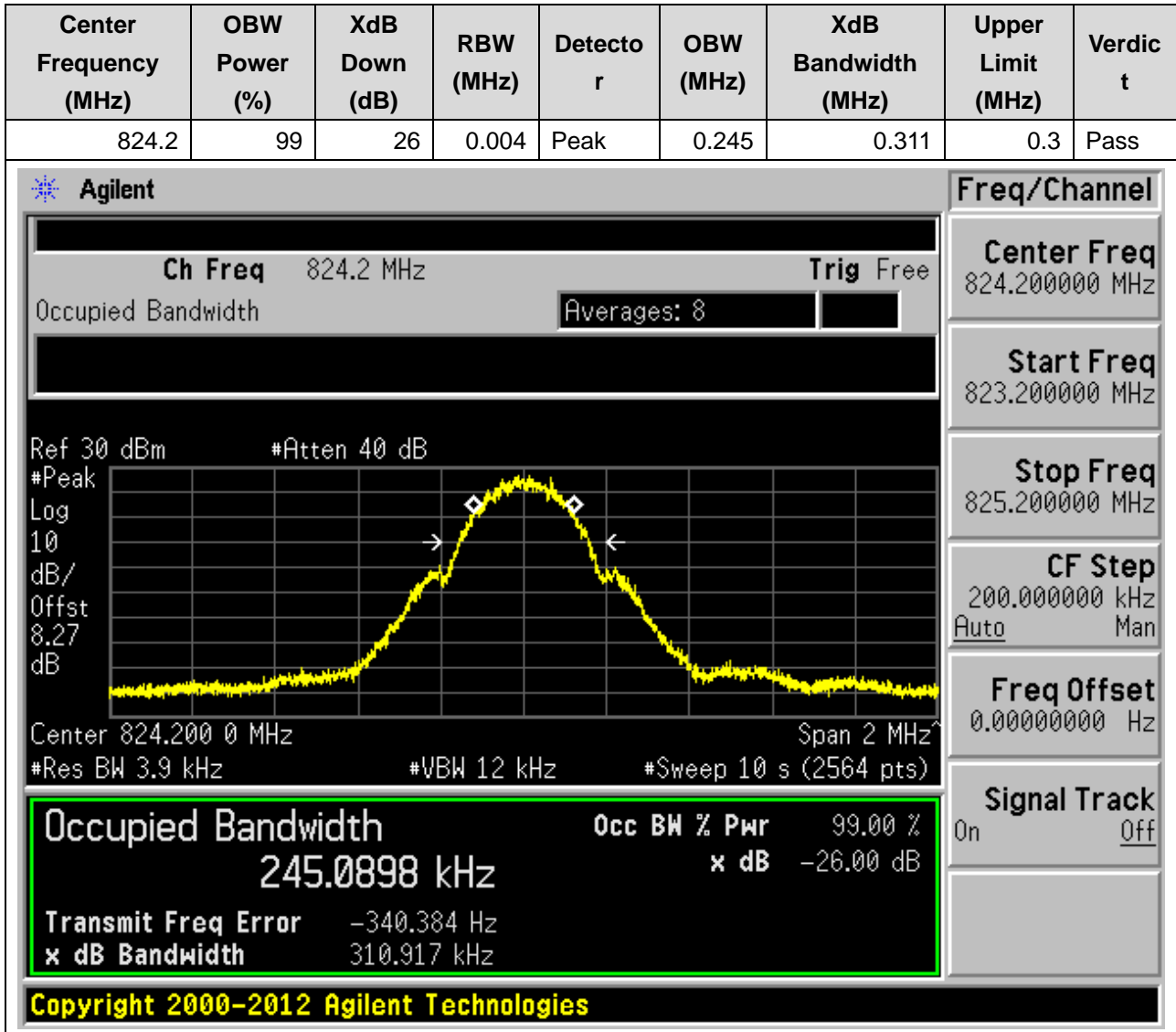


A.3 Occupied Bandwidth

1. GSM_GSM850

1.1. GSM Occupied Bandwidth(NTNV)(Channel:128)



1.2. GSM Occupied Bandwidth(NTNV)(Channel:190)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.6	99	26	0.004	Peak	0.247	0.313	0.3	Pass

Agilent

Ch Freq 836.6 MHz Trig Free

Occupied Bandwidth Averages: 8

Ref 30 dBm #Atten 40 dB

#Peak Log 10 dB/ Offst 8.28 dB

Center 836.600 MHz Span 2 MHz

#Res BW 3.9 kHz #VBW 12 kHz #Sweep 10 s (2564 pts)

Occupied Bandwidth Occ BW % Pwr 99.00 %

247.3575 kHz x dB -26.00 dB

Transmit Freq Error 279.862 Hz

x dB Bandwidth 312.554 kHz

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Freq/Channel

Center Freq 836.600000 MHz

Start Freq 835.600000 MHz

Stop Freq 837.600000 MHz

CF Step 200.000000 kHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

1.3. GSM Occupied Bandwidth(NTNV)(Channel:251)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
848.8	99	26	0.004	Peak	0.246	0.311	0.3	Pass

Agilent

Ch Freq 848.8 MHz Trig Free

Occupied Bandwidth Averages: 8

Ref 30 dBm #Atten 40 dB

Center 848.800 0 MHz Span 2 MHz

#Res BW 3.9 kHz #VBW 12 kHz #Sweep 10 s (2564 pts)

Freq/Channel

Center Freq 848.800000 MHz

Start Freq 847.800000 MHz

Stop Freq 849.800000 MHz

CF Step 200.000000 kHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

Occupied Bandwidth Occ BW % Pwr 99.00 %

245.7327 kHz x dB -26.00 dB

Transmit Freq Error 398.357 Hz

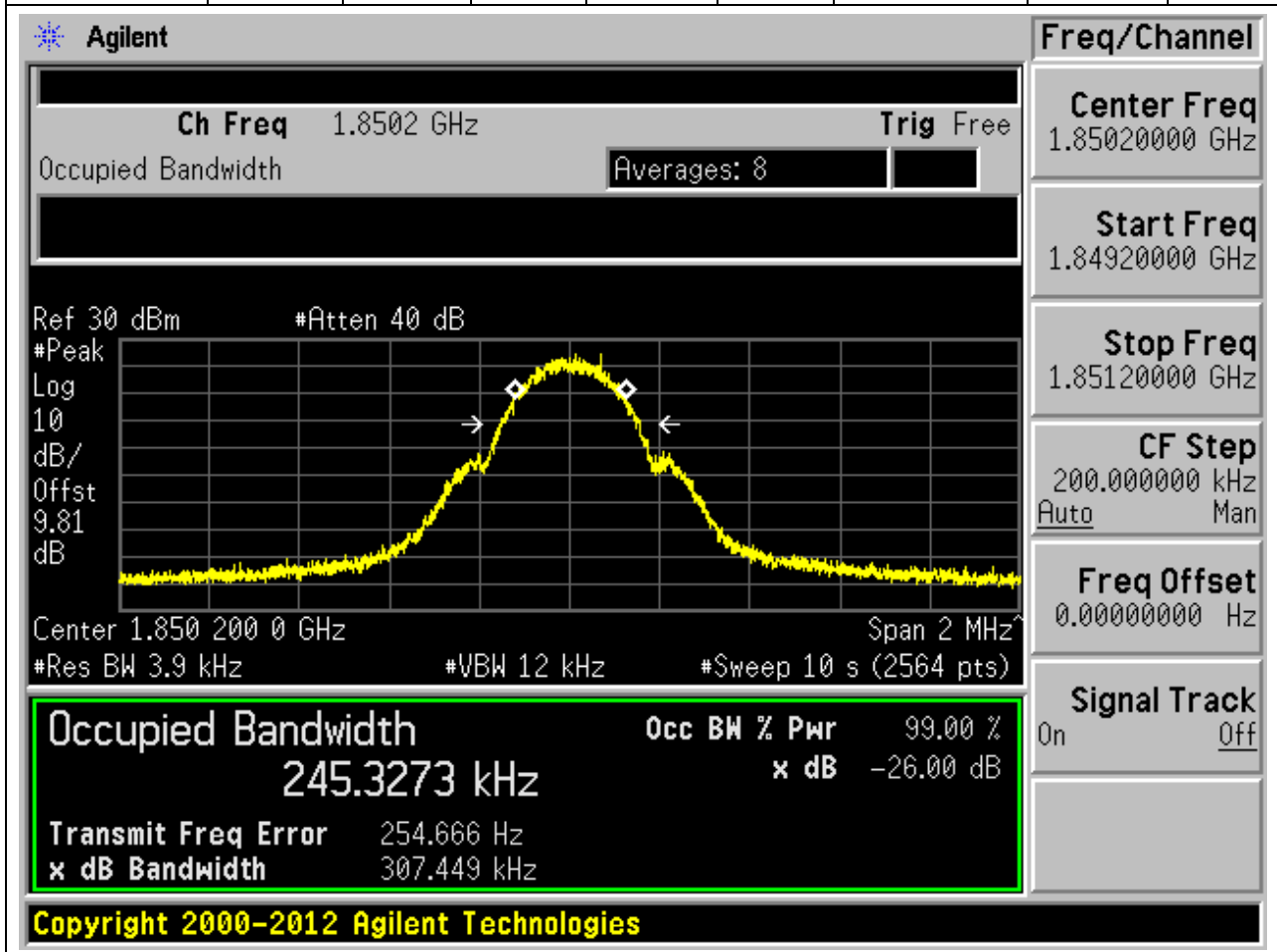
x dB Bandwidth 311.264 kHz

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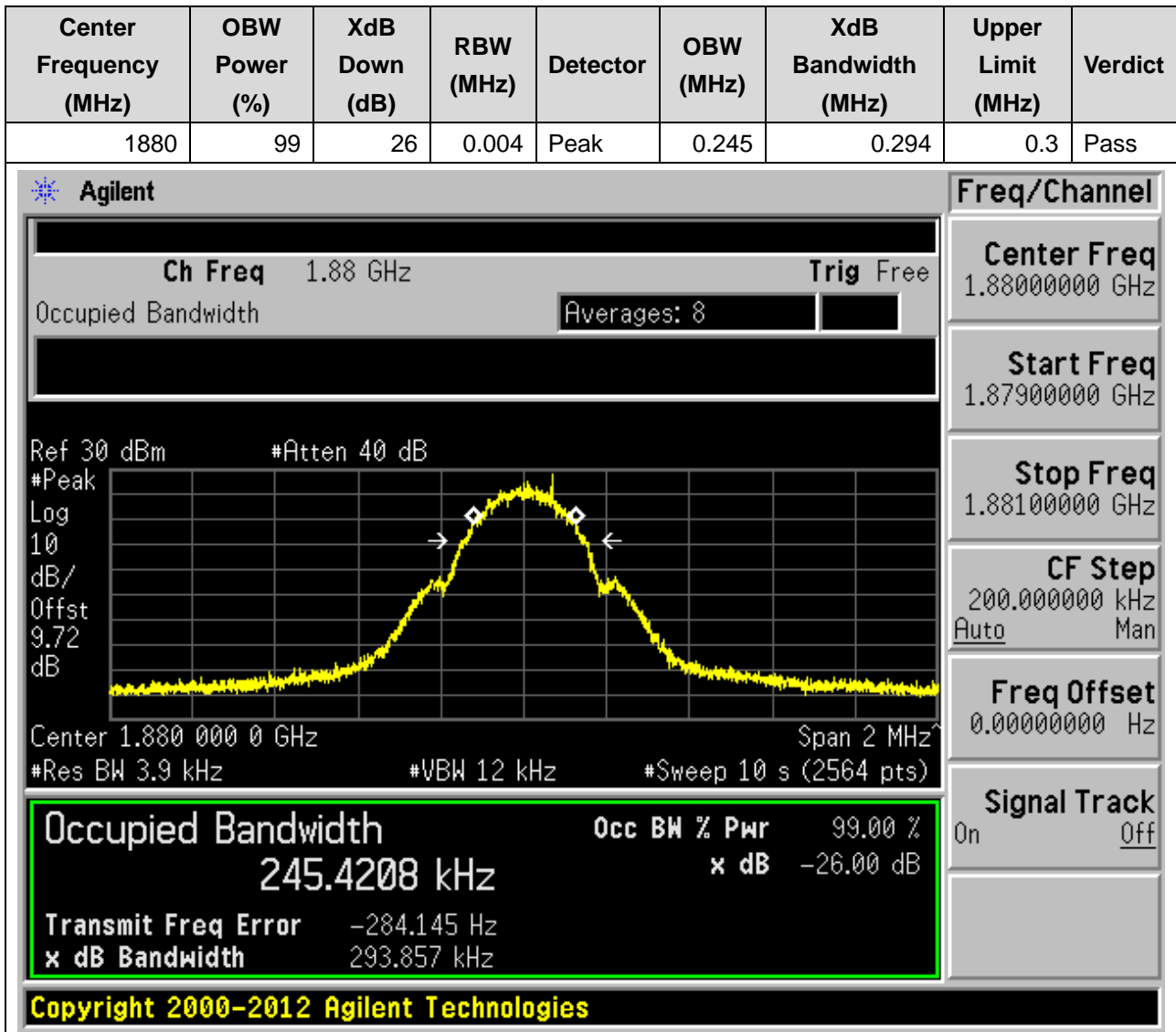
2. GSM_PCS

2.1. GSM Occupied Bandwidth(NTNV)(Channel:512)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1850.2	99	26	0.004	Peak	0.245	0.307	0.3	Pass



2.2. GSM Occupied Bandwidth(NTNV)(Channel:661)



2.3. GSM Occupied Bandwidth(NTNV)(Channel:810)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1909.8	99	26	0.004	Peak	0.246	0.316	0.3	Pass

Agilent

Ch Freq 1.9098 GHz Trig Free

Occupied Bandwidth Averages: 8

Ref 30 dBm #Atten 40 dB

#Peak Log 10 dB/ Offst 9.8 dB

Center 1.909 800 0 GHz Span 2 MHz

#Res BW 3.9 kHz #VBW 12 kHz #Sweep 10 s (2564 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
246.4598 kHz	x dB	-26.00 dB
Transmit Freq Error	783.266 Hz	
x dB Bandwidth	316.174 kHz	

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Freq/Channel

Center Freq
1.90980000 GHz

Start Freq
1.90880000 GHz

Stop Freq
1.91080000 GHz

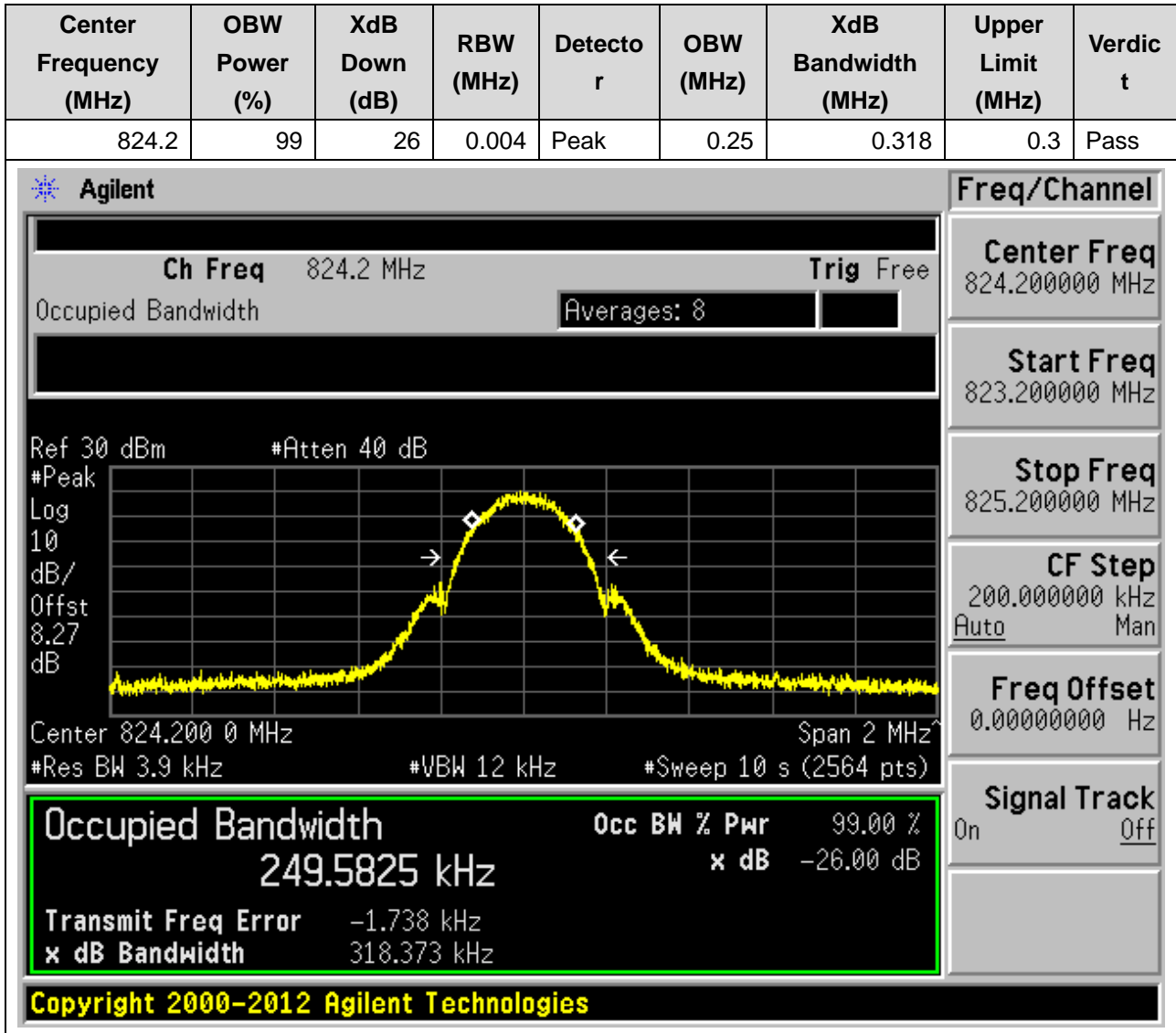
CF Step
200.000000 kHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

3. EGPRS_GSM850

3.1. EGPRS Occupied Bandwidth(NTNV)(Channel:128)



3.2. EGPRS Occupied Bandwidth(NTNV)(Channel:190)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.6	99	26	0.004	Peak	0.25	0.318	0.3	Pass

Agilent

Ch Freq 836.6 MHz Trig Free

Occupied Bandwidth Averages: 8

Ref 30 dBm #Atten 40 dB

Center 836.600 0 MHz Span 2 MHz

#Res BW 3.9 kHz #VBW 12 kHz #Sweep 10 s (2564 pts)

Freq/Channel

Center Freq
836.600000 MHz

Start Freq
835.600000 MHz

Stop Freq
837.600000 MHz

CF Step
200.000000 kHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

Occupied Bandwidth	Occ BW % Pwr 99.00 %
249.7063 kHz	x dB -26.00 dB
Transmit Freq Error -1.147 kHz	
x dB Bandwidth 317.613 kHz	

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3.3. EGPRS Occupied Bandwidth(NTNV)(Channel:251)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
848.8	99	26	0.004	Peak	0.249	0.31	0.3	Pass

Agilent

Ch Freq 848.8 MHz Trig Free

Occupied Bandwidth Averages: 8

Ref 30 dBm #Atten 40 dB

Center 848.800 0 MHz Span 2 MHz

#Res BW 3.9 kHz #VBW 12 kHz #Sweep 10 s (2564 pts)

Freq/Channel

Center Freq
848.800000 MHz

Start Freq
847.800000 MHz

Stop Freq
849.800000 MHz

CF Step
200.000000 kHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

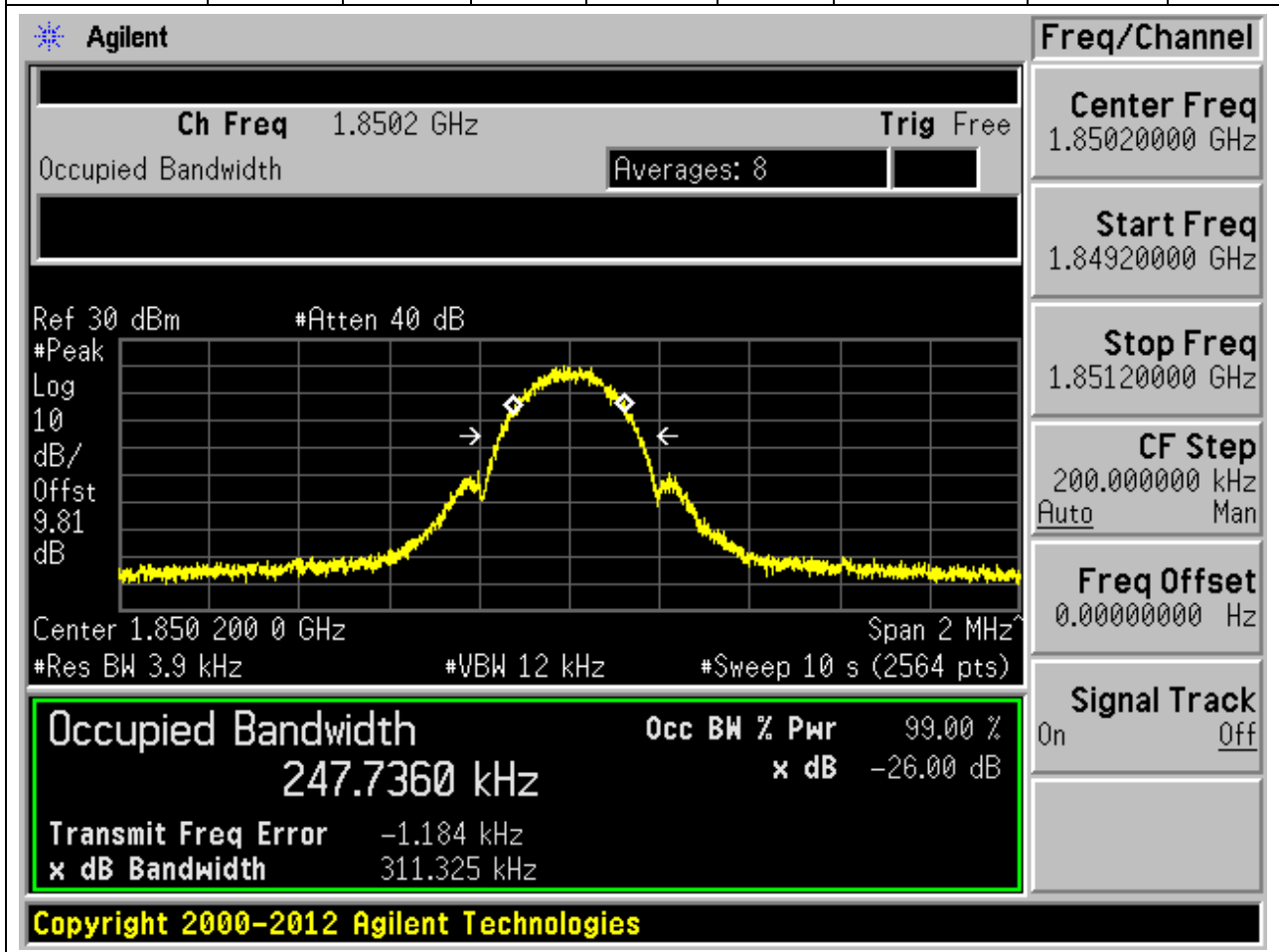
Occupied Bandwidth	Occ BW % Pwr 99.00 %
248.6282 kHz	x dB -26.00 dB
Transmit Freq Error	-481.356 Hz
x dB Bandwidth	309.827 kHz

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4. EGPRS_PCS

4.1. EGPRS Occupied Bandwidth(NTNV)(Channel:512)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1850.2	99	26	0.004	Peak	0.248	0.311	0.3	Pass



4.2. EGPRS Occupied Bandwidth(NTNV)(Channel:661)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880	99	26	0.004	Peak	0.249	0.323	0.3	Pass

Agilent

Ch Freq 1.88 GHz Trig Free

Occupied Bandwidth Averages: 8

Ref 30 dBm #Atten 40 dB

Center 1.880 000 0 GHz Span 2 MHz

#Res BW 3.9 kHz #VBW 12 kHz #Sweep 10 s (2564 pts)

Freq/Channel

Center Freq 1.88000000 GHz

Start Freq 1.87900000 GHz

Stop Freq 1.88100000 GHz

CF Step 200.000000 kHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

Occupied Bandwidth Occ BW % Pwr 99.00 %

249.3774 kHz x dB -26.00 dB

Transmit Freq Error 253.827 Hz

x dB Bandwidth 323.128 kHz

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4.3. EGPRS Occupied Bandwidth(NTNV)(Channel:810)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1909.8	99	26	0.004	Peak	0.246	0.311	0.3	Pass

Agilent

Ch Freq 1.9098 GHz Trig Free

Occupied Bandwidth Averages: 8

Ref 30 dBm #Atten 40 dB

Center 1.909 800 0 GHz Span 2 MHz

#Res BW 3.9 kHz #VBW 12 kHz #Sweep 10 s (2564 pts)

Freq/Channel

Center Freq 1.90980000 GHz

Start Freq 1.90880000 GHz

Stop Freq 1.91080000 GHz

CF Step 200.000000 kHz
Auto Man

Freq Offset 0.00000000 Hz

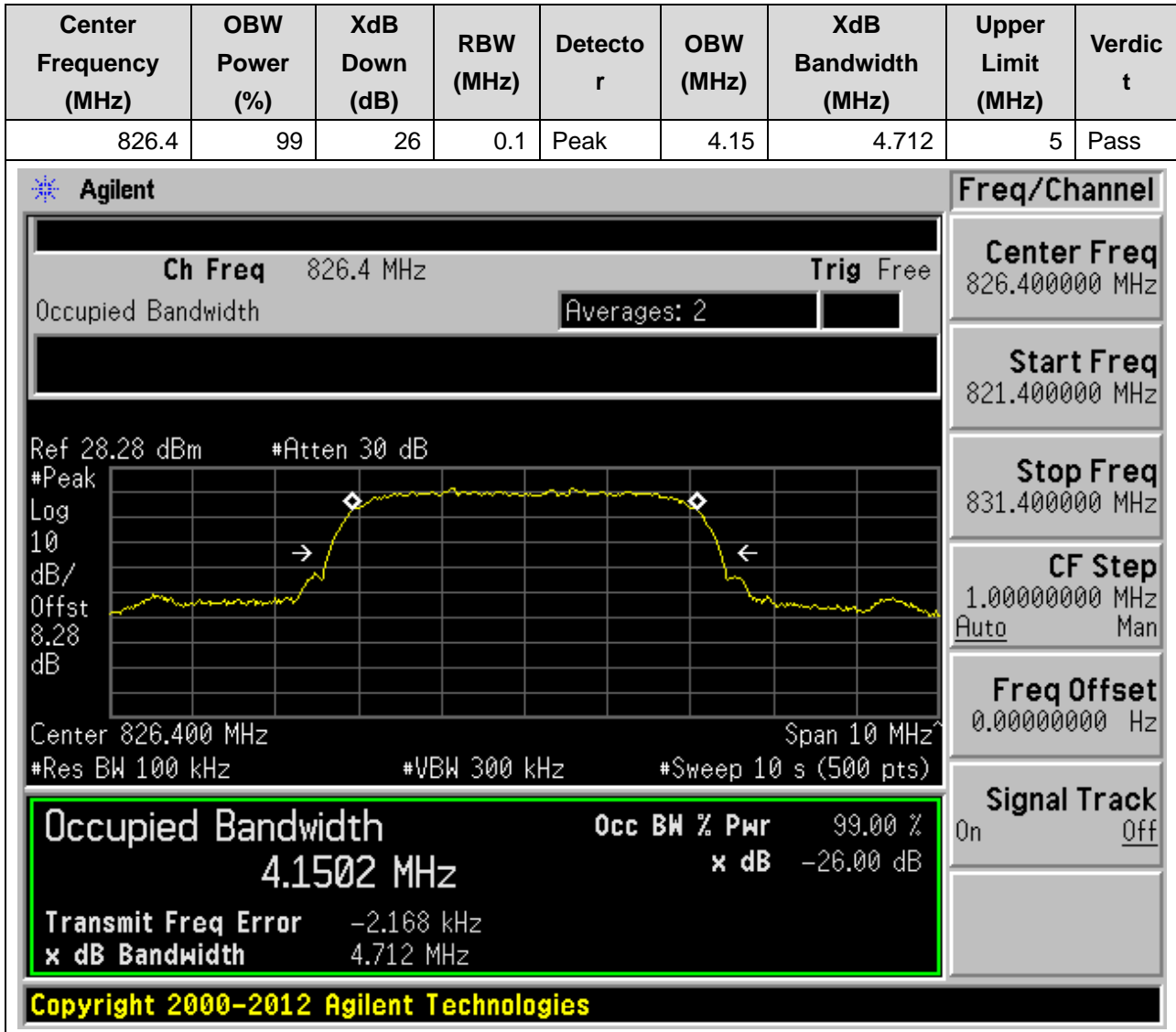
Signal Track On Off

Occupied Bandwidth	Occ BW % Pwr 99.00 %
245.9320 kHz	x dB -26.00 dB
Transmit Freq Error -185.644 Hz	
x dB Bandwidth 311.069 kHz	

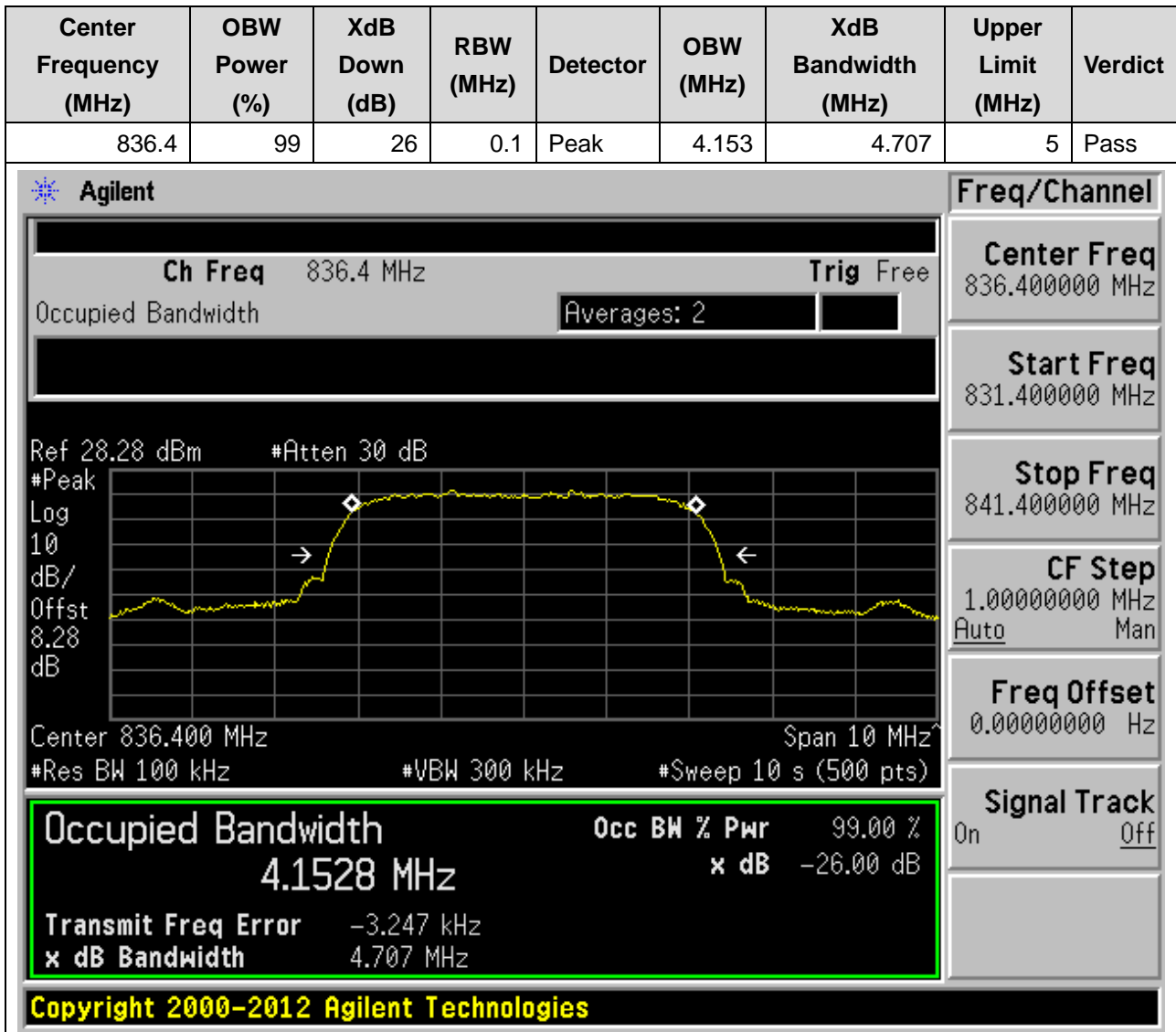
Copyright 2000-2012 Agilent Technologies

5. WCDMA_Band5

5.1. WCDMA Occupied Bandwidth(NTNV)(Channel:4132)



5.2. WCDMA Occupied Bandwidth(NTNV)(Channel:4182)



5.3. WCDMA Occupied Bandwidth(NTNV)(Channel:4233)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
846.6	99	26	0.1	Peak	4.148	4.716	5	Pass

Agilent

Ch Freq 846.6 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.32 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 8.32 dB

Center 846.600 MHz Span 10 MHz

#Res BW 100 kHz #VBW 300 kHz #Sweep 10 s (500 pts)

Occupied Bandwidth Occ BW % Pwr 99.00 %

4.1479 MHz x dB -26.00 dB

Transmit Freq Error -10.120 kHz

x dB Bandwidth 4.716 MHz

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Freq/Channel

Center Freq 846.600000 MHz

Start Freq 841.600000 MHz

Stop Freq 851.600000 MHz

CF Step 1.00000000 MHz

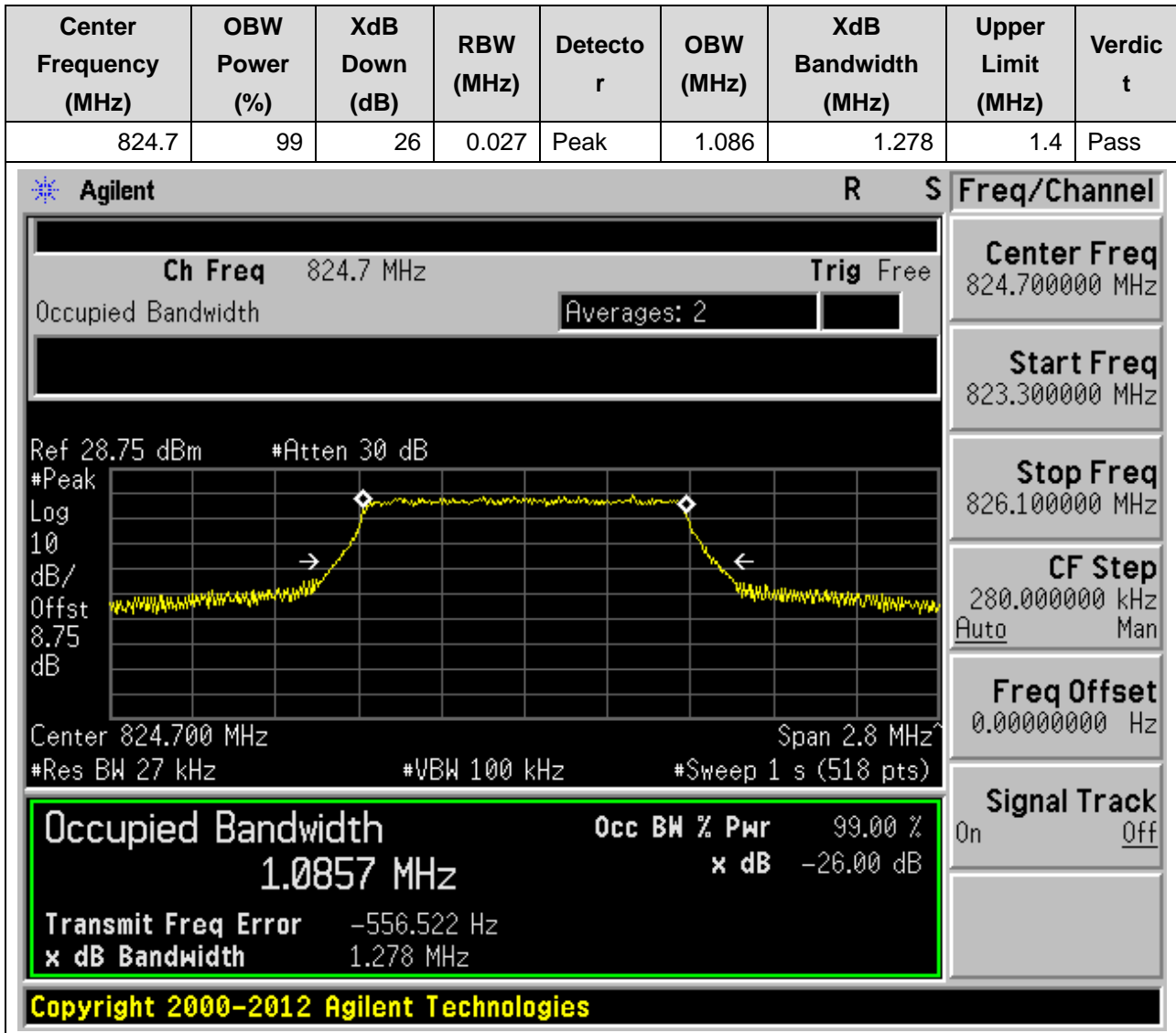
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

6. LTE_Band5

6.1. LTE Occupied Bandwidth(NTNV)(Subtest:1, Channel:20407, Bandwidth:1.4, Modulation:QPSK, RB Number: 6, RB Position:LOW)



6.2. LTE Occupied Bandwidth(NTNV)(Subtest:2, Channel:20407, Bandwidth:1.4, Modulation:Q16, RB Number: 6, RB Position:LOW)



6.3. LTE Occupied Bandwidth(NTNV)(Subtest:3, Channel:20525, Bandwidth:1.4, Modulation:QPSK, RB Number: 6, RB Position:LOW)



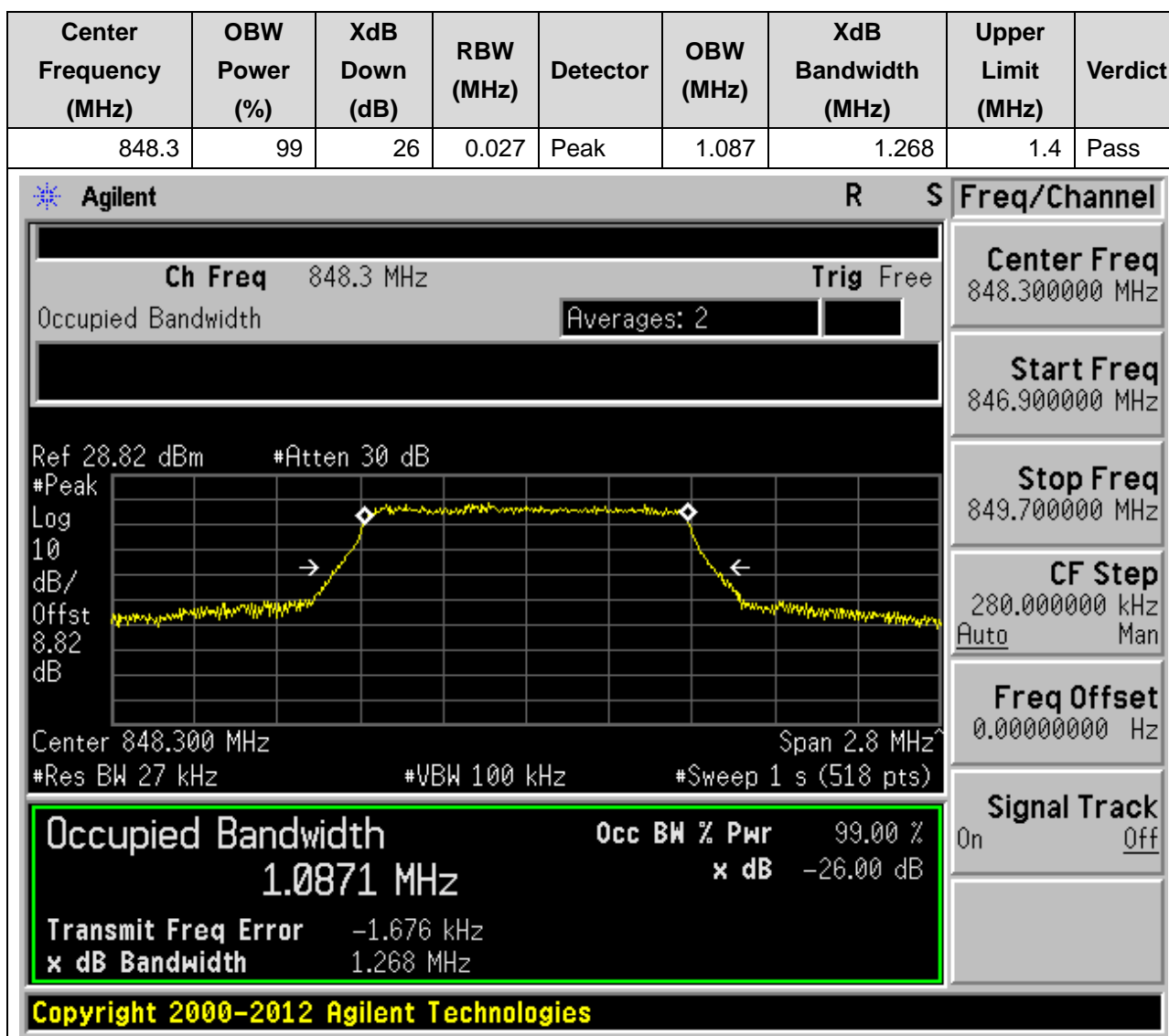
6.4. LTE Occupied Bandwidth(NTNV)(Subtest:4, Channel:20525, Bandwidth:1.4, Modulation:Q16, RB Number: 6, RB Position:LOW)



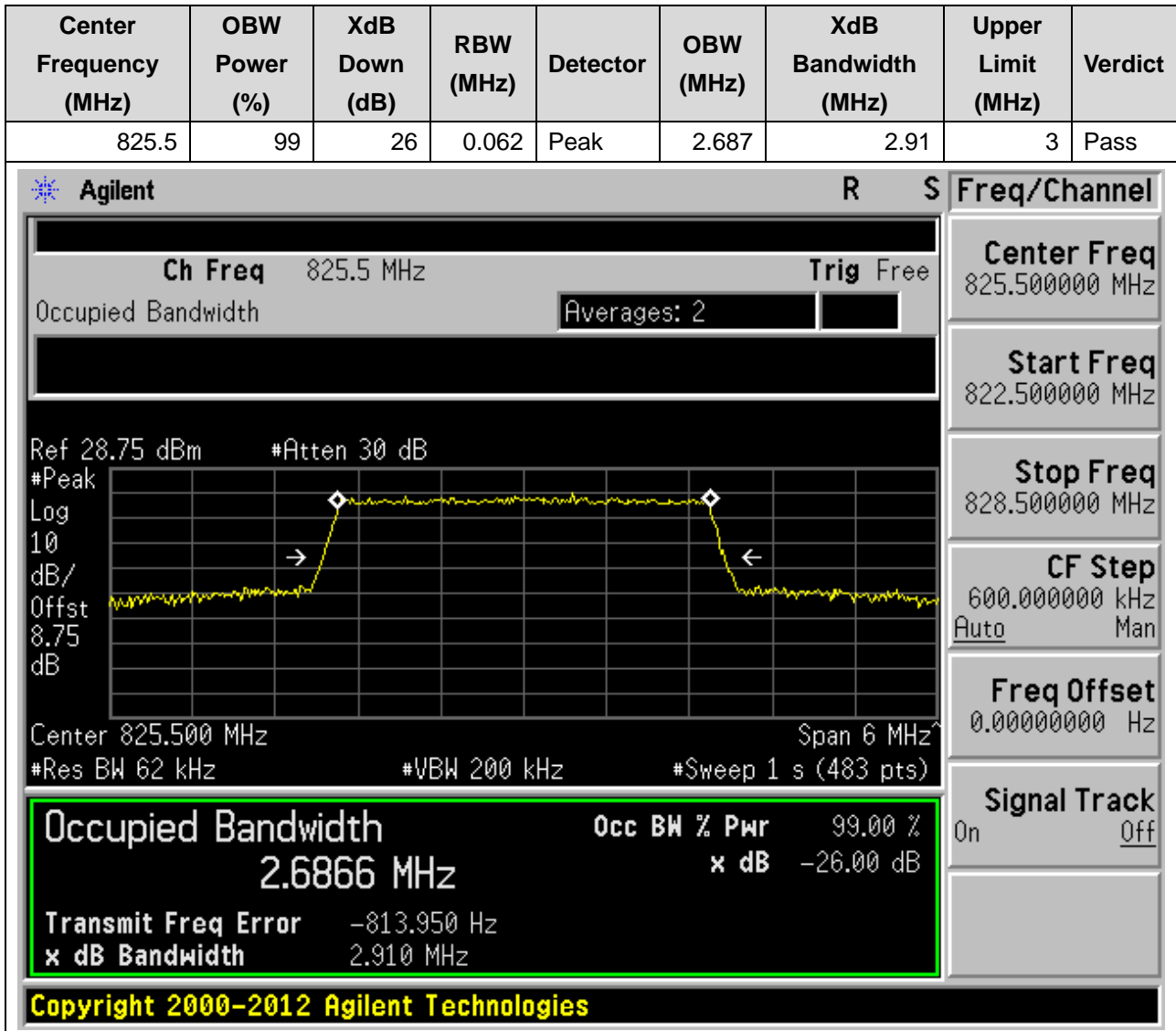
6.5. LTE Occupied Bandwidth(NTNV)(Subtest:5, Channel:20643, Bandwidth:1.4, Modulation:QPSK, RB Number: 6, RB Position:LOW)



6.6. LTE Occupied Bandwidth(NTNV)(Subtest:6, Channel:20643, Bandwidth:1.4, Modulation:Q16, RB Number: 6, RB Position:LOW)



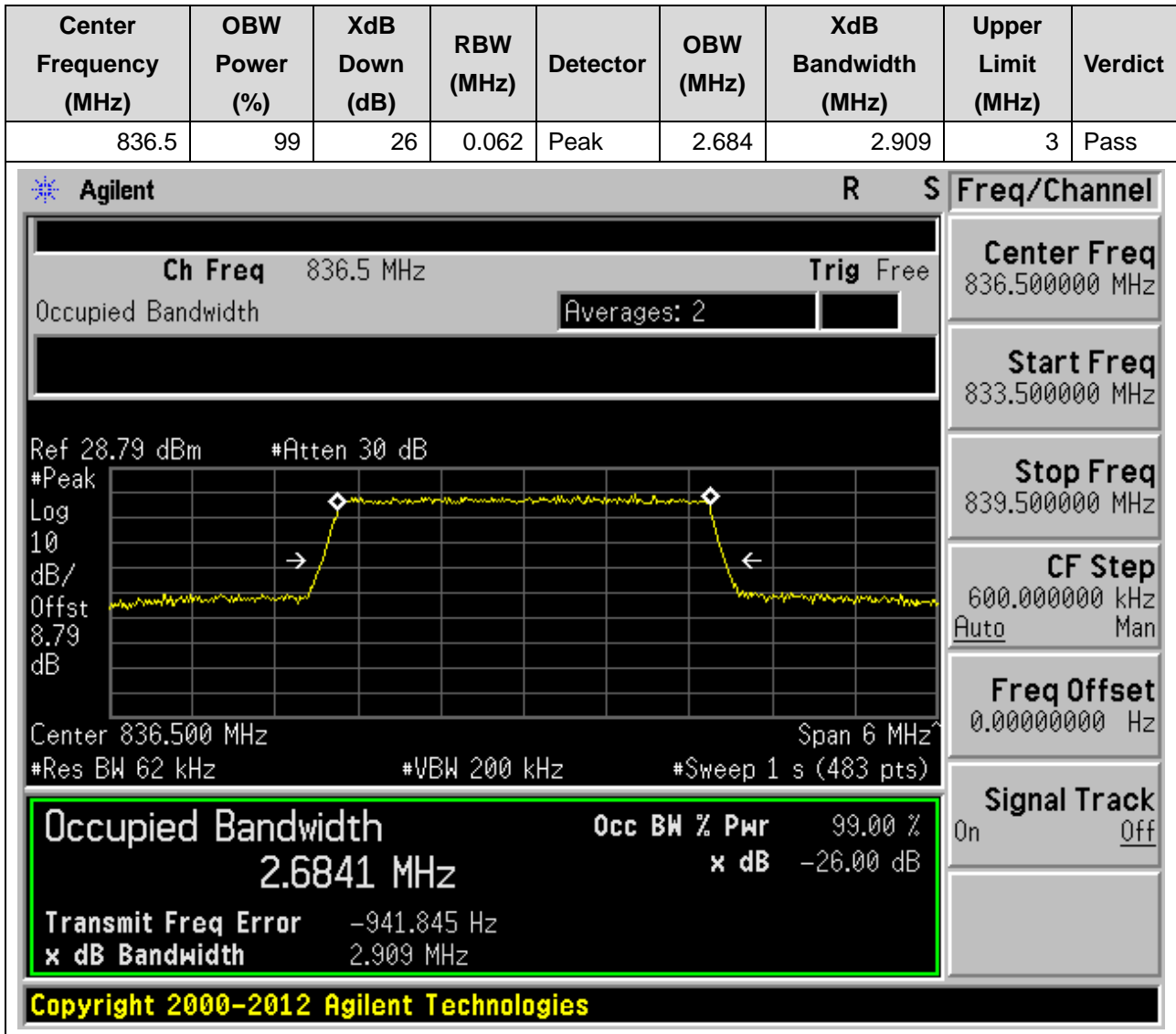
6.7. LTE Occupied Bandwidth(NTNV)(Subtest:7, Channel:20415, Bandwidth:3, Modulation:QPSK, RB Number: 15, RB Position:LOW)



6.8. LTE Occupied Bandwidth(NTNV)(Subtest:8, Channel:20415, Bandwidth:3, Modulation:Q16, RB Number: 15, RB Position:LOW)



6.9. LTE Occupied Bandwidth(NTNV)(Subtest:9, Channel:20525, Bandwidth:3, Modulation:QPSK, RB Number: 15, RB Position:LOW)



6.10. LTE Occupied Bandwidth(NTNV)(Subtest:10, Channel:20525, Bandwidth:3, Modulation:Q16, RB Number: 15, RB Position:LOW)



6.11. LTE Occupied Bandwidth(NTNV)(Subtest:11, Channel:20635, Bandwidth:3, Modulation:QPSK, RB Number: 15, RB Position:LOW)



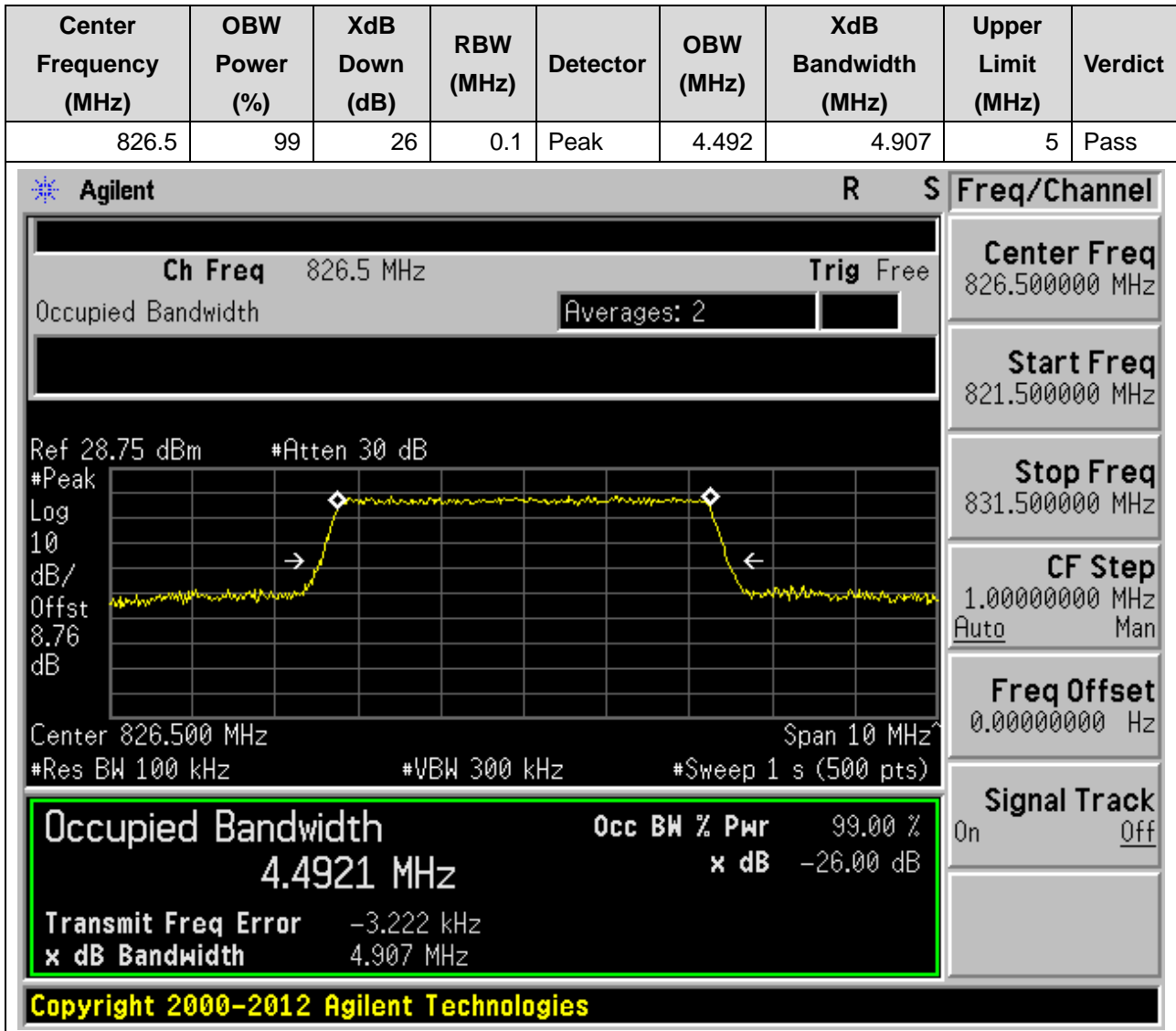
6.12. LTE Occupied Bandwidth(NTNV)(Subtest:12, Channel:20635, Bandwidth:3, Modulation:Q16, RB Number: 15, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
847.5	99	26	0.062	Peak	2.68	2.926	3	Pass

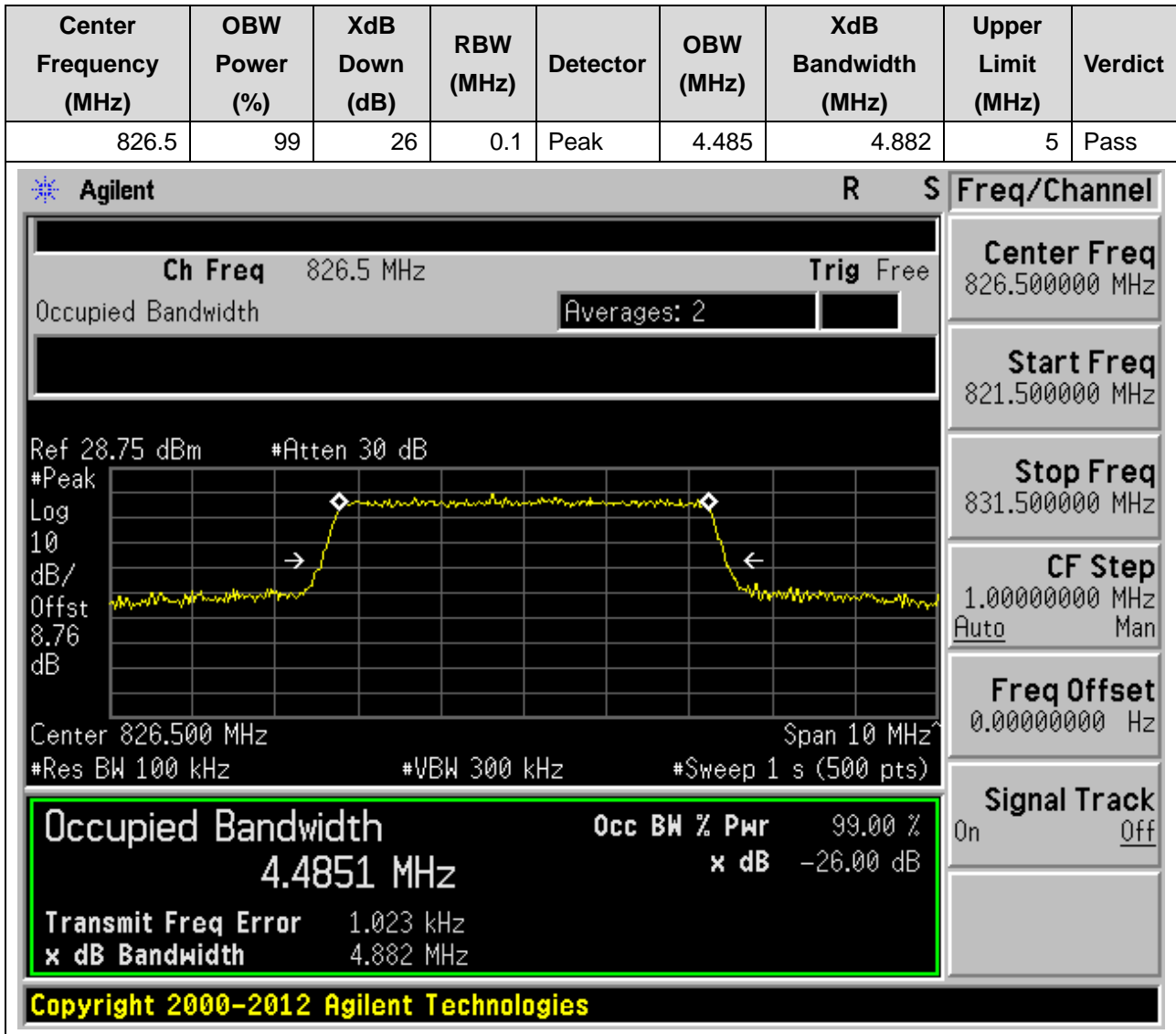
Occupied Bandwidth		Occ BW % Pwr	99.00 %
2.6800 MHz		x dB	-26.00 dB
Transmit Freq Error	-4.031 kHz		
x dB Bandwidth	2.926 MHz		

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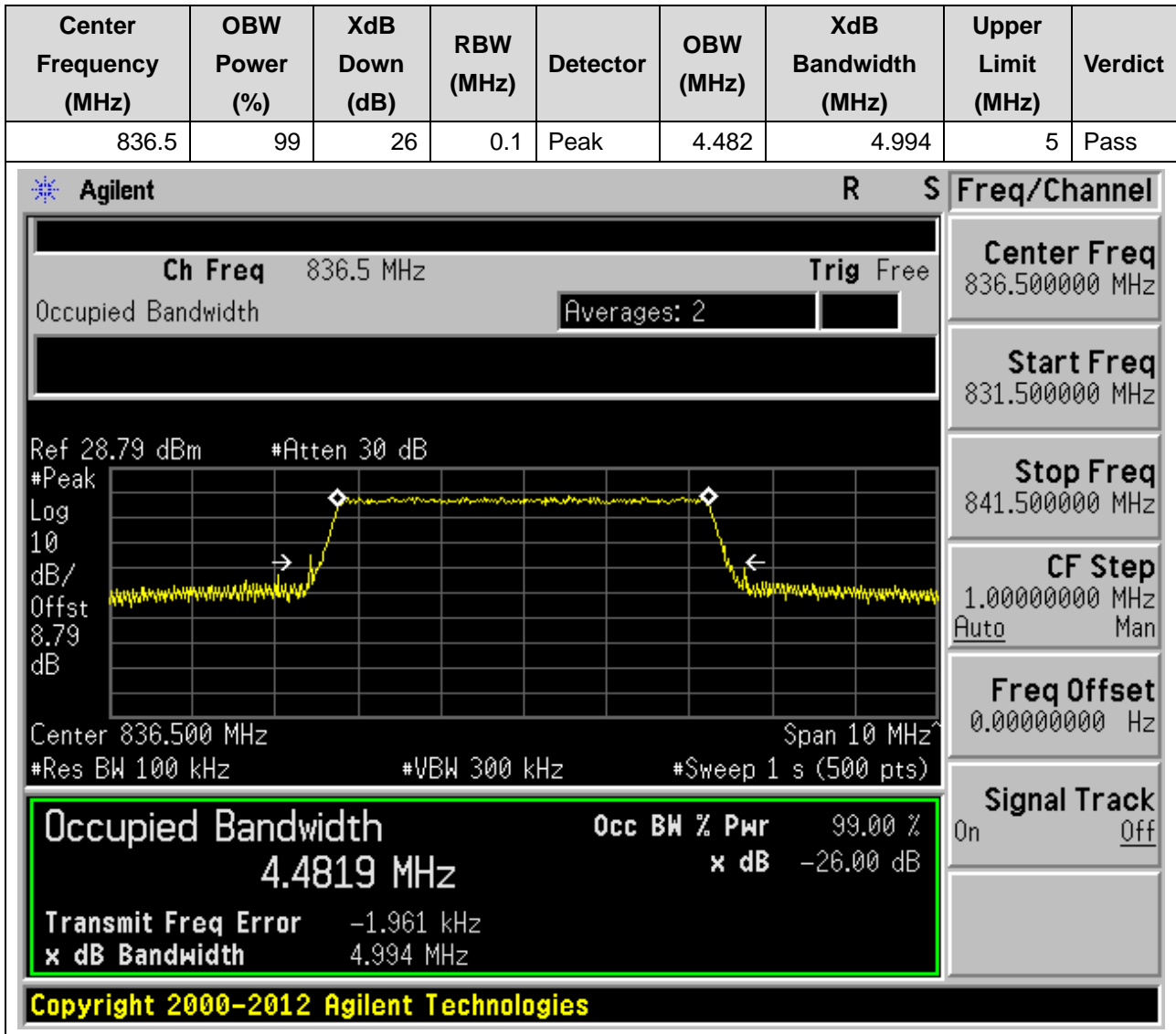
6.13. LTE Occupied Bandwidth(NTNV)(Subtest:13, Channel:20425, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



6.14. LTE Occupied Bandwidth(NTNV)(Subtest:14, Channel:20425, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



6.15. LTE Occupied Bandwidth(NTNV)(Subtest:15, Channel:20525, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



6.16. LTE Occupied Bandwidth(NTNV)(Subtest:16, Channel:20525, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



6.17. LTE Occupied Bandwidth(NTNV)(Subtest:17, Channel:20625, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



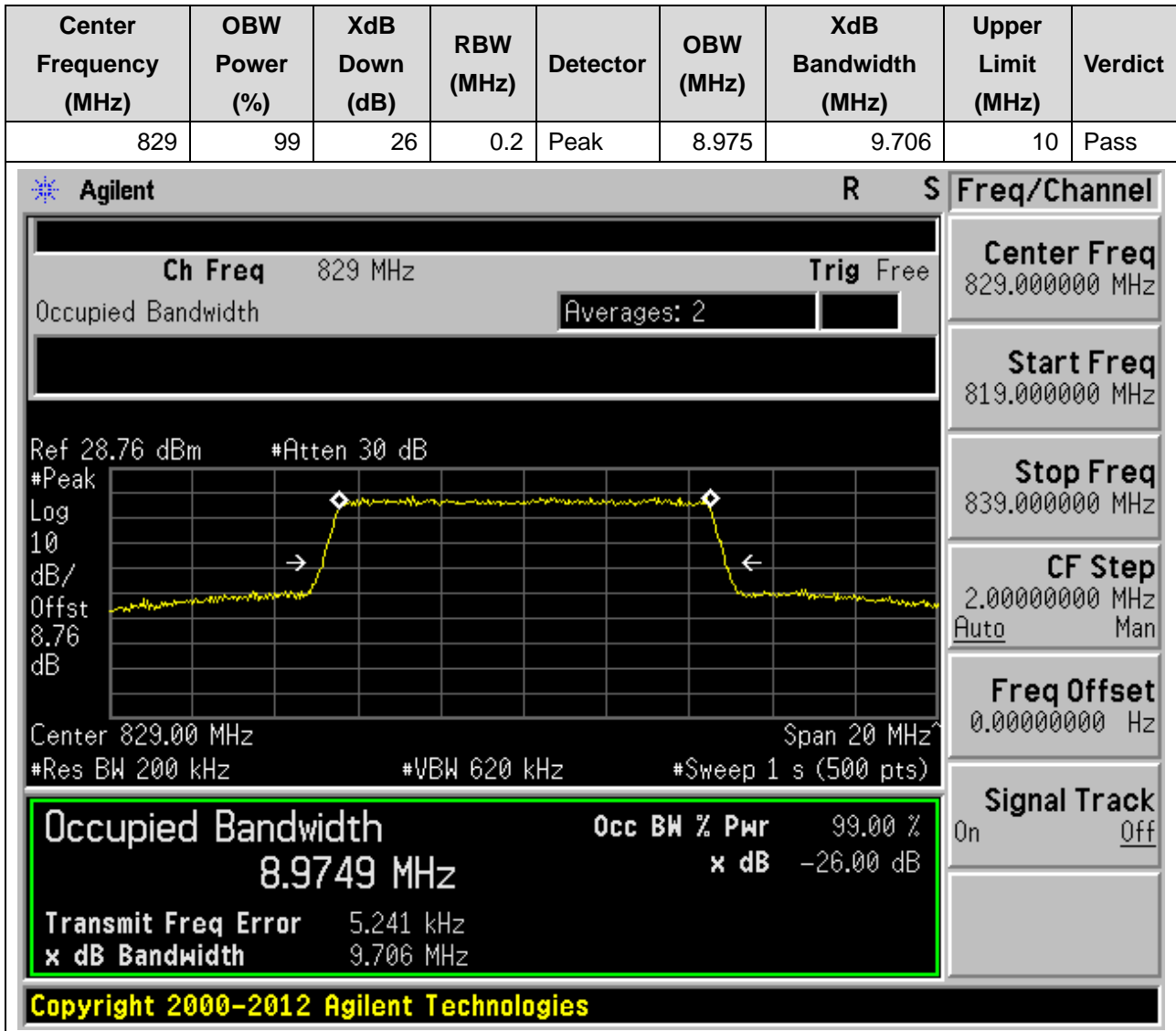
6.18. LTE Occupied Bandwidth(NTNV)(Subtest:18, Channel:20625, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



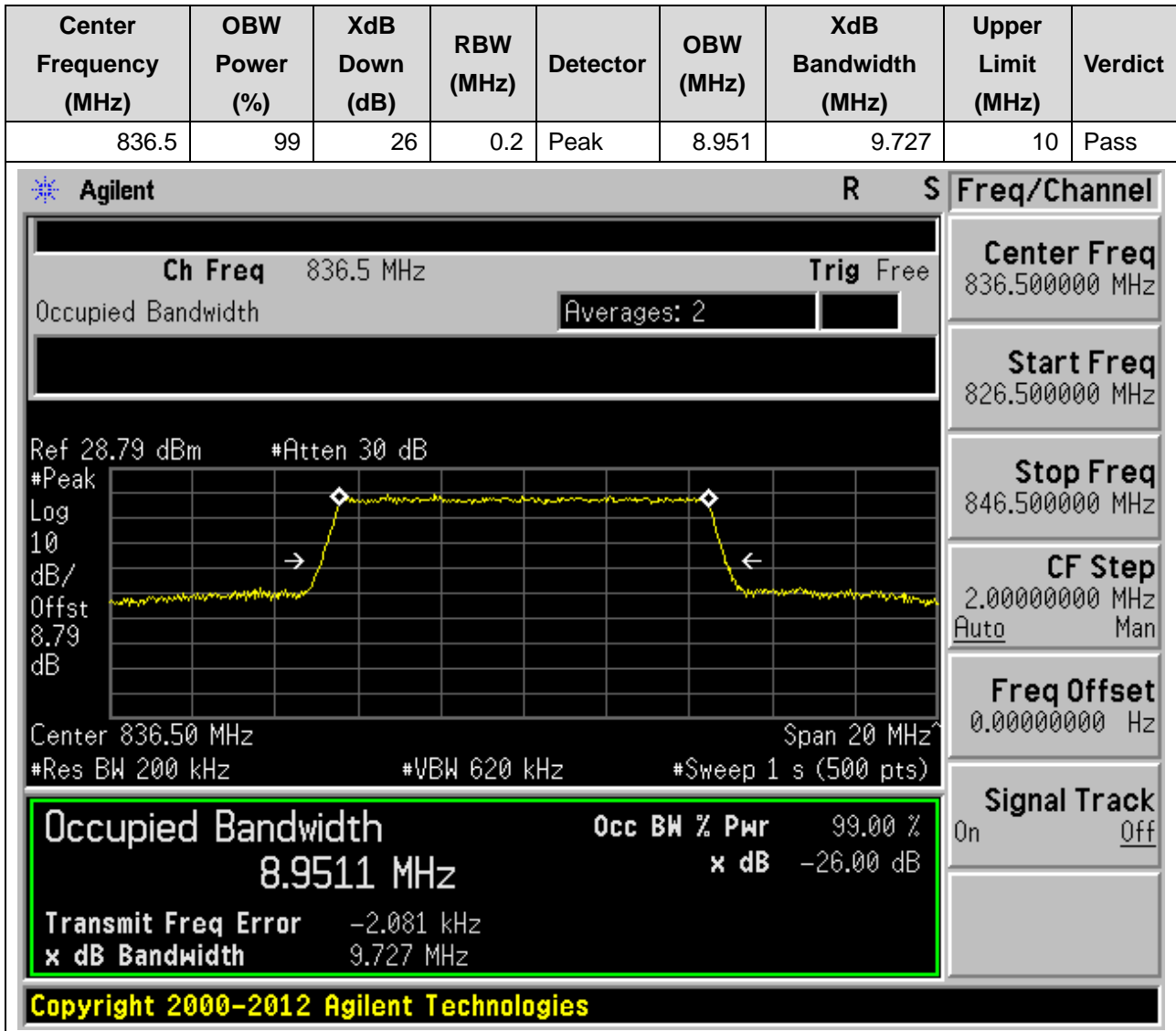
6.19. LTE Occupied Bandwidth(NTNV)(Subtest:19, Channel:20450, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



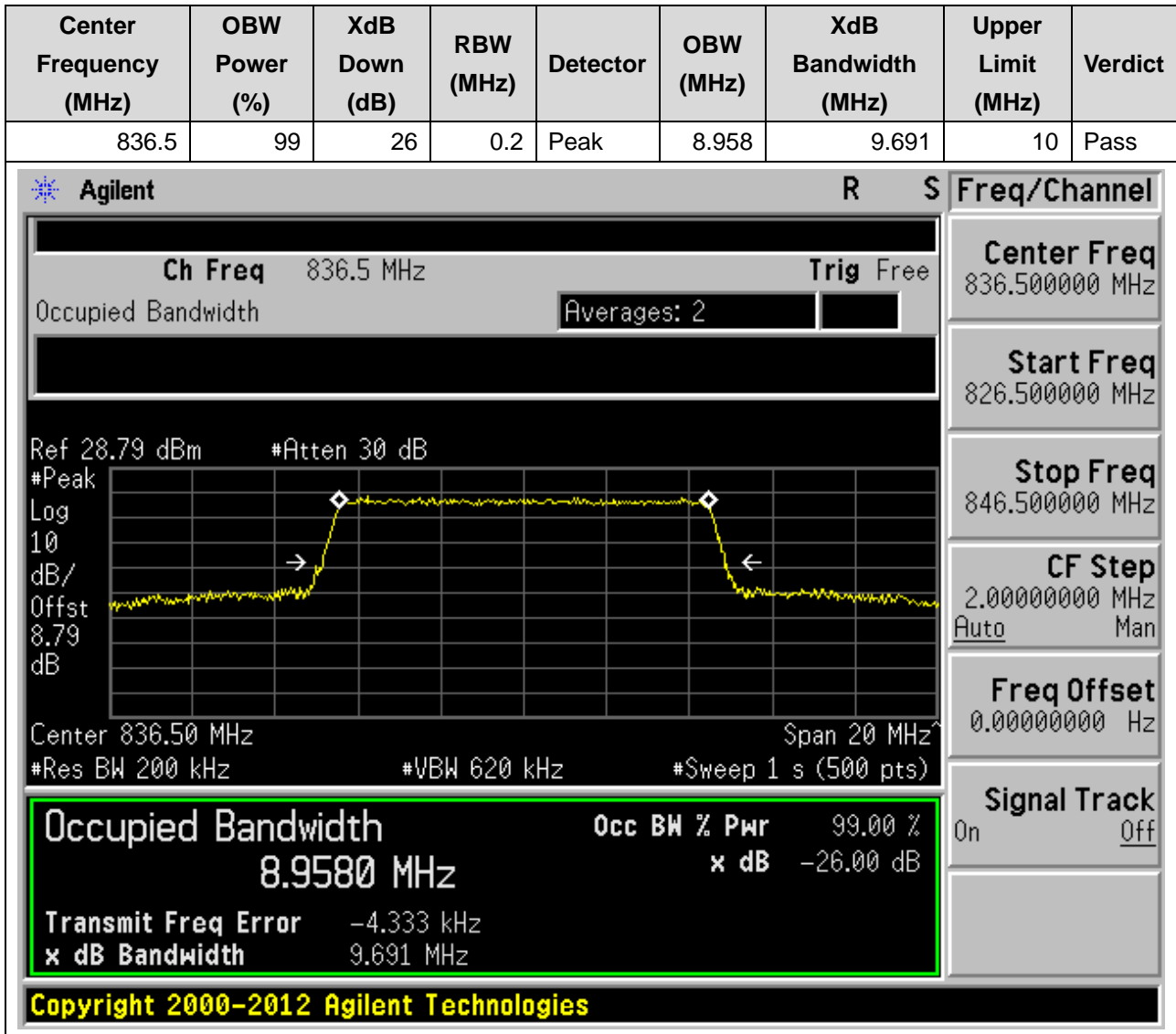
6.20. LTE Occupied Bandwidth(NTNV)(Subtest:20, Channel:20450, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



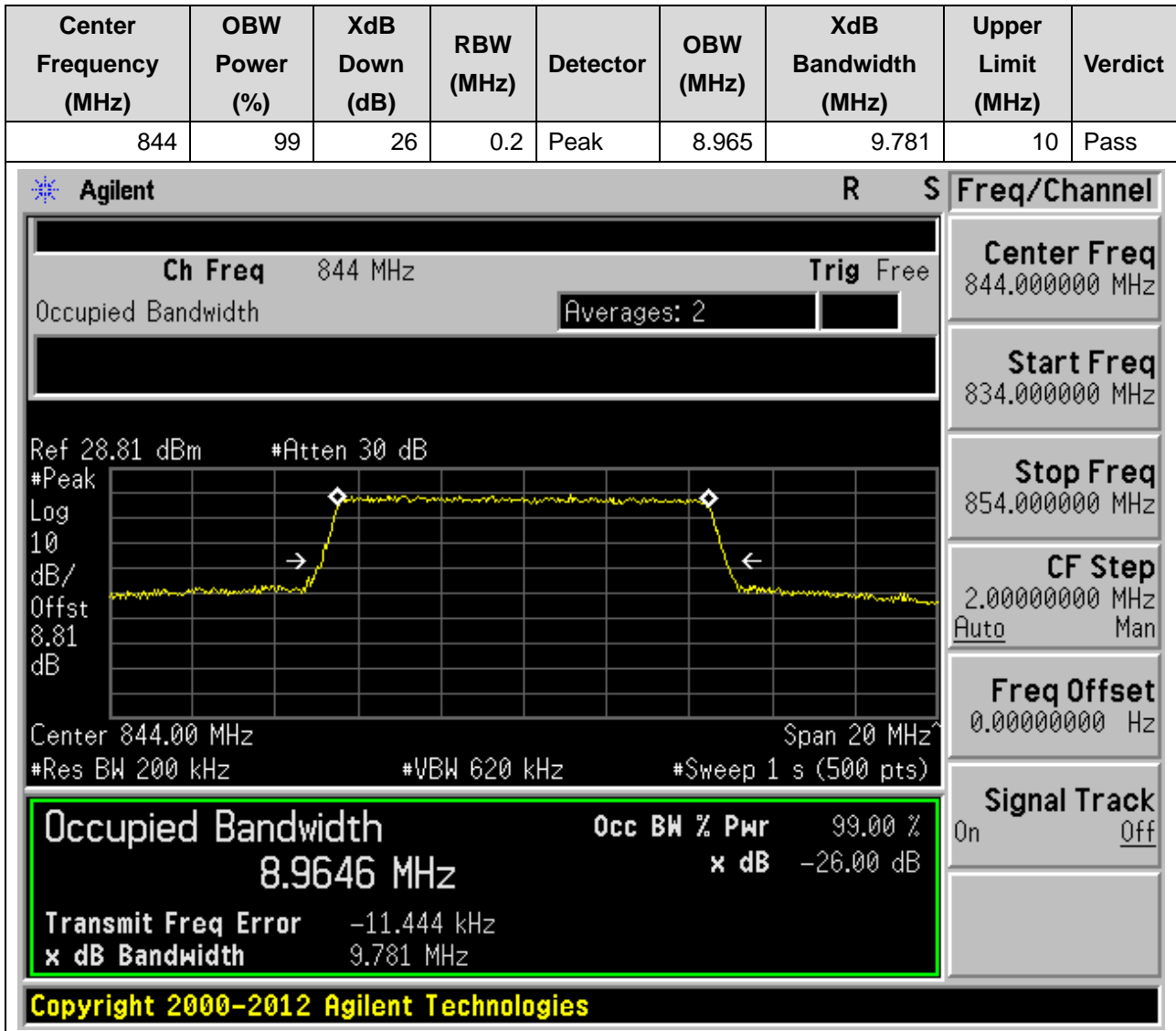
6.21. LTE Occupied Bandwidth(NTNV)(Subtest:21, Channel:20525, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



6.22. LTE Occupied Bandwidth(NTNV)(Subtest:22, Channel:20525, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



6.23. LTE Occupied Bandwidth(NTNV)(Subtest:23, Channel:20600, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)

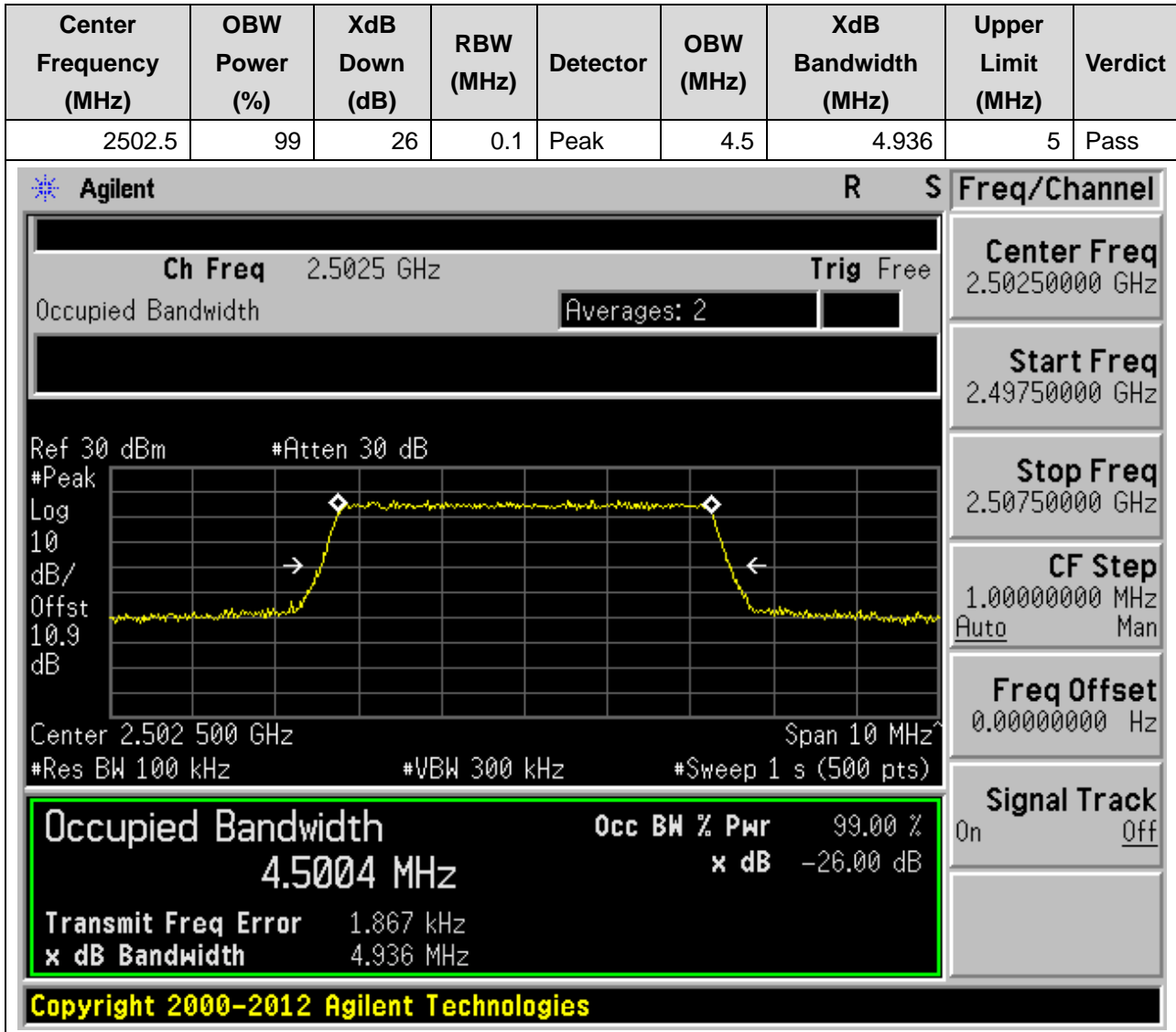


6.24. LTE Occupied Bandwidth(NTNV)(Subtest:24, Channel:20600, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

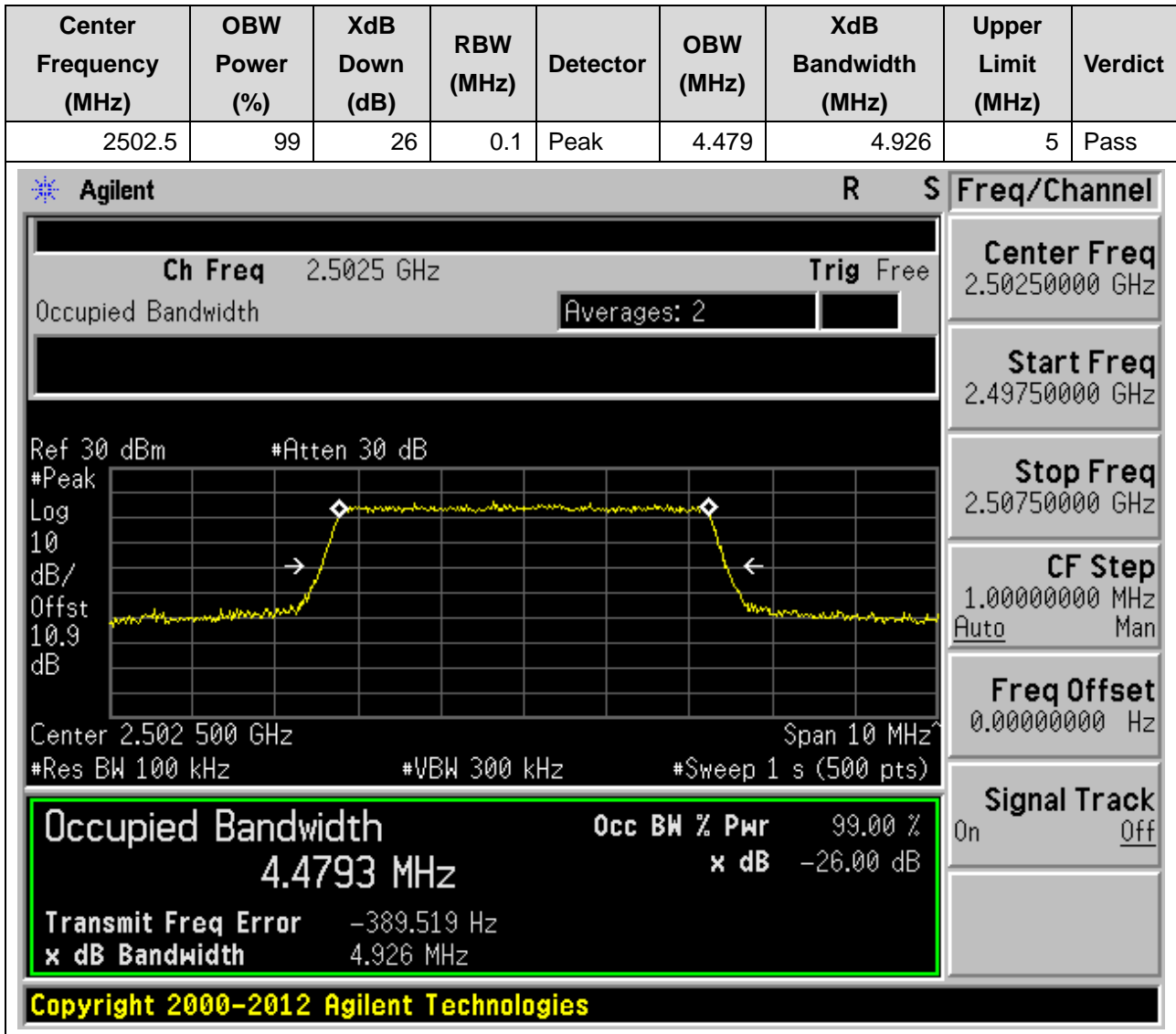


7. LTE_Band7

7.1. LTE Occupied Bandwidth(NTNV)(Subtest:1, Channel:20775, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



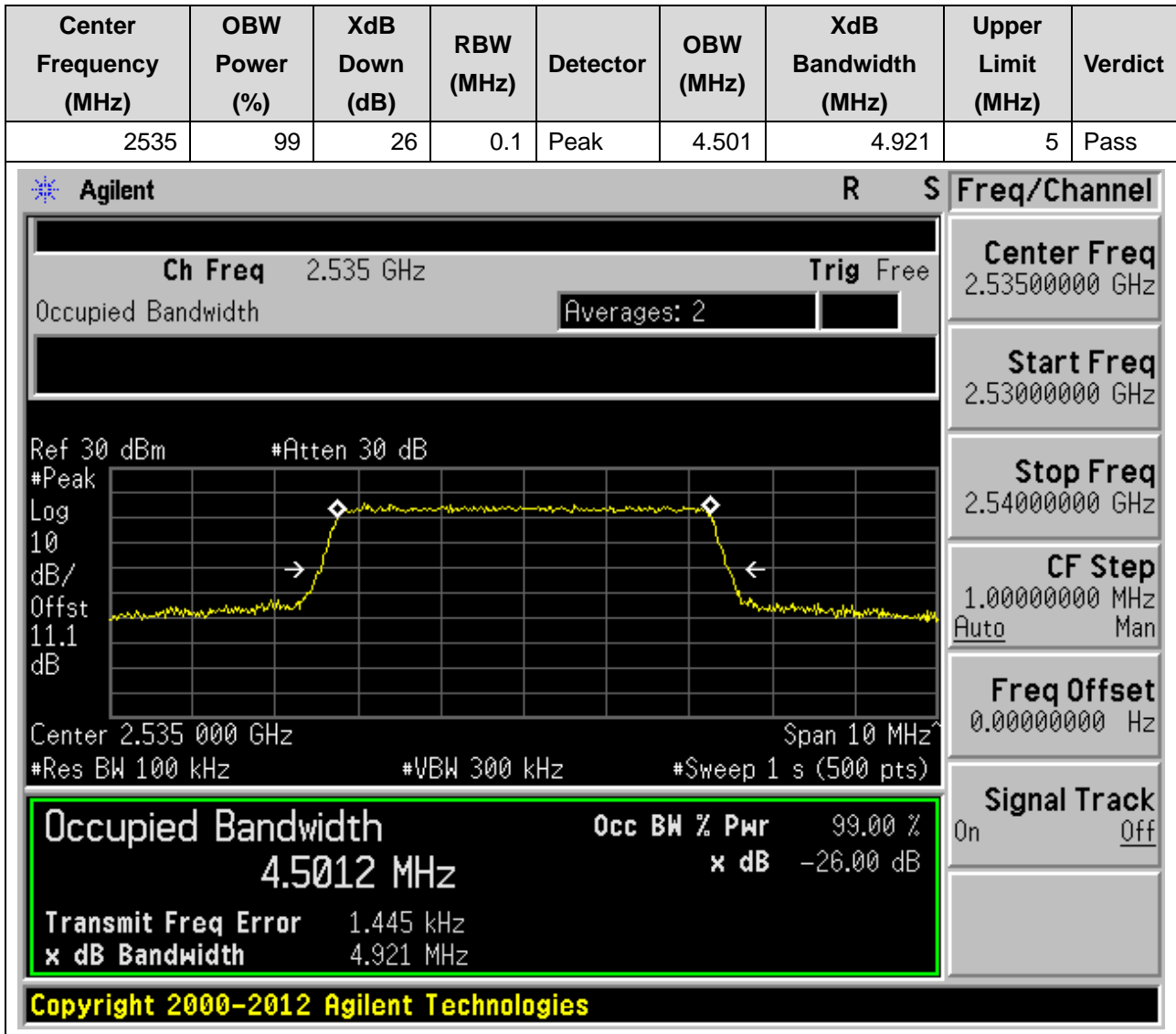
7.2. LTE Occupied Bandwidth(NTNV)(Subtest:2, Channel:20775, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



7.3. LTE Occupied Bandwidth(NTNV)(Subtest:3, Channel:21100, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



7.4. LTE Occupied Bandwidth(NTNV)(Subtest:4, Channel:21100, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



7.5. LTE Occupied Bandwidth(NTNV)(Subtest:5, Channel:21425, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



7.6. LTE Occupied Bandwidth(NTNV)(Subtest:6, Channel:21425, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



7.7. LTE Occupied Bandwidth(NTNV)(Subtest:7, Channel:20800, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



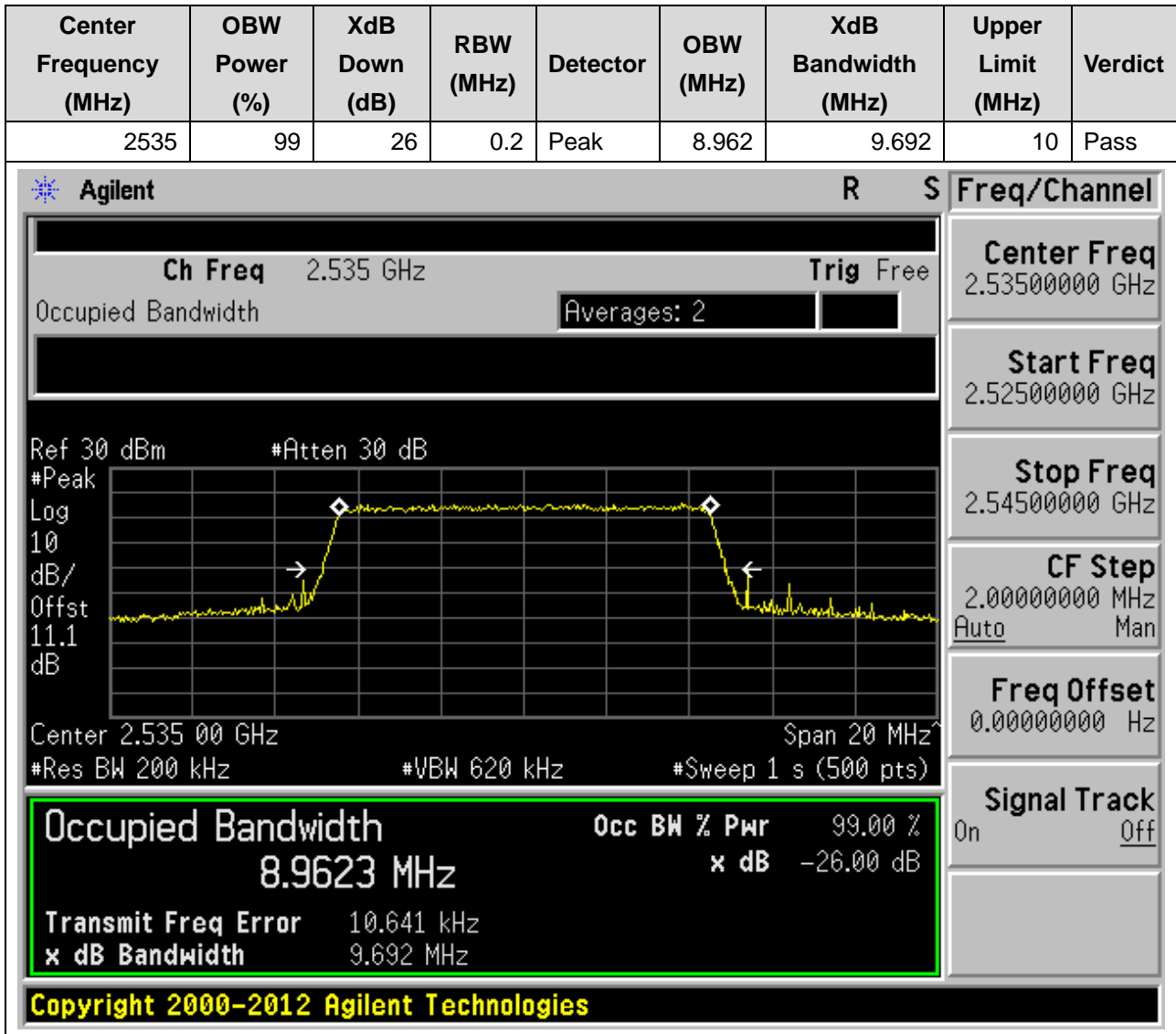
7.8. LTE Occupied Bandwidth(NTNV)(Subtest:8, Channel:20800, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



7.9. LTE Occupied Bandwidth(NTNV)(Subtest:9, Channel:21100, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



7.10. LTE Occupied Bandwidth(NTNV)(Subtest:10, Channel:21100, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



7.11. LTE Occupied Bandwidth(NTNV)(Subtest:11, Channel:21400, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



7.12. LTE Occupied Bandwidth(NTNV)(Subtest:12, Channel:21400, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2565	99	26	0.2	Peak	8.966	9.799	10	Pass

Agilent
R S
Freq/Channel

Ch Freq 2.565 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 2.565 00 GHz Span 20 MHz

#Res BW 200 kHz #VBW 620 kHz #Sweep 1 s (500 pts)

Occupied Bandwidth Occ BW % Pwr 99.00 %

8.9661 MHz x dB -26.00 dB

Transmit Freq Error -1.176 kHz

x dB Bandwidth 9.799 MHz

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Center Freq 2.56500000 GHz

Start Freq 2.55500000 GHz

Stop Freq 2.57500000 GHz

CF Step 2.00000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

7.13. LTE Occupied Bandwidth(NTNV)(Subtest:13, Channel:20825, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



7.14. LTE Occupied Bandwidth(NTNV)(Subtest:14, Channel:20825, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2507.5	99	26	0.3	Peak	13.468	14.64	15	Pass

Agilent R S Freq/Channel

Ch Freq 2.5075 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11 dB

Center 2.507 50 GHz Span 30 MHz

#Res BW 300 kHz #VBW 1 MHz #Sweep 1 s (500 pts)

Occupied Bandwidth Occ BW % Pwr 99.00 %

13.4682 MHz x dB -26.00 dB

Transmit Freq Error -2.281 kHz

x dB Bandwidth 14.640 MHz

Signal Track On Off

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7.15. LTE Occupied Bandwidth(NTNV)(Subtest:15, Channel:21100, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535	99	26	0.3	Peak	13.397	14.574	15	Pass

Agilent R S **Freq/Channel**

Ch Freq 2.535 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.1 dB

Center 2.535 00 GHz Span 30 MHz

#Res BW 300 kHz #VBW 1 MHz #Sweep 1 s (500 pts)

Occupied Bandwidth Occ BW % Pwr 99.00 %

13.3974 MHz x dB -26.00 dB

Transmit Freq Error 16.185 kHz

x dB Bandwidth 14.574 MHz

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Center Freq 2.53500000 GHz

Start Freq 2.52000000 GHz

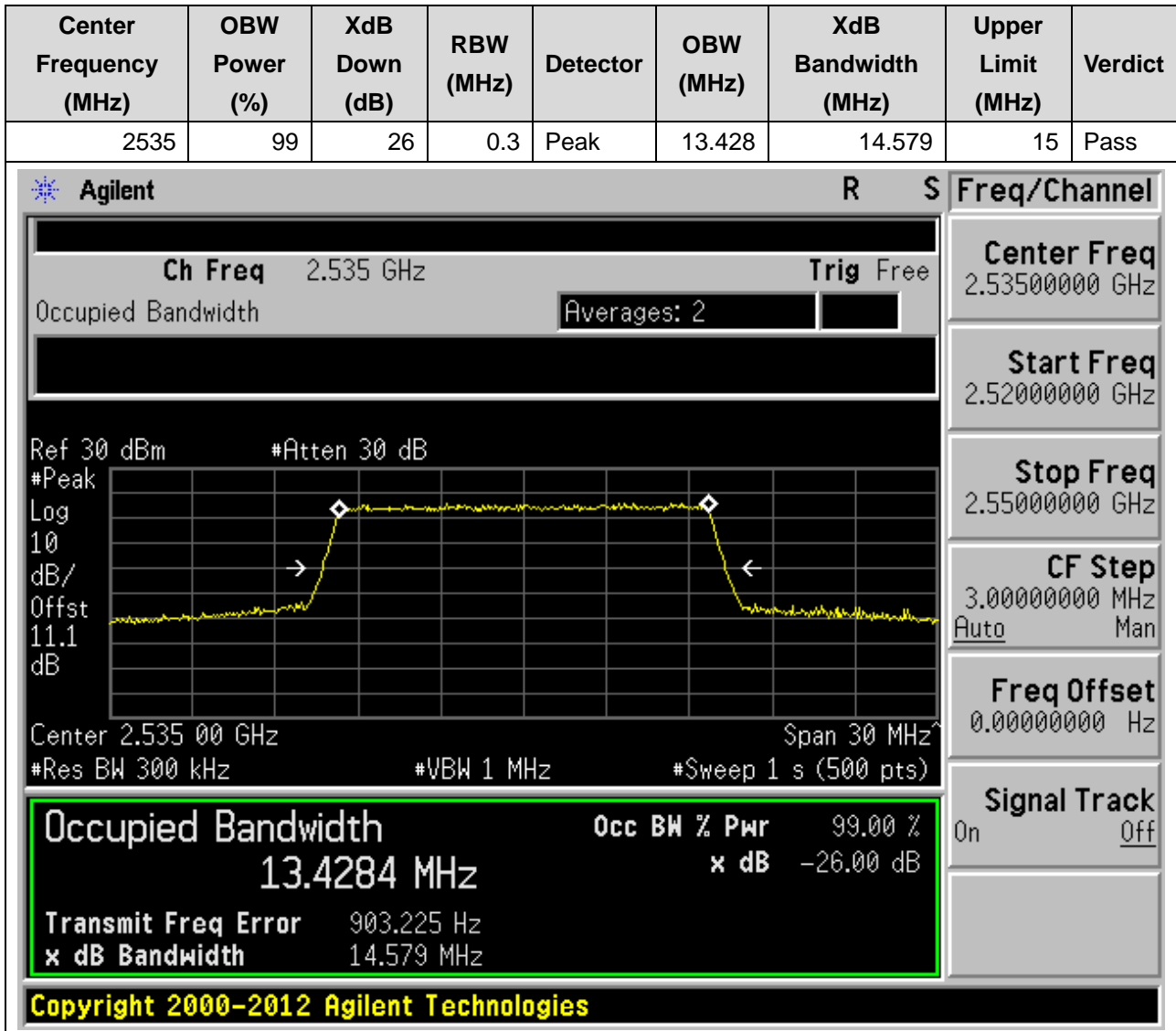
Stop Freq 2.55000000 GHz

CF Step 3.00000000 MHz Auto Man

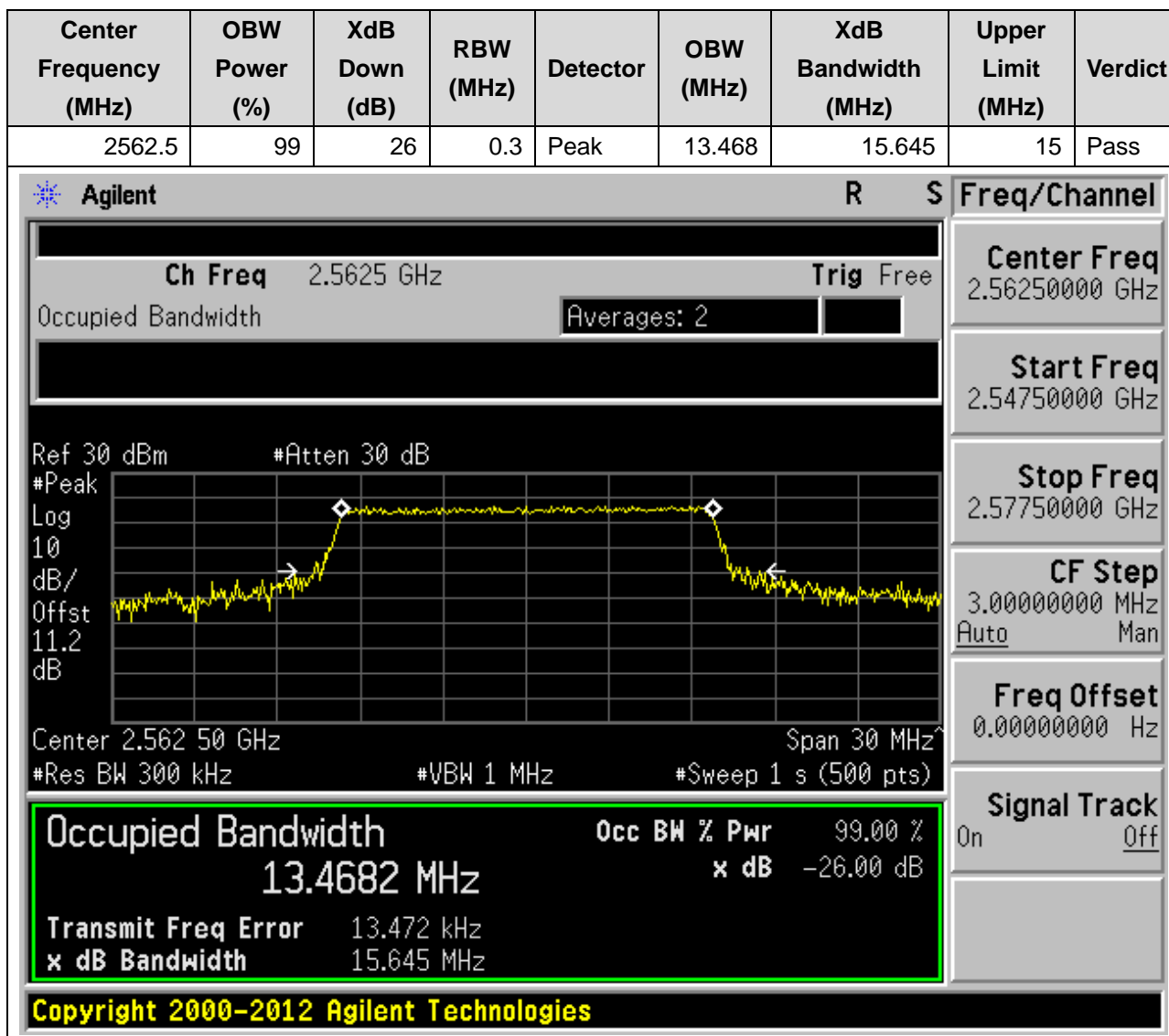
Freq Offset 0.00000000 Hz

Signal Track On Off

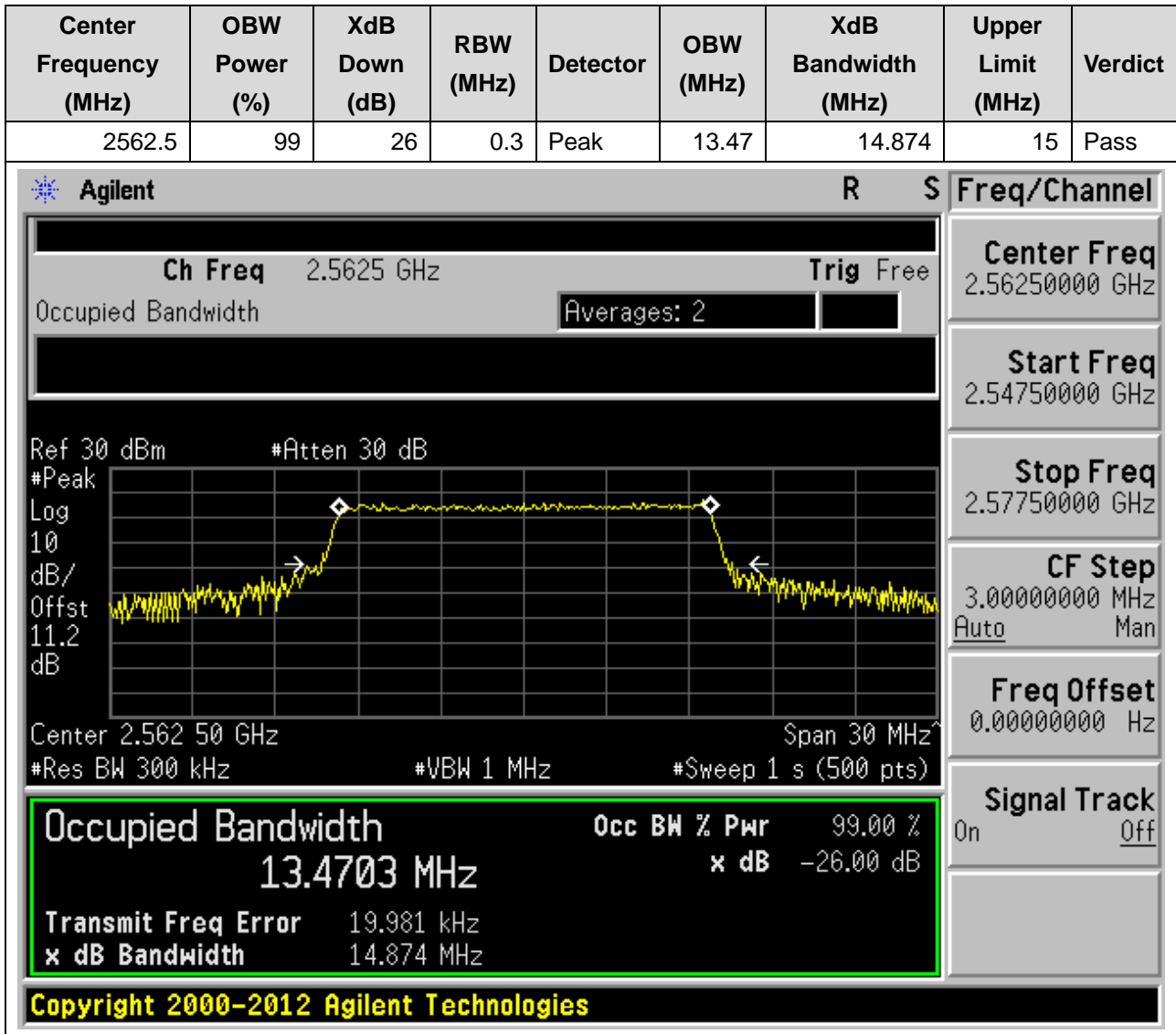
7.16. LTE Occupied Bandwidth(NTNV)(Subtest:16, Channel:21100, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)



7.17. LTE Occupied Bandwidth(NTNV)(Subtest:17, Channel:21375, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



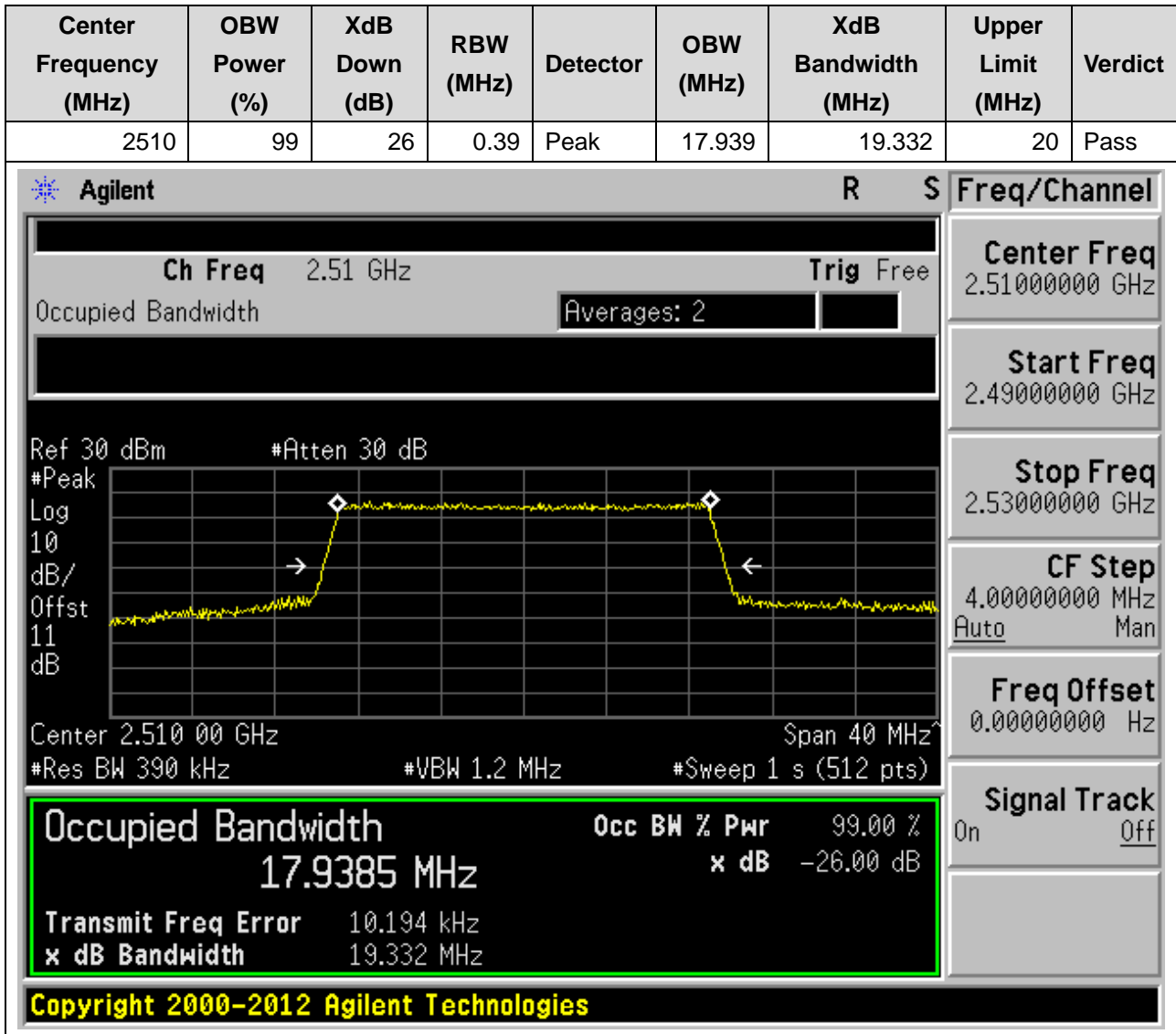
7.18. LTE Occupied Bandwidth(NTNV)(Subtest:18, Channel:21375, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)



7.19. LTE Occupied Bandwidth(NTNV)(Subtest:19, Channel:20850, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



7.20. LTE Occupied Bandwidth(NTNV)(Subtest:20, Channel:20850, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



7.21. LTE Occupied Bandwidth(NTNV)(Subtest:21, Channel:21100, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535	99	26	0.39	Peak	17.892	19.337	20	Pass

Agilent R S **Freq/Channel**

Ch Freq 2.535 GHz **Trig** Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak

Log

10

dB/

Offst

11.1

dB

Center 2.535 00 GHz Span 40 MHz

#Res BW 390 kHz #VBW 1.2 MHz #Sweep 1 s (512 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
17.8921 MHz	x dB	-26.00 dB
Transmit Freq Error	25.022 kHz	
x dB Bandwidth	19.337 MHz	

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Center Freq
2.53500000 GHz

Start Freq
2.51500000 GHz

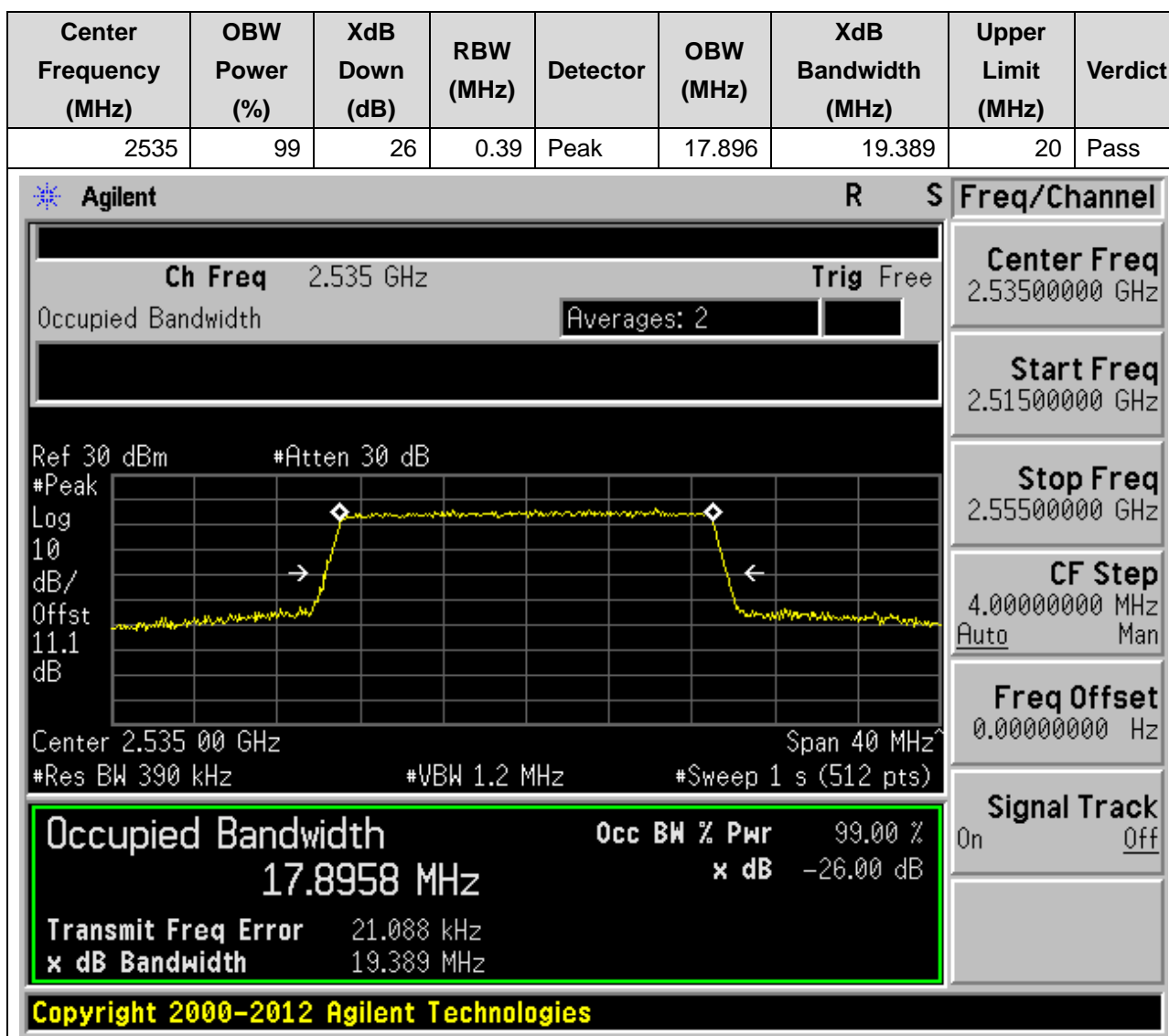
Stop Freq
2.55500000 GHz

CF Step
4.00000000 MHz
Auto Man

Freq Offset
0.00000000 Hz

Signal Track
On Off

7.22. LTE Occupied Bandwidth(NTNV)(Subtest:22, Channel:21100, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



7.23. LTE Occupied Bandwidth(NTNV)(Subtest:23, Channel:21350, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2560	99	26	0.39	Peak	17.944	19.482	20	Pass

Agilent R S Freq/Channel

Ch Freq 2.56 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.2 dB

Center 2.560 00 GHz Span 40 MHz

#Res BW 390 kHz #VBW 1.2 MHz #Sweep 1 s (512 pts)

Occupied Bandwidth Occ BW % Pwr 99.00 %

17.9444 MHz x dB -26.00 dB

Transmit Freq Error -1.180 kHz

x dB Bandwidth 19.482 MHz

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Center Freq 2.56000000 GHz

Start Freq 2.54000000 GHz

Stop Freq 2.58000000 GHz

CF Step 4.00000000 MHz Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

7.24. LTE Occupied Bandwidth(NTNV)(Subtest:24, Channel:21350, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2560	99	26	0.39	Peak	17.923	19.345	20	Pass

Agilent R S **Freq/Channel**

Ch Freq 2.56 GHz **Trig** Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.2 dB

Center 2.560 00 GHz Span 40 MHz

#Res BW 390 kHz #VBW 1.2 MHz #Sweep 1 s (512 pts)

Occupied Bandwidth **Occ BW % Pwr** 99.00 %

17.9230 MHz **x dB** -26.00 dB

Transmit Freq Error 33.540 kHz

x dB Bandwidth 19.345 MHz

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Center Freq 2.56000000 GHz

Start Freq 2.54000000 GHz

Stop Freq 2.58000000 GHz

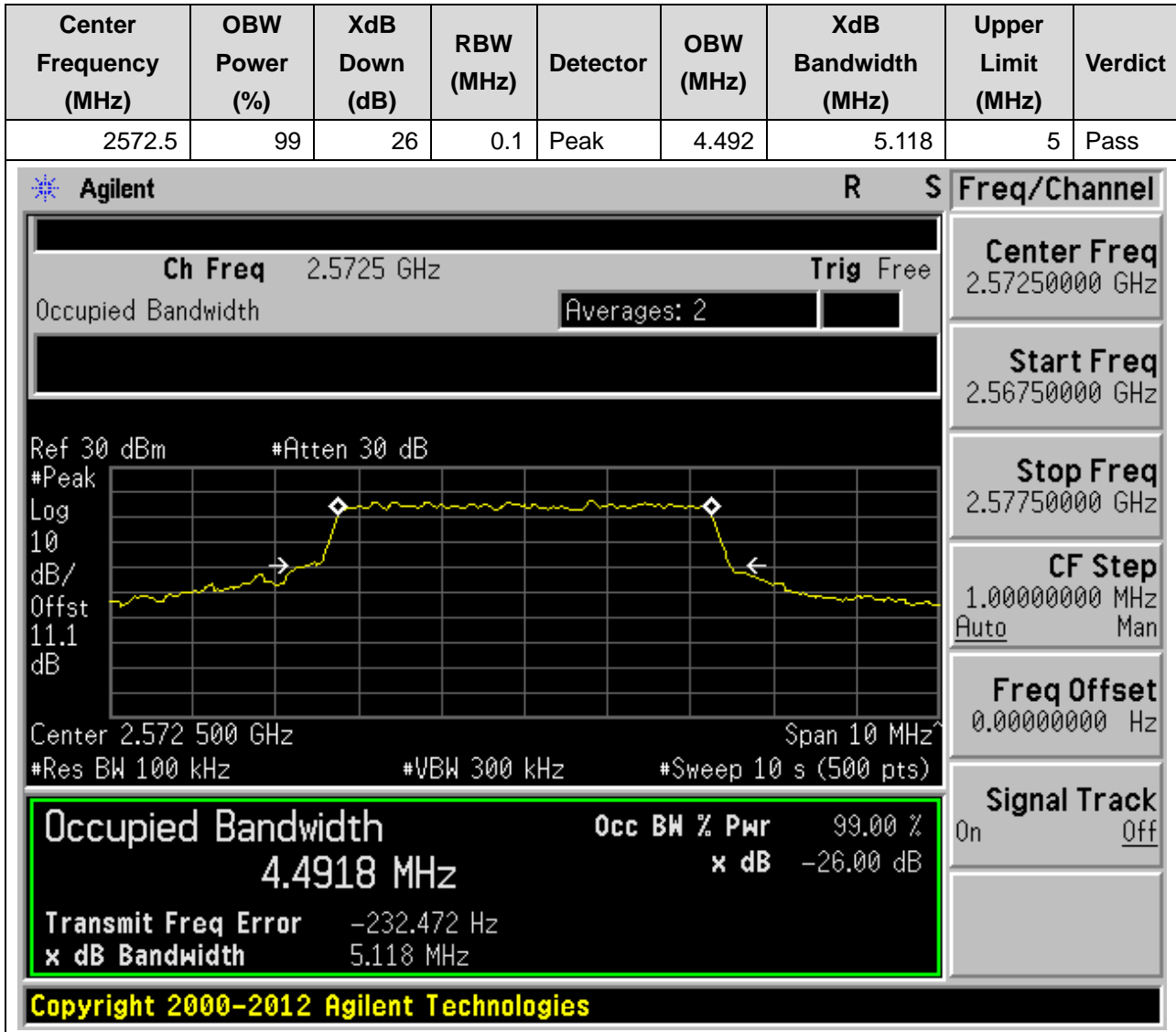
CF Step 4.00000000 MHz
Auto Man

Freq Offset 0.00000000 Hz

Signal Track On Off

8. LTE_Band38

8.1. LTE Occupied Bandwidth(NTNV)(Subtest:1, Channel:37775, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



8.2. LTE Occupied Bandwidth(NTNV)(Subtest:2, Channel:37775, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



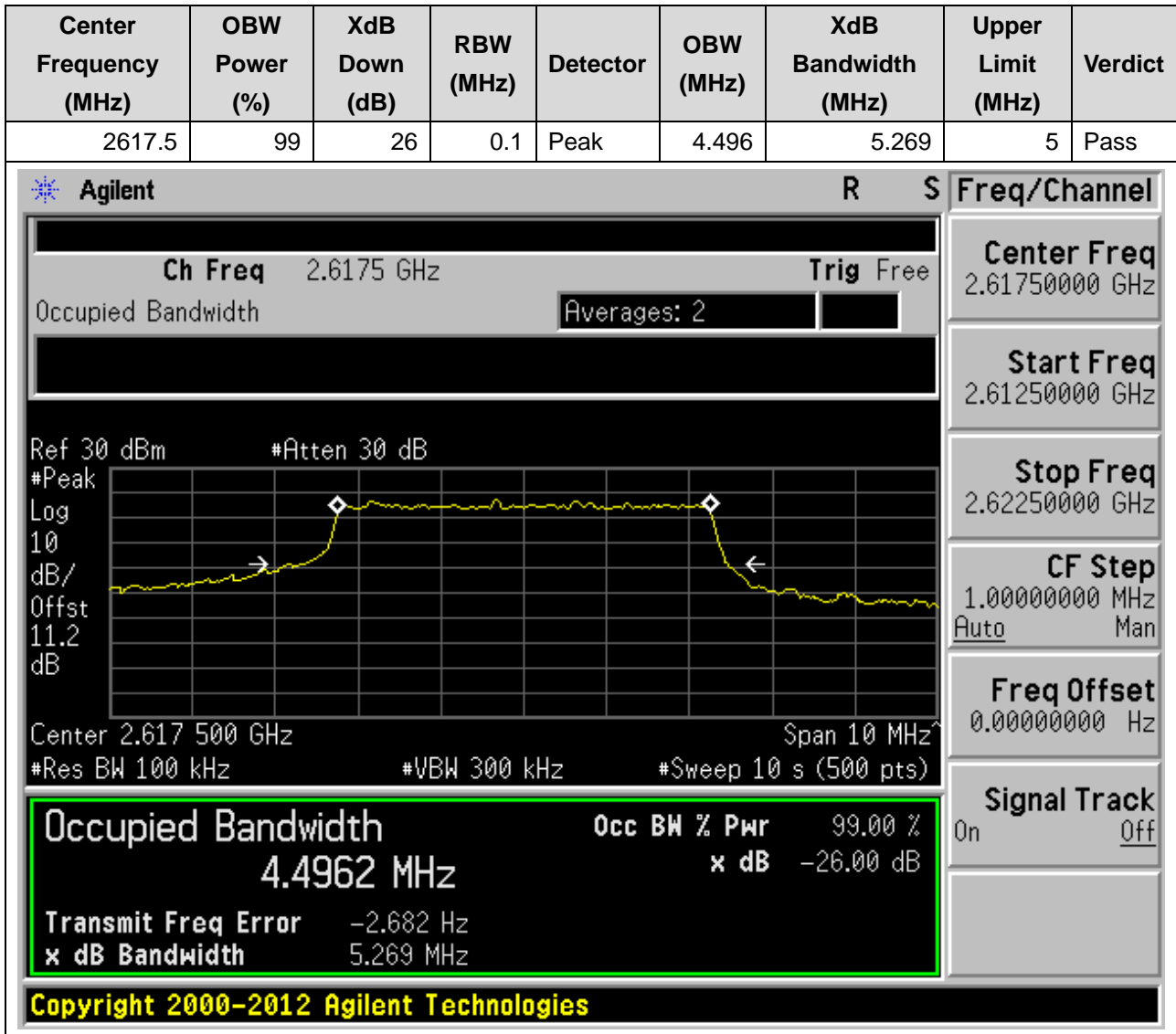
8.3. LTE Occupied Bandwidth(NTNV)(Subtest:3, Channel:38000, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



8.4. LTE Occupied Bandwidth(NTNV)(Subtest:4, Channel:38000, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



8.5. LTE Occupied Bandwidth(NTNV)(Subtest:5, Channel:38225, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



8.6. LTE Occupied Bandwidth(NTNV)(Subtest:6, Channel:38225, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



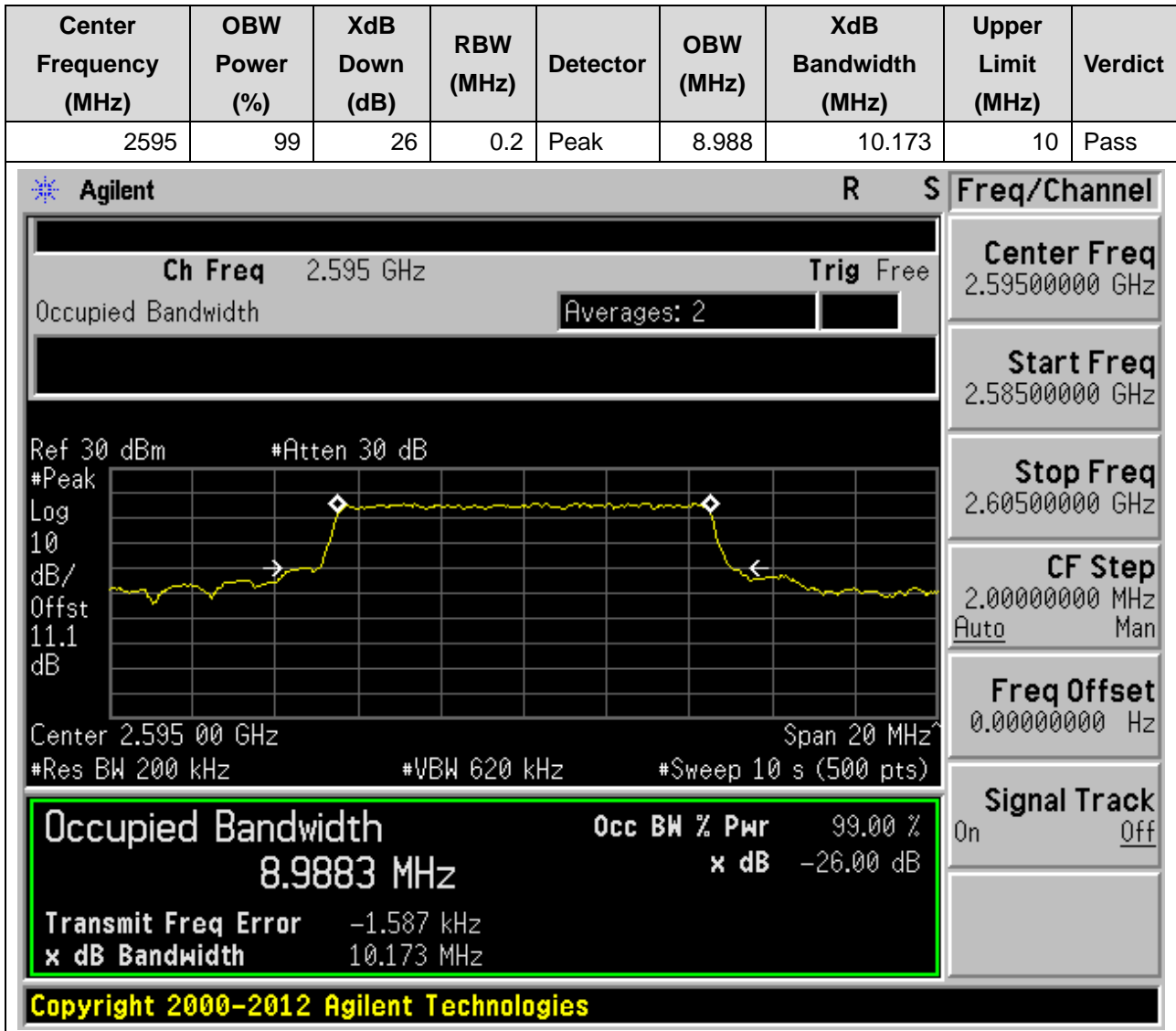
8.7. LTE Occupied Bandwidth(NTNV)(Subtest:7, Channel:37800, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



8.8. LTE Occupied Bandwidth(NTNV)(Subtest:8, Channel:37800, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



8.9. LTE Occupied Bandwidth(NTNV)(Subtest:9, Channel:38000, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



8.10. LTE Occupied Bandwidth(NTNV)(Subtest:10, Channel:38000, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2595	99	26	0.2	Peak	8.946	10.001	10	Pass

Agilent
R S
Freq/Channel

Ch Freq 2.595 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB



Center 2.595 00 GHz Span 20 MHz

#Res BW 200 kHz #VBW 620 kHz #Sweep 10 s (500 pts)

Center Freq
2.59500000 GHz

Start Freq
2.58500000 GHz

Stop Freq
2.60500000 GHz

CF Step
2.00000000 MHz
Auto Man

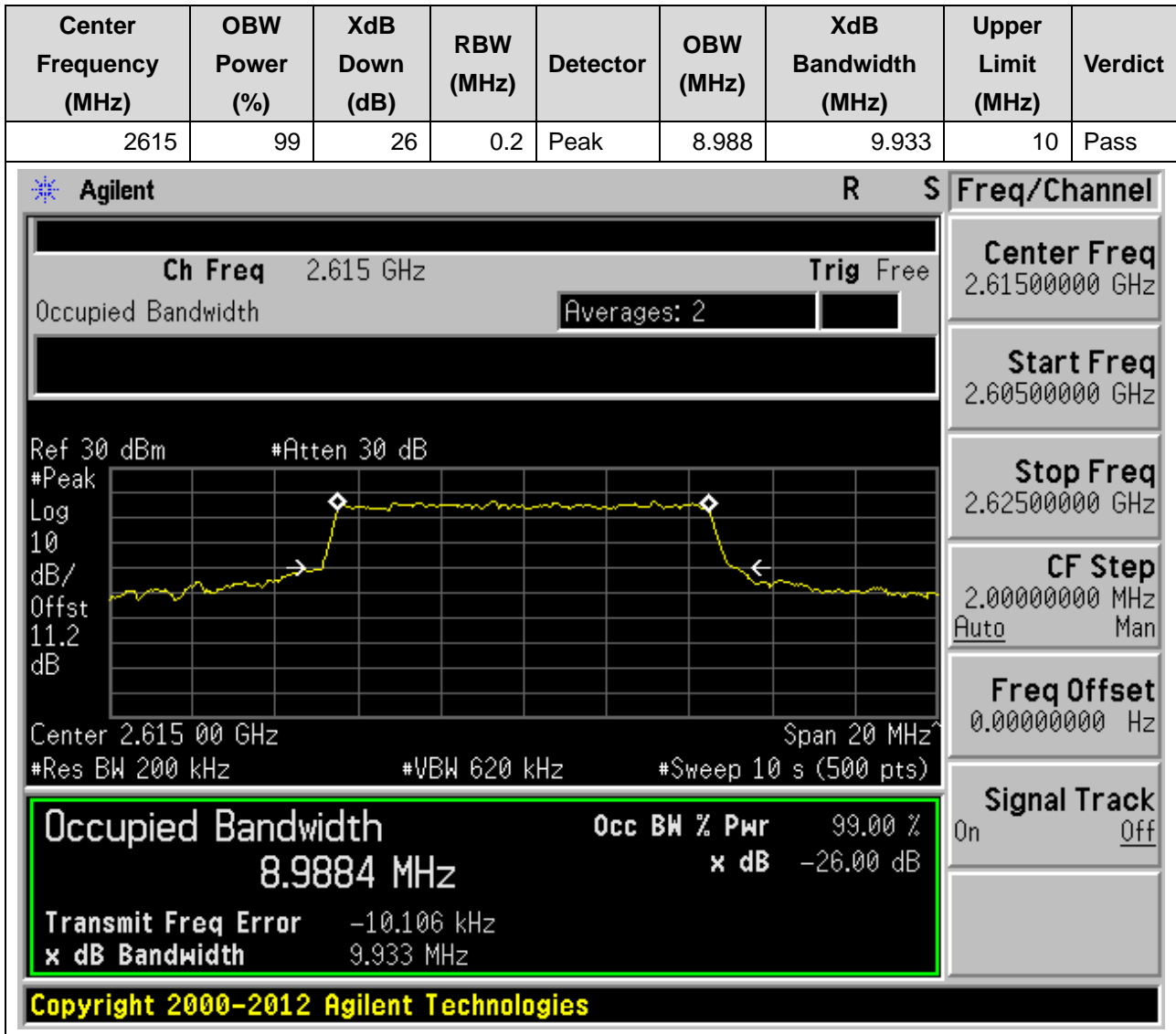
Freq Offset
0.00000000 Hz

Signal Track
On Off

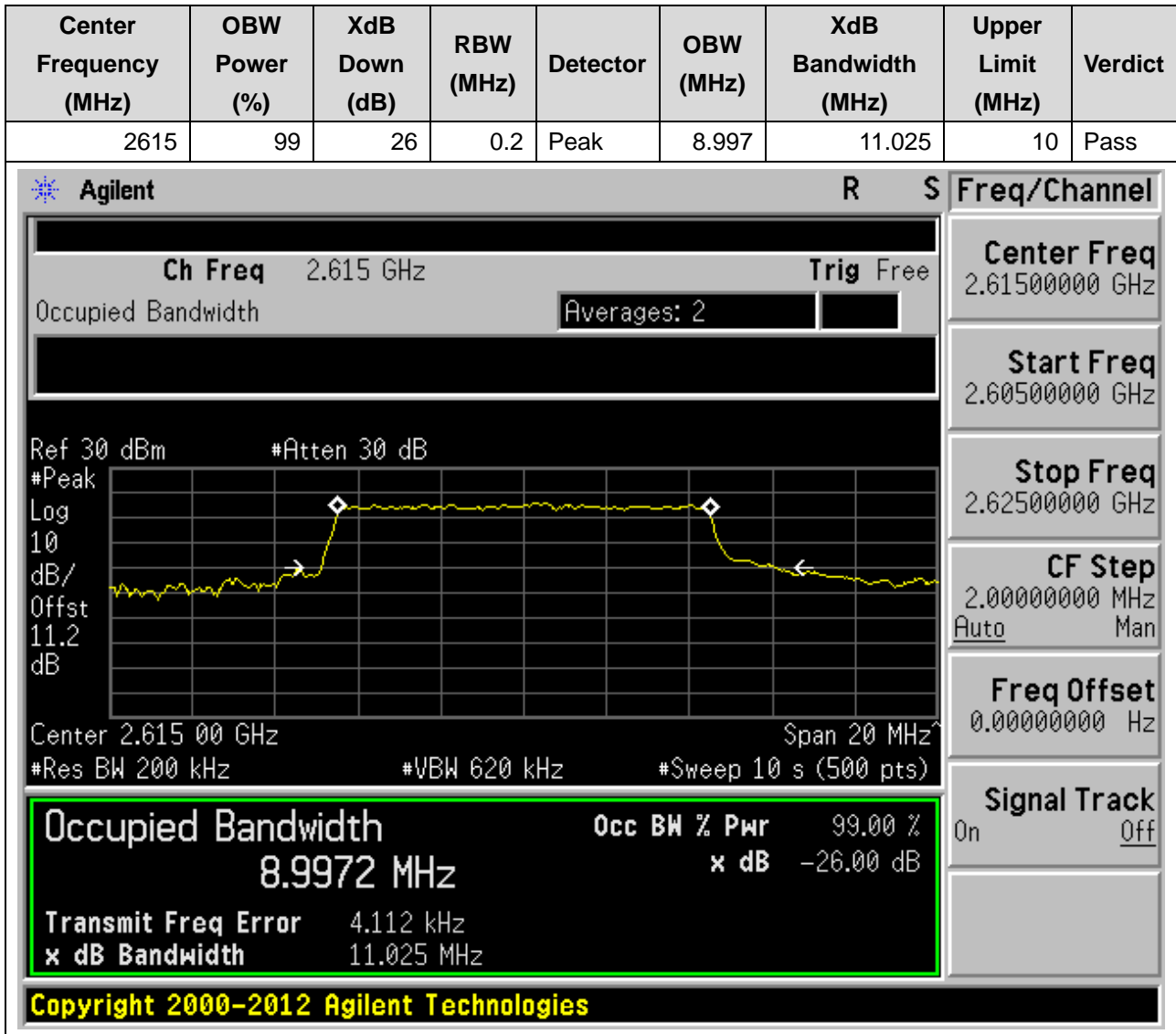
Occupied Bandwidth	Occ BW % Pwr	99.00 %
8.9462 MHz	x dB	-26.00 dB
Transmit Freq Error	-3.477 kHz	
x dB Bandwidth	10.001 MHz	

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8.11. LTE Occupied Bandwidth(NTNV)(Subtest:11, Channel:38200, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



8.12. LTE Occupied Bandwidth(NTNV)(Subtest:12, Channel:38200, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



8.13. LTE Occupied Bandwidth(NTNV)(Subtest:13, Channel:37825, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2577.5	99	26	0.3	Peak	13.484	15.412	15	Pass

Agilent R S Freq/Channel

Ch Freq 2.5775 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.1 dB

Center 2.577 50 GHz Span 30 MHz

#Res BW 300 kHz #VBW 1 MHz #Sweep 10 s (500 pts)

Occupied Bandwidth Occ BW % Pwr 99.00 %

13.4839 MHz x dB -26.00 dB

Transmit Freq Error 5.565 kHz

x dB Bandwidth 15.412 MHz

Signal Track On Off

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8.14. LTE Occupied Bandwidth(NTNV)(Subtest:14, Channel:37825, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)

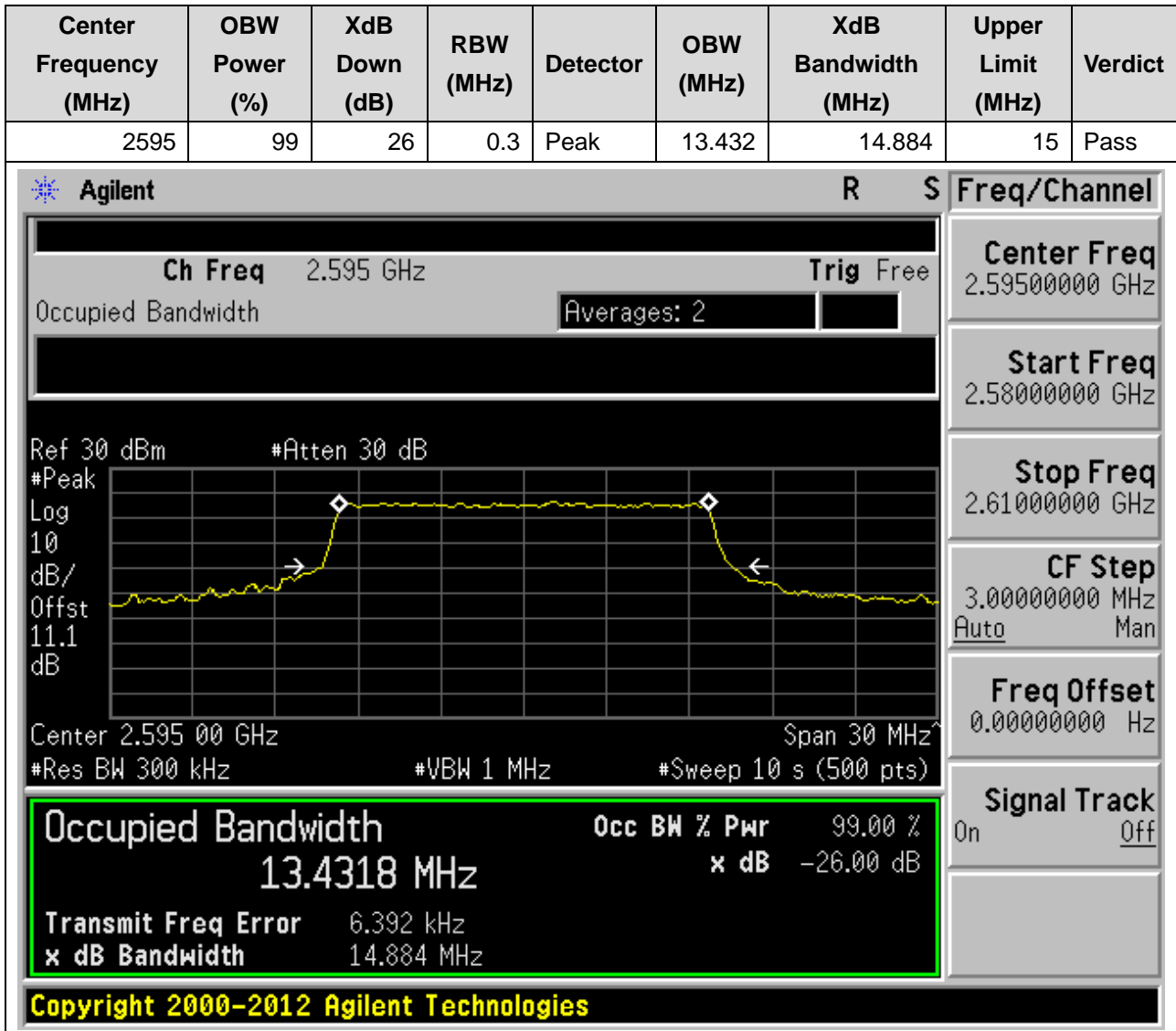
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2577.5	99	26	0.3	Peak	13.476	15.654	15	Pass

The screenshot displays the Agilent spectrum analyzer interface for an LTE Occupied Bandwidth (OBW) measurement. The main display shows a frequency plot with a yellow signal trace. The center frequency is 2.5775 GHz, and the span is 30 MHz. The occupied bandwidth is measured as 13.476 MHz, which is 99.00% of the 15.654 MHz bandwidth. The measurement is taken at a reference level of 30 dBm with 30 dB of attenuation. The signal track is turned on.

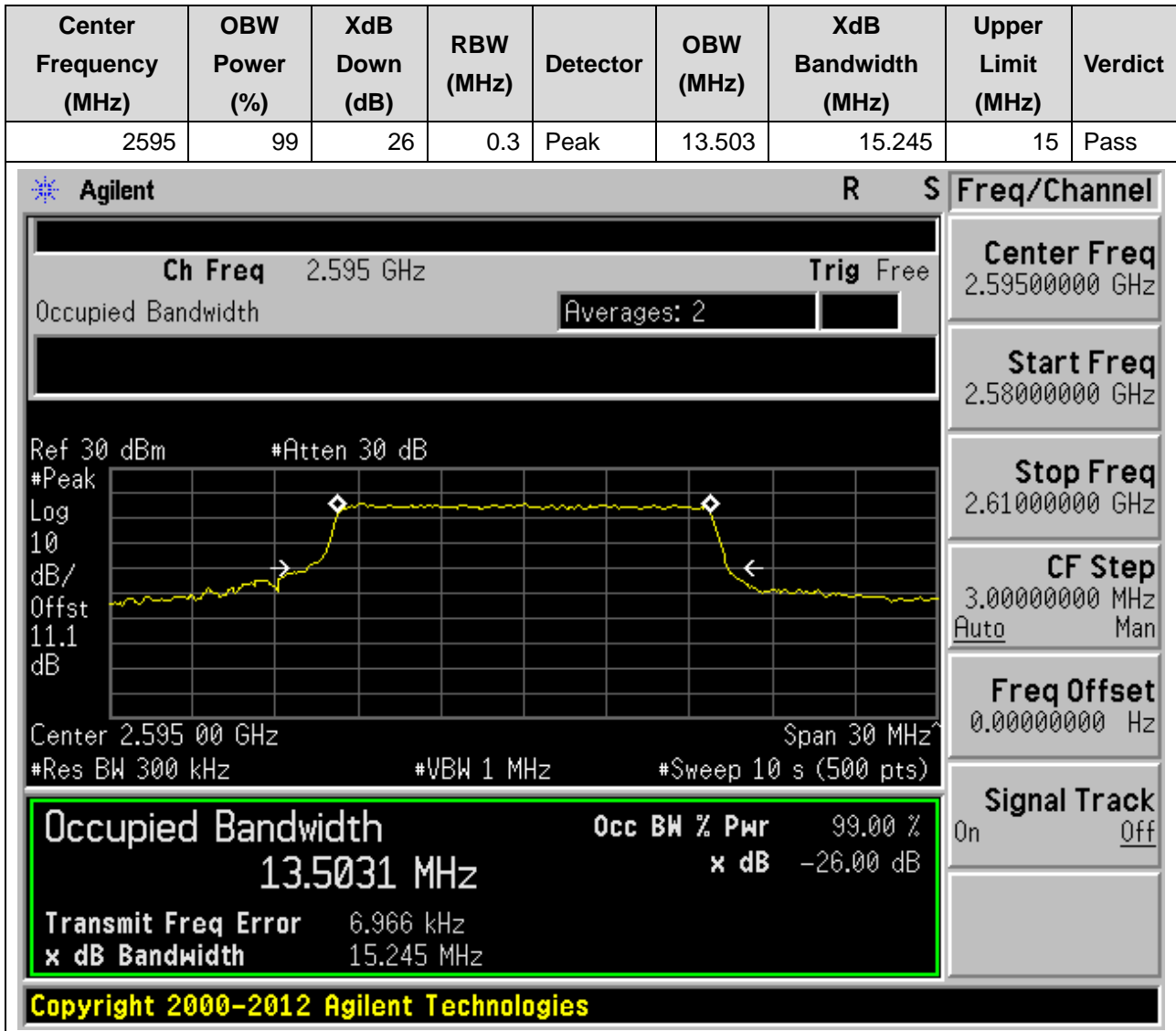
Parameter	Value
Center Freq	2.5775 GHz
Occupied Bandwidth	13.476 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-4.108 kHz
x dB Bandwidth	15.654 MHz

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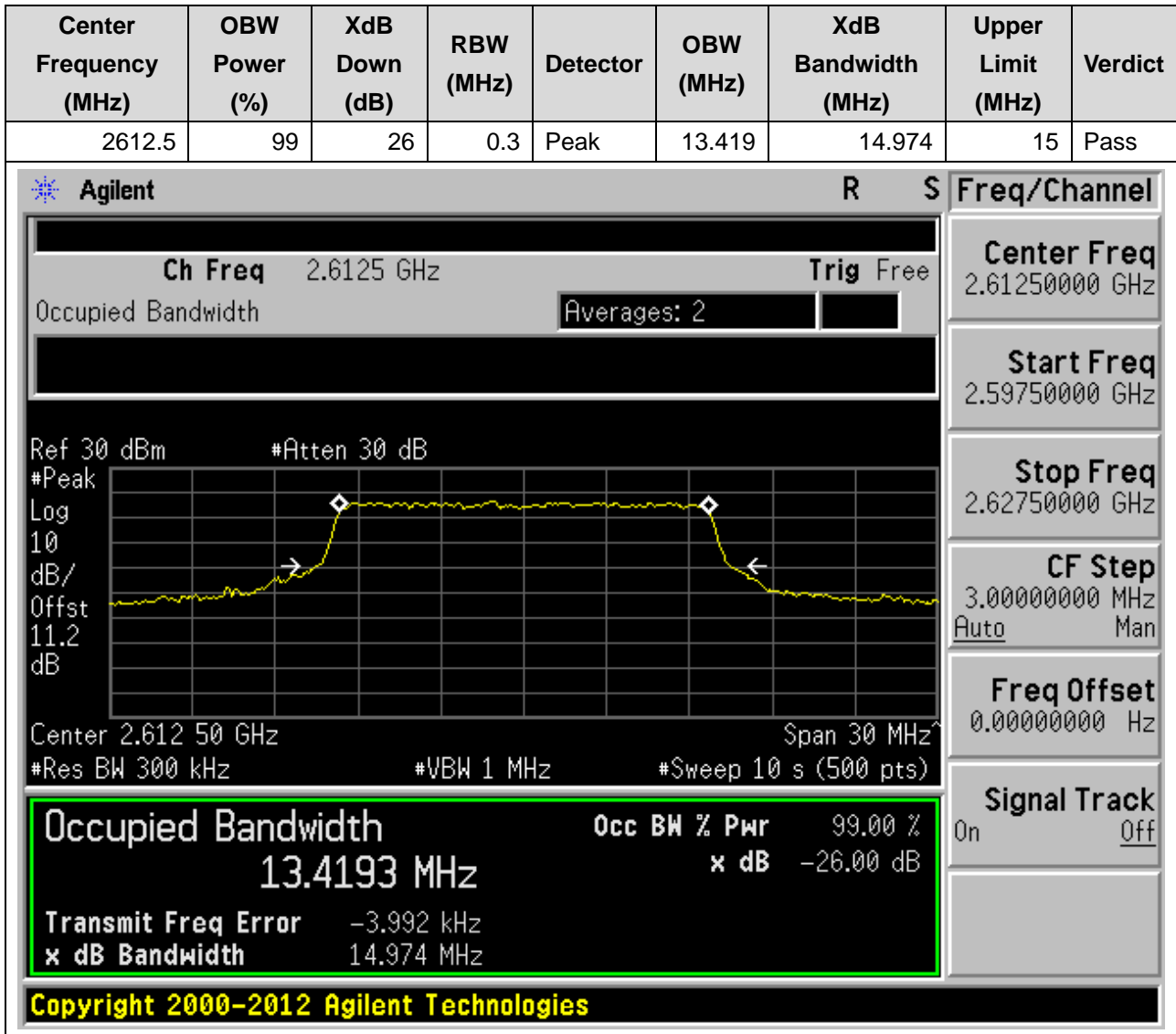
8.15. LTE Occupied Bandwidth(NTNV)(Subtest:15, Channel:38000, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



8.16. LTE Occupied Bandwidth(NTNV)(Subtest:16, Channel:38000, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)



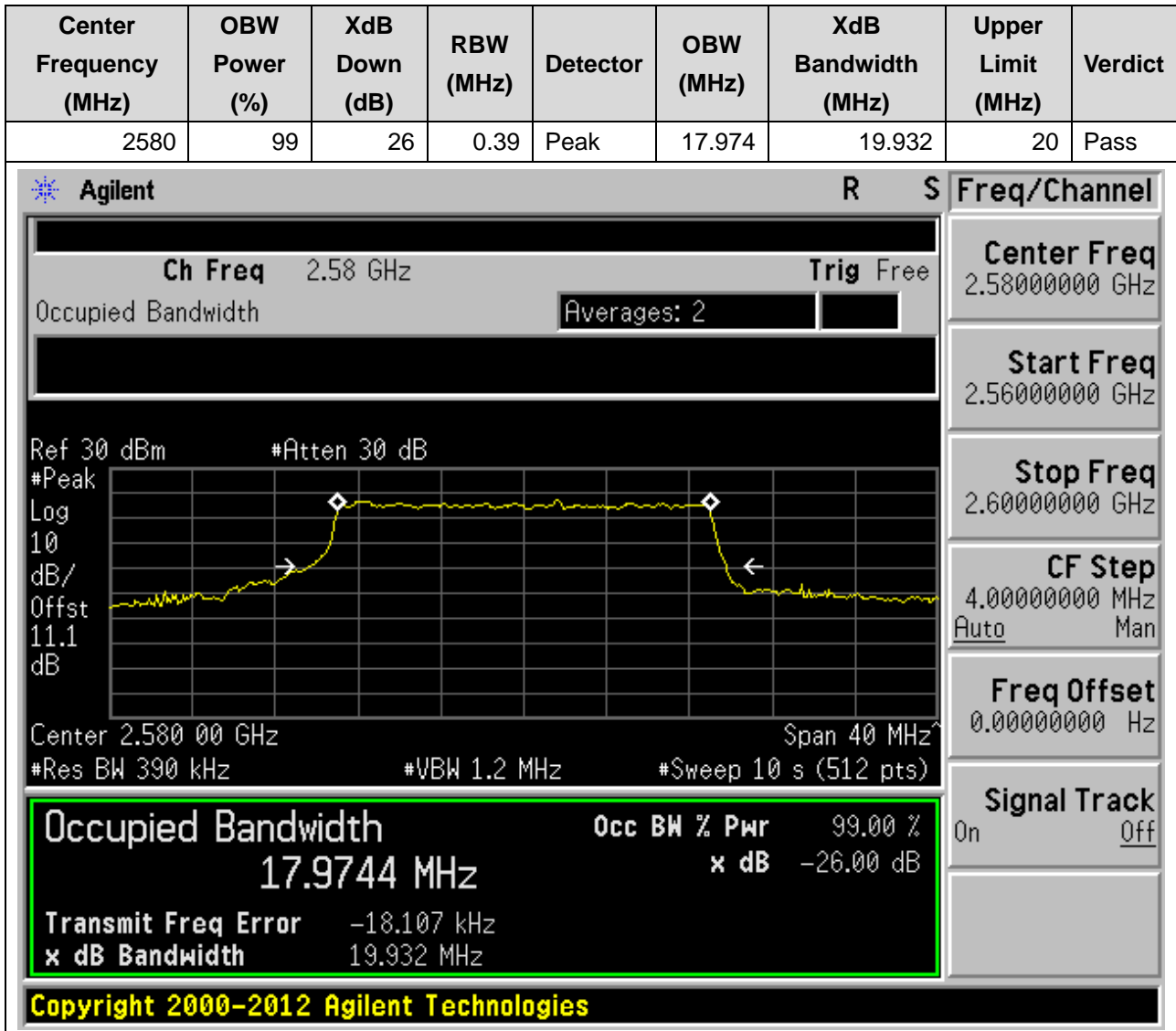
8.17. LTE Occupied Bandwidth(NTNV)(Subtest:17, Channel:38175, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



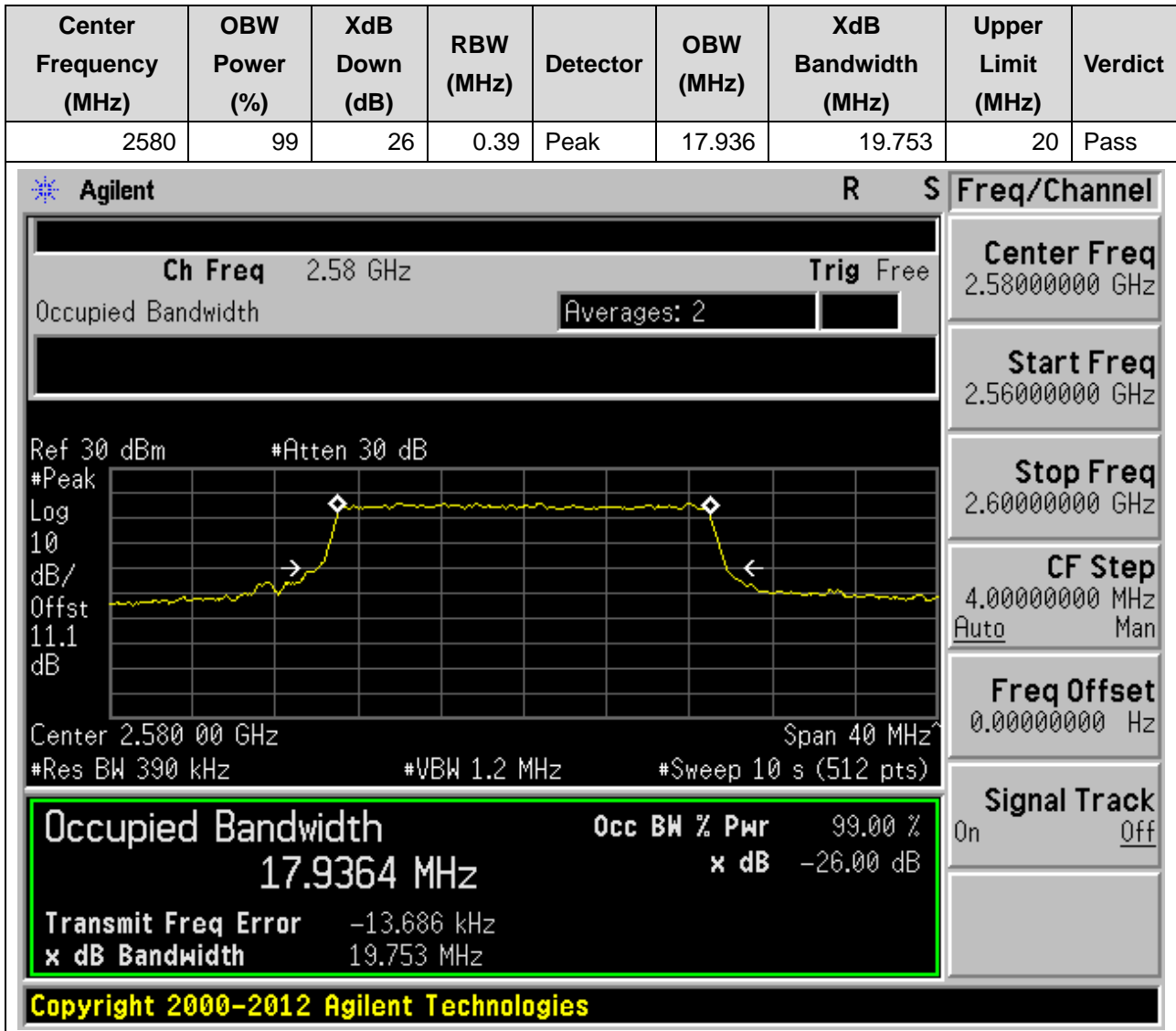
8.18. LTE Occupied Bandwidth(NTNV)(Subtest:18, Channel:38175, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)



8.19. LTE Occupied Bandwidth(NTNV)(Subtest:19, Channel:37850, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



8.20. LTE Occupied Bandwidth(NTNV)(Subtest:20, Channel:37850, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



8.21. LTE Occupied Bandwidth(NTNV)(Subtest:21, Channel:38000, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2595	99	26	0.39	Peak	17.918	19.425	20	Pass

Agilent R S Freq/Channel

Ch Freq 2.595 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.1 dB

Center 2.595 00 GHz Span 40 MHz

#Res BW 390 kHz #VBW 1.2 MHz #Sweep 10 s (512 pts)

Occupied Bandwidth Occ BW % Pwr 99.00 %

17.9178 MHz x dB -26.00 dB

Transmit Freq Error 3.120 kHz

x dB Bandwidth 19.425 MHz

Signal Track On Off

Center Freq 2.59500000 GHz

Start Freq 2.57500000 GHz

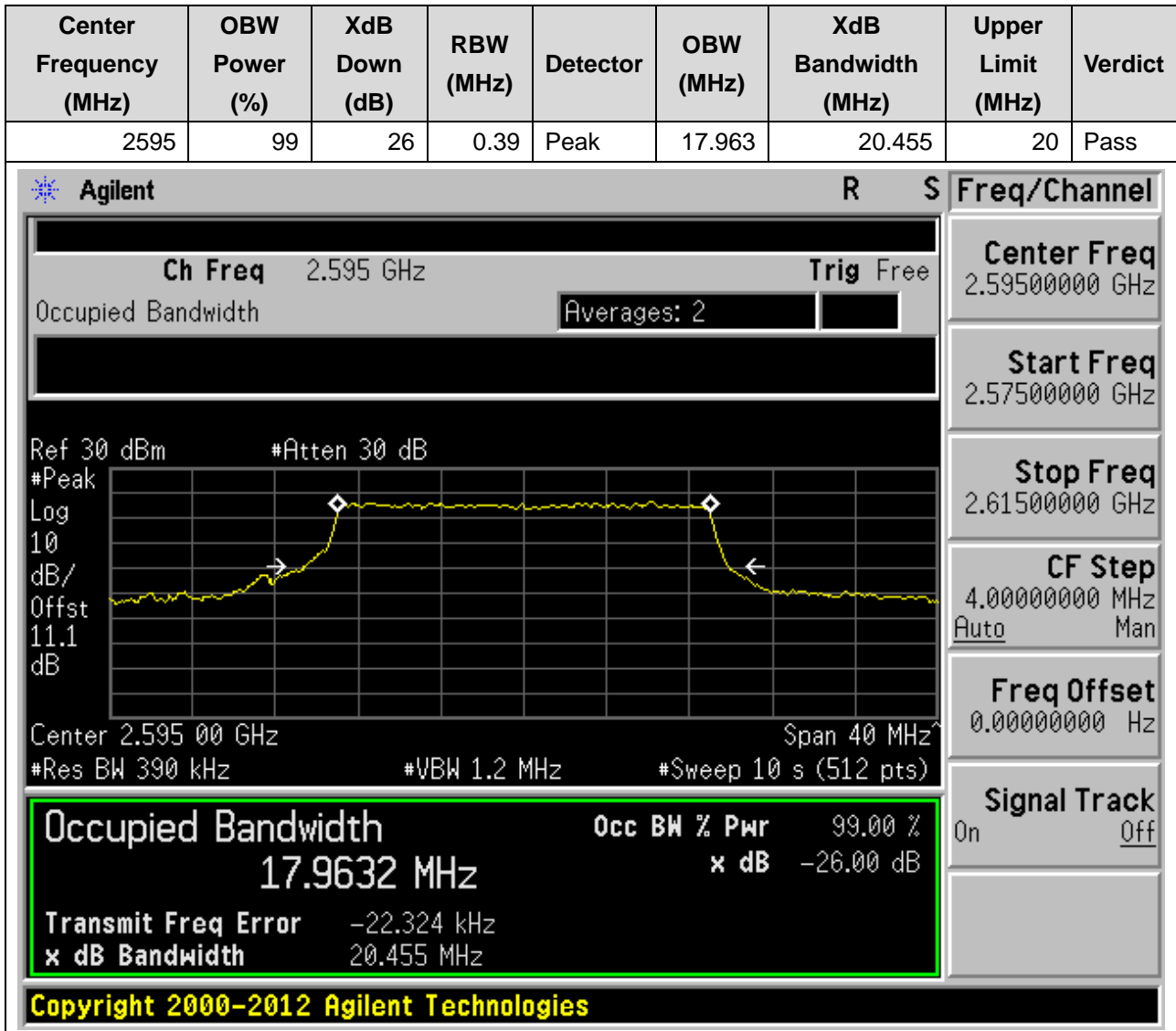
Stop Freq 2.61500000 GHz

CF Step 4.00000000 MHz Auto Man

Freq Offset 0.00000000 Hz

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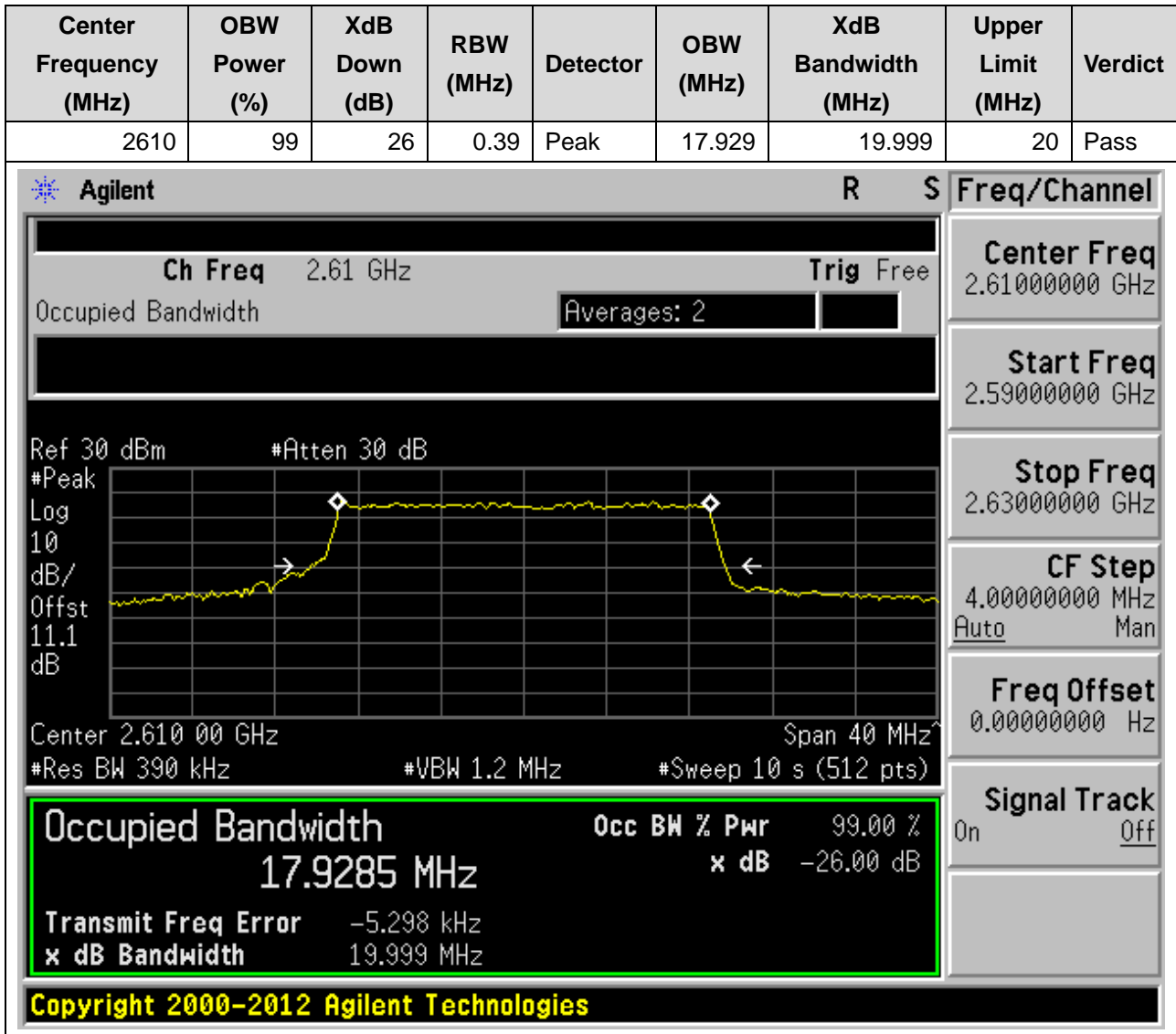
8.22. LTE Occupied Bandwidth(NTNV)(Subtest:22, Channel:38000, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



8.23. LTE Occupied Bandwidth(NTNV)(Subtest:23, Channel:38150, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)

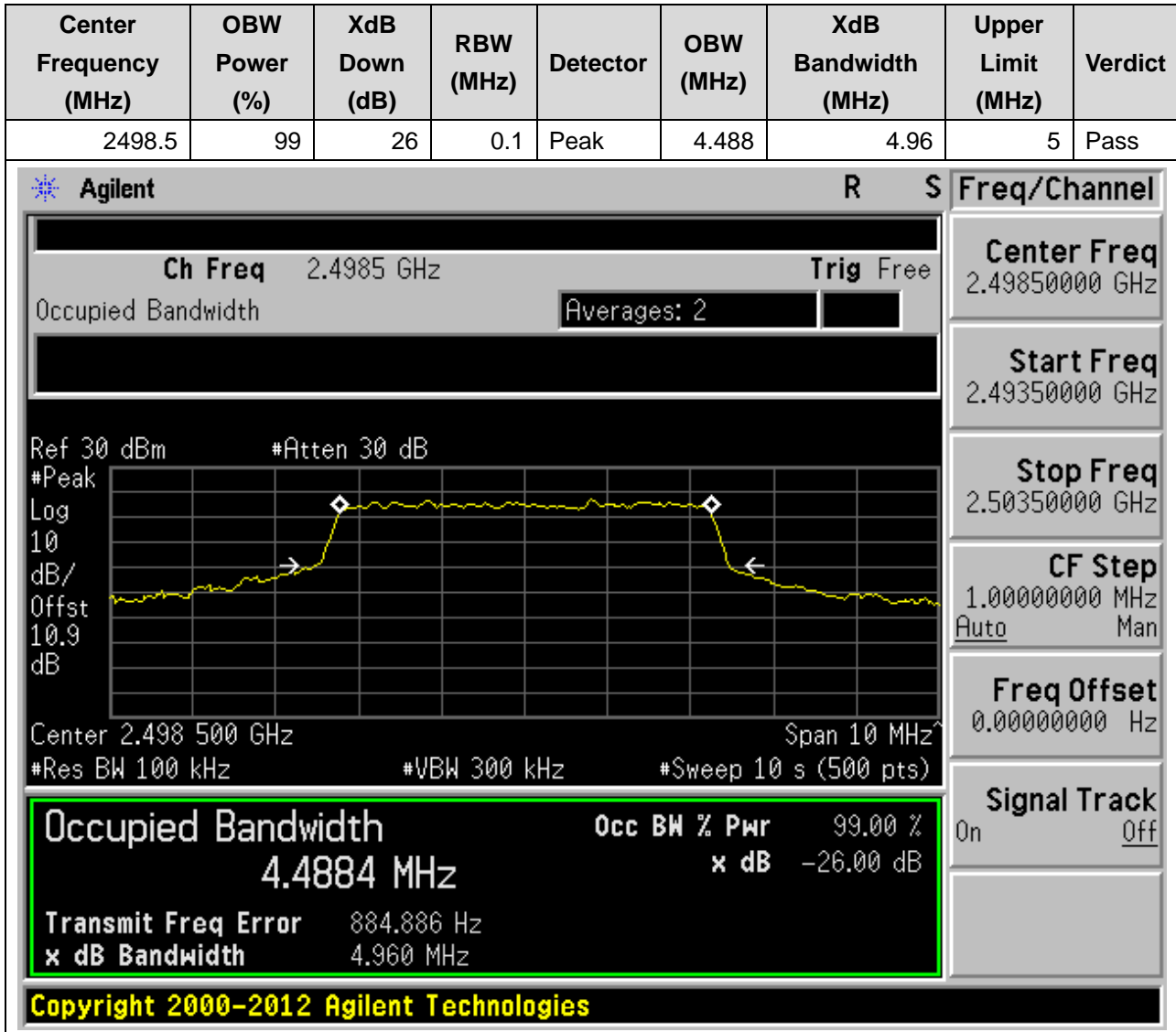


8.24. LTE Occupied Bandwidth(NTNV)(Subtest:24, Channel:38150, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)

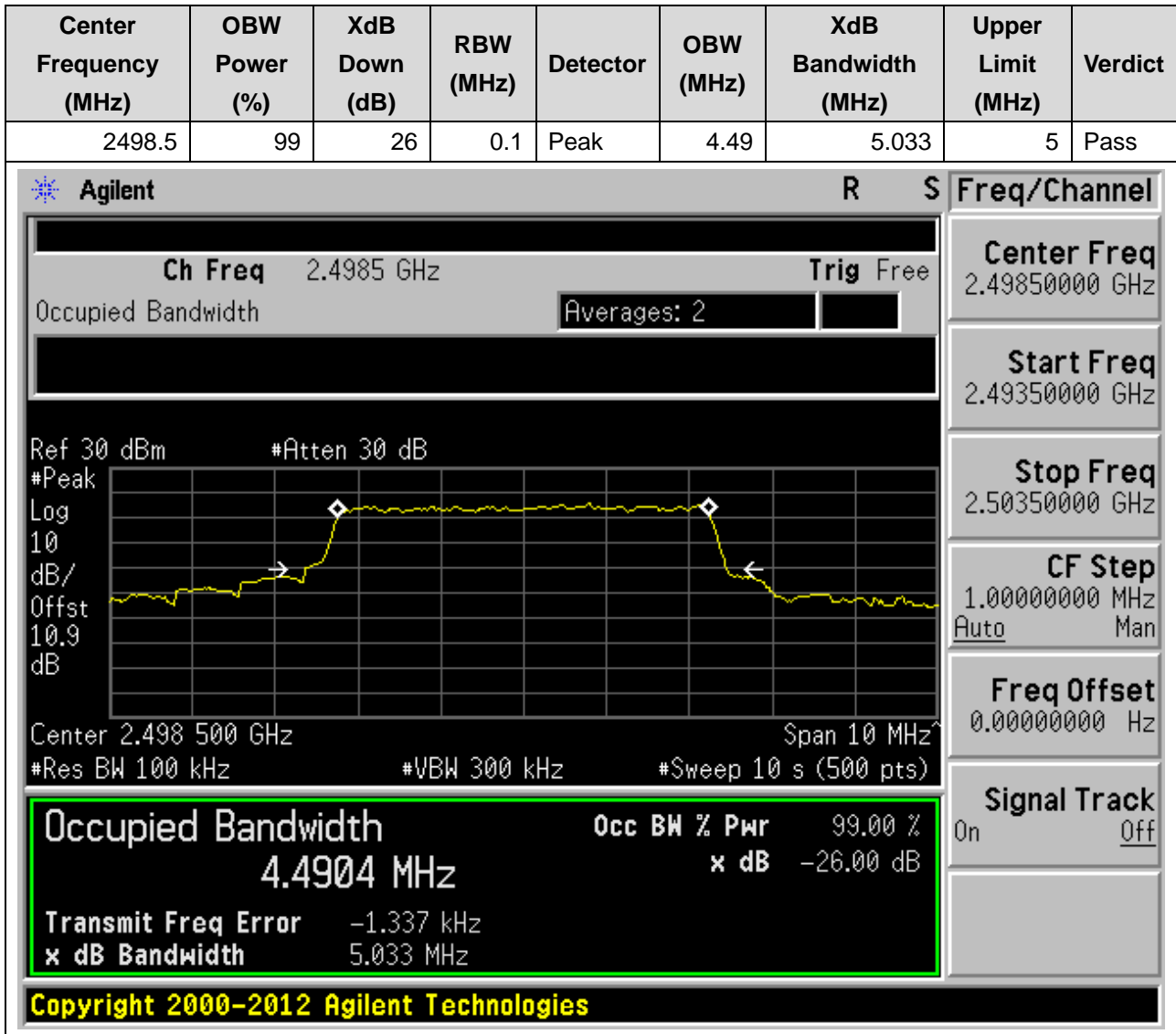


9. LTE_Band41 full

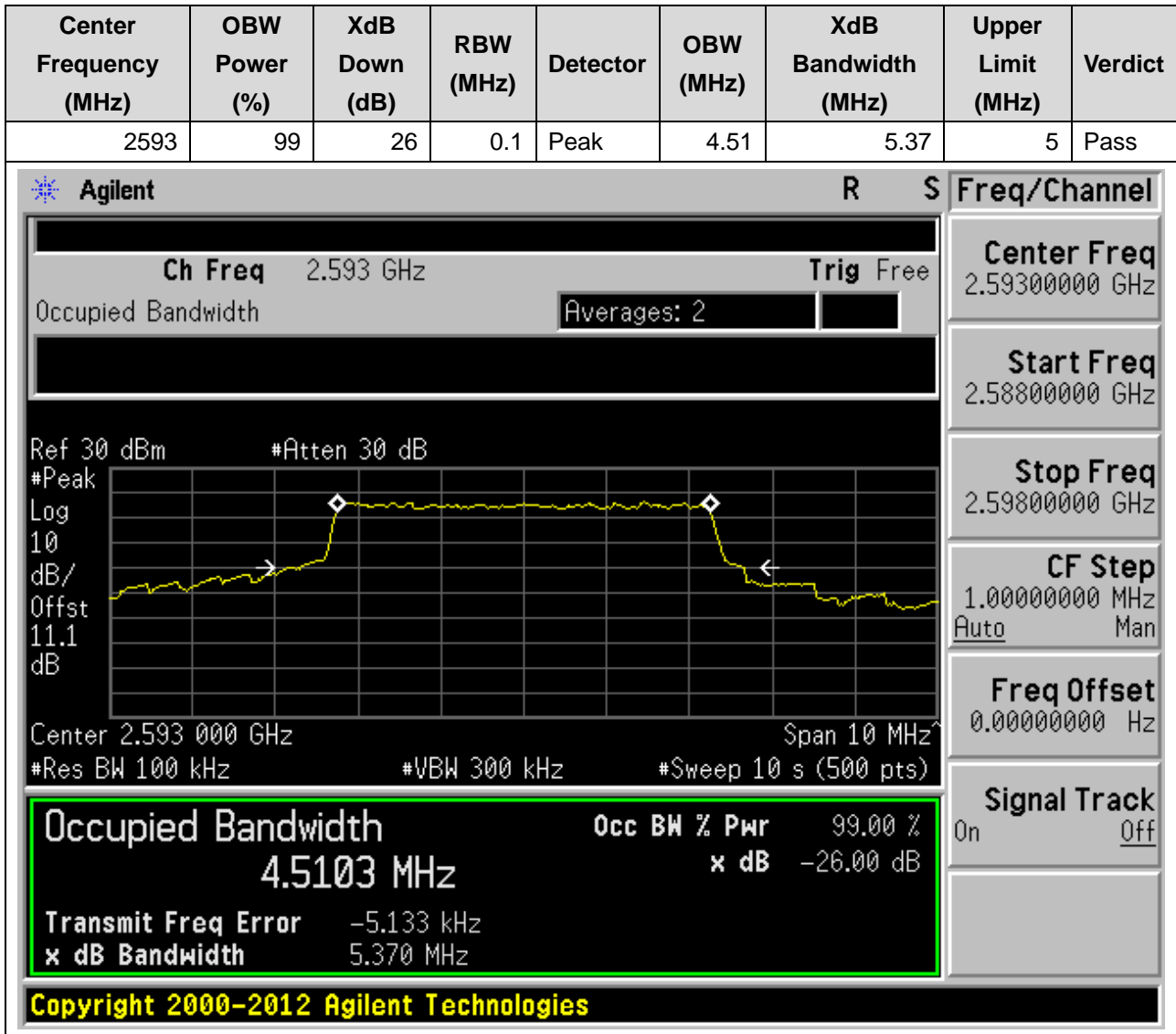
9.1. LTE Occupied Bandwidth(NTNV)(Subtest:1, Channel:39675, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



9.2. LTE Occupied Bandwidth(NTNV)(Subtest:2, Channel:39675, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



9.3. LTE Occupied Bandwidth(NTNV)(Subtest:3, Channel:40620, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



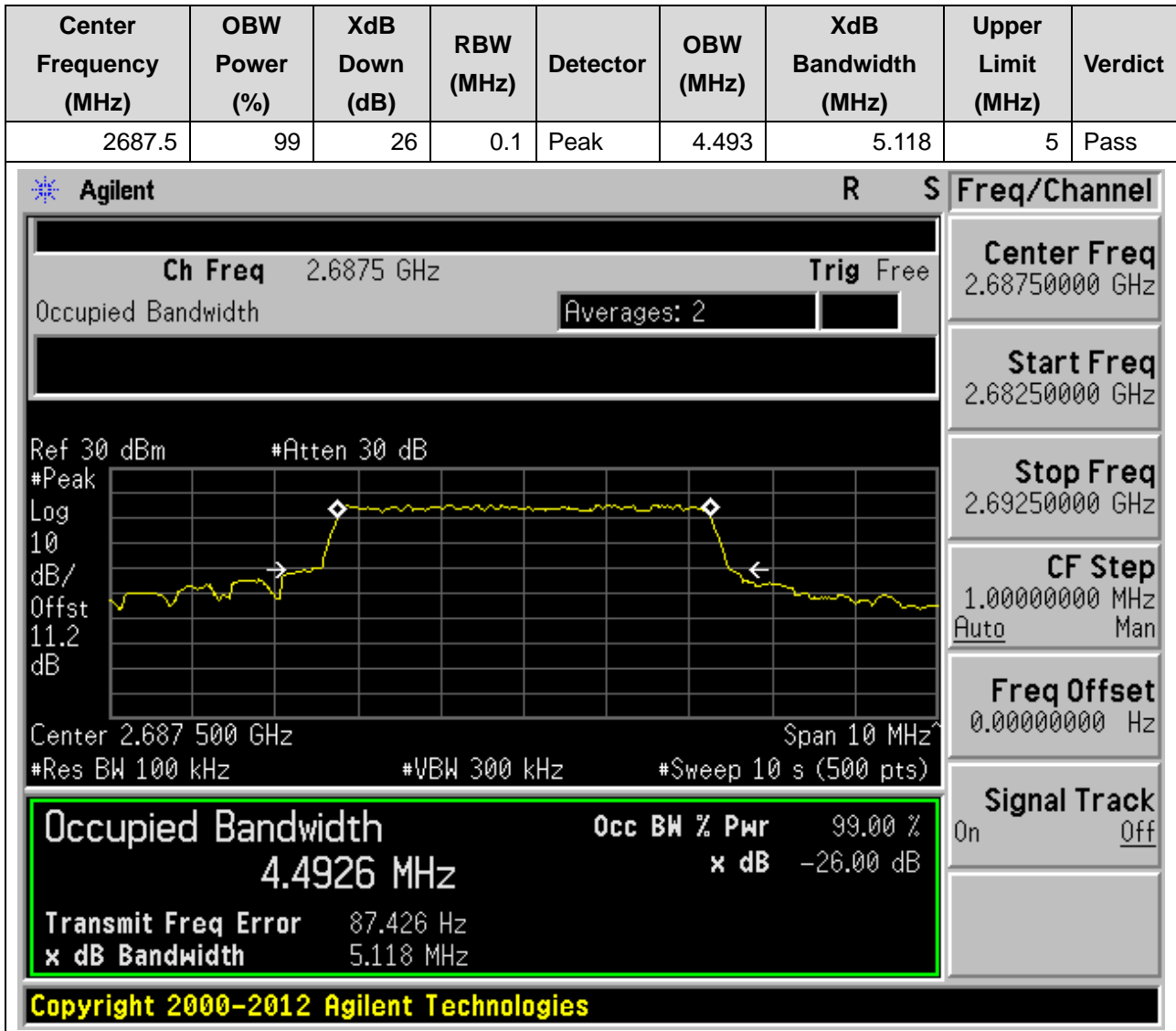
9.4. LTE Occupied Bandwidth(NTNV)(Subtest:4, Channel:40620, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



9.5. LTE Occupied Bandwidth(NTNV)(Subtest:5, Channel:41565, Bandwidth:5, Modulation:QPSK, RB Number: 25, RB Position:LOW)



9.6. LTE Occupied Bandwidth(NTNV)(Subtest:6, Channel:41565, Bandwidth:5, Modulation:Q16, RB Number: 25, RB Position:LOW)



9.7. LTE Occupied Bandwidth(NTNV)(Subtest:7, Channel:39700, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



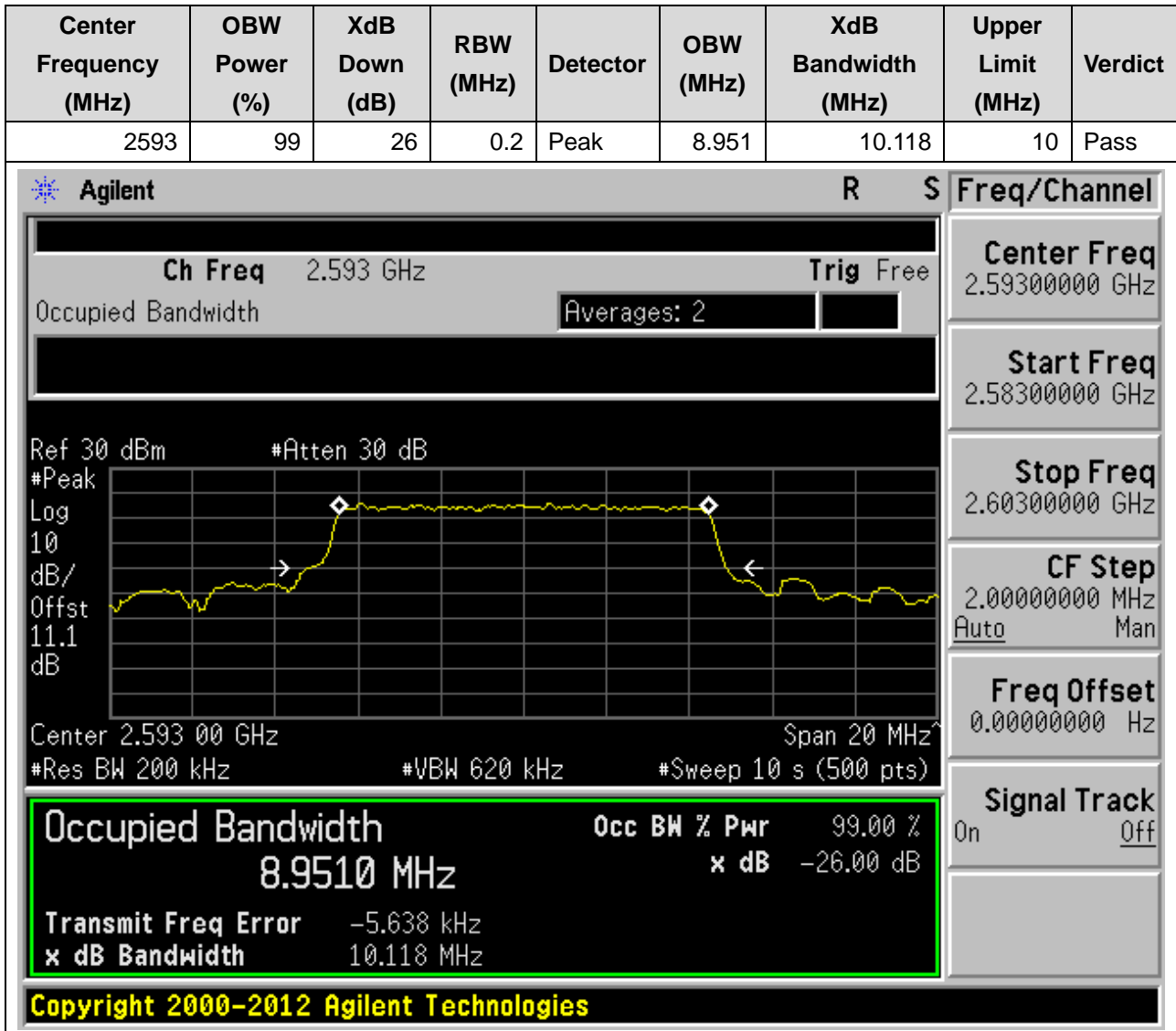
9.8. LTE Occupied Bandwidth(NTNV)(Subtest:8, Channel:39700, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



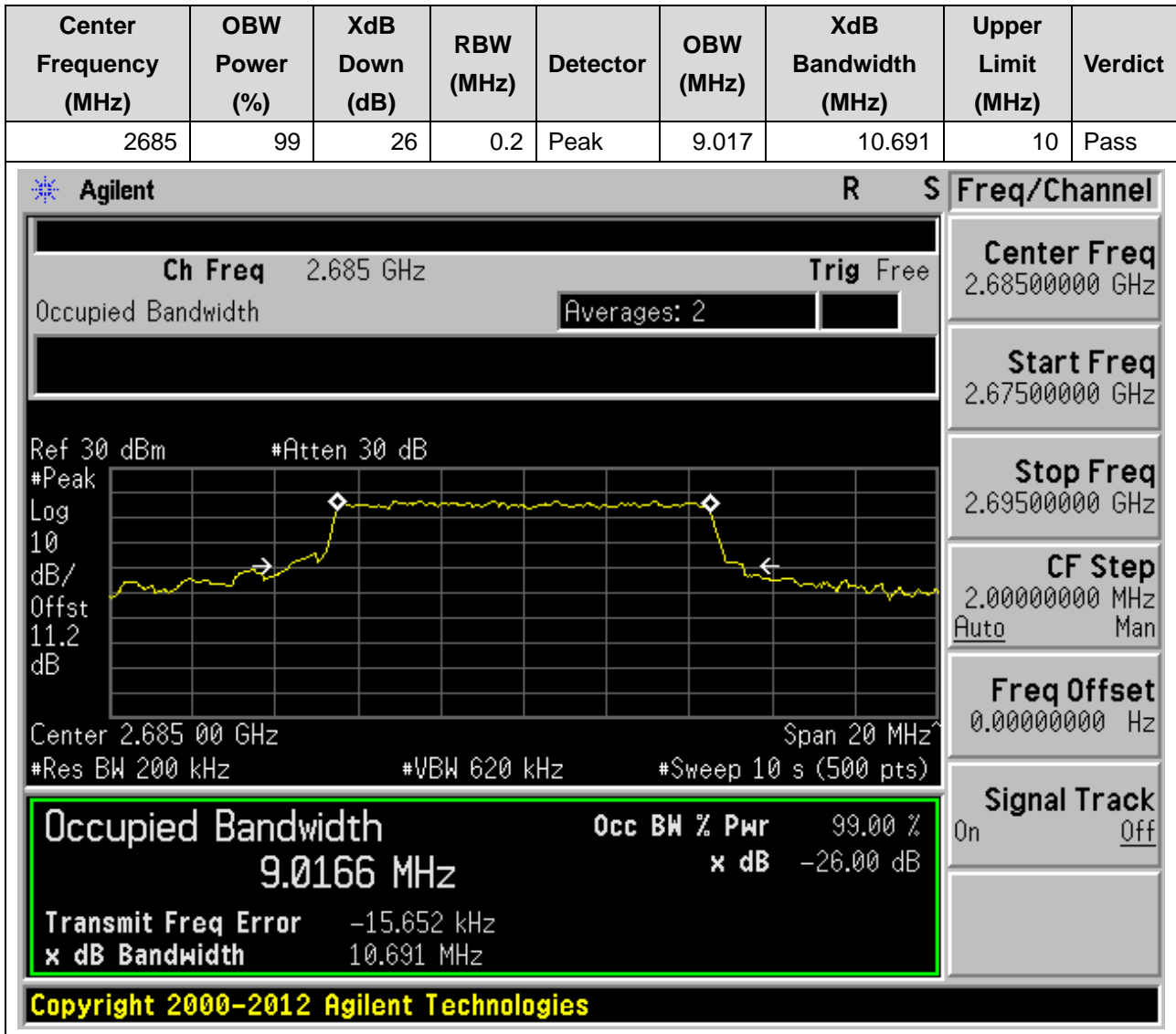
9.9. LTE Occupied Bandwidth(NTNV)(Subtest:9, Channel:40620, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



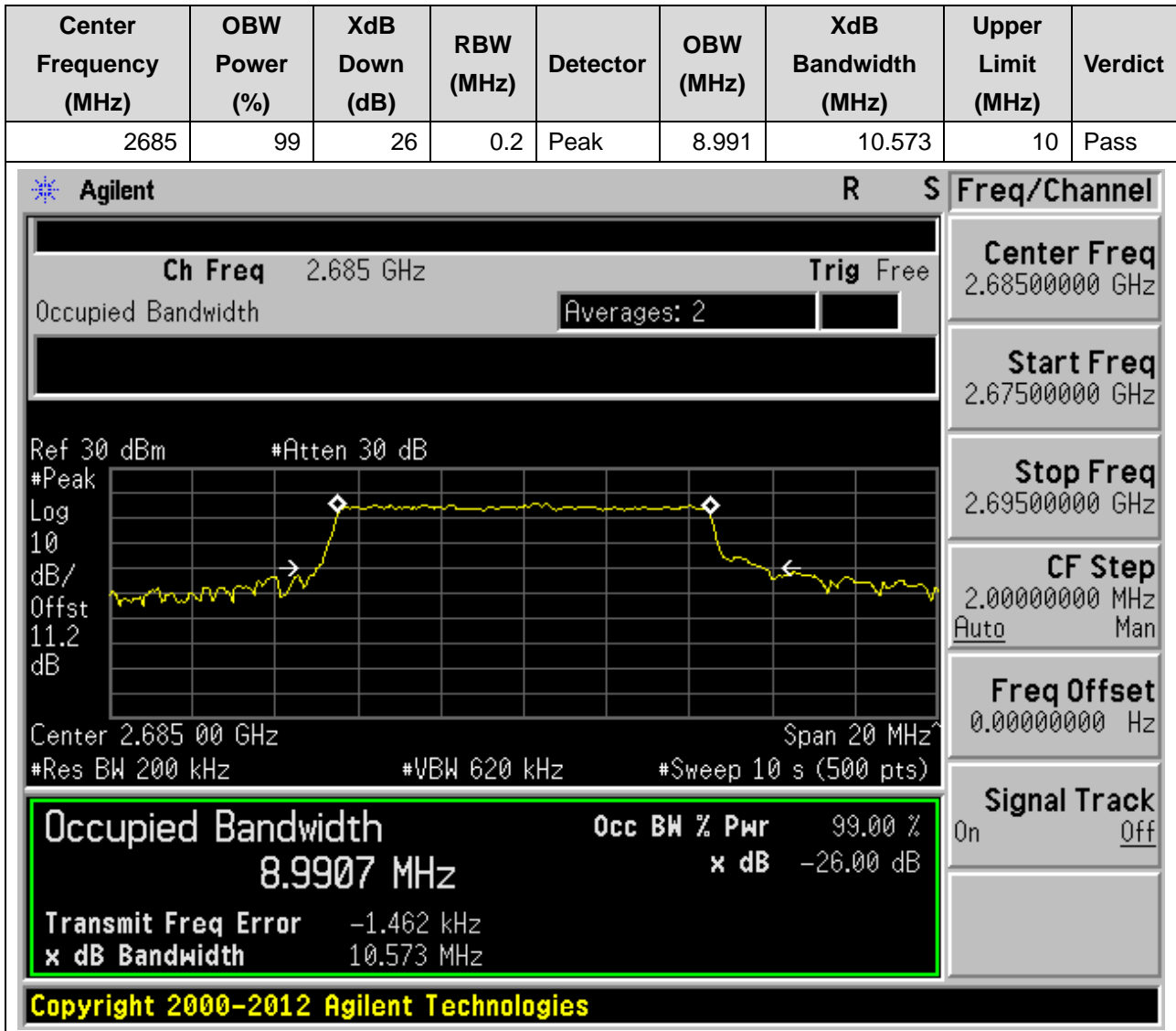
9.10. LTE Occupied Bandwidth(NTNV)(Subtest:10, Channel:40620, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



9.11. LTE Occupied Bandwidth(NTNV)(Subtest:11, Channel:41540, Bandwidth:10, Modulation:QPSK, RB Number: 50, RB Position:LOW)



9.12. LTE Occupied Bandwidth(NTNV)(Subtest:12, Channel:41540, Bandwidth:10, Modulation:Q16, RB Number: 50, RB Position:LOW)



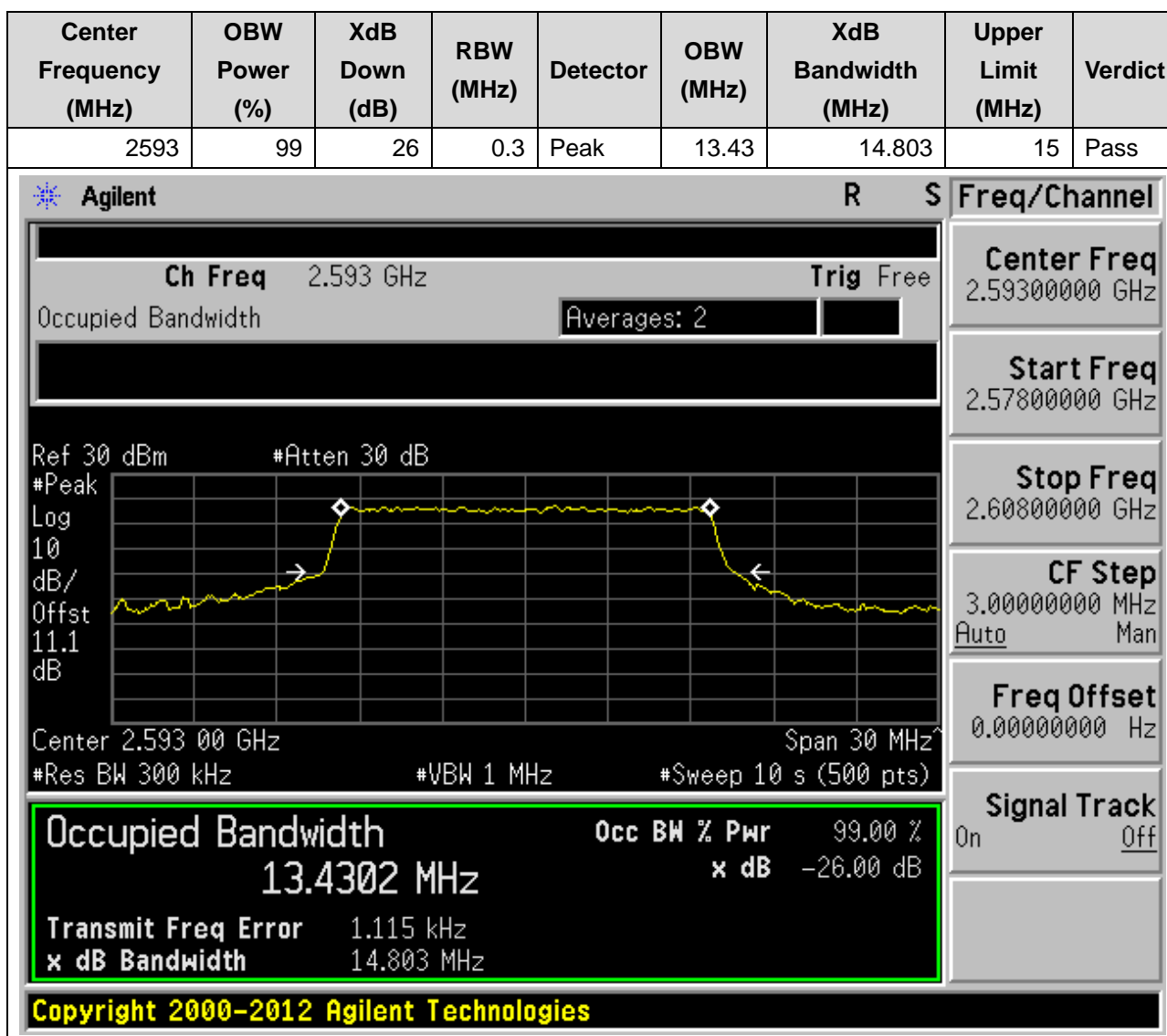
9.13. LTE Occupied Bandwidth(NTNV)(Subtest:13, Channel:39725, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



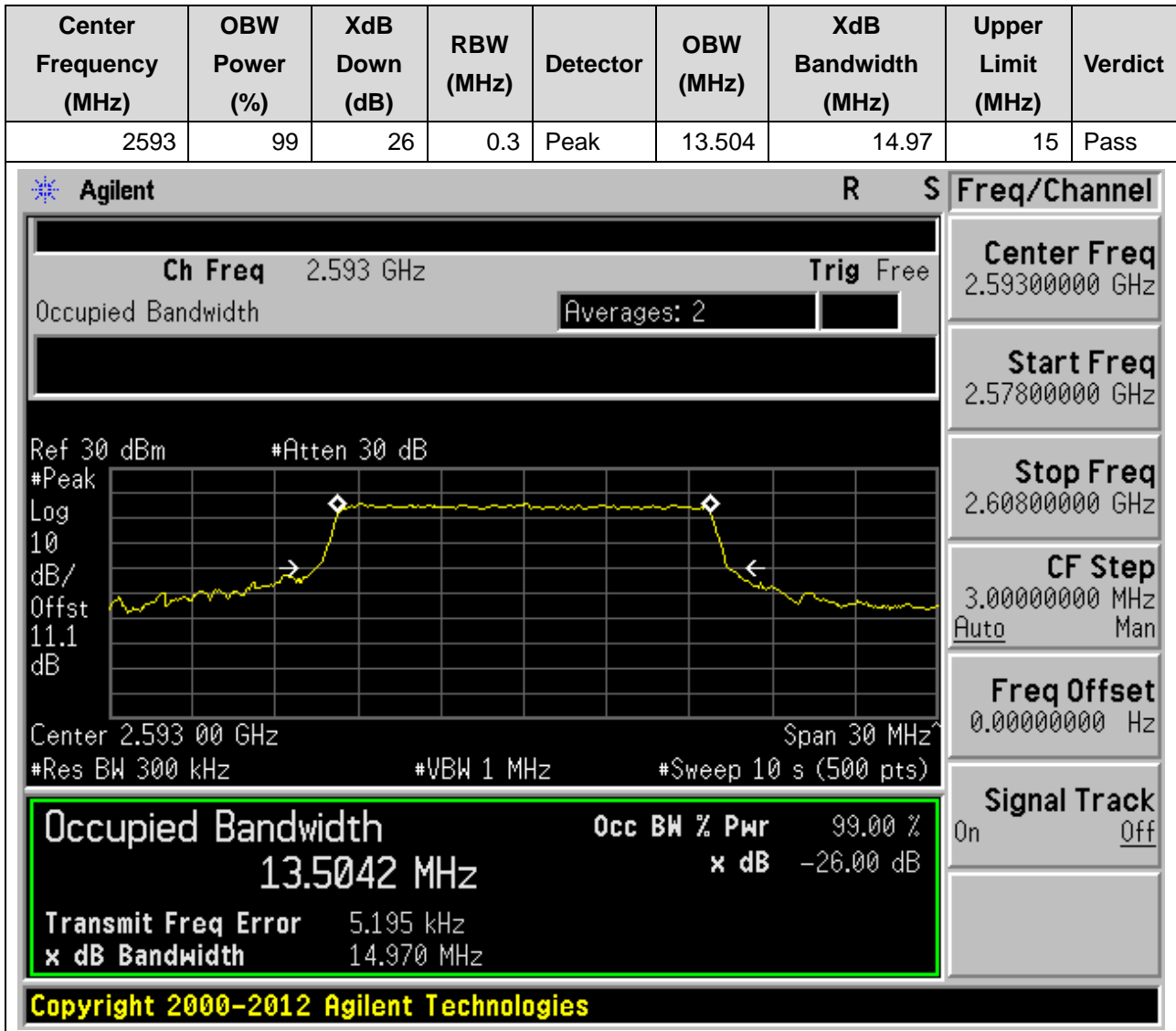
9.14. LTE Occupied Bandwidth(NTNV)(Subtest:14, Channel:39725, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)



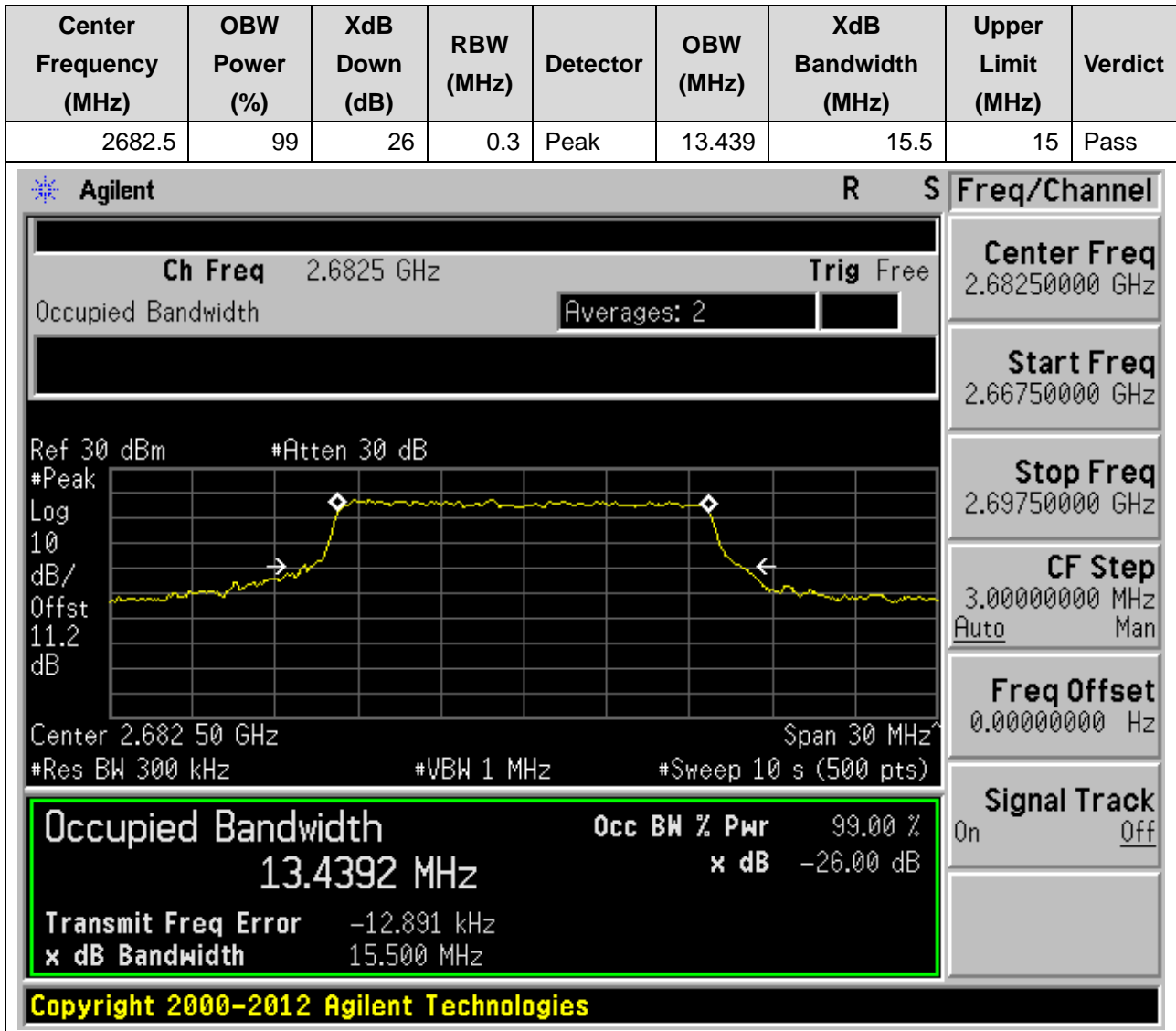
9.15. LTE Occupied Bandwidth(NTNV)(Subtest:15, Channel:40620, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



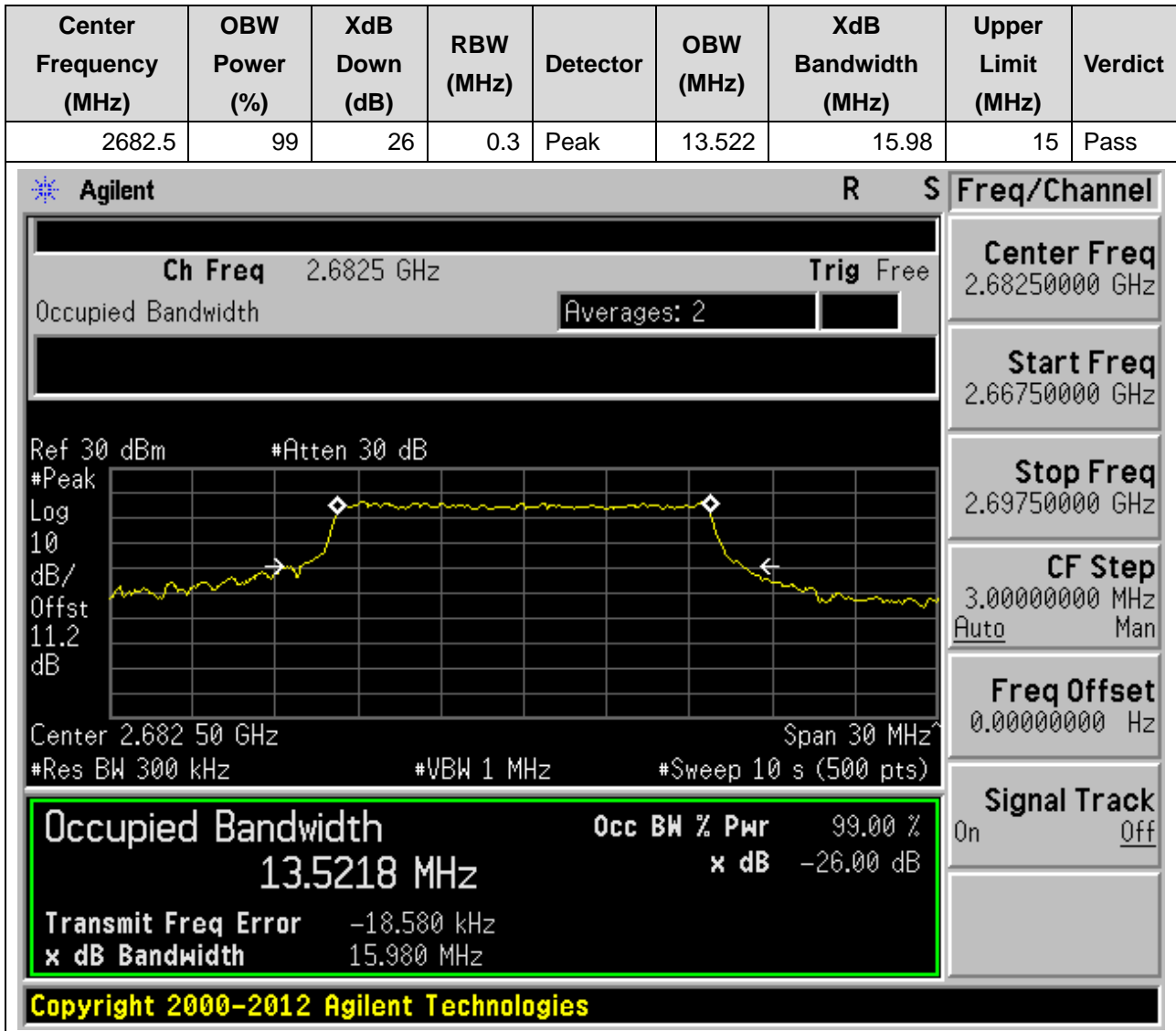
9.16. LTE Occupied Bandwidth(NTNV)(Subtest:16, Channel:40620, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)



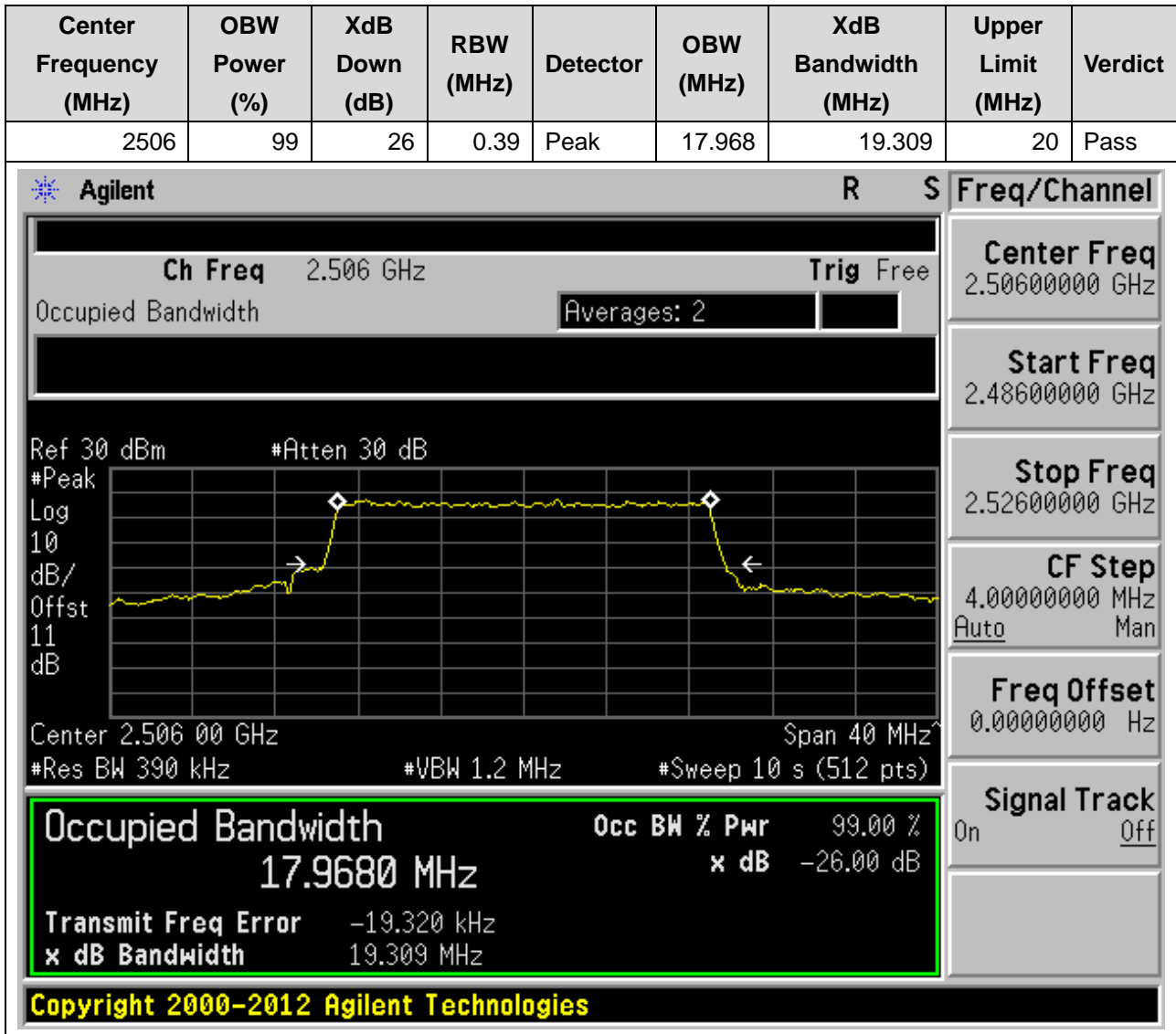
9.17. LTE Occupied Bandwidth(NTNV)(Subtest:17, Channel:41515, Bandwidth:15, Modulation:QPSK, RB Number: 75, RB Position:LOW)



9.18. LTE Occupied Bandwidth(NTNV)(Subtest:18, Channel:41515, Bandwidth:15, Modulation:Q16, RB Number: 75, RB Position:LOW)



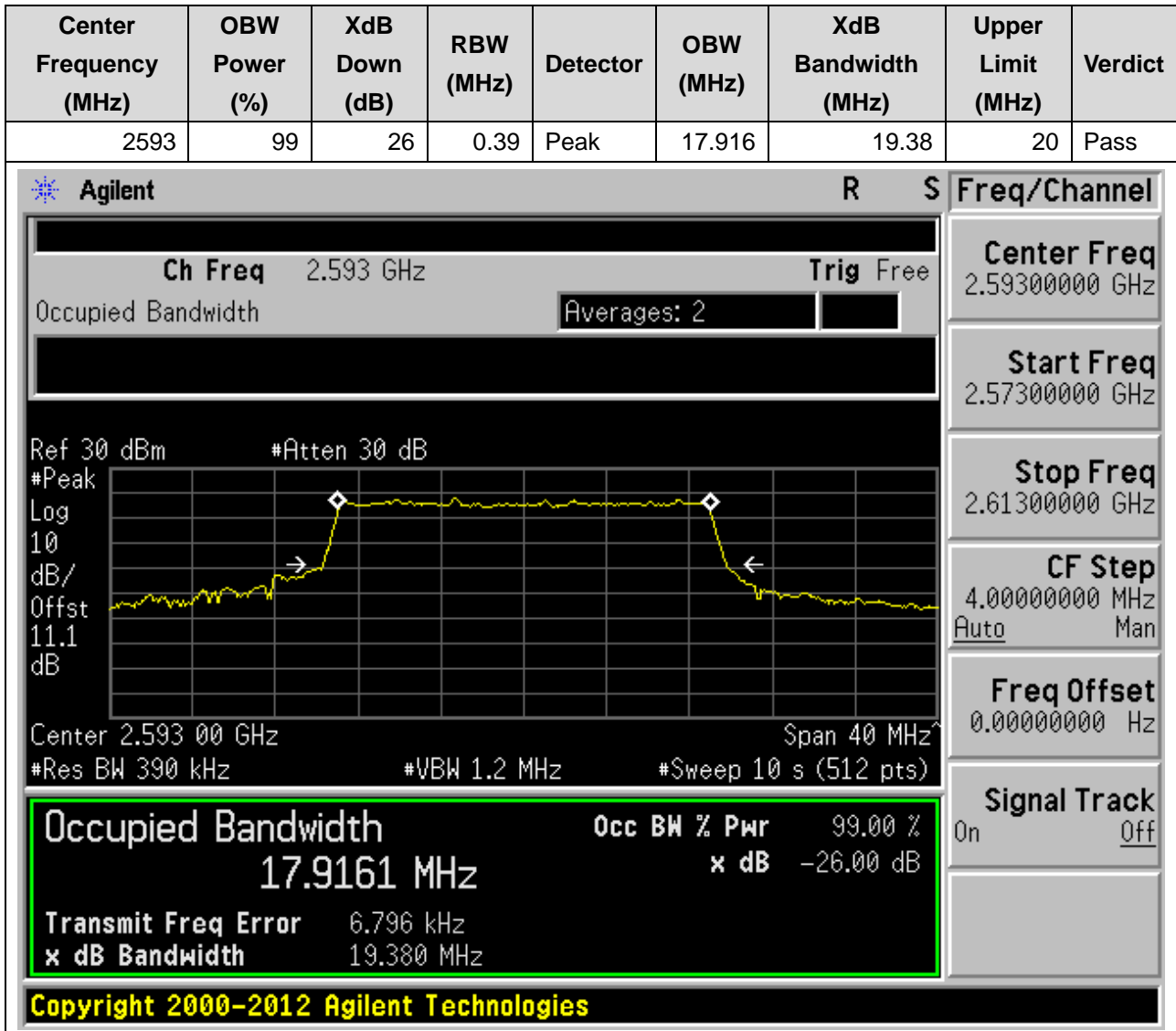
9.19. LTE Occupied Bandwidth(NTNV)(Subtest:19, Channel:39750, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



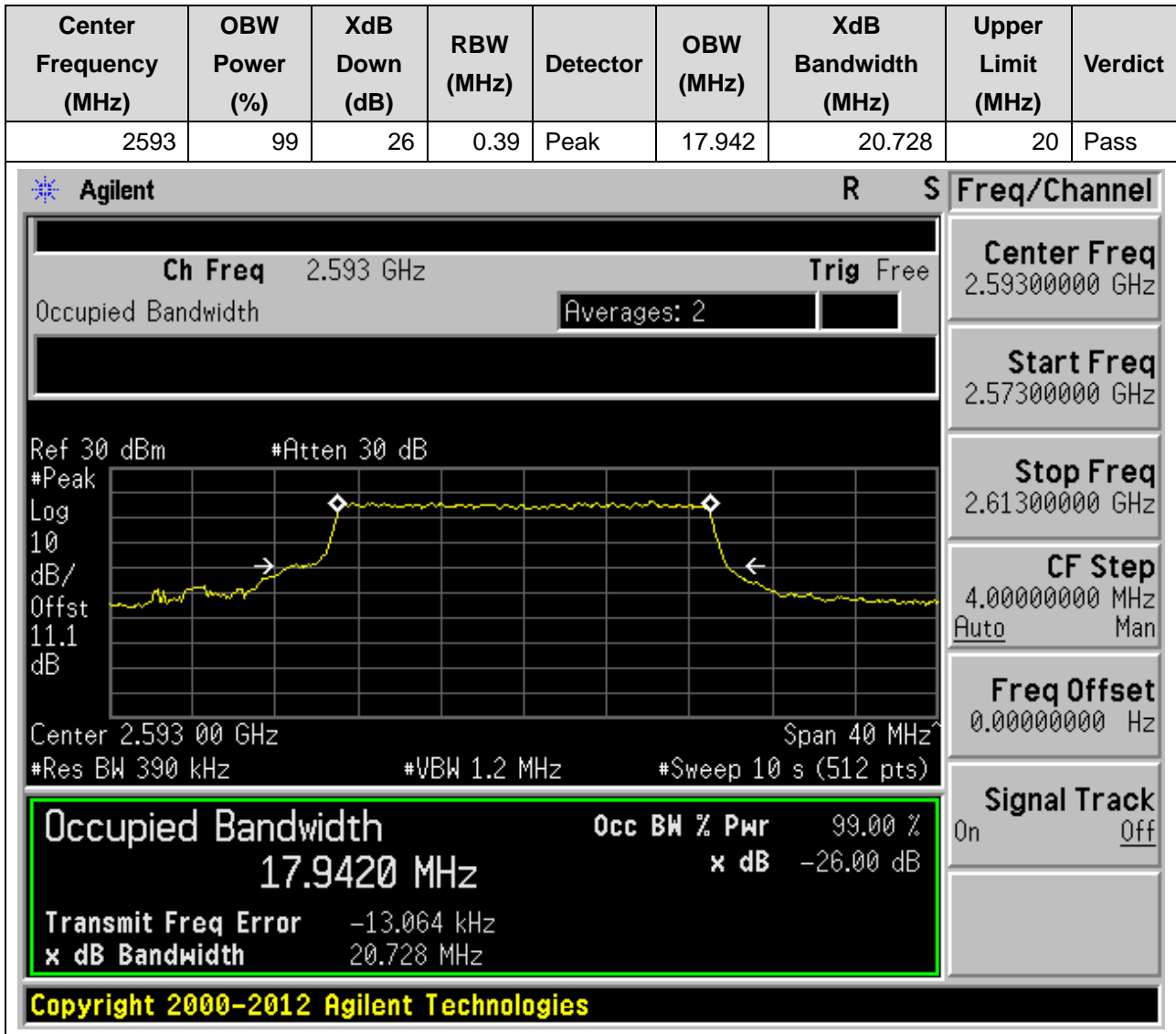
9.20. LTE Occupied Bandwidth(NTNV)(Subtest:20, Channel:39750, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



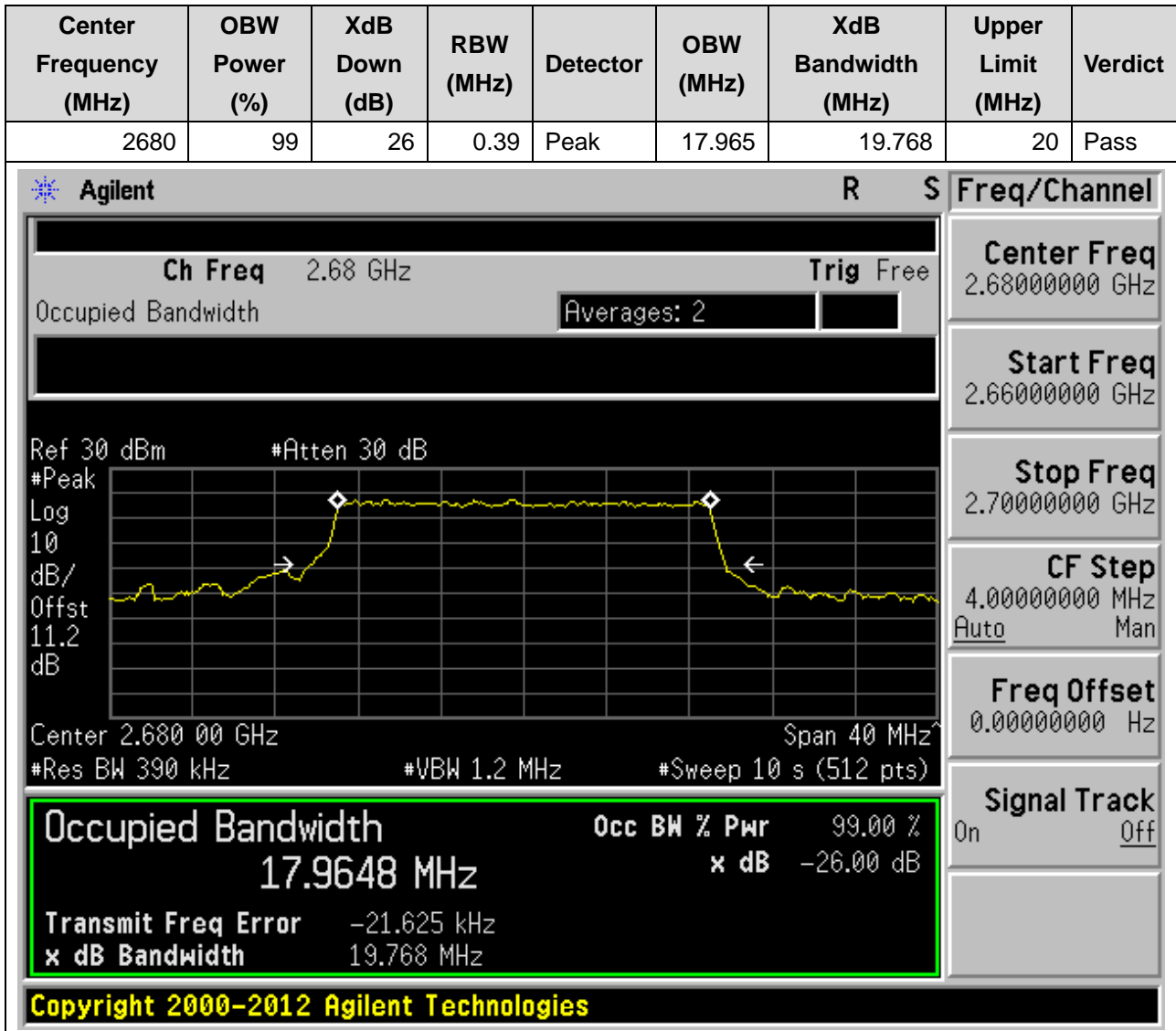
9.21. LTE Occupied Bandwidth(NTNV)(Subtest:21, Channel:40620, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



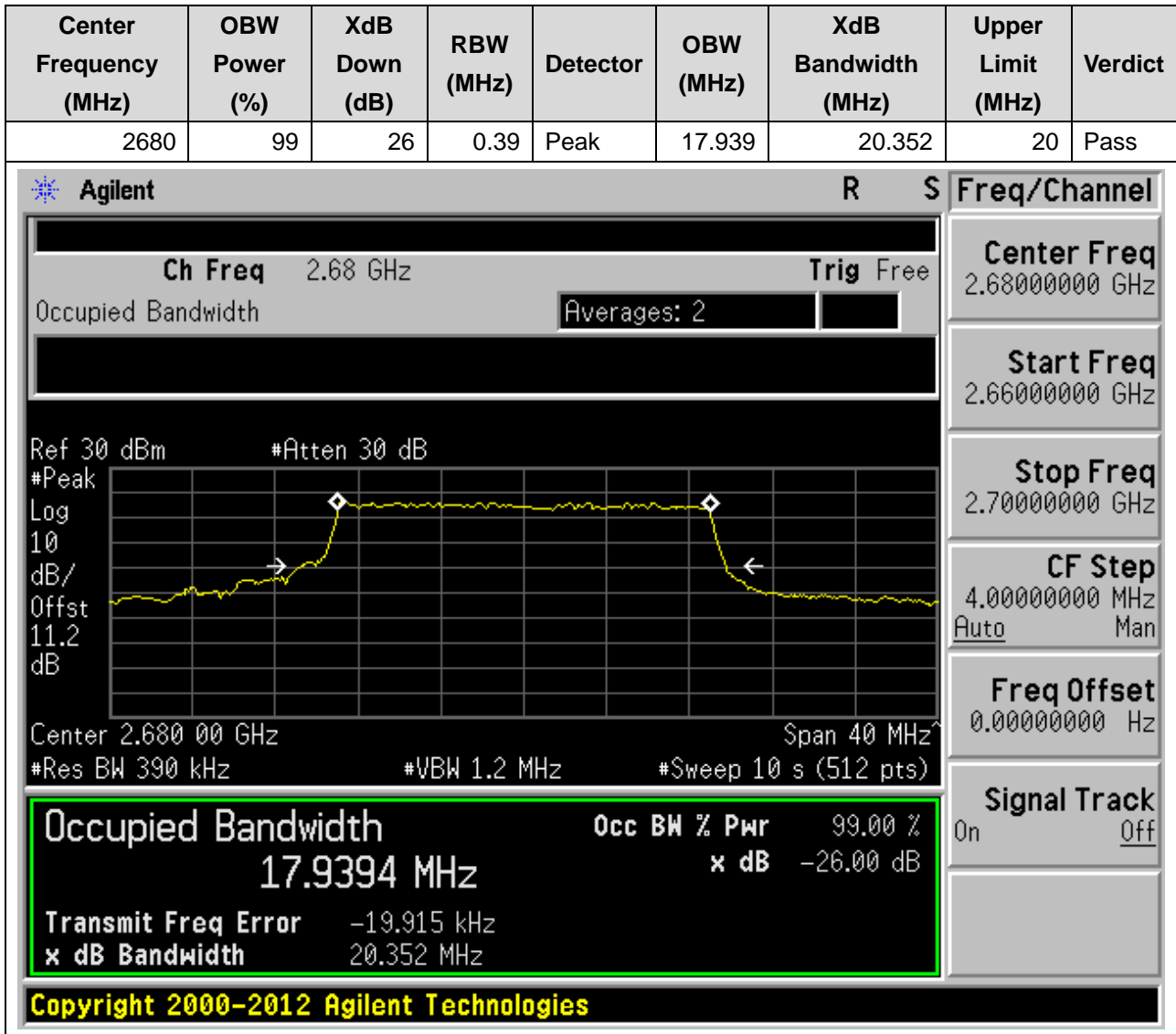
9.22. LTE Occupied Bandwidth(NTNV)(Subtest:22, Channel:40620, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



9.23. LTE Occupied Bandwidth(NTNV)(Subtest:23, Channel:41490, Bandwidth:20, Modulation:QPSK, RB Number: 100, RB Position:LOW)



9.24. LTE Occupied Bandwidth(NTNV)(Subtest:24, Channel:41490, Bandwidth:20, Modulation:Q16, RB Number: 100, RB Position:LOW)



END