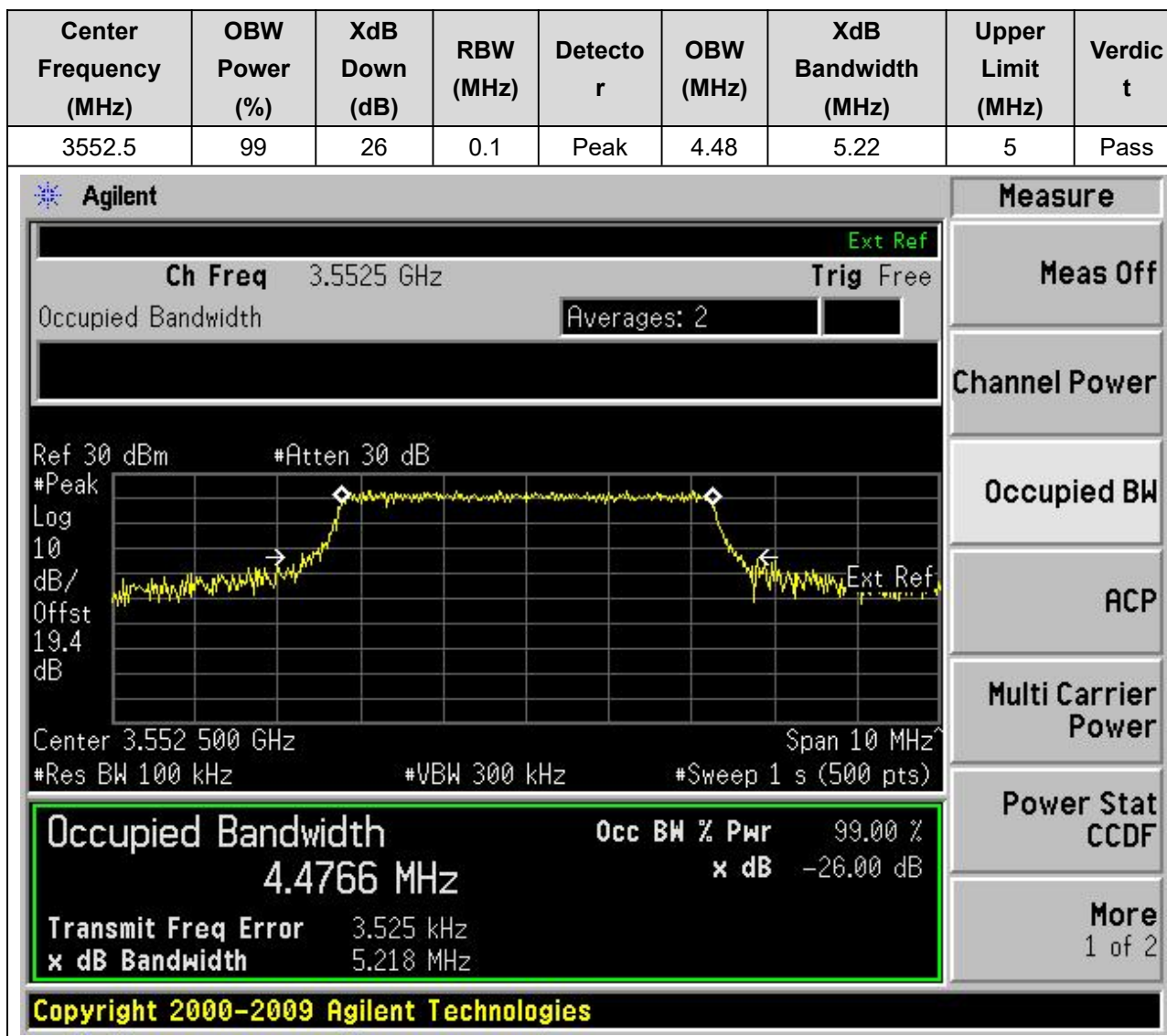
Test Band	NR Test Bandwidth	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	OBW (MHz)	XdB Bandwidth (MHz)	Verdict
n48	20 MHz	LCH	BPSK	51	0	17.81	18.27	Pass
		MCH	BPSK	51	0	17.8	18.3	Pass
		HCH	BPSK	51	0	17.82	18.4	Pass
	20 MHz	LCH	QPSK	51	0	18.34	20.29	Pass
		MCH	QPSK	51	0	18.39	20.26	Pass
		HCH	QPSK	51	0	18.34	20.23	Pass
	20 MHz	LCH	16QAM	51	0	18.28	20.18	Pass
		MCH	16QAM	51	0	18.36	20.15	Pass
		HCH	16QAM	51	0	18.3	20.14	Pass
	20 MHz	LCH	64QAM	51	0	18.46	20.32	Pass
		MCH	64QAM	51	0	18.41	20.21	Pass
		HCH	64QAM	51	0	18.41	20.22	Pass
	20 MHz	LCH	256QAM	51	0	18.27	20.18	Pass
		MCH	256QAM	51	0	18.32	20.26	Pass
		HCH	256QAM	51	0	18.28	20.2	Pass
	40 MHz	LCH	BPSK	106	0	35.75	38.32	Pass
		MCH	BPSK	106	0	35.78	38.29	Pass
		HCH	BPSK	106	0	35.77	38.33	Pass
	40 MHz	LCH	QPSK	106	0	38.05	41.13	Pass
		MCH	QPSK	106	0	38.01	40.73	Pass
		HCH	QPSK	106	0	38.01	40.88	Pass
	40 MHz	LCH	16QAM	106	0	38.03	41.08	Pass
		MCH	16QAM	106	0	38.1	41.11	Pass
		HCH	16QAM	106	0	38.1	41.1	Pass
	40 MHz	LCH	64QAM	106	0	38.13	41.18	Pass
		MCH	64QAM	106	0	38.17	41.16	Pass
		HCH	64QAM	106	0	38.14	41.06	Pass
	40 MHz	LCH	256QAM	106	0	38.07	41.06	Pass
		MCH	256QAM	106	0	38.08	41.09	Pass
		HCH	256QAM	106	0	38.06	40.99	Pass

2. LTE_Band48

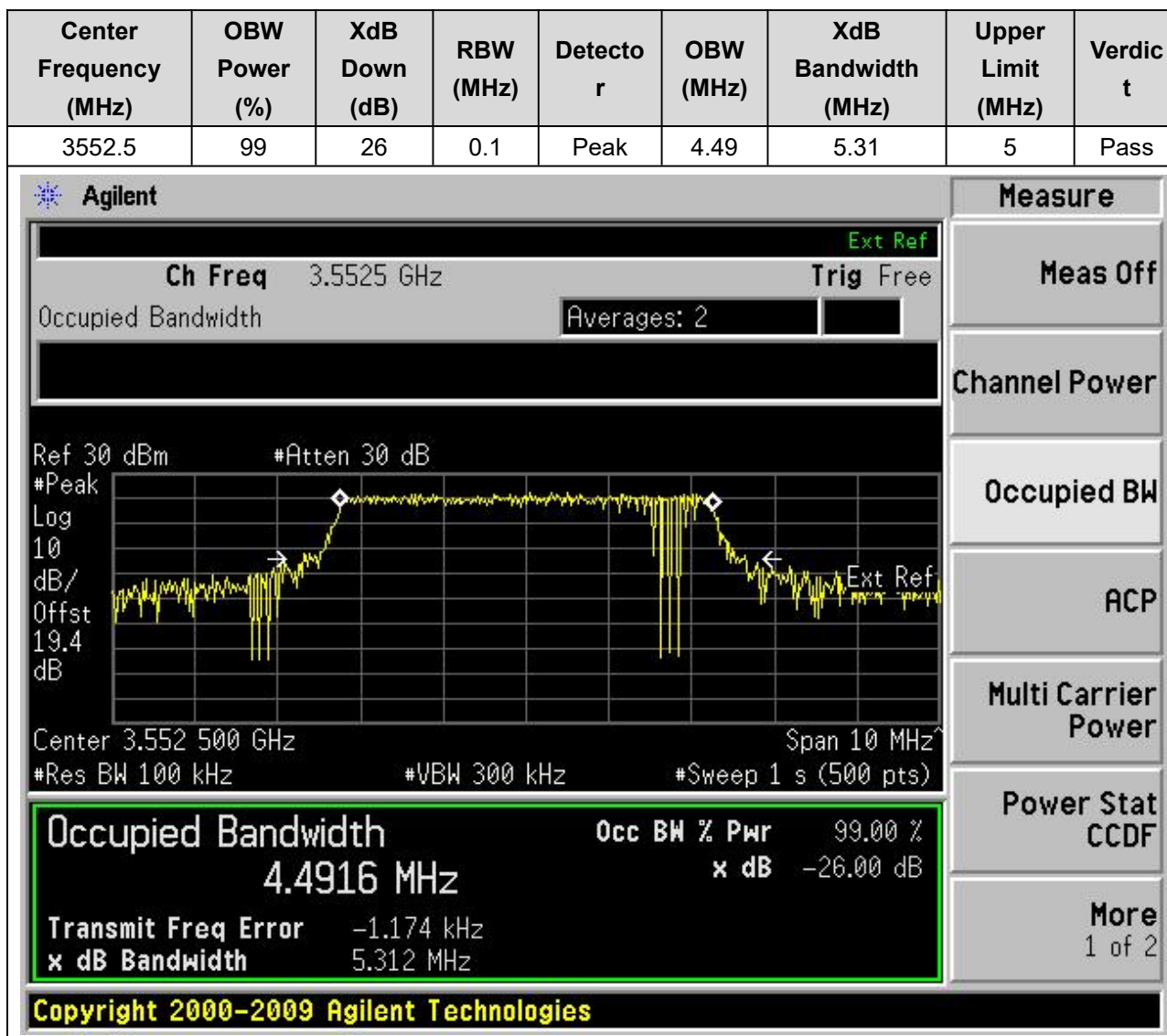
2.1 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55265, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)



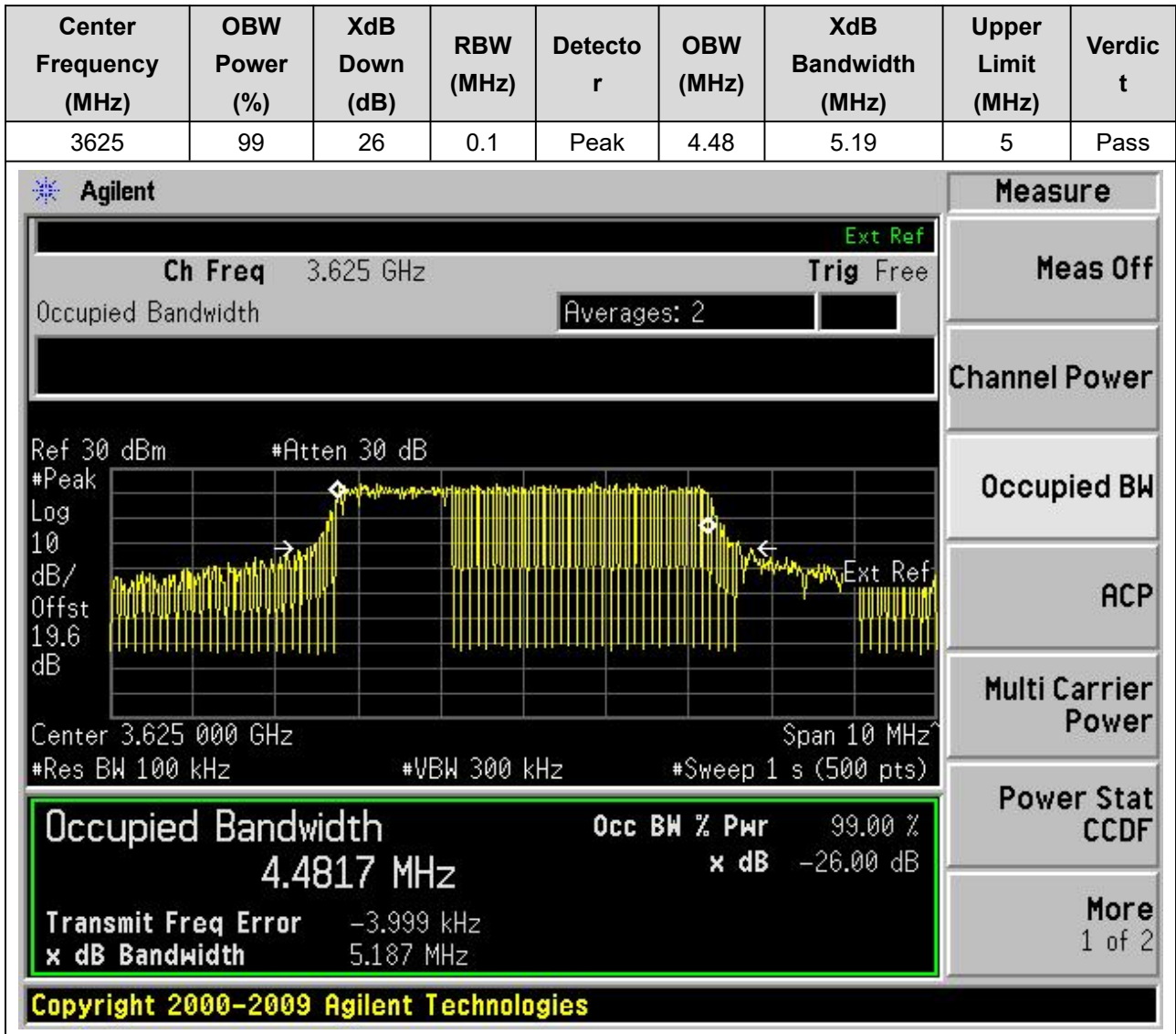
2.2 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55265, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)



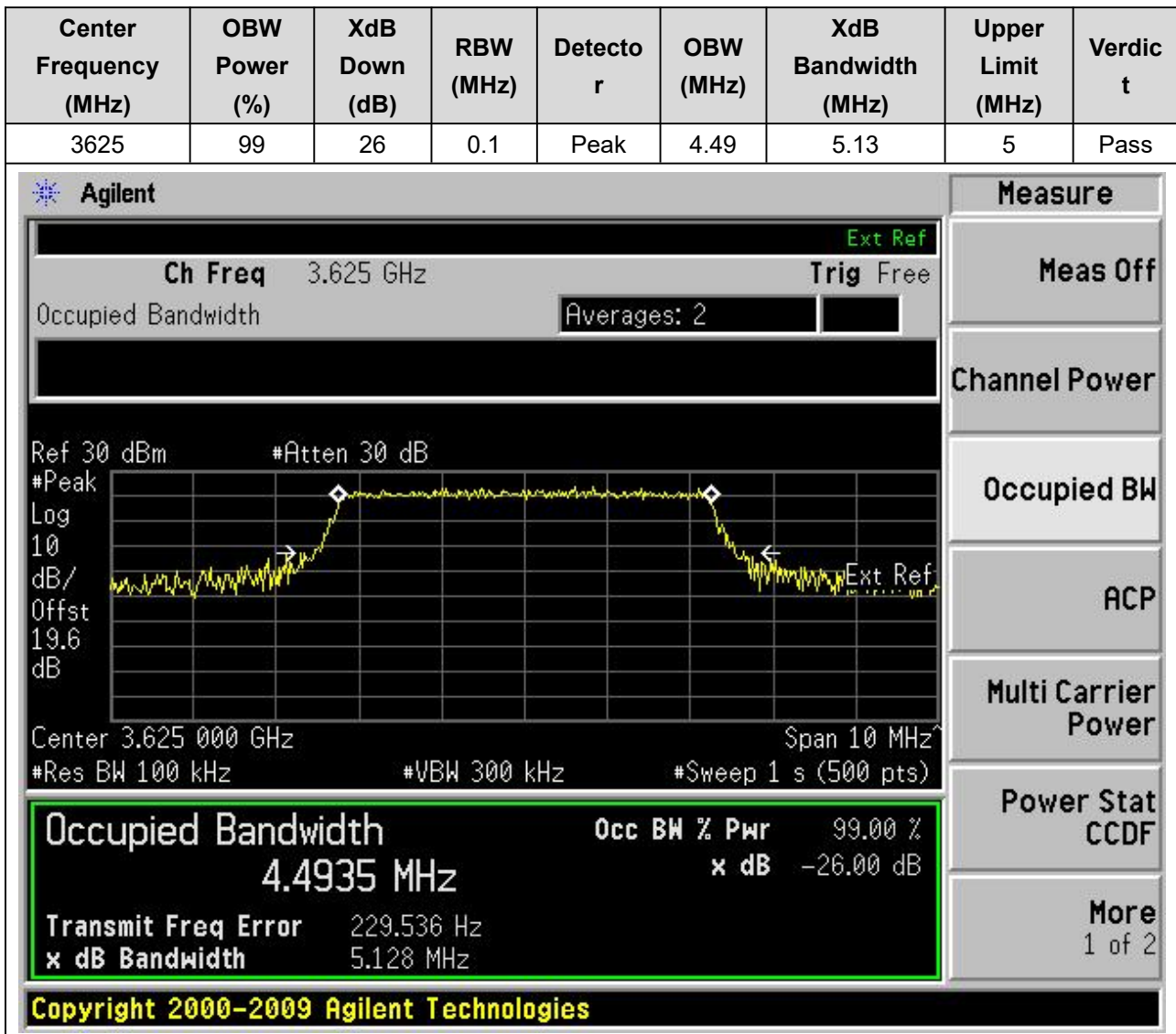
2.3 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55265, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)



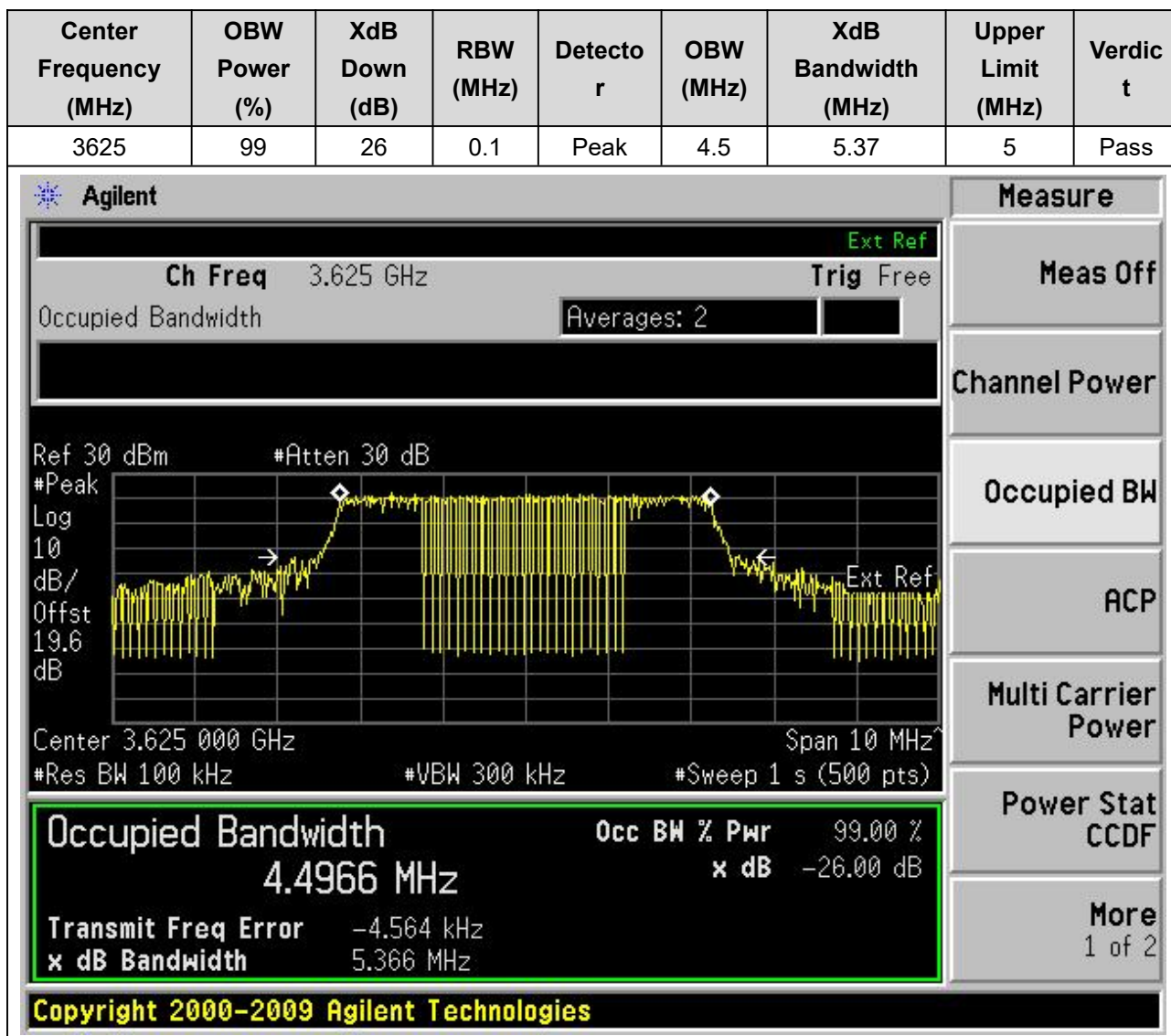
2.4 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)



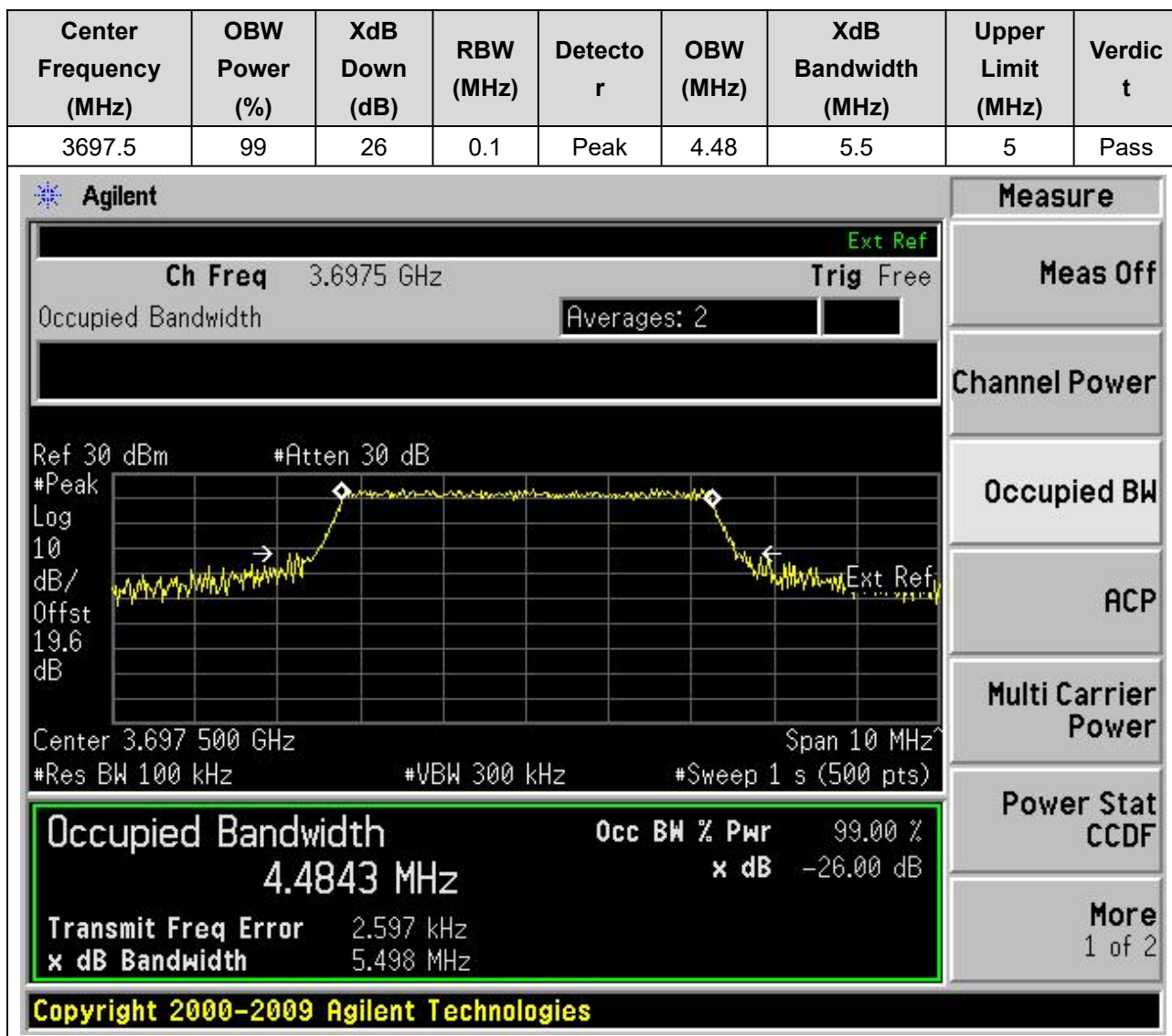
2.5 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)



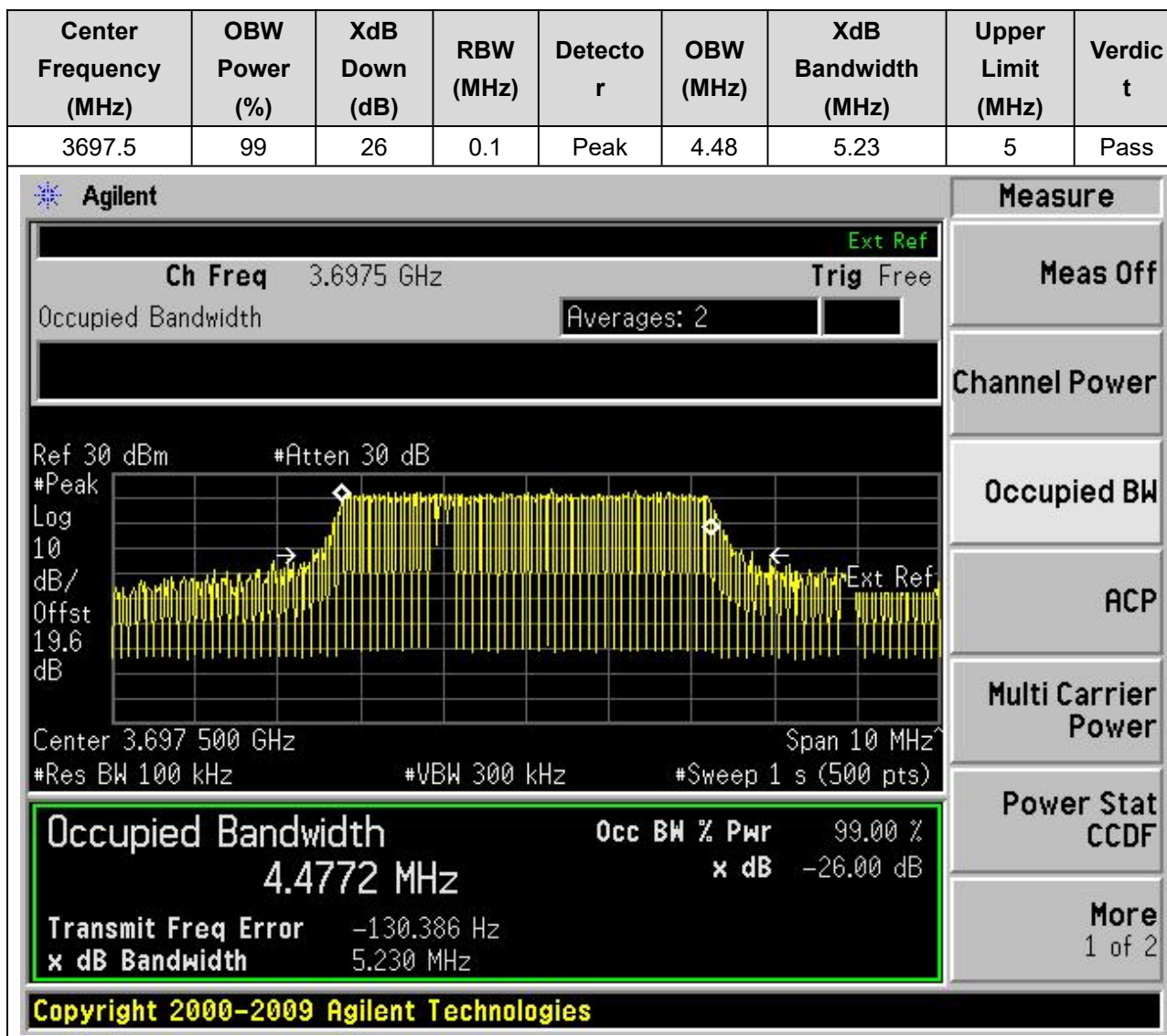
2.6 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)



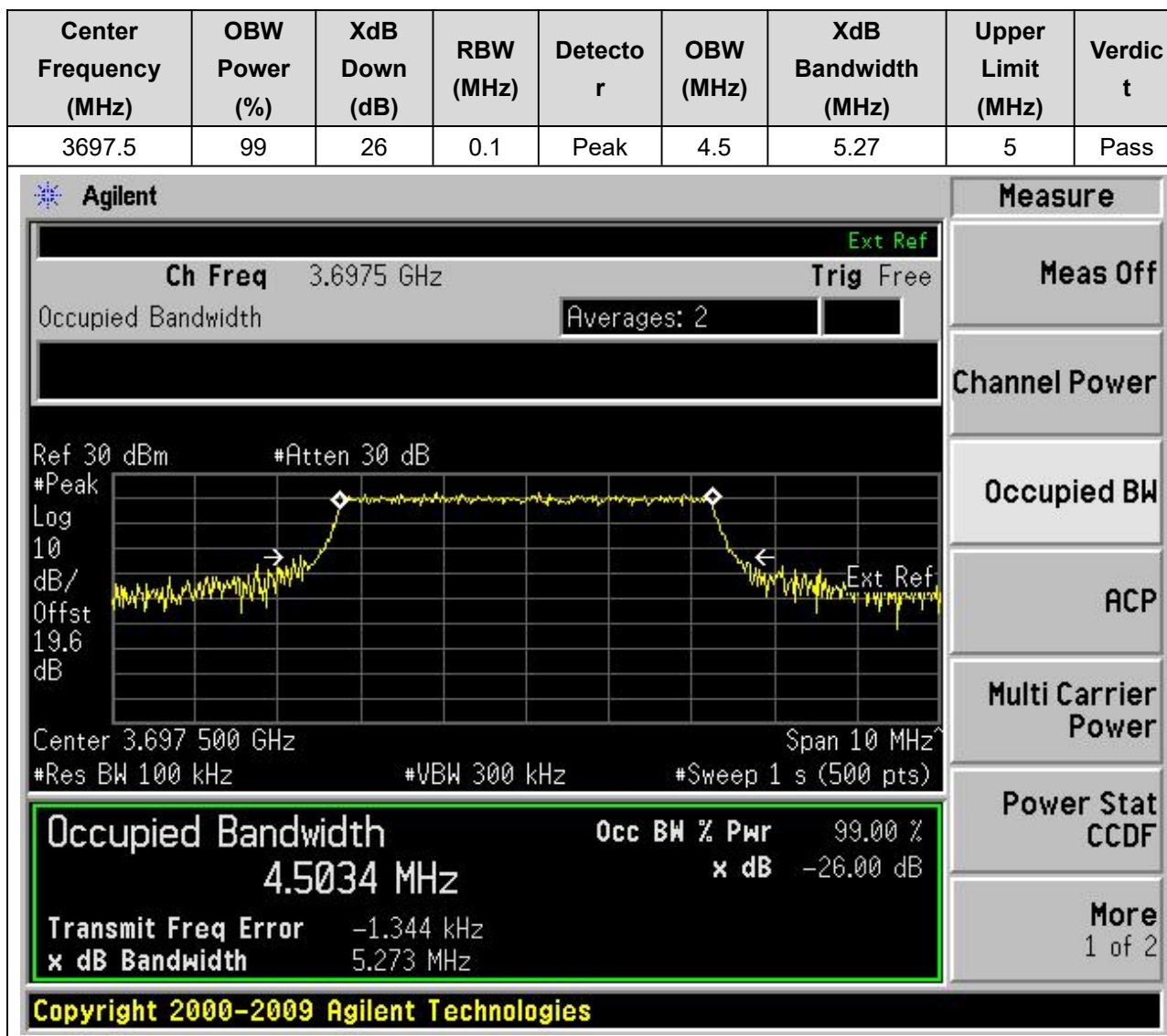
2.7 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56715, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)



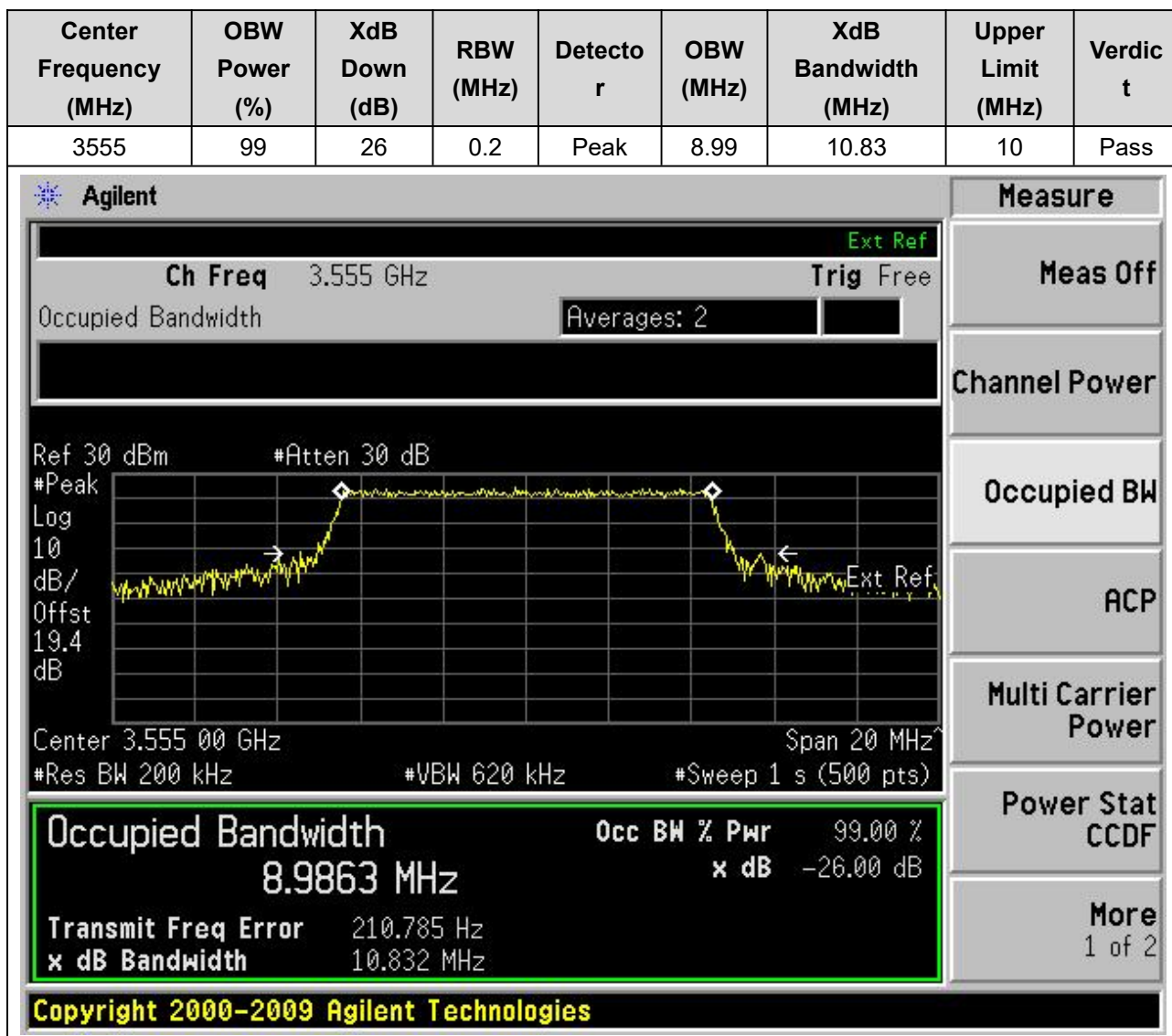
2.8 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56715, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)



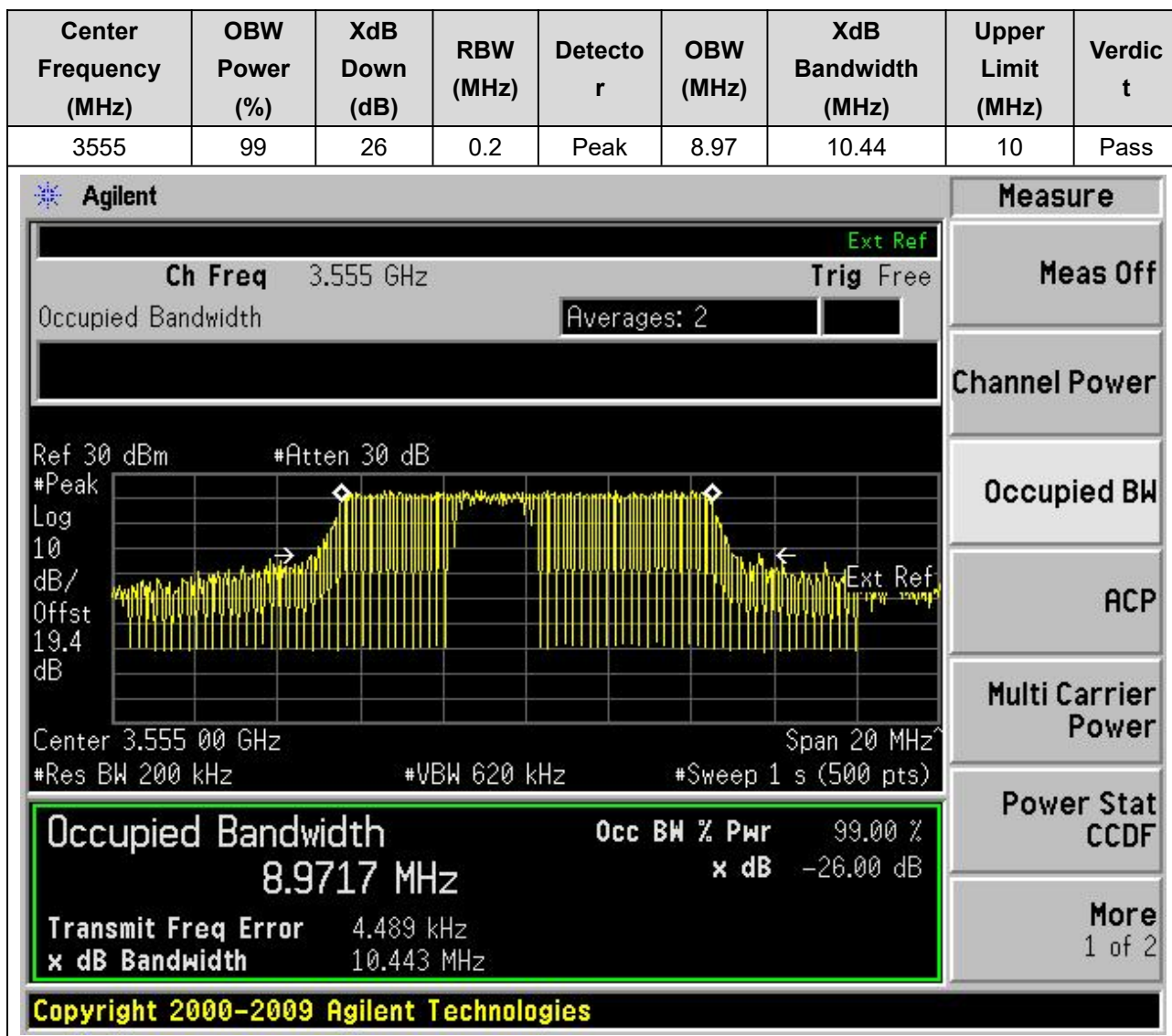
2.9 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56715, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)



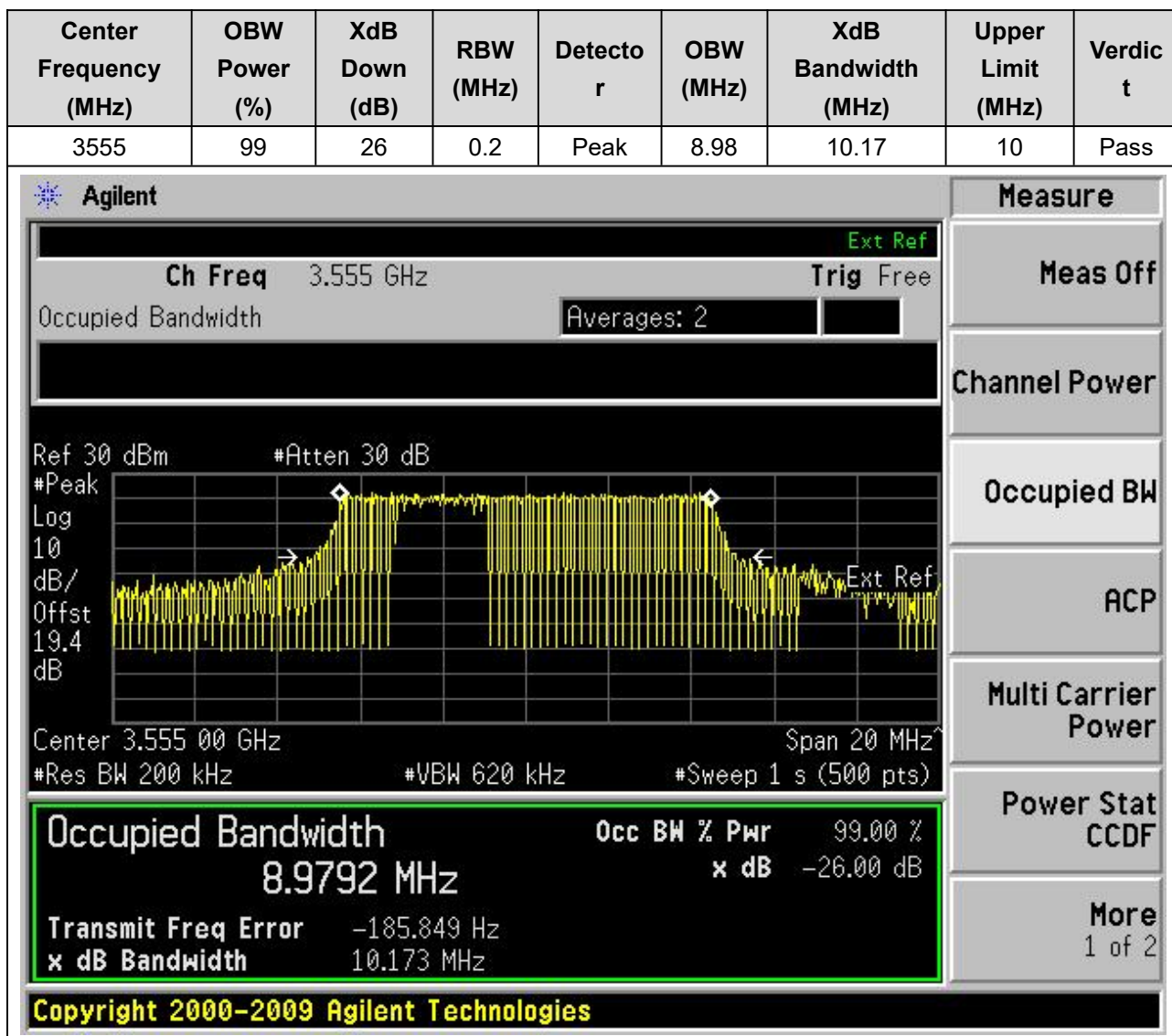
2.10 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55290, Bandwidth:10, Modulation:QPSK, RB Number:50, RB Position:0)



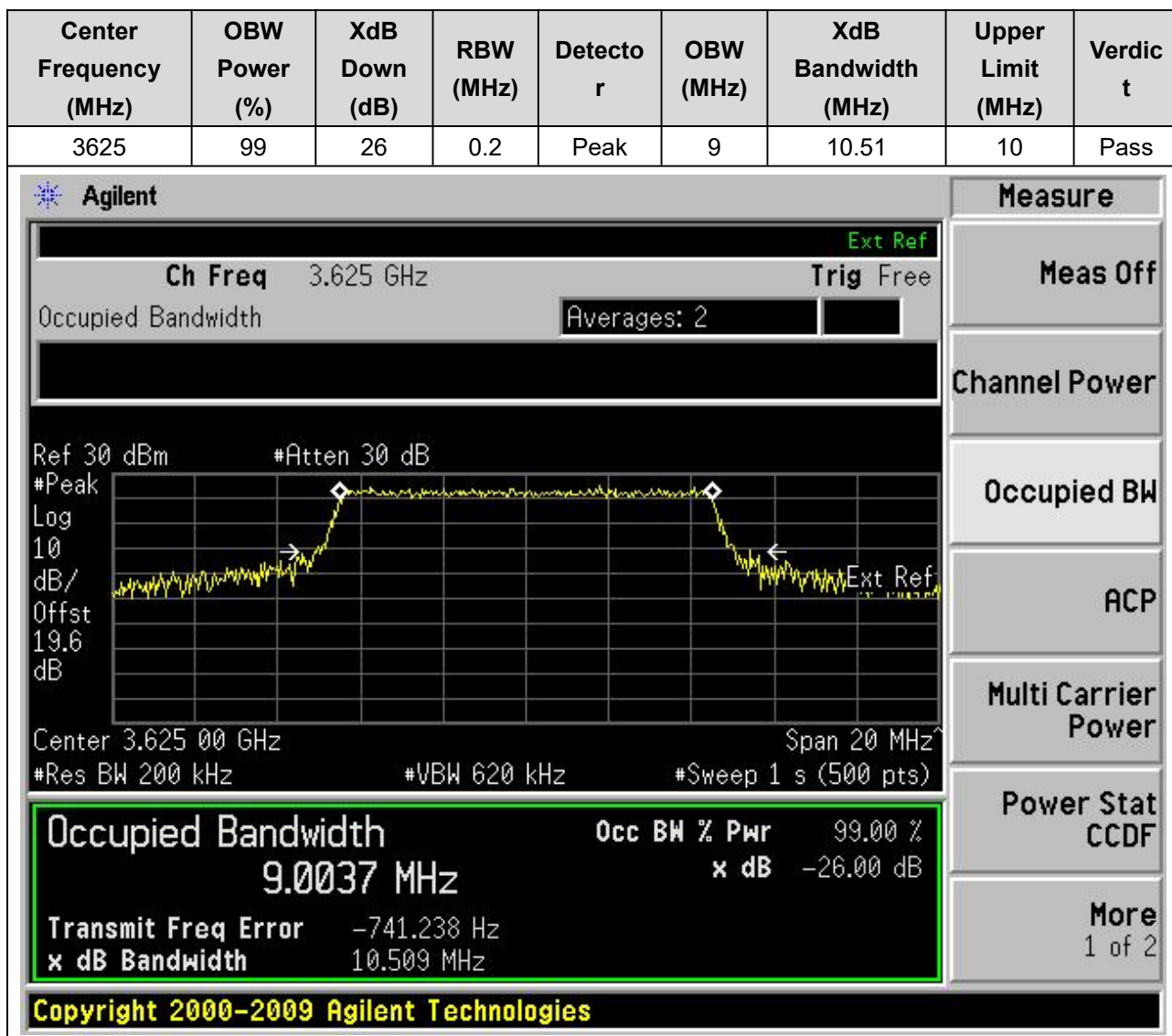
2.11 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55290, Bandwidth:10, Modulation:16QAM, RB Number:50, RB Position:0)



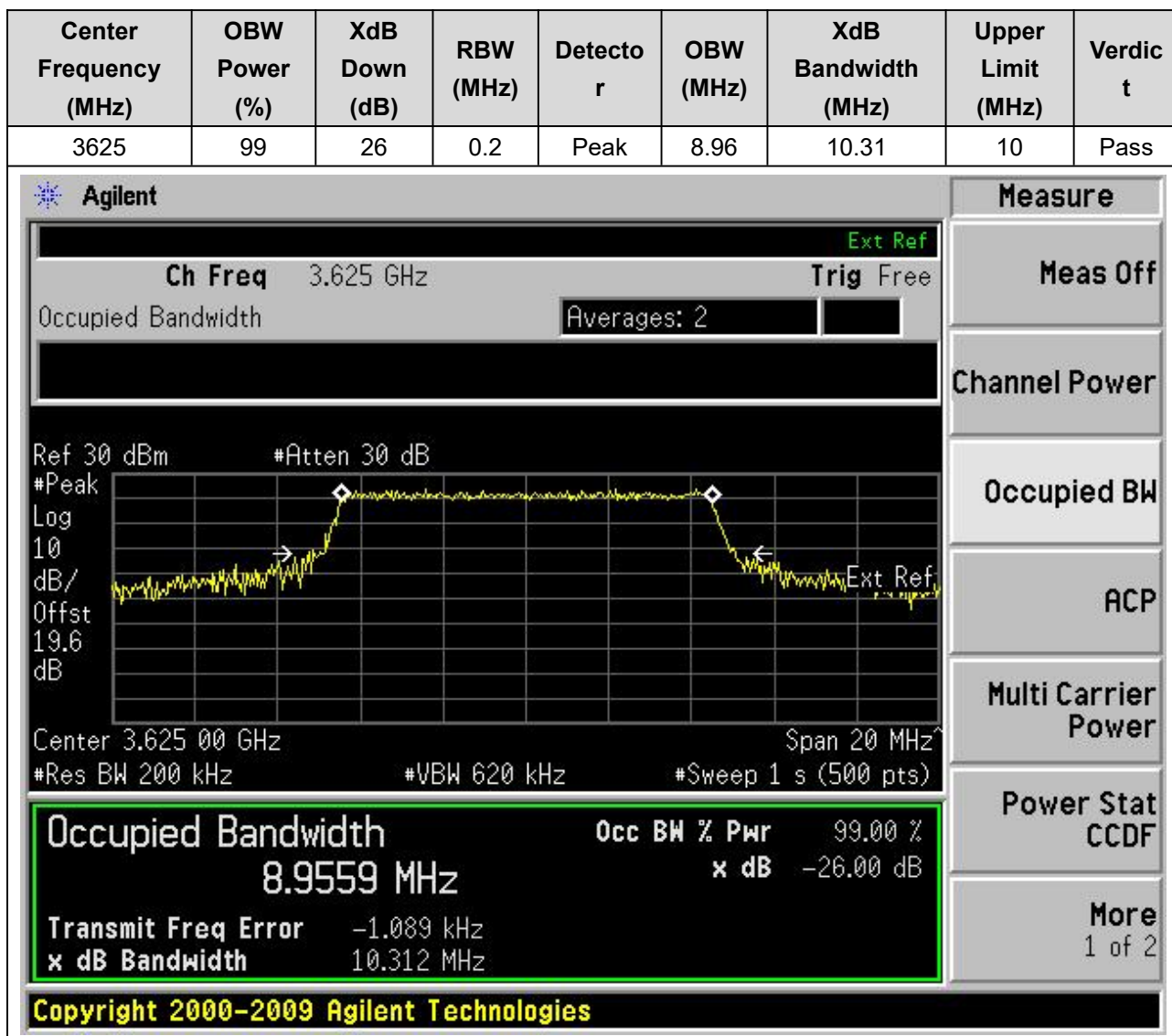
2.12 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55290, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)



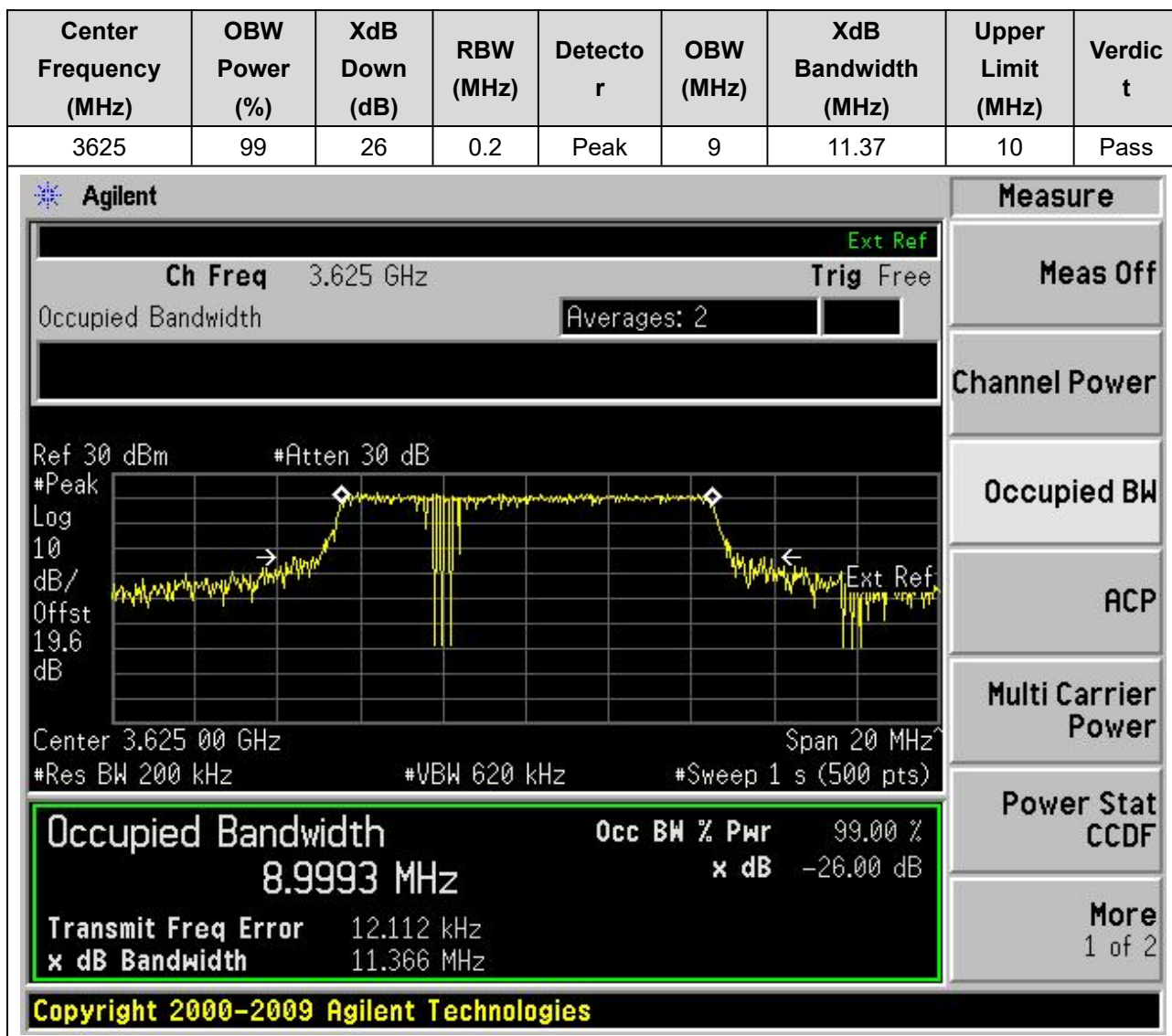
2.13 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:10, Modulation:QPSK, RB Number:50, RB Position:0)



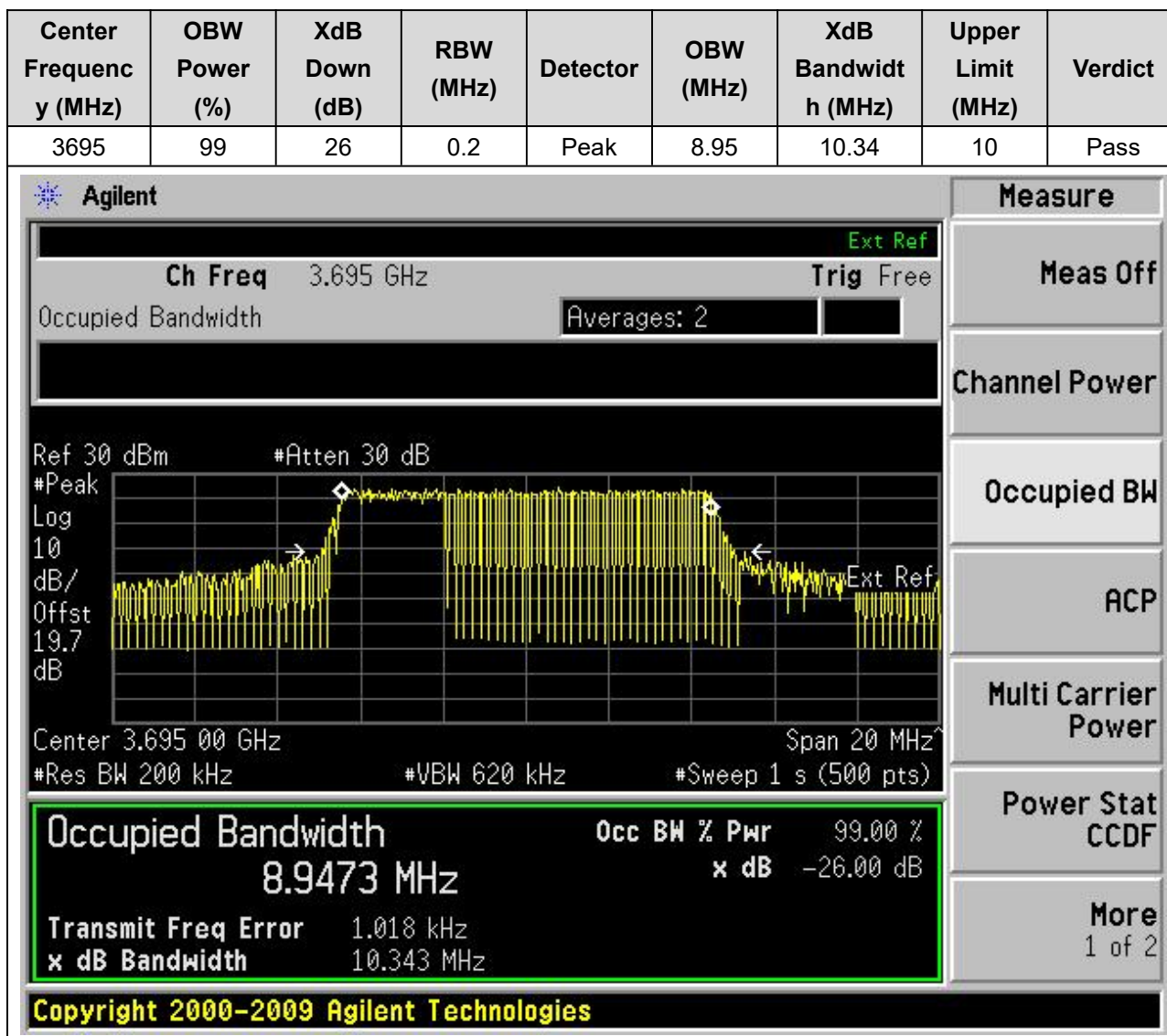
2.14 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:10, Modulation:16QAM, RB Number:50, RB Position:0)



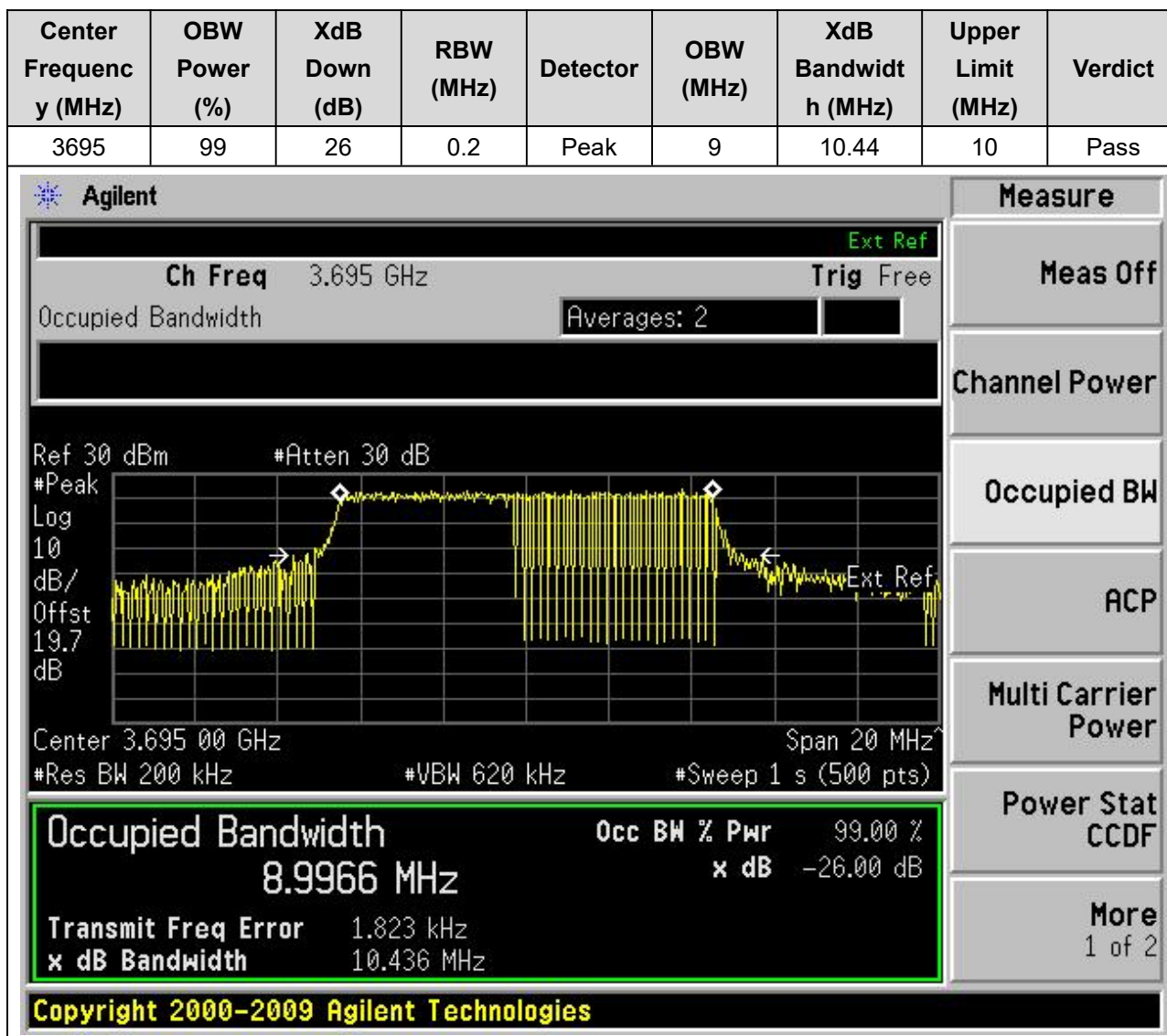
2.15 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)



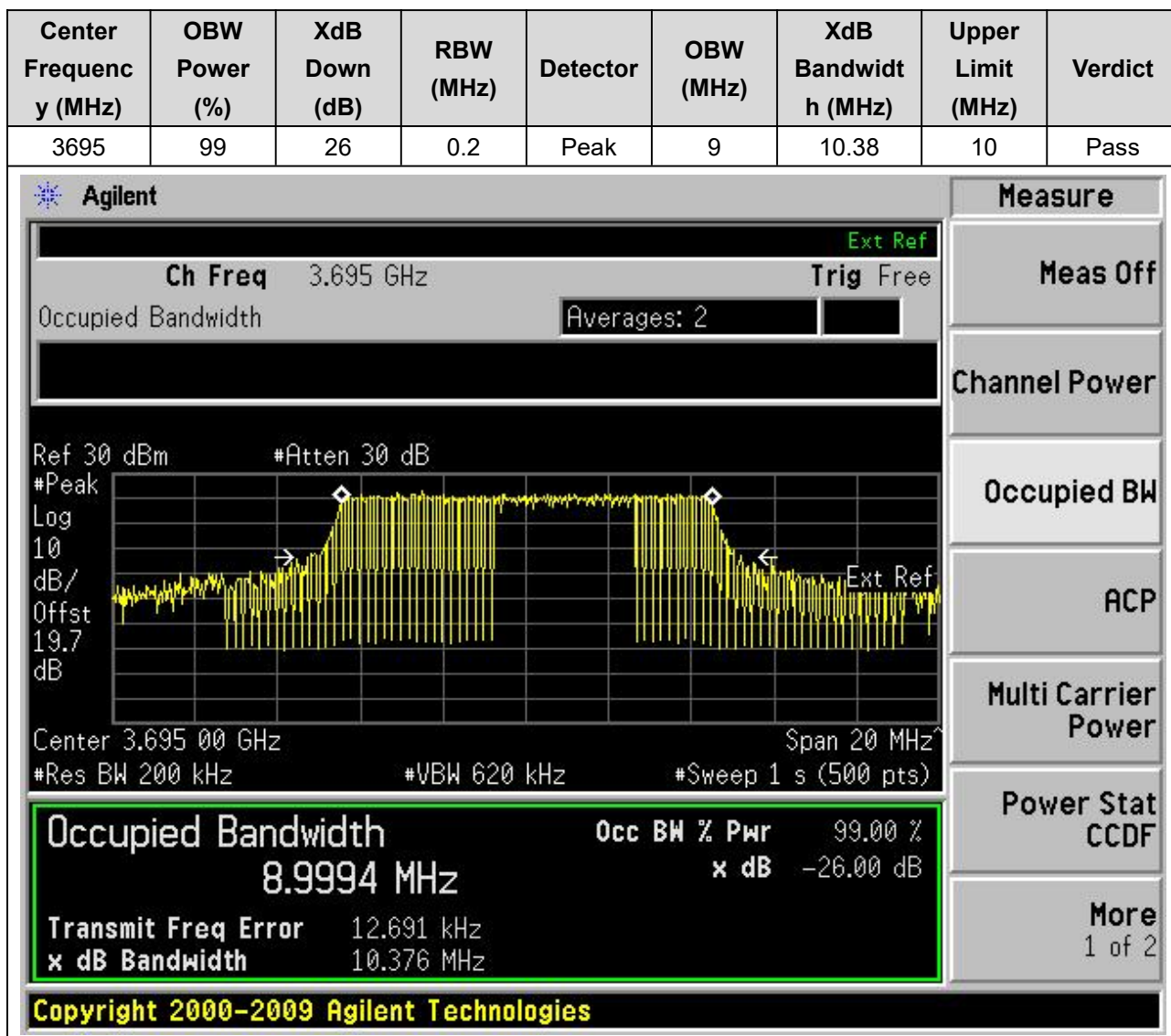
2.16 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56690, Bandwidth:10, Modulation:QPSK, RB Number:50, RB Position:0)



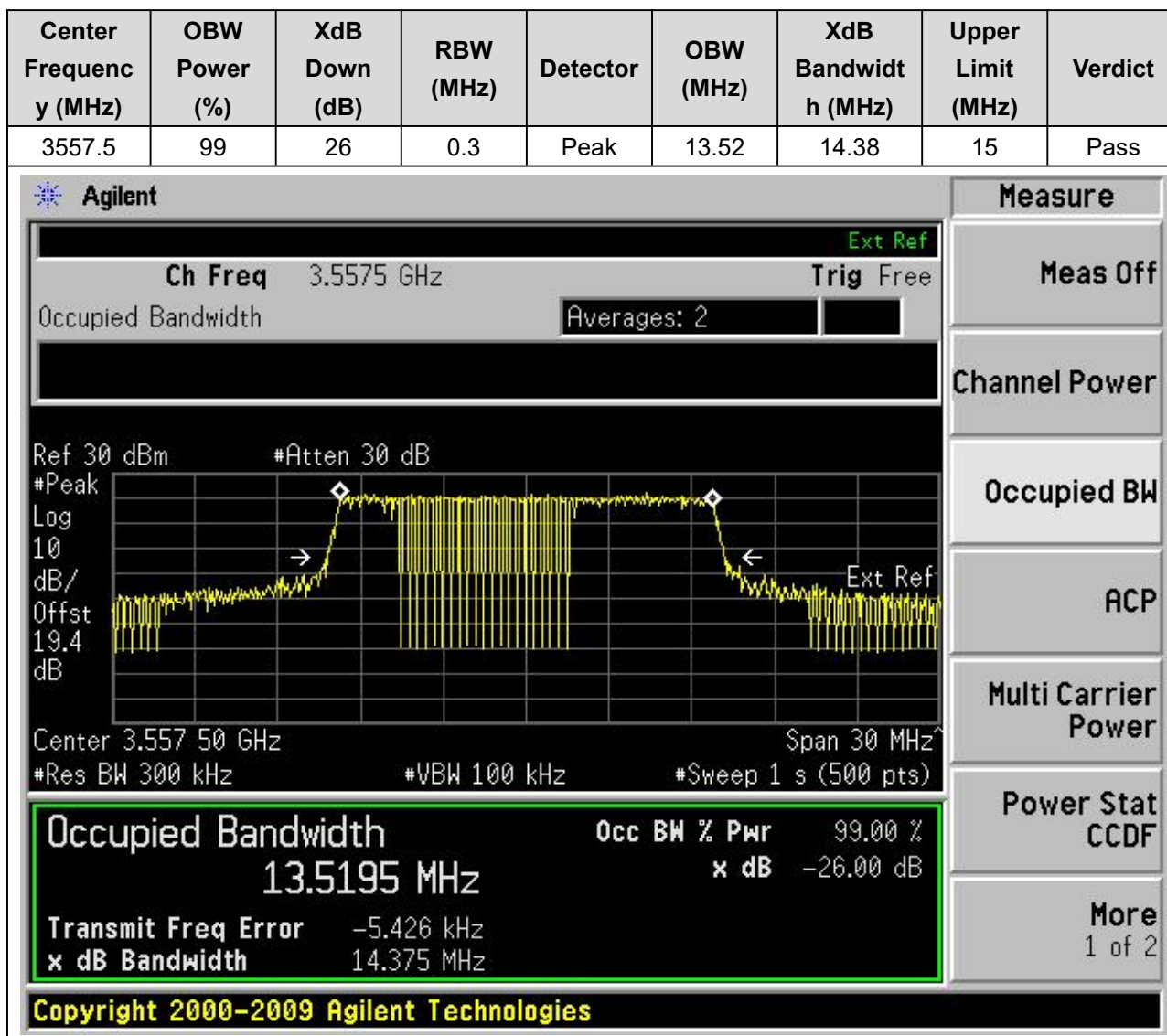
2.17 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56690, Bandwidth:10, Modulation:16QAM, RB Number:50, RB Position:0)



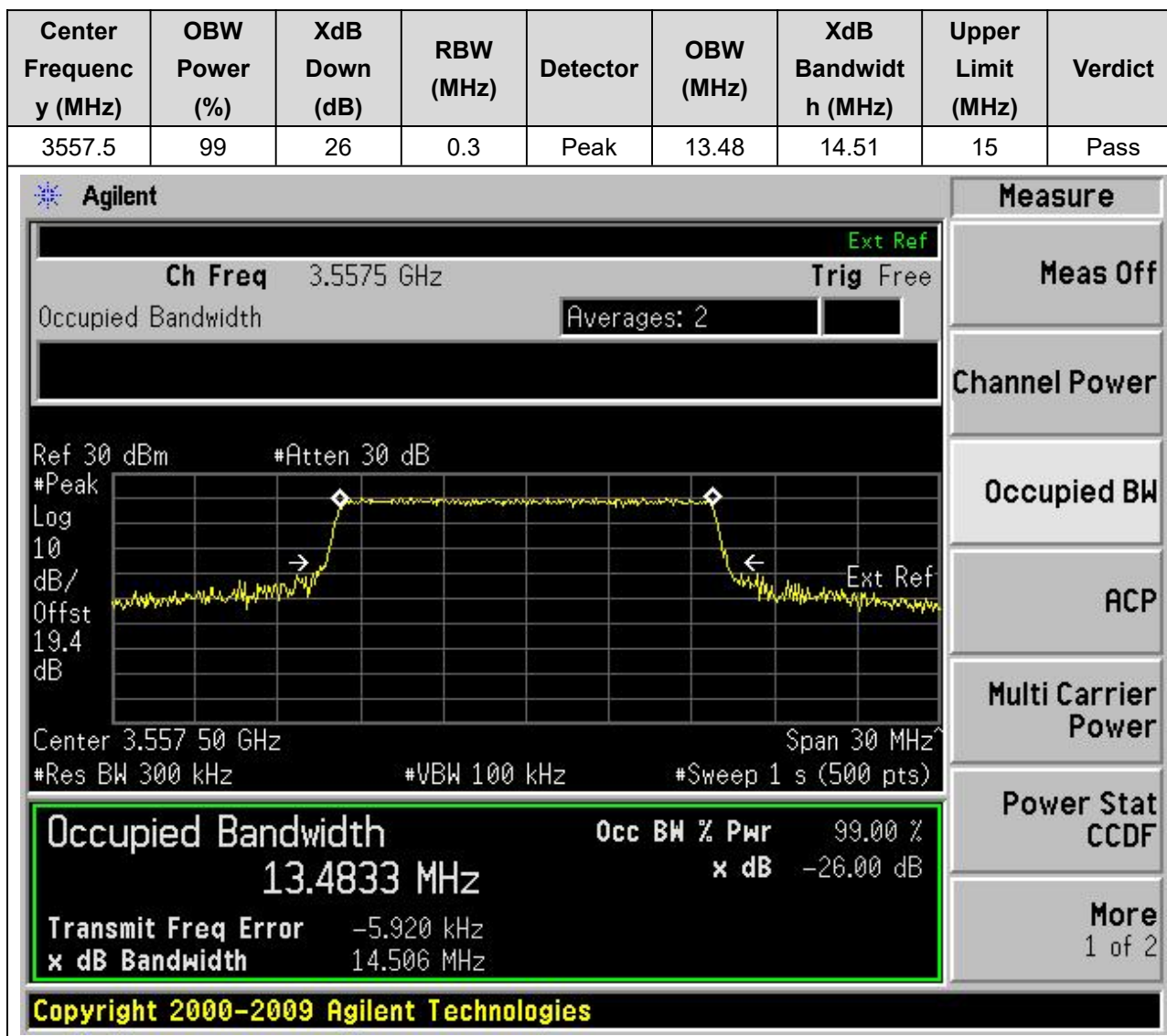
2.18 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56690, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)



2.19 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55315, Bandwidth:15, Modulation:QPSK, RB Number:75, RB Position:0)

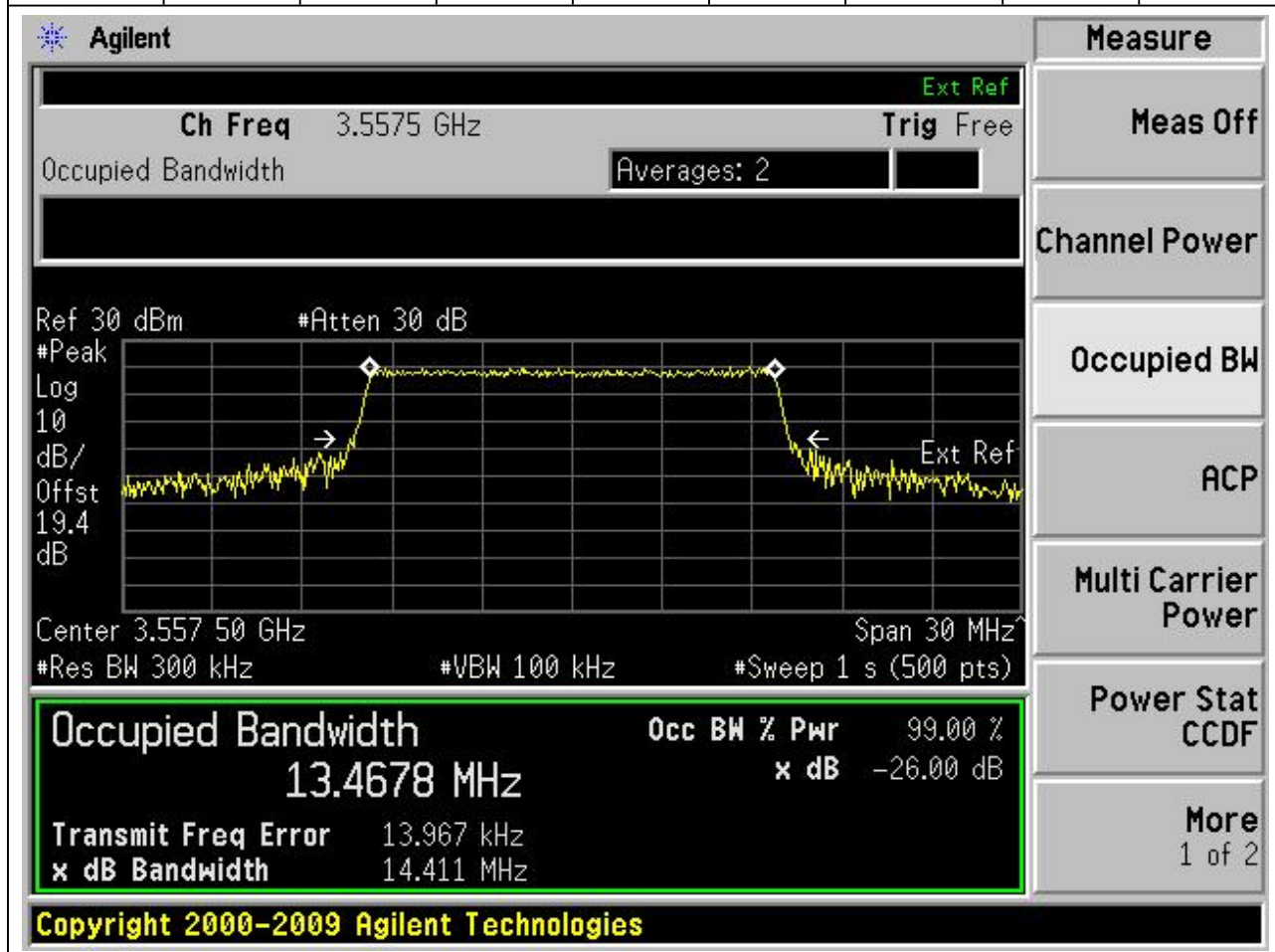


2.20 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55315, Bandwidth:15, Modulation:16QAM, RB Number:75, RB Position:0)

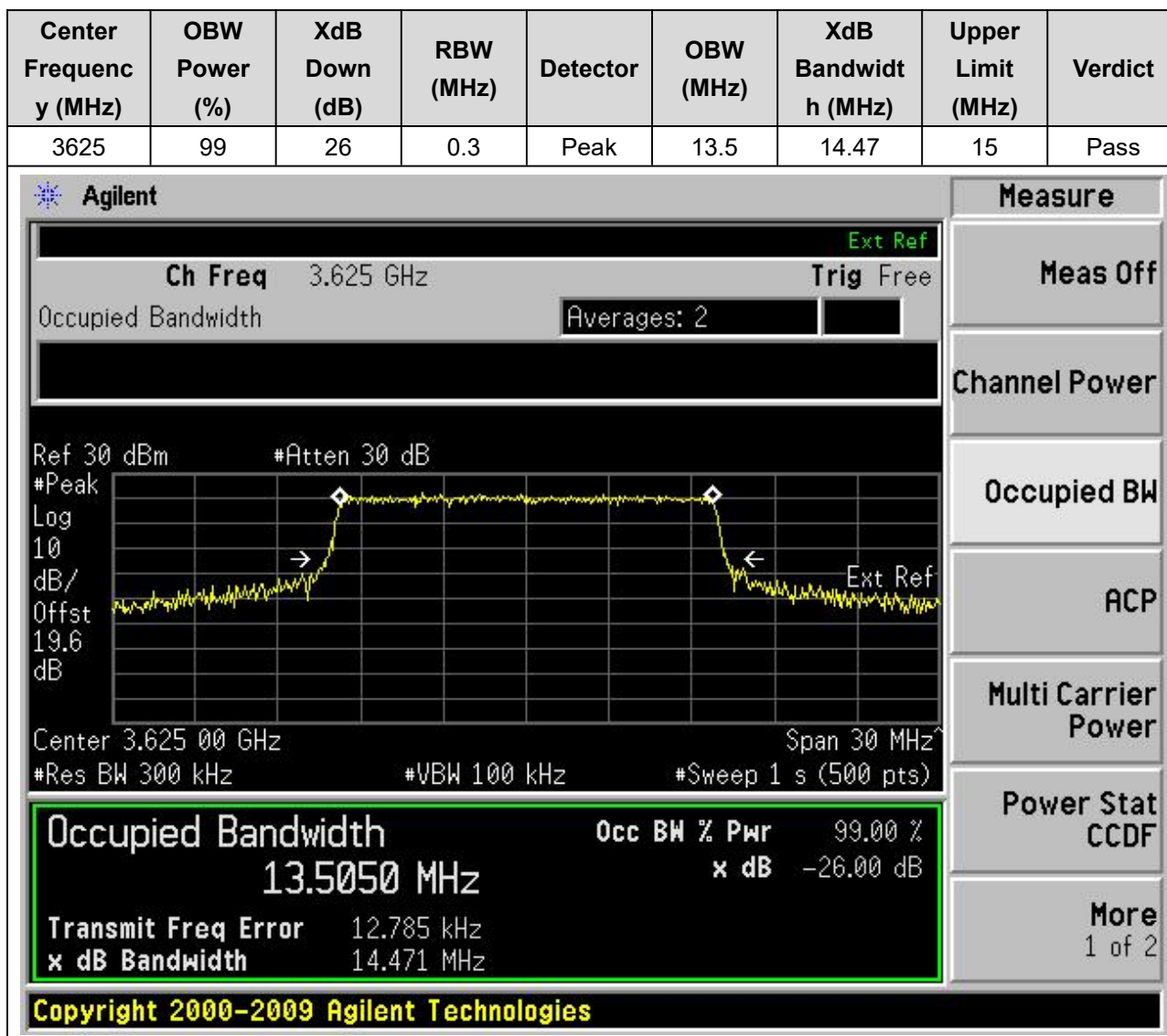


2.21 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55315, Bandwidth:15, Modulation:64QAM, RB Number:75, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
3557.5	99	26	0.3	Peak	13.47	14.41	15	Pass

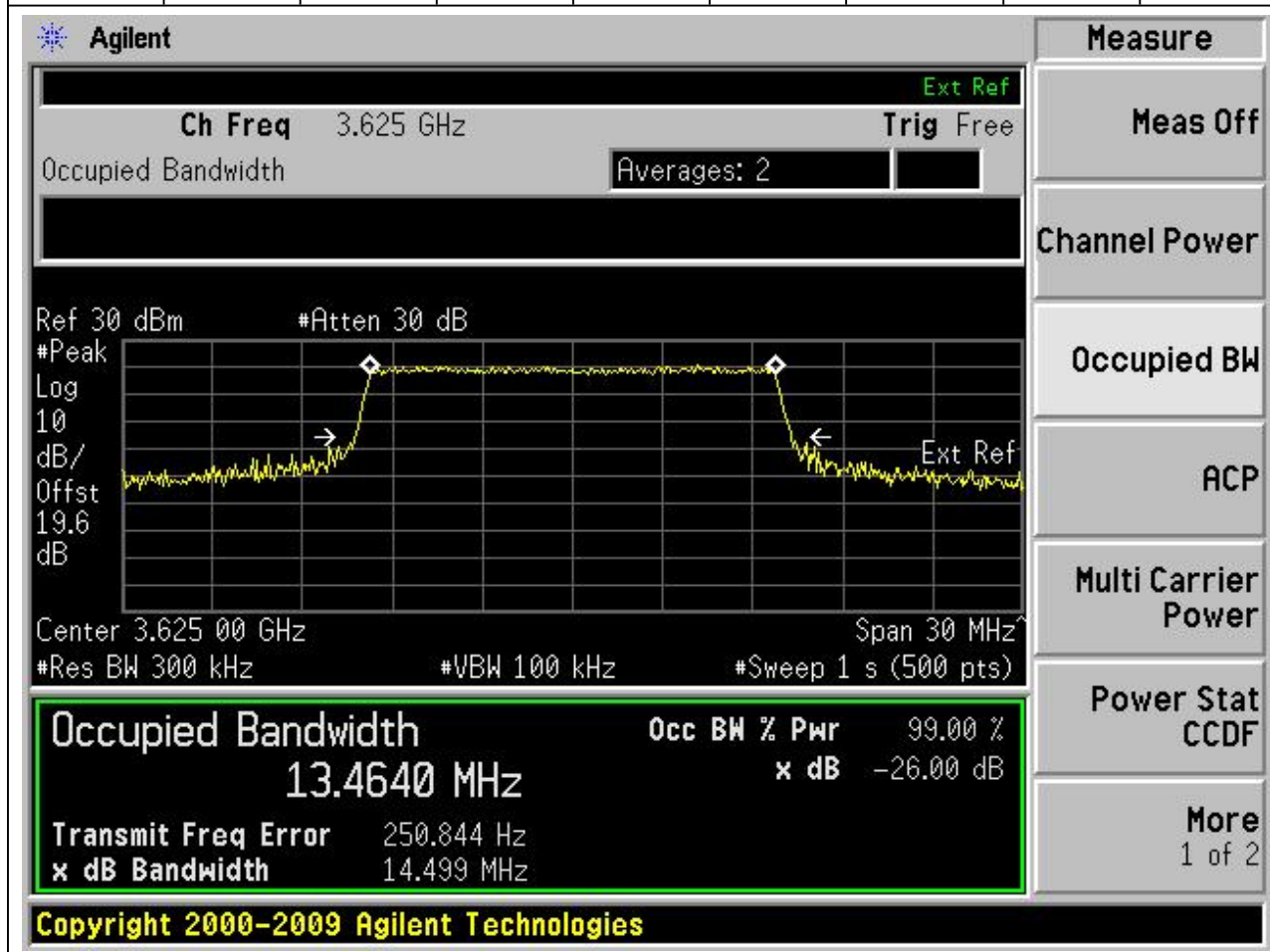


2.22 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:15, Modulation:QPSK, RB Number:75, RB Position:0)

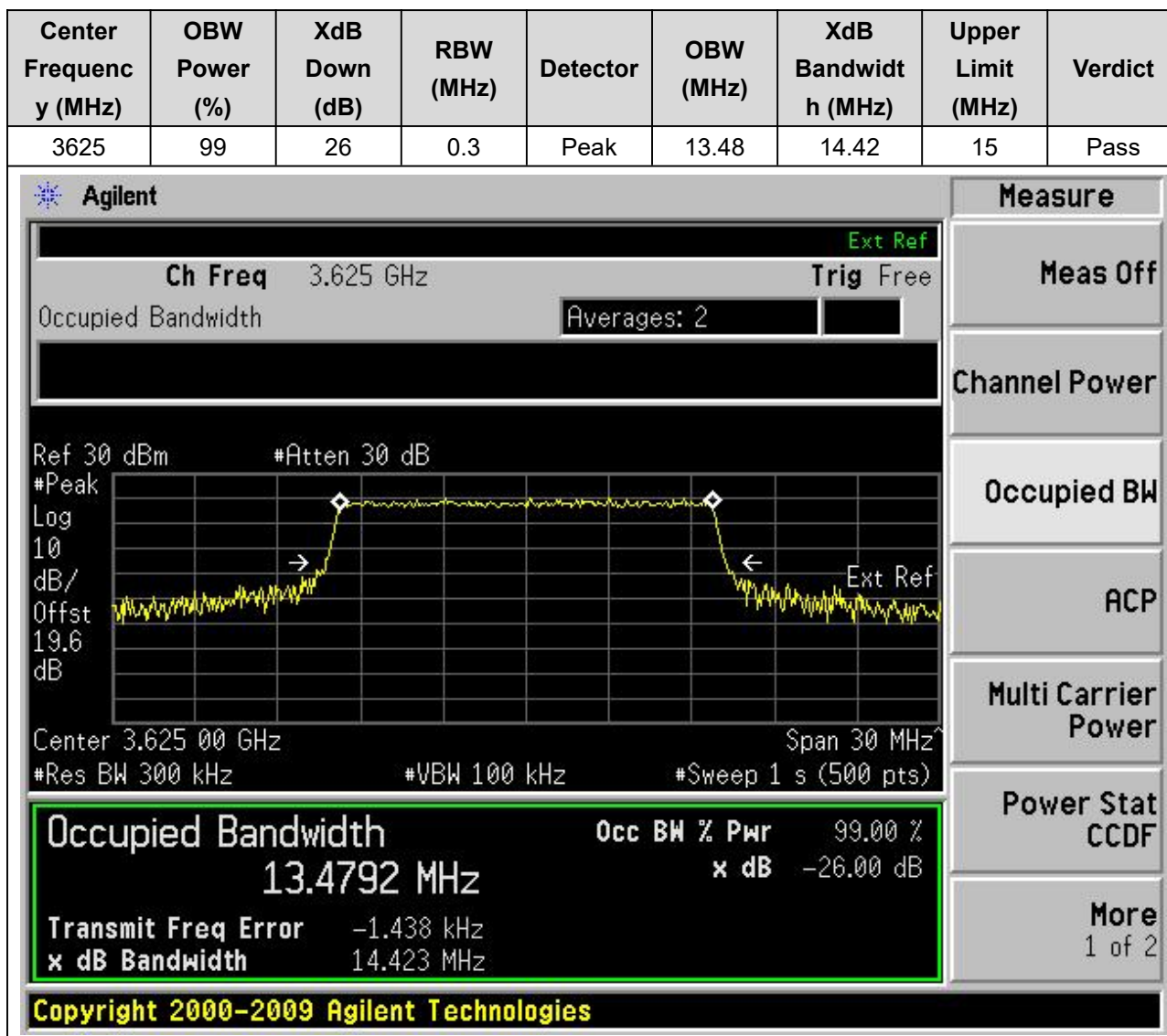


2.23 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:15, Modulation:16QAM, RB Number:75, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
3625	99	26	0.3	Peak	13.46	14.5	15	Pass

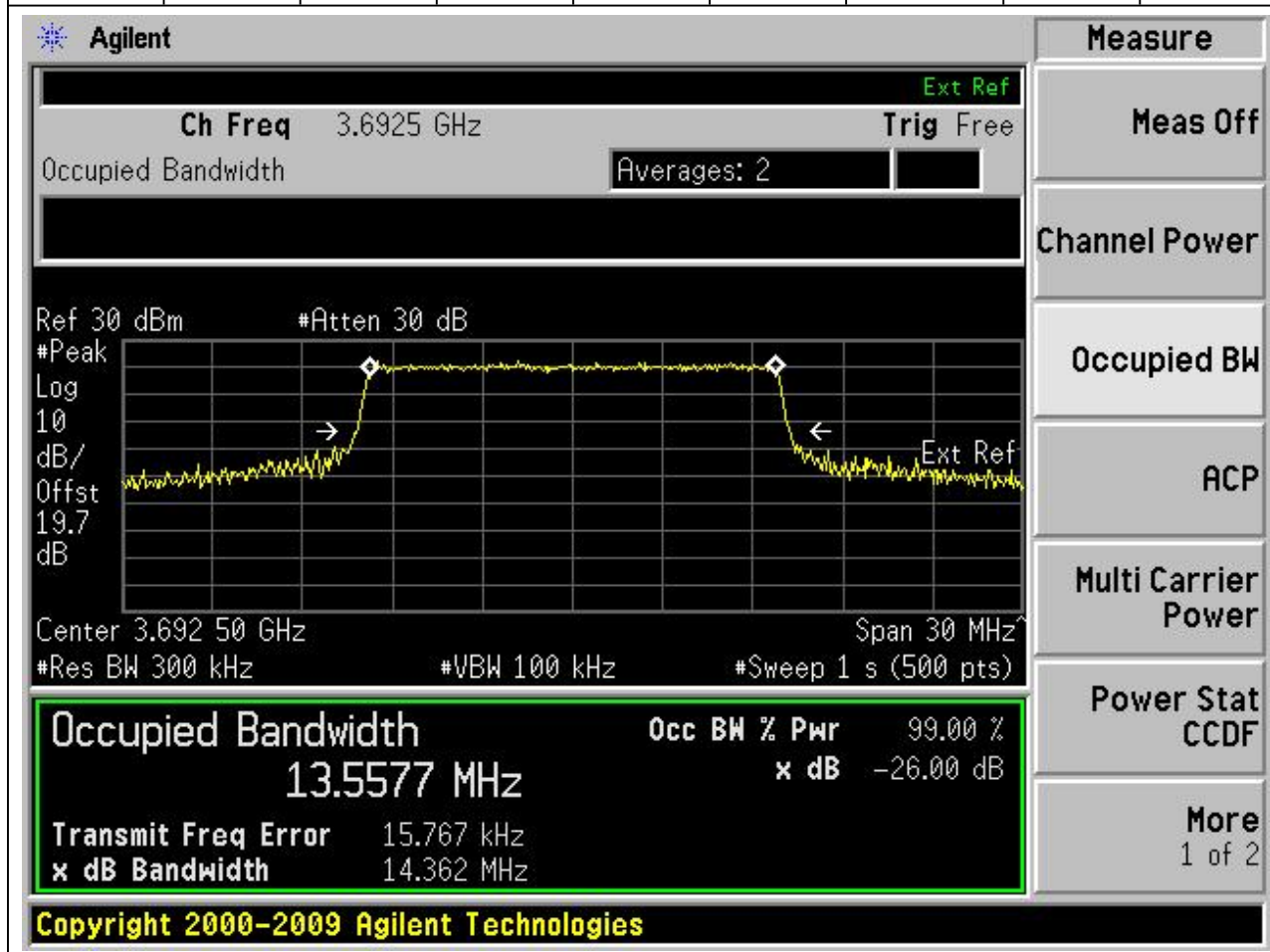


2.24 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:15, Modulation:64QAM, RB Number:75, RB Position:0)

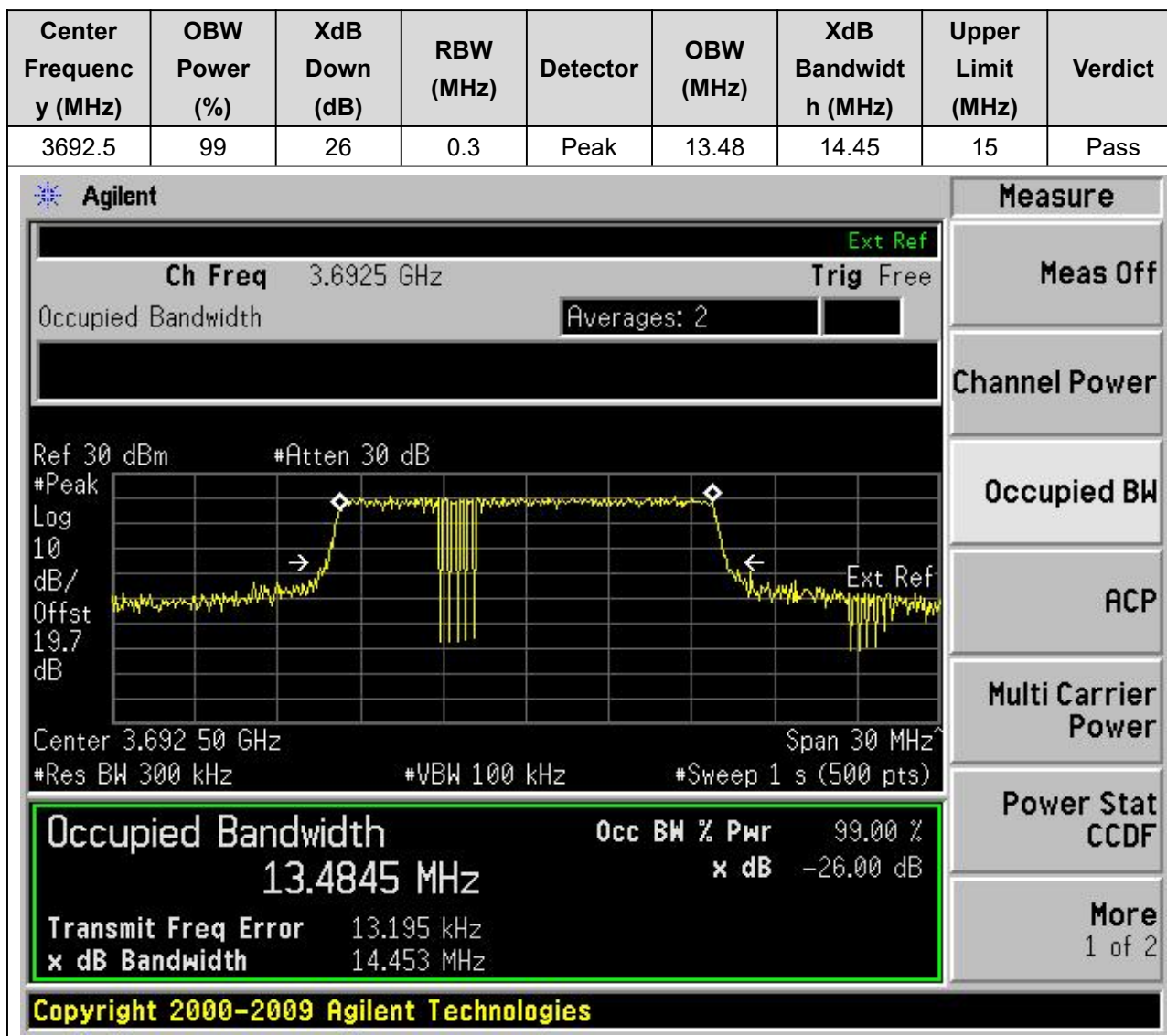


2.25 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56665, Bandwidth:15, Modulation:QPSK, RB Number:75, RB Position:0)

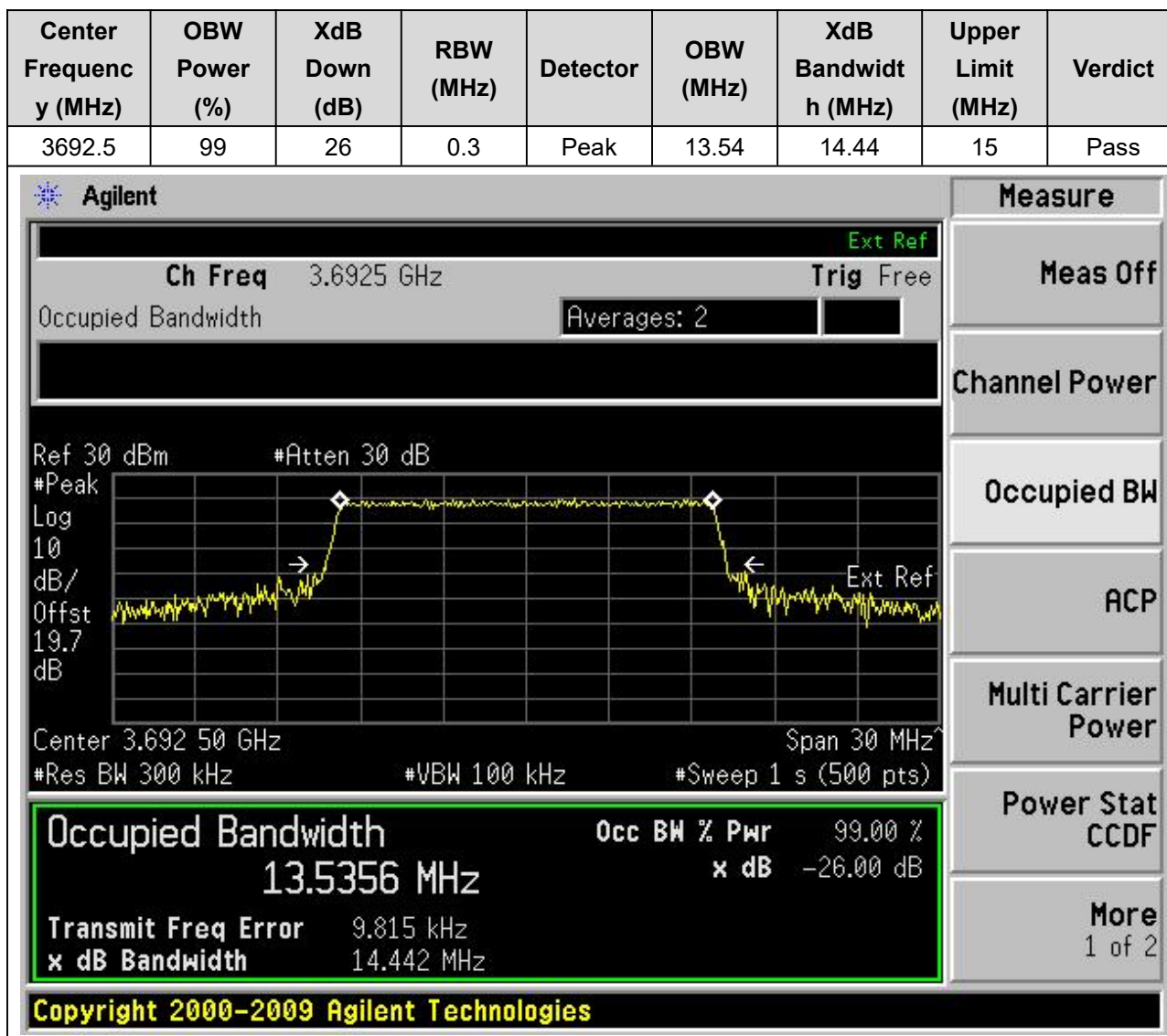
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
3692.5	99	26	0.3	Peak	13.56	14.36	15	Pass



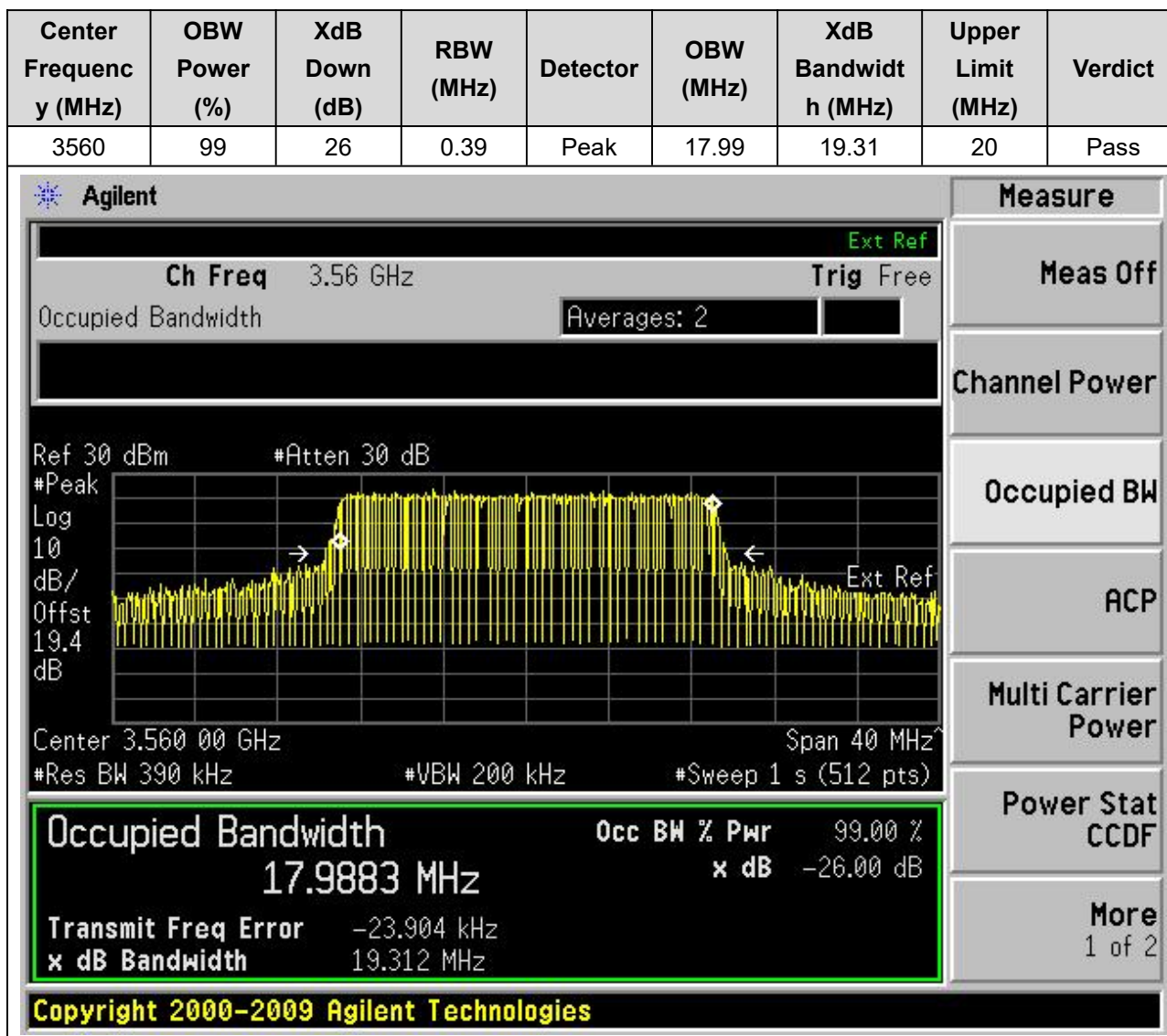
2.26 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56665, Bandwidth:15, Modulation:16QAM, RB Number:75, RB Position:0)



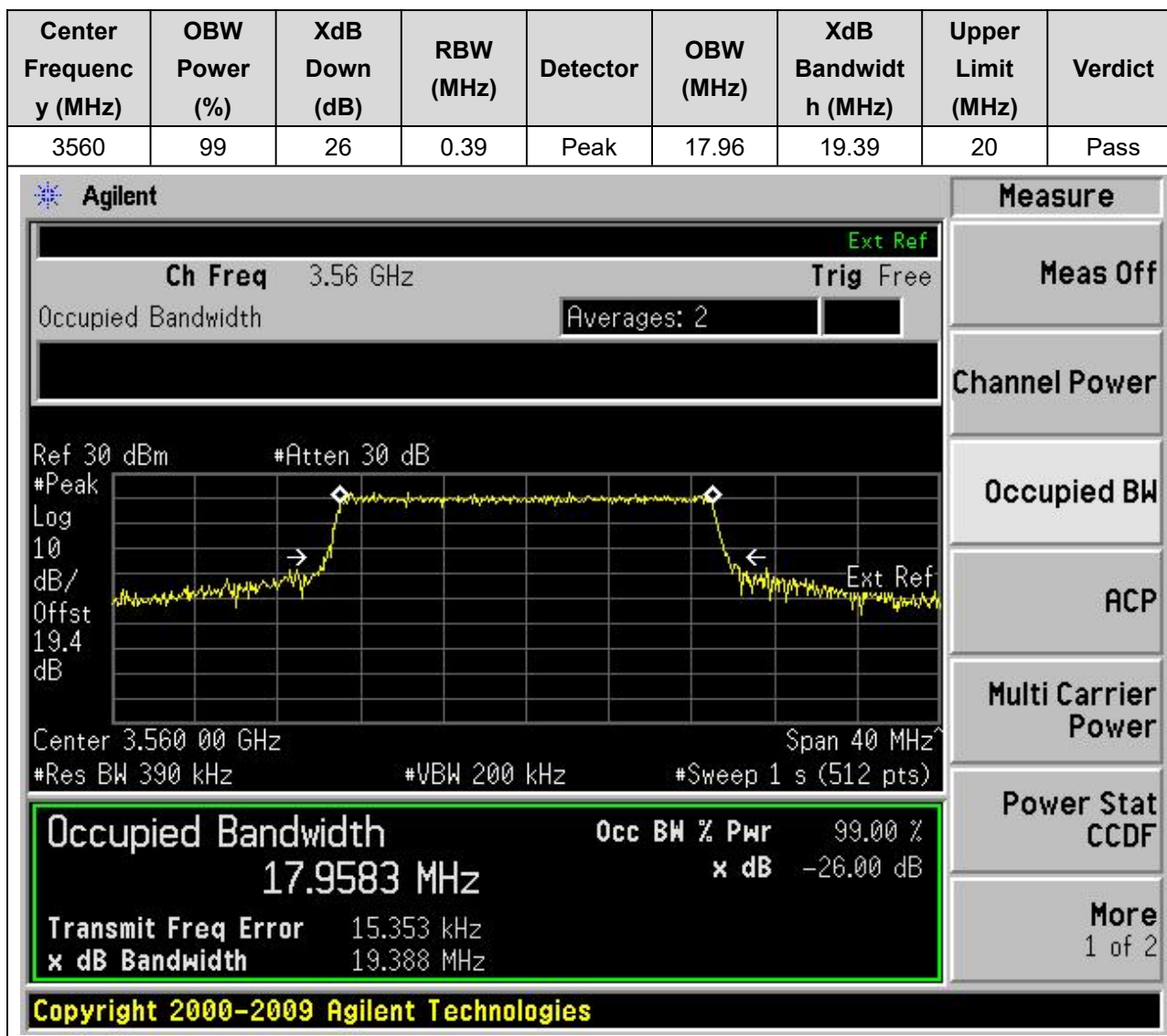
2.27 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56665, Bandwidth:15, Modulation:64QAM, RB Number:75, RB Position:0)



2.28 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55340, Bandwidth:20, Modulation:QPSK, RB Number:100, RB Position:0)

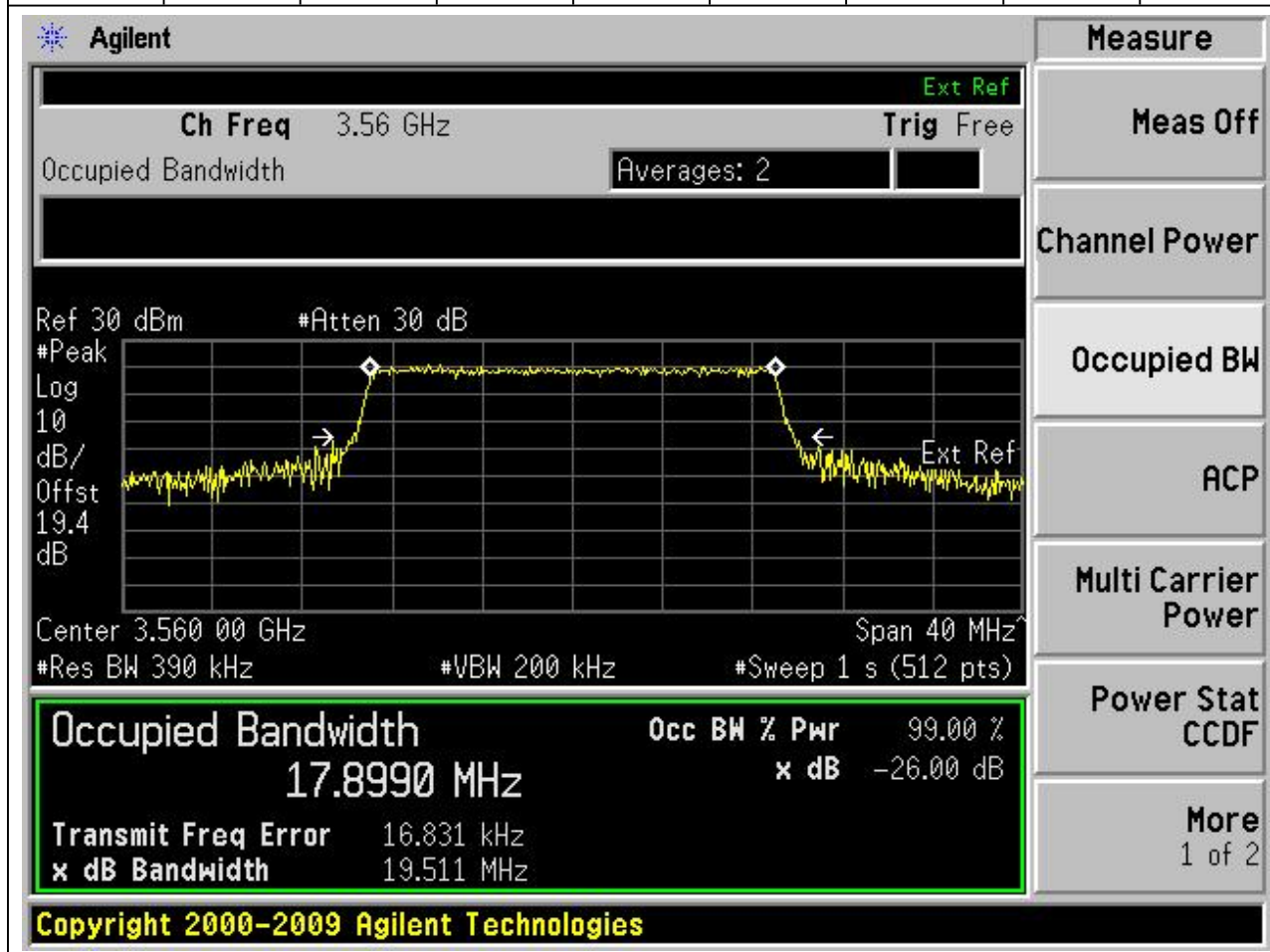


2.29 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55340, Bandwidth:20, Modulation:16QAM, RB Number:100, RB Position:0)

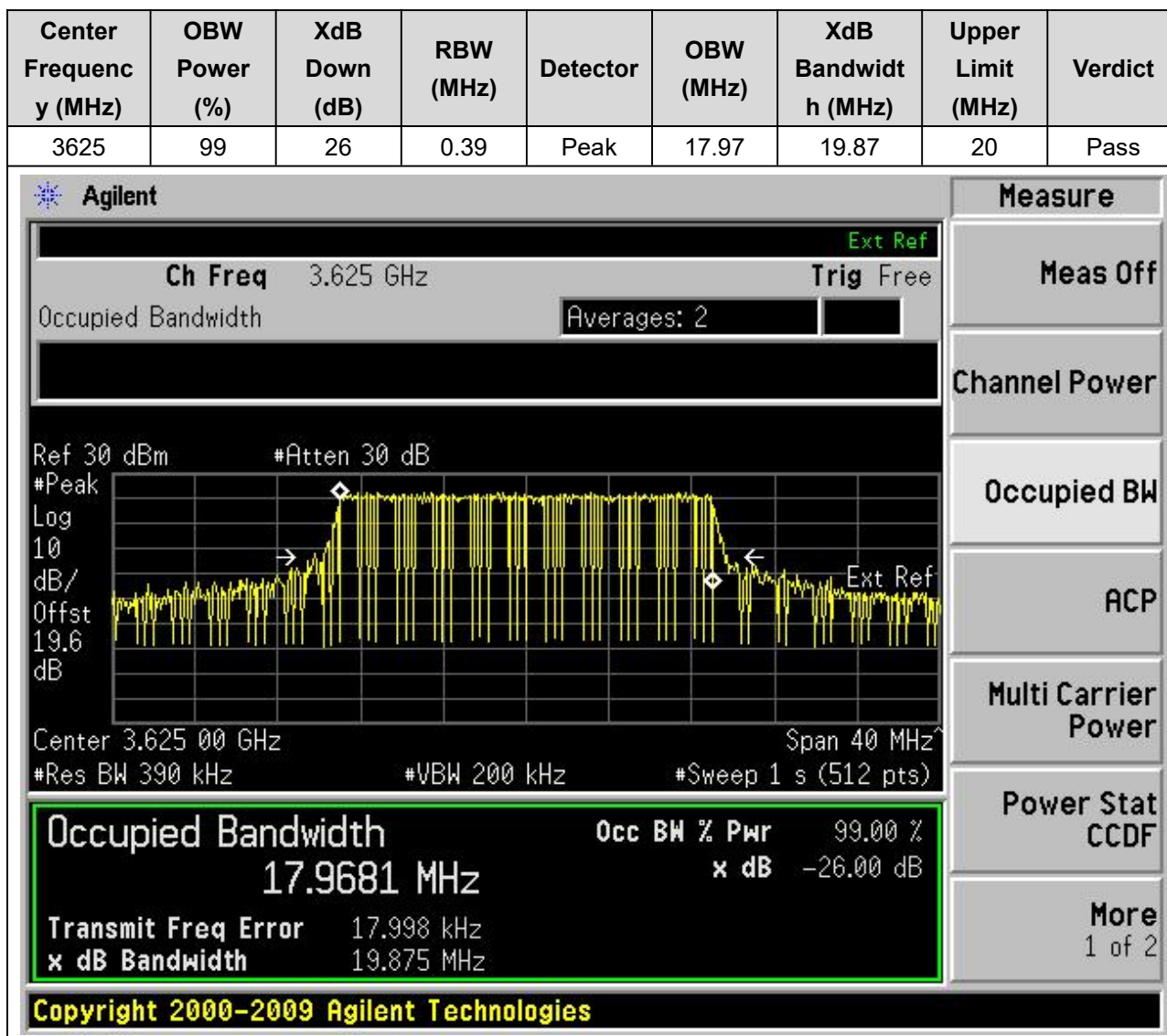


2.30 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55340, Bandwidth:20, Modulation:64QAM, RB Number:100, RB Position:0)

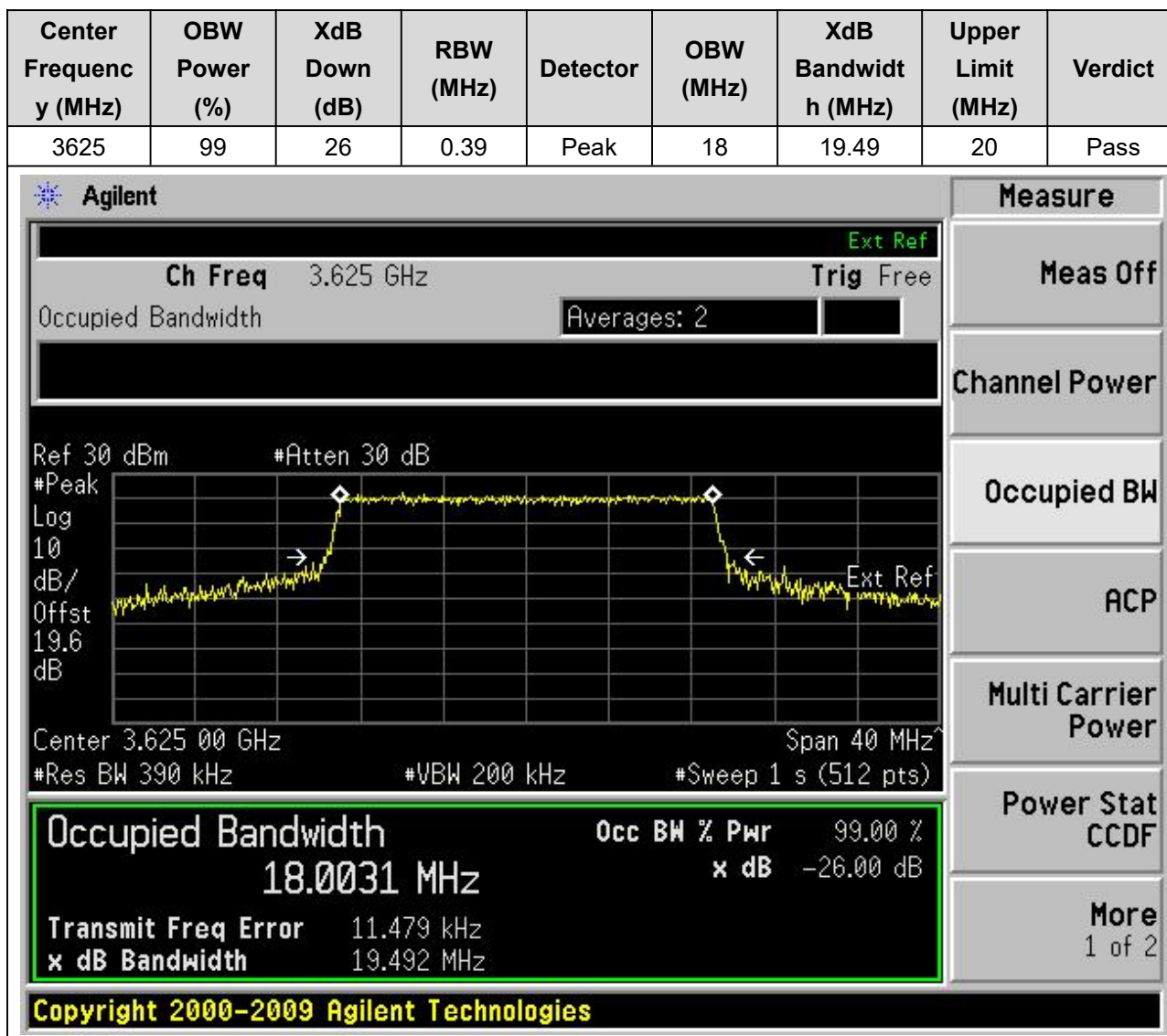
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
3560	99	26	0.39	Peak	17.9	19.51	20	Pass



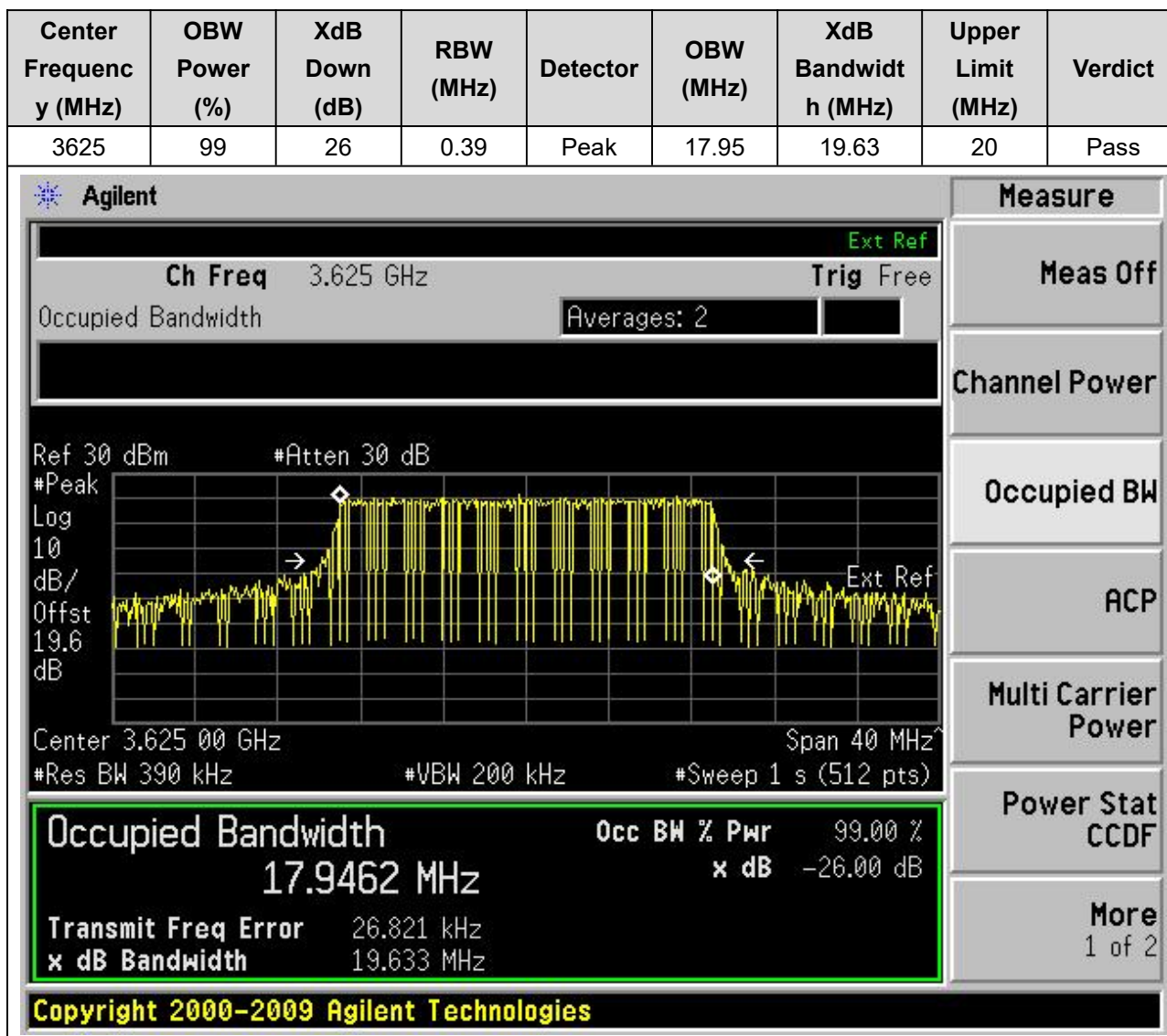
2.31 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:20, Modulation:QPSK, RB Number:100, RB Position:0)



2.32 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:20, Modulation:16QAM, RB Number:100, RB Position:0)

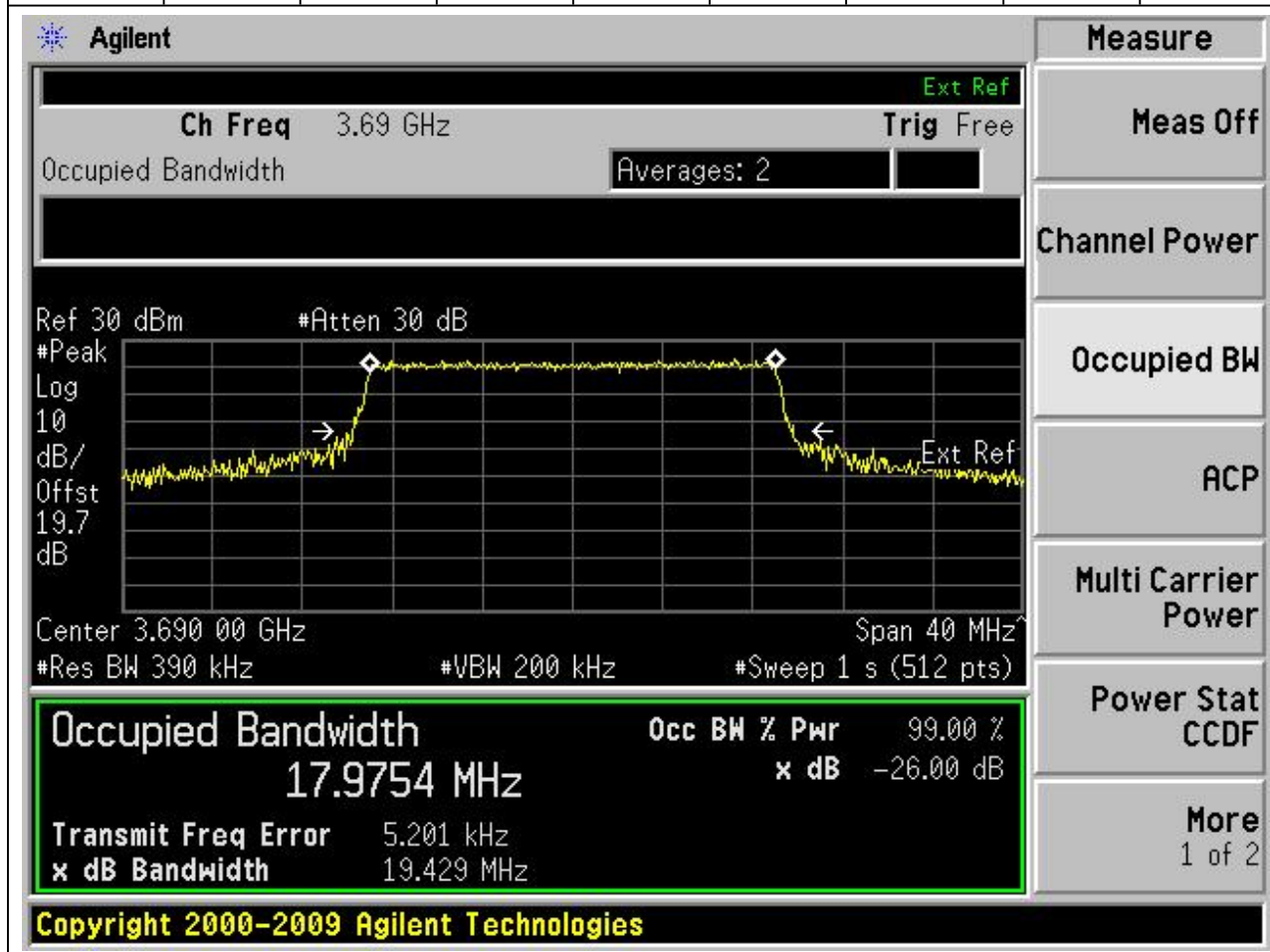


2.33 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:55990, Bandwidth:20, Modulation:64QAM, RB Number:100, RB Position:0)

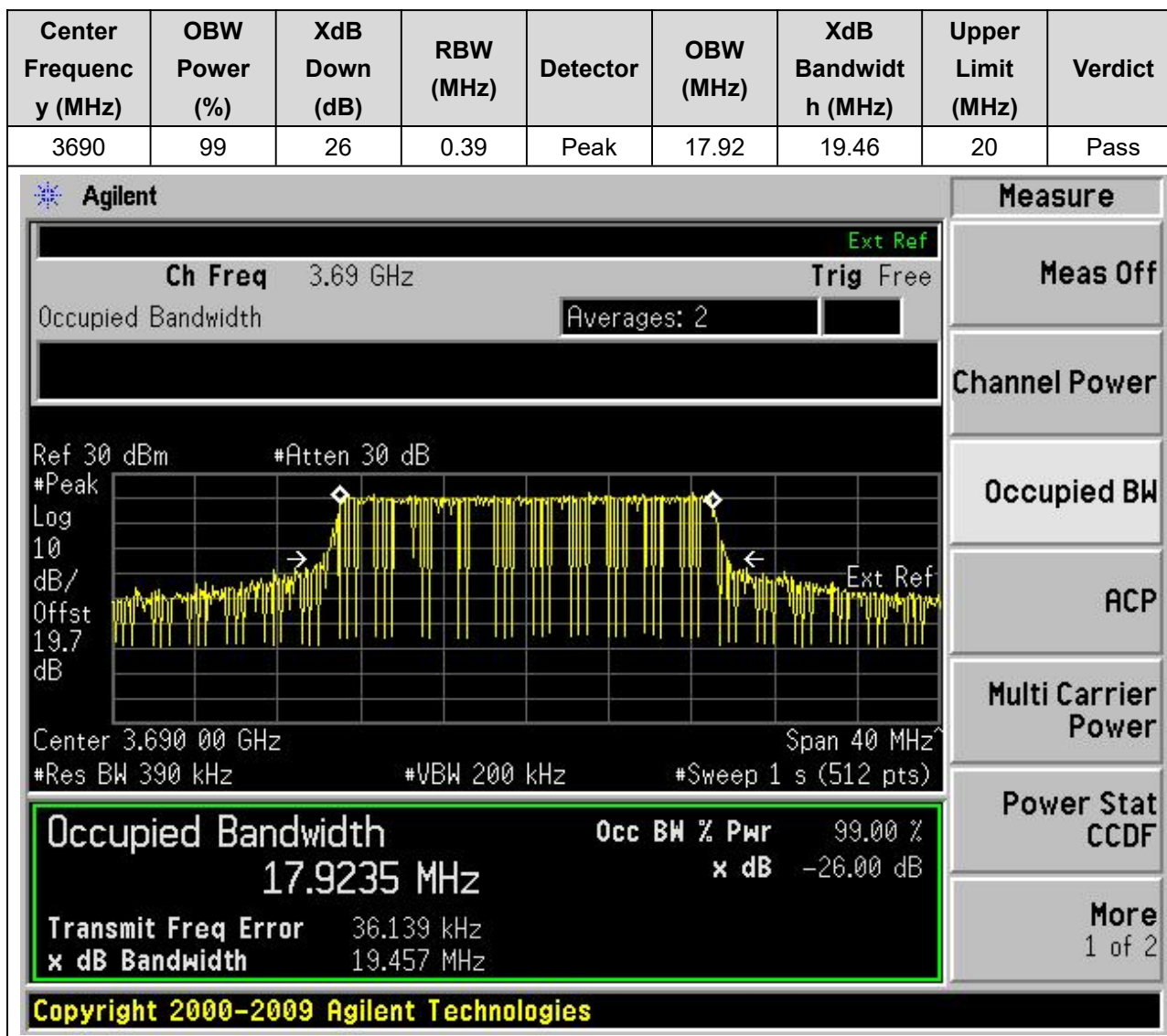


2.34 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56640, Bandwidth:20, Modulation:QPSK, RB Number:100, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
3690	99	26	0.39	Peak	17.98	19.43	20	Pass

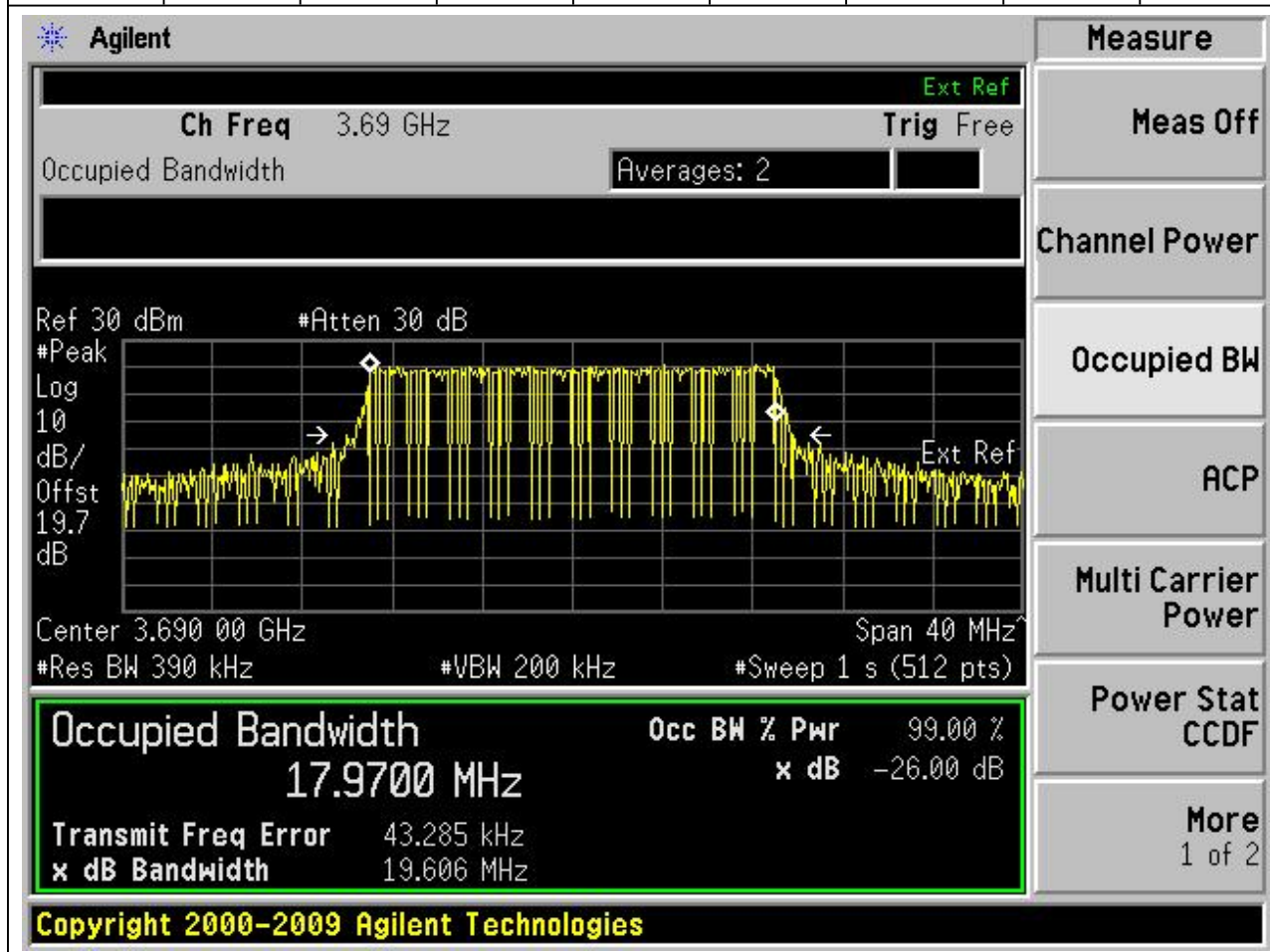


2.35 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56640, Bandwidth:20, Modulation:16QAM, RB Number:100, RB Position:0)



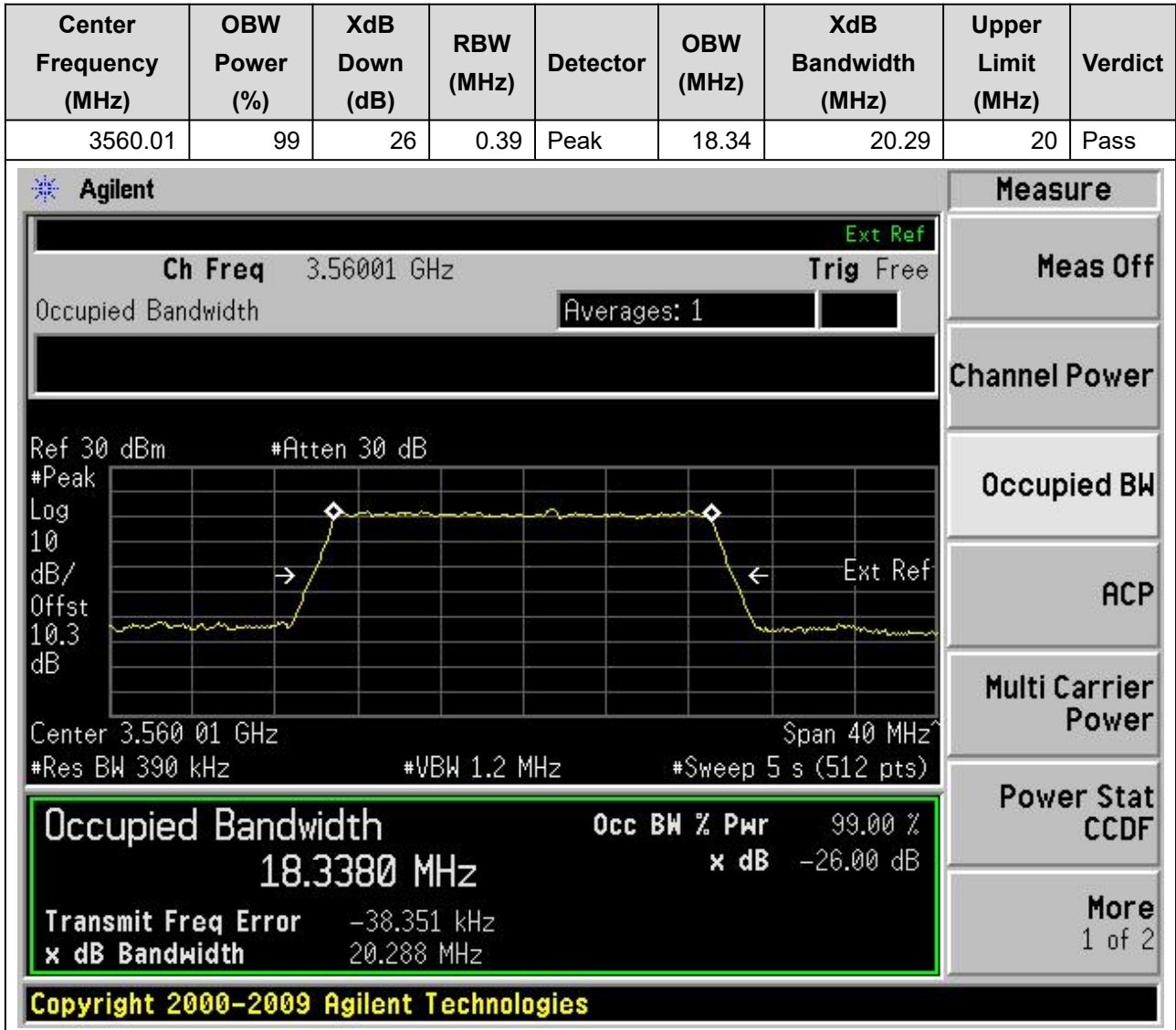
2.36 LTE Occupied Bandwidth_Part96(added 64QAM)(NTNV)(Channel:56640, Bandwidth:20, Modulation:64QAM, RB Number:100, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
3690	99	26	0.39	Peak	17.97	19.61	20	Pass

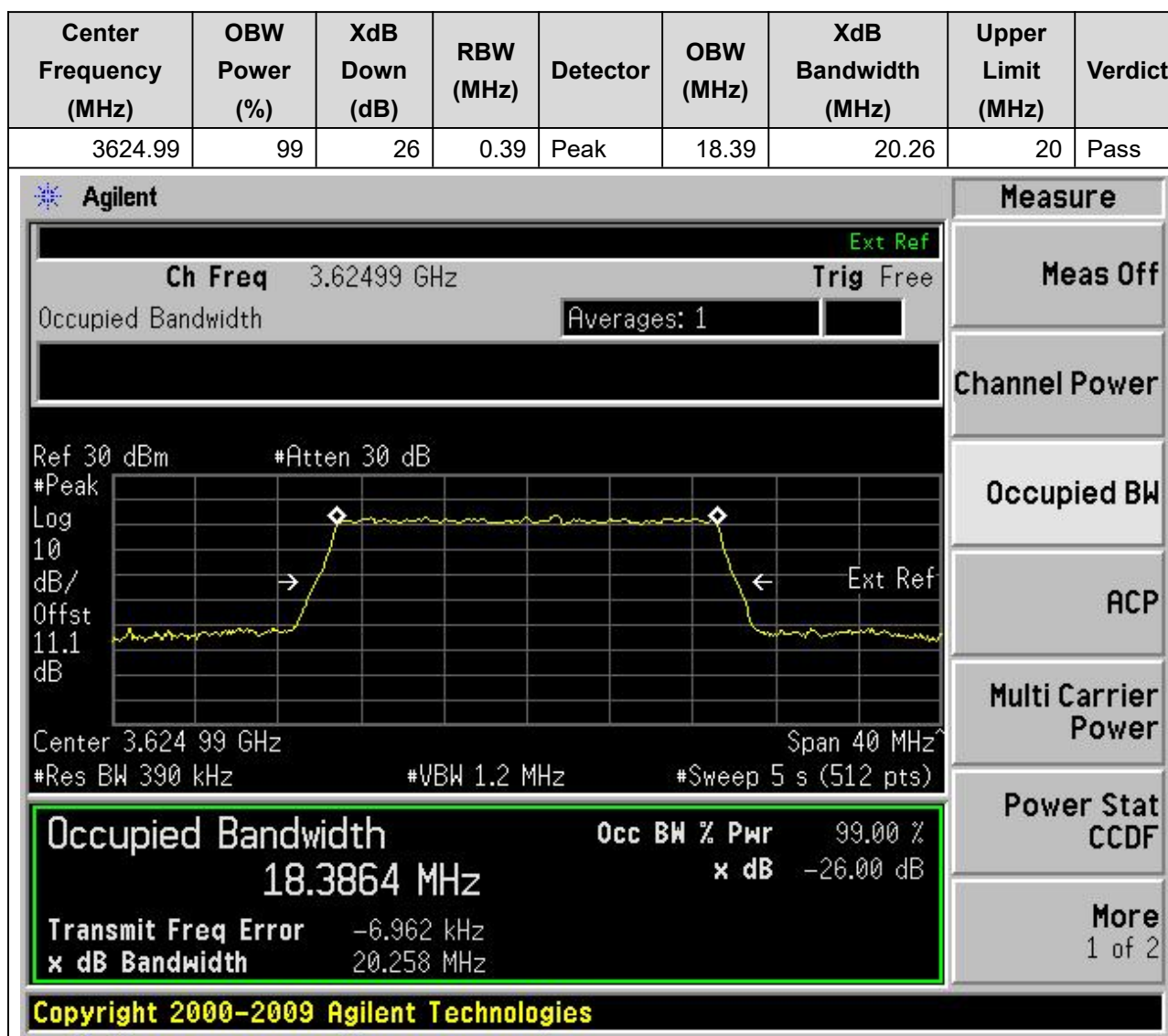


1. n48 30kHz

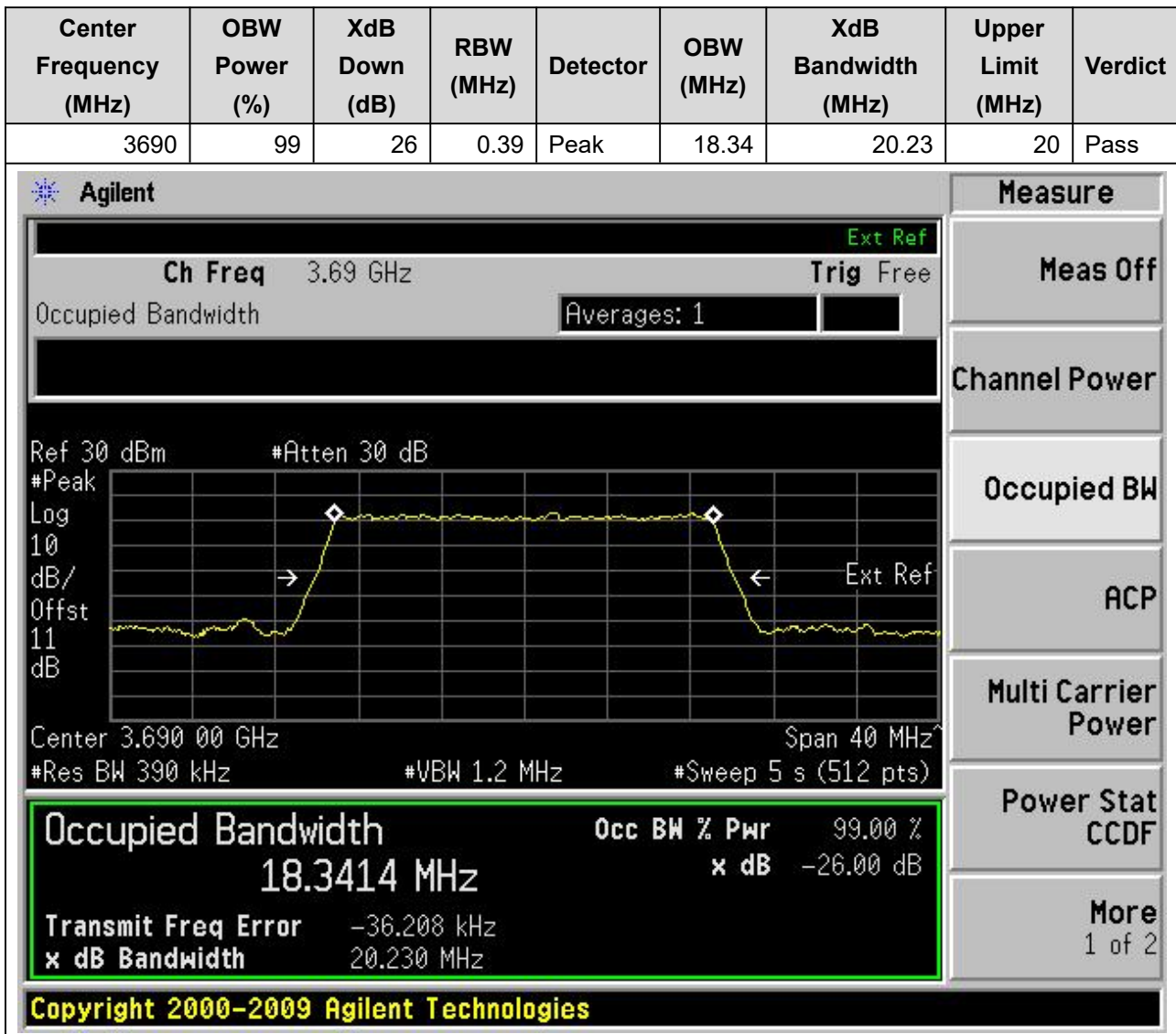
1.1 Occupied Bandwidth for SA_Part96(NTLV)(Channel:637334, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:QPSK, RB Number:51, RB Position:0)



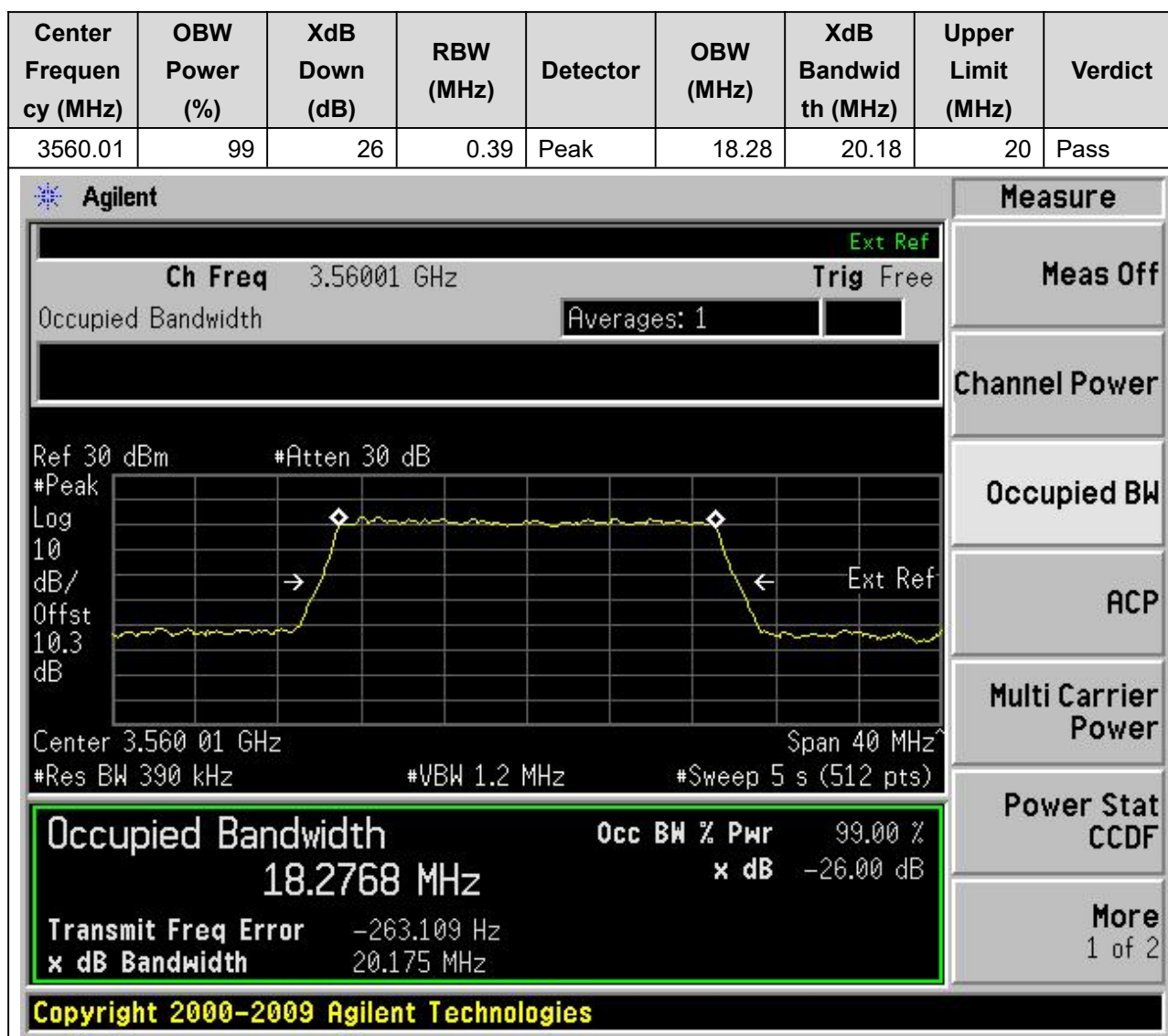
1.2 Occupied Bandwidth for SA_Part96(NTLV)(Channel:641666, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:QPSK, RB Number:51, RB Position:0)



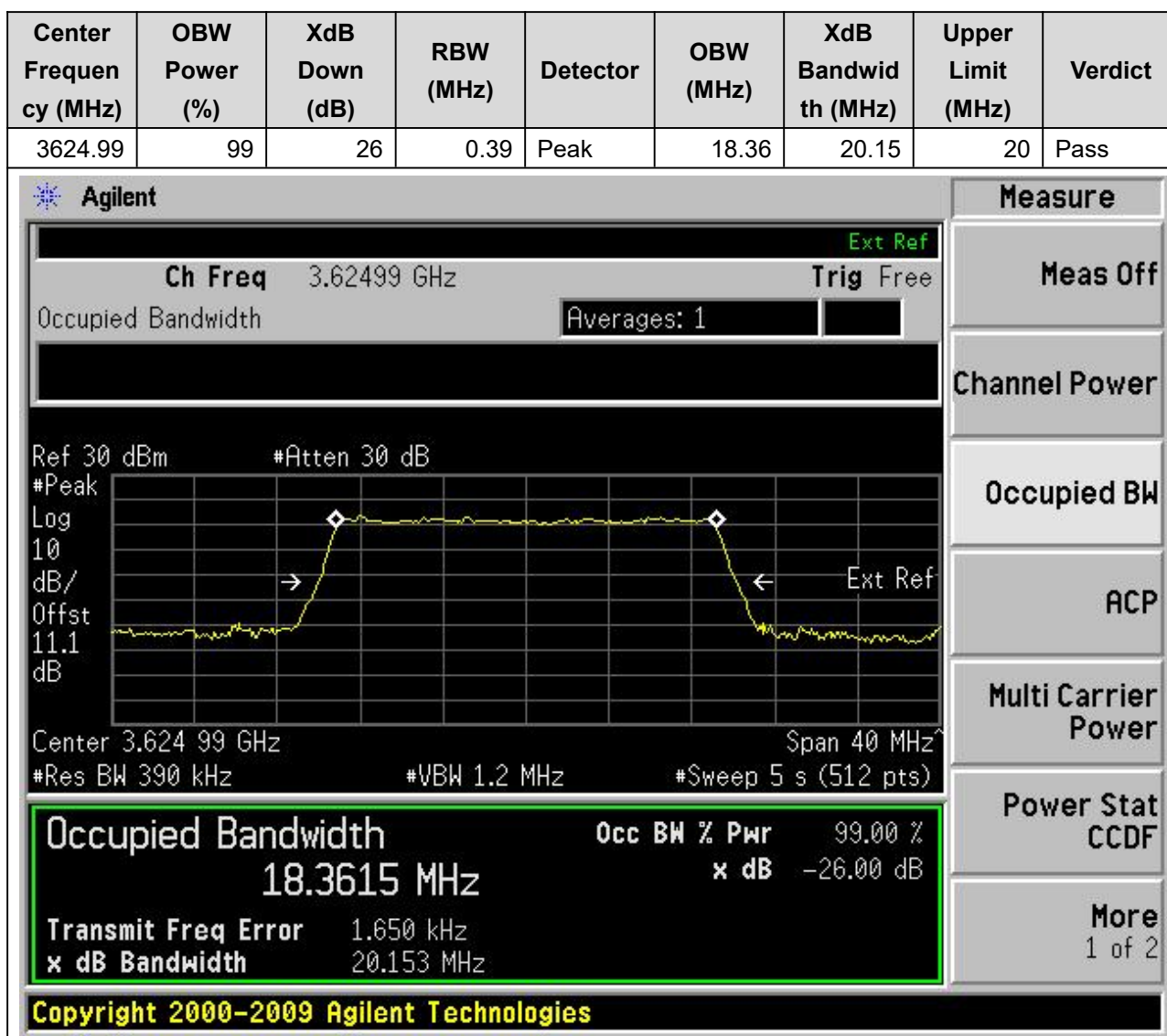
1.3 Occupied Bandwidth for SA_Part96(NTLV)(Channel:646000, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:QPSK, RB Number:51, RB Position:0)



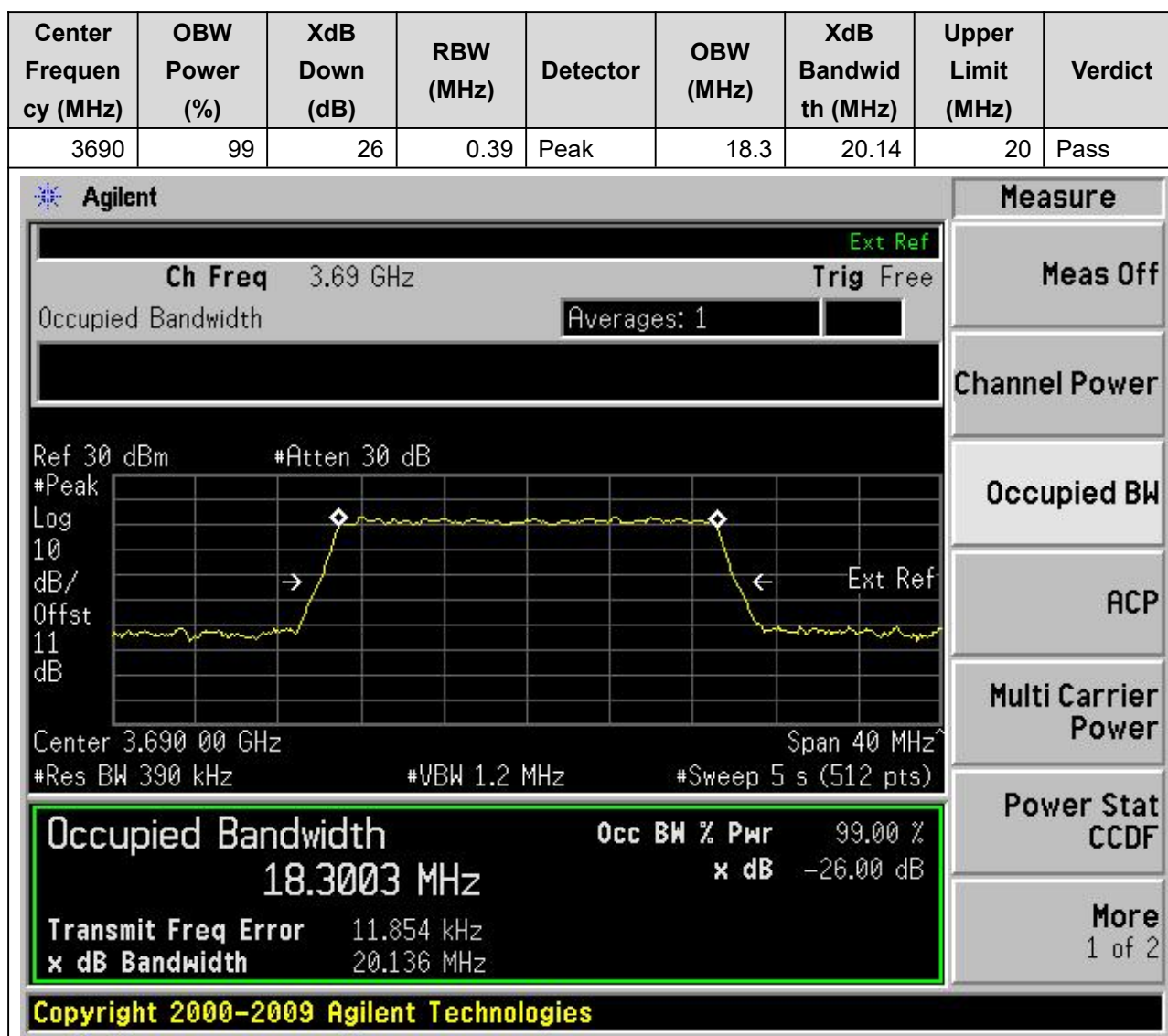
1.4 Occupied Bandwidth for SA_Part96(NTLV)(Channel:637334, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:16QAM, RB Number:51, RB Position:0)



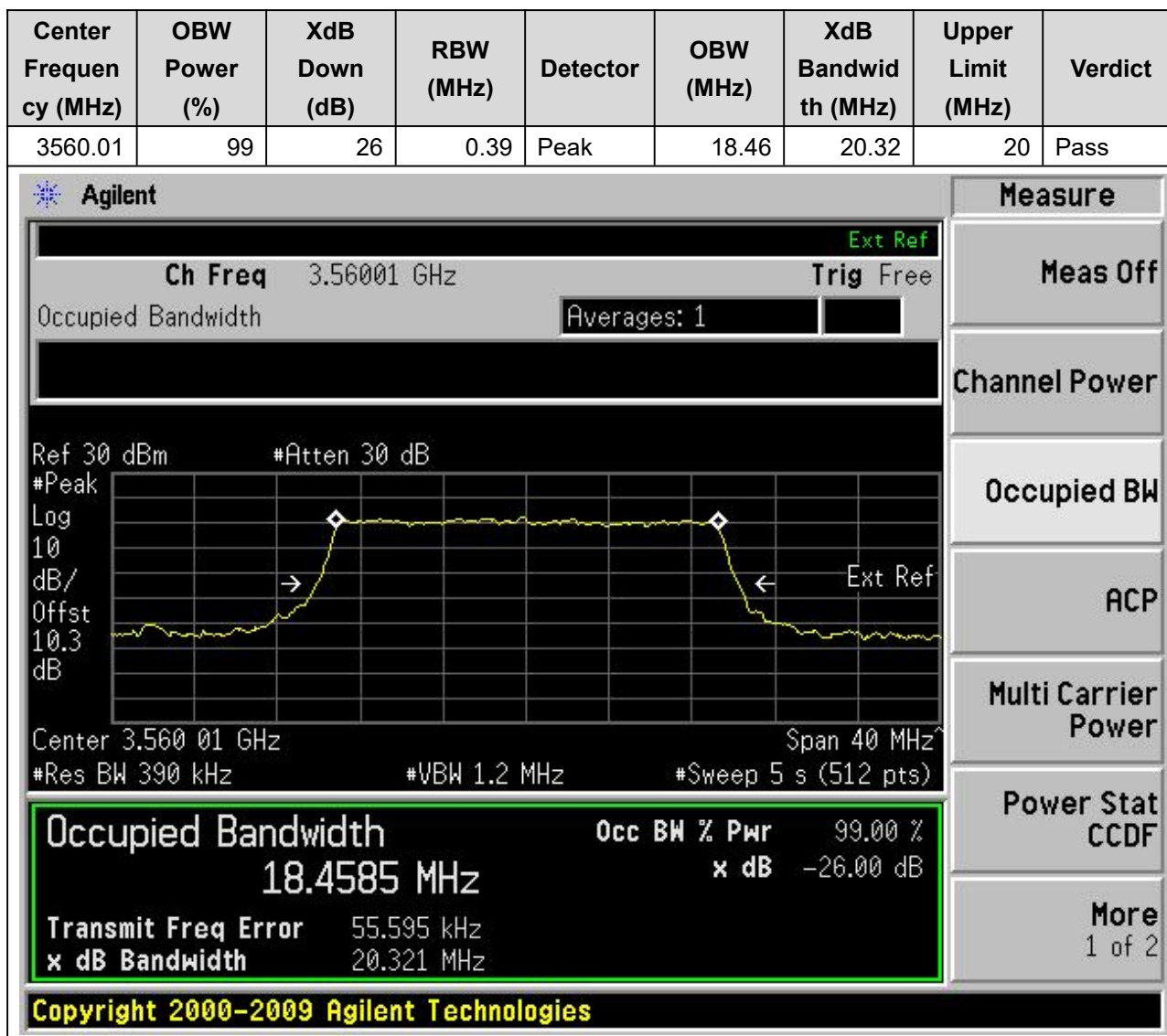
1.5 Occupied Bandwidth for SA_Part96(NTLV)(Channel:641666, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:16QAM, RB Number:51, RB Position:0)



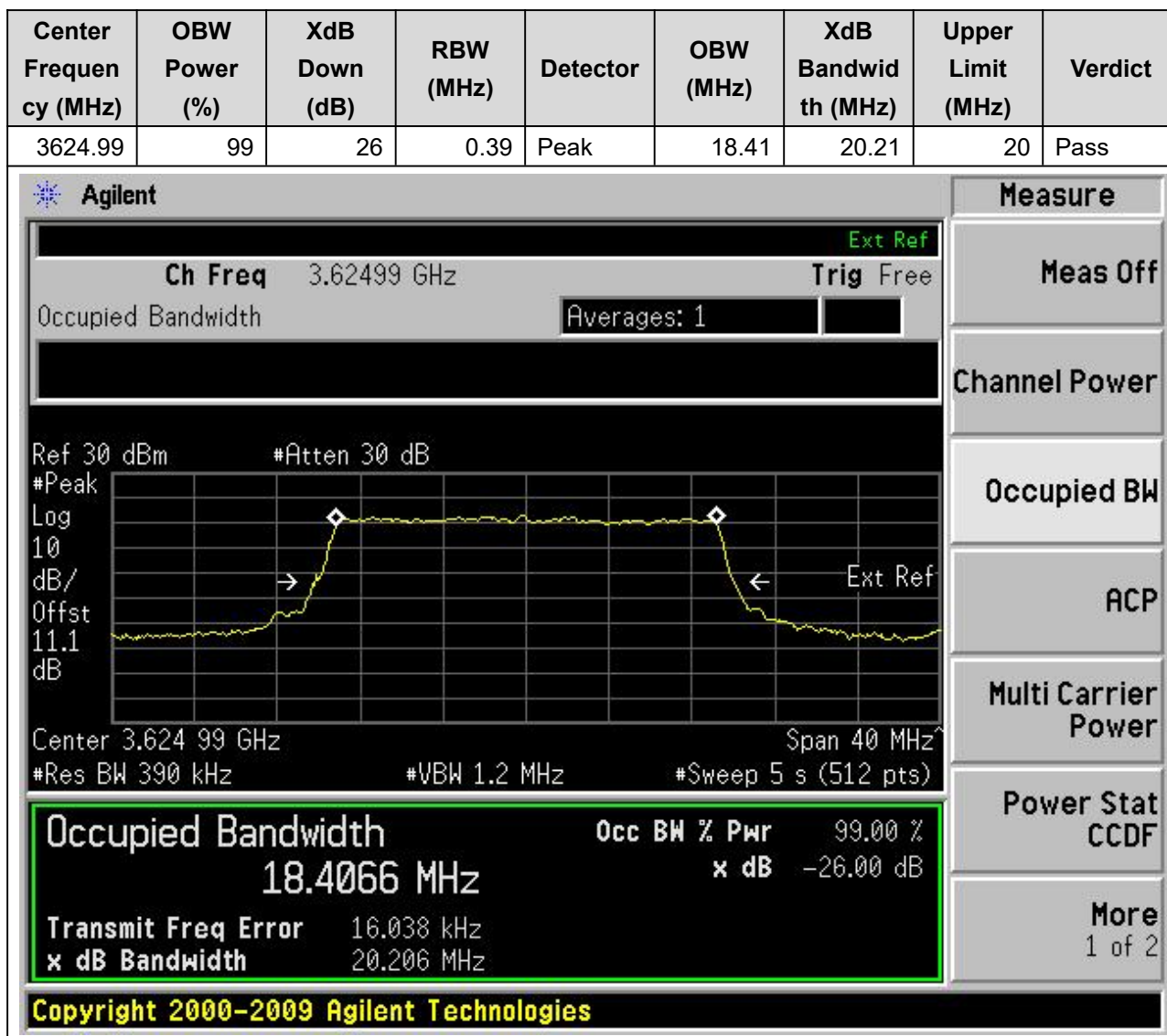
1.6 Occupied Bandwidth for SA_Part96(NTLV)(Channel:646000, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:16QAM, RB Number:51, RB Position:0)



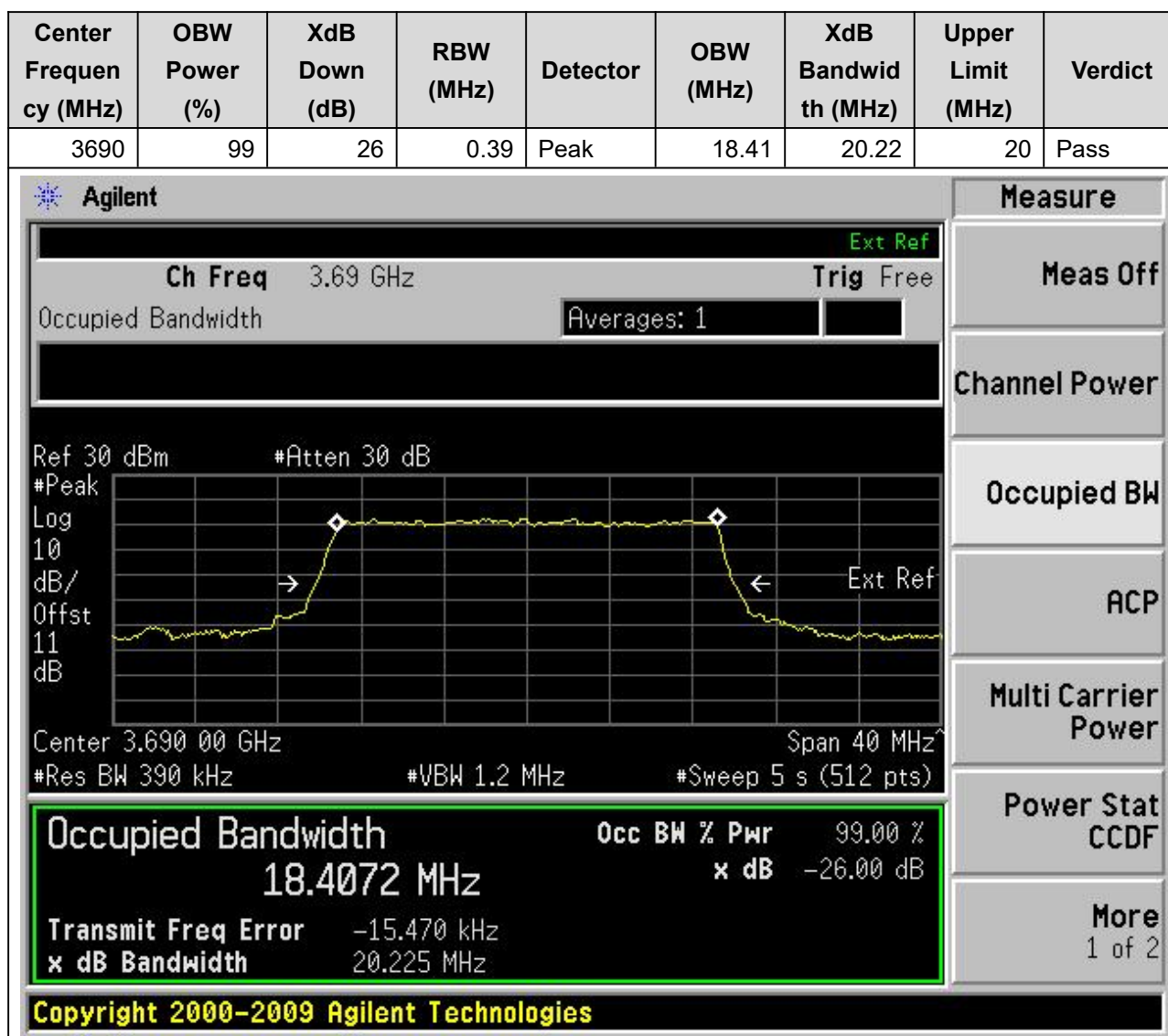
1.7 Occupied Bandwidth for SA_Part96(NTLV)(Channel:637334, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:64QAM, RB Number:51, RB Position:0)



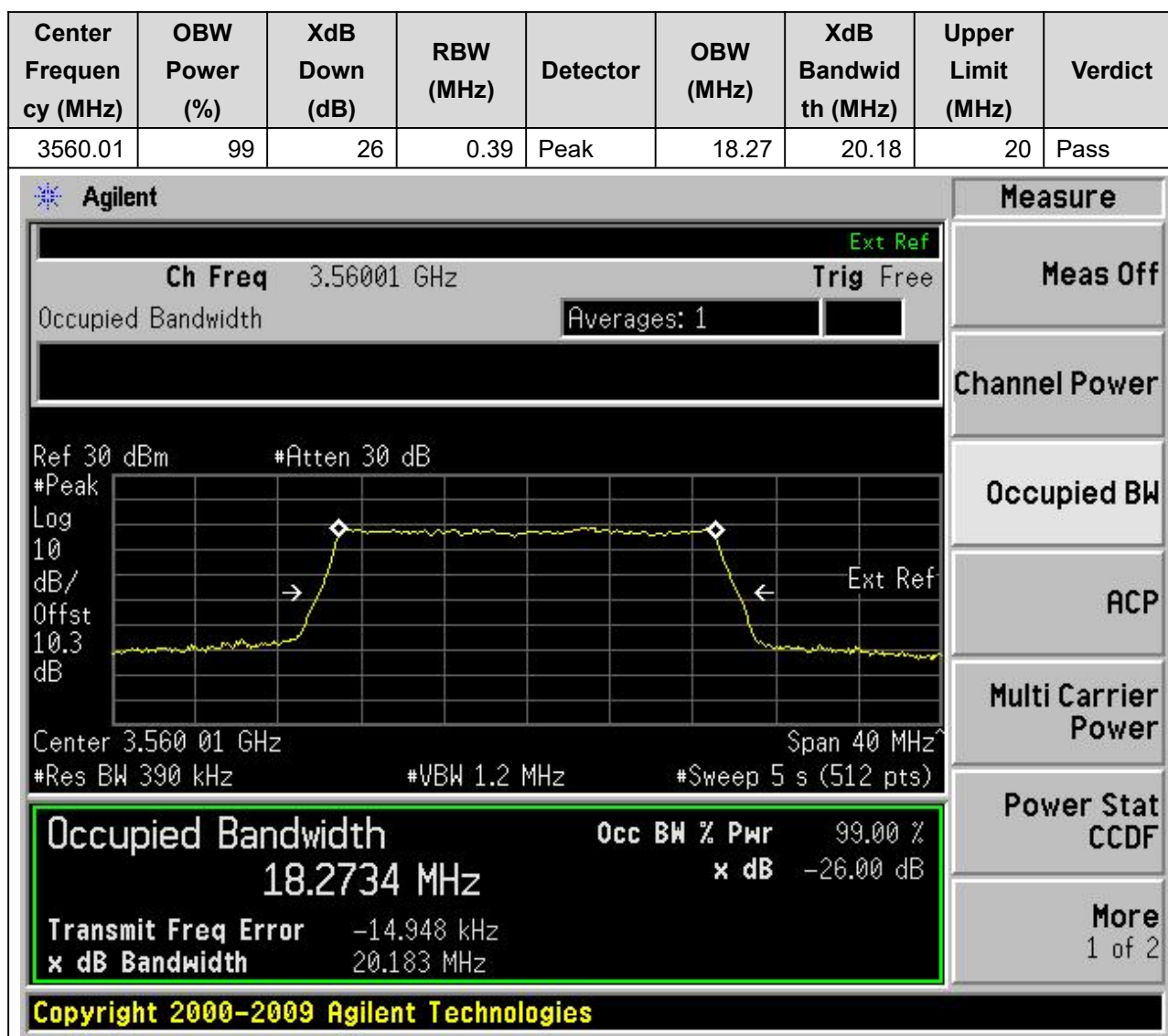
1.8 Occupied Bandwidth for SA_Part96(NTLV)(Channel:641666, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:64QAM, RB Number:51, RB Position:0)



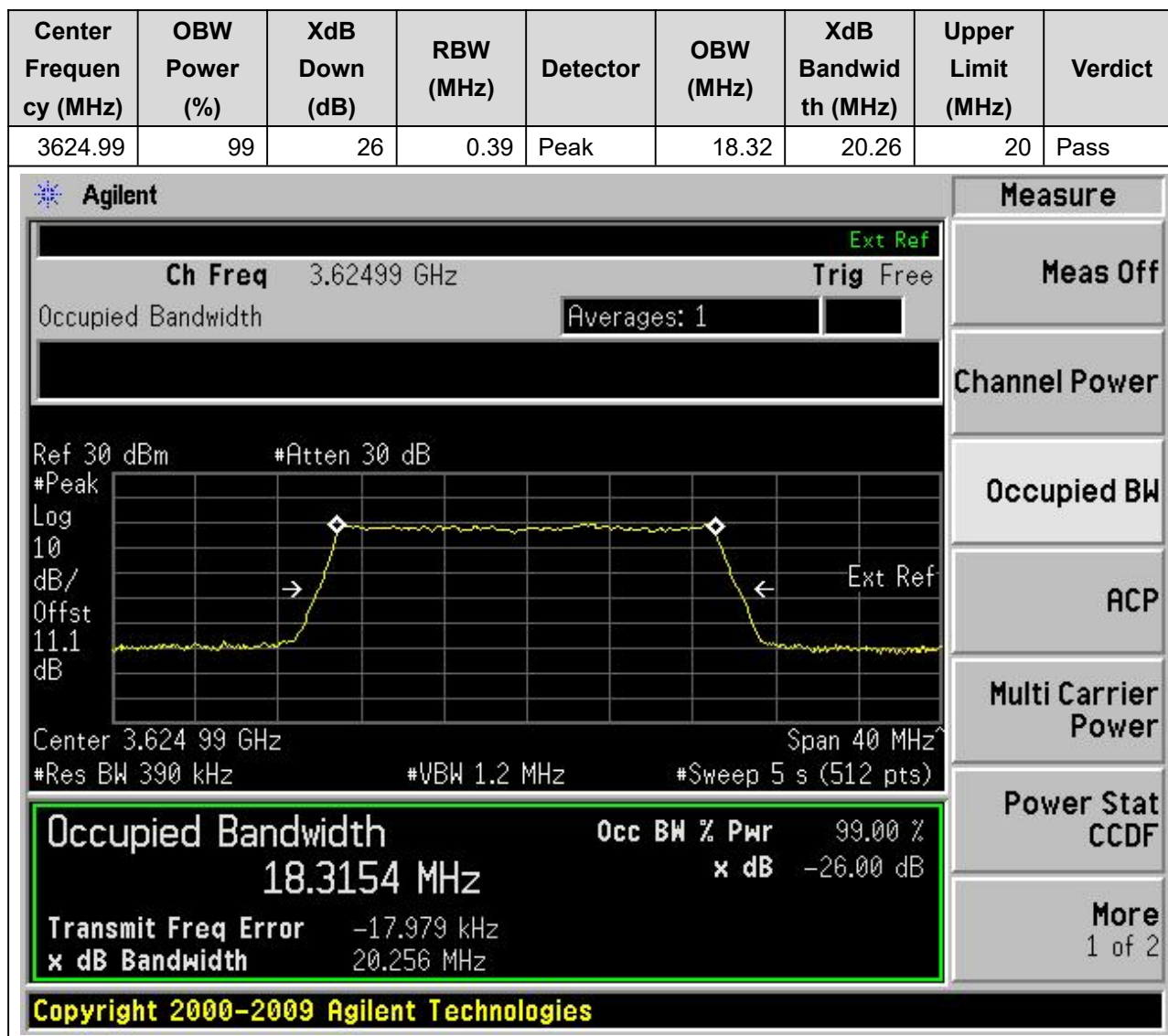
1.9 Occupied Bandwidth for SA_Part96(NTLV)(Channel:646000, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:64QAM, RB Number:51, RB Position:0)



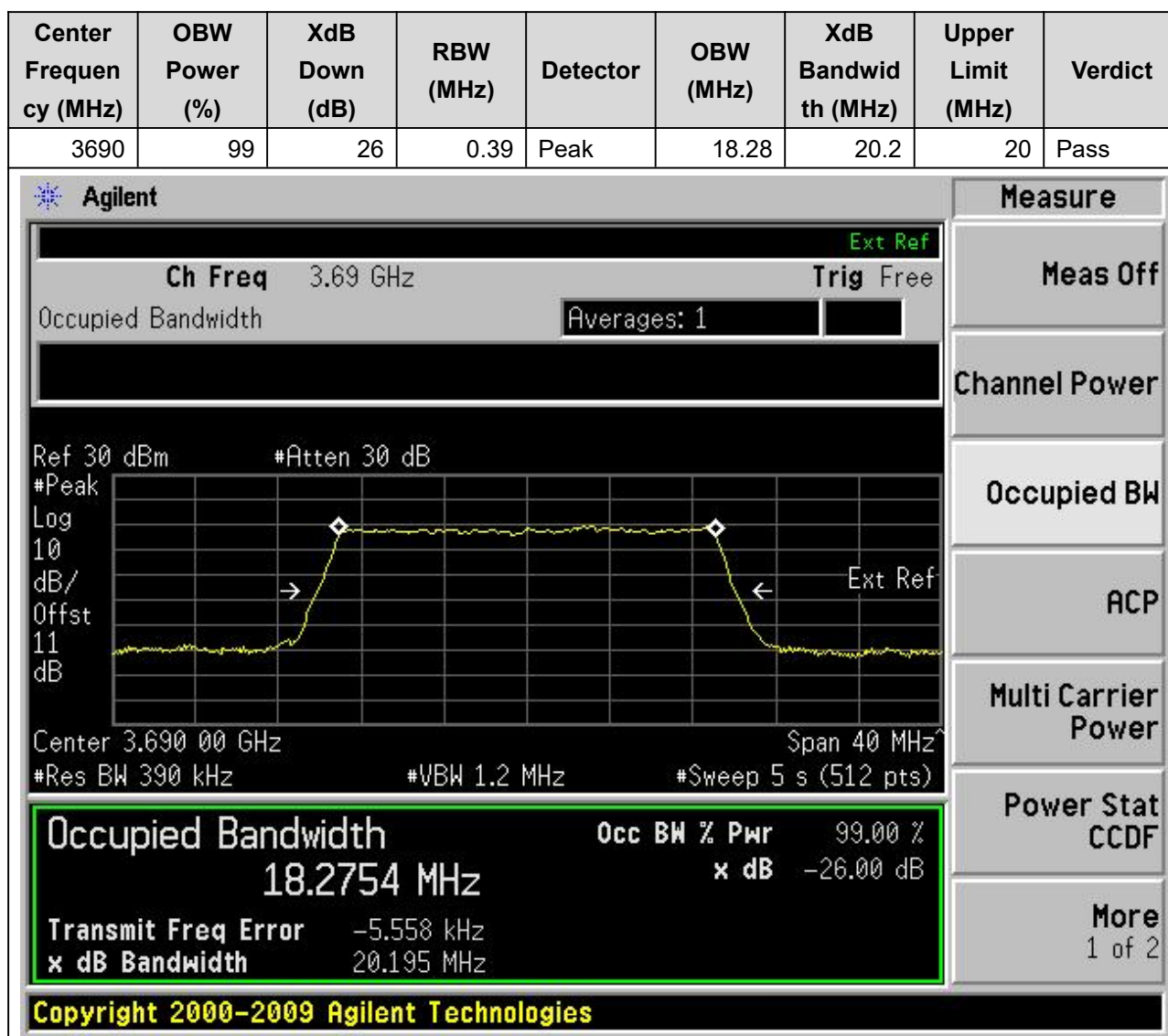
1.10 Occupied Bandwidth for SA_Part96(NTLV)(Channel:637334, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:256QAM, RB Number:51, RB Position:0)



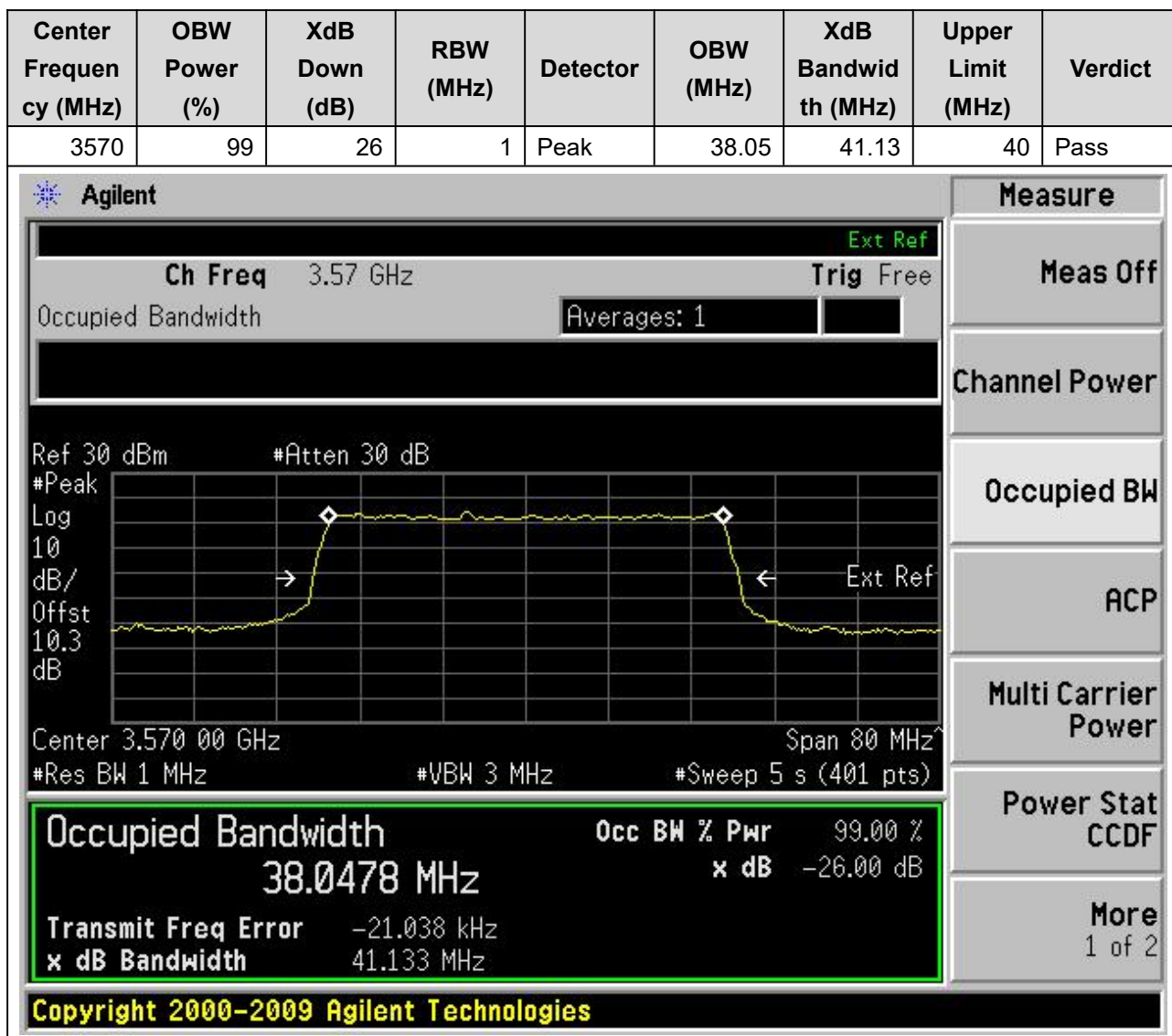
1.11 Occupied Bandwidth for SA_Part96(NTLV)(Channel:641666, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:256QAM, RB Number:51, RB Position:0)



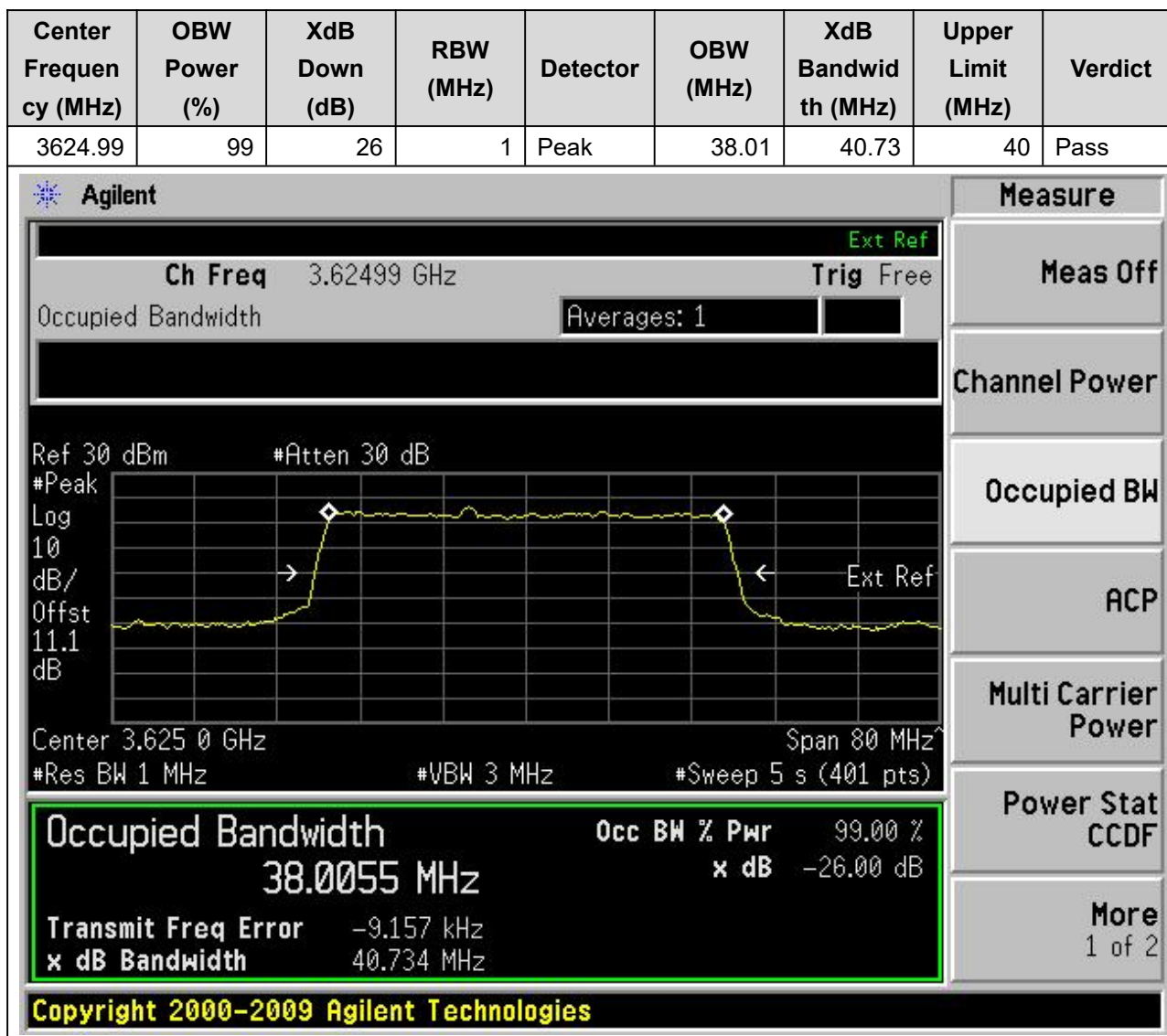
1.12 Occupied Bandwidth for SA_Part96(NTLV)(Channel:646000, Bandwidth:20, SCS:30, OFDM:CP-OFDM, Modulation:256QAM, RB Number:51, RB Position:0)



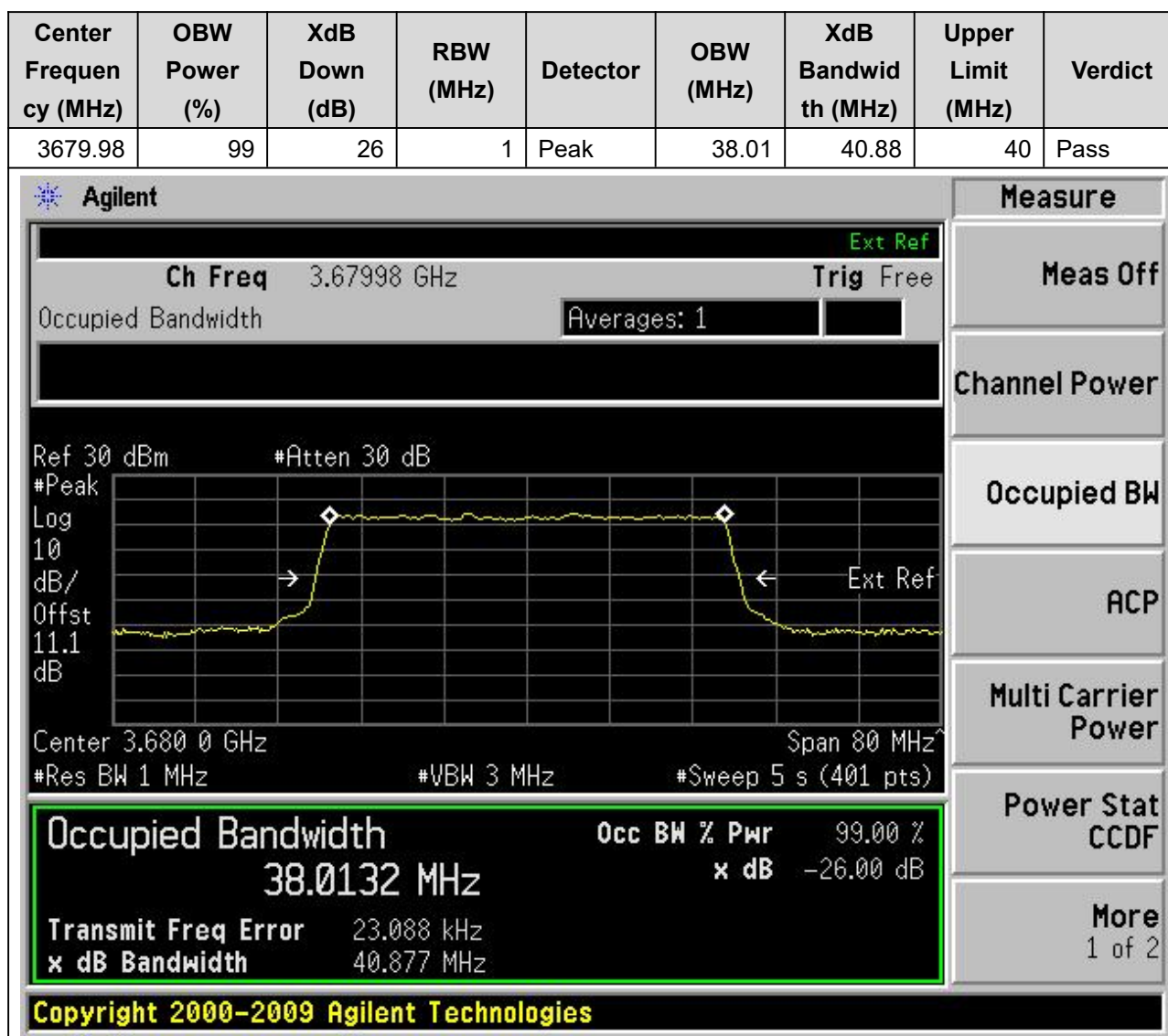
1.13 Occupied Bandwidth for SA_Part96(NTLV)(Channel:638000, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:QPSK, RB Number:106, RB Position:0)



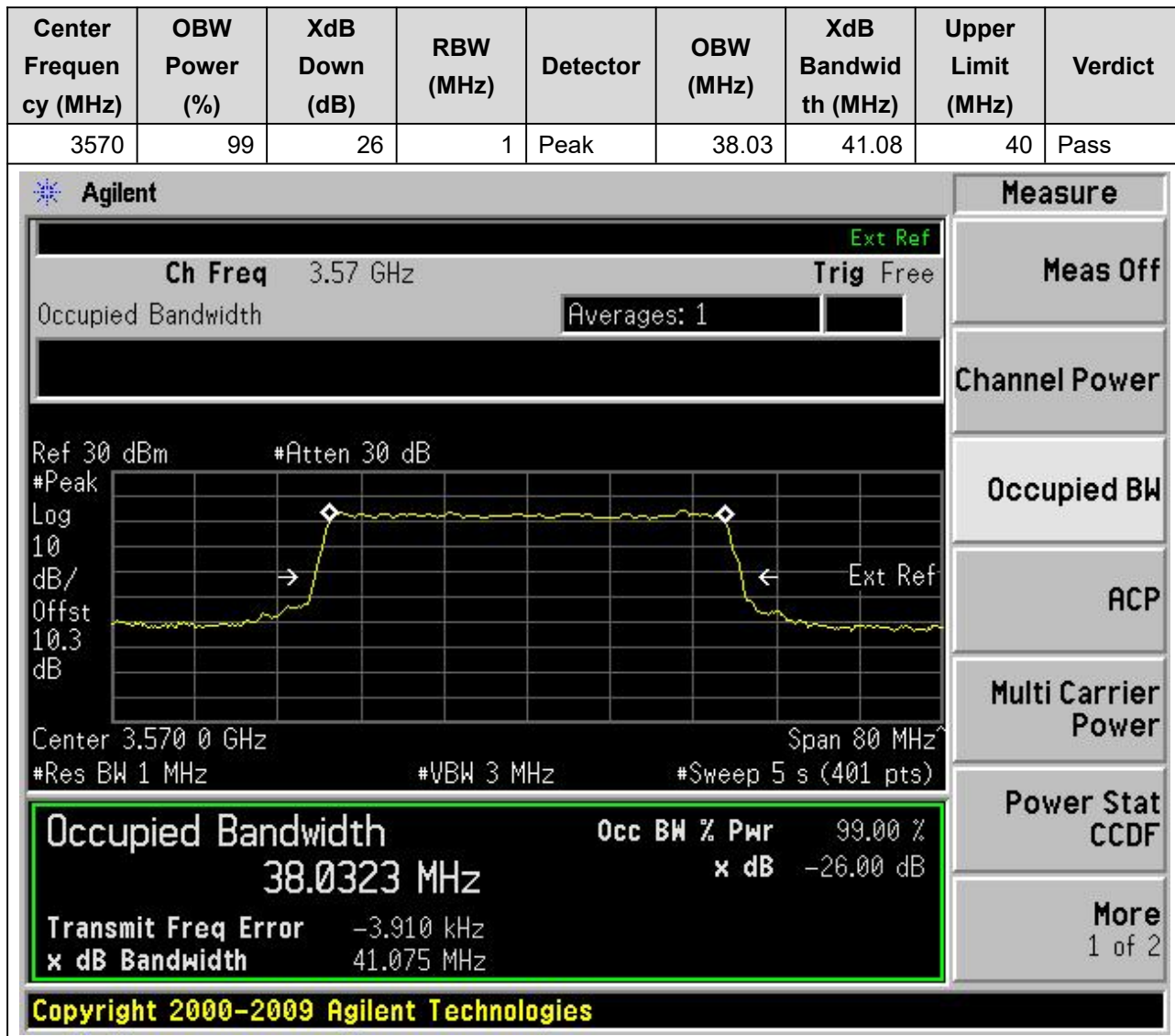
1.14 Occupied Bandwidth for SA_Part96(NTLV)(Channel:641666, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:QPSK, RB Number:106, RB Position:0)



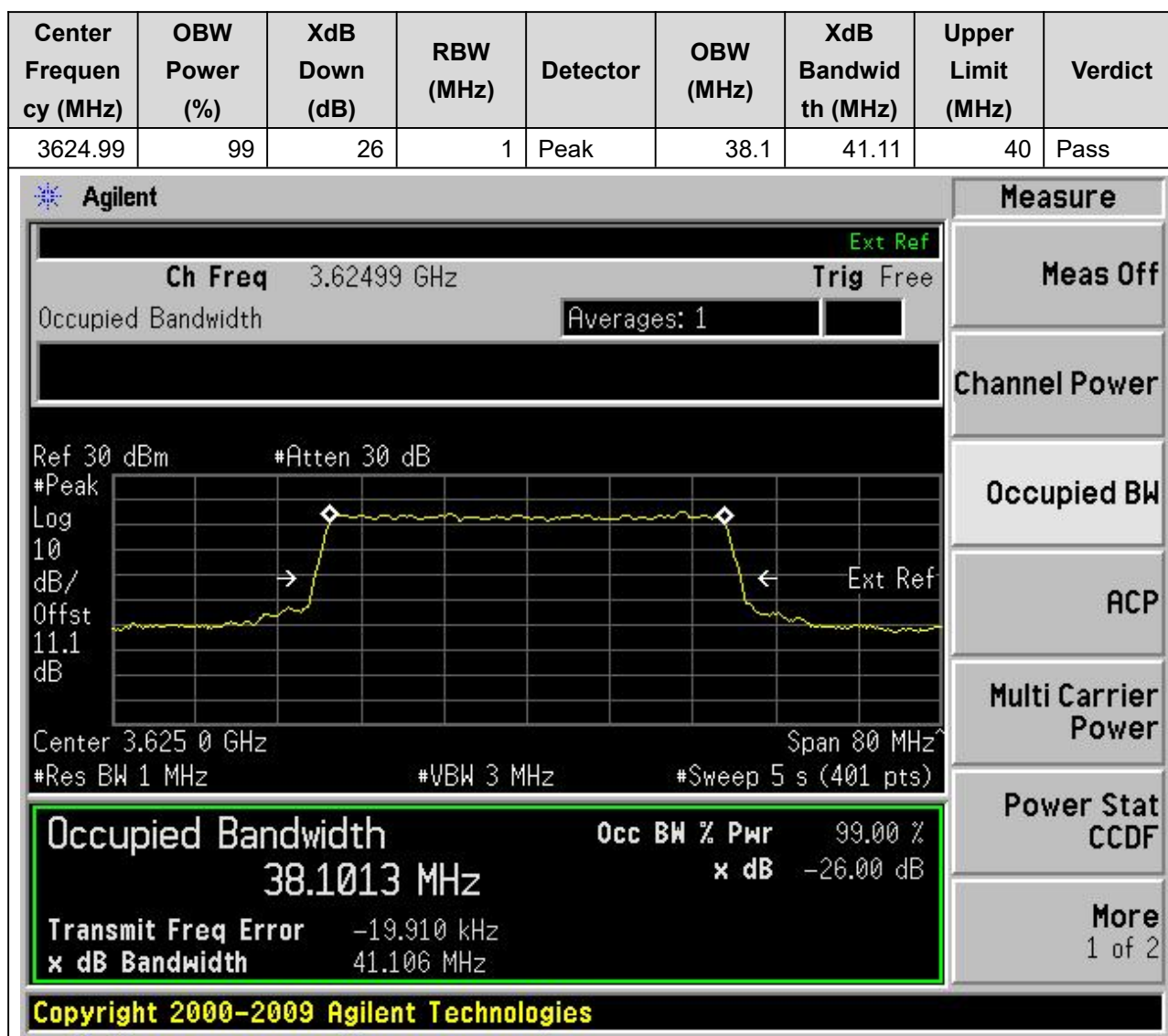
1.15 Occupied Bandwidth for SA_Part96(NTLV)(Channel:645332, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:QPSK, RB Number:106, RB Position:0)



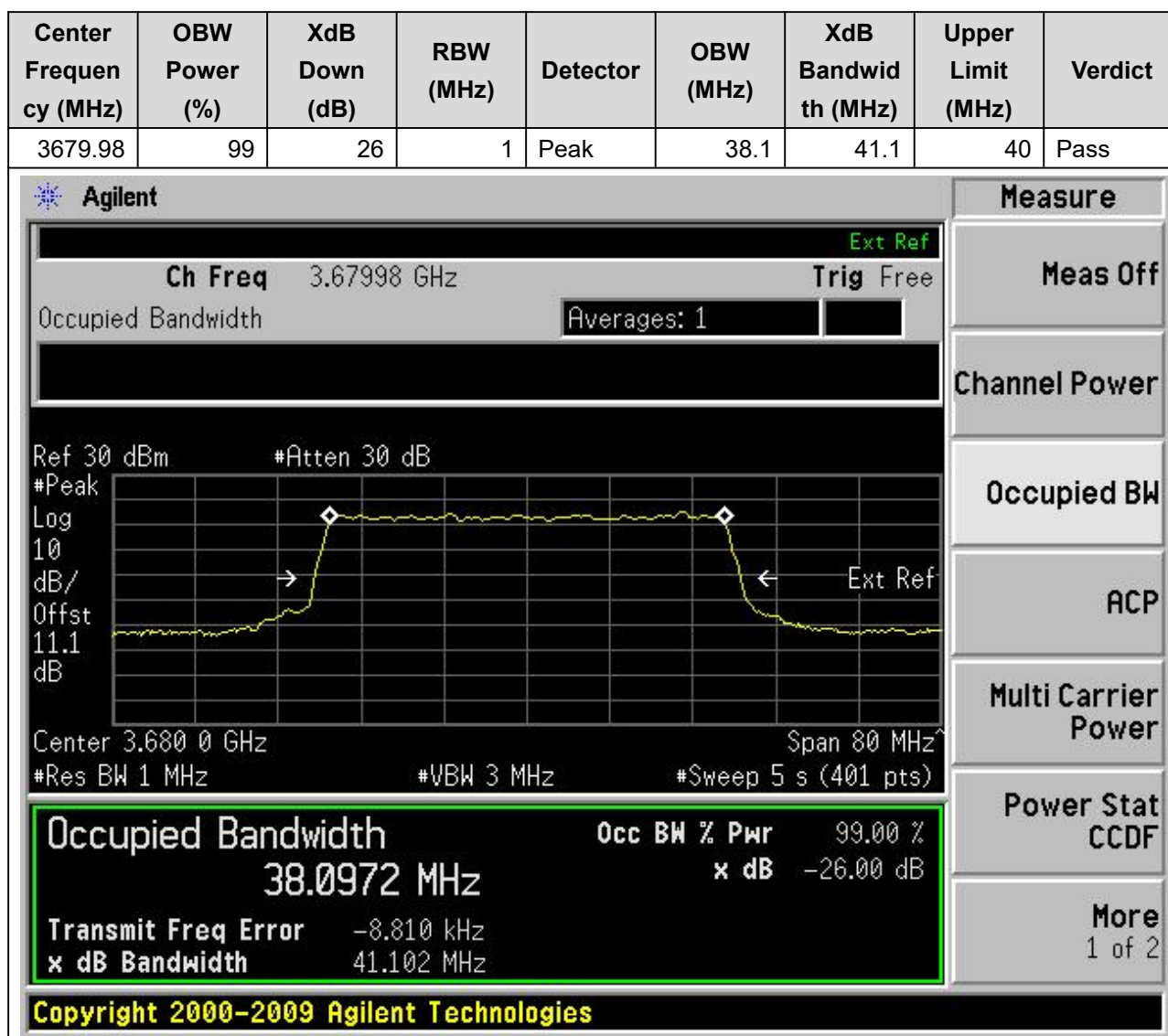
1.16 Occupied Bandwidth for SA_Part96(NTLV)(Channel:638000, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:16QAM, RB Number:106, RB Position:0)



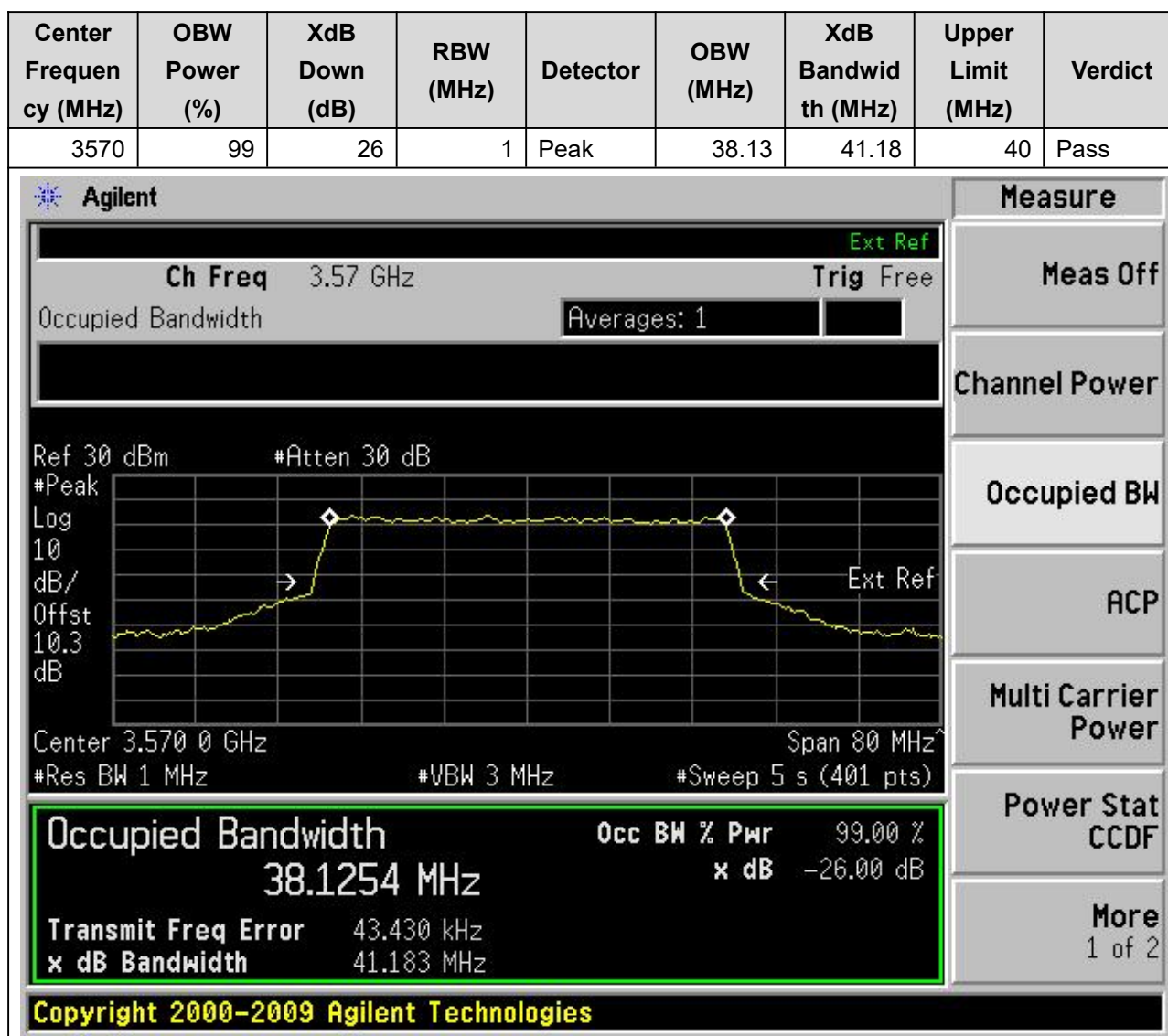
1.17 Occupied Bandwidth for SA_Part96(NTLV)(Channel:641666, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:16QAM, RB Number:106, RB Position:0)



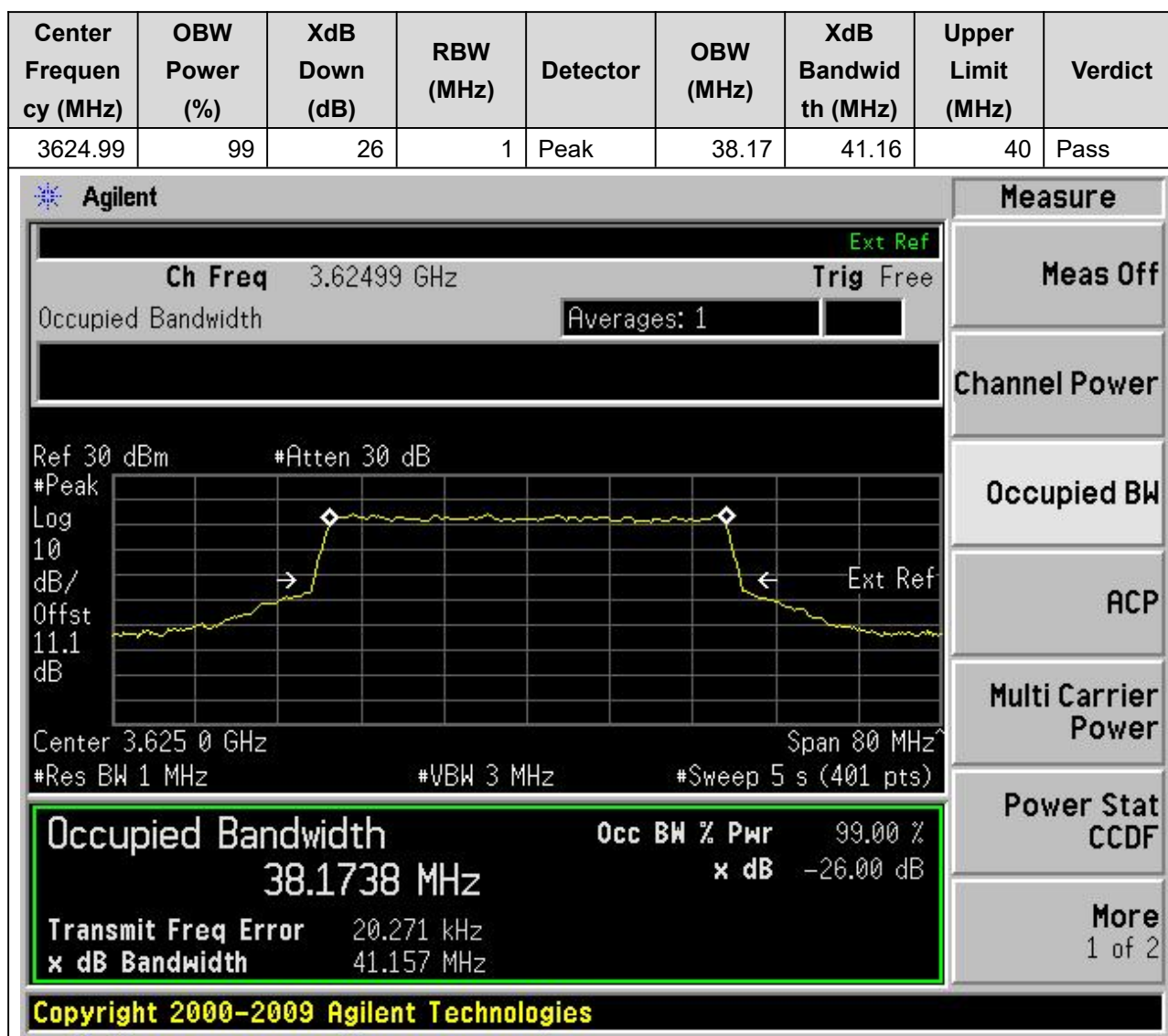
1.18 Occupied Bandwidth for SA_Part96(NTLV)(Channel:645332, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:16QAM, RB Number:106, RB Position:0)



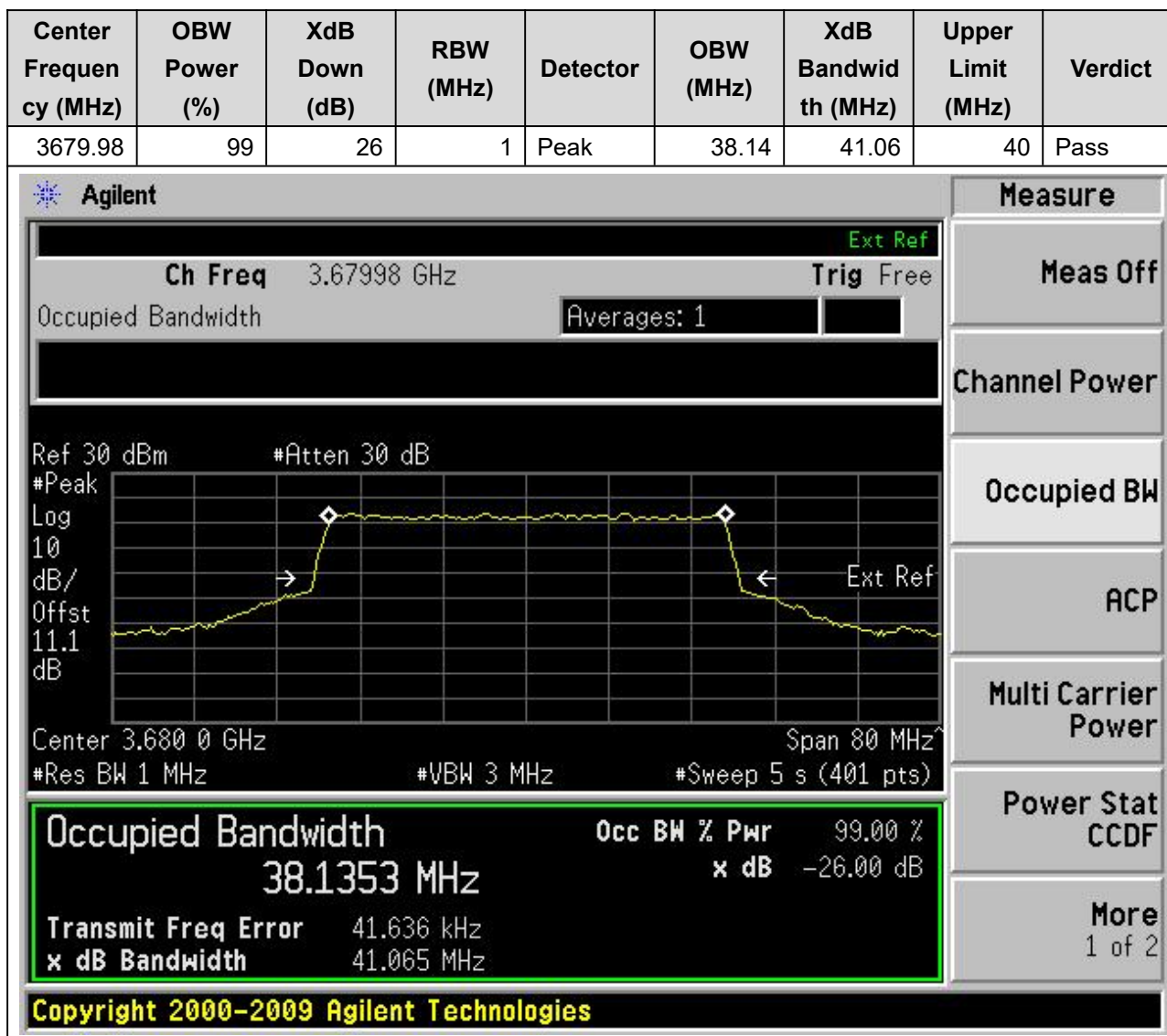
1.19 Occupied Bandwidth for SA_Part96(NTLV)(Channel:638000, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:64QAM, RB Number:106, RB Position:0)



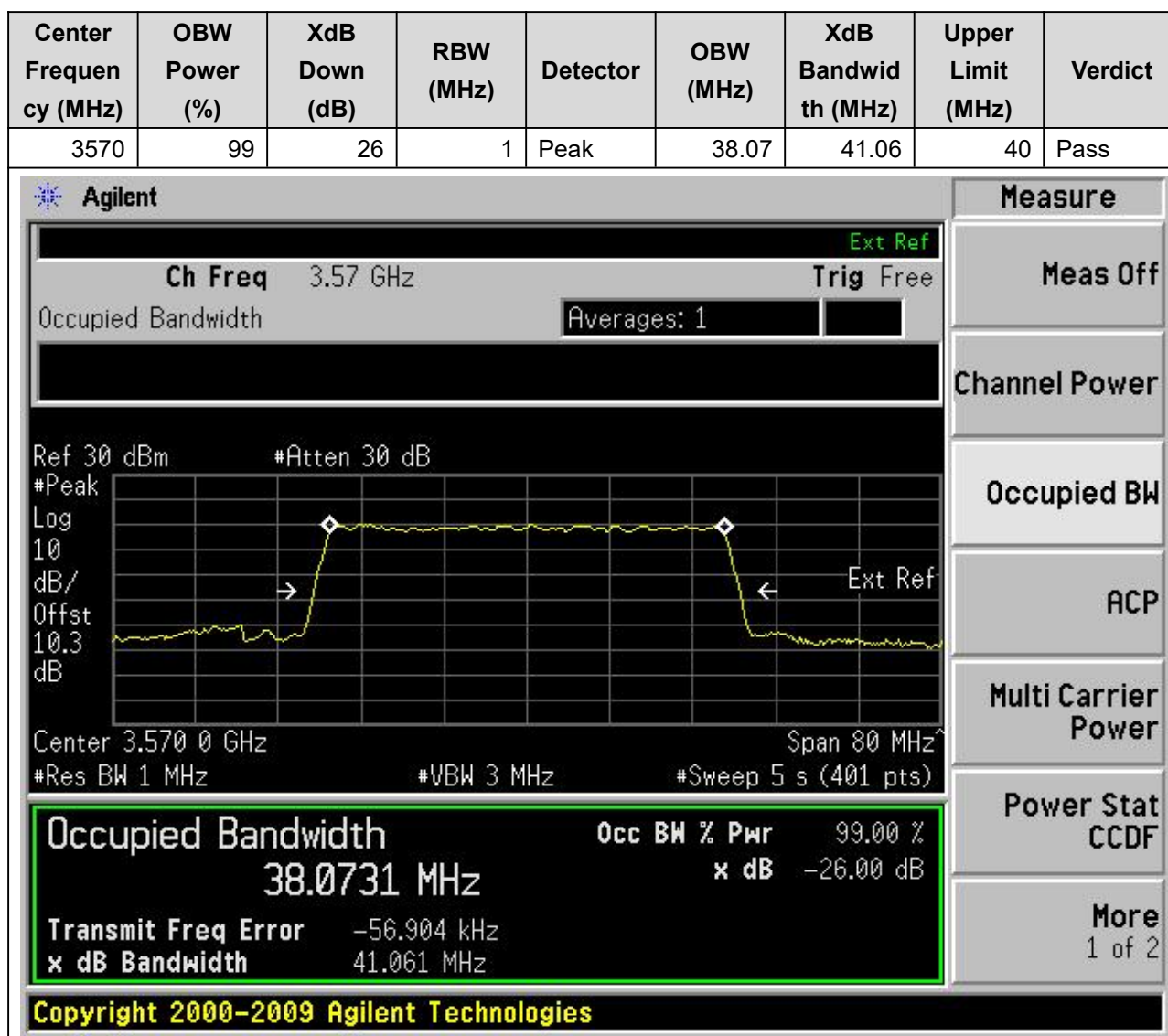
1.20 Occupied Bandwidth for SA_Part96(NTLV)(Channel:641666, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:64QAM, RB Number:106, RB Position:0)



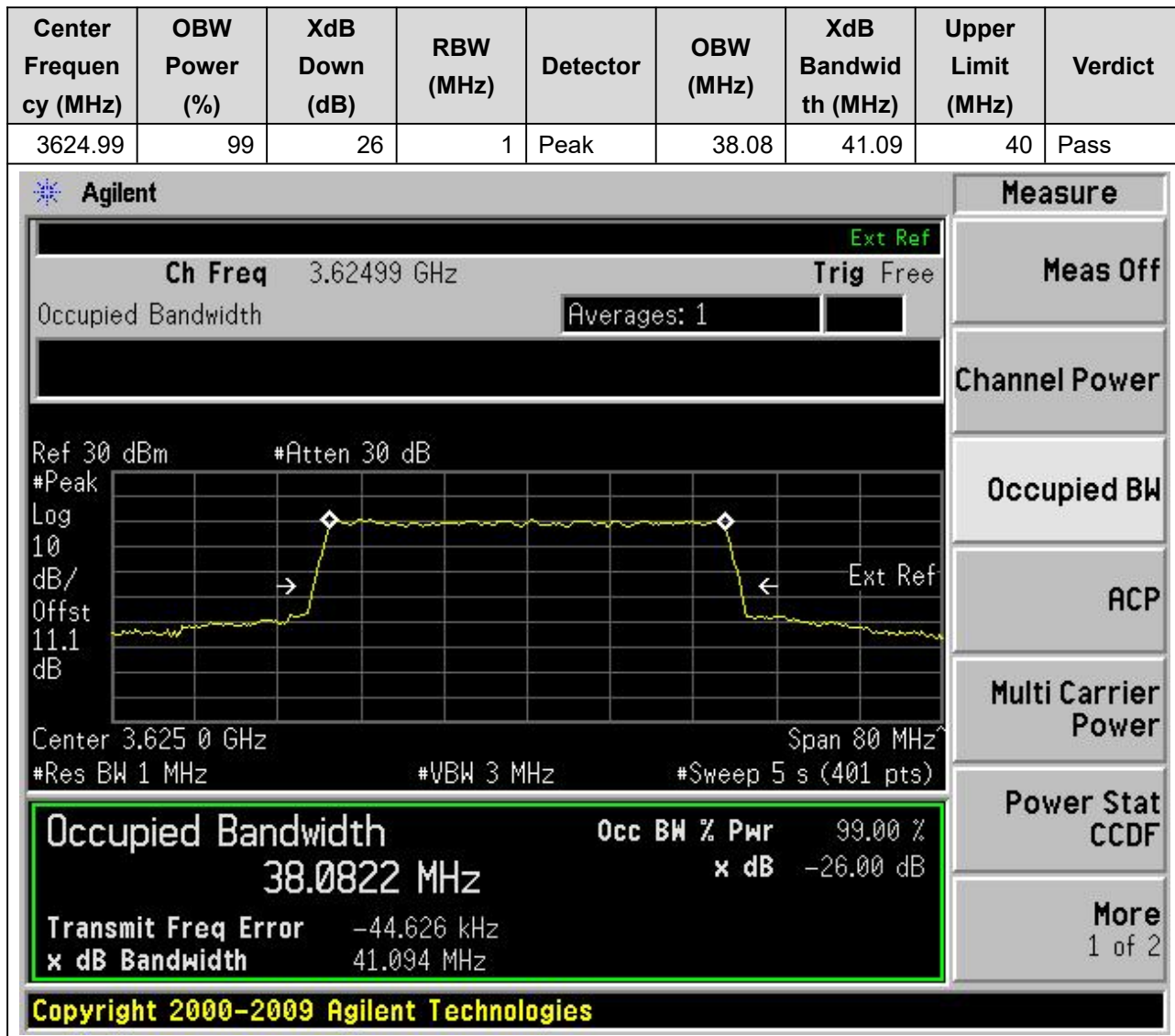
1.21 Occupied Bandwidth for SA_Part96(NTLV)(Channel:645332, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:64QAM, RB Number:106, RB Position:0)



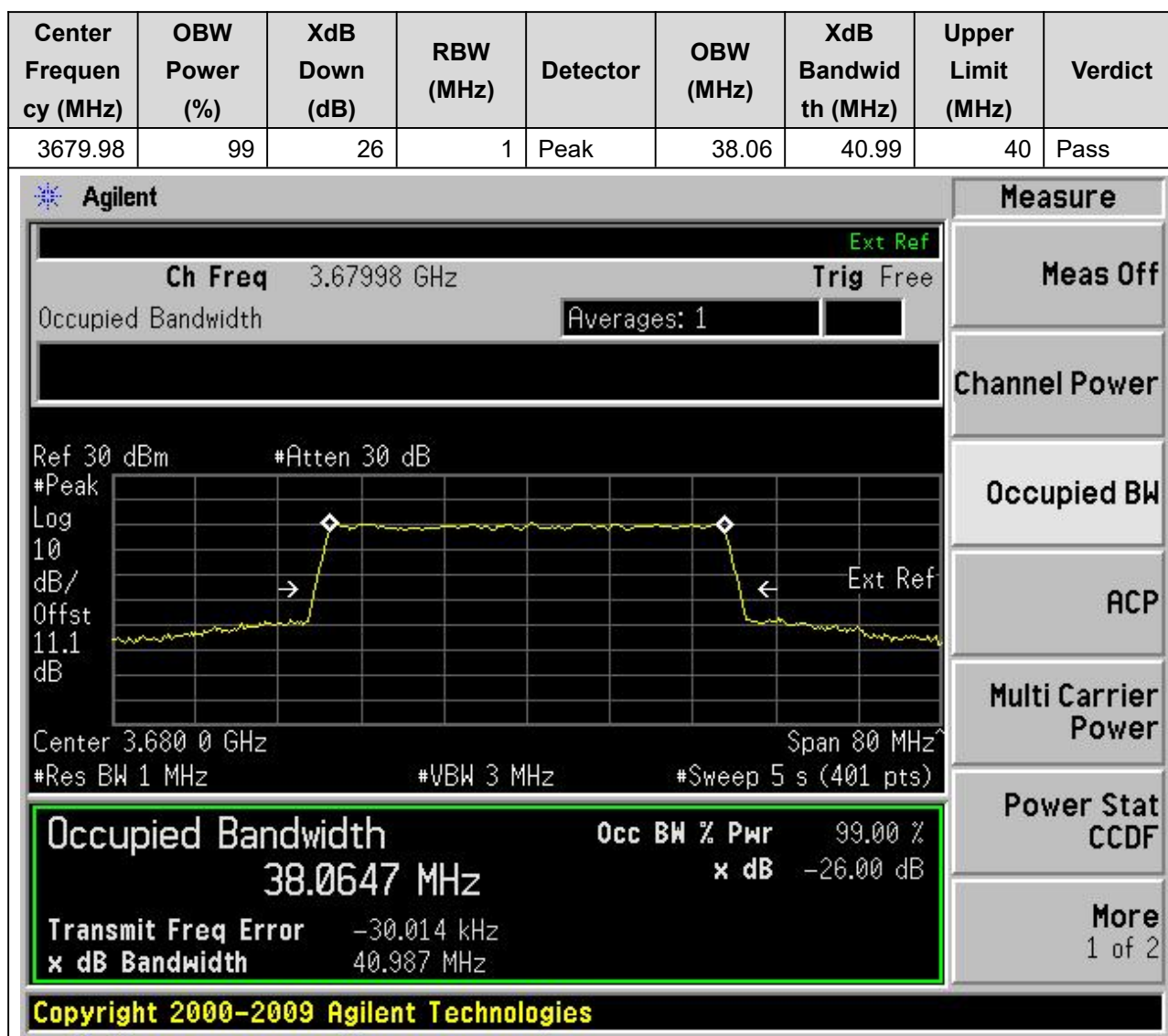
1.22 Occupied Bandwidth for SA_Part96(NTLV)(Channel:638000, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:256QAM, RB Number:106, RB Position:0)



1.23 Occupied Bandwidth for SA_Part96(NTLV)(Channel:641666, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:256QAM, RB Number:106, RB Position:0)

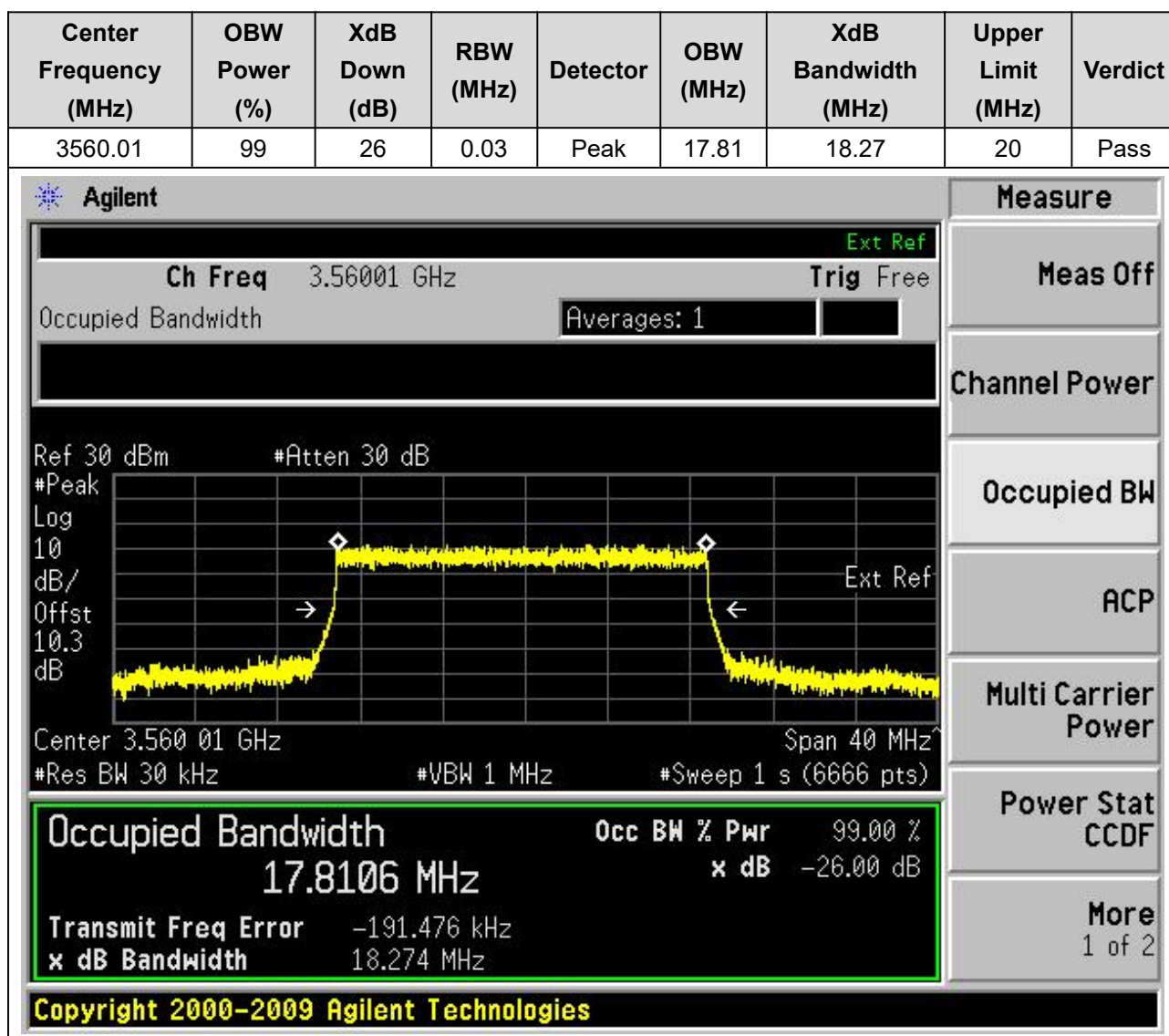


1.24 Occupied Bandwidth for SA_Part96(NTLV)(Channel:645332, Bandwidth:40, SCS:30, OFDM:CP-OFDM, Modulation:256QAM, RB Number:106, RB Position:0)



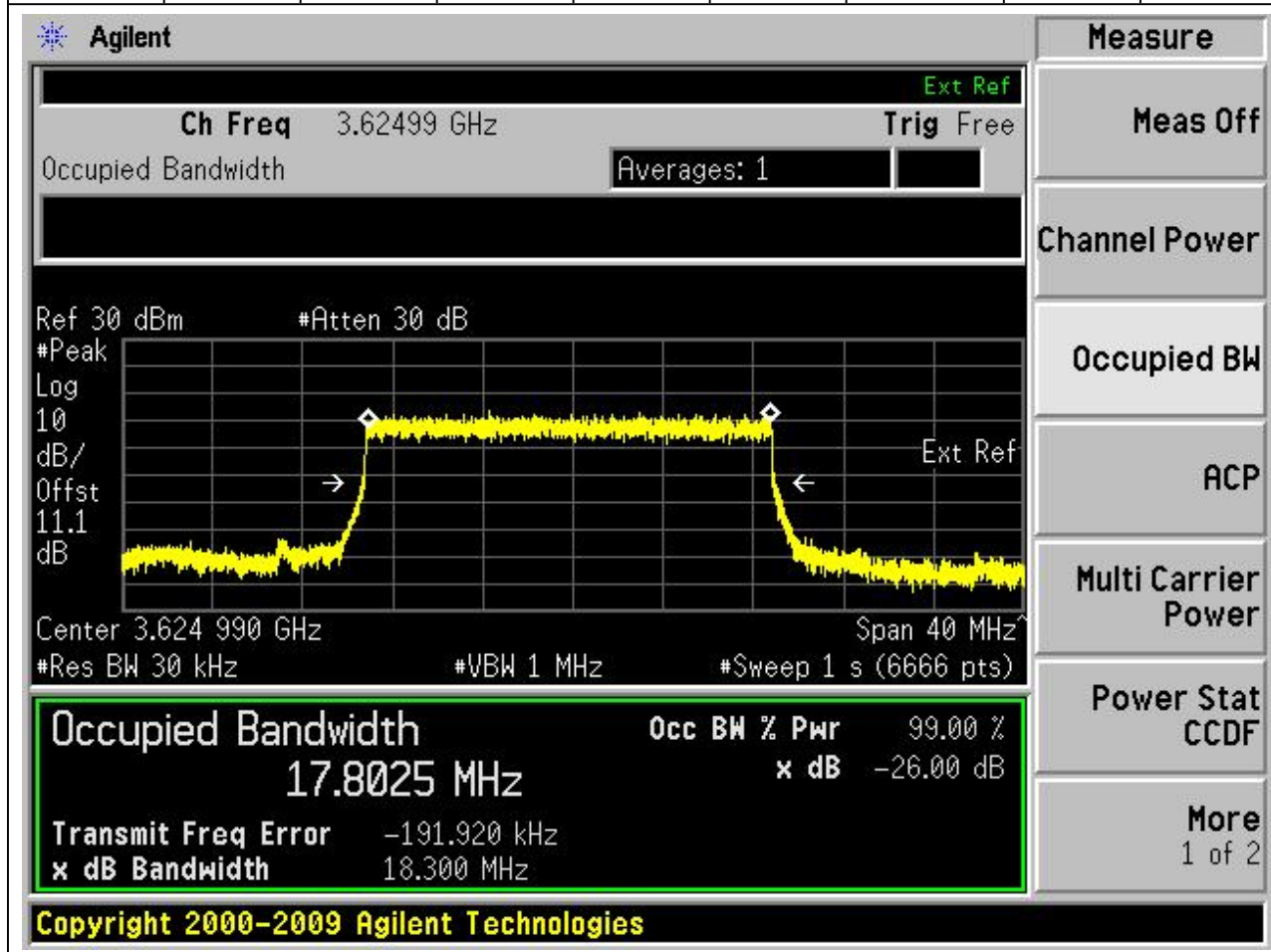
8. n48 30kHz

8.1 Occupied Bandwidth for SA_Part22-24-27-Pi2 BPSK(NTNV)(Channel:637334, Bandwidth:20, SCS:30, OFDM:DFT-s-OFDM, Modulation:Pi/2-BPSK, RB Number:50, RB Position:0)



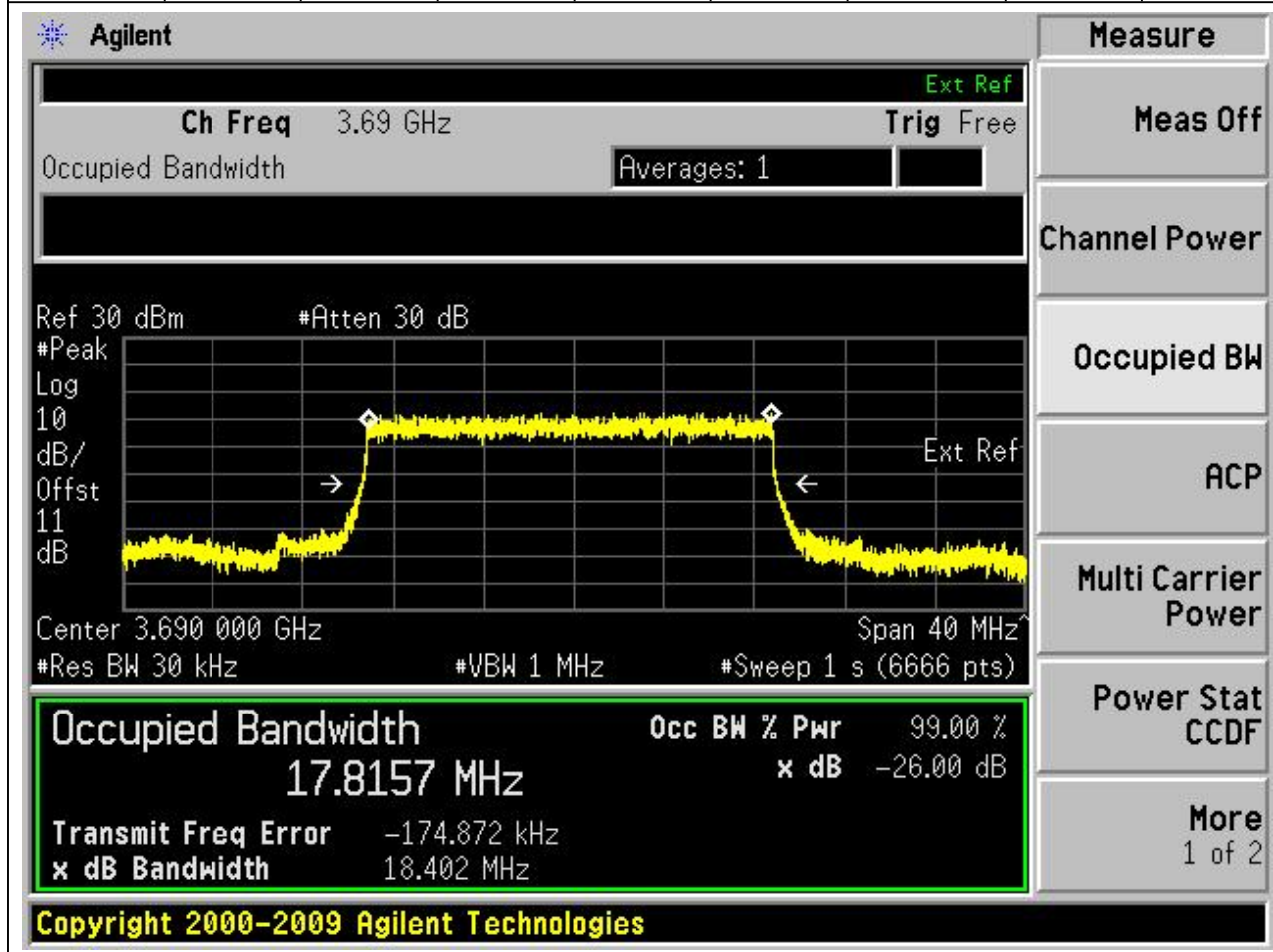
8.2 Occupied Bandwidth for SA_Part22-24-27-PI2 BPSK(NTNV)(Channel:641666, Bandwidth:20, SCS:30, OFDM:DFT-s-OFDM, Modulation:Pi/2-BPSK, RB Number:50, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
3624.99	99	26	0.03	Peak	17.8	18.3	20	Pass

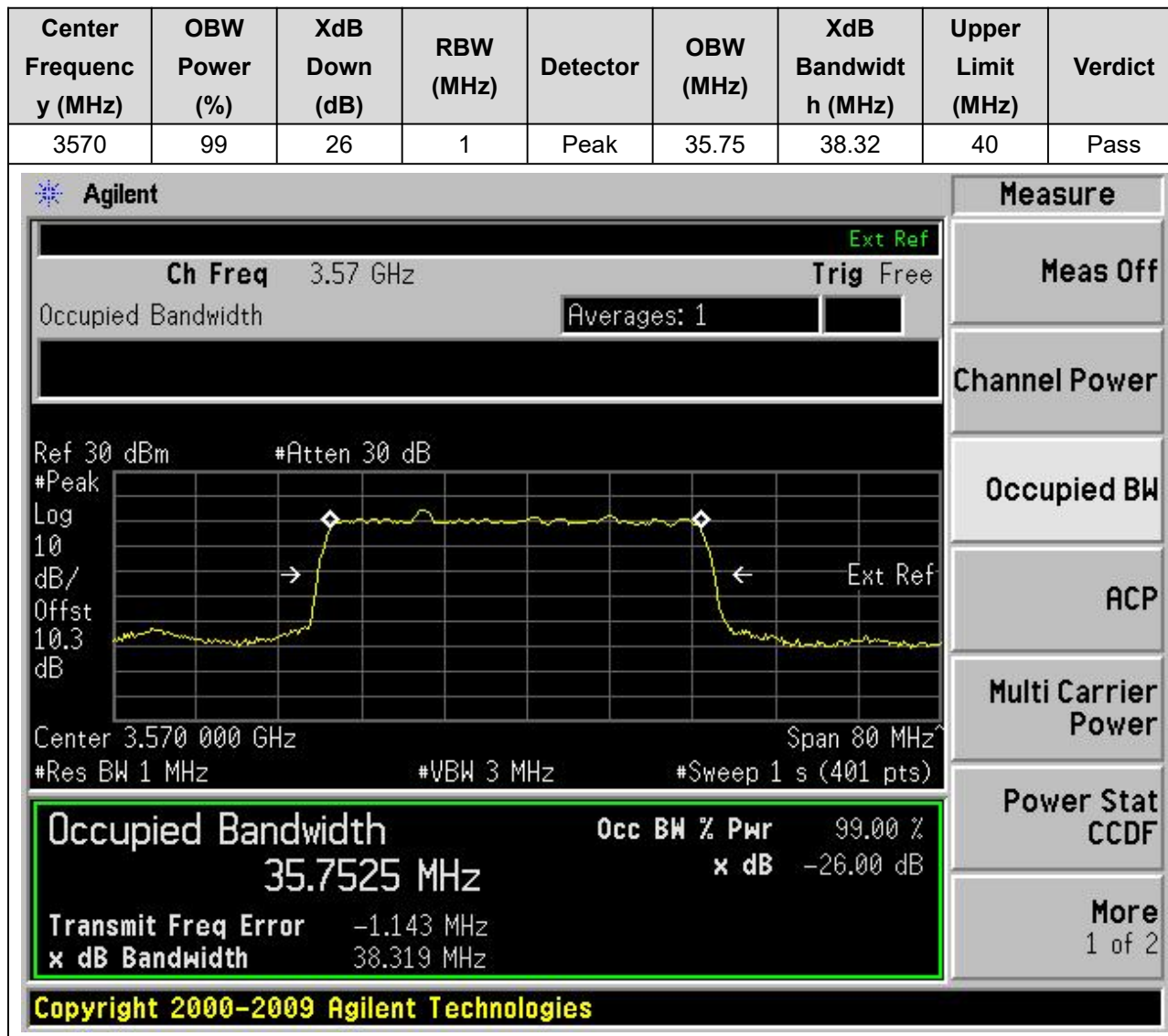


8.3 Occupied Bandwidth for SA_Part22-24-27-PI2 BPSK(NTNV)(Channel:646000, Bandwidth:20, SCS:30, OFDM:DFT-s-OFDM, Modulation:Pi/2-BPSK, RB Number:50, RB Position:0)

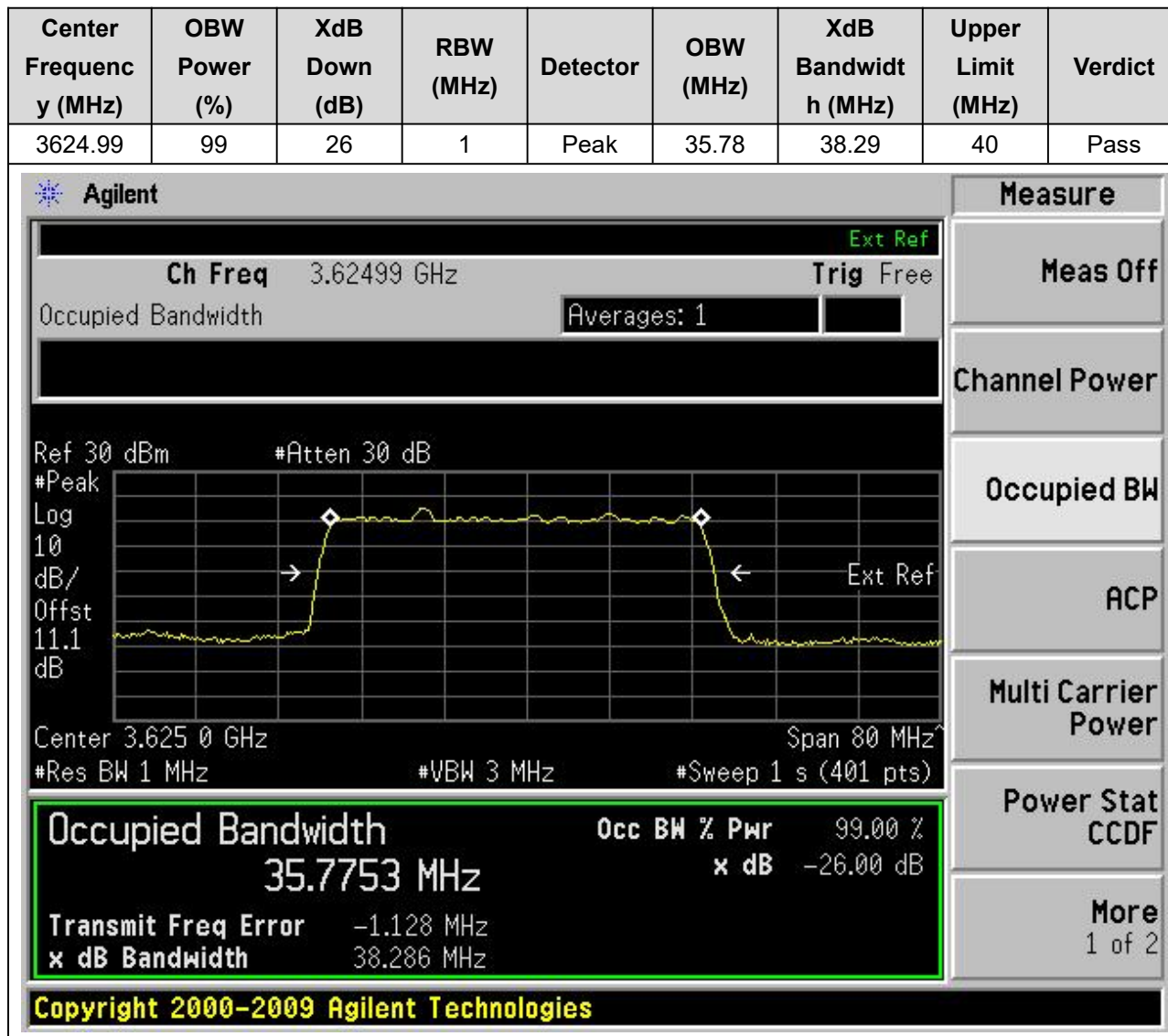
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
3690	99	26	0.03	Peak	17.82	18.4	20	Pass



8.4 Occupied Bandwidth for SA_Part22-24-27-PI2 BPSK(NTNV)(Channel:638000, Bandwidth:40, SCS:30, OFDM:DFT-s-OFDM, Modulation:Pi/2-BPSK, RB Number:100, RB Position:0)



8.5 Occupied Bandwidth for SA_Part22-24-27-PI2 BPSK(NTNV)(Channel:641666, Bandwidth:40, SCS:30, OFDM:DFT-s-OFDM, Modulation:Pi/2-BPSK, RB Number:100, RB Position:0)



8.6 Occupied Bandwidth for SA_Part22-24-27-PI2 BPSK(NTNV)(Channel:645332, Bandwidth:40, SCS:30, OFDM:DFT-s-OFDM, Modulation:Pi/2-BPSK, RB Number:100, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
3679.98	99	26	1	Peak	35.77	38.33	40	Pass

