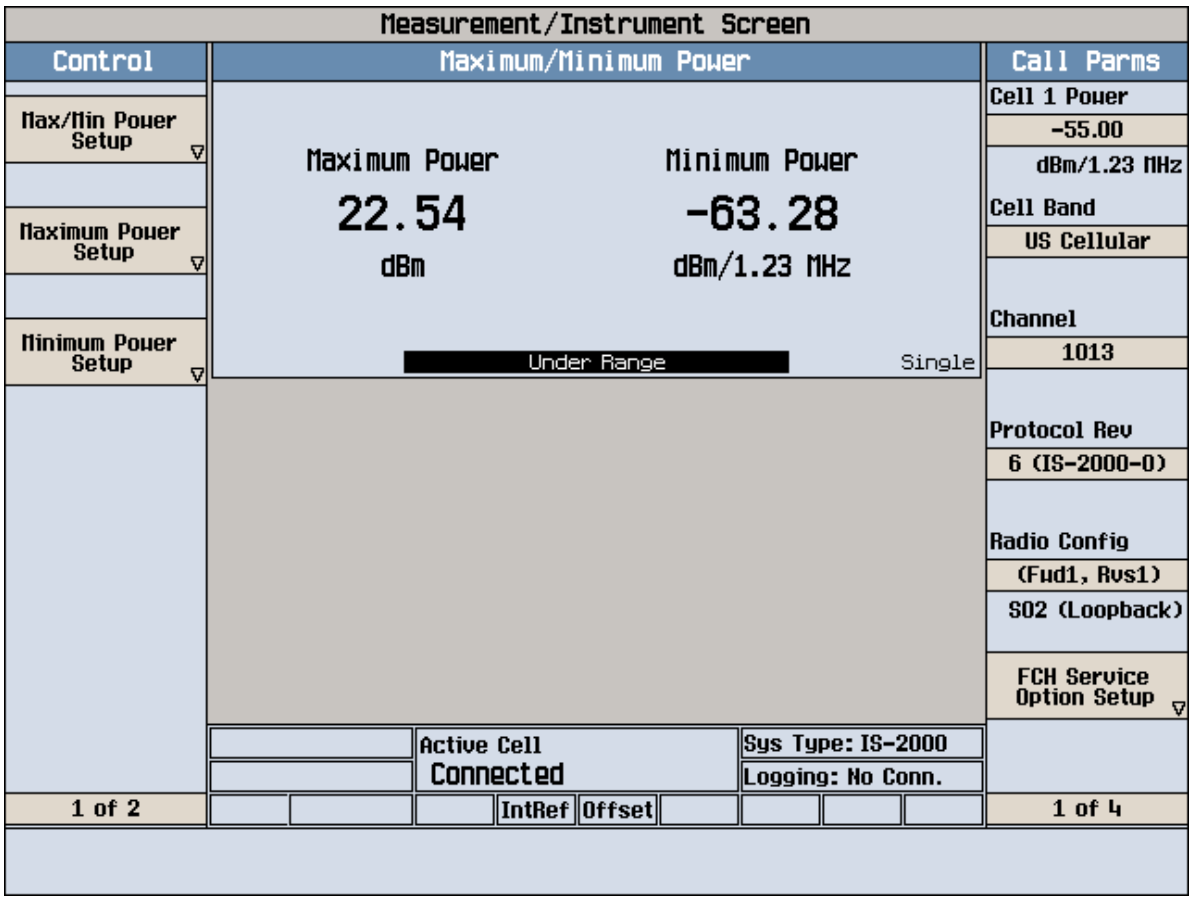
Appendix A

Effective Radiated Power of Transmitter

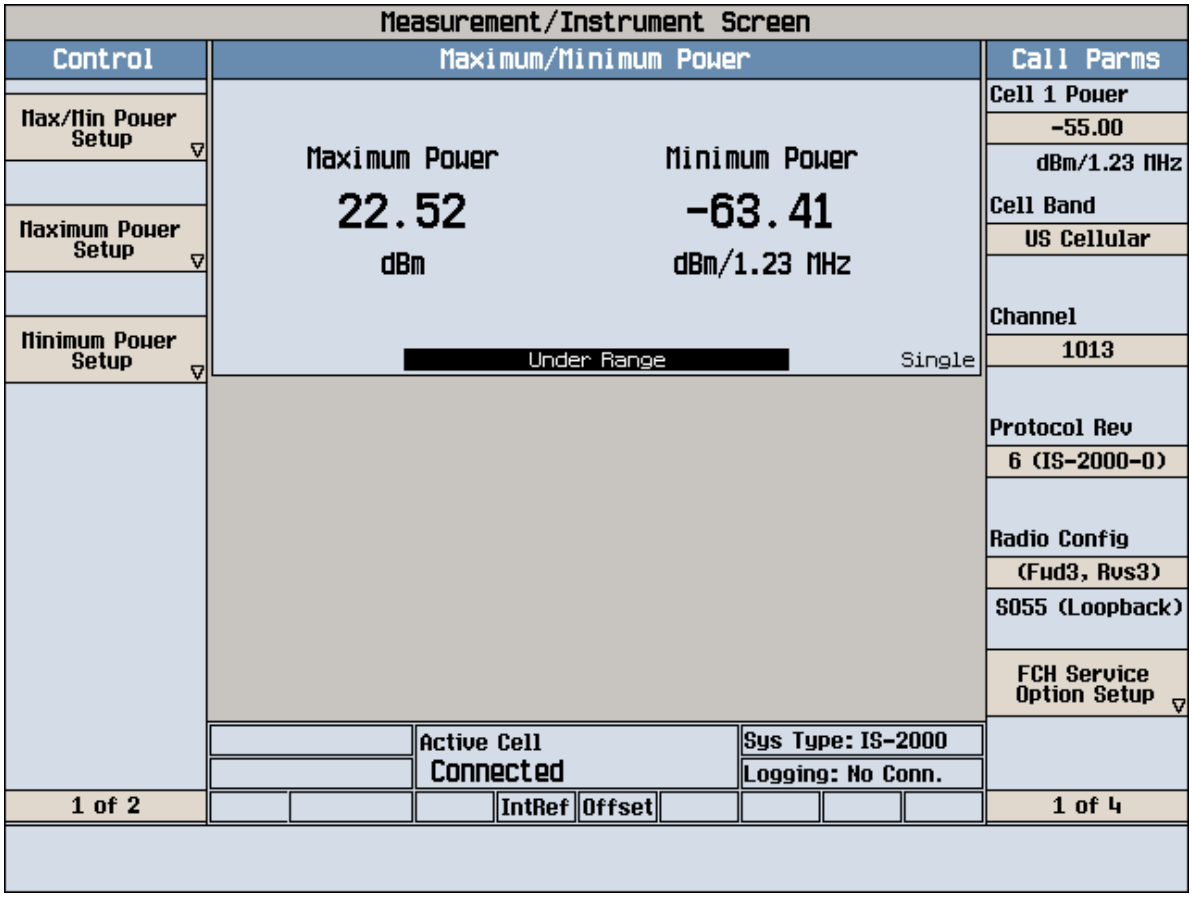
According to FCC Part 2.1046 & 22.913

Channel 1013

TM1:

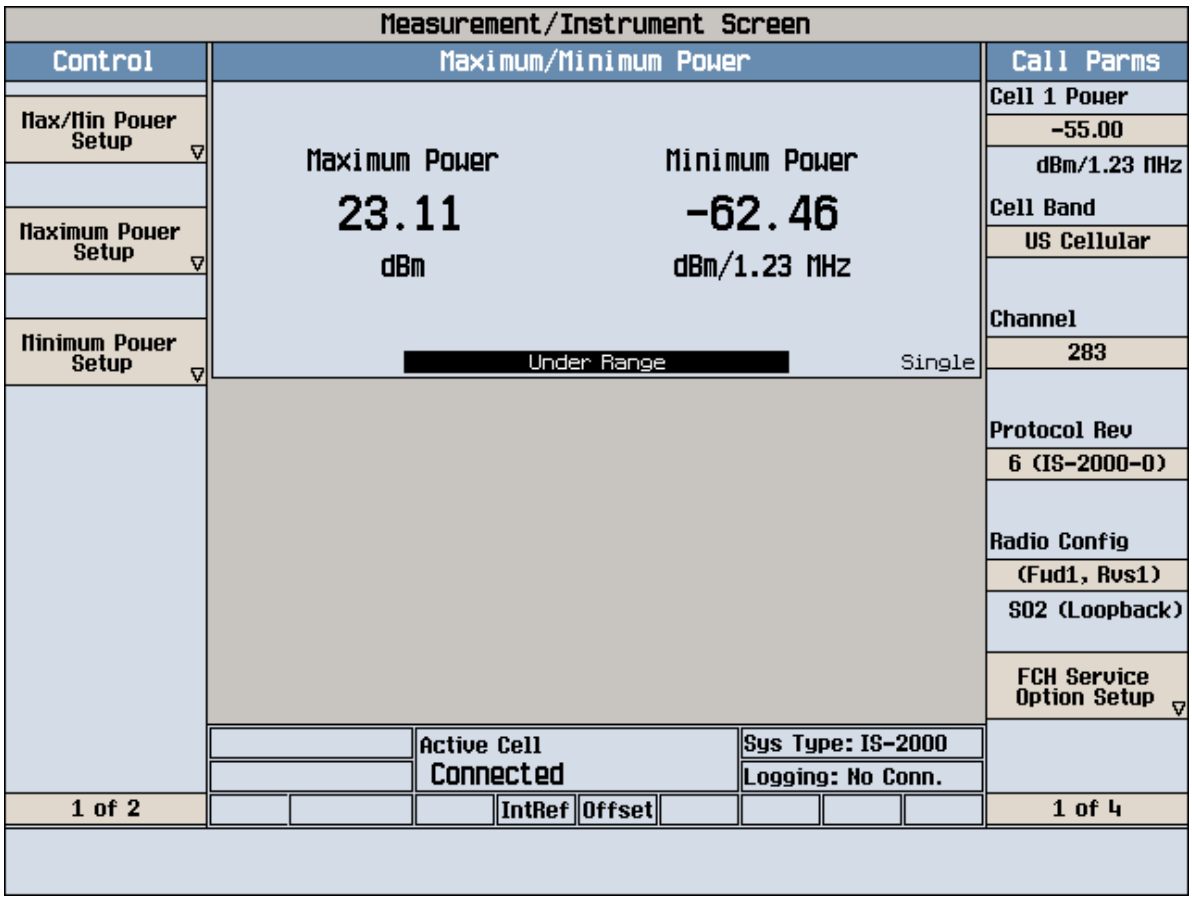


TM3:

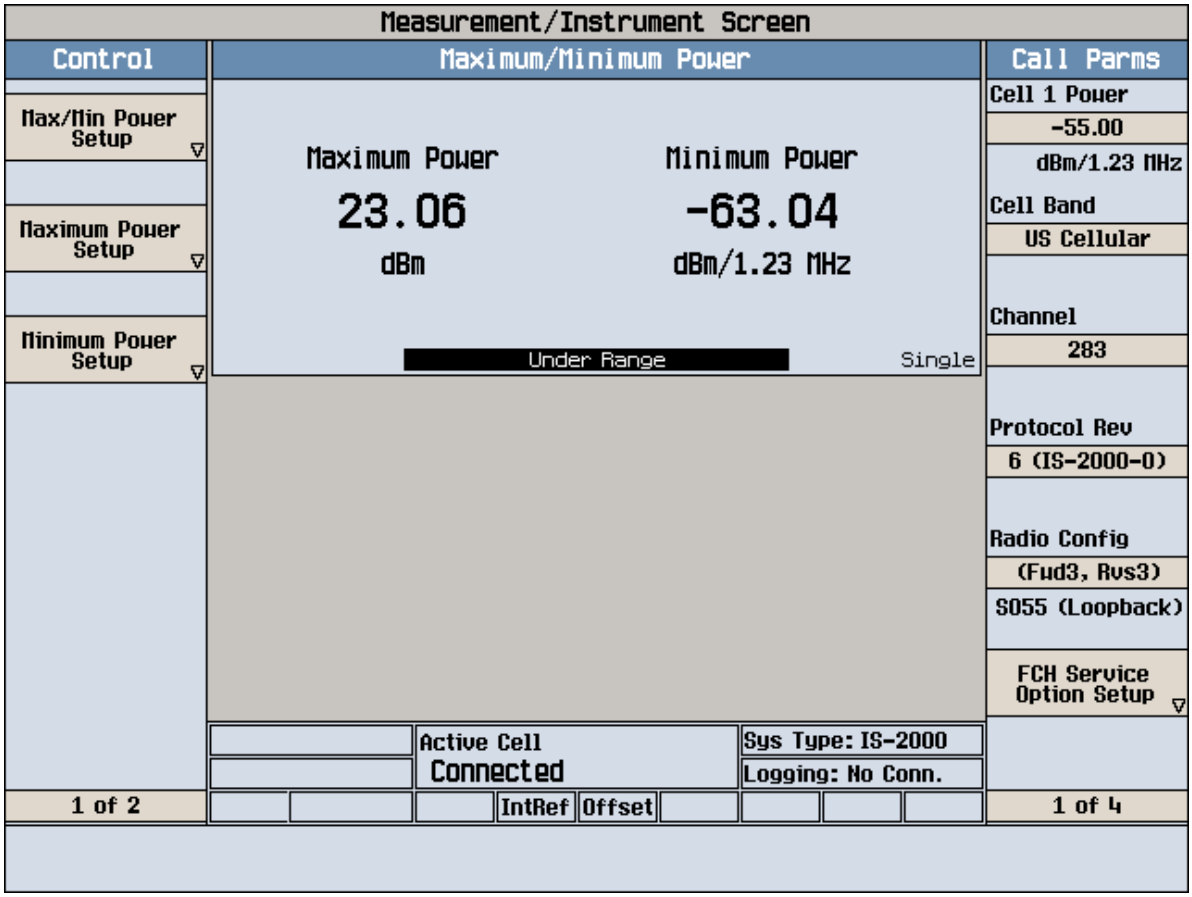

Measurement/Instrument Screen
Control
Maximum/Minimum Power
Call Parms
Max/Min Power Setup
Maximum Power Setup
Minimum Power Setup
Maximum Power
22.52
dBm
Minimum Power
-63.41
dBm/1.23 MHz
Under Range
Single
Cell 1 Power
-55.00
dBm/1.23 MHz
Cell Band
US Cellular
Channel
1013
Protocol Rev
6 (IS-2000-0)
Radio Config
(Fwd3, Rvs3)
S055 (Loopback)
FCH Service Option Setup
Active Cell
Connected
Sys Type: IS-2000
Logging: No Conn.
IntRef
Offset
1 of 2
1 of 4

Channel 283

TM1:

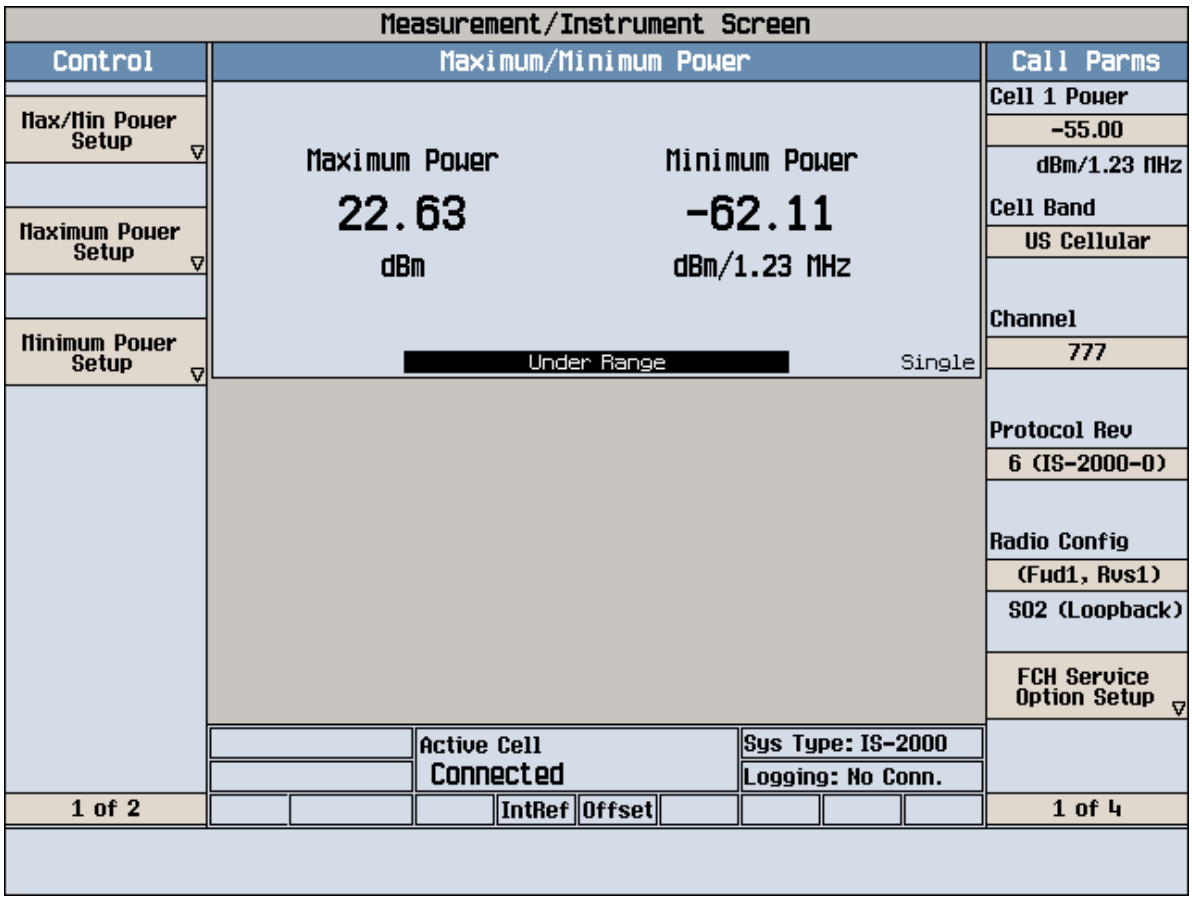


TM3:

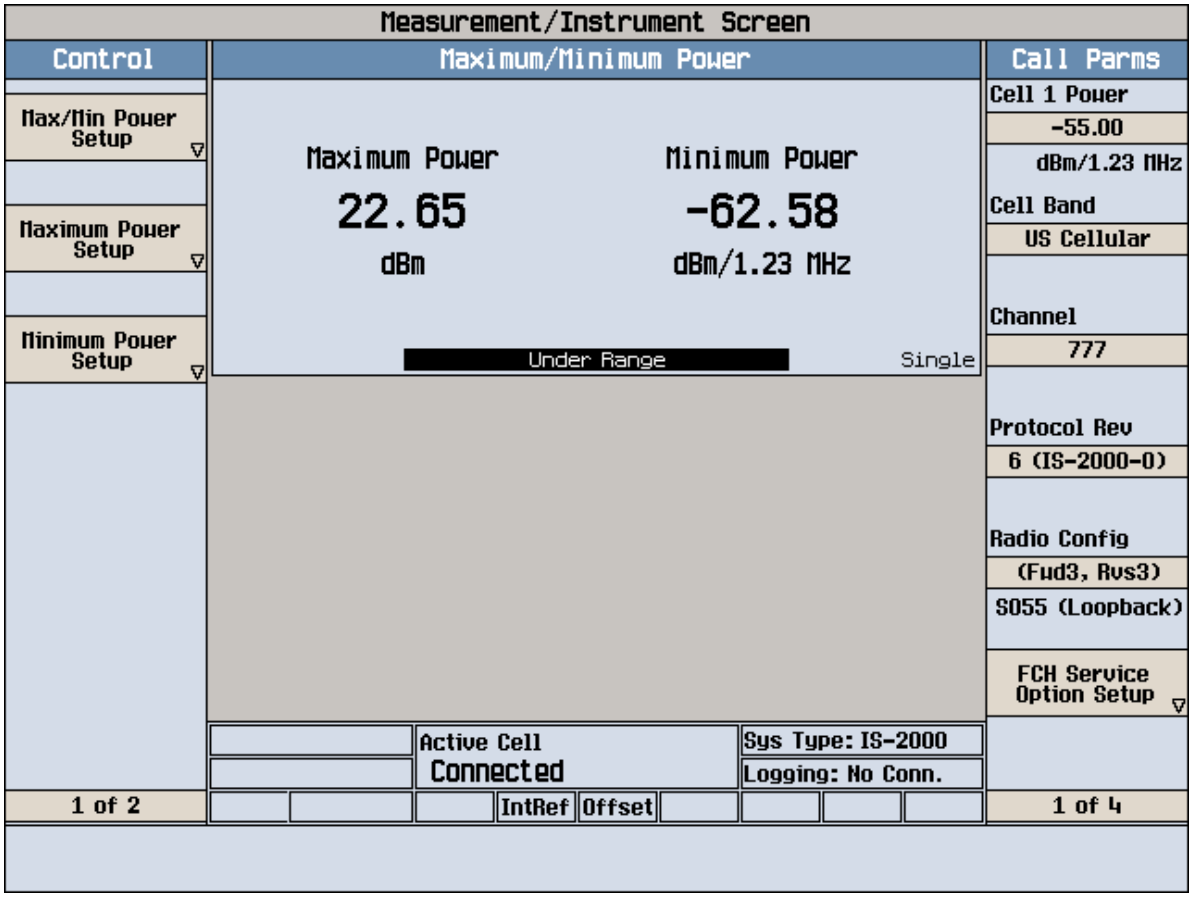

Measurement/Instrument Screen
Control
Maximum/Minimum Power
Call Parms
Max/Min Power Setup
Maximum Power Setup
Minimum Power Setup
Maximum Power
23.06
dBm
Minimum Power
-63.04
dBm/1.23 MHz
Under Range
Single
Cell 1 Power
-55.00
dBm/1.23 MHz
Cell Band
US Cellular
Channel
283
Protocol Rev
6 (IS-2000-0)
Radio Config
(Fwd3, Rvs3)
S055 (Loopback)
FCH Service Option Setup
Active Cell
Connected
Sys Type: IS-2000
Logging: No Conn.
IntRef
Offset
1 of 2
1 of 4

Channel 777

TM1:



TM3:

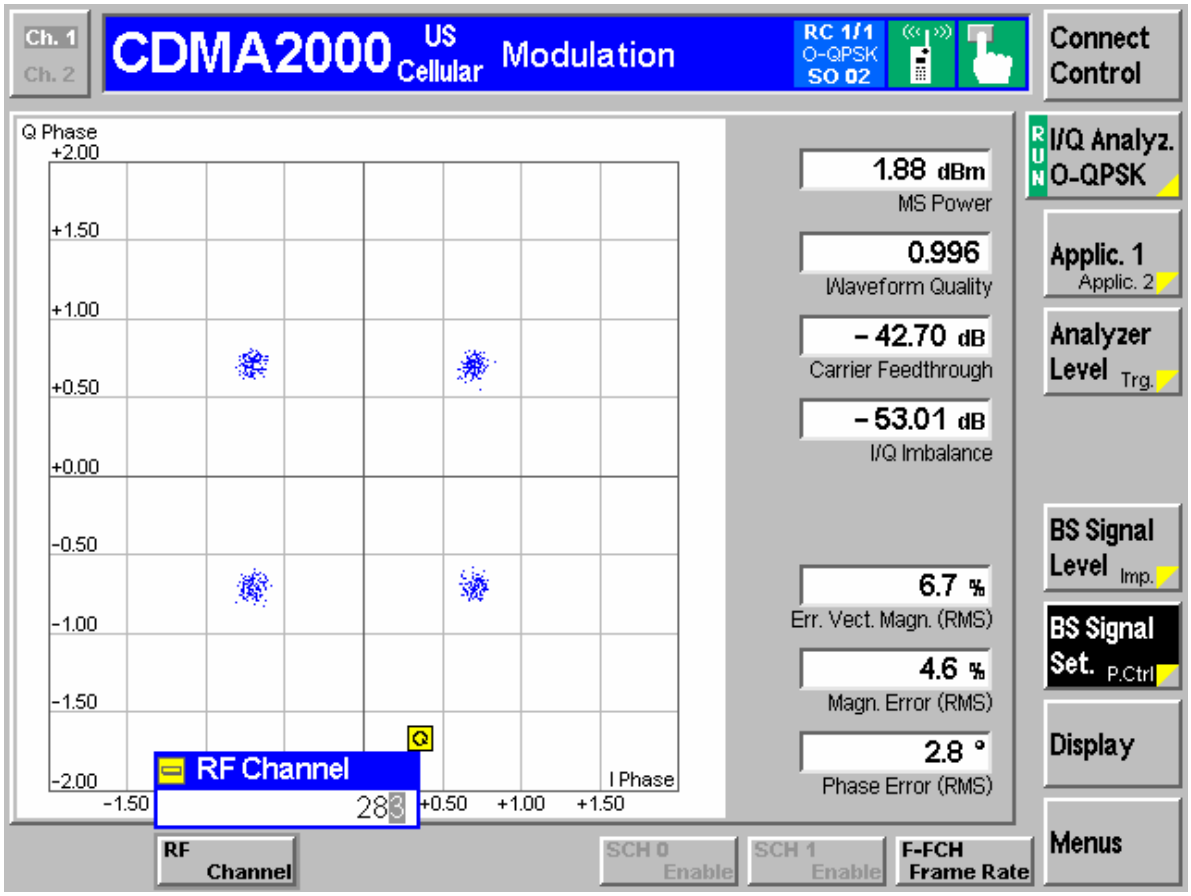

Measurement/Instrument Screen
Control
Maximum/Minimum Power
Call Parms
Max/Min Power Setup
Maximum Power Setup
Minimum Power Setup
Maximum Power
22.65
dBm
Minimum Power
-62.58
dBm/1.23 MHz
Under Range
Single
Cell 1 Power
-55.00
dBm/1.23 MHz
Cell Band
US Cellular
Channel
777
Protocol Rev
6 (IS-2000-0)
Radio Config
(Fwd3, Rvs3)
S055 (Loopback)
FCH Service Option Setup
Active Cell
Connected
Sys Type: IS-2000
Logging: No Conn.
IntRef
Offset
1 of 2
1 of 4

Appendix B

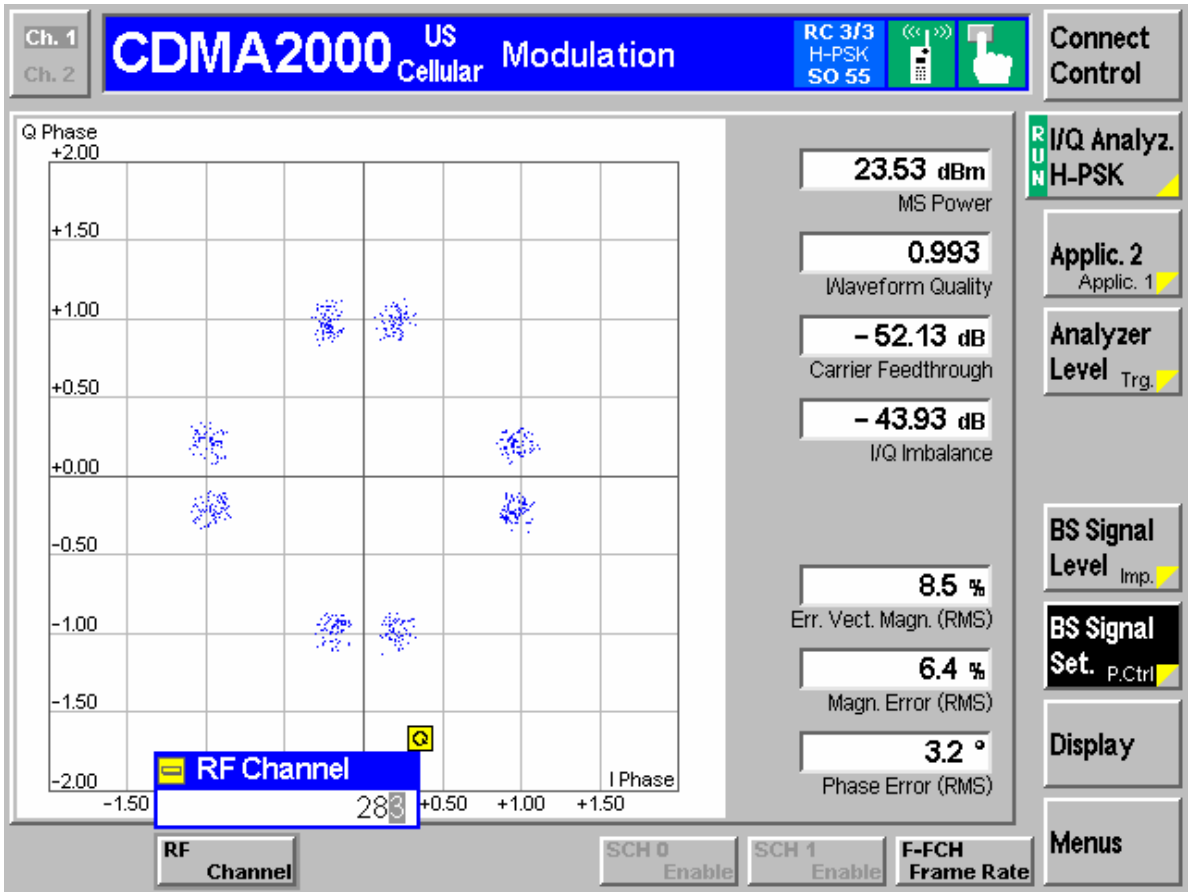
Modulation Characteristics

According to FCC Part 2.1047 & Part22 Subpart H

Channel 283（TM1）



Channel 283（TM3）

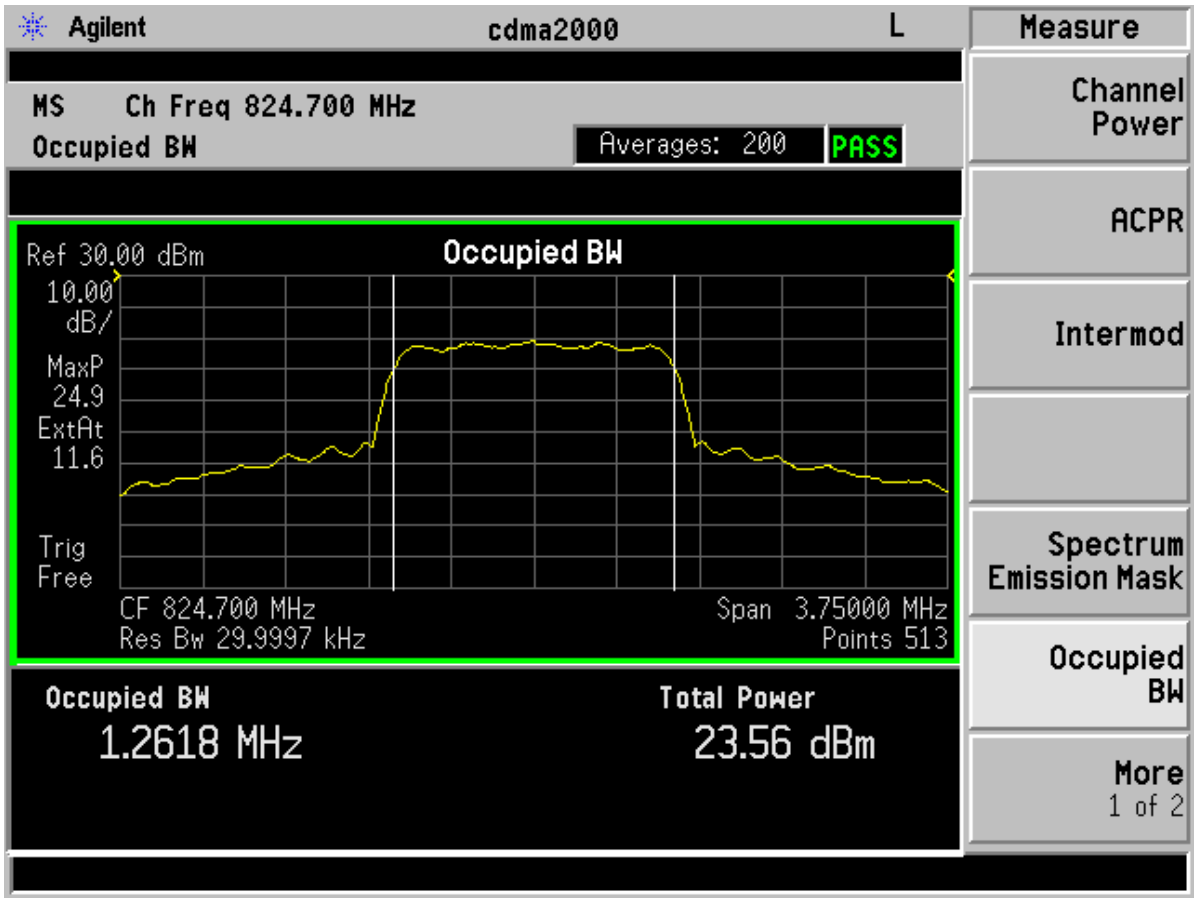


Appendix C

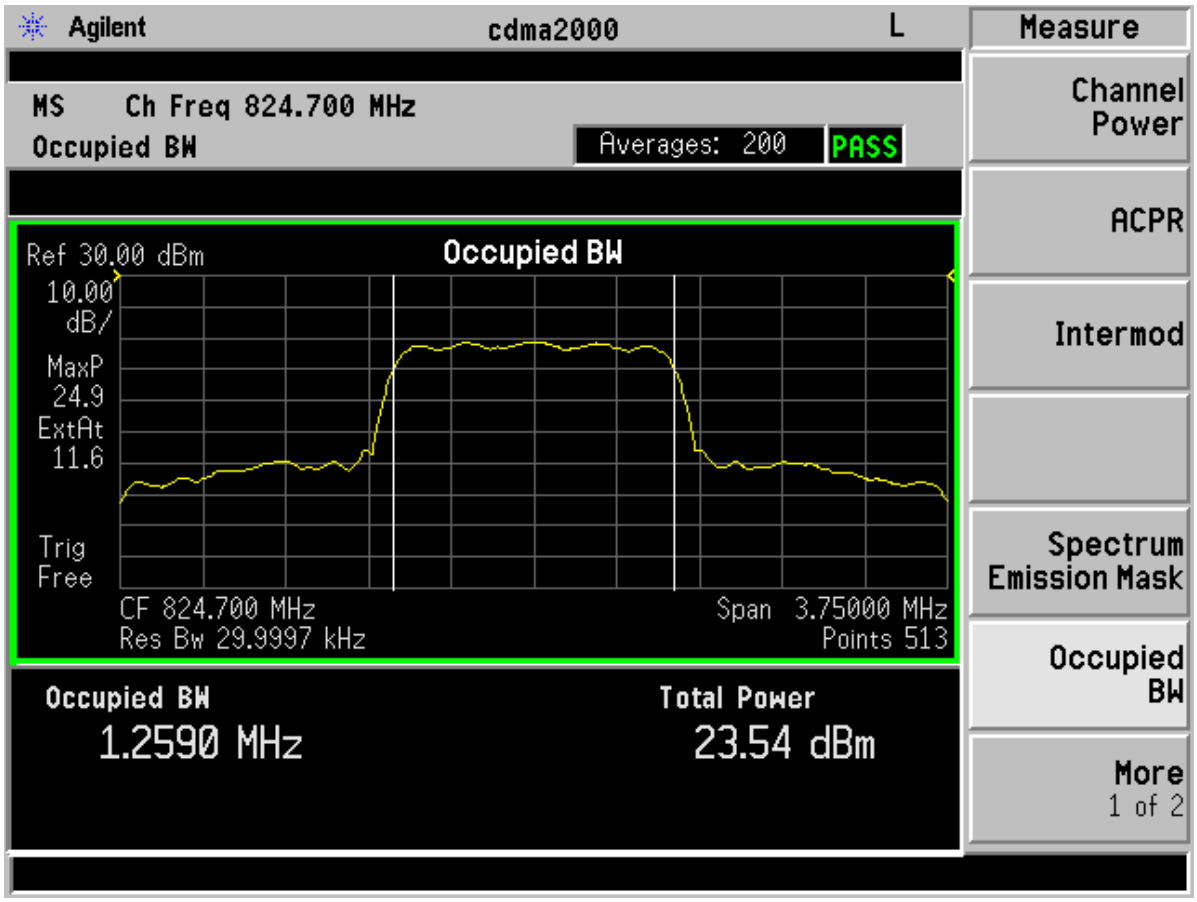
Occupied Bandwidth

According to FCC Part 2.1049 & Part 22 Subpart H

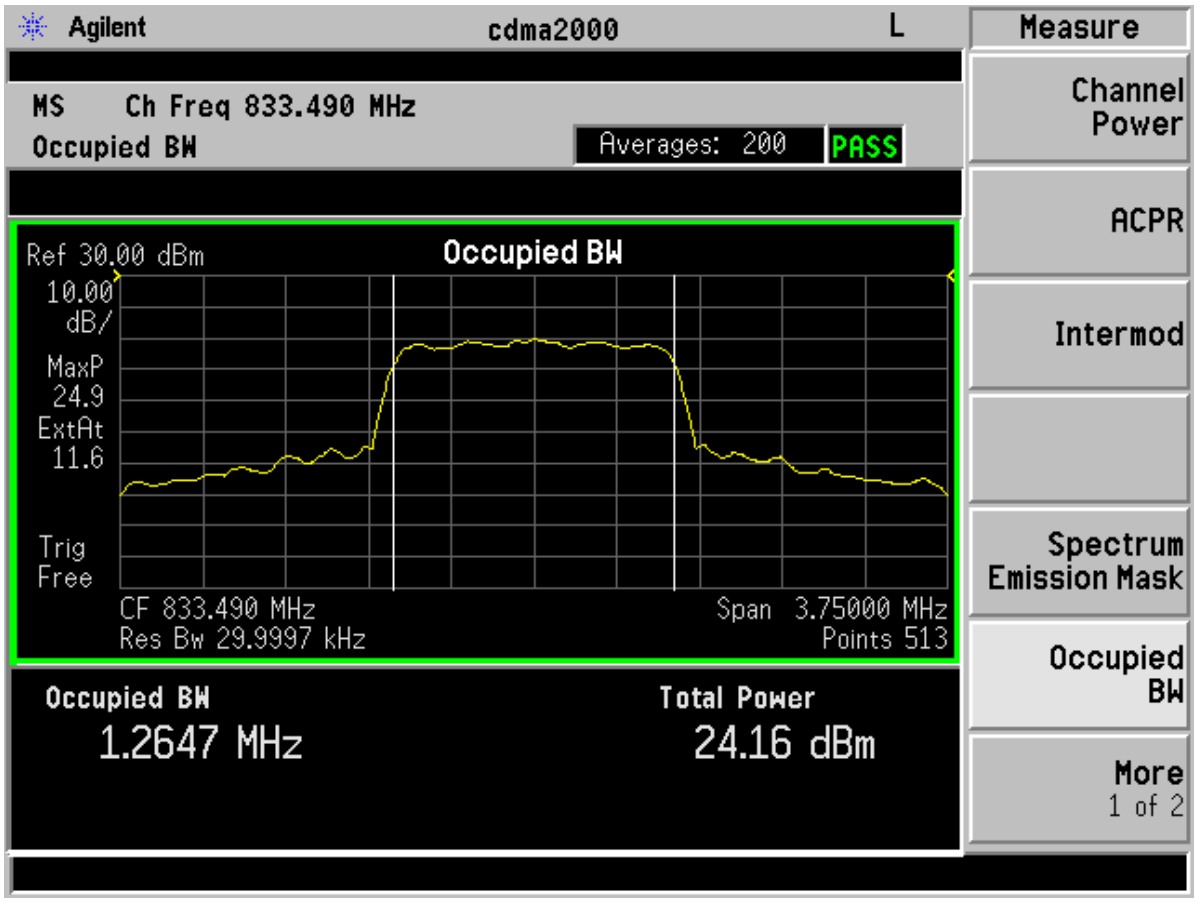
Channel 1013（TM1）



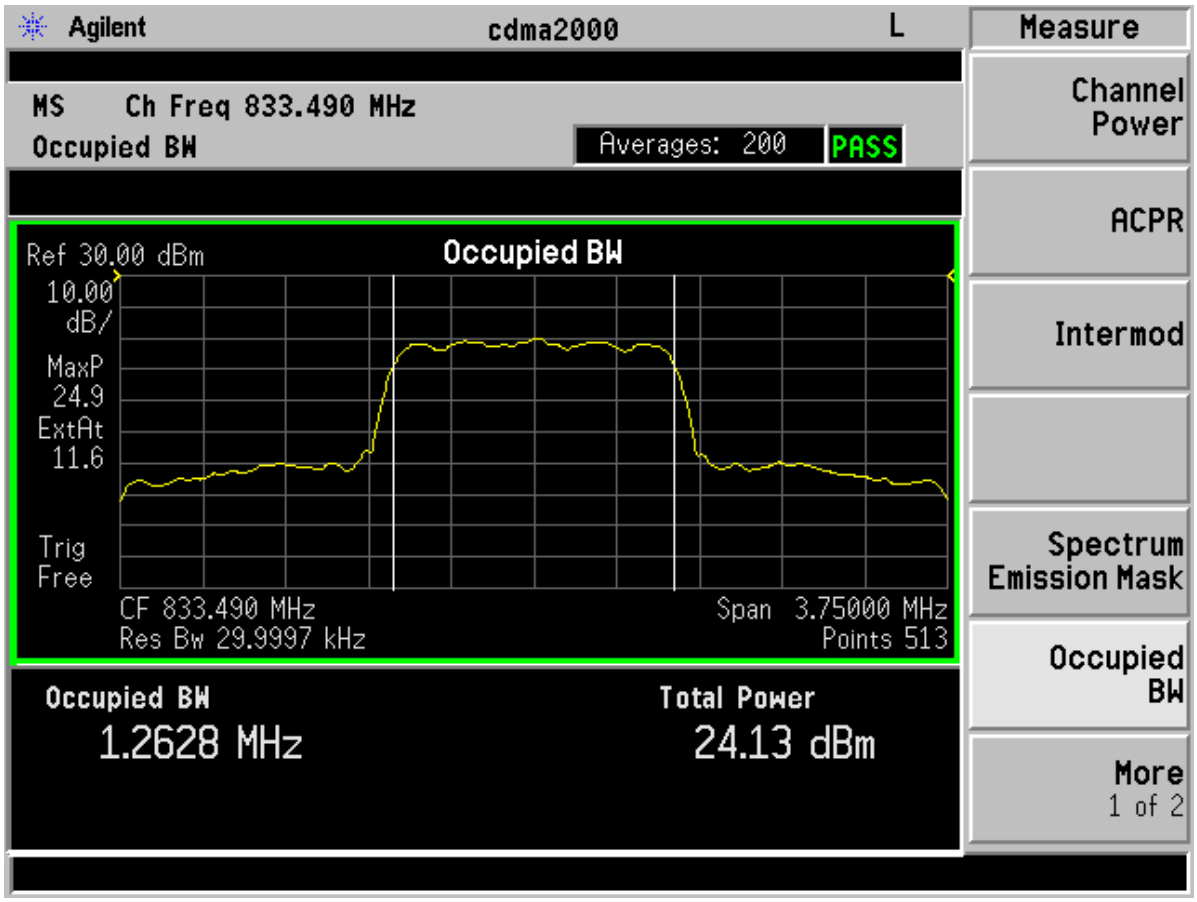
Channel 1013（TM3）



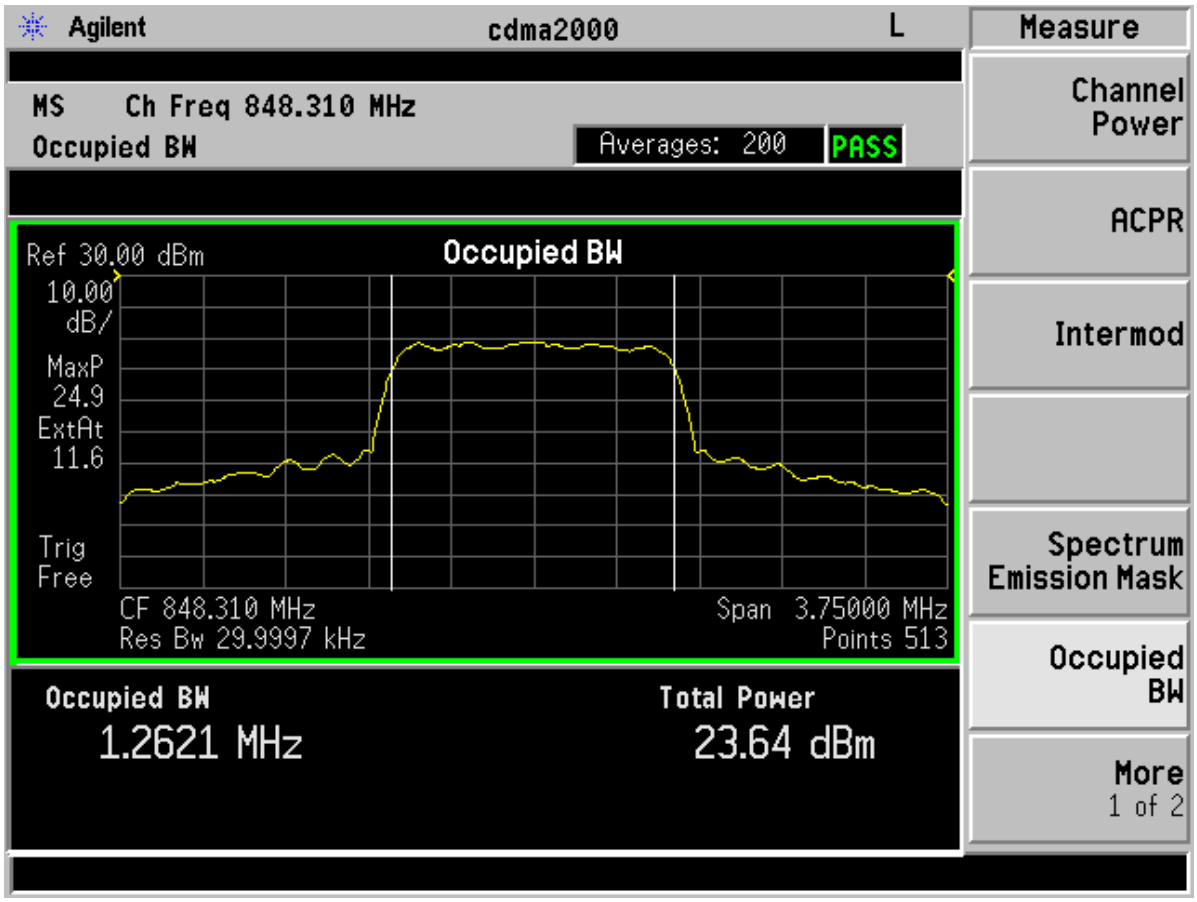
Channel 283（TM1）



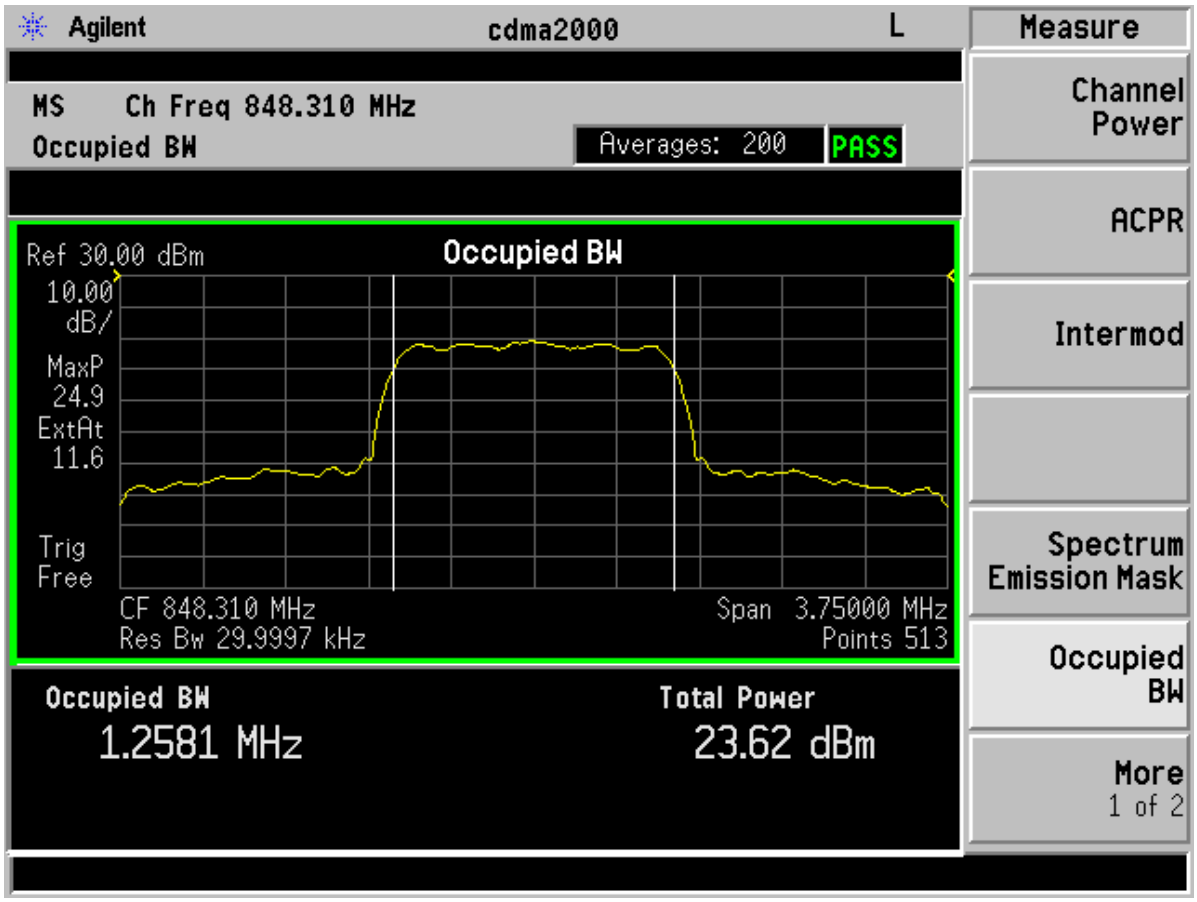
Channel 283（TM3）



Channel 777（TM1）



Channel 777（TM3）



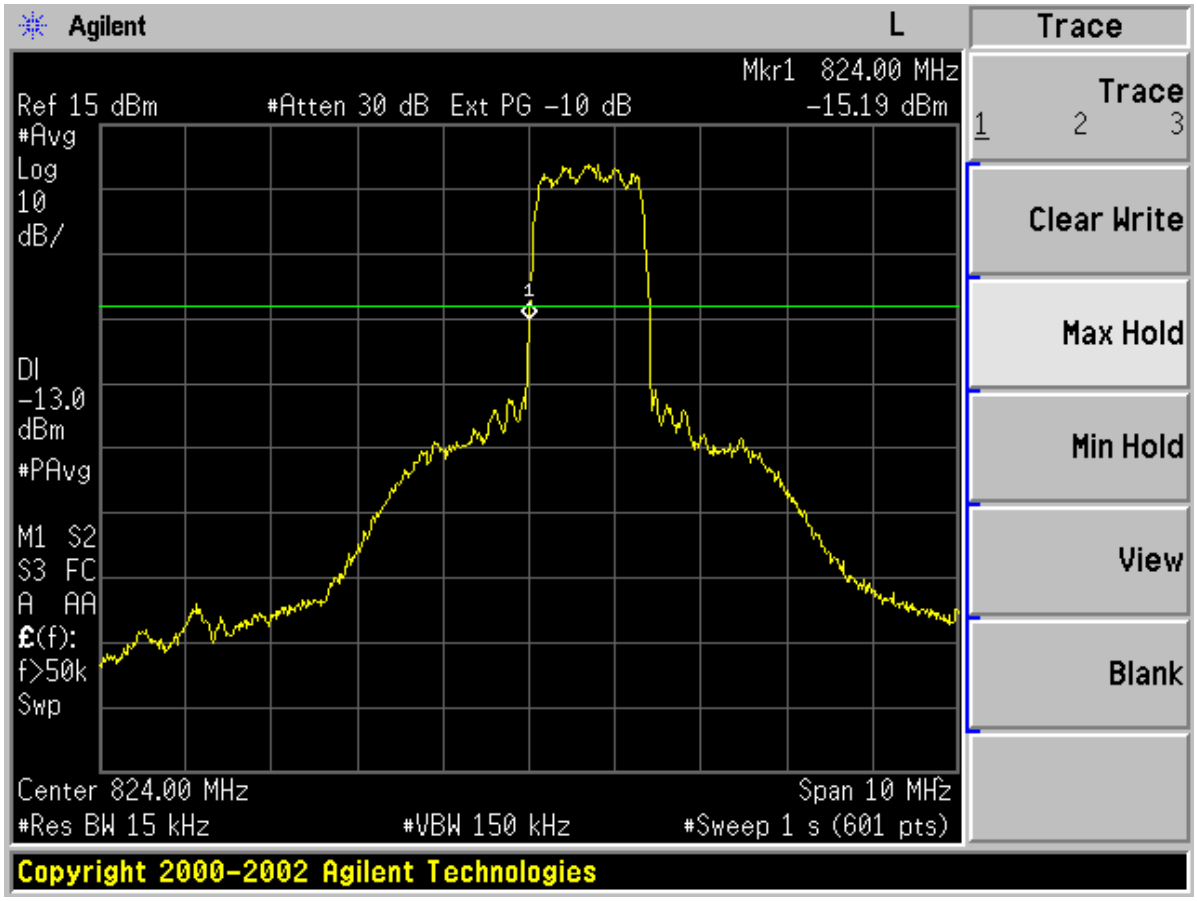
Appendix D

Band Edges Compliance

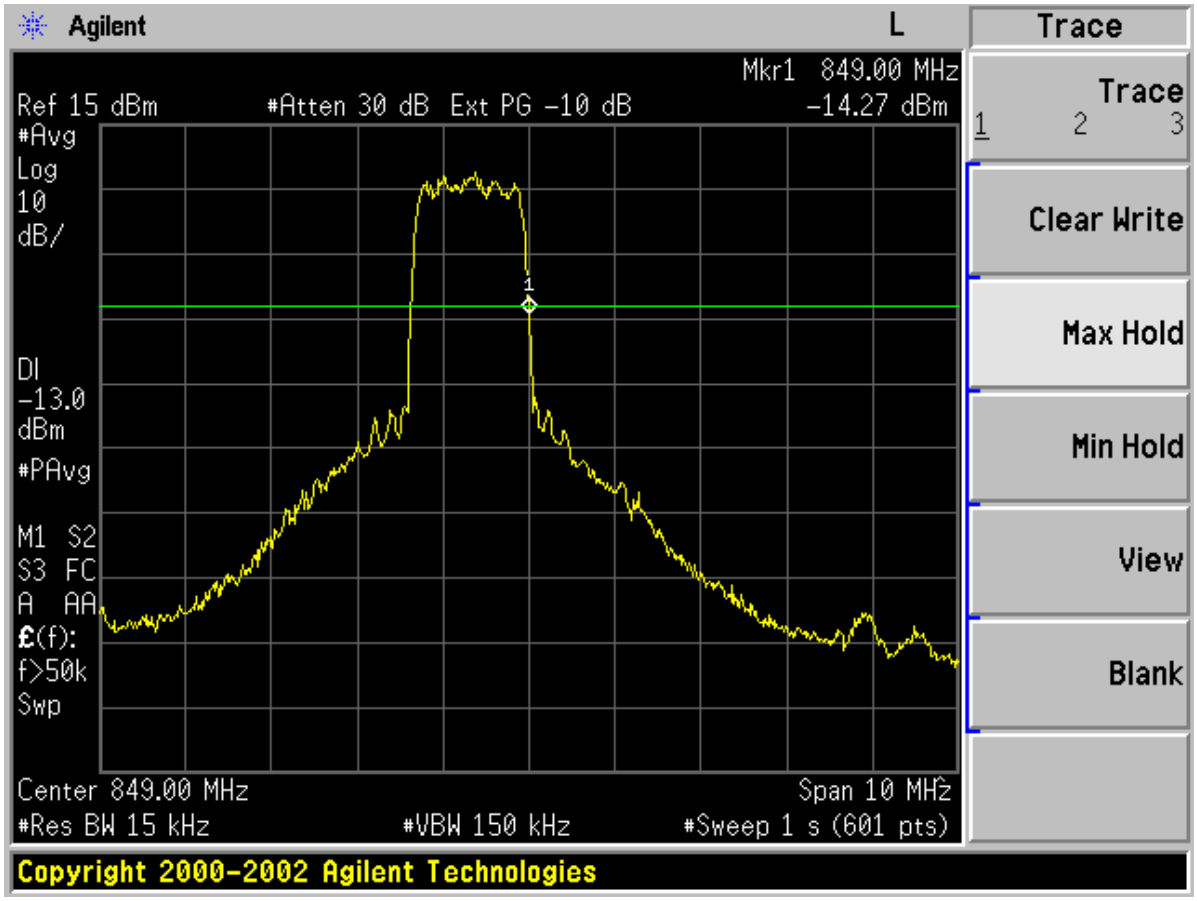
According to FCC part 2.1051 & 22.917

TM1

Left Edge (824 MHz)
Channel 1013

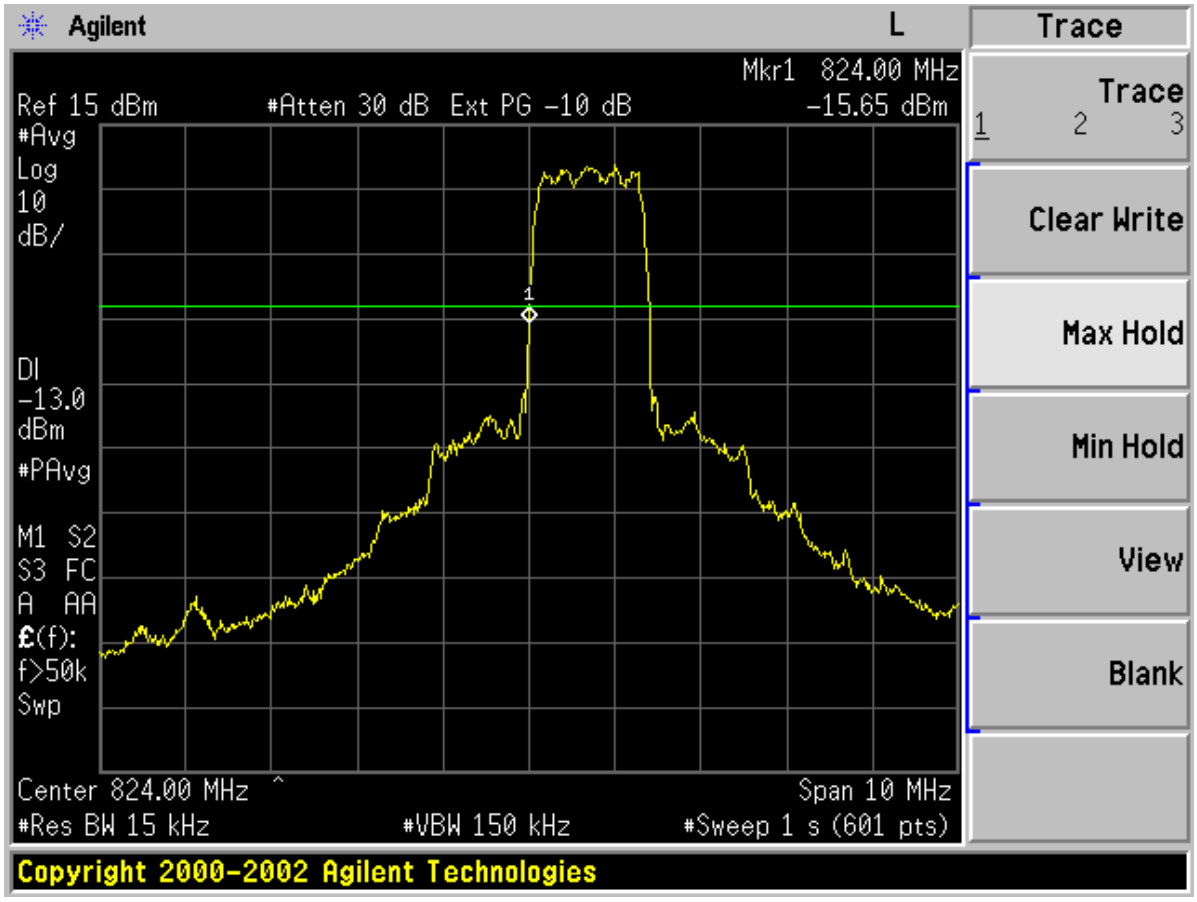


Right Edge (849 MHz)
Channel 777

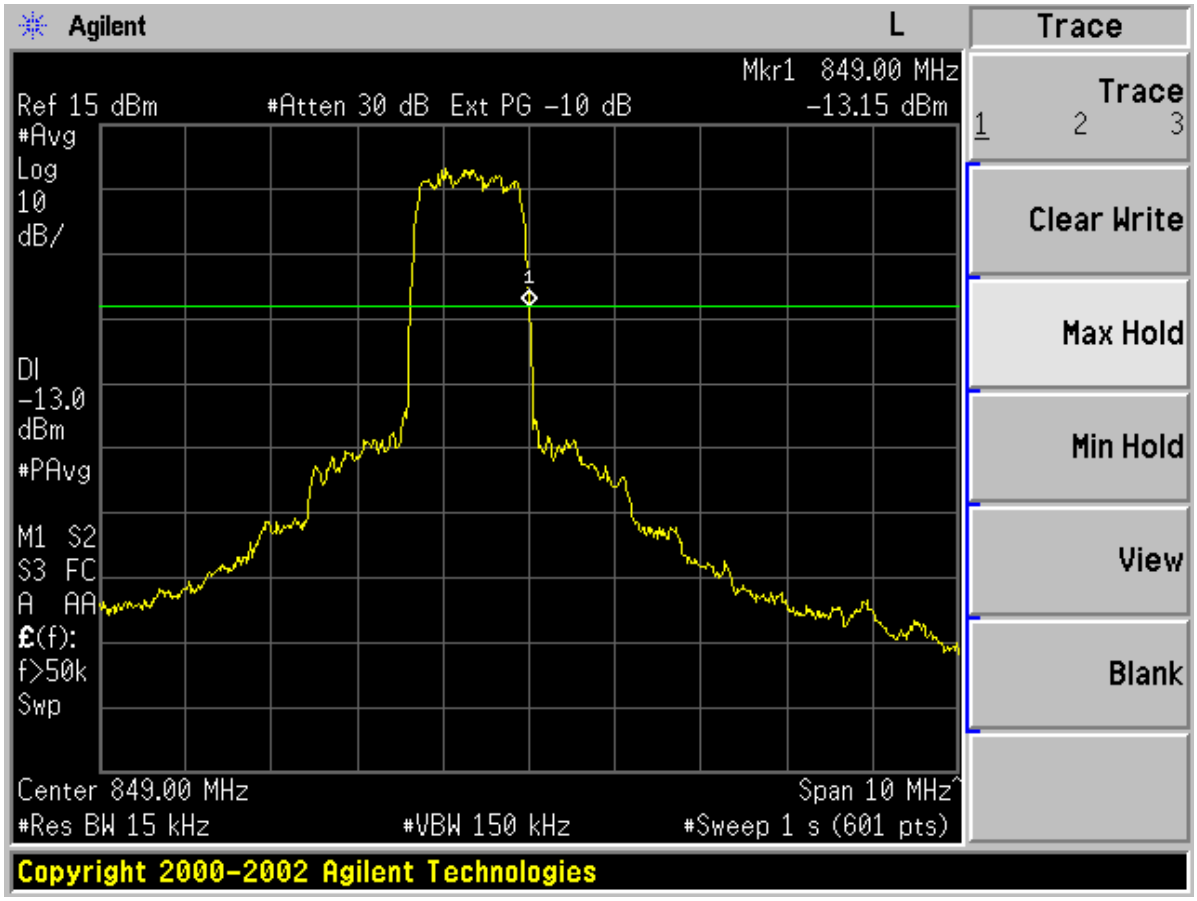


TM3

Left Edge (824 MHz)
Channel 1013



Right Edge (849 MHz)
Channel 777



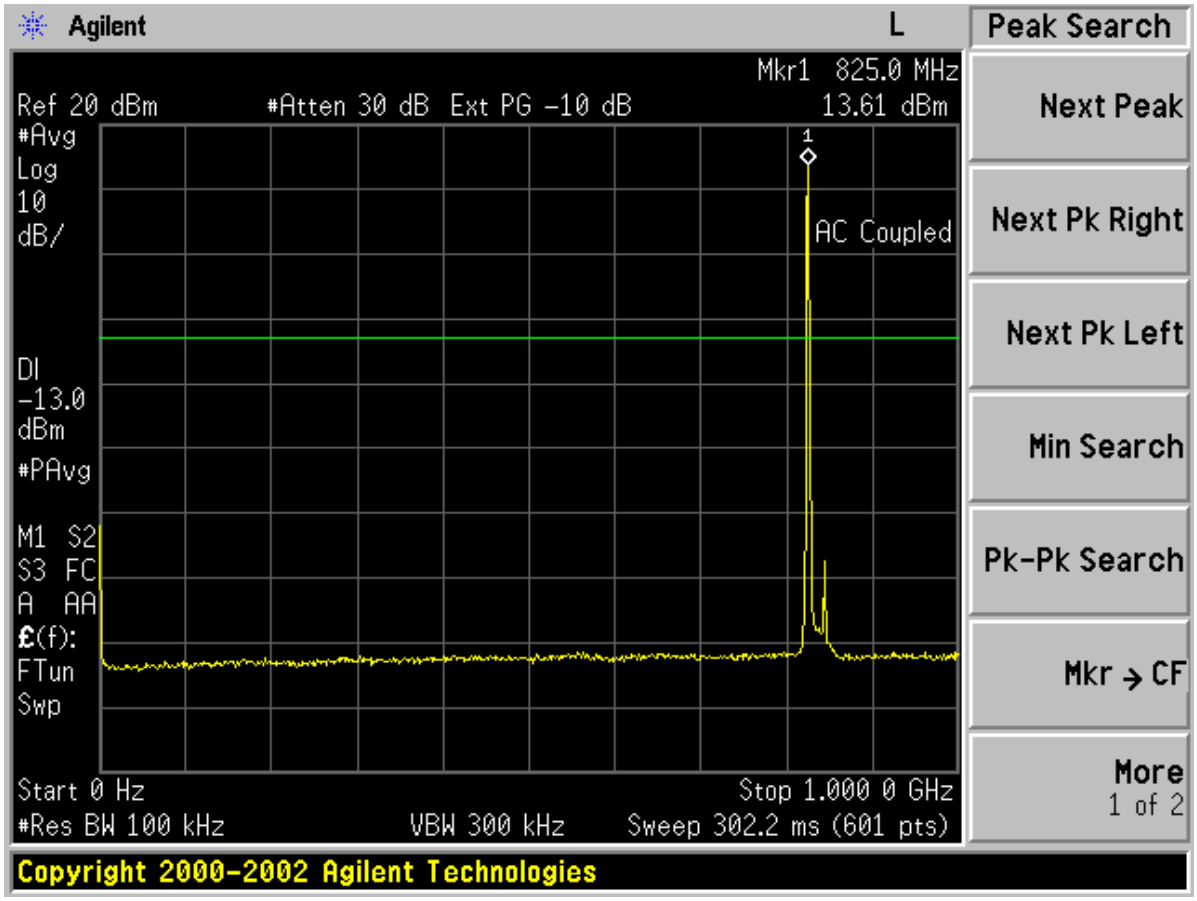
Appendix E

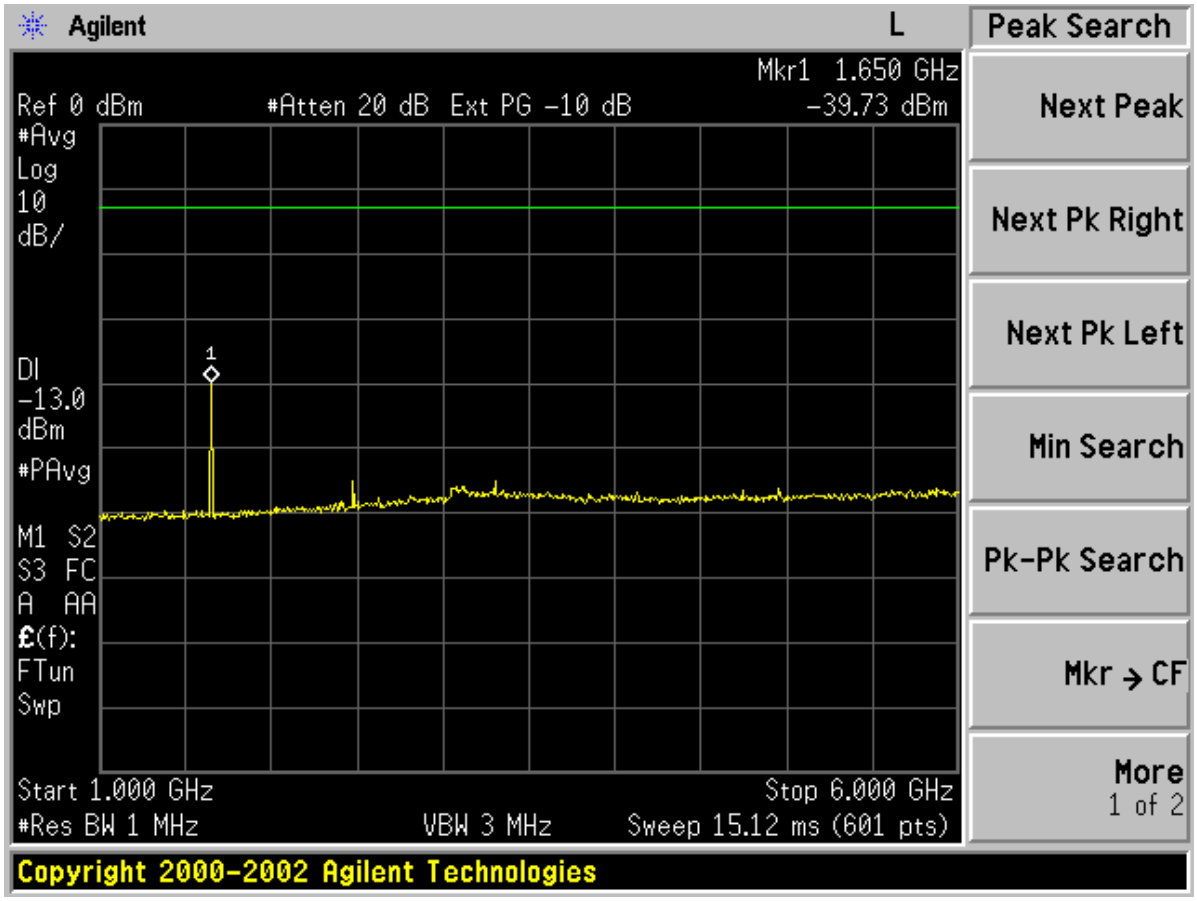
Spurious Emission at Antenna Terminal

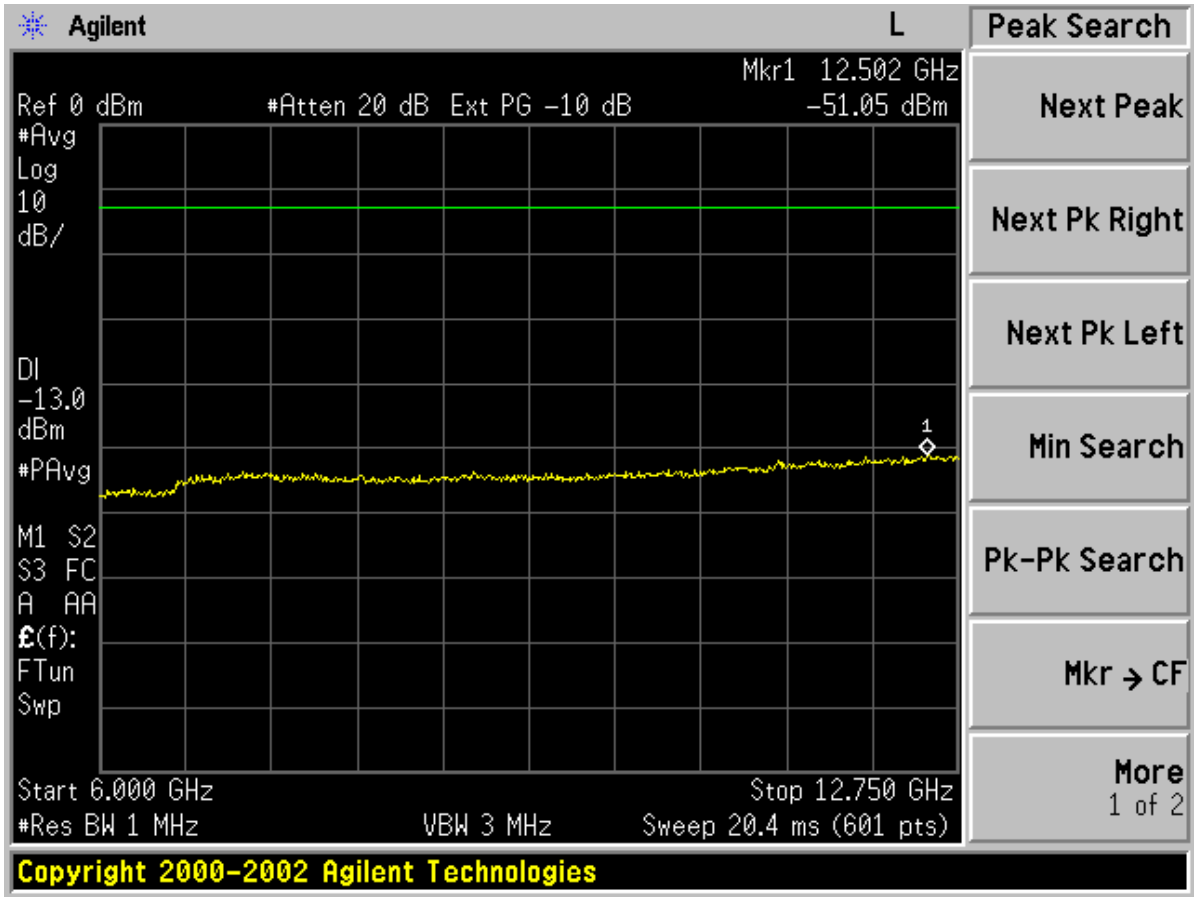
According to FCC Part 2.1051 & 22.917

TM1

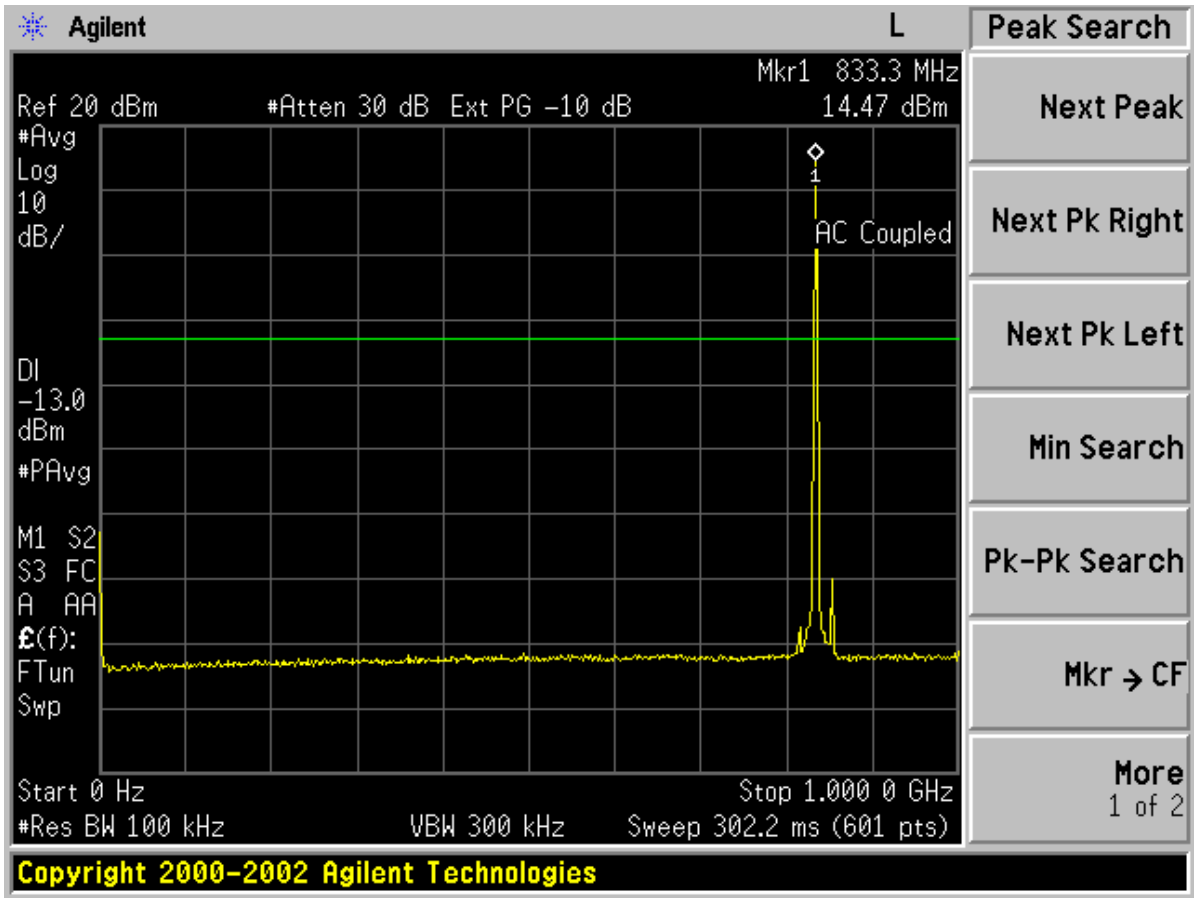
Channel 1013

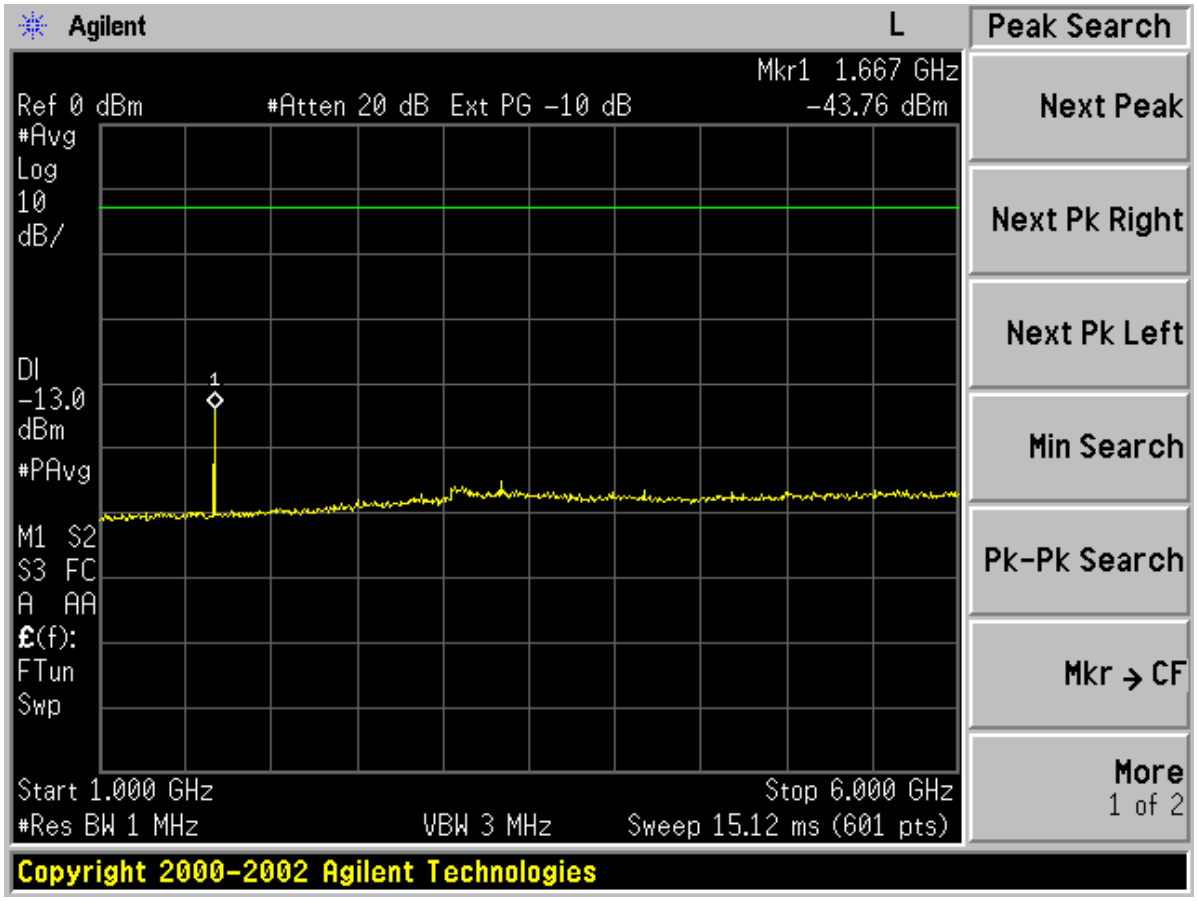


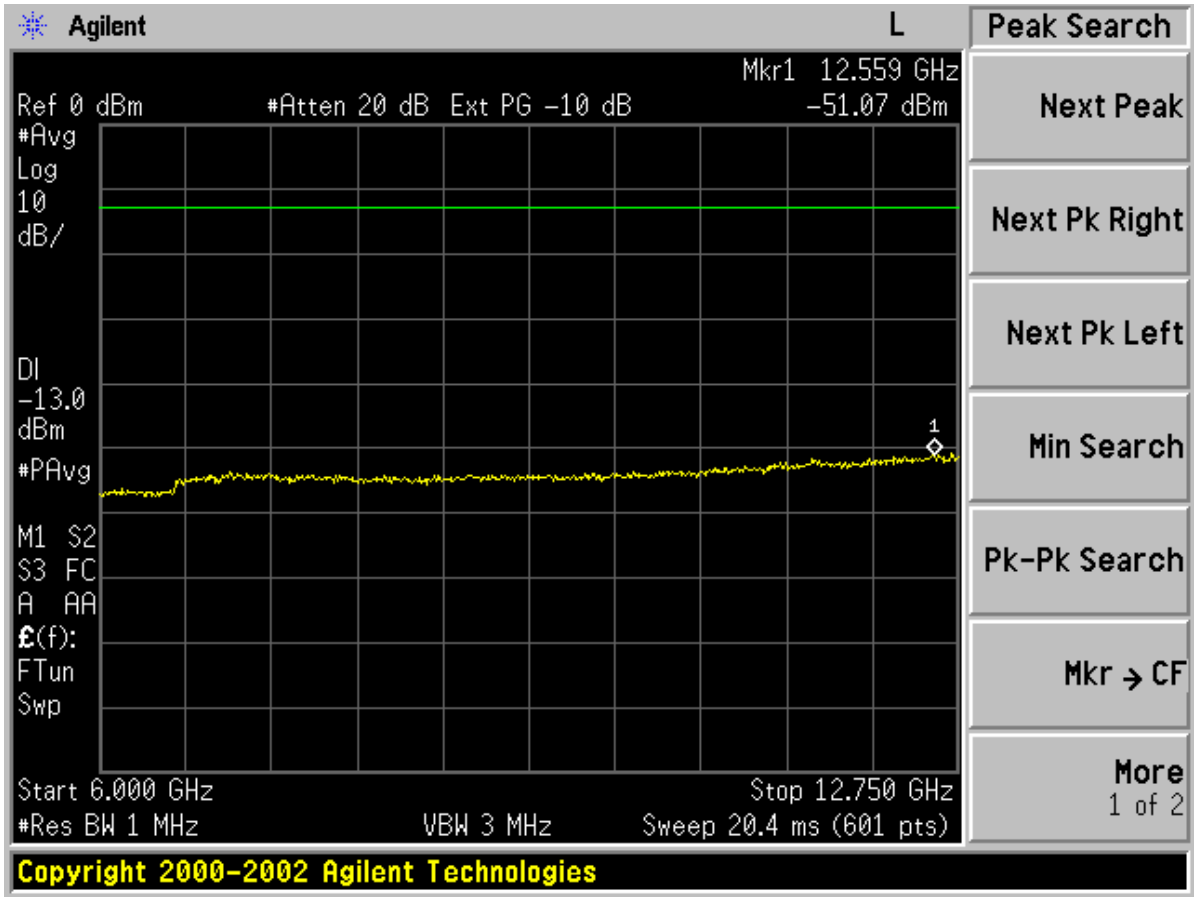

Agilent
L
Peak Search
Mkr1 1.650 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-39.73 dBm
#Avg
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 1.000 GHz
Stop 6.000 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 15.12 ms (601 pts)
Copyright 2000-2002 Agilent Technologies


Agilent
L
Peak Search
Mkr1 12.502 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-51.05 dBm
Next Peak
#Avg
Log
10
dB/
Next Pk Right
Next Pk Left
Dl
-13.0
dBm
#PAvg
Min Search
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 6.000 GHz
Stop 12.750 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 20.4 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

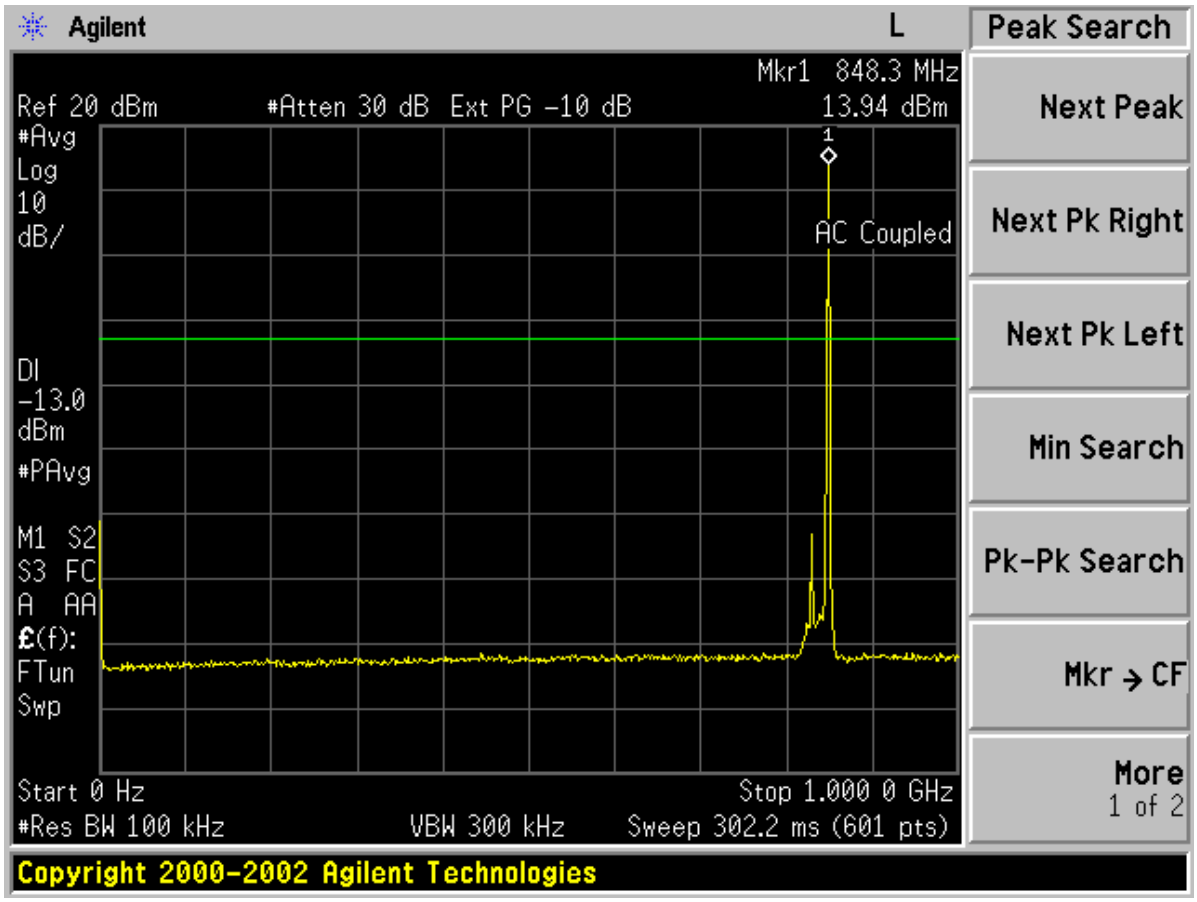
Channel 283

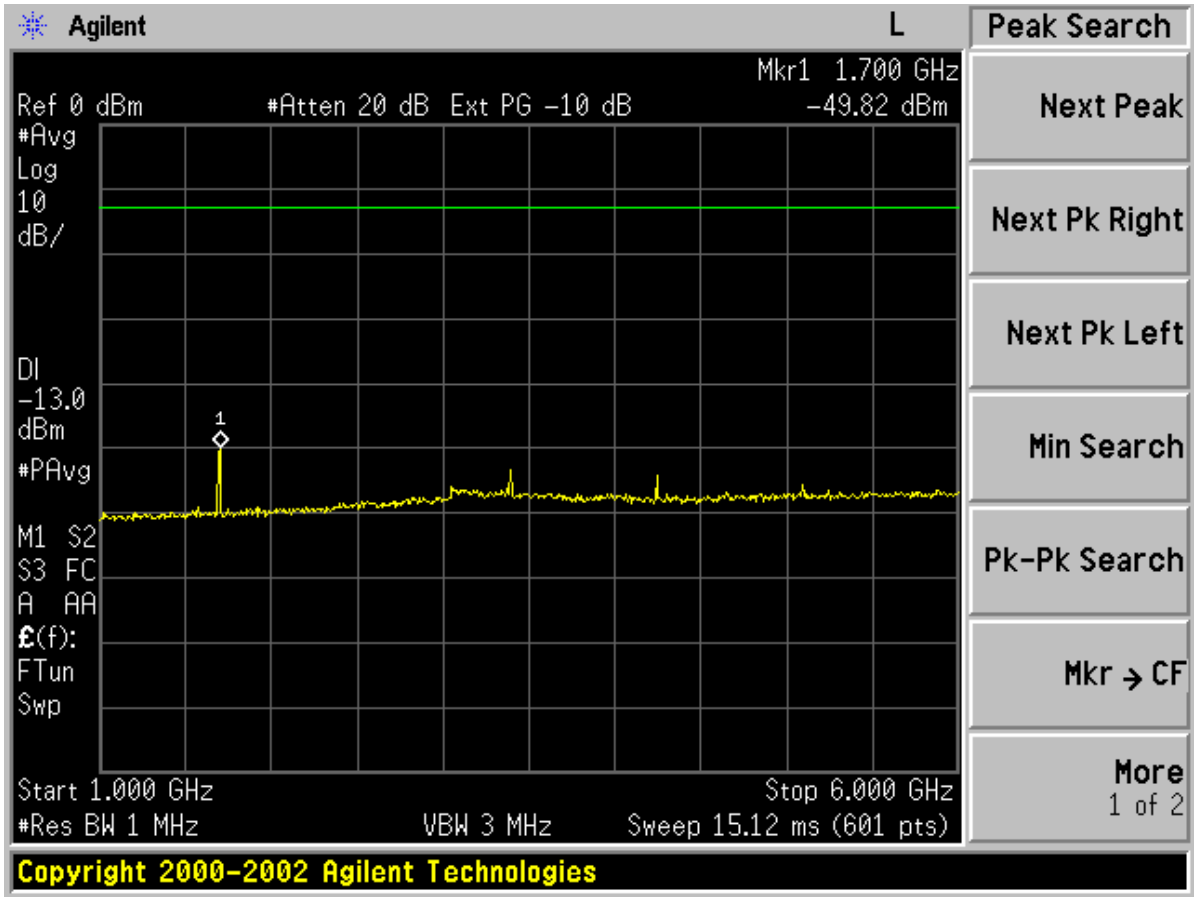

Agilent
L
Peak Search
Mkr1 833.3 MHz
Ref 20 dBm
#Atten 30 dB Ext PG -10 dB
14.47 dBm
#Avg
Log
10
dB/
AC Coupled
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 0 Hz
Stop 1.000 0 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 302.2 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

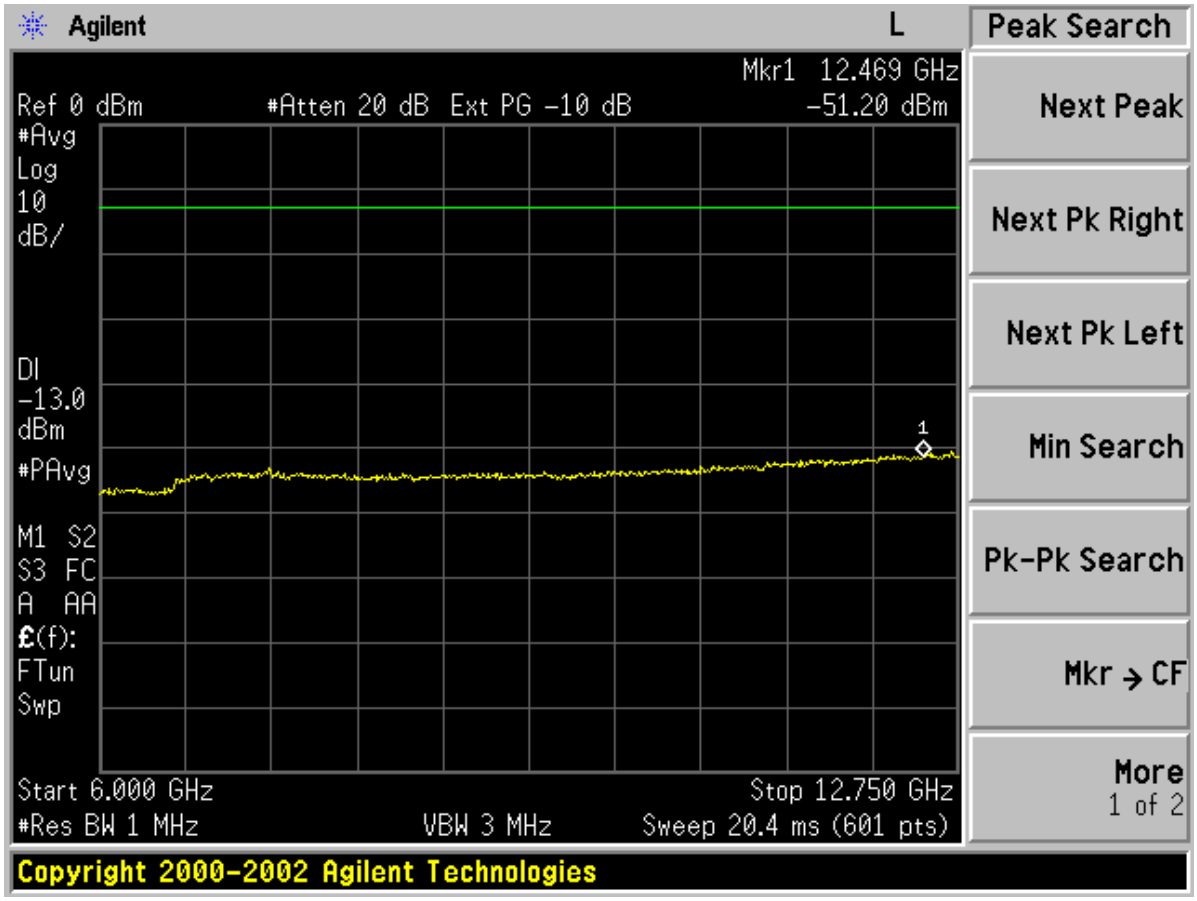

Agilent
L
Peak Search
Mkr1 1.667 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-43.76 dBm
#Avg
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 1.000 GHz
Stop 6.000 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 15.12 ms (601 pts)
Copyright 2000-2002 Agilent Technologies


Agilent
L
Peak Search
Mkr1 12.559 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-51.07 dBm
#Avg
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 6.000 GHz
Stop 12.750 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 20.4 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

Channel 777

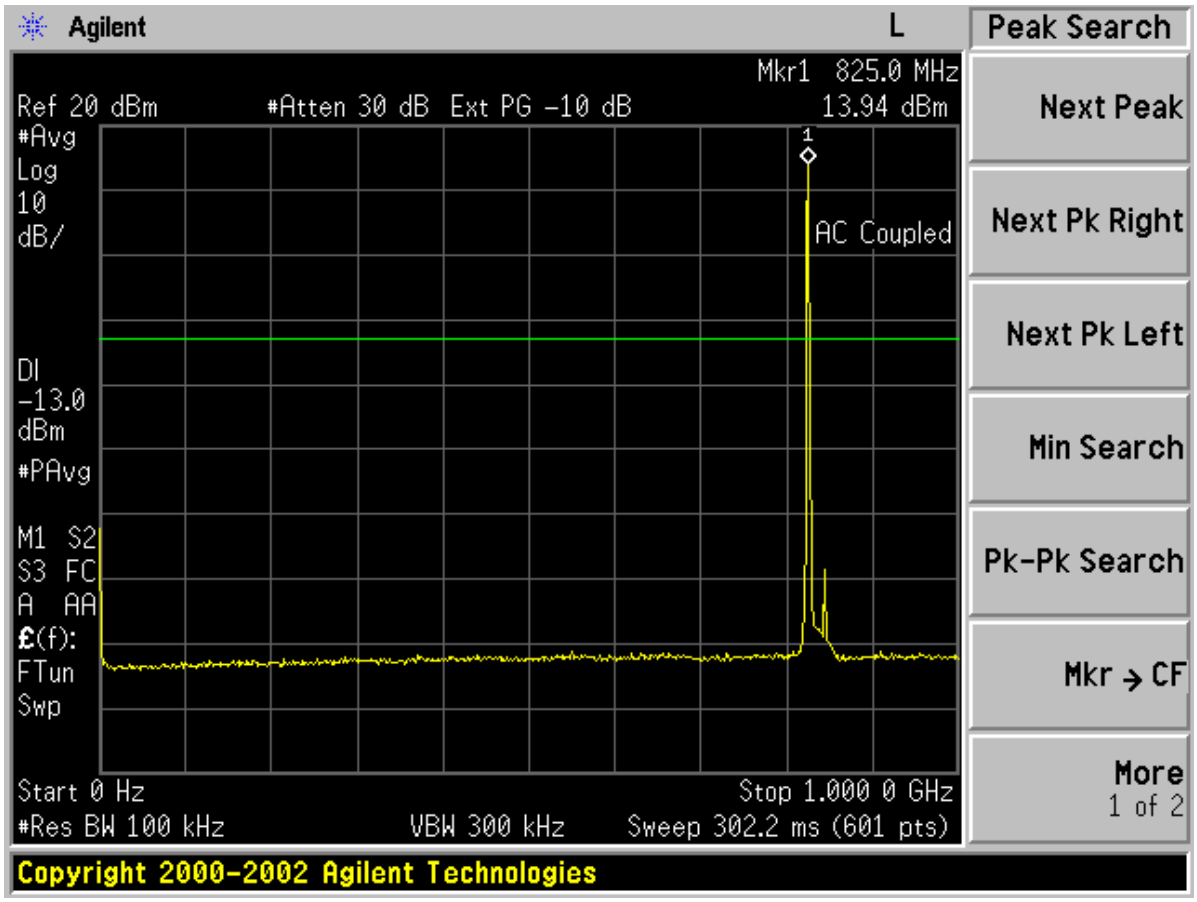

Agilent
L
Peak Search
Mkr1 848.3 MHz
Ref 20 dBm
#Atten 30 dB Ext PG -10 dB
13.94 dBm
#Avg
Log
10
dB/
AC Coupled
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 0 Hz
Stop 1.000 0 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 302.2 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

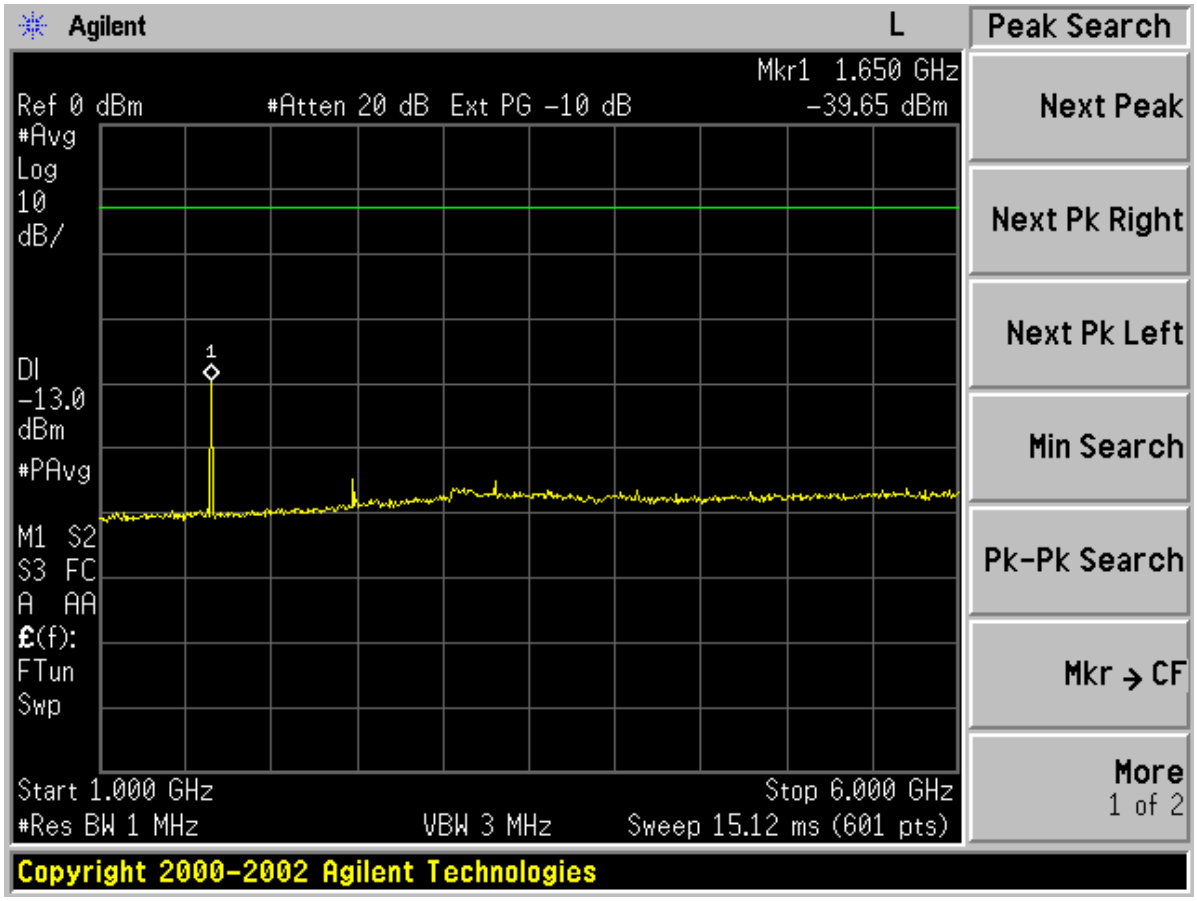

Agilent
L
Peak Search
Mkr1 1.700 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-49.82 dBm
#Avg
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
1
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 1.000 GHz
Stop 6.000 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 15.12 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

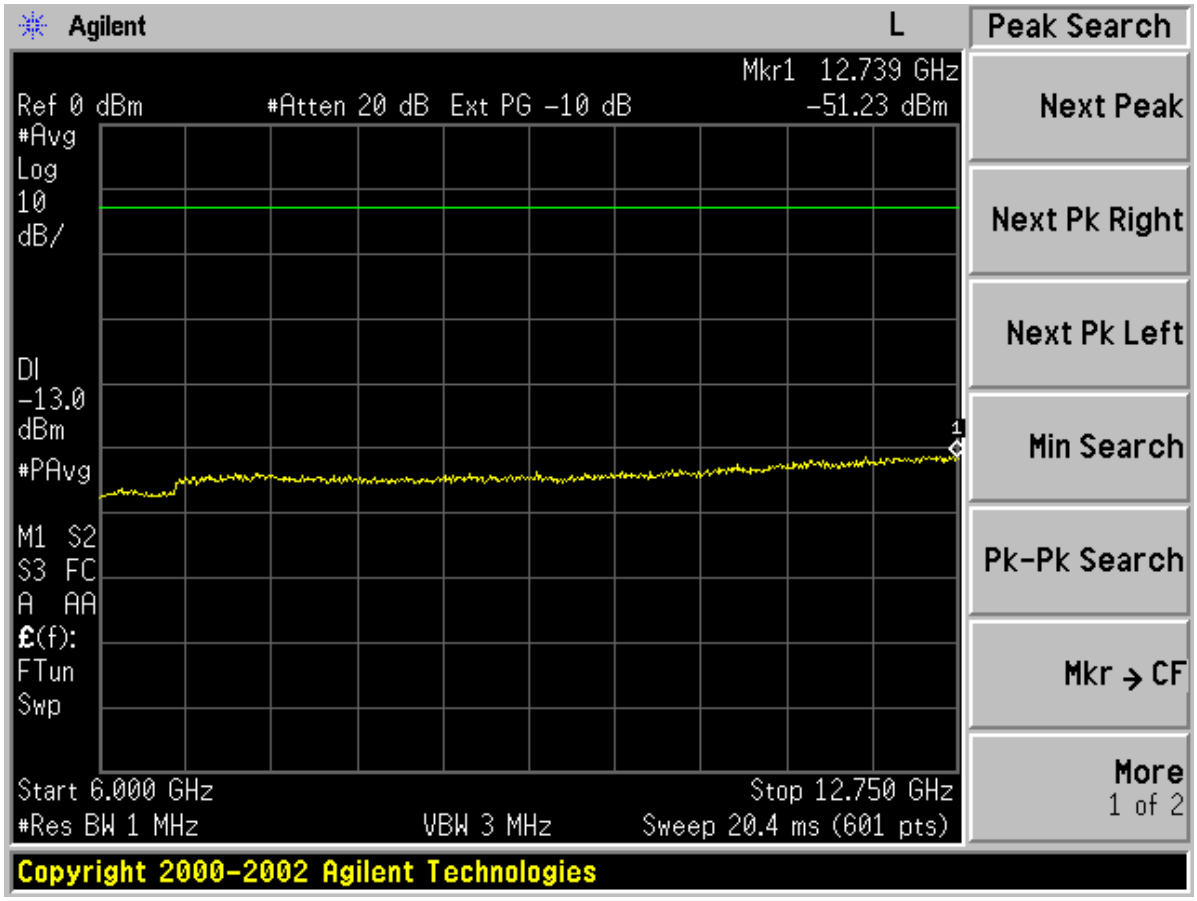

Agilent
L
Peak Search
Mkr1 12.469 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-51.20 dBm
#Avg
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 6.000 GHz
Stop 12.750 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 20.4 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

TM3

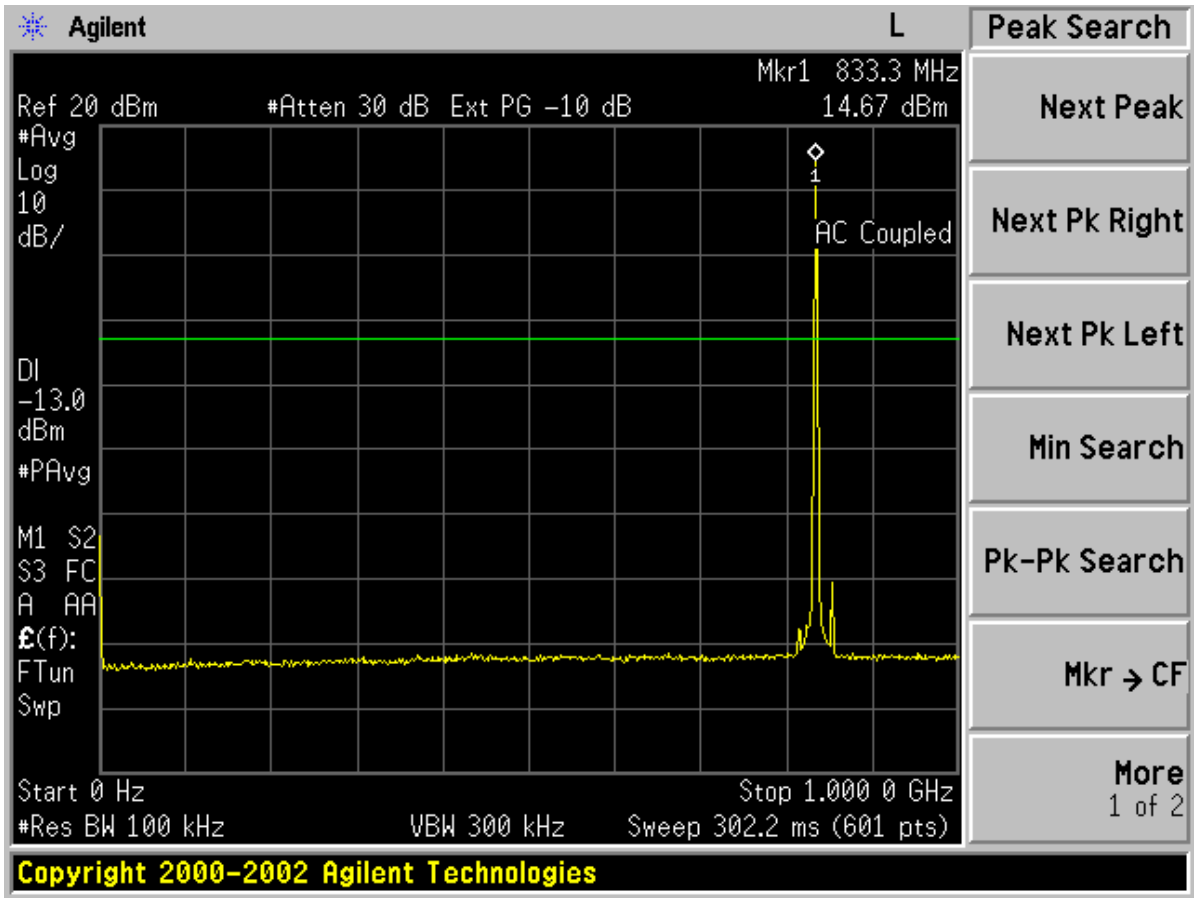
Channel 1013

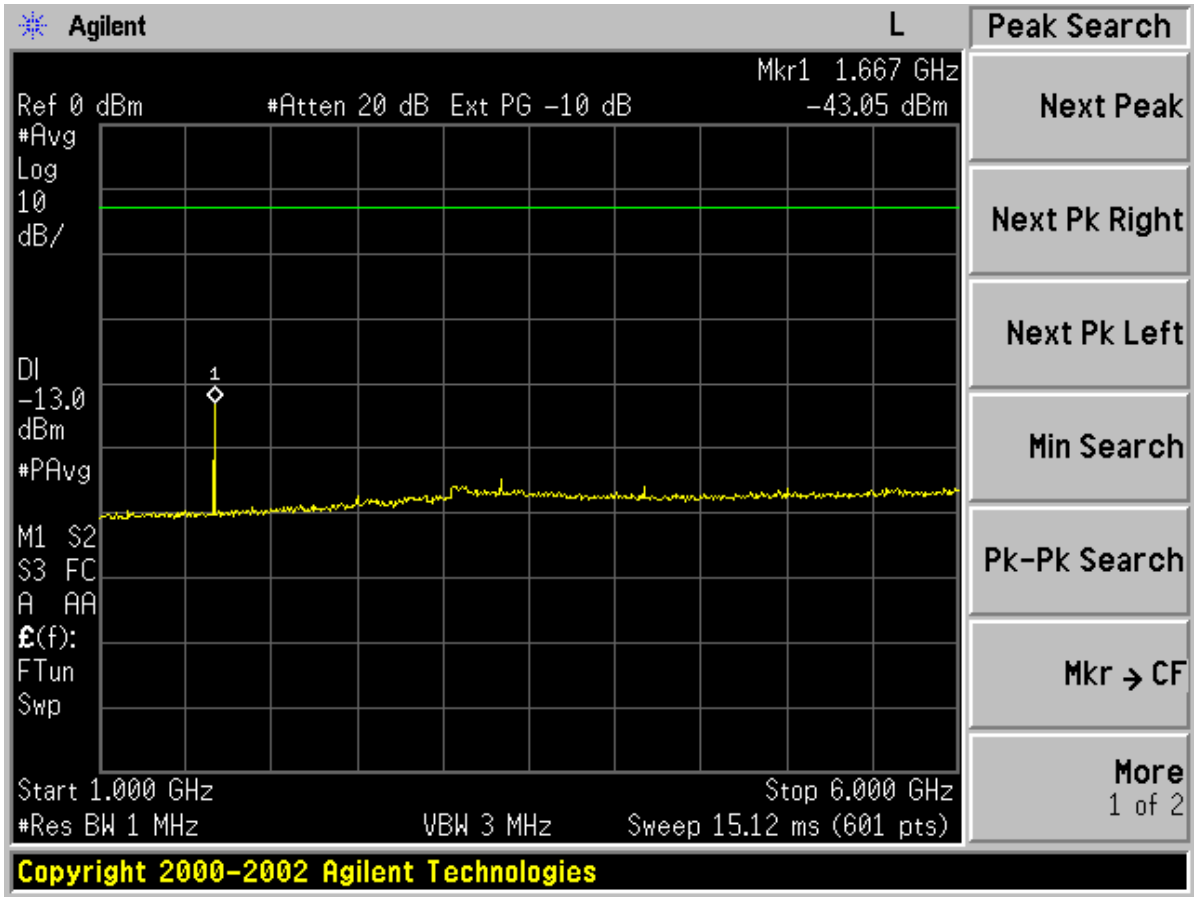


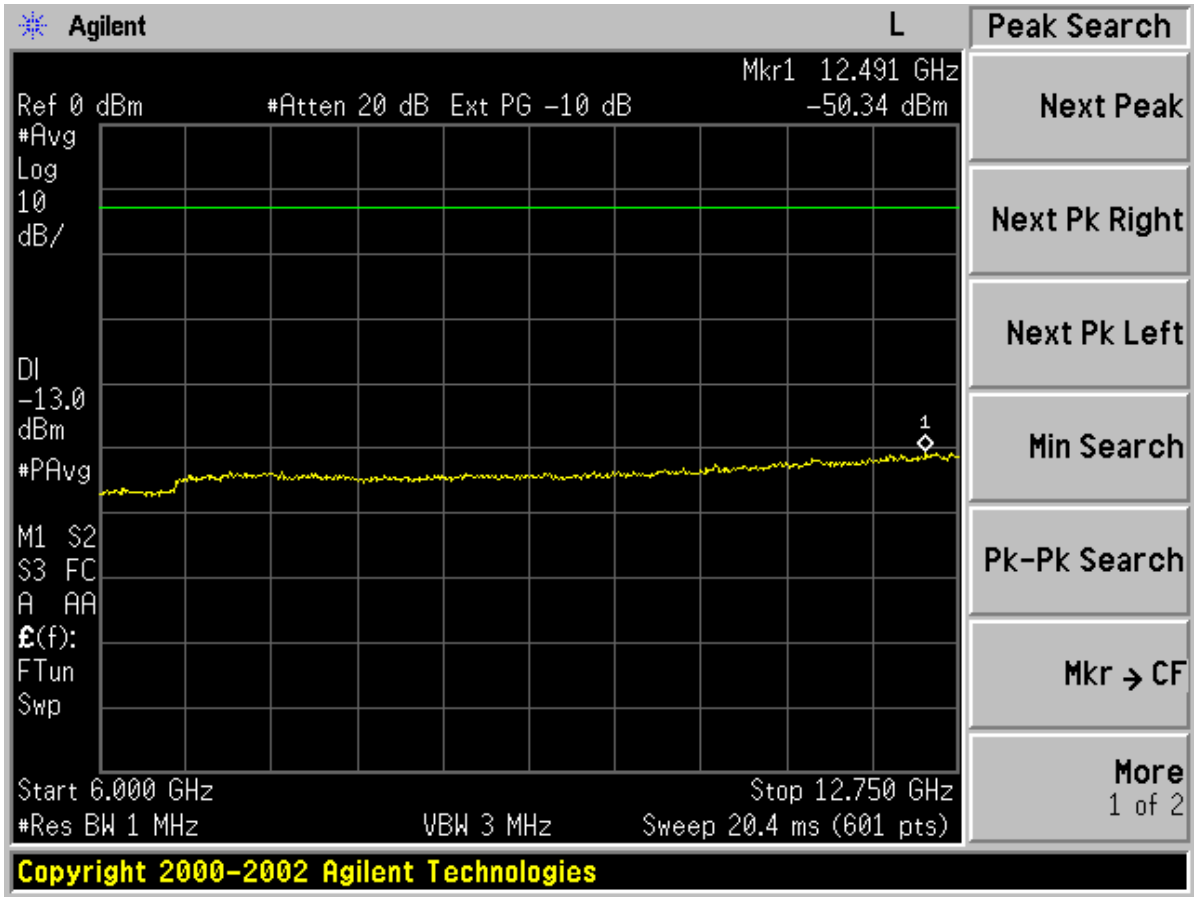

Agilent
L
Peak Search
Mkr1 1.650 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-39.65 dBm
Next Peak
#Avg
Log
10
dB/
Next Pk Right
Next Pk Left
Dl
-13.0
dBm
#PAvg
Min Search
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 1.000 GHz
Stop 6.000 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 15.12 ms (601 pts)
Copyright 2000-2002 Agilent Technologies


Agilent
L
Peak Search
Mkr1 12.739 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-51.23 dBm
Next Peak
#Avg
Log
10
dB/
Next Pk Right
Next Pk Left
Dl
-13.0
dBm
#PAvg
Min Search
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 6.000 GHz
Stop 12.750 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 20.4 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

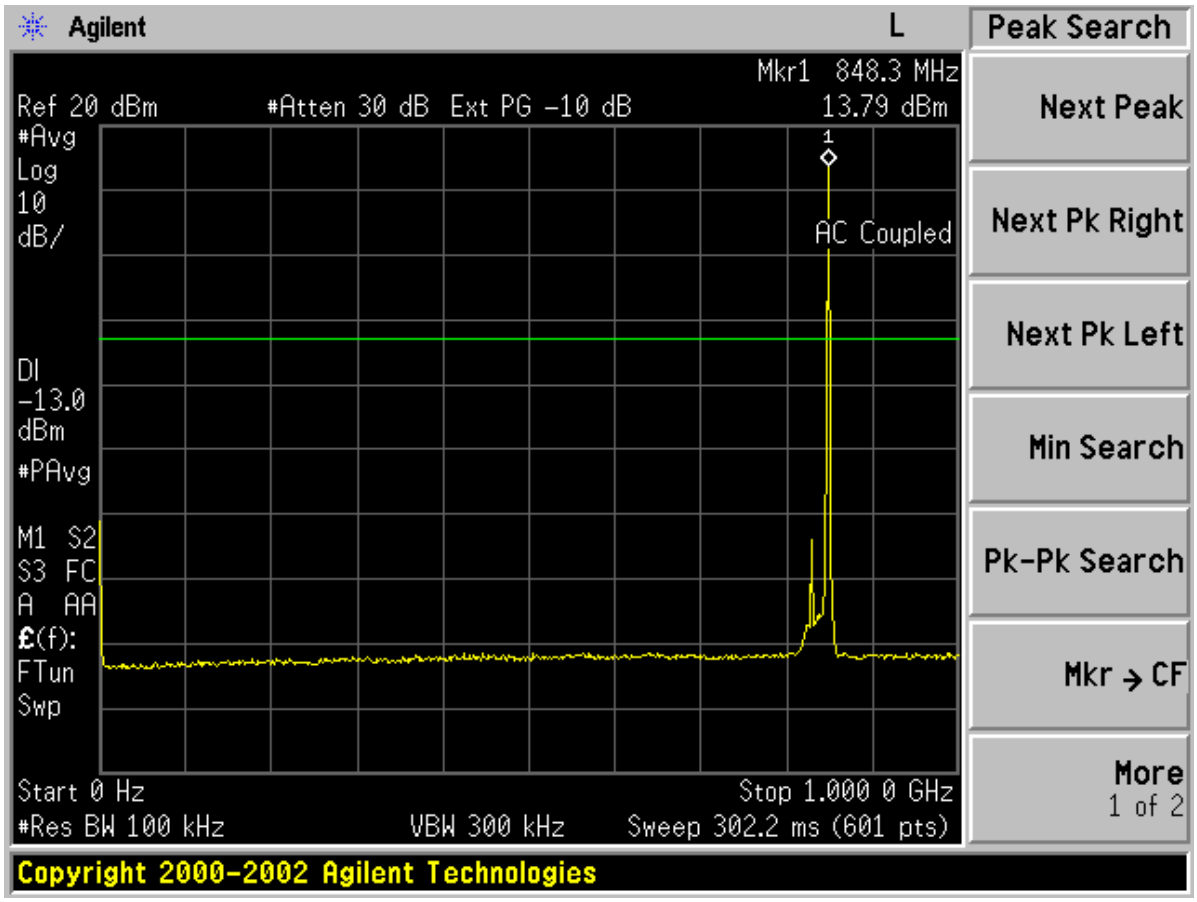
Channel 283

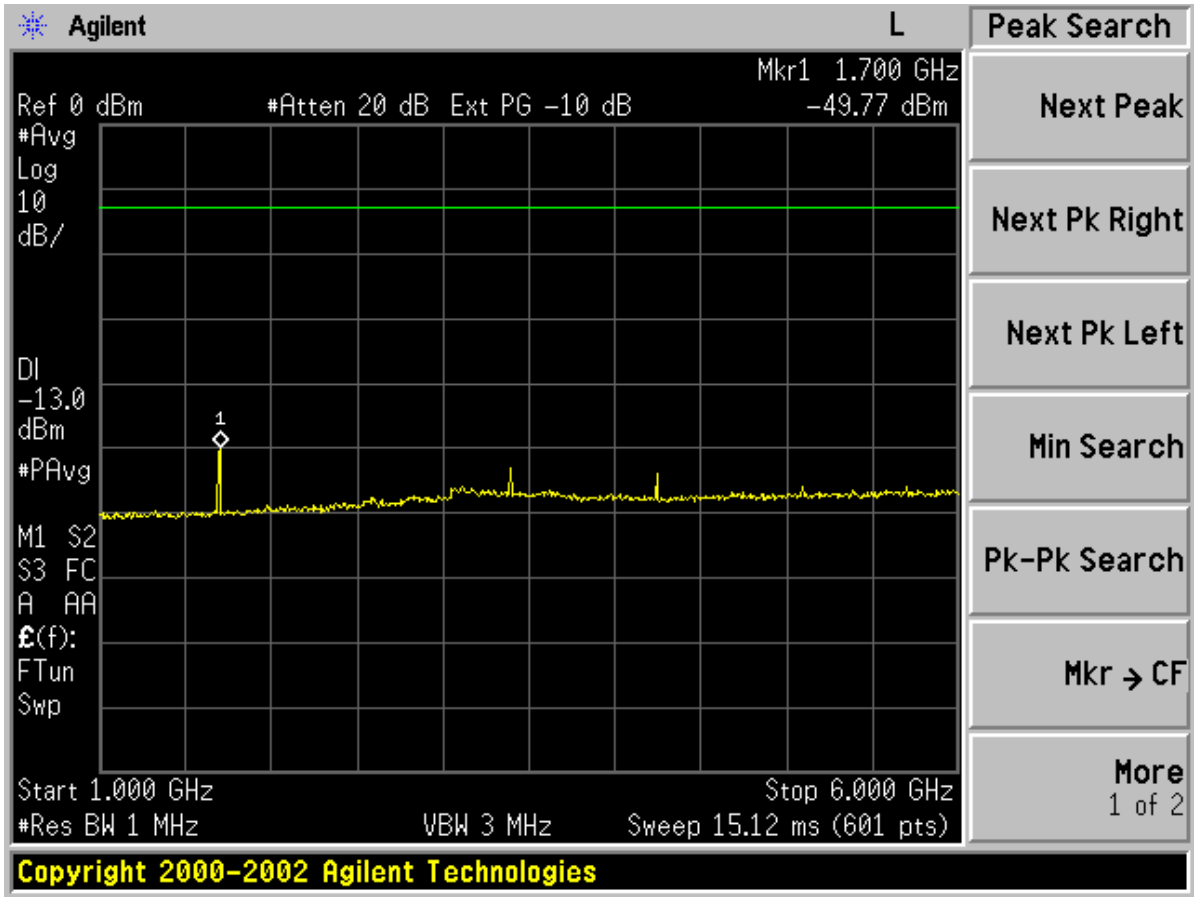

Agilent
L
Peak Search
Mkr1 833.3 MHz
Ref 20 dBm
#Atten 30 dB Ext PG -10 dB
14.67 dBm
#Avg
Log
10
dB/
AC Coupled
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 0 Hz
Stop 1.000 0 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 302.2 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

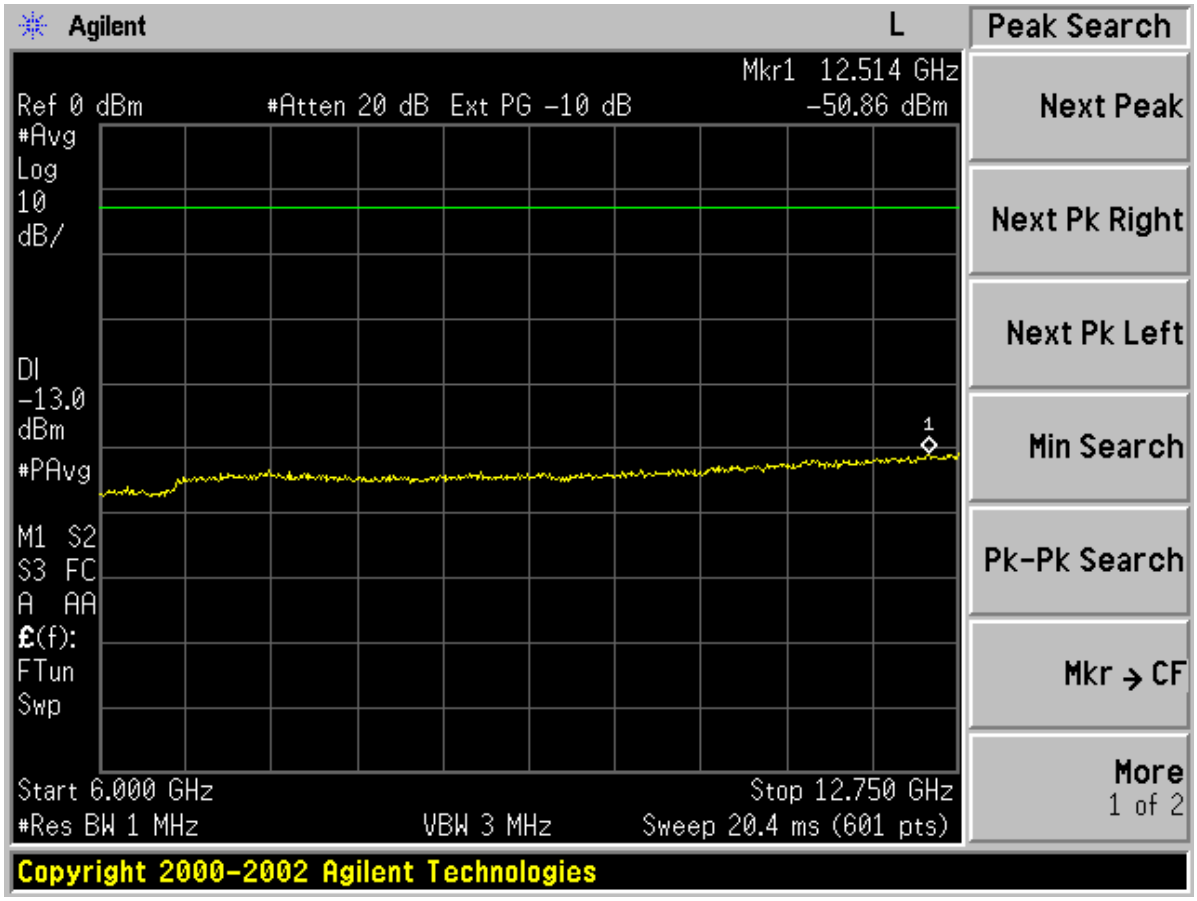

Agilent
L
Peak Search
Mkr1 1.667 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-43.05 dBm
Next Peak
#Avg
Log
10
dB/
Next Pk Right
Next Pk Left
Dl
-13.0
dBm
#PAvg
Min Search
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Start 1.000 GHz
Stop 6.000 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 15.12 ms (601 pts)
Copyright 2000-2002 Agilent Technologies


Agilent
L
Peak Search
Mkr1 12.491 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-50.34 dBm
#Avg
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 6.000 GHz
Stop 12.750 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 20.4 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

Channel 777


Agilent
L
Peak Search
Mkr1 848.3 MHz
Ref 20 dBm
#Atten 30 dB Ext PG -10 dB
13.79 dBm
#Avg
Log
10
dB/
AC Coupled
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 0 Hz
Stop 1.000 0 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 302.2 ms (601 pts)
Copyright 2000-2002 Agilent Technologies


Agilent
L
Peak Search
Mkr1 1.700 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-49.77 dBm
#Avg
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Dl
-13.0
dBm
#PAvg
1
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Start 1.000 GHz
Stop 6.000 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 15.12 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

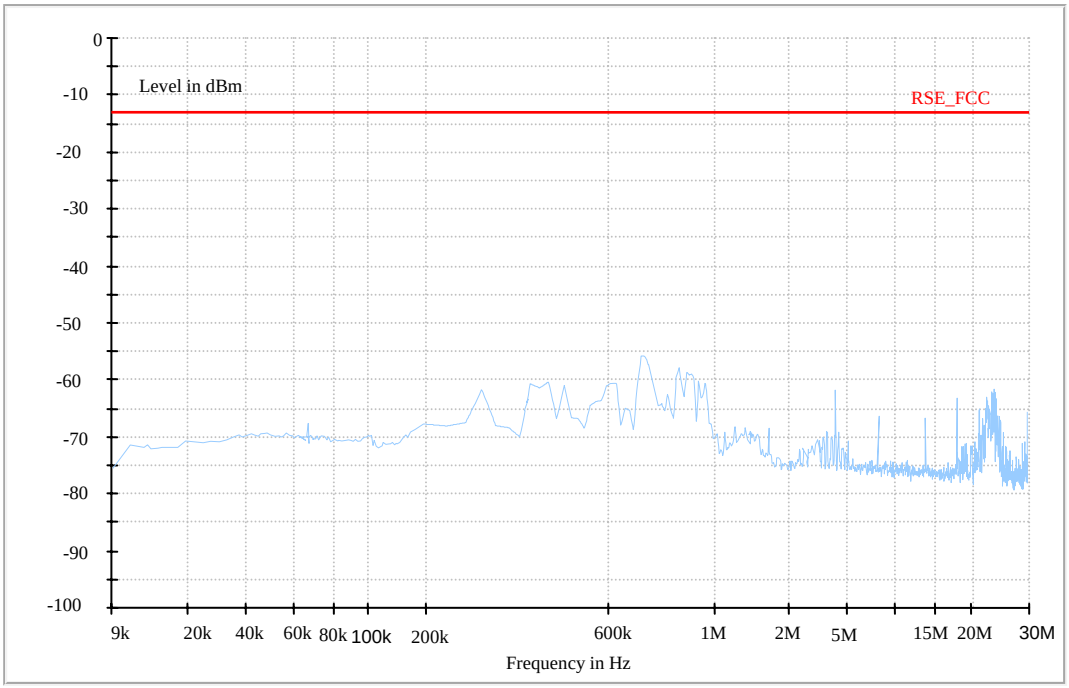

Agilent
L
Peak Search
Mkr1 12.514 GHz
Ref 0 dBm
#Atten 20 dB Ext PG -10 dB
-50.86 dBm
#Avg
Log
10
dB/
Next Peak
Next Pk Right
Next Pk Left
Dl
-13.0
dBm
#PAvg
Min Search
Pk-Pk Search
M1 S2
S3 FC
A AA
£(f):
FTun
Swp
Mkr → CF
More
1 of 2
Start 6.000 GHz
Stop 12.750 GHz
#Res BW 1 MHz
VBW 3 MHz
Sweep 20.4 ms (601 pts)
Copyright 2000-2002 Agilent Technologies

Appendix F

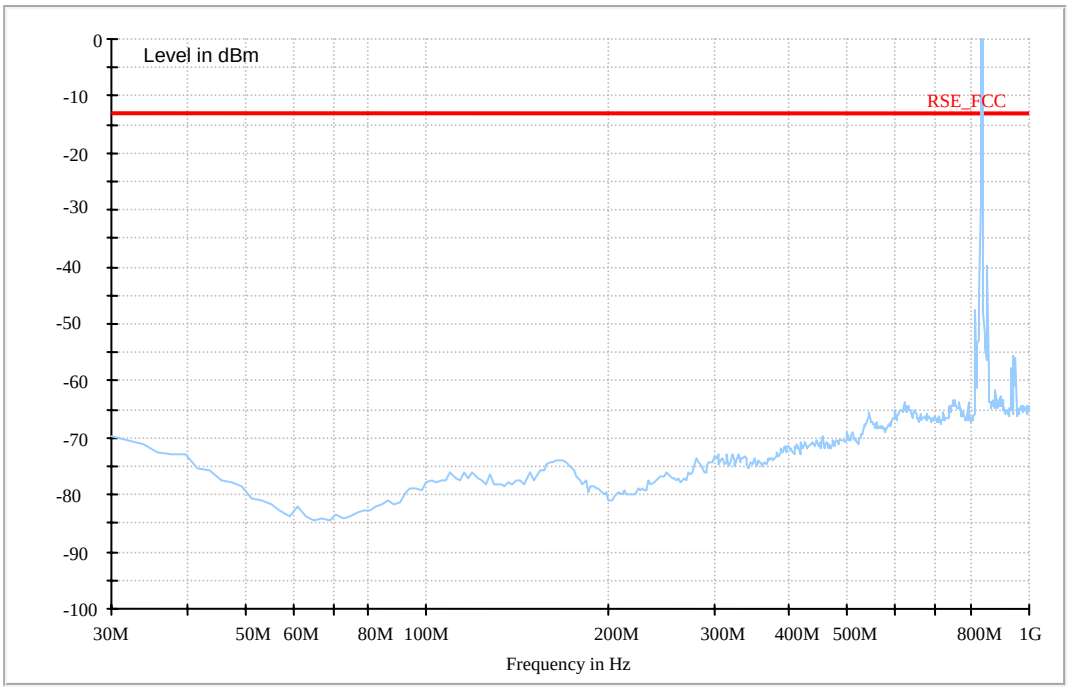
Radiated Spurious Emission

According to FCC Part 2.1053 & 22.917

Traffic Mode (9kHz-30MHz)

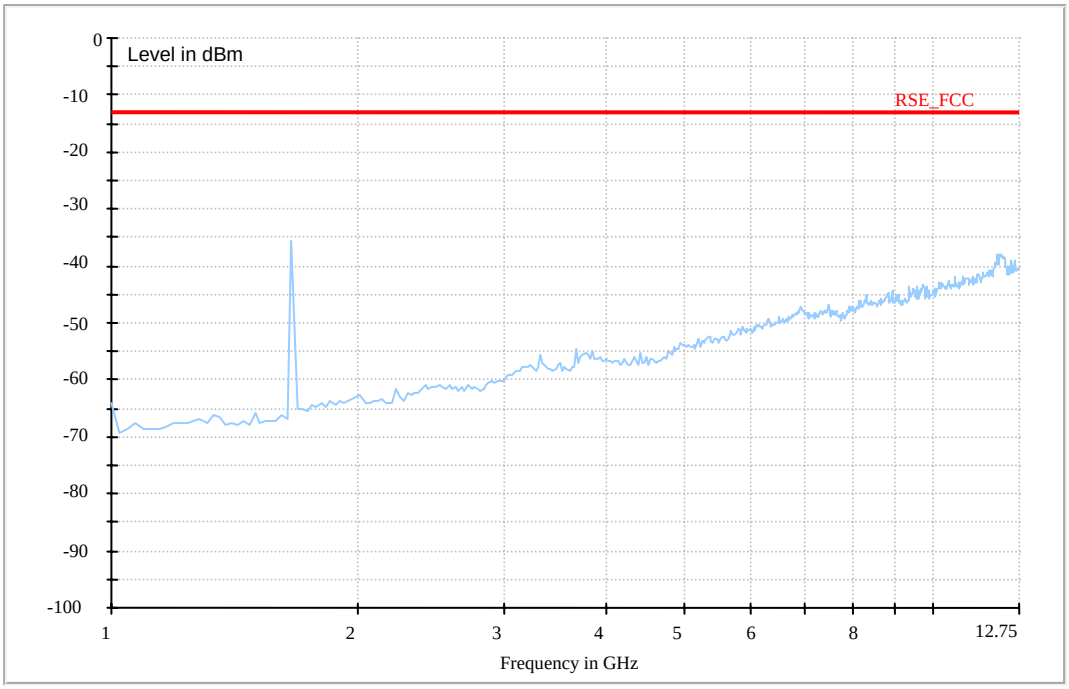


Traffic Mode (30MHz-1GHz)

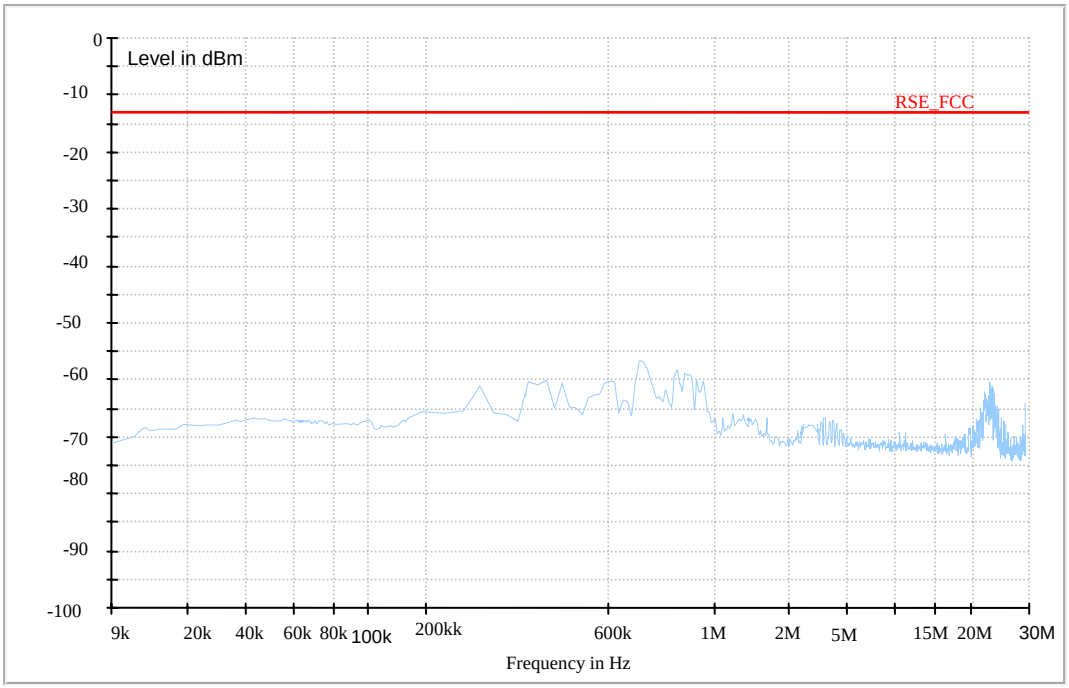


Note: The frequency which exceeded the limit was the carrier frequency.

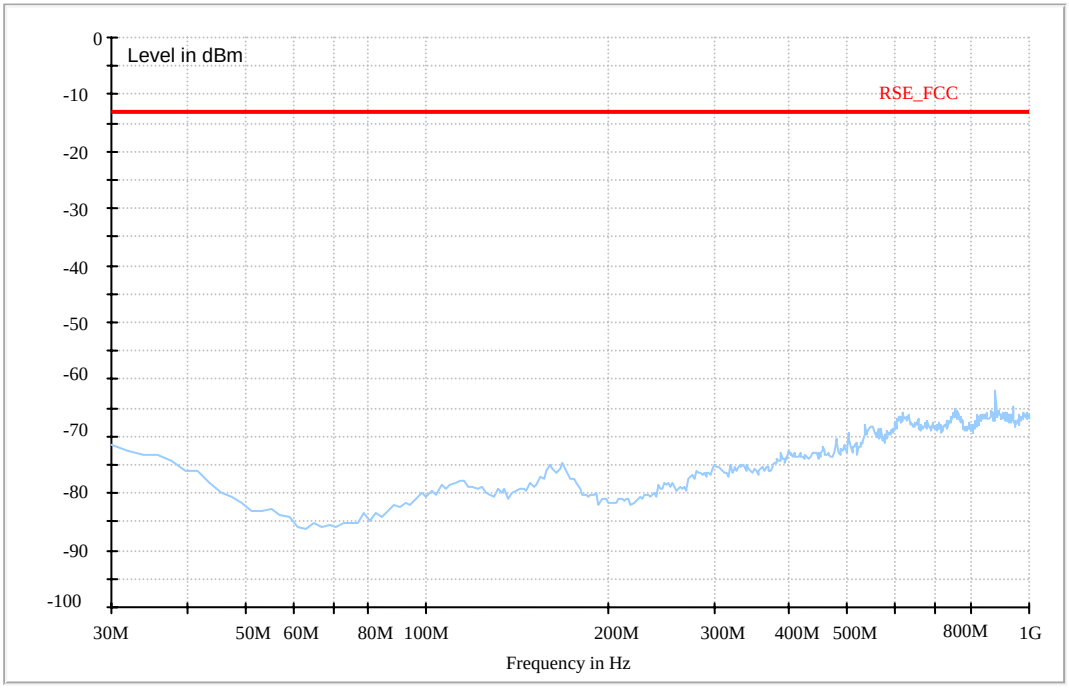
Traffic Mode (1GHz-12.75GHz)



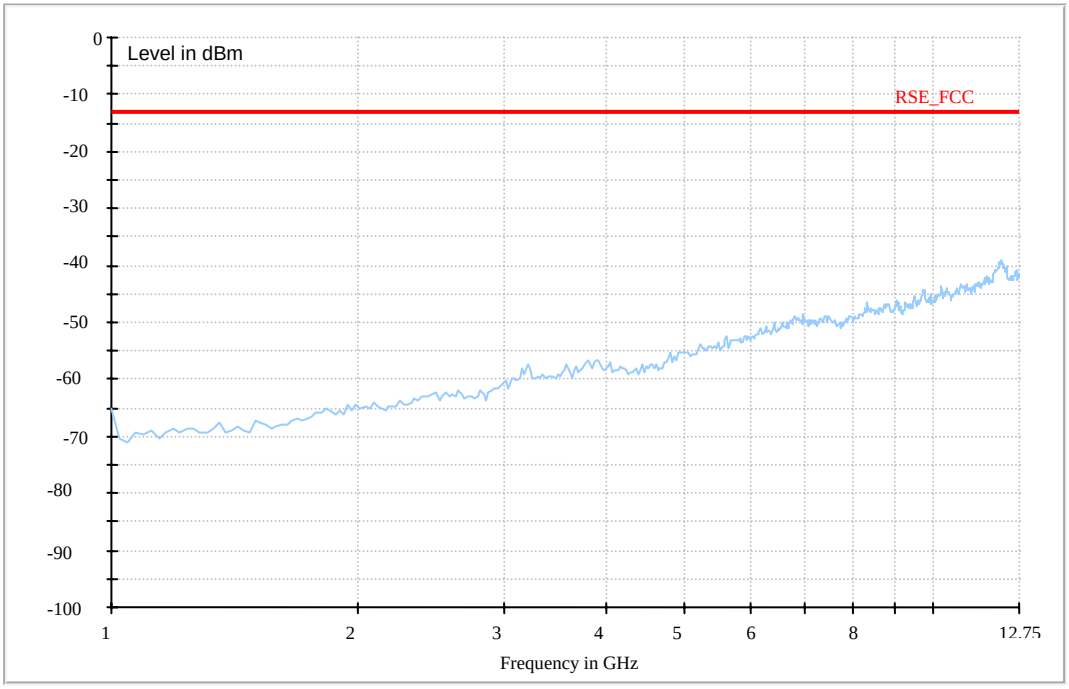
Idle Mode (9 kHz-30MHz)



Idle Mode (30MHz-1GHz)



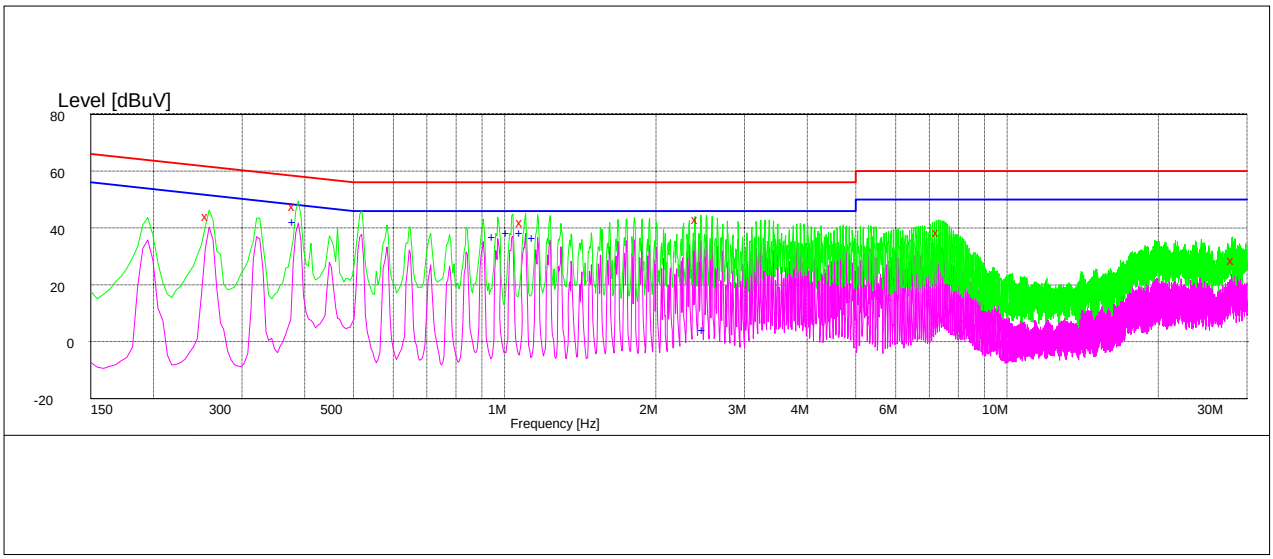
Idle Mode (1GHz-12.75GHz)



Appendix G

Conducted Emission at Power Port

According to FCC Part 15.107



MEASUREMENT RESULT: QP DECTER

Frequency （MHz）	Level （dBμV）	Transd （dB）	Limit （dBμV）	Margin （dB）	Line	PE
0.258000	44.60	1.1	62	16.9	L1	FLO
0.384000	48.40	0.8	58	9.8	L1	FLO
1.090500	42.60	0.6	56	13.4	L1	FLO
2.431500	43.70	0.5	56	12.3	L1	FLO
7.359000	39.00	0.8	60	21.0	L1	FLO
28.356000	29.30	3.5	60	30.7	L1	FLO

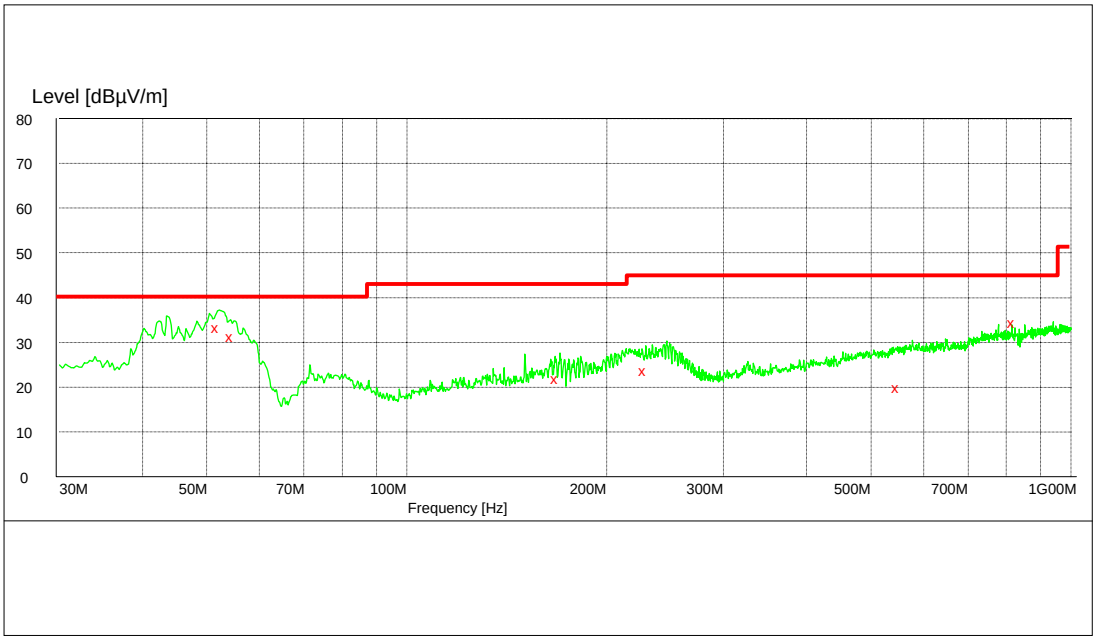
MEASUREMENT RESULT: “AV DECTER”

Frequency （MHz）	Level （dBμV）	Transd （dB）	Limit （dBμV）	Margin （dB）	Line	PE
0.384000	42.80	0.8	48	5.3	L1	FLO
0.960000	37.30	0.5	46	8.7	L1	FLO
1.023000	38.80	0.5	46	7.2	L1	FLO
1.086000	38.90	0.6	46	7.1	L1	FLO
1.153500	36.90	0.6	46	9.1	L1	FLO
2.517000	4.70	0.5	46	41.3	L1	FLO

Appendix H

Radiated Emission of Enclosure in Idle Mode

According to FCC Part 15.109



MEASUREMENT RESULT: QP DECTER

Frequency （MHz）	Level dBµV/m）	Transd （dB）	Limit (dBµV/m）	Margin （dB）	Height （cm）	Azimuth （deg）	Polarisation
51.960000	33.50	-14.7	40.0	6.5	107.0	265.00	VERTICAL
54.600000	31.40	-15.5	40.0	8.6	100.0	244.00	VERTICAL
168.540000	22.20	-11.6	43.5	21.3	179.0	270.00	HORIZONTAL
228.660000	23.80	-10.8	46.0	22.2	144.0	270.00	HORIZONTAL
549.360000	20.10	-1.8	46.0	25.9	200.0	0.00	VERTICAL
820.000000	34.60	0.8	46.0	11.4	159.0	0.00	VERTICAL

Appendix I

Photos of Test Setup

1 Radiated Emission

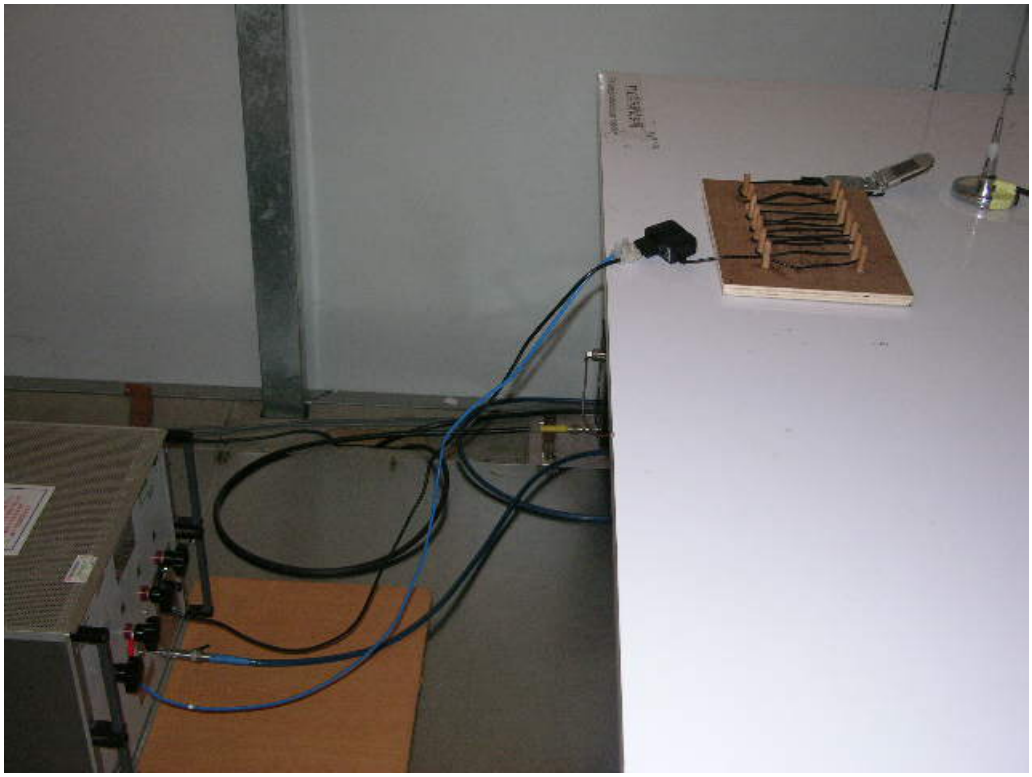
Radiated Disturbance

2 Radiated Spurious Emission

Radiated Spurious Emission (below 1GHz)

Radiated Spurious Emission (above 1GHz)

3 Conducted Emissions



Conducted Emissions for AC Ports