

**12.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:27015, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
846.5	99	26	0.1	Peak	4.48	4.9	5	Pass

Agilent
Measure

Ch Freq 846.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.22 dBm #Atten 30 dB

Center 846.500 MHz Span 10 MHz

#Res BW 100 kHz #VBW 300 kHz #Sweep 1 s (500 pts)

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

**Occupied Bandwidth**

4.4831 MHz

Transmit Freq Error -6.795 kHz

x dB Bandwidth 4.900 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**12.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26840, Bandwidth:10, Modulation:64QAM, 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
829	99	26	0.2	Peak	8.95	9.75	10	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 829 MHz
Trig Free

Occupied Bandwidth Averages: 2

Ref 29.16 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 9.16 dB

Center 829.00 MHz Span 20 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
8.9516 MHz	x dB -26.00 dB
Transmit Freq Error 9.913 kHz	
x dB Bandwidth 9.754 MHz	

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**12.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26915, Bandwidth:10, Modulation:64QAM, 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
836.5	99	26	0.2	Peak	8.94	9.71	10	Pass

Agilent
Measure

Ch Freq 836.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.16 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 9.16 dB

Center 836.50 MHz Span 20 MHz

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

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**Occupied Bandwidth**

**8.9387 MHz**

Transmit Freq Error -8.374 kHz

x dB Bandwidth 9.705 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**12.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26990, Bandwidth:10, Modulation:64QAM, 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
844	99	26	0.2	Peak	8.95	9.69	10	Pass

**Agilent**
**Measure**

**Ch Freq** 844 MHz **Trig** Free

Occupied Bandwidth Averages: 2

**Meas Off**

**Channel Power**

**Occupied BW**

**ACP**

**Multi Carrier Power**

**Power Stat CCDF**

**More**  
1 of 2

Ref 29.2 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 9.2 dB

Center 844.00 MHz Span 20 MHz

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

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

**8.9495 MHz** **x dB** -26.00 dB

**Transmit Freq Error** -15.477 kHz

**x dB Bandwidth** 9.689 MHz

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**12.13. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26865, 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
831.5	99	26	0.3	Peak	13.41	14.61	15	Pass

**Agilent**
**Measure**

**Ch Freq** 831.5 MHz **Trig** Free

Occupied Bandwidth **Averages: 2**

Ref 29.16 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 9.16 dB

Center 831.50 MHz Span 30 MHz

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

**Meas Off**

**Channel Power**

**Occupied BW**

**ACP**

**Multi Carrier Power**

**Power Stat CCDF**

**More**  
1 of 2

**Occupied Bandwidth**

**13.4102 MHz**

Transmit Freq Error -1.675 kHz

x dB Bandwidth 14.615 MHz

**Occ BW % Pwr** 99.00 %

**x dB** -26.00 dB

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**12.14. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26915, 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
836.5	99	26	0.3	Peak	13.41	14.57	15	Pass

Agilent

Measure

Ch Freq 836.5 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 29.16 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
9.16

dB

Center 836.50 MHz
Span 30 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
13.4073 MHz	x dB -26.00 dB
<b>Transmit Freq Error</b>	-4.317 kHz
<b>x dB Bandwidth</b>	14.569 MHz

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

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**12.15. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26965, 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
841.5	99	26	0.3	Peak	13.46	14.58	15	Pass

**Agilent**
**Measure**

**Ch Freq** 841.5 MHz **Trig** Free

Occupied Bandwidth Averages: 2

**Meas Off**

**Channel Power**

**Occupied BW**

**ACP**

**Multi Carrier Power**

**Power Stat CCDF**

**More**  
1 of 2

Ref 29.17 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 9.17 dB

Center 841.50 MHz Span 30 MHz

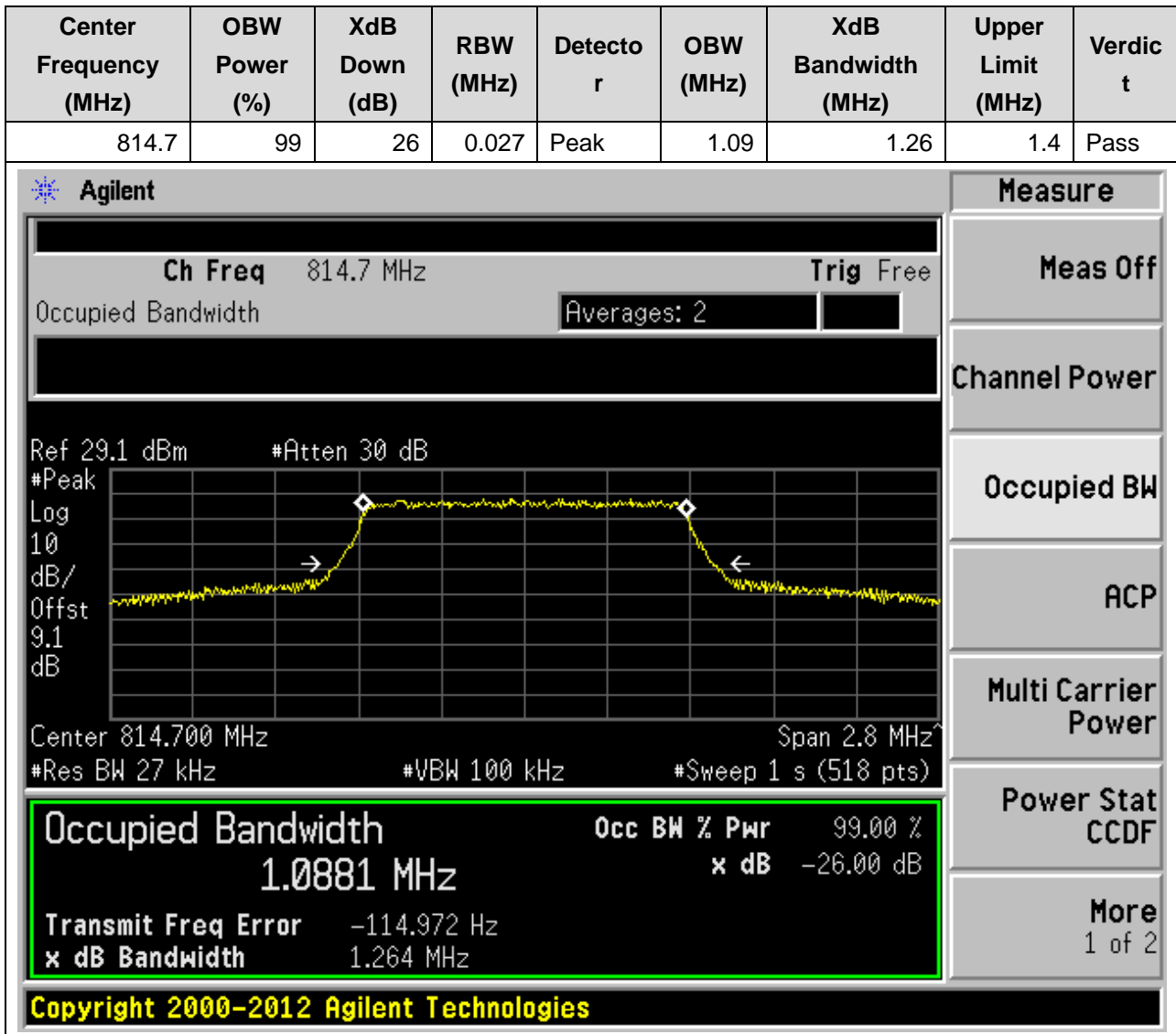
#Res BW 300 kHz #VBW 1 MHz #Sweep 1 s (500 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
13.4552 MHz	x dB -26.00 dB
<b>Transmit Freq Error</b> -17.878 kHz	
<b>x dB Bandwidth</b> 14.581 MHz	

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## 1. LTE\_Band26(part90)

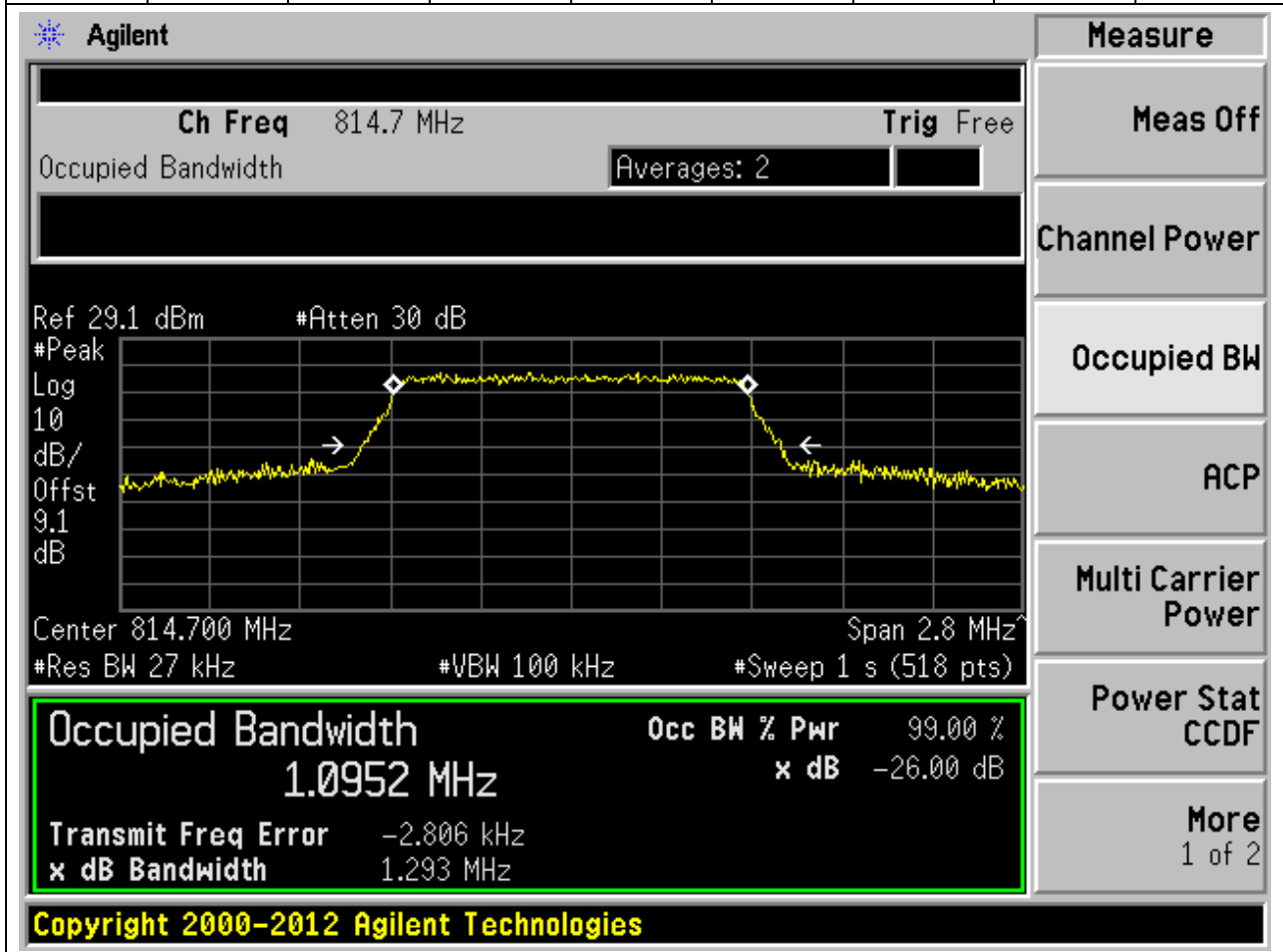
### 1.1. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26697, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)





**1.2. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26697, Bandwidth:1.4, Modulation:16QAM, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
814.7	99	26	0.027	Peak	1.1	1.29	1.4	Pass



**1.3. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26740, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
819	99	26	0.027	Peak	1.09	1.28	1.4	Pass

Agilent
Measure

Ch Freq 819 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 29.11 dBm    #Atten 30 dB

#Peak

Log 10

dB/Offst 9.11 dB

Center 819.000 MHz    Span 2.8 MHz

#Res BW 27 kHz    #VBW 100 kHz    #Sweep 1 s (518 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
1.0872 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		-1.136 kHz
x dB Bandwidth		1.277 MHz

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Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

**1.4. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26740, Bandwidth:1.4, Modulation:16QAM, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
819	99	26	0.027	Peak	1.09	1.26	1.4	Pass

Agilent
Measure

Ch Freq 819 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.11 dBm #Atten 30 dB  
#Peak Log 10 dB/Offst 9.11 dB  
Center 819.000 MHz Span 2.8 MHz  
#Res BW 27 kHz #VBW 100 kHz #Sweep 1 s (518 pts)

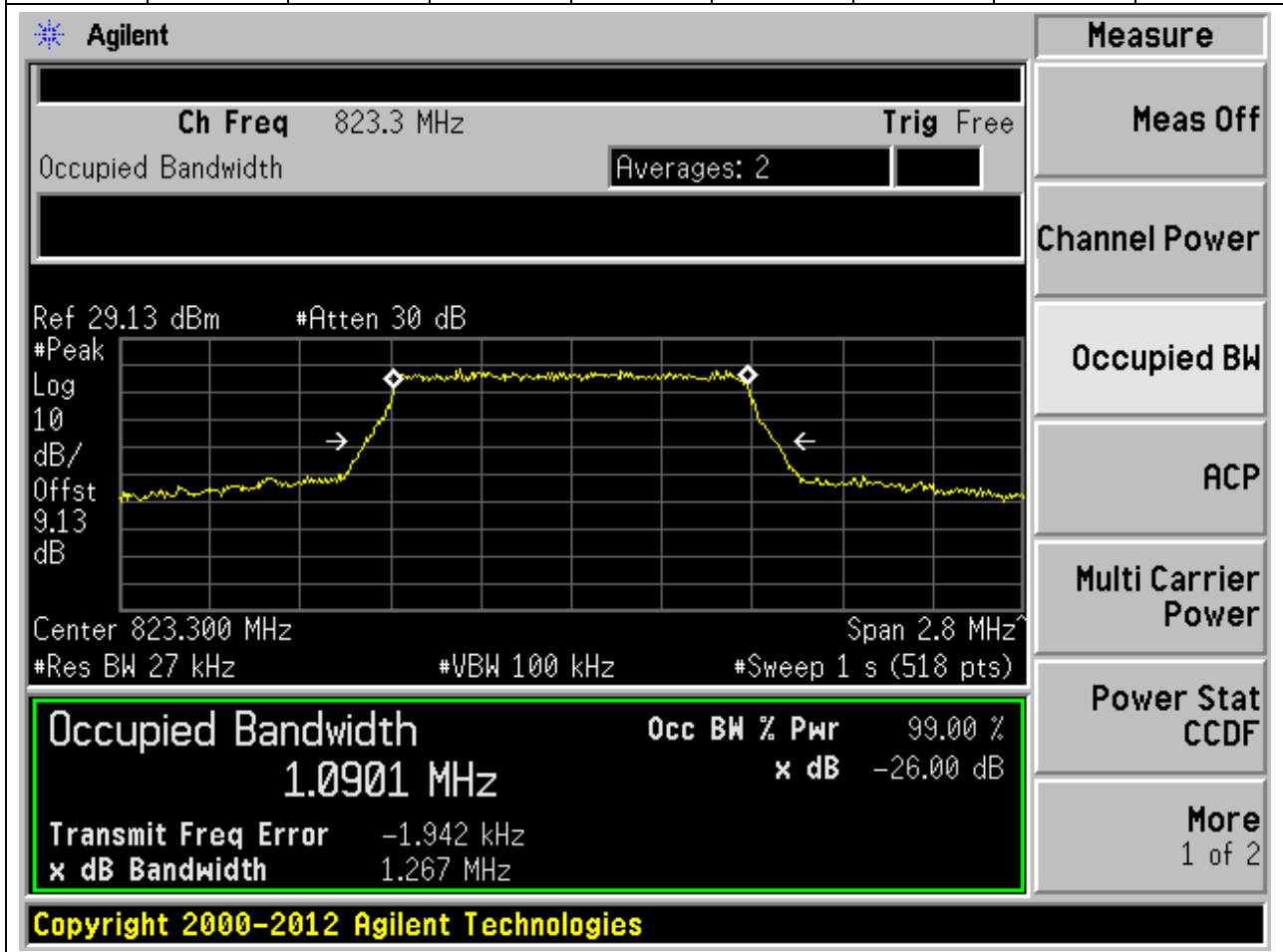
Meas Off
Channel Power
Occupied BW
ACP
Multi Carrier Power
Power Stat CCDF
More  
1 of 2

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
1.0865 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		-230.365 Hz
<b>x dB Bandwidth</b>		1.259 MHz

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**1.5. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26783, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
823.3	99	26	0.027	Peak	1.09	1.27	1.4	Pass



**1.6. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26783, Bandwidth:1.4, Modulation:16QAM, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
823.3	99	26	0.027	Peak	1.09	1.27	1.4	Pass

**Agilent**

Ch Freq 823.3 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.13 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 9.13 dB

Center 823.300 MHz Span 2.8 MHz

#Res BW 27 kHz #VBW 100 kHz #Sweep 1 s (518 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
1.0879 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		-988.987 Hz
<b>x dB Bandwidth</b>		1.266 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**1.7. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26705, Bandwidth:3, Modulation:QPSK, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
815.5	99	26	0.062	Peak	2.69	2.96	3	Pass

Agilent

**Measure**

Ch Freq 815.5 MHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 29.1 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
9.1

dB

Center 815.500 MHz
Span 6 MHz

#Res BW 62 kHz
#VBW 200 kHz
#Sweep 1 s (483 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
2.6897 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	423.735 Hz	
<b>x dB Bandwidth</b>	2.961 MHz	

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

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**1.8. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26705, Bandwidth:3, Modulation:16QAM, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
815.5	99	26	0.062	Peak	2.69	2.99	3	Pass

Agilent
Measure

Ch Freq 815.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.1 dBm #Atten 30 dB

Center 815.500 MHz Span 6 MHz

#Res BW 62 kHz #VBW 200 kHz #Sweep 1 s (483 pts)

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

Occupied Bandwidth	Occ BW % Pwr	99.00 %
2.6881 MHz	x dB	-26.00 dB
Transmit Freq Error		1.968 kHz
x dB Bandwidth		2.988 MHz

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**1.9. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26740, Bandwidth:3, Modulation:QPSK, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
819	99	26	0.062	Peak	2.69	2.98	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 819.000 MHz and the span is 6 MHz. The occupied bandwidth is measured as 2.6892 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is 108.765 Hz and the XdB bandwidth is 2.975 MHz. The interface includes a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
2.6892 MHz	x dB	-26.00 dB
Transmit Freq Error	108.765 Hz	
x dB Bandwidth	2.975 MHz	



**1.10. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26740, Bandwidth:3, Modulation:16QAM, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
819	99	26	0.062	Peak	2.69	2.98	3	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 819 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.11 dBm #Atten 30 dB

Center 819.000 MHz Span 6 MHz

#Res BW 62 kHz #VBW 200 kHz #Sweep 1 s (483 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
2.6863 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-1.806 kHz	
<b>x dB Bandwidth</b>	2.980 MHz	

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**1.11. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26775, Bandwidth:3, Modulation:QPSK, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
822.5	99	26	0.062	Peak	2.69	2.97	3	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
 Occupied BW  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 822.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.12 dBm #Atten 30 dB

Center 822.500 MHz Span 6 MHz

#Res BW 62 kHz #VBW 200 kHz #Sweep 1 s (483 pts)

<b>Occupied Bandwidth</b>	Occ BW % Pwr	99.00 %
2.6941 MHz	x dB	-26.00 dB
Transmit Freq Error		-1.156 kHz
x dB Bandwidth		2.968 MHz

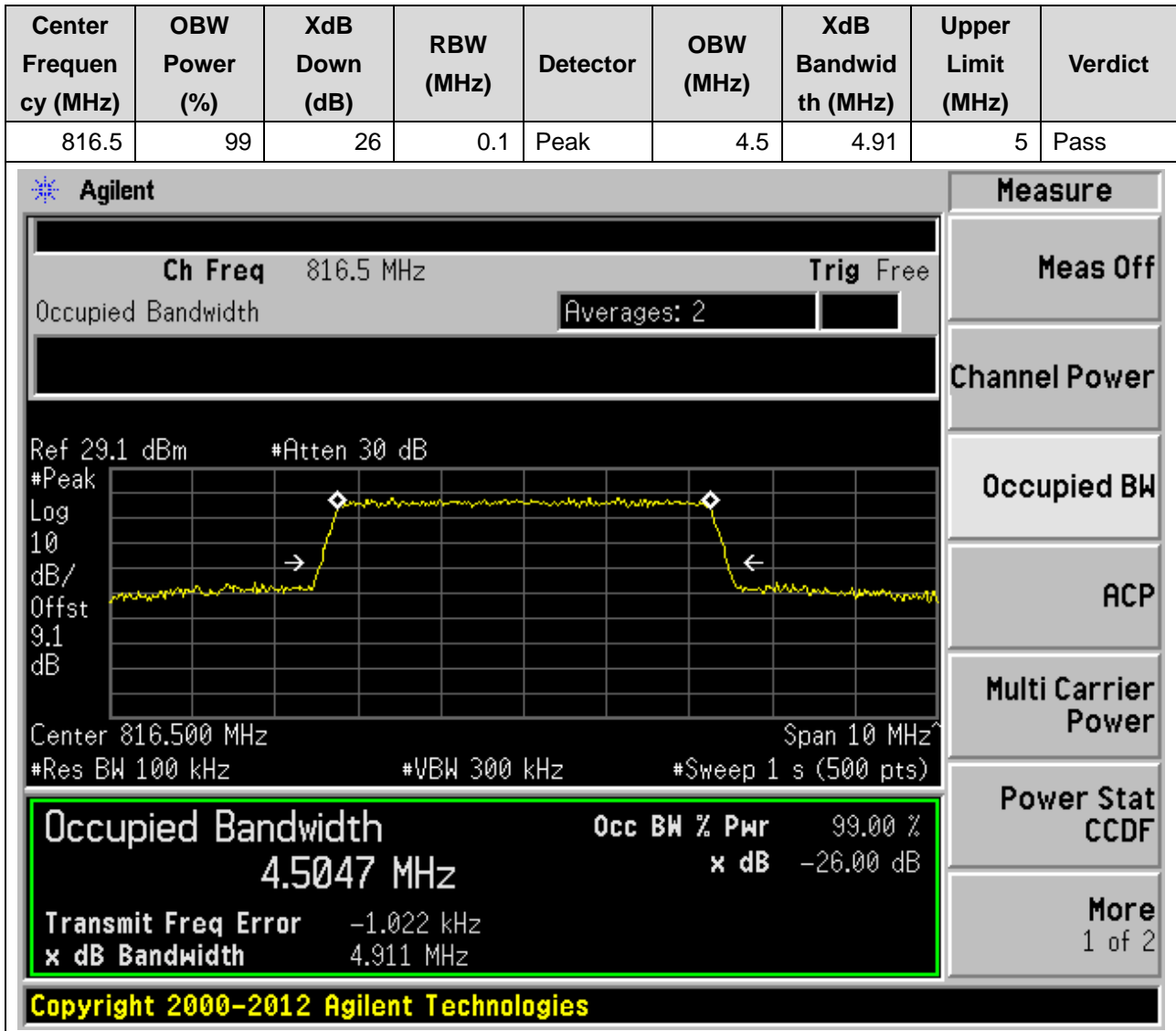
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**1.12. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26775, Bandwidth:3, Modulation:16QAM, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
822.5	99	26	0.062	Peak	2.69	2.97	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 822.5 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 29.12 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 9.12 dB', 'Center 822.500 MHz', 'Span 6 MHz', '#Res BW 62 kHz', '#VBW 200 kHz', and '#Sweep 1 s (483 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 2.6854 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -2.713 kHz', and 'x dB Bandwidth 2.970 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**1.13. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26715, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**



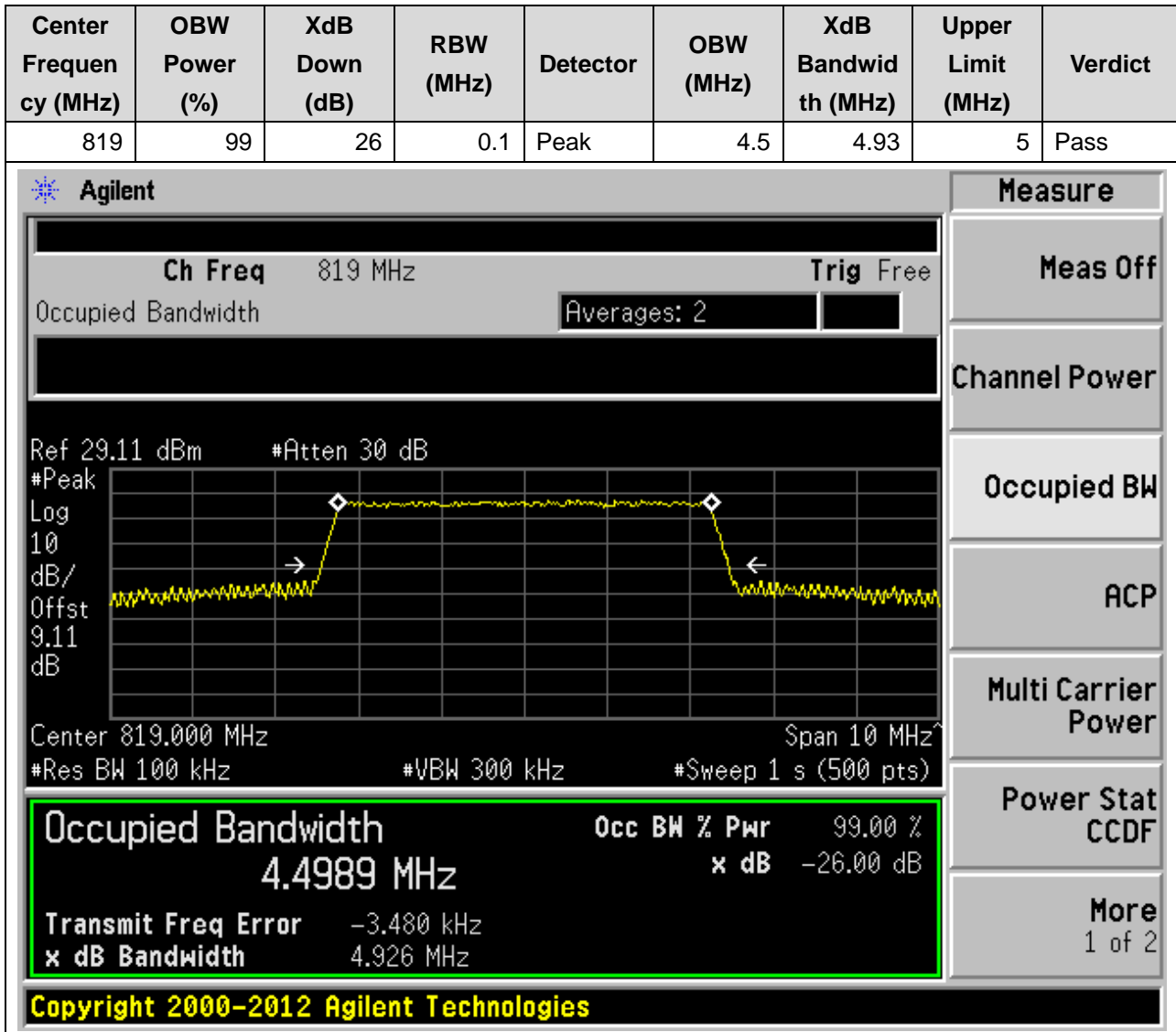
**1.14. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26715, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
816.5	99	26	0.1	Peak	4.49	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 816.5 MHz. The main display shows a spectrum plot with a yellow trace. The plot parameters are: Center 816.500 MHz, Span 10 MHz, Res BW 100 kHz, VBW 300 kHz, and Sweep 1 s (500 pts). The plot shows a signal with a peak at approximately 816.5 MHz. The occupied bandwidth is measured as 4.4912 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is -555.000 Hz, and the X dB bandwidth is 4.895 MHz. The interface includes a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.4912 MHz	x dB	-26.00 dB
Transmit Freq Error	-555.000 Hz	
x dB Bandwidth	4.895 MHz	

**1.15. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26740, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**



**1.16. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26740, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
819	99	26	0.1	Peak	4.5	4.94	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 819 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 29.11 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 9.11 dB', 'Center 819.000 MHz', 'Span 10 MHz', '#Res BW 100 kHz', '#VBW 300 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 4.4984 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -3.644 kHz', and 'x dB Bandwidth 4.936 MHz'. On the right side, there is a 'Measure' menu with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**1.17. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26765, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**

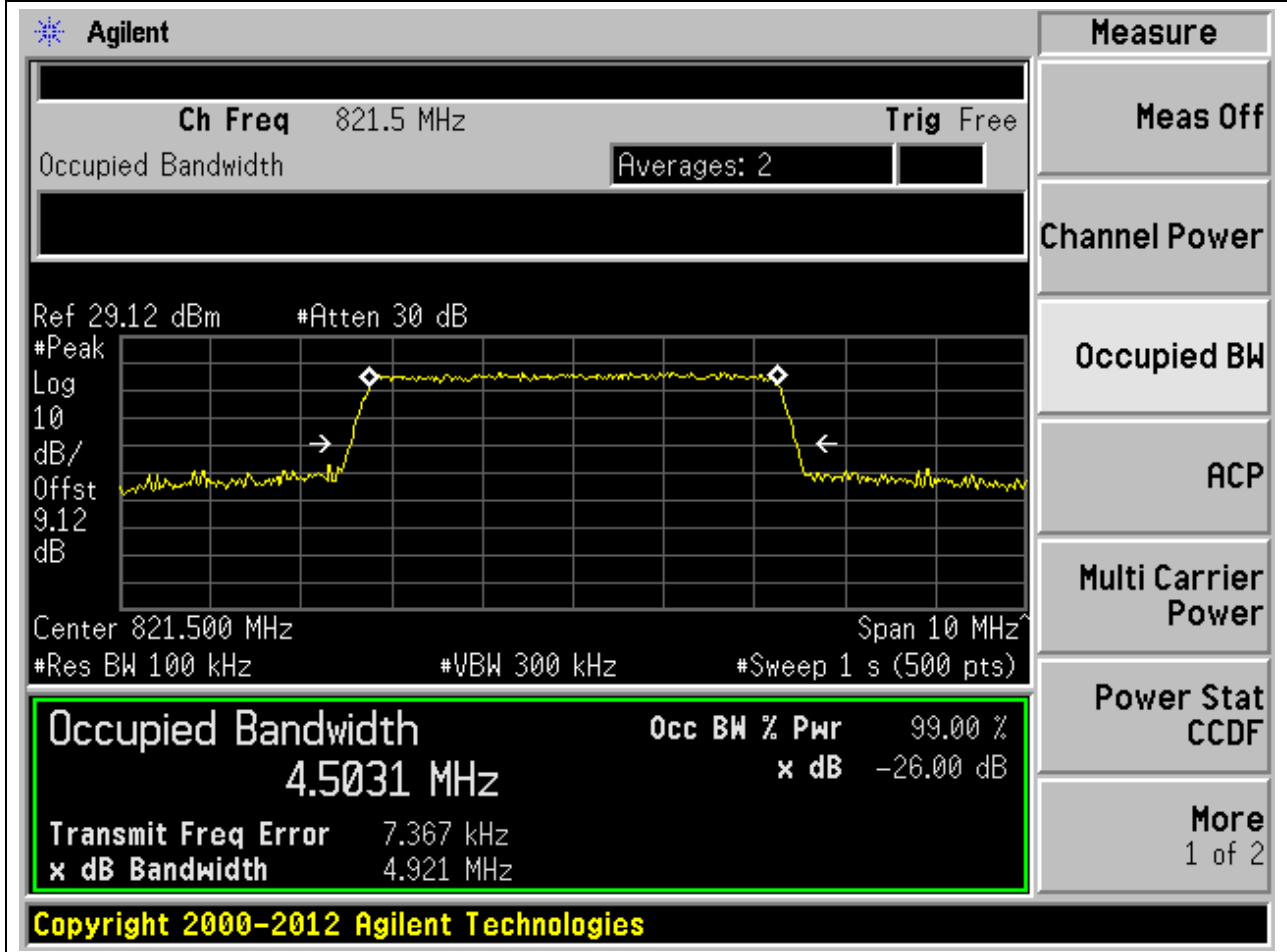
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
821.5	99	26	0.1	Peak	4.49	4.91	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 821.5 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 29.12 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 9.12 dB', 'Center 821.500 MHz', 'Span 10 MHz', '#Res BW 100 kHz', '#VBW 300 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 4.4917 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 3.137 kHz' and 'x dB Bandwidth 4.914 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.



**1.18. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26765, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
821.5	99	26	0.1	Peak	4.5	4.92	5	Pass



**1.19. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26740, Bandwidth:10, Modulation:QPSK, 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
819	99	26	0.2	Peak	8.96	9.78	10	Pass

Agilent
Measure

Ch Freq 819 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.11 dBm #Atten 30 dB

Center 819.00 MHz Span 20 MHz

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

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

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

8.9626 MHz x dB -26.00 dB

Transmit Freq Error 9.059 kHz

x dB Bandwidth 9.780 MHz

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**1.20. LTE Occupied Bandwidth\_Part90(NTNV)(Channel:26740, Bandwidth:10, Modulation:16QAM, 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
819	99	26	0.2	Peak	8.96	9.72	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 819.00 MHz and the span is 20 MHz. The occupied bandwidth is measured as 8.9635 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is 10.476 kHz and the XdB bandwidth is 9.724 MHz. The interface includes a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
8.9635 MHz	x dB	-26.00 dB
Transmit Freq Error	10.476 kHz	
x dB Bandwidth	9.724 MHz	

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**1.1. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26697, Bandwidth:1.4, Modulation:64QAM, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
814.7	99	26	0.027	Peak	1.09	1.27	1.4	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 814.7 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.1 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 9.1 dB

Center 814.700 MHz Span 2.8 MHz

#Res BW 27 kHz #VBW 100 kHz #Sweep 1 s (518 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
1.0874 MHz	x dB -26.00 dB
<b>Transmit Freq Error</b> 1.784 kHz	
<b>x dB Bandwidth</b> 1.269 MHz	

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**1.2. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26740, Bandwidth:1.4, Modulation:64QAM, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
819	99	26	0.027	Peak	1.1	1.28	1.4	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
 Occupied BW  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 819 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.11 dBm #Atten 30 dB

Center 819.000 MHz Span 2.8 MHz

#Res BW 27 kHz #VBW 100 kHz #Sweep 1 s (518 pts)

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

1.0952 MHz

x dB -26.00 dB

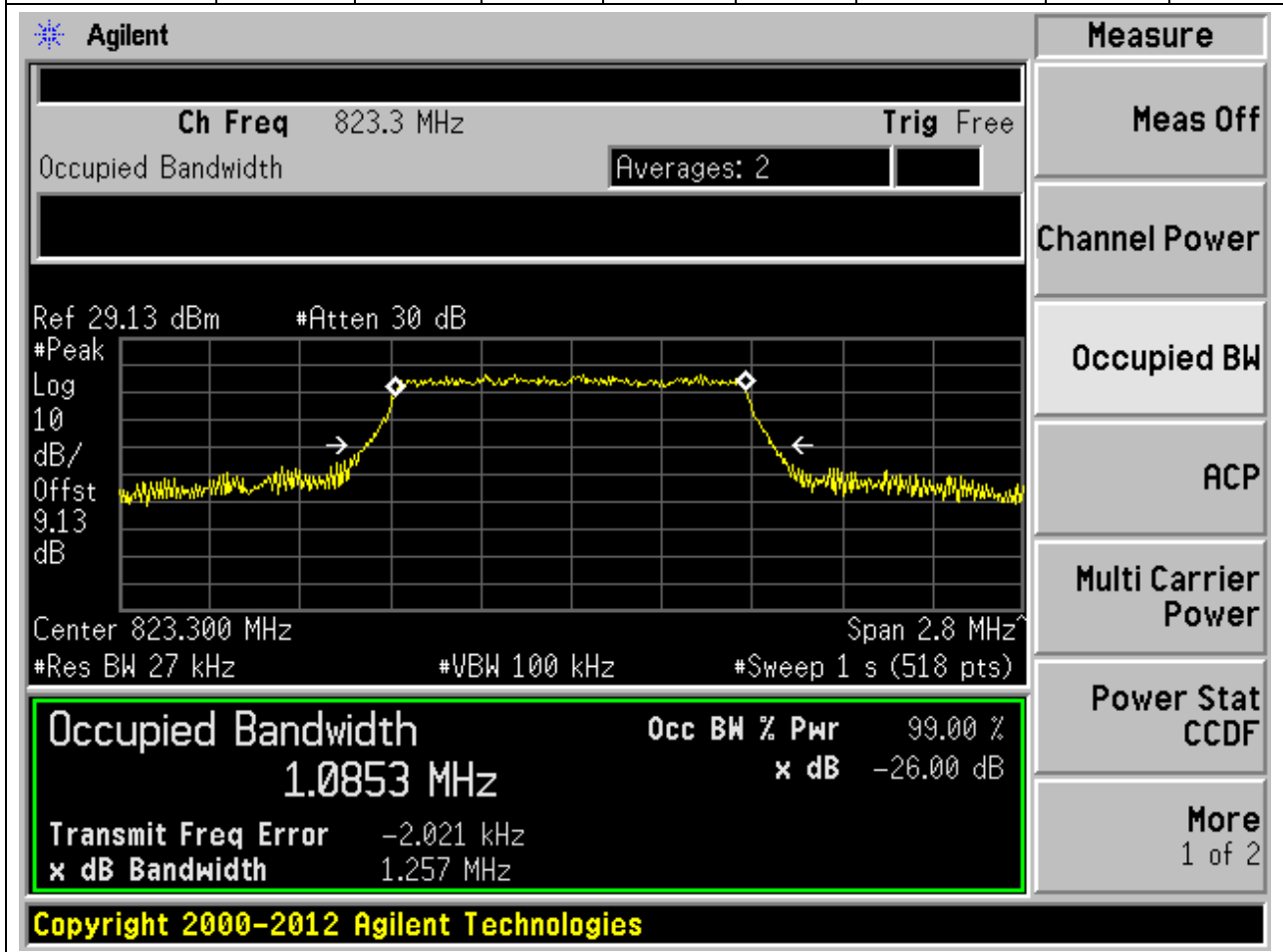
Transmit Freq Error 398.212 Hz

x dB Bandwidth 1.279 MHz

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**1.3. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26783, Bandwidth:1.4, Modulation:64QAM, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
823.3	99	26	0.027	Peak	1.09	1.26	1.4	Pass



**1.4. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26705, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
815.5	99	26	0.062	Peak	2.69	2.99	3	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
 Occupied BW  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 815.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.1 dBm #Atten 30 dB

Center 815.500 MHz Span 6 MHz

#Res BW 62 kHz #VBW 200 kHz #Sweep 1 s (483 pts)

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

2.6913 MHz

x dB -26.00 dB

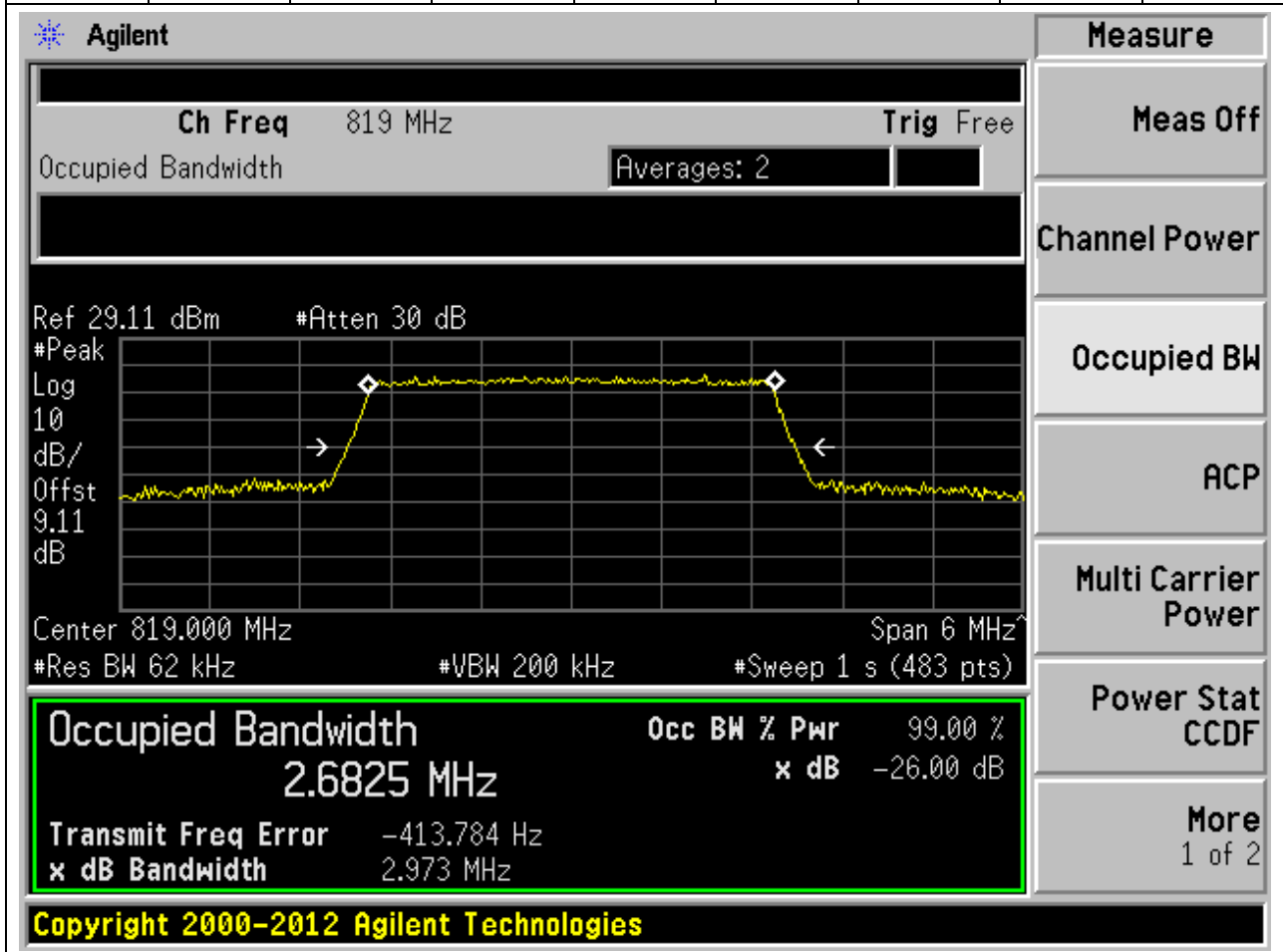
Transmit Freq Error -253.277 Hz

x dB Bandwidth 2.986 MHz

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**1.5. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26740, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
819	99	26	0.062	Peak	2.68	2.97	3	Pass





1.6. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26775, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
822.5	99	26	0.062	Peak	2.69	2.97	3	Pass

Agilent
Measure

Ch Freq 822.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.12 dBm #Atten 30 dB

Center 822.500 MHz Span 6 MHz

#Res BW 62 kHz #VBW 200 kHz #Sweep 1 s (483 pts)

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**Occupied Bandwidth**

**2.6866 MHz**

Transmit Freq Error -1.873 kHz

x dB Bandwidth 2.973 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**1.7. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26715, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
816.5	99	26	0.1	Peak	4.49	4.93	5	Pass

Agilent

**Measure**

Ch Freq 816.5 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 29.1 dBm
#Atten 30 dB

#Peak  
 Log  
 10  
 dB/  
 Offst  
 9.1  
 dB

Center 816.500 MHz
Span 10 MHz

#Res BW 100 kHz
#VBW 300 kHz
#Sweep 1 s (500 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.4894 MHz	x dB	-26.00 dB
Transmit Freq Error	319.280 Hz	
x dB Bandwidth	4.934 MHz	

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Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More

1 of 2

**1.8. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26740, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
819	99	26	0.1	Peak	4.49	4.89	5	Pass

**Agilent**

Ch Freq 819 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.11 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 9.11 dB

Center 819.000 MHz Span 10 MHz

#Res BW 100 kHz #VBW 300 kHz #Sweep 1 s (500 pts)

**Occupied Bandwidth** Occ BW % Pwr 99.00 %  
**4.4934 MHz** x dB -26.00 dB

Transmit Freq Error 2.498 kHz  
 x dB Bandwidth 4.894 MHz

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Measure  
 Meas Off  
 Channel Power  
 Occupied BW  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More 1 of 2

**1.9. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26765, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
821.5	99	26	0.1	Peak	4.49	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 821.500 MHz and the span is 10 MHz. The occupied bandwidth is measured as 4.4884 MHz. The power is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -2.186 kHz and the XdB bandwidth is 4.904 MHz. The interface includes a 'Measure' panel on the right with buttons for 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.4884 MHz	x dB	-26.00 dB
Transmit Freq Error	-2.186 kHz	
x dB Bandwidth	4.904 MHz	

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**1.10. LTE Occupied Bandwidth\_Part90(added 64QAM)(NTNV)(Channel:26740, Bandwidth:10, Modulation:64QAM, 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
819	99	26	0.2	Peak	8.96	9.73	10	Pass

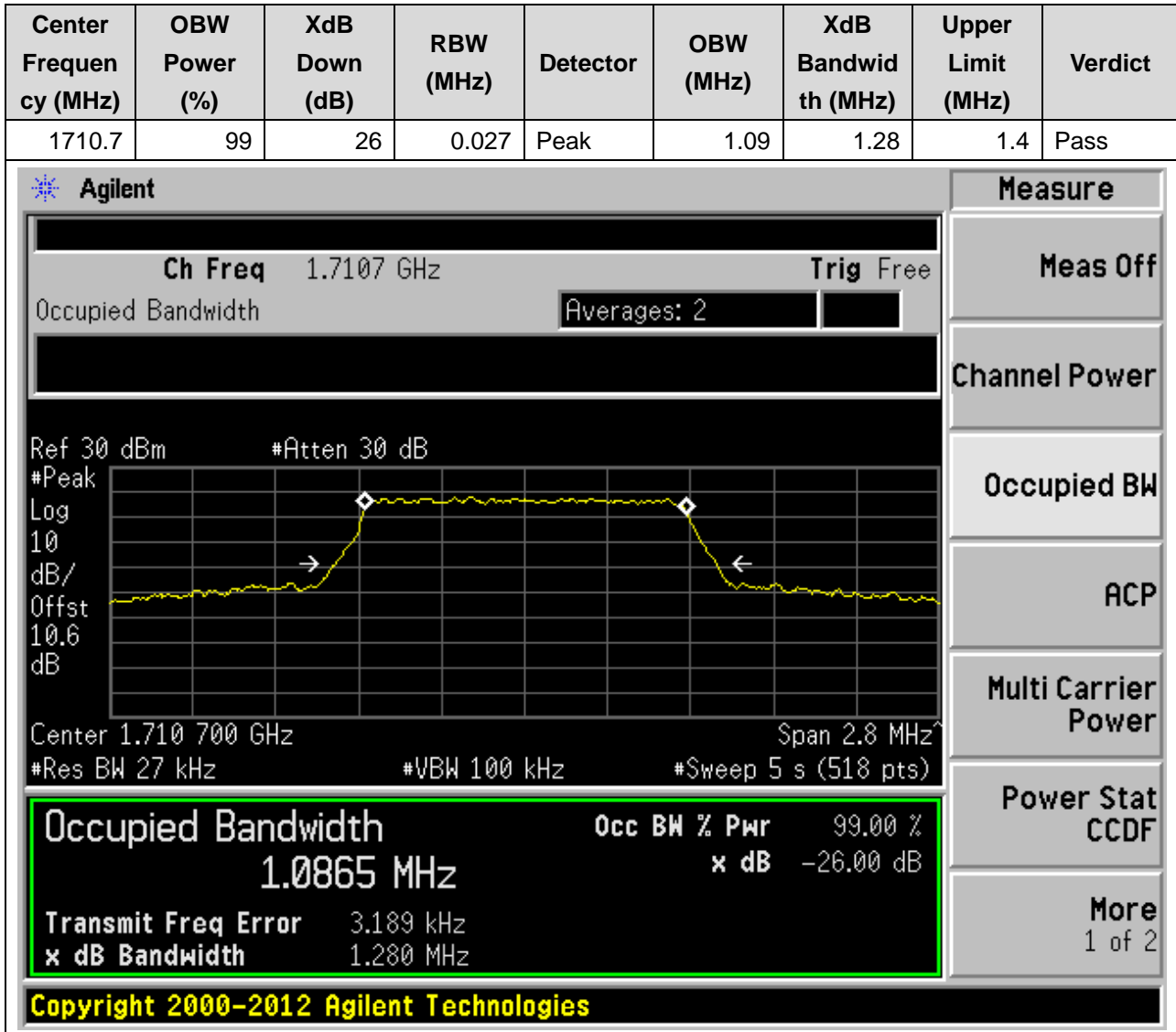
The screenshot displays the Agilent spectrum analyzer interface for an LTE channel at 819 MHz. The main display shows a yellow trace of the signal spectrum with a green box highlighting the Occupied Bandwidth (OBW) measurement results. The OBW is 8.9600 MHz, which is 99.00% of the 9.726 MHz bandwidth. The XdB Down is -26.00 dB. Other parameters shown include a center frequency of 819.00 MHz, a span of 20 MHz, and a resolution bandwidth (RBW) of 200 kHz. The interface also includes a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
8.9600 MHz	x dB	-26.00 dB
Transmit Freq Error	10.423 kHz	
x dB Bandwidth	9.726 MHz	

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## 5. LTE\_Band66

### 5.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:131979, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)



5.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:131979, Bandwidth:1.4, Modulation:16QAM, RB Number:6, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1710.7	99	26	0.027	Peak	1.09	1.28	1.4	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7107 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log', '10 dB/Offst', '10.6 dB', 'Center 1.710 700 GHz', 'Span 2.8 MHz', '#Res BW 27 kHz', '#VBW 100 kHz', and '#Sweep 5 s (518 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 1.0907 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 796.315 Hz' and 'x dB Bandwidth 1.284 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

5.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.027	Peak	1.1	1.3	1.4	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 1.745 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.745 000 GHz Span 2.8 MHz

#Res BW 27 kHz #VBW 100 kHz #Sweep 5 s (518 pts)

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

1.0970 MHz

x dB -26.00 dB

Transmit Freq Error -2.226 kHz

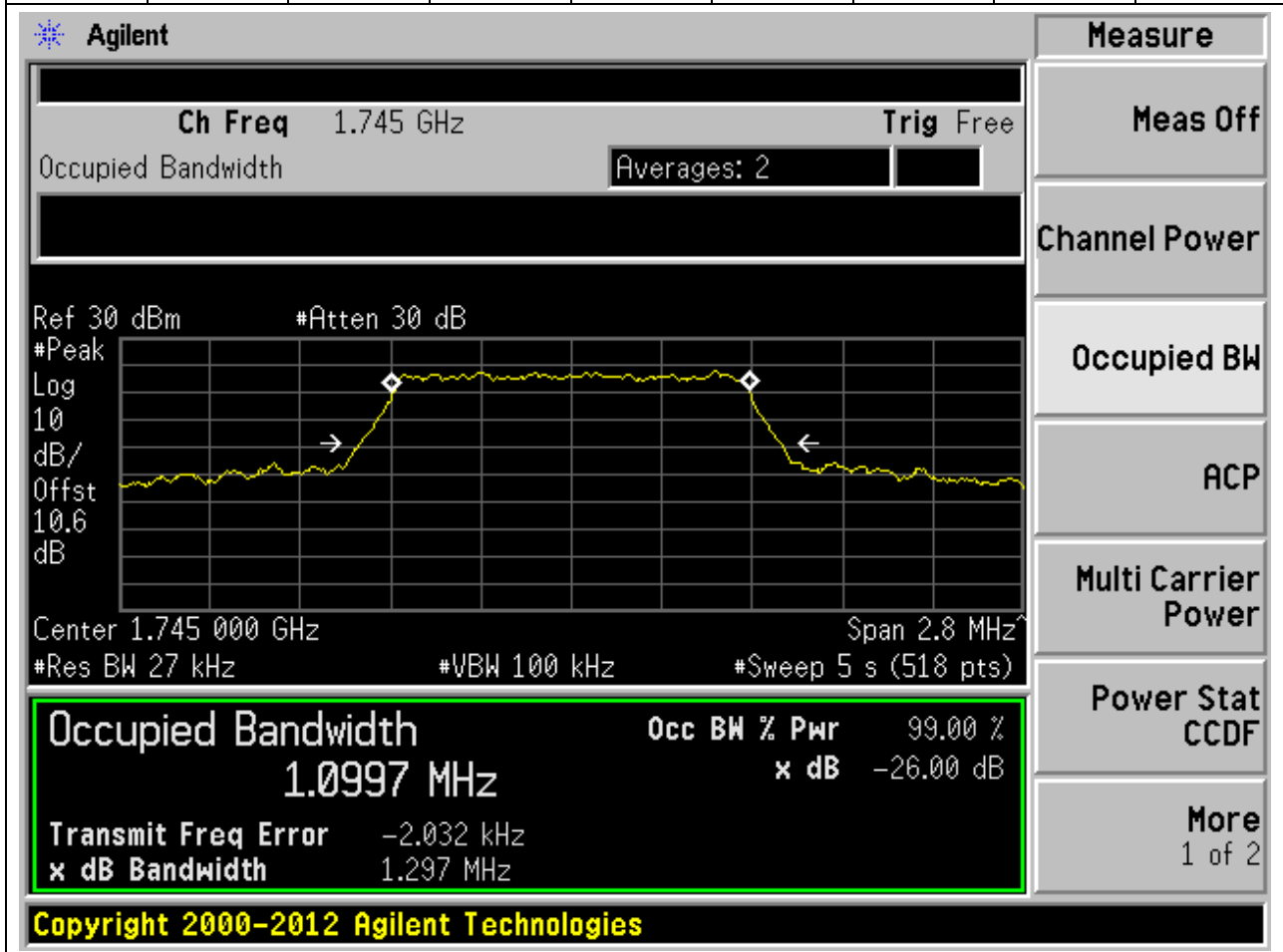
x dB Bandwidth 1.296 MHz

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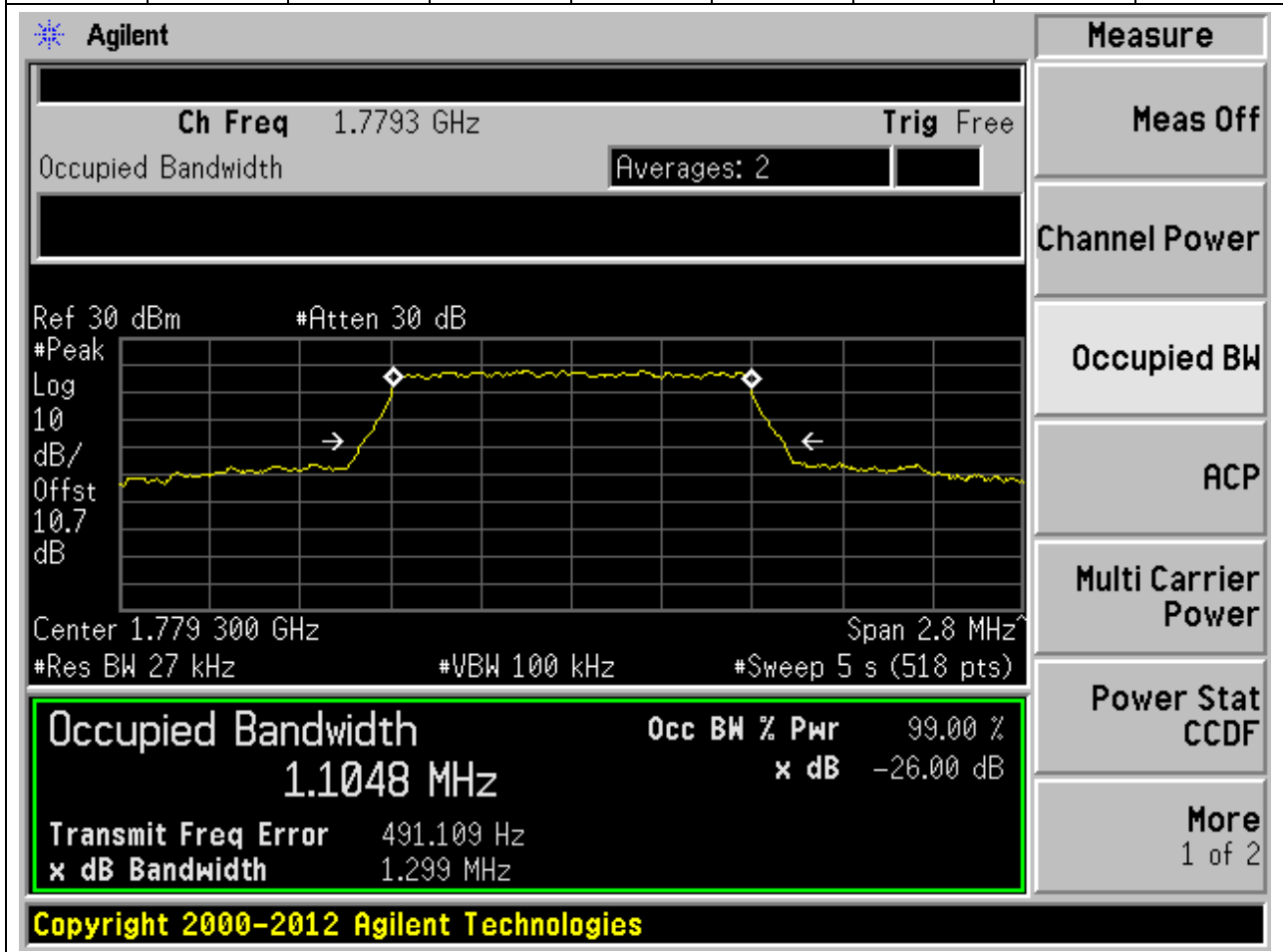
5.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, Bandwidth:1.4, Modulation:16QAM, RB Number:6, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.027	Peak	1.1	1.3	1.4	Pass



5.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132665, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1779.3	99	26	0.027	Peak	1.1	1.3	1.4	Pass



5.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132665, Bandwidth:1.4, Modulation:16QAM, RB Number:6, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1779.3	99	26	0.027	Peak	1.09	1.28	1.4	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7793 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include a reference level of 30 dBm, an attenuation of 30 dB, a resolution bandwidth of 27 kHz, and a video bandwidth of 100 kHz. The span is 2.8 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 1.0859 MHz. The occupied bandwidth percentage is 99.00%, and the XdB down is -26.00 dB. Other parameters shown include a transmit frequency error of 246.239 Hz and an XdB bandwidth of 1.276 MHz. The interface also includes a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The copyright notice at the bottom reads 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	X dB
1.0859 MHz	99.00 %	-26.00 dB

Transmit Freq Error: 246.239 Hz  
 x dB Bandwidth: 1.276 MHz

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**5.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:131987, Bandwidth:3, Modulation:QPSK, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1711.5	99	26	0.062	Peak	2.69	3	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7115 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters are: Ref 30 dBm, #Atten 30 dB, Log 10 dB/Offst 10.6 dB, Center 1.711 500 GHz, Span 6 MHz, #Res BW 62 kHz, #VBW 200 kHz, and #Sweep 5 s (483 pts). The Occupied Bandwidth measurement is highlighted in a green box, showing: Occupied Bandwidth 2.6907 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB, Transmit Freq Error 4.436 kHz, and x dB Bandwidth 3.003 MHz. The right-hand side of the interface features a 'Measure' menu with options: Meas Off, Channel Power, Occupied BW, ACP, Multi Carrier Power, Power Stat CCDF, and More (1 of 2). The bottom of the screen displays the copyright notice: Copyright 2000-2012 Agilent Technologies.

5.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:131987, Bandwidth:3, Modulation:16QAM, RB Number:15, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1711.5	99	26	0.062	Peak	2.69	3	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7115 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include a reference level of 30 dBm, a 30 dB attenuation, a resolution bandwidth of 62 kHz, and a video bandwidth of 200 kHz. The span is 6 MHz. The measurement results are highlighted in a green box:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
2.6936 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-1.087 kHz	
<b>x dB Bandwidth</b>	2.997 MHz	

On the right side of the interface, there is a 'Measure' menu with options: Meas Off, Channel Power, Occupied BW, ACP, Multi Carrier Power, Power Stat CCDF, and More (1 of 2).

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**5.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, Bandwidth:3, Modulation:QPSK, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.062	Peak	2.7	3	3	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 1.745 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.745 000 GHz Span 6 MHz

#Res BW 62 kHz #VBW 200 kHz #Sweep 5 s (483 pts)

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

2.6962 MHz

x dB -26.00 dB

Transmit Freq Error -2.798 kHz

x dB Bandwidth 2.997 MHz

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**5.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, Bandwidth:3, Modulation:16QAM, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.062	Peak	2.69	3	3	Pass

Agilent

Measure

Ch Freq 1.745 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.6

dB

Center 1.745 000 GHz
Span 6 MHz

#Res BW 62 kHz
#VBW 200 kHz
#Sweep 5 s (483 pts)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
2.6947 MHz	x dB	-26.00 dB
Transmit Freq Error	1.757 kHz	
x dB Bandwidth	2.997 MHz	

Power Stat
CCDF

More
1 of 2

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**5.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132657, Bandwidth:3, Modulation:QPSK, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1778.5	99	26	0.062	Peak	2.69	2.98	3	Pass

Agilent
Measure

Ch Freq 1.7785 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.778 500 GHz Span 6 MHz

#Res BW 62 kHz #VBW 200 kHz #Sweep 5 s (483 pts)

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**Occupied Bandwidth**

**2.6903 MHz**

Transmit Freq Error -716.771 Hz

x dB Bandwidth 2.977 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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5.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132657, Bandwidth:3, Modulation:16QAM, RB Number:15, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1778.5	99	26	0.062	Peak	2.68	3	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 1.7785 GHz. The occupied bandwidth is measured as 2.6823 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The RBW is 0.062 MHz. The detector is set to Peak. The upper limit is 3 MHz. The verdict is Pass.

Occupied Bandwidth	Occ BW % Pwr	X dB
2.6823 MHz	99.00 %	-26.00 dB

Transmit Freq Error: 1.192 kHz  
x dB Bandwidth: 2.998 MHz

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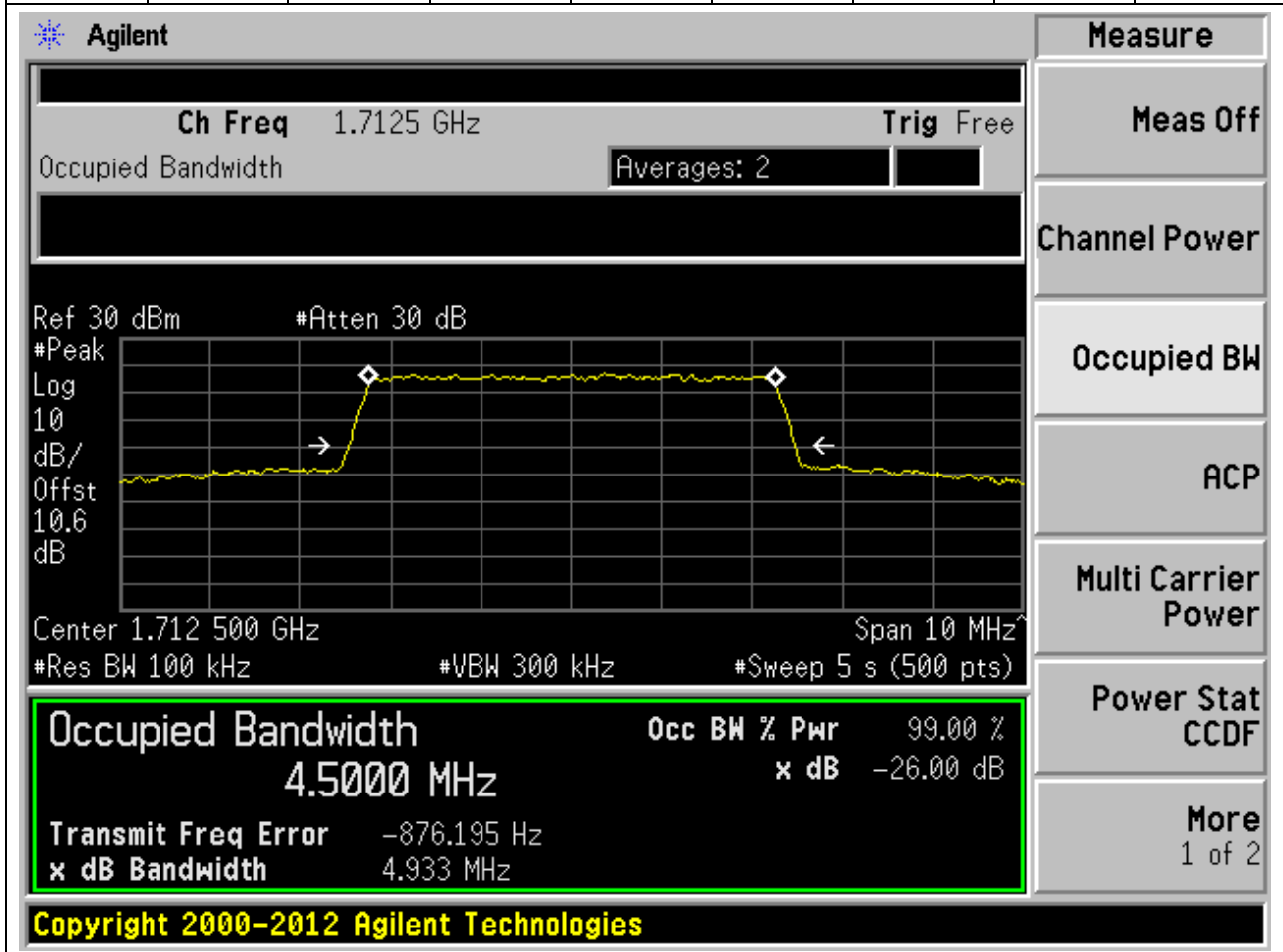
**5.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:131997, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1712.5	99	26	0.1	Peak	4.52	4.95	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7125 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.6 dB', 'Center 1.712 500 GHz', 'Span 10 MHz', '#Res BW 100 kHz', '#VBW 300 kHz', and '#Sweep 5 s (500 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 4.5243 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -13.737 kHz', and 'x dB Bandwidth 4.950 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

5.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:131997, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1712.5	99	26	0.1	Peak	4.5	4.93	5	Pass



5.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.1	Peak	4.5	4.93	5	Pass

Agilent
Measure

Ch Freq 1.745 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.6

dB

Center 1.745 000 GHz
Span 10 MHz

#Res BW 100 kHz
#VBW 300 kHz
#Sweep 5 s (500 pts)

Occupied Bandwidth
Occ BW % Pwr 99.00 %

4.5014 MHz
x dB -26.00 dB

Transmit Freq Error -997.293 Hz

x dB Bandwidth 4.933 MHz

Power Stat
CCDF

More
1 of 2

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5.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.1	Peak	4.5	4.92	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 1.745 GHz, and the span is 10 MHz. The occupied bandwidth is measured as 4.4978 MHz. The power is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is 1.387 kHz, and the XdB bandwidth is 4.925 MHz. The interface includes a 'Measure' panel on the right with buttons for 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The 'Occupied BW' button is highlighted.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.4978 MHz	x dB	-26.00 dB
Transmit Freq Error	1.387 kHz	
x dB Bandwidth	4.925 MHz	

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5.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132647, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1777.5	99	26	0.1	Peak	4.5	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7775 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include: Ref 30 dBm, #Atten 30 dB, Log 10, dB/Offst 10.7 dB, Center 1.777 500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, and #Sweep 5 s (500 pts). A green box highlights the measurement results: Occupied Bandwidth 4.4980 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB, Transmit Freq Error 2.118 kHz, and x dB Bandwidth 4.897 MHz. On the right side, there is a 'Measure' menu with options: Meas Off, Channel Power, Occupied BW, ACP, Multi Carrier Power, Power Stat CCDF, and More (1 of 2). The bottom of the screen shows the copyright notice: Copyright 2000-2012 Agilent Technologies.

5.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132647, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1777.5	99	26	0.1	Peak	4.48	4.89	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7775 GHz. The main display shows a spectrum plot with a yellow trace representing the signal. The plot is set to a center frequency of 1.777500 GHz with a span of 10 MHz. The resolution bandwidth (RBW) is 100 kHz, and the video bandwidth (VBW) is 300 kHz. The sweep time is 5 seconds. The plot shows a signal with a peak level of approximately -26 dB. The occupied bandwidth is measured as 4.4801 MHz, which is 99.00% of the total bandwidth. The XdB down is -26.00 dB. The transmit frequency error is -125.664 Hz, and the XdB bandwidth is 4.894 MHz. The interface includes a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.4801 MHz	x dB	-26.00 dB
Transmit Freq Error	-125.664 Hz	
x dB Bandwidth	4.894 MHz	

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**5.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132022, Bandwidth:10, Modulation:QPSK, 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
1715	99	26	0.2	Peak	8.98	9.85	10	Pass

**Agilent**

Ch Freq 1.715 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.6 dB

Center 1.715 00 GHz Span 20 MHz

#Res BW 200 kHz #VBW 620 kHz #Sweep 5 s (500 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
8.9761 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>	14.606 kHz	
<b>x dB Bandwidth</b>	9.849 MHz	

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2



**5.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132022, Bandwidth:10, Modulation:16QAM, 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
1715	99	26	0.2	Peak	8.99	9.78	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.715 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot is set to 'Log' scale with 'dB/Offst 10.6 dB'. The center frequency is 1.715 00 GHz and the span is 20 MHz. The resolution bandwidth (Res BW) is 200 kHz, the video bandwidth (VBW) is 620 kHz, and the sweep time is 5 s (500 pts). The plot shows a signal with a peak level of approximately -26 dB. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 8.9912 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is 5.205 kHz and the 'x dB Bandwidth' is 9.784 MHz. The 'Measure' menu on the right includes options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. The bottom of the screen displays the copyright notice 'Copyright 2000-2012 Agilent Technologies'.

**5.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, Bandwidth:10, Modulation:QPSK, 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
1745	99	26	0.2	Peak	8.94	9.79	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.745 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.6 dB', 'Center 1.745 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 5 s (500 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 8.9402 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 4.357 kHz', and 'x dB Bandwidth 9.793 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**5.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, Bandwidth:10, Modulation:16QAM, 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
1745	99	26	0.2	Peak	8.94	9.78	10	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 1.745 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.745 00 GHz Span 20 MHz

#Res BW 200 kHz #VBW 620 kHz #Sweep 5 s (500 pts)

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

8.9401 MHz x dB -26.00 dB

Transmit Freq Error -4.526 kHz

x dB Bandwidth 9.778 MHz

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**5.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132622, Bandwidth:10, Modulation:QPSK, 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
1775	99	26	0.2	Peak	9.02	9.83	10	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 1.775 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.775 00 GHz Span 20 MHz

#Res BW 200 kHz #VBW 620 kHz #Sweep 5 s (500 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
9.0170 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	32.741 kHz	
<b>x dB Bandwidth</b>	9.830 MHz	

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**5.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132622, Bandwidth:10, Modulation:16QAM, 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
1775	99	26	0.2	Peak	9	9.78	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 1.775 GHz, and the span is 20 MHz. The occupied bandwidth is measured as 9.0000 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is -13.822 kHz, and the XdB bandwidth is 9.784 MHz. The interface includes various measurement buttons on the right side, such as 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
9.0000 MHz	x dB	-26.00 dB
Transmit Freq Error	-13.822 kHz	
x dB Bandwidth	9.784 MHz	

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**5.25. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132047, 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
1717.5	99	26	0.3	Peak	13.45	14.68	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7175 GHz' and 'Trig Free'. Below this, the 'Occupied Bandwidth' measurement is shown with 'Averages: 2'. The main display area shows a spectrum plot with a yellow trace. The plot has a grid and is labeled with 'Ref 30 dBm', '#Peak Log 10 dB/Offst 10.6 dB', '#Atten 30 dB', 'Center 1.717 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 5 s (500 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 13.4536 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -7.991 kHz', and 'x dB Bandwidth 14.684 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

5.26. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132047, 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
1717.5	99	26	0.3	Peak	13.46	14.61	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The 'Occupied Bandwidth' measurement is highlighted in a green box. The results are as follows:

Measurement	Value
Occupied Bandwidth	13.4641 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-5.016 kHz
x dB Bandwidth	14.611 MHz

Additional parameters shown in the interface include: Ch Freq 1.7175 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log, 10 dB/Offst, 10.6 dB, Center 1.717 50 GHz, Span 30 MHz, #Res BW 300 kHz, #VBW 1 MHz, #Sweep 5 s (500 pts).

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**5.27. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, 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
1745	99	26	0.3	Peak	13.45	14.65	15	Pass

Agilent

**Measure**

Ch Freq 1.745 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak  
 Log  
 10  
 dB/  
 Offst  
 10.6  
 dB

Center 1.745 00 GHz
Span 30 MHz

#Res BW 300 kHz
#VBW 1 MHz
#Sweep 5 s (500 pts)

Occupied Bandwidth	13.4529 MHz	Occ BW % Pwr	99.00 %
		x dB	-26.00 dB
Transmit Freq Error	8.873 kHz		
x dB Bandwidth	14.649 MHz		

Power Stat	CCDF
More	1 of 2

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**5.28. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, 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
1745	99	26	0.3	Peak	13.43	14.64	15	Pass

Agilent

**Measure**

Ch Freq 1.745 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak  
 Log  
 10  
 dB/  
 Offst  
 10.6  
 dB

Center 1.745 00 GHz
Span 30 MHz

#Res BW 300 kHz
#VBW 1 MHz
#Sweep 5 s (500 pts)

Occupied Bandwidth	13.4262 MHz	Occ BW % Pwr	99.00 %
		x dB	-26.00 dB
Transmit Freq Error	14.675 kHz		
x dB Bandwidth	14.642 MHz		

Channel Power	Meas Off
Occupied BW	
ACP	
Multi Carrier Power	
Power Stat CCDF	
More	1 of 2

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**5.29. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132597, 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
1772.5	99	26	0.3	Peak	13.45	14.64	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7725 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log', '10 dB/Offst', '10.7 dB', 'Center 1.772 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 5 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4539 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 14.993 kHz' and 'x dB Bandwidth 14.644 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**5.30. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132597, 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
1772.5	99	26	0.3	Peak	13.46	14.63	15	Pass

Agilent

**Measure**

**Ch Freq** 1.7725 GHz
**Trig** Free

Occupied Bandwidth

Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.7

dB

Center 1.772 50 GHz
Span 30 MHz

#Res BW 300 kHz
#VBW 1 MHz
#Sweep 5 s (500 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
13.4600 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	6.435 kHz	
<b>x dB Bandwidth</b>	14.630 MHz	

**Meas Off**

**Channel Power**

**Occupied BW**

**ACP**

**Multi Carrier Power**

**Power Stat CCDF**

**More**

1 of 2

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5.31. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132072, 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
1720	99	26	0.39	Peak	17.93	19.44	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.72 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.6 dB', 'Center 1.720 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 5 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9319 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 14.172 kHz' and 'x dB Bandwidth 19.437 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

5.32. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132072, Bandwidth:20, Modulation:16QAM, 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
1720	99	26	0.39	Peak	17.94	19.45	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.72 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log', '10 dB/Offst', '10.6 dB', 'Center 1.720 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 5 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9368 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 24.661 kHz' and 'x dB Bandwidth 19.452 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

5.33. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, 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
1745	99	26	0.39	Peak	17.91	19.39	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.745 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.6 dB', 'Center 1.745 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 5 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9149 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 22.923 kHz' and 'x dB Bandwidth 19.394 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

5.34. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132322, Bandwidth:20, Modulation:16QAM, 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
1745	99	26	0.39	Peak	17.89	19.4	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace representing the signal. The plot is centered at 1.745 GHz with a span of 40 MHz. The vertical axis is labeled 'dB/Offst' with a scale of 10.6 dB. The horizontal axis is labeled 'Span 40 MHz'. The plot shows a signal with a peak at approximately 1.745 GHz. The signal is measured with a resolution bandwidth (RBW) of 390 kHz and a video bandwidth (VBW) of 1.2 MHz. The sweep time is 5 seconds (512 points). The signal is measured with a peak detector and a 30 dB attenuator. The results are displayed in a summary box at the bottom of the screen:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
17.8934 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		4.187 kHz
<b>x dB Bandwidth</b>		19.404 MHz

The summary box also includes the text 'Copyright 2000-2012 Agilent Technologies' at the bottom.

5.35. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132572, 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
1770	99	26	0.39	Peak	17.92	19.46	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.77 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.7 dB', 'Center 1.770 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 5 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9208 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error -5.906 kHz' and 'x dB Bandwidth 19.458 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.



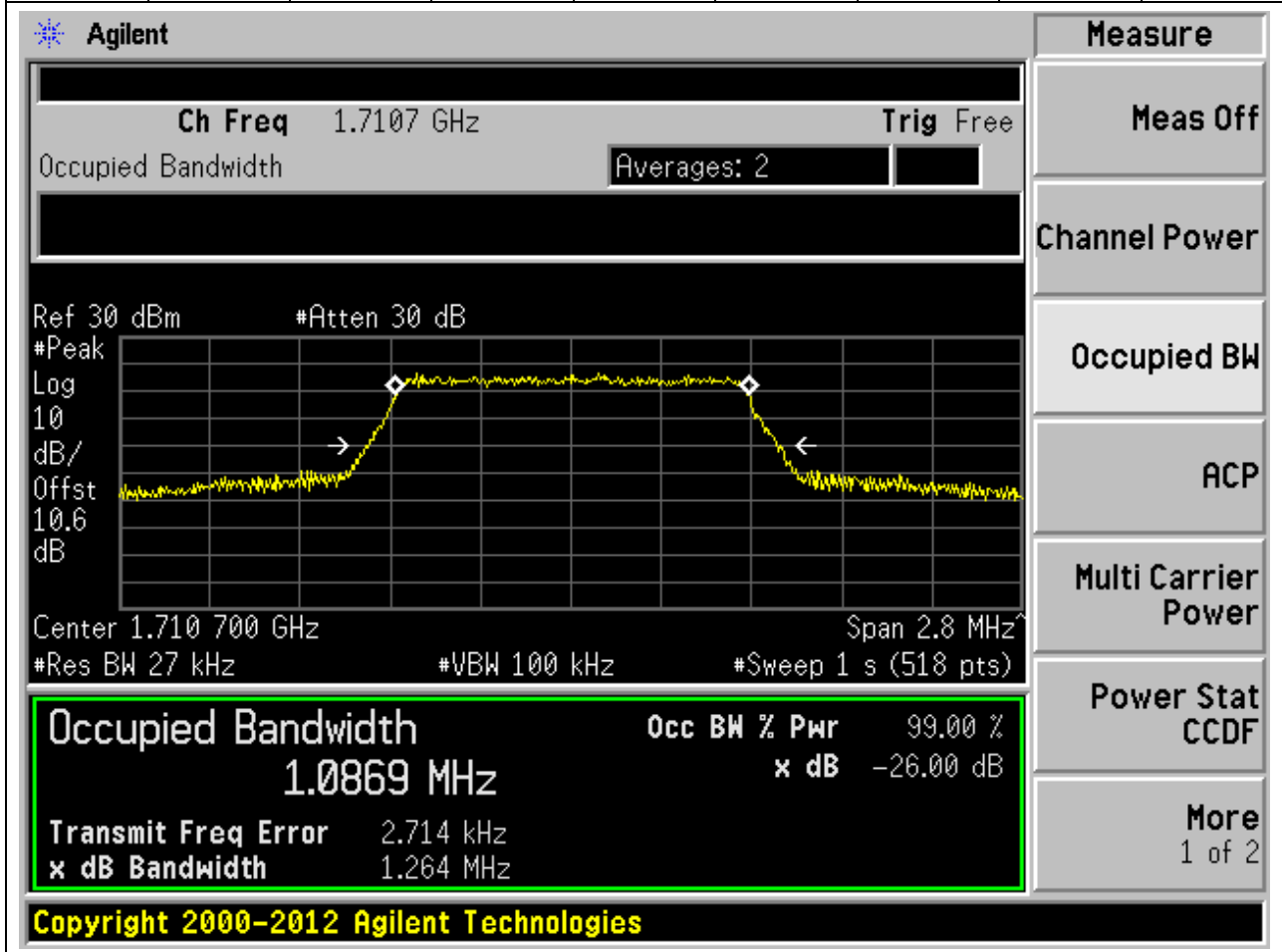
5.36. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:132572, Bandwidth:20, Modulation:16QAM, RB Number:100, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1770	99	26	0.39	Peak	17.95	19.47	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.77 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.7 dB', 'Center 1.770 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 5 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9450 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error -4.153 kHz' and 'x dB Bandwidth 19.473 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

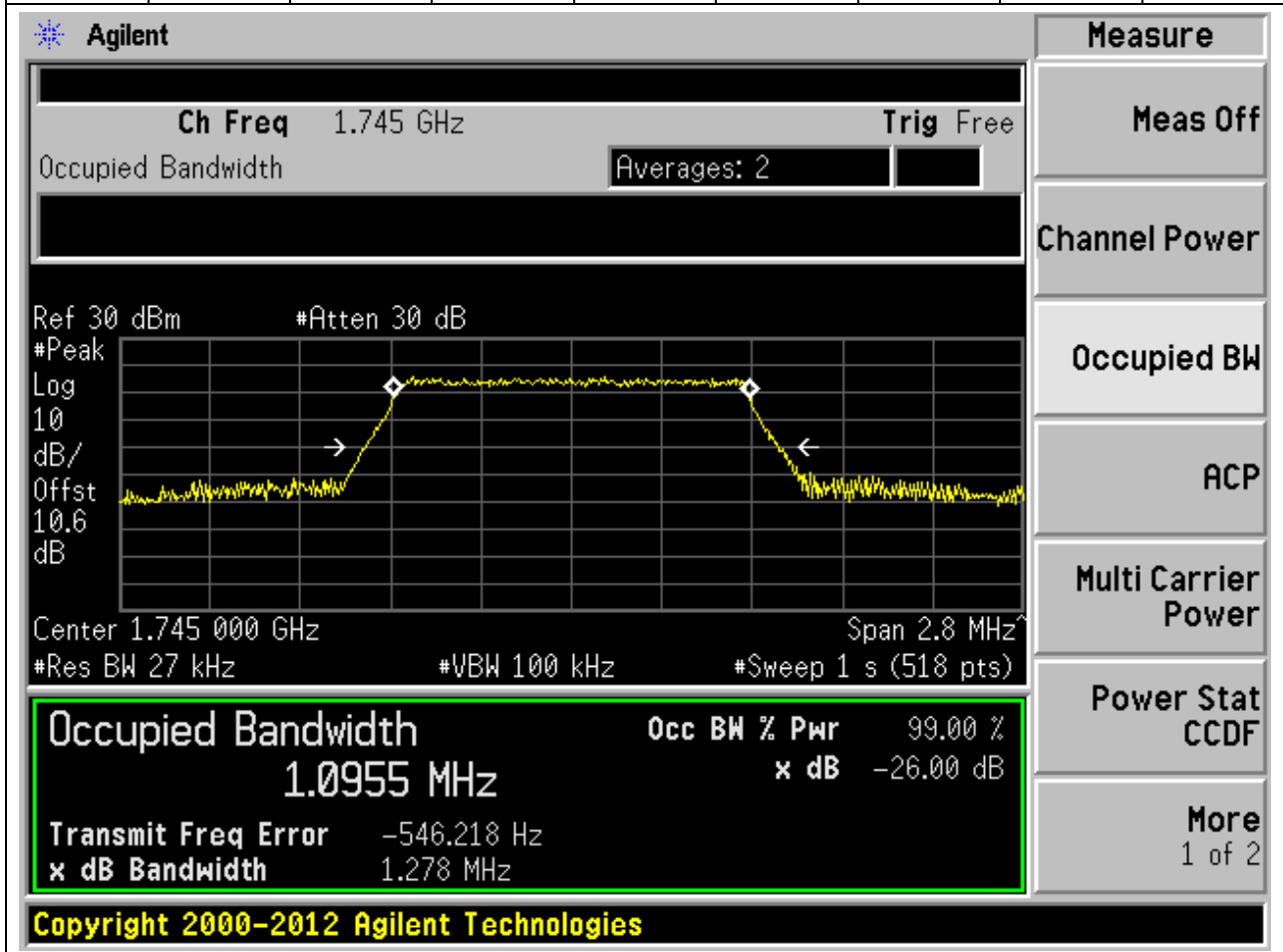
**5.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:131979, Bandwidth:1.4, Modulation:64QAM, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1710.7	99	26	0.027	Peak	1.09	1.26	1.4	Pass



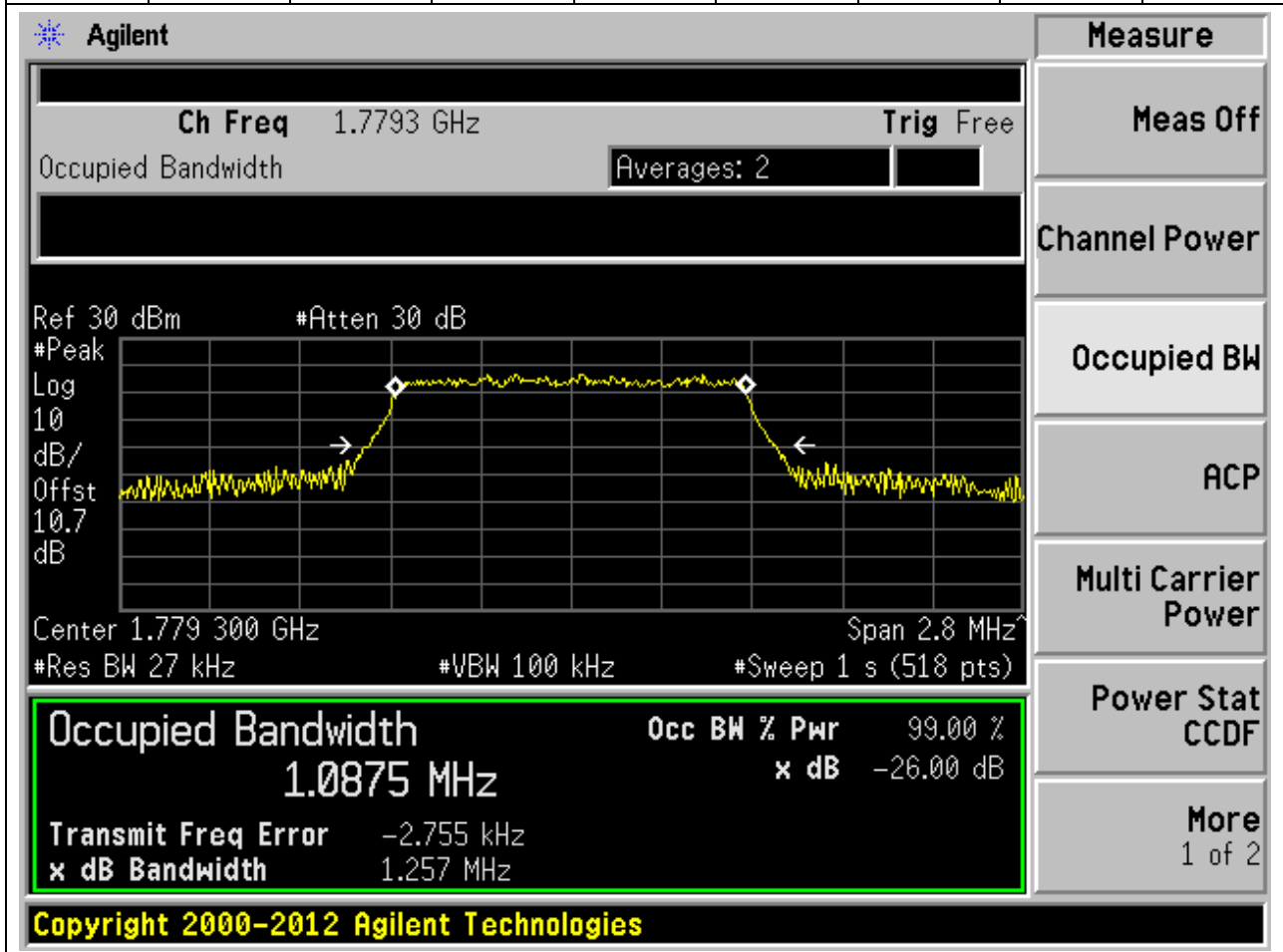
**5.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132322, Bandwidth:1.4, Modulation:64QAM, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.027	Peak	1.1	1.28	1.4	Pass



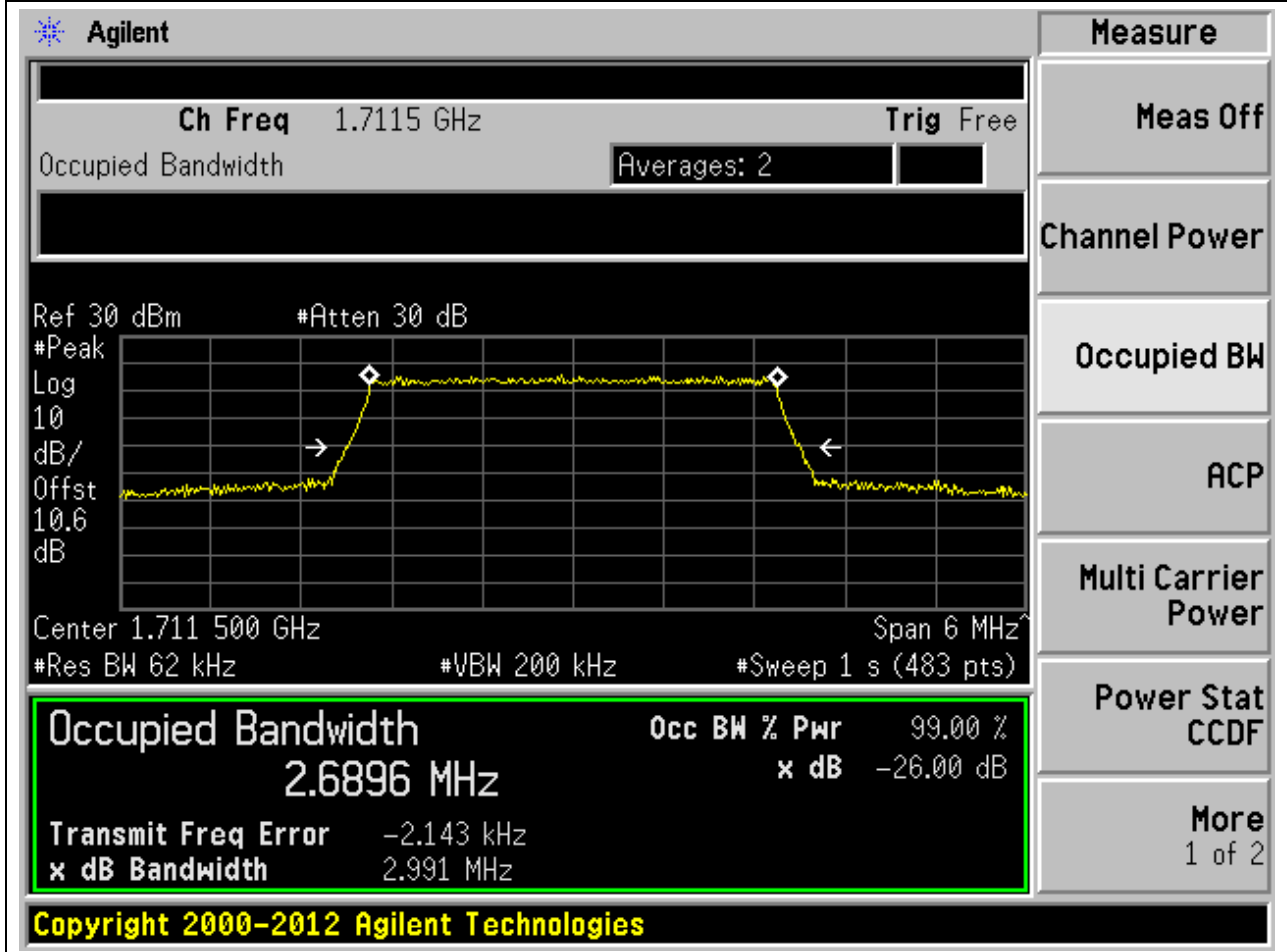
5.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132665, Bandwidth:1.4, Modulation:64QAM, RB Number:6, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1779.3	99	26	0.027	Peak	1.09	1.26	1.4	Pass



5.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:131987, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1711.5	99	26	0.062	Peak	2.69	2.99	3	Pass



5.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132322, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.062	Peak	2.69	2.97	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 1.745 GHz and the span is 6 MHz. The occupied bandwidth is measured as 2.6852 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -1.419 kHz and the XdB bandwidth is 2.970 MHz. The interface includes various measurement buttons on the right side, such as Measure, Meas Off, Channel Power, Occupied BW, ACP, Multi Carrier Power, Power Stat CCDF, and More.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
2.6852 MHz	x dB	-26.00 dB
Transmit Freq Error	-1.419 kHz	
x dB Bandwidth	2.970 MHz	

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5.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132657, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1778.5	99	26	0.062	Peak	2.69	2.98	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7785 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot is set to 'Log' scale with 'dB/Offst 10.7 dB'. The center frequency is 1.778500 GHz and the span is 6 MHz. The resolution bandwidth (RBW) is 62 kHz and the video bandwidth (VBW) is 200 kHz. The sweep time is 1 second (483 points). The plot shows a signal with a peak at approximately 1.7785 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 2.6870 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is -2.757 kHz and the 'x dB Bandwidth' is 2.978 MHz. The 'Copyright 2000-2012 Agilent Technologies' is displayed at the bottom.

Occupied Bandwidth	Occ BW % Pwr	x dB
2.6870 MHz	99.00 %	-26.00 dB

Transmit Freq Error: -2.757 kHz  
x dB Bandwidth: 2.978 MHz

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5.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:131997, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1712.5	99	26	0.1	Peak	4.49	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 1.7125 GHz. The occupied bandwidth is highlighted in a green box at the bottom of the screen.

**Occupied Bandwidth Measurement Results:**

Occupied Bandwidth	Occ BW % Pwr	X dB
4.4881 MHz	99.00 %	-26.00 dB

Additional parameters shown in the green box:

- Transmit Freq Error: 2.110 kHz
- x dB Bandwidth: 4.901 MHz

Other visible parameters include: Ch Freq 1.7125 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log 10, dB/Offst 10.6 dB, Center 1.712 500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, #Sweep 1 s (500 pts).

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5.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132322, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.1	Peak	4.5	4.91	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The plot is centered at 1.745 GHz with a span of 10 MHz. The vertical axis is labeled 'dB/Offst' with a value of 10.6 dB. The horizontal axis is labeled 'Span 10 MHz'. The plot shows a signal with a peak at 1.745 GHz. The 'Occupied Bandwidth' is measured as 4.5017 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is 1.046 kHz and the 'x dB Bandwidth' is 4.912 MHz. The 'Copyright 2000-2012 Agilent Technologies' is displayed at the bottom.

Occupied Bandwidth	Occ BW % Pwr	x dB
4.5017 MHz	99.00 %	-26.00 dB

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**5.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132647, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1777.5	99	26	0.1	Peak	4.49	4.91	5	Pass

Agilent

Measure

Ch Freq 1.7775 GHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.7

dB

Center 1.777 500 GHz
Span 10 MHz

#Res BW 100 kHz
#VBW 300 kHz
#Sweep 1 s (500 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
4.4932 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-3.651 kHz	
<b>x dB Bandwidth</b>	4.906 MHz	

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

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**5.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132022, Bandwidth:10, Modulation:64QAM, 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
1715	99	26	0.2	Peak	8.95	9.74	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a signal trace with a yellow line indicating the occupied bandwidth. The measurement results are summarized in a table at the bottom of the screen:

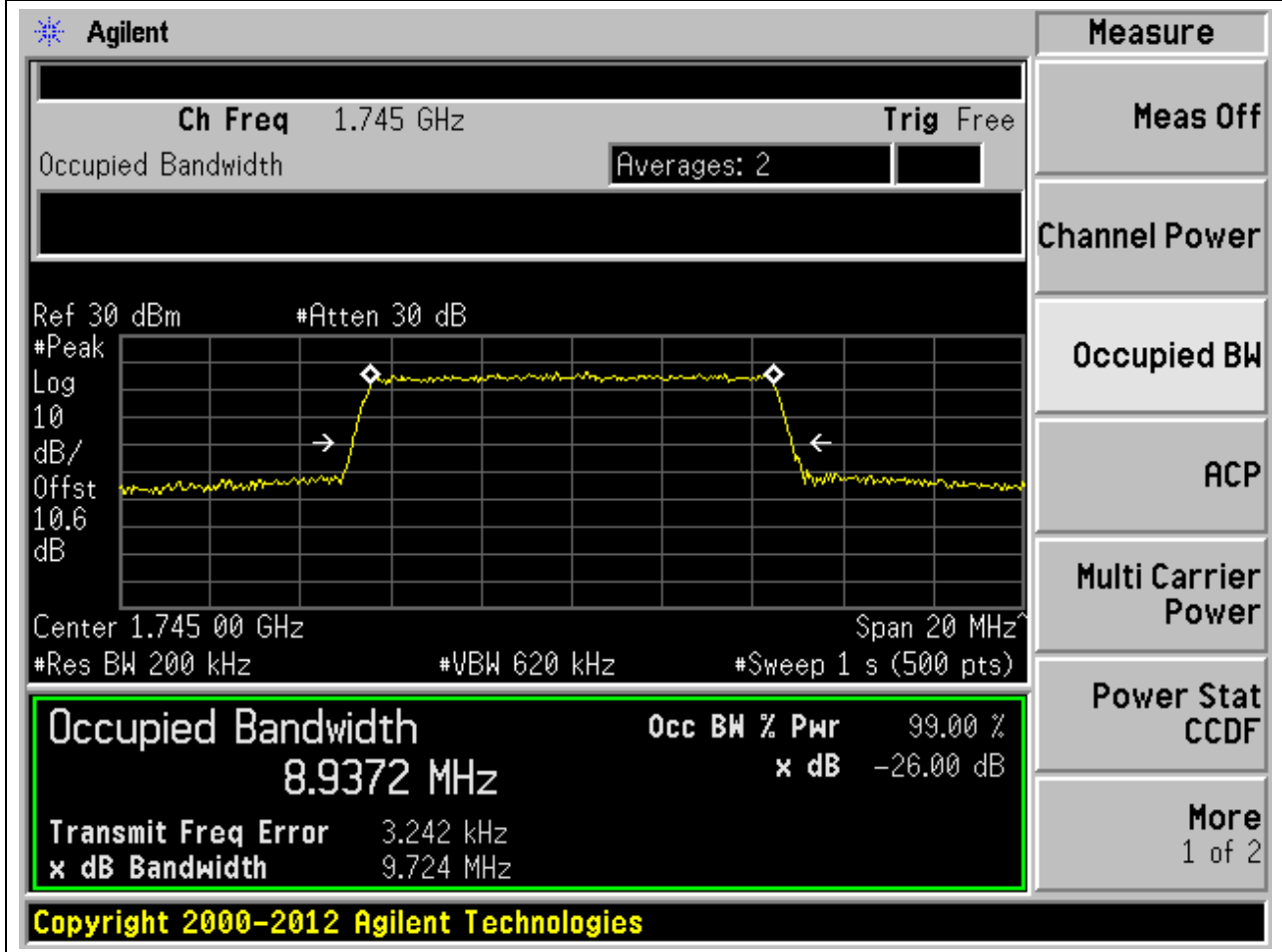
Occupied Bandwidth	Occ BW % Pwr	x dB
8.9529 MHz	99.00 %	-26.00 dB

Additional parameters shown in the interface include: Ch Freq 1.715 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log, 10 dB/Offst, 10.6 dB, Center 1.715 00 GHz, Span 20 MHz, #Res BW 200 kHz, #VBW 620 kHz, #Sweep 1 s (500 pts). The interface also includes a 'Measure' menu with options like Meas Off, Channel Power, Occupied BW, ACP, Multi Carrier Power, Power Stat CCDF, and More (1 of 2).

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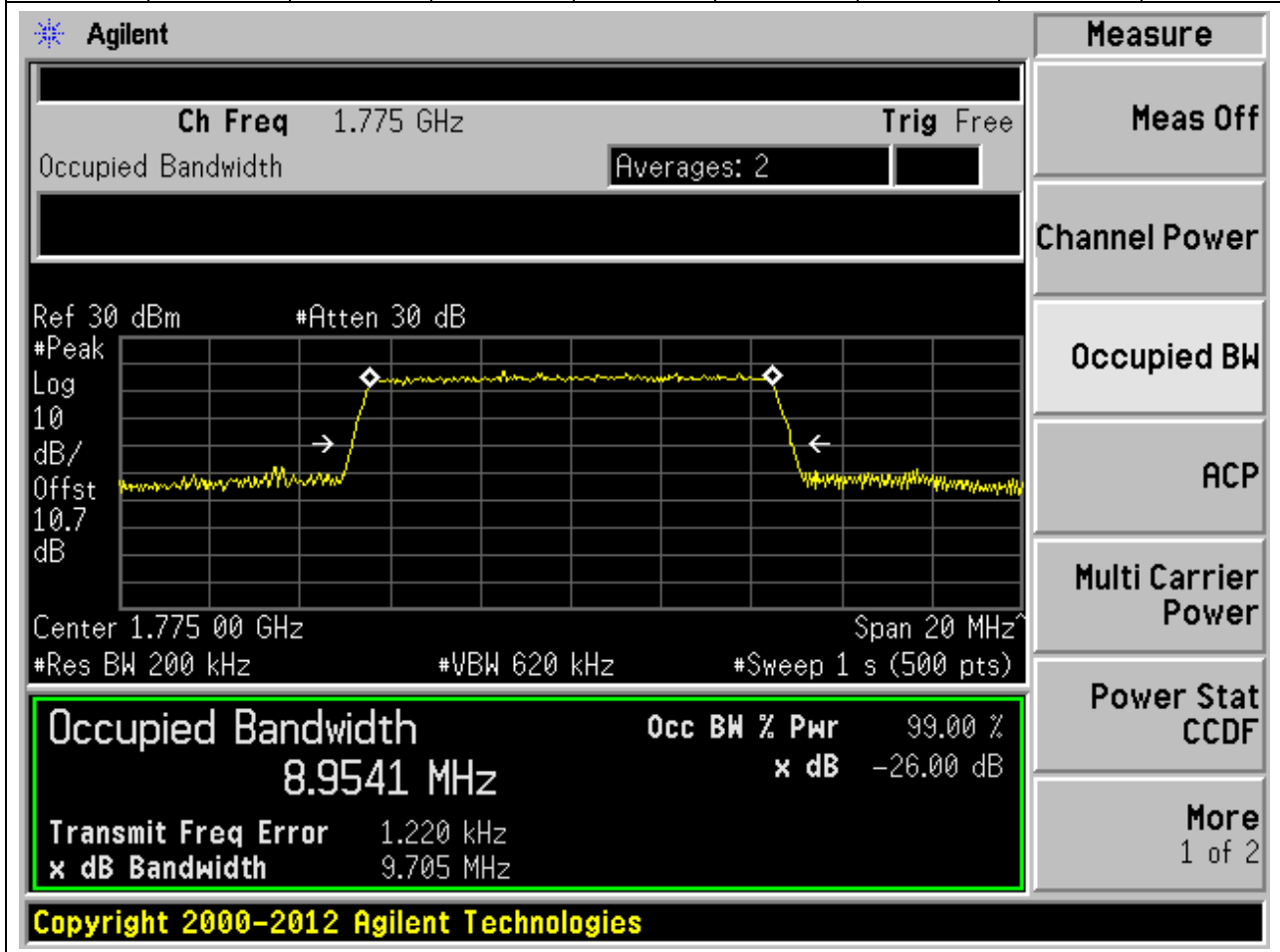
5.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132322, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.2	Peak	8.94	9.72	10	Pass



**5.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132622, Bandwidth:10, Modulation:64QAM, 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
1775	99	26	0.2	Peak	8.95	9.7	10	Pass



**5.13. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132047, 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
1717.5	99	26	0.3	Peak	13.41	14.56	15	Pass

Agilent

Measure

Ch Freq 1.7175 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 10.6 dB

Center 1.717 50 GHz Span 30 MHz

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

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**Occupied Bandwidth**

**13.4079 MHz**

Transmit Freq Error -2.110 kHz

x dB Bandwidth 14.555 MHz

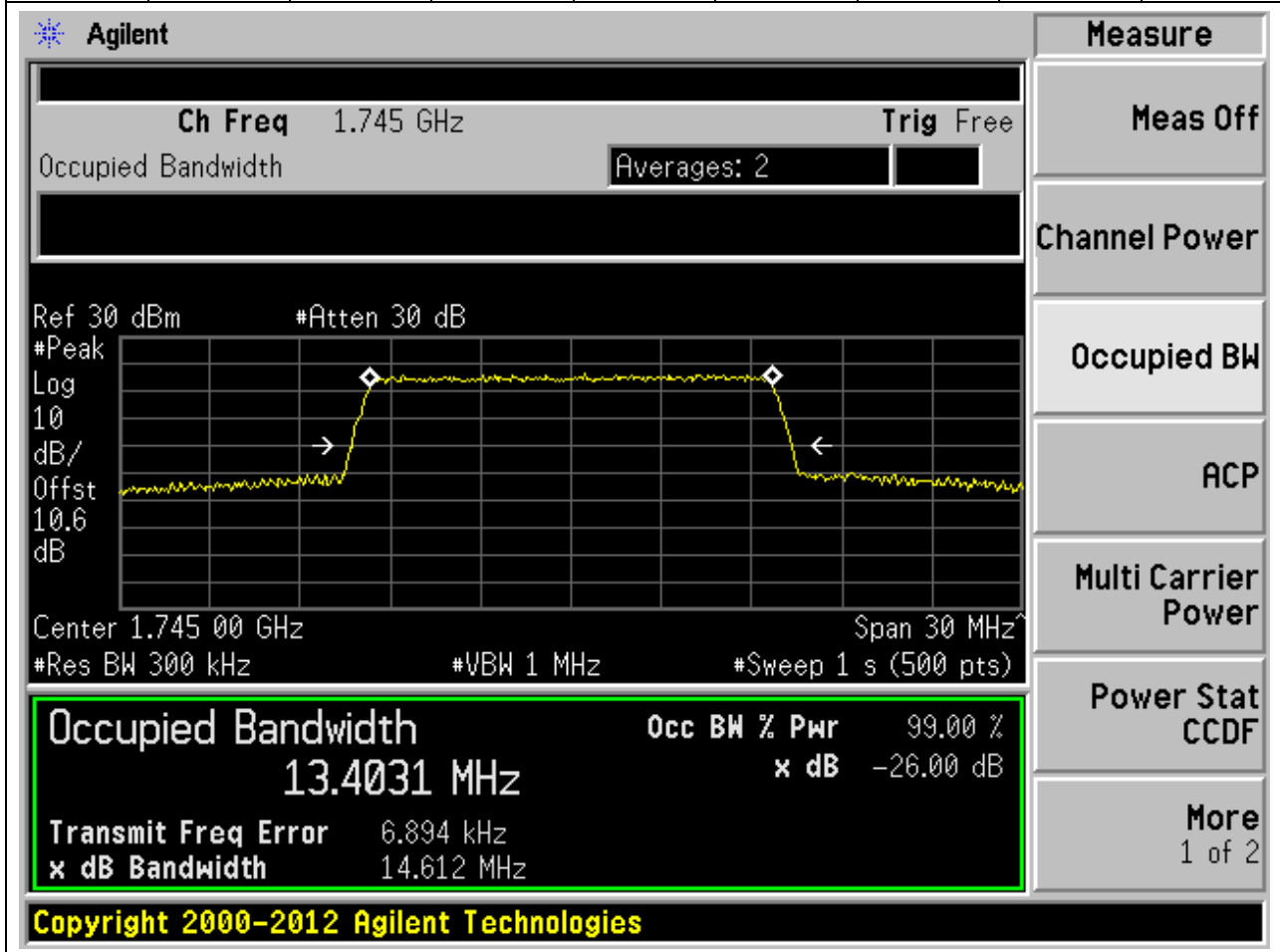
Occ BW % Pwr 99.00 %

x dB -26.00 dB

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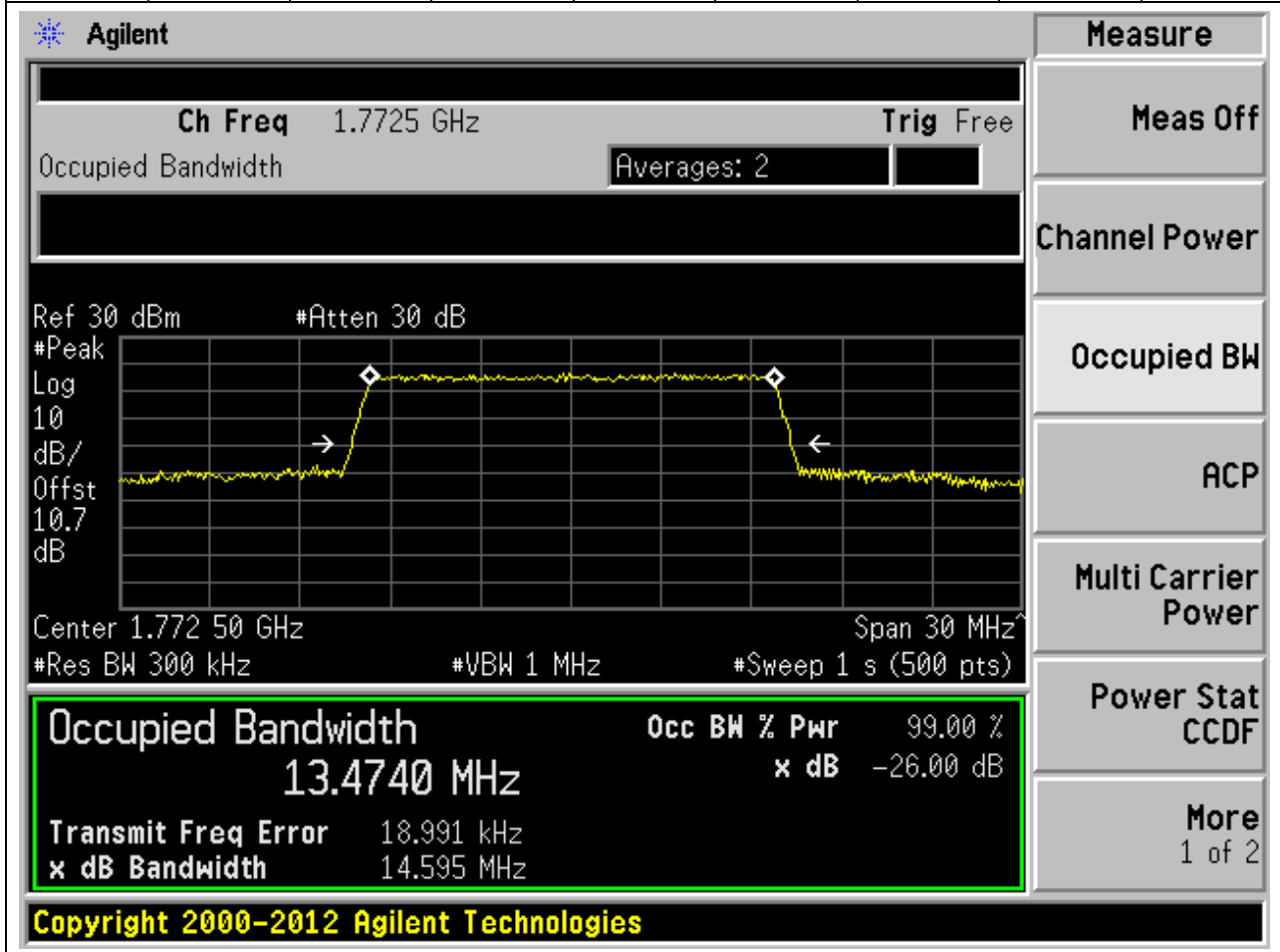
5.14. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132322, Bandwidth:15, Modulation:64QAM, RB Number:75, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1745	99	26	0.3	Peak	13.4	14.61	15	Pass



5.15. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132597, Bandwidth:15, Modulation:64QAM, RB Number:75, RB Position:0)

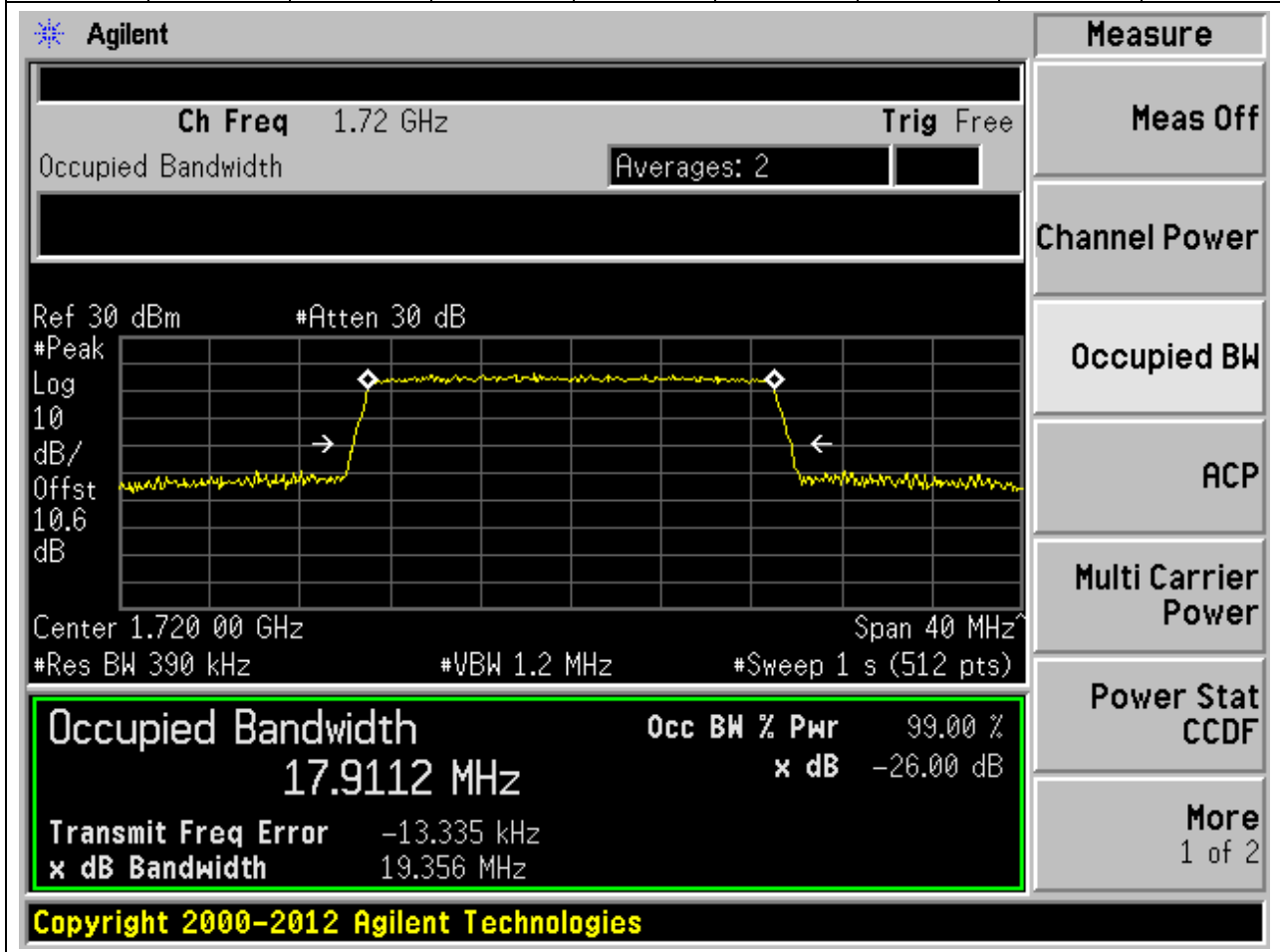
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1772.5	99	26	0.3	Peak	13.47	14.59	15	Pass





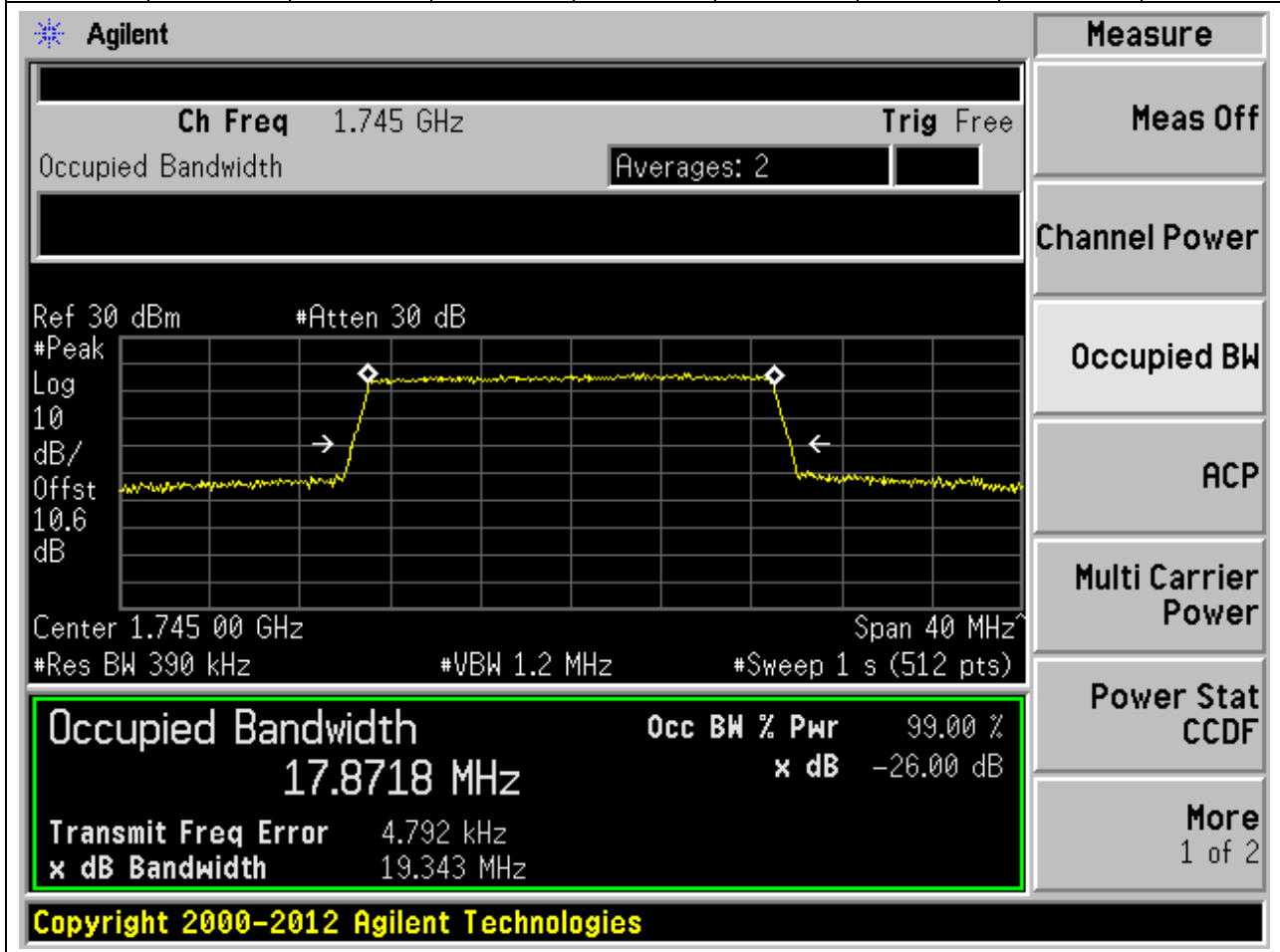
5.16. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132072, Bandwidth:20, Modulation:64QAM, RB Number:100, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1720	99	26	0.39	Peak	17.91	19.36	20	Pass



**5.17. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132322, 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
1745	99	26	0.39	Peak	17.87	19.34	20	Pass



5.18. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:132572, Bandwidth:20, Modulation:64QAM, RB Number:100, RB Position:0)

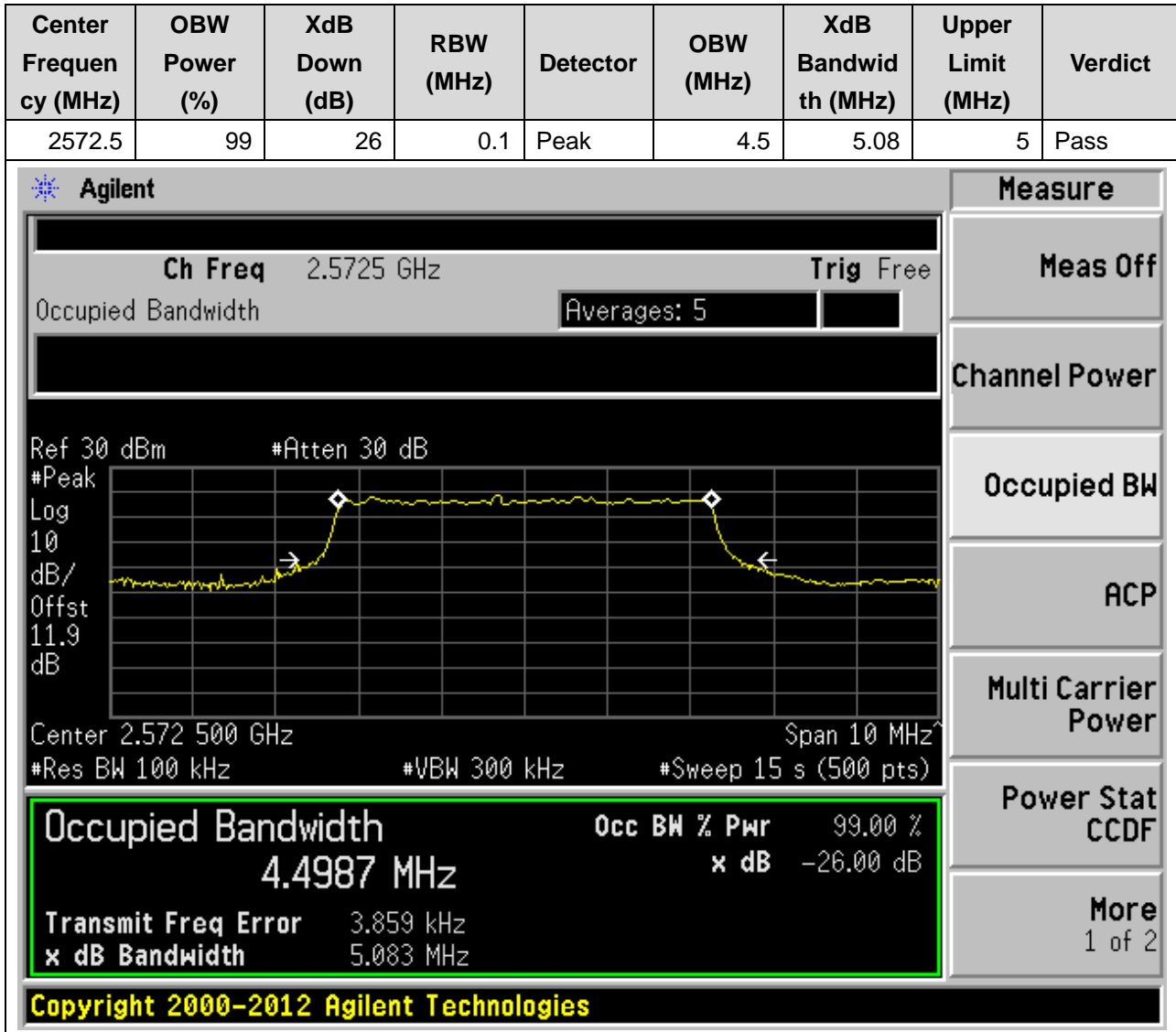
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1770	99	26	0.39	Peak	17.93	19.35	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The plot is set to a center frequency of 1.770 GHz and a span of 40 MHz. The resolution bandwidth (RBW) is 390 kHz, and the video bandwidth (VBW) is 1.2 MHz. The plot shows a signal with a peak level of approximately -26 dB. The occupied bandwidth is measured as 17.9290 MHz, which is 99.00% of the total bandwidth. The XdB bandwidth is 19.345 MHz. The transmit frequency error is 6.614 kHz. The interface includes a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
17.9290 MHz	x dB	-26.00 dB
Transmit Freq Error	6.614 kHz	
x dB Bandwidth	19.345 MHz	

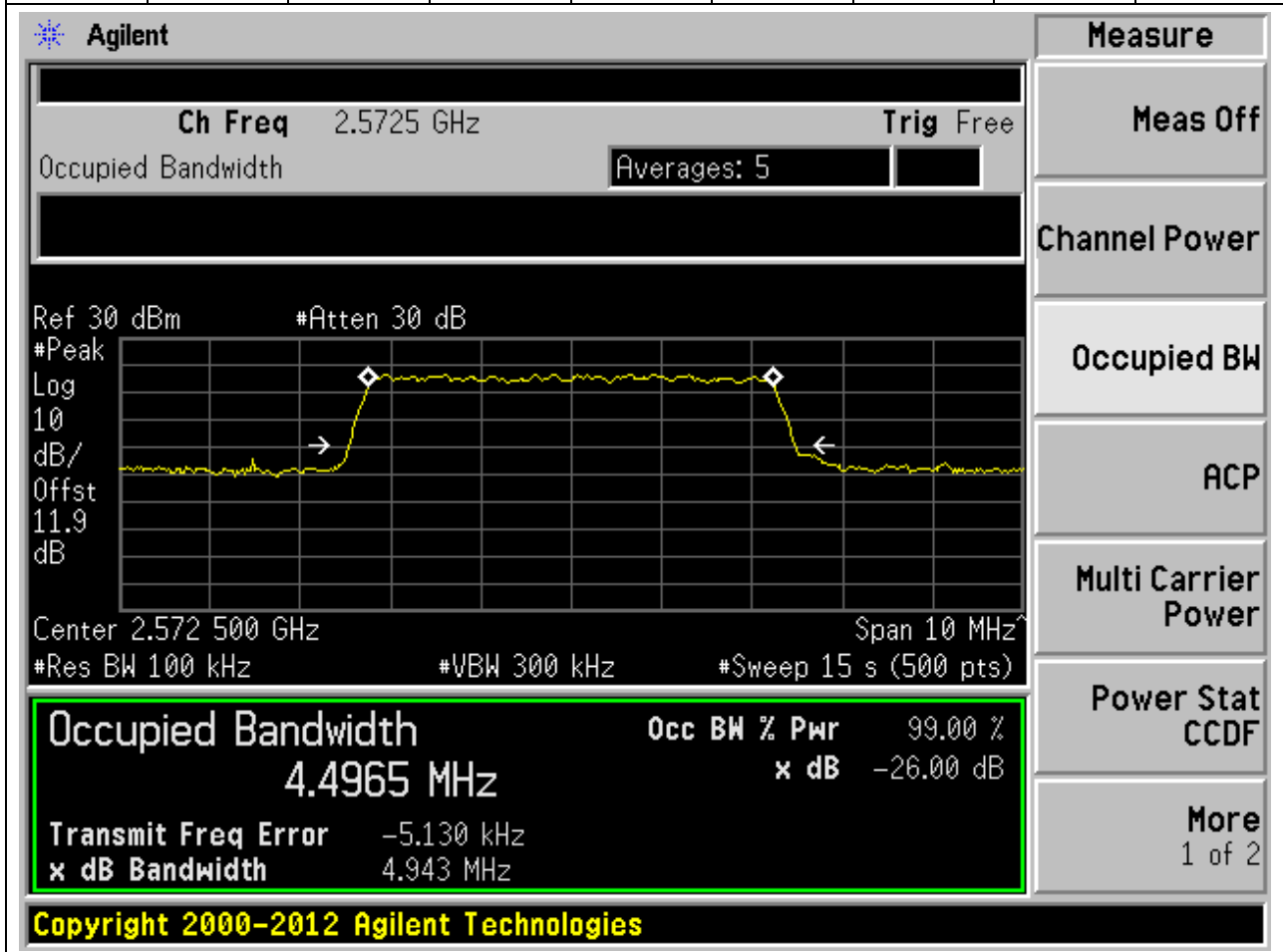
## 6. LTE\_Band38

### 6.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:37775, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)



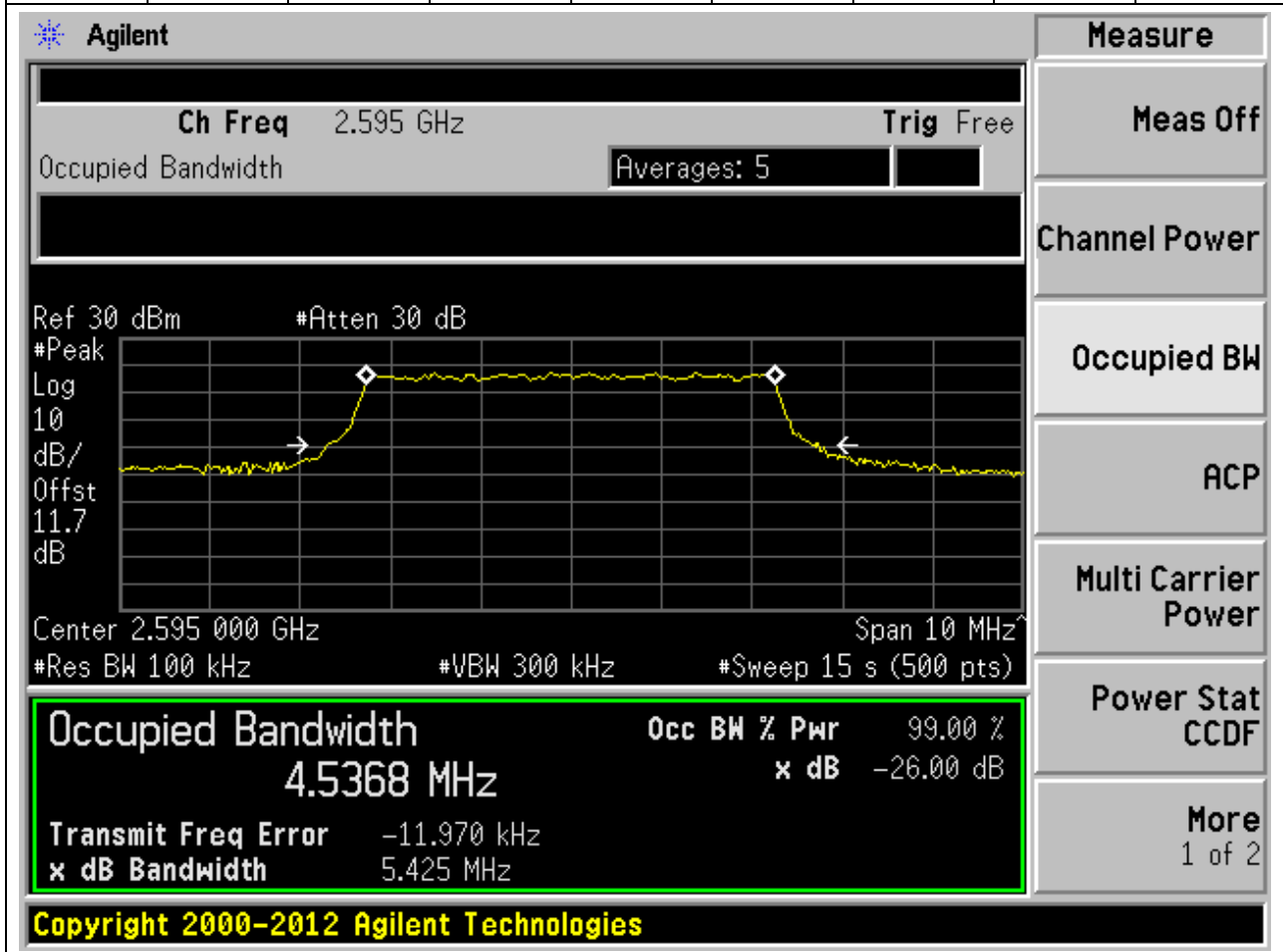
**6.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:37775, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2572.5	99	26	0.1	Peak	4.5	4.94	5	Pass



**6.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38000, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2595	99	26	0.1	Peak	4.54	5.43	5	Pass



6.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38000, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)

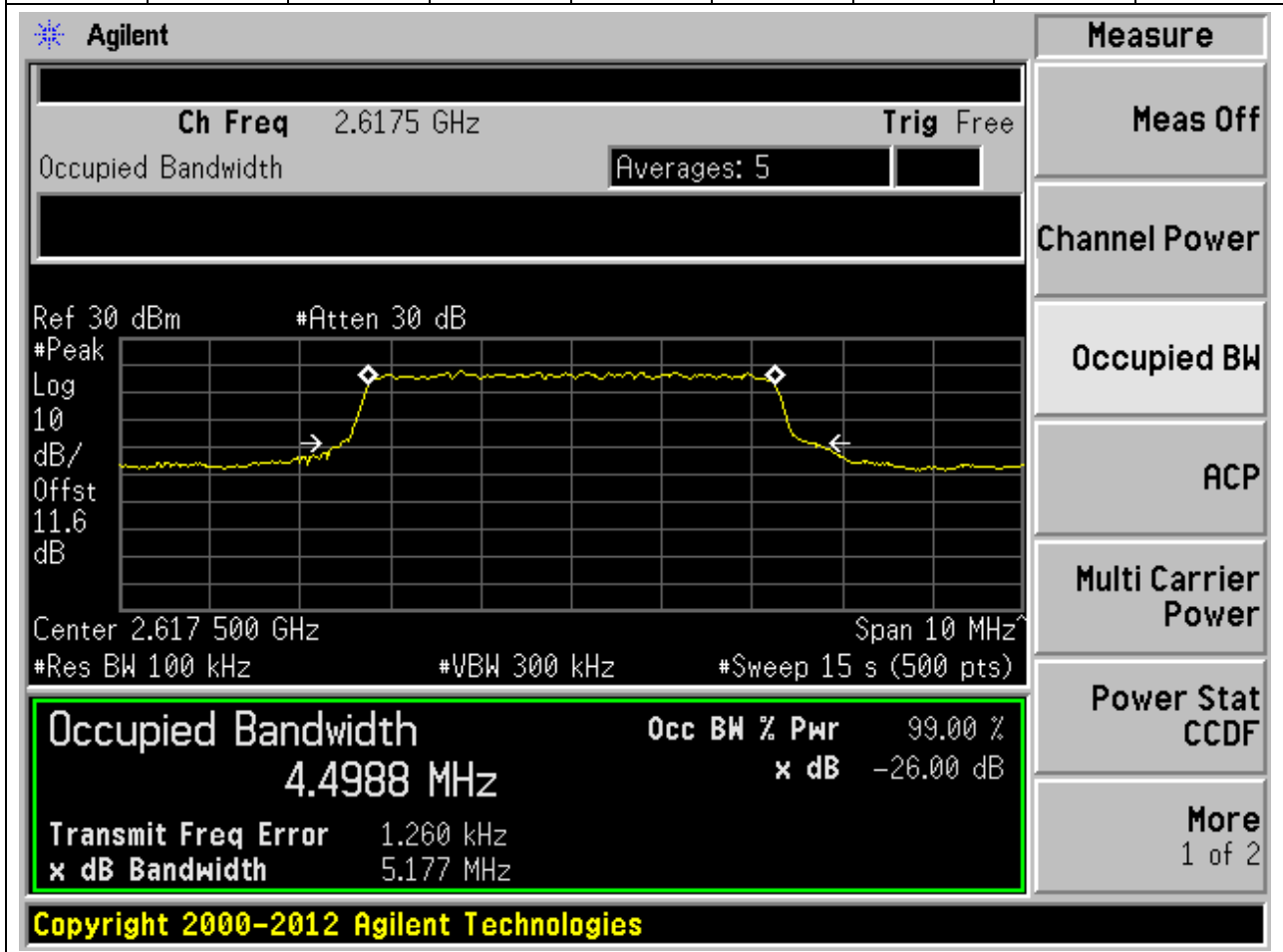
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2595	99	26	0.1	Peak	4.49	4.94	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.595 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot is set to 'Log' scale with a 'Ref 30 dBm' and '#Atten 30 dB'. The y-axis is labeled 'dB/Offst 11.7 dB'. The x-axis is labeled 'Center 2.595 000 GHz' and 'Span 10 MHz'. The plot shows a signal with a peak at approximately 2.595 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 4.4926 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. Other parameters shown include 'Transmit Freq Error 5.979 kHz' and 'x dB Bandwidth 4.938 MHz'. The bottom of the screen shows 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	x dB
4.4926 MHz	99.00 %	-26.00 dB

**6.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38225, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2617.5	99	26	0.1	Peak	4.5	5.18	5	Pass





6.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38225, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2617.5	99	26	0.1	Peak	4.5	5.09	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.6175 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include: Ref 30 dBm, #Atten 30 dB, Log 10 dB/Offst 11.6 dB, Center 2.617500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, and #Sweep 15 s (500 pts). A green box highlights the measurement results: Occupied Bandwidth 4.5041 MHz, Occ BW % Pwr 99.00%, x dB -26.00 dB, Transmit Freq Error 5.784 kHz, and x dB Bandwidth 5.087 MHz. On the right side, there is a 'Measure' menu with options: Meas Off, Channel Power, Occupied BW, ACP, Multi Carrier Power, Power Stat CCDF, and More (1 of 2). The bottom of the screen shows the copyright notice: Copyright 2000-2012 Agilent Technologies.

**6.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:37800, Bandwidth:10, Modulation:QPSK, 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
2575	99	26	0.2	Peak	8.98	9.8	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.575 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.9 dB', 'Center 2.575 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 15 s (500 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 8.9843 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 18.896 kHz', and 'x dB Bandwidth 9.804 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**6.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:37800, Bandwidth:10, Modulation:16QAM, 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
2575	99	26	0.2	Peak	8.94	9.78	10	Pass

**Agilent**

Ch Freq 2.575 GHz Trig Free

Occupied Bandwidth Averages: 5

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.9 dB

Center 2.575 00 GHz Span 20 MHz

#Res BW 200 kHz #VBW 620 kHz #Sweep 15 s (500 pts)

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

**8.9419 MHz** x dB -26.00 dB

Transmit Freq Error -1.544 kHz

x dB Bandwidth 9.778 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**6.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38000, Bandwidth:10, Modulation:QPSK, 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
2595	99	26	0.2	Peak	8.98	10.11	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.595 GHz' and 'Trig Free'. Below this, the 'Occupied Bandwidth' measurement is shown with 'Averages: 5'. The main display is a spectrum plot with a yellow trace. The plot shows a signal with a flat top and sloping sides. Two white diamonds mark the -26 dB points on the trace, with arrows pointing to them. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.7 dB', 'Center 2.595 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 15 s (500 pts)'. A summary box at the bottom left highlights the following data:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>8.9772 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		21.815 kHz
<b>x dB Bandwidth</b>		10.111 MHz

On the right side of the interface, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom of the screen, the text 'Copyright 2000-2012 Agilent Technologies' is displayed.

**6.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38000, Bandwidth:10, Modulation:16QAM, 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
2595	99	26	0.2	Peak	9	10.27	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.595 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.7 dB', 'Center 2.595 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 15 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 9.0012 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error -1.895 kHz' and 'x dB Bandwidth 10.268 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**6.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38200, Bandwidth:10, Modulation:QPSK, 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
2615	99	26	0.2	Peak	9.05	10.21	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.615 GHz, and the span is 20 MHz. The occupied bandwidth is measured as 9.0543 MHz, which is 99.00% of the 10.208 MHz bandwidth. The XdB down is -26.00 dB. The transmit frequency error is 21.434 kHz. The interface includes various measurement controls and a 'Measure' menu on the right.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
9.0543 MHz	x dB	-26.00 dB
Transmit Freq Error	21.434 kHz	
x dB Bandwidth	10.208 MHz	

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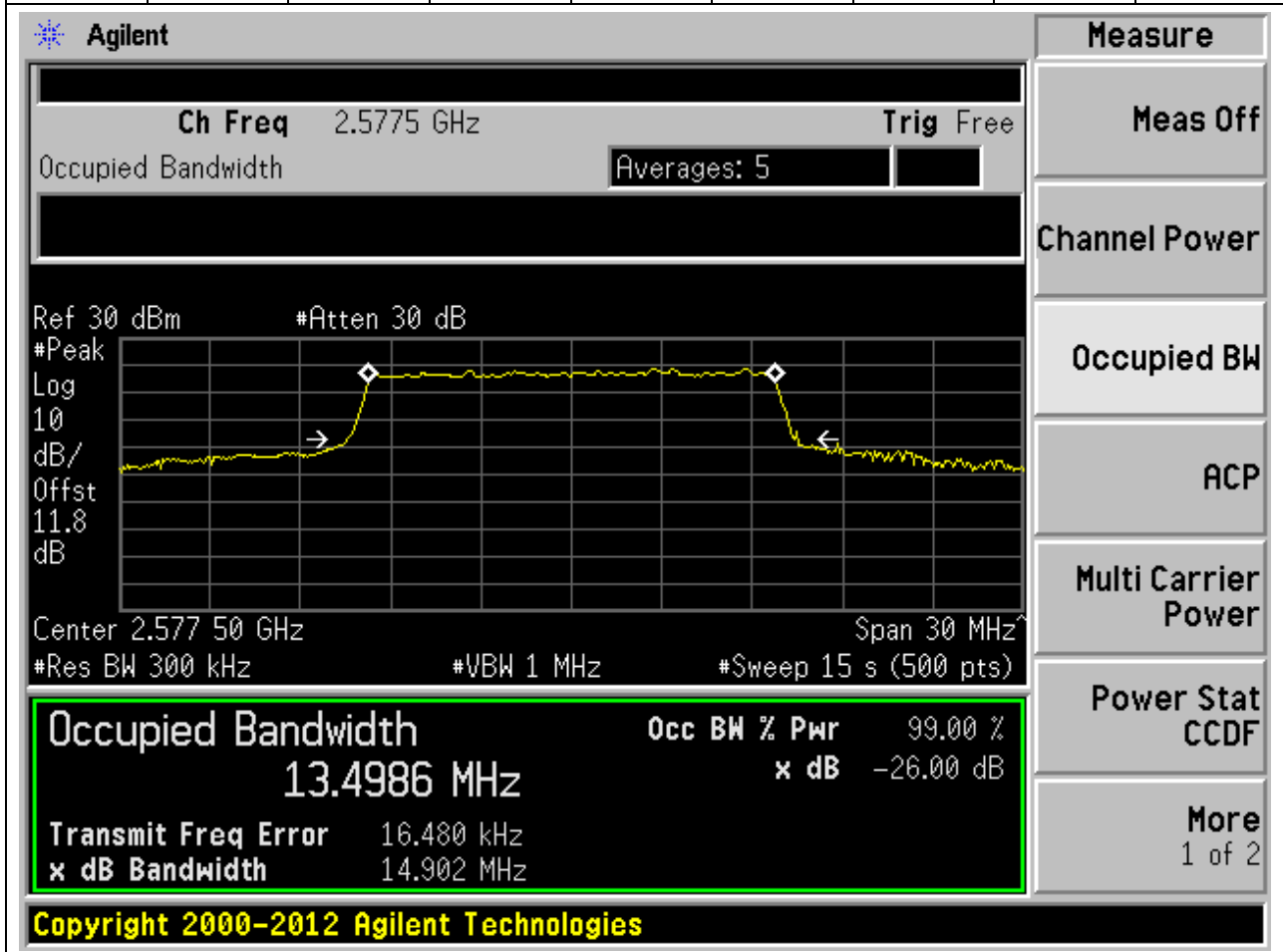
**6.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38200, Bandwidth:10, Modulation:16QAM, RB Number:50, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2615	99	26	0.2	Peak	8.98	9.96	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.615 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.6 dB', 'Center 2.615 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 15 s (500 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 8.9815 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 4.535 kHz', and 'x dB Bandwidth 9.961 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**6.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:37825, 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
2577.5	99	26	0.3	Peak	13.5	14.9	15	Pass





**6.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:37825, 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
2577.5	99	26	0.3	Peak	13.47	14.78	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.5775 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot is set to 'Log' scale with 'dB/Offst 11.8 dB'. The center frequency is 2.5775 GHz and the span is 30 MHz. The resolution bandwidth (RBW) is 300 kHz and the video bandwidth (VBW) is 1 MHz. The sweep time is 15 seconds (500 points). The plot shows a signal with a peak at approximately 2.5775 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 13.4670 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is 12.826 kHz and the 'x dB Bandwidth' is 14.780 MHz. The 'Copyright 2000-2012 Agilent Technologies' is displayed at the bottom.

Occupied Bandwidth	Occ BW % Pwr	x dB
13.4670 MHz	99.00 %	-26.00 dB

**6.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38000, 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
2595	99	26	0.3	Peak	13.48	14.99	15	Pass

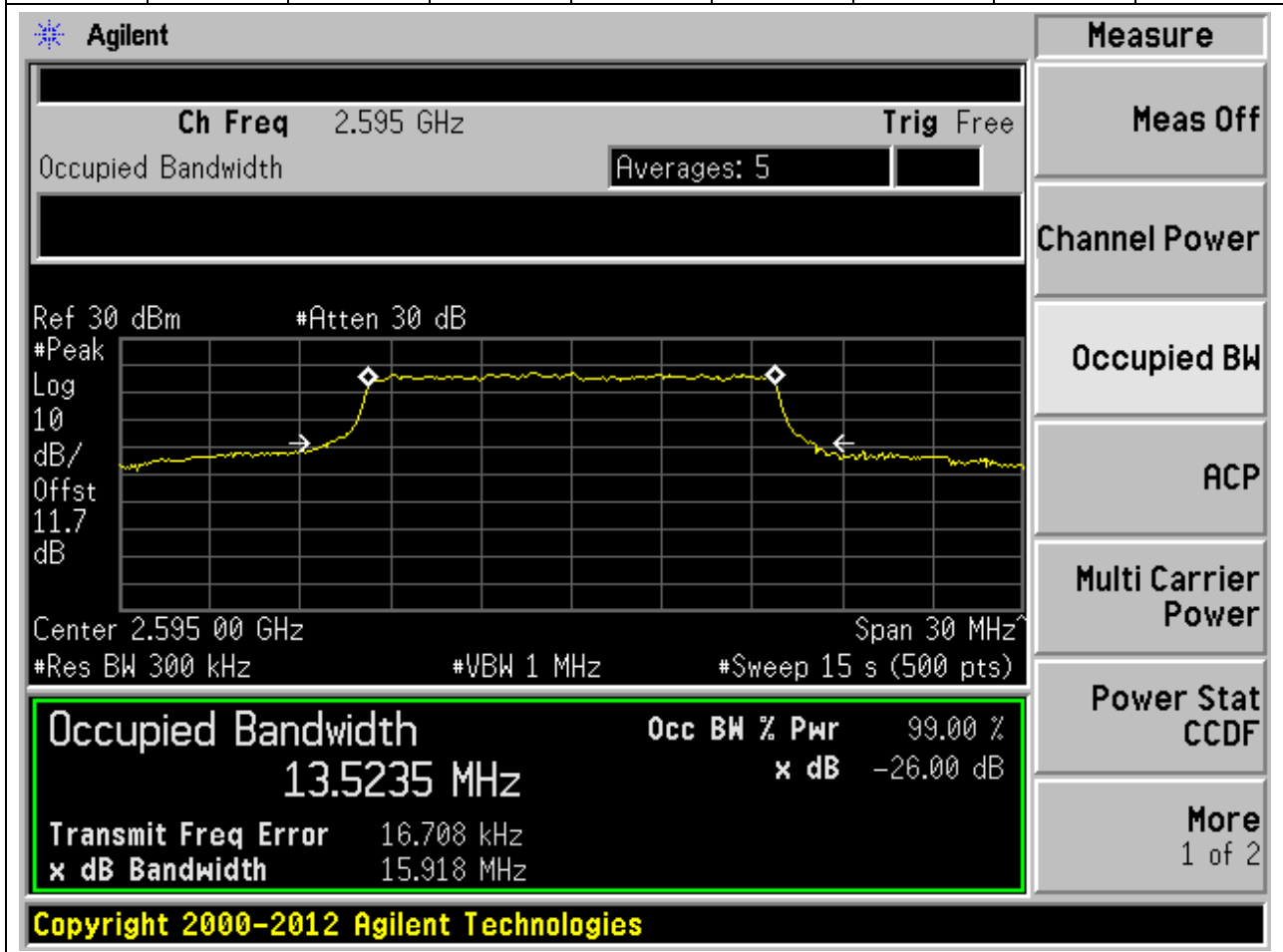
The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.595 GHz, and the span is 30 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 13.4776 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -10.765 kHz, and the XdB bandwidth is 14.990 MHz. The interface includes various measurement buttons on the right side, such as 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
13.4776 MHz	x dB	-26.00 dB
Transmit Freq Error	-10.765 kHz	
x dB Bandwidth	14.990 MHz	

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6.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38000, 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
2595	99	26	0.3	Peak	13.52	15.92	15	Pass



**6.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38175, 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
2612.5	99	26	0.3	Peak	13.46	14.66	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.6125 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.6 dB', 'Center 2.612 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 15 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4638 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error 8.977 kHz' and 'x dB Bandwidth 14.655 MHz'. On the right side, there is a 'Measure' menu with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**6.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38175, 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
2612.5	99	26	0.3	Peak	13.5	15.07	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.6125 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.6 dB', 'Center 2.612 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 15 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4951 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown are 'Transmit Freq Error 5.826 kHz' and 'x dB Bandwidth 15.069 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**6.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:37850, 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
2580	99	26	0.39	Peak	17.97	19.51	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.58 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log', '10 dB/Offst', '11.8 dB', 'Center 2.580 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 15 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9703 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -3.220 kHz', and 'x dB Bandwidth 19.511 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**6.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:37850, Bandwidth:20, Modulation:16QAM, 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
2580	99	26	0.39	Peak	17.95	19.69	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.58 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.8 dB', 'Center 2.580 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 15 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9461 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error -9.772 kHz' and 'x dB Bandwidth 19.689 MHz'. On the right side, there is a 'Measure' menu with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**6.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38000, 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
2595	99	26	0.39	Peak	18	19.38	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.595 GHz, and the span is 40 MHz. The occupied bandwidth is measured as 18.0001 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The detector is set to Peak. The upper limit is 20 MHz. The verdict is Pass.

Occupied Bandwidth	Occ BW % Pwr	X dB
18.0001 MHz	99.00 %	-26.00 dB

Transmit Freq Error: 41.330 kHz  
 x dB Bandwidth: 19.376 MHz

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**6.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38000, Bandwidth:20, Modulation:16QAM, 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
2595	99	26	0.39	Peak	17.98	22.43	20	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 2.595 GHz Trig Free

Occupied Bandwidth Averages: 5

Ref 30 dBm #Atten 30 dB

Center 2.595 00 GHz Span 40 MHz

#Res BW 390 kHz #VBW 1.2 MHz #Sweep 15 s (512 pts)

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

**17.9785 MHz** x dB -26.00 dB

Transmit Freq Error 15.174 kHz

x dB Bandwidth 22.426 MHz

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**6.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38150, 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
2610	99	26	0.39	Peak	17.94	19.42	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.61 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.6 dB', 'Center 2.610 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 15 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9399 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error 9.942 kHz' and 'x dB Bandwidth 19.422 MHz'. On the right side, there is a 'Measure' menu with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. The bottom of the screen displays the copyright notice 'Copyright 2000-2012 Agilent Technologies'.

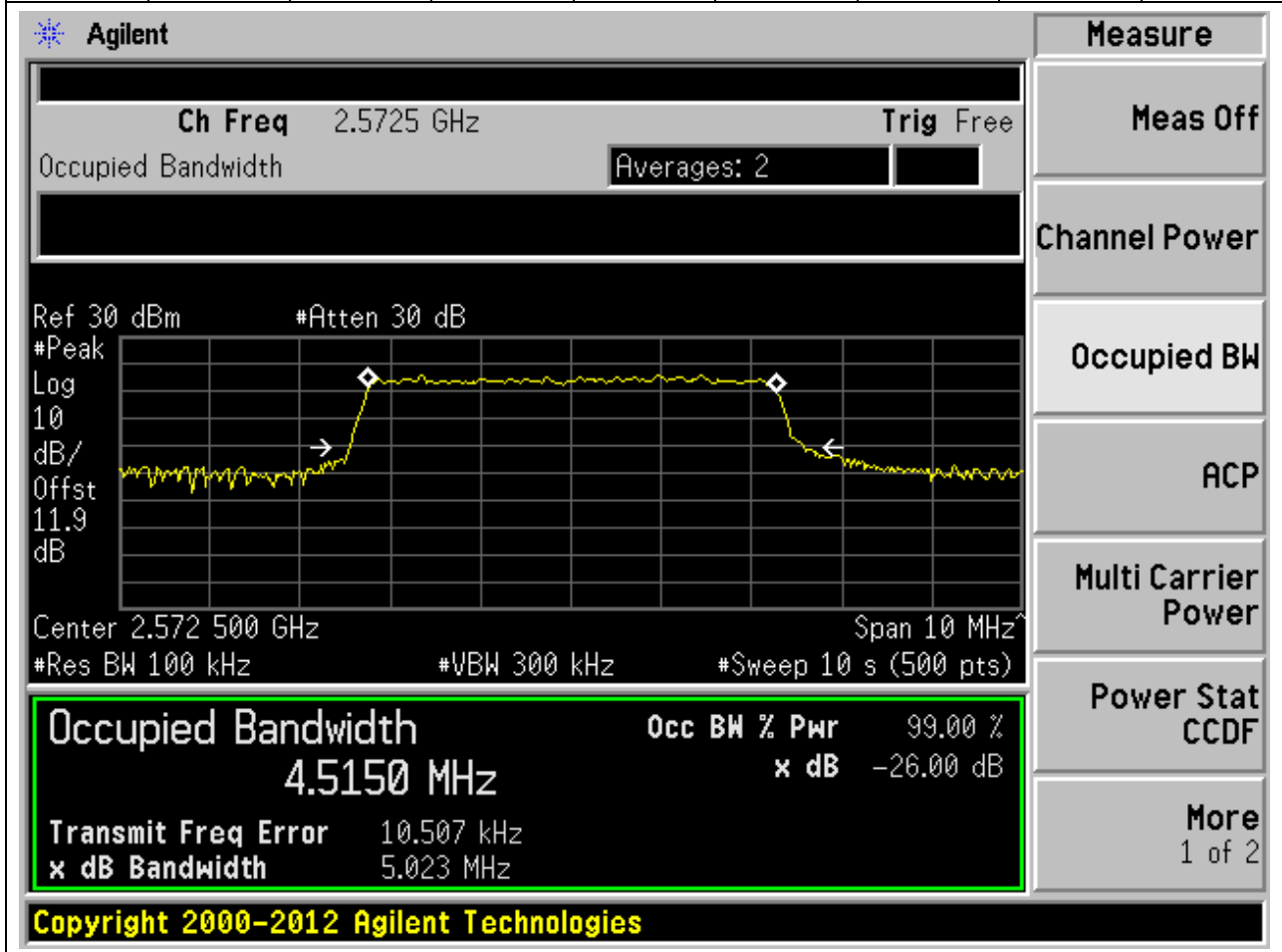
**6.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:38150, Bandwidth:20, Modulation:16QAM, RB Number:100, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2610	99	26	0.39	Peak	17.93	19.61	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.61 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.6 dB', 'Center 2.610 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 15 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9292 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error -2.931 kHz' and 'x dB Bandwidth 19.606 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**6.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:37775, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2572.5	99	26	0.1	Peak	4.52	5.02	5	Pass



**6.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:38000, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2595	99	26	0.1	Peak	4.51	5.05	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.595 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot is set to 'Log' scale with 'dB/Offst 11.7 dB'. The center frequency is 2.595 000 GHz and the span is 10 MHz. The resolution bandwidth (Res BW) is 100 kHz, the video bandwidth (VBW) is 300 kHz, and the sweep time is 10 s (500 pts). A green box highlights the 'Occupied Bandwidth' measurement results: 4.5113 MHz, with 99.00% power and -26.00 dB attenuation. Other parameters shown include 'Transmit Freq Error 482.528 Hz' and 'x dB Bandwidth 5.046 MHz'. The interface also includes a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. The bottom of the screen displays the copyright notice 'Copyright 2000-2012 Agilent Technologies'.

**6.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:38225, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2617.5	99	26	0.1	Peak	4.49	4.94	5	Pass

Agilent

Measure

Ch Freq 2.6175 GHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
11.6

dB

Center 2.617 500 GHz
Span 10 MHz

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

**Occupied Bandwidth**

**4.4873 MHz**

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error -528.394 Hz

x dB Bandwidth 4.939 MHz

Power Stat
CCDF

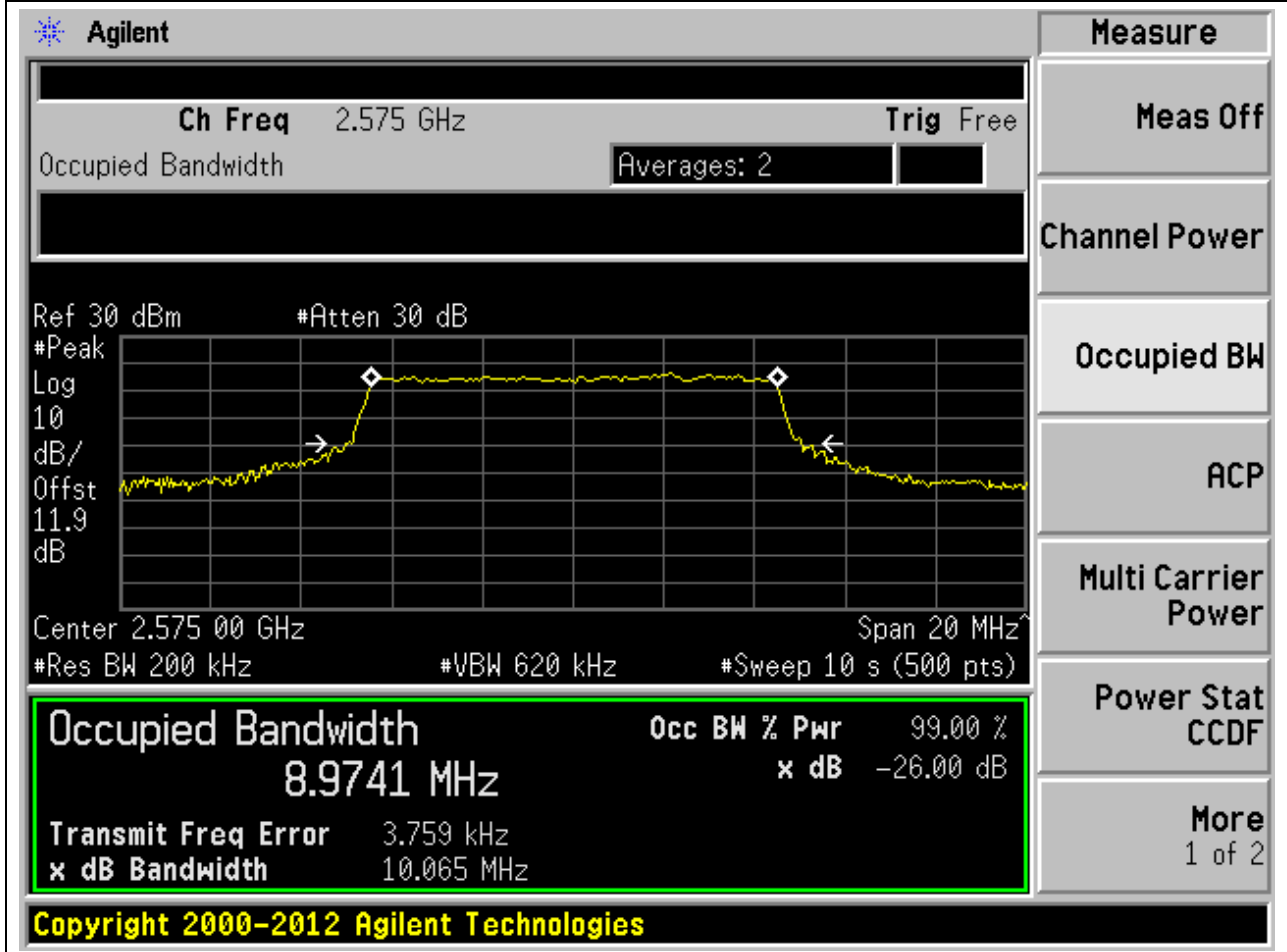
More

1 of 2

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6.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:37800, Bandwidth:10, Modulation:64QAM, 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
2575	99	26	0.2	Peak	8.97	10.06	10	Pass



6.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:38000, Bandwidth:10, Modulation:64QAM, 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
2595	99	26	0.2	Peak	8.96	9.74	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.595 GHz and the span is 20 MHz. The occupied bandwidth is highlighted in a green box with the following data:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>8.9571 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		1.032 kHz
<b>x dB Bandwidth</b>		9.735 MHz

Additional parameters shown in the interface include: Ch Freq 2.595 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log 10, dB/Offst 11.7 dB, Center 2.595 00 GHz, Span 20 MHz, #Res BW 200 kHz, #VBW 620 kHz, #Sweep 10 s (500 pts).

On the right side, there is a 'Measure' menu with options: Meas Off, Channel Power, Occupied BW, ACP, Multi Carrier Power, Power Stat CCDF, and More (1 of 2).

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6.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:38200, Bandwidth:10, Modulation:64QAM, 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
2615	99	26	0.2	Peak	8.98	10.13	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.615 GHz, and the span is 20 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 8.9771 MHz. The power level is 99.00% and the XdB bandwidth is -26.00 dB. The transmit frequency error is 4.706 kHz and the XdB bandwidth is 10.131 MHz. The interface includes various measurement buttons on the right side, such as 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen displays the copyright information: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
8.9771 MHz	x dB	-26.00 dB
Transmit Freq Error	4.706 kHz	
x dB Bandwidth	10.131 MHz	

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6.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:37825, 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
2577.5	99	26	0.3	Peak	13.42	15	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.5775 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.8 dB', 'Center 2.577 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 10 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4204 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error 16.677 kHz' and 'x dB Bandwidth 15.001 MHz'. On the right side, there is a 'Measure' menu with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

6.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:38000, 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
2595	99	26	0.3	Peak	13.48	14.93	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.595 GHz, and the span is 30 MHz. The occupied bandwidth is highlighted in a green box, showing 13.4785 MHz. The power level is 99.00% and the XdB bandwidth is -26.00 dB. The interface includes various measurement controls and a 'Measure' menu on the right side.

Occupied Bandwidth		Occ BW % Pwr	99.00 %
13.4785 MHz		x dB	-26.00 dB
Transmit Freq Error	20.739 kHz		
x dB Bandwidth	14.935 MHz		

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6.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:38175, 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
2612.5	99	26	0.3	Peak	13.46	14.95	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.6125 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.6 dB', 'Center 2.612 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 10 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4612 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error -7.330 kHz' and 'x dB Bandwidth 14.947 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

6.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:37850, Bandwidth:20, Modulation:64QAM, RB Number:100, RB Position:0)

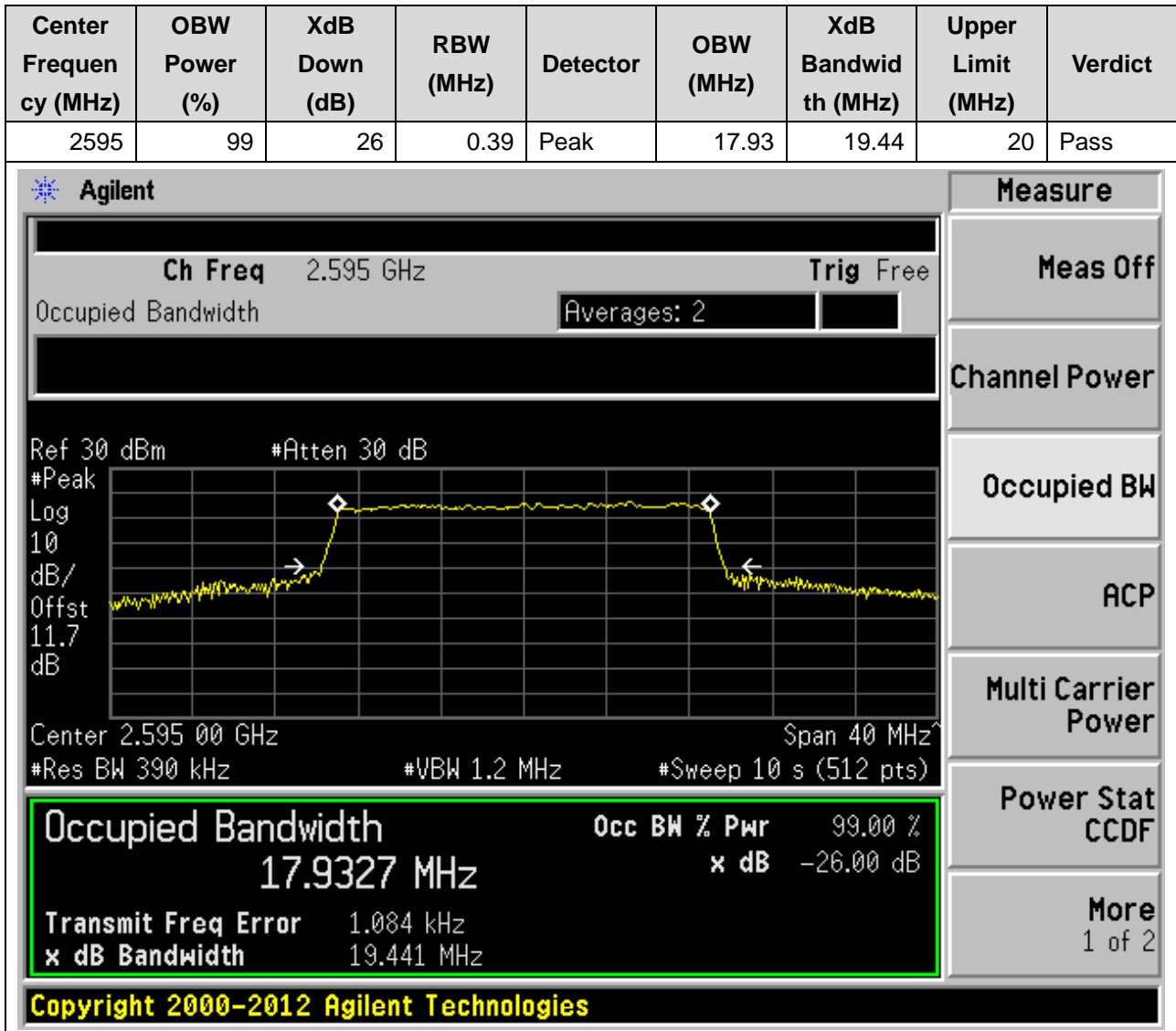
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2580	99	26	0.39	Peak	17.85	19.81	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.58 GHz, and the span is 40 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 17.8532 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The interface also shows various measurement parameters and a 'Measure' menu on the right side.

Occupied Bandwidth		Occ BW % Pwr	99.00 %
17.8532 MHz		x dB	-26.00 dB
Transmit Freq Error	24.535 kHz		
x dB Bandwidth	19.806 MHz		

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6.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:38000, Bandwidth:20, Modulation:64QAM, RB Number:100, RB Position:0)



6.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:38150, 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
2610	99	26	0.39	Peak	17.94	20.65	20	Pass

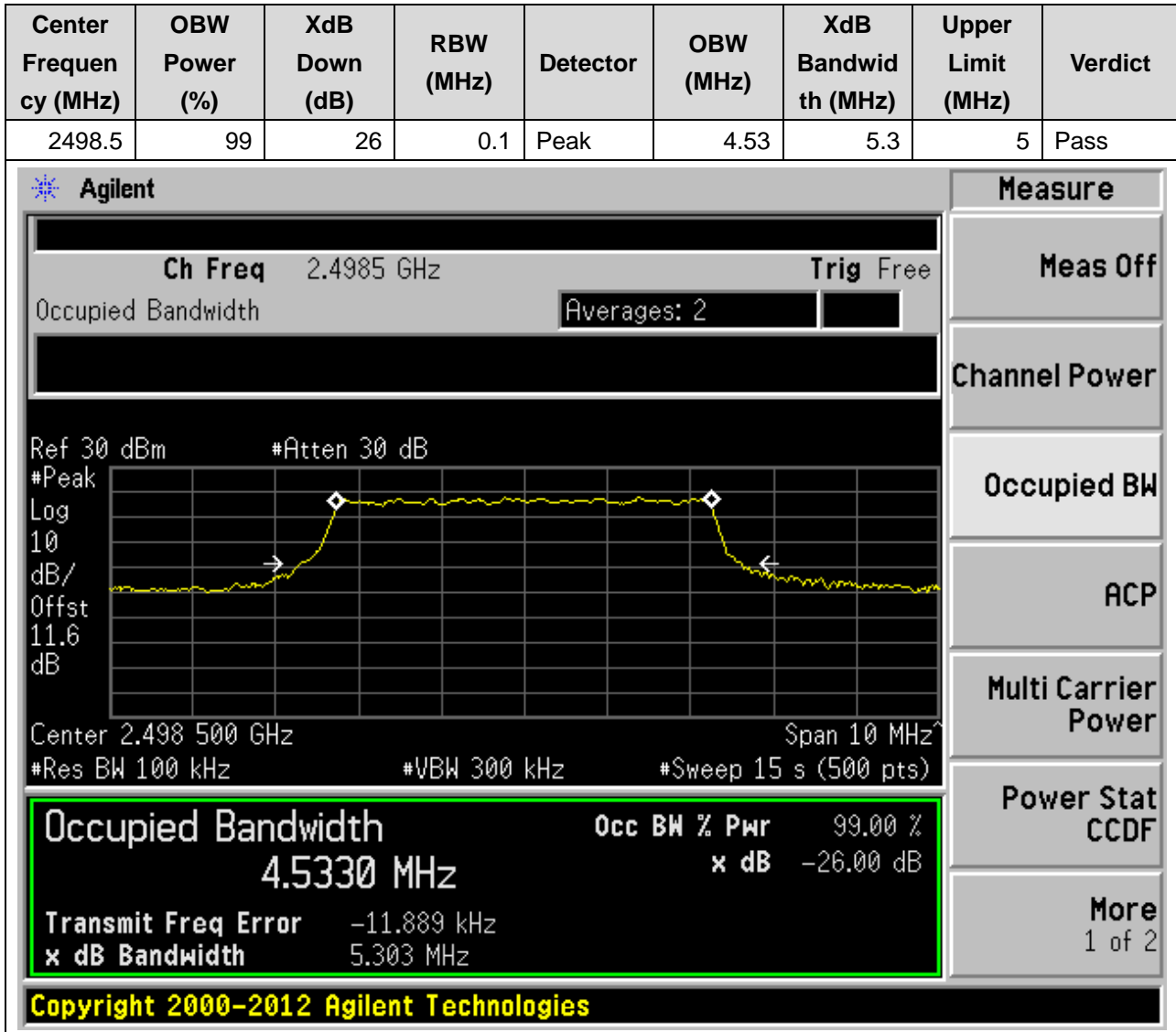
The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.61 GHz, and the span is 40 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 17.9361 MHz. The power level is 99.00% and the XdB bandwidth is -26.00 dB. The interface also shows various measurement parameters such as Res BW (390 kHz), VBW (1.2 MHz), and Sweep (10 s).

Occupied Bandwidth	Occ BW % Pwr	x dB
17.9361 MHz	99.00 %	-26.00 dB

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## 7. LTE\_Band41 full

### 7.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:39675, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)





**7.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:39675, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2498.5	99	26	0.1	Peak	4.49	4.95	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.4985 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.6 dB', 'Center 2.498 500 GHz', 'Span 10 MHz', '#Res BW 100 kHz', '#VBW 300 kHz', and '#Sweep 15 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 4.4894 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 7.265 kHz' and 'x dB Bandwidth 4.948 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**7.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:40620, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593	99	26	0.1	Peak	4.5	5.2	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.593 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.7 dB', 'Center 2.593 000 GHz', 'Span 10 MHz', '#Res BW 100 kHz', '#VBW 300 kHz', and '#Sweep 15 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 4.4963 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error 3.107 kHz' and 'x dB Bandwidth 5.197 MHz'. On the right side, there is a 'Measure' menu with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**7.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:40620, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593	99	26	0.1	Peak	4.5	5.05	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a signal spectrum with a yellow trace. The center frequency is 2.593 GHz, and the span is 10 MHz. The occupied bandwidth is measured as 4.5025 MHz, which is 99.00% of the total bandwidth. The XdB down is -26.00 dB. The transmit frequency error is 6.243 kHz, and the XdB bandwidth is 5.053 MHz. The interface includes various measurement controls and a 'Measure' menu on the right.

Occupied Bandwidth		Occ BW % Pwr
4.5025 MHz	99.00 %	
Transmit Freq Error		6.243 kHz
x dB Bandwidth		5.053 MHz
		x dB -26.00 dB

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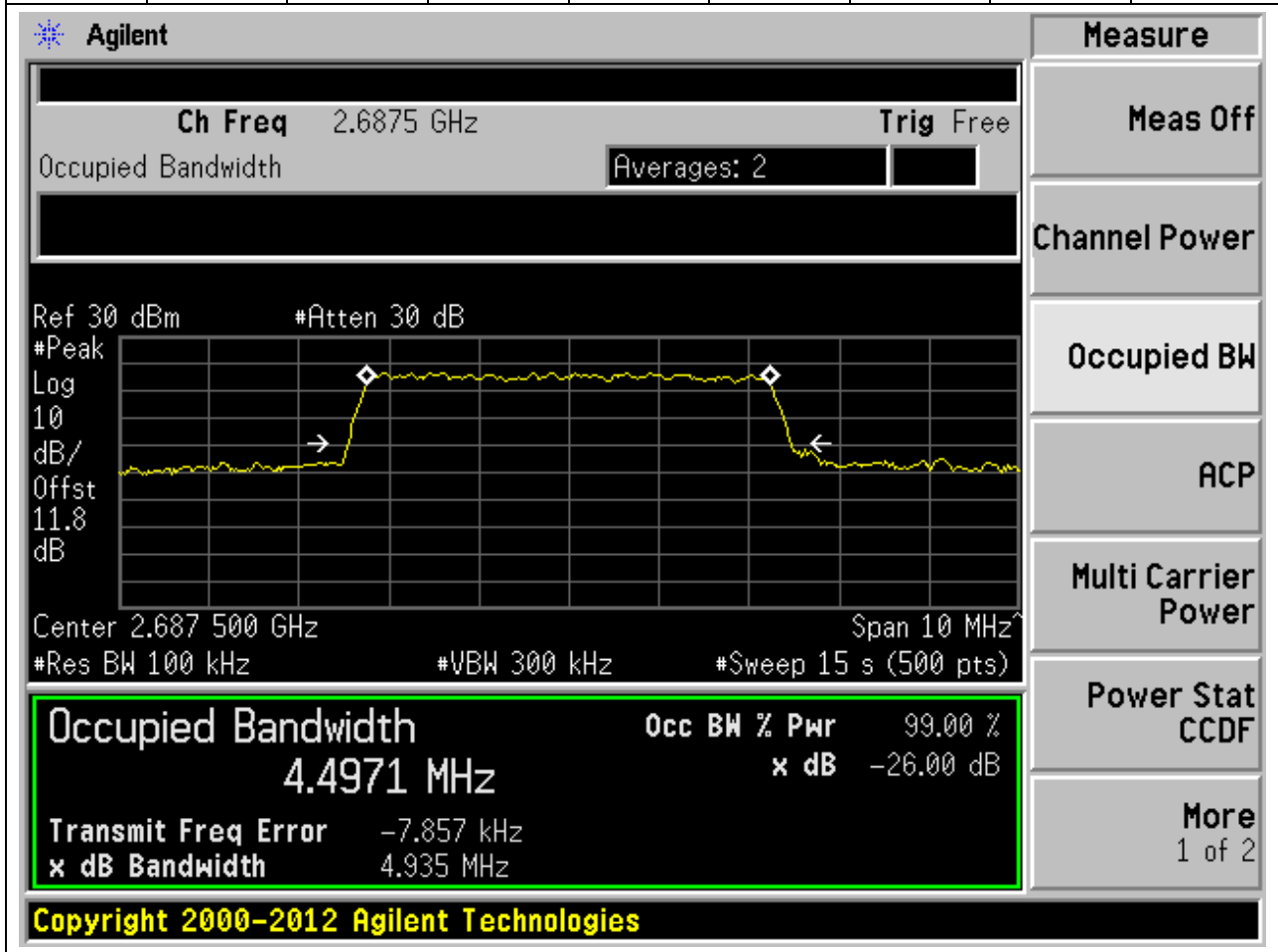
**7.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:41565, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2687.5	99	26	0.1	Peak	4.51	4.96	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.6875 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.8 dB', 'Center 2.687 500 GHz', 'Span 10 MHz', '#Res BW 100 kHz', '#VBW 300 kHz', and '#Sweep 15 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 4.5122 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 1.860 kHz' and 'x dB Bandwidth 4.962 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**7.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:41565, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2687.5	99	26	0.1	Peak	4.5	4.93	5	Pass



**7.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:39700, Bandwidth:10, Modulation:QPSK, 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
2501	99	26	0.2	Peak	8.97	10.3	10	Pass

**Agilent**

Ch Freq 2.501 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.6 dB

Center 2.501 00 GHz Span 20 MHz

#Res BW 200 kHz #VBW 620 kHz #Sweep 15 s (500 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
8.9661 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>	16.402 kHz	
<b>x dB Bandwidth</b>	10.302 MHz	

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**7.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:39700, Bandwidth:10, Modulation:16QAM, 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
2501	99	26	0.2	Peak	8.94	9.77	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.501 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.6 dB', 'Center 2.501 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 15 s (500 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 8.9411 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -479.284 Hz', and 'x dB Bandwidth 9.768 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**7.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:40620, Bandwidth:10, Modulation:QPSK, 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
2593	99	26	0.2	Peak	8.97	10.01	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.593 GHz' and 'Trig Free'. Below this, the 'Occupied Bandwidth' measurement is active, with 'Averages: 2'. The main display area shows a spectrum plot with a yellow trace. The plot is set to 'Log' scale, 'dB/Offst 11.7 dB', and 'Ref 30 dBm'. The plot shows a signal with a peak at approximately 2.593 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 8.9736 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. Other parameters shown include 'Transmit Freq Error 21.576 kHz' and 'x dB Bandwidth 10.013 MHz'. The bottom of the screen displays 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	x dB
8.9736 MHz	99.00 %	-26.00 dB



**7.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:40620, Bandwidth:10, Modulation:16QAM, 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
2593	99	26	0.2	Peak	9	10.32	10	Pass

Agilent
Measure

Ch Freq 2.593 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.7 dB

Center 2.593 00 GHz Span 20 MHz

#Res BW 200 kHz #VBW 620 kHz #Sweep 15 s (500 pts)

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

Occupied Bandwidth

8.9953 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error -2.504 kHz

x dB Bandwidth 10.318 MHz

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**7.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:41540, Bandwidth:10, Modulation:QPSK, 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
2685	99	26	0.2	Peak	9.05	10.15	10	Pass

**Agilent**
**Measure**

Ch Freq 2.685 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 2.685 00 GHz Span 20 MHz

#Res BW 200 kHz #VBW 620 kHz #Sweep 15 s (500 pts)

**Meas Off**

**Channel Power**

**Occupied BW**

**ACP**

**Multi Carrier Power**

**Power Stat CCDF**

**More**  
1 of 2

**Occupied Bandwidth**

**9.0528 MHz**

Transmit Freq Error 15.358 kHz

x dB Bandwidth 10.154 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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7.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:41540, Bandwidth:10, Modulation:16QAM, 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
2685	99	26	0.2	Peak	8.99	10.03	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.685 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include: Ref 30 dBm, #Atten 30 dB, Log 10 dB/Offst 11.8 dB, Center 2.685 00 GHz, Span 20 MHz, #Res BW 200 kHz, #VBW 620 kHz, and #Sweep 15 s (500 pts). A green box highlights the measurement results: Occupied Bandwidth 8.9880 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB, Transmit Freq Error 774.381 Hz, and x dB Bandwidth 10.033 MHz. On the right side, there is a 'Measure' menu with options: Meas Off, Channel Power, Occupied BW, ACP, Multi Carrier Power, Power Stat CCDF, and More (1 of 2). The bottom of the screen shows the copyright notice: Copyright 2000-2012 Agilent Technologies.

**7.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:39725, 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
2503.5	99	26	0.3	Peak	13.47	14.93	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The plot is set to a center frequency of 2.5035 GHz and a span of 30 MHz. The vertical axis is labeled 'dB/Offst' with a value of 11.6 dB. The horizontal axis is labeled 'Span 30 MHz'. The plot shows a signal with a peak at approximately 2.5035 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 13.4687 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is 25.869 kHz and the 'x dB Bandwidth' is 14.931 MHz. The 'Copyright 2000-2012 Agilent Technologies' is displayed at the bottom.

Occupied Bandwidth	Occ BW % Pwr	x dB
13.4687 MHz	99.00 %	-26.00 dB

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**7.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:39725, 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
2503.5	99	26	0.3	Peak	13.47	14.76	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.5035 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot is set to 'Log' scale with 'dB/Offst 11.6 dB'. The center frequency is 2.5035 GHz and the span is 30 MHz. The resolution bandwidth (RBW) is 300 kHz and the video bandwidth (VBW) is 1 MHz. The sweep time is 15 s (500 pts). The plot shows a signal with a peak at approximately 2.5035 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 13.4689 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is 17.566 kHz and the 'x dB Bandwidth' is 14.762 MHz. The 'Copyright 2000-2012 Agilent Technologies' is displayed at the bottom.

Occupied Bandwidth	Occ BW % Pwr	x dB
13.4689 MHz	99.00 %	-26.00 dB

**7.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:40620, 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
2593	99	26	0.3	Peak	13.47	14.99	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.593 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.7 dB', 'Center 2.593 00 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 15 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4661 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown are 'Transmit Freq Error -5.469 kHz' and 'x dB Bandwidth 14.991 MHz'. On the right side, there is a 'Measure' menu with options: 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

7.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:40620, 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
2593	99	26	0.3	Peak	13.51	16.01	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.593 GHz, and the span is 30 MHz. The occupied bandwidth is measured as 13.5129 MHz. The power is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is 17.877 kHz, and the XdB bandwidth is 16.014 MHz. The interface includes a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
13.5129 MHz	x dB	-26.00 dB
Transmit Freq Error	17.877 kHz	
x dB Bandwidth	16.014 MHz	

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**7.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:41515, 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
2682.5	99	26	0.3	Peak	13.47	15.09	15	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
 Occupied BW  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 2.6825 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 2.682 50 GHz Span 30 MHz

#Res BW 300 kHz #VBW 1 MHz #Sweep 15 s (500 pts)

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

**13.4685 MHz** x dB -26.00 dB

Transmit Freq Error 1.410 kHz

x dB Bandwidth 15.092 MHz

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7.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:41515, 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
2682.5	99	26	0.3	Peak	13.48	14.95	15	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 2.6825 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 2.682 50 GHz Span 30 MHz

#Res BW 300 kHz #VBW 1 MHz #Sweep 15 s (500 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
13.4804 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-5.589 kHz	
<b>x dB Bandwidth</b>	14.946 MHz	

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**7.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:39750, 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
2506	99	26	0.39	Peak	17.93	19.58	20	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
 Occupied BW  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 2.506 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 2.506 00 GHz Span 40 MHz

#Res BW 390 kHz #VBW 1.2 MHz #Sweep 15 s (512 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
17.9324 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	47.557 kHz	
<b>x dB Bandwidth</b>	19.585 MHz	

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**7.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:39750, Bandwidth:20, Modulation:16QAM, 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
2506	99	26	0.39	Peak	17.93	19.72	20	Pass

Agilent
Measure

Ch Freq 2.506 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
11.5

dB

Center 2.506 00 GHz
Span 40 MHz

#Res BW 390 kHz
#VBW 1.2 MHz
#Sweep 15 s (512 pts)

Occupied Bandwidth
Occ BW % Pwr 99.00 %

17.9288 MHz
x dB -26.00 dB

Transmit Freq Error 1.834 kHz

x dB Bandwidth 19.719 MHz

Power Stat
CCDF

More
1 of 2

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**7.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:40620, 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
2593	99	26	0.39	Peak	18	19.68	20	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 2.593 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 2.593 00 GHz Span 40 MHz

#Res BW 390 kHz #VBW 1.2 MHz #Sweep 15 s (512 pts)

<b>Occupied Bandwidth</b>	Occ BW % Pwr	99.00 %
17.9992 MHz	x dB	-26.00 dB
Transmit Freq Error	35.751 kHz	
x dB Bandwidth	19.680 MHz	

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**7.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:40620, Bandwidth:20, Modulation:16QAM, 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
2593	99	26	0.39	Peak	17.97	22.39	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.593 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.7 dB', 'Center 2.593 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 15 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9698 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error 10.974 kHz' and 'x dB Bandwidth 22.387 MHz'. On the right side, there is a 'Measure' menu with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.

**7.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:41490, 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
2680	99	26	0.39	Peak	17.94	19.49	20	Pass

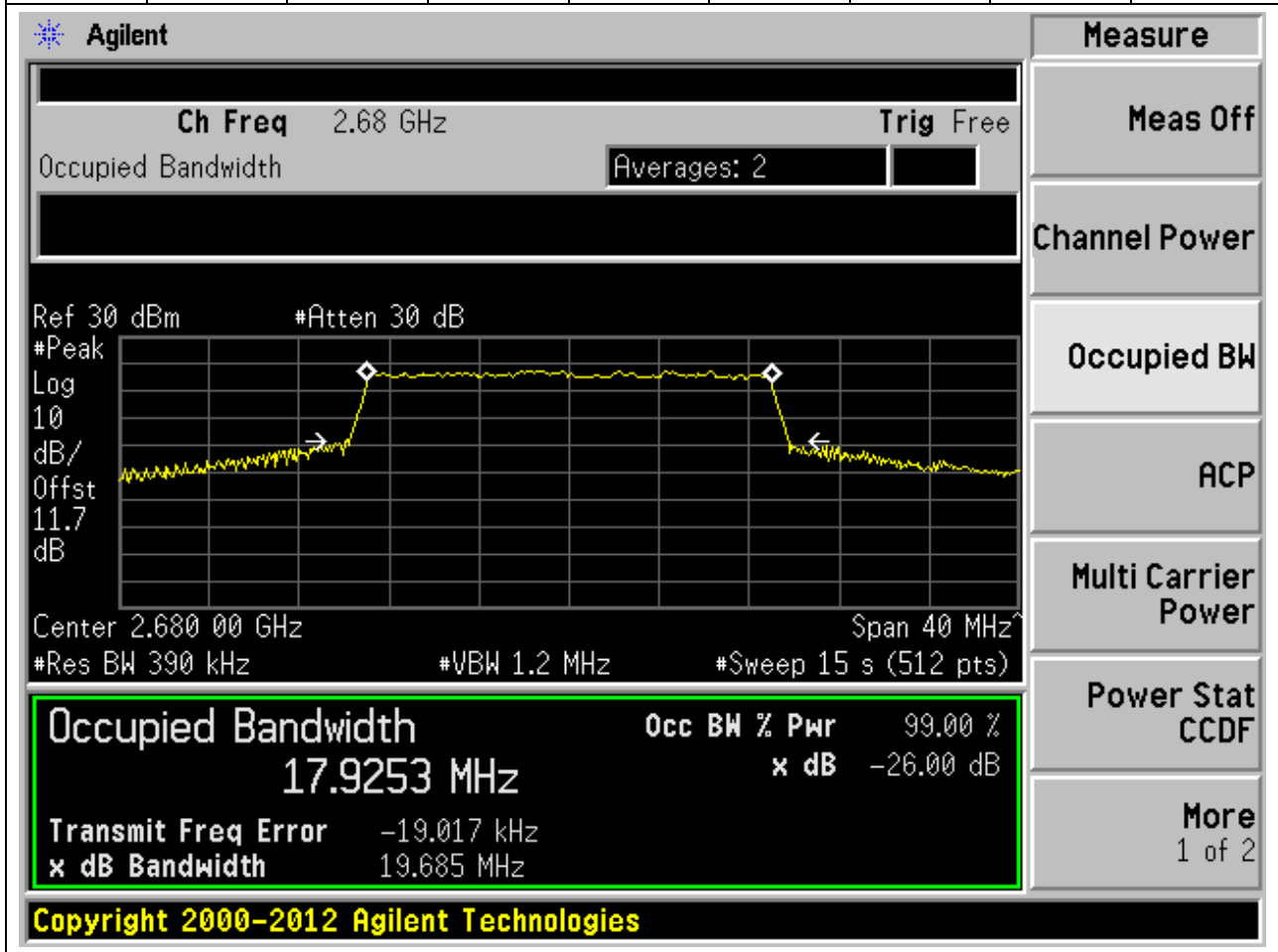
The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.68 GHz. The occupied bandwidth is measured as 17.9387 MHz, which is 99.00% of the 18 MHz channel bandwidth. The XdB down is -26.00 dB. The transmit frequency error is -2.032 kHz, and the x dB bandwidth is 19.486 MHz. The interface includes various measurement controls and a 'Measure' menu on the right.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
17.9387 MHz	x dB	-26.00 dB
Transmit Freq Error	-2.032 kHz	
x dB Bandwidth	19.486 MHz	

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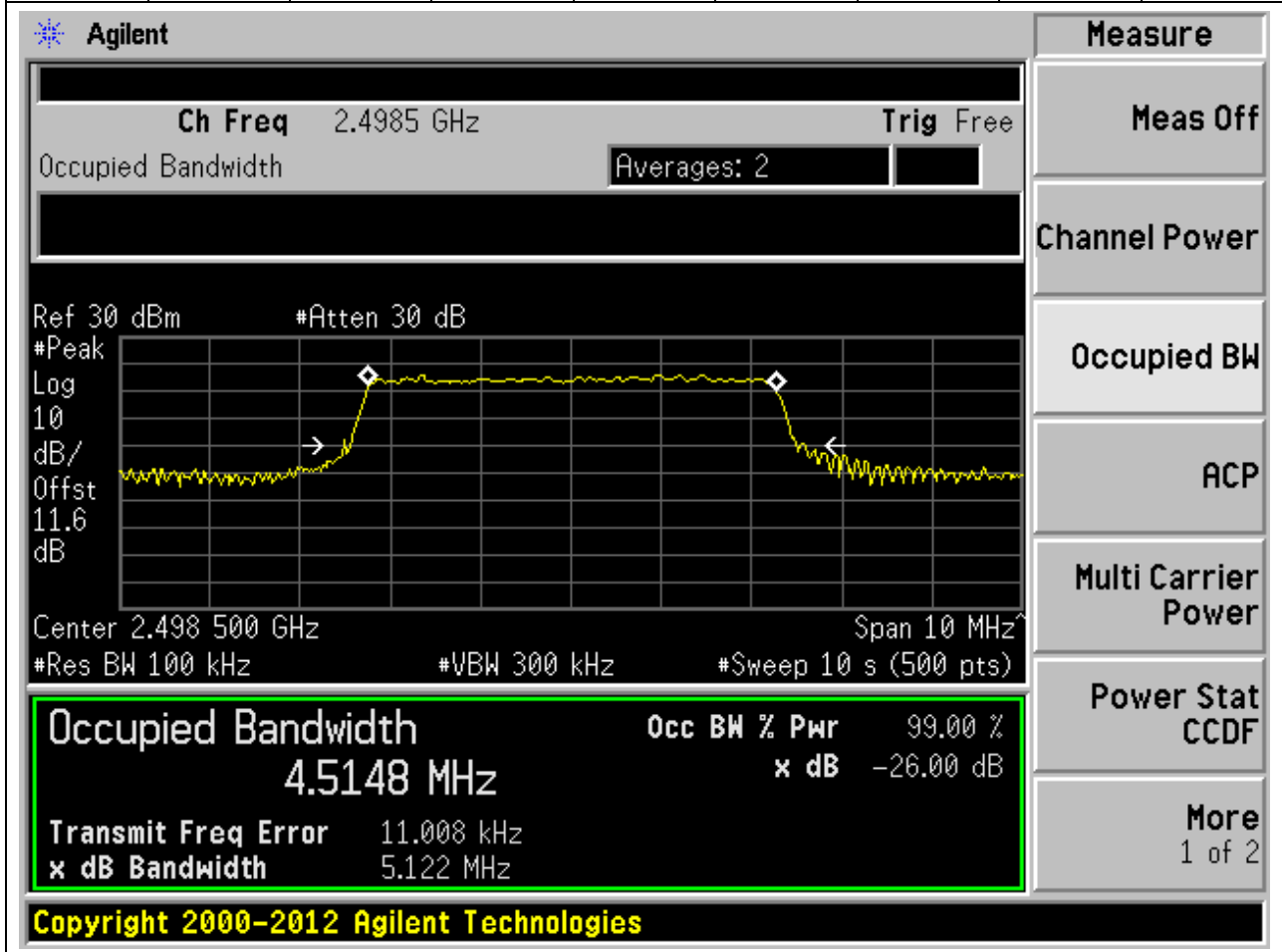
**7.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:41490, Bandwidth:20, Modulation:16QAM, RB Number:100, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2680	99	26	0.39	Peak	17.93	19.69	20	Pass



**7.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:39675, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2498.5	99	26	0.1	Peak	4.51	5.12	5	Pass





7.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:40620, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593	99	26	0.1	Peak	4.51	5.04	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.593 GHz, and the span is 10 MHz. The occupied bandwidth is measured as 4.5103 MHz, which is 99.00% of the 5.042 MHz bandwidth. The XdB Down is -26.00 dB. The transmit frequency error is 817.325 Hz. The interface includes various control buttons on the right side, such as 'Measure', 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.5103 MHz	x dB	-26.00 dB
Transmit Freq Error	817.325 Hz	
x dB Bandwidth	5.042 MHz	

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**7.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:41565, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2687.5	99	26	0.1	Peak	4.49	4.97	5	Pass

Agilent

Measure

Ch Freq 2.6875 GHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
11.8

dB

Center 2.687 500 GHz
Span 10 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
4.4921 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	43.074 Hz	
<b>x dB Bandwidth</b>	4.975 MHz	

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

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**7.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:39700, Bandwidth:10, Modulation:64QAM, 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
2501	99	26	0.2	Peak	8.96	10.15	10	Pass

**Agilent**

Ch Freq 2.501 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.6 dB

Center 2.501 00 GHz Span 20 MHz

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

**Occupied Bandwidth** Occ BW % Pwr 99.00 %  
**8.9636 MHz** x dB -26.00 dB

Transmit Freq Error 4.911 kHz  
x dB Bandwidth 10.149 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

7.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:40620, Bandwidth:10, Modulation:64QAM, 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
2593	99	26	0.2	Peak	8.96	9.97	10	Pass

Agilent
Measure

Ch Freq 2.593 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 2.593 00 GHz Span 20 MHz

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

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

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

**8.9589 MHz** x dB -26.00 dB

Transmit Freq Error -1.844 kHz

x dB Bandwidth 9.970 MHz

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7.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:41540, Bandwidth:10, Modulation:64QAM, 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
2685	99	26	0.2	Peak	8.98	10.14	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 2.685 GHz and the span is 20 MHz. The occupied bandwidth is highlighted in a green box with the following data:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>8.9828 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		8.640 kHz
<b>x dB Bandwidth</b>		10.143 MHz

Additional parameters shown in the interface include: Ch Freq 2.685 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log 10, dB/Offst 11.8 dB, Center 2.685 00 GHz, Span 20 MHz, #Res BW 200 kHz, #VBW 620 kHz, #Sweep 10 s (500 pts).

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7.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:39725, 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
2503.5	99	26	0.3	Peak	13.44	15.05	15	Pass

Agilent

Measure

Ch Freq 2.5035 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak  
 Log  
 10  
 dB/  
 Offst  
 11.6  
 dB

Center 2.503 50 GHz
Span 30 MHz

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

Occupied Bandwidth	13.4439 MHz	Occ BW % Pwr	99.00 %
		x dB	-26.00 dB
Transmit Freq Error	27.932 kHz		
x dB Bandwidth	15.049 MHz		

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Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

7.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:40620, 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
2593	99	26	0.3	Peak	13.48	15	15	Pass

Agilent

**Measure**

Ch Freq 2.593 GHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
11.7

dB

Center 2.593 00 GHz
Span 30 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
13.4807 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	14.907 kHz	
<b>x dB Bandwidth</b>	15.000 MHz	

Power Stat
CCDF

More
1 of 2

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7.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:41515, Bandwidth:15, Modulation:64QAM, RB Number:75, RB Position:0)

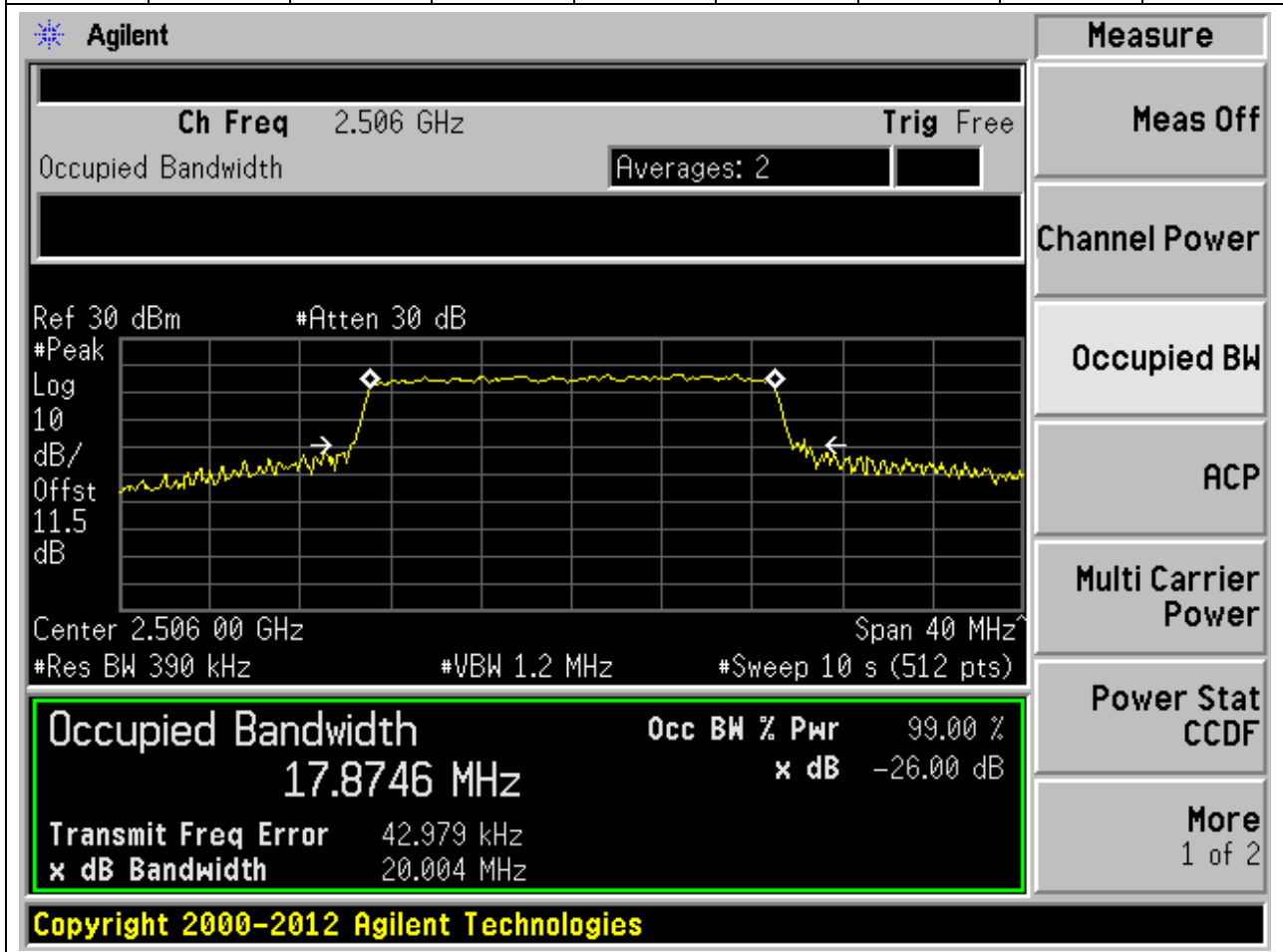
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2682.5	99	26	0.3	Peak	13.48	14.91	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.6825 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.8 dB', 'Center 2.682 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 10 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4834 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error -9.488 kHz' and 'x dB Bandwidth 14.911 MHz'. On the right side, there is a 'Measure' menu with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. At the bottom, it says 'Copyright 2000-2012 Agilent Technologies'.



7.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:39750, 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
2506	99	26	0.39	Peak	17.87	20	20	Pass



7.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:40620, 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
2593	99	26	0.39	Peak	17.93	19.5	20	Pass

Agilent
Measure

Ch Freq 2.593 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 2.593 00 GHz Span 40 MHz

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

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

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

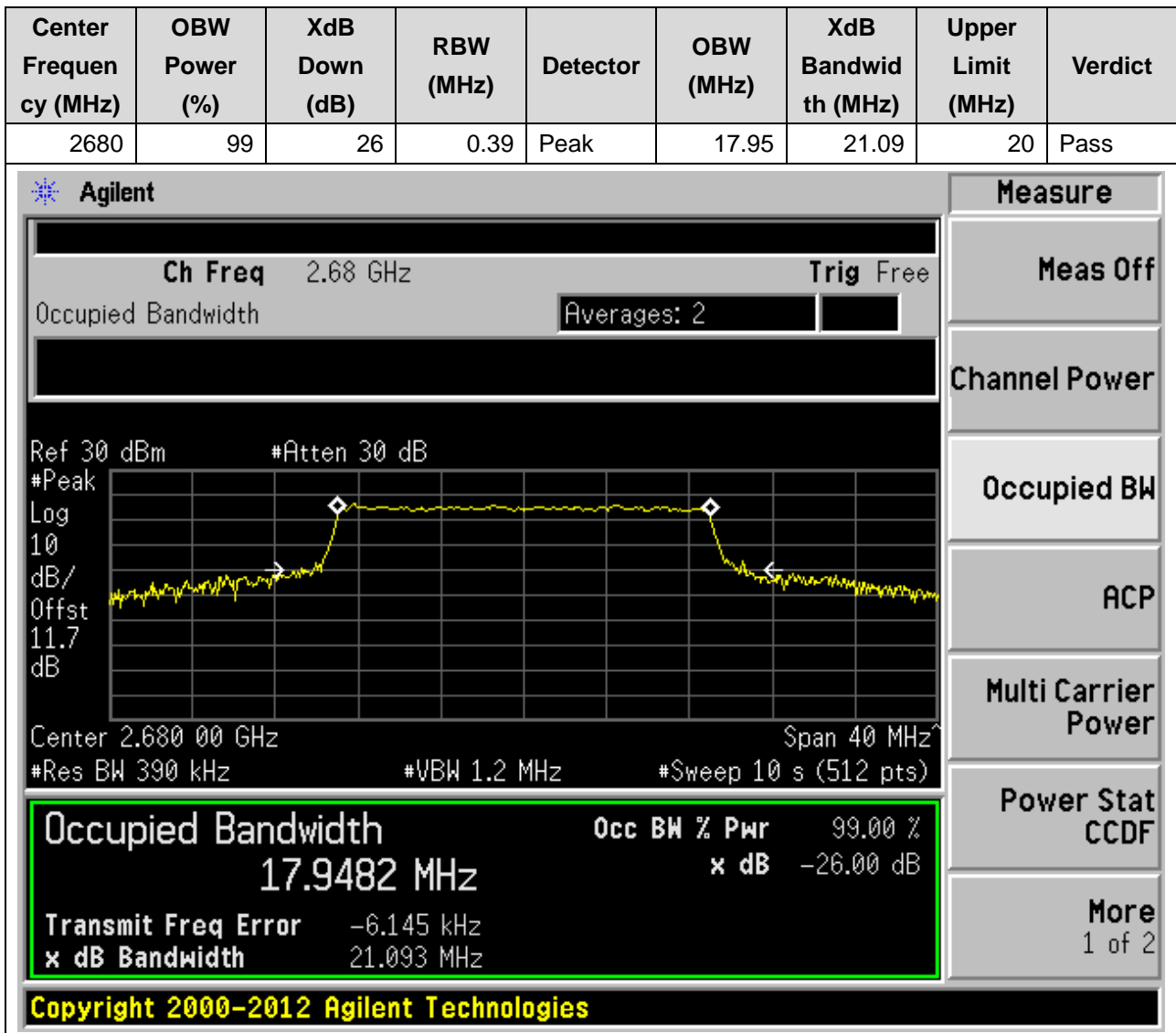
**17.9272 MHz** x dB -26.00 dB

Transmit Freq Error -7.385 kHz

x dB Bandwidth 19.496 MHz

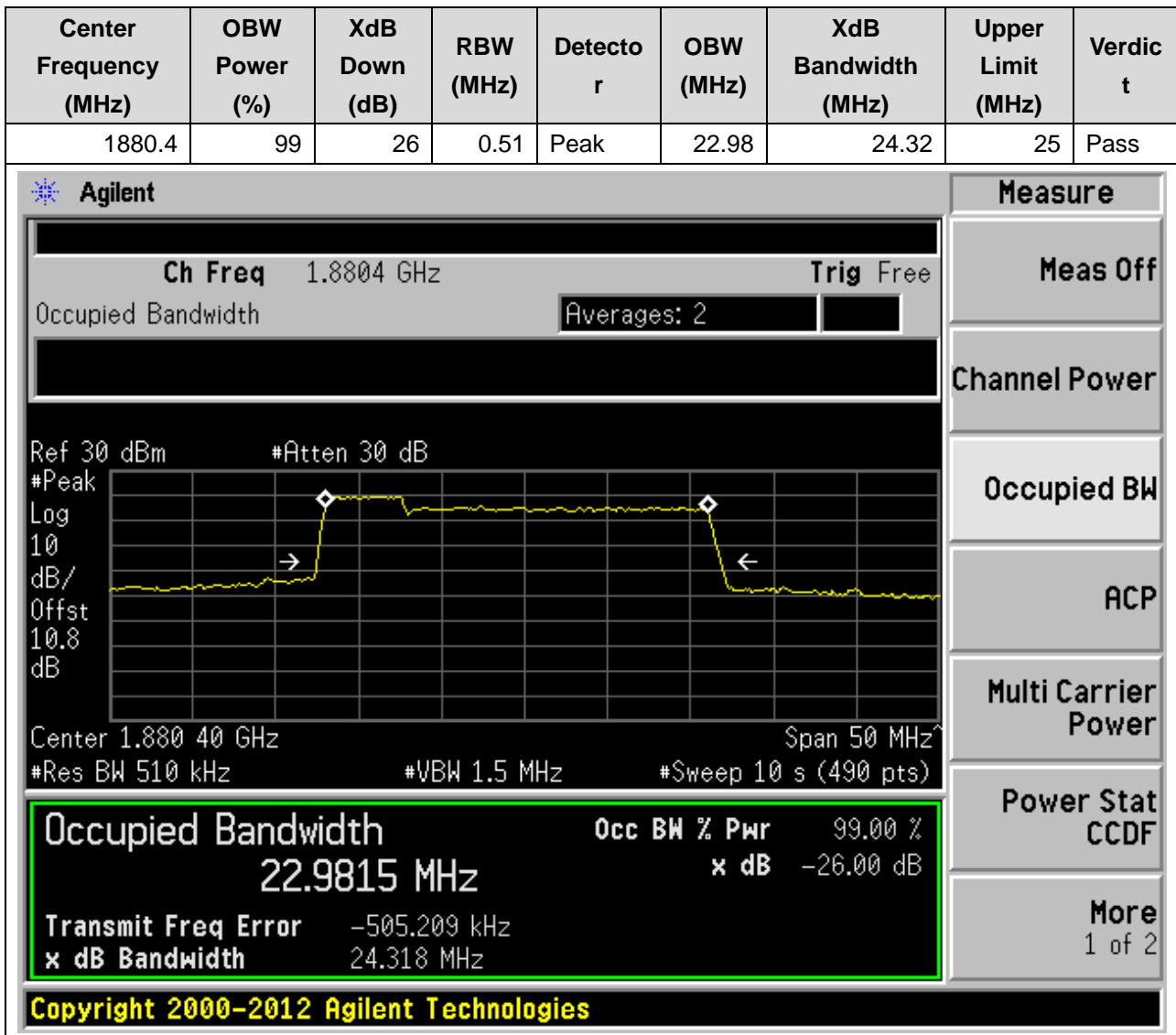
Copyright 2000-2012 Agilent Technologies

7.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:41490, Bandwidth:20, Modulation:64QAM, RB Number:100, RB Position:0)



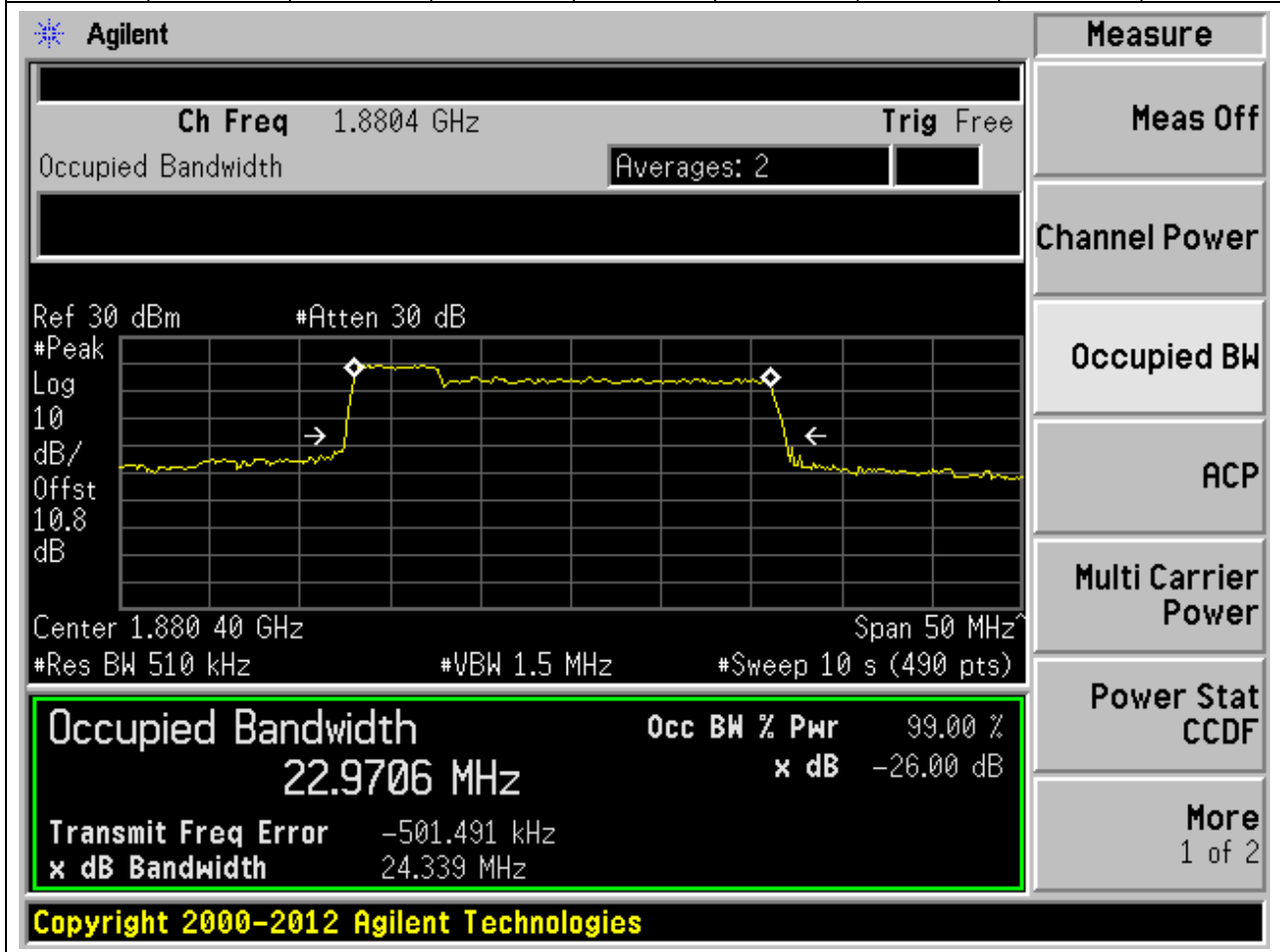
## 1. CA\_2C

1.1. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:1, Channel:18808|18925, Bandwidth:5|20MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)



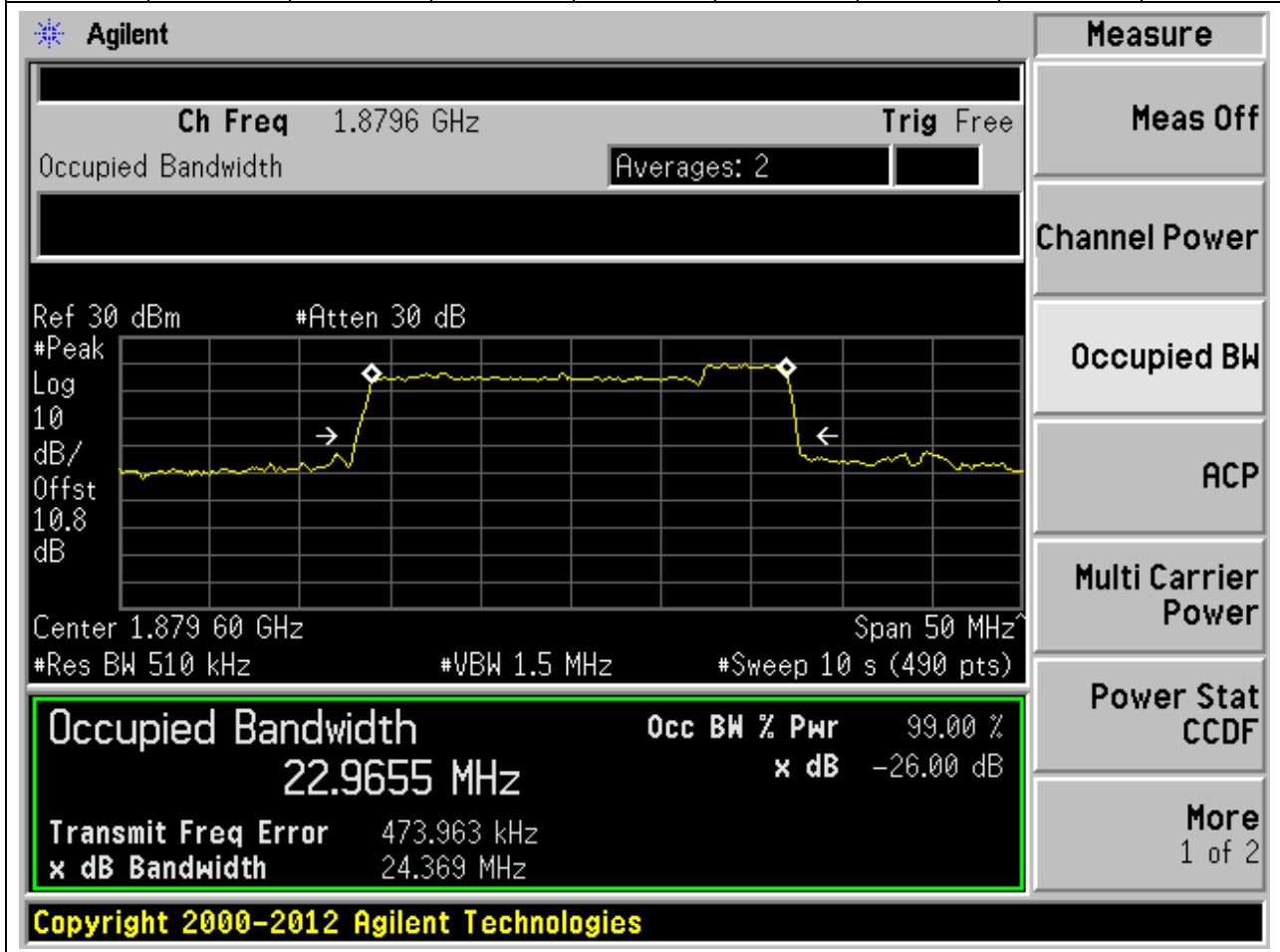
**1.2. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:2,  
Channel:18808|18925, Bandwidth:5|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880.4	99	26	0.51	Peak	22.97	24.34	25	Pass



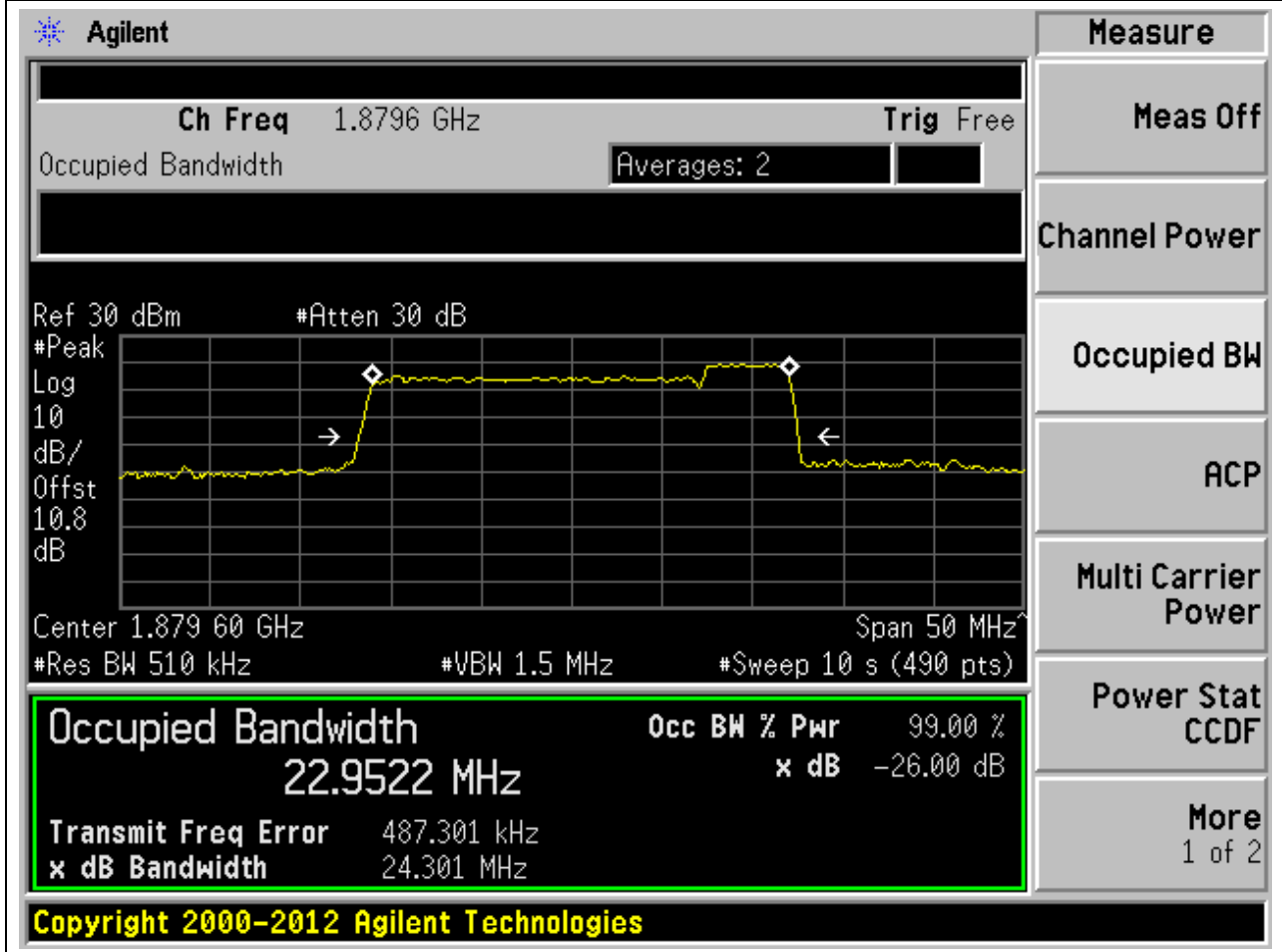
**1.3. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:3, Channel:18875|18992, Bandwidth:20|5MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1879.6	99	26	0.51	Peak	22.97	24.37	25	Pass



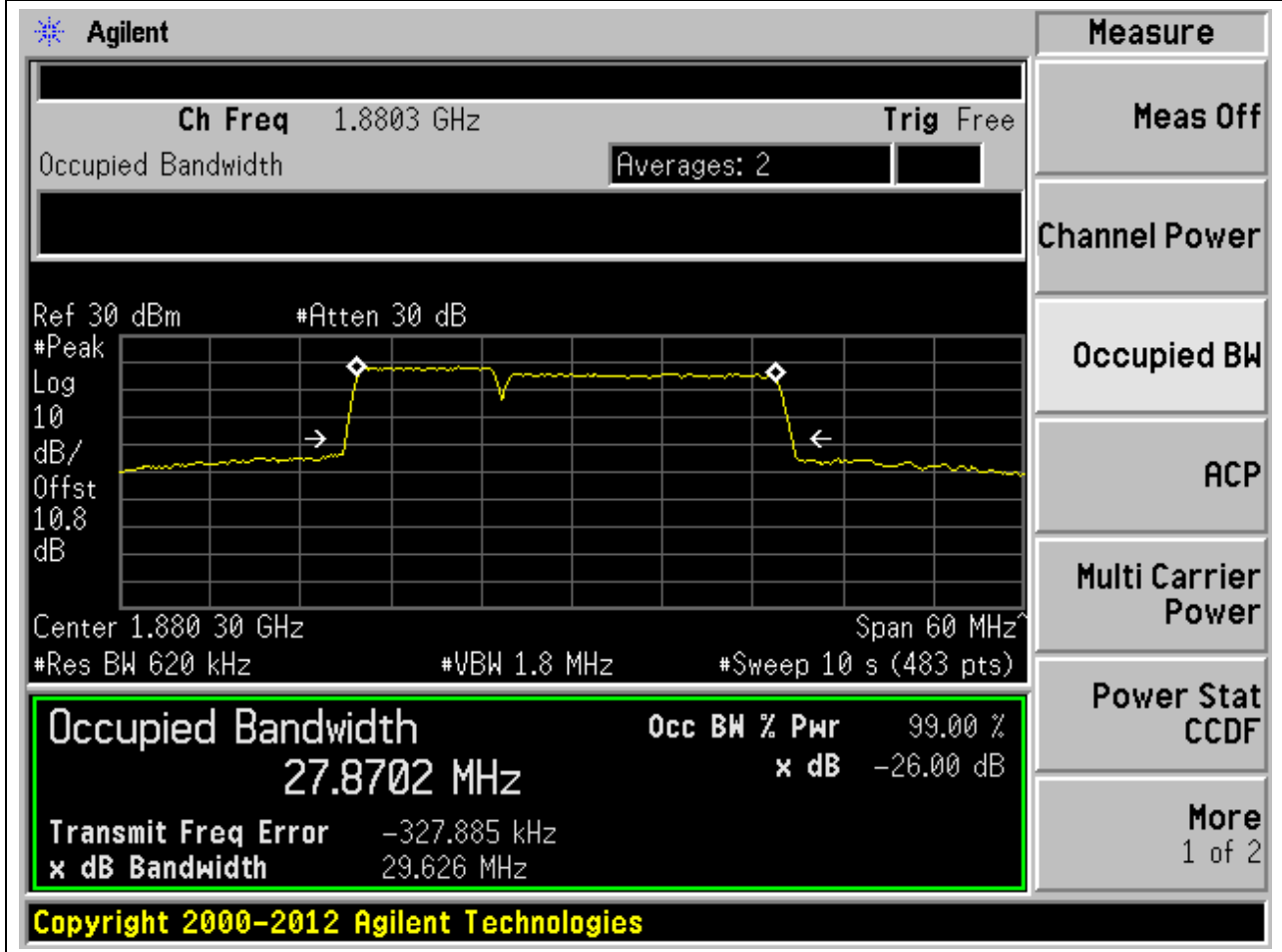
**1.4. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:4,  
Channel:18875|18992, Bandwidth:20|5MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1879.6	99	26	0.51	Peak	22.95	24.3	25	Pass



**1.5. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:5,  
Channel:18806|18950, Bandwidth:10|20MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

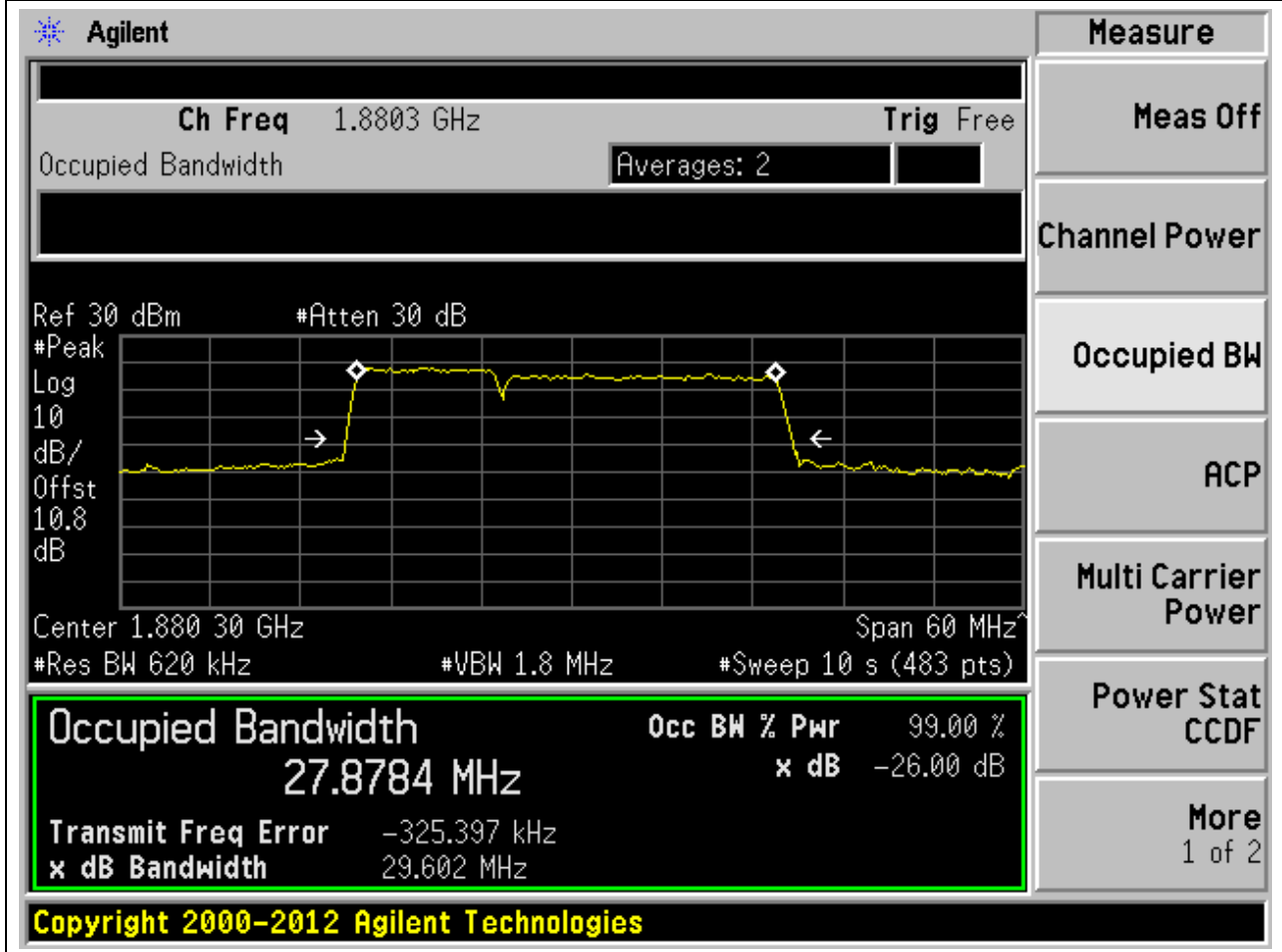
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880.3	99	26	0.62	Peak	27.87	29.63	30	Pass





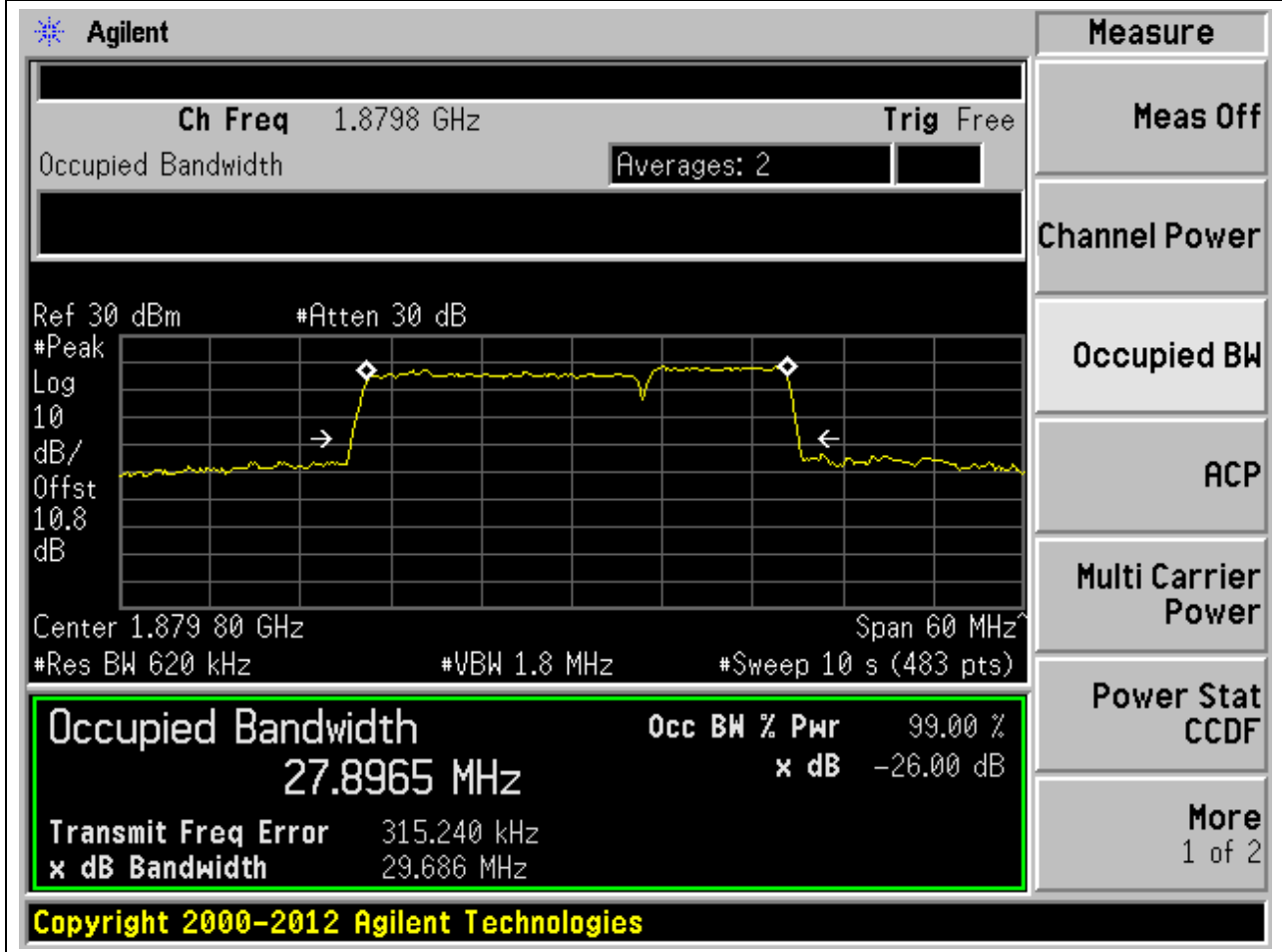
**1.6. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:6,  
Channel:18806|18950, Bandwidth:10|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880.3	99	26	0.62	Peak	27.88	29.6	30	Pass



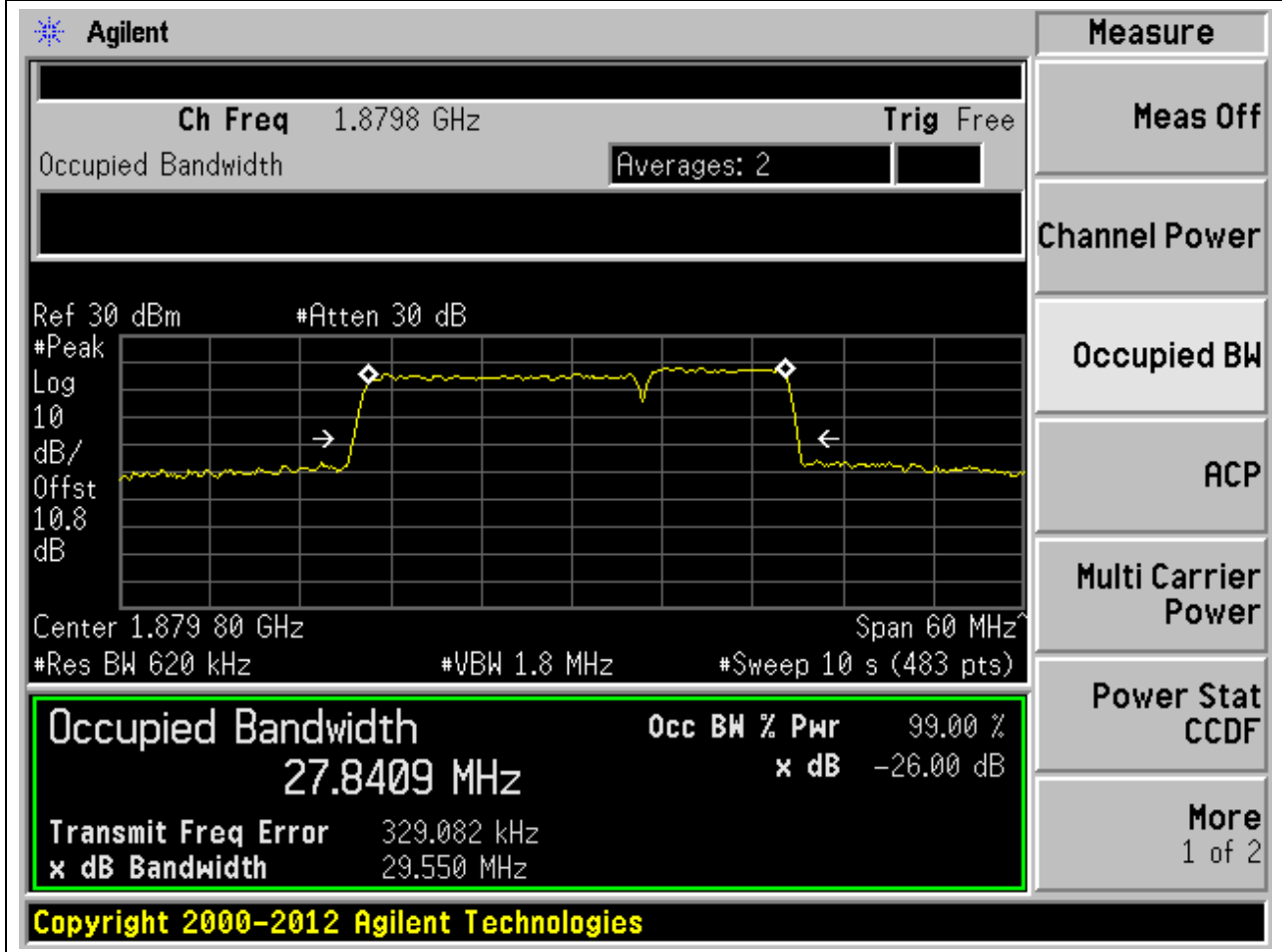
**1.7. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:7,  
Channel:18851|18995, Bandwidth:20|10MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1879.8	99	26	0.62	Peak	27.9	29.69	30	Pass



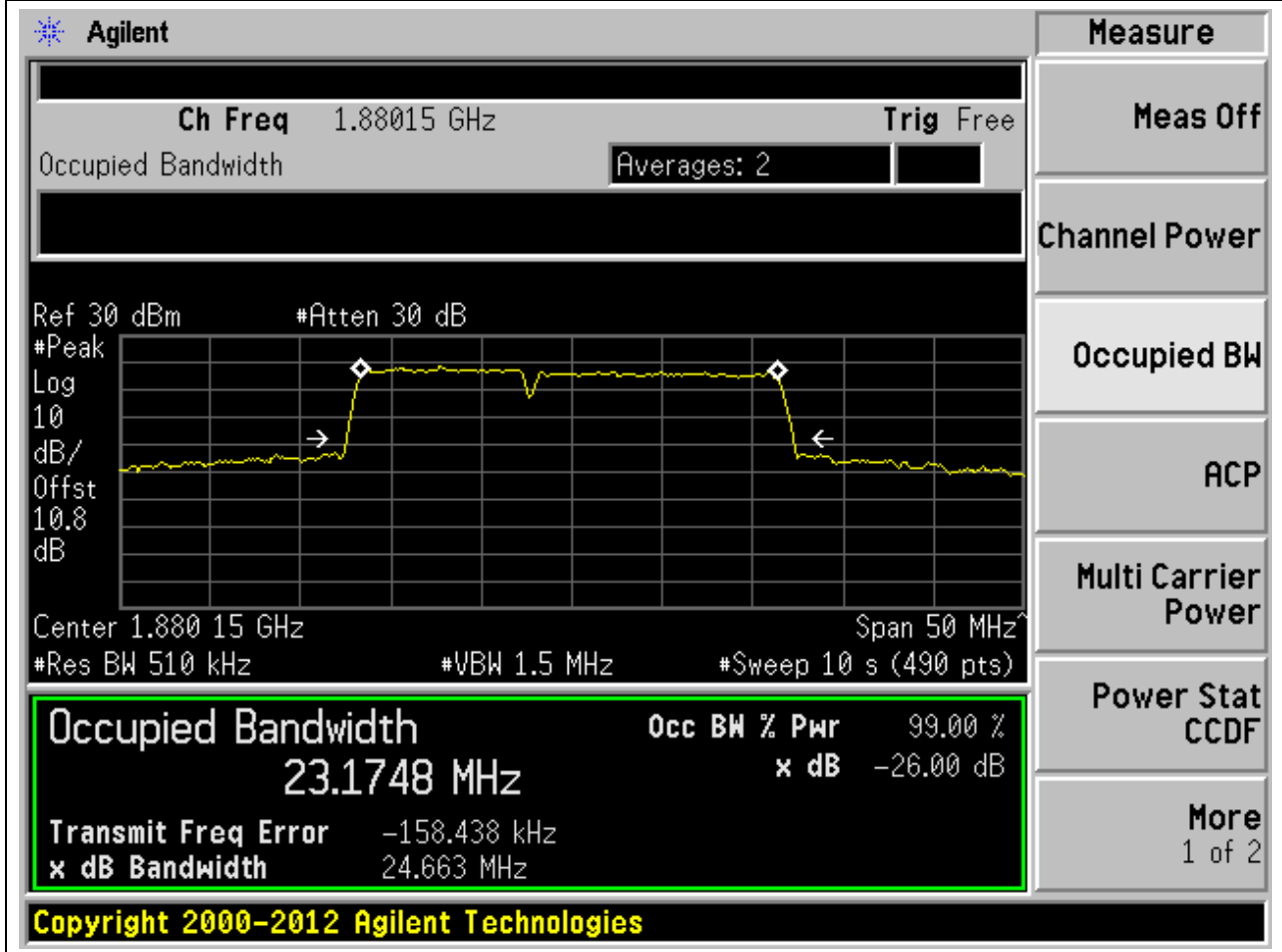
**1.8. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:8,  
Channel:18851|18995, Bandwidth:20|10MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1879.8	99	26	0.62	Peak	27.84	29.55	30	Pass



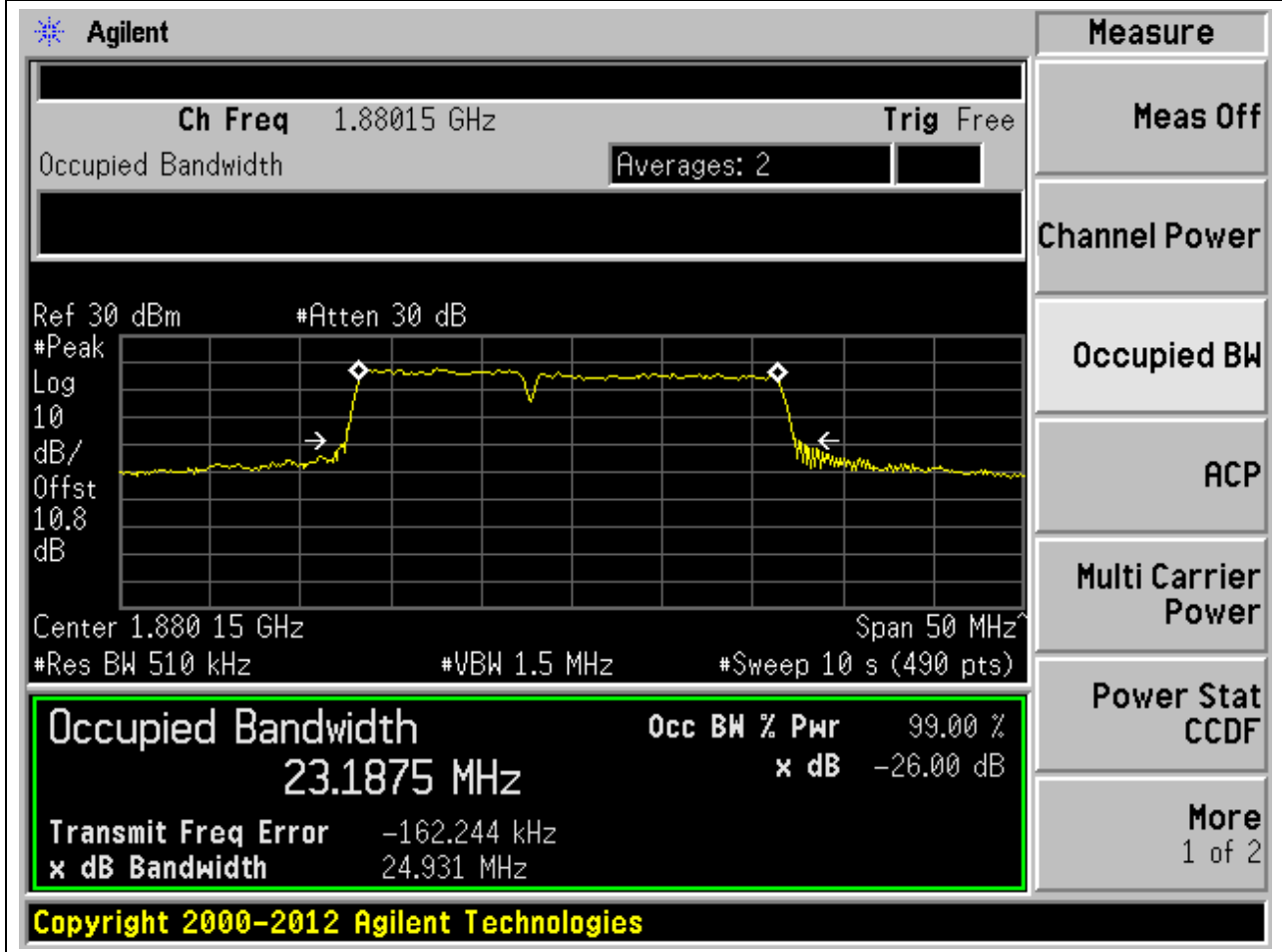
**1.9. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:9,  
Channel:18829|18949, Bandwidth:10|15MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880.15	99	26	0.51	Peak	23.17	24.66	25	Pass



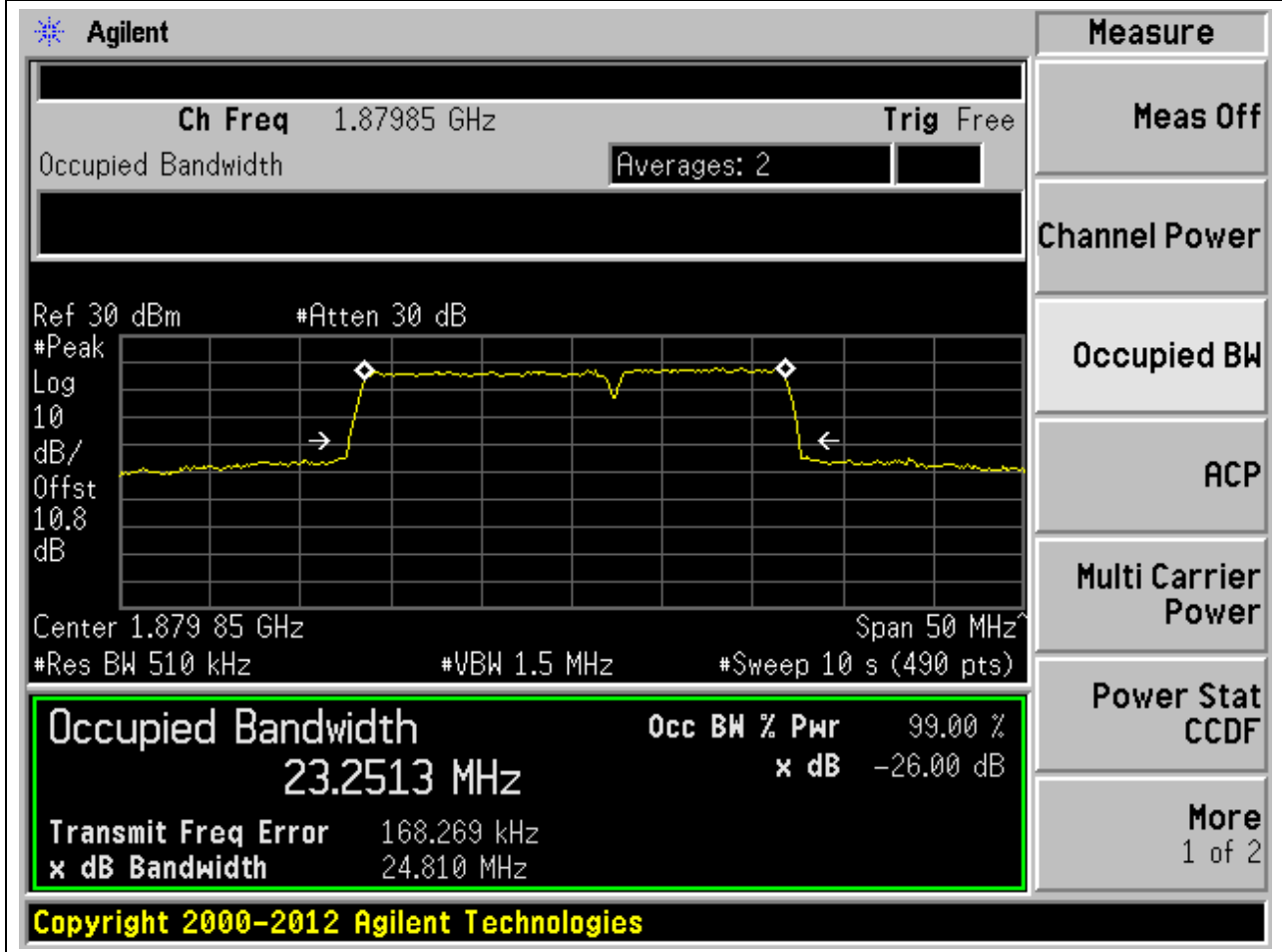
**1.10. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:10,  
Channel:18829|18949, Bandwidth:10|15MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880.15	99	26	0.51	Peak	23.19	24.93	25	Pass



**1.11. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:11, Channel:18851|18971, Bandwidth:15|10MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1879.85	99	26	0.51	Peak	23.25	24.81	25	Pass



**1.12. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:12,  
Channel:18851|18971, Bandwidth:15|10MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1879.85	99	26	0.51	Peak	23.16	24.64	25	Pass

Agilent

**Measure**  
Meas Off  
Channel Power  
**Occupied BW**  
ACP  
Multi Carrier Power  
Power Stat CCDF  
More  
1 of 2

Ch Freq 1.87985 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 10.8 dB

Center 1.879 85 GHz Span 50 MHz

#Res BW 510 kHz #VBW 1.5 MHz #Sweep 10 s (490 pts)

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

**23.1621 MHz** x dB -26.00 dB

Transmit Freq Error 164.177 kHz

x dB Bandwidth 24.643 MHz

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**1.13. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:13,  
Channel:18825|18975, Bandwidth:15|15MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880	99	26	0.62	Peak	28.4	30.31	30	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The plot is centered at 1.880 GHz with a span of 60 MHz. The vertical axis is labeled 'dB' and the horizontal axis is labeled 'MHz'. The plot shows a signal with a peak at approximately 1.880 GHz. The signal is measured at a reference level of 30 dBm and an attenuation of 30 dB. The occupied bandwidth is measured as 28.4004 MHz, which is 99.00% of the 30.31 MHz bandwidth. The transmit frequency error is -25.970 kHz. The x-axis is labeled 'x dB' and the y-axis is labeled 'dB'.

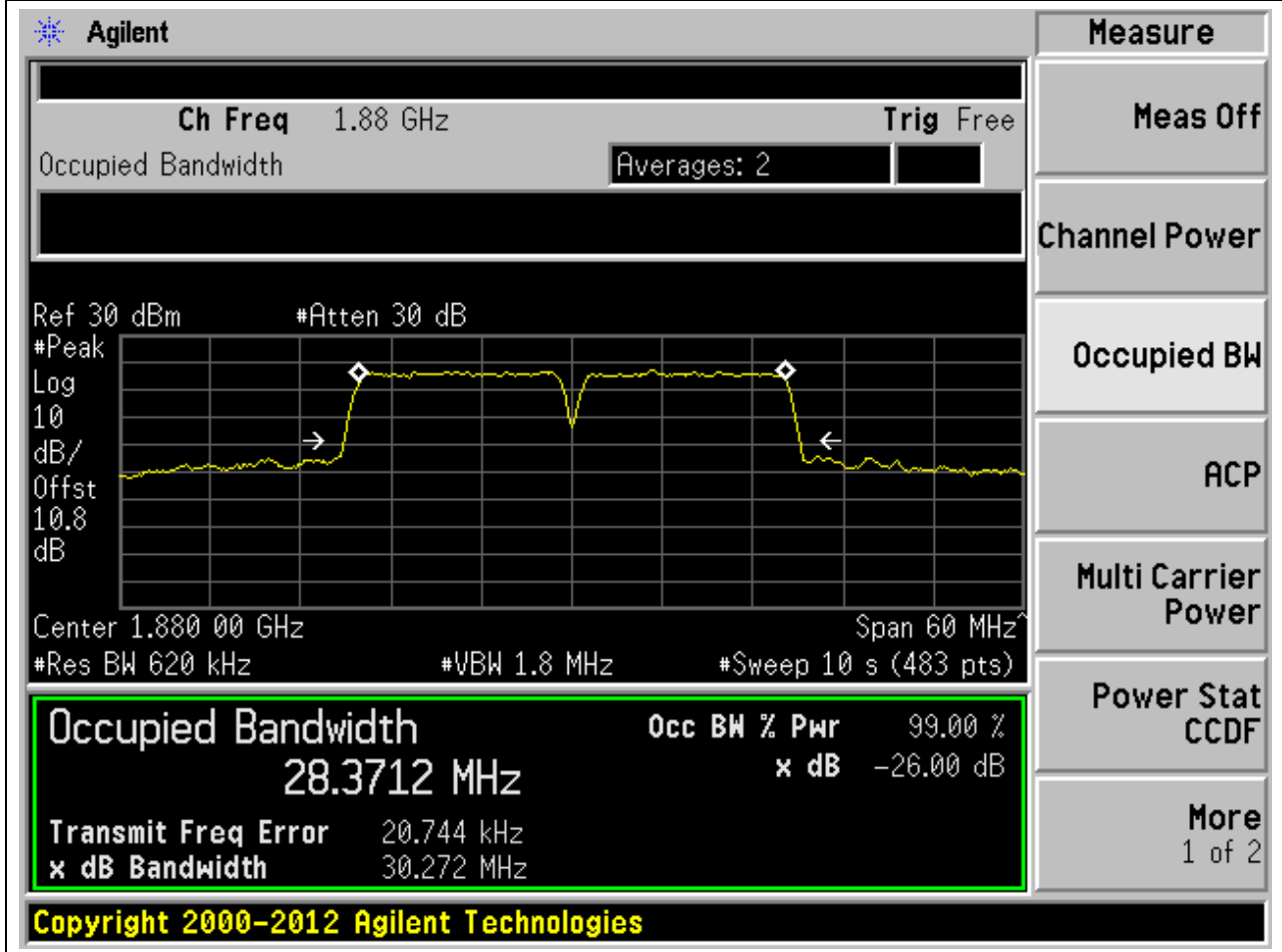
Occupied Bandwidth	Occ BW % Pwr	99.00 %
28.4004 MHz	x dB	-26.00 dB
Transmit Freq Error	-25.970 kHz	
x dB Bandwidth	30.311 MHz	

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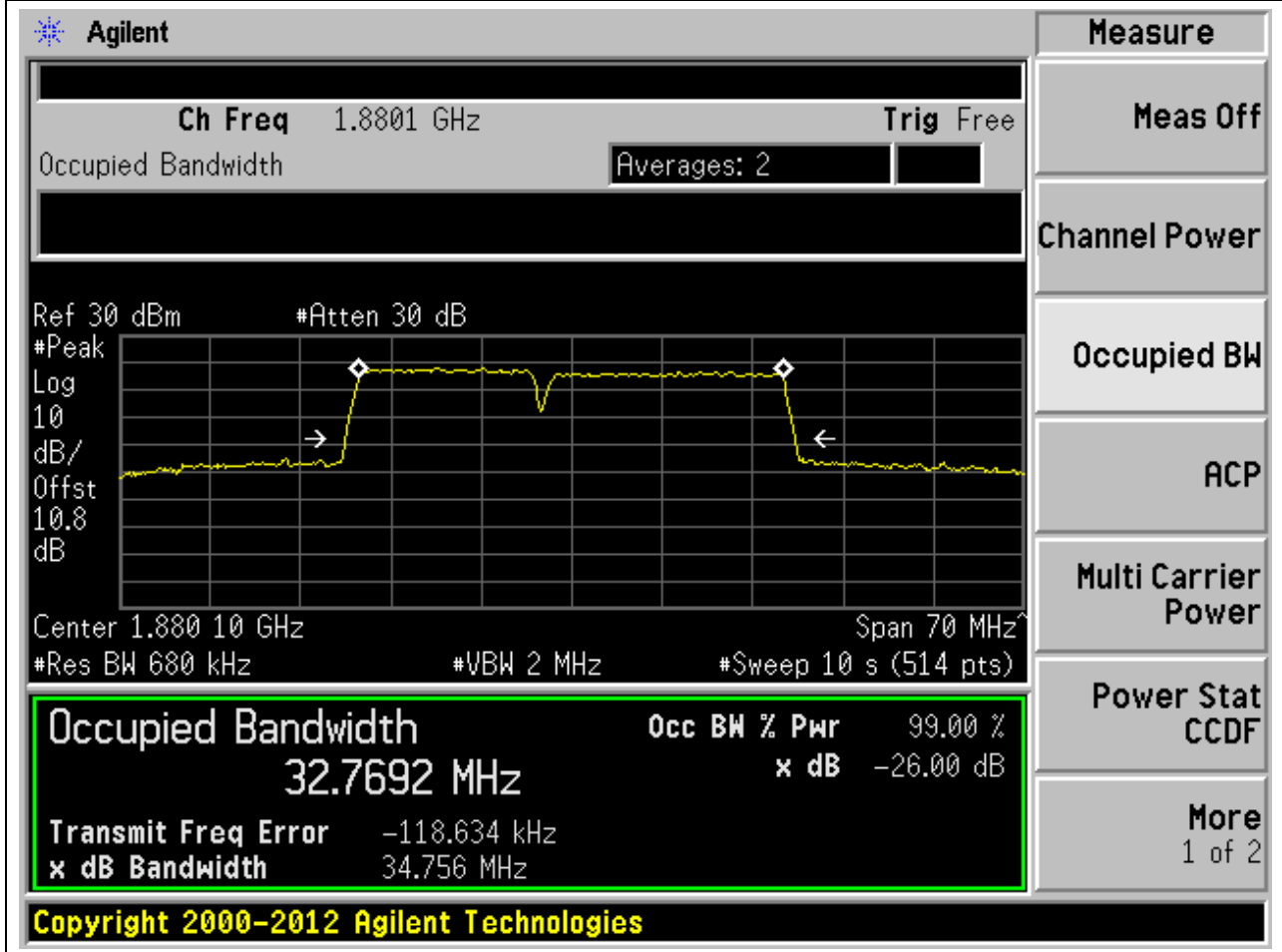
**1.14. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:14, Channel:18825|18975, Bandwidth:15|15MHz, Modulation:16QAM, RB Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880	99	26	0.62	Peak	28.37	30.27	30	Pass



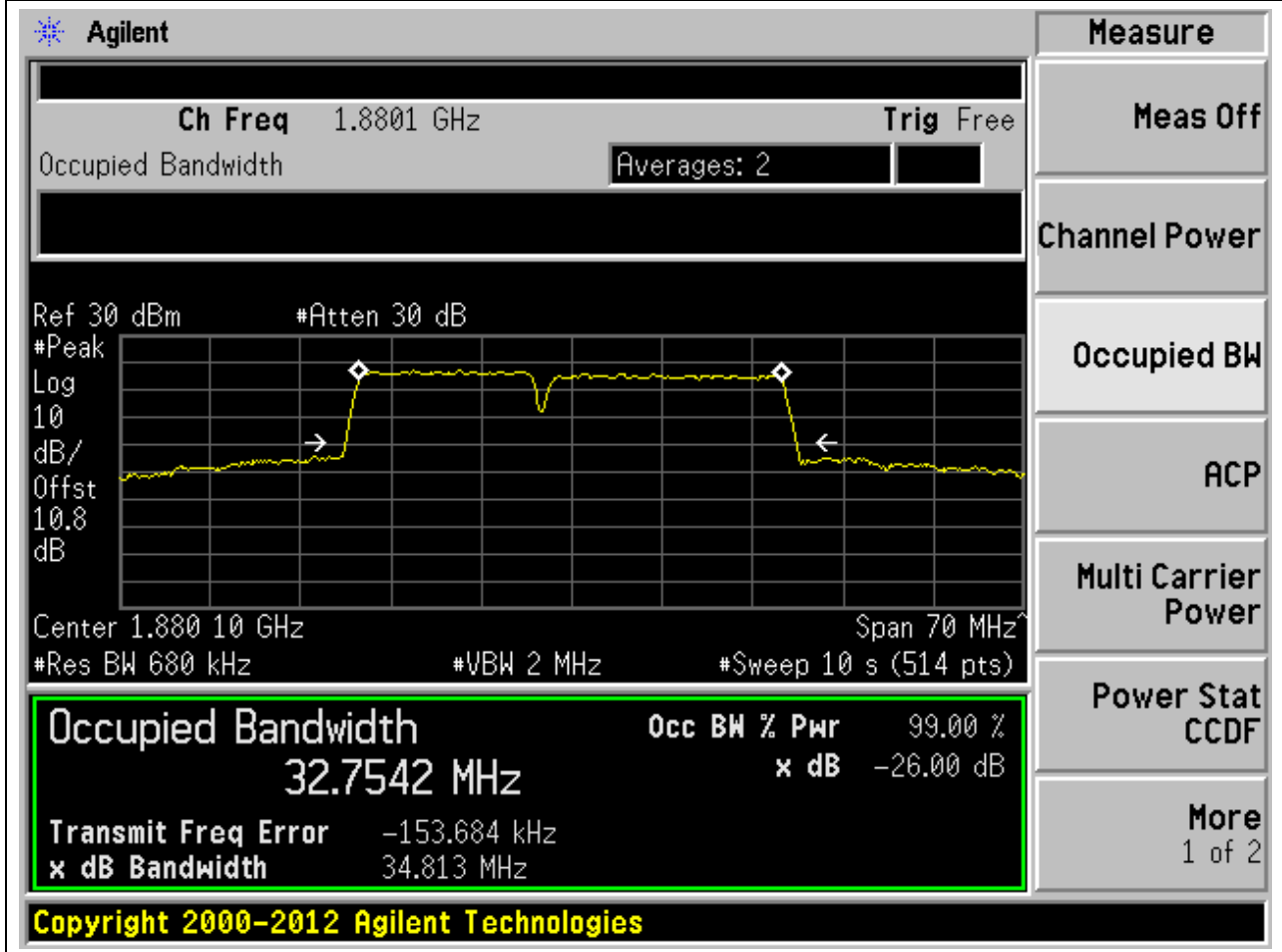
**1.15. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:15,  
Channel:18803|18974, Bandwidth:15|20MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880.1	99	26	0.68	Peak	32.77	34.76	35	Pass



**1.16. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:16,  
Channel:18803|18974, Bandwidth:15|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880.1	99	26	0.68	Peak	32.75	34.81	35	Pass



**1.17. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:17,  
Channel:18826|18997, Bandwidth:20|15MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1879.9	99	26	0.68	Peak	32.78	34.88	35	Pass

Agilent
Measure

**Ch Freq** 1.8799 GHz **Trig** Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 10.8 dB

Center 1.879 90 GHz Span 70 MHz

#Res BW 680 kHz #VBW 2 MHz #Sweep 10 s (514 pts)

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

**32.7825 MHz** **x dB** -26.00 dB

**Transmit Freq Error** 161.078 kHz

**x dB Bandwidth** 34.882 MHz

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

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**1.18. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:18,  
Channel:18826|18997, Bandwidth:20|15MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1879.9	99	26	0.68	Peak	32.73	34.73	35	Pass

Agilent

Measure

Ch Freq 1.8799 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.8

dB

Center 1.879 90 GHz
Span 70 MHz

#Res BW 680 kHz
#VBW 2 MHz
#Sweep 10 s (514 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
32.7257 MHz	x dB -26.00 dB
Transmit Freq Error 163.934 kHz	
x dB Bandwidth 34.727 MHz	

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

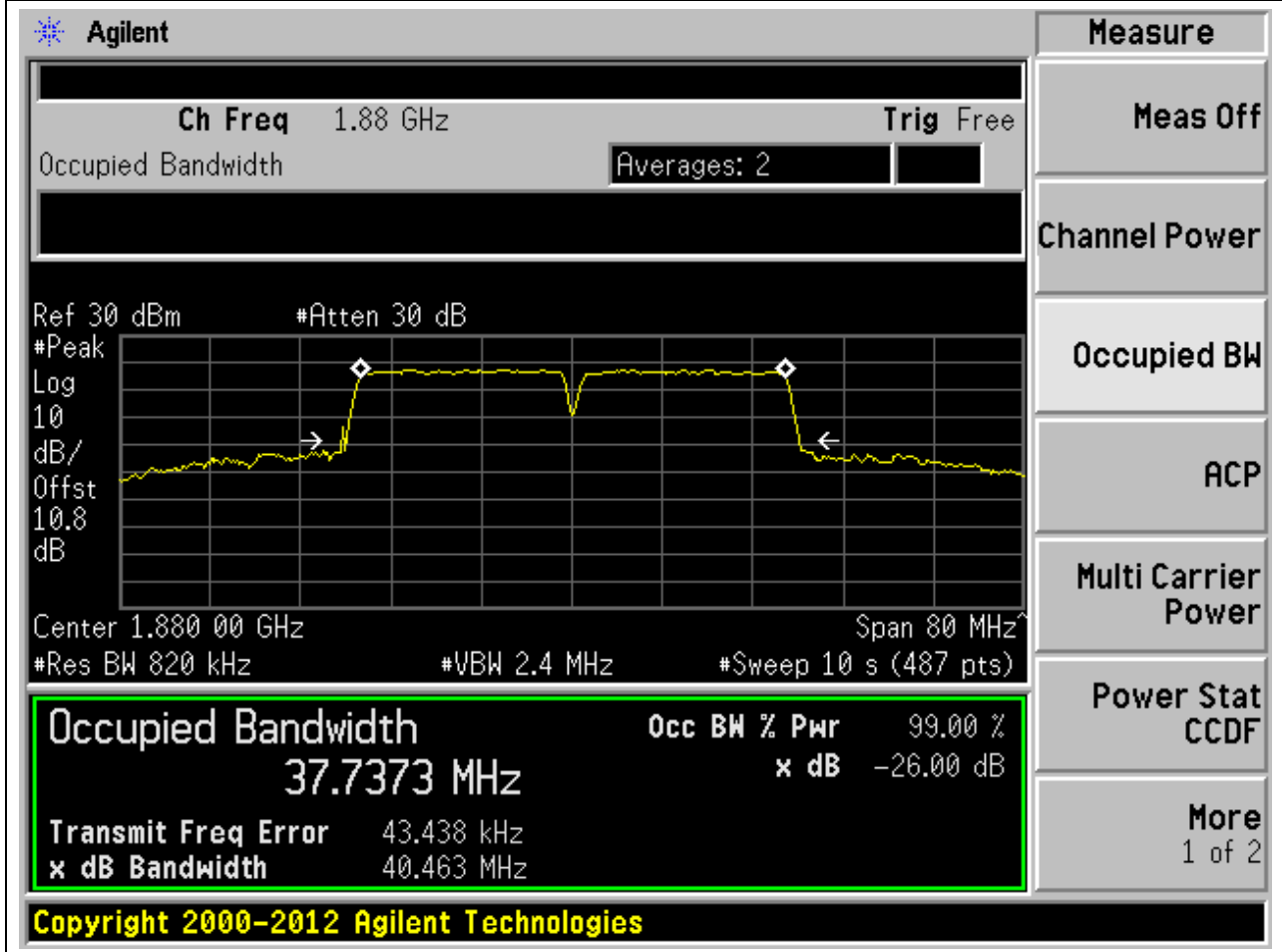
Power Stat CCDF

More  
1 of 2

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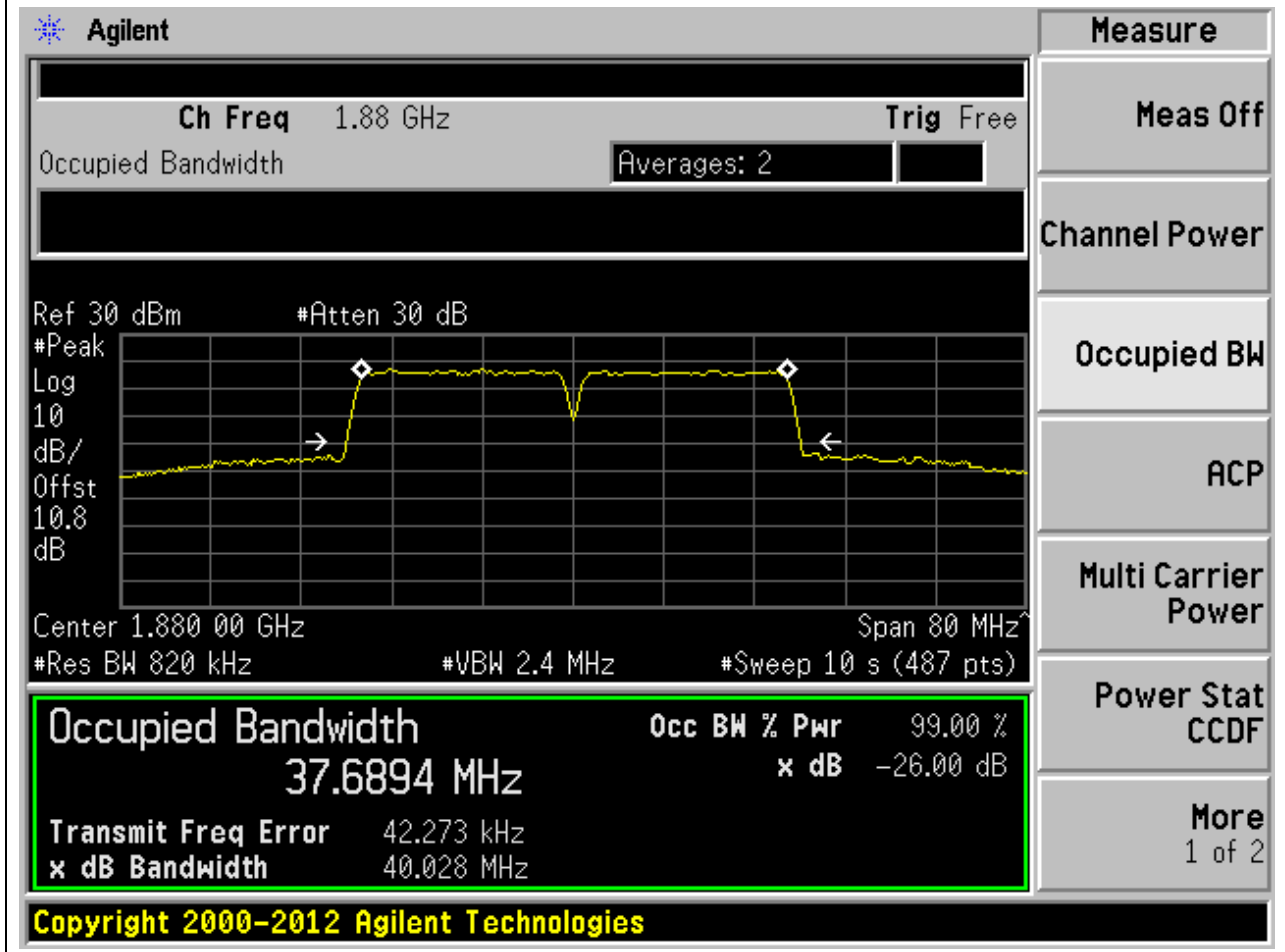
**1.19. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:19, Channel:18801|18999, Bandwidth:20|20MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880	99	26	0.82	Peak	37.74	40.46	40	Pass



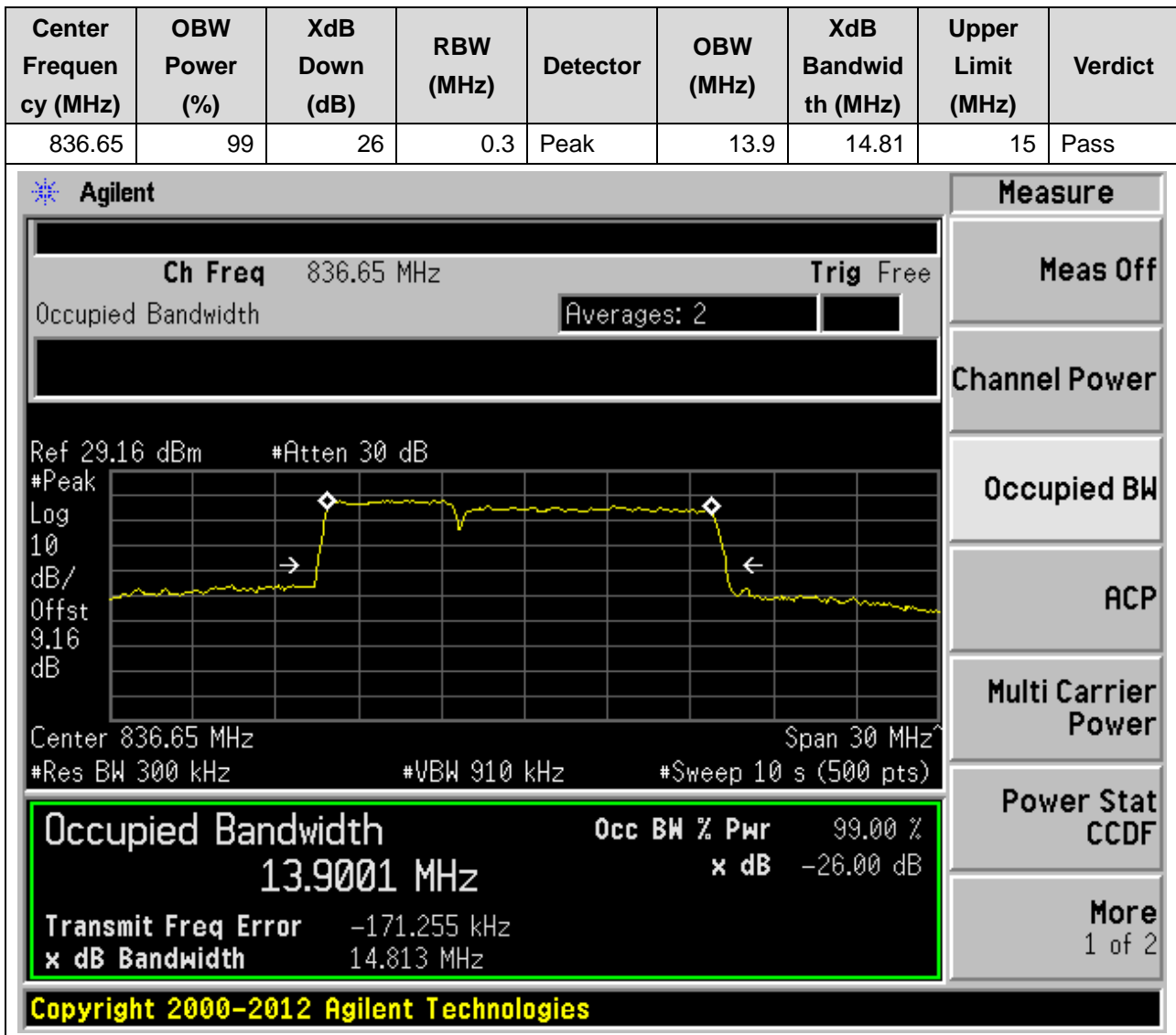
**1.20. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:20,  
Channel:18801|18999, Bandwidth:20|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880	99	26	0.82	Peak	37.69	40.03	40	Pass



## 6. CA\_5B

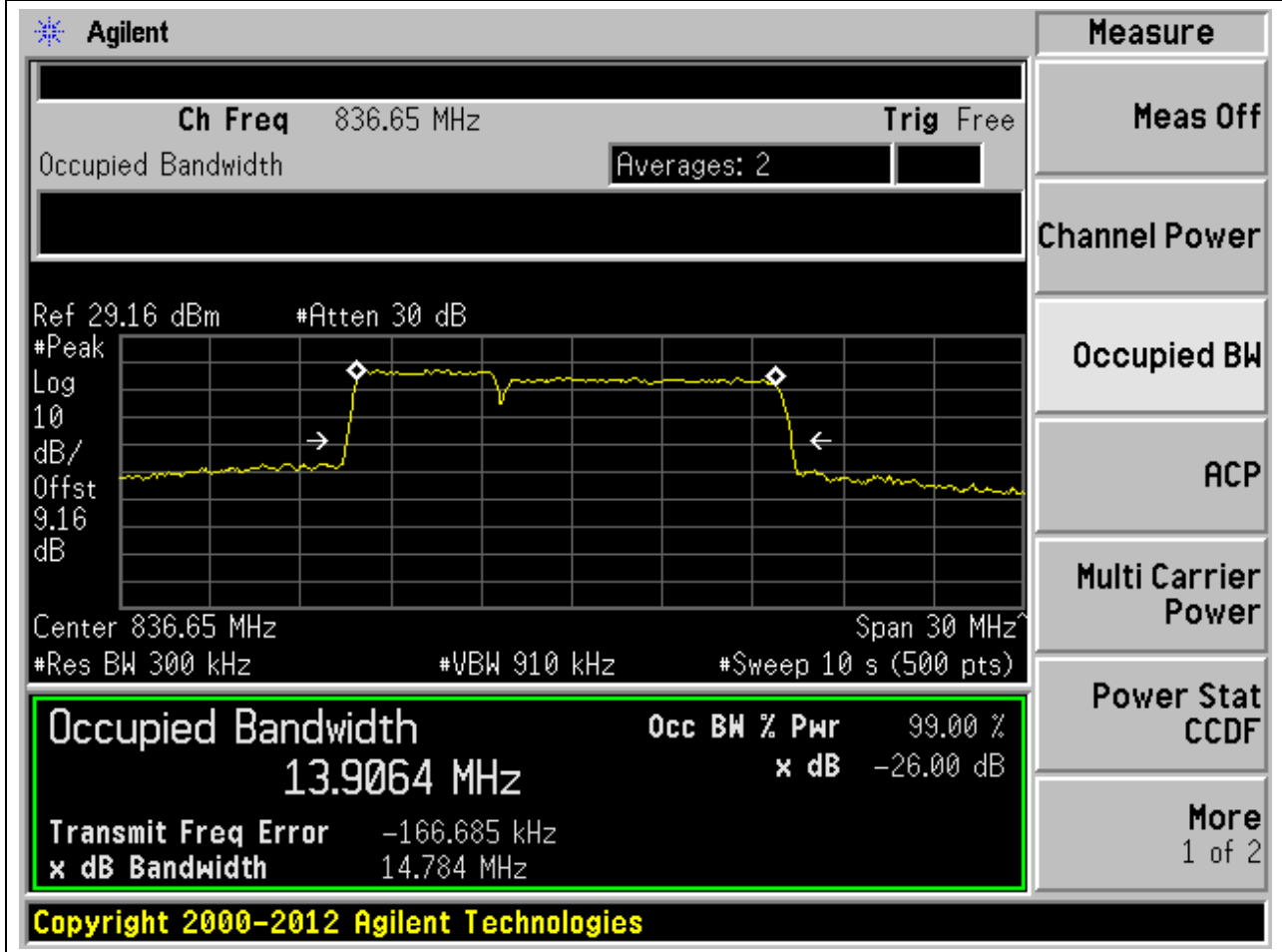
6.1. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:1, Channel:20478|20550, Bandwidth:5|10MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)





**6.2. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:2,  
Channel:20478|20550, Bandwidth:5|10MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.65	99	26	0.3	Peak	13.91	14.78	15	Pass



**6.3. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:3, Channel:20500|20572, Bandwidth:10|5MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.35	99	26	0.3	Peak	13.9	14.85	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a signal spectrum with a yellow trace. The 'Occupied Bandwidth' measurement is highlighted in a green box. The measurement results are as follows:

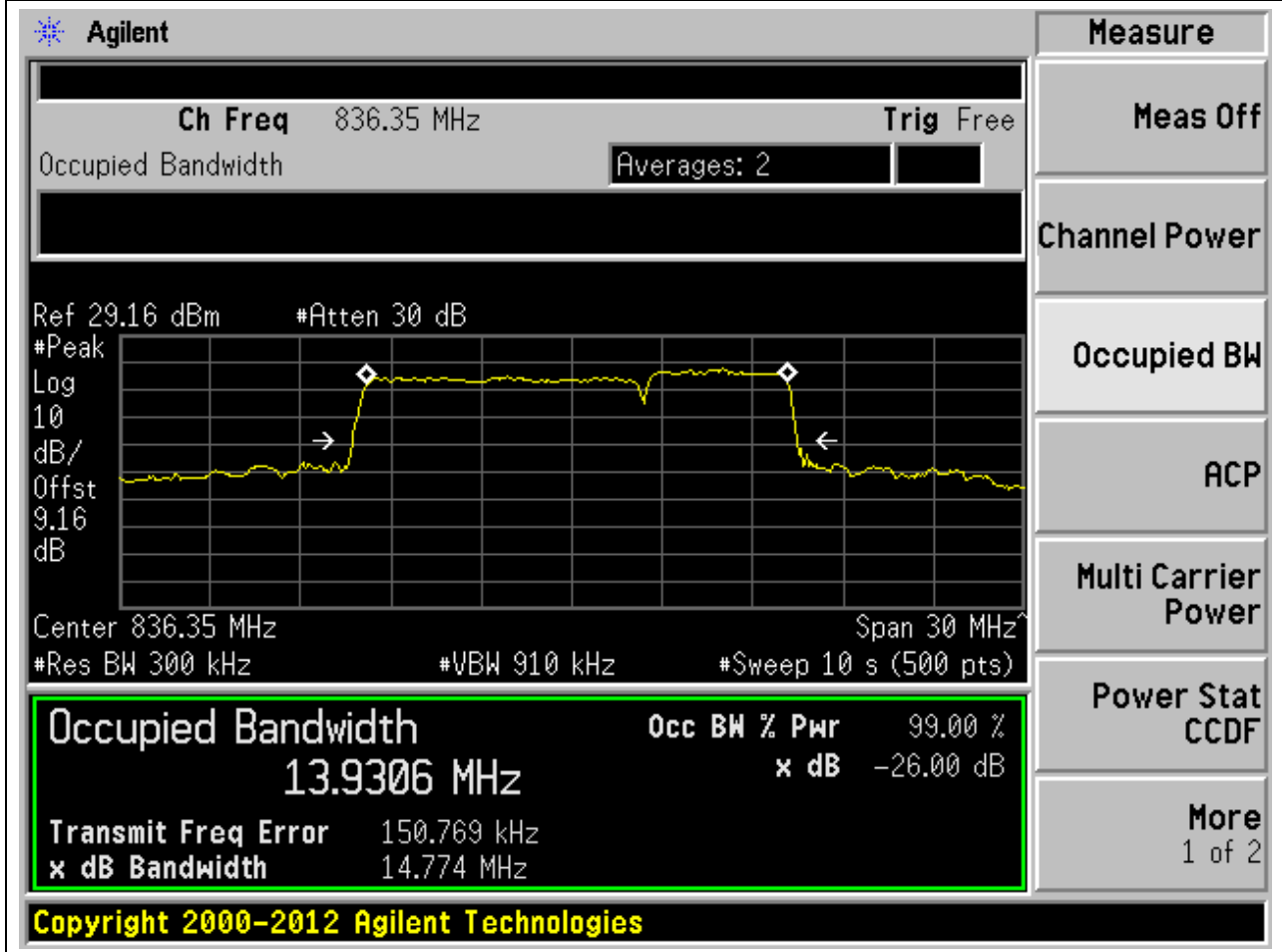
Measurement	Value
Occupied Bandwidth	13.8952 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	158.481 kHz
x dB Bandwidth	14.845 MHz

Additional parameters shown in the interface include: Ch Freq 836.35 MHz, Trig Free, Averages: 2, Ref 29.16 dBm, #Atten 30 dB, #Peak, Log 10 dB/Offst 9.16 dB, Center 836.35 MHz, Span 30 MHz, #Res BW 300 kHz, #VBW 910 kHz, #Sweep 10 s (500 pts).

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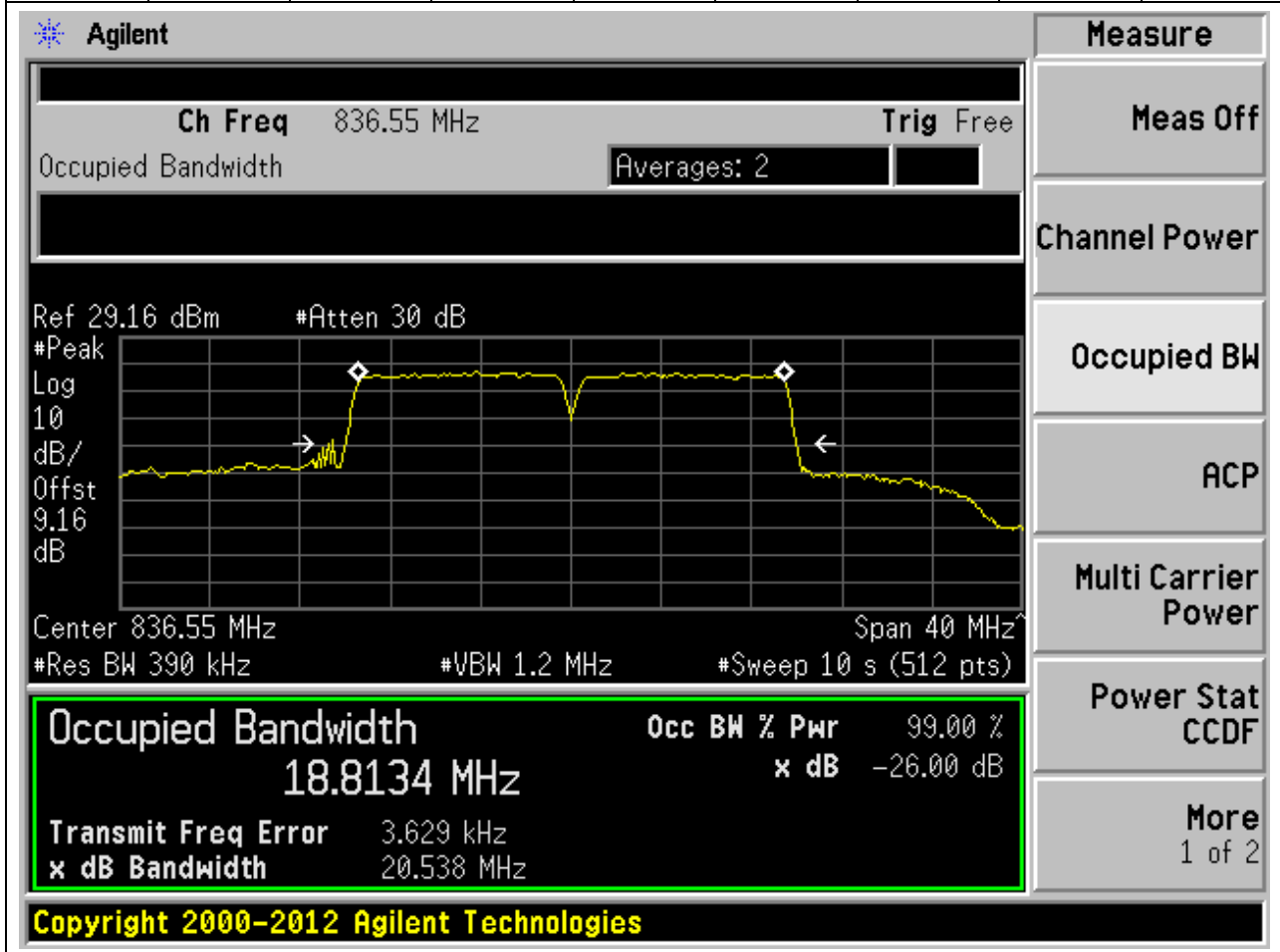
**6.4. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:4,  
Channel:20500|20572, Bandwidth:10|5MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.35	99	26	0.3	Peak	13.93	14.77	15	Pass



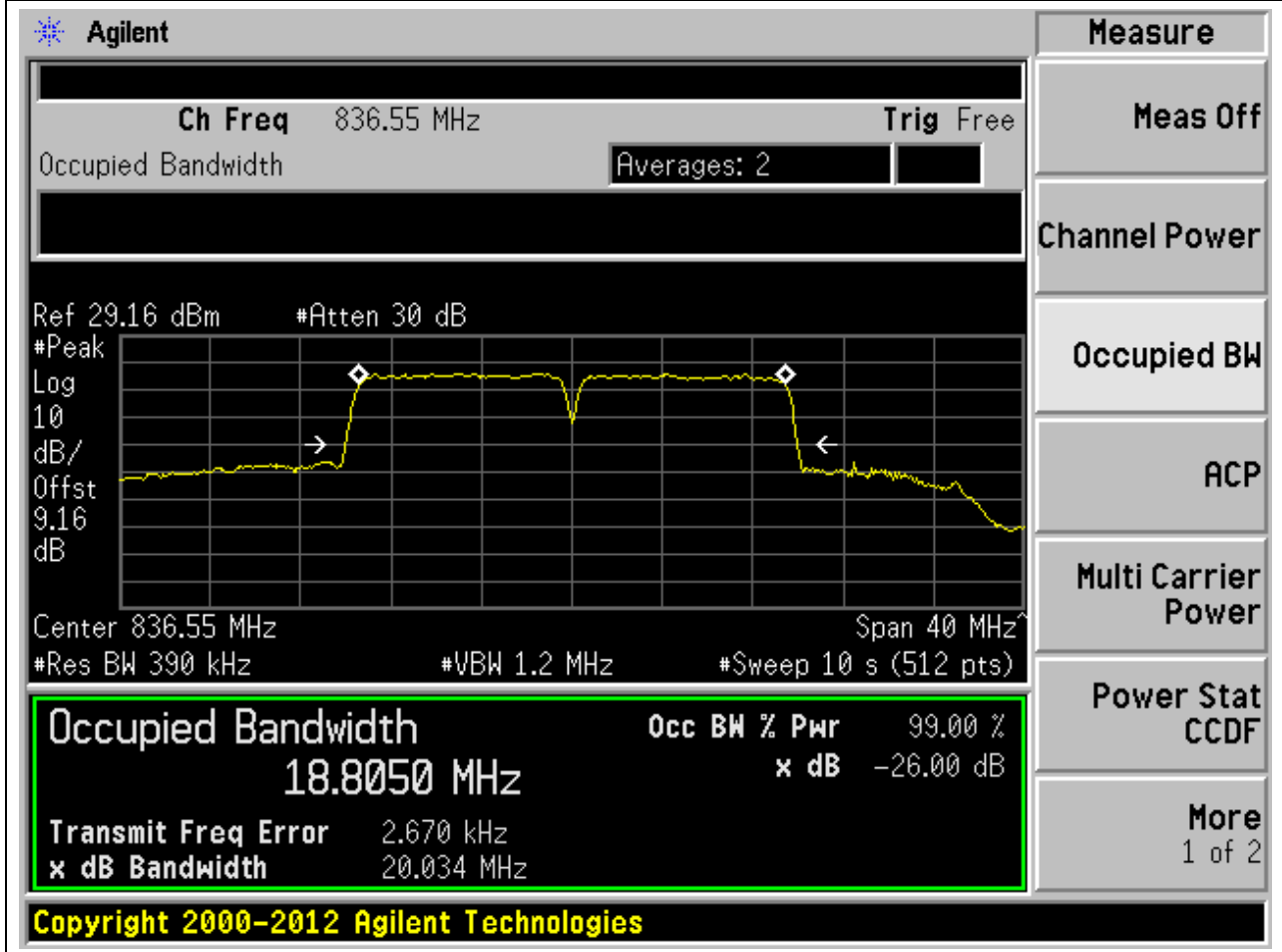
**6.5. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:5,  
Channel:20476|20575, Bandwidth:10|10MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.55	99	26	0.39	Peak	18.81	20.54	20	Pass



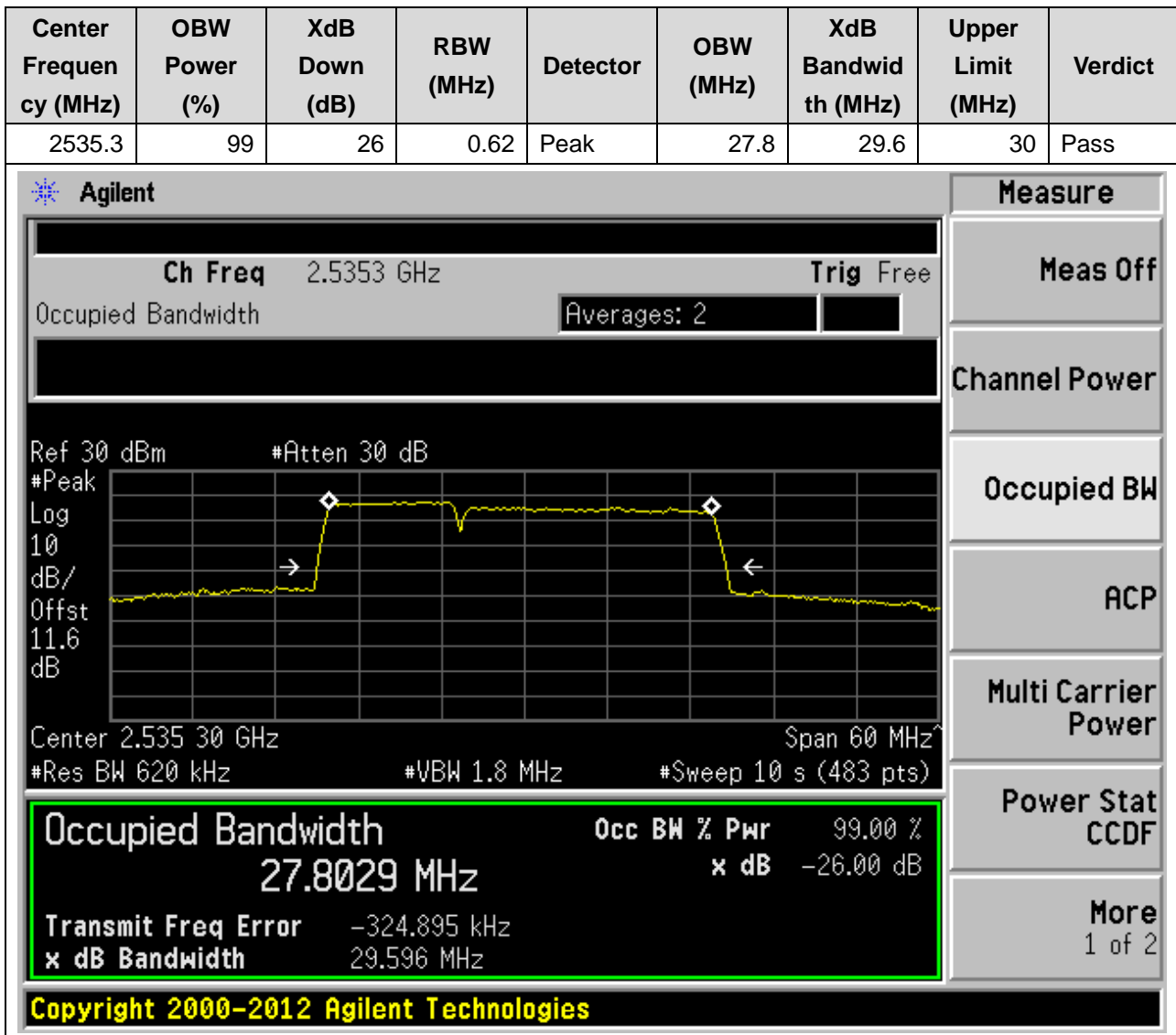
6.6. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:6,  
Channel:20476|20575, Bandwidth:10|10MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.55	99	26	0.39	Peak	18.8	20.03	20	Pass



## 2. CA\_7C

2.1. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:1, Channel:21006|21150, Bandwidth:10|20MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)



**2.2. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:2,  
Channel:21006|21150, Bandwidth:10|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535.3	99	26	0.62	Peak	27.8	29.55	30	Pass

**Agilent**
**Measure**

**Ch Freq** 2.5353 GHz **Trig** Free

Occupied Bandwidth **Averages: 2**

**Meas Off**

**Channel Power**

**Occupied BW**

**ACP**

**Multi Carrier Power**

**Power Stat CCDF**

**More**  
1 of 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 11.6 dB

Center 2.535 30 GHz Span 60 MHz

#Res BW 620 kHz #VBW 1.8 MHz #Sweep 10 s (483 pts)

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

**27.8016 MHz** **x dB** -26.00 dB

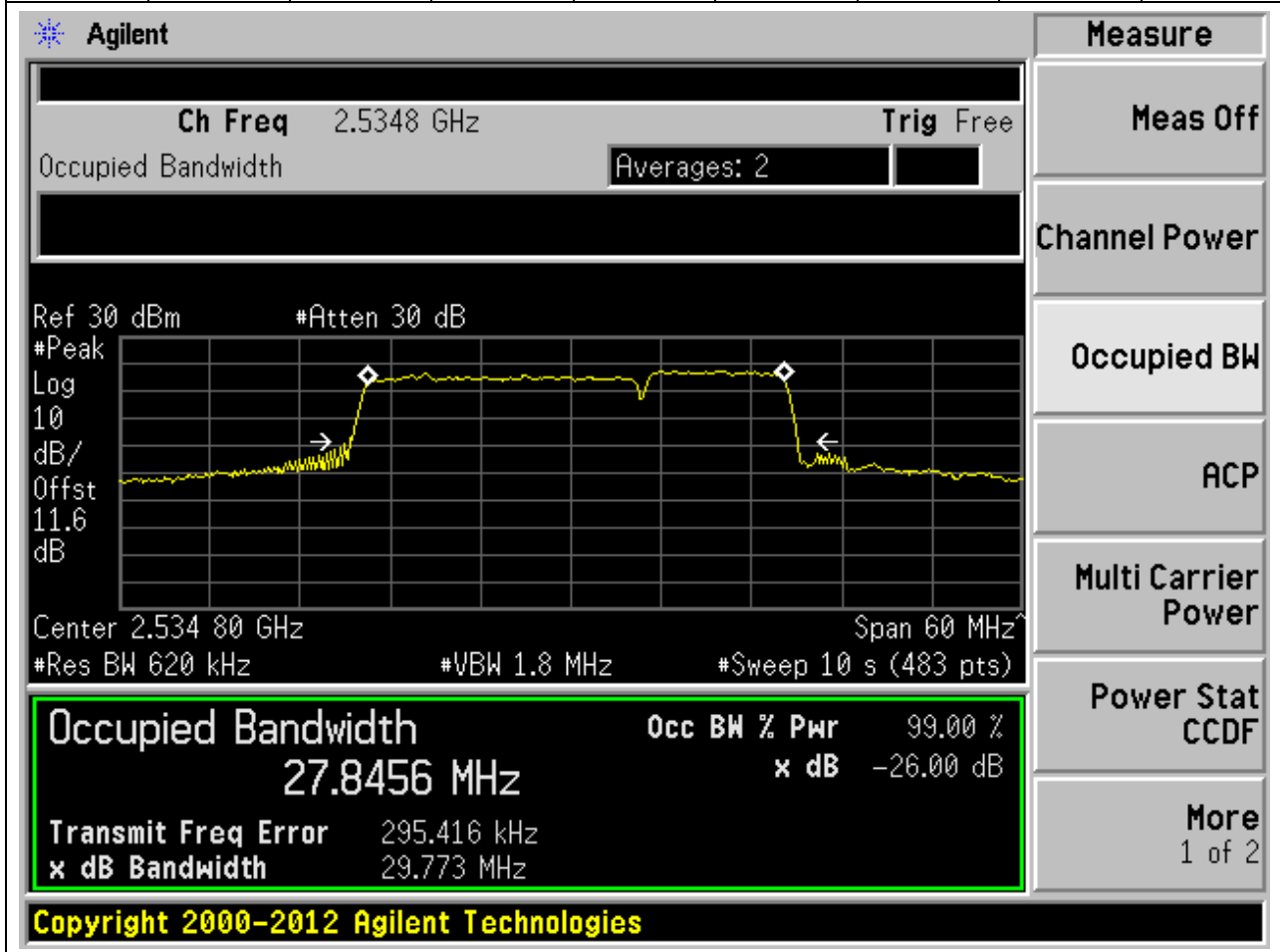
**Transmit Freq Error** -338.937 kHz

**x dB Bandwidth** 29.545 MHz

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**2.3. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:3,  
Channel:21051|21195, Bandwidth:20|10MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

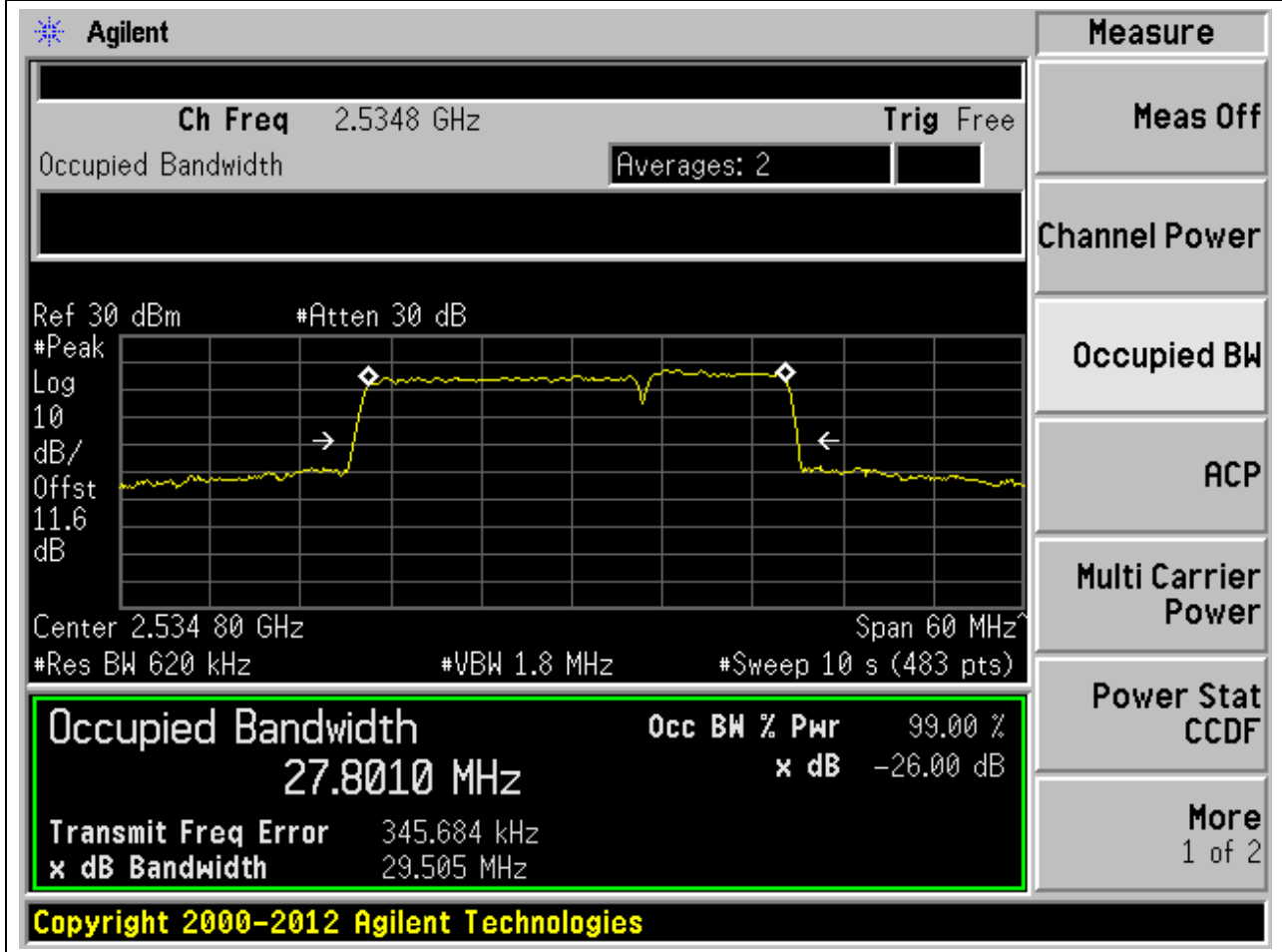
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2534.8	99	26	0.62	Peak	27.85	29.77	30	Pass





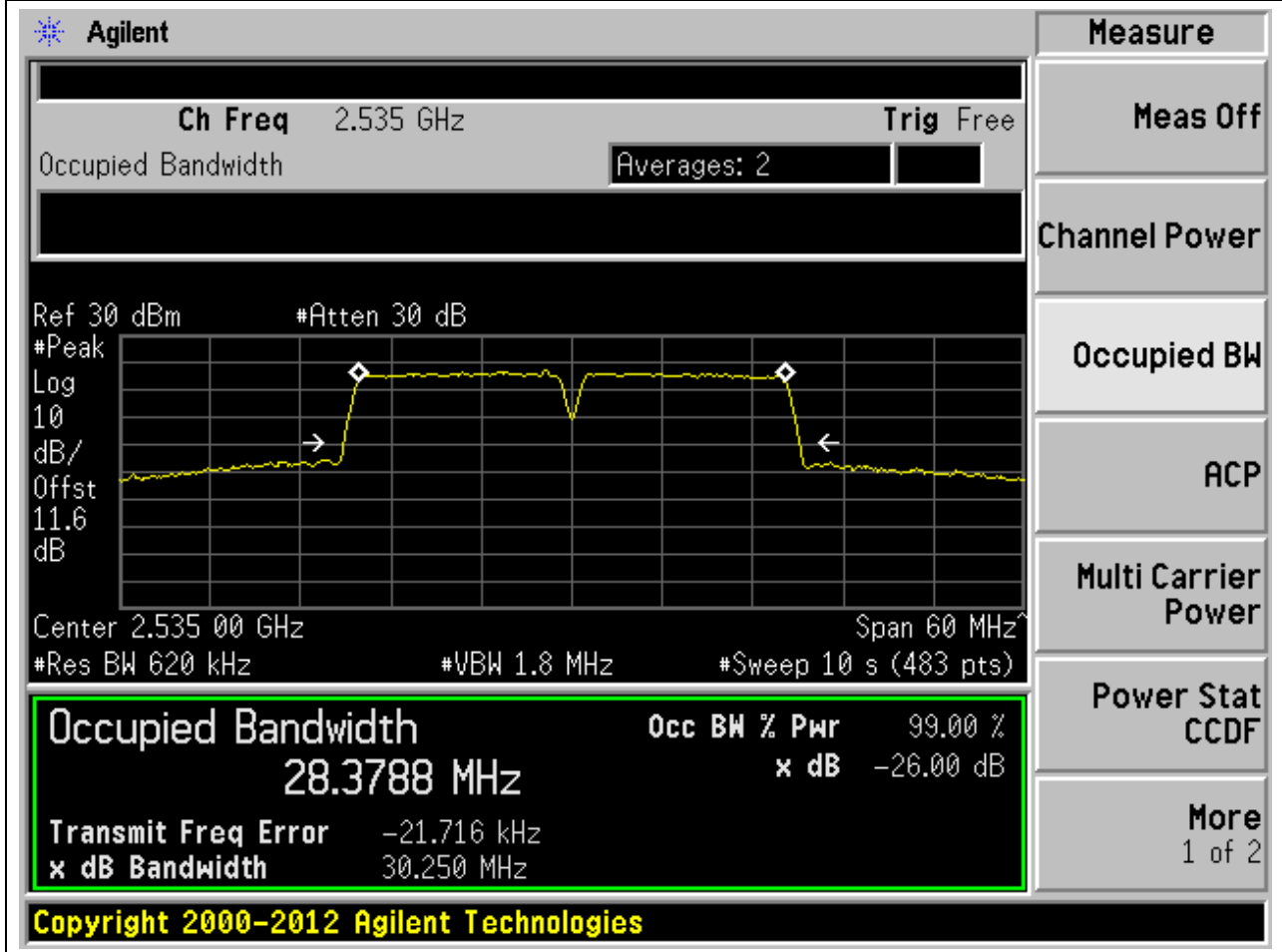
**2.4. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:4,  
Channel:21051|21195, Bandwidth:20|10MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2534.8	99	26	0.62	Peak	27.8	29.51	30	Pass



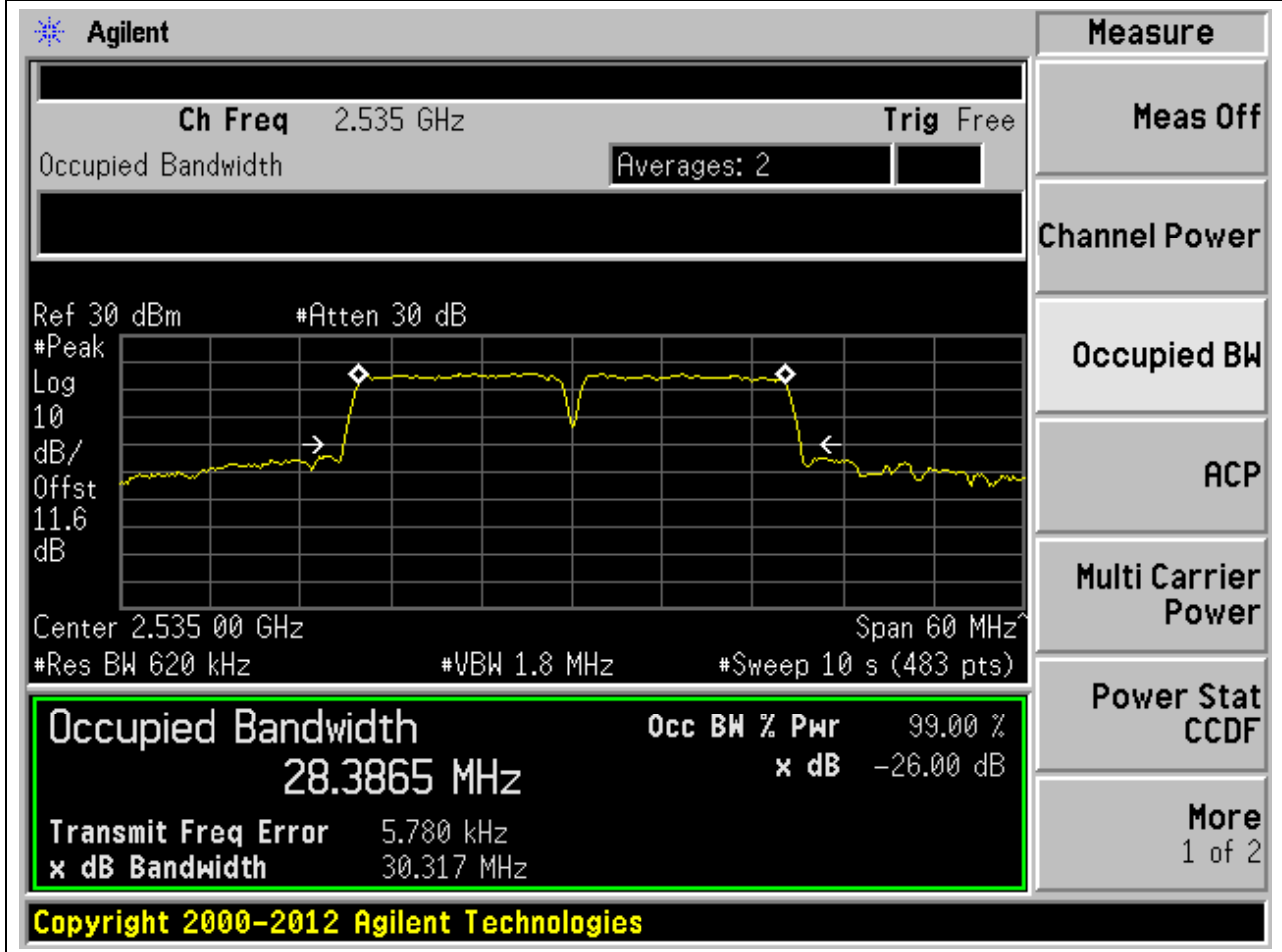
2.5. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:5,  
Channel:21025|21175, Bandwidth:15|15MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535	99	26	0.62	Peak	28.38	30.25	30	Pass



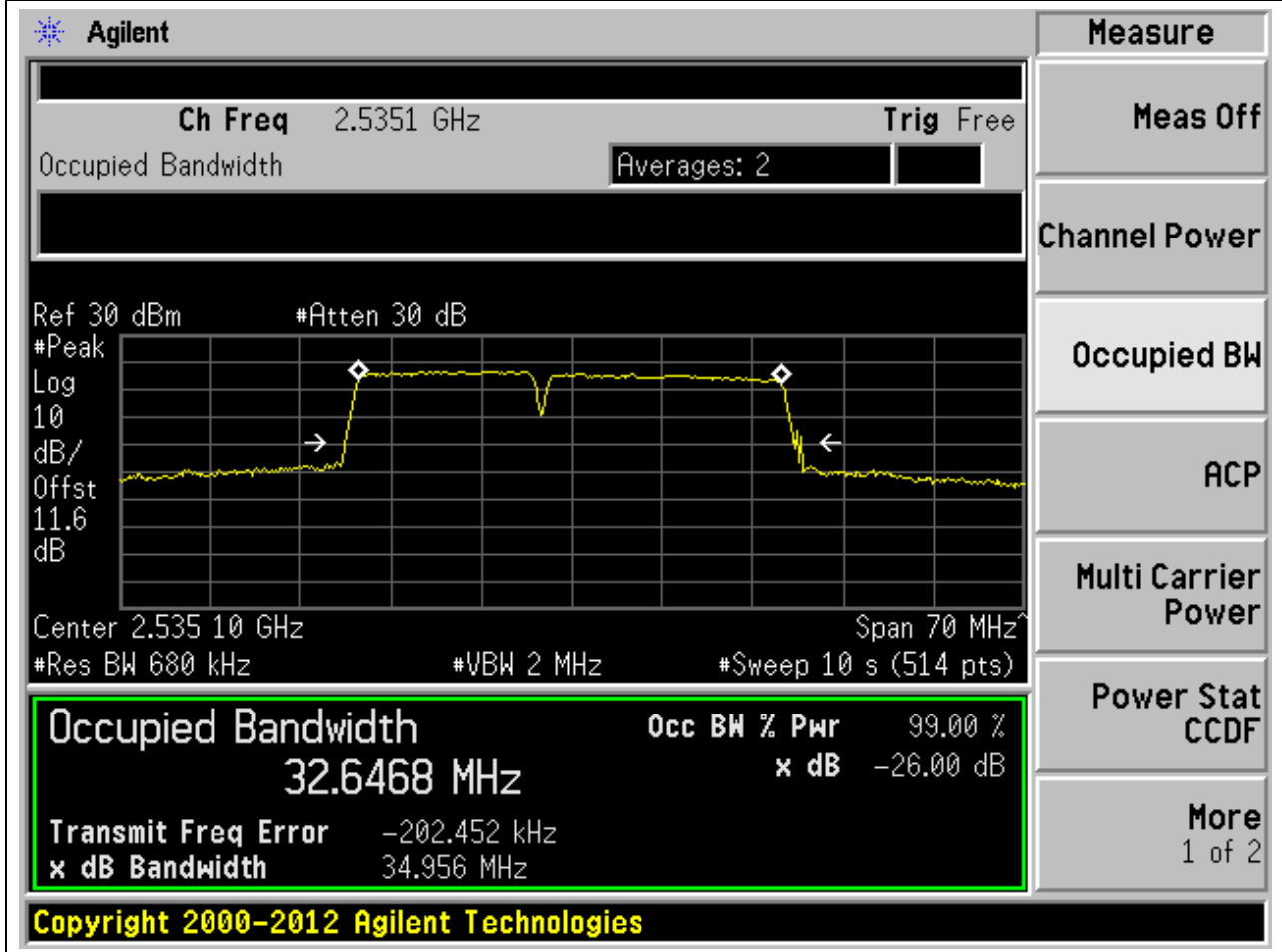
2.6. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:6,  
 Channel:21025|21175, Bandwidth:15|15MHz, Modulation:16QAM, RB  
 Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535	99	26	0.62	Peak	28.39	30.32	30	Pass



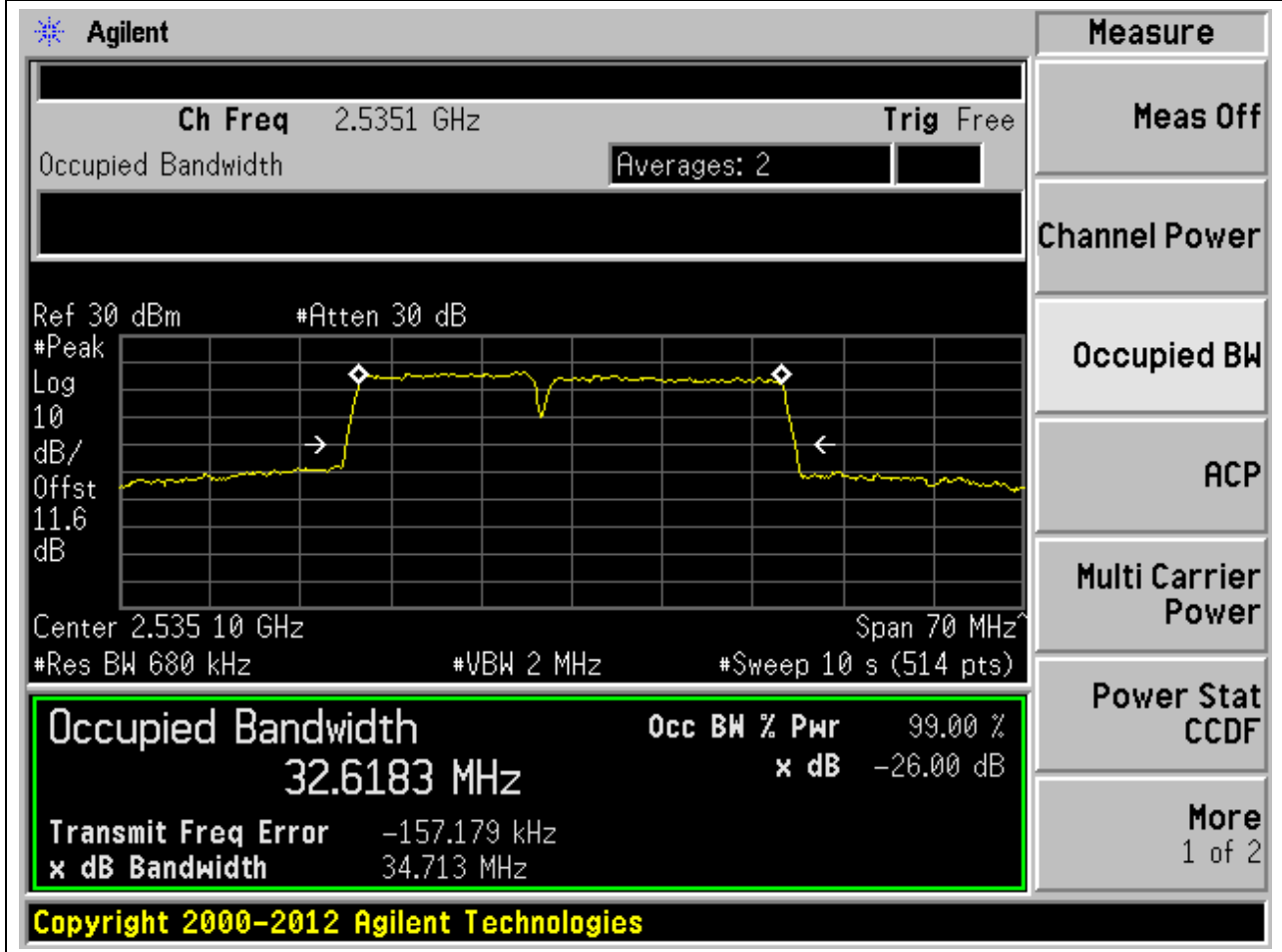
**2.7. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:7,  
Channel:21003|21174, Bandwidth:15|20MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535.1	99	26	0.68	Peak	32.65	34.96	35	Pass



**2.8. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:8,  
Channel:21003|21174, Bandwidth:15|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535.1	99	26	0.68	Peak	32.62	34.71	35	Pass



**2.9. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:9,  
Channel:21026|21197, Bandwidth:20|15MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2534.9	99	26	0.68	Peak	32.7	34.86	35	Pass

Agilent
Measure

Ch Freq 2.5349 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 11.6 dB

Center 2.534 90 GHz Span 70 MHz

#Res BW 680 kHz #VBW 2 MHz #Sweep 10 s (514 pts)

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

**32.6962 MHz** x dB -26.00 dB

Transmit Freq Error 143.275 kHz

x dB Bandwidth 34.864 MHz

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

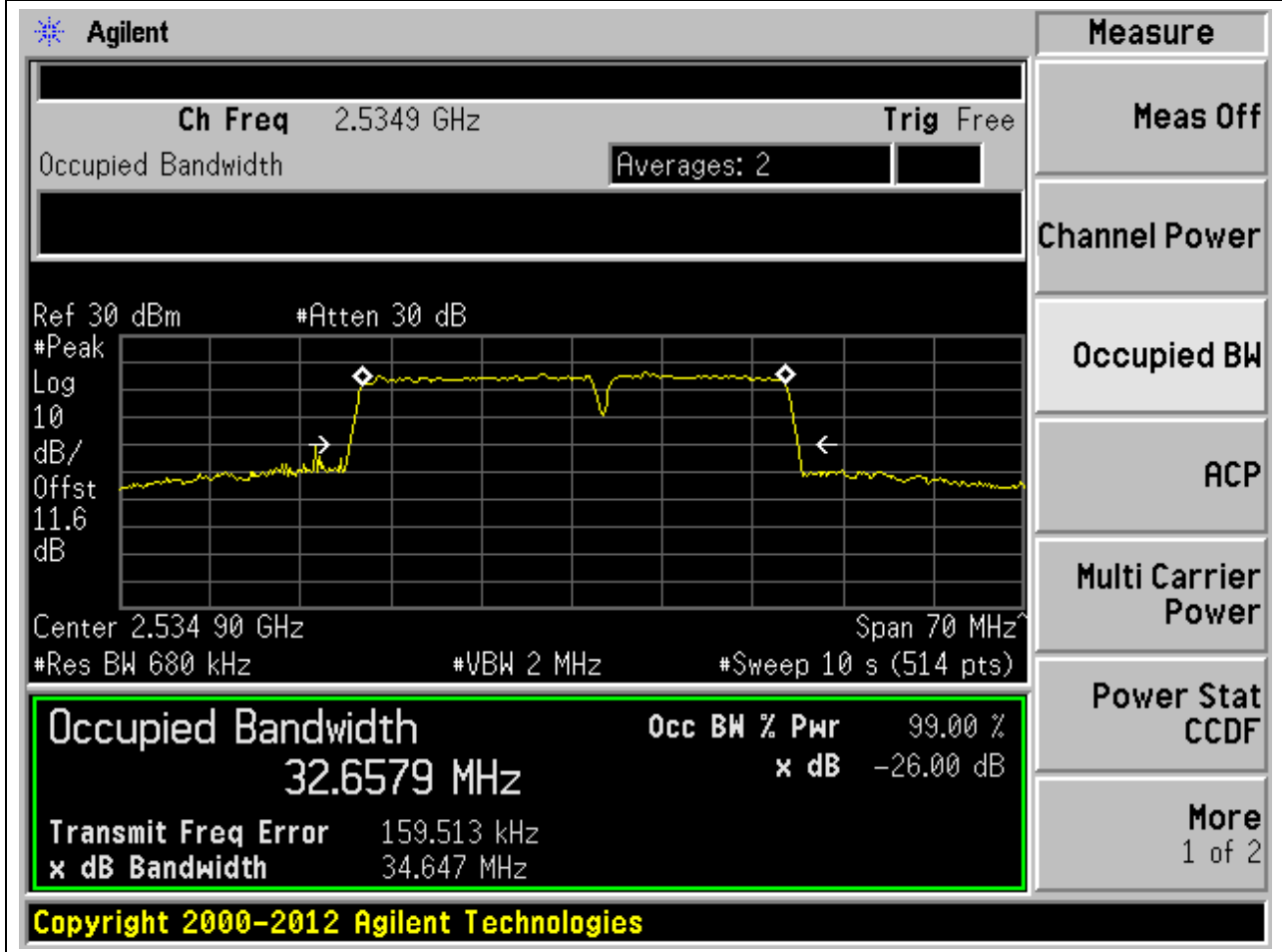
Power Stat CCDF

More 1 of 2

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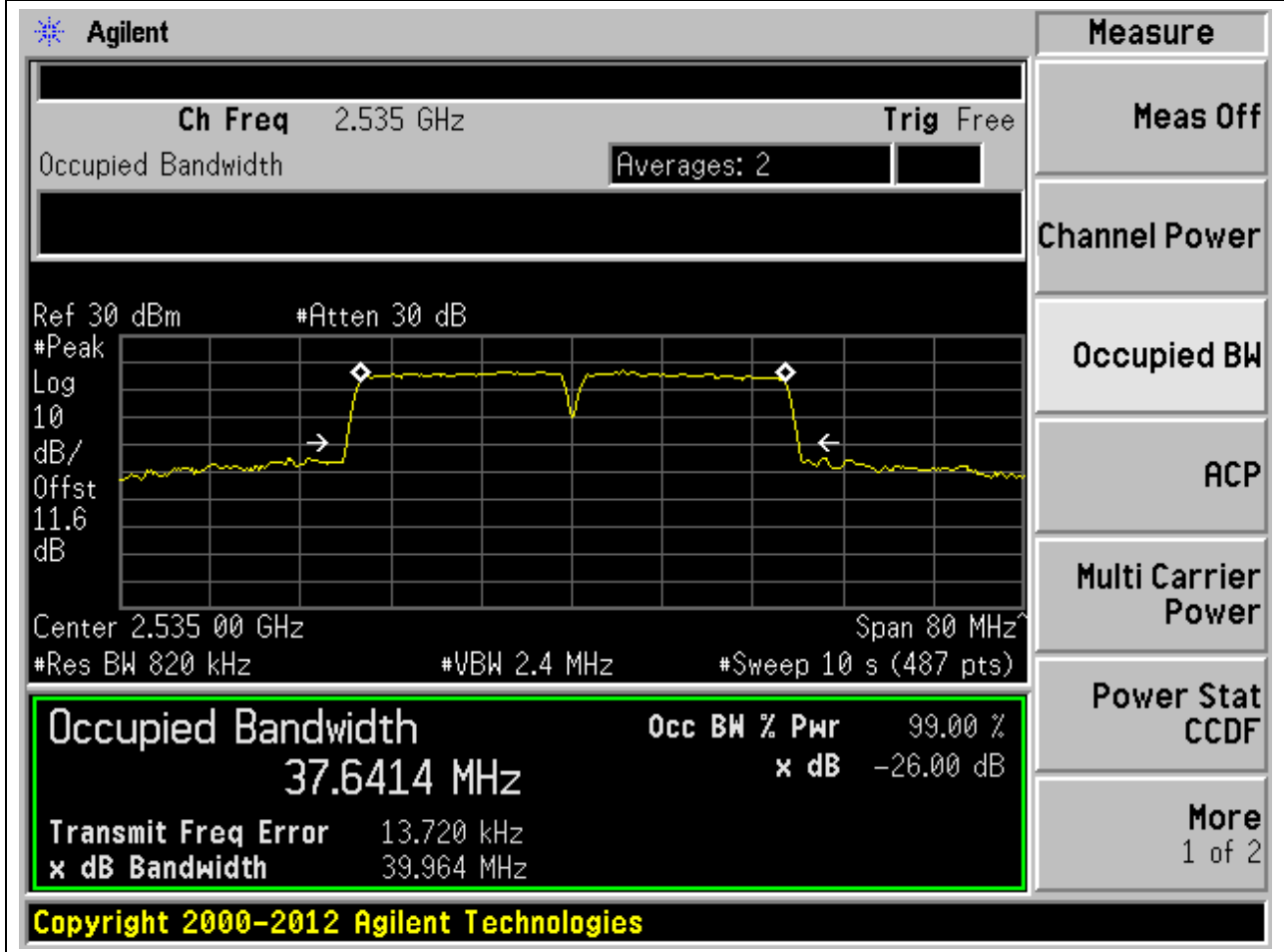
**2.10. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:10, Channel:21026|21197, Bandwidth:20|15MHz, Modulation:16QAM, RB Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2534.9	99	26	0.68	Peak	32.66	34.65	35	Pass



**2.11. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:11, Channel:21001|21199, Bandwidth:20|20MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)**

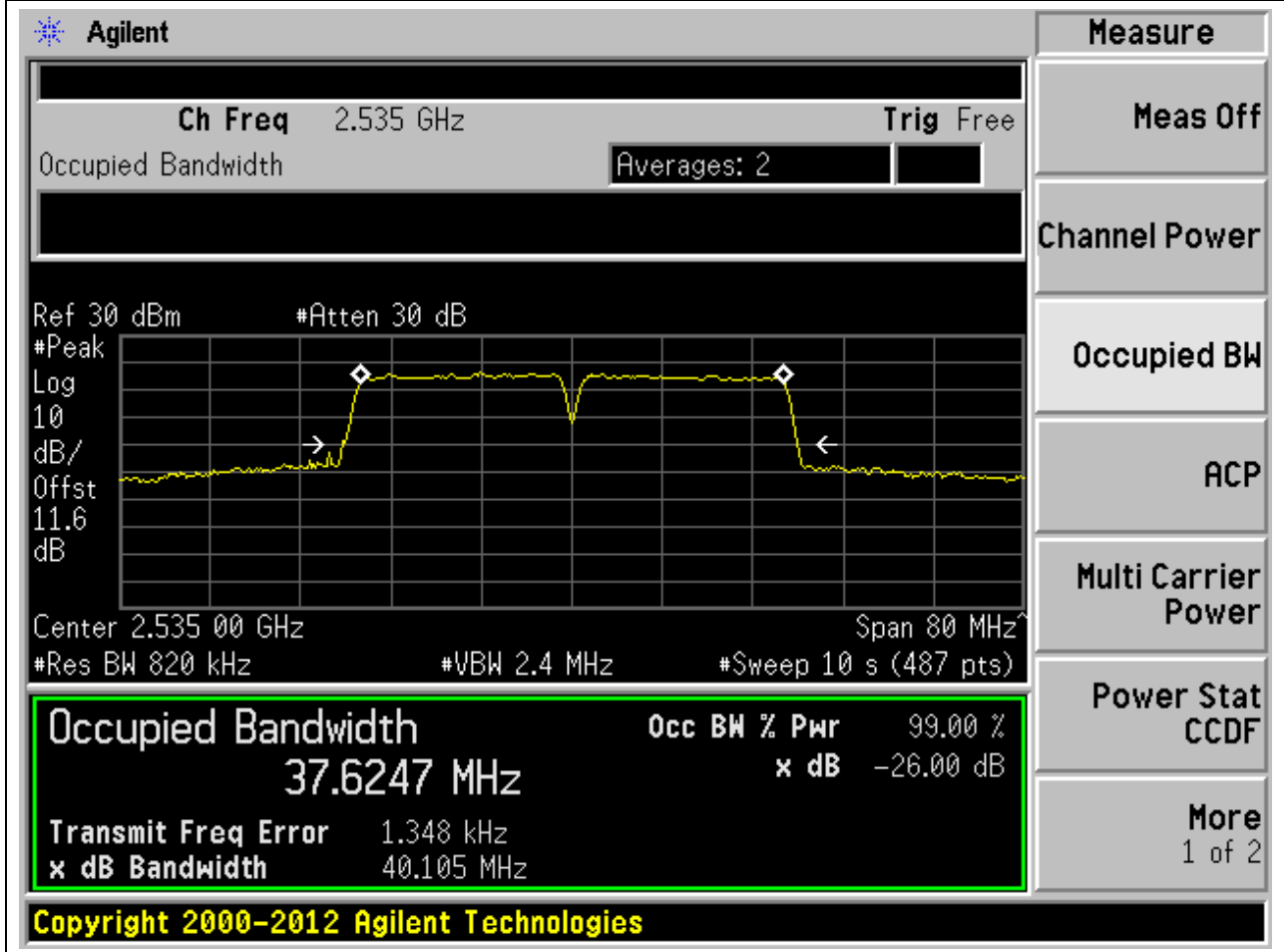
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535	99	26	0.82	Peak	37.64	39.96	40	Pass





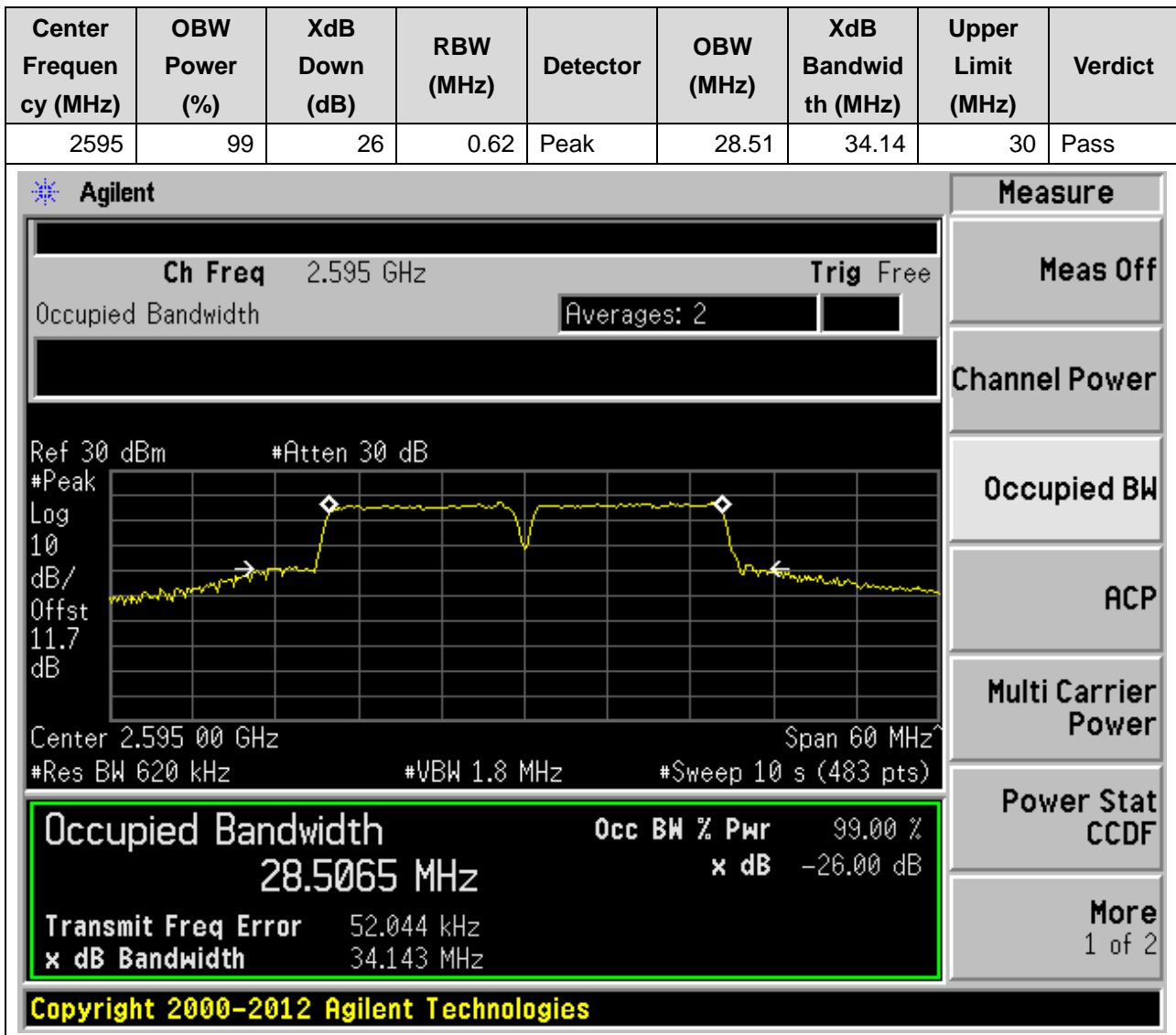
**2.12. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:12,  
Channel:21001|21199, Bandwidth:20|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535	99	26	0.82	Peak	37.62	40.11	40	Pass



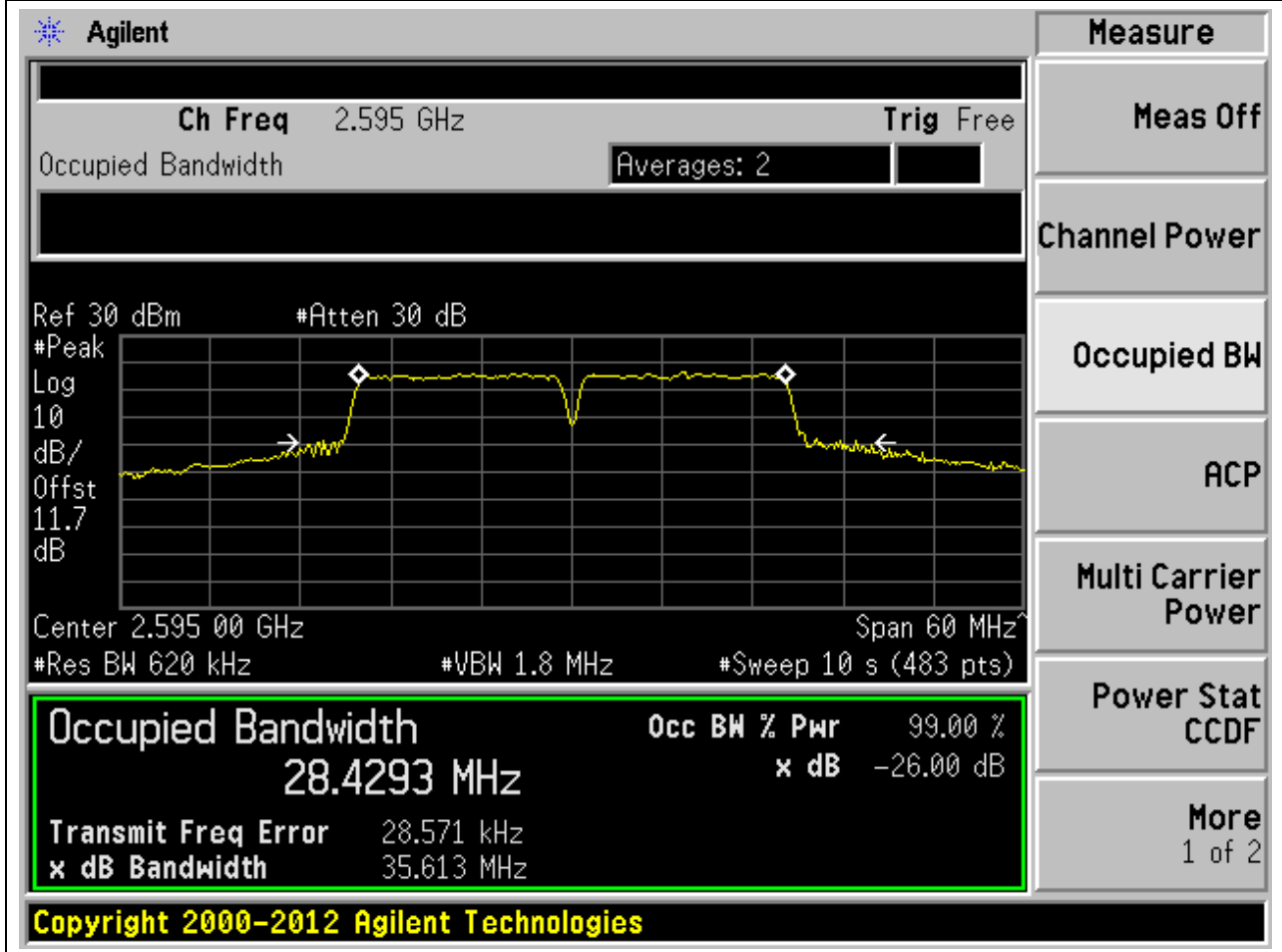
## 4. CA\_38C

4.1. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:1, Channel:37925|38075, Bandwidth:15|15MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)



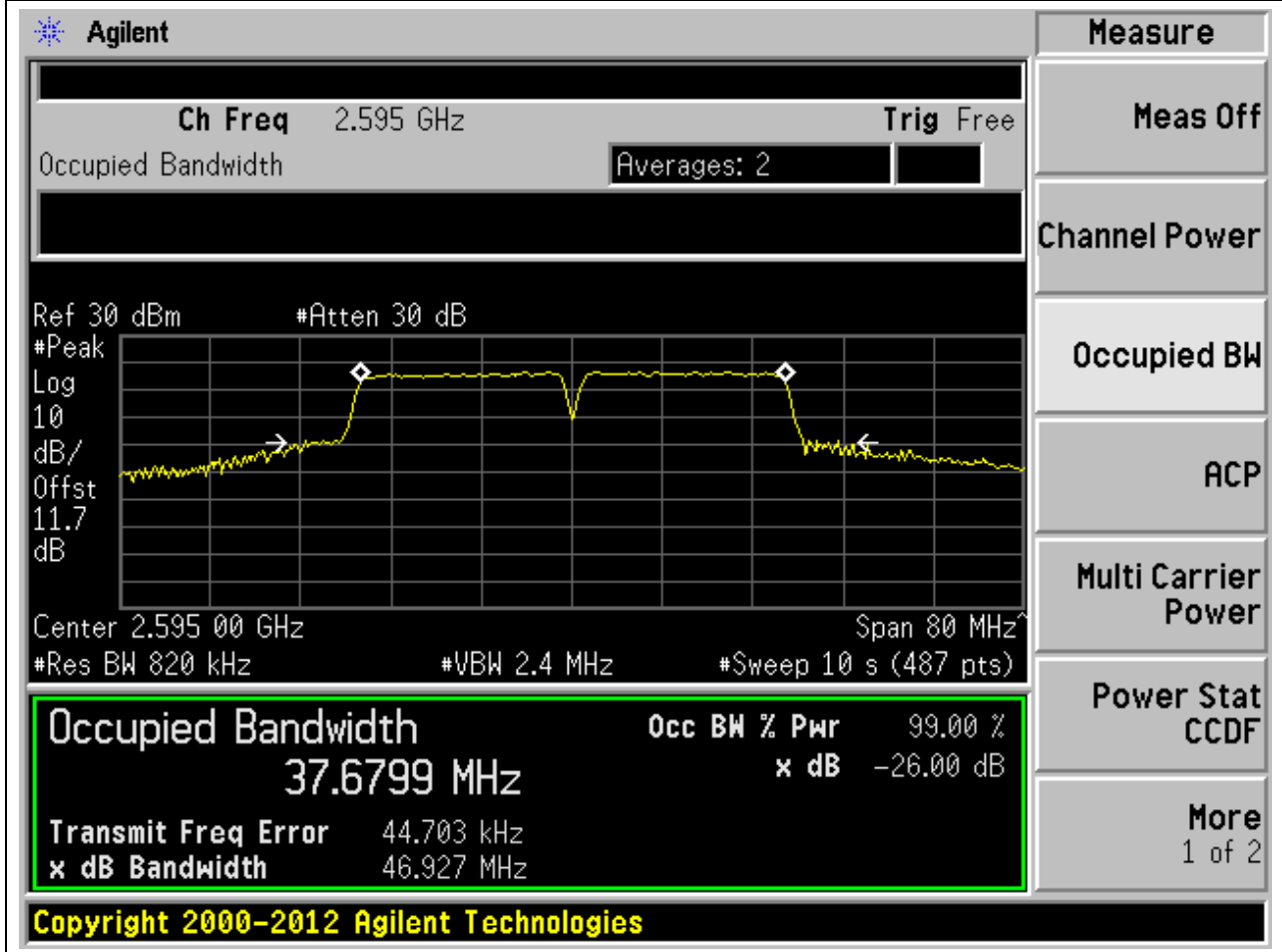
**4.2. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:2,  
Channel:37925|38075, Bandwidth:15|15MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2595	99	26	0.62	Peak	28.43	35.61	30	Pass



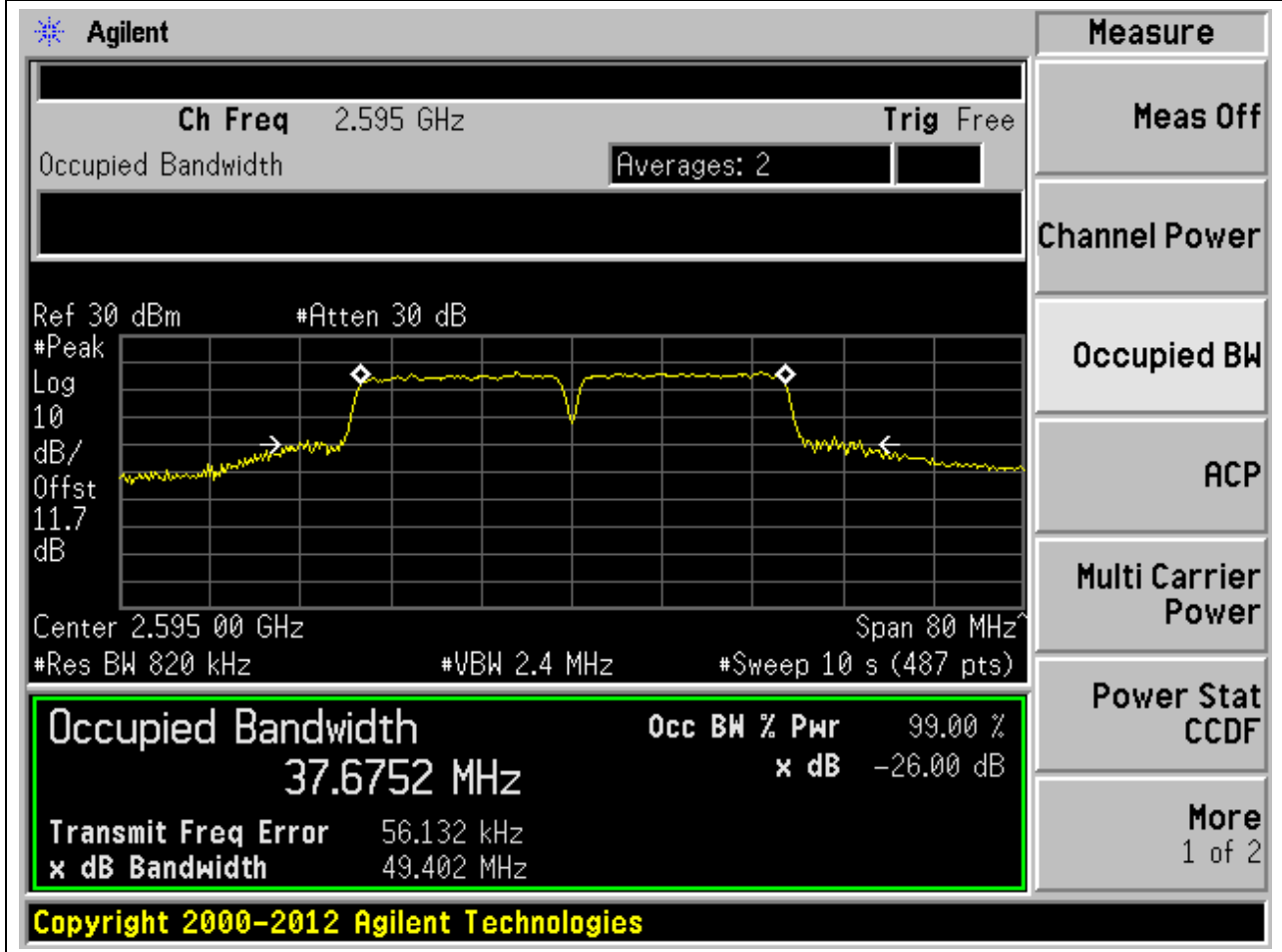
**4.3. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:3,  
Channel:37901|38099, Bandwidth:20|20MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2595	99	26	0.82	Peak	37.68	46.93	40	Pass



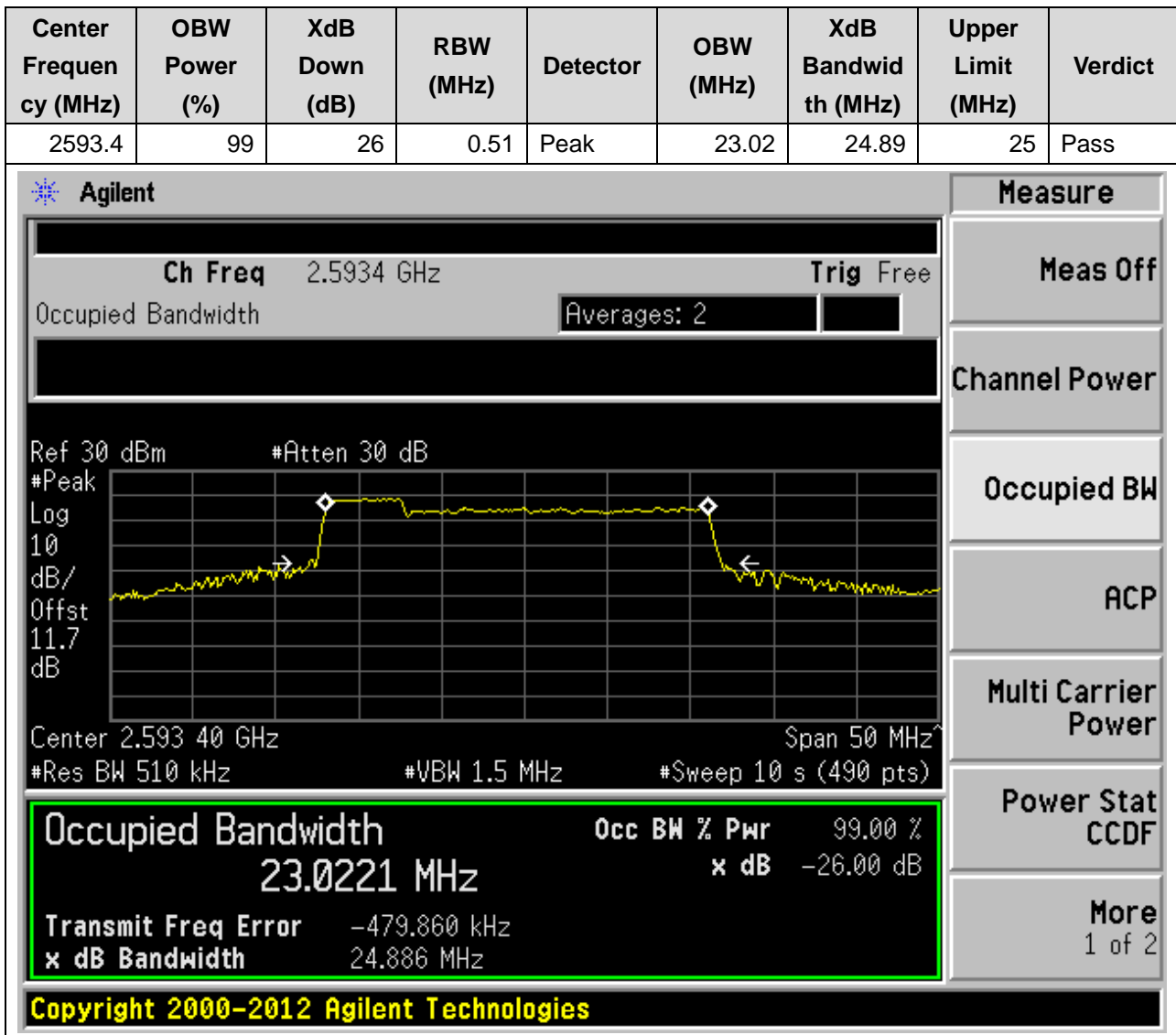
**4.4. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:4,  
Channel:37901|38099, Bandwidth:20|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2595	99	26	0.82	Peak	37.68	49.4	40	Pass



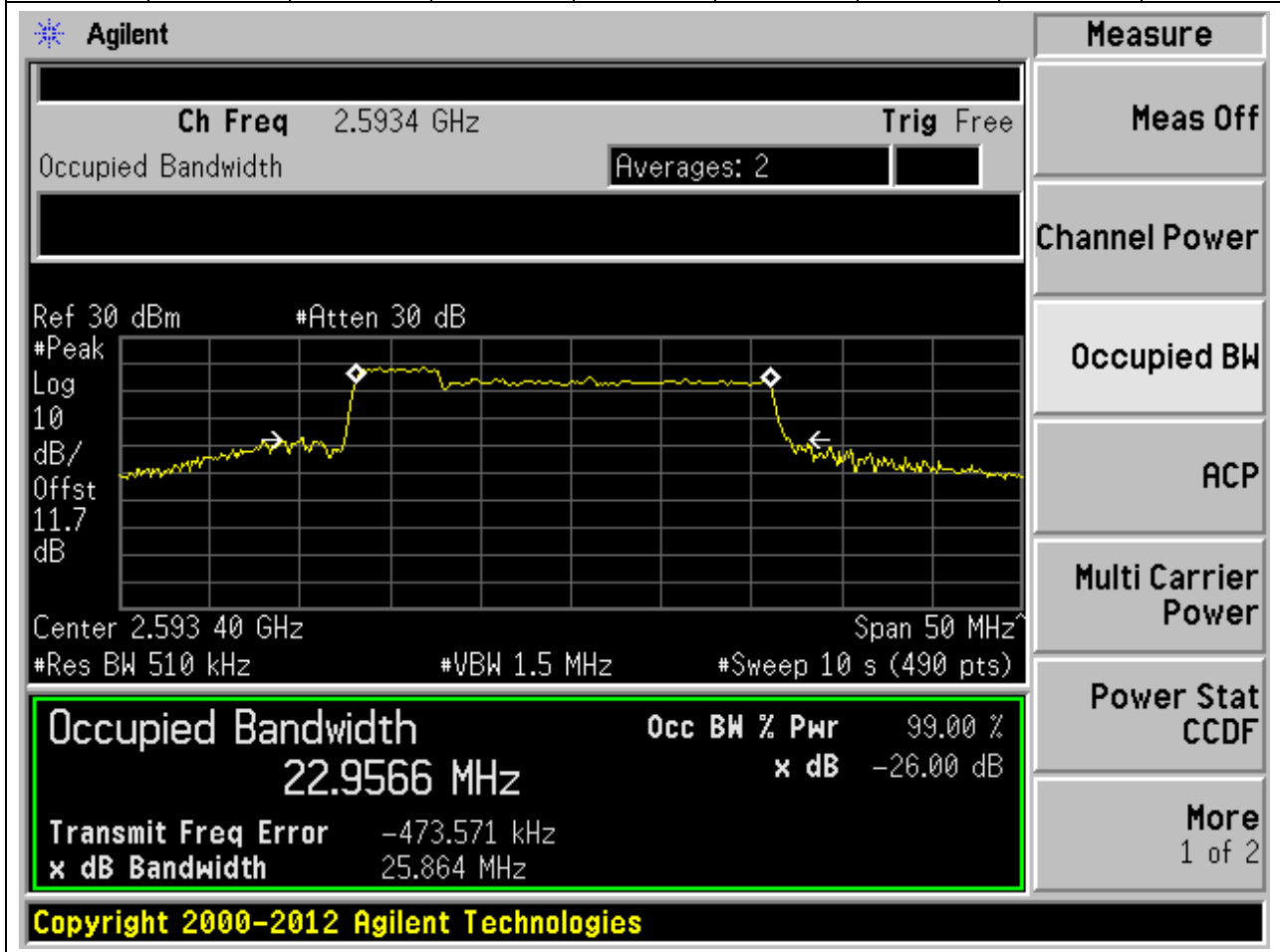
## 5. CA\_41C\_full

5.1. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:1,  
Channel:40528|40645, Bandwidth:5|20MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)



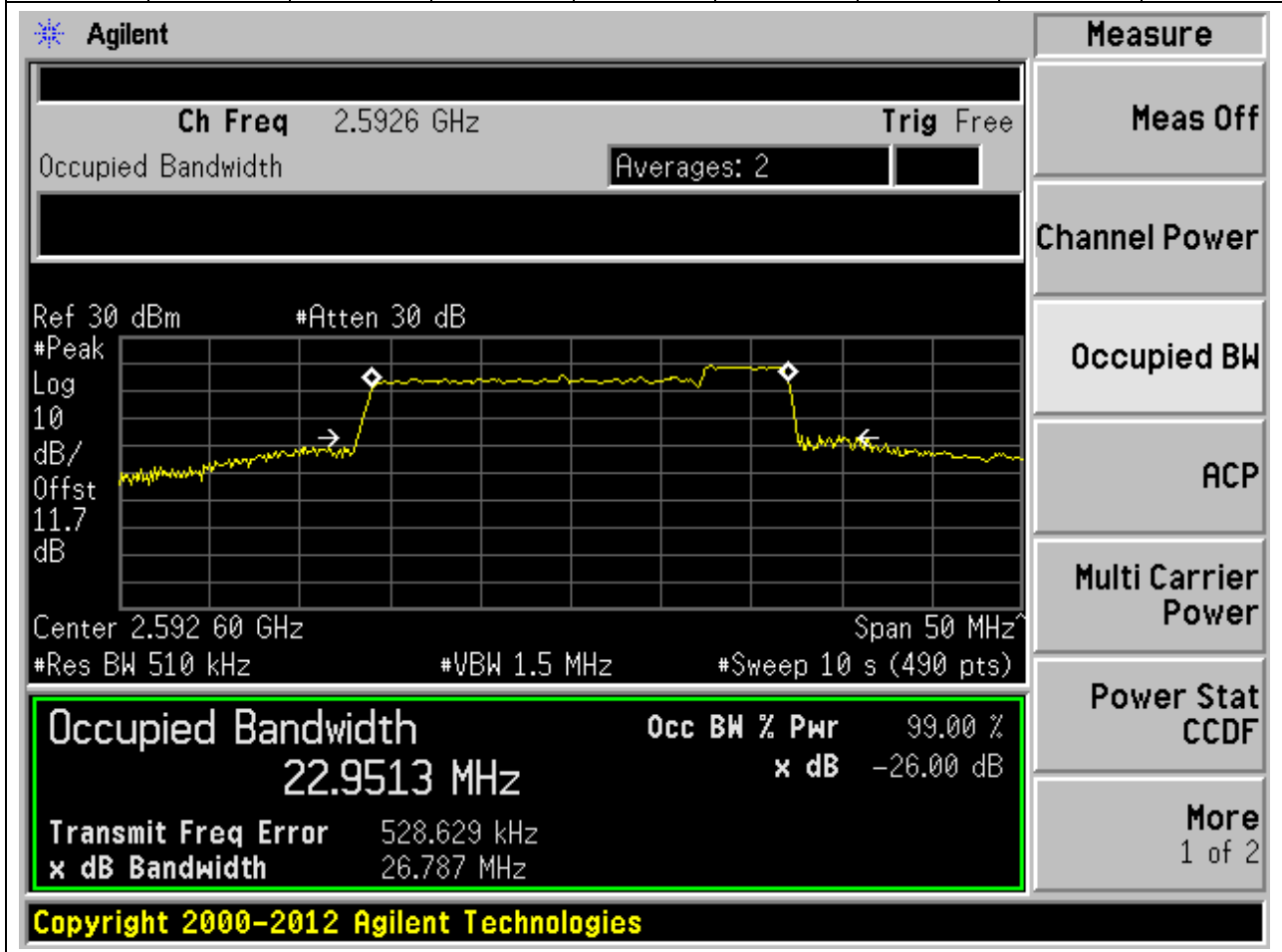
5.2. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:2,  
Channel:40528|40645, Bandwidth:5|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593.4	99	26	0.51	Peak	22.96	25.86	25	Pass



**5.3. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:3, Channel:40595|40712, Bandwidth:20|5MHz, Modulation:QPSK, RB Number:Full|Full, RB Position:Low|Low)**

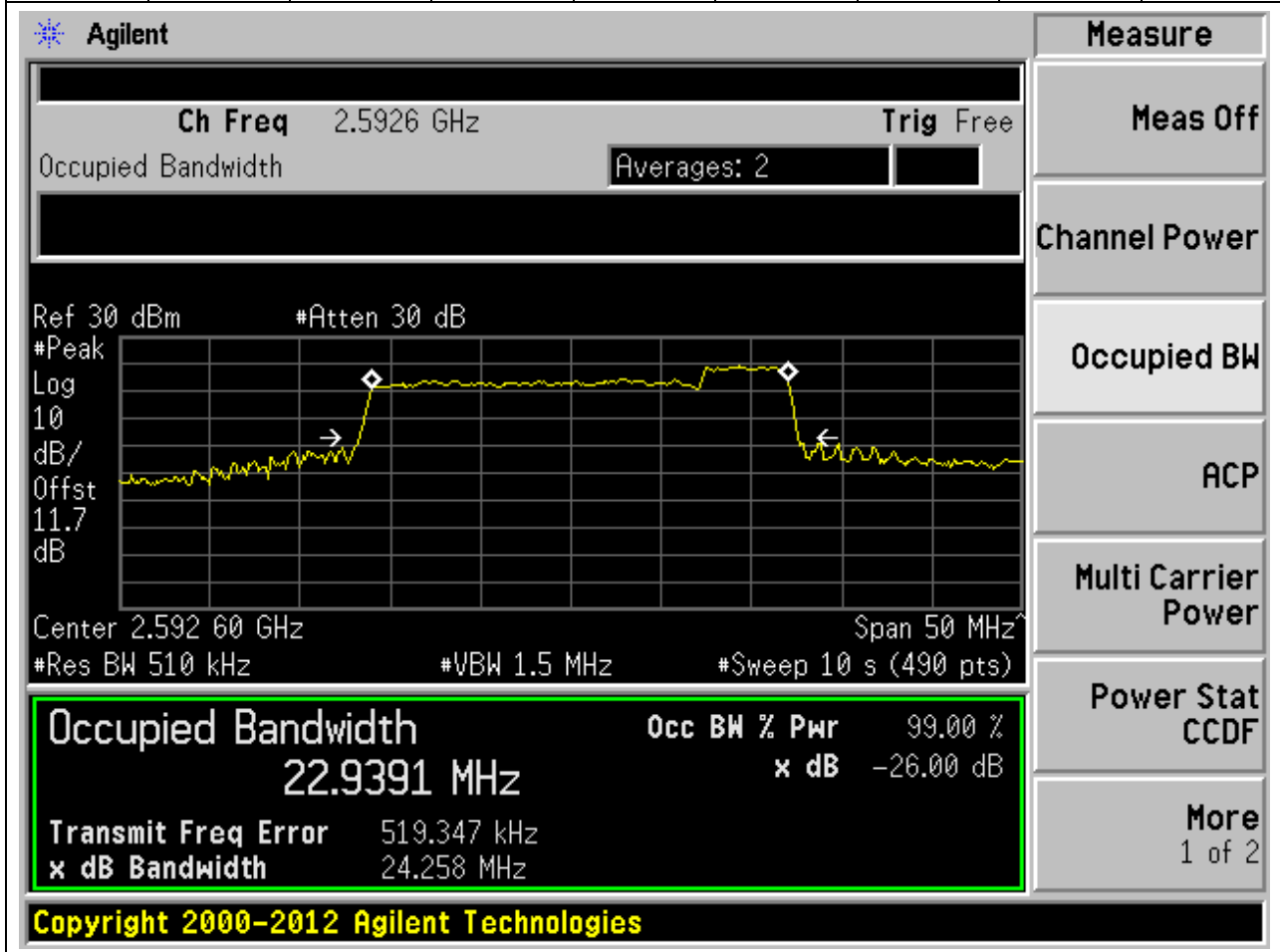
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2592.6	99	26	0.51	Peak	22.95	26.79	25	Pass





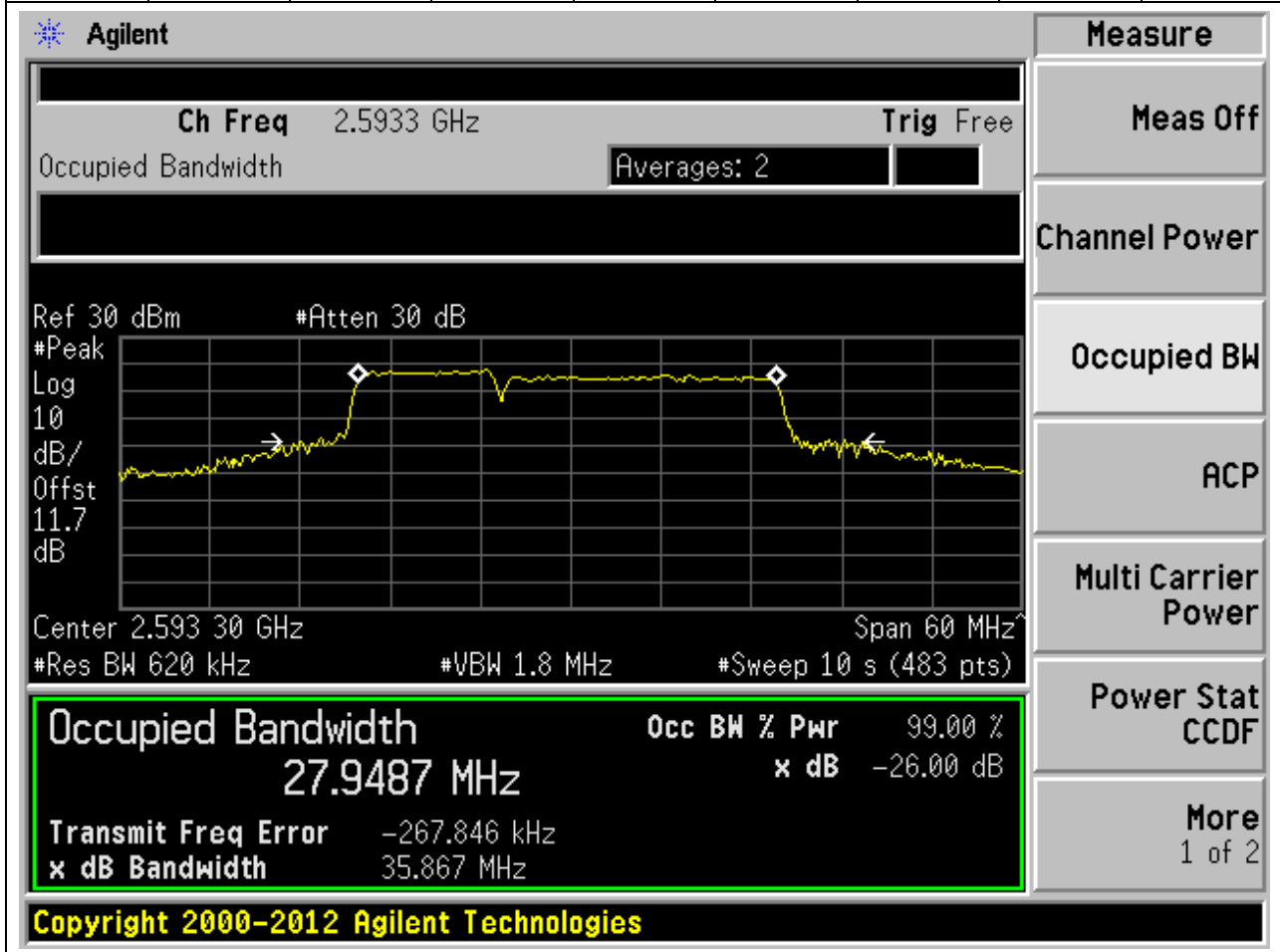
**5.4. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:4,  
Channel:40595|40712, Bandwidth:20|5MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2592.6	99	26	0.51	Peak	22.94	24.26	25	Pass



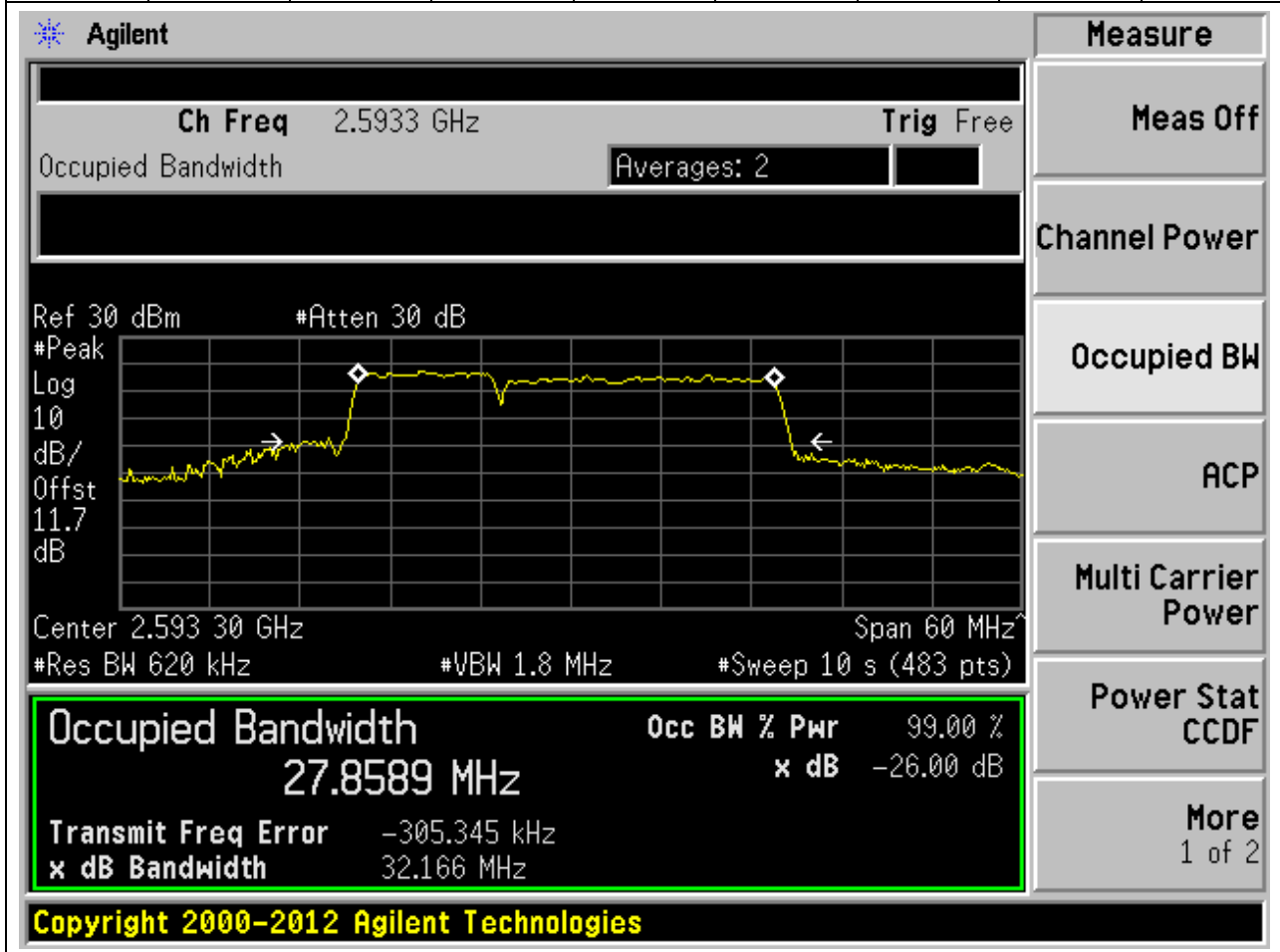
5.5. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:5,  
 Channel:40526|40670, Bandwidth:10|20MHz, Modulation:QPSK, RB  
 Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593.3	99	26	0.62	Peak	27.95	35.87	30	Pass



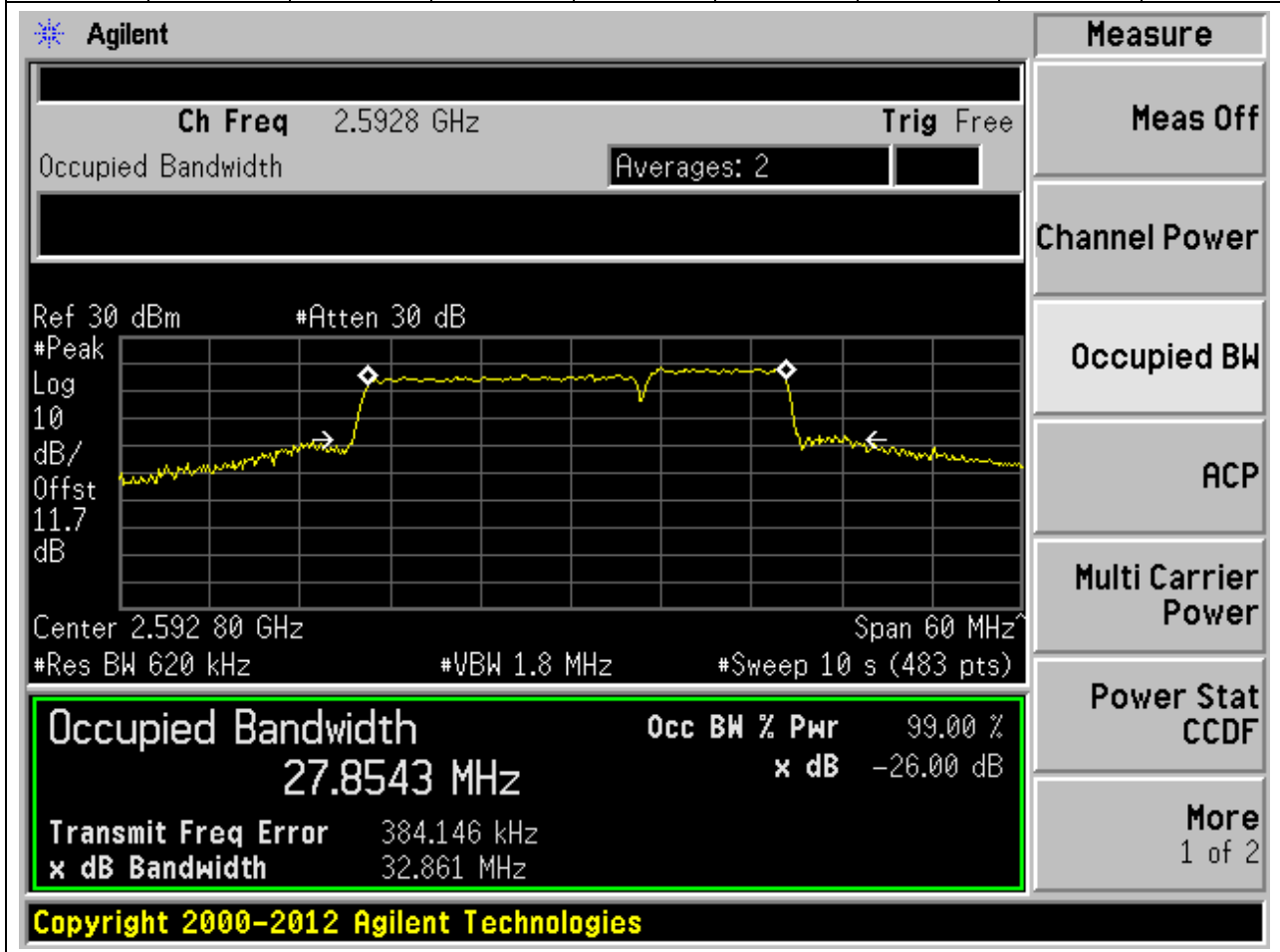
5.6. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:6,  
Channel:40526|40670, Bandwidth:10|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593.3	99	26	0.62	Peak	27.86	32.17	30	Pass



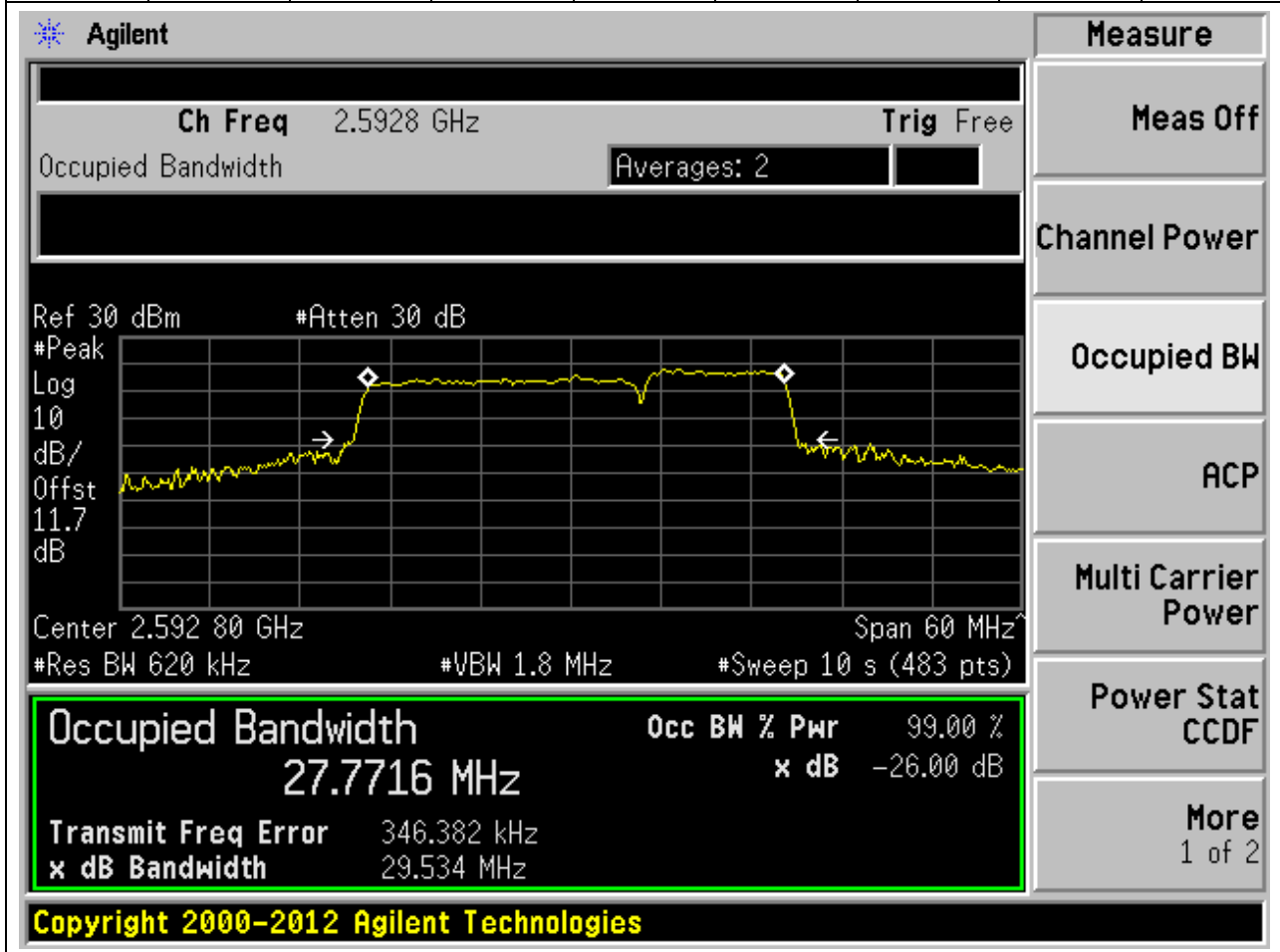
5.7. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:7,  
Channel:40571|40715, Bandwidth:20|10MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2592.8	99	26	0.62	Peak	27.85	32.86	30	Pass



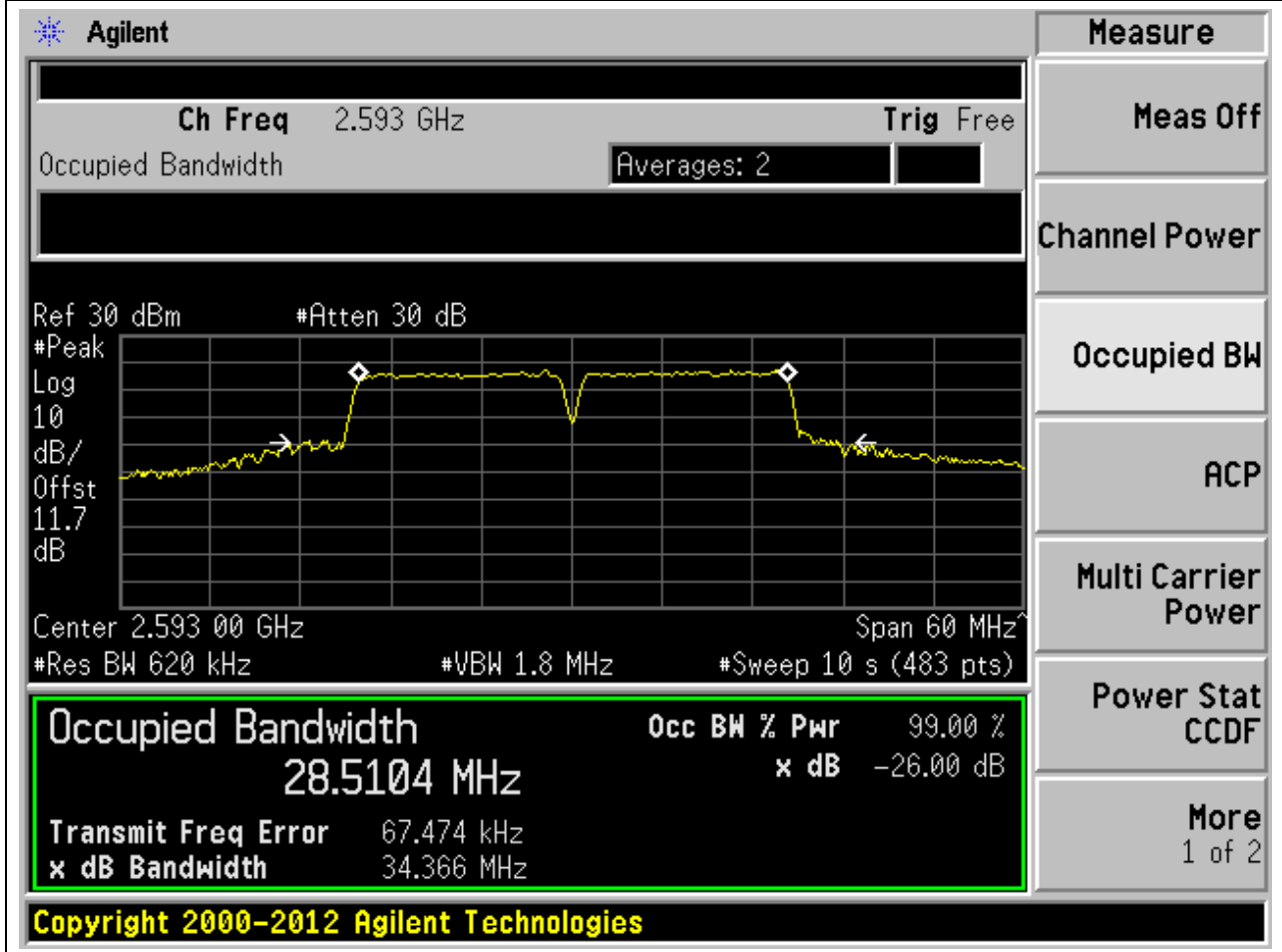
5.8. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:8,  
 Channel:40571|40715, Bandwidth:20|10MHz, Modulation:16QAM, RB  
 Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2592.8	99	26	0.62	Peak	27.77	29.53	30	Pass



5.9. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:9,  
 Channel:40545|40695, Bandwidth:15|15MHz, Modulation:QPSK, RB  
 Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593	99	26	0.62	Peak	28.51	34.37	30	Pass



**5.10. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:10,  
Channel:40545|40695, Bandwidth:15|15MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593	99	26	0.62	Peak	28.44	35.89	30	Pass

Agilent

Measure

Ch Freq 2.593 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 11.7 dB

Center 2.593 00 GHz Span 60 MHz

#Res BW 620 kHz #VBW 1.8 MHz #Sweep 10 s (483 pts)

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
28.4417 MHz	x dB -26.00 dB
Transmit Freq Error 31.130 kHz	
x dB Bandwidth 35.893 MHz	

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5.11. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:11,  
 Channel:40523|40694, Bandwidth:15|20MHz, Modulation:QPSK, RB  
 Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593.1	99	26	0.68	Peak	32.7	37.64	35	Pass

Agilent
Measure

Ch Freq 2.5931 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.7 dB

Center 2.593 10 GHz Span 70 MHz

#Res BW 680 kHz #VBW 2 MHz #Sweep 10 s (514 pts)

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

**32.6988 MHz** x dB -26.00 dB

Transmit Freq Error -120.756 kHz

x dB Bandwidth 37.642 MHz

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

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5.12. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:12,  
Channel:40523|40694, Bandwidth:15|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593.1	99	26	0.68	Peak	32.71	42.78	35	Pass

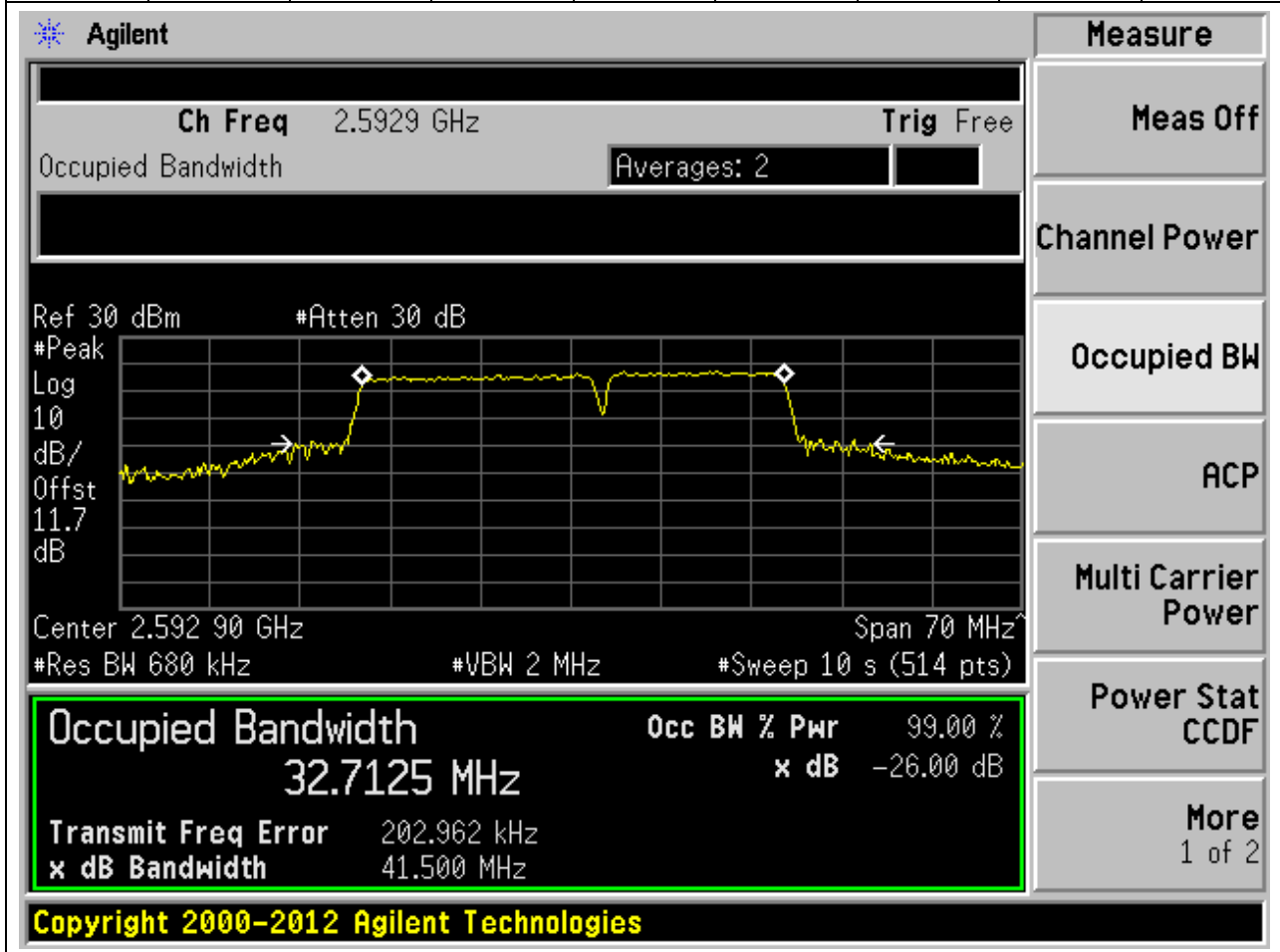
The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.5931 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include a reference level of 30 dBm, a peak level of 10 dB, and an offset of 11.7 dB. The occupied bandwidth is highlighted in a green box with the following values:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>32.7127 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		-124.266 kHz
<b>x dB Bandwidth</b>		42.784 MHz

Additional parameters shown include a span of 70 MHz, a resolution bandwidth of 680 kHz, a video bandwidth of 2 MHz, and a sweep time of 10 seconds (514 points). The right-hand side of the interface features a 'Measure' menu with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More 1 of 2'. The bottom of the screen displays the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

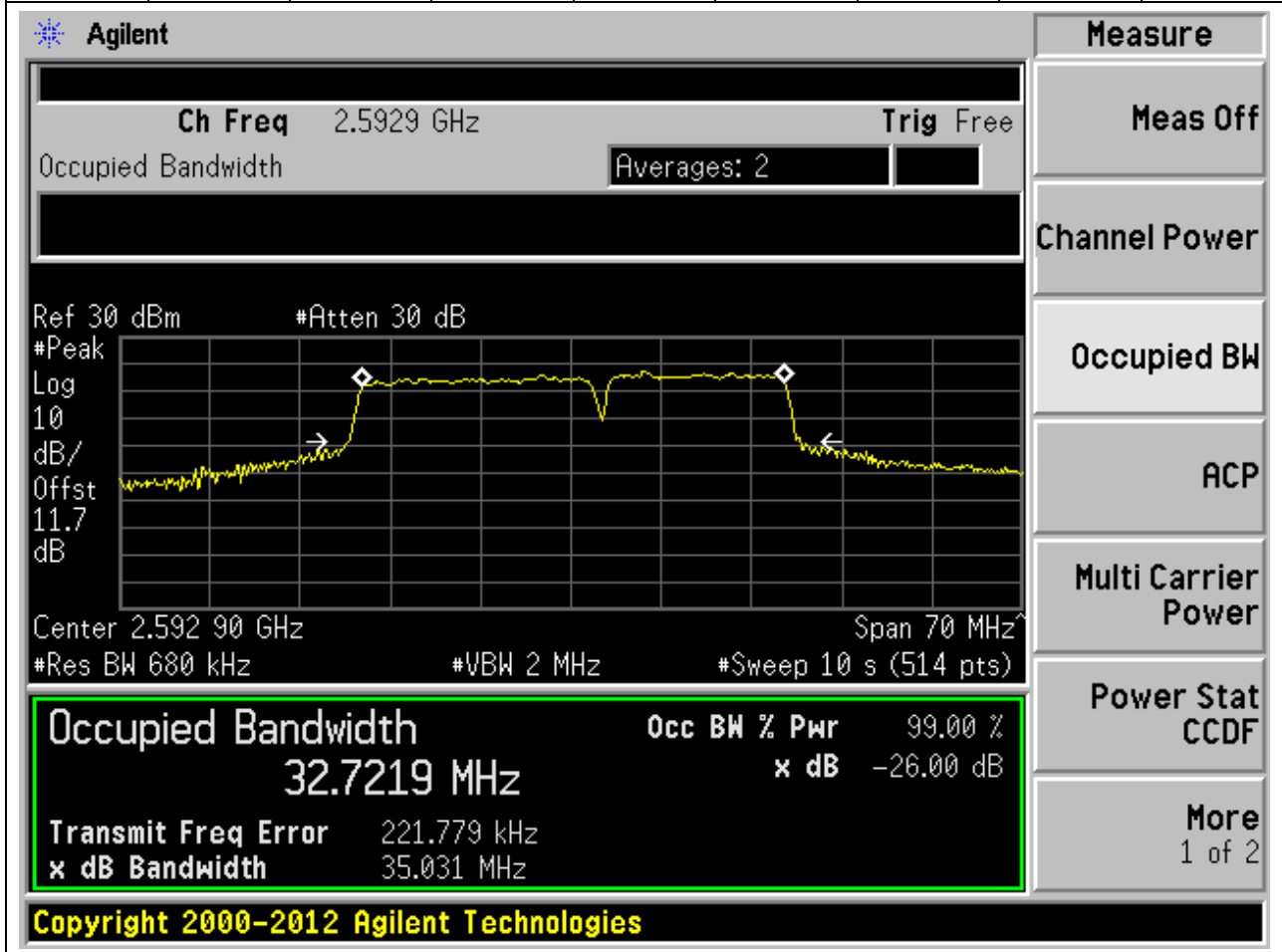
5.13. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:13,  
 Channel:40546|40717, Bandwidth:20|15MHz, Modulation:QPSK, RB  
 Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2592.9	99	26	0.68	Peak	32.71	41.5	35	Pass



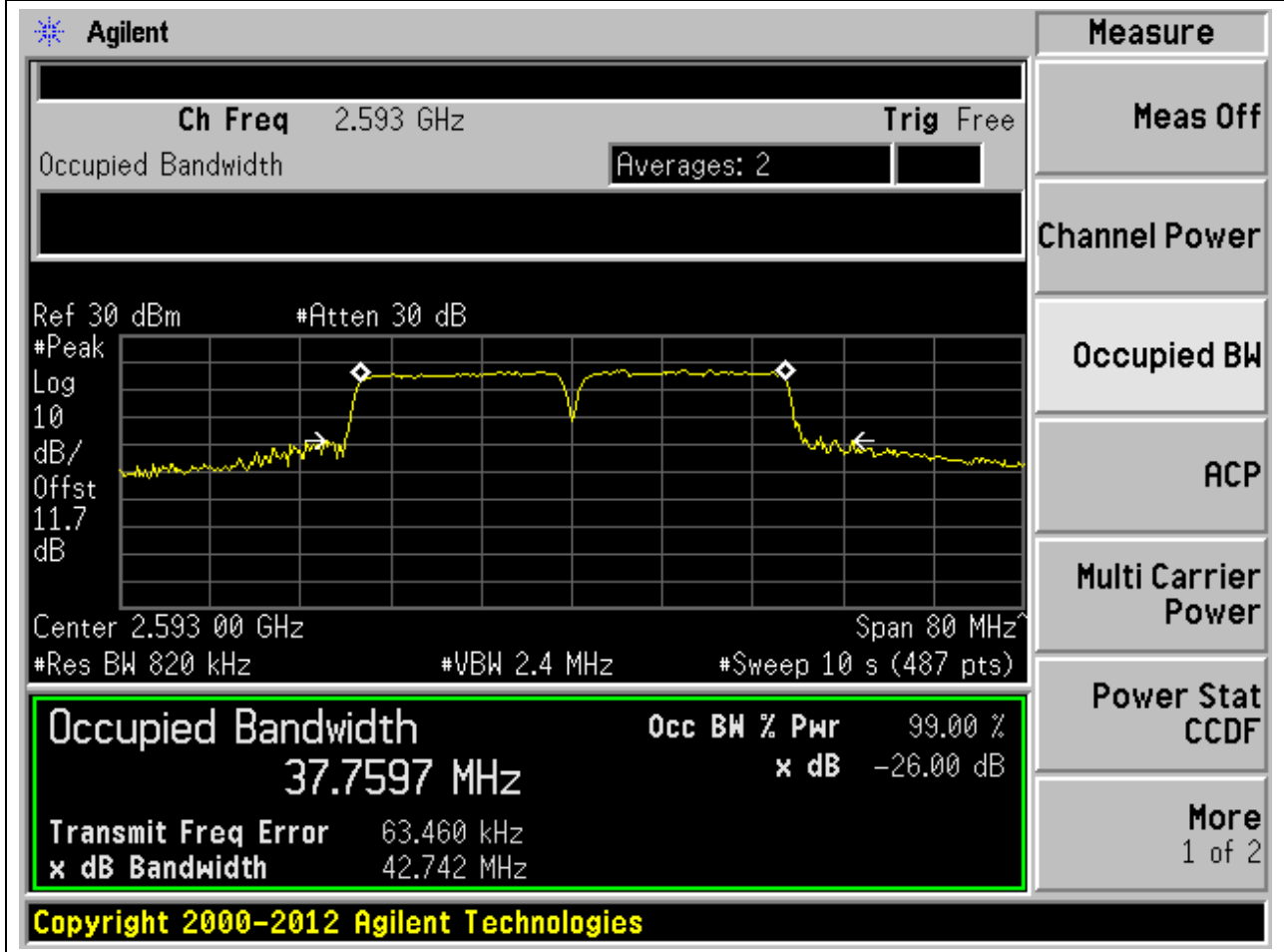
5.14. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:14,  
 Channel:40546|40717, Bandwidth:20|15MHz, Modulation:16QAM, RB  
 Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2592.9	99	26	0.68	Peak	32.72	35.03	35	Pass



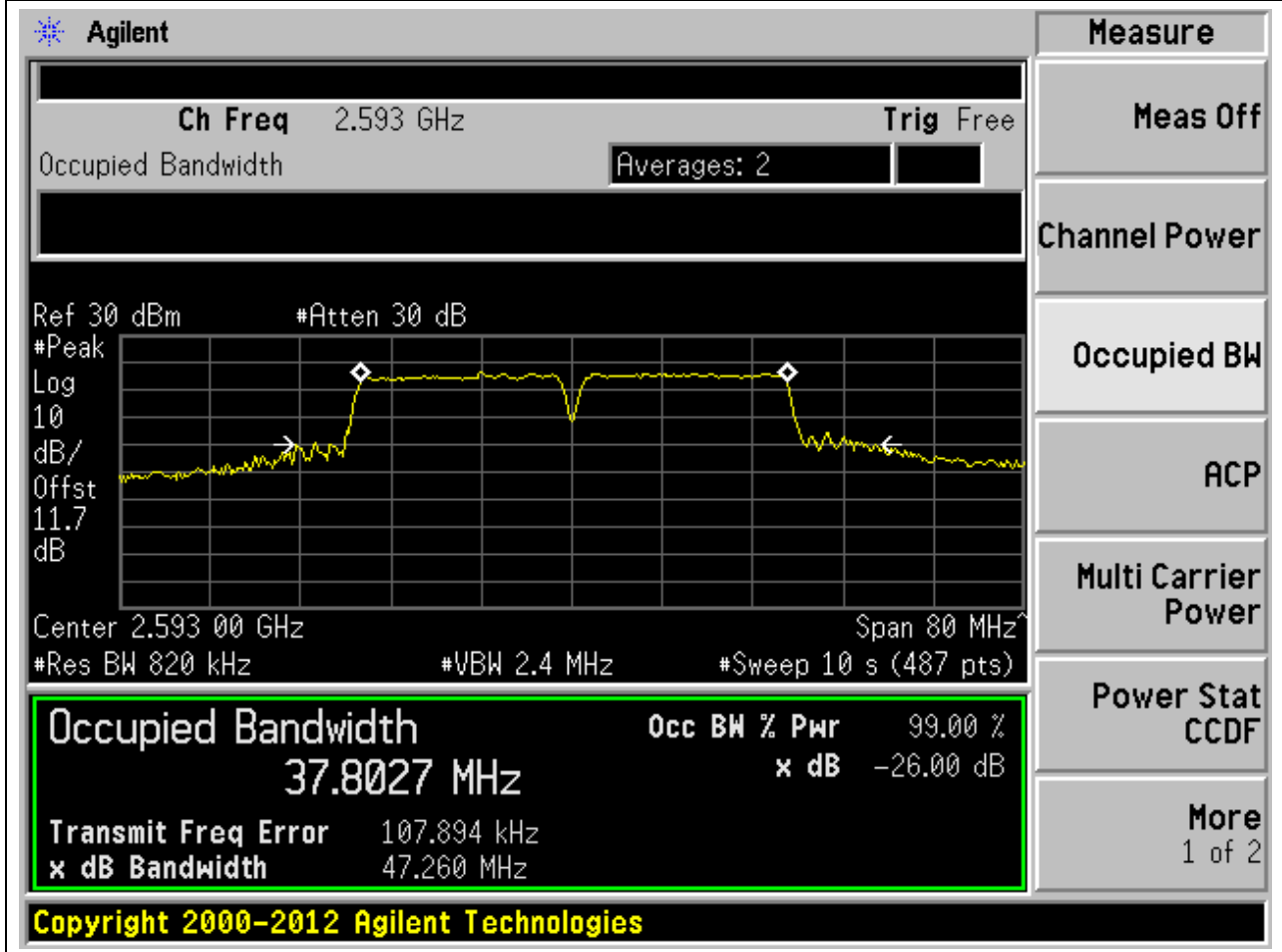
5.15. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:15,  
 Channel:40521|40719, Bandwidth:20|20MHz, Modulation:QPSK, RB  
 Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593	99	26	0.82	Peak	37.76	42.74	40	Pass



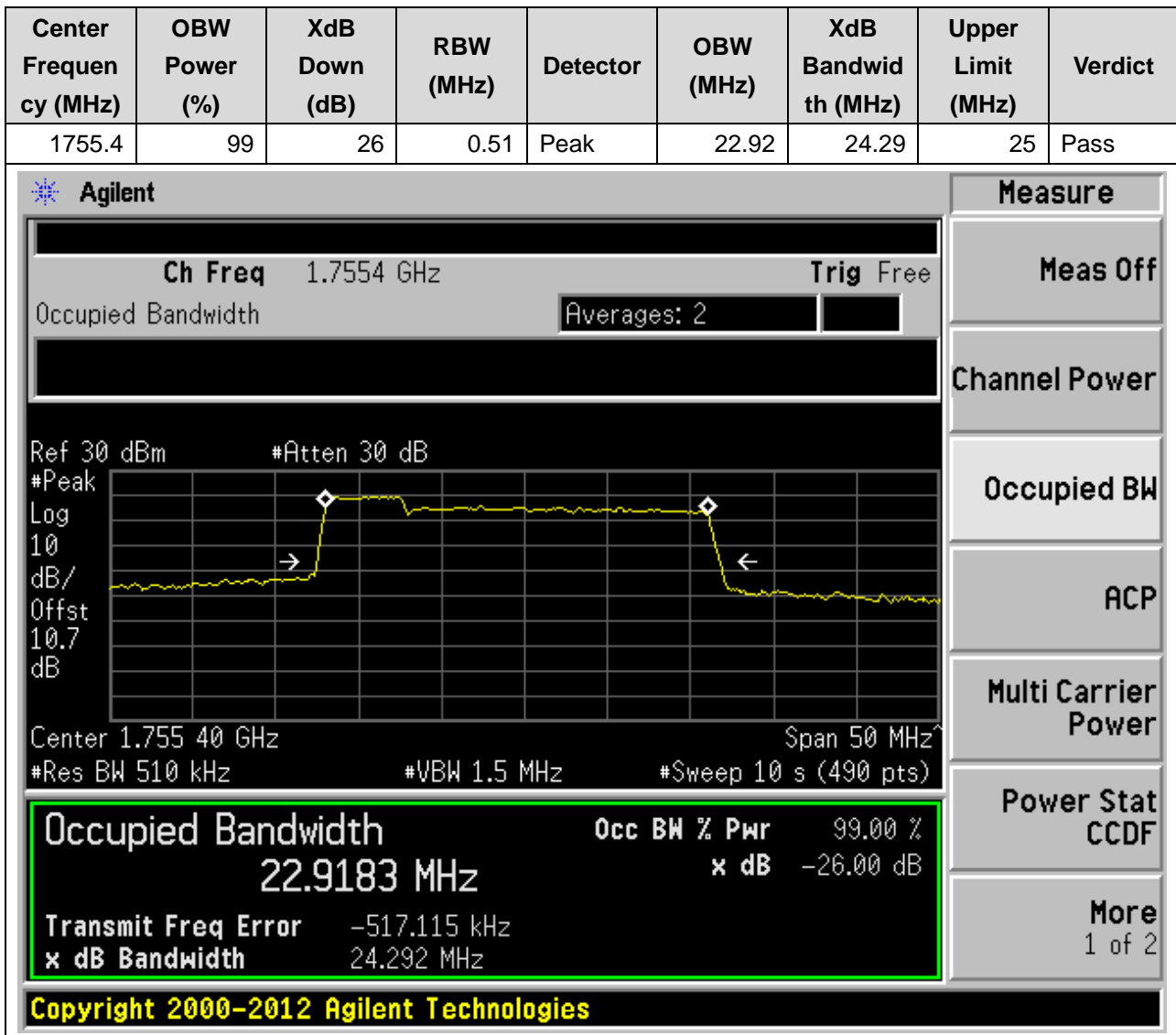
5.16. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:16,  
 Channel:40521|40719, Bandwidth:20|20MHz, Modulation:16QAM, RB  
 Number:Full|Full, RB Position:Low|Low)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2593	99	26	0.82	Peak	37.8	47.26	40	Pass



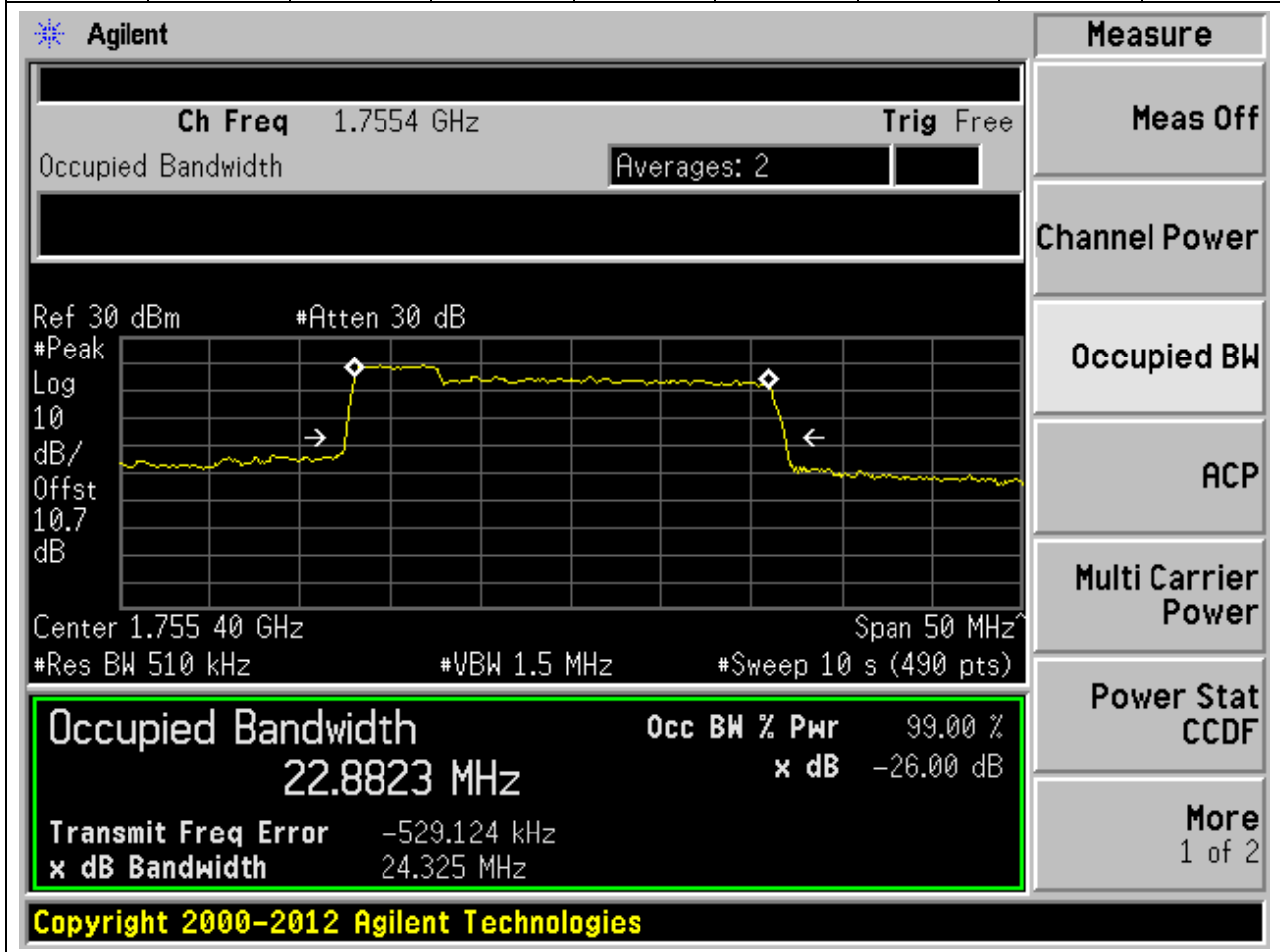
### 3. CA\_66C

3.1. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:1,  
Channel:132330|132447, Bandwidth:5|20MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)



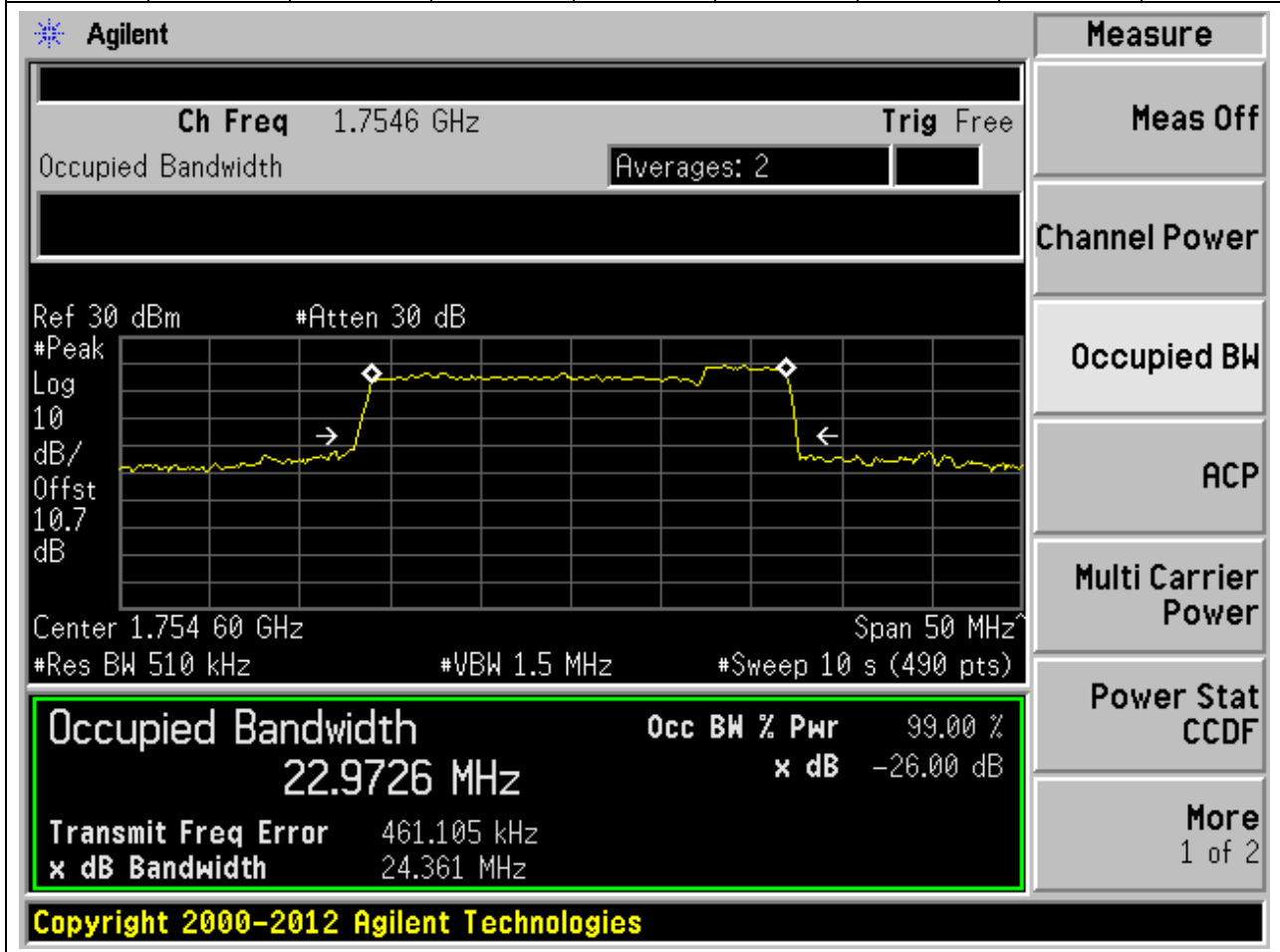
**3.2. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:2,  
Channel:132330|132447, Bandwidth:5|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755.4	99	26	0.51	Peak	22.88	24.32	25	Pass



**3.3. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:3,  
Channel:132397|132514, Bandwidth:20|5MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

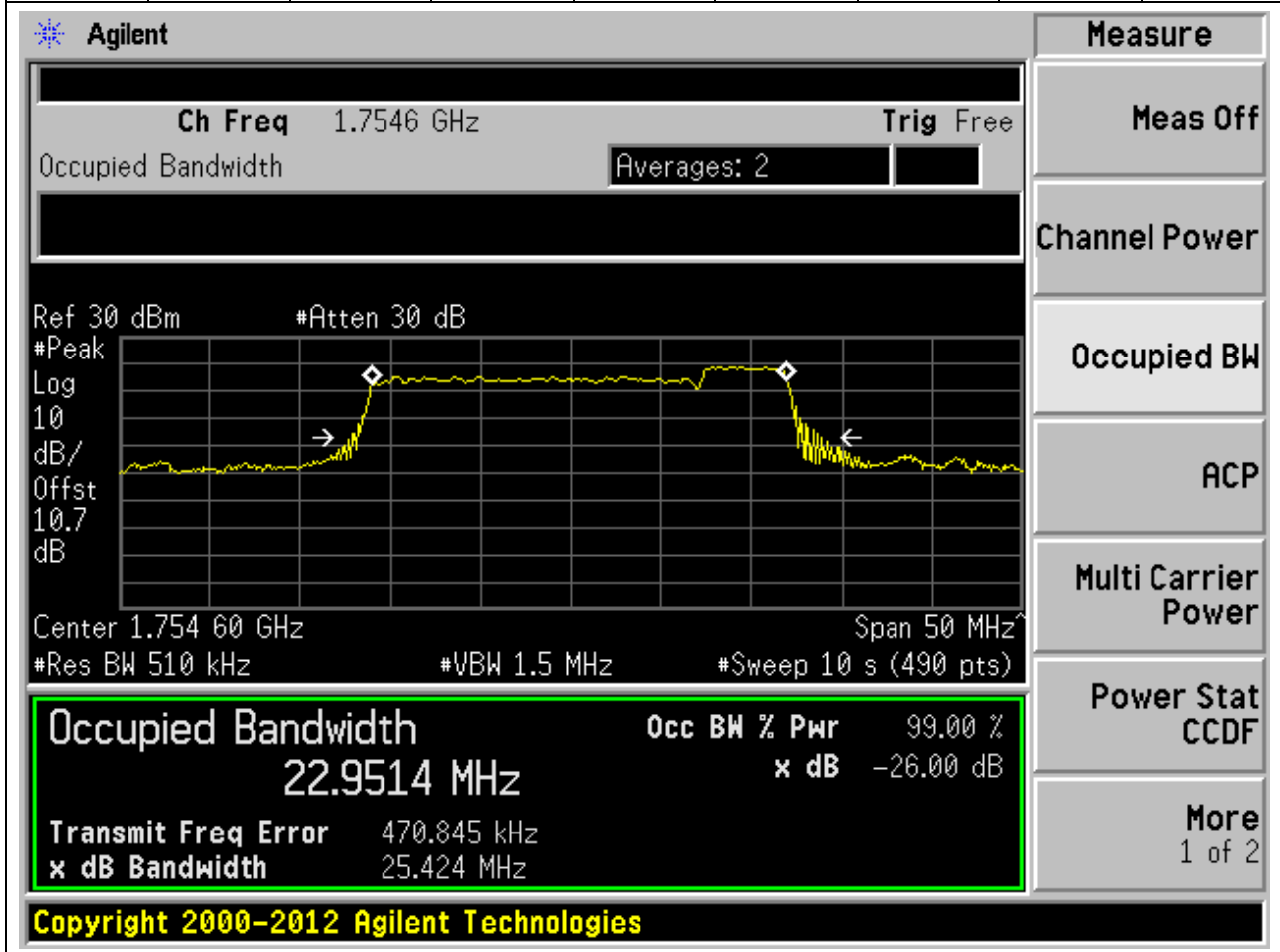
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1754.6	99	26	0.51	Peak	22.97	24.36	25	Pass





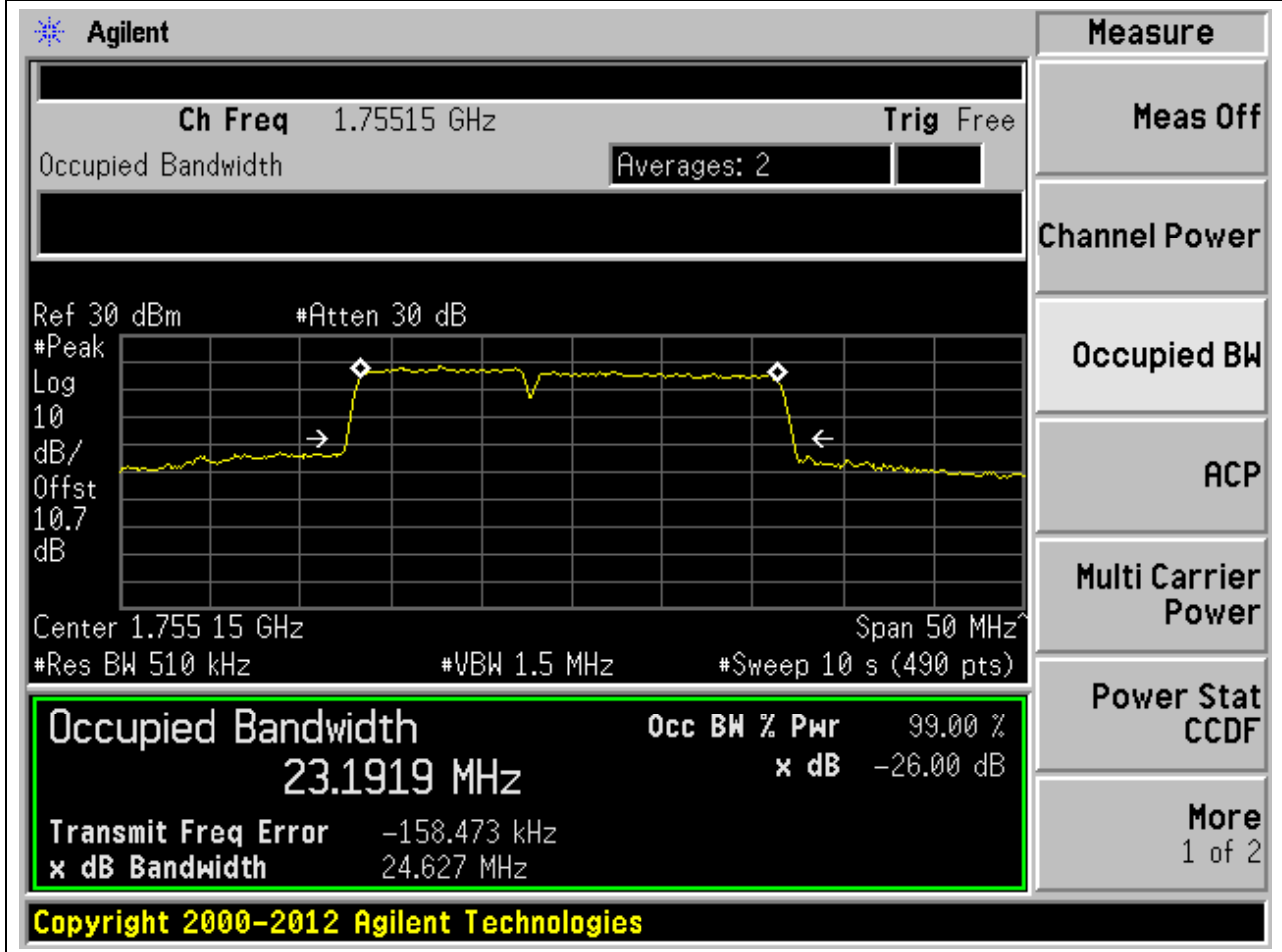
**3.4. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:4,  
Channel:132397|132514, Bandwidth:20|5MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1754.6	99	26	0.51	Peak	22.95	25.42	25	Pass



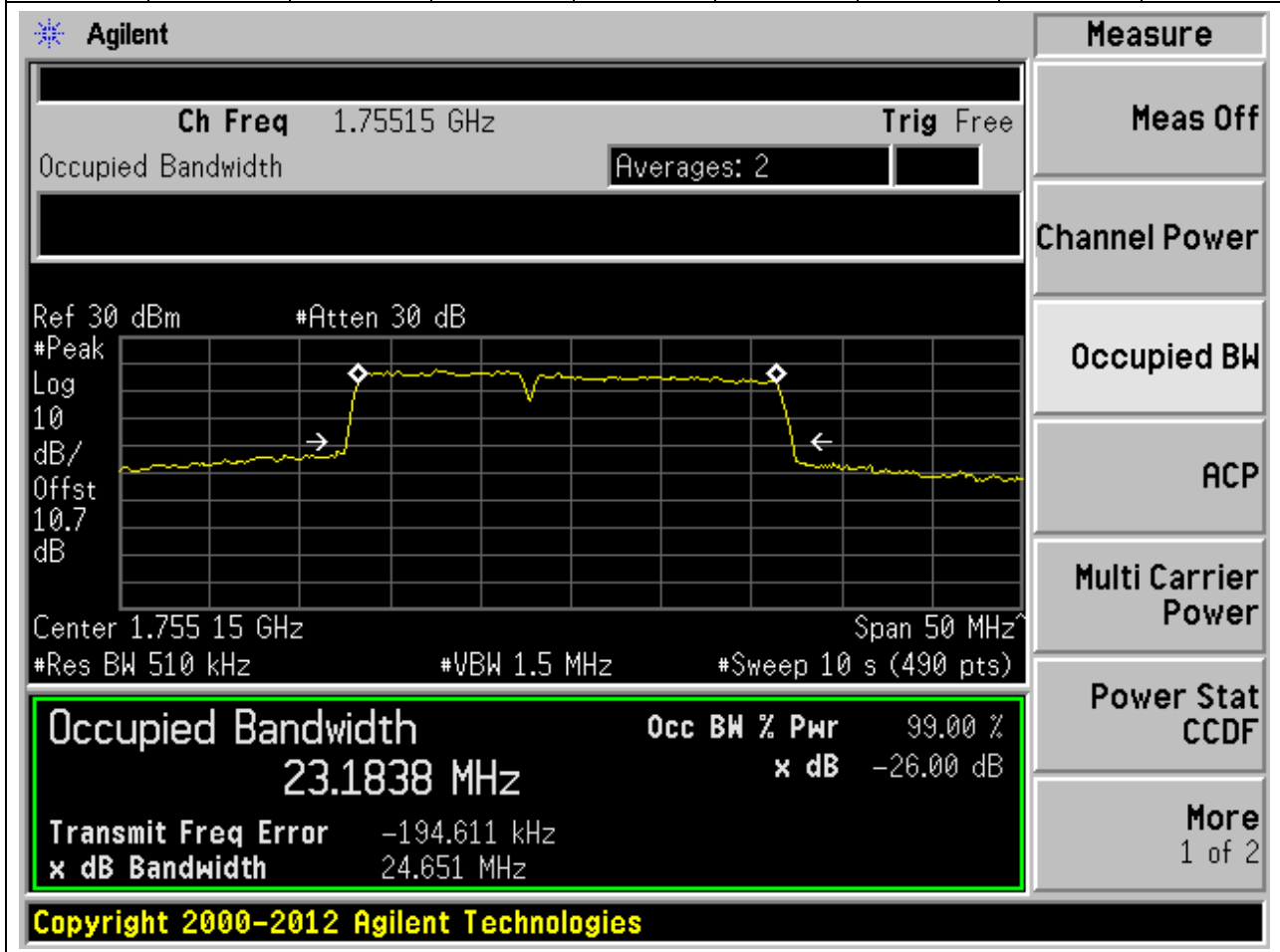
**3.5. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:5,  
Channel:132351|132471, Bandwidth:10|15MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755.15	99	26	0.51	Peak	23.19	24.63	25	Pass



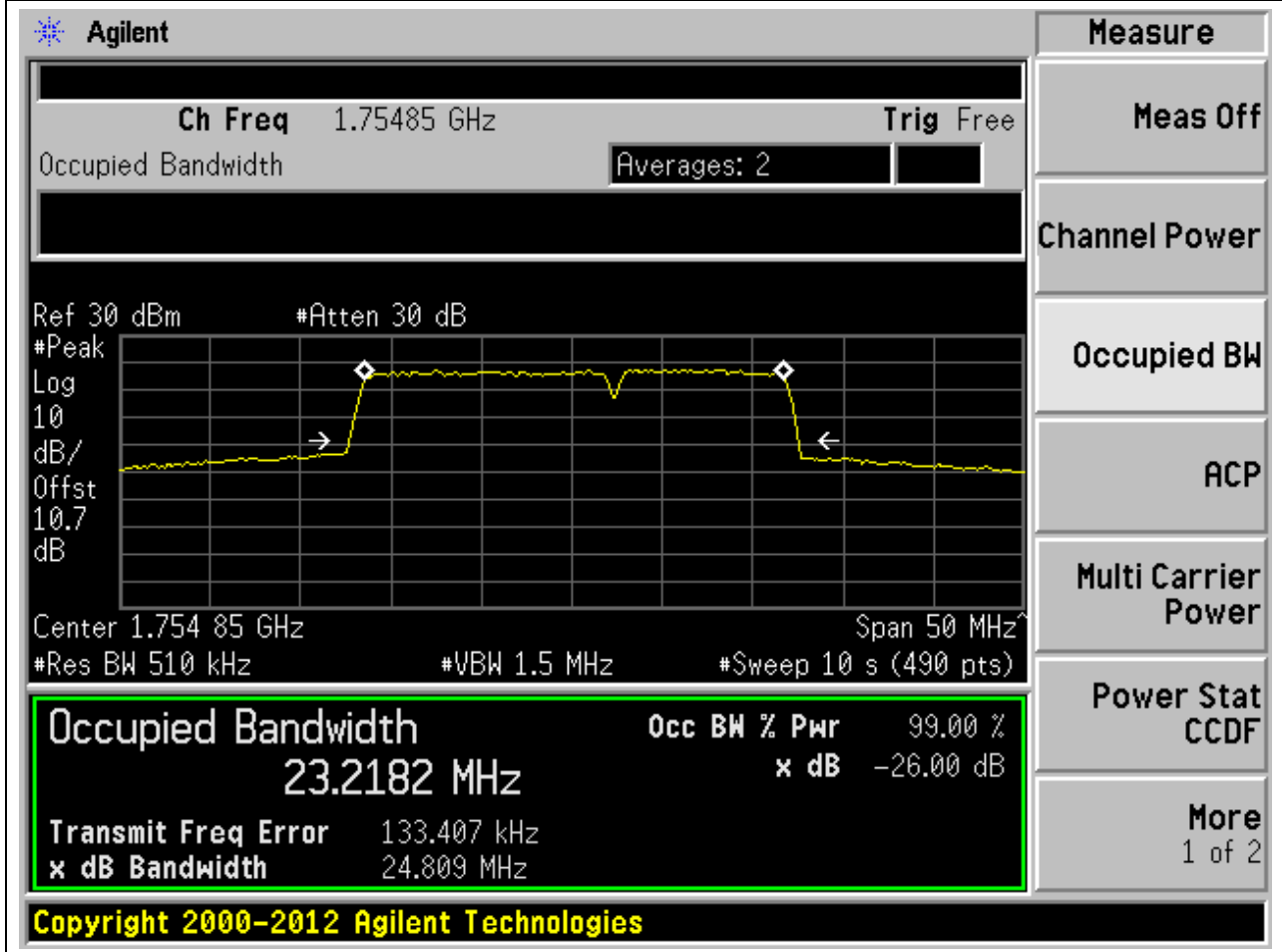
**3.6. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:6,  
Channel:132351|132471, Bandwidth:10|15MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755.15	99	26	0.51	Peak	23.18	24.65	25	Pass



**3.7. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:7,  
Channel:132373|132493, Bandwidth:15|10MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1754.85	99	26	0.51	Peak	23.22	24.81	25	Pass



**3.8. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:8,  
Channel:132373|132493, Bandwidth:15|10MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1754.85	99	26	0.51	Peak	23.13	24.66	25	Pass

Agilent

**Measure**  
 Meas Off  
 Channel Power  
**Occupied BW**  
 ACP  
 Multi Carrier Power  
 Power Stat CCDF  
 More  
 1 of 2

Ch Freq 1.75485 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.7 dB

Center 1.754 85 GHz Span 50 MHz

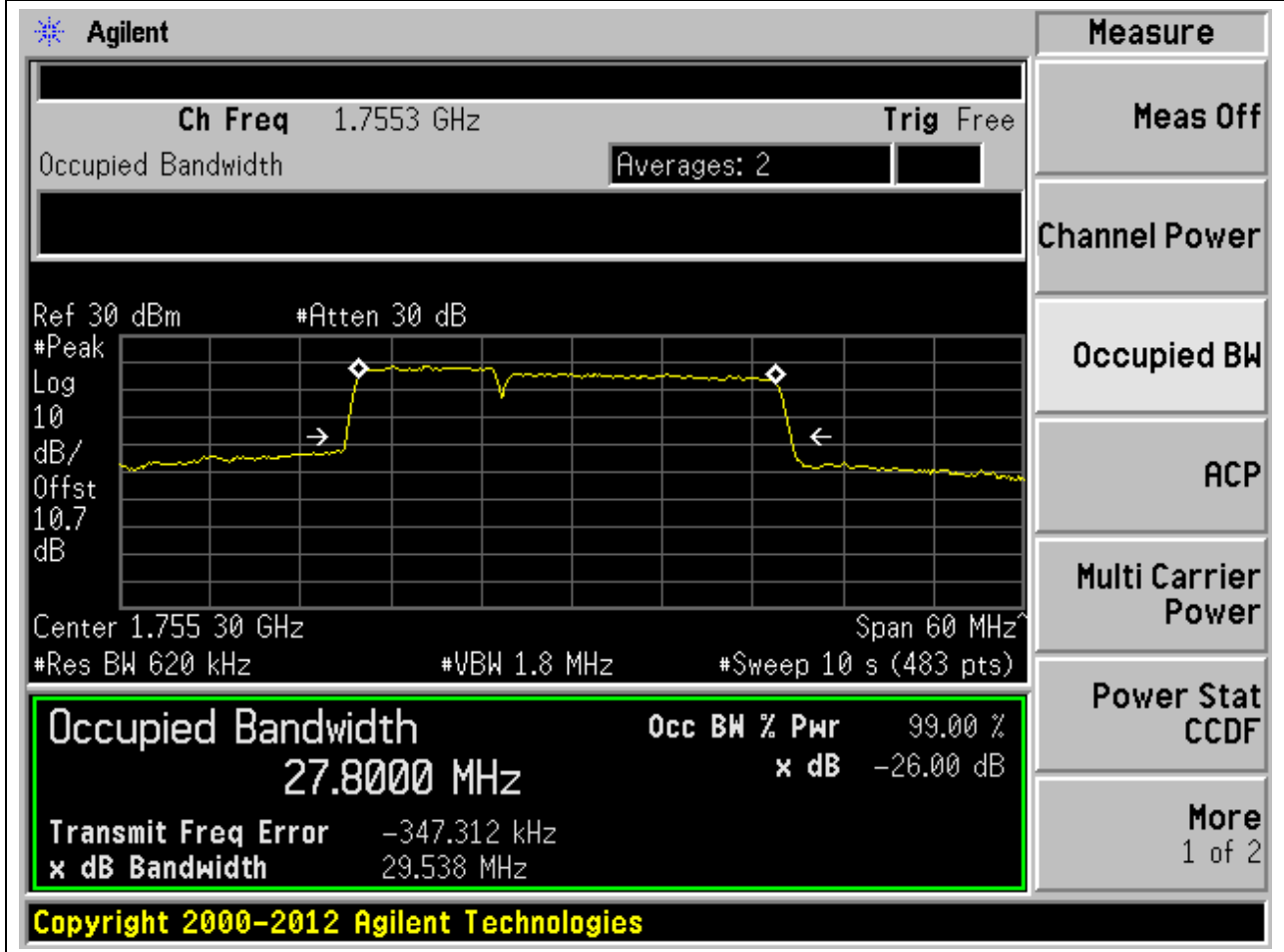
#Res BW 510 kHz #VBW 1.5 MHz #Sweep 10 s (490 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
23.1337 MHz	x dB -26.00 dB
<b>Transmit Freq Error</b> 143.500 kHz	
<b>x dB Bandwidth</b> 24.658 MHz	

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**3.9. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:9,  
Channel:132328|132472, Bandwidth:10|20MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755.3	99	26	0.62	Peak	27.8	29.54	30	Pass



**3.10. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:10,  
Channel:132328|132472, Bandwidth:10|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755.3	99	26	0.62	Peak	27.79	29.5	30	Pass

Agilent

Measure

Ch Freq 1.7553 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.7

dB

Center 1.7553 GHz
Span 60 MHz

#Res BW 620 kHz
#VBW 1.8 MHz
#Sweep 10 s (483 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
27.7936 MHz	x dB -26.00 dB
<b>Transmit Freq Error</b>	-339.926 kHz
<b>x dB Bandwidth</b>	29.497 MHz

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

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**3.12. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:12,  
Channel:132373|132517, Bandwidth:20|10MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1754.8	99	26	0.62	Peak	27.82	29.52	30	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7548 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include a reference level of 30 dBm, a 30 dB attenuator, a resolution bandwidth of 620 kHz, and a video bandwidth of 1.8 MHz. The occupied bandwidth is measured as 27.8240 MHz, which is 99.00% of the power within a 29.518 MHz bandwidth. The XdB down is -26.00 dB. The transmit frequency error is 312.609 kHz. The interface also shows a 'Measure' menu on the right with options like 'Meas Off', 'Channel Power', 'Occupied BW', 'ACP', 'Multi Carrier Power', 'Power Stat CCDF', and 'More'. The bottom of the screen displays the copyright information: 'Copyright 2000-2012 Agilent Technologies'.

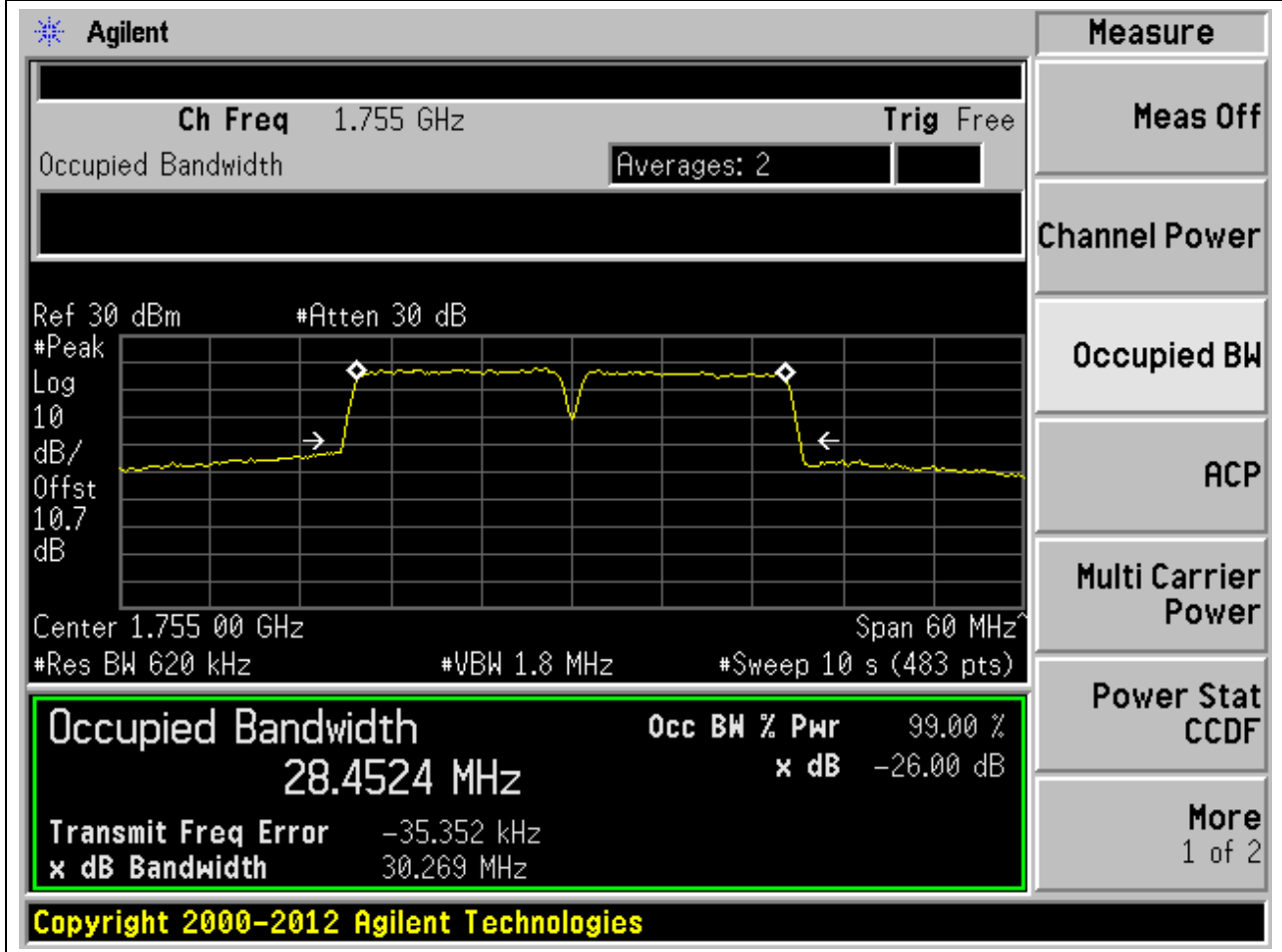
Occupied Bandwidth	Occ BW % Pwr	x dB
27.8240 MHz	99.00 %	-26.00 dB

Transmit Freq Error: 312.609 kHz  
x dB Bandwidth: 29.518 MHz

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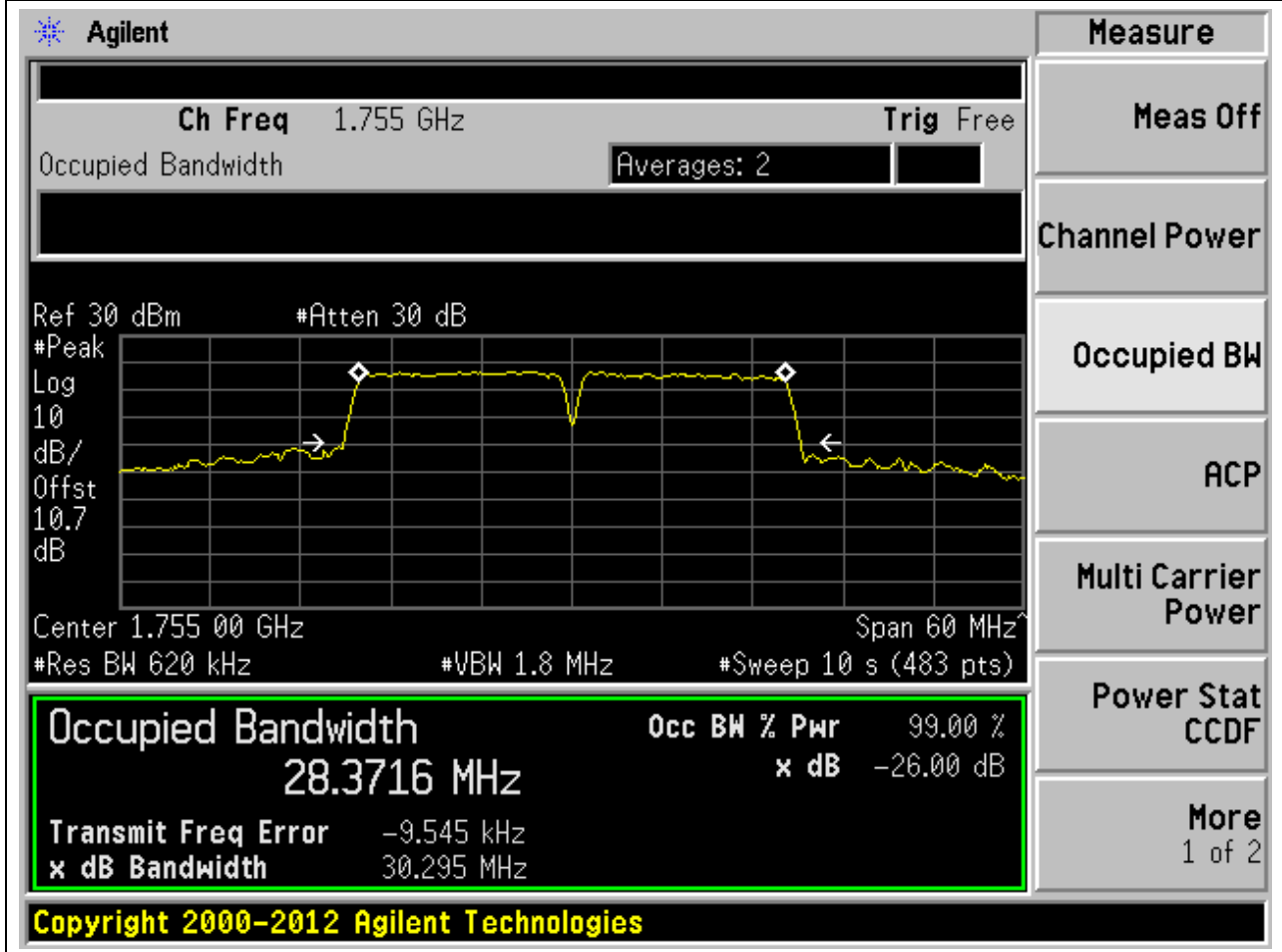
**3.13. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:13,  
Channel:132347|132497, Bandwidth:15|15MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755	99	26	0.62	Peak	28.45	30.27	30	Pass



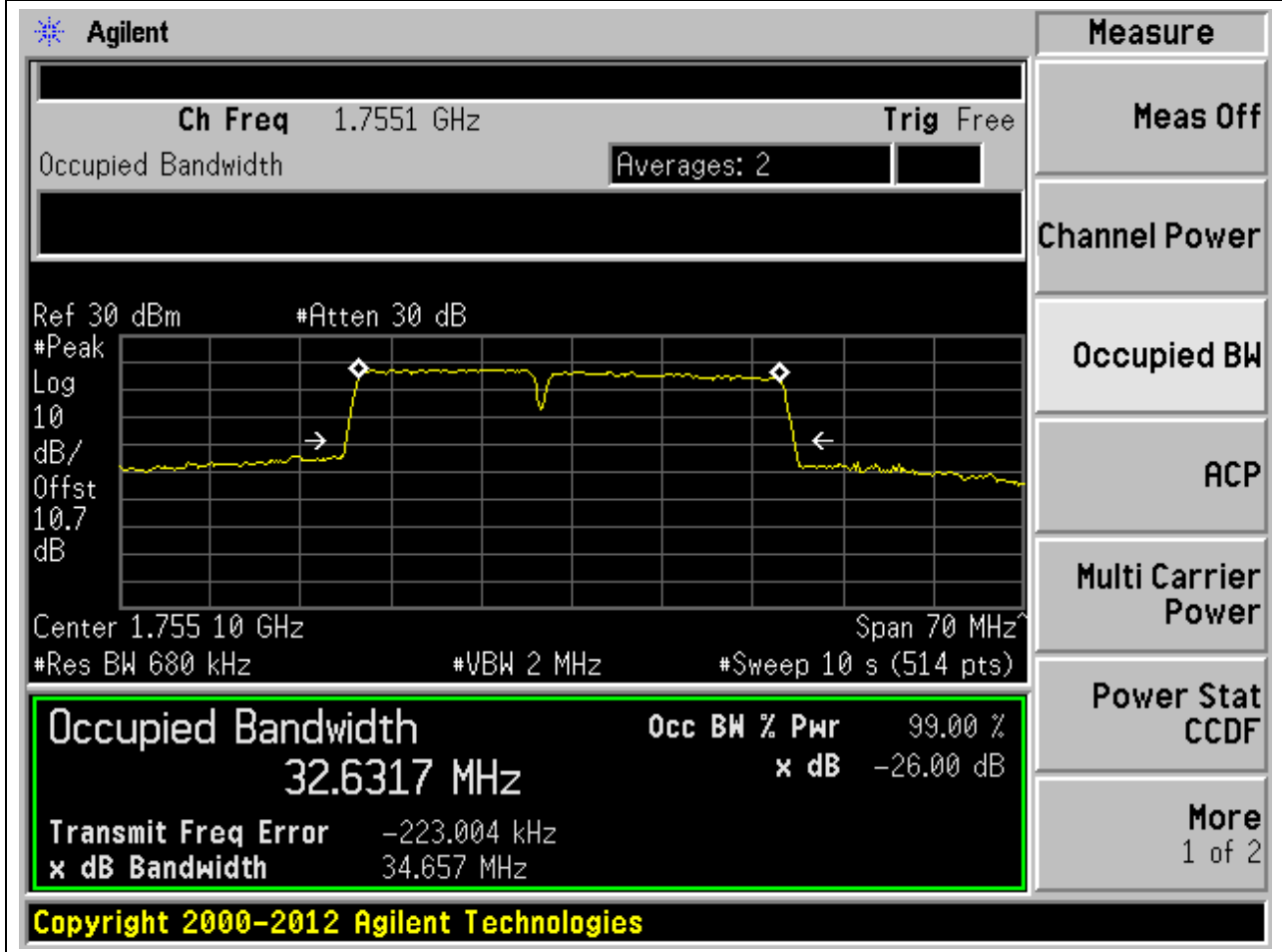
**3.14. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:14,  
Channel:132347|132497, Bandwidth:15|15MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755	99	26	0.62	Peak	28.37	30.29	30	Pass



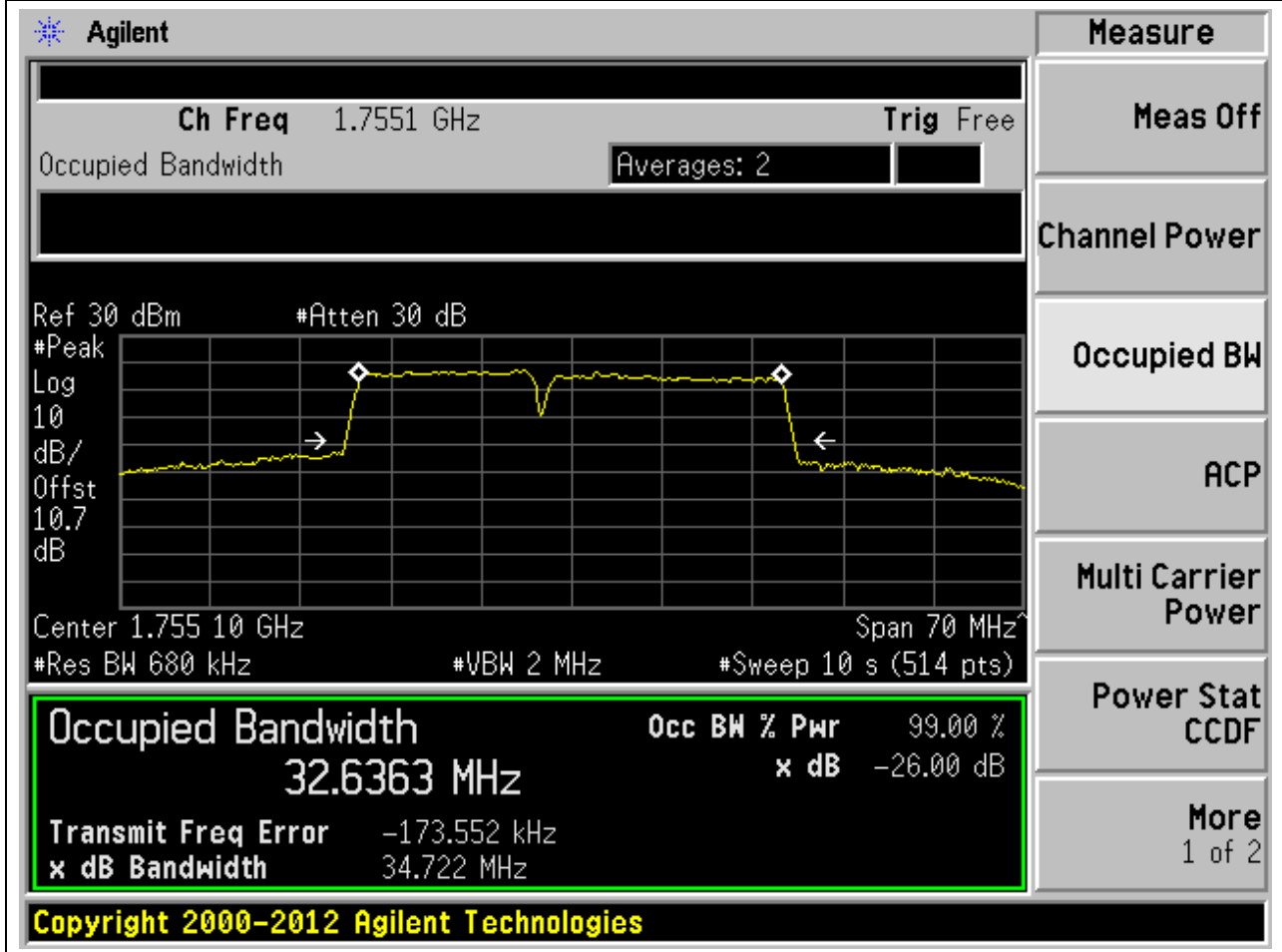
**3.15. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:15,  
Channel:132325|132496, Bandwidth:15|20MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755.1	99	26	0.68	Peak	32.63	34.66	35	Pass



**3.16. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:16,  
Channel:132325|132496, Bandwidth:15|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755.1	99	26	0.68	Peak	32.64	34.72	35	Pass



**3.17. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:17,  
Channel:132348|132519, Bandwidth:20|15MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1754.9	99	26	0.68	Peak	32.72	34.88	35	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The plot is set to a center frequency of 1.7549 GHz and a span of 70 MHz. The trace shows a signal with a peak level of approximately -26 dB. The occupied bandwidth is measured as 32.7197 MHz, which is 99.00% of the 34.884 MHz bandwidth. The XdB down is -26.00 dB. The interface includes various measurement controls and a 'Measure' menu on the right side.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
32.7197 MHz	x dB	-26.00 dB
Transmit Freq Error	139.747 kHz	
x dB Bandwidth	34.884 MHz	

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**3.18. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:18,  
Channel:132348|132519, Bandwidth:20|15MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1754.9	99	26	0.68	Peak	32.67	34.67	35	Pass

Agilent

Measure

Ch Freq 1.7549 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 10.7 dB

Center 1.754 90 GHz Span 70 MHz

#Res BW 680 kHz #VBW 2 MHz #Sweep 10 s (514 pts)

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**Occupied Bandwidth**

**32.6715 MHz**

Transmit Freq Error 134.783 kHz

x dB Bandwidth 34.669 MHz

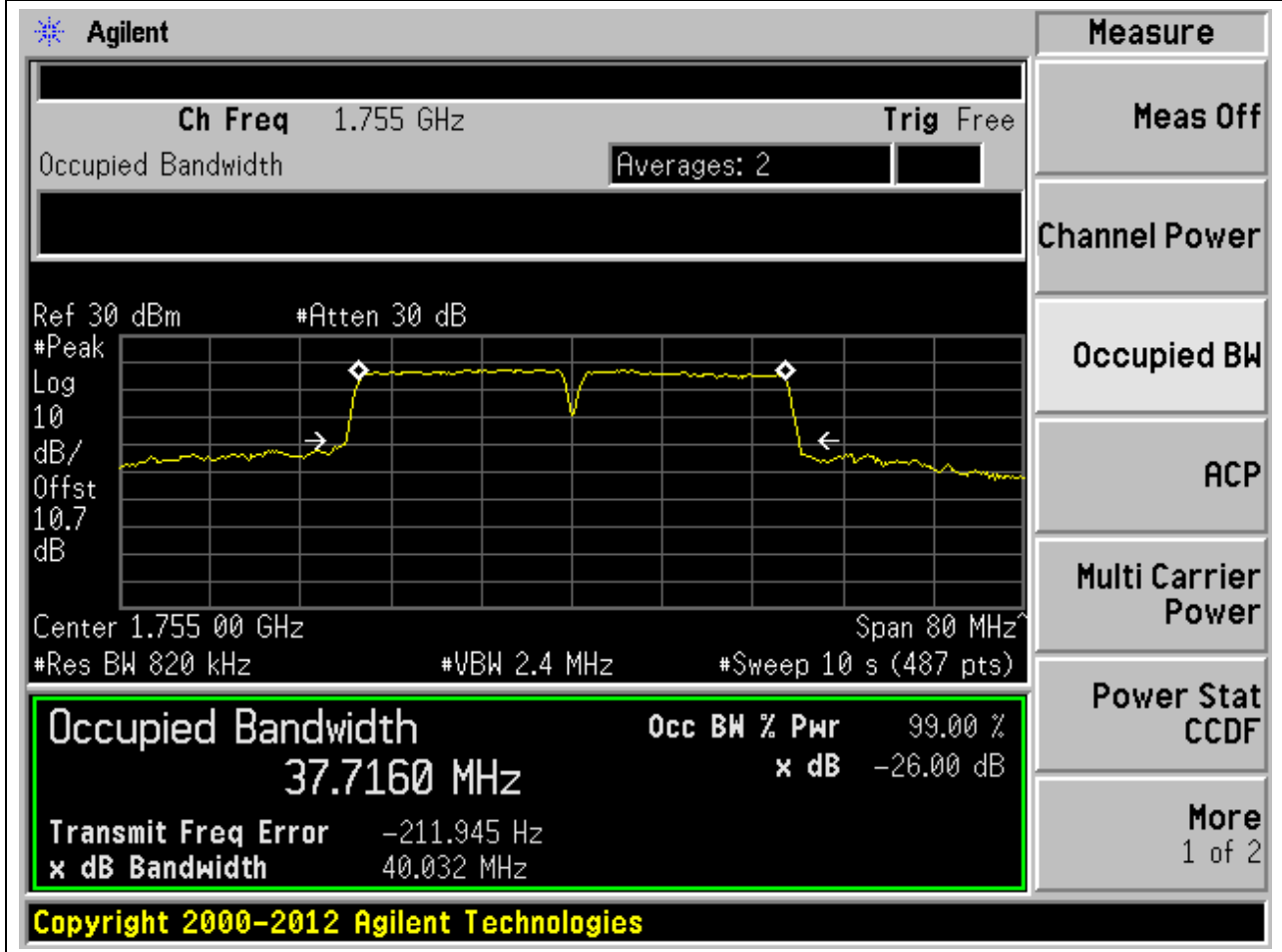
Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**3.19. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:19,  
Channel:132323|132521, Bandwidth:20|20MHz, Modulation:QPSK, RB  
Number:Full|Full, RB Position:Low|Low)**

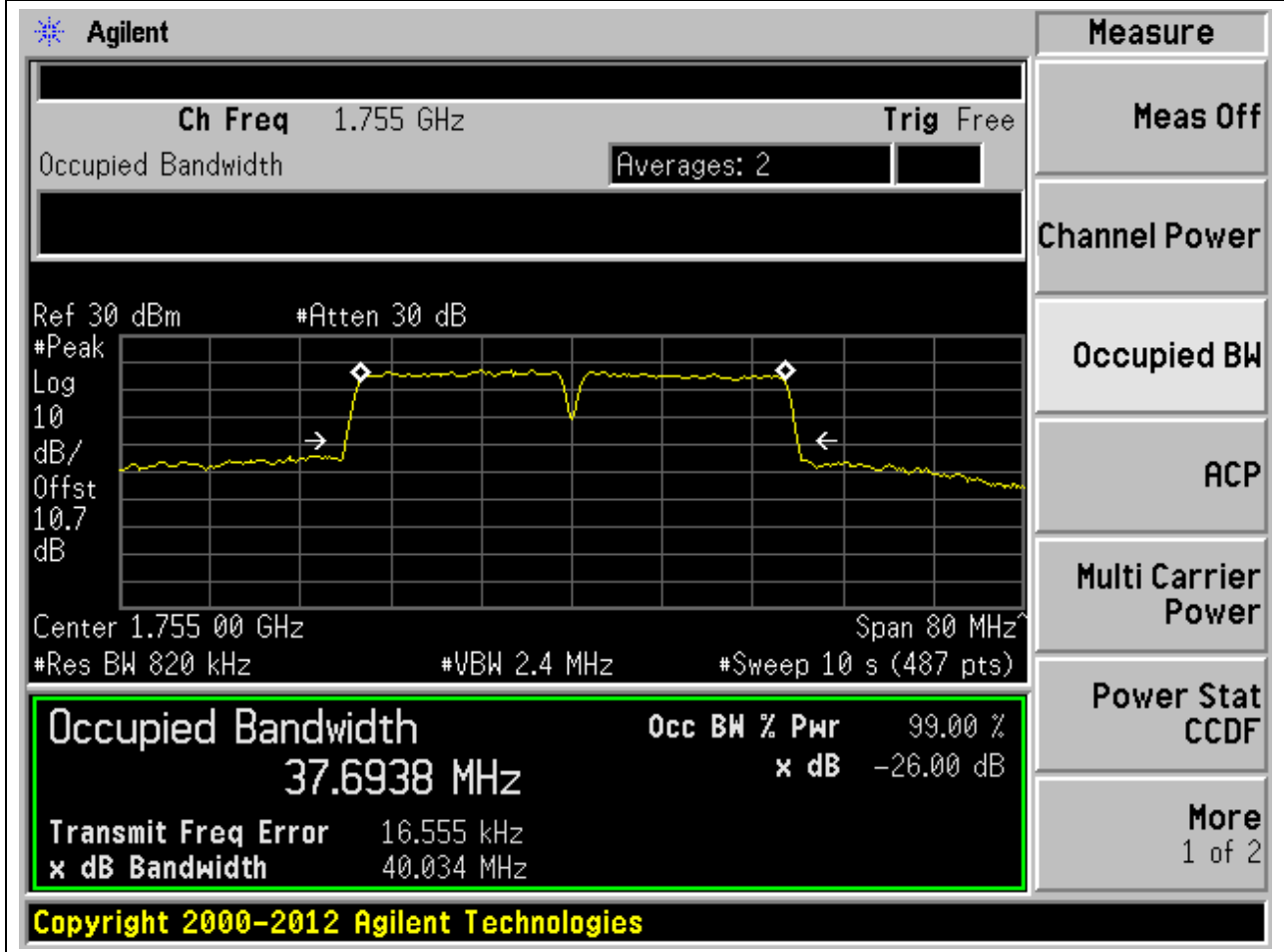
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755	99	26	0.82	Peak	37.72	40.03	40	Pass





**3.20. LTE-A Occupied Bandwidth\_Part22-24-27(NTNV)(Subtest:20,  
Channel:132323|132521, Bandwidth:20|20MHz, Modulation:16QAM, RB  
Number:Full|Full, RB Position:Low|Low)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1755	99	26	0.82	Peak	37.69	40.03	40	Pass



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