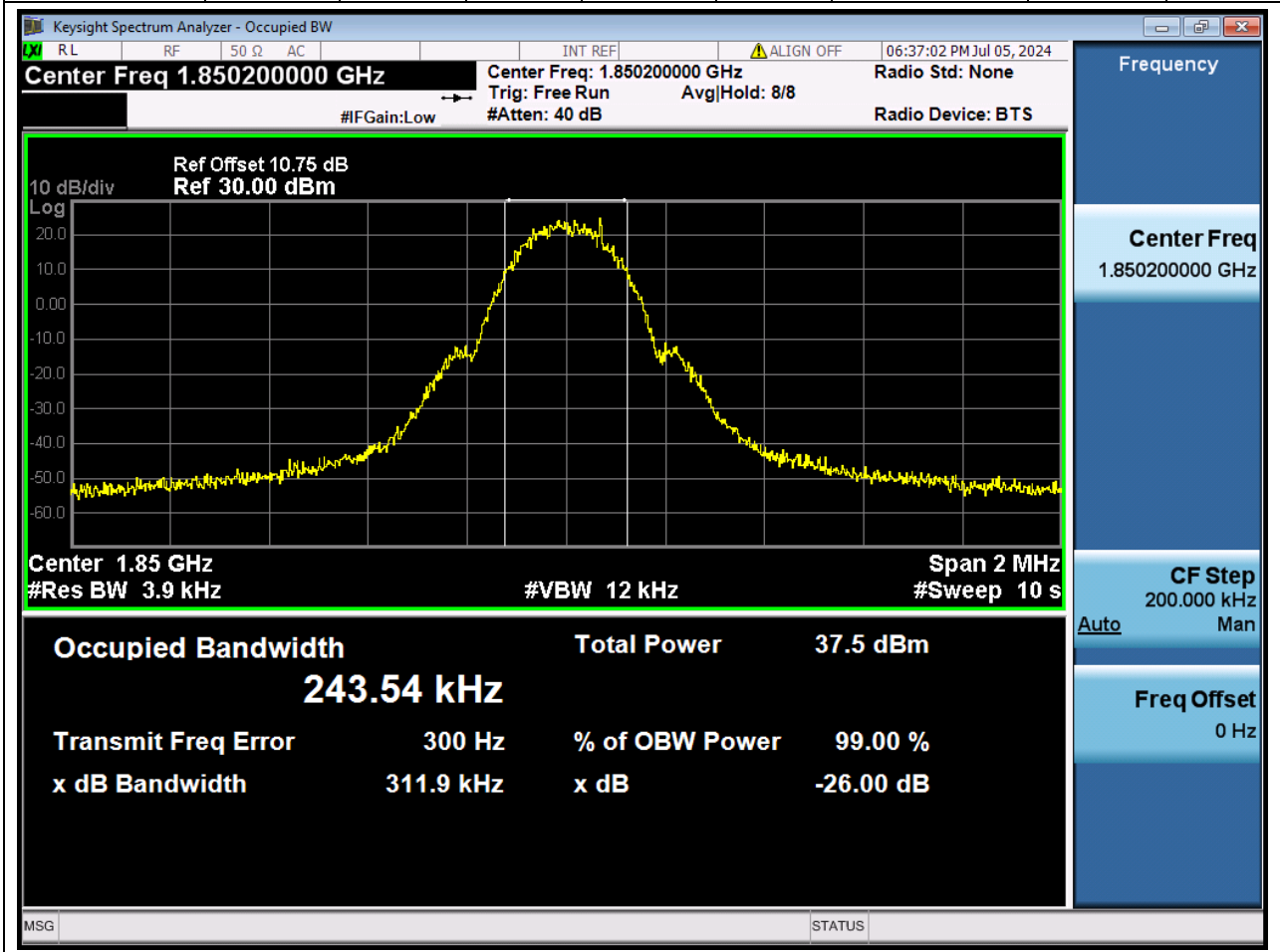


## **Annex A.3 Occupied Bandwidth**

# 1. GSM\_PCS

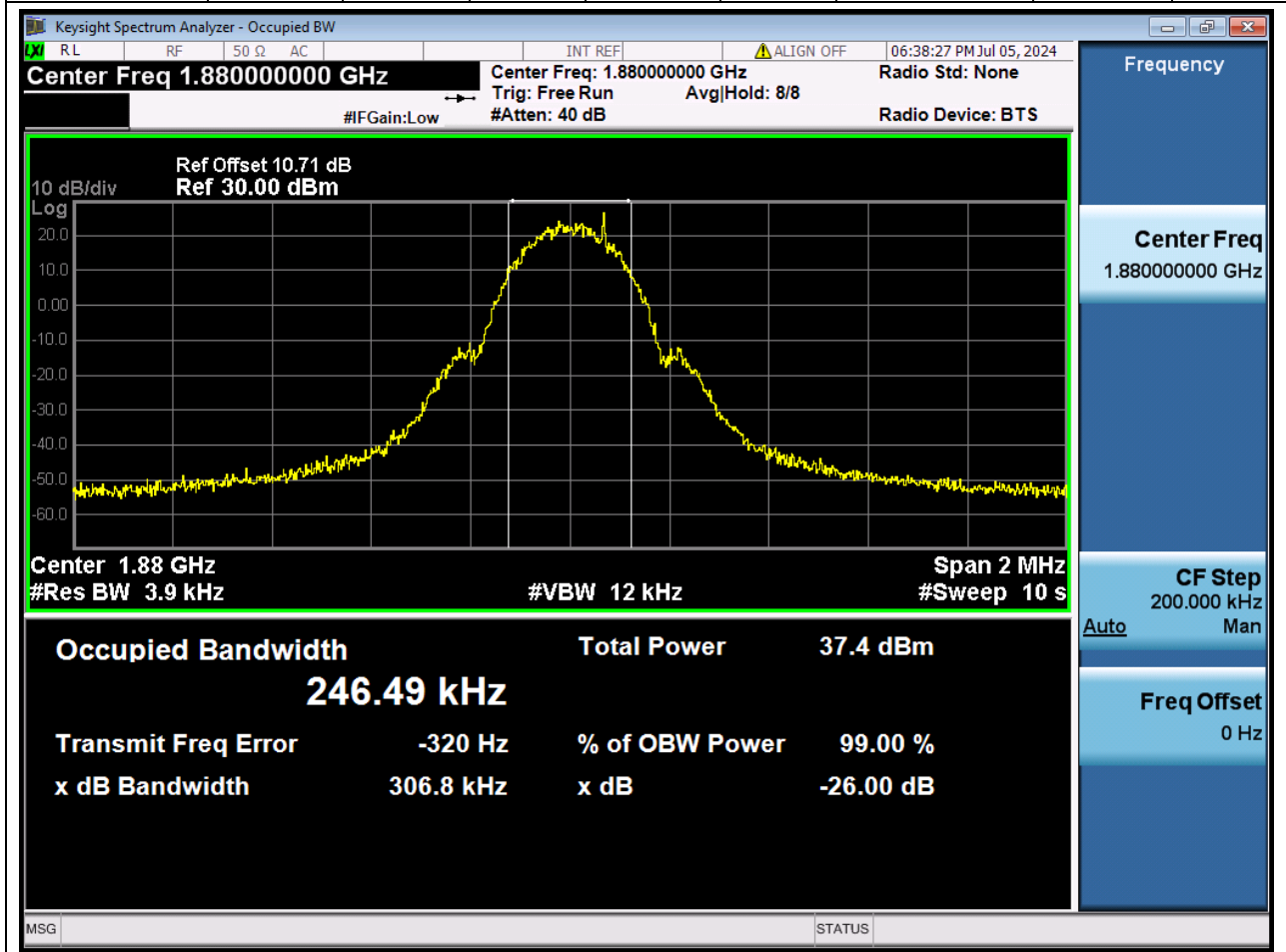
## 1.1. GSM Occupied Bandwidth\_Part22-24(NTNV)(Channel:512)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1850.2	99	26	0.004	Peak	0.244	0.312	0.3	Pass



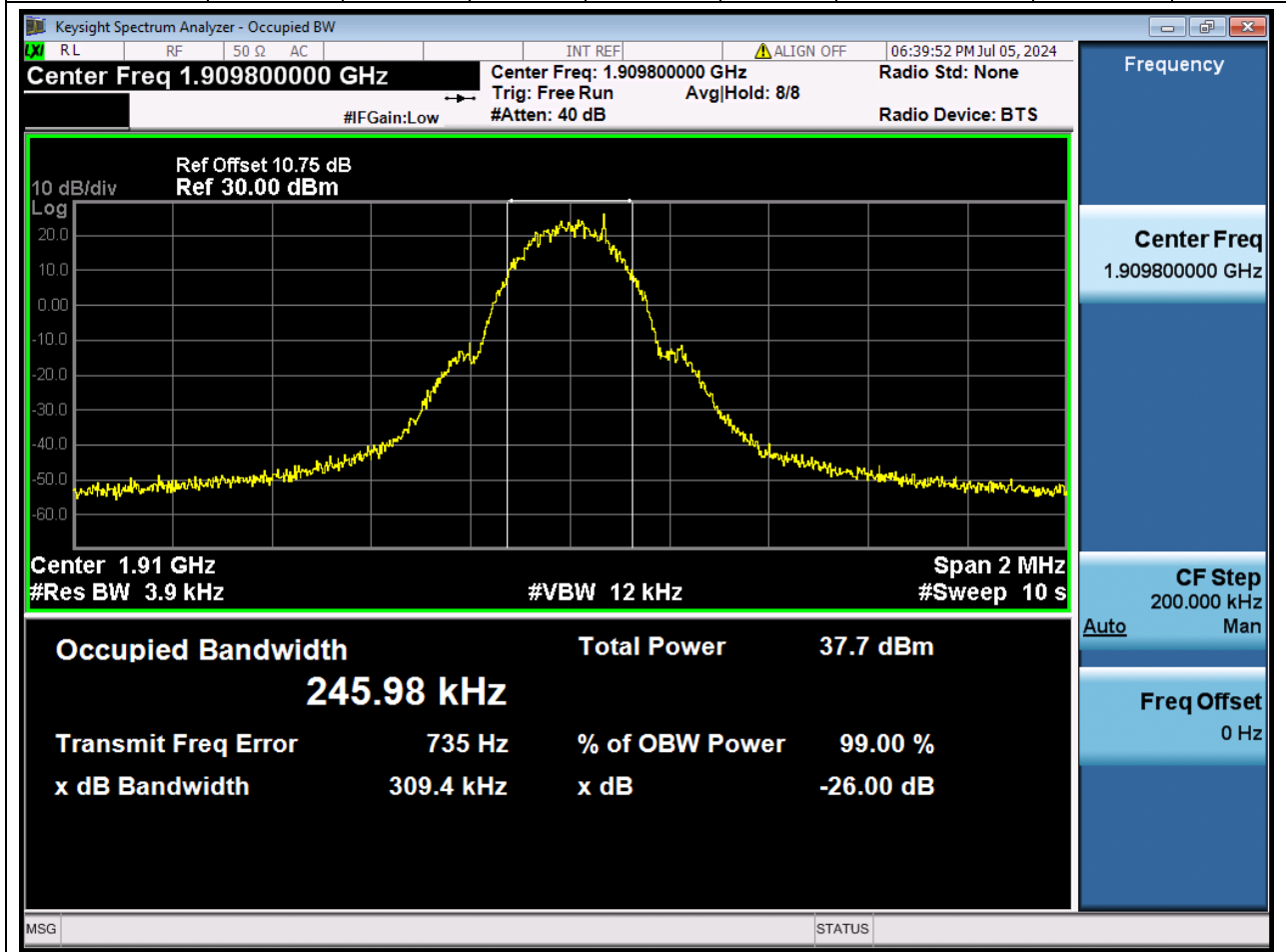
## 1.2. GSM Occupied Bandwidth\_Part22-24(NTNV)(Channel:661)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880	99	26	0.004	Peak	0.246	0.307	0.3	Pass



### 1.3. GSM Occupied Bandwidth\_Part22-24(NTNV)(Channel:810)

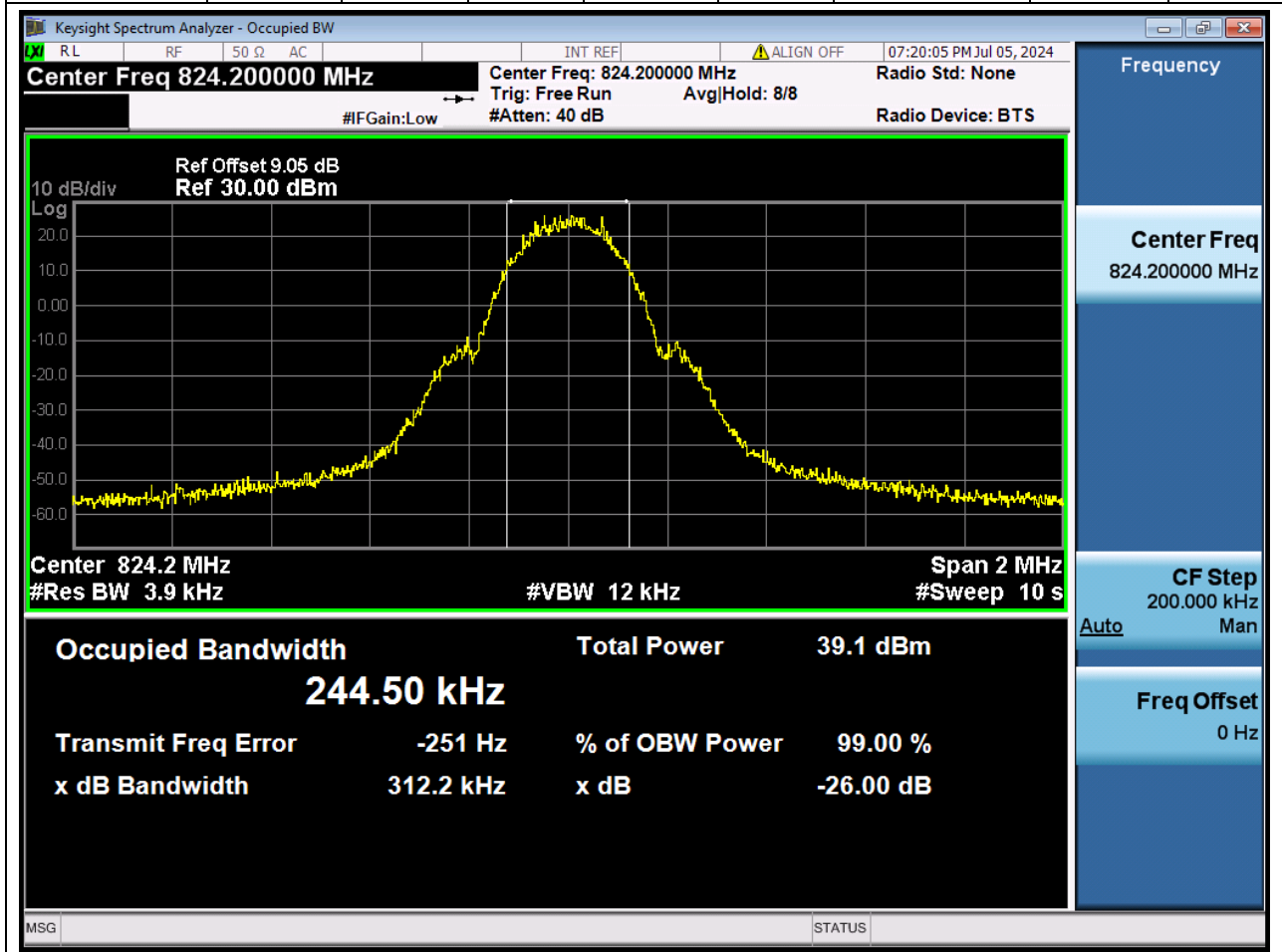
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1909.8	99	26	0.004	Peak	0.246	0.309	0.3	Pass



## 2. GSM\_GSM850

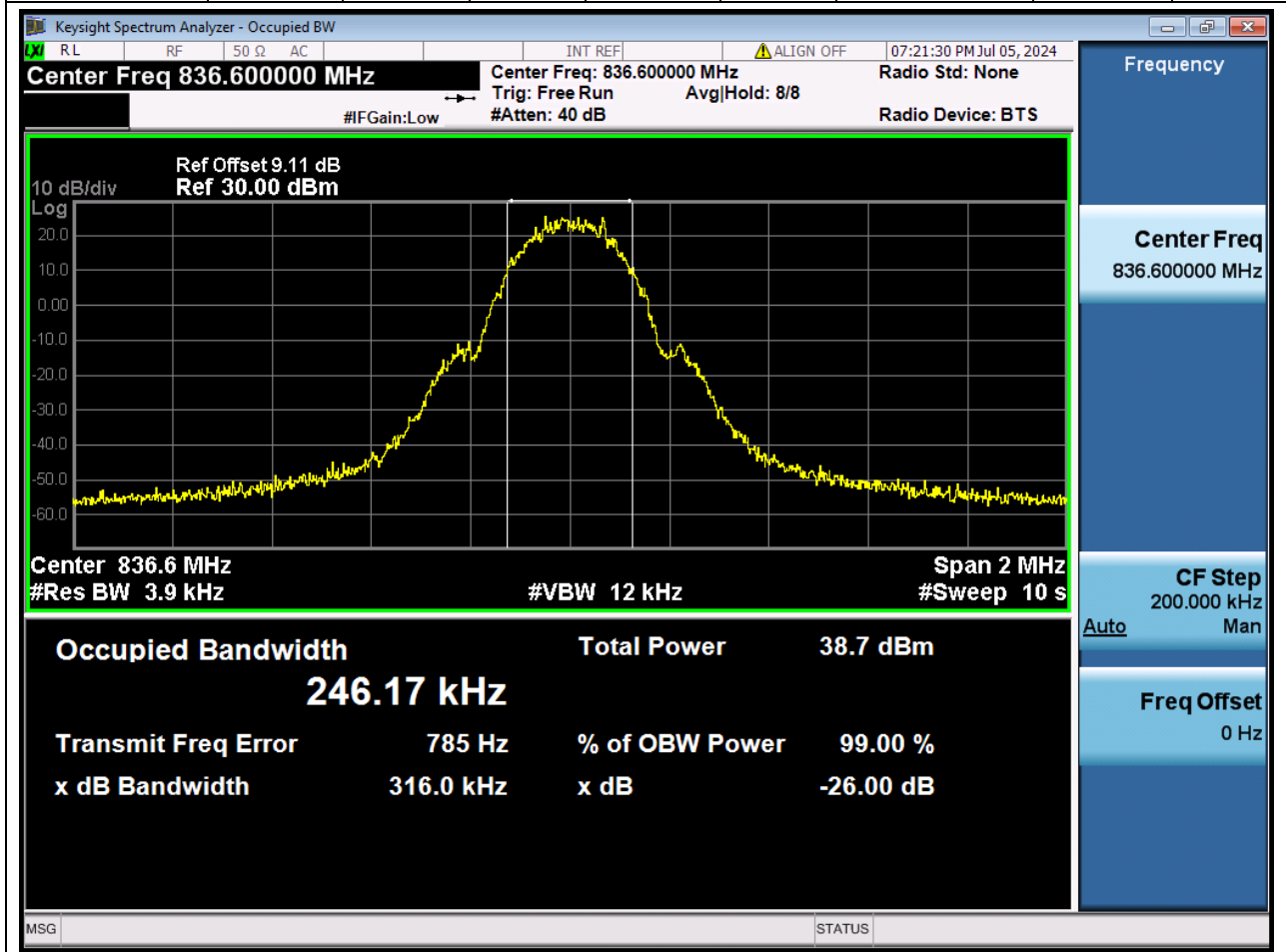
### 2.1. GSM Occupied Bandwidth\_Part22-24(NTNV)(Channel:128)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
824.2	99	26	0.004	Peak	0.245	0.312	0.3	Pass



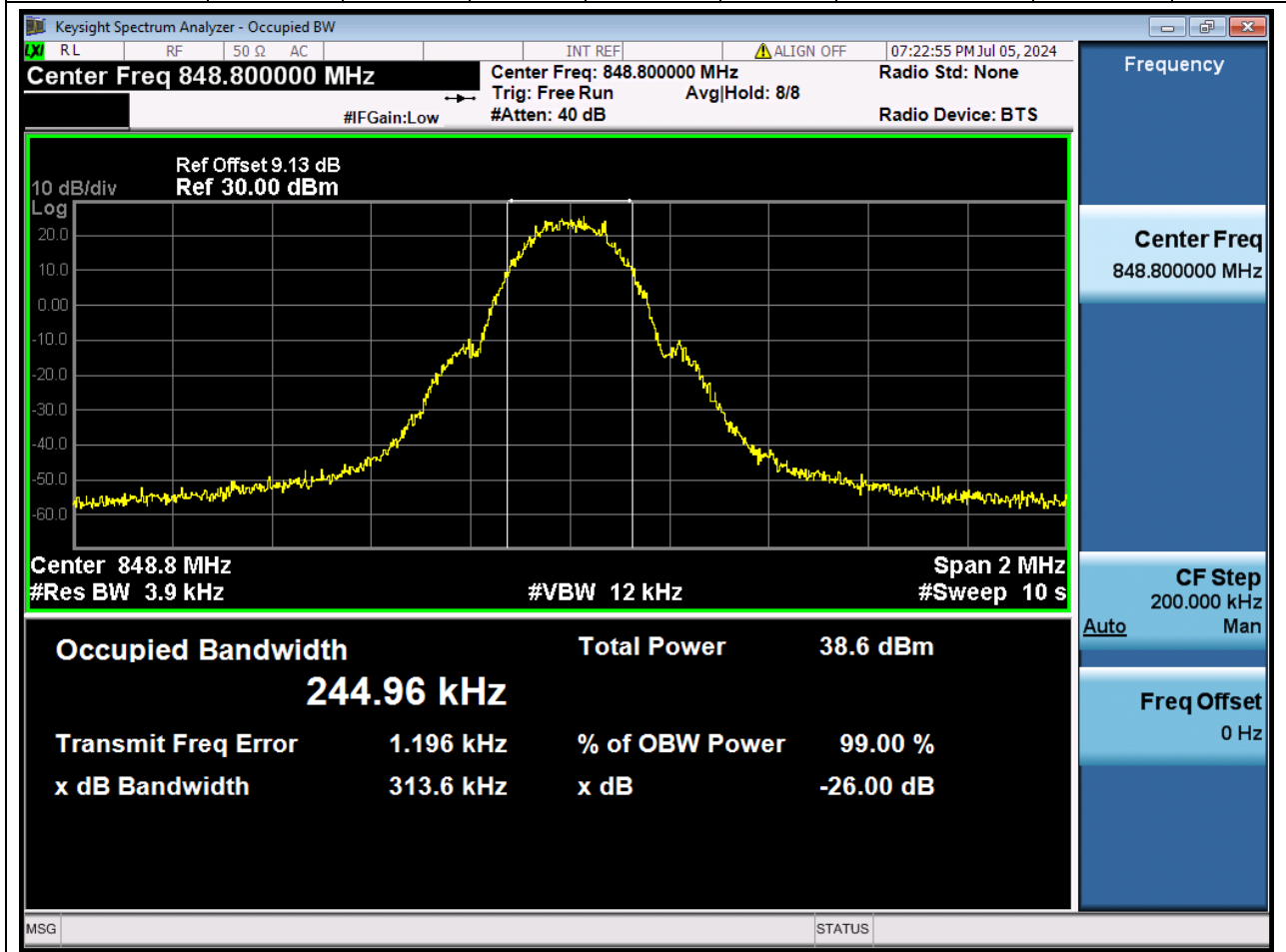
## 2.2. GSM Occupied Bandwidth\_Part22-24(NTNV)(Channel:190)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.6	99	26	0.004	Peak	0.246	0.316	0.3	Pass



### 2.3. GSM Occupied Bandwidth\_Part22-24(NTNV)(Channel:251)

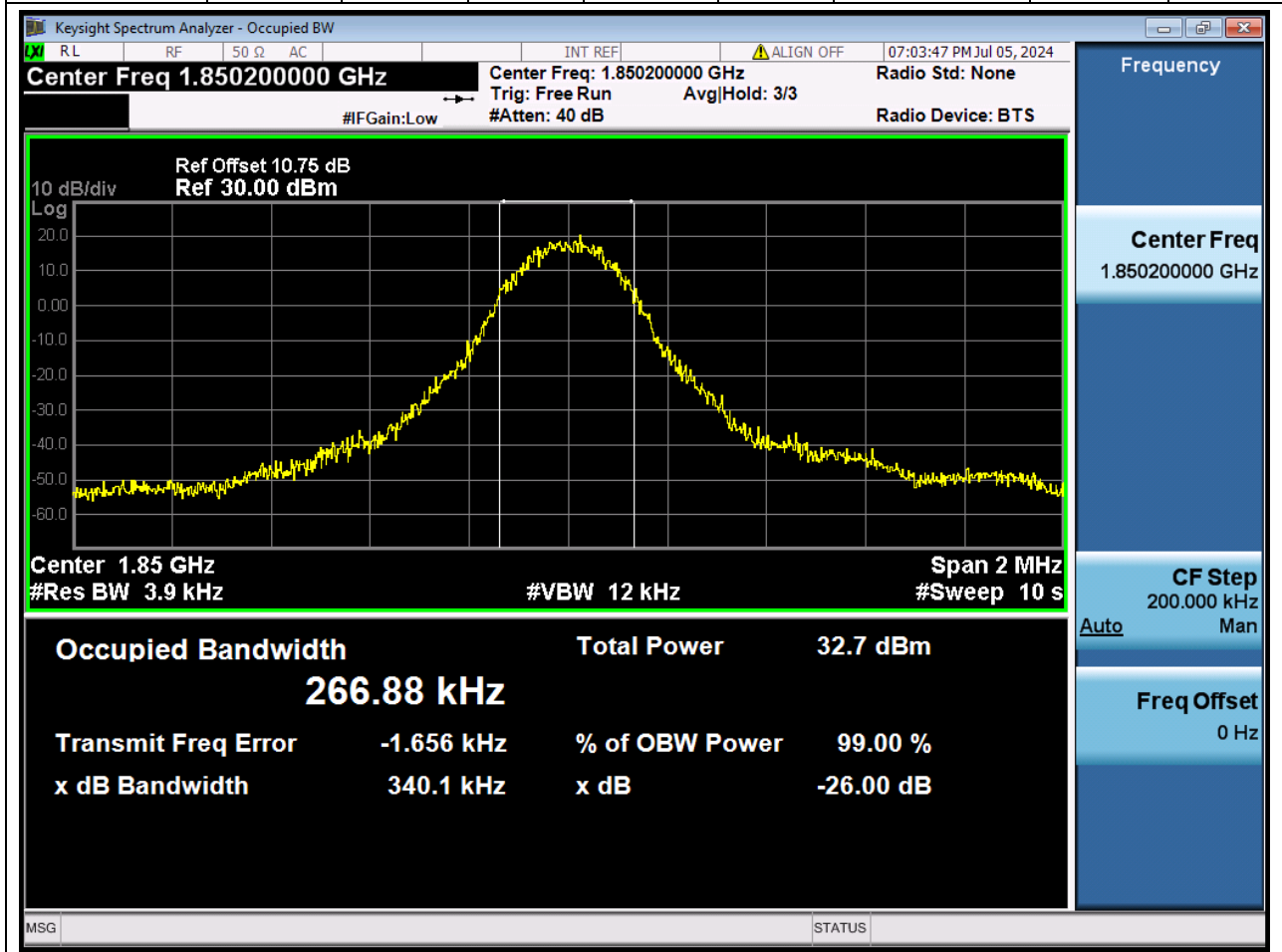
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
848.8	99	26	0.004	Peak	0.245	0.314	0.3	Pass



# 1. EGPRS\_PCS

## 1.1. EGPRS Occupied Bandwidth\_Part22-24(NTLV)(Channel:512)

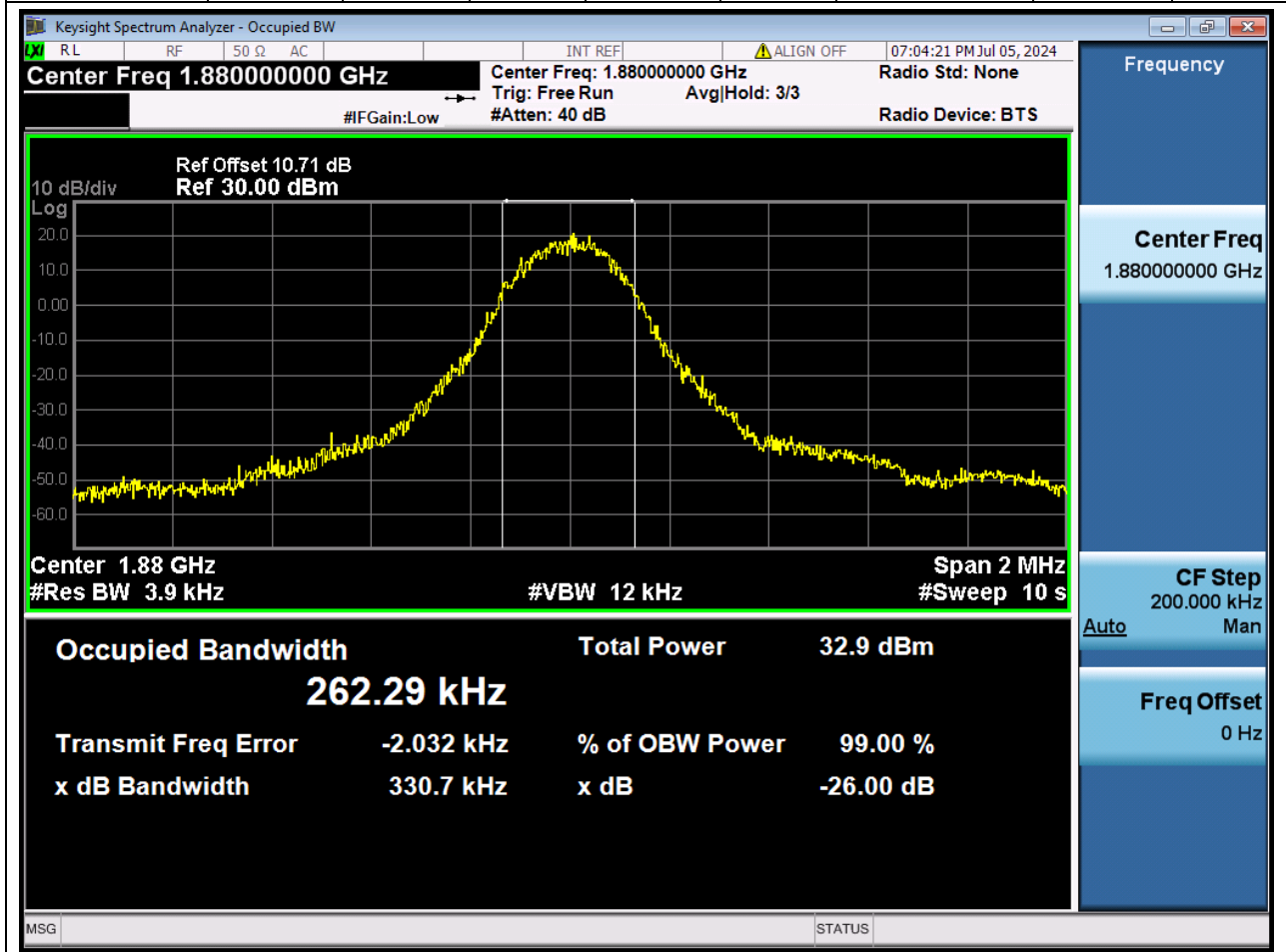
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1850.2	99	26	0.004	Peak	0.267	0.34	0.3	Pass





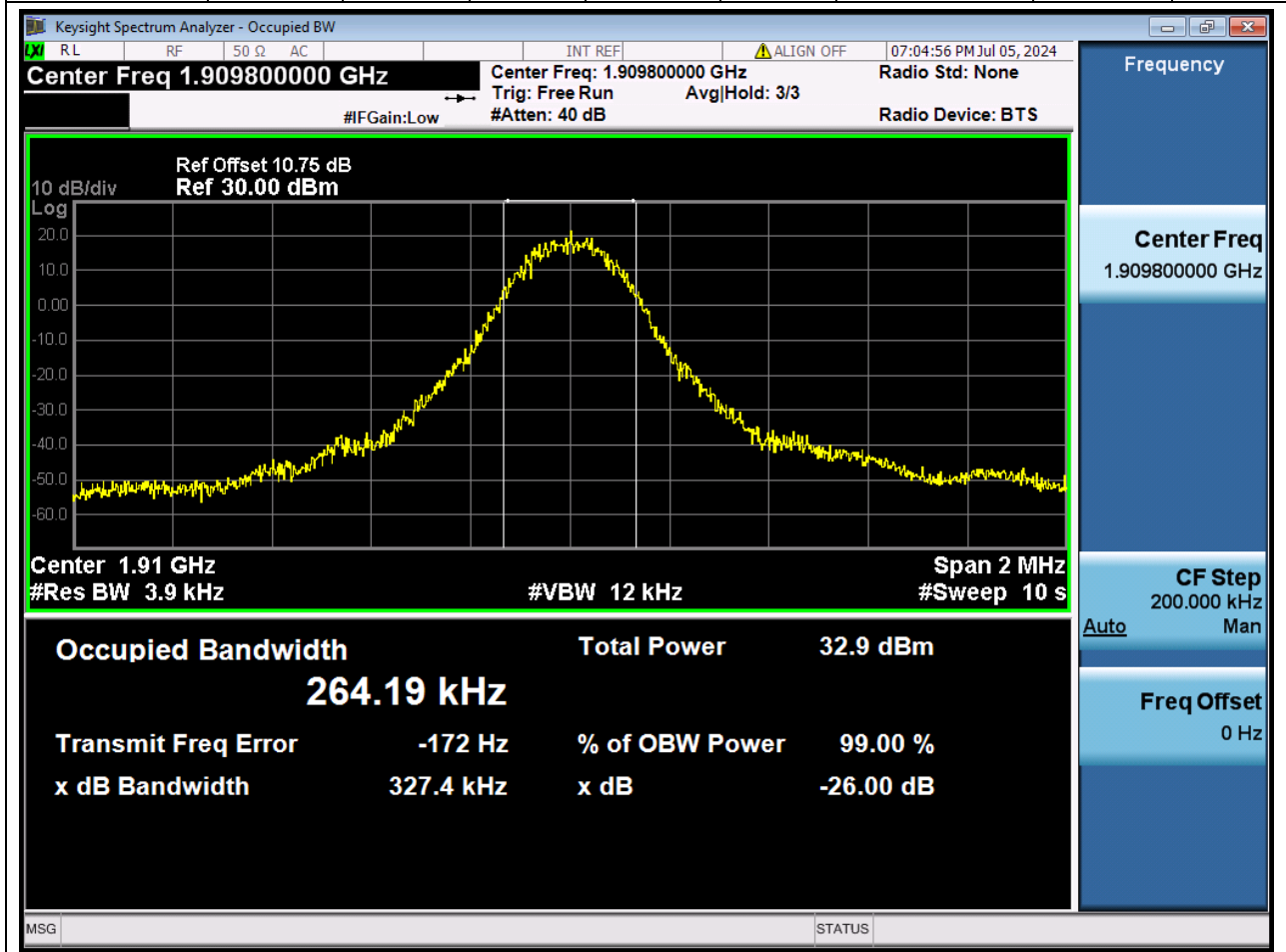
## 1.2. EGPRS Occupied Bandwidth\_Part22-24(NTLV)(Channel:661)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880	99	26	0.004	Peak	0.262	0.331	0.3	Pass



### 1.3. EGPRS Occupied Bandwidth\_Part22-24(NTLV)(Channel:810)

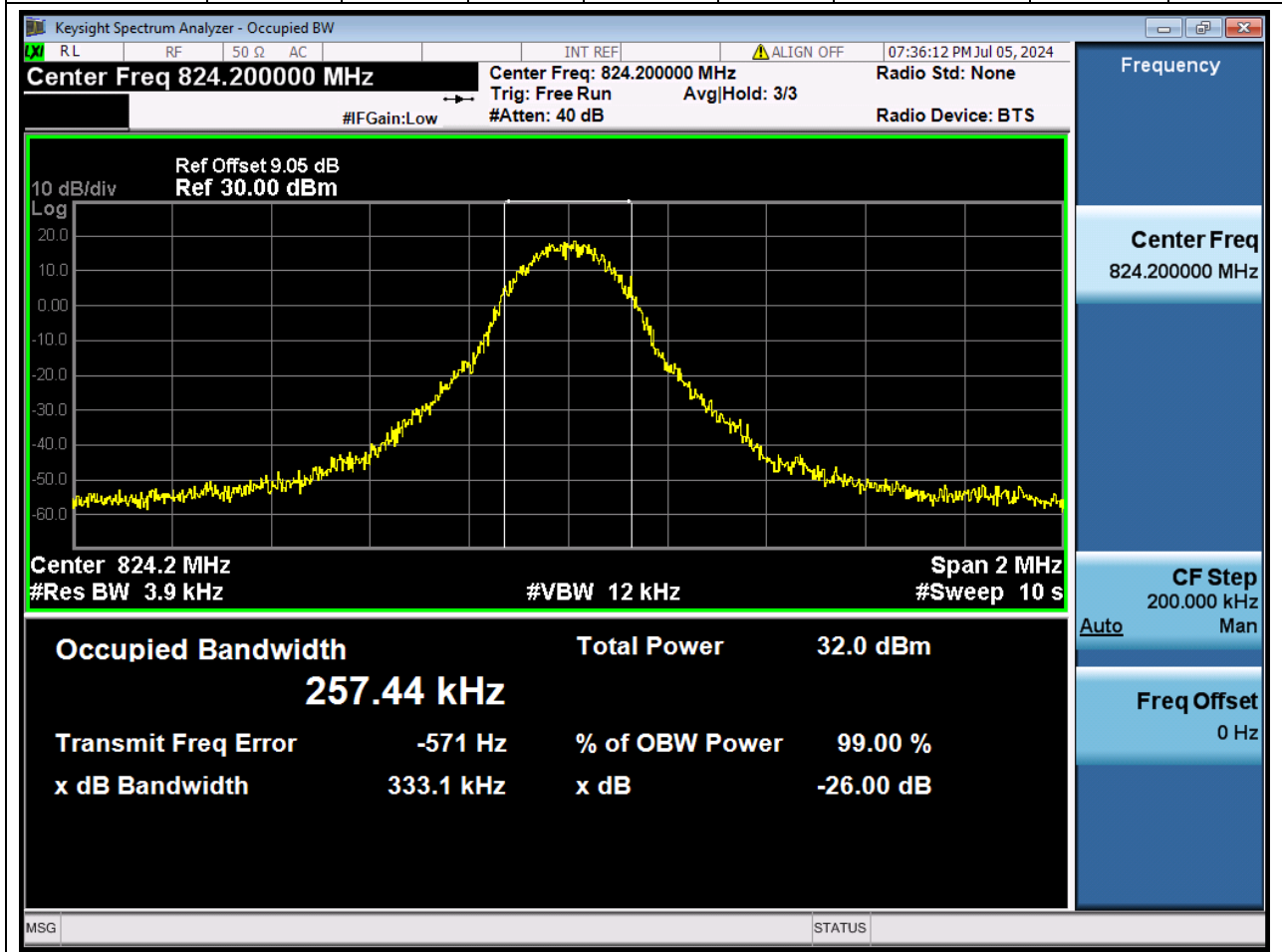
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1909.8	99	26	0.004	Peak	0.264	0.327	0.3	Pass



## 2. EGPRS\_GSM850

### 2.1. EGPRS Occupied Bandwidth\_Part22-24(NTLV)(Channel:128)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
824.2	99	26	0.004	Peak	0.257	0.333	0.3	Pass



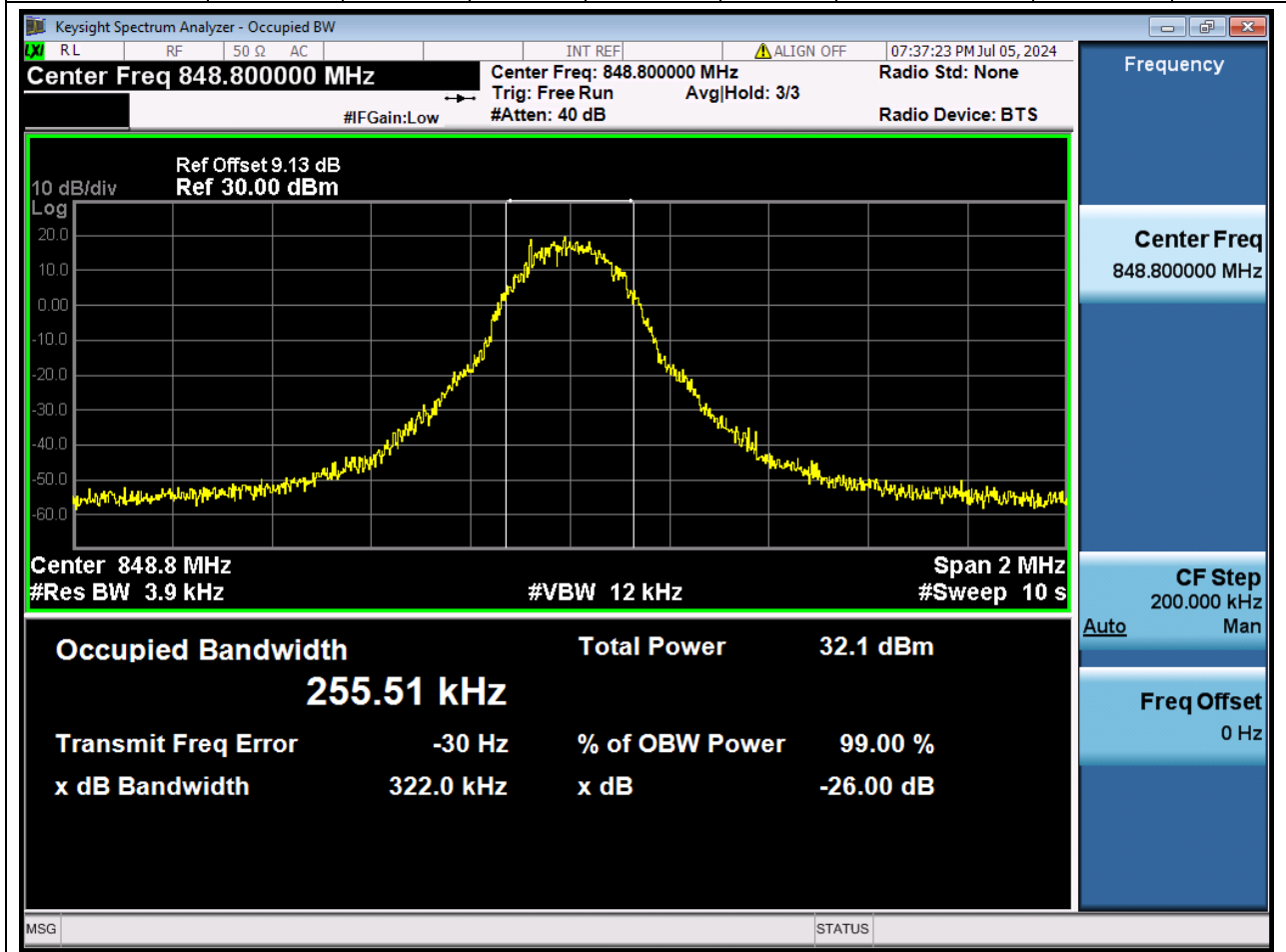
## 2.2. EGPRS Occupied Bandwidth\_Part22-24(NTLV)(Channel:190)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.6	99	26	0.004	Peak	0.252	0.315	0.3	Pass



### 2.3. EGPRS Occupied Bandwidth\_Part22-24(NTLV)(Channel:251)

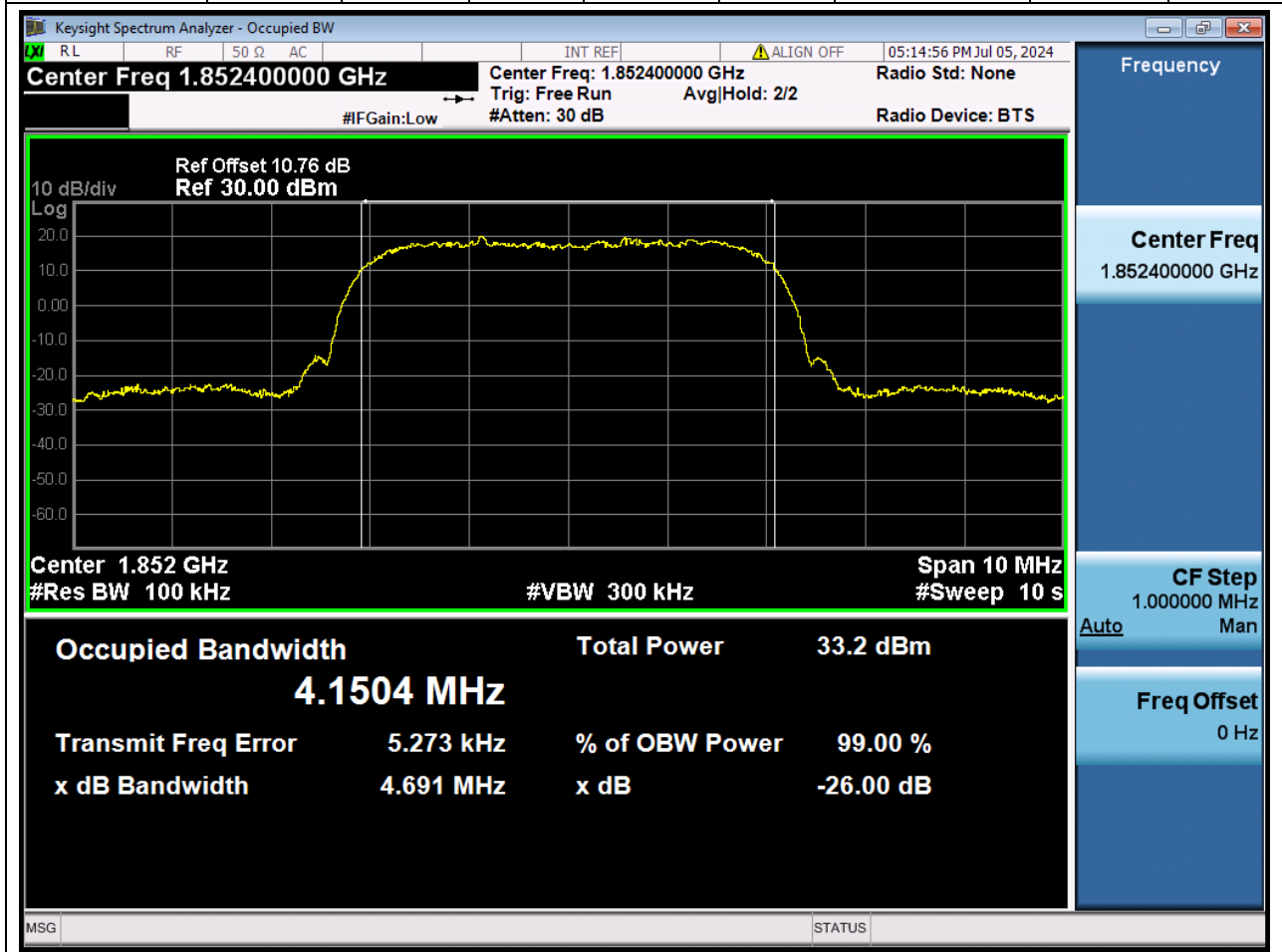
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
848.8	99	26	0.004	Peak	0.256	0.322	0.3	Pass



# 1. WCDMA\_Band2

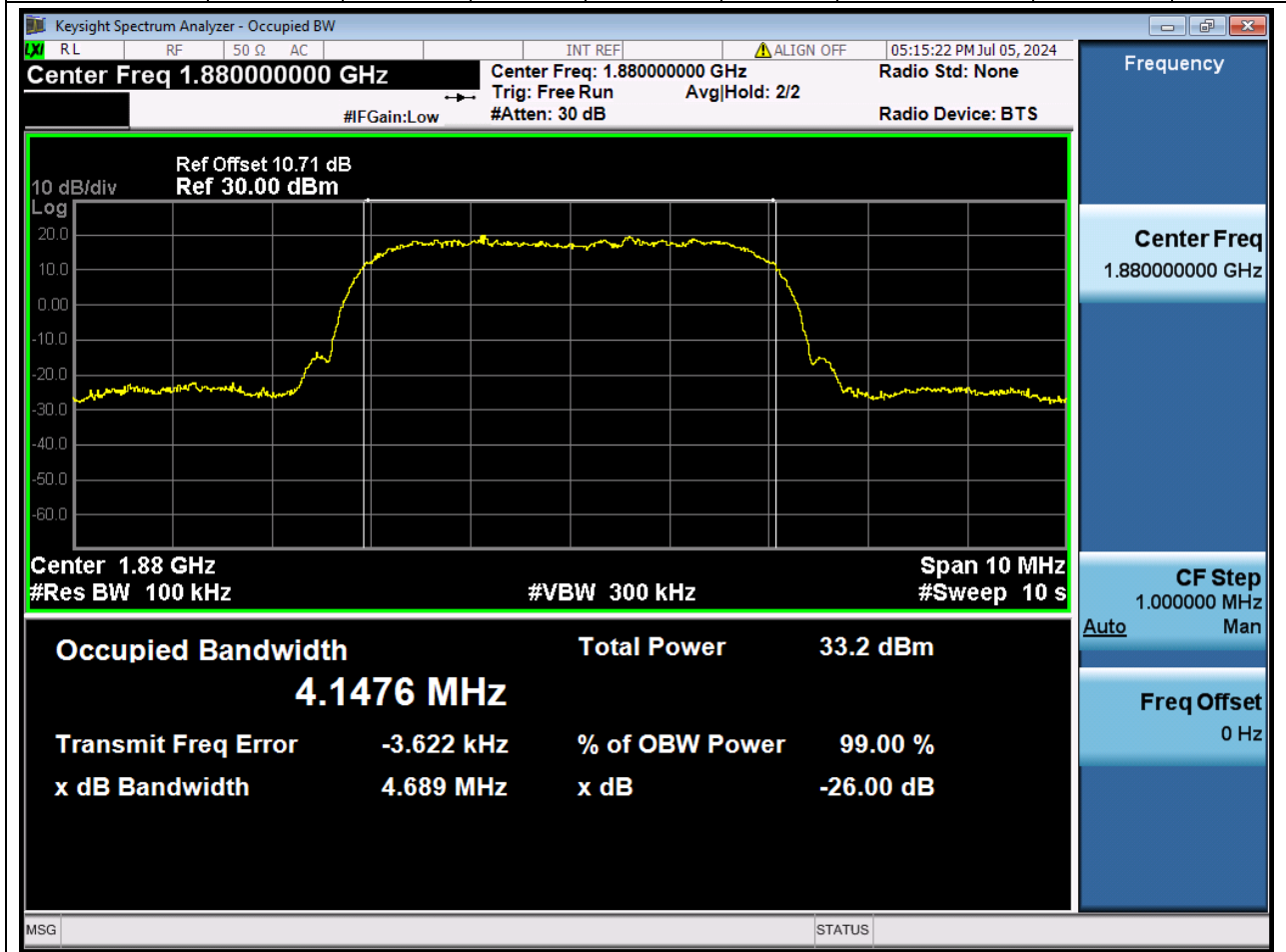
## 1.1. WCDMA Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:9262)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1852.4	99	26	0.1	Peak	4.15	4.691	5	Pass



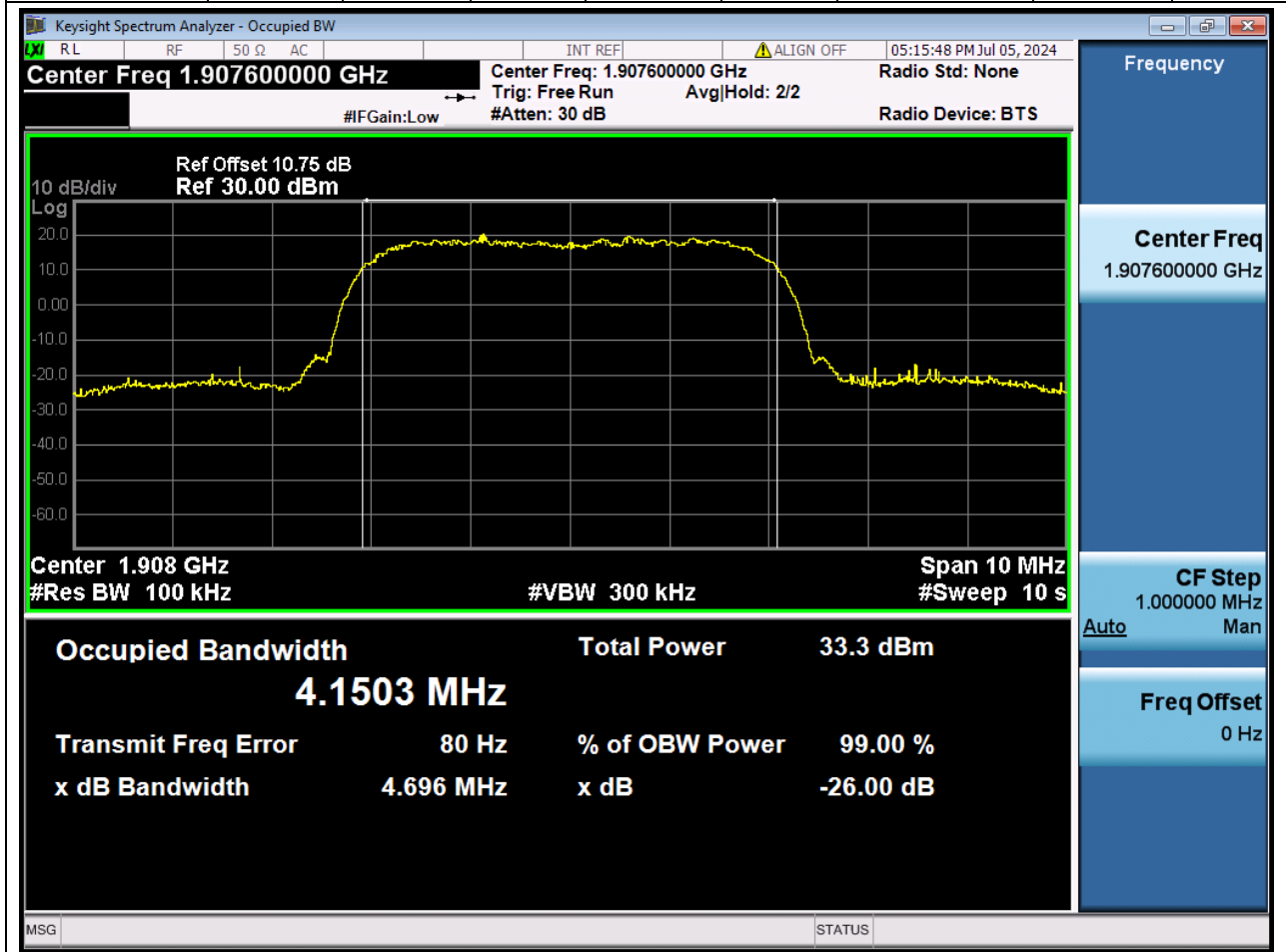
## 1.2. WCDMA Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:9400)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1880	99	26	0.1	Peak	4.148	4.689	5	Pass



### 1.3. WCDMA Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:9538)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1907.6	99	26	0.1	Peak	4.15	4.696	5	Pass

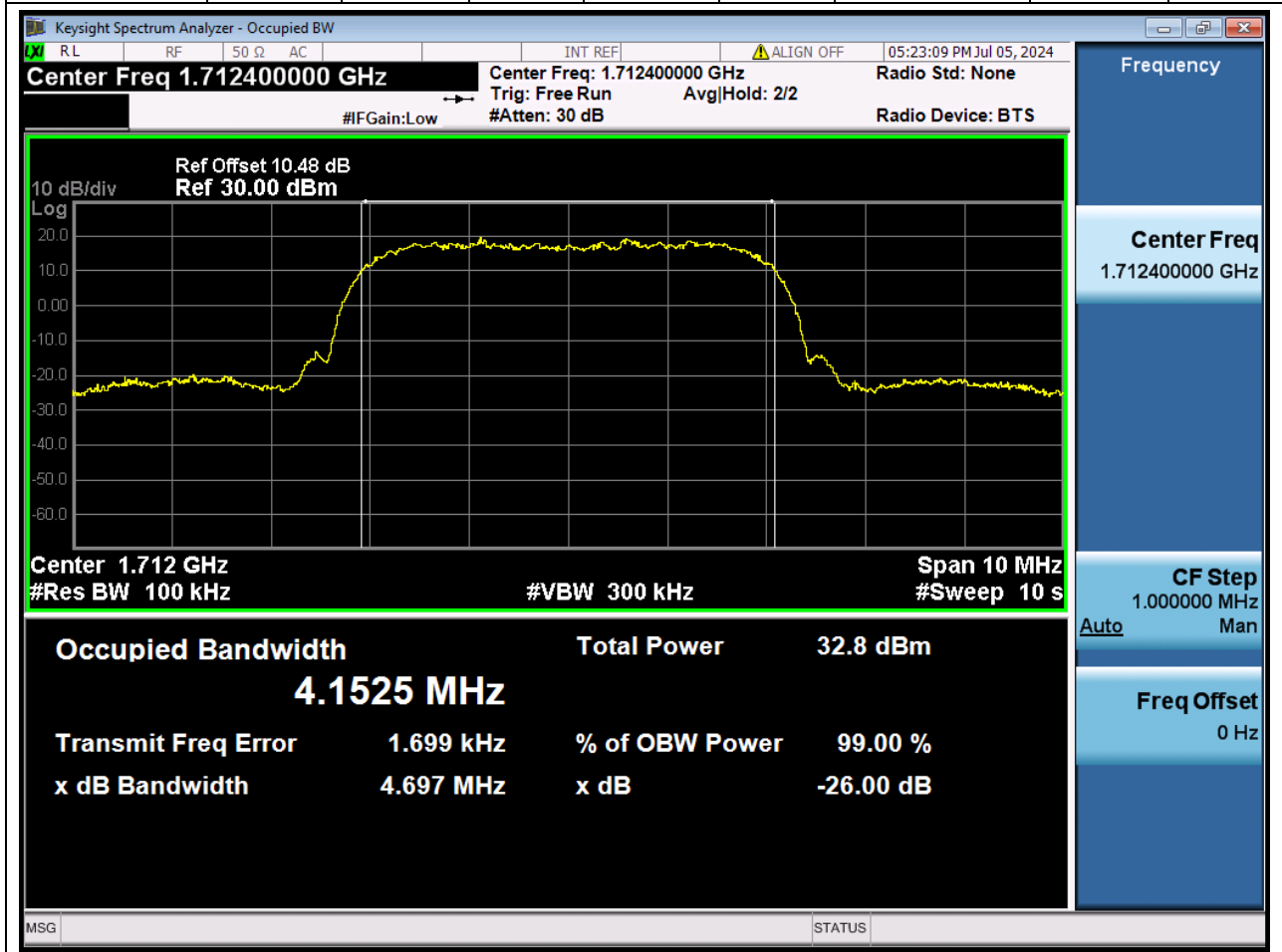




## 2. WCDMA\_Band4

### 2.1. WCDMA Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:1312)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1712.4	99	26	0.1	Peak	4.152	4.697	5	Pass



## 2.2. WCDMA Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:1412)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1732.4	99	26	0.1	Peak	4.149	4.688	5	Pass



### 2.3. WCDMA Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:1513)

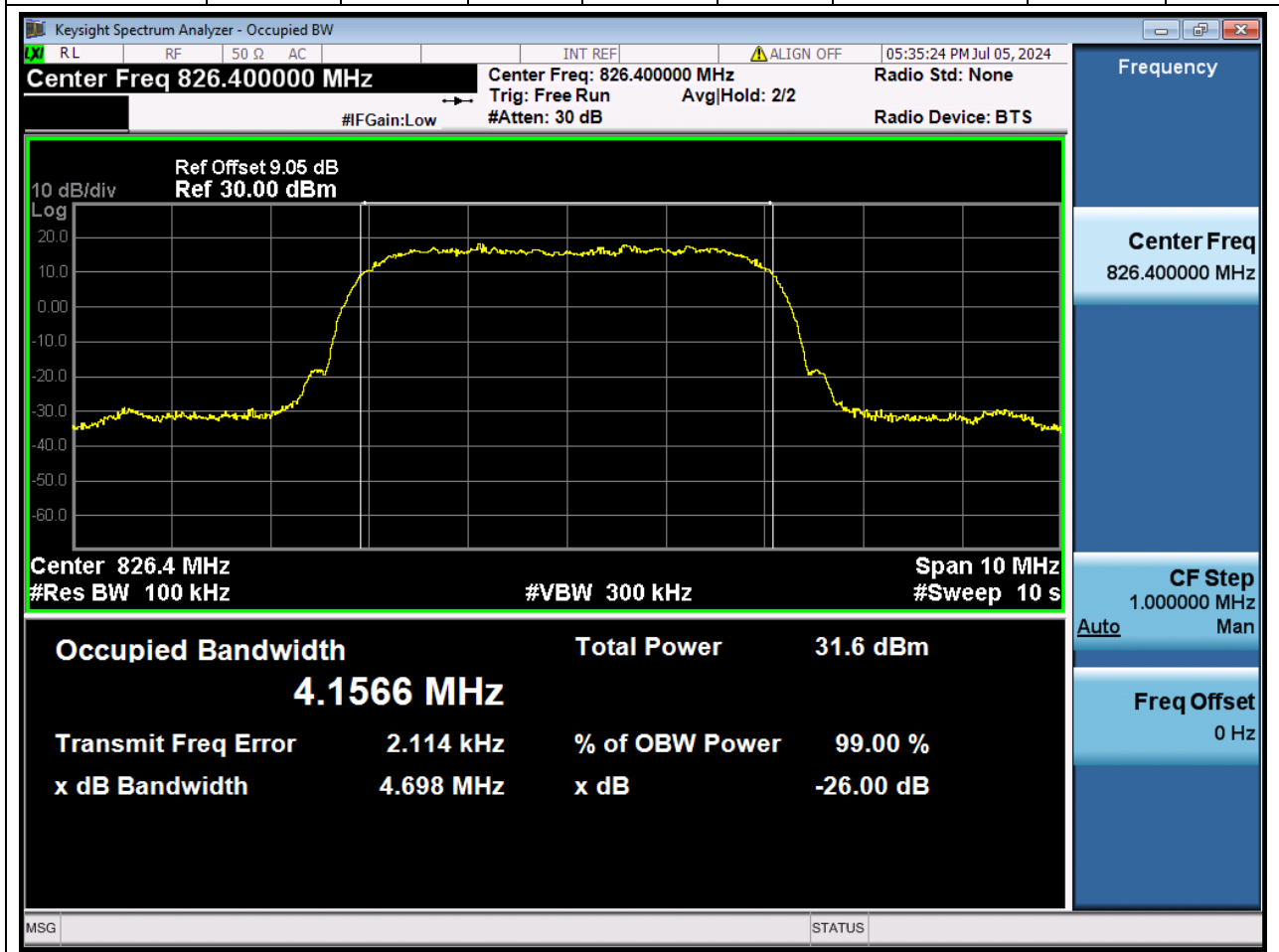
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1752.6	99	26	0.1	Peak	4.149	4.687	5	Pass



### 3. WCDMA\_Band5

#### 3.1. WCDMA Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:4132)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
826.4	99	26	0.1	Peak	4.157	4.698	5	Pass



### 3.2. WCDMA Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:4182)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.4	99	26	0.1	Peak	4.15	4.694	5	Pass



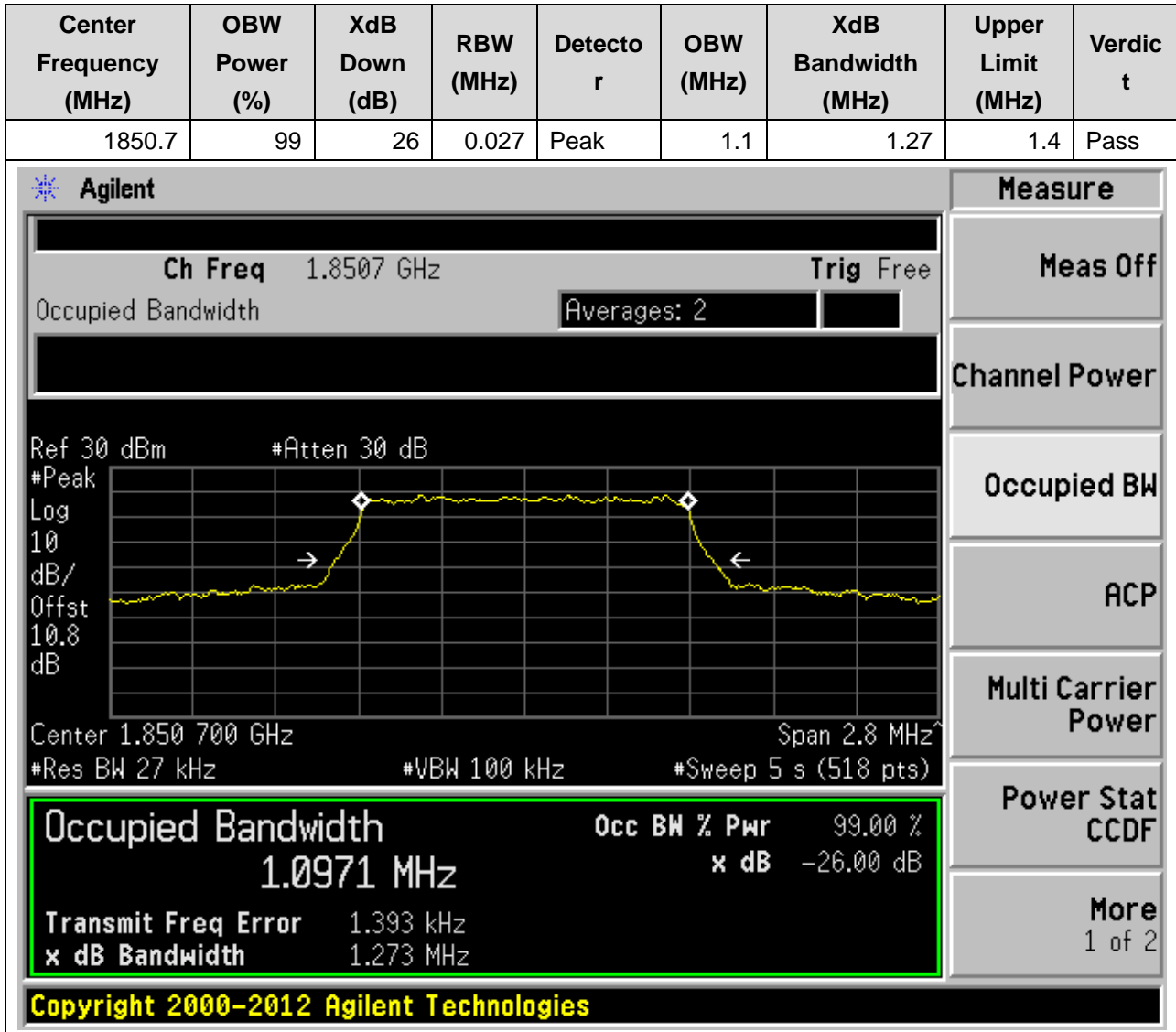
### 3.3. WCDMA Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:4233)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
846.6	99	26	0.1	Peak	4.144	4.685	5	Pass



## 1. LTE\_Band2

### 1.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18607, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)



**1.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18607, 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
1850.7	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 1.8507 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.850 700 GHz Span 2.8 MHz

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

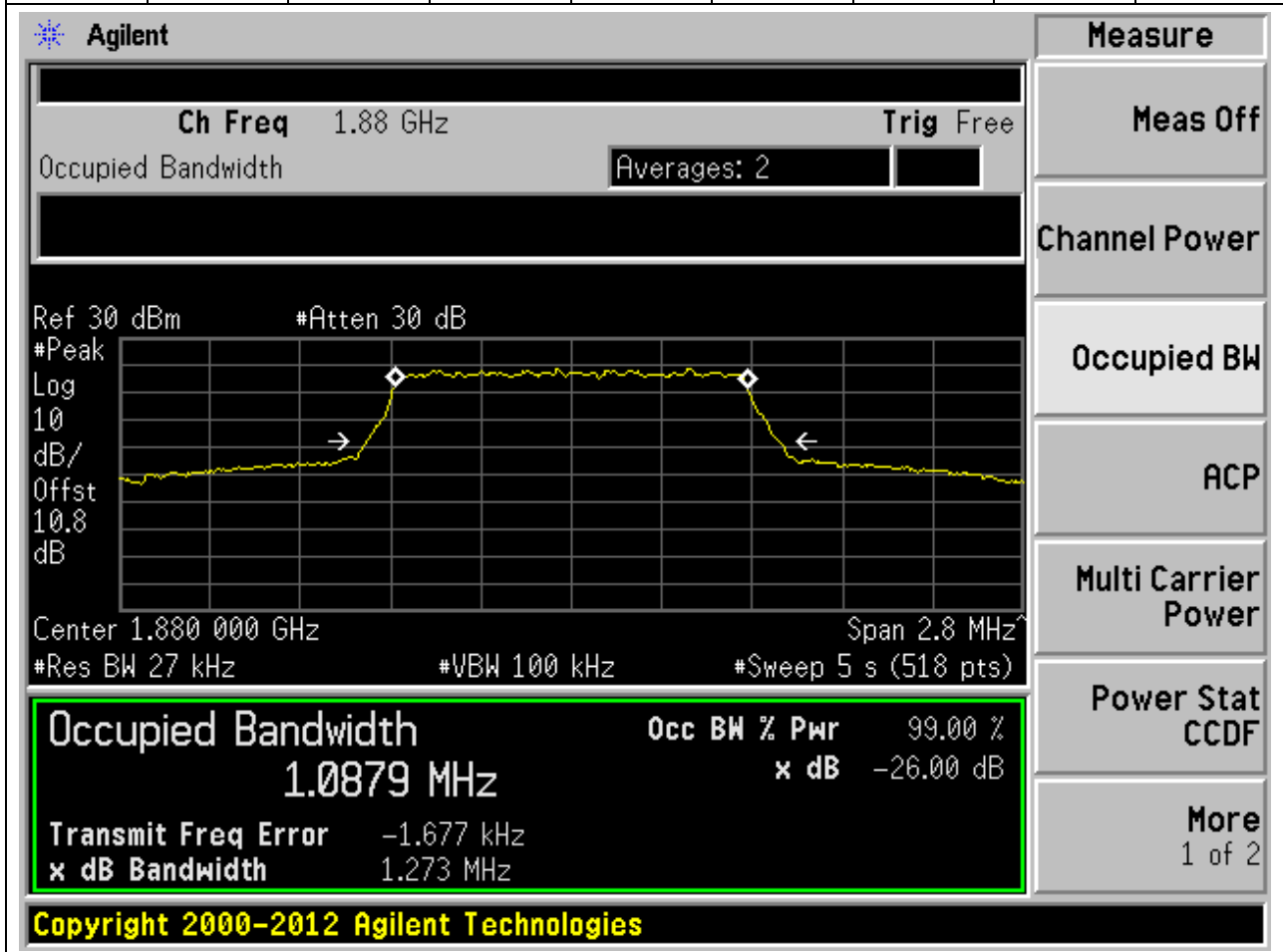
<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
1.0914 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	416.117 Hz	
<b>x dB Bandwidth</b>	1.272 MHz	

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**1.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.027	Peak	1.09	1.27	1.4	Pass



**1.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.027	Peak	1.1	1.29	1.4	Pass

Agilent

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

Ch Freq 1.88 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.880 000 GHz Span 2.8 MHz

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

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

1.0964 MHz

x dB -26.00 dB

Transmit Freq Error -2.812 kHz

x dB Bandwidth 1.293 MHz

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**1.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19193, 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
1909.3	99	26	0.027	Peak	1.09	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 1.9093 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.9 dB

Center 1.909 300 GHz Span 2.8 MHz

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

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

1.0938 MHz

x dB -26.00 dB

Transmit Freq Error 1.257 kHz

x dB Bandwidth 1.279 MHz

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**1.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19193, 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
1909.3	99	26	0.027	Peak	1.09	1.27	1.4	Pass

Agilent
Measure

Ch Freq 1.9093 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.9 dB

Center 1.909 300 GHz Span 2.8 MHz

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

**1.0852 MHz** x dB -26.00 dB

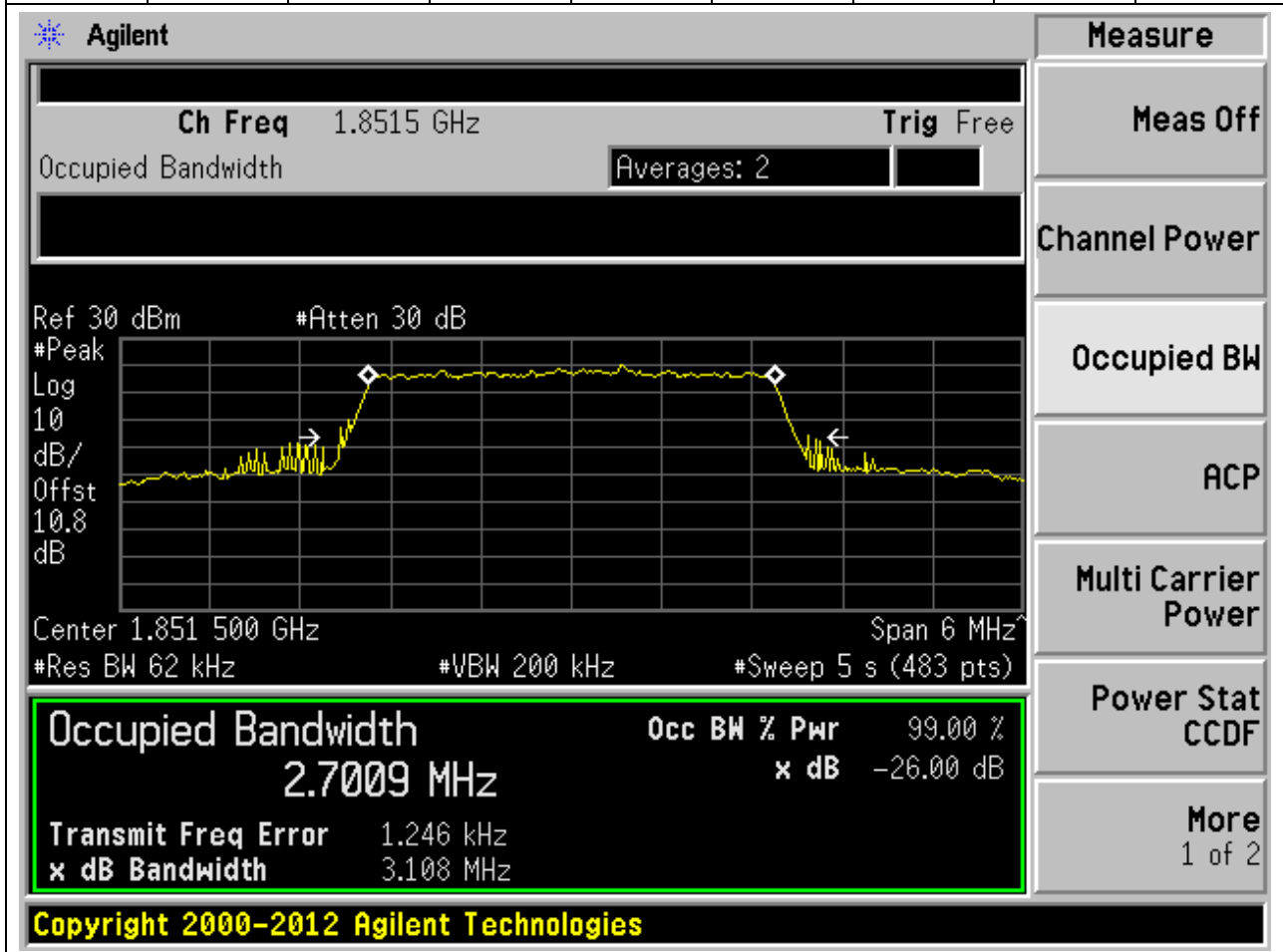
Transmit Freq Error -1.171 kHz

x dB Bandwidth 1.267 MHz

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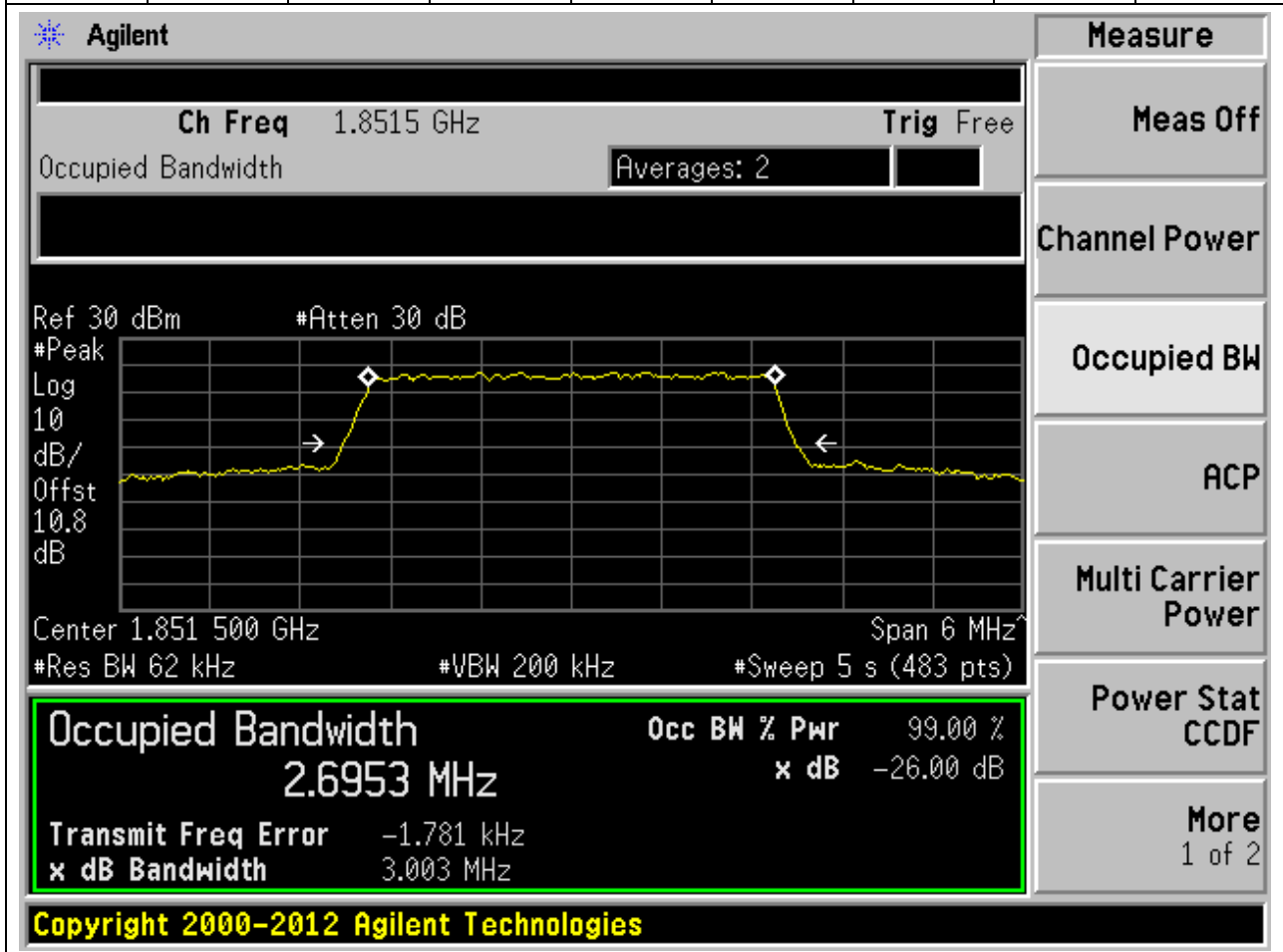
**1.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18615, Bandwidth:3, Modulation:QPSK, RB Number:15, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1851.5	99	26	0.062	Peak	2.7	3.11	3	Pass



**1.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18615, 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
1851.5	99	26	0.062	Peak	2.7	3	3	Pass



**1.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.062	Peak	2.69	3	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.88 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 10.8 dB', 'Center 1.880 000 GHz', 'Span 6 MHz', '#Res BW 62 kHz', '#VBW 200 kHz', and '#Sweep 5 s (483 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 2.6910 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -3.342 kHz', and 'x dB Bandwidth 3.001 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'.

**1.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.062	Peak	2.69	3	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.88 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', '10.8 dB', 'Center 1.880 000 GHz', 'Span 6 MHz', '#Res BW 62 kHz', '#VBW 200 kHz', and '#Sweep 5 s (483 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 2.6946 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 586.674 Hz' and 'x dB Bandwidth 2.996 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'.



**1.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19185, 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
1908.5	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 1.9085 GHz. The occupied bandwidth is measured as 2.6927 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is -567.619 Hz, and the XdB bandwidth is 2.983 MHz. 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 %
2.6927 MHz	x dB	-26.00 dB
Transmit Freq Error	-567.619 Hz	
x dB Bandwidth	2.983 MHz	

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**1.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19185, 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
1908.5	99	26	0.062	Peak	2.69	2.99	3	Pass

Agilent
Measure

Ch Freq 1.9085 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.9 dB

Center 1.908 500 GHz Span 6 MHz

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

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

**2.6854 MHz** x dB -26.00 dB

Transmit Freq Error -652.374 Hz

x dB Bandwidth 2.992 MHz

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Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

**1.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18625, 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
1852.5	99	26	0.1	Peak	4.53	4.95	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8525 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', '10.8 dB', 'Center 1.852 500 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 4.5290 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -13.613 kHz', and 'x dB Bandwidth 4.947 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'.

**1.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18625, 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
1852.5	99	26	0.1	Peak	4.5	4.93	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8525 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 10.8 dB'. The center frequency is 1.852500 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 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 4.5013 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. Other parameters shown include 'Transmit Freq Error -618.050 Hz' and 'x dB Bandwidth 4.926 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'.

**1.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.1	Peak	4.51	4.91	5	Pass

**Agilent**

Ch Freq 1.88 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.8 dB

Center 1.880 000 GHz Span 10 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
4.5075 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		-2.855 kHz
<b>x dB Bandwidth</b>		4.911 MHz

**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

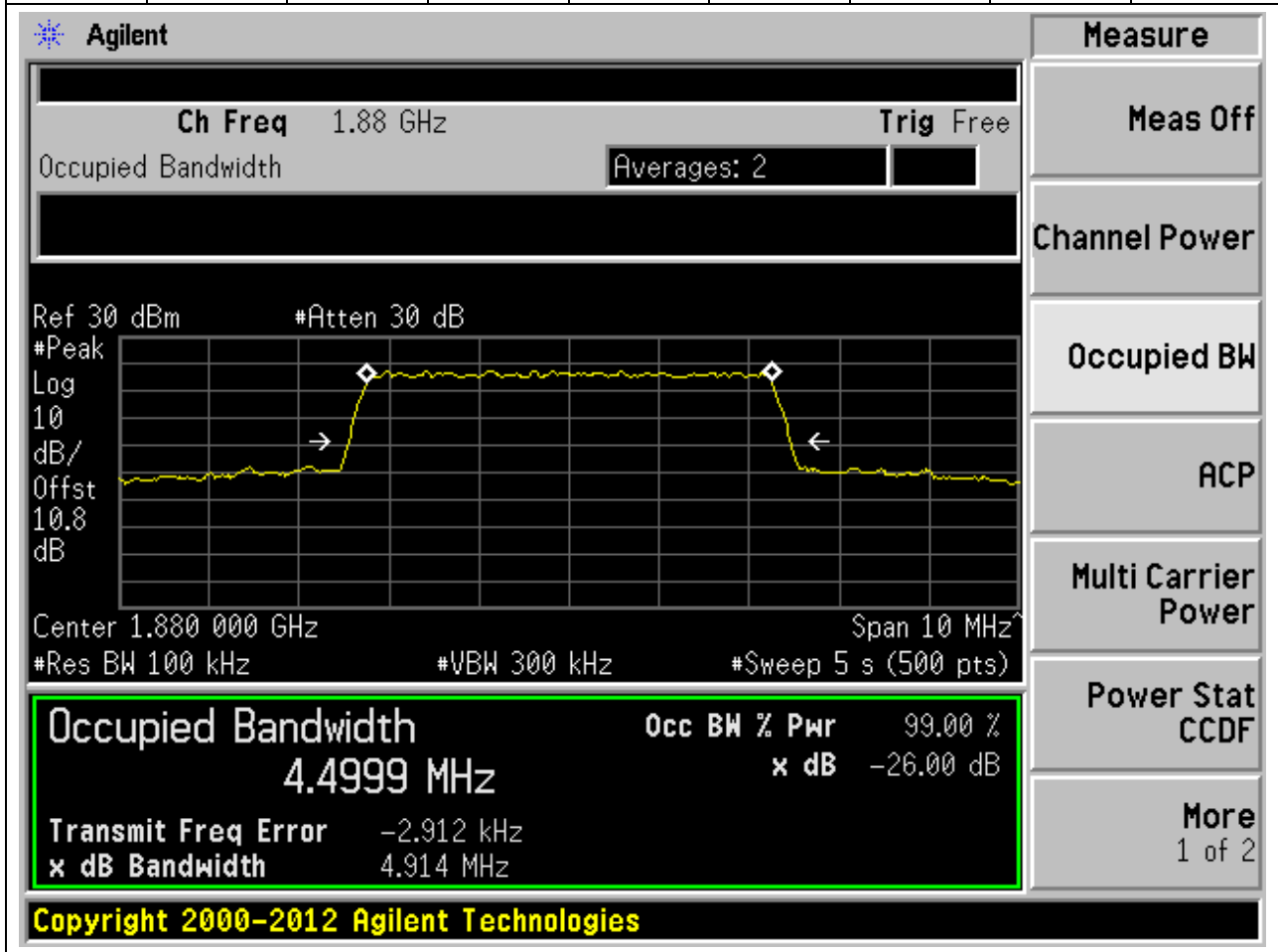
Power Stat CCDF

More 1 of 2

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**1.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.1	Peak	4.5	4.91	5	Pass



**1.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19175, 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
1907.5	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 center frequency is 1.9075 GHz. The occupied bandwidth is measured as 4.5035 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -2.014 kHz. The XdB bandwidth is 4.910 MHz. The interface includes various measurement controls and a 'Measure' menu on the right side.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.5035 MHz	x dB	-26.00 dB
Transmit Freq Error	-2.014 kHz	
x dB Bandwidth	4.910 MHz	

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**1.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19175, 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
1907.5	99	26	0.1	Peak	4.49	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.9075 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', '10.9 dB', 'Center 1.907 500 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 4.4915 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -1.700 kHz', and 'x dB Bandwidth 4.902 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'.



**1.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18650, 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
1855	99	26	0.2	Peak	8.96	9.85	10	Pass

Agilent

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

Ch Freq 1.855 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.855 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 %
8.9629 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	16.223 kHz	
<b>x dB Bandwidth</b>	9.846 MHz	

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**1.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18650, 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
1855	99	26	0.2	Peak	8.97	9.78	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.855 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 parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.8 dB', 'Center 1.855 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:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>8.9696 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		17.299 kHz
<b>x dB Bandwidth</b>		9.780 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, the copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible.

**1.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.2	Peak	8.99	9.79	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.88 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 10.8 dB', 'Center 1.880 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 8.9850 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 4.740 kHz', and 'x dB Bandwidth 9.793 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'.

**1.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.2	Peak	8.94	9.8	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.88 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 10.8 dB', 'Center 1.880 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 8.9444 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -6.958 kHz', and 'x dB Bandwidth 9.797 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'.

**1.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19150, 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
1905	99	26	0.2	Peak	9.01	9.85	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.905 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 10.9 dB', 'Center 1.905 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 9.0144 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 28.043 kHz', and 'x dB Bandwidth 9.848 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'.

**1.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19150, 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
1905	99	26	0.2	Peak	8.99	9.79	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.905 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 parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log', '10 dB/Offst', '10.9 dB', 'Center 1.905 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 8.9929 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -14.955 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, the copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible.

**1.25. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18675, 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
1857.5	99	26	0.3	Peak	13.46	14.7	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.8575 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, 10.8 dB, Center 1.857 50 GHz, Span 30 MHz, #Res BW 300 kHz, #VBW 1 MHz, #Sweep 5 s (500 pts). The Occupied Bandwidth measurement results are highlighted in a green box:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>13.4618 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		16.767 kHz
<b>x dB Bandwidth</b>		14.701 MHz

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

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**1.26. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18675, 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
1857.5	99	26	0.3	Peak	13.45	14.66	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.8575 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 10.8 dB, Center 1.857 50 GHz, Span 30 MHz, #Res BW 300 kHz, #VBW 1 MHz, and #Sweep 5 s (500 pts). The Occupied Bandwidth measurement results are highlighted in a green box:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>13.4490 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		16.494 kHz
<b>x dB Bandwidth</b>		14.655 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).

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**1.27. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.3	Peak	13.45	14.64	15	Pass

Agilent

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

Ch Freq 1.88 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.8 dB

Center 1.880 00 GHz Span 30 MHz

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

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

**13.4544 MHz** x dB -26.00 dB

Transmit Freq Error 2.127 kHz

x dB Bandwidth 14.640 MHz

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**1.28. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.3	Peak	13.44	14.67	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.88 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 10.8 dB', 'Center 1.880 00 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 13.4438 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 11.553 kHz' and 'x dB Bandwidth 14.672 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'.

**1.29. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19125, 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
1902.5	99	26	0.3	Peak	13.44	14.69	15	Pass

Agilent

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

Ch Freq 1.9025 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.902 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 %
13.4396 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-4.925 kHz	
<b>x dB Bandwidth</b>	14.694 MHz	

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**1.30. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19125, 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
1902.5	99	26	0.3	Peak	13.44	14.69	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.9025 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 10.9 dB'. The center frequency is 1.9025 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 5 seconds (500 points). The plot shows a signal with a peak at approximately 1.9025 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 13.4449 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is 1.507 kHz and the 'x dB Bandwidth' is 14.688 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'.

**1.31. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18700, 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
1860	99	26	0.39	Peak	17.93	19.42	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The plot parameters are: Center 1.860 00 GHz, Span 40 MHz, #Res BW 390 kHz, #VBW 1.2 MHz, #Sweep 5 s (512 pts). The plot shows a signal with a peak at approximately 1.86 GHz. The measurement results are displayed in a green-bordered box:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
17.9331 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	26.092 kHz	
<b>x dB Bandwidth</b>	19.421 MHz	

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

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**1.32. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18700, 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
1860	99	26	0.39	Peak	17.94	19.41	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.86 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 10.9 dB', 'Center 1.860 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 17.9421 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 43.458 kHz' and 'x dB Bandwidth 19.410 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'.

**1.33. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.39	Peak	17.94	19.43	20	Pass

Agilent

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

Ch Freq 1.88 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.880 00 GHz Span 40 MHz

#Res BW 390 kHz #VBW 1.2 MHz #Sweep 5 s (512 pts)

<b>Occupied Bandwidth</b>	Occ BW % Pwr	99.00 %
17.9445 MHz	x dB	-26.00 dB
Transmit Freq Error	26.877 kHz	
x dB Bandwidth	19.433 MHz	

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**1.34. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:18900, 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
1880	99	26	0.39	Peak	17.92	19.45	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.88 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 10.8 dB', 'Center 1.880 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 17.9177 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error -1.756 kHz' and 'x dB Bandwidth 19.455 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'.



**1.35. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19100, 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
1900	99	26	0.39	Peak	17.9	19.39	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.9 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 10.8 dB', 'Center 1.900 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 17.8971 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error 6.342 kHz' and 'x dB Bandwidth 19.387 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'.

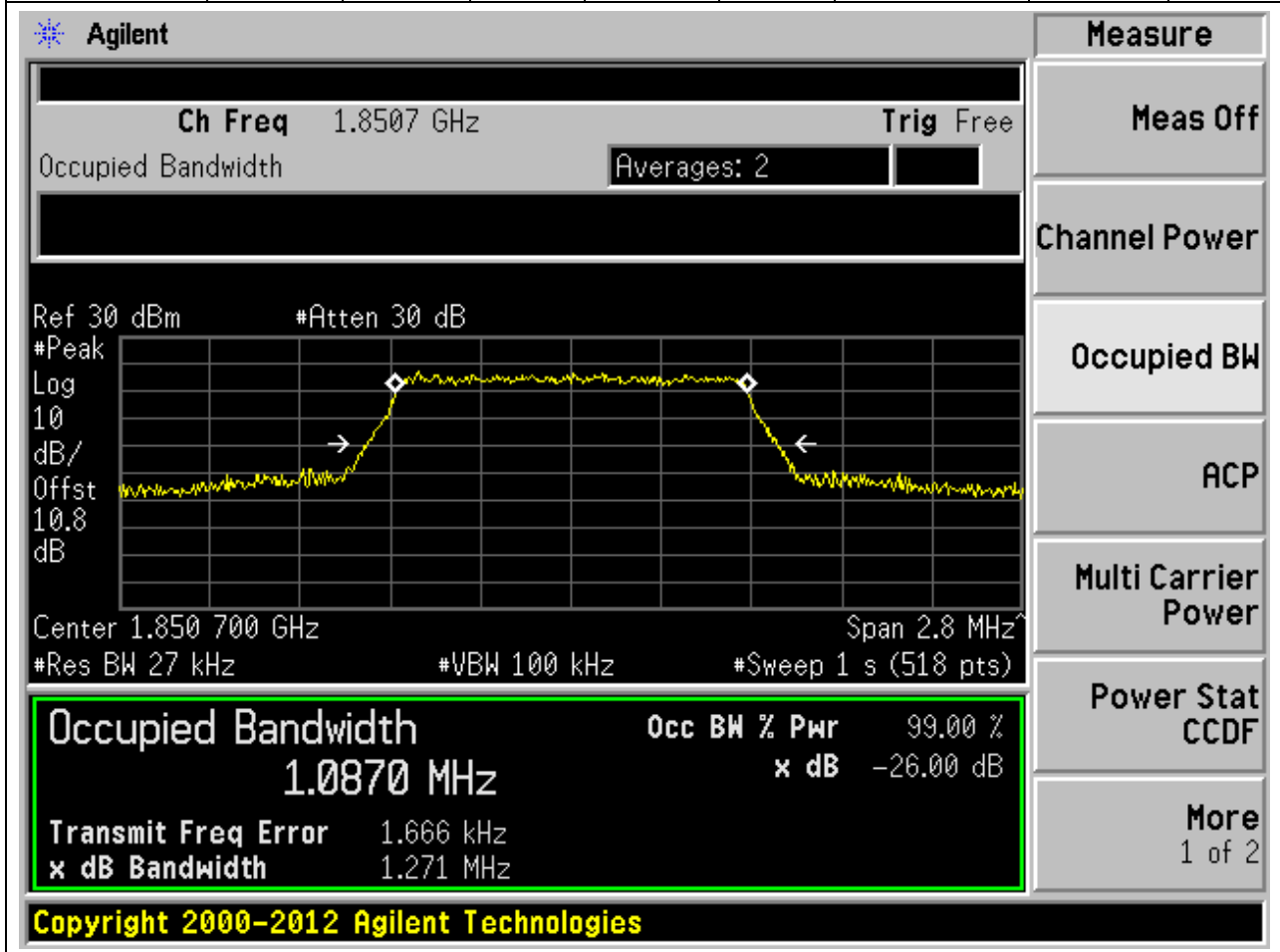
**1.36. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19100, Bandwidth:20, Modulation:16QAM, RB Number:100, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1900	99	26	0.39	Peak	17.91	19.51	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.9 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 10.8 dB', 'Center 1.900 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 17.9145 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error -12.023 kHz' and 'x dB Bandwidth 19.508 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'.

**1.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18607, 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
1850.7	99	26	0.027	Peak	1.09	1.27	1.4	Pass



**1.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18900, 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
1880	99	26	0.027	Peak	1.09	1.29	1.4	Pass

Agilent

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

Ch Freq 1.88 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.880 000 GHz Span 2.8 MHz

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

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

1.0942 MHz

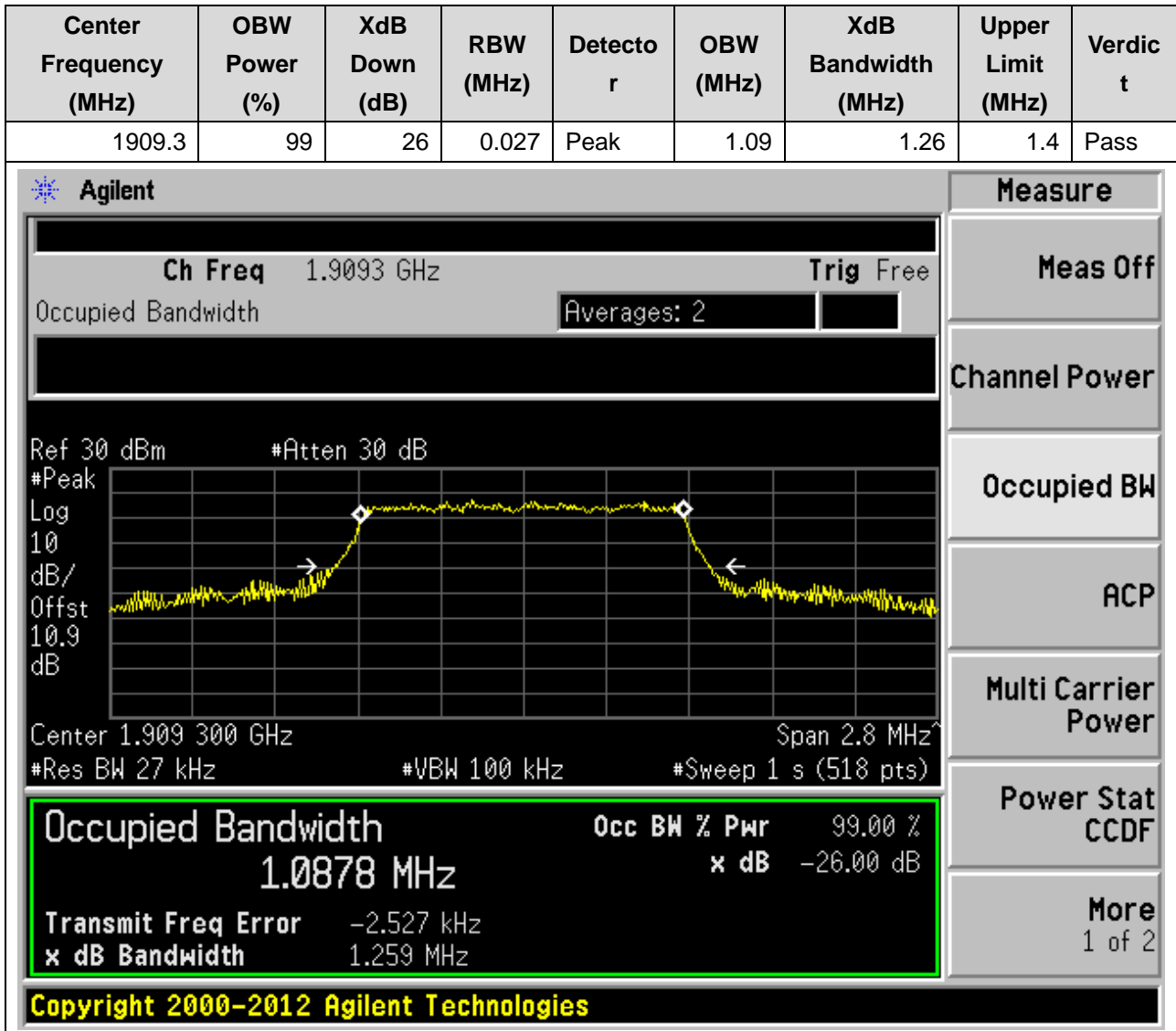
x dB -26.00 dB

Transmit Freq Error 234.309 Hz

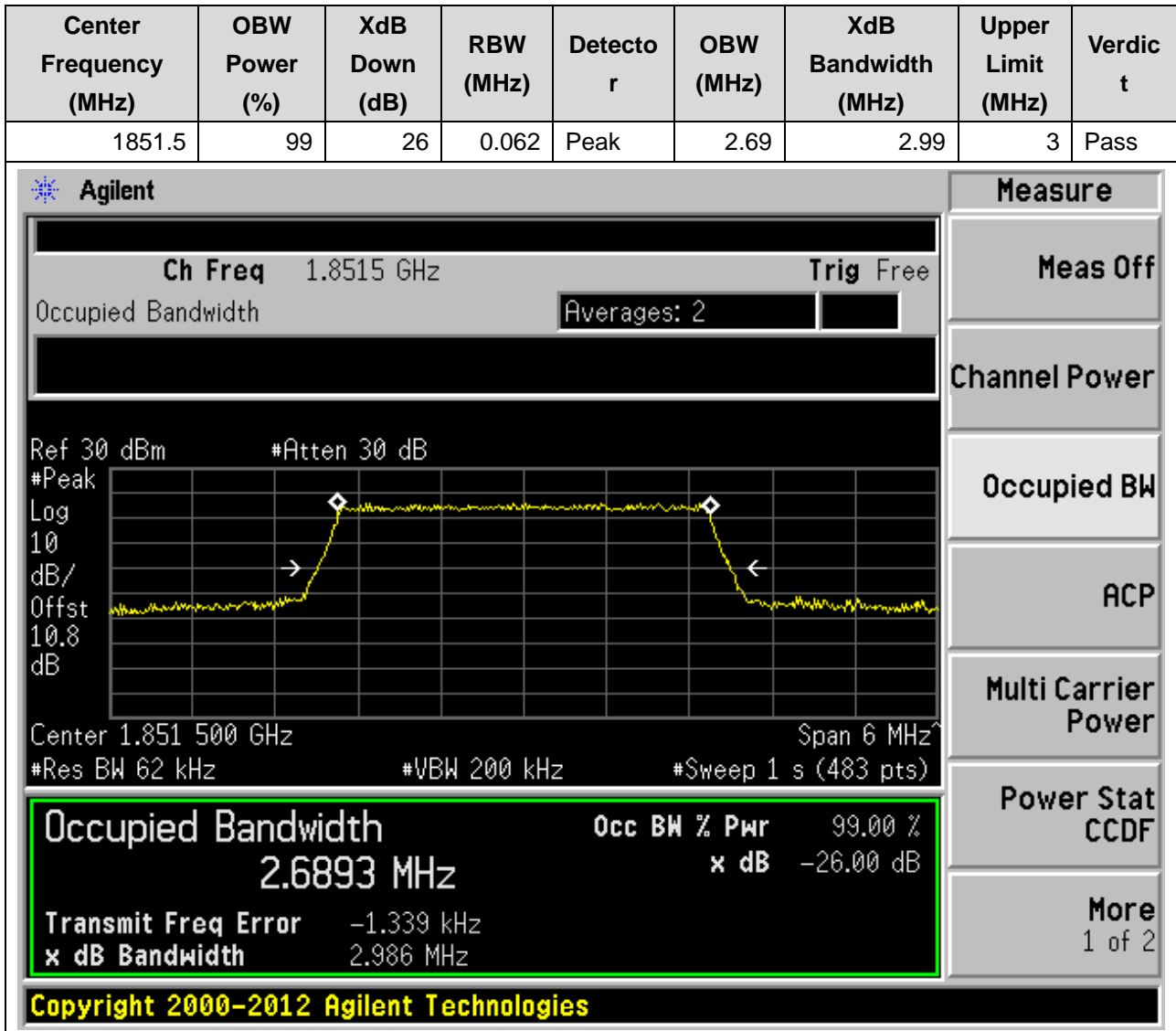
x dB Bandwidth 1.287 MHz

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**1.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:19193, Bandwidth:1.4, Modulation:64QAM, RB Number:6, RB Position:0)**



**1.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18615, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)**



**1.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18900, 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
1880	99	26	0.062	Peak	2.68	2.97	3	Pass

Agilent
Measure

Ch Freq 1.88 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

Center 1.880 000 GHz Span 6 MHz

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

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

2.6836 MHz

x dB -26.00 dB

Transmit Freq Error -3.363 kHz

x dB Bandwidth 2.969 MHz

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1.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:19185, 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
1908.5	99	26	0.062	Peak	2.69	2.98	3	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	2.6856 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-2.108 kHz
x dB Bandwidth	2.984 MHz

Other visible parameters include: Ch Freq 1.9085 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log, 10 dB/Offst, 10.9 dB, Center 1.908500 GHz, Span 6 MHz, #Res BW 62 kHz, #VBW 200 kHz, #Sweep 1 s (483 pts).

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**1.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18625, 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
1852.5	99	26	0.1	Peak	4.49	4.9	5	Pass

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

Measurement	Value
Occupied Bandwidth	4.4933 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	3.639 kHz
x dB Bandwidth	4.901 MHz

Other visible parameters include: Ch Freq 1.8525 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log 10, dB/Offst 10.8 dB, Center 1.852 500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, #Sweep 1 s (500 pts).

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**1.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18900, 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
1880	99	26	0.1	Peak	4.5	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a signal spectrum with a yellow trace. The measurement results are summarized in a table below the spectrum:

Occupied Bandwidth	Occ BW % Pwr	X dB
4.4969 MHz	99.00 %	-26.00 dB

Additional parameters shown in the interface include:

- Center Freq: 1.88 GHz
- Trig: Free
- Averages: 2
- Ref: 30 dBm, #Atten: 30 dB
- Log: 10 dB/Offst: 10.8 dB
- Center: 1.880 000 GHz, Span: 10 MHz
- #Res BW: 100 kHz, #VBW: 300 kHz, #Sweep: 1 s (500 pts)
- Transmit Freq Error: -3.560 kHz
- x dB Bandwidth: 4.900 MHz

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**1.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:19175, 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
1907.5	99	26	0.1	Peak	4.49	4.92	5	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	4.4896 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-2.828 kHz
x dB Bandwidth	4.917 MHz

Other visible parameters include: Ch Freq 1.9075 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak Log 10 dB/Offst 10.9 dB, Center 1.907500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, #Sweep 1 s (500 pts).

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**1.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18650, 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
1855	99	26	0.2	Peak	8.95	10.02	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.855 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 10.8 dB, Center 1.855 00 GHz, Span 20 MHz, #Res BW 200 kHz, #VBW 620 kHz, and #Sweep 1 s (500 pts). The Occupied Bandwidth measurement results are highlighted in a green box:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>8.9483 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		9.414 kHz
<b>x dB Bandwidth</b>		10.022 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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1.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18900, 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
1880	99	26	0.2	Peak	8.96	9.71	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a signal spectrum with a yellow trace. The measurement results are summarized in a table below the spectrum plot:

Occupied Bandwidth	Occ BW % Pwr	X dB
8.9574 MHz	99.00 %	-26.00 dB

Additional parameters shown in the interface include:

- Center Freq: 1.88 GHz
- Trig: Free
- Averages: 2
- Ref: 30 dBm, #Atten: 30 dB
- Log: 10 dB/Offst: 10.8 dB
- Center: 1.880 00 GHz, Span: 20 MHz
- #Res BW: 200 kHz, #VBW: 620 kHz, #Sweep: 1 s (500 pts)
- Transmit Freq Error: -10.745 kHz
- x dB Bandwidth: 9.713 MHz

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1.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:19150, 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
1905	99	26	0.2	Peak	8.96	9.68	10	Pass

**Agilent**

Ch Freq 1.905 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.9 dB

Center 1.905 00 GHz Span 20 MHz

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

**Occupied Bandwidth** 8.9573 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error -7.346 kHz

x dB Bandwidth 9.675 MHz

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**1.13. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18675, 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
1857.5	99	26	0.3	Peak	13.42	14.61	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8575 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 10.8 dB'. The center frequency is 1.8575 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 1 s (500 pts). The plot shows a signal with a peak at approximately 1.8575 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 13.4194 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. Other parameters shown include 'Transmit Freq Error 8.487 kHz' and 'x dB Bandwidth 14.609 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'.

**1.14. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18900, 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
1880	99	26	0.3	Peak	13.43	14.64	15	Pass

Agilent
Measure

**Ch Freq** 1.88 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

10.8

dB

Center 1.880 00 GHz 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 %
13.4303 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-10.800 kHz	
<b>x dB Bandwidth</b>	14.639 MHz	

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**1.15. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:19125, 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
1902.5	99	26	0.3	Peak	13.46	14.59	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.9025 GHz. The main display shows a spectrum plot with a yellow trace representing the signal. The plot is set to a reference level of 30 dBm and an attenuation of 30 dB. The occupied bandwidth is measured as 13.4644 MHz, which is 99.00% of the power. The XdB bandwidth is -26.00 dB. The transmit frequency error is -7.698 kHz, and the XdB bandwidth is 14.595 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 %
13.4644 MHz	x dB	-26.00 dB
Transmit Freq Error	-7.698 kHz	
x dB Bandwidth	14.595 MHz	

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1.16. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18700, 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
1860	99	26	0.39	Peak	17.88	19.37	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The plot is titled 'Occupied Bandwidth' and shows a signal centered at 1.86 GHz. The plot parameters are: Center 1.860 00 GHz, Span 40 MHz, #Res BW 390 kHz, #VBW 1.2 MHz, #Sweep 1 s (512 pts). The plot shows a signal with a peak at 1.86 GHz and a bandwidth of 17.8767 MHz. The plot also shows the XdB Down value of -26.00 dB and the XdB Bandwidth of 19.374 MHz. The plot is titled 'Occupied Bandwidth' and shows a signal centered at 1.86 GHz. The plot parameters are: Center 1.860 00 GHz, Span 40 MHz, #Res BW 390 kHz, #VBW 1.2 MHz, #Sweep 1 s (512 pts). The plot shows a signal with a peak at 1.86 GHz and a bandwidth of 17.8767 MHz. The plot also shows the XdB Down value of -26.00 dB and the XdB Bandwidth of 19.374 MHz.

Occupied Bandwidth	Occ BW % Pwr	X dB
17.8767 MHz	99.00 %	-26.00 dB

Transmit Freq Error: 25.217 kHz  
 x dB Bandwidth: 19.374 MHz

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1.17. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:18900, 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
1880	99	26	0.39	Peak	17.89	19.4	20	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	17.8882 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-19.094 kHz
x dB Bandwidth	19.395 MHz

Additional parameters shown in the interface include: Ch Freq 1.88 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log 10, dB/Offst 10.8 dB, Center 1.880 00 GHz, Span 40 MHz, #Res BW 390 kHz, #VBW 1.2 MHz, #Sweep 1 s (512 pts).

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1.18. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:19100, 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
1900	99	26	0.39	Peak	17.9	19.24	20	Pass

Agilent
Measure

Ch Freq 1.9 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.8

dB

Center 1.900 00 GHz
Span 40 MHz

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

Occupied Bandwidth
Occ BW % Pwr 99.00 %

17.8979 MHz
x dB -26.00 dB

Transmit Freq Error -17.214 kHz

x dB Bandwidth 19.245 MHz

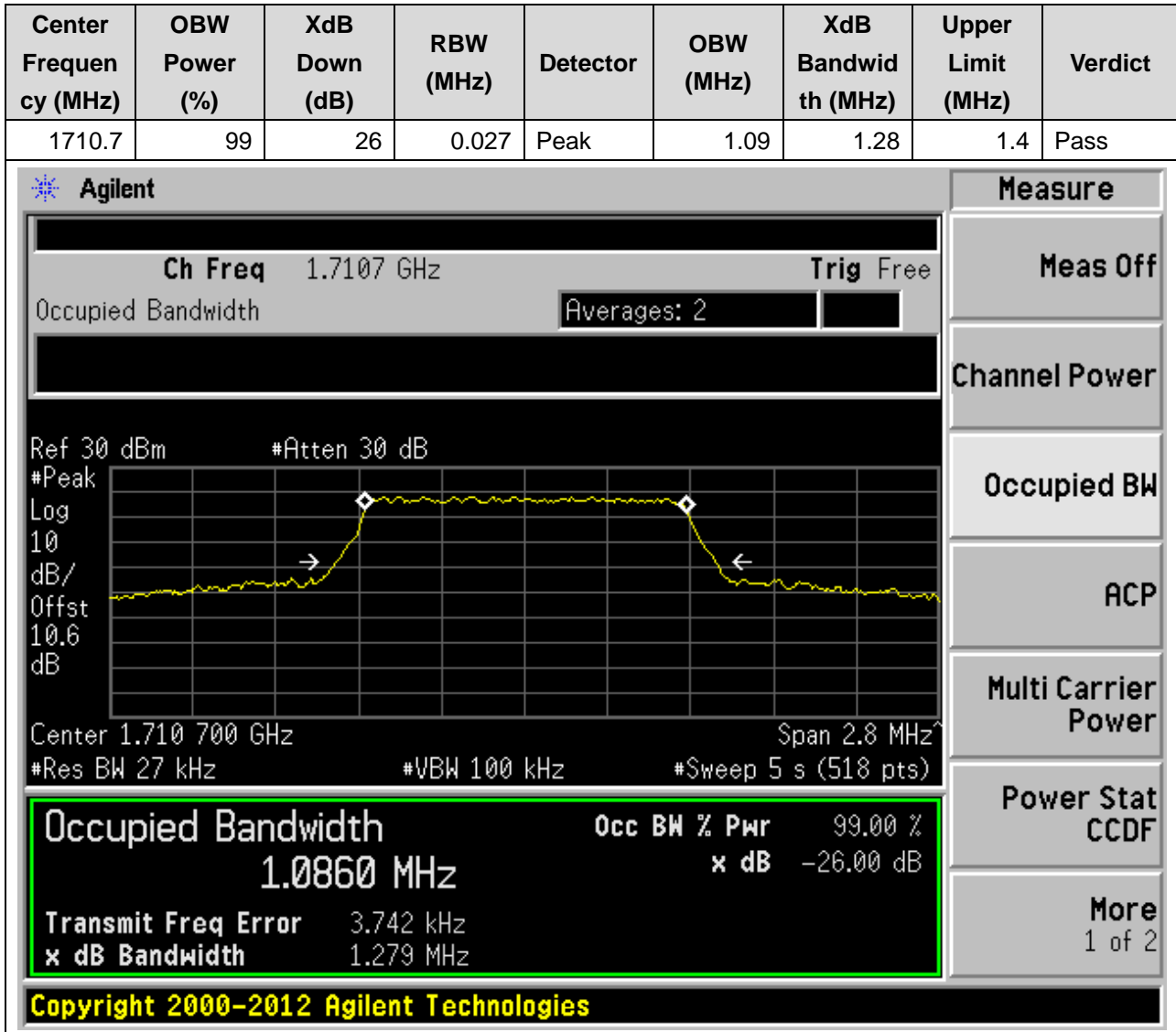
Power Stat
CCDF

More
1 of 2

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## 2. LTE\_Band4

### 2.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19957, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)



**2.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19957, 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	1.29	1.4	Pass

Agilent

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

Ch Freq 1.7107 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.710 700 GHz Span 2.8 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
1.0905 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	196.323 Hz	
<b>x dB Bandwidth</b>	1.295 MHz	

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**2.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.027	Peak	1.09	1.29	1.4	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7325 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, 10.6 dB, Center 1.732 500 GHz, Span 2.8 MHz, #Res BW 27 kHz, #VBW 100 kHz, and #Sweep 5 s (518 pts). A green box highlights the measurement results:

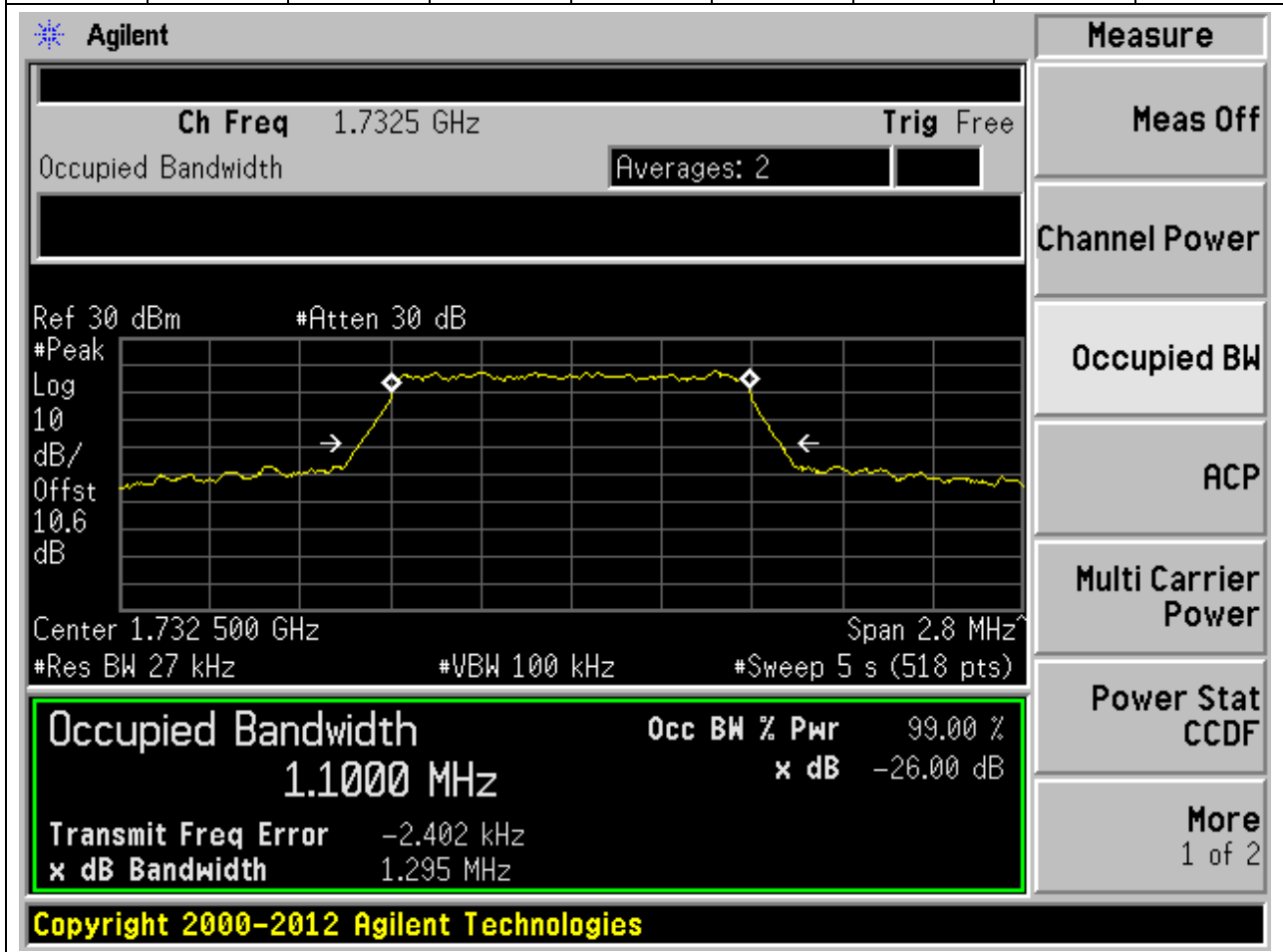
<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>1.0943 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		-2.713 kHz
<b>x dB Bandwidth</b>		1.293 MHz

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 'Occupied BW' option is currently selected.

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**2.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.027	Peak	1.1	1.29	1.4	Pass





**2.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20393, 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
1754.3	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 1.7543 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.754 300 GHz Span 2.8 MHz

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

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

1.1049 MHz

x dB -26.00 dB

Transmit Freq Error -7.985 Hz

x dB Bandwidth 1.302 MHz

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**2.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20393, 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
1754.3	99	26	0.027	Peak	1.09	1.28	1.4	Pass

Agilent
Measure

Ch Freq 1.7543 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.6 dB

Center 1.754 300 GHz Span 2.8 MHz

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

**1.0896 MHz** x dB -26.00 dB

Transmit Freq Error -690.984 Hz

x dB Bandwidth 1.278 MHz

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**2.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19965, 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 include: 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). A green box highlights the measurement results: Occupied Bandwidth 2.6896 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB, Transmit Freq Error 4.155 kHz, and x dB Bandwidth 3.004 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.

**2.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19965, 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, it shows 'Ch Freq 1.7115 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 1.711 500 GHz', 'Span 6 MHz', '#Res BW 62 kHz', '#VBW 200 kHz', and '#Sweep 5 s (483 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 2.6933 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error -920.396 Hz' and 'x dB Bandwidth 2.999 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'.

**2.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.062	Peak	2.7	2.99	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7325 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot is set to 'Log' scale, 'dB/Offst' mode, with a reference of '30 dBm' and an attenuation of '30 dB'. The center frequency is '1.732 500 GHz' and the span is '6 MHz'. The resolution bandwidth is '62 kHz', video bandwidth is '200 kHz', and the sweep time is '5 s (483 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: '2.6950 MHz' with '99.00 %' power and '-26.00 dB' attenuation. Other parameters shown include 'Transmit Freq Error -2.259 kHz' and 'x dB Bandwidth 2.994 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'.

**2.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.062	Peak	2.7	3	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7325 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 10.6 dB, Center 1.732 500 GHz, Span 6 MHz, #Res BW 62 kHz, #VBW 200 kHz, and #Sweep 5 s (483 pts). The Occupied Bandwidth measurement results are highlighted in a green box:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
2.6954 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>	3.366 kHz	
<b>x dB Bandwidth</b>	2.996 MHz	

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

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**2.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20385, 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
1753.5	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 1.7535 GHz. The occupied bandwidth is measured as 2.6926 MHz. The power is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -1.409 kHz and the XdB bandwidth is 2.983 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 %
2.6926 MHz	x dB	-26.00 dB
Transmit Freq Error	-1.409 kHz	
x dB Bandwidth	2.983 MHz	

2.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20385, 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
1753.5	99	26	0.062	Peak	2.69	3.01	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7535 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 10.6 dB, Center 1.753 500 GHz, Span 6 MHz, #Res BW 62 kHz, #VBW 200 kHz, and #Sweep 5 s (483 pts). A green box highlights the measurement results: Occupied Bandwidth 2.6871 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB, Transmit Freq Error -870.170 Hz, and x dB Bandwidth 3.011 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.



**2.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19975, 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	4.53	4.96	5	Pass

**Agilent**

Ch Freq 1.7125 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.6 dB

Center 1.712500 GHz Span 10 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
4.5325 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		-14.496 kHz
<b>x dB Bandwidth</b>		4.955 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

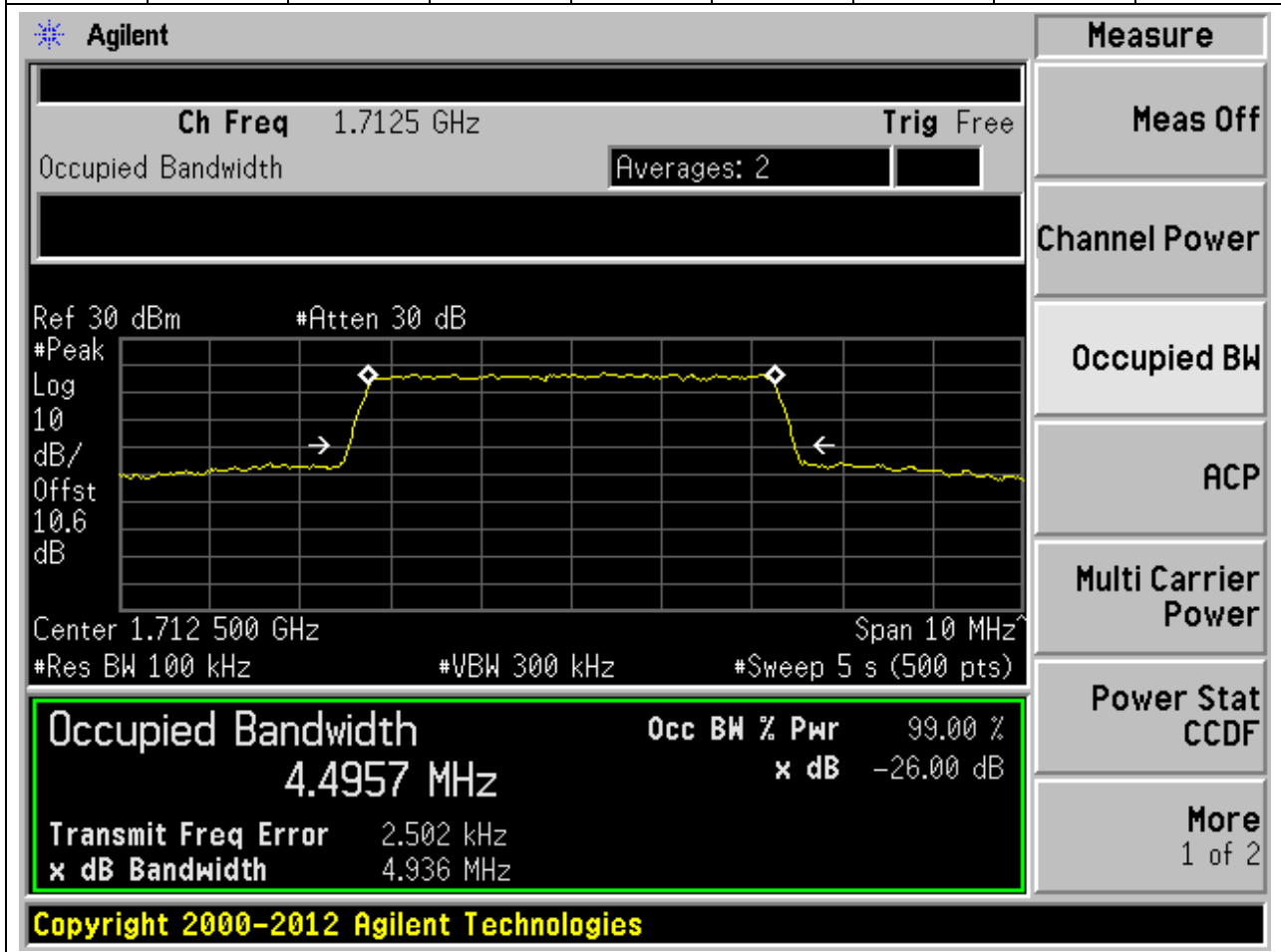
Multi Carrier Power

Power Stat CCDF

More 1 of 2

**2.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:19975, 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	4.94	5	Pass



**2.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.1	Peak	4.51	4.92	5	Pass

**Agilent**

Ch Freq 1.7325 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.6 dB

Center 1.732 500 GHz Span 10 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
4.5051 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		-913.214 Hz
<b>x dB Bandwidth</b>		4.921 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

2.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.1	Peak	4.5	4.91	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7325 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 1.732 500 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 4.4962 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 1.971 kHz', and 'x dB Bandwidth 4.911 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'.

**2.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20375, 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
1752.5	99	26	0.1	Peak	4.5	4.91	5	Pass

The screenshot displays the Agilent spectrum analyzer interface for an LTE channel. The main display shows a spectrum plot with a yellow trace. The center frequency is 1.7525 GHz, and the span is 10 MHz. The occupied bandwidth is measured as 4.5041 MHz, which is 99.00% of the total bandwidth. The XdB down is -26.00 dB. The transmit frequency error is -1.597 kHz, and the XdB bandwidth is 4.909 MHz. The interface includes various measurement controls and a 'Measure' menu on the right.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.5041 MHz	x dB	-26.00 dB
Transmit Freq Error	-1.597 kHz	
x dB Bandwidth	4.909 MHz	

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2.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20375, 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
1752.5	99	26	0.1	Peak	4.49	4.91	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7525 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include: Ref 30 dBm, #Atten 30 dB, #Peak, Log, 10 dB/Offst, 10.6 dB, Center 1.752 500 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 4.4912 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB, Transmit Freq Error -6.471 kHz, and x dB Bandwidth 4.912 MHz. The right-hand side of the interface shows 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.

**2.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20000, 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	9.86	10	Pass

Agilent

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

Ch Freq 1.715 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.715 00 GHz Span 20 MHz

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

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

8.9757 MHz

x dB -26.00 dB

Transmit Freq Error 12.211 kHz

x dB Bandwidth 9.859 MHz

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**2.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20000, 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

**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)

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

8.9919 MHz x dB -26.00 dB

Transmit Freq Error 7.715 kHz

x dB Bandwidth 9.784 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2



**2.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.2	Peak	8.98	9.81	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7325 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 1.732 50 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 5 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 8.9786 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -3.417 kHz', and 'x dB Bandwidth 9.809 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'.

**2.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.2	Peak	8.97	9.79	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7325 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 10.6 dB, Center 1.732 50 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 8.9711 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB, Transmit Freq Error 7.490 kHz, and x dB Bandwidth 9.791 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.

**2.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20350, 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
1750	99	26	0.2	Peak	9.01	9.81	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.75 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 1.750 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 9.0077 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 8.508 kHz', and 'x dB Bandwidth 9.812 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'.

**2.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20350, 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
1750	99	26	0.2	Peak	8.99	9.88	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.75 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 1.750 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 8.9898 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -22.701 kHz', and 'x dB Bandwidth 9.878 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'.

**2.25. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20025, 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	13.47	14.69	15	Pass

Agilent

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

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 5 s (500 pts)

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

**13.4666 MHz** x dB -26.00 dB

Transmit Freq Error -10.311 kHz

x dB Bandwidth 14.688 MHz

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2.26. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20025, 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	13.45	14.65	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7175 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 1.717 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 13.4548 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown are 'Transmit Freq Error 4.803 kHz' and 'x dB Bandwidth 14.652 MHz'. The bottom of the screen shows 'Copyright 2000-2012 Agilent Technologies'.

**2.27. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.3	Peak	13.45	14.62	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7325 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 300 kHz, and a video bandwidth of 1 MHz. The span is 30 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 13.4550 MHz. The percentage of power within this bandwidth is 99.00%, and the XdB bandwidth is -26.00 dB. Other parameters shown include a transmit frequency error of 18.865 kHz and an XdB bandwidth of 14.618 MHz. 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'.

Occupied Bandwidth	Occ BW % Pwr	X dB
13.4550 MHz	99.00 %	-26.00 dB

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**2.28. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.3	Peak	13.44	14.71	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7325 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 1.732 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 13.4356 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 17.051 kHz' and 'x dB Bandwidth 14.707 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'.



**2.29. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20325, 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
1747.5	99	26	0.3	Peak	13.43	14.7	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7475 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 300 kHz, and a video bandwidth of 1 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 13.4324 MHz, which is 99.00% of the 14.700 MHz channel bandwidth. The XdB down is -26.00 dB. The transmit frequency error is 3.289 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'. The copyright notice at the bottom reads 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	X dB
13.4324 MHz	99.00 %	-26.00 dB

Transmit Freq Error: 3.289 kHz  
x dB Bandwidth: 14.700 MHz

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**2.30. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20325, 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
1747.5	99	26	0.3	Peak	13.44	14.66	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7475 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 1.747 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 13.4414 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 1.458 kHz' and 'x dB Bandwidth 14.664 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'.

**2.31. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20050, 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:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
17.9335 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>	9.963 kHz	
<b>x dB Bandwidth</b>	19.436 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, the copyright notice reads 'Copyright 2000-2012 Agilent Technologies'.

**2.32. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20050, 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	17.93	19.43	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 1.720 GHz and a span of 40 MHz. The y-axis is labeled 'dB/Offst' and the x-axis is labeled 'MHz'. The plot shows a signal with a peak at approximately 1.720 GHz. The 'Occupied Bandwidth' measurement is highlighted in a green box, showing a value of 17.9348 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is 17.674 kHz and the 'x dB Bandwidth' is 19.434 MHz. The 'Copyright 2000-2012 Agilent Technologies' is displayed at the bottom of the screen.

Occupied Bandwidth	Occ BW % Pwr	x dB
17.9348 MHz	99.00 %	-26.00 dB

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**2.33. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.39	Peak	17.95	19.37	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7325 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 1.732 50 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 17.9525 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 44.573 kHz' and 'x dB Bandwidth 19.369 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'.

**2.34. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20175, 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
1732.5	99	26	0.39	Peak	17.92	19.44	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7325 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 1.732 50 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 17.9206 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 18.944 kHz' and 'x dB Bandwidth 19.437 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'.

**2.35. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20300, 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	17.87	19.42	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 17.8679 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 15.551 kHz' and 'x dB Bandwidth 19.419 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'.

**2.36. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20300, 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	17.88	19.41	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 1.745 GHz, and the span is 40 MHz. The occupied bandwidth is measured as 17.8827 MHz. The power is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is 8.026 kHz, and the XdB bandwidth is 19.411 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'.

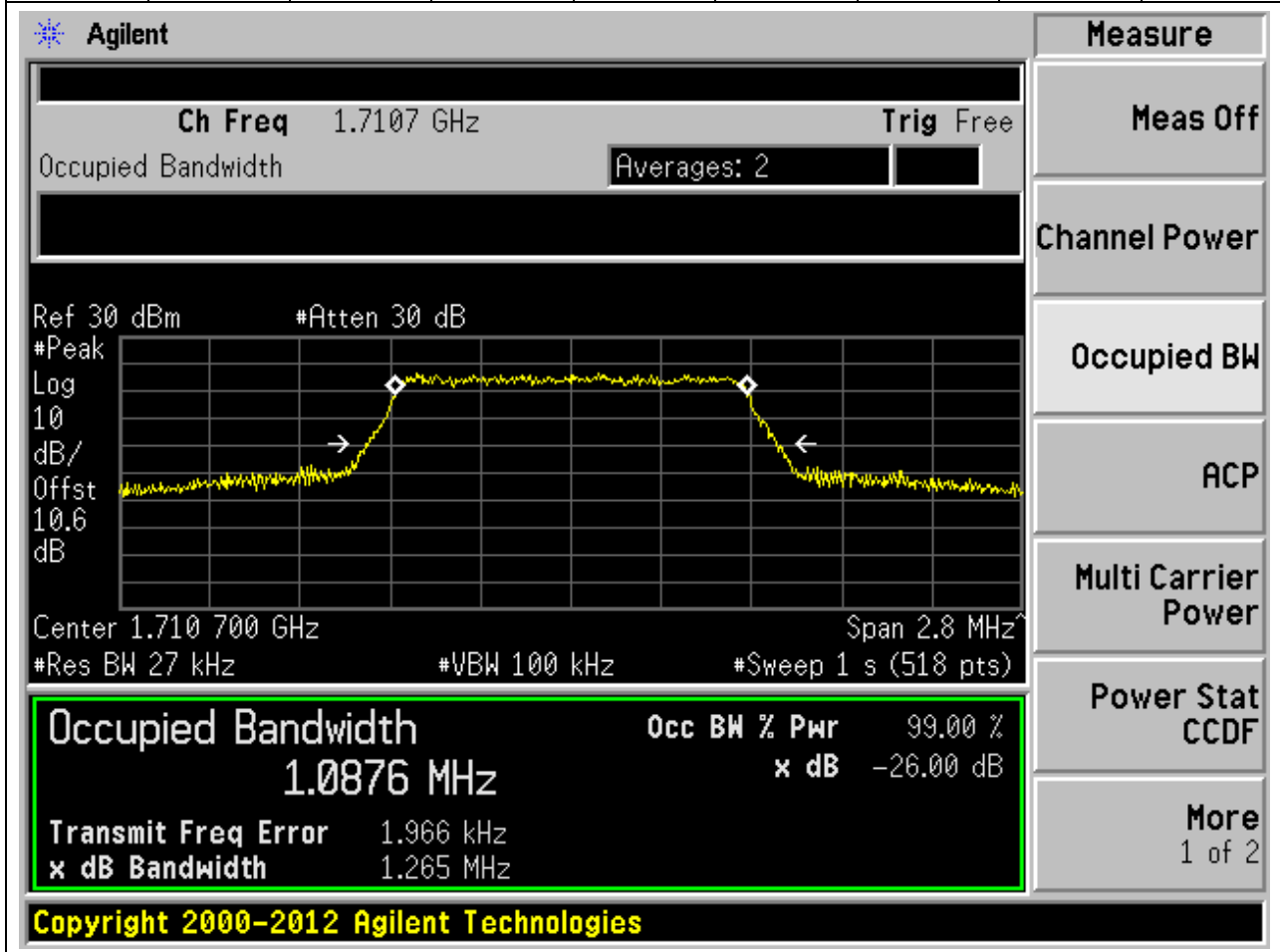
Occupied Bandwidth	Occ BW % Pwr	99.00 %
17.8827 MHz	x dB	-26.00 dB
Transmit Freq Error	8.026 kHz	
x dB Bandwidth	19.411 MHz	

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**2.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:19957, 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



**2.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20175, 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
1732.5	99	26	0.027	Peak	1.1	1.28	1.4	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7325 GHz' and 'Trig Free'. Below this, the 'Occupied Bandwidth' measurement is shown with 'Averages: 2'. The main display area contains a spectrum plot with a yellow trace. The plot settings include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.6 dB', 'Center 1.732 500 GHz', 'Span 2.8 MHz', '#Res BW 27 kHz', '#VBW 100 kHz', and '#Sweep 1 s (518 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 1.0967 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 758.582 Hz', and 'x dB Bandwidth 1.279 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, the copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible.

**2.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20393, 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
1754.3	99	26	0.027	Peak	1.09	1.26	1.4	Pass

Agilent

Measure

Ch Freq 1.7543 GHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.6

dB

Center 1.754 300 GHz
Span 2.8 MHz

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

**Occupied Bandwidth**

**1.0903 MHz**

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error -2.231 kHz

x dB Bandwidth 1.263 MHz

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

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2.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:19965, 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	3	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7115 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 1.711 500 GHz', '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 2.6929 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error -670.338 Hz' and 'x dB Bandwidth 2.995 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'.

2.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20175, 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
1732.5	99	26	0.062	Peak	2.68	2.96	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 1.7325 GHz. The occupied bandwidth is measured as 2.6817 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is 1.670 kHz and the XdB bandwidth is 2.958 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 %
2.6817 MHz	x dB	-26.00 dB
Transmit Freq Error	1.670 kHz	
x dB Bandwidth	2.958 MHz	

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2.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20385, 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
1753.5	99	26	0.062	Peak	2.69	2.98	3	Pass

Agilent
Measure

Ch Freq 1.7535 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.6 dB

Center 1.753 500 GHz 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 %

2.6889 MHz

x dB -26.00 dB

Transmit Freq Error -4.738 kHz

x dB Bandwidth 2.977 MHz

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**2.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:19975, 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 signal spectrum with a yellow trace. The 'Occupied Bandwidth' measurement is highlighted in a green box. The results are as follows:

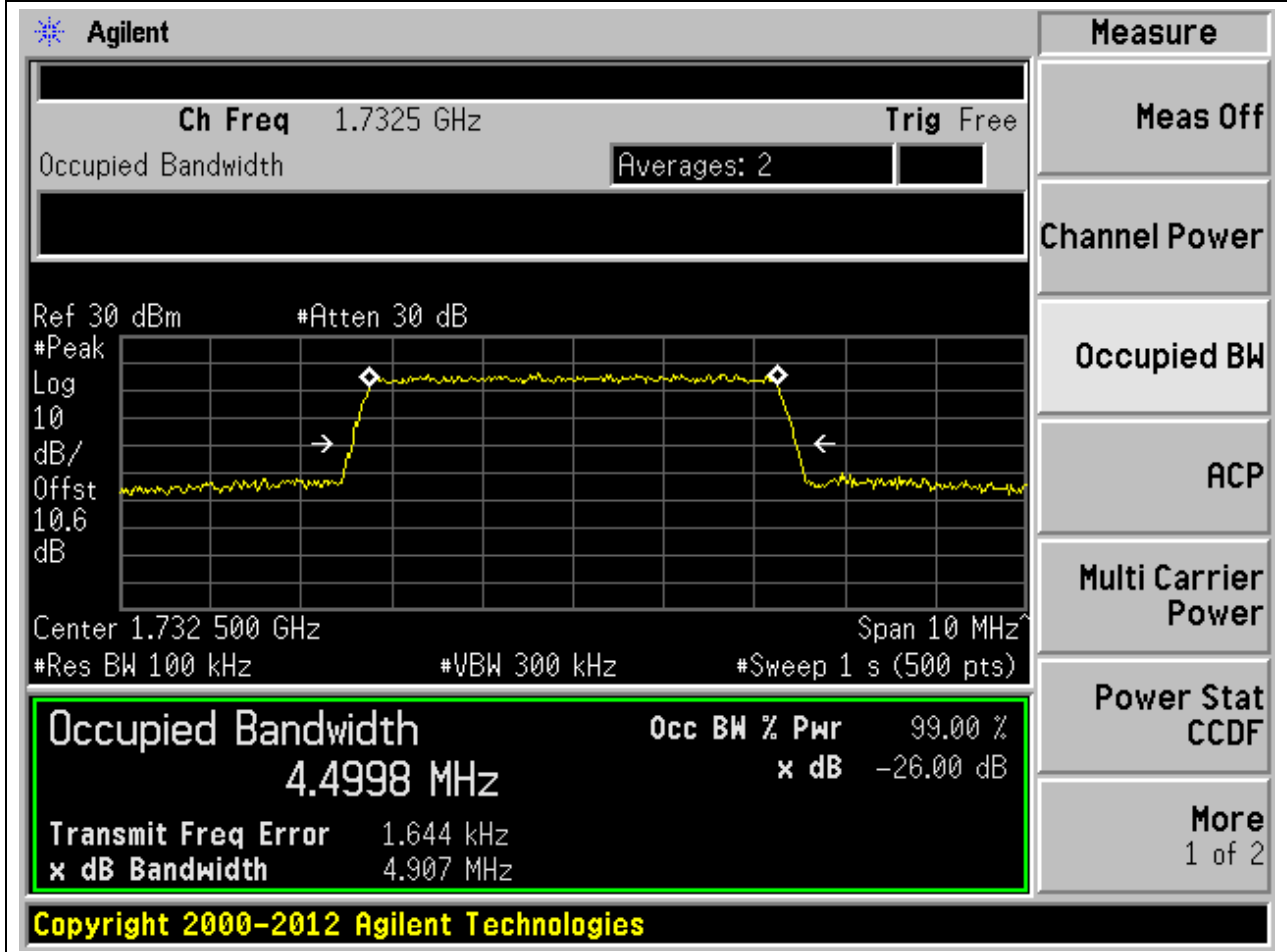
Measurement	Value
Occupied Bandwidth	4.4944 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	1.578 kHz
x dB Bandwidth	4.897 MHz

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 1.712500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, #Sweep 1 s (500 pts).

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2.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20175, 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
1732.5	99	26	0.1	Peak	4.5	4.91	5	Pass





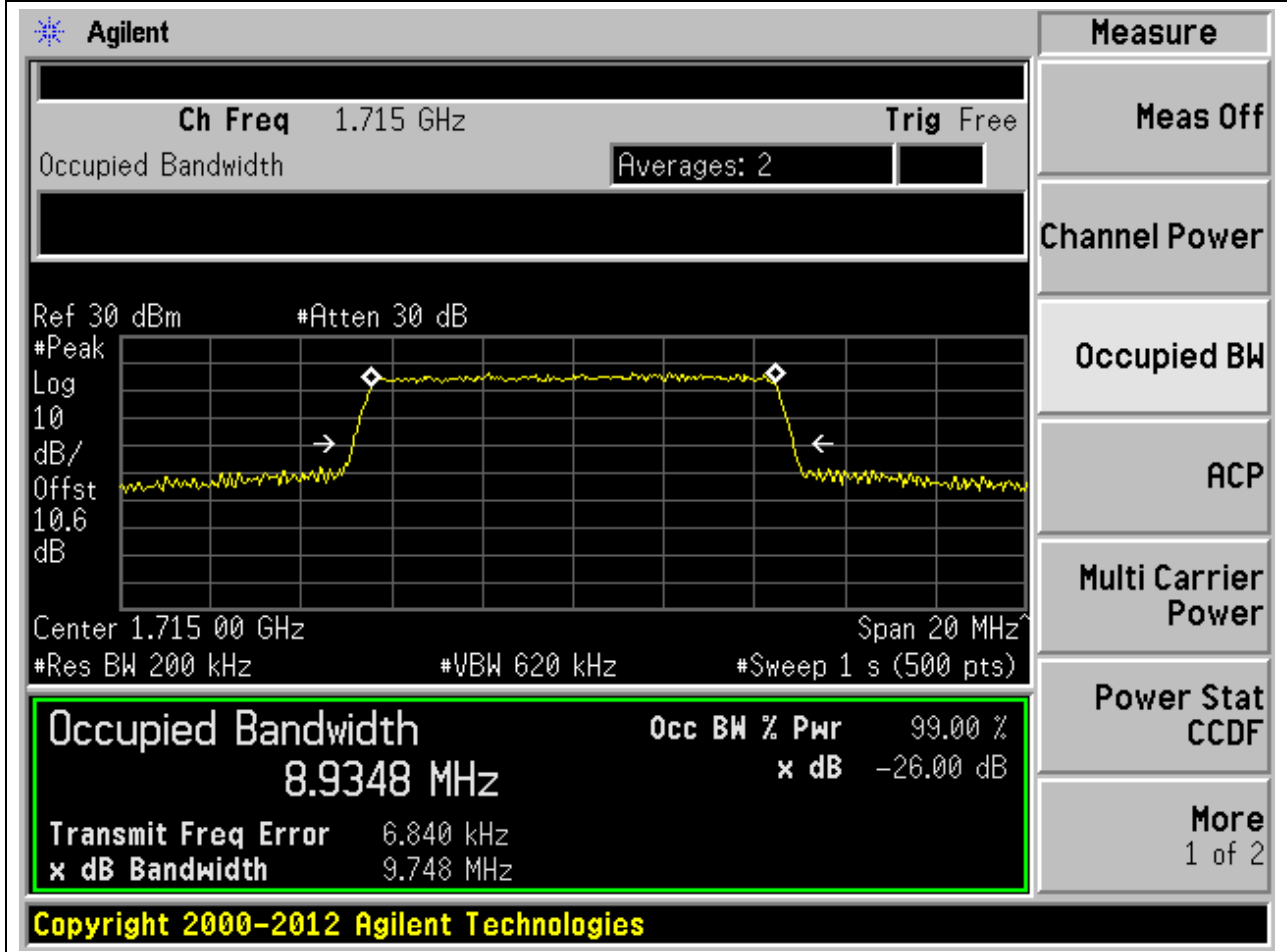
**2.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20375, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1752.5	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 1.7525 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 10.6 dB. The center frequency is 1.7525 GHz, the span is 10 MHz, the resolution bandwidth is 100 kHz, the video bandwidth is 300 kHz, and the sweep time is 1 second (500 points). The occupied bandwidth is highlighted in a green box, showing a value of 4.4878 MHz, which is 99.00% of the power and -26.00 dB from the peak. The transmit frequency error is -4.198 kHz, and the x dB bandwidth is 4.900 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 copyright notice at the bottom reads 'Copyright 2000-2012 Agilent Technologies'.

**2.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20000, 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	8.93	9.75	10	Pass



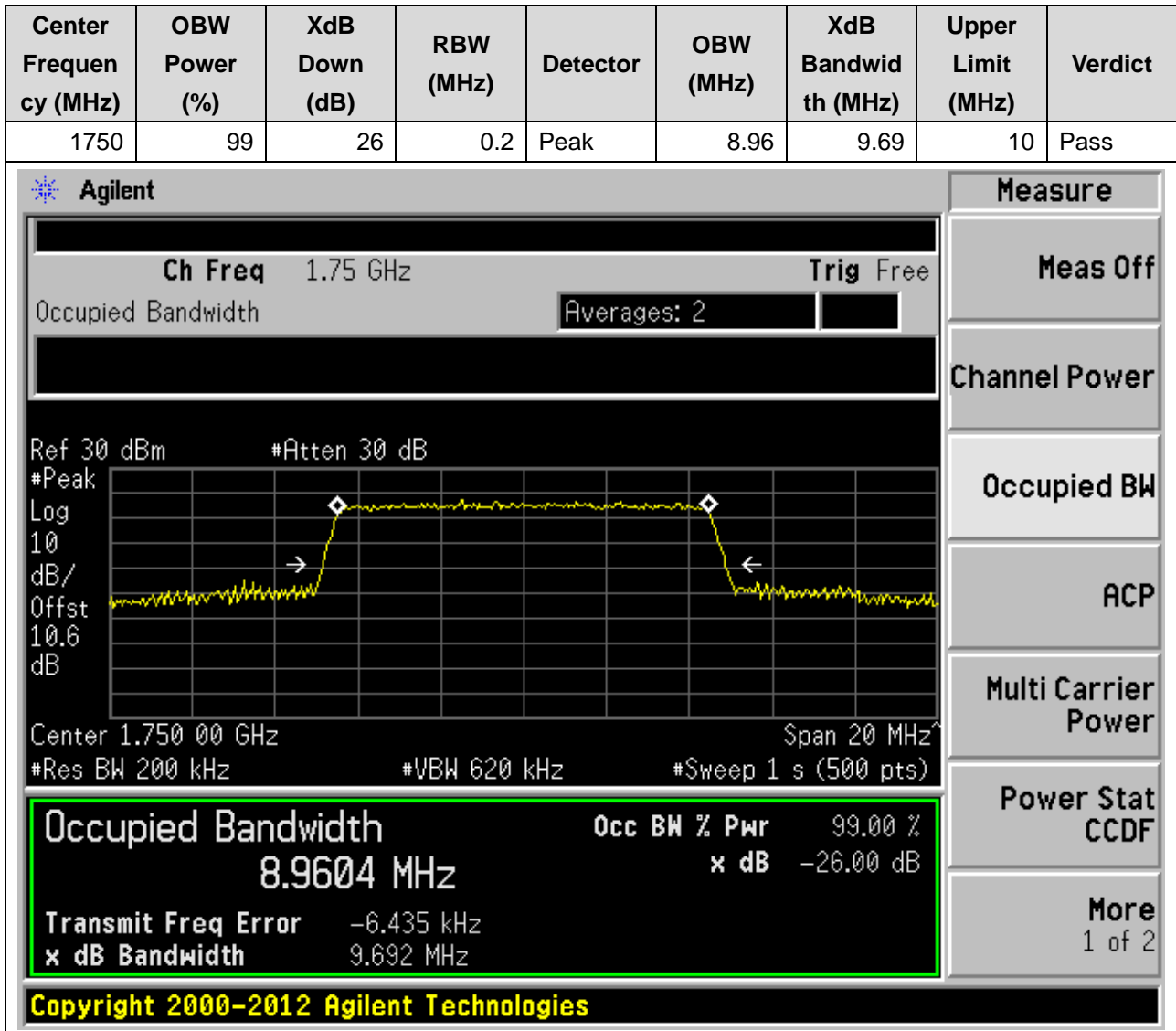
2.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20175, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1732.5	99	26	0.2	Peak	8.95	9.72	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7325 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace representing the signal. The plot is set to 'Log' scale with a 'Ref 30 dBm' and '#Atten 30 dB'. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 8.9480 MHz. Other parameters shown include 'Transmit Freq Error -995.712 Hz' and 'x dB Bandwidth 9.716 MHz'. The 'Occupied BW % Pwr' is 99.00% and 'x dB' is -26.00 dB. The bottom of the screen shows 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	x dB
8.9480 MHz	99.00 %	-26.00 dB

2.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20350, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)



2.13. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20025, 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	13.42	14.58	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.7175 GHz. The main display shows a spectrum plot with a yellow trace representing the signal. The plot is set to a reference level of 30 dBm and an attenuation of 30 dB. The occupied bandwidth is highlighted in a green box, showing a value of 13.4178 MHz. The percentage of power within this bandwidth is 99.00%, and the XdB bandwidth is -26.00 dB. Other parameters shown include a transmit frequency error of -627.109 Hz and an XdB bandwidth of 14.584 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'.

Occupied Bandwidth	Occ BW % Pwr	X dB
13.4178 MHz	99.00 %	-26.00 dB

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2.14. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20175, 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
1732.5	99	26	0.3	Peak	13.43	14.82	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 results are as follows:

Measurement	Value
Occupied Bandwidth	13.4308 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	15.550 kHz
x dB Bandwidth	14.821 MHz

Additional parameters shown in the interface include: Ch Freq 1.7325 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log 10, dB/Offst 10.6 dB, Center 1.732 50 GHz, Span 30 MHz, #Res BW 300 kHz, #VBW 1 MHz, #Sweep 1 s (500 pts).

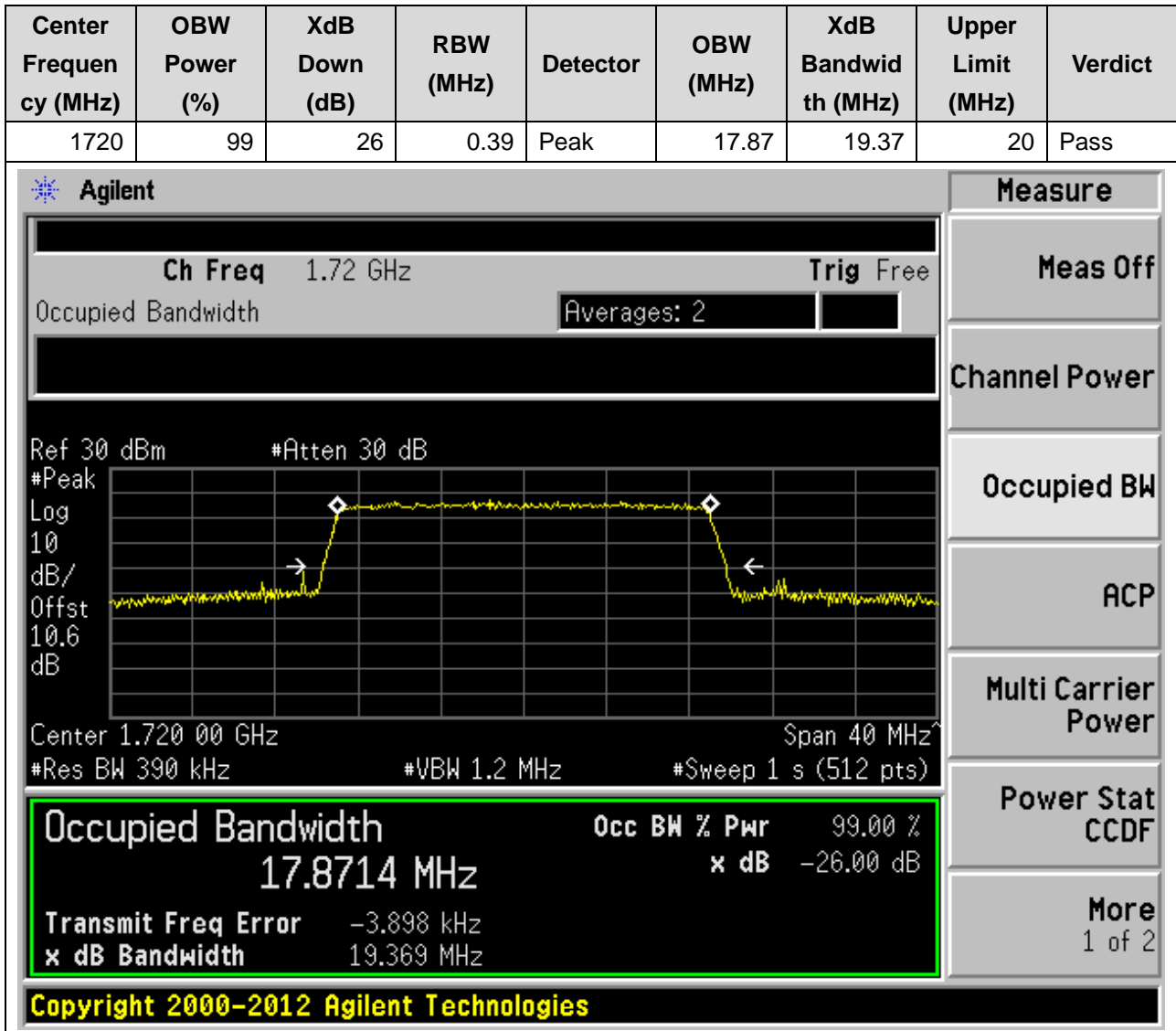
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2.15. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20325, Bandwidth:15, Modulation:64QAM, RB Number:75, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1747.5	99	26	0.3	Peak	13.43	14.56	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7475 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot settings include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.6 dB', 'Center 1.747 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4341 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 7.590 kHz' and 'x dB Bandwidth 14.559 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'.

2.16. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20050, Bandwidth:20, Modulation:64QAM, RB Number:100, RB Position:0)





2.17. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20175, 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
1732.5	99	26	0.39	Peak	17.91	19.41	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.7325 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 1.732 50 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 1 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9148 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 1.917 kHz' and 'x dB Bandwidth 19.414 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'.

2.18. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20300, 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	17.88	19.32	20	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 40 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
17.8817 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	20.615 kHz	
<b>x dB Bandwidth</b>	19.319 MHz	

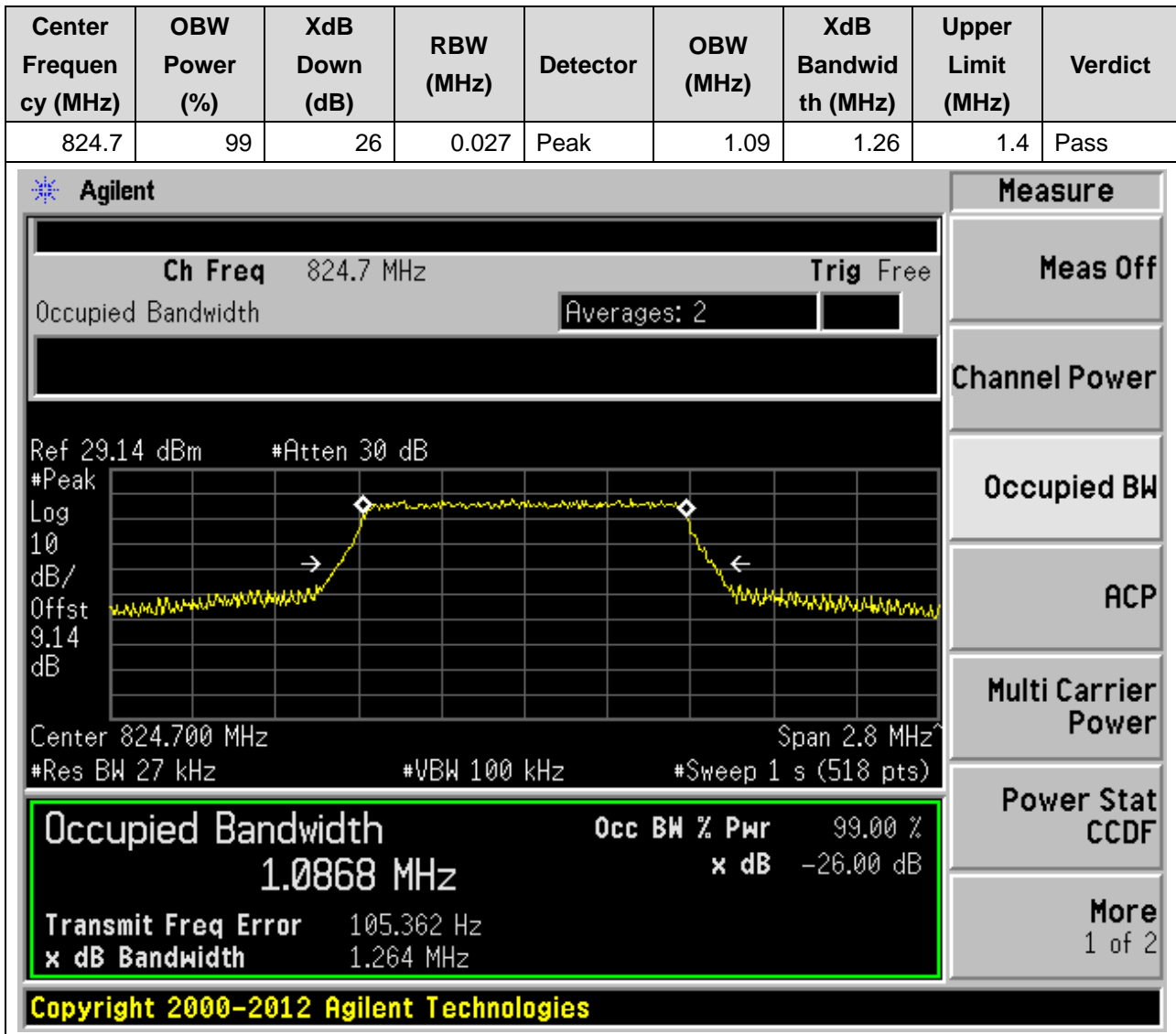
Power Stat
CCDF

More
1 of 2

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## 8. LTE\_Band5

### 8.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20407, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)



**8.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20407, 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
824.7	99	26	0.027	Peak	1.09	1.28	1.4	Pass

Agilent

Measure

Ch Freq 824.7 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.14 dBm #Atten 30 dB

Center 824.700 MHz Span 2.8 MHz  
#Res BW 27 kHz #VBW 100 kHz #Sweep 1 s (518 pts)

**Occupied Bandwidth**

**1.0947 MHz**

Transmit Freq Error -81.992 Hz

x dB Bandwidth 1.280 MHz

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

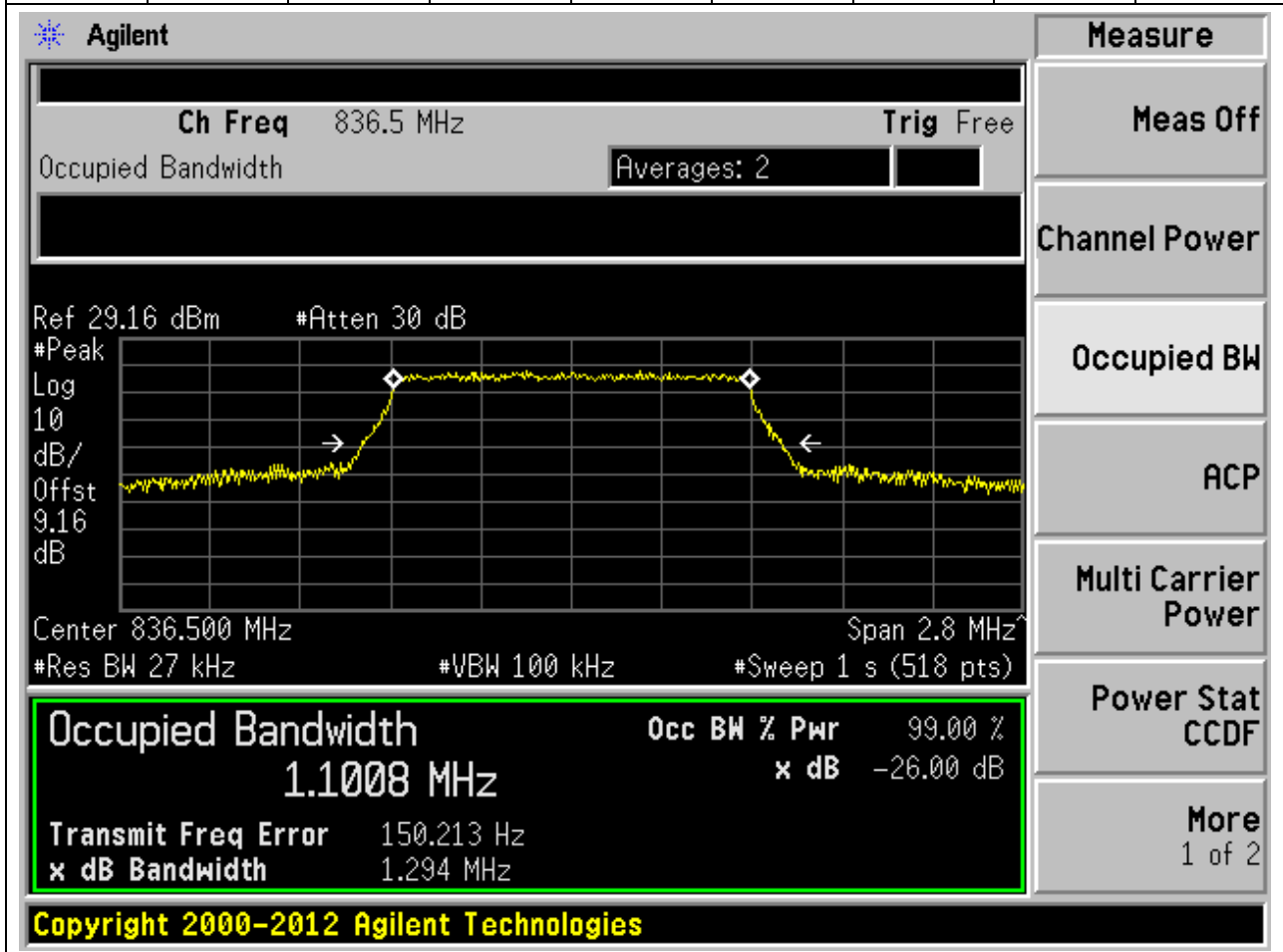
Power Stat CCDF

More  
1 of 2

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**8.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20525, 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
836.5	99	26	0.027	Peak	1.1	1.29	1.4	Pass



**8.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20525, 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
836.5	99	26	0.027	Peak	1.09	1.27	1.4	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 836.500 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 %
1.0881 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-595.513 Hz	
<b>x dB Bandwidth</b>	1.266 MHz	

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

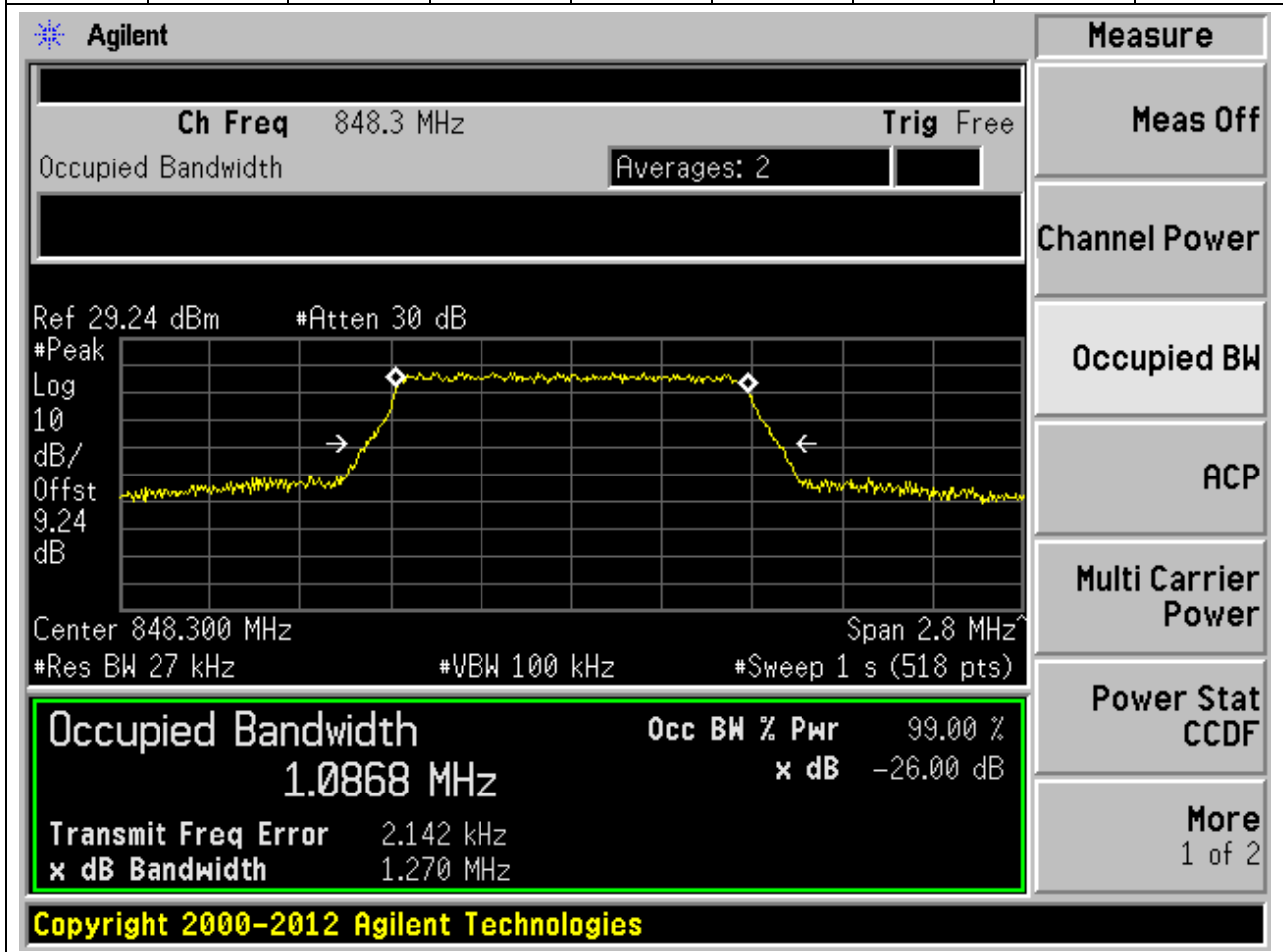
Power Stat CCDF

More  
1 of 2

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**8.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20643, 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
848.3	99	26	0.027	Peak	1.09	1.27	1.4	Pass



**8.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20643, 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
848.3	99	26	0.027	Peak	1.09	1.28	1.4	Pass

Agilent
Measure

Ch Freq 848.3 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.24 dBm #Atten 30 dB

#Peak  
Log 10 dB/Offst 9.24 dB

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**Occupied Bandwidth**

1.0906 MHz

Transmit Freq Error -581.559 Hz

x dB Bandwidth 1.276 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**8.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20415, 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
825.5	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 825.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.14 dBm #Atten 30 dB

Center 825.500 MHz Span 6 MHz

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

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

2.6881 MHz x dB -26.00 dB

Transmit Freq Error 458.747 Hz

x dB Bandwidth 2.969 MHz

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**8.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20415, 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
825.5	99	26	0.062	Peak	2.69	2.99	3	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 825.5 MHz' 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 parameters include 'Ref 29.14 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 9.14 dB', 'Center 825.500 MHz', 'Span 6 MHz', '#Res BW 62 kHz', '#VBW 200 kHz', and '#Sweep 1 s (483 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 2.6882 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -1.707 kHz', and 'x dB Bandwidth 2.993 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, the copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible.

**8.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20525, 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
836.5	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 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 836.500 MHz Span 6 MHz

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

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

2.6879 MHz

x dB -26.00 dB

Transmit Freq Error -2.008 kHz

x dB Bandwidth 2.973 MHz

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**8.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20525, 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
836.5	99	26	0.062	Peak	2.68	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 836.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.16 dBm #Atten 30 dB

Center 836.500 MHz Span 6 MHz  
 #Res BW 62 kHz #VBW 200 kHz #Sweep 1 s (483 pts)

**Occupied Bandwidth** Occ BW % Pwr 99.00 %  
 2.6831 MHz x dB -26.00 dB

Transmit Freq Error -2.146 kHz  
 x dB Bandwidth 2.994 MHz

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**8.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20635, 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
847.5	99	26	0.062	Peak	2.69	2.96	3	Pass

Agilent

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

Ch Freq 847.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.23 dBm #Atten 30 dB

Center 847.500 MHz Span 6 MHz

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

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

2.6861 MHz

x dB -26.00 dB

Transmit Freq Error -3.452 kHz

x dB Bandwidth 2.960 MHz

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**8.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20635, 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
847.5	99	26	0.062	Peak	2.68	2.97	3	Pass

Agilent

Measure

Ch Freq 847.5 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 29.23 dBm
#Atten 30 dB

#Peak  
Log  
10  
dB/  
Offst  
9.23  
dB

Center 847.500 MHz

#Res BW 62 kHz

#VBW 200 kHz

#Sweep 1 s (483 pts)

Span 6 MHz

Occupied Bandwidth	Occ BW % Pwr	99.00 %
2.6804 MHz	x dB	-26.00 dB
Transmit Freq Error	-4.318 kHz	
x dB Bandwidth	2.972 MHz	

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Meas Off

Channel Power

Occupied BW

ACP

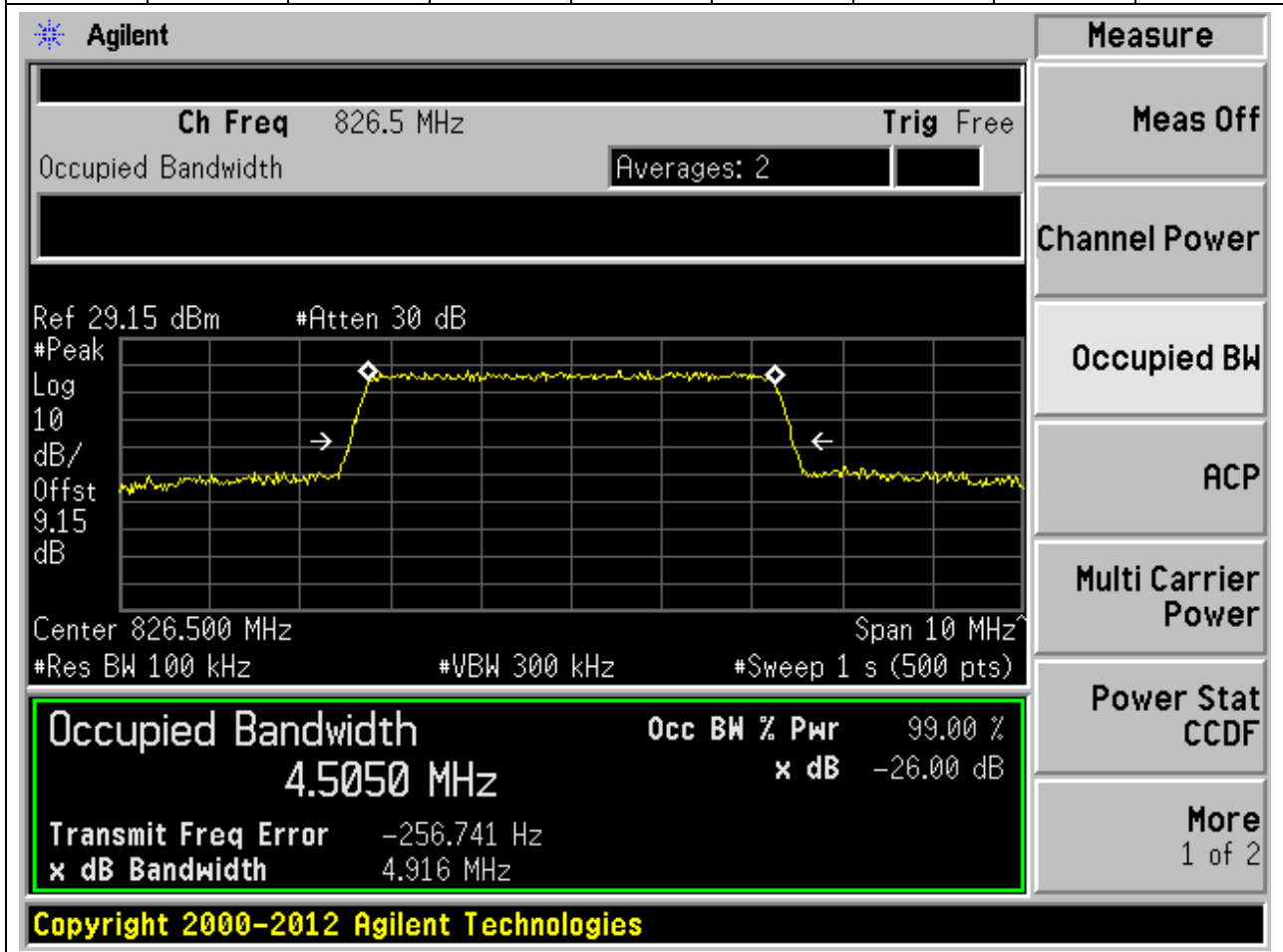
Multi Carrier Power

Power Stat CCDF

More  
1 of 2

**8.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20425, 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
826.5	99	26	0.1	Peak	4.5	4.92	5	Pass



8.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20425, 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
826.5	99	26	0.1	Peak	4.5	4.91	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 826.500 MHz, and the span is 10 MHz. The resolution bandwidth (RBW) is 100 kHz, and the video bandwidth (VBW) is 300 kHz. The sweep time is 1 s (500 pts). The occupied bandwidth is measured as 4.4957 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is 3.079 kHz, and the XdB bandwidth is 4.915 MHz. The interface also shows 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 %
4.4957 MHz	x dB	-26.00 dB
Transmit Freq Error	3.079 kHz	
x dB Bandwidth	4.915 MHz	

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**8.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20525, 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
836.5	99	26	0.1	Peak	4.5	4.89	5	Pass

Agilent

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

Ch Freq 836.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.16 dBm #Atten 30 dB

Center 836.500 MHz 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 %
4.4976 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-1.832 kHz	
<b>x dB Bandwidth</b>	4.885 MHz	

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8.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20525, 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
836.5	99	26	0.1	Peak	4.49	4.91	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 836.5 MHz. The main display shows a spectrum plot with a yellow trace representing the signal. The plot is set to a center frequency of 836.500 MHz and a span of 10 MHz. The resolution bandwidth (Res BW) is 100 kHz, and the video bandwidth (VBW) is 300 kHz. The sweep time is 1 second with 500 points. The plot shows a signal with a peak level of 29.16 dBm and an attenuation of 30 dB. The occupied bandwidth is measured as 4.4941 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is -4.487 kHz, and the XdB bandwidth is 4.906 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 %
4.4941 MHz	x dB	-26.00 dB
Transmit Freq Error	-4.487 kHz	
x dB Bandwidth	4.906 MHz	

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**8.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20625, 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
846.5	99	26	0.1	Peak	4.5	4.92	5	Pass

Agilent

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

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)

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

4.4970 MHz

x dB -26.00 dB

Transmit Freq Error -6.847 kHz

x dB Bandwidth 4.917 MHz

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8.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20625, 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
846.5	99	26	0.1	Peak	4.48	4.88	5	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 below the trace:

Occupied Bandwidth	Occ BW % Pwr	X dB
4.4845 MHz	99.00 %	-26.00 dB

Additional parameters shown in the interface include: Ch Freq 846.5 MHz, Trig Free, Averages: 2, Ref 29.22 dBm, #Atten 30 dB, #Peak Log 10 dB/Offst 9.22 dB, Center 846.500 MHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 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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**8.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20450, 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
829	99	26	0.2	Peak	8.97	9.78	10	Pass

Agilent

Measure

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)

**Occupied Bandwidth**

**8.9650 MHz**

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error 11.762 kHz

x dB Bandwidth 9.776 MHz

Power Stat
CCDF

More

1 of 2

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**8.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20450, 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
829	99	26	0.2	Peak	8.96	9.76	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 829 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 29.16 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 9.16 dB', 'Center 829.00 MHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 8.9551 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 3.511 kHz', and 'x dB Bandwidth 9.764 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'.

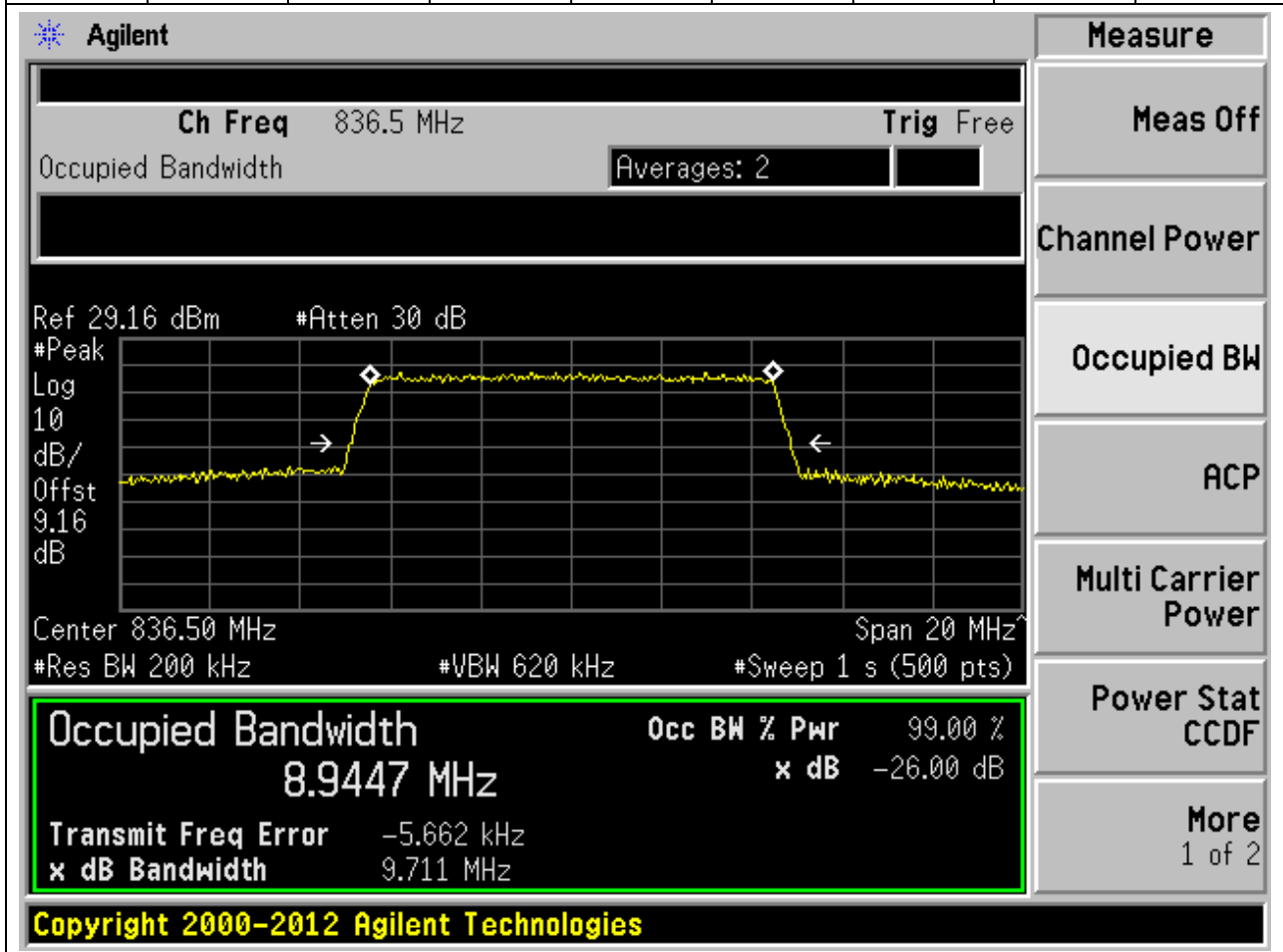
**8.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20525, Bandwidth:10, Modulation:QPSK, RB Number:50, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.5	99	26	0.2	Peak	8.95	9.75	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 836.5 MHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include: Ref 29.16 dBm, #Atten 30 dB, Log 10 dB/Offst 9.16 dB, Center 836.50 MHz, Span 20 MHz, #Res BW 200 kHz, #VBW 620 kHz, and #Sweep 1 s (500 pts). A green box highlights the measurement results: Occupied Bandwidth 8.9466 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB, Transmit Freq Error -1.462 kHz, and x dB Bandwidth 9.746 MHz. The right-hand side of the interface shows 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 shows the copyright notice: Copyright 2000-2012 Agilent Technologies.

**8.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20525, 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
836.5	99	26	0.2	Peak	8.94	9.71	10	Pass





**8.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20600, 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
844	99	26	0.2	Peak	8.96	9.78	10	Pass

Agilent
Measure

Ch Freq 844 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.2 dBm #Atten 30 dB

Center 844.00 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**

**8.9639 MHz**

Transmit Freq Error -5.185 kHz

x dB Bandwidth 9.775 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**8.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20600, 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
844	99	26	0.2	Peak	8.94	9.7	10	Pass

Agilent
Measure

Ch Freq 844 MHz Trig Free

Occupied Bandwidth Averages: 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

8.9366 MHz

Transmit Freq Error -12.073 kHz

x dB Bandwidth 9.700 MHz

Meas Off

---

Channel Power

---

Occupied BW

---

ACP

---

Multi Carrier Power

---

Power Stat CCDF

---

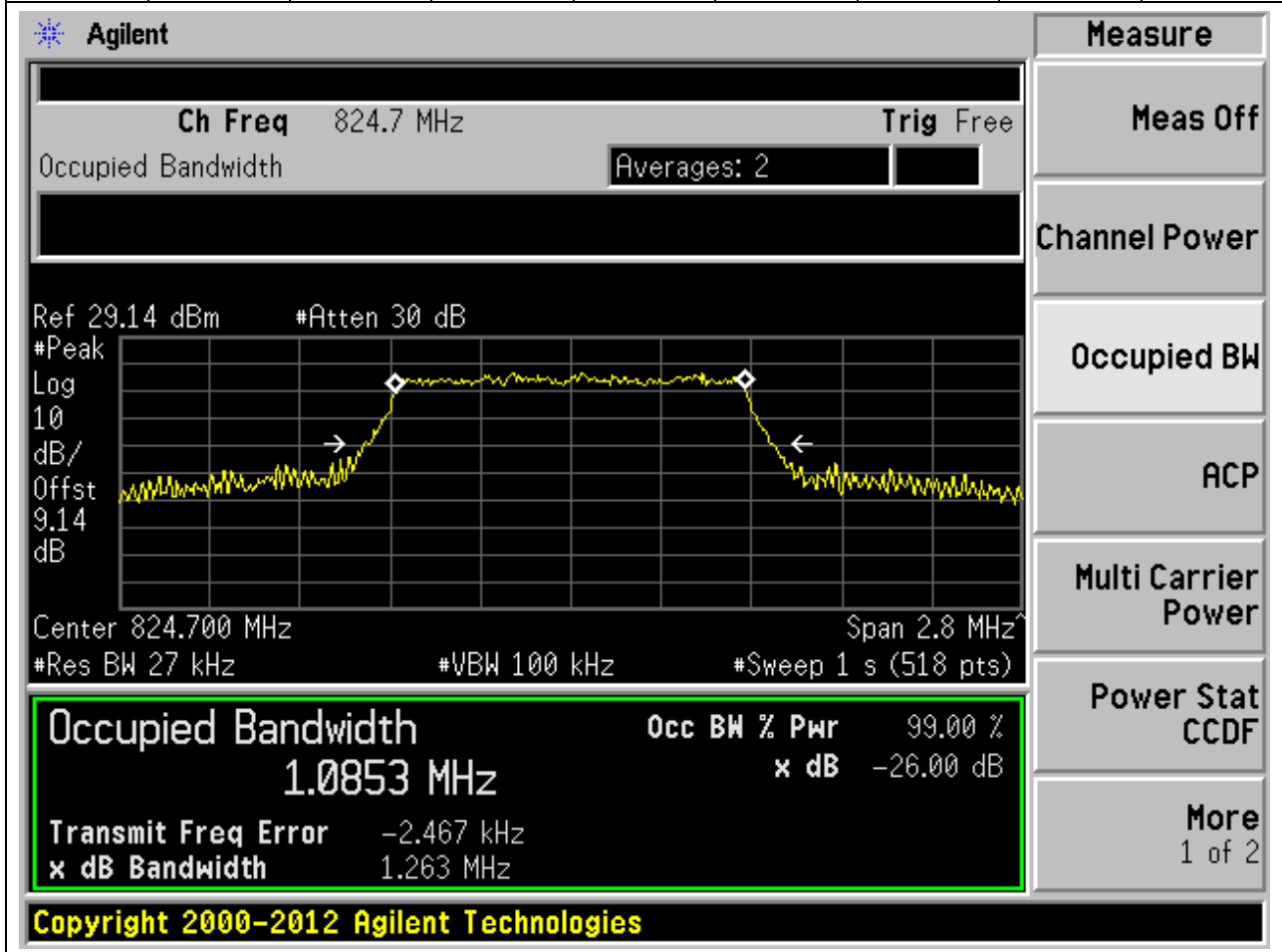
More

1 of 2

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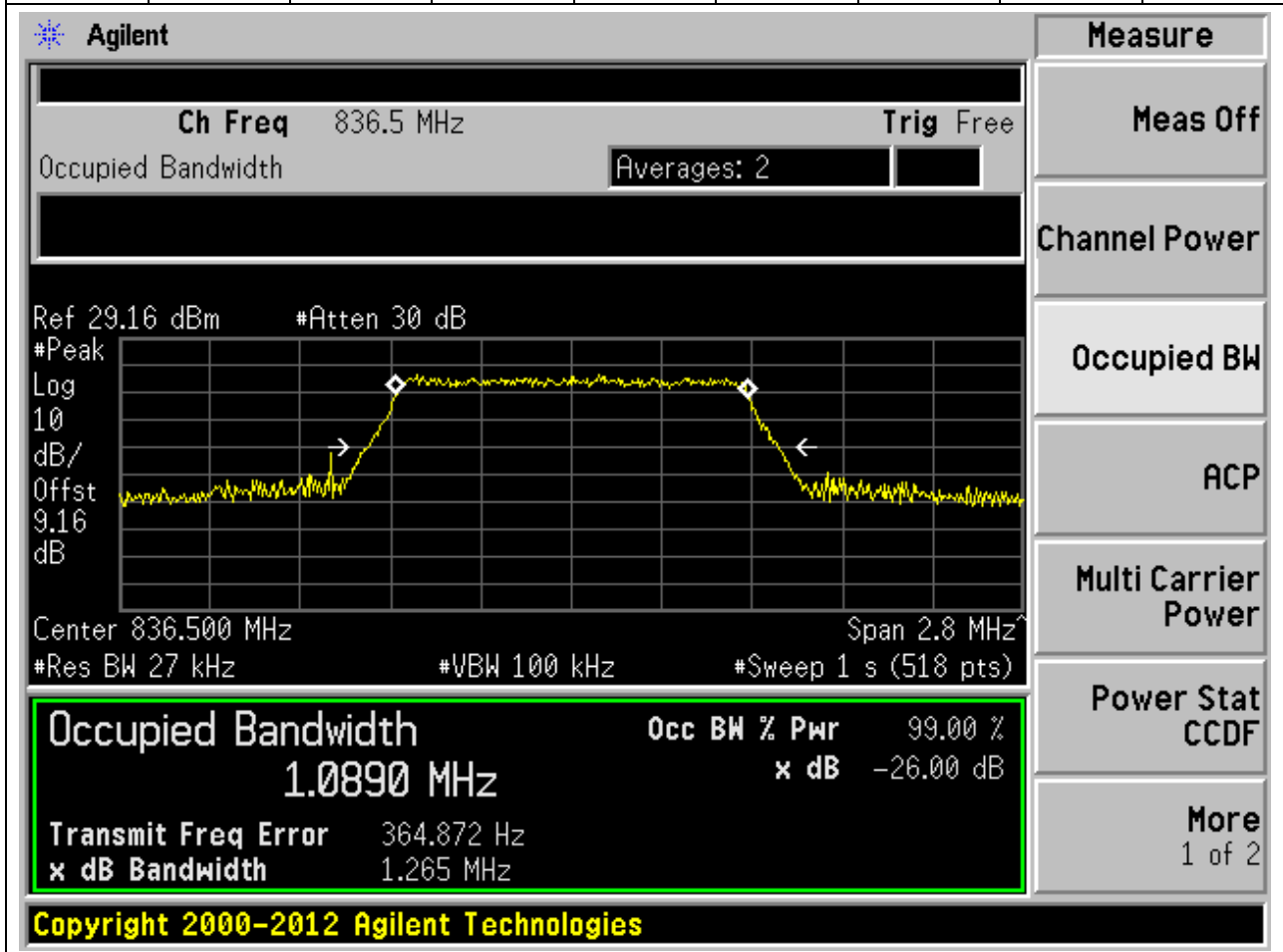
**8.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20407, Bandwidth:1.4, Modulation:64QAM, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
824.7	99	26	0.027	Peak	1.09	1.26	1.4	Pass



**8.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20525, 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
836.5	99	26	0.027	Peak	1.09	1.27	1.4	Pass



**8.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20643, 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
848.3	99	26	0.027	Peak	1.1	1.29	1.4	Pass

Agilent
Measure

Ch Freq 848.3 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.24 dBm #Atten 30 dB

Center 848.300 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

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

**1.0959 MHz** x dB -26.00 dB

Transmit Freq Error -1.305 kHz

x dB Bandwidth 1.289 MHz

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8.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20415, 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
825.5	99	26	0.062	Peak	2.69	2.99	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 825.5 MHz, and the span is 6 MHz. The occupied bandwidth is measured as 2.6943 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -885.355 Hz, and the XdB bandwidth is 2.986 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 %
2.6943 MHz	x dB	-26.00 dB
Transmit Freq Error	-885.355 Hz	
x dB Bandwidth	2.986 MHz	

8.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20525, 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
836.5	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 836.5 MHz, and the span is 6 MHz. The occupied bandwidth is measured as 2.6853 MHz. The power level is 99.00% and the XdB bandwidth is -26.00 dB. The transmit frequency error is -2.432 kHz. The XdB bandwidth is 2.970 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 %
2.6853 MHz	x dB	-26.00 dB
Transmit Freq Error	-2.432 kHz	
x dB Bandwidth	2.970 MHz	

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8.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20635, 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
847.5	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 847.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.23 dBm #Atten 30 dB

Center 847.500 MHz Span 6 MHz

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

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

2.6883 MHz

x dB -26.00 dB

Transmit Freq Error -7.172 kHz

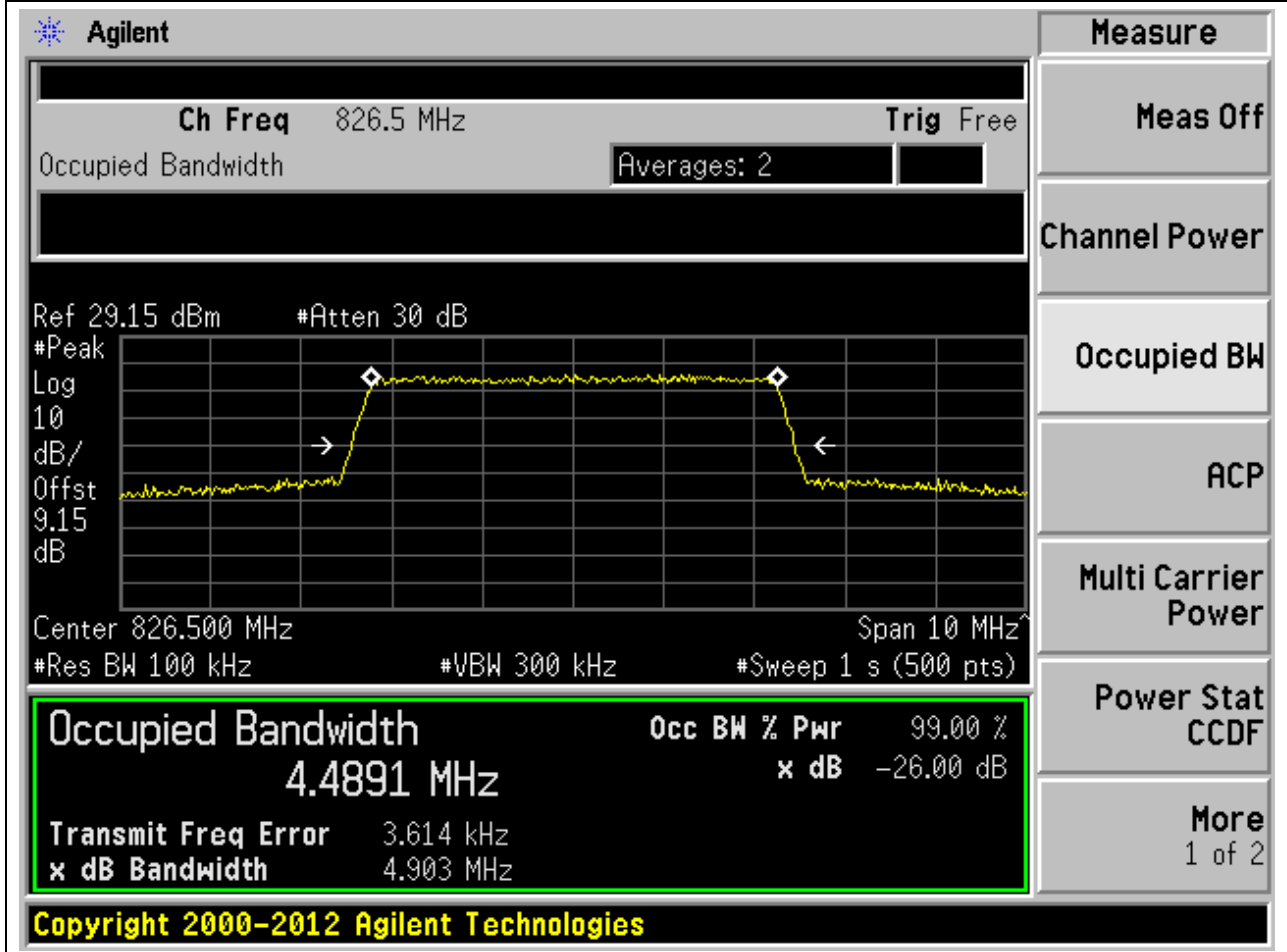
x dB Bandwidth 2.968 MHz

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**8.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20425, 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
826.5	99	26	0.1	Peak	4.49	4.9	5	Pass



**8.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20525, 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
836.5	99	26	0.1	Peak	4.5	4.91	5	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 836.500 MHz    Span 10 MHz

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

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.5007 MHz	x dB	-26.00 dB
Transmit Freq Error	-1.612 kHz	
x dB Bandwidth	4.909 MHz	

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Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

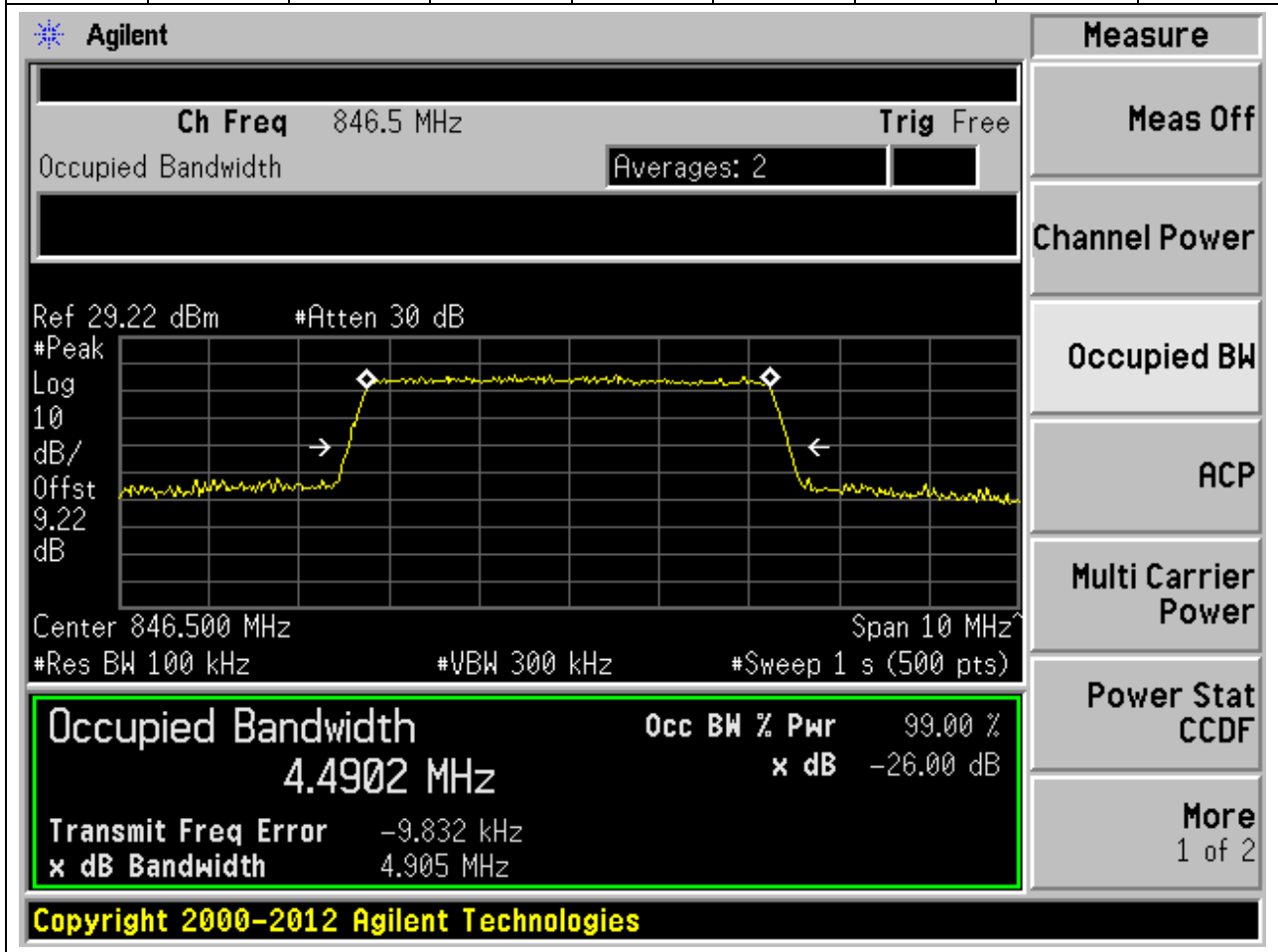
Power Stat CCDF

More

1 of 2

**8.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20625, 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	4.49	4.91	5	Pass



**8.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20450, 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	8.94	9.73	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 829 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include: Ref 29.16 dBm, #Atten 30 dB, Log 10, dB/Offst 9.16 dB, Center 829.00 MHz, Span 20 MHz, #Res BW 200 kHz, #VBW 620 kHz, and #Sweep 1 s (500 pts). A green box highlights the 'Occupied Bandwidth' measurement results: 8.9351 MHz, Occ BW % Pwr 99.00 %, and x dB -26.00 dB. Below this, it shows 'Transmit Freq Error 3.930 kHz' and 'x dB Bandwidth 9.733 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'.

8.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20525, 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	9.74	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 836.5 MHz. The main display shows a spectrum plot with a yellow trace. The plot parameters are: Ref 29.16 dBm, #Atten 30 dB, 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). The Occupied Bandwidth is highlighted in a green box with the following values: 8.9407 MHz, Occ BW % Pwr 99.00%, x dB -26.00 dB. Other parameters shown include Transmit Freq Error -15.169 kHz and x dB Bandwidth 9.737 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 copyright notice at the bottom reads 'Copyright 2000-2012 Agilent Technologies'.

8.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20600, 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**

Ch Freq 844 MHz Trig Free

Occupied Bandwidth Averages: 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)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
8.9526 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		-16.372 kHz
<b>x dB Bandwidth</b>		9.686 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

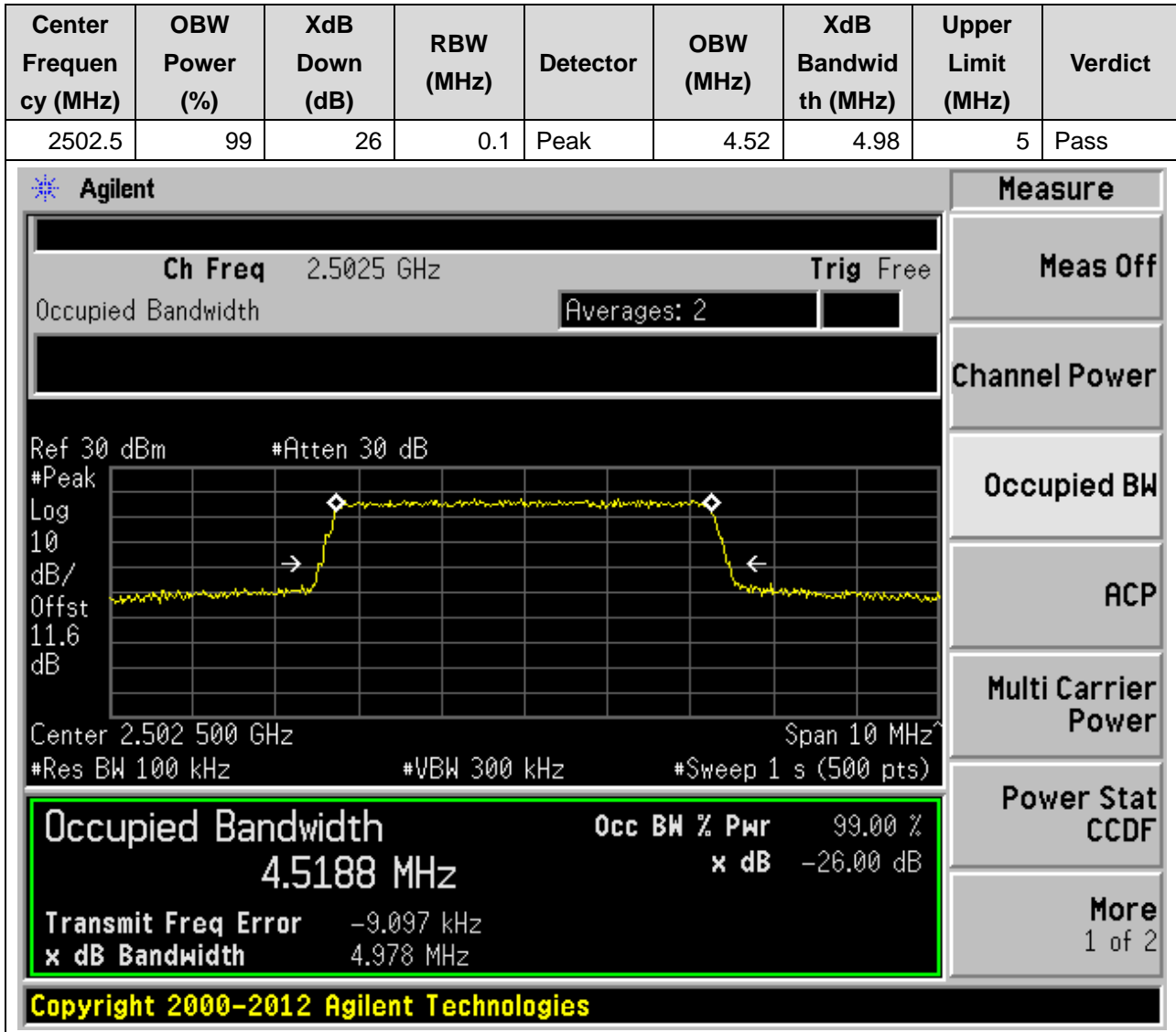
Multi Carrier Power

Power Stat CCDF

More 1 of 2

### 3. LTE\_Band7

#### 3.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20775, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)



**3.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20775, 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
2502.5	99	26	0.1	Peak	4.49	4.92	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.5025 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 100 kHz, and a video bandwidth of 300 kHz. The span is 10 MHz. The measurement results are highlighted in a green box:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>4.4890 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		7.424 Hz
<b>x dB Bandwidth</b>		4.920 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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**3.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21100, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**

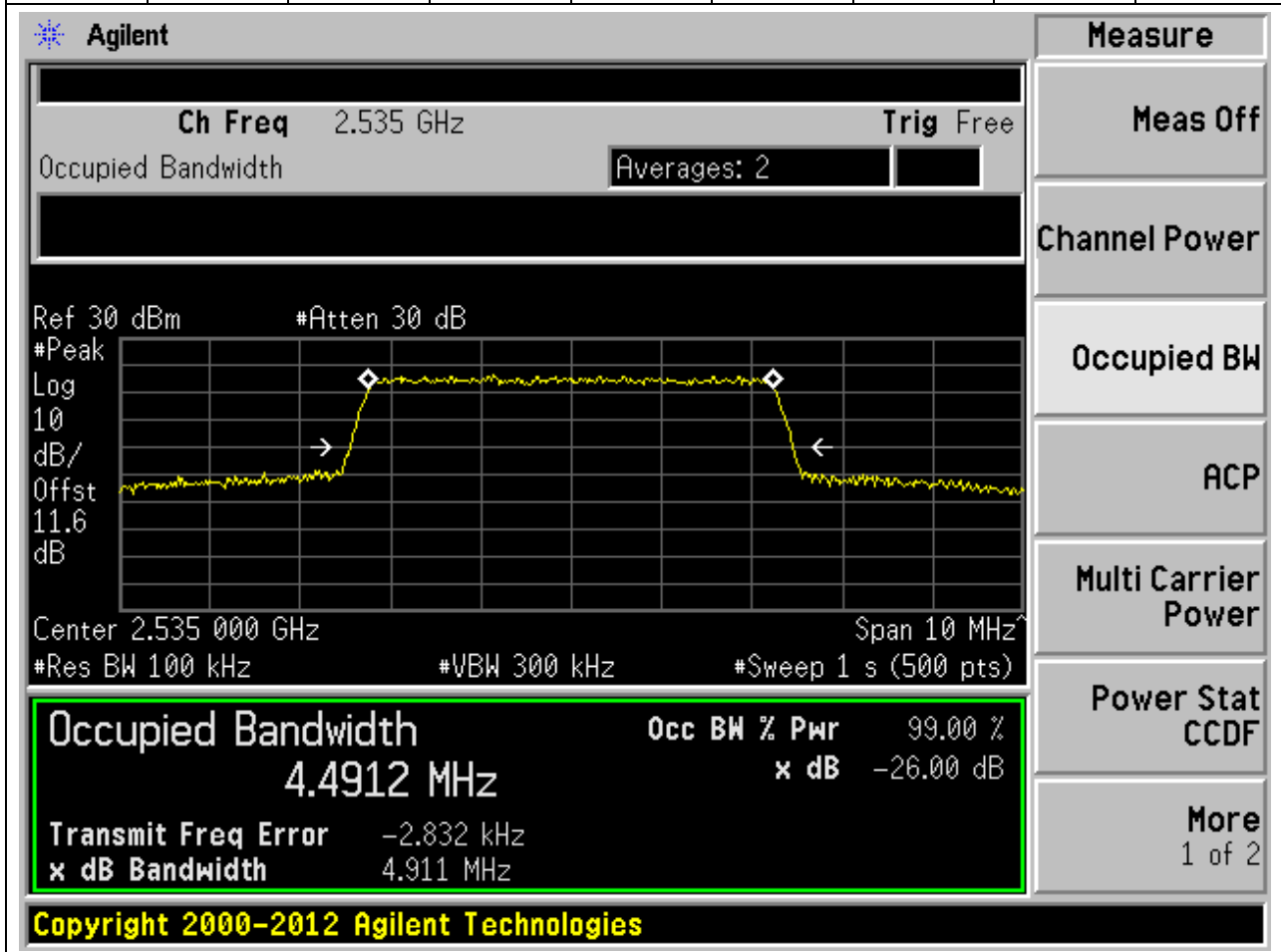
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535	99	26	0.1	Peak	4.5	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.535 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 2.535 000 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 1 s (500 pts). The plot shows a signal with a peak at approximately 2.535 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 4.4982 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is -3.902 kHz and the 'x dB Bandwidth' is 4.900 MHz. The 'Copyright 2000-2012 Agilent Technologies' is displayed at the bottom.

Occupied Bandwidth	Occ BW % Pwr	x dB
4.4982 MHz	99.00 %	-26.00 dB

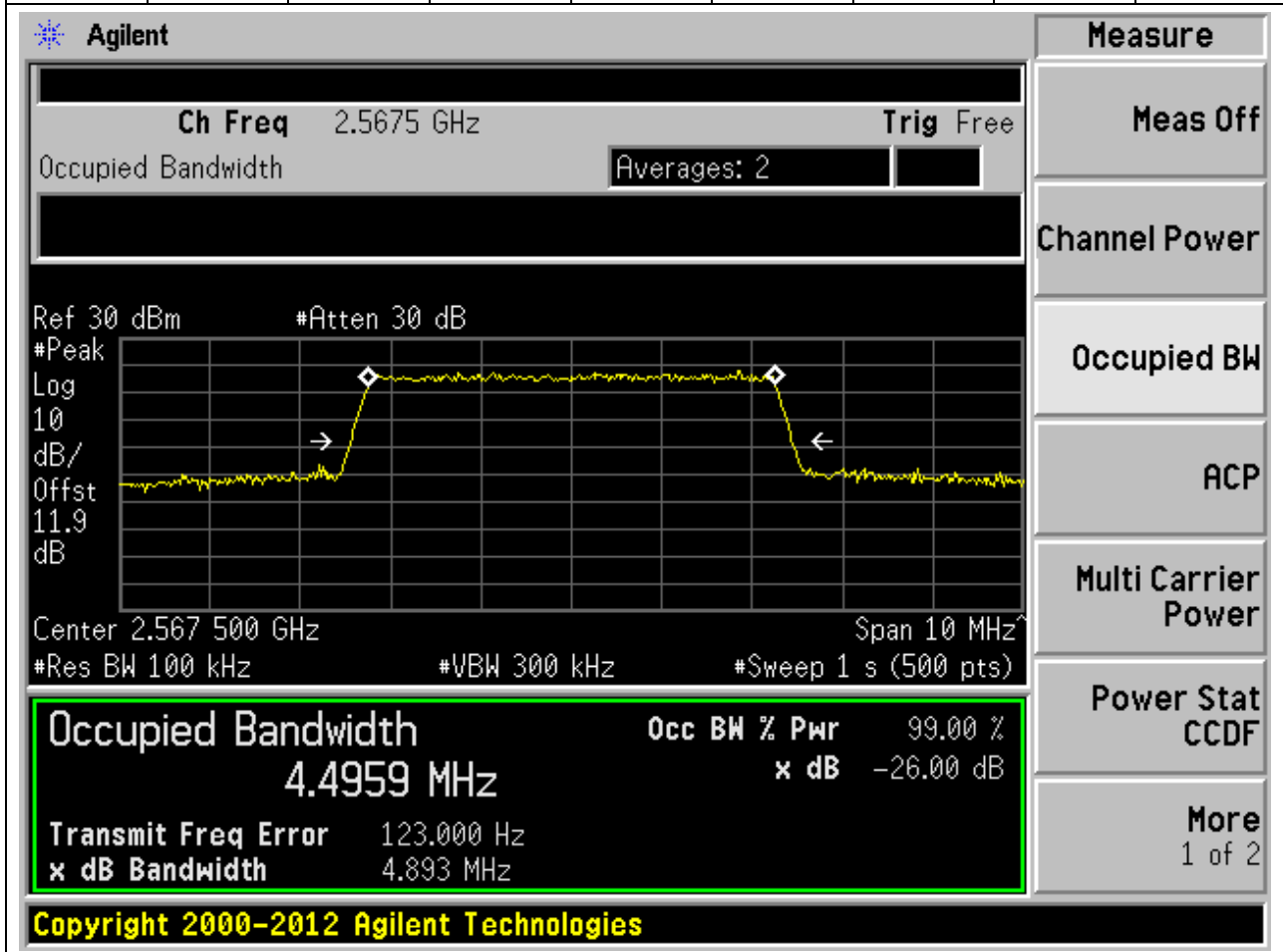
### 3.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21100, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2535	99	26	0.1	Peak	4.49	4.91	5	Pass



**3.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21425, 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
2567.5	99	26	0.1	Peak	4.5	4.89	5	Pass



**3.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21425, 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
2567.5	99	26	0.1	Peak	4.49	4.89	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.5675 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 11.9 dB, a resolution bandwidth of 100 kHz, and a video bandwidth of 300 kHz. The span is 10 MHz. The measurement results are highlighted in a green box:

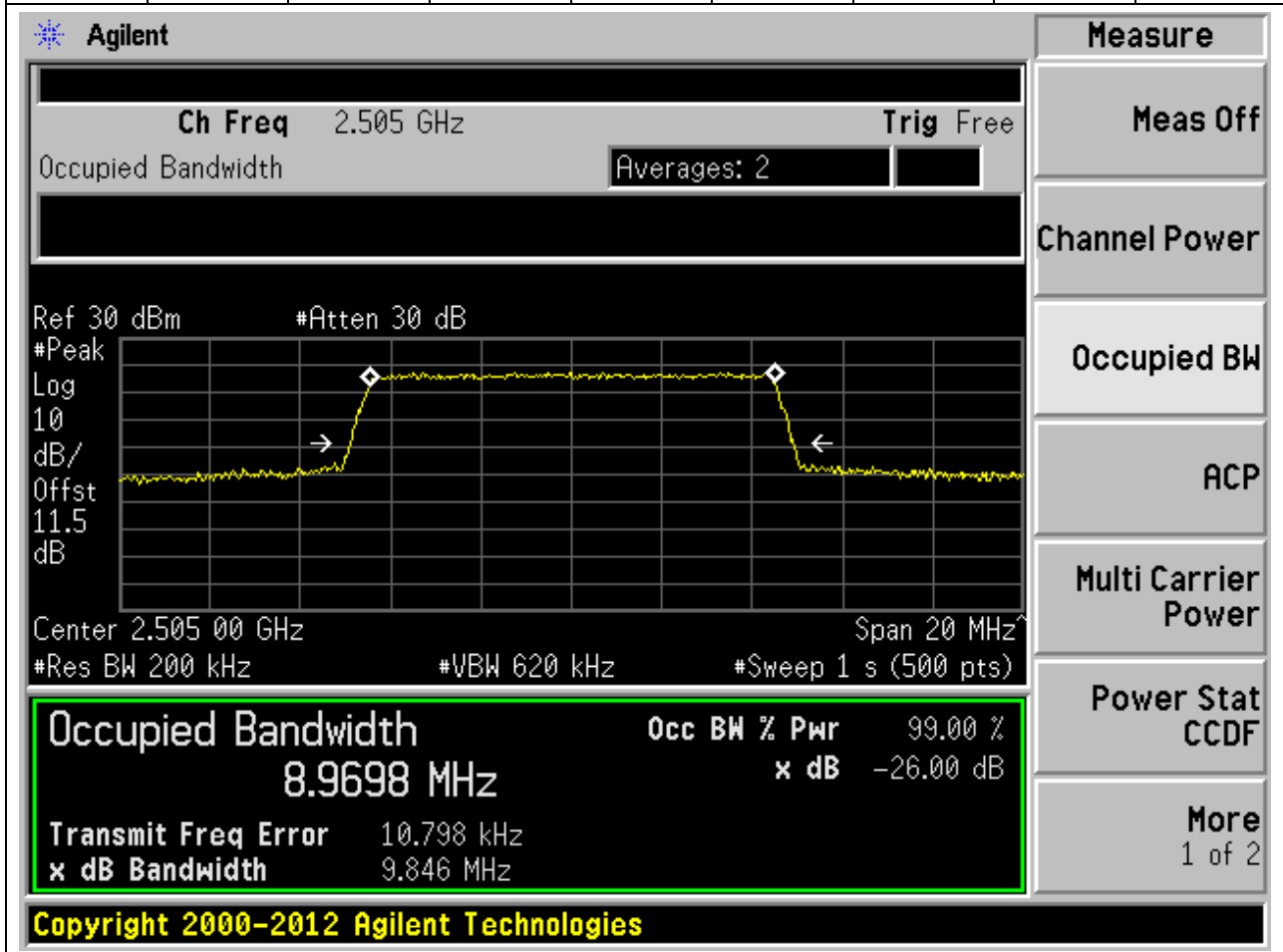
<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>4.4866 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		-2.284 kHz
<b>x dB Bandwidth</b>		4.893 MHz

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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**3.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20800, 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
2505	99	26	0.2	Peak	8.97	9.85	10	Pass



**3.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20800, 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
2505	99	26	0.2	Peak	8.97	9.73	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.505 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 11.5 dB', 'Center 2.505 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 8.9658 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 11.911 kHz' and 'x dB Bandwidth 9.729 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'.

**3.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21100, 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
2535	99	26	0.2	Peak	8.97	9.74	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a signal spectrum with a yellow trace. The center frequency is 2.535 GHz, and the span is 20 MHz. The occupied bandwidth is measured as 8.9722 MHz, which is 99.00% of the total bandwidth. The XdB down is -26.00 dB. The transmit frequency error is -3.730 kHz, and the XdB bandwidth is 9.742 MHz. The interface includes various measurement controls and a 'Measure' menu on the right side.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
8.9722 MHz	x dB	-26.00 dB
Transmit Freq Error	-3.730 kHz	
x dB Bandwidth	9.742 MHz	

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**3.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21100, 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
2535	99	26	0.2	Peak	8.96	9.87	10	Pass

Agilent

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

Ch Freq 2.535 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.6 dB

Center 2.535 00 GHz Span 20 MHz

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

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

8.9644 MHz

x dB -26.00 dB

Transmit Freq Error -365.970 Hz

x dB Bandwidth 9.866 MHz

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3.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21400, 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
2565	99	26	0.2	Peak	8.99	9.82	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.565 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 2.565 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 8.9872 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 6.031 kHz' and 'x dB Bandwidth 9.816 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'.

**3.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21400, 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
2565	99	26	0.2	Peak	8.97	9.73	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.565 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 11.9 dB, a resolution bandwidth of 200 kHz, and a video bandwidth of 620 kHz. The span is 20 MHz. The measurement results are highlighted in a green box:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>8.9670 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		-8.979 kHz
<b>x dB Bandwidth</b>		9.730 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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**3.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20825, 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
2507.5	99	26	0.3	Peak	13.47	14.67	15	Pass

**Agilent**

Ch Freq 2.5075 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.5 dB

Center 2.5075 GHz 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 %
13.4724 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>	3.917 kHz	
<b>x dB Bandwidth</b>	14.668 MHz	

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**3.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20825, 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
2507.5	99	26	0.3	Peak	13.45	14.67	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.5075 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters are: Center 2.50750 GHz, Span 30 MHz, Res BW 300 kHz, VBW 1 MHz, Sweep 1 s (500 pts). The plot shows a signal with a peak at approximately 2.5075 GHz. The occupied bandwidth is measured as 13.4460 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is 13.402 kHz and the XdB bandwidth is 14.669 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 %
13.4460 MHz	x dB	-26.00 dB
Transmit Freq Error	13.402 kHz	
x dB Bandwidth	14.669 MHz	

**3.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21100, 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
2535	99	26	0.3	Peak	13.44	14.58	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 2.535 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 2.535 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 13.4403 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is -9.702 kHz and the 'x dB Bandwidth' is 14.576 MHz. The 'Copyright 2000-2012 Agilent Technologies' is displayed at the bottom.

Occupied Bandwidth	Occ BW % Pwr	x dB
13.4403 MHz	99.00 %	-26.00 dB

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**3.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21100, 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
2535	99	26	0.3	Peak	13.42	14.63	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.535 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 parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 11.6 dB', 'Center 2.535 00 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 1 s (500 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 13.4211 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -8.683 kHz', and 'x dB Bandwidth 14.629 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, the copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible.

**3.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21375, 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
2562.5	99	26	0.3	Peak	13.44	14.64	15	Pass

**Agilent**

Ch Freq 2.5625 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.8 dB

Center 2.562 50 GHz Span 30 MHz

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

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

**13.4379 MHz** x dB -26.00 dB

Transmit Freq Error 3.032 kHz

x dB Bandwidth 14.639 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**3.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21375, 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
2562.5	99	26	0.3	Peak	13.44	14.57	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.5625 GHz. The main display shows a spectrum plot with a yellow trace. The plot parameters include: Ref 30 dBm, #Peak, Log, 10 dB/Offst, 11.8 dB, Center 2.562 50 GHz, Span 30 MHz, #Res BW 300 kHz, #VBW 1 MHz, and #Sweep 1 s (500 pts). A green box highlights the measurement results: Occupied Bandwidth 13.4423 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB, Transmit Freq Error 1.548 kHz, and x dB Bandwidth 14.565 MHz. The right-hand side of the interface shows 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.



**3.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20850, 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
2510	99	26	0.39	Peak	17.9	19.44	20	Pass

**Agilent**

Ch Freq 2.51 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 11.5 dB

Center 2.510 00 GHz Span 40 MHz

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

<b>Occupied Bandwidth</b>	Occ BW % Pwr	99.00 %
17.9032 MHz	x dB	-26.00 dB
Transmit Freq Error	35.546 kHz	
x dB Bandwidth	19.443 MHz	

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**3.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:20850, 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
2510	99	26	0.39	Peak	17.91	19.31	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.51 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 11.5 dB', 'Center 2.510 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 1 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9069 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 16.887 kHz' and 'x dB Bandwidth 19.311 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'.

**3.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21100, 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
2535	99	26	0.39	Peak	17.91	19.32	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 2.535 GHz, and the span is 40 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 17.9091 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -2.920 kHz, and the XdB bandwidth is 19.325 MHz. The interface also shows various measurement settings like Res BW (390 kHz), VBW (1.2 MHz), and Sweep (1 s).

Occupied Bandwidth	Occ BW % Pwr	X dB
17.9091 MHz	99.00 %	-26.00 dB

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**3.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21100, 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
2535	99	26	0.39	Peak	17.89	19.37	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.535 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 11.6 dB. The center frequency is 2.53500 GHz, the span is 40 MHz, the resolution bandwidth is 390 kHz, the video bandwidth is 1.2 MHz, and the sweep time is 1 second (512 points). A green box highlights the measurement results: Occupied Bandwidth is 17.8853 MHz, Occ BW % Pwr is 99.00%, and x dB is -26.00 dB. Other parameters shown include Transmit Freq Error of -1.923 kHz and x dB Bandwidth of 19.366 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).

Occupied Bandwidth	Occ BW % Pwr	x dB
17.8853 MHz	99.00 %	-26.00 dB

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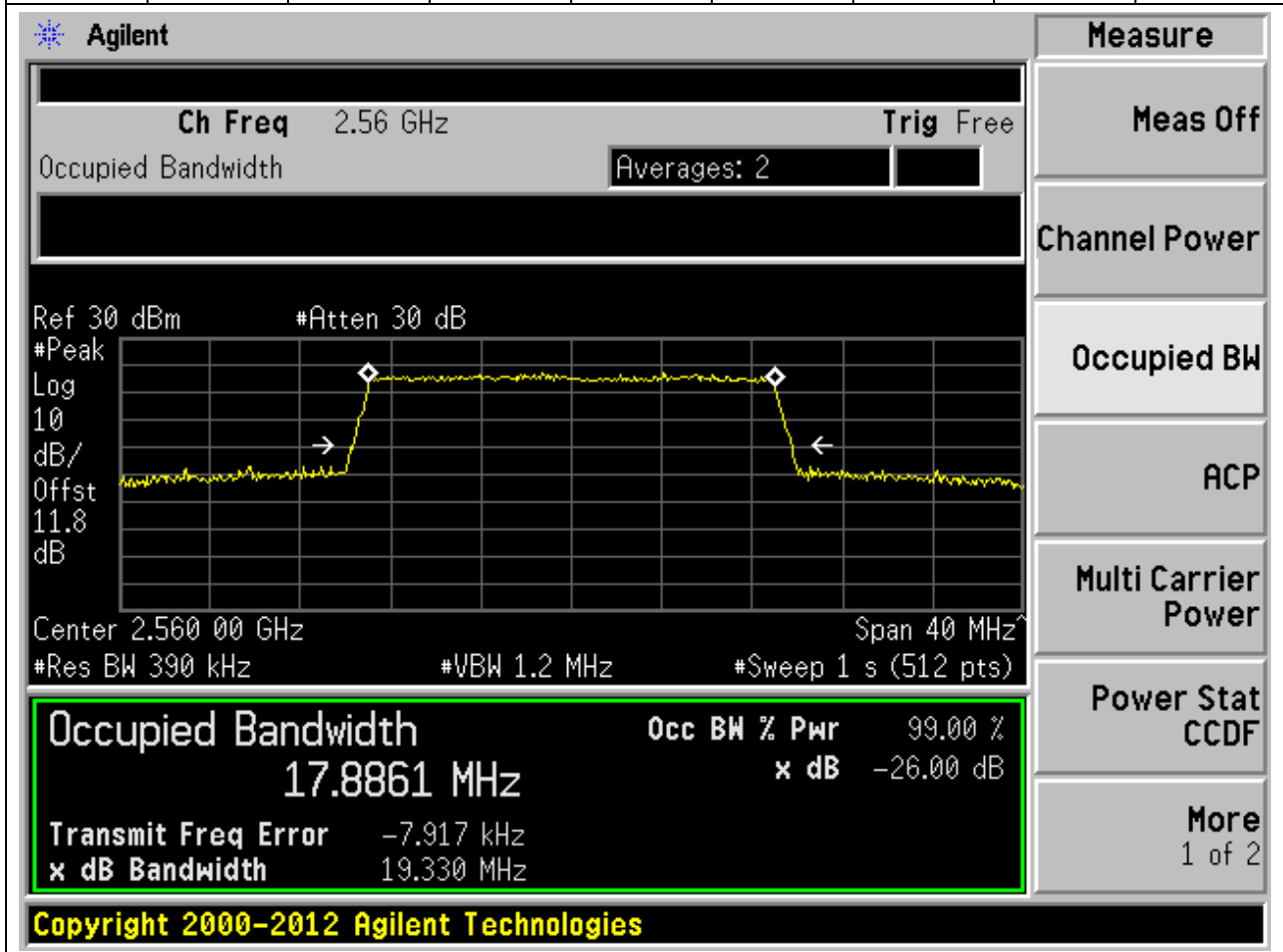
**3.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21350, Bandwidth:20, Modulation:QPSK, RB Number:100, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
2560	99	26	0.39	Peak	17.9	19.35	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 2.56 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 2.560 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 1 s (512 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 17.8965 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -2.434 kHz', and 'x dB Bandwidth 19.352 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'.

**3.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:21350, 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
2560	99	26	0.39	Peak	17.89	19.33	20	Pass



**3.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20775, 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
2502.5	99	26	0.1	Peak	4.49	4.89	5	Pass

Agilent
Measure

Ch Freq 2.5025 GHz Trig Free

Occupied Bandwidth Averages: 2

Center 2.502 500 GHz 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**

**4.4874 MHz**

Transmit Freq Error -357.959 Hz

x dB Bandwidth 4.886 MHz

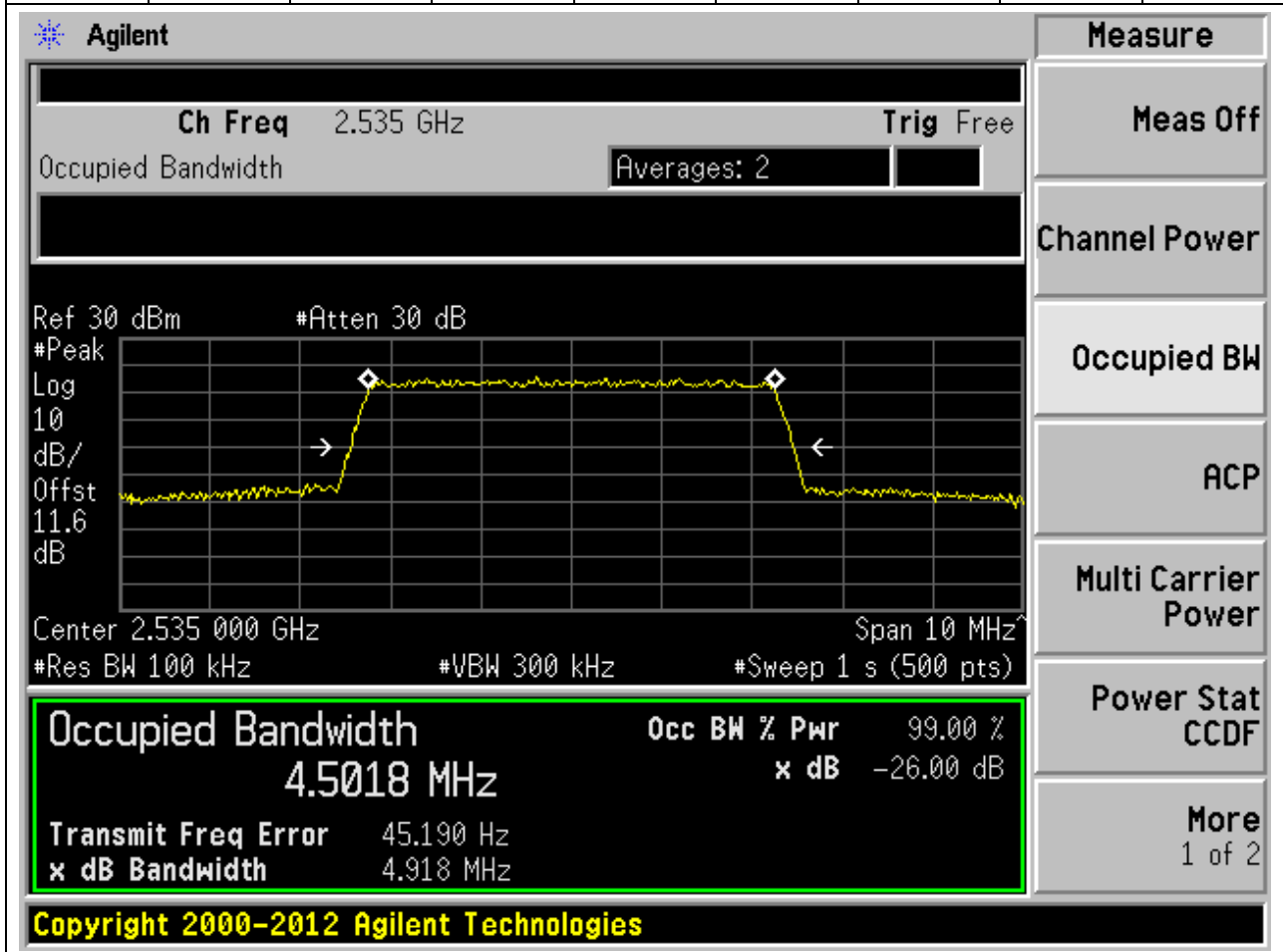
Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**3.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:21100, 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
2535	99	26	0.1	Peak	4.5	4.92	5	Pass





**3.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:21425, 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
2567.5	99	26	0.1	Peak	4.49	4.9	5	Pass

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

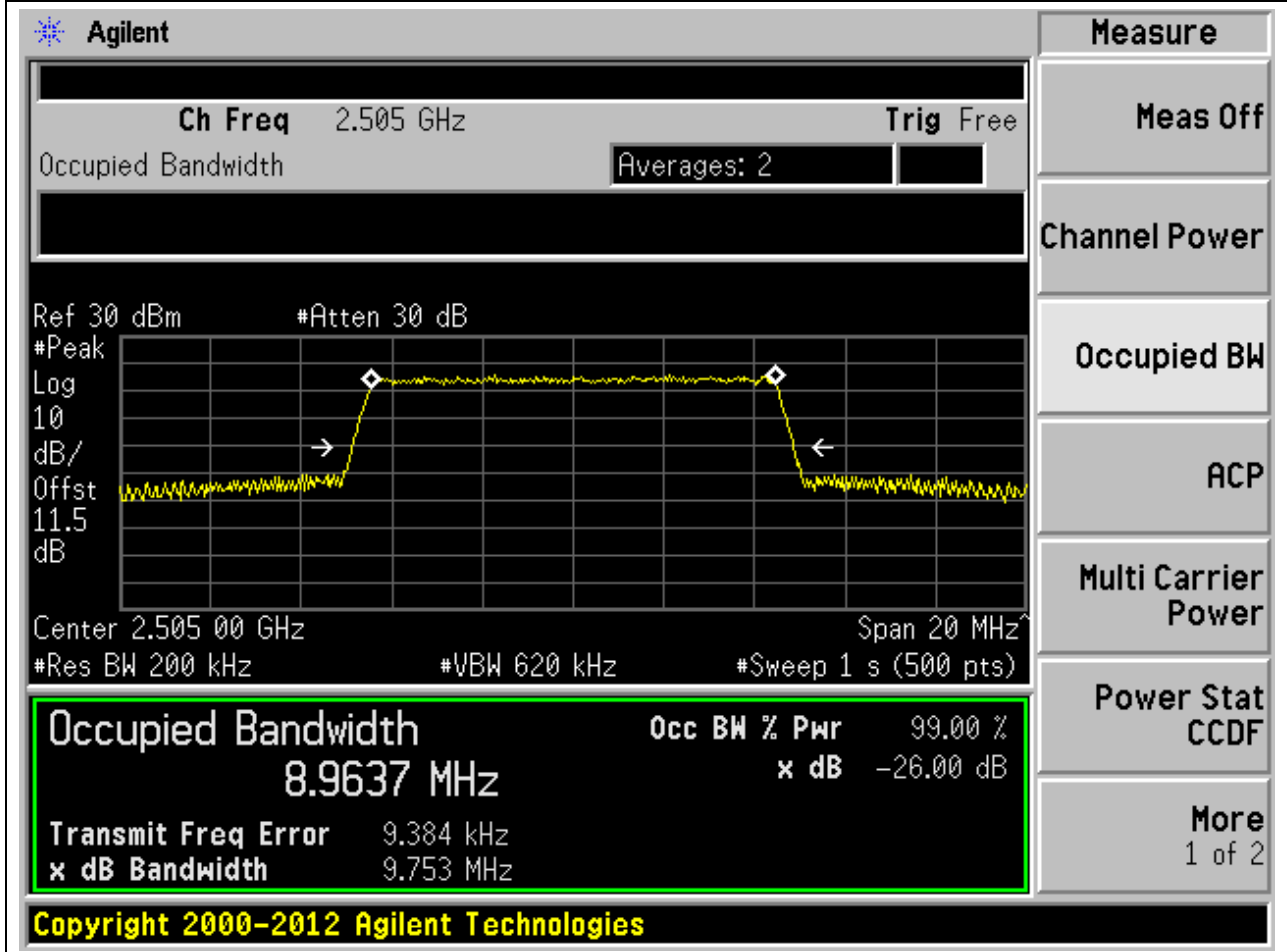
Measurement	Value
Occupied Bandwidth	4.4864 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-4.018 kHz
x dB Bandwidth	4.904 MHz

Other visible parameters include: Ch Freq 2.5675 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak Log 10 dB/Offst 11.9 dB, Center 2.567 500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, #Sweep 1 s (500 pts).

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3.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20800, 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
2505	99	26	0.2	Peak	8.96	9.75	10	Pass



**3.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:21100, 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
2535	99	26	0.2	Peak	8.95	9.73	10	Pass

Agilent

**Measure**

Ch Freq 2.535 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
11.6

dB

Center 2.535 00 GHz
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 %
8.9524 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-2.818 kHz	
<b>x dB Bandwidth</b>	9.733 MHz	

Power Stat
CCDF

More
1 of 2

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3.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:21400, 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
2565	99	26	0.2	Peak	8.96	9.72	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a signal spectrum with a yellow trace. The center frequency is 2.565 GHz, and the span is 20 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 8.9605 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -7.662 kHz, and the XdB bandwidth is 9.719 MHz. The interface also shows various measurement settings like Res BW (200 kHz), VBW (620 kHz), and Sweep (1 s).

Occupied Bandwidth	Occ BW % Pwr	99.00 %
8.9605 MHz	x dB	-26.00 dB
Transmit Freq Error	-7.662 kHz	
x dB Bandwidth	9.719 MHz	

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3.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20825, 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
2507.5	99	26	0.3	Peak	13.42	14.62	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 2.5075 GHz. The main display shows a spectrum plot with a yellow trace representing the signal. The plot is set to a reference level of 30 dBm and an attenuation of 30 dB. The occupied bandwidth is highlighted in a green box, showing a value of 13.4209 MHz. The percentage of power within this bandwidth is 99.00%, and the XdB bandwidth is -26.00 dB. Other parameters shown include a transmit frequency error of 7.875 kHz and an XdB bandwidth of 14.624 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
13.4209 MHz	99.00 %	-26.00 dB

Transmit Freq Error: 7.875 kHz  
 x dB Bandwidth: 14.624 MHz

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**3.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:21100, 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
2535	99	26	0.3	Peak	13.41	14.58	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	13.4077 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-3.985 kHz
x dB Bandwidth	14.579 MHz

Additional parameters shown in the interface include: Ch Freq 2.535 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak Log 10 dB/Offst 11.6 dB, Center 2.535 00 GHz, Span 30 MHz, #Res BW 300 kHz, #VBW 1 MHz, #Sweep 1 s (500 pts).

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**3.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:21375, 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
2562.5	99	26	0.3	Peak	13.46	14.59	15	Pass

Agilent

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

Ch Freq 2.5625 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 2.562 50 GHz Span 30 MHz

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

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

13.4579 MHz

x dB -26.00 dB

Transmit Freq Error -1.560 kHz

x dB Bandwidth 14.590 MHz

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**3.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:20850, 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
2510	99	26	0.39	Peak	17.87	19.35	20	Pass

Agilent
Measure

Ch Freq 2.51 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
11.5

dB

Center 2.510 00 GHz
Span 40 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
17.8744 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	12.970 kHz	
<b>x dB Bandwidth</b>	19.353 MHz	

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat

CCDF

More

1 of 2

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3.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:21100, 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
2535	99	26	0.39	Peak	17.88	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 titled 'Occupied Bandwidth' and shows a signal centered at 2.535 GHz. The plot parameters are: Center 2.535 00 GHz, Span 40 MHz, #Res BW 390 kHz, #VBW 1.2 MHz, #Sweep 1 s (512 pts). The plot shows a signal with a peak level of approximately -26 dB and a bandwidth of 17.8782 MHz. The plot also shows a reference level of 30 dBm and an attenuation of 30 dB. The plot is titled 'Occupied Bandwidth' and shows a signal centered at 2.535 GHz. The plot parameters are: Center 2.535 00 GHz, Span 40 MHz, #Res BW 390 kHz, #VBW 1.2 MHz, #Sweep 1 s (512 pts). The plot shows a signal with a peak level of approximately -26 dB and a bandwidth of 17.8782 MHz. The plot also shows a reference level of 30 dBm and an attenuation of 30 dB.

Occupied Bandwidth	Occ BW % Pwr	x dB
17.8782 MHz	99.00 %	-26.00 dB

Transmit Freq Error: -14.011 kHz  
x dB Bandwidth: 19.351 MHz

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3.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:21350, 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
2560	99	26	0.39	Peak	17.91	19.21	20	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 measurement results are as follows:

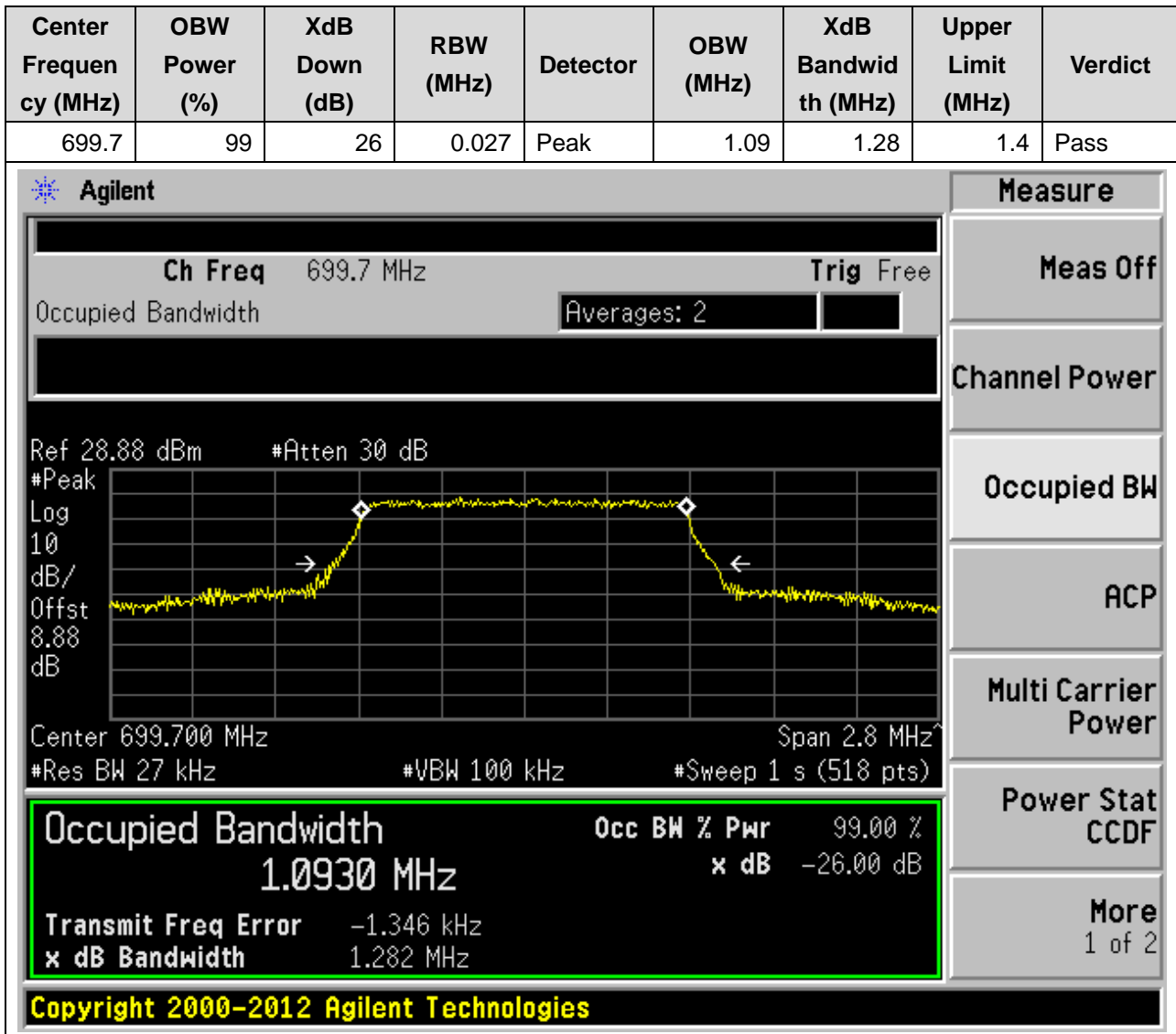
Measurement	Value
Occupied Bandwidth	17.9131 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-29.675 kHz
x dB Bandwidth	19.213 MHz

Other visible parameters include: Ch Freq 2.56 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak Log 10 dB/Offst 11.8 dB, Center 2.560 00 GHz, Span 40 MHz, #Res BW 390 kHz, #VBW 1.2 MHz, #Sweep 1 s (512 pts).

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## 9. LTE\_Band12

### 9.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23017, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)



9.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23017, 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
699.7	99	26	0.027	Peak	1.1	1.28	1.4	Pass

Agilent
Measure

Ch Freq 699.7 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 28.88 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
8.88

dB

Center 699.700 MHz
Span 2.8 MHz

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

Occupied Bandwidth
Occ BW % Pwr 99.00 %

1.0958 MHz
x dB -26.00 dB

Transmit Freq Error 74.471 Hz

x dB Bandwidth 1.279 MHz

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

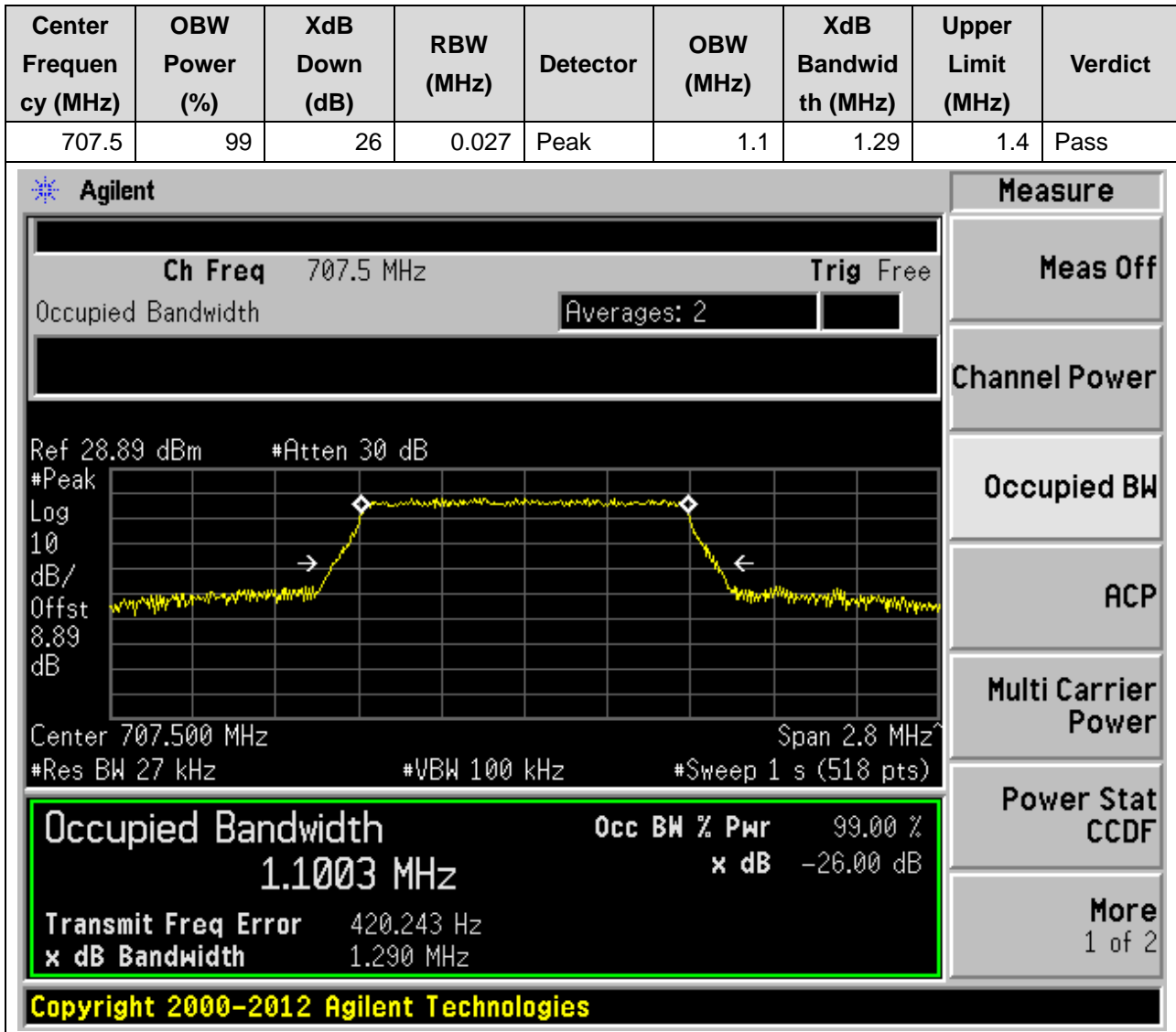
Power Stat CCDF

More

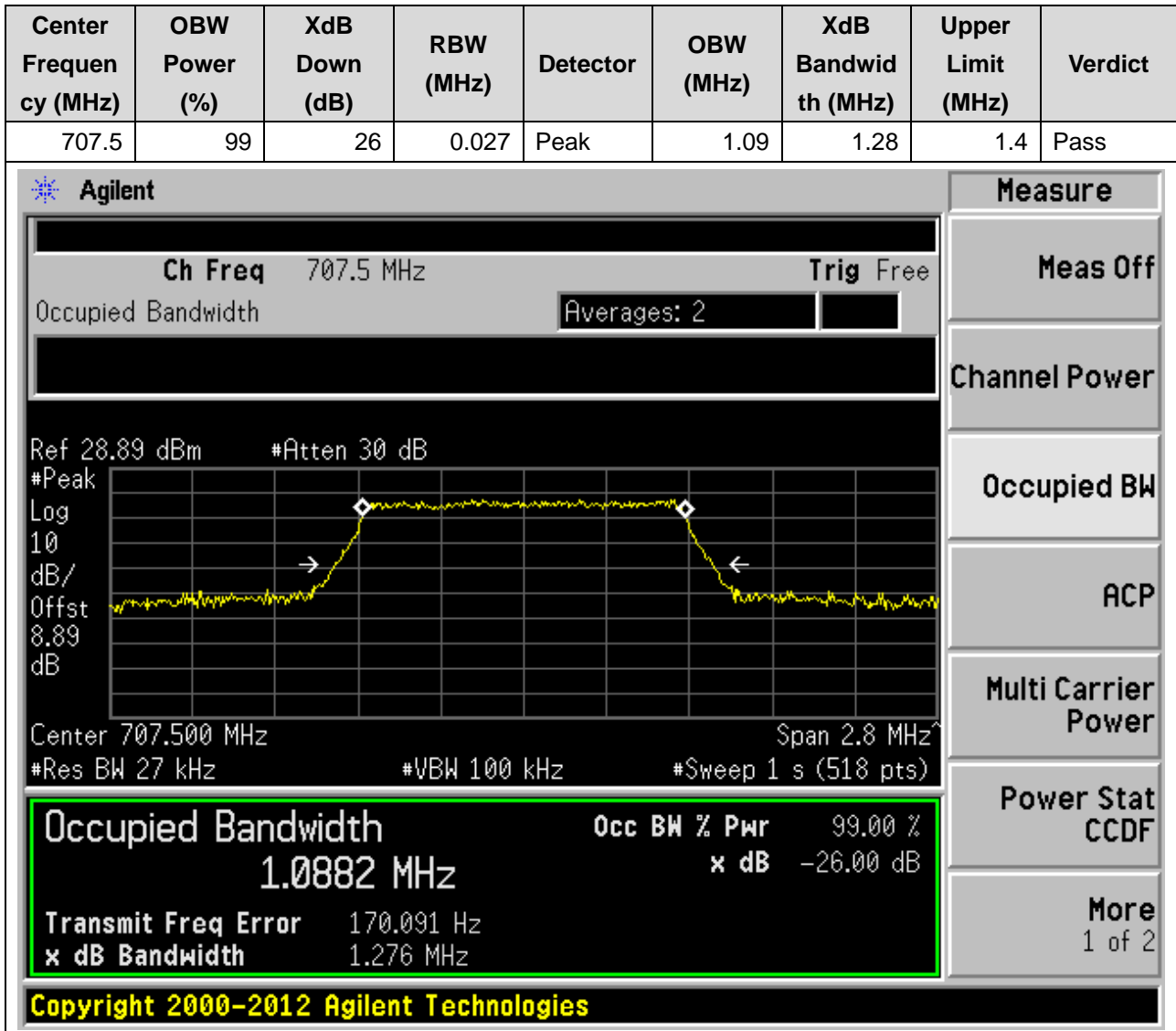
1 of 2

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9.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23095, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)



9.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23095, Bandwidth:1.4, Modulation:16QAM, RB Number:6, RB Position:0)



9.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23173, 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
715.3	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 715.3 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.89 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.89 dB

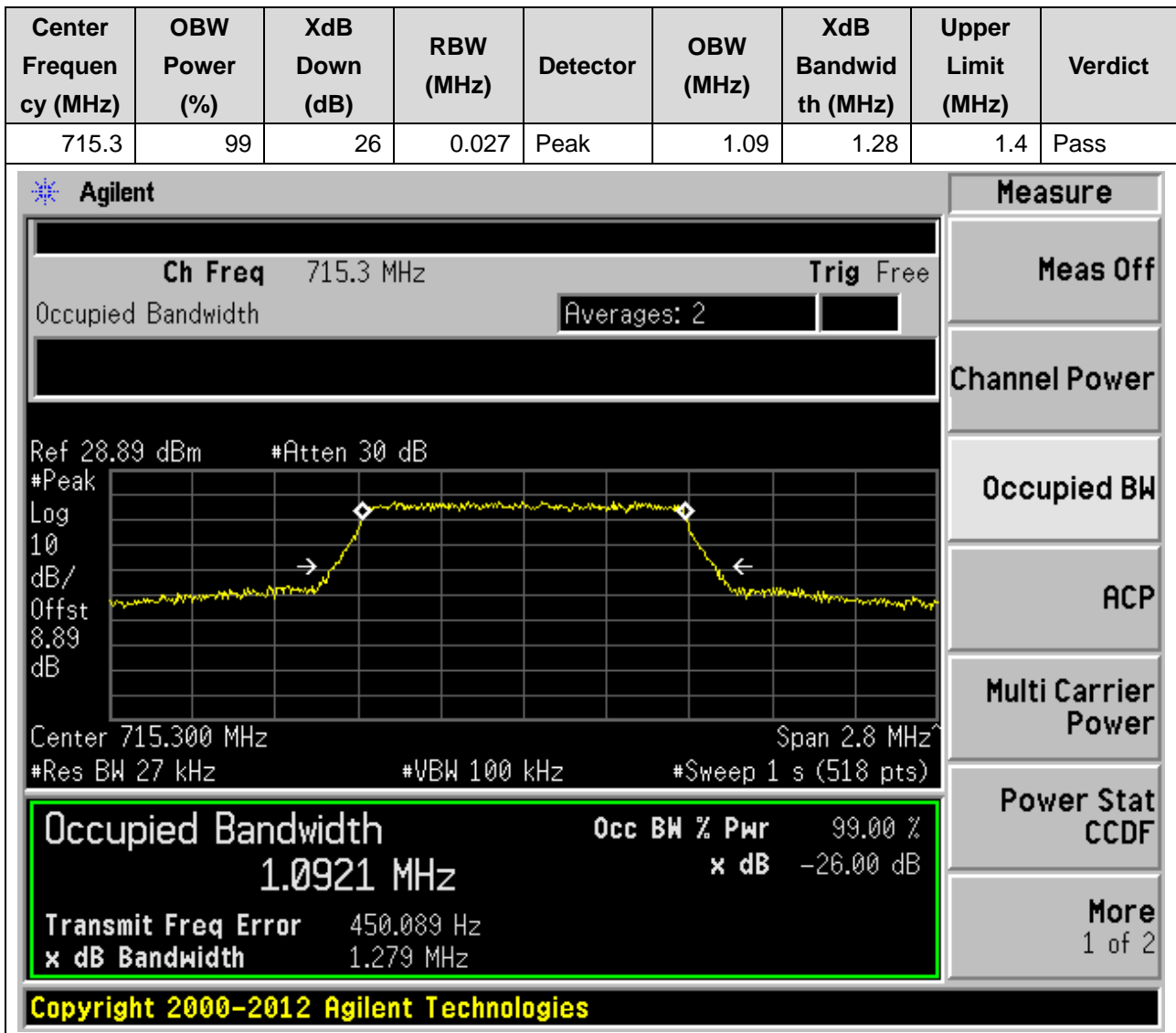
Center 715.300 MHz Span 2.8 MHz

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %
1.0864 MHz	<b>x dB</b> -26.00 dB
<b>Transmit Freq Error</b> 2.307 kHz	
<b>x dB Bandwidth</b> 1.268 MHz	

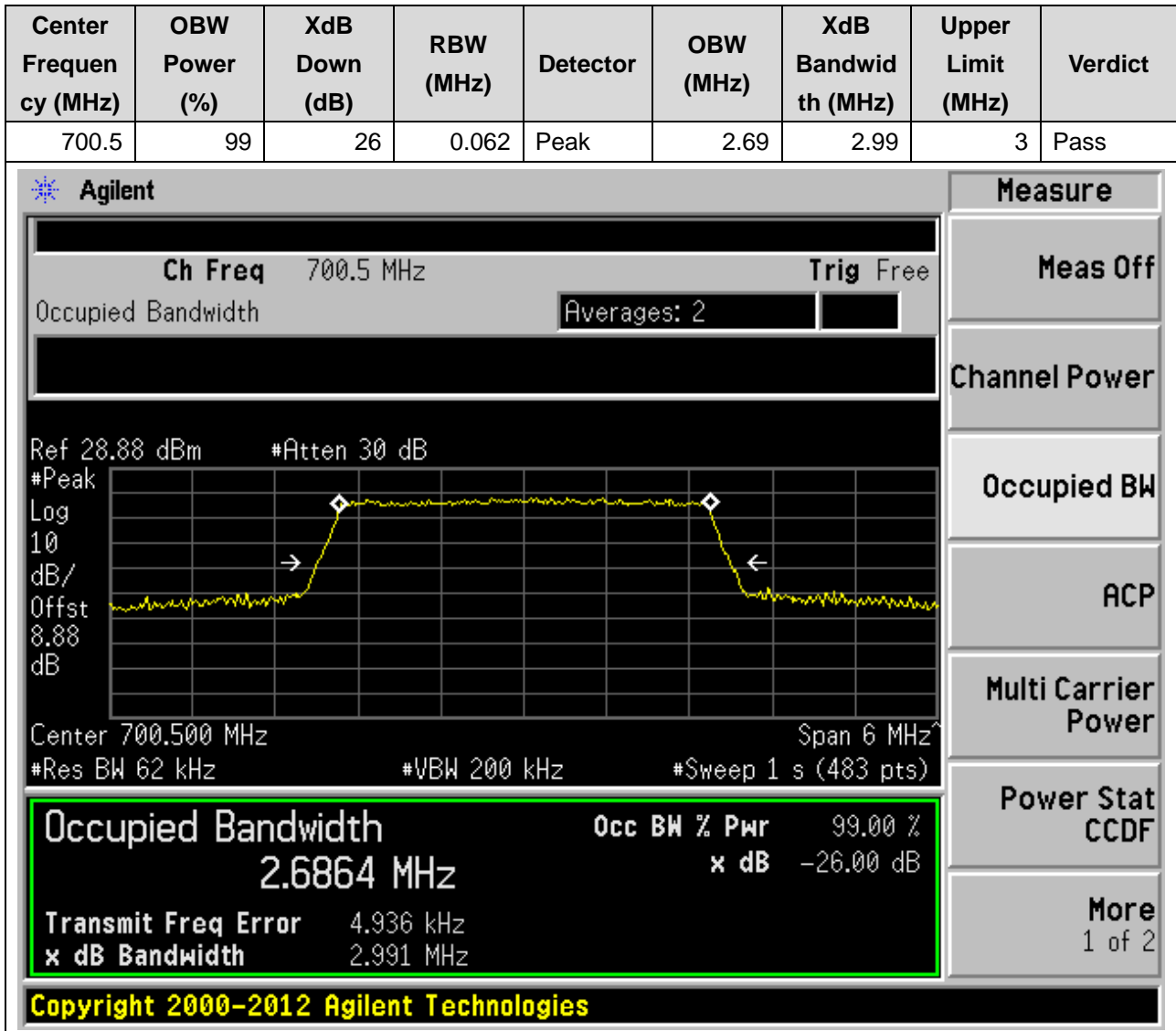
Copyright 2000-2012 Agilent Technologies

9.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23173, Bandwidth:1.4, Modulation:16QAM, RB Number:6, RB Position:0)





9.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23025, Bandwidth:3, Modulation:QPSK, RB Number:15, RB Position:0)



**9.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23025, 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
700.5	99	26	0.062	Peak	2.69	2.99	3	Pass

**Agilent**

Ch Freq 700.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.88 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.88 dB

Center 700.500 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 %
2.6877 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		-1.939 kHz
<b>x dB Bandwidth</b>		2.994 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**9.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23095, 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
707.5	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 707.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.89 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.89 dB

Center 707.500 MHz Span 6 MHz

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

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

2.6888 MHz

x dB -26.00 dB

Transmit Freq Error -641.609 Hz

x dB Bandwidth 2.976 MHz

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**9.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23095, 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
707.5	99	26	0.062	Peak	2.69	2.97	3	Pass

Agilent
Measure

Ch Freq 707.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.89 dBm #Atten 30 dB

#Peak

Log

10

dB/

Offst

8.89

dB

Center 707.500 MHz Span 6 MHz

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

Occupied Bandwidth

2.6867 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error -1.396 kHz

x dB Bandwidth 2.966 MHz

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Meas Off

---

Channel Power

---

Occupied BW

---

ACP

---

Multi Carrier Power

---

Power Stat CCDF

---

More  
1 of 2

**9.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23165, 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
714.5	99	26	0.062	Peak	2.69	2.97	3	Pass

Agilent

**Measure**

Ch Freq 714.5 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 28.89 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
8.89

dB

Center 714.500 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 %
2.6851 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-2.002 kHz	
<b>x dB Bandwidth</b>	2.967 MHz	

Power Stat
CCDF

More
1 of 2

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9.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23165, 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
714.5	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 714.5 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.89 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.89 dB', 'Center 714.500 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 2.6853 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -2.550 kHz', and 'x dB Bandwidth 2.977 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'.

**9.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23035, 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
701.5	99	26	0.1	Peak	4.5	4.93	5	Pass

Agilent

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

Ch Freq 701.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.88 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.88 dB

Center 701.500 MHz Span 10 MHz

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

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

4.4998 MHz x dB -26.00 dB

Transmit Freq Error -3.319 kHz

x dB Bandwidth 4.927 MHz

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9.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23035, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)

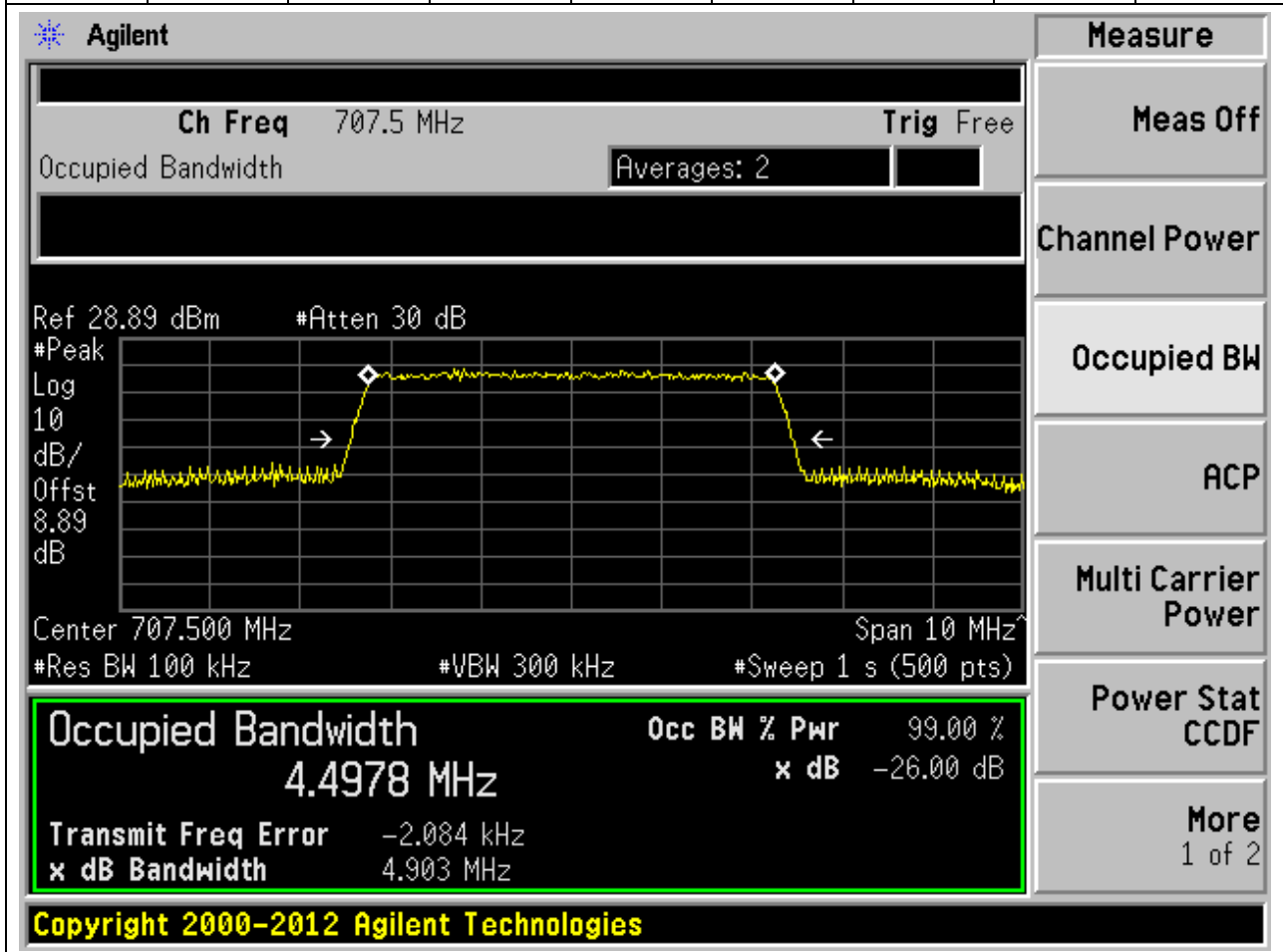
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
701.5	99	26	0.1	Peak	4.49	4.91	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 701.5 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.88 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.88 dB', 'Center 701.500 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 4.4903 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 1.298 kHz', and 'x dB Bandwidth 4.910 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'.



**9.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23095, 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
707.5	99	26	0.1	Peak	4.5	4.9	5	Pass



9.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23095, 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
707.5	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 707.5 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.89 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.89 dB', 'Center 707.500 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 4.4890 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 64.213 Hz', and 'x dB Bandwidth 4.915 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'.

**9.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23155, 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
713.5	99	26	0.1	Peak	4.49	4.89	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 713.500 MHz and the span is 10 MHz. The resolution bandwidth (RBW) is 100 kHz and the video bandwidth (VBW) is 300 kHz. The sweep time is 1 s (500 pts). The occupied bandwidth is measured as 4.4928 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is -5.686 kHz and the XdB bandwidth is 4.887 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 %
4.4928 MHz	x dB	-26.00 dB
Transmit Freq Error	-5.686 kHz	
x dB Bandwidth	4.887 MHz	

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9.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23155, 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
713.5	99	26	0.1	Peak	4.49	4.88	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 713.5 MHz. The main display shows a spectrum plot with a yellow trace representing the signal. The plot is set to a center frequency of 713.500 MHz 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 1 second with 500 points. The occupied bandwidth is measured as 4.4909 MHz, which is 99.00% of the total bandwidth. The XdB down is -26.00 dB. The transmit frequency error is -8.915 kHz, and the XdB bandwidth is 4.885 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 %
4.4909 MHz	x dB	-26.00 dB
Transmit Freq Error	-8.915 kHz	
x dB Bandwidth	4.885 MHz	

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**9.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23060, 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
704	99	26	0.2	Peak	8.95	9.8	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 704 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.88 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.88 dB', 'Center 704.00 MHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 8.9485 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 8.690 kHz' and 'x dB Bandwidth 9.805 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'.

**9.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23060, 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
704	99	26	0.2	Peak	8.95	9.77	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 704.00 MHz and the span is 20 MHz. 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>8.9464 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	6.714 kHz	
<b>x dB Bandwidth</b>	9.769 MHz	

Other visible parameters include: Ch Freq 704 MHz, Trig Free, Averages: 2, Ref 28.88 dBm, #Atten 30 dB, #Peak Log 10 dB/Offst 8.88 dB, #Res BW 200 kHz, #VBW 620 kHz, #Sweep 1 s (500 pts). The right-hand side of the interface shows 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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**9.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23095, 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
707.5	99	26	0.2	Peak	8.94	9.76	10	Pass

Agilent

**Measure**

Ch Freq 707.5 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 28.89 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
8.89

dB

Center 707.50 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 %
8.9442 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	2.415 kHz	
<b>x dB Bandwidth</b>	9.761 MHz	

Power Stat
CCDF

More
1 of 2

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**9.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23095, 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
707.5	99	26	0.2	Peak	8.95	9.76	10	Pass

Agilent

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

Ch Freq 707.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.89 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.89 dB

Center 707.50 MHz Span 20 MHz

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

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

**8.9465 MHz** x dB -26.00 dB

Transmit Freq Error -5.607 kHz

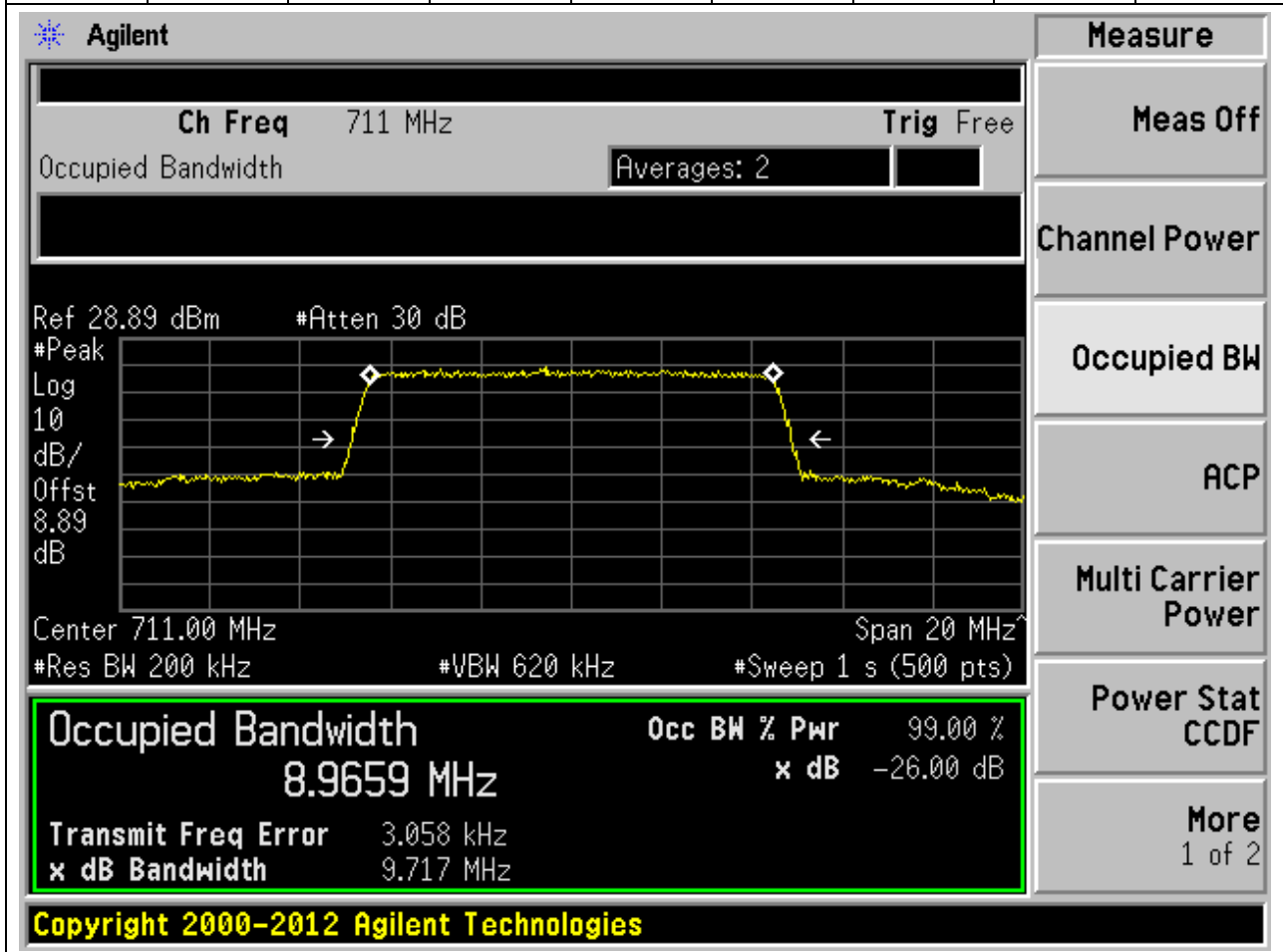
x dB Bandwidth 9.760 MHz

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**9.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23130, 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
711	99	26	0.2	Peak	8.97	9.72	10	Pass



9.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23130, 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
711	99	26	0.2	Peak	8.95	9.7	10	Pass

Agilent

Measure

Ch Freq 711 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 28.89 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
8.89

dB

Center 711.00 MHz
Span 20 MHz

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

**Occupied Bandwidth**

**8.9480 MHz**

Transmit Freq Error -15.350 kHz

x dB Bandwidth 9.699 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

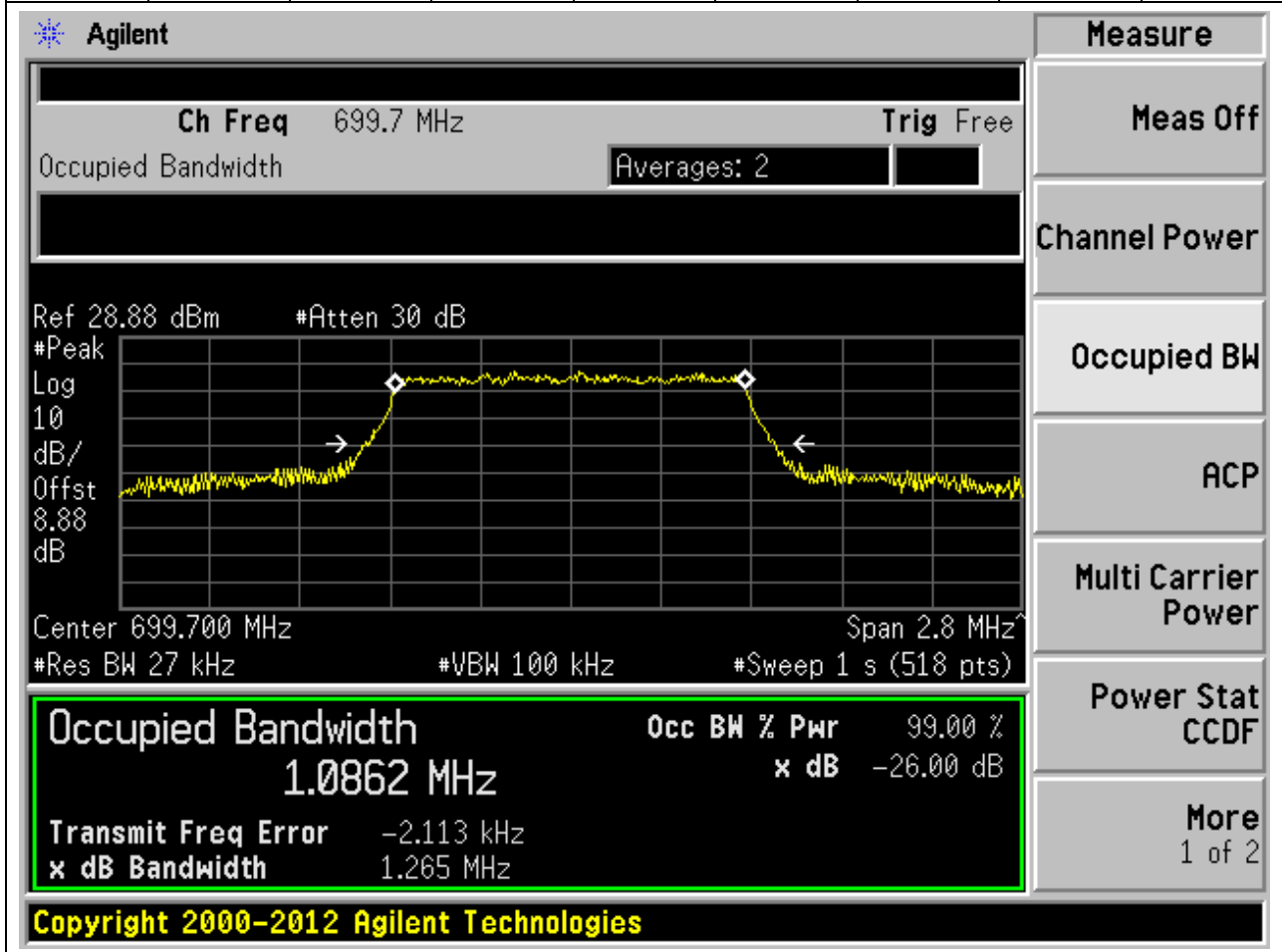
Power Stat
CCDF

More
1 of 2

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**9.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23017, 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
699.7	99	26	0.027	Peak	1.09	1.26	1.4	Pass



**9.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23095, 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
707.5	99	26	0.027	Peak	1.09	1.27	1.4	Pass

Agilent
Measure

Ch Freq 707.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.89 dBm #Atten 30 dB

Center 707.500 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

**Occupied Bandwidth**

**1.0865 MHz**

Transmit Freq Error 1.445 kHz

x dB Bandwidth 1.272 MHz

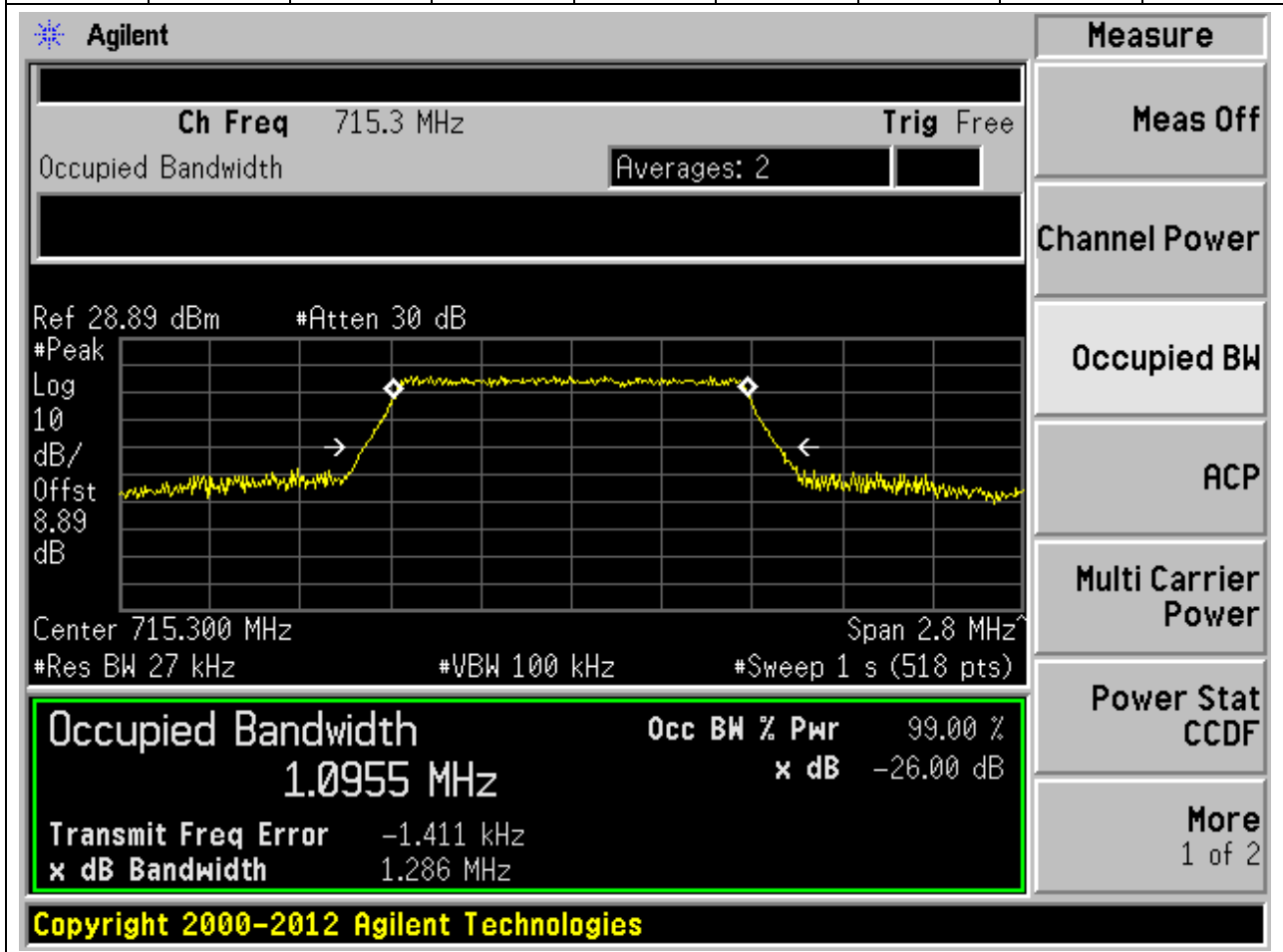
Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**9.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23173, 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
715.3	99	26	0.027	Peak	1.1	1.29	1.4	Pass



9.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23025, 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
700.5	99	26	0.062	Peak	2.69	2.98	3	Pass

**Agilent**

Ch Freq 700.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.88 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.88 dB

Center 700.500 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 %
2.6917 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		38.019 Hz
<b>x dB Bandwidth</b>		2.976 MHz

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9.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23095, 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
707.5	99	26	0.062	Peak	2.68	2.96	3	Pass

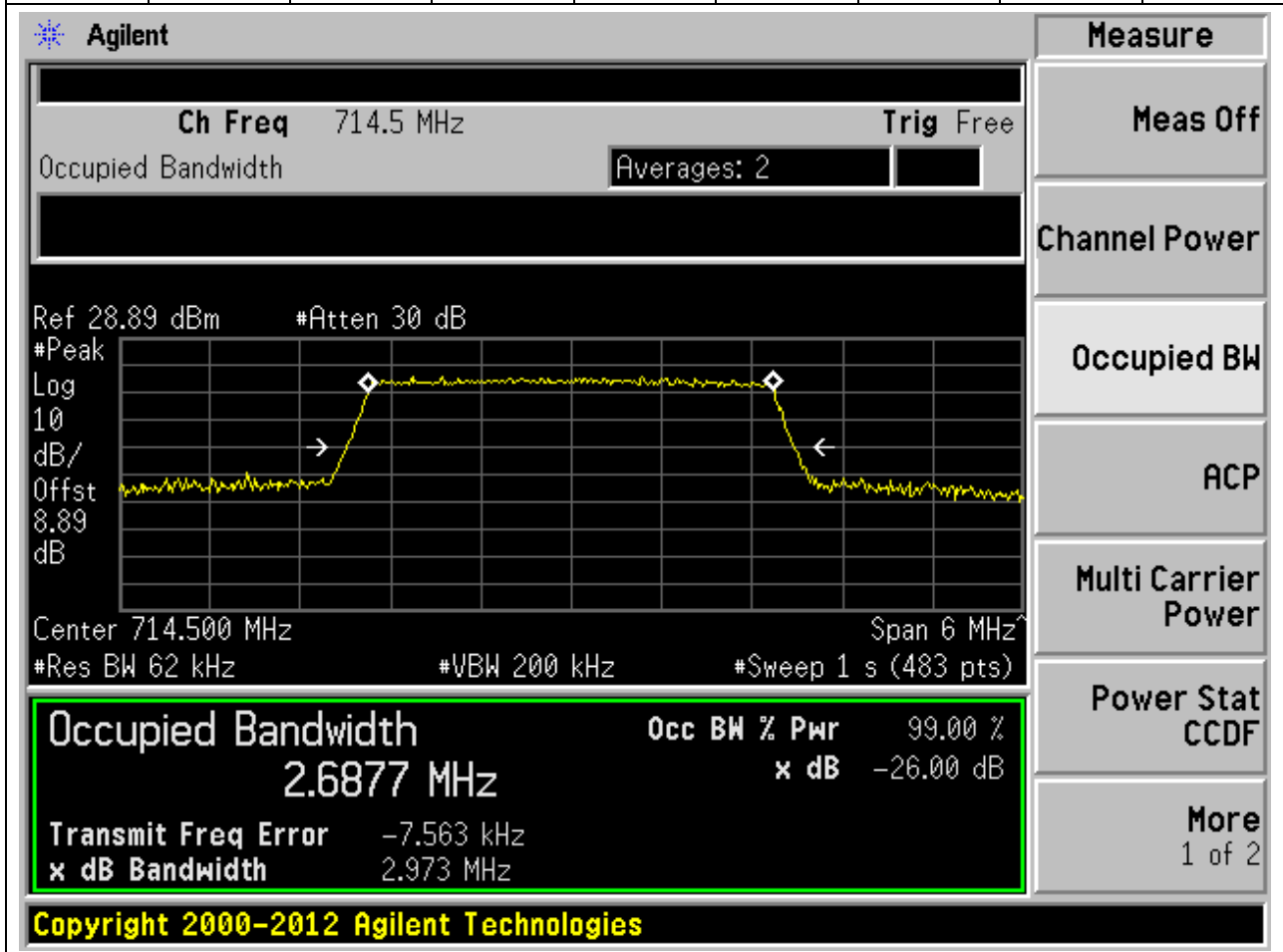
The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 707.5 MHz' and 'Trig Free'. Below this, the 'Occupied Bandwidth' measurement is shown with 'Averages: 2'. The main display area shows a spectrum plot with a yellow trace. The plot has a reference level of 28.89 dBm and an attenuation of 30 dB. The plot shows a signal with a peak at approximately 707.5 MHz. The 'Occupied Bandwidth' is measured as 2.6830 MHz, which is 99.00% of the power. The 'x dB Bandwidth' is 2.964 MHz. The 'Transmit Freq Error' is -1.543 kHz. The plot also shows the 'Ref 28.89 dBm', '#Peak Log 10 dB/Offst 8.89 dB', 'Center 707.500 MHz', 'Span 6 MHz', '#Res BW 62 kHz', '#VBW 200 kHz', and '#Sweep 1 s (483 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'. At the bottom, there is a copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
2.6830 MHz	x dB	-26.00 dB
Transmit Freq Error	-1.543 kHz	
x dB Bandwidth	2.964 MHz	

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9.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23165, 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
714.5	99	26	0.062	Peak	2.69	2.97	3	Pass





9.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23035, 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
701.5	99	26	0.1	Peak	4.49	4.92	5	Pass

**Agilent**

Ch Freq 701.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.88 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.88 dB

Center 701.500 MHz Span 10 MHz

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

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

4.4885 MHz x dB -26.00 dB

Transmit Freq Error 5.692 kHz

x dB Bandwidth 4.917 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**9.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23095, 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
707.5	99	26	0.1	Peak	4.5	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 707.5 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.89 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.89 dB', 'Center 707.500 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: 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', '4.5017 MHz', 'Transmit Freq Error -522.864 Hz', and 'x dB Bandwidth 4.902 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'.

**9.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23155, 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
713.5	99	26	0.1	Peak	4.49	4.9	5	Pass

Agilent

Measure

Ch Freq 713.5 MHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 28.89 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
8.89

dB

Center 713.500 MHz
Span 10 MHz

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

**Occupied Bandwidth**

**4.4873 MHz**

**Occ BW % Pwr** 99.00 %

**x dB** -26.00 dB

**Transmit Freq Error** -8.905 kHz

**x dB Bandwidth** 4.905 MHz

**Power Stat**

CCDF

**More**

1 of 2

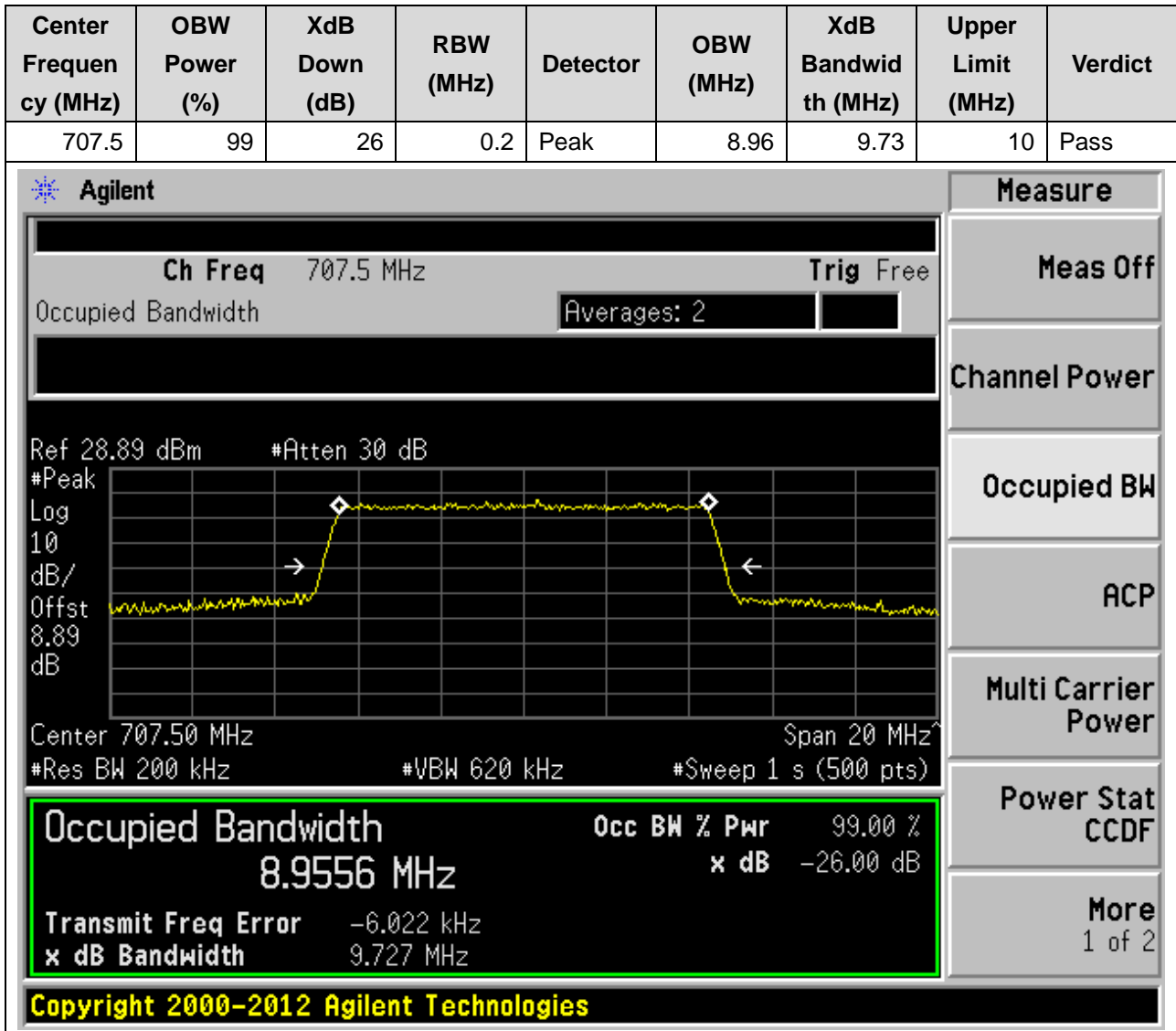
**Copyright 2000-2012 Agilent Technologies**

**9.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23060, 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
704	99	26	0.2	Peak	8.95	9.74	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 704 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot has a center frequency of 704.00 MHz and a span of 20 MHz. The y-axis is labeled 'dB/Offst' with a reference of 28.88 dB and an attenuation of 30 dB. The plot shows a signal with a peak at approximately 704 MHz. Below the plot, the 'Occupied Bandwidth' is highlighted in a green box, showing a value of 8.9511 MHz. Other parameters shown include 'Occ BW % Pwr' at 99.00% and 'x dB' at -26.00 dB. The 'Transmit Freq Error' is 5.933 kHz and the 'x dB Bandwidth' is 9.740 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 bottom of the screen displays the copyright notice 'Copyright 2000-2012 Agilent Technologies'.

9.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23095, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)



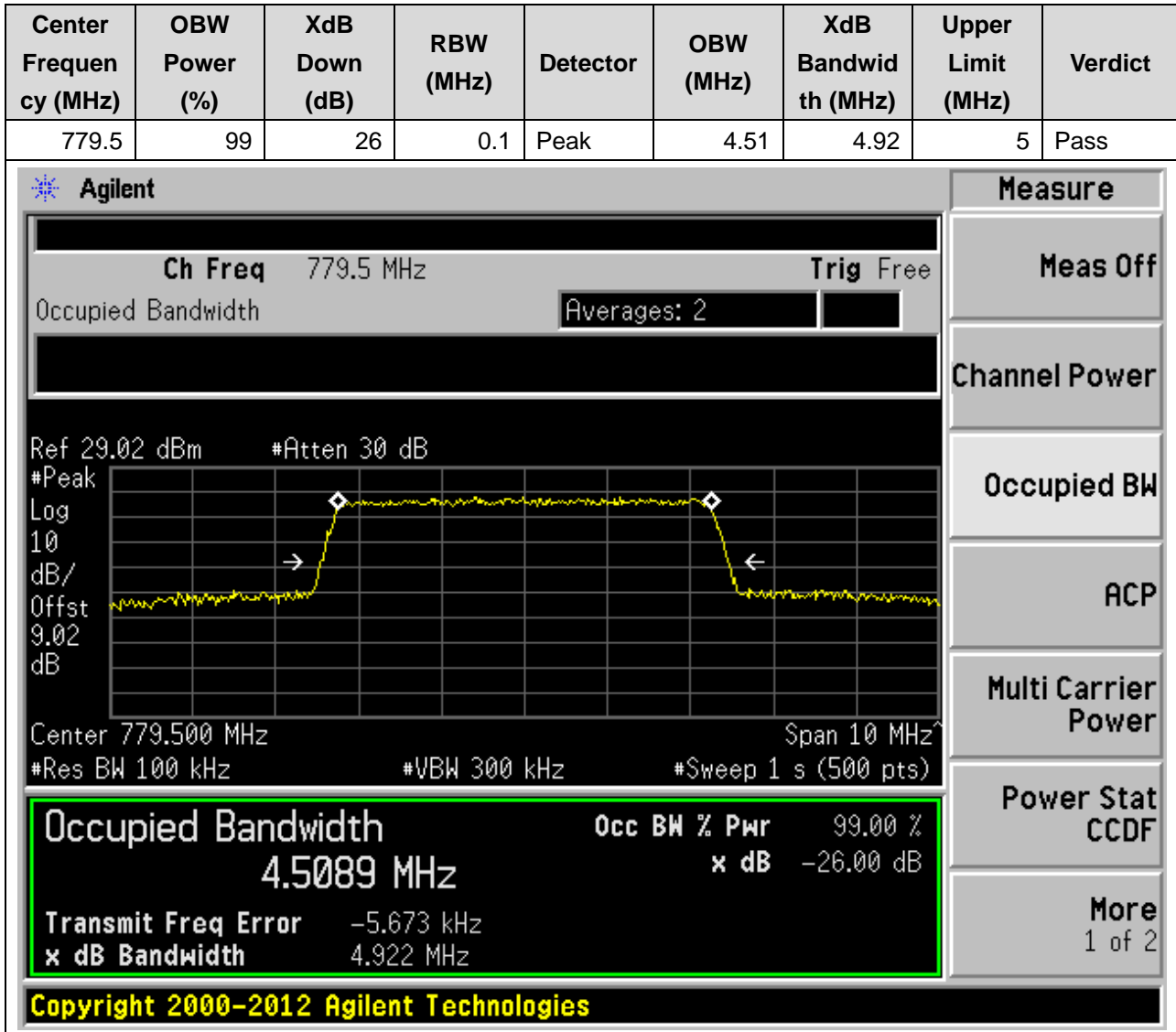
9.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23130, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
711	99	26	0.2	Peak	8.95	9.7	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 711 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.89 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.89 dB', 'Center 711.00 MHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: '8.9463 MHz' and 'Occ BW % Pwr 99.00 % x dB -26.00 dB'. Other parameters shown include 'Transmit Freq Error -12.857 kHz' and 'x dB Bandwidth 9.701 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'.

## 10. LTE\_Band13

### 10.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23205, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)



**10.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23205, 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
779.5	99	26	0.1	Peak	4.49	4.91	5	Pass

**Agilent**

Ch Freq 779.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.02 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 9.02 dB

Center 779.500 MHz Span 10 MHz

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

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

4.4917 MHz x dB -26.00 dB

Transmit Freq Error -69.212 Hz

x dB Bandwidth 4.913 MHz

**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

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**10.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23230, 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
782	99	26	0.1	Peak	4.49	4.9	5	Pass

Agilent
Measure

Ch Freq 782 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.02 dBm #Atten 30 dB

Center 782.000 MHz Span 10 MHz  
#Res BW 100 kHz #VBW 300 kHz #Sweep 1 s (500 pts)

**Occupied Bandwidth**

**4.4937 MHz**

Transmit Freq Error 846.629 Hz

x dB Bandwidth 4.898 MHz

**Meas Off**

**Channel Power**

**Occupied BW**

**ACP**

**Multi Carrier Power**

**Power Stat CCDF**

**More**  
1 of 2

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**10.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23230, Bandwidth:5, Modulation:16QAM, RB Number:25, RB Position:0)**

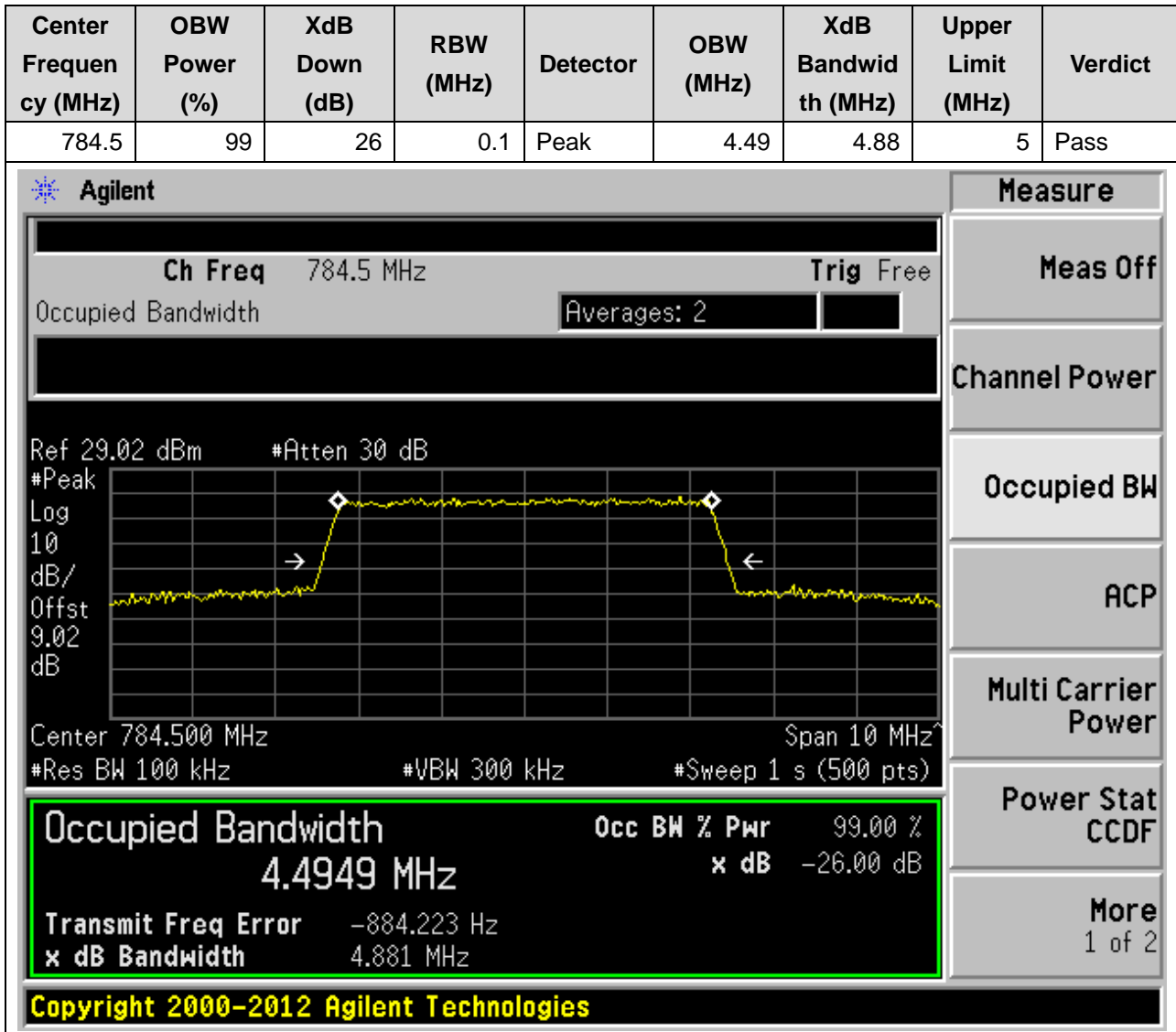
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
782	99	26	0.1	Peak	4.49	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. The main display shows a signal spectrum with a yellow trace. The center frequency is 782.000 MHz, and the span is 10 MHz. The resolution bandwidth (RBW) is 100 kHz, and the video bandwidth (VBW) is 300 kHz. The sweep time is 1 s (500 pts). The occupied bandwidth is measured as 4.4937 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is 776.670 Hz, and the XdB bandwidth is 4.895 MHz. The interface also shows various measurement buttons on the right side, such as '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 information: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.4937 MHz	x dB	-26.00 dB
Transmit Freq Error	776.670 Hz	
x dB Bandwidth	4.895 MHz	

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**10.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23255, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)**



**10.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23255, 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
784.5	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 784.500 MHz, and the span is 10 MHz. The resolution bandwidth (RBW) is 100 kHz, and the video bandwidth (VBW) is 300 kHz. The sweep time is 1 s (500 pts). The occupied bandwidth is measured as 4.4856 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is -4.654 kHz, and the XdB bandwidth is 4.904 MHz. The interface also shows 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 %
4.4856 MHz	x dB	-26.00 dB
Transmit Freq Error	-4.654 kHz	
x dB Bandwidth	4.904 MHz	

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**10.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23230, 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
782	99	26	0.2	Peak	8.95	9.81	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 782 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 29.02 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 9.02 dB', 'Center 782.00 MHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 8.9484 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 10.292 kHz', and 'x dB Bandwidth 9.814 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'.

**10.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23230, 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
782	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 spectrum with a yellow trace. The center frequency is 782.00 MHz and the span is 20 MHz. The occupied bandwidth is measured as 8.9538 MHz. The power is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is 13.887 kHz and the XdB bandwidth is 9.738 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 %
8.9538 MHz	x dB	-26.00 dB
Transmit Freq Error	13.887 kHz	
x dB Bandwidth	9.738 MHz	

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**10.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23205, 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
779.5	99	26	0.1	Peak	4.49	4.9	5	Pass

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

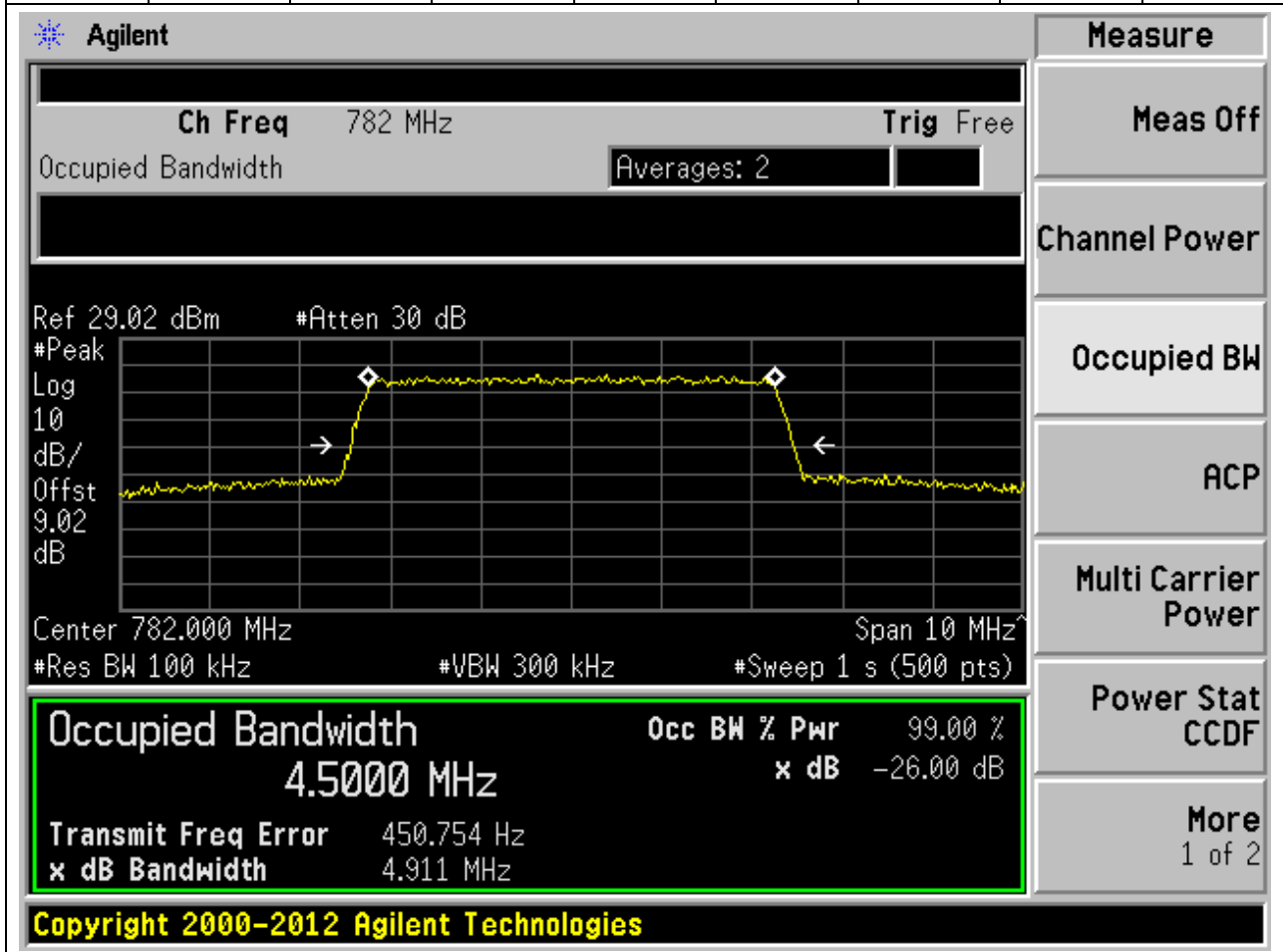
Measurement	Value
Occupied Bandwidth	4.4874 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-1.804 kHz
x dB Bandwidth	4.901 MHz

Additional parameters shown in the interface include: Ch Freq 779.5 MHz, Trig Free, Averages: 2, Ref 29.02 dBm, #Atten 30 dB, #Peak Log 10 dB/Offst 9.02 dB, Center 779.500 MHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, #Sweep 1 s (500 pts).

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**10.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23230, Bandwidth:5, Modulation:64QAM, RB Number:25, RB Position:0)**

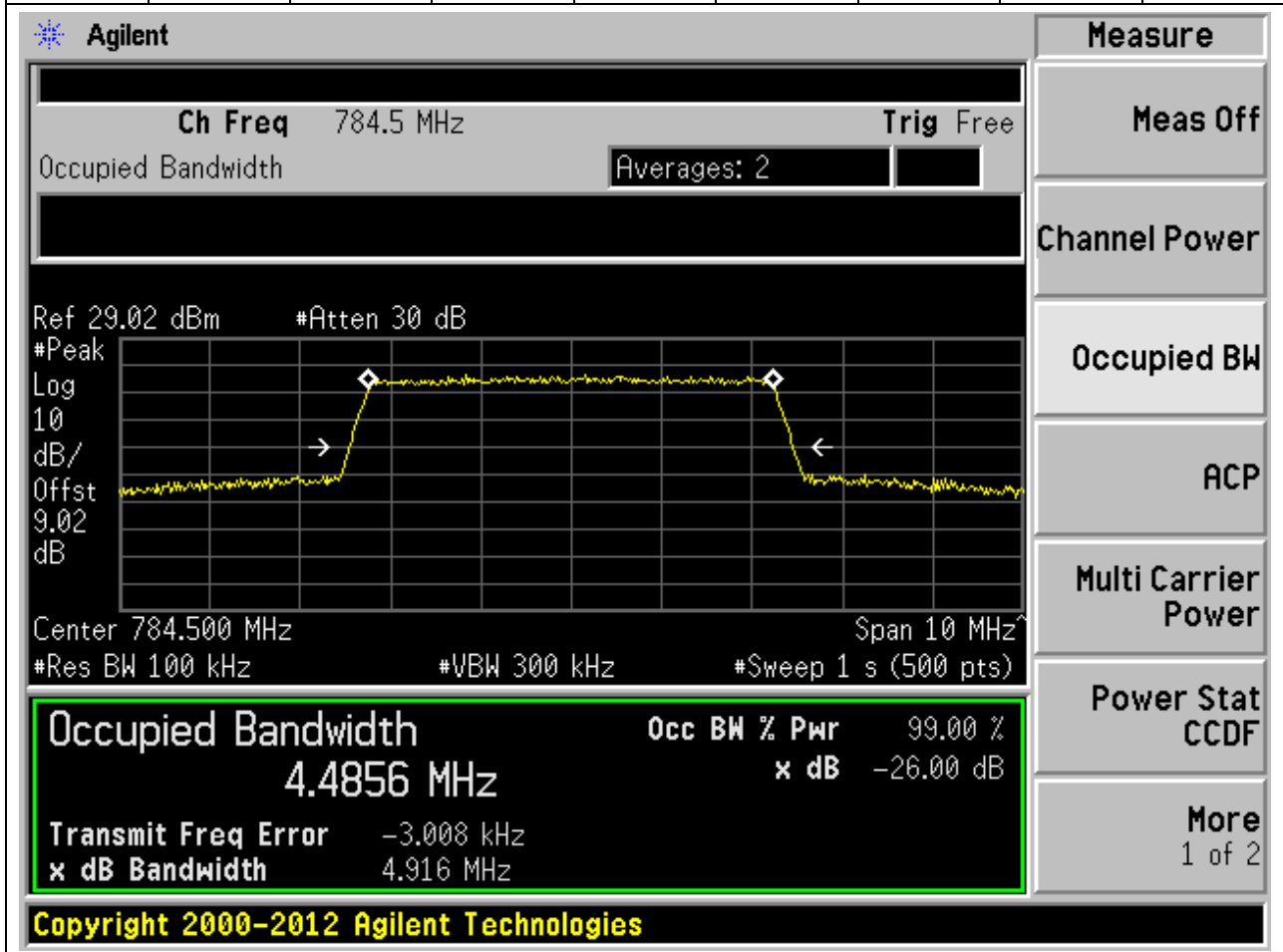
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
782	99	26	0.1	Peak	4.5	4.91	5	Pass





**10.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23255, 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
784.5	99	26	0.1	Peak	4.49	4.92	5	Pass



**10.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23230, 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
782	99	26	0.2	Peak	8.94	9.73	10	Pass

Agilent
Measure

Ch Freq 782 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 29.02 dBm    #Atten 30 dB

#Peak

Log 10

dB/Offst 9.02 dB

Center 782.00 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 %
8.9431 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	8.524 kHz	
<b>x dB Bandwidth</b>	9.733 MHz	

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Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

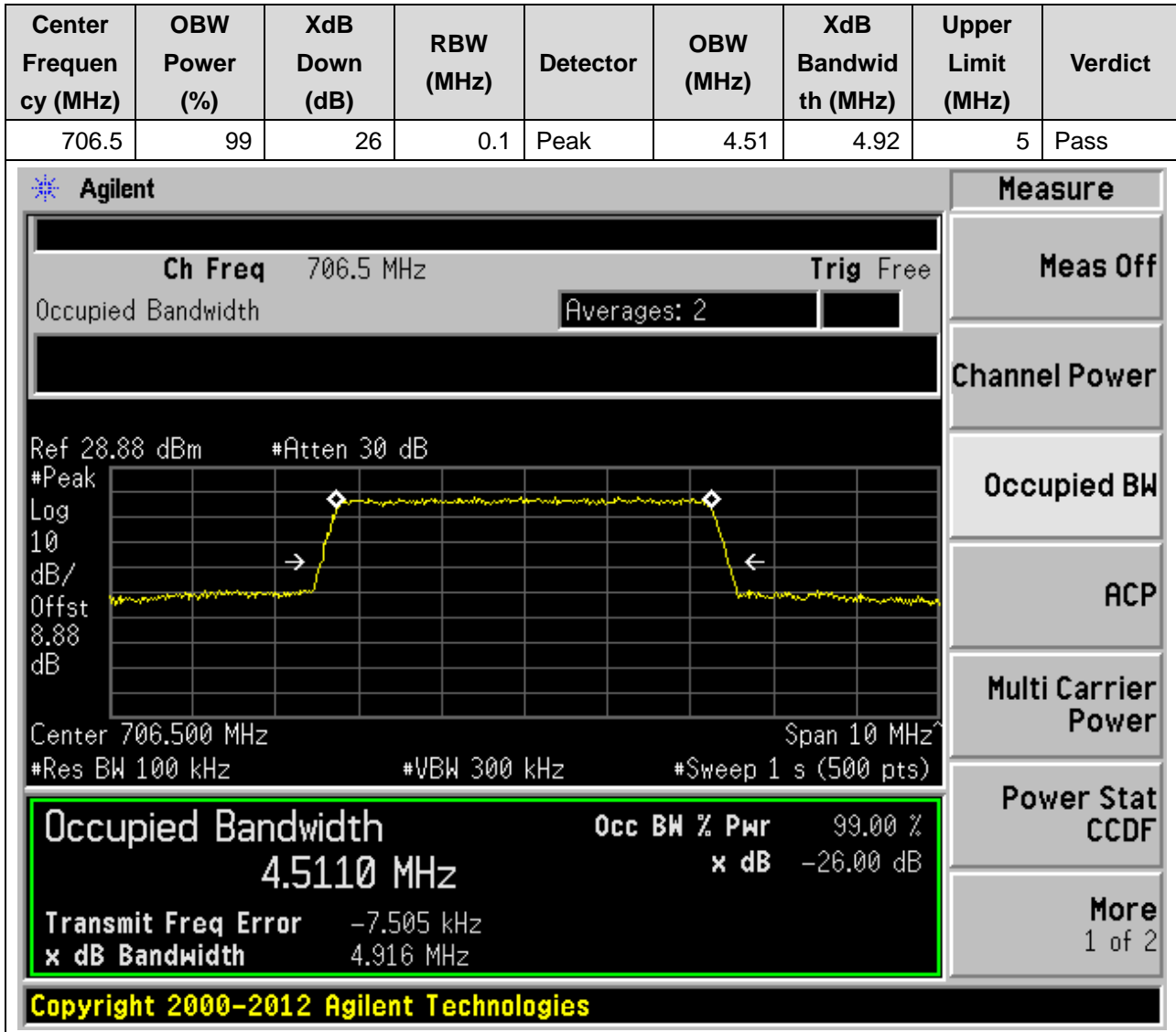
Power Stat CCDF

More

1 of 2

## 11. LTE\_Band17

### 11.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23755, Bandwidth:5, Modulation:QPSK, RB Number:25, RB Position:0)



11.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23755, 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
706.5	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 706.5 MHz' 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 parameters include 'Ref 28.88 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.88 dB', 'Center 706.500 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 4.4907 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -4.071 kHz', and 'x dB Bandwidth 4.911 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, the copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible.

**11.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23790, 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
710	99	26	0.1	Peak	4.5	4.89	5	Pass

Agilent

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

Ch Freq 710 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.89 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.89 dB

Center 710.000 MHz Span 10 MHz

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

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

4.4968 MHz x dB -26.00 dB

Transmit Freq Error 70.507 Hz

x dB Bandwidth 4.894 MHz

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**11.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23790, 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
710	99	26	0.1	Peak	4.49	4.96	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 710 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.89 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.89 dB', 'Center 710.000 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 4.4921 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 242.855 Hz', and 'x dB Bandwidth 4.960 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'.

**11.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23825, 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
713.5	99	26	0.1	Peak	4.49	4.89	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 713.5 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.89 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.89 dB', 'Center 713.500 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 4.4925 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -3.929 kHz', and 'x dB Bandwidth 4.893 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'.

**11.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23825, 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
713.5	99	26	0.1	Peak	4.49	4.89	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 713.5 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.89 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.89 dB', 'Center 713.500 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 4.4939 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -7.769 kHz', and 'x dB Bandwidth 4.886 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'.



**11.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23780, 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
709	99	26	0.2	Peak	8.96	9.82	10	Pass

Agilent

**Measure**

Ch Freq 709 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 28.89 dBm    #Atten 30 dB

Center 709.00 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 %
8.9643 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	820.287 Hz	
<b>x dB Bandwidth</b>	9.823 MHz	

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Meas Off

Channel Power

Occupied BW

ACP

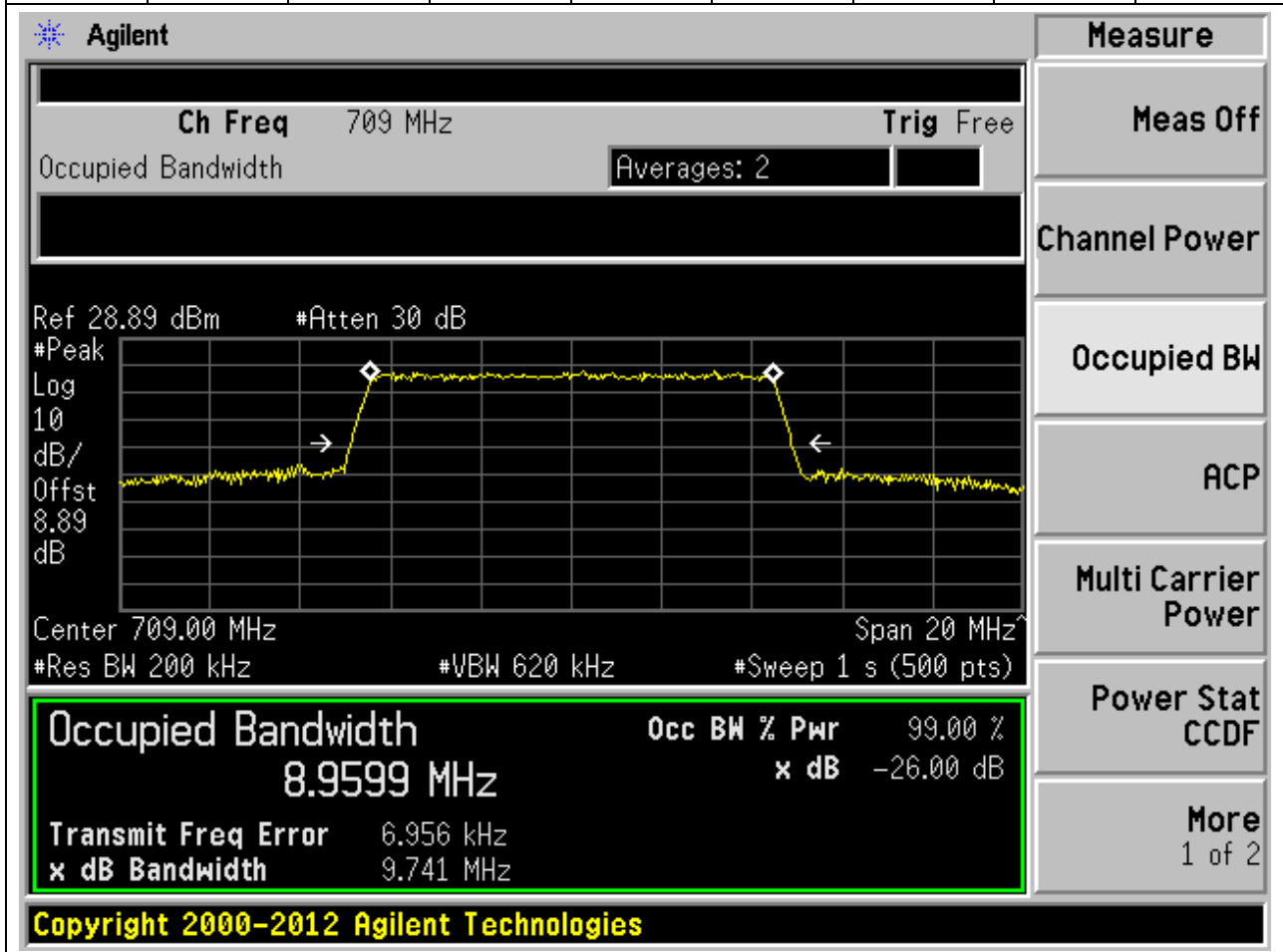
Multi Carrier Power

Power Stat CCDF

More  
1 of 2

11.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23780, 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
709	99	26	0.2	Peak	8.96	9.74	10	Pass



**11.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23790, 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
710	99	26	0.2	Peak	8.96	9.71	10	Pass

Agilent
Measure

Ch Freq 710 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 28.89 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
8.89

dB

Center 710.00 MHz
Span 20 MHz

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

Occupied Bandwidth
Occ BW % Pwr 99.00 %

8.9636 MHz
x dB -26.00 dB

Transmit Freq Error -2.671 kHz

x dB Bandwidth 9.709 MHz

Power Stat
CCDF

More
1 of 2

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**11.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23790, 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
710	99	26	0.2	Peak	8.94	9.7	10	Pass

Agilent
Measure

Ch Freq 710 MHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 28.89 dBm    #Atten 30 dB

#Peak

Log 10

dB/Offst 8.89 dB

Center 710.00 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 %
8.9432 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-4.986 kHz	
<b>x dB Bandwidth</b>	9.699 MHz	

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Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

**11.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23800, 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
711	99	26	0.2	Peak	8.97	9.7	10	Pass

Agilent

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

Ch Freq 711 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.89 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.89 dB

Center 711.00 MHz Span 20 MHz

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

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

8.9697 MHz x dB -26.00 dB

Transmit Freq Error 4.447 kHz

x dB Bandwidth 9.705 MHz

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**11.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:23800, 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
711	99	26	0.2	Peak	8.94	9.69	10	Pass

Agilent

**Measure**

Ch Freq 711 MHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 28.89 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
8.89

dB

Center 711.00 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 %
8.9399 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-9.906 kHz	
<b>x dB Bandwidth</b>	9.693 MHz	

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

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11.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23755, 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
706.5	99	26	0.1	Peak	4.5	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 706.5 MHz, and the span is 10 MHz. The occupied bandwidth is measured as 4.4961 MHz. The power is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -672.843 Hz, and the XdB bandwidth is 4.901 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 1 of 2'. The bottom of the screen shows the copyright notice: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.4961 MHz	x dB	-26.00 dB
Transmit Freq Error	-672.843 Hz	
x dB Bandwidth	4.901 MHz	

**11.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23790, 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
710	99	26	0.1	Peak	4.5	4.92	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 710 MHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters include 'Ref 28.89 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 8.89 dB', 'Center 710.000 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 4.4993 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 2.500 kHz', and 'x dB Bandwidth 4.919 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'.



**11.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23825, 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
713.5	99	26	0.1	Peak	4.48	4.9	5	Pass

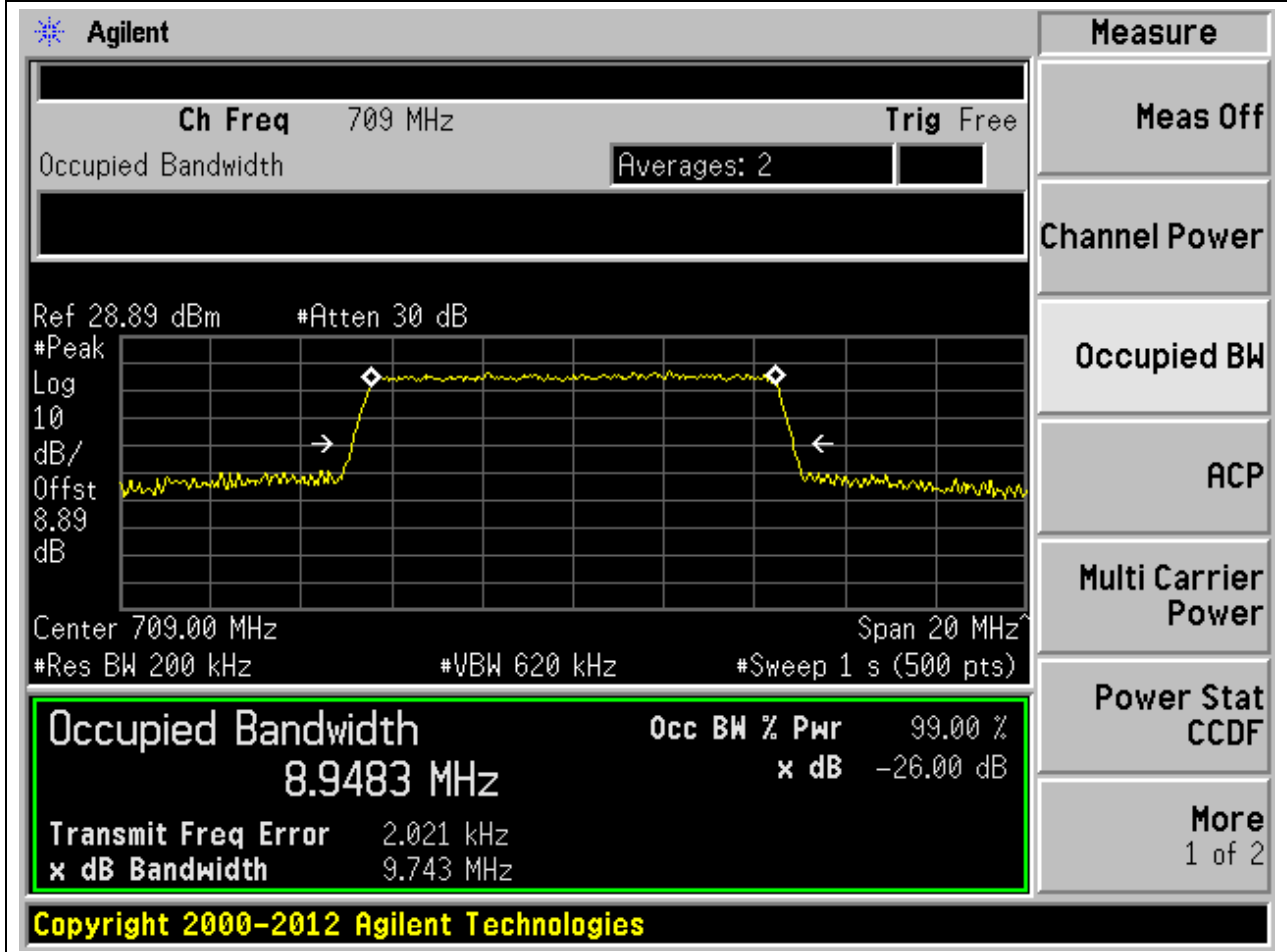
The screenshot displays the Agilent spectrum analyzer interface. The main display shows a signal spectrum with a yellow trace. The center frequency is 713.500 MHz, and the span is 10 MHz. The occupied bandwidth is measured as 4.4848 MHz, which is 99.00% of the 4.900 MHz channel bandwidth. The power level is -26.00 dB. The interface includes various measurement controls and a list of measurement options on the right side.

Occupied Bandwidth		Occ BW % Pwr	99.00 %
4.4848 MHz		x dB	-26.00 dB
Transmit Freq Error	-7.934 kHz		
x dB Bandwidth	4.900 MHz		

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**11.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23780, 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
709	99	26	0.2	Peak	8.95	9.74	10	Pass



**11.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23790, 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
710	99	26	0.2	Peak	8.94	9.72	10	Pass

Agilent
Measure

Ch Freq 710 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 28.89 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 8.89 dB

Center 710.00 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**

**8.9353 MHz**

Transmit Freq Error -3.482 kHz

x dB Bandwidth 9.721 MHz

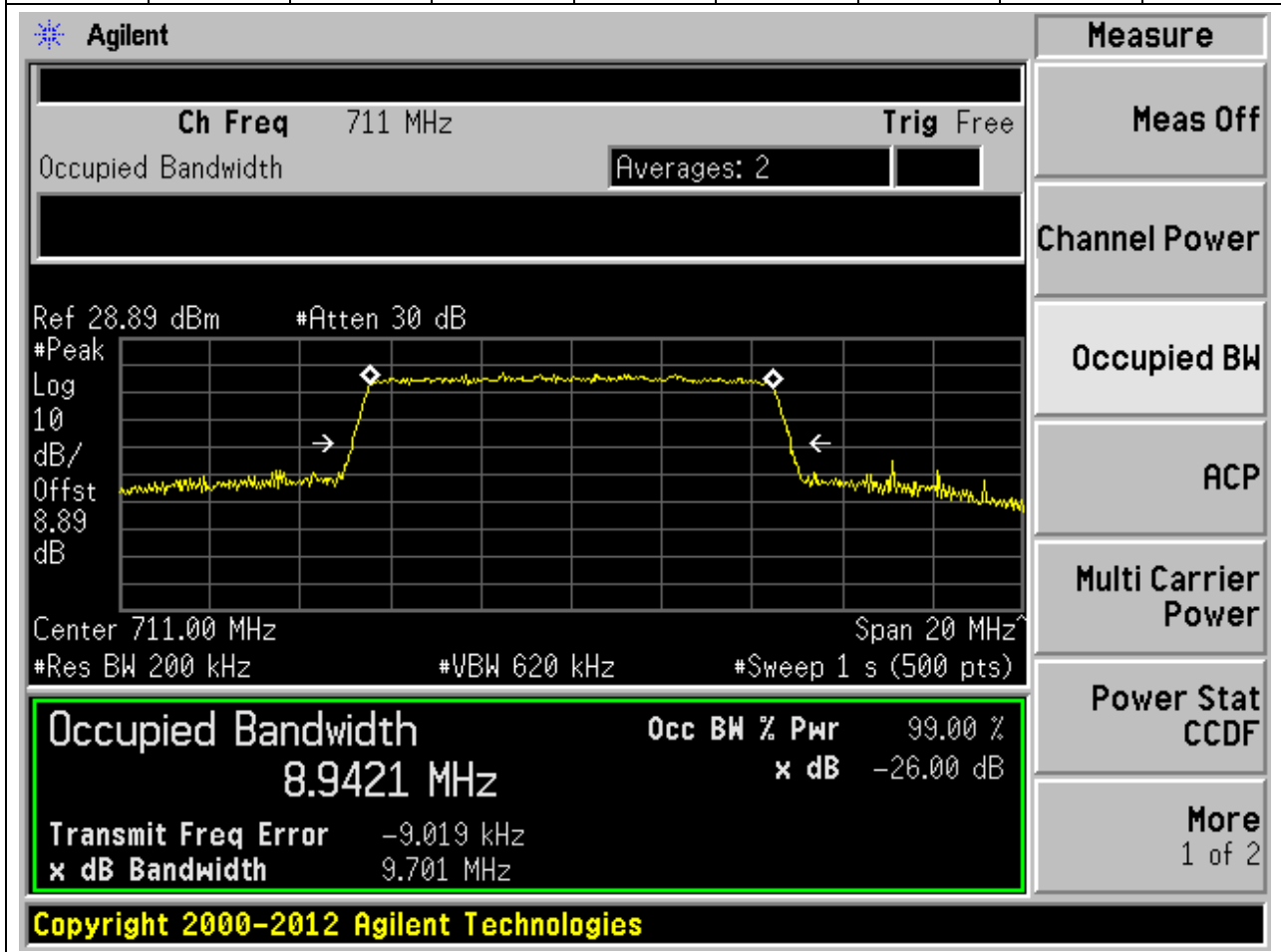
Occ BW % Pwr 99.00 %

x dB -26.00 dB

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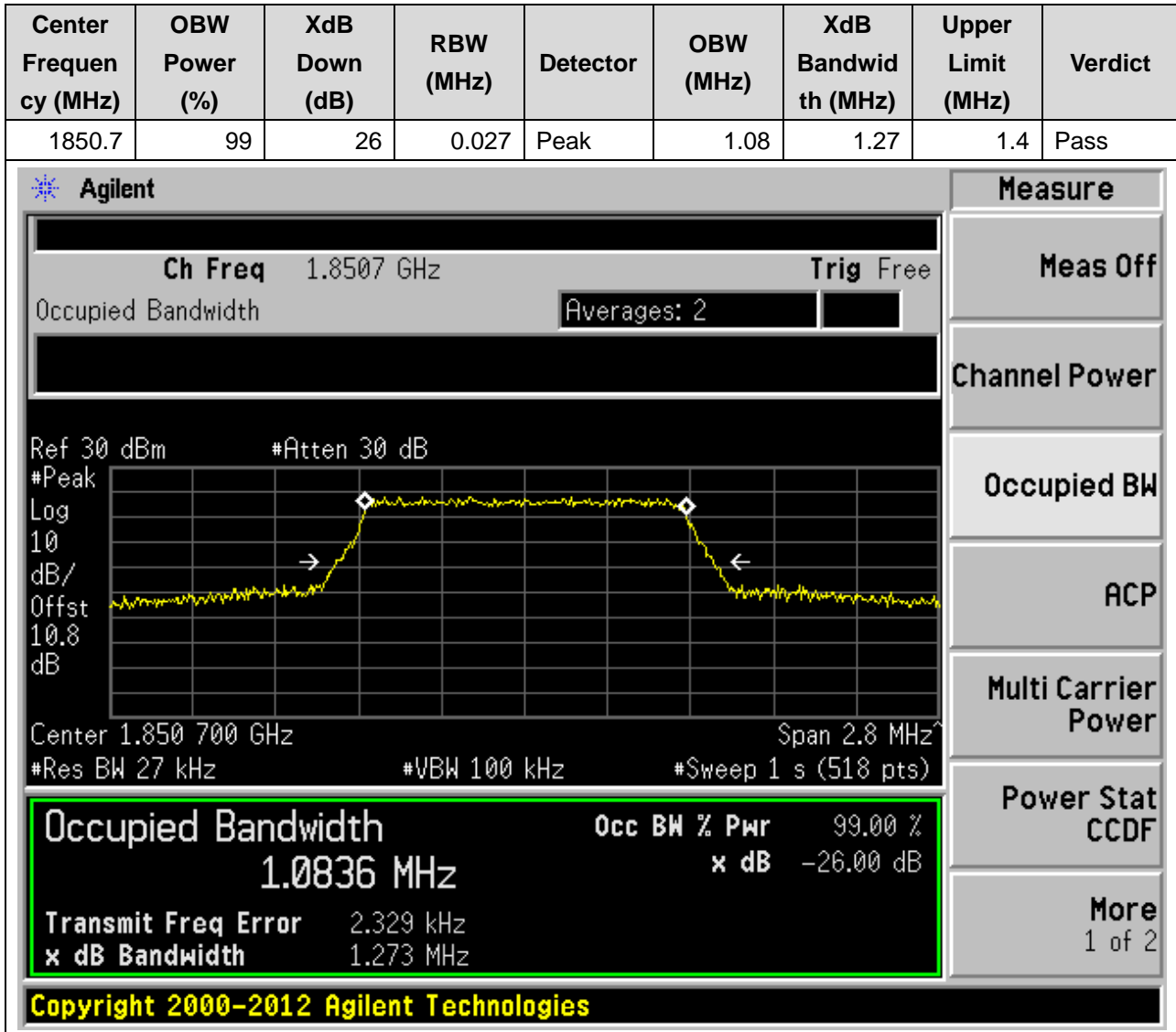
11.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:23800, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
711	99	26	0.2	Peak	8.94	9.7	10	Pass



## 4. LTE\_Band25

### 4.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26047, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)



**4.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26047, 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
1850.7	99	26	0.027	Peak	1.09	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 1.8507 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.850 700 GHz Span 2.8 MHz

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

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

1.0891 MHz

x dB -26.00 dB

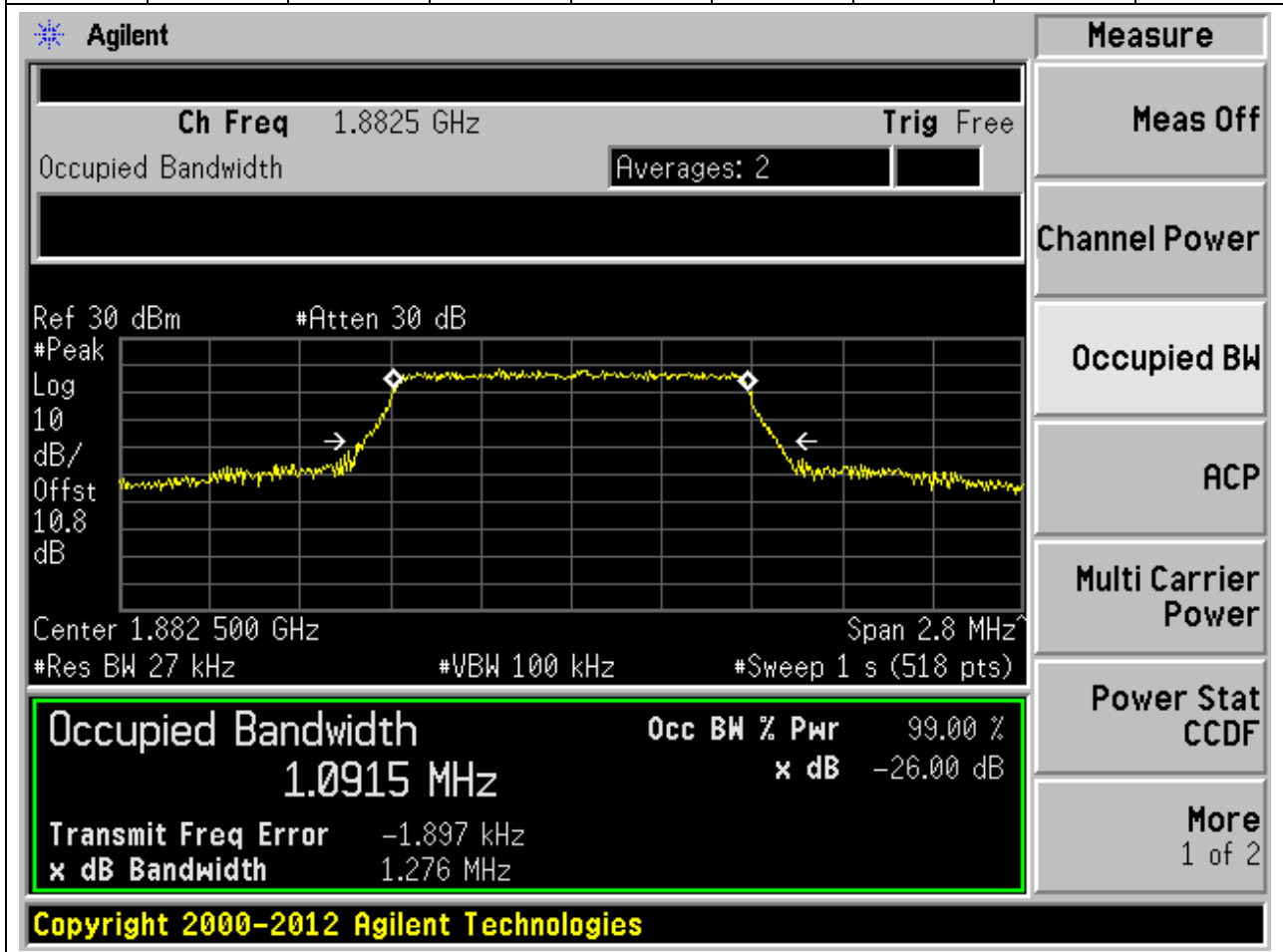
Transmit Freq Error -227.094 Hz

x dB Bandwidth 1.276 MHz

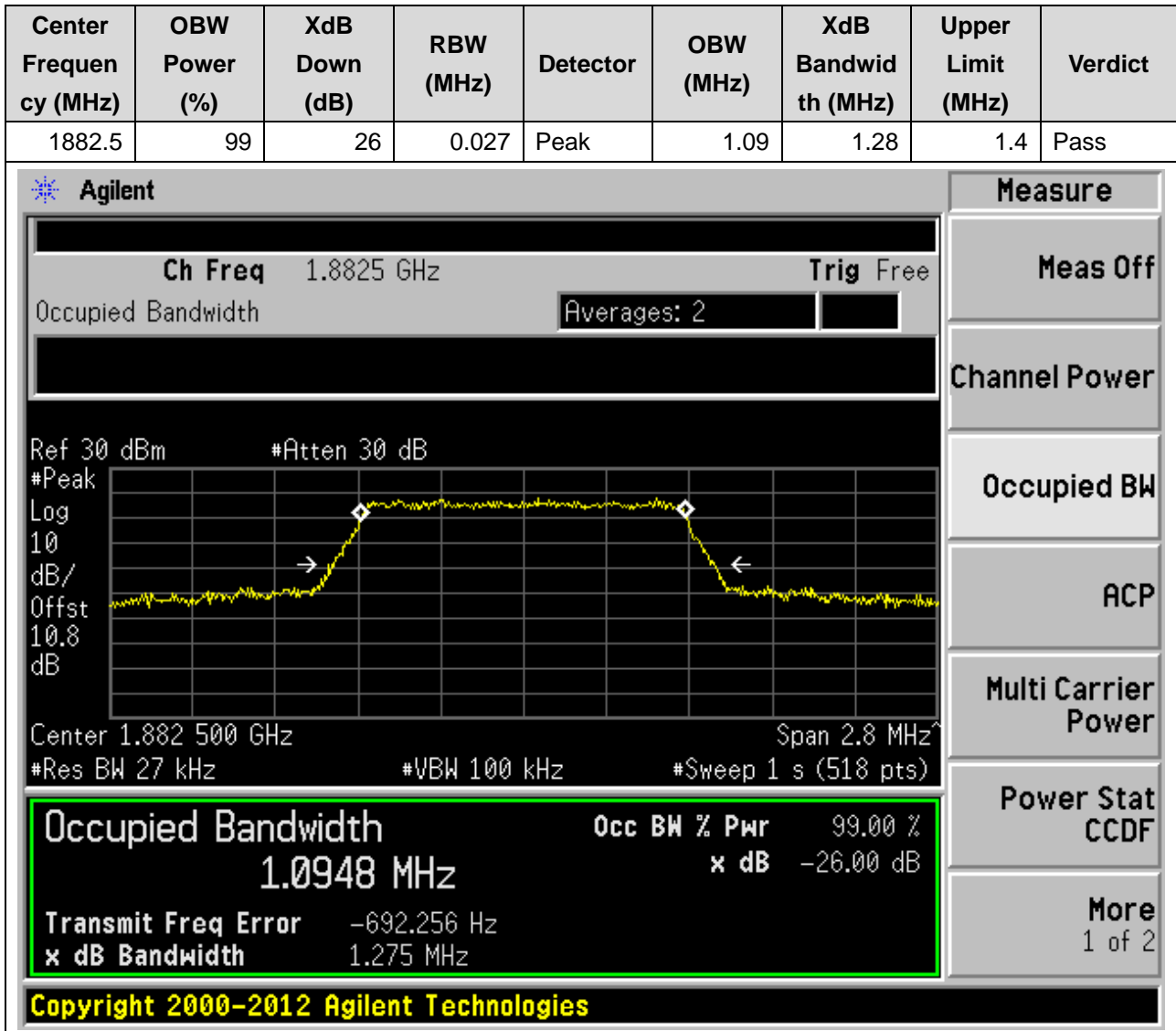
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**4.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)**

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1882.5	99	26	0.027	Peak	1.09	1.28	1.4	Pass



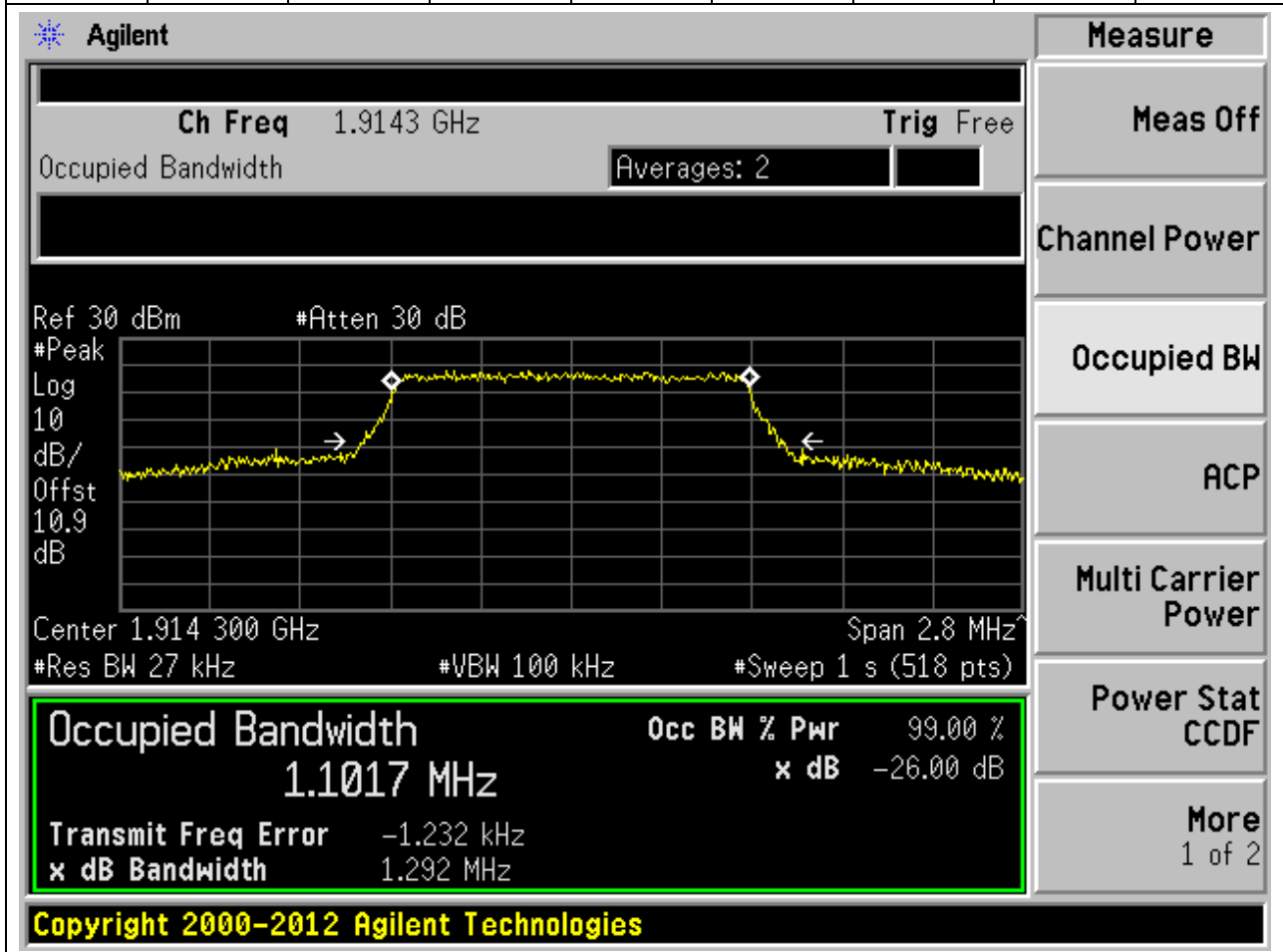
**4.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, Bandwidth:1.4, Modulation:16QAM, RB Number:6, RB Position:0)**





**4.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26683, 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
1914.3	99	26	0.027	Peak	1.1	1.29	1.4	Pass



**4.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26683, 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
1914.3	99	26	0.027	Peak	1.09	1.28	1.4	Pass

Agilent
Measure

**Ch Freq** 1.9143 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

10.9

dB

Center 1.914 300 GHz      Span 2.8 MHz

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

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

1.0880 MHz

x dB      -26.00 dB

Transmit Freq Error      120.822 Hz

x dB Bandwidth      1.277 MHz

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**4.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26055, 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
1851.5	99	26	0.062	Peak	2.69	2.99	3	Pass

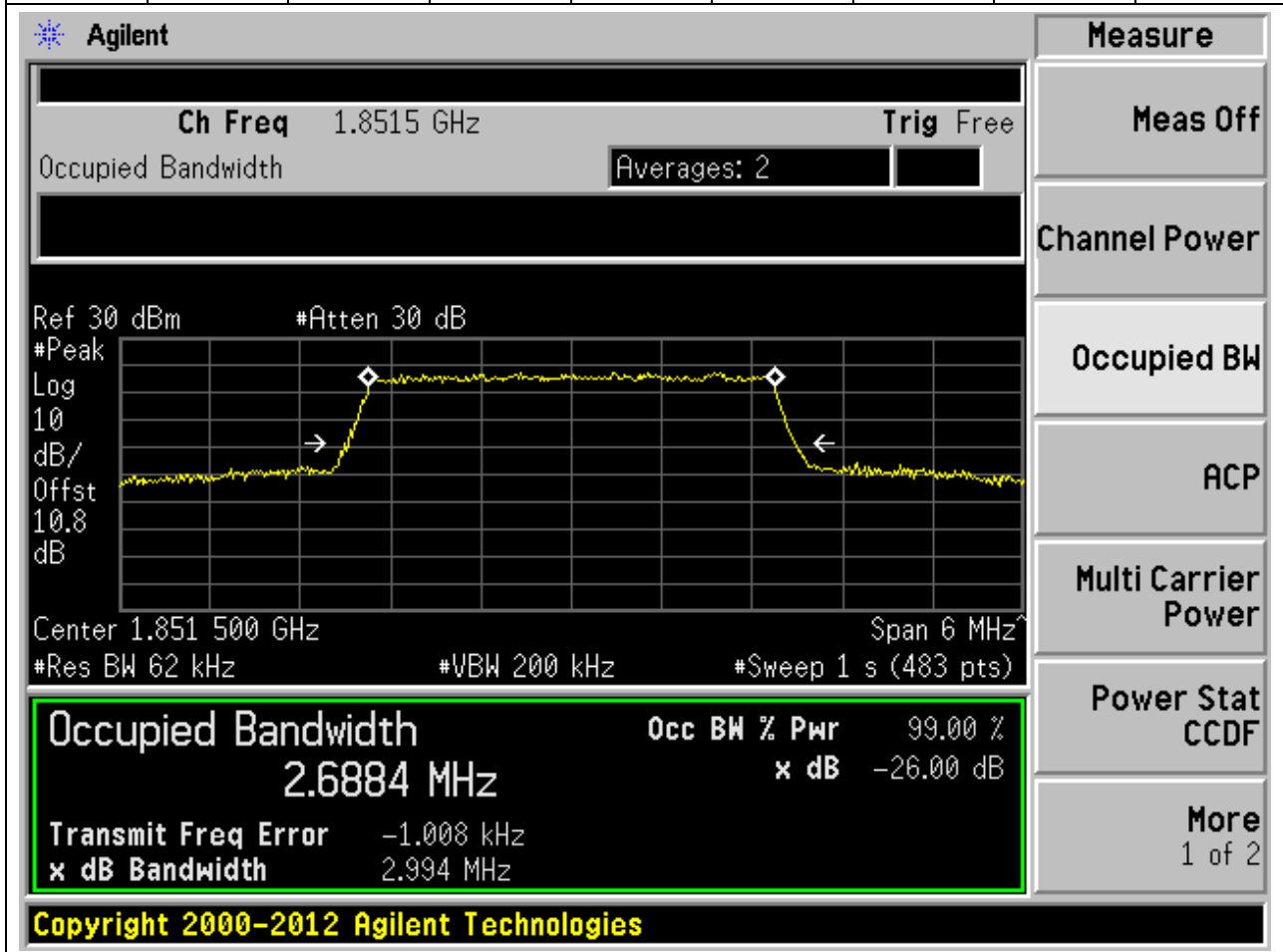
The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8515 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot is set to 'Log' scale with 'dB/Offst 10.8 dB'. The center frequency is 1.851500 GHz and the span is 6 MHz. The resolution bandwidth (Res BW) is 62 kHz, the video bandwidth (VBW) is 200 kHz, and the sweep time is 1 s (483 pts). The plot shows a signal with a peak at approximately 1.8515 GHz. The occupied bandwidth is highlighted in a green box, showing a value of 2.6866 MHz. The percentage of power within this bandwidth is 99.00%, and the XdB bandwidth is -26.00 dB. The transmit frequency error is 3.528 kHz. The XdB bandwidth is 2.991 MHz. The interface also 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 1 of 2'. The bottom of the screen displays the copyright notice 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
2.6866 MHz	x dB	-26.00 dB
Transmit Freq Error		3.528 kHz
x dB Bandwidth		2.991 MHz

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**4.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26055, 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
1851.5	99	26	0.062	Peak	2.69	2.99	3	Pass



**4.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	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 1.8825 GHz. 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>2.6897 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		-639.294 Hz
<b>x dB Bandwidth</b>		2.976 MHz

Other parameters shown include: Ch Freq 1.8825 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log 10, dB/Offst 10.8 dB, Center 1.882500 GHz, Span 6 MHz, #Res BW 62 kHz, #VBW 200 kHz, #Sweep 1 s (483 pts).

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**4.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	99	26	0.062	Peak	2.69	2.98	3	Pass

Agilent
Measure

Ch Freq 1.8825 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.8 dB

Center 1.882 500 GHz 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**

**2.6908 MHz**

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error 492.836 Hz

x dB Bandwidth 2.975 MHz

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**4.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26675, 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
1913.5	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 1.9135 GHz' and 'Trig Free'. Below this, the 'Occupied Bandwidth' measurement is shown with 'Averages: 2'. 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', '10.9 dB', 'Center 1.913 500 GHz', 'Span 6 MHz', '#Res BW 62 kHz', '#VBW 200 kHz', and '#Sweep 1 s (483 pts)'. A summary box at the bottom left, highlighted with a green border, contains the following data:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
2.6868 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		451.636 Hz
<b>x dB Bandwidth</b>		2.966 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 screenshot, the text 'Copyright 2000-2012 Agilent Technologies' is visible.

**4.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26675, 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
1913.5	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 1.9135 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 10.9 dB

Center 1.913 500 GHz Span 6 MHz

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

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

2.6856 MHz

x dB -26.00 dB

Transmit Freq Error -3.481 kHz

x dB Bandwidth 2.985 MHz

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**4.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26065, 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
1852.5	99	26	0.1	Peak	4.5	4.93	5	Pass

Agilent

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

Ch Freq 1.8525 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.852 500 GHz Span 10 MHz

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

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

4.5040 MHz

x dB -26.00 dB

Transmit Freq Error -4.560 kHz

x dB Bandwidth 4.927 MHz

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4.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26065, 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
1852.5	99	26	0.1	Peak	4.49	4.9	5	Pass

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

Measurement	Value
Occupied Bandwidth	4.4859 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	3.005 kHz
x dB Bandwidth	4.896 MHz

Additional parameters shown in the interface include: Ch Freq 1.8525 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log 10, dB/Offst 10.8 dB, Center 1.852 500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, #Sweep 1 s (500 pts).

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**4.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	99	26	0.1	Peak	4.5	4.91	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 1.8825 GHz. The occupied bandwidth is measured as 4.5003 MHz. The power is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -3.201 kHz and the XdB bandwidth is 4.908 MHz. The interface includes various measurement controls and a 'Measure' menu on the right.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.5003 MHz	x dB	-26.00 dB
Transmit Freq Error	-3.201 kHz	
x dB Bandwidth	4.908 MHz	

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**4.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	99	26	0.1	Peak	4.5	4.9	5	Pass

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

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
4.4954 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		-615.214 Hz
<b>x dB Bandwidth</b>		4.898 MHz

Additional parameters shown in the interface include: Ch Freq 1.8825 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log, 10 dB/Offst, 10.8 dB, Center 1.882 500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, #Sweep 1 s (500 pts).

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**4.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26665, 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
1912.5	99	26	0.1	Peak	4.49	4.89	5	Pass

Agilent

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

Ch Freq 1.9125 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.912 500 GHz Span 10 MHz

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

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

4.4913 MHz x dB -26.00 dB

Transmit Freq Error -5.439 kHz

x dB Bandwidth 4.890 MHz

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4.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26665, 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
1912.5	99	26	0.1	Peak	4.49	4.89	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.9125 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', '10.9 dB', 'Center 1.912 500 GHz', '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 4.4882 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -7.967 kHz', and 'x dB Bandwidth 4.892 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'.

**4.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26090, 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
1855	99	26	0.2	Peak	8.96	9.76	10	Pass

Agilent

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

Ch Freq 1.855 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.855 00 GHz 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 %
8.9646 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	13.134 kHz	
<b>x dB Bandwidth</b>	9.760 MHz	

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**4.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26090, 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
1855	99	26	0.2	Peak	8.95	9.78	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.855 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 parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 10.8 dB', 'Center 1.855 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 8.9542 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error 11.347 kHz', and 'x dB Bandwidth 9.782 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, the copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible.



**4.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	99	26	0.2	Peak	8.96	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 1.8825 GHz Trig Free

Occupied Bandwidth Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.882 50 GHz Span 20 MHz

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

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

8.9571 MHz x dB -26.00 dB

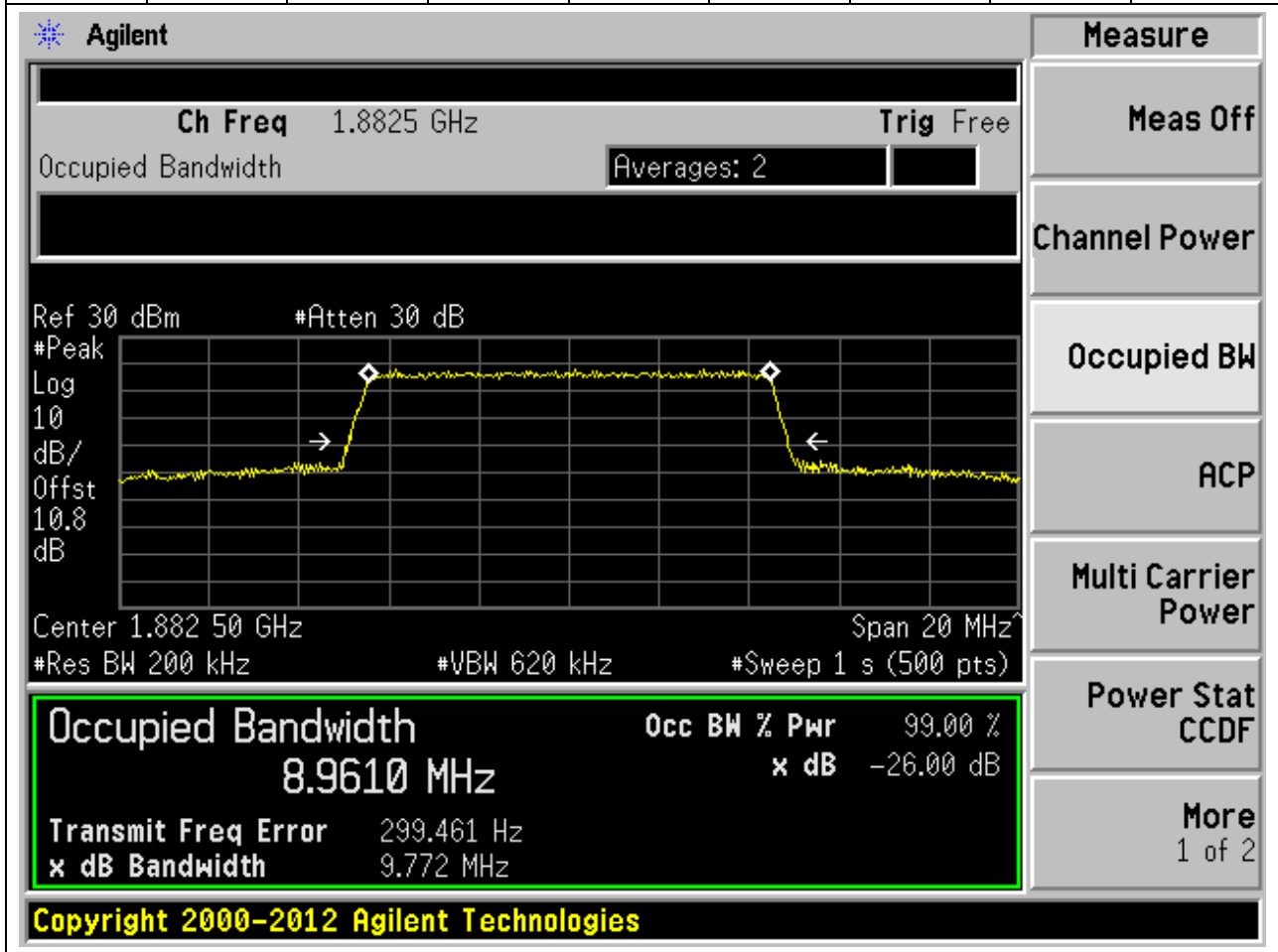
Transmit Freq Error -1.258 kHz

x dB Bandwidth 9.784 MHz

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**4.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	99	26	0.2	Peak	8.96	9.77	10	Pass



**4.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26640, 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
1910	99	26	0.2	Peak	8.96	9.79	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.91 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 10.9 dB', 'Center 1.910 00 GHz', 'Span 20 MHz', '#Res BW 200 kHz', '#VBW 620 kHz', and '#Sweep 1 s (500 pts)'. A green box highlights the measurement results:

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
8.9647 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>		2.377 kHz
<b>x dB Bandwidth</b>		9.787 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, the copyright notice reads 'Copyright 2000-2012 Agilent Technologies'.

**4.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26640, 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
1910	99	26	0.2	Peak	8.97	9.76	10	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 1.91 GHz and a span of 20 MHz. The trace shows a signal with a flat top and sloping sides, characteristic of a modulated signal. The measurement results are displayed in a green-bordered box at the bottom of the screen.

Occupied Bandwidth	Occ BW % Pwr	X dB
8.9750 MHz	99.00 %	-26.00 dB

Additional measurement data shown in the green box:

- Transmit Freq Error: -8.283 kHz
- x dB Bandwidth: 9.761 MHz

The right-hand side of the interface features a 'Measure' menu with the following options: Meas Off, Channel Power, Occupied BW, ACP, Multi Carrier Power, Power Stat CCDF, and More (1 of 2).

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**4.25. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26115, 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
1857.5	99	26	0.3	Peak	13.45	14.66	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8575 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 parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log', '10 dB/Offst', and '10.8 dB'. The plot shows a signal with a peak at approximately 1.8575 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 13.4457 MHz. Other parameters shown include 'Transmit Freq Error 15.887 kHz' and 'x dB Bandwidth 14.659 MHz'. The 'Occupied Bandwidth' summary table shows 'Occ BW % Pwr 99.00 %' and 'x dB -26.00 dB'. 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'. The copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible at the bottom.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
13.4457 MHz	x dB	-26.00 dB
Transmit Freq Error	15.887 kHz	
x dB Bandwidth	14.659 MHz	

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**4.26. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26115, 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
1857.5	99	26	0.3	Peak	13.44	14.65	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8575 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 plot shows a signal with a peak at approximately 1.8575 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 13.4387 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. Other parameters shown include 'Transmit Freq Error 10.601 kHz' and 'x dB Bandwidth 14.645 MHz'. The bottom of the screen shows the copyright notice 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	x dB
13.4387 MHz	99.00 %	-26.00 dB

**4.27. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	99	26	0.3	Peak	13.46	14.58	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.8825 GHz. The main display shows a spectrum plot with a yellow trace representing the signal. The plot is set to a reference level of 30 dBm and an attenuation of 30 dB. The occupied bandwidth is highlighted in a green box, showing a value of 13.4559 MHz. The percentage of power within this bandwidth is 99.00%, and the XdB bandwidth is -26.00 dB. Other parameters shown include a transmit frequency error of 1.127 kHz and an XdB bandwidth of 14.584 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'.

Occupied Bandwidth	Occ BW % Pwr	X dB
13.4559 MHz	99.00 %	-26.00 dB

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**4.28. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	99	26	0.3	Peak	13.43	14.54	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8825 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', and '10.8 dB'. The plot shows a signal with a peak at approximately 1.8825 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 13.4272 MHz. Other parameters shown include 'Transmit Freq Error -397.356 Hz' and 'x dB Bandwidth 14.538 MHz'. The 'Occupied Bandwidth' summary table is as follows:

Occupied Bandwidth	Occ BW % Pwr	x dB
13.4272 MHz	99.00 %	-26.00 dB

Additional parameters shown in the summary include 'Transmit Freq Error -397.356 Hz' and 'x dB Bandwidth 14.538 MHz'. The interface also shows 'Center 1.882 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 1 s (500 pts)'. 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 copyright notice at the bottom reads 'Copyright 2000-2012 Agilent Technologies'.



**4.29. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26615, 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
1907.5	99	26	0.3	Peak	13.43	14.69	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.9075 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 10.9 dB', 'Center 1.907 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4335 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other parameters shown are 'Transmit Freq Error 4.554 kHz' and 'x dB Bandwidth 14.692 MHz'. The bottom of the screen shows 'Copyright 2000-2012 Agilent Technologies'.

**4.30. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26615, 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
1907.5	99	26	0.3	Peak	13.42	14.58	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, the channel frequency is 1.9075 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 300 kHz, and a video bandwidth of 1 MHz. The span is 30 MHz. The occupied bandwidth is highlighted in a green box, showing a value of 13.4241 MHz. The percentage of power within this bandwidth is 99.00%, and the XdB bandwidth is -26.00 dB. Other parameters shown include a transmit frequency error of 930.456 Hz and an XdB bandwidth of 14.583 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'.

Occupied Bandwidth	Occ BW % Pwr	X dB
13.4241 MHz	99.00 %	-26.00 dB

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**4.31. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26140, 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
1860	99	26	0.39	Peak	17.93	19.35	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.86 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 10.9 dB', 'Center 1.860 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 1 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9336 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 22.163 kHz' and 'x dB Bandwidth 19.354 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'.

**4.32. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26140, 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
1860	99	26	0.39	Peak	17.91	19.31	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.86 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 10.9 dB', 'Center 1.860 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 1 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9129 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 22.395 kHz' and 'x dB Bandwidth 19.312 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'.

**4.33. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	99	26	0.39	Peak	17.92	19.33	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8825 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', '10.8 dB', 'Center 1.882 50 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 1 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9195 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error 14.636 kHz' and 'x dB Bandwidth 19.334 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'.

**4.34. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26365, 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
1882.5	99	26	0.39	Peak	17.92	19.35	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8825 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 10.8 dB', 'Center 1.882 50 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 1 s (512 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 17.9152 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other measurements shown include 'Transmit Freq Error 6.622 kHz' and 'x dB Bandwidth 19.349 MHz'. 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'.

**4.35. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26590, 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
1905	99	26	0.39	Peak	17.88	19.39	20	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.905 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 parameters include 'Ref 30 dBm', '#Atten 30 dB', 'Log', '10 dB/Offst', '10.9 dB', 'Center 1.905 00 GHz', 'Span 40 MHz', '#Res BW 390 kHz', '#VBW 1.2 MHz', and '#Sweep 1 s (512 pts)'. A green box highlights the measurement results: 'Occupied Bandwidth 17.8828 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -11.869 kHz', and 'x dB Bandwidth 19.395 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, the copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible.

**4.36. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26590, 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
1905	99	26	0.39	Peak	17.89	19.31	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 1.905 GHz, and the span is 40 MHz. The occupied bandwidth is measured as 17.8898 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is -9.201 kHz, and the XdB bandwidth is 19.308 MHz. The interface includes various measurement controls and a 'Measure' menu on the right.

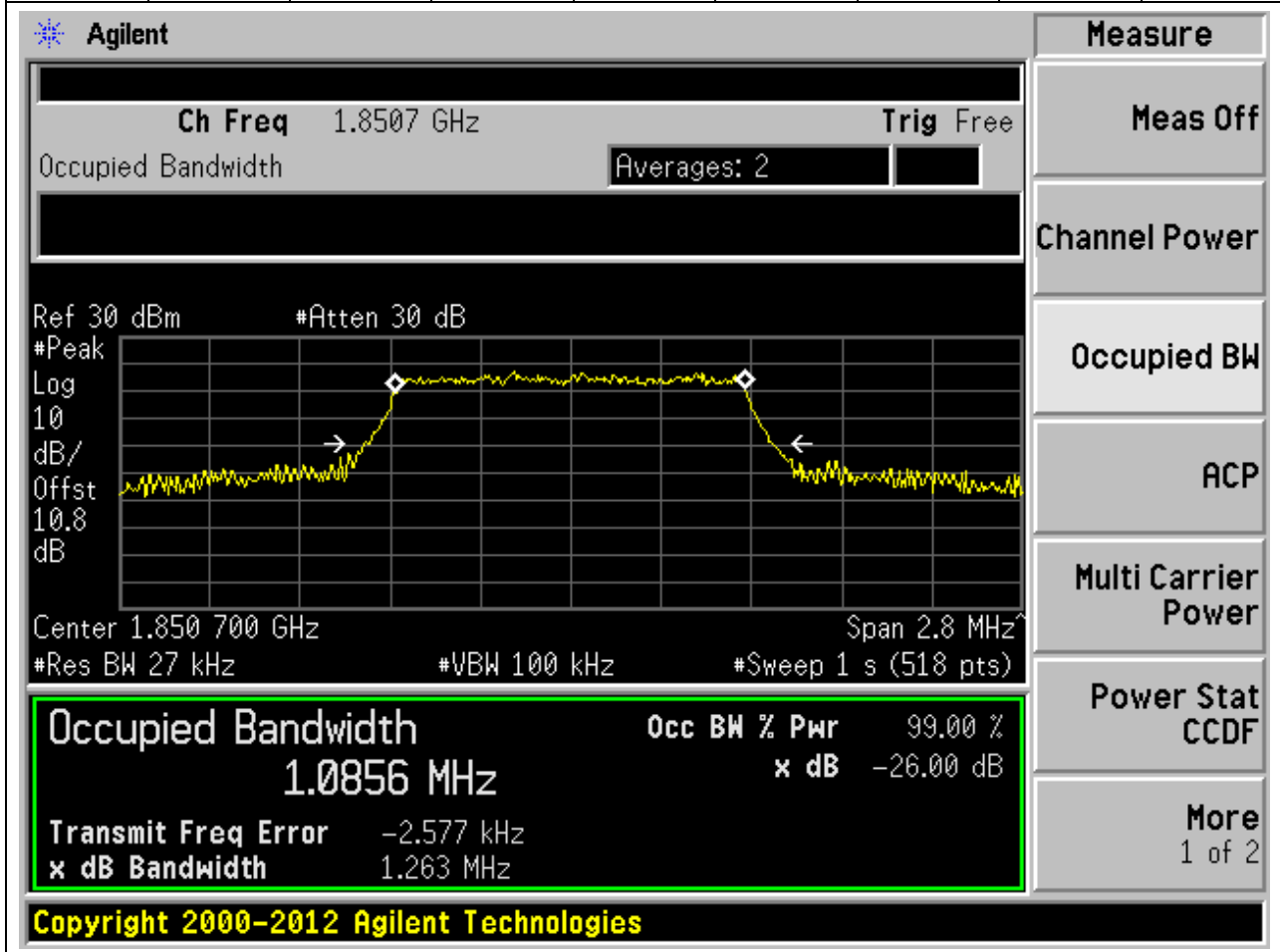
Occupied Bandwidth	Occ BW % Pwr	99.00 %
17.8898 MHz	x dB	-26.00 dB
Transmit Freq Error	-9.201 kHz	
x dB Bandwidth	19.308 MHz	

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**4.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26047, 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
1850.7	99	26	0.027	Peak	1.09	1.26	1.4	Pass



**4.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26365, 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
1882.5	99	26	0.027	Peak	1.09	1.27	1.4	Pass

Agilent

Measure

Ch Freq 1.8825 GHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.8

dB

Center 1.882 500 GHz
Span 2.8 MHz

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

**Occupied Bandwidth**

**1.0878 MHz**

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Transmit Freq Error 1.597 kHz

x dB Bandwidth 1.271 MHz

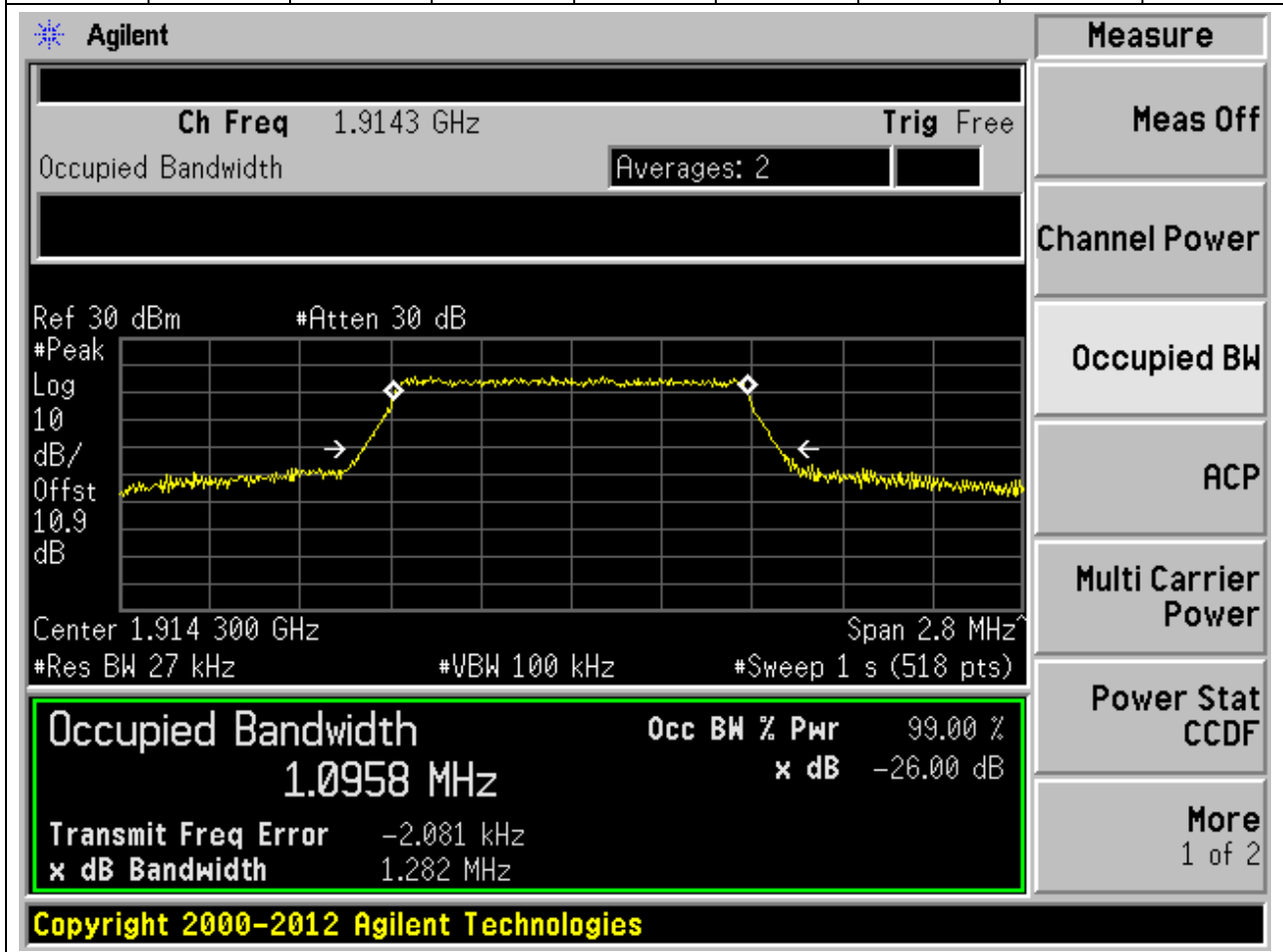
Power Stat
CCDF

More
1 of 2

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**4.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26683, 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
1914.3	99	26	0.027	Peak	1.1	1.28	1.4	Pass



4.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26055, 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
1851.5	99	26	0.062	Peak	2.69	2.98	3	Pass

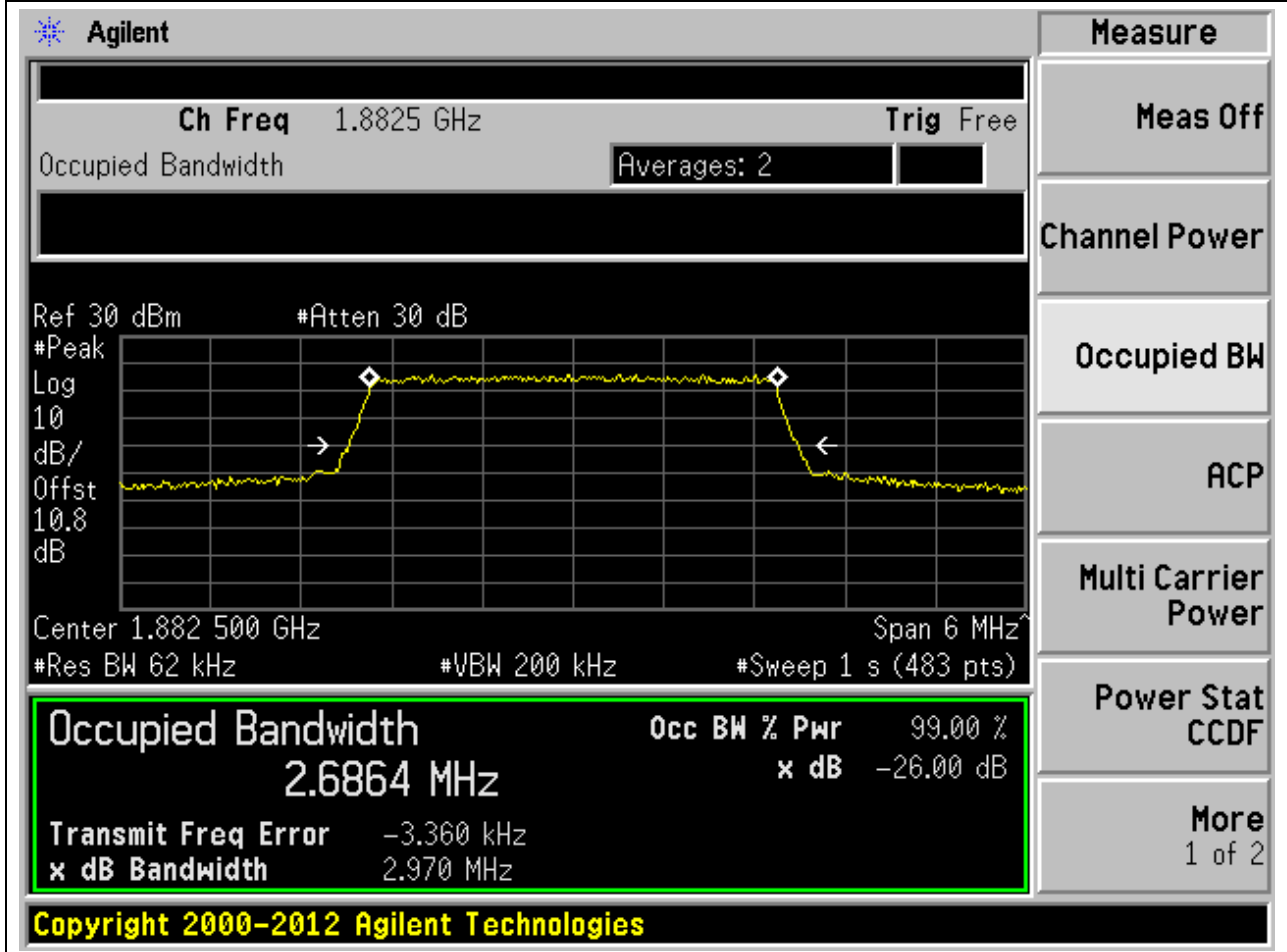
The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 1.8515 GHz. The occupied bandwidth is measured as 2.6917 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -2.287 kHz and the XdB bandwidth is 2.977 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 information: 'Copyright 2000-2012 Agilent Technologies'.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
2.6917 MHz	x dB	-26.00 dB
Transmit Freq Error	-2.287 kHz	
x dB Bandwidth	2.977 MHz	

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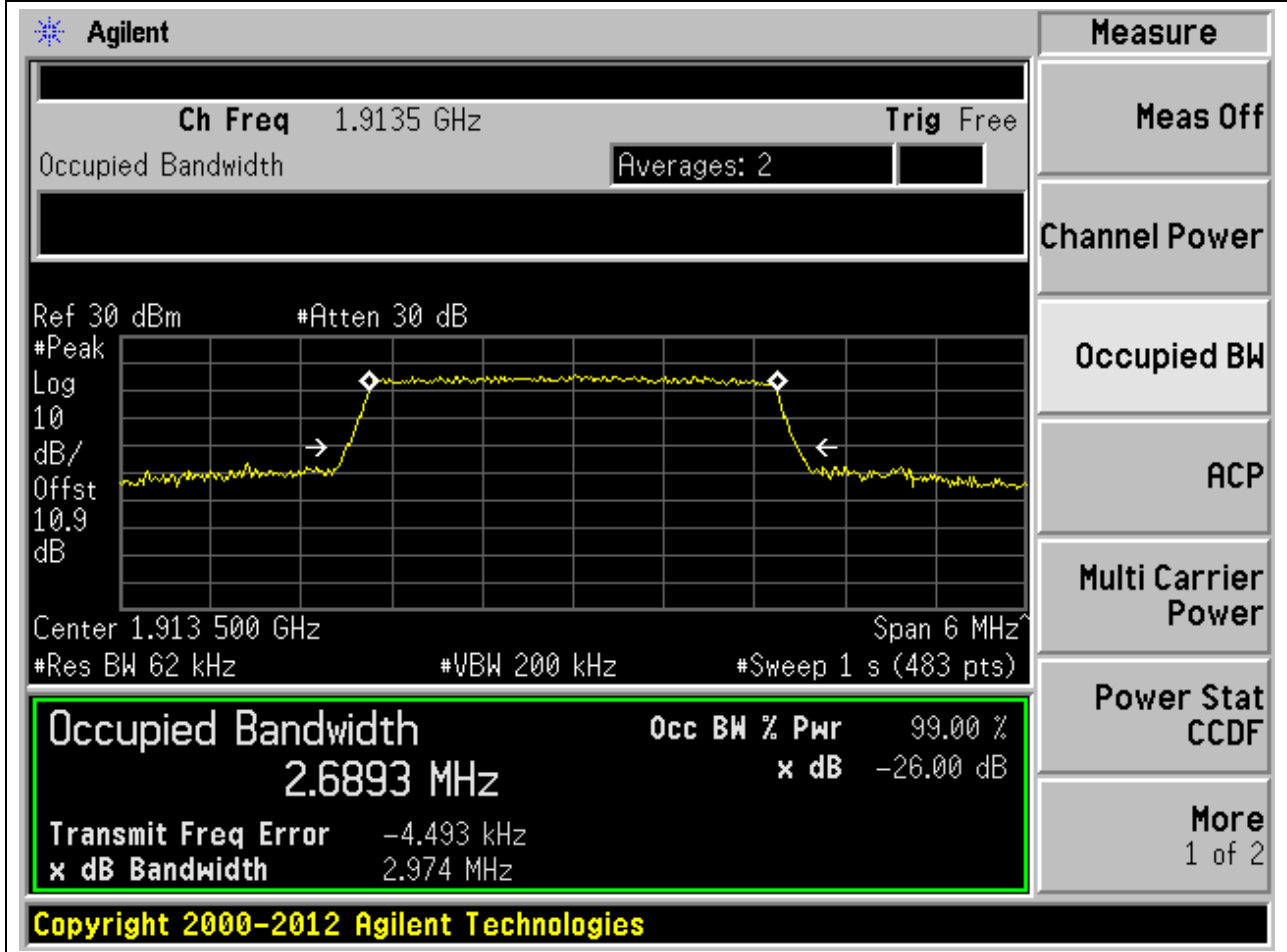
4.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26365, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1882.5	99	26	0.062	Peak	2.69	2.97	3	Pass



4.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26675, 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
1913.5	99	26	0.062	Peak	2.69	2.97	3	Pass



**4.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26065, 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
1852.5	99	26	0.1	Peak	4.49	4.9	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8525 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 10.8 dB', 'Center 1.852 500 GHz', '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 4.4914 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Other measurements shown include 'Transmit Freq Error -866.852 Hz' and 'x dB Bandwidth 4.898 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'.

**4.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26365, 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
1882.5	99	26	0.1	Peak	4.5	4.9	5	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 results are as follows:

Measurement	Value
Occupied Bandwidth	4.5000 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	-372.855 Hz
x dB Bandwidth	4.903 MHz

Additional parameters shown in the interface include: Ch Freq 1.8825 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log, 10 dB/Offst, 10.8 dB, Center 1.882 500 GHz, Span 10 MHz, #Res BW 100 kHz, #VBW 300 kHz, #Sweep 1 s (500 pts).

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**4.9. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26665, 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
1912.5	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 plot is centered at 1.9125 GHz with a span of 10 MHz. The vertical axis is labeled 'dB/Offst' with a scale of 10.9 dB. The horizontal axis is labeled 'Span 10 MHz'. The plot shows a signal with a peak at approximately 1.9125 GHz. The 'Occupied Bandwidth' is highlighted in a green box, showing a value of 4.4927 MHz. The 'Occ BW % Pwr' is 99.00% and the 'x dB' is -26.00 dB. The 'Transmit Freq Error' is -7.749 kHz and the 'x dB Bandwidth' is 4.904 MHz. The 'Copyright 2000-2012 Agilent Technologies' is displayed at the bottom.

Occupied Bandwidth	Occ BW % Pwr	x dB
4.4927 MHz	99.00 %	-26.00 dB

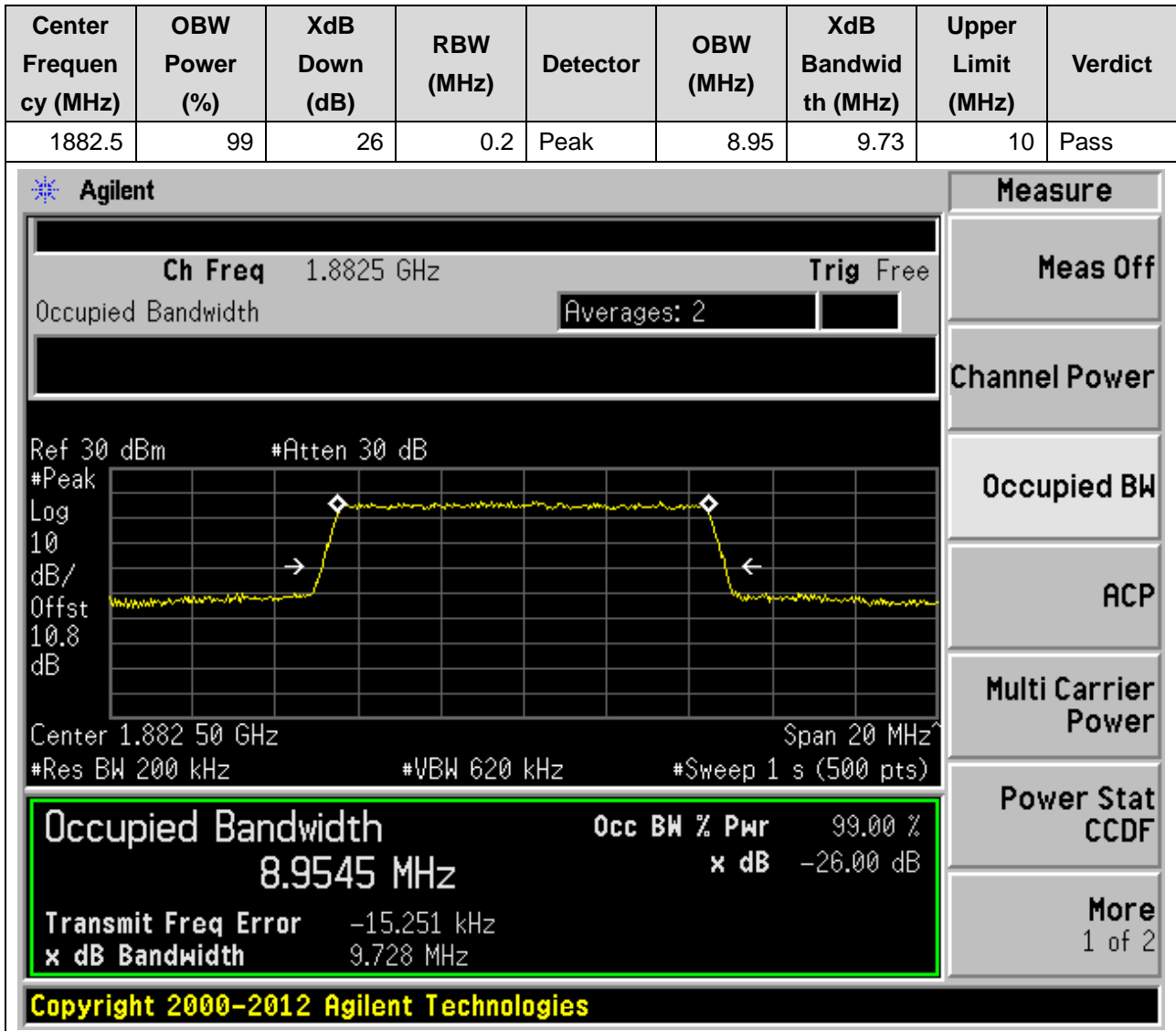
Copyright 2000-2012 Agilent Technologies

**4.10. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26090, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)**

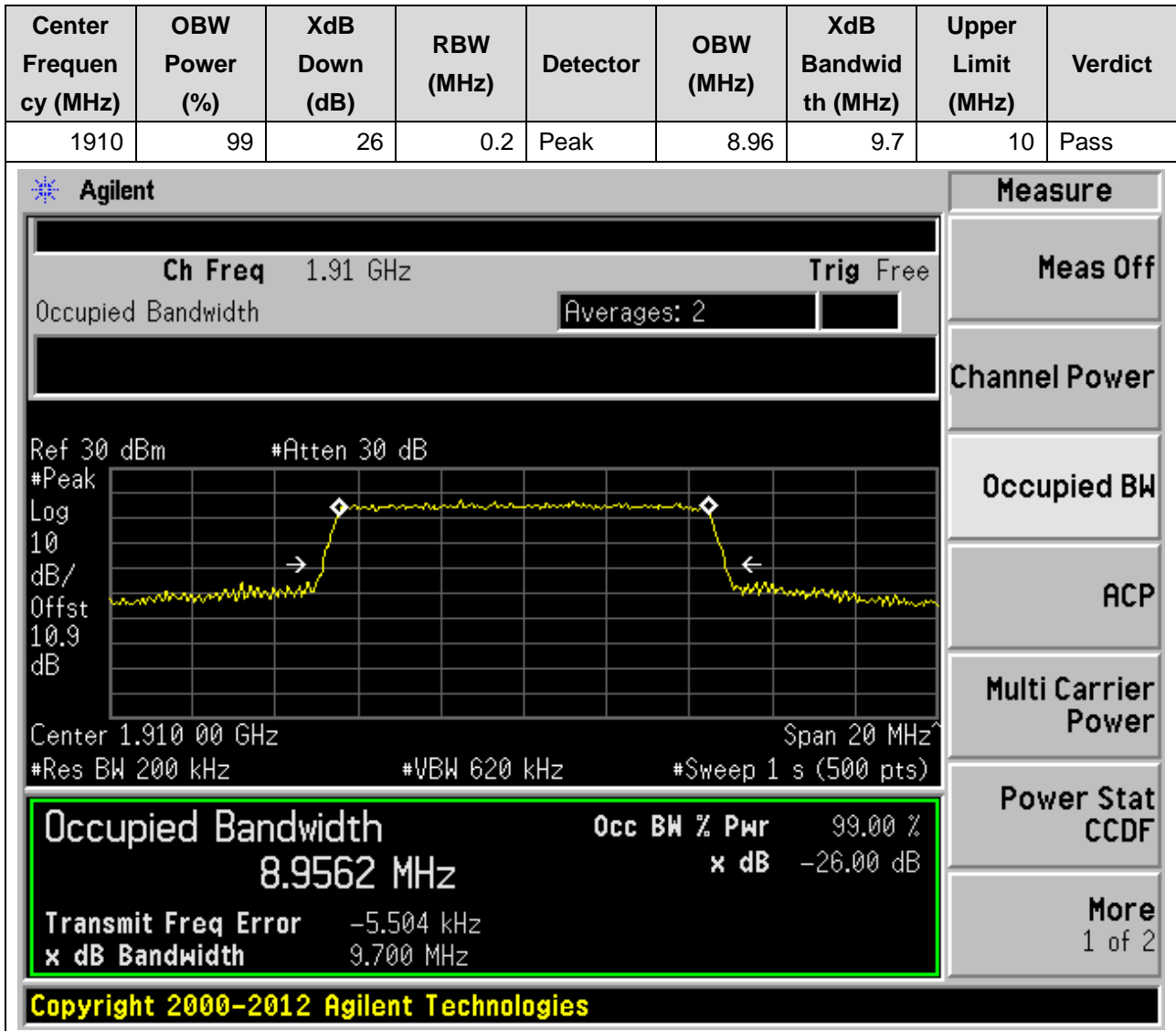
Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
1855	99	26	0.2	Peak	8.96	9.74	10	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.855 GHz' and 'Trig Free'. The main display area shows a spectrum plot with a yellow trace. The plot parameters are: Ref 30 dBm, #Atten 30 dB, Log 10, dB/Offst 10.8 dB, Center 1.855 00 GHz, Span 20 MHz, #Res BW 200 kHz, #VBW 620 kHz, #Sweep 1 s (500 pts). A green box highlights the 'Occupied Bandwidth' measurement results: 8.9603 MHz, Occ BW % Pwr 99.00 %, x dB -26.00 dB. Below this, it shows 'Transmit Freq Error 11.666 kHz' and 'x dB Bandwidth 9.743 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'.

4.11. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26365, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)



4.12. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26640, Bandwidth:10, Modulation:64QAM, RB Number:50, RB Position:0)



4.13. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26115, 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
1857.5	99	26	0.3	Peak	13.43	14.63	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 results are as follows:

Measurement	Value
Occupied Bandwidth	13.4295 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	15.048 kHz
x dB Bandwidth	14.631 MHz

Additional parameters shown in the interface include: Ch Freq 1.8575 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak Log 10 dB/Offst 10.8 dB, Center 1.857 50 GHz, Span 30 MHz, #Res BW 300 kHz, #VBW 1 MHz, #Sweep 1 s (500 pts).

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4.14. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26365, 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
1882.5	99	26	0.3	Peak	13.42	14.69	15	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 1.8825 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 10.8 dB', 'Center 1.882 50 GHz', 'Span 30 MHz', '#Res BW 300 kHz', '#VBW 1 MHz', and '#Sweep 1 s (500 pts)'. A green box highlights the 'Occupied Bandwidth' measurement results: 'Occupied Bandwidth 13.4224 MHz', 'Occ BW % Pwr 99.00 %', and 'x dB -26.00 dB'. Below this, it shows 'Transmit Freq Error -6.487 kHz' and 'x dB Bandwidth 14.694 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'.

4.15. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26615, 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
1907.5	99	26	0.3	Peak	13.47	14.6	15	Pass

Agilent

Measure

Ch Freq 1.9075 GHz
Trig Free

Occupied Bandwidth

Averages: 2

Ref 30 dBm
#Atten 30 dB

#Peak
Log

10
dB/

Offst
10.9

dB

Center 1.907 50 GHz
Span 30 MHz

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

**Occupied Bandwidth**

**13.4713 MHz**

Transmit Freq Error -13.160 kHz

x dB Bandwidth 14.602 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More

1 of 2

4.16. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26140, 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
1860	99	26	0.39	Peak	17.91	19.42	20	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	17.9149 MHz
Occ BW % Pwr	99.00 %
x dB	-26.00 dB
Transmit Freq Error	13.476 kHz
x dB Bandwidth	19.419 MHz

Additional parameters shown in the interface include: Ch Freq 1.86 GHz, Trig Free, Averages: 2, Ref 30 dBm, #Atten 30 dB, #Peak, Log, 10 dB/Offst, 10.9 dB, Center 1.860 00 GHz, Span 40 MHz, #Res BW 390 kHz, #VBW 1.2 MHz, #Sweep 1 s (512 pts).

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4.17. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26365, 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
1882.5	99	26	0.39	Peak	17.91	19.42	20	Pass

Agilent
Measure

Ch Freq 1.8825 GHz
Trig Free

Occupied Bandwidth
Averages: 2

Ref 30 dBm #Atten 30 dB

Center 1.882 50 GHz Span 40 MHz

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

Occupied Bandwidth	Occ BW % Pwr	99.00 %
17.9093 MHz	x dB	-26.00 dB
Transmit Freq Error	-10.219 kHz	
x dB Bandwidth	19.420 MHz	

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Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More  
1 of 2

4.18. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26590, 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
1905	99	26	0.39	Peak	17.91	19.95	20	Pass

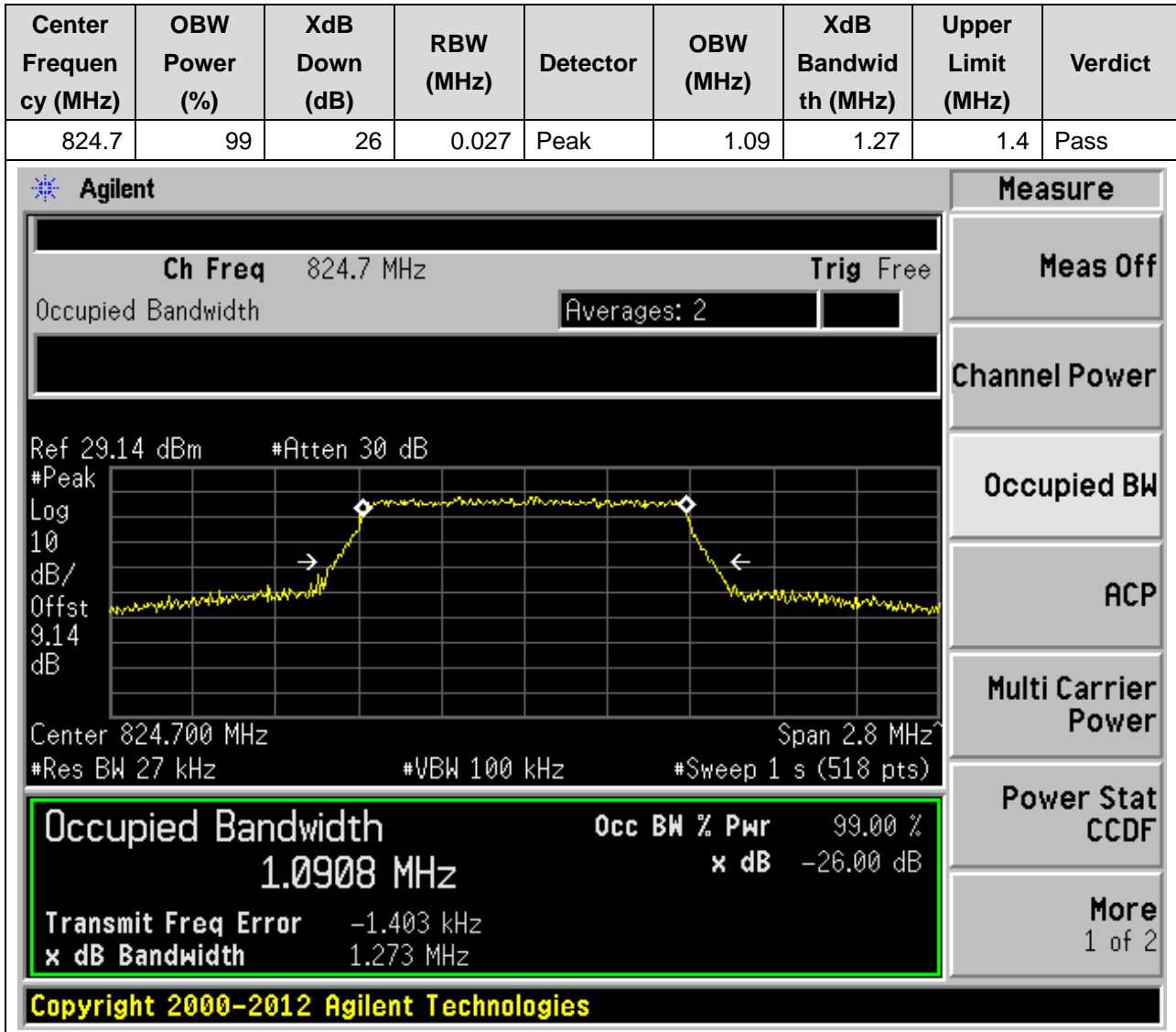
The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 1.905 GHz, and the span is 40 MHz. The occupied bandwidth is measured as 17.9074 MHz, which is 99.00% of the total bandwidth. The XdB down is -26.00 dB. The transmit frequency error is 1.114 kHz, and the XdB bandwidth is 19.952 MHz. The interface includes various measurement controls and a list of measurement options on the right side.

Occupied Bandwidth	Occ BW % Pwr	99.00 %
17.9074 MHz	x dB	-26.00 dB
Transmit Freq Error	1.114 kHz	
x dB Bandwidth	19.952 MHz	

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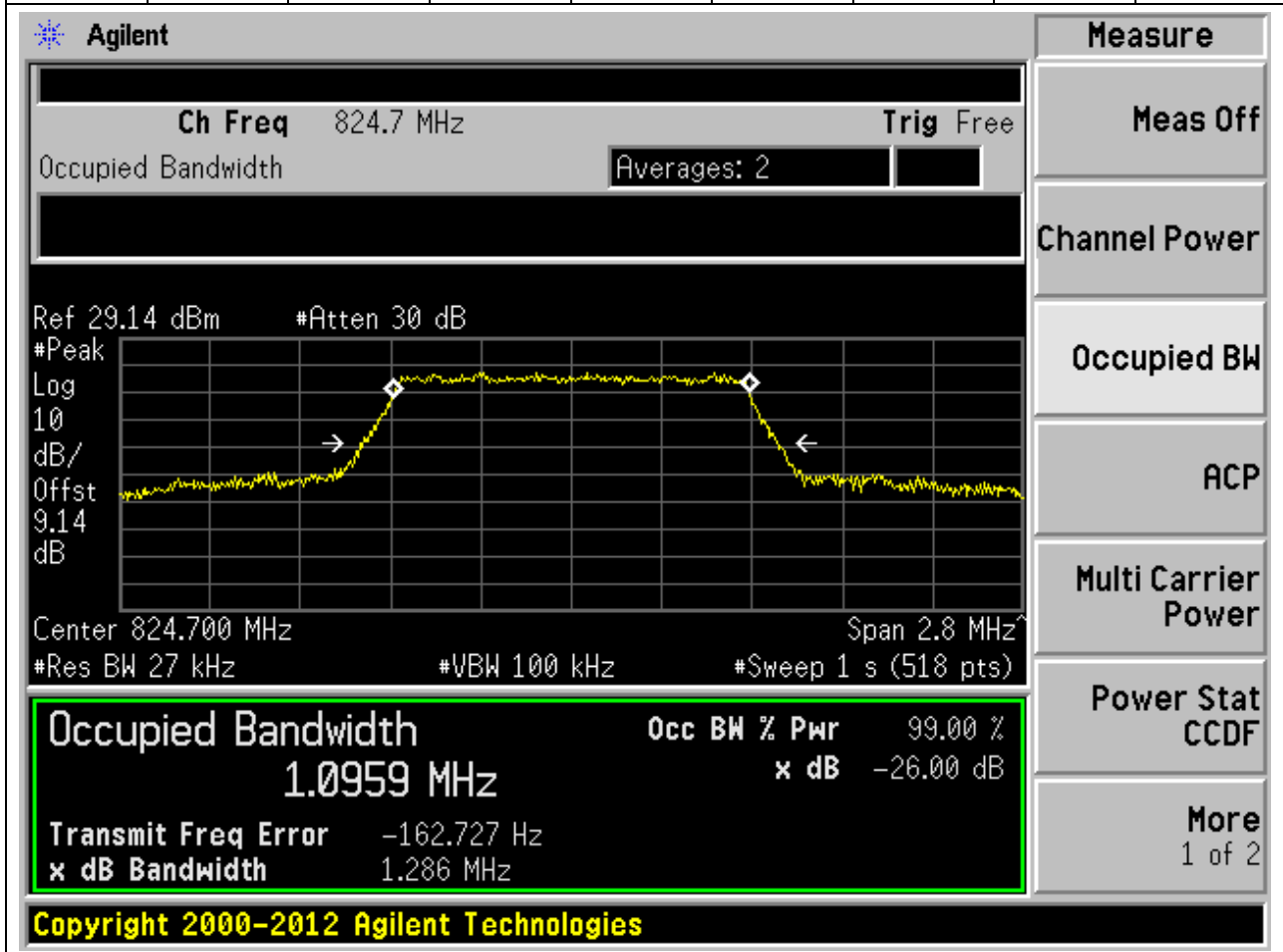
## 12. LTE\_Band26(part22)

### 12.1. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26797, Bandwidth:1.4, Modulation:QPSK, RB Number:6, RB Position:0)



**12.2. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26797, 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
824.7	99	26	0.027	Peak	1.1	1.29	1.4	Pass



**12.3. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.027	Peak	1.1	1.29	1.4	Pass

Agilent
Measure

Ch Freq 836.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.16 dBm #Atten 30 dB

Center 836.500 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

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

**1.1013 MHz** x dB -26.00 dB

Transmit Freq Error 684.133 Hz

x dB Bandwidth 1.292 MHz

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**12.4. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.027	Peak	1.09	1.28	1.4	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 836.500 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

**Occupied Bandwidth**

1.0867 MHz

Transmit Freq Error 1.019 Hz

x dB Bandwidth 1.278 MHz

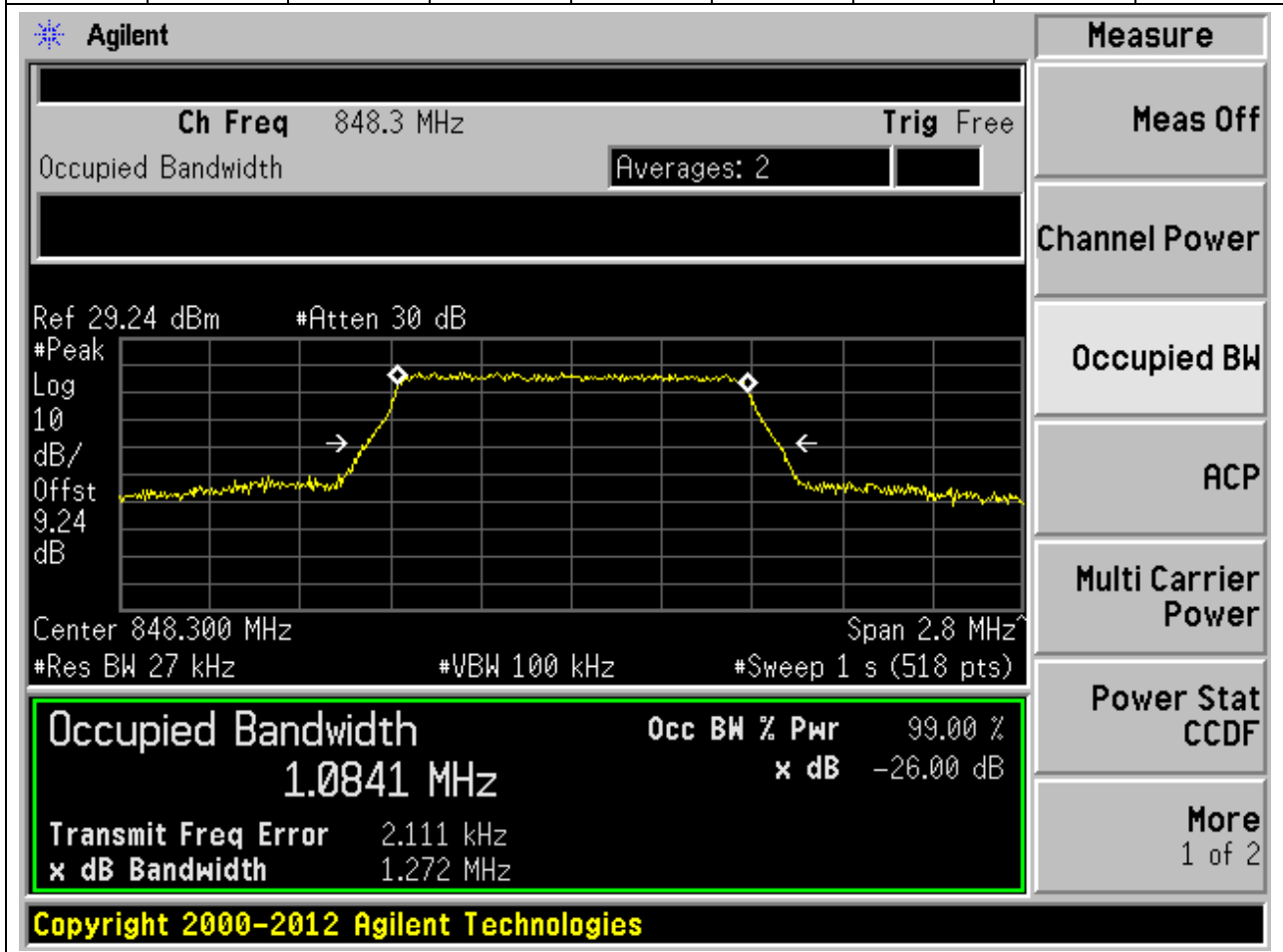
Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**12.5. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:27033, 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
848.3	99	26	0.027	Peak	1.08	1.27	1.4	Pass



12.6. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:27033, 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
848.3	99	26	0.027	Peak	1.09	1.28	1.4	Pass

Agilent
Measure

Ch Freq 848.3 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.24 dBm #Atten 30 dB

Center 848.300 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

**Occupied Bandwidth**

**1.0919 MHz**

Transmit Freq Error 356.464 Hz

x dB Bandwidth 1.278 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**12.7. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26805, 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
825.5	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 825.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.14 dBm #Atten 30 dB

Center 825.500 MHz Span 6 MHz

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

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

2.6862 MHz

x dB -26.00 dB

Transmit Freq Error 1.065 kHz

x dB Bandwidth 2.988 MHz

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**12.8. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26805, 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
825.5	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 825.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.14 dBm #Atten 30 dB

Center 825.500 MHz Span 6 MHz

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

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

2.6882 MHz x dB -26.00 dB

Transmit Freq Error -1.384 kHz

x dB Bandwidth 2.972 MHz

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**12.9. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.062	Peak	2.69	2.99	3	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 836.500 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 %
2.6887 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-2.219 kHz	
<b>x dB Bandwidth</b>	2.987 MHz	

**Meas Off**

**Channel Power**

**Occupied BW**

**ACP**

**Multi Carrier Power**

**Power Stat CCDF**

**More**

1 of 2

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**12.10. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.062	Peak	2.68	2.98	3	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 836.500 MHz    Span 6 MHz

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

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

2.6835 MHz

x dB    -26.00 dB

Transmit Freq Error    -1.928 kHz

x dB Bandwidth    2.982 MHz

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Meas Off

---

Channel Power

---

Occupied BW

---

ACP

---

Multi Carrier Power

---

Power Stat CCDF

---

More

1 of 2

**12.11. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:27025, 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
847.5	99	26	0.062	Peak	2.68	2.97	3	Pass

Agilent
Measure

Ch Freq 847.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.23 dBm #Atten 30 dB

Center 847.500 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**

**2.6786 MHz**

Transmit Freq Error -2.424 kHz

x dB Bandwidth 2.966 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**12.12. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:27025, 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
847.5	99	26	0.062	Peak	2.68	2.99	3	Pass

Agilent
Measure

Ch Freq 847.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.23 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 9.23 dB

Center 847.500 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**

**2.6829 MHz**

Transmit Freq Error -3.800 kHz

x dB Bandwidth 2.987 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**12.13. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26815, 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
826.5	99	26	0.1	Peak	4.51	4.94	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 826.5 MHz, and the span is 10 MHz. The occupied bandwidth is measured as 4.5085 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -4.051 kHz, and the XdB bandwidth is 4.940 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 %
4.5085 MHz	x dB	-26.00 dB
Transmit Freq Error	-4.051 kHz	
x dB Bandwidth	4.940 MHz	

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12.14. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26815, 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
826.5	99	26	0.1	Peak	4.49	4.91	5	Pass

Agilent

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

Ch Freq 826.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.15 dBm #Atten 30 dB

Center 826.500 MHz Span 10 MHz

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

Occupied Bandwidth	Occ BW % Pwr	99.00 %
4.4925 MHz	x dB	-26.00 dB
Transmit Freq Error		-516.950 Hz
x dB Bandwidth		4.911 MHz

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**12.15. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.1	Peak	4.5	4.88	5	Pass

Agilent

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

Ch Freq 836.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.16 dBm #Atten 30 dB

Center 836.500 MHz Span 10 MHz

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

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

4.4958 MHz

x dB -26.00 dB

Transmit Freq Error -1.006 kHz

x dB Bandwidth 4.881 MHz

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12.16. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.1	Peak	4.49	4.9	5	Pass

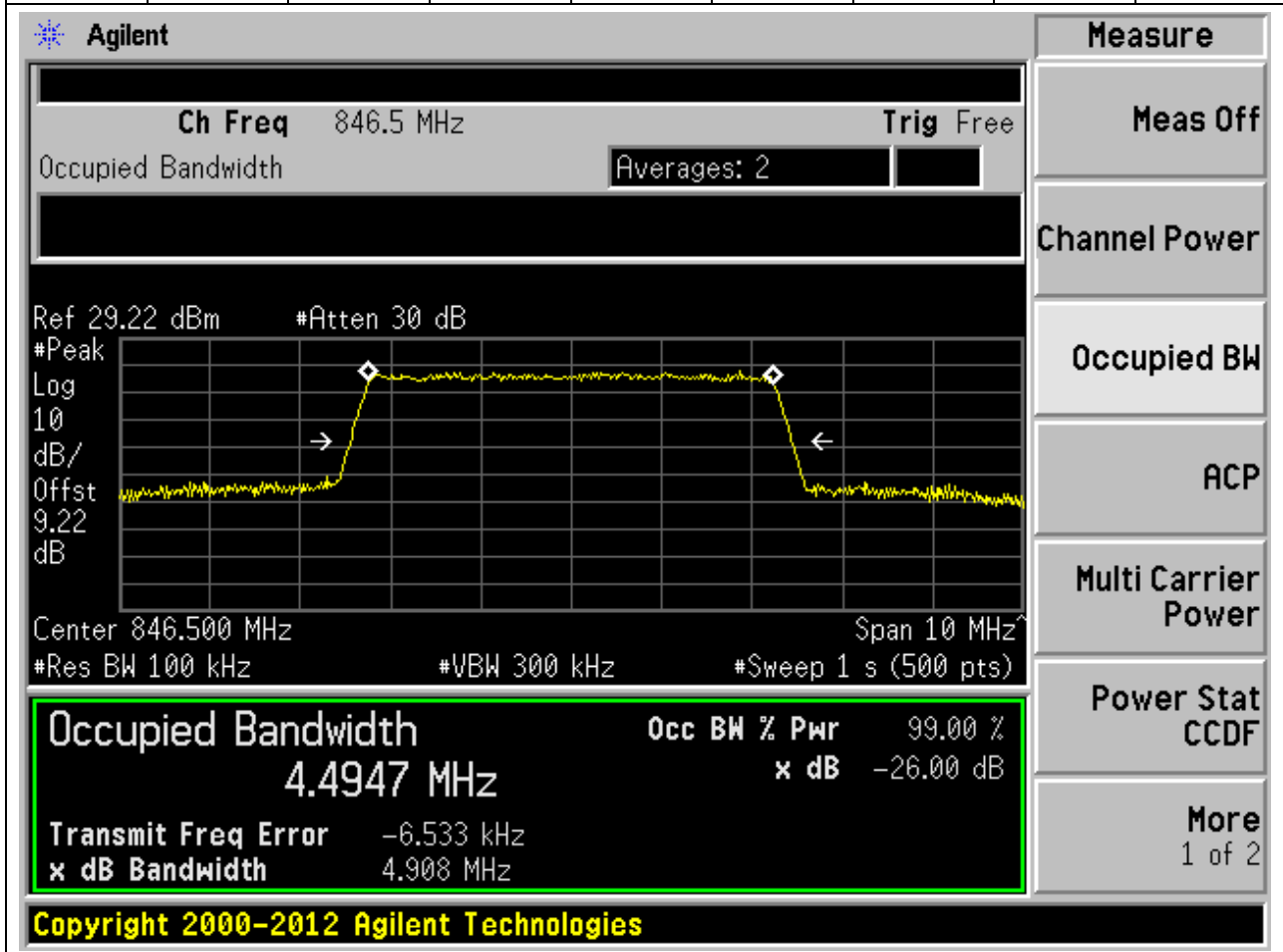
The screenshot displays the Agilent spectrum analyzer interface. The main display shows a spectrum plot with a yellow trace. The center frequency is 836.500 MHz and the span is 10 MHz. The occupied bandwidth is measured as 4.4914 MHz. The power level is 99.00% and the XdB down is -26.00 dB. The transmit frequency error is -3.074 kHz and the X dB bandwidth is 4.902 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 %
4.4914 MHz	x dB	-26.00 dB
Transmit Freq Error	-3.074 kHz	
x dB Bandwidth	4.902 MHz	

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**12.17. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:27015, 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
846.5	99	26	0.1	Peak	4.49	4.91	5	Pass



12.18. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:27015, 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
846.5	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 846.5 MHz. The main display shows a spectrum plot with a yellow trace representing the signal. The plot is set to a center frequency of 846.500 MHz 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 1 second with 500 points. The occupied bandwidth is measured as 4.4824 MHz, which is 99.00% of the power. The XdB down is -26.00 dB. The transmit frequency error is -9.420 kHz, and the XdB bandwidth is 4.886 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 %
4.4824 MHz	x dB	-26.00 dB
Transmit Freq Error	-9.420 kHz	
x dB Bandwidth	4.886 MHz	

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**12.19. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26840, 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
829	99	26	0.2	Peak	8.95	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 829 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.16 dBm #Atten 30 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 %
8.9501 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	7.485 kHz	
<b>x dB Bandwidth</b>	9.828 MHz	

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**12.20. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26840, 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
829	99	26	0.2	Peak	8.94	9.77	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

Center 829.00 MHz Span 20 MHz

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

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

8.9441 MHz

x dB -26.00 dB

Transmit Freq Error 6.255 kHz

x dB Bandwidth 9.765 MHz

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**12.21. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.2	Peak	8.95	9.72	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**

**8.9538 MHz**

Transmit Freq Error -1.943 kHz

x dB Bandwidth 9.723 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

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**12.22. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.2	Peak	8.96	9.79	10	Pass

Agilent

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

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)

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

8.9590 MHz

x dB      -26.00 dB

Transmit Freq Error      -7.294 kHz

x dB Bandwidth      9.785 MHz

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**12.23. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26990, 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
844	99	26	0.2	Peak	8.96	9.79	10	Pass

Agilent

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

Ch Freq 844 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.2 dBm #Atten 30 dB

Center 844.00 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 %
8.9647 MHz	<b>x dB</b> -26.00 dB
<b>Transmit Freq Error</b>	-2.044 kHz
<b>x dB Bandwidth</b>	9.794 MHz

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**12.24. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26990, 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
844	99	26	0.2	Peak	8.97	9.72	10	Pass

Agilent

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

Ch Freq 844 MHz
Trig Free

Occupied Bandwidth Averages: 2

Ref 29.2 dBm #Atten 30 dB

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
8.9670 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-12.014 kHz	
<b>x dB Bandwidth</b>	9.722 MHz	

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**12.25. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26865, 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
831.5	99	26	0.3	Peak	13.42	14.66	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)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
13.4243 MHz	x dB	-26.00 dB
<b>Transmit Freq Error</b>	2.034 kHz	
<b>x dB Bandwidth</b>	14.662 MHz	

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Meas Off

---

Channel Power

---

Occupied BW

---

ACP

---

Multi Carrier Power

---

Power Stat CCDF

---

More  
1 of 2

**12.26. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26865, 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
831.5	99	26	0.3	Peak	13.43	14.61	15	Pass

Agilent

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

Ch Freq 831.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.16 dBm #Atten 30 dB

Center 831.50 MHz Span 30 MHz

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

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

13.4270 MHz

x dB -26.00 dB

Transmit Freq Error 4.467 kHz

x dB Bandwidth 14.606 MHz

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**12.27. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.3	Peak	13.44	14.59	15	Pass

Agilent
Measure

Ch Freq 836.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.16 dBm #Atten 30 dB

Center 836.50 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** Occ BW % Pwr 99.00 %

**13.4444 MHz** x dB -26.00 dB

Transmit Freq Error -12.678 kHz

x dB Bandwidth 14.593 MHz

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**12.28. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26915, 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
836.5	99	26	0.3	Peak	13.42	14.53	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 %
13.4193 MHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-6.642 kHz	
<b>x dB Bandwidth</b>	14.529 MHz	

**Power Stat**  
CCDF

**More**  
1 of 2

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**12.29. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26965, 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
841.5	99	26	0.3	Peak	13.42	14.56	15	Pass

Agilent

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

Ch Freq 841.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.17 dBm #Atten 30 dB

Center 841.50 MHz Span 30 MHz

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

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

13.4177 MHz

x dB -26.00 dB

Transmit Freq Error -12.533 kHz

x dB Bandwidth 14.563 MHz

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**12.30. LTE Occupied Bandwidth\_Part22-24-27(NTNV)(Channel:26965, 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
841.5	99	26	0.3	Peak	13.42	14.61	15	Pass

Agilent
Measure

Ch Freq 841.5 MHz Trig Free

Occupied Bandwidth Averages: 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)

Occupied Bandwidth	Occ BW % Pwr	99.00 %
13.4151 MHz	x dB	-26.00 dB
Transmit Freq Error	-10.229 kHz	
x dB Bandwidth	14.613 MHz	

Power Stat CCDF

More 1 of 2

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**12.1. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26797, 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
824.7	99	26	0.027	Peak	1.09	1.26	1.4	Pass

**Agilent**

Ch Freq 824.7 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.14 dBm #Atten 30 dB

#Peak Log 10 dB/ Offst 9.14 dB

Center 824.700 MHz Span 2.8 MHz

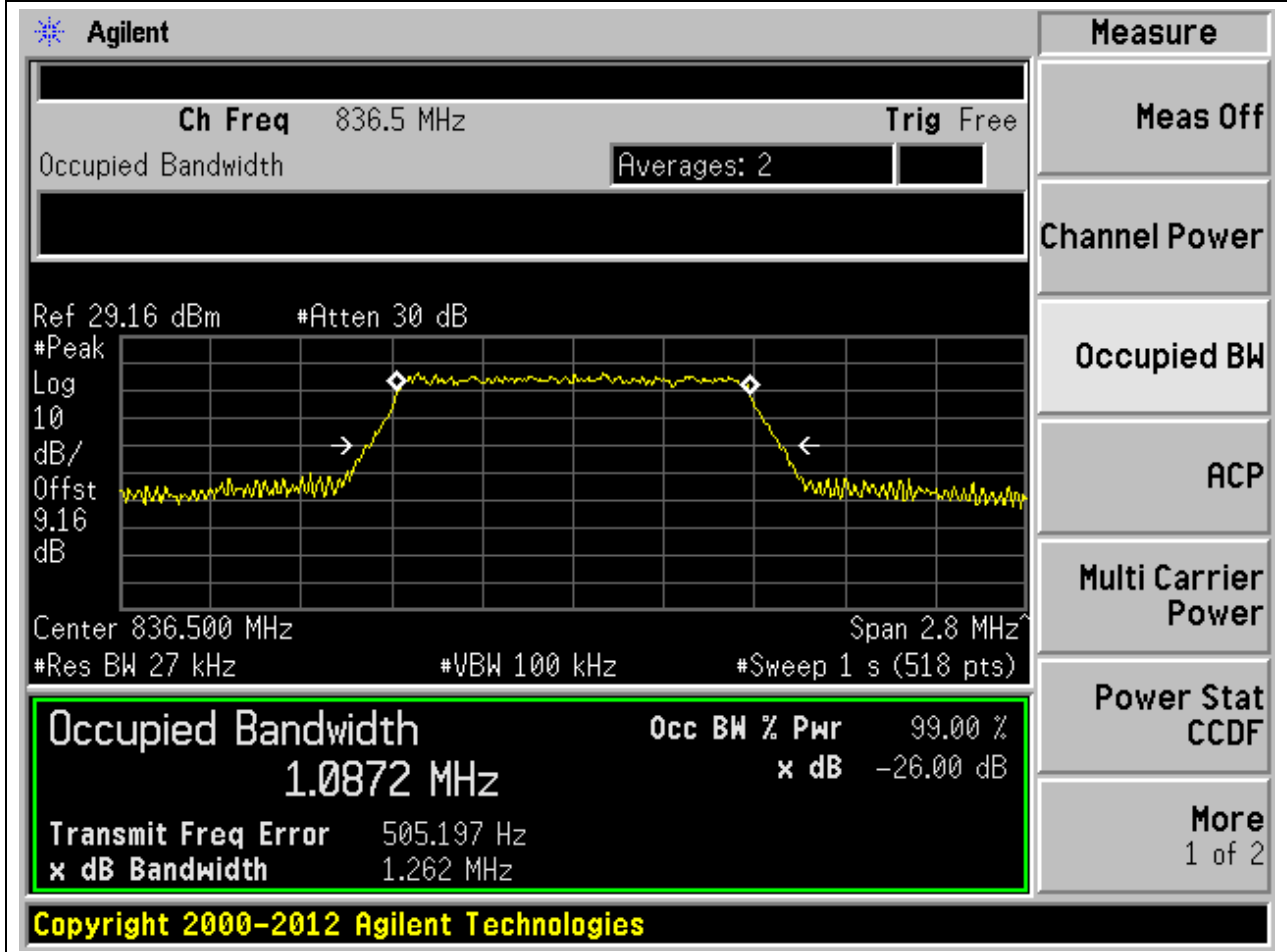
#Res BW 27 kHz #VBW 100 kHz #Sweep 1 s (518 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
<b>1.0855 MHz</b>	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		-2.358 kHz
<b>x dB Bandwidth</b>		1.260 MHz

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**12.2. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26915, 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
836.5	99	26	0.027	Peak	1.09	1.26	1.4	Pass



**12.3. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:27033, 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
848.3	99	26	0.027	Peak	1.1	1.28	1.4	Pass

Agilent

Measure

Ch Freq 848.3 MHz

Trig Free

Occupied Bandwidth

Averages: 2

Ref 29.24 dBm
#Atten 30 dB

#Peak  
Log  
10  
dB/  
Offst  
9.24  
dB

Center 848.300 MHz
Span 2.8 MHz

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

**Occupied Bandwidth**

**1.0955 MHz**

Transmit Freq Error -971.313 Hz

x dB Bandwidth 1.280 MHz

Occ BW % Pwr 99.00 %

x dB -26.00 dB

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

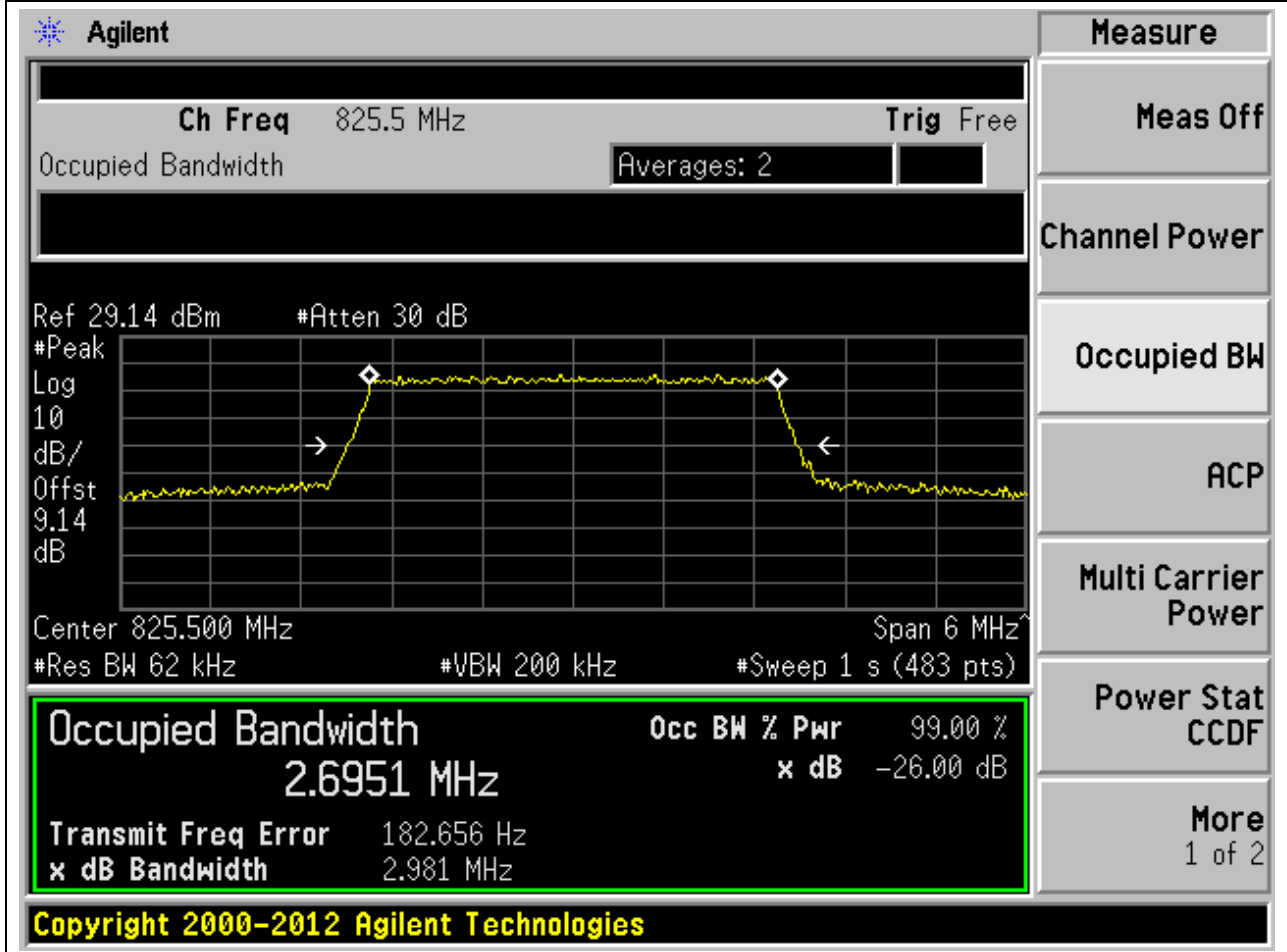
Power Stat CCDF

More  
1 of 2

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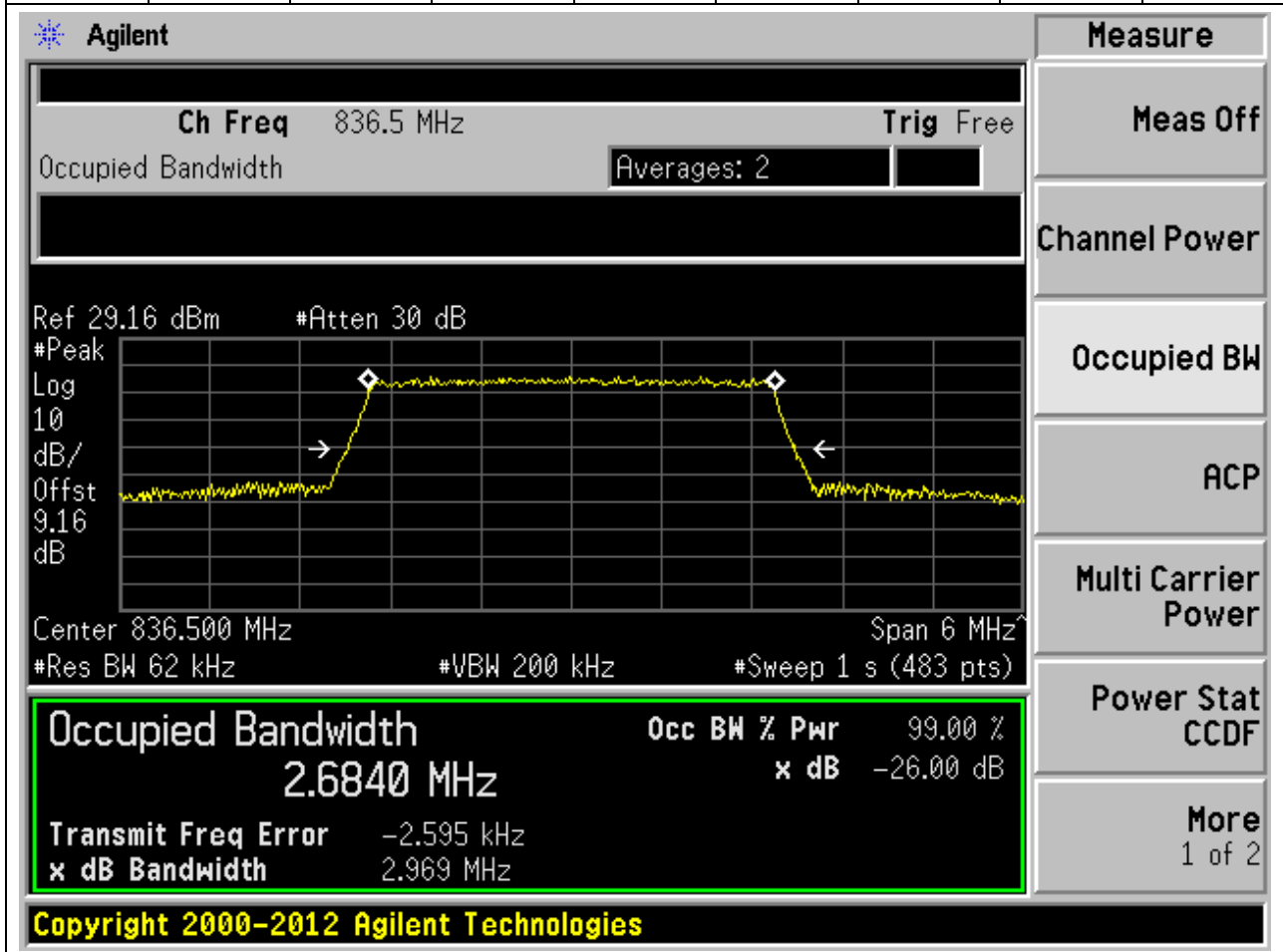
12.4. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26805, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
825.5	99	26	0.062	Peak	2.7	2.98	3	Pass



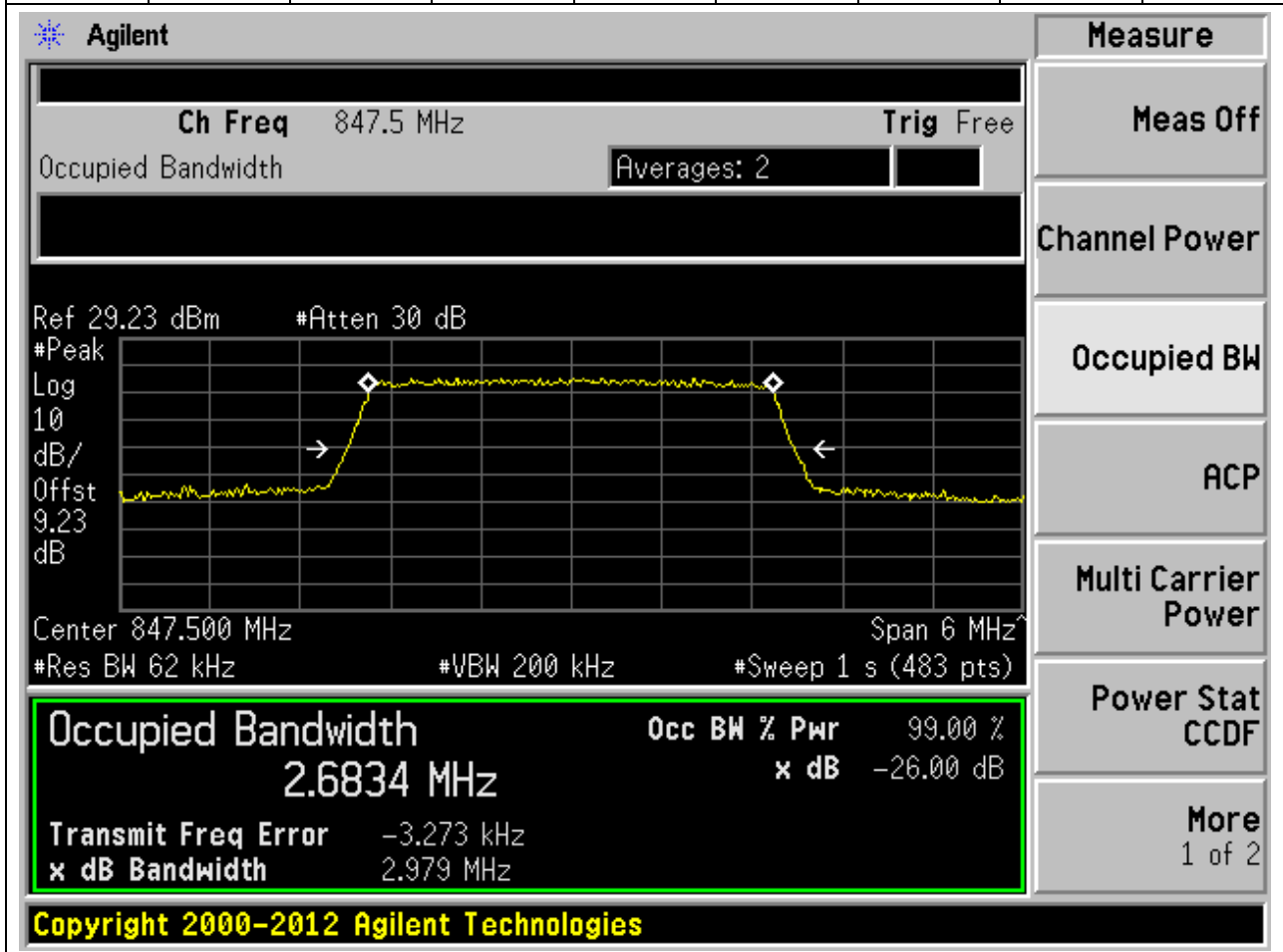
12.5. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26915, Bandwidth:3, Modulation:64QAM, RB Number:15, RB Position:0)

Center Frequency (MHz)	OBW Power (%)	XdB Down (dB)	RBW (MHz)	Detector	OBW (MHz)	XdB Bandwidth (MHz)	Upper Limit (MHz)	Verdict
836.5	99	26	0.062	Peak	2.68	2.97	3	Pass



12.6. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:27025, 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
847.5	99	26	0.062	Peak	2.68	2.98	3	Pass



**12.7. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26815, 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
826.5	99	26	0.1	Peak	4.49	4.91	5	Pass

**Agilent**

Ch Freq 826.5 MHz Trig Free

Occupied Bandwidth Averages: 2

Ref 29.15 dBm #Atten 30 dB

#Peak Log 10 dB/Offst 9.15 dB

Center 826.500 MHz Span 10 MHz

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

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

**4.4912 MHz** x dB -26.00 dB

Transmit Freq Error 1.349 kHz

x dB Bandwidth 4.907 MHz

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**Measure**

Meas Off

Channel Power

Occupied BW

ACP

Multi Carrier Power

Power Stat CCDF

More 1 of 2

**12.8. LTE Occupied Bandwidth\_Part22-24-27(added 64QAM)(NTNV)(Channel:26915, 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
836.5	99	26	0.1	Peak	4.5	4.91	5	Pass

The screenshot displays the Agilent spectrum analyzer interface. At the top, it shows 'Ch Freq 836.5 MHz' 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 parameters include 'Ref 29.16 dBm', '#Atten 30 dB', 'Log 10 dB/Offst 9.16 dB', 'Center 836.500 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 4.5008 MHz', 'Occ BW % Pwr 99.00 %', 'x dB -26.00 dB', 'Transmit Freq Error -191.851 Hz', and 'x dB Bandwidth 4.908 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, the copyright notice 'Copyright 2000-2012 Agilent Technologies' is visible.