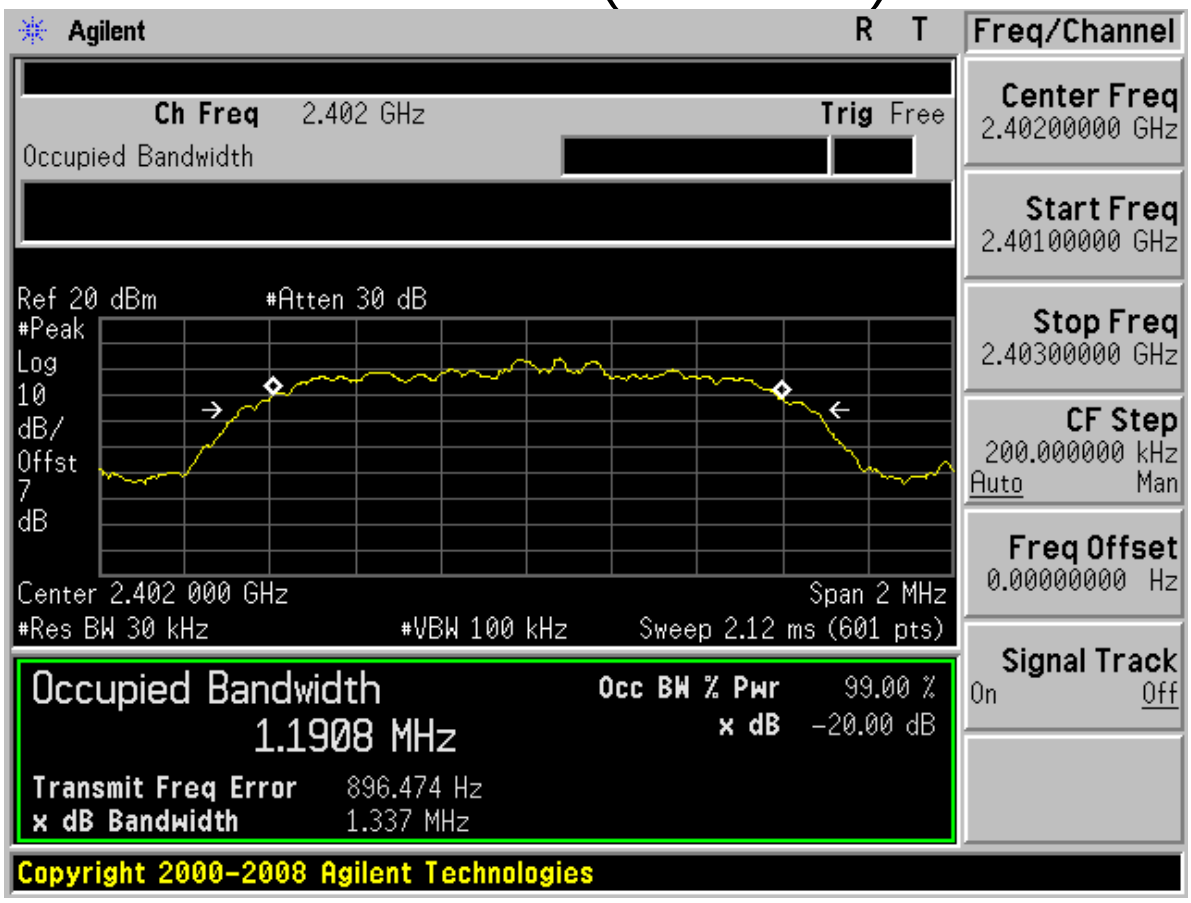
Appendix A

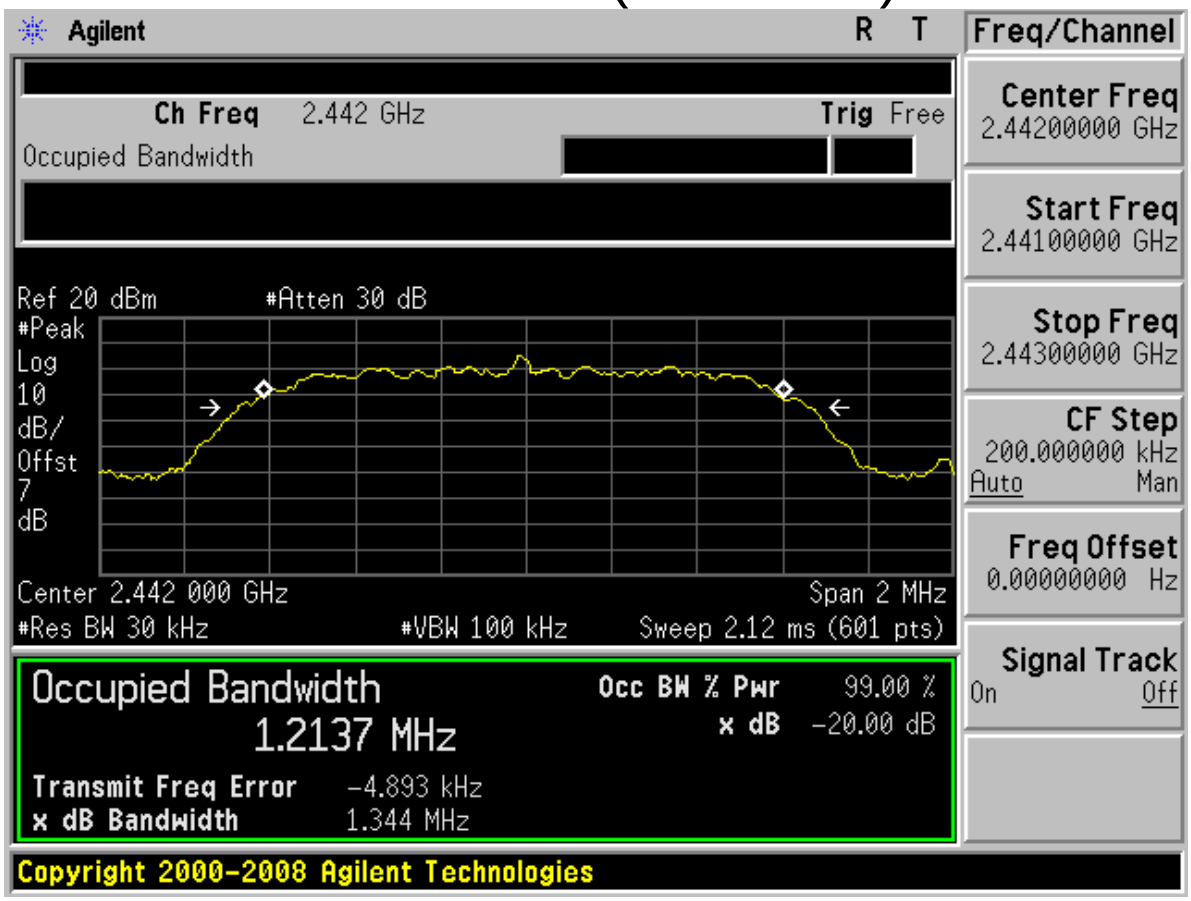
Bandwidth measurement

According to FCC Part 15.247 (a) (1)

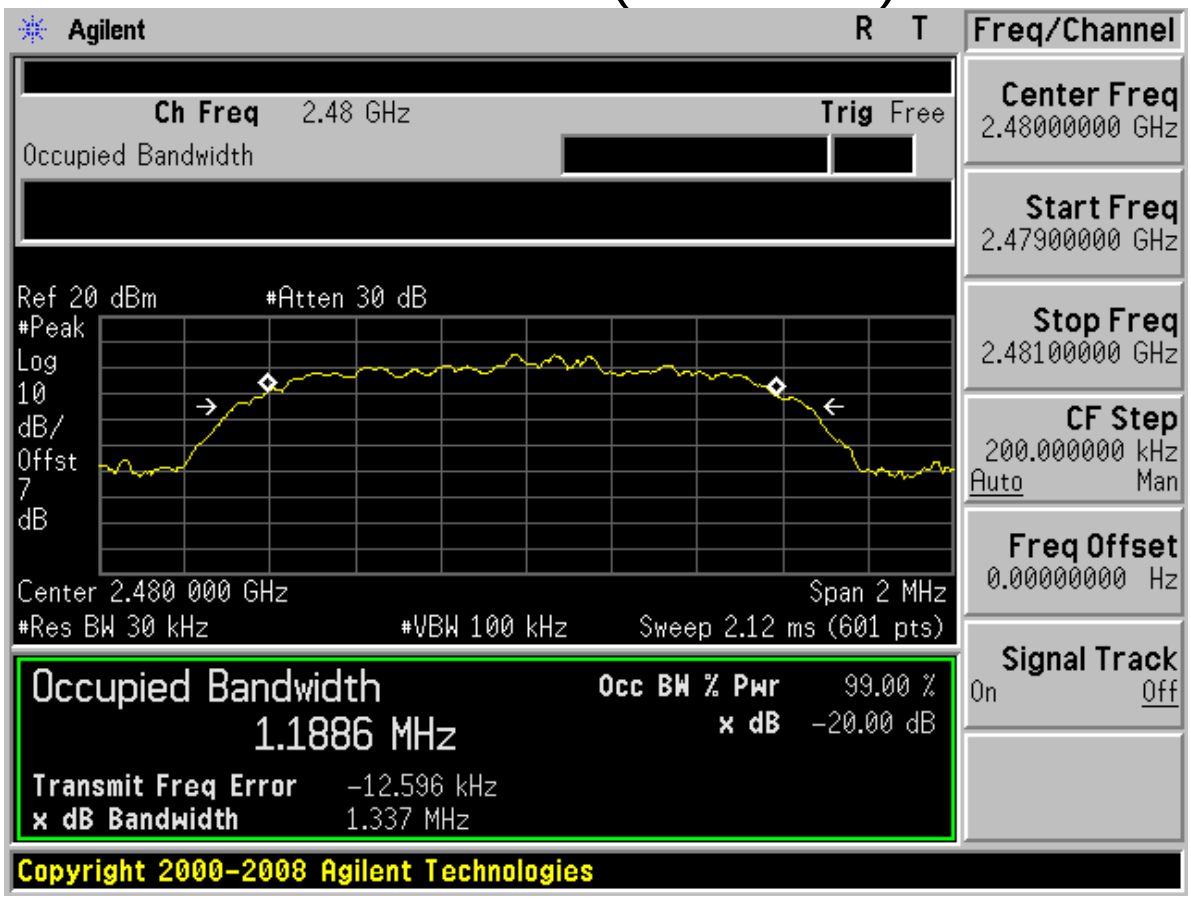
Modulation:π/4-DQPSK
Channel 0 (2402MHz)



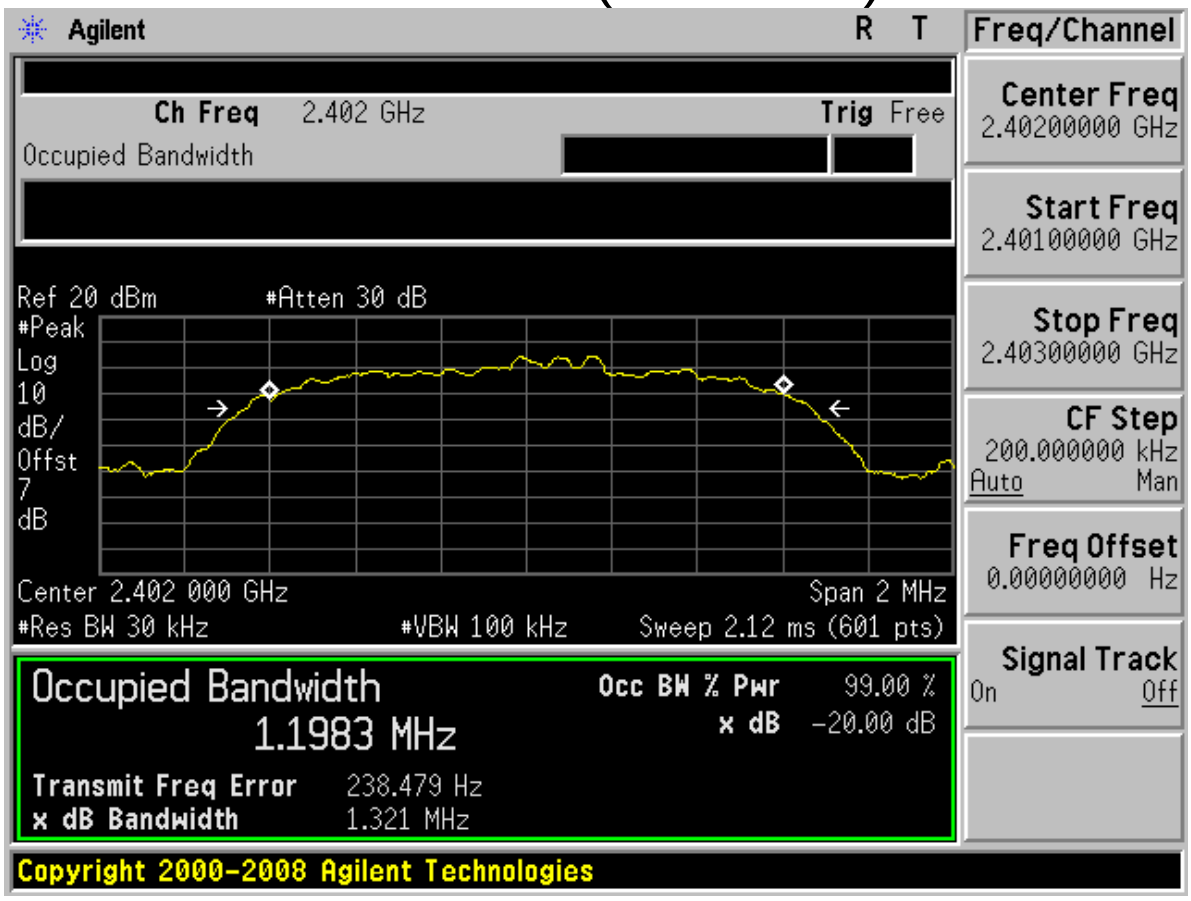
Channel 40 (2442MHz)



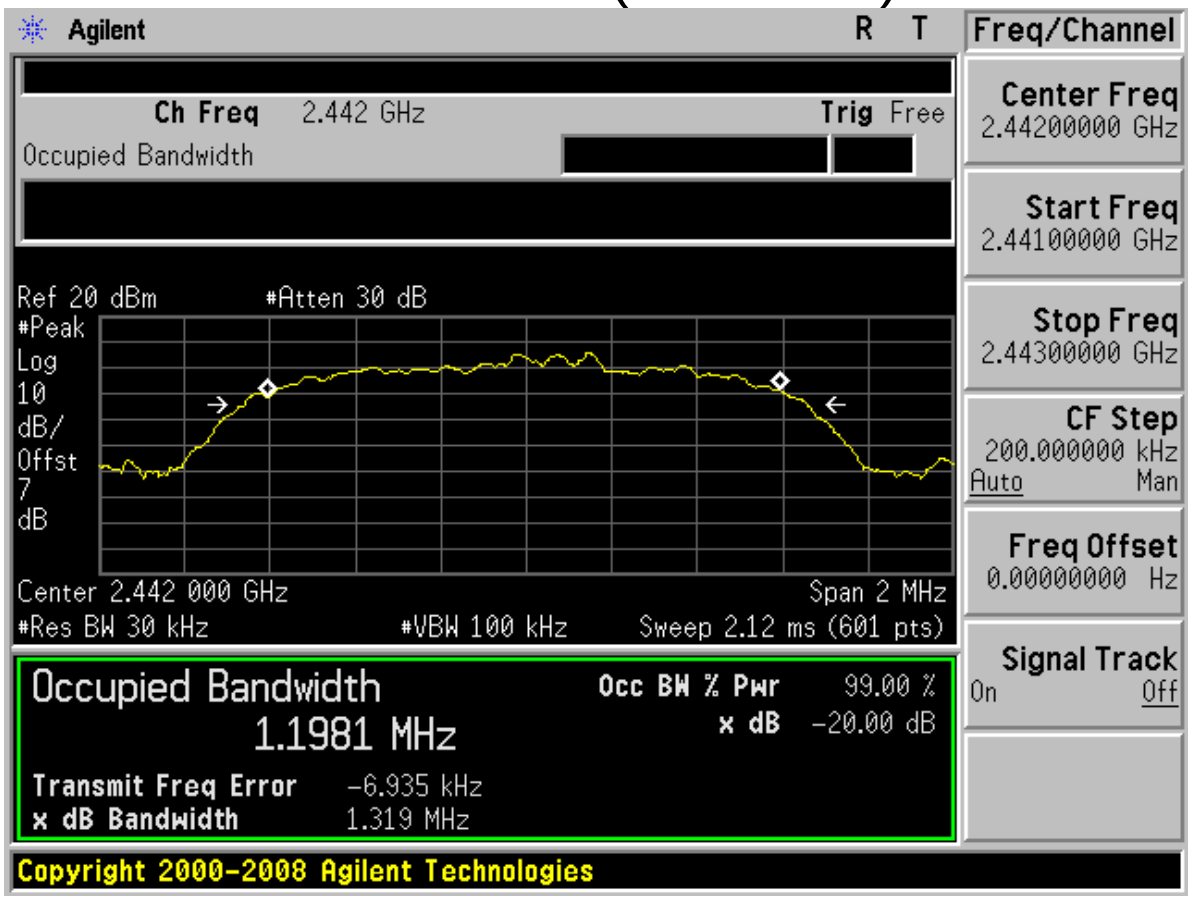
Channel 78 (2480MHz)



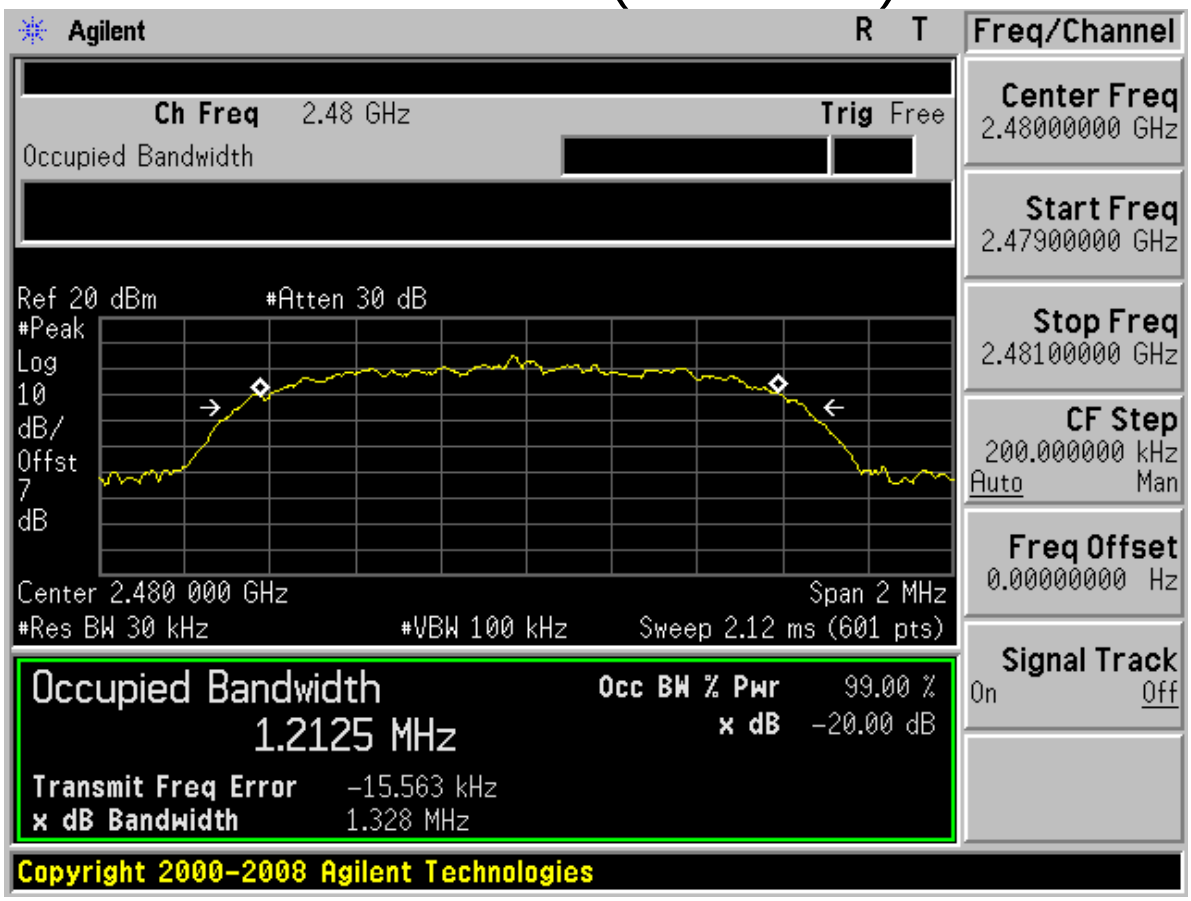
Modulation:8DPSK
Channel 0 (2402MHz)



Channel 40 (2442MHz)



Channel 78 (2480MHz)



----------The END----------

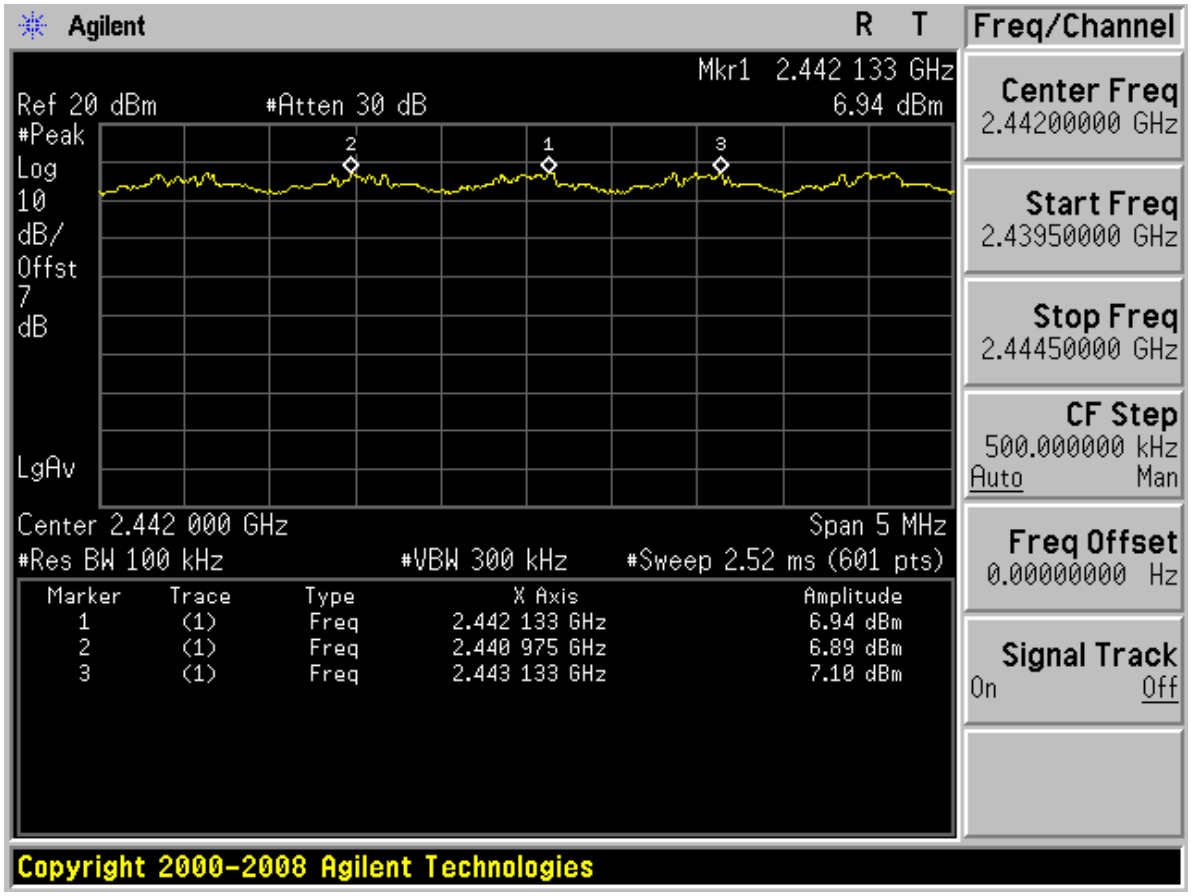
Appendix B

Carrier frequency separation measurement

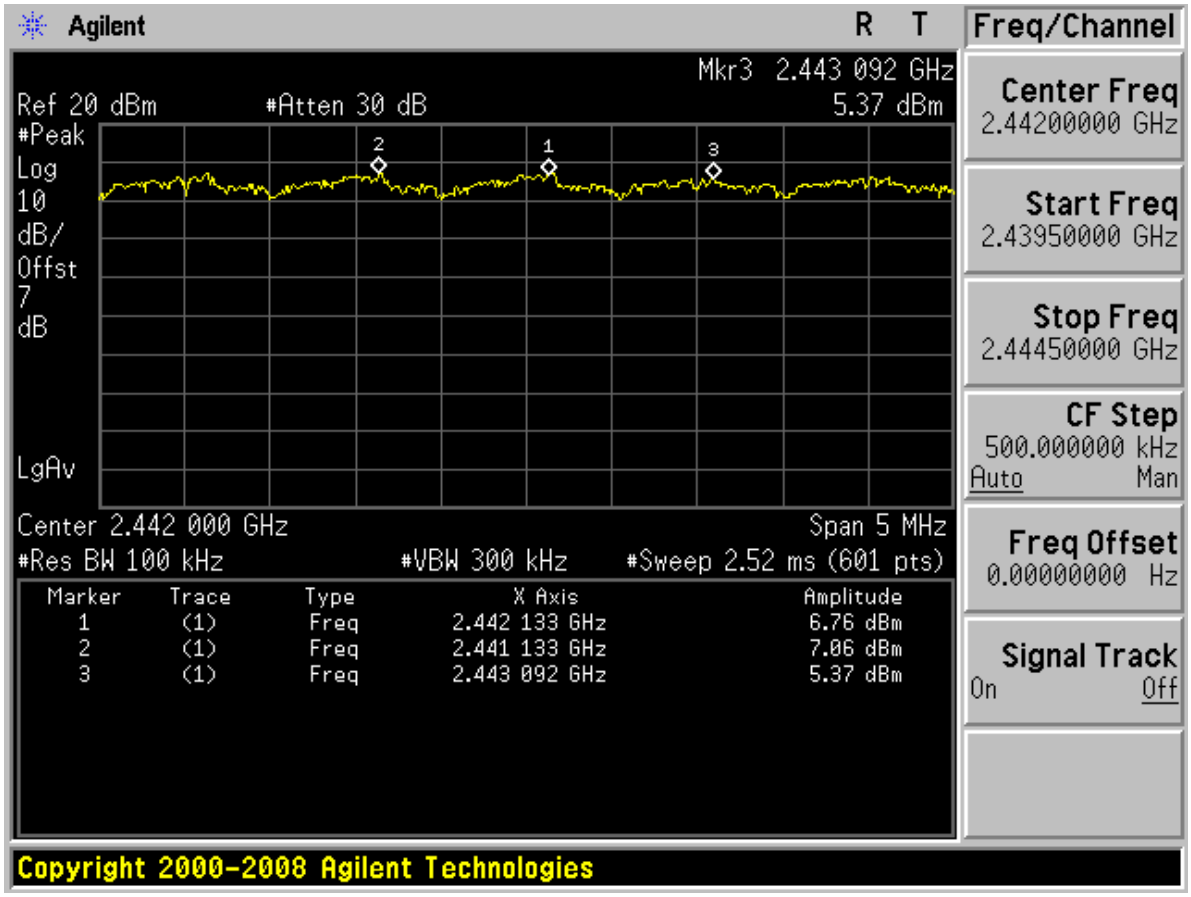
According to FCC Part 15.247 (a) (1)

Modulation:π/4-DQPSK

Centred at Channel 40



Modulation:8DPSK
Centred at Channel 40



----------The END----------

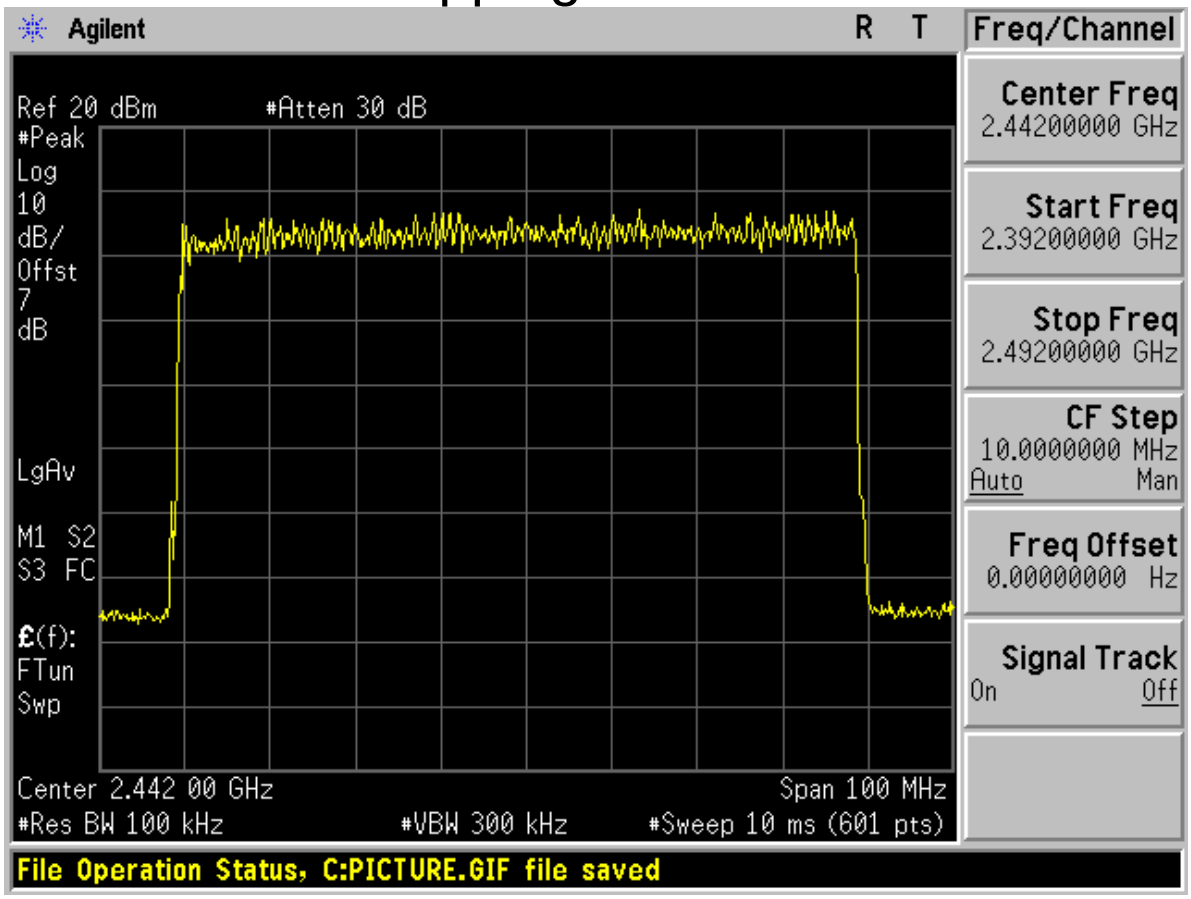
Appendix C

Number of hopping channel

According to FCC Part 15.247 (a) (1) iii

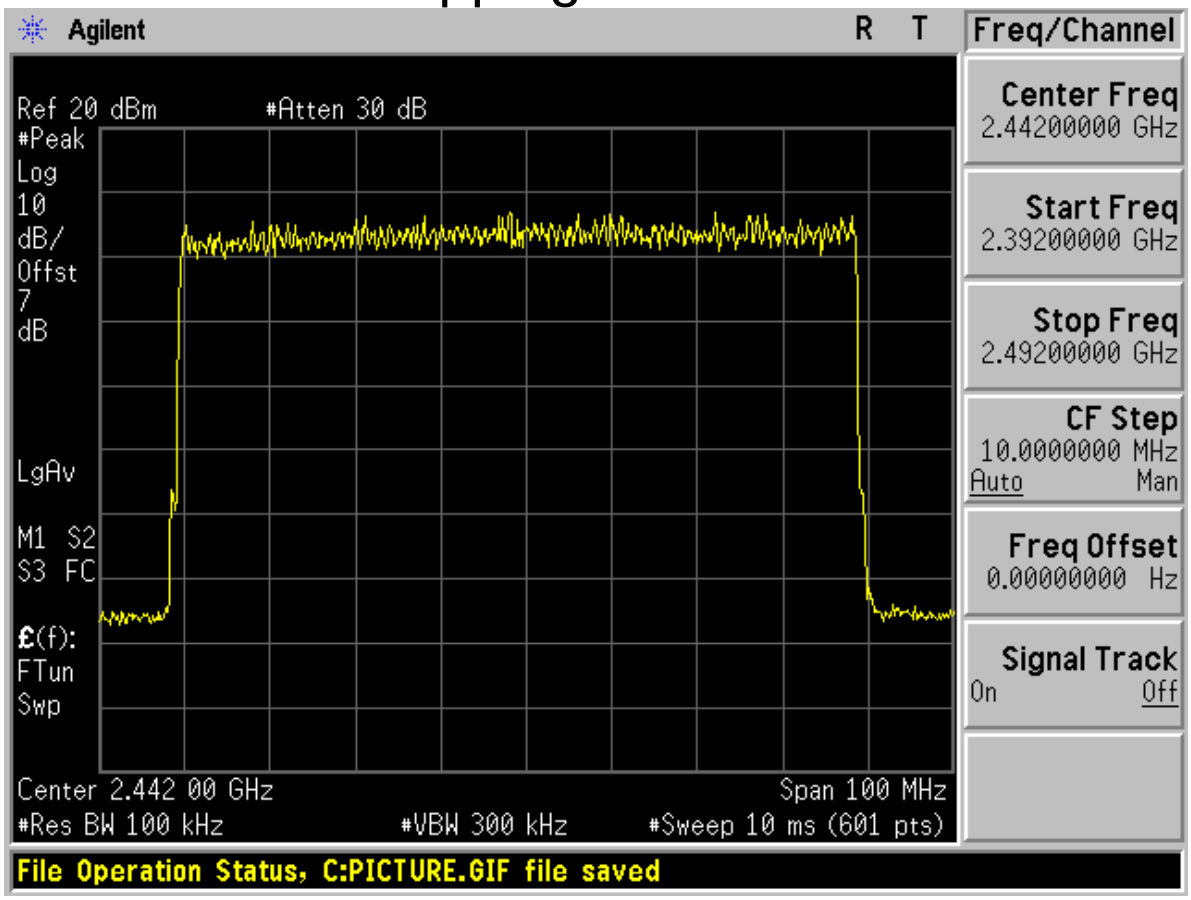
Modulation:π/4-DQPSK

Total hopping channels = 79



Modulation:8DPSK

Total hopping channels = 79



----------The END----------

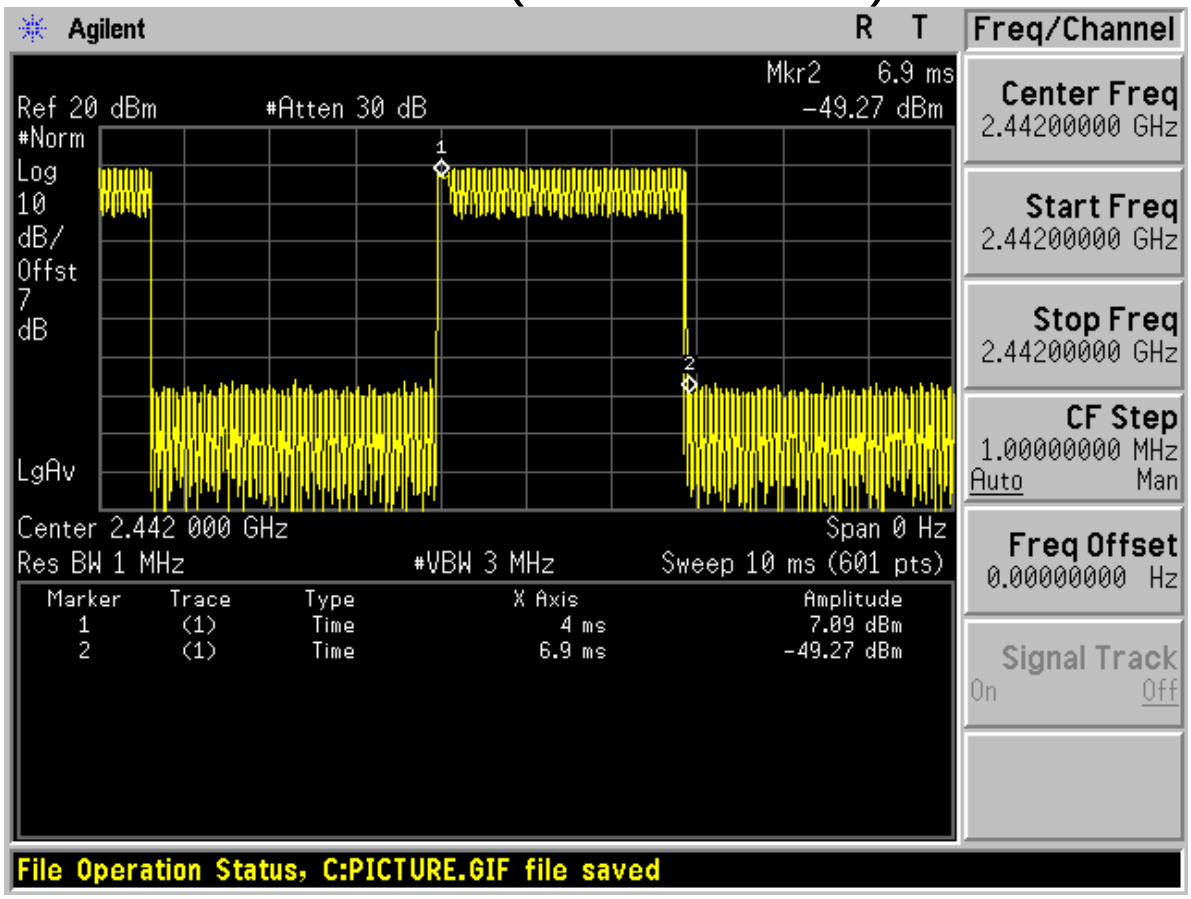
Appendix D

Time of occupancy

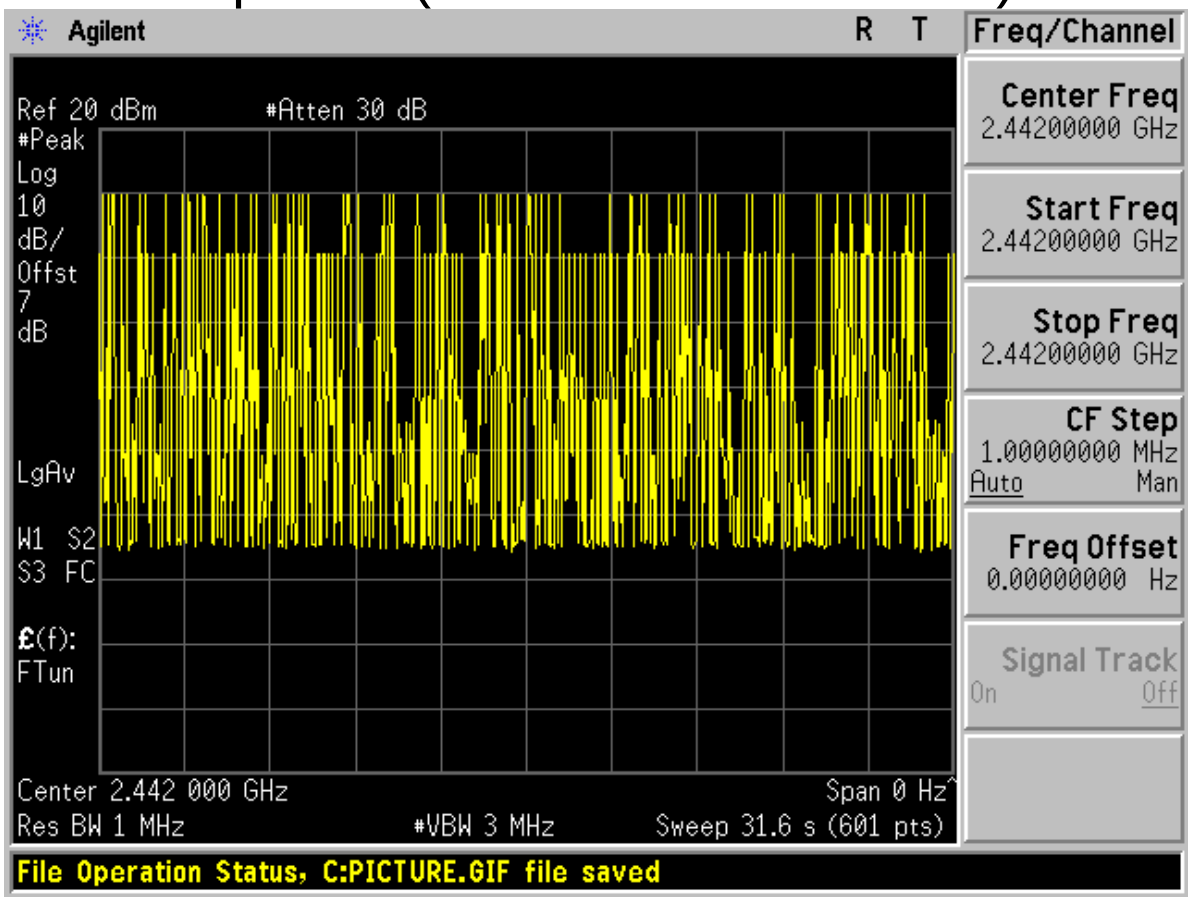
According to FCC Part 15.247 (a) (1) iii

Modulation:π/4-DQPSK

A burst (One time slot)

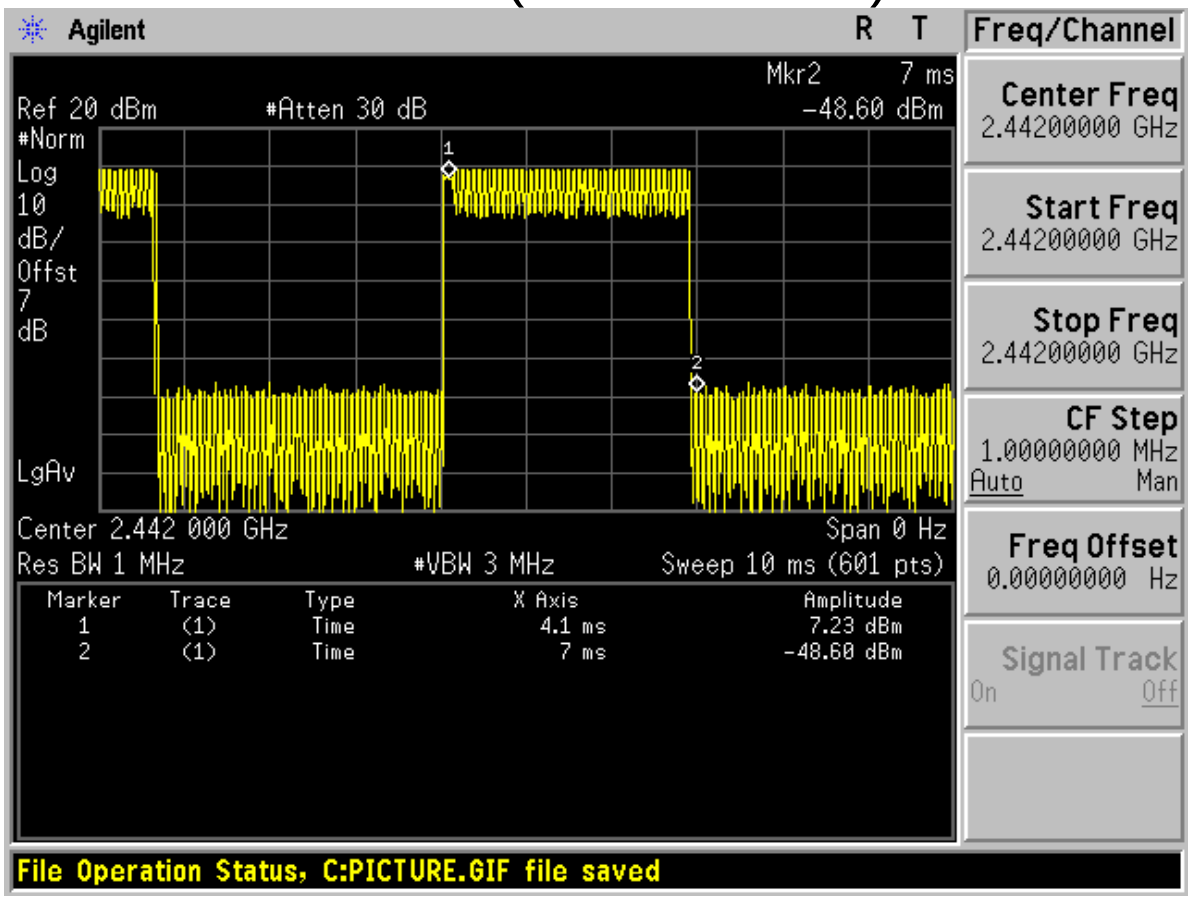


A period (Less than 106.7 burst)

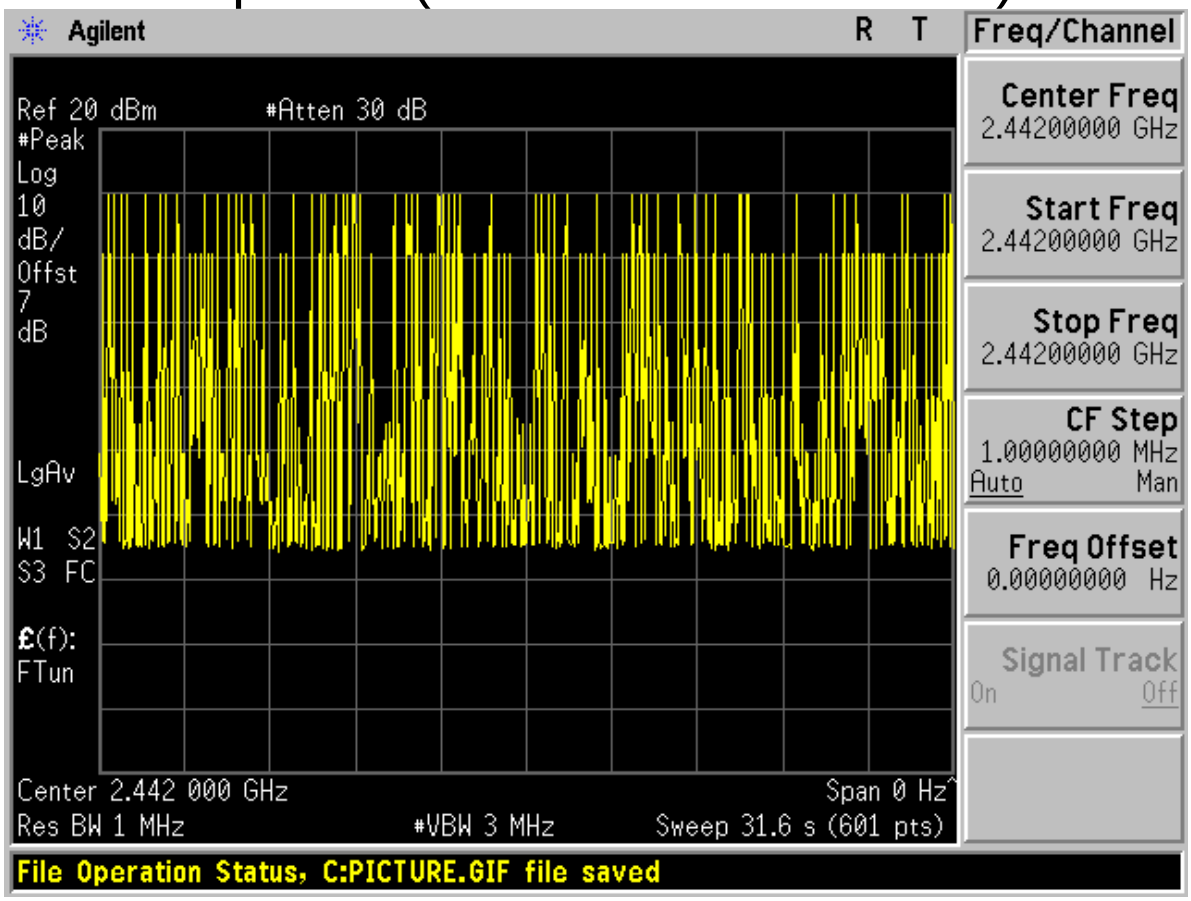


Modulation:8DPSK

A burst (One time slot)



A period (Less than 106.7 burst)



----------The END----------

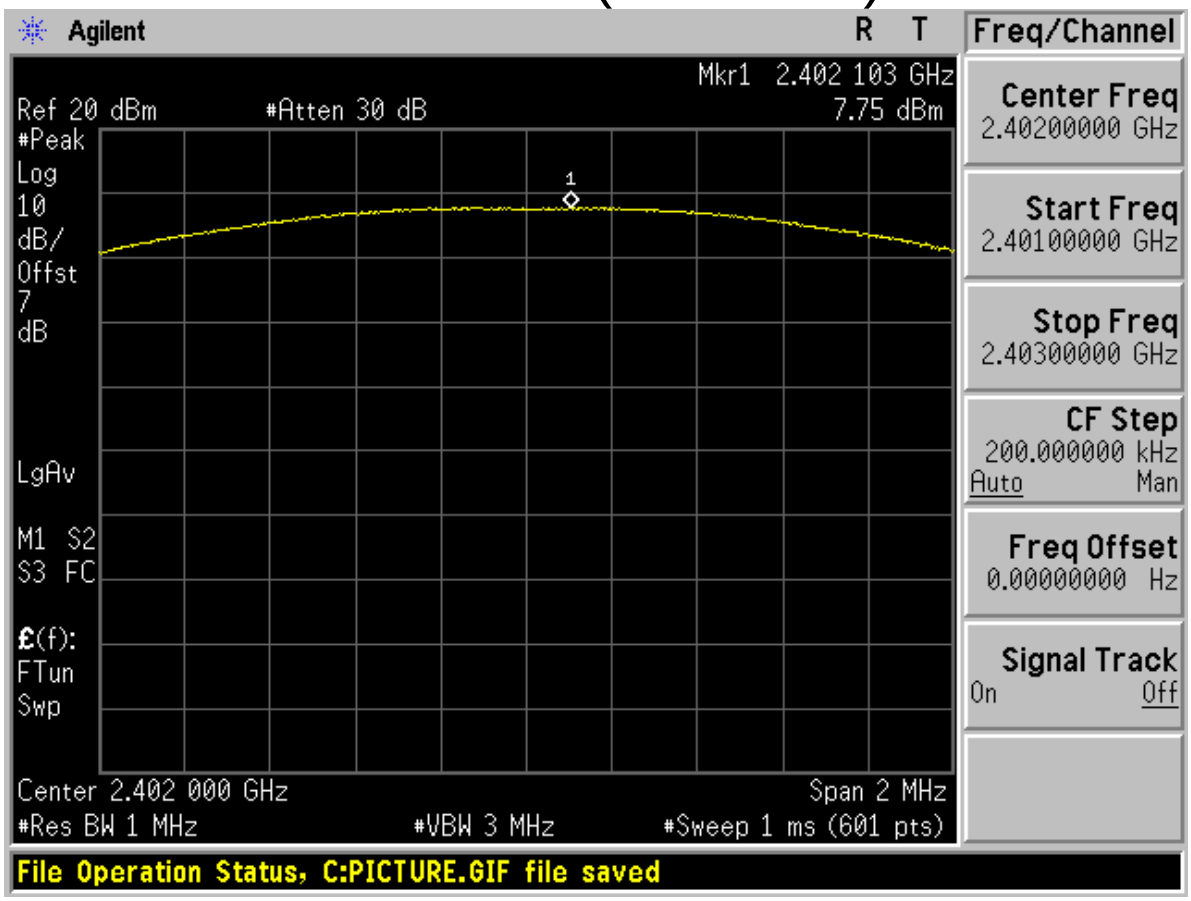
Appendix E

Peak output power

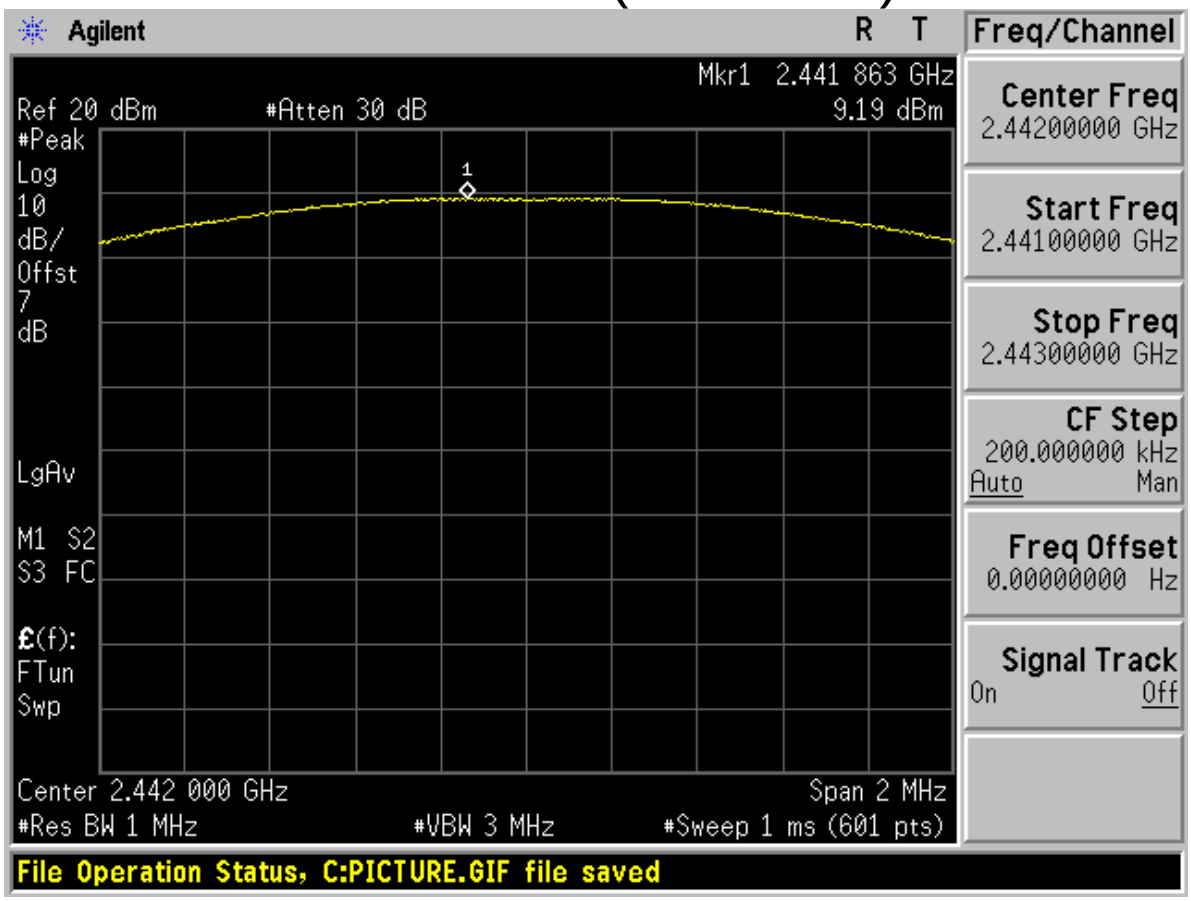
According to FCC Part 15.247 (b) (1)

Modulation:π/4-DQPSK

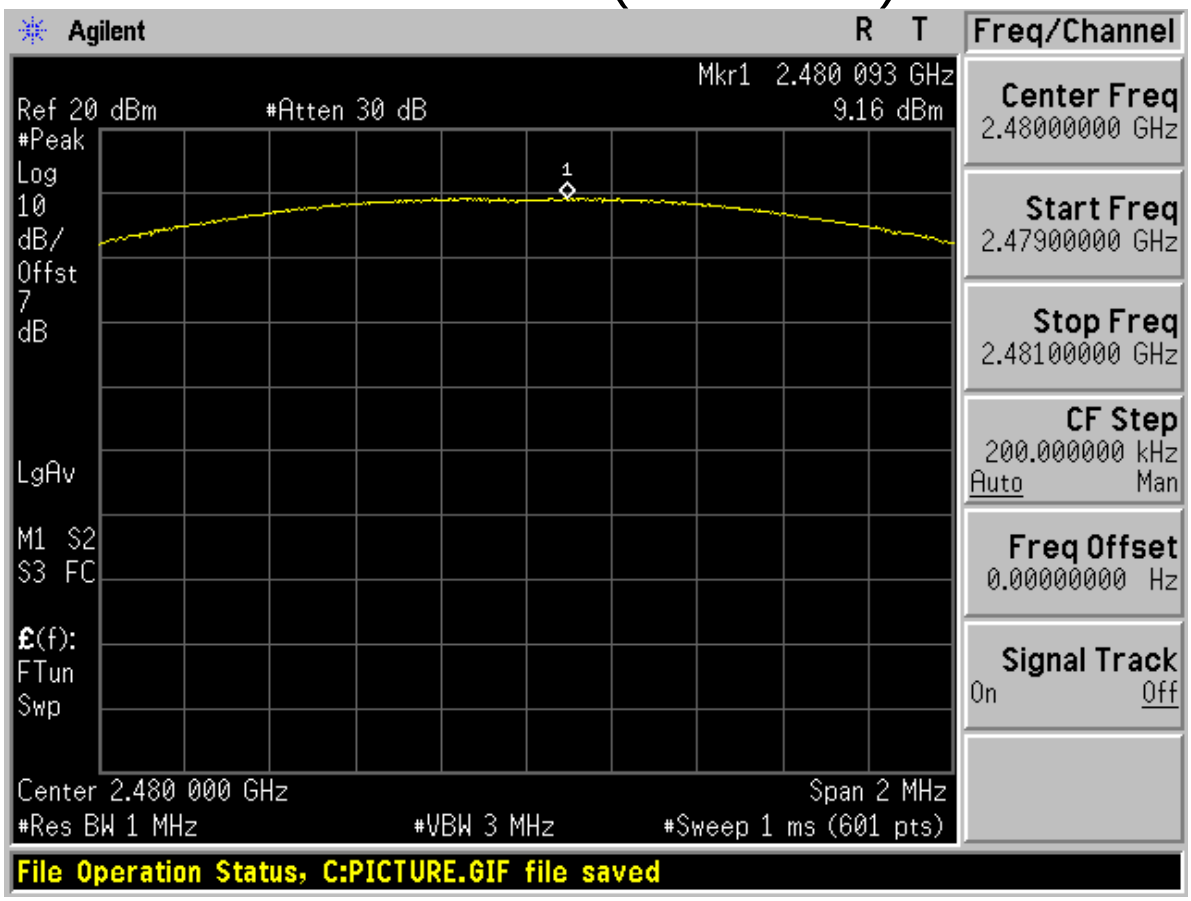
Channel 0 (2402MHz)



Channel 40 (2442MHz)

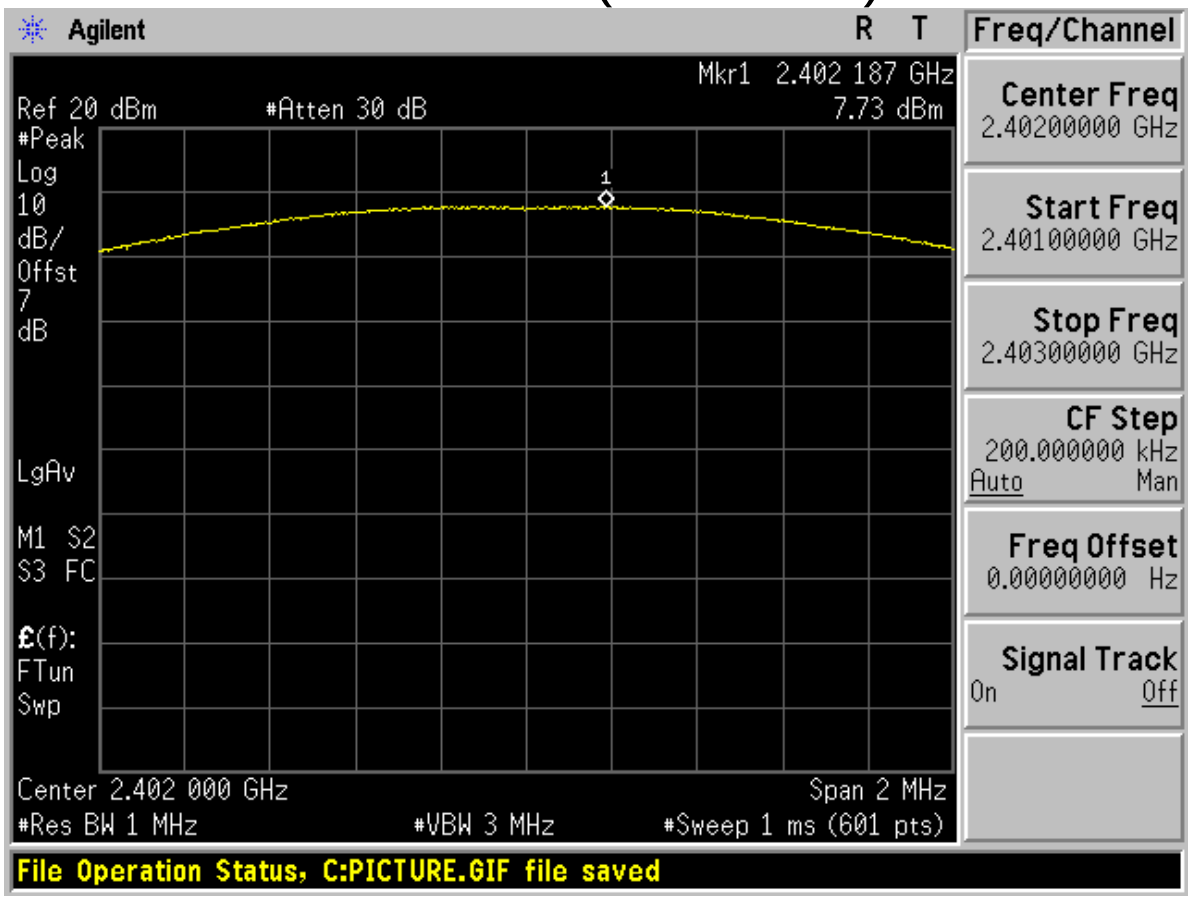


Channel 78 (2480MHz)

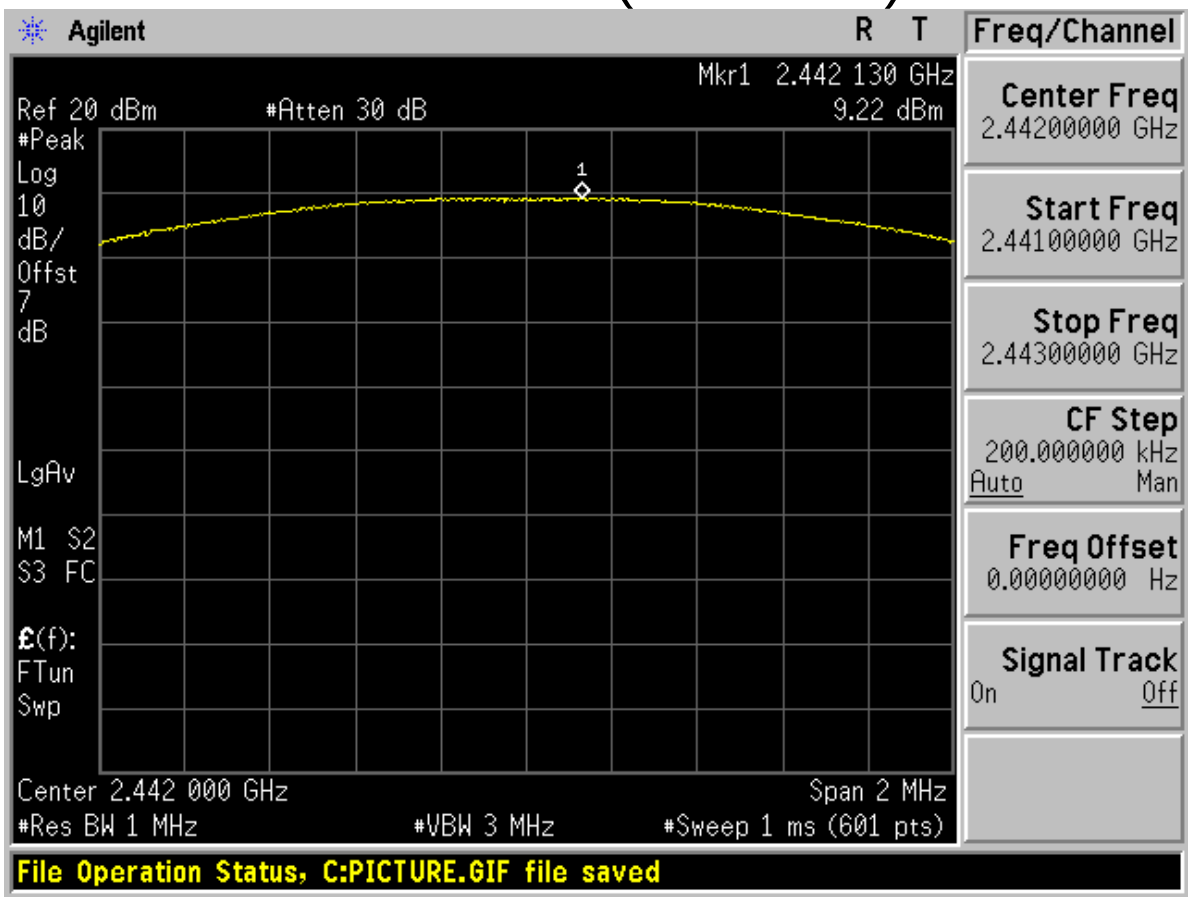


Modulation:8DPSK

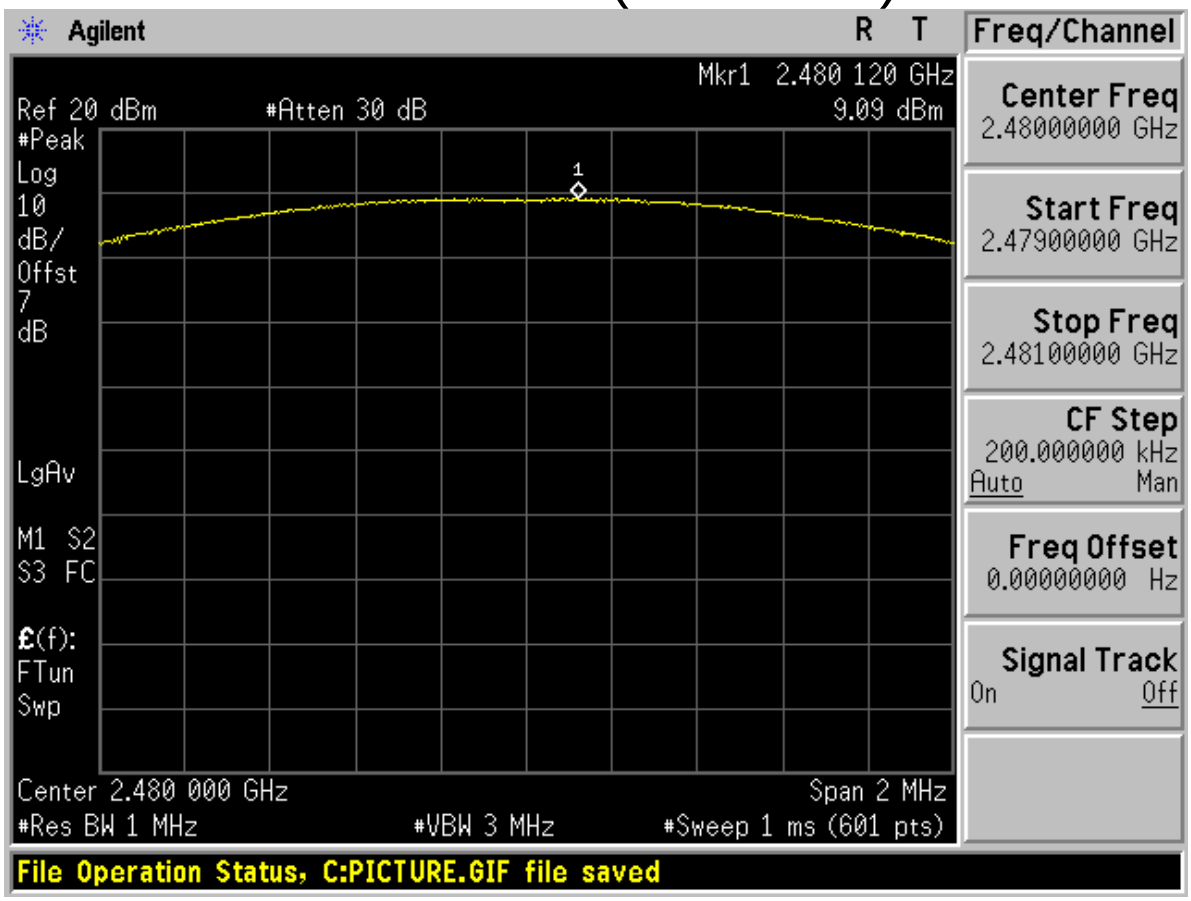
Channel 0 (2402MHz)



Channel 40 (2442MHz)



Channel 78 (2480MHz)



----------The END----------

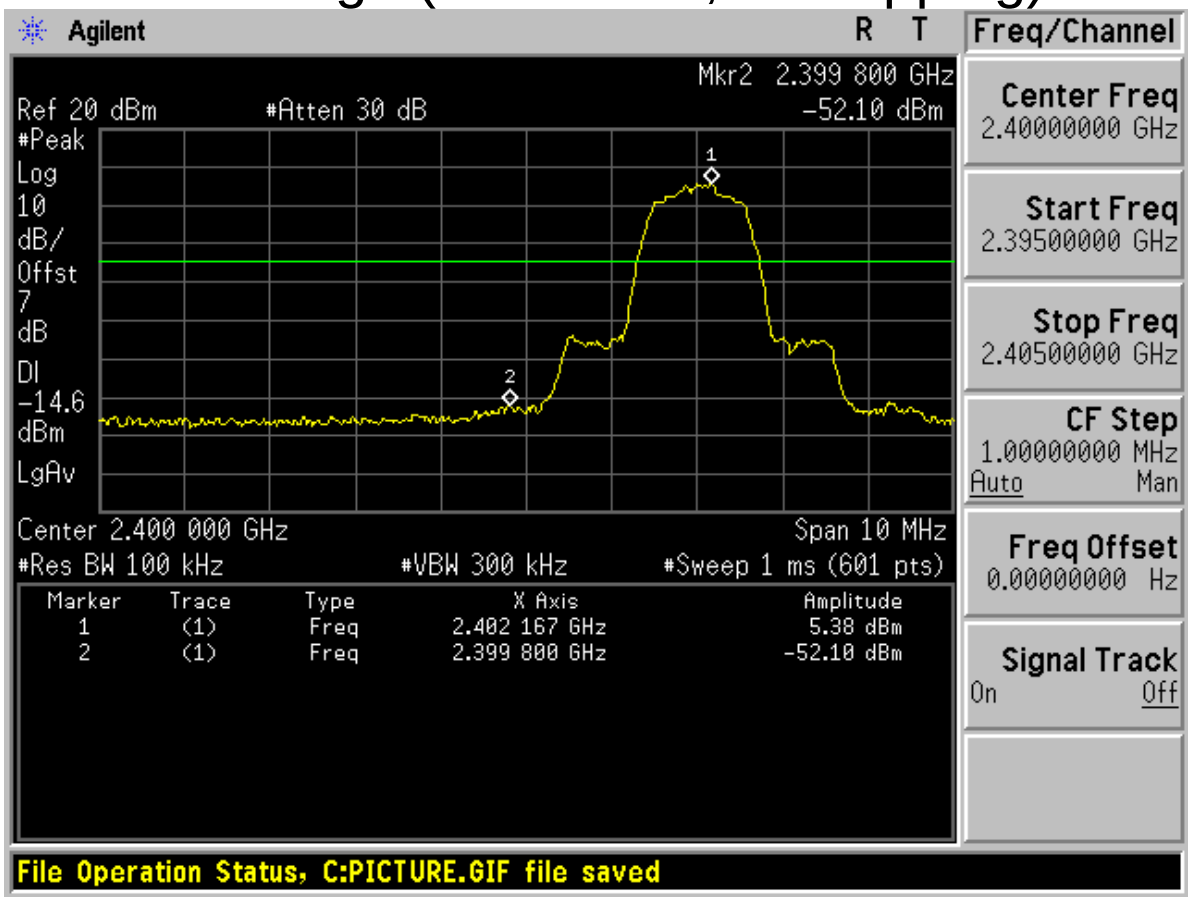
Appendix F

Band edge spurious emission

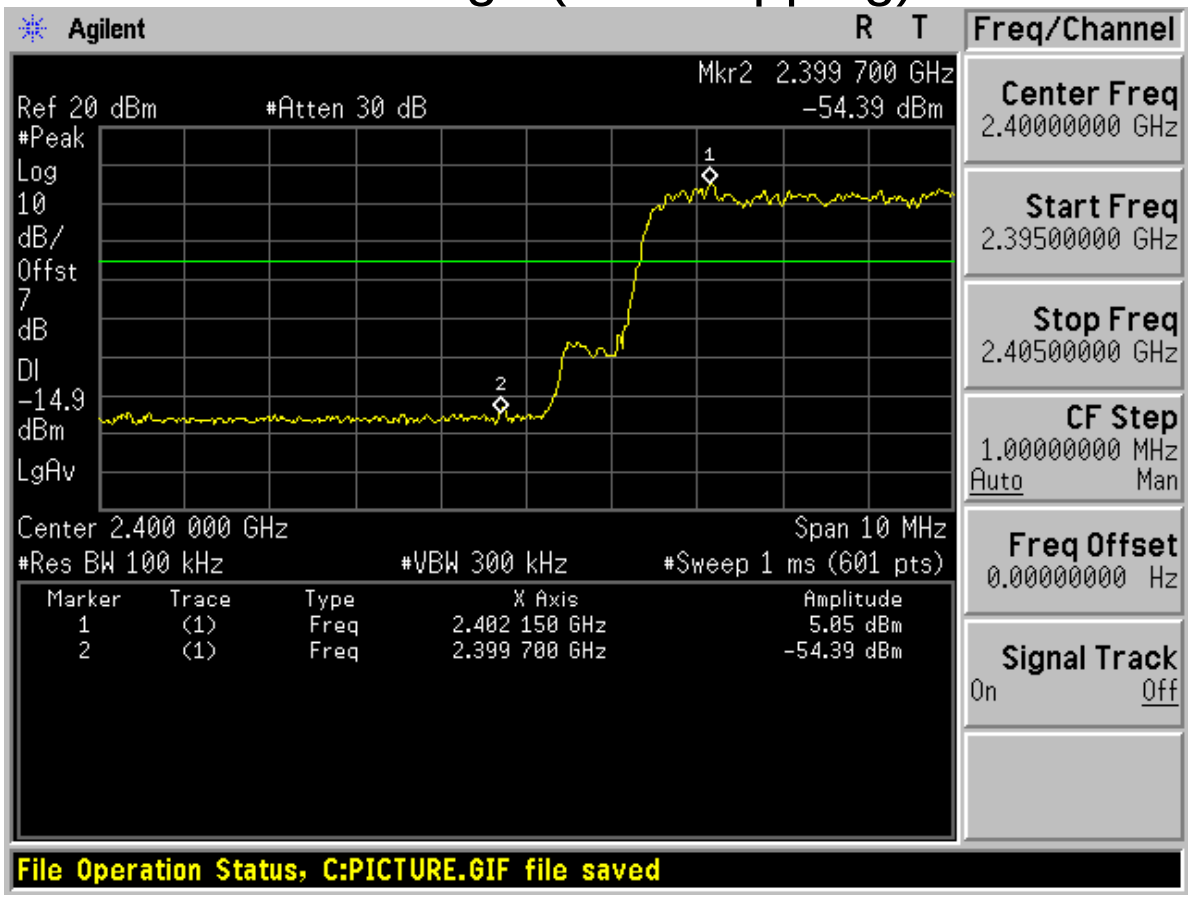
According to FCC Part 15.247 (d)

Modulation:π/4-DQPSK

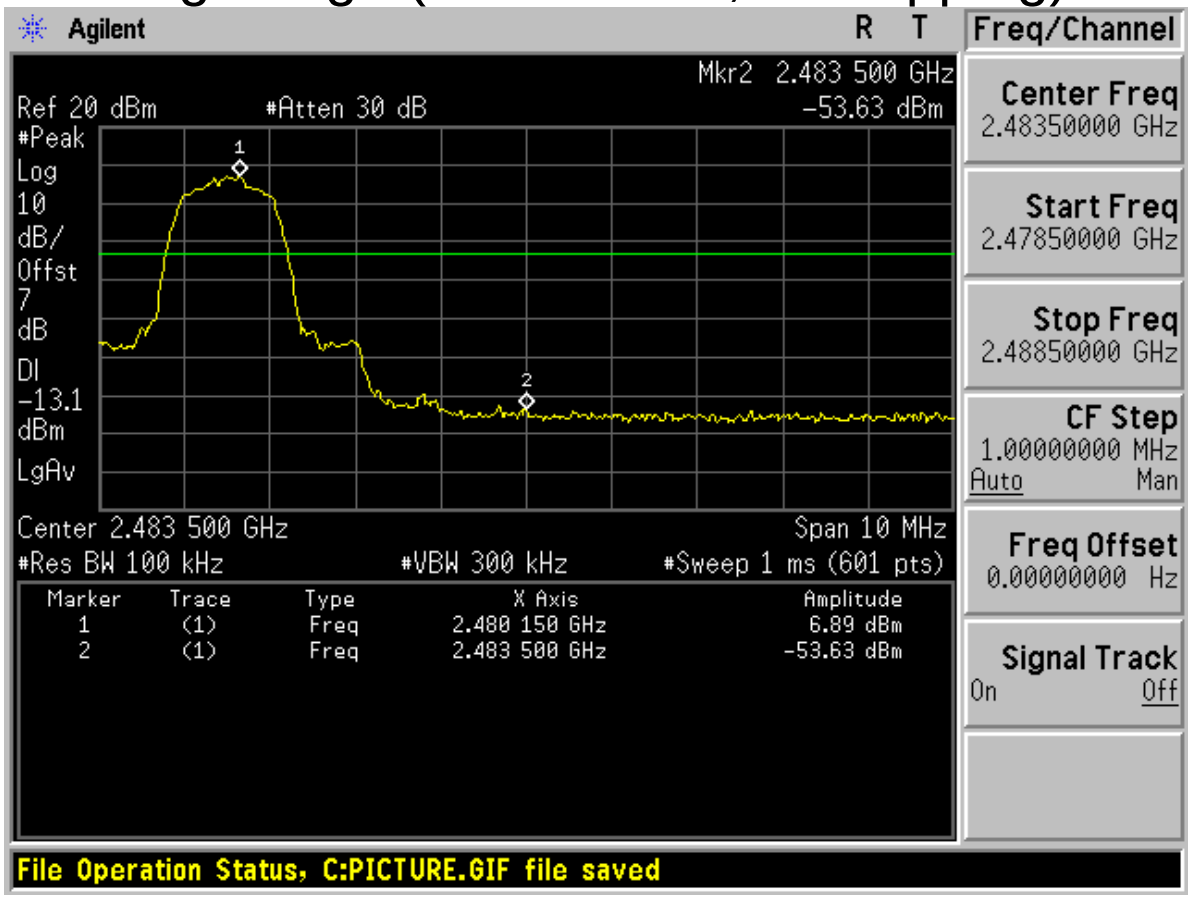
Low edge (Channel 0, no hopping)



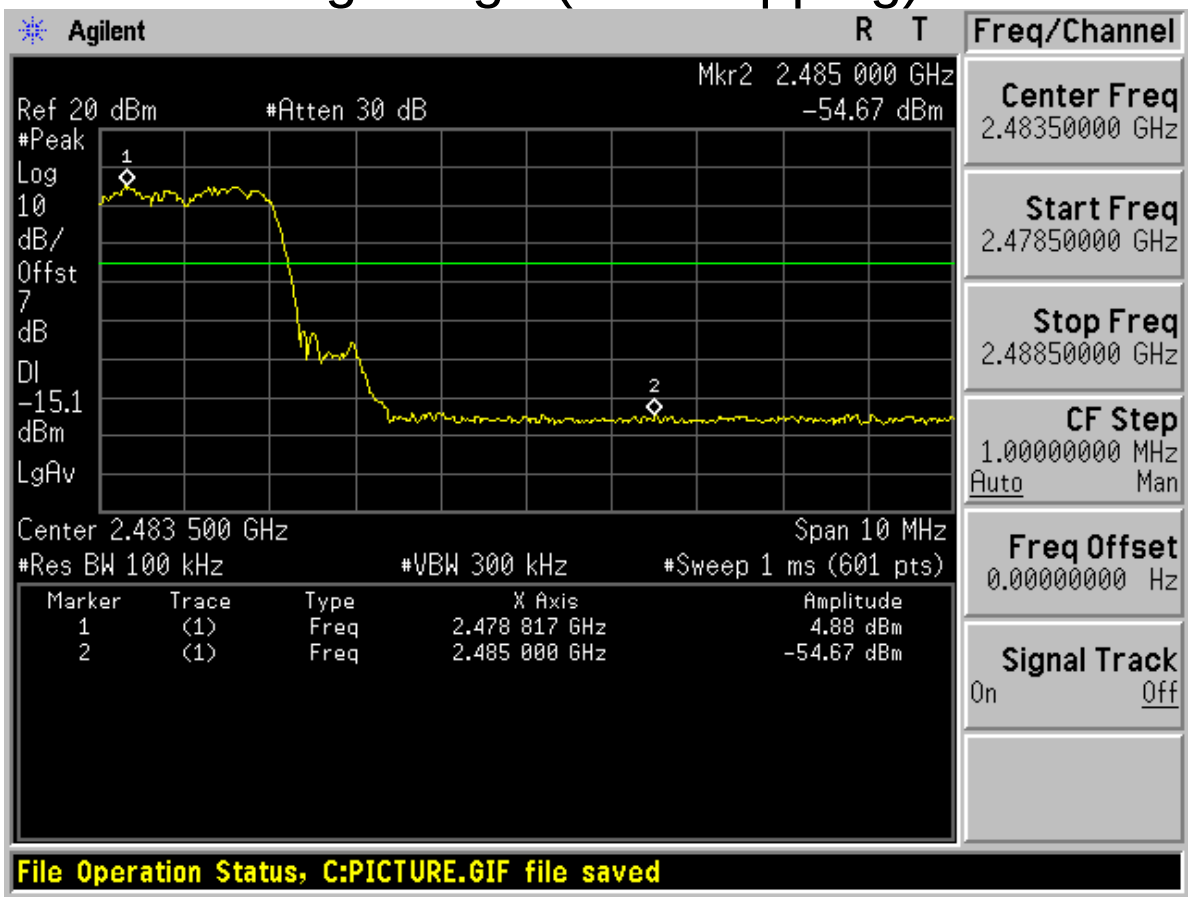
Low edge (with hopping)



High edge (Channel 78, no hopping)

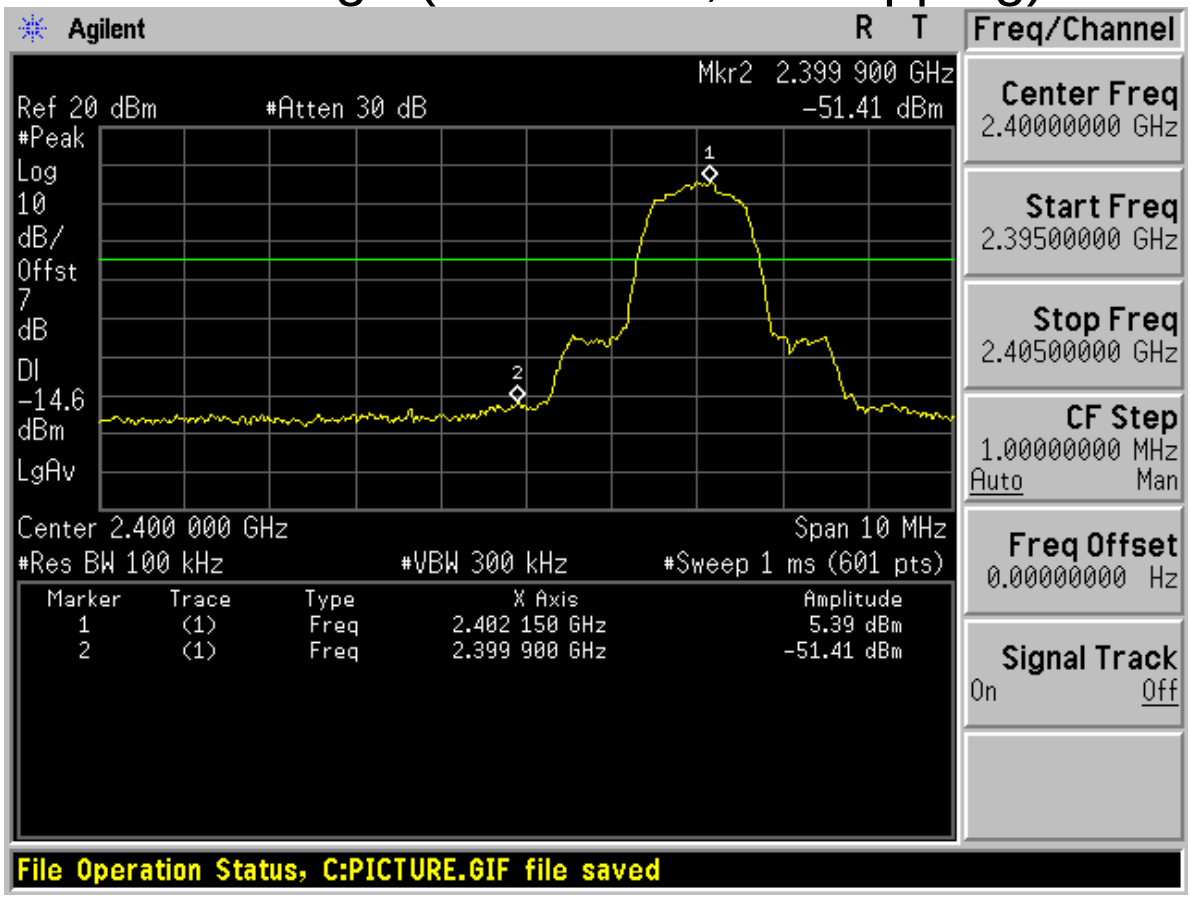


High edge (with hopping)

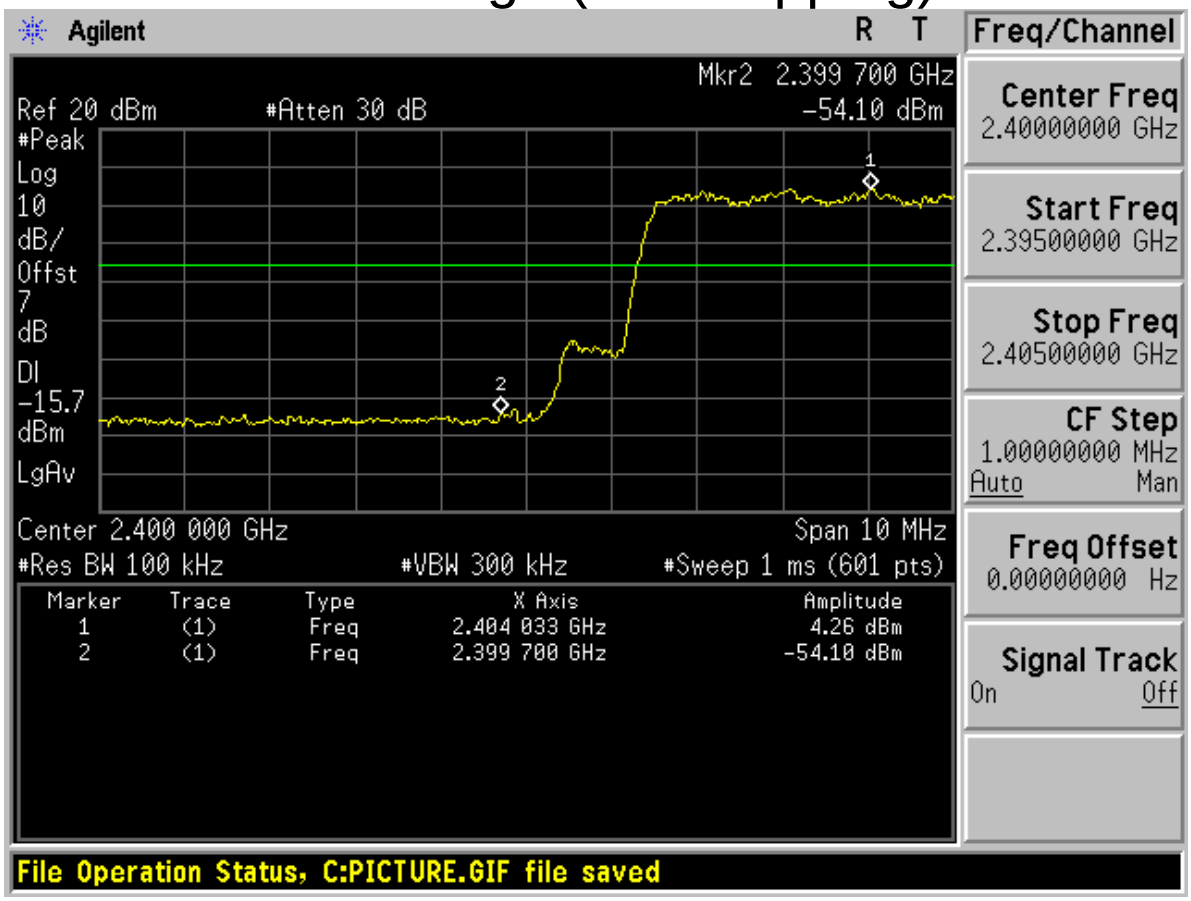


Modulation:8DPSK

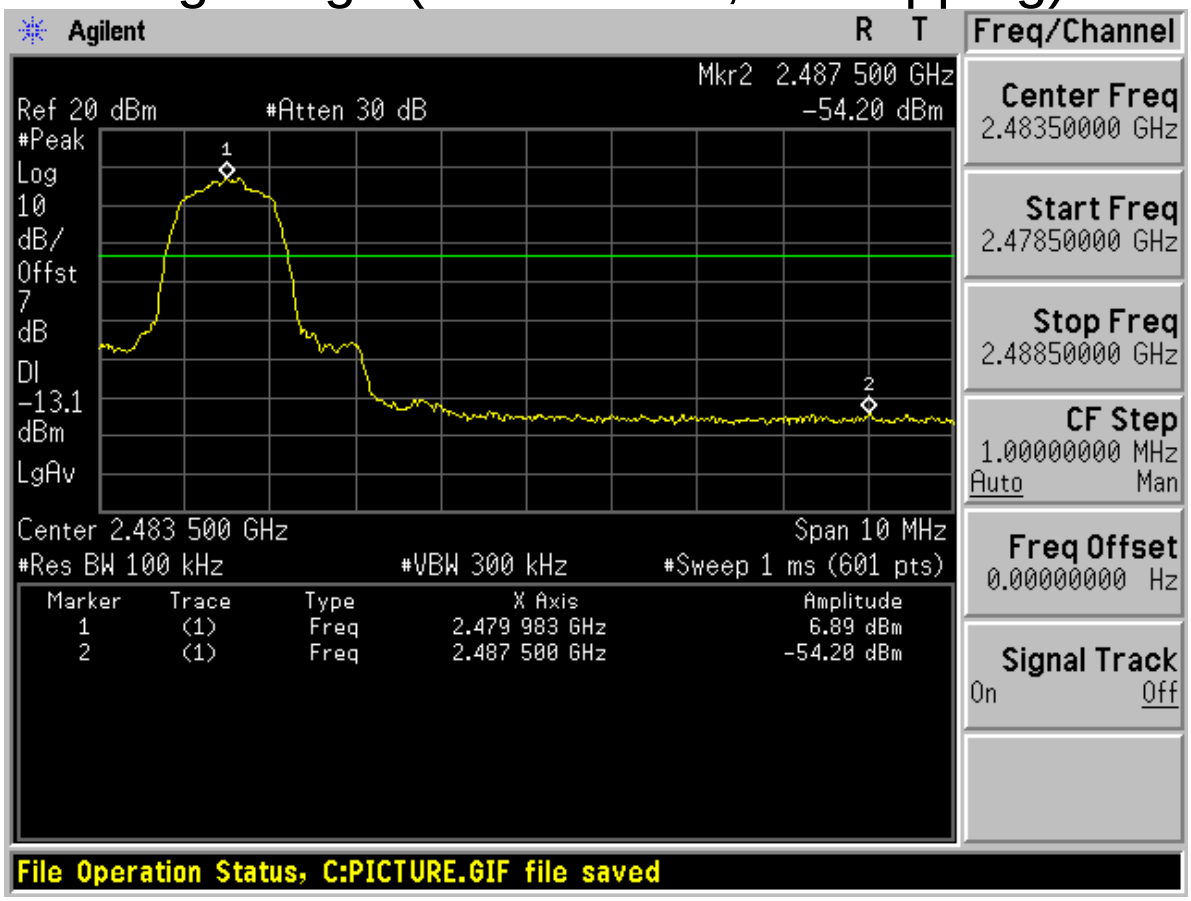
Low edge (Channel 0, no hopping)



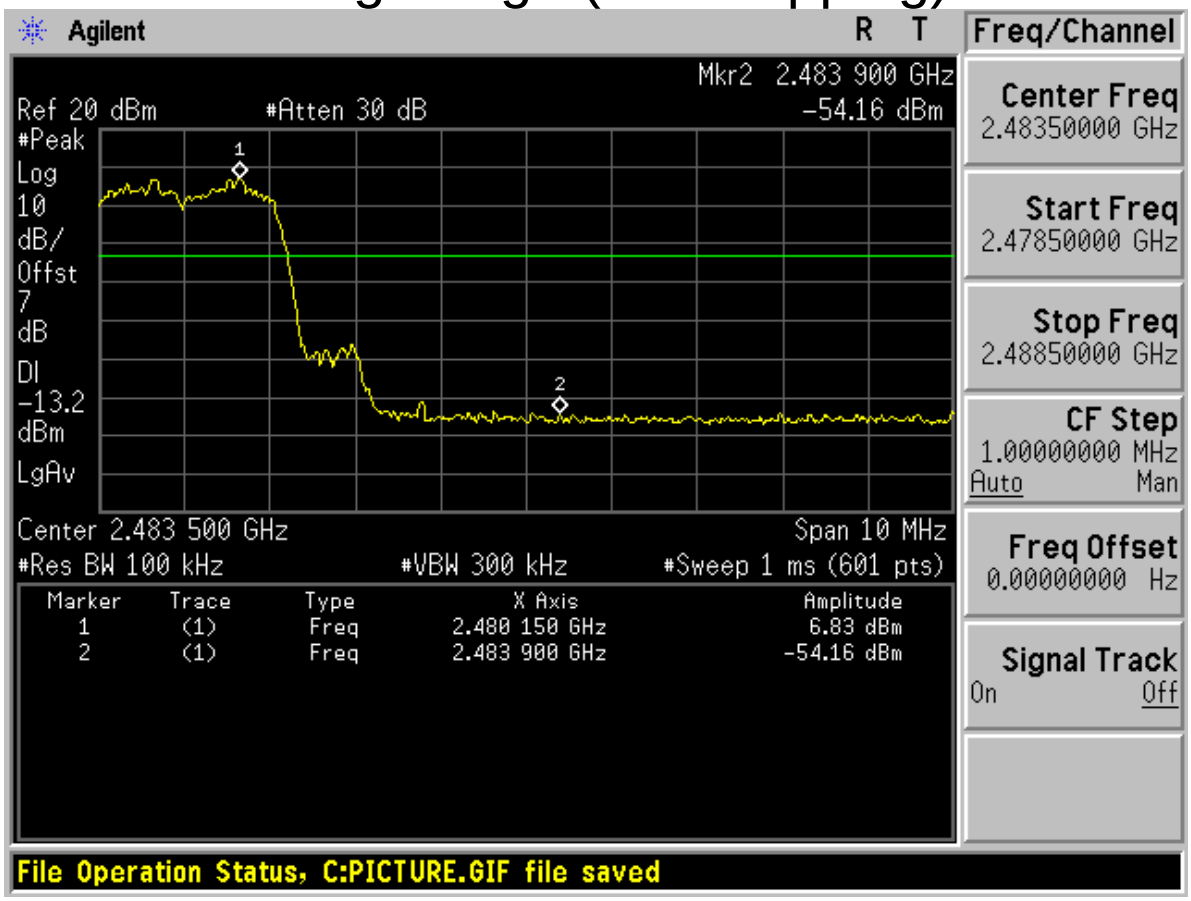
Low edge (with hopping)



High edge (Channel 78, no hopping)



High edge (with hopping)



----------The END----------

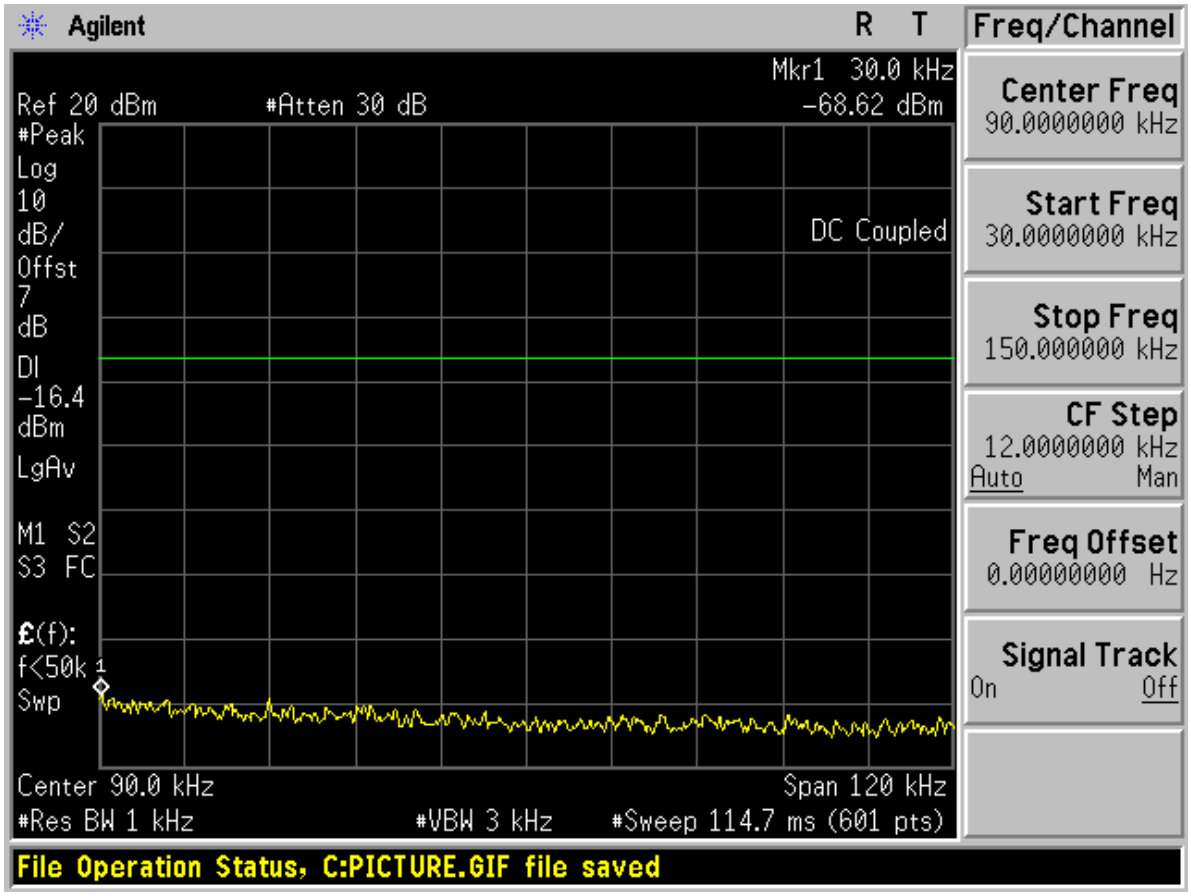
Appendix G

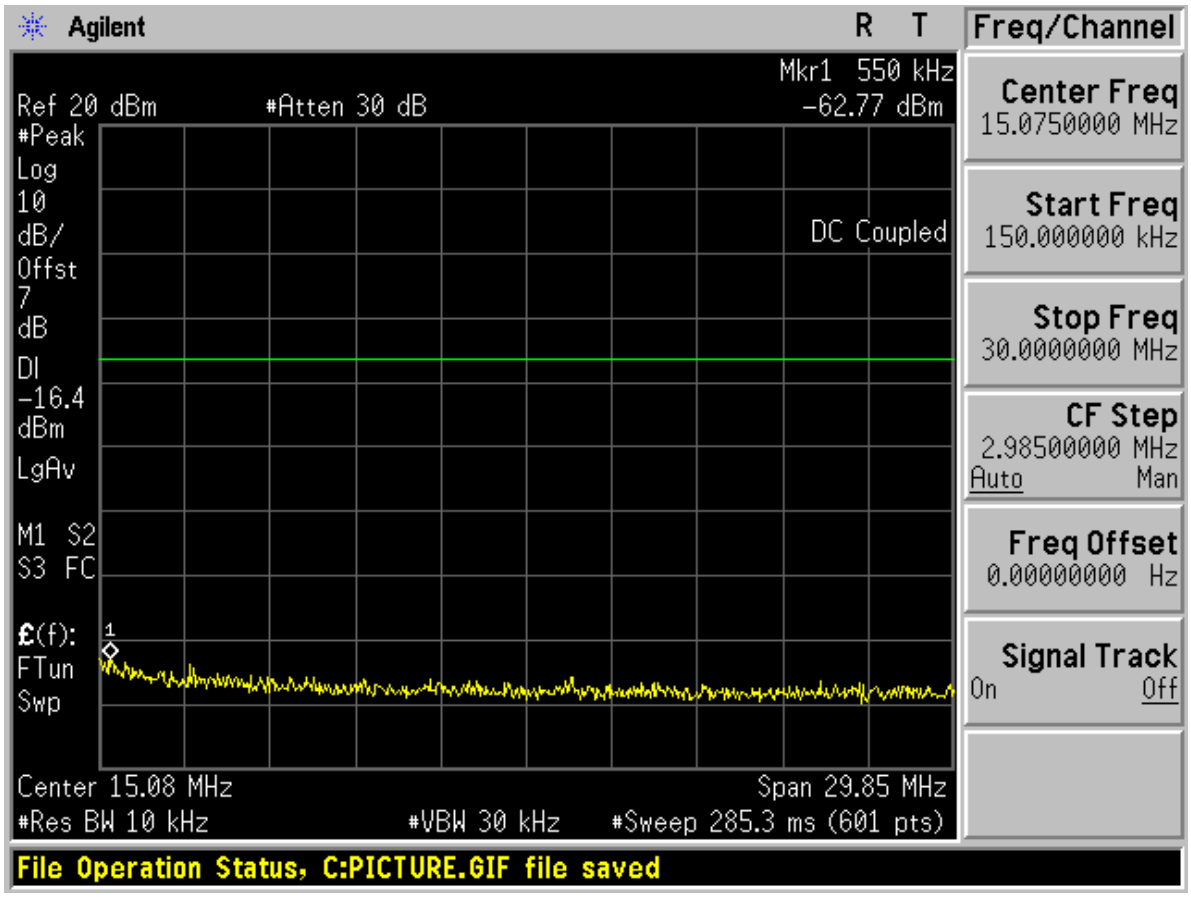
Conducted RF spurious

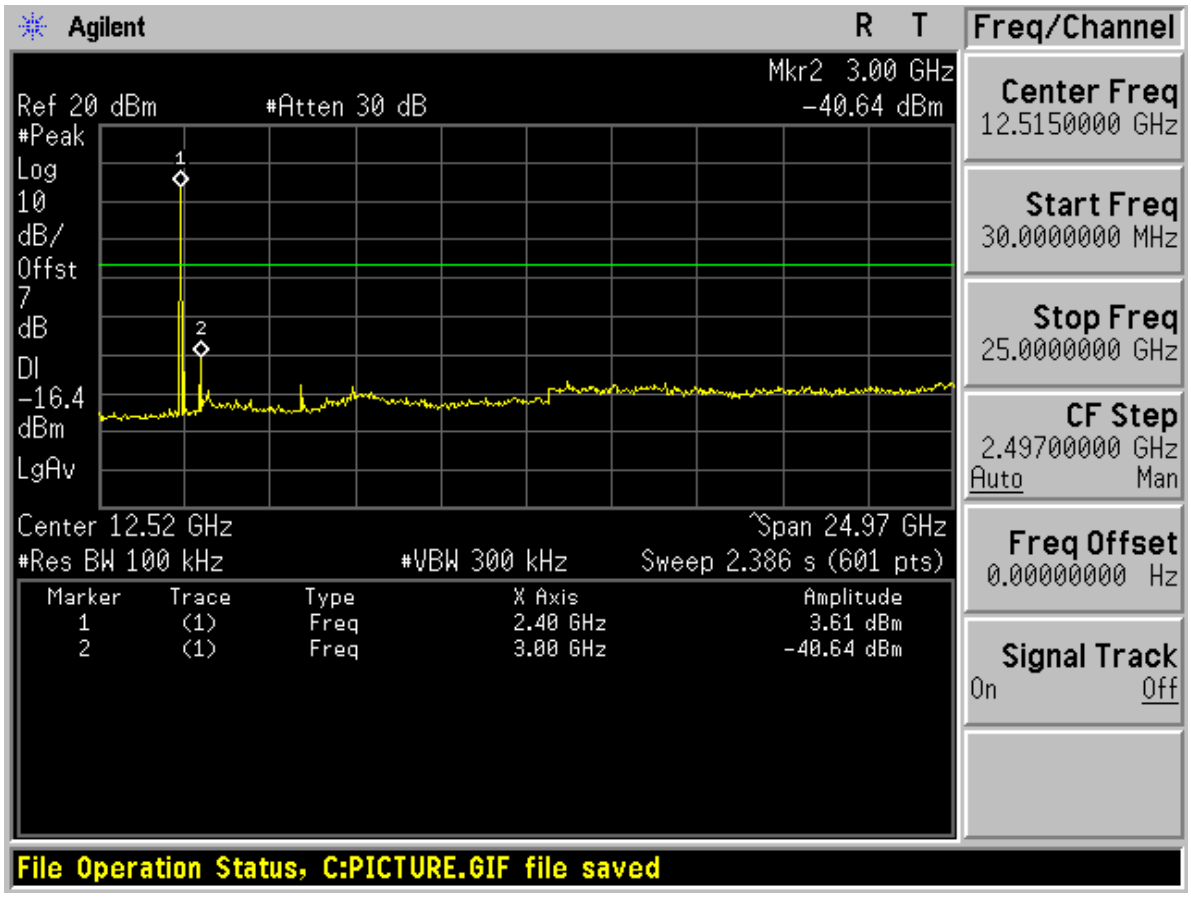
According to FCC Part 15.247 (d)

Modulation:π/4-DQPSK

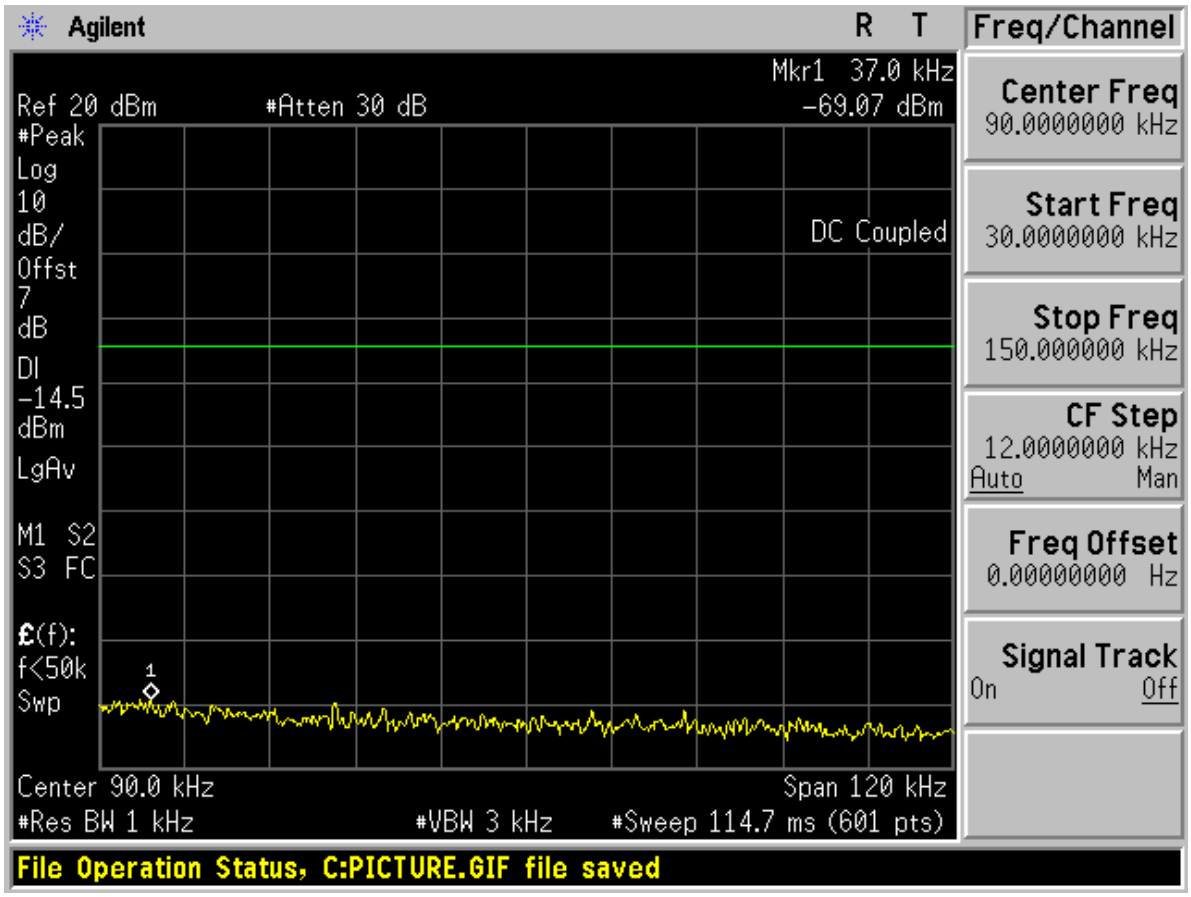
Channel 0

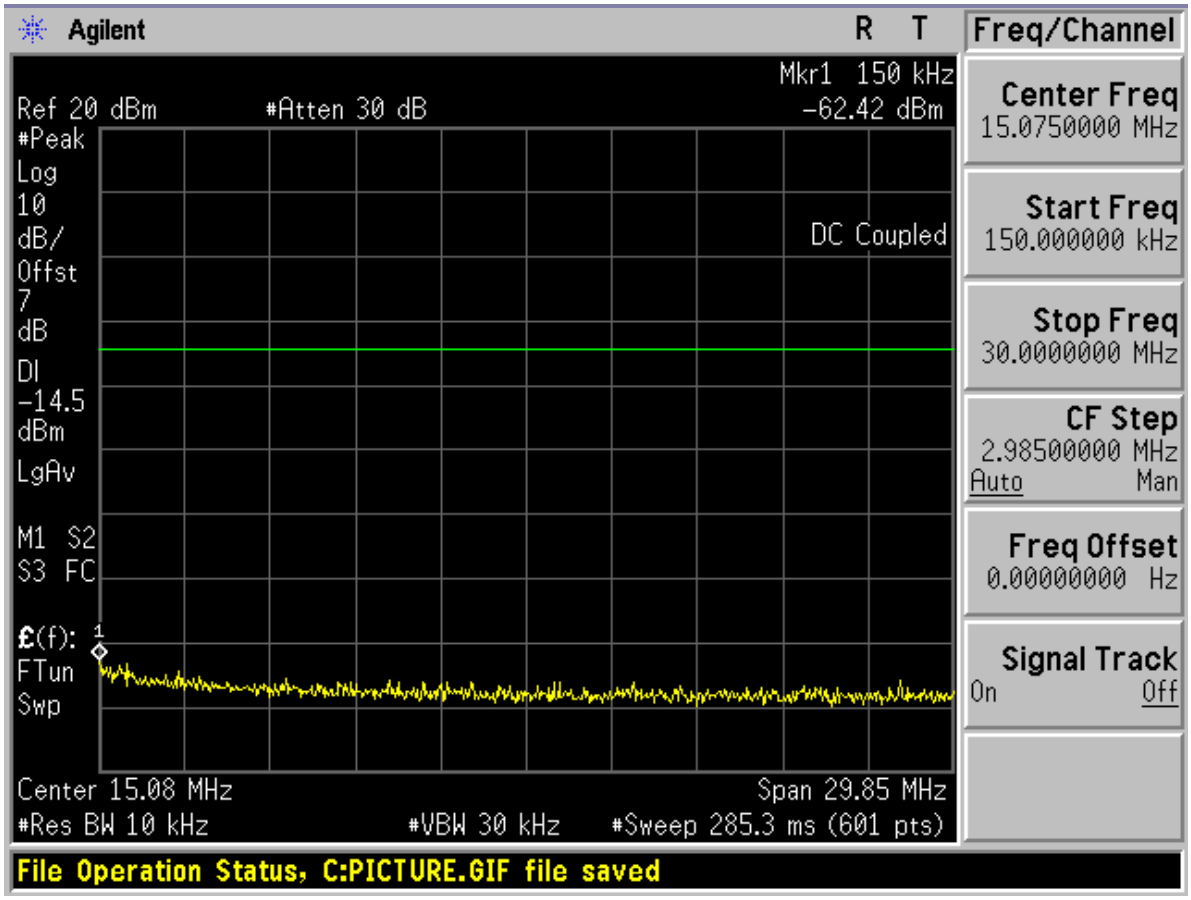


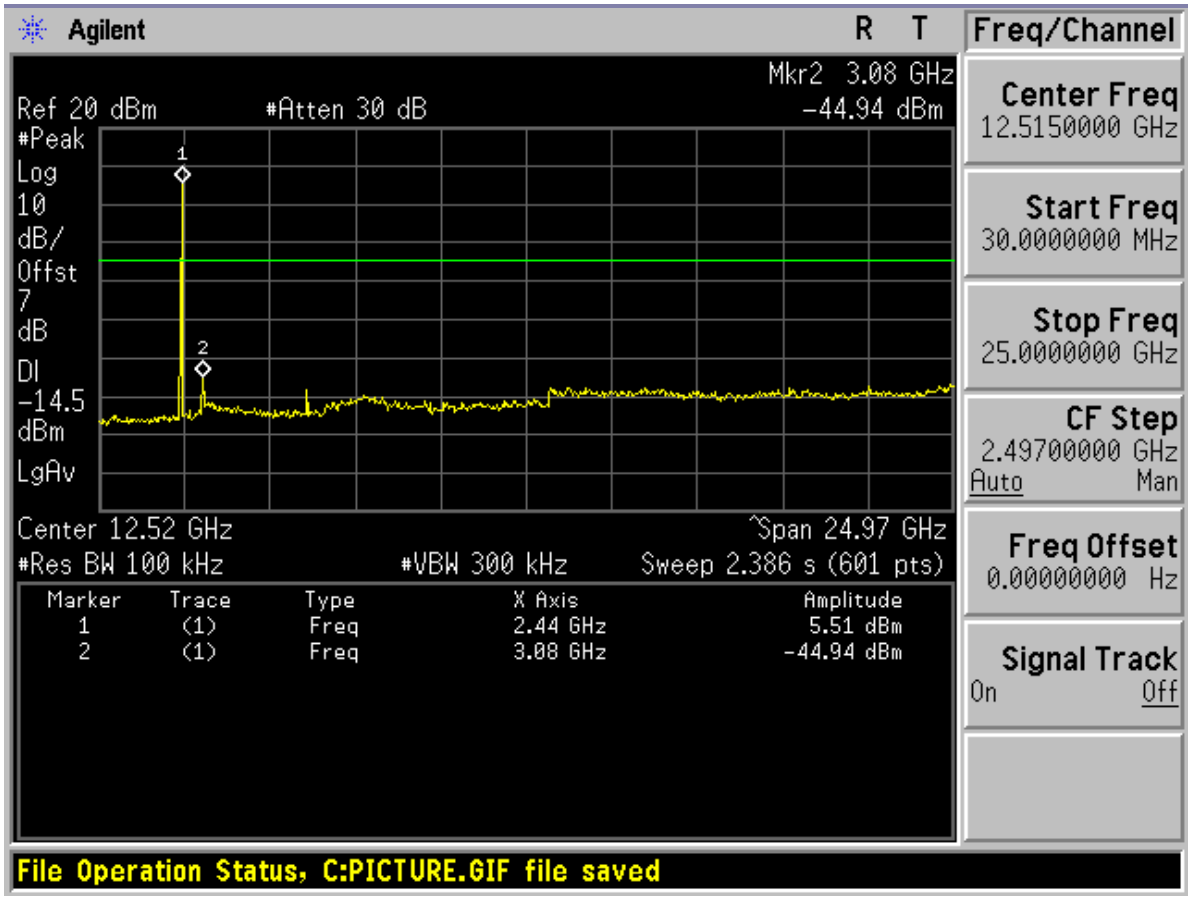

Agilent
R T
Freq/Channel
Mkr1 550 kHz
Ref 20 dBm
#Atten 30 dB
-62.77 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-16.4
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved


Agilent
R T
Freq/Channel
Mkr2 3.00 GHz
Ref 20 dBm
#Atten 30 dB
-40.64 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-16.4
dBm
LgAv
Center 12.52 GHz
Span 24.97 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.386 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.40 GHz 3.61 dBm
2 (1) Freq 3.00 GHz -40.64 dBm
Center Freq
12.5150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
25.0000000 GHz
CF Step
2.49700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:PICTURE.GIF file saved

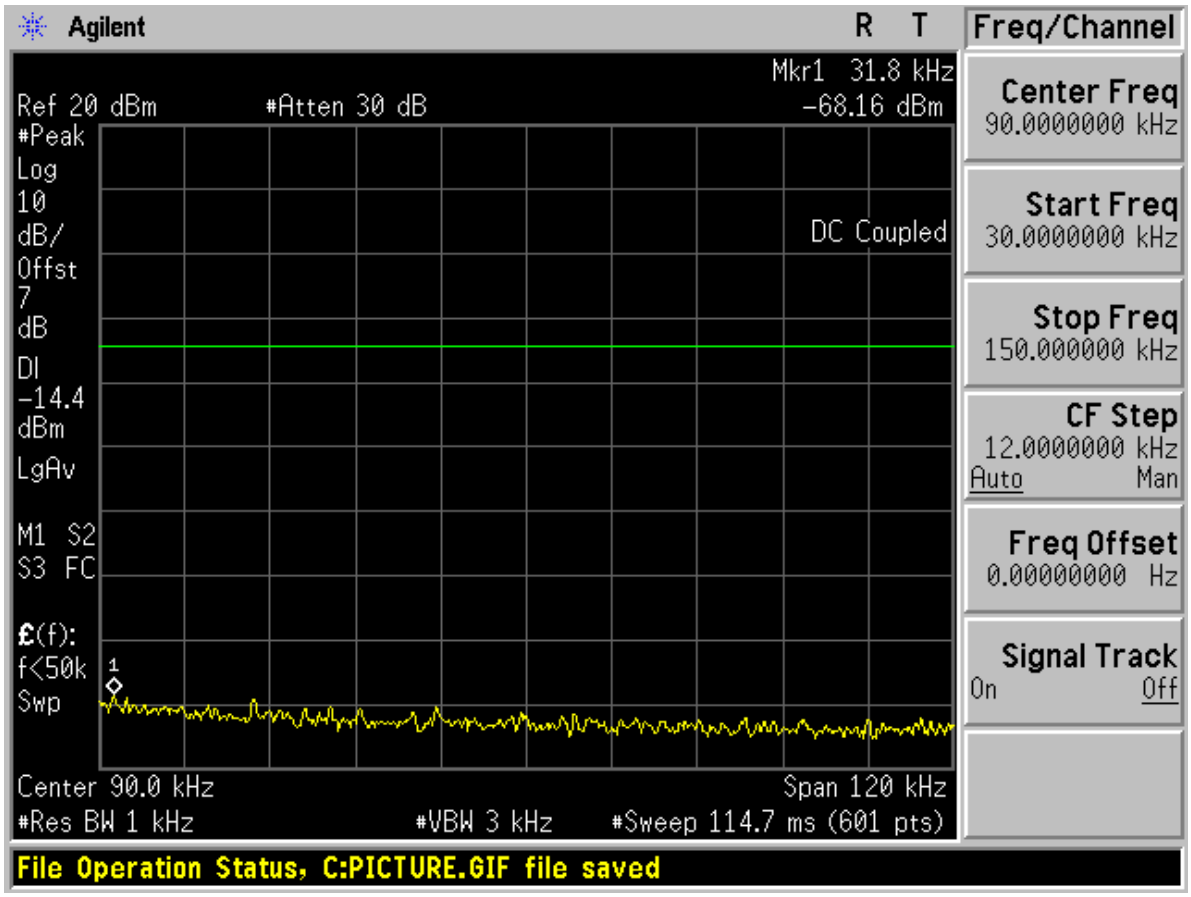
Channel 40

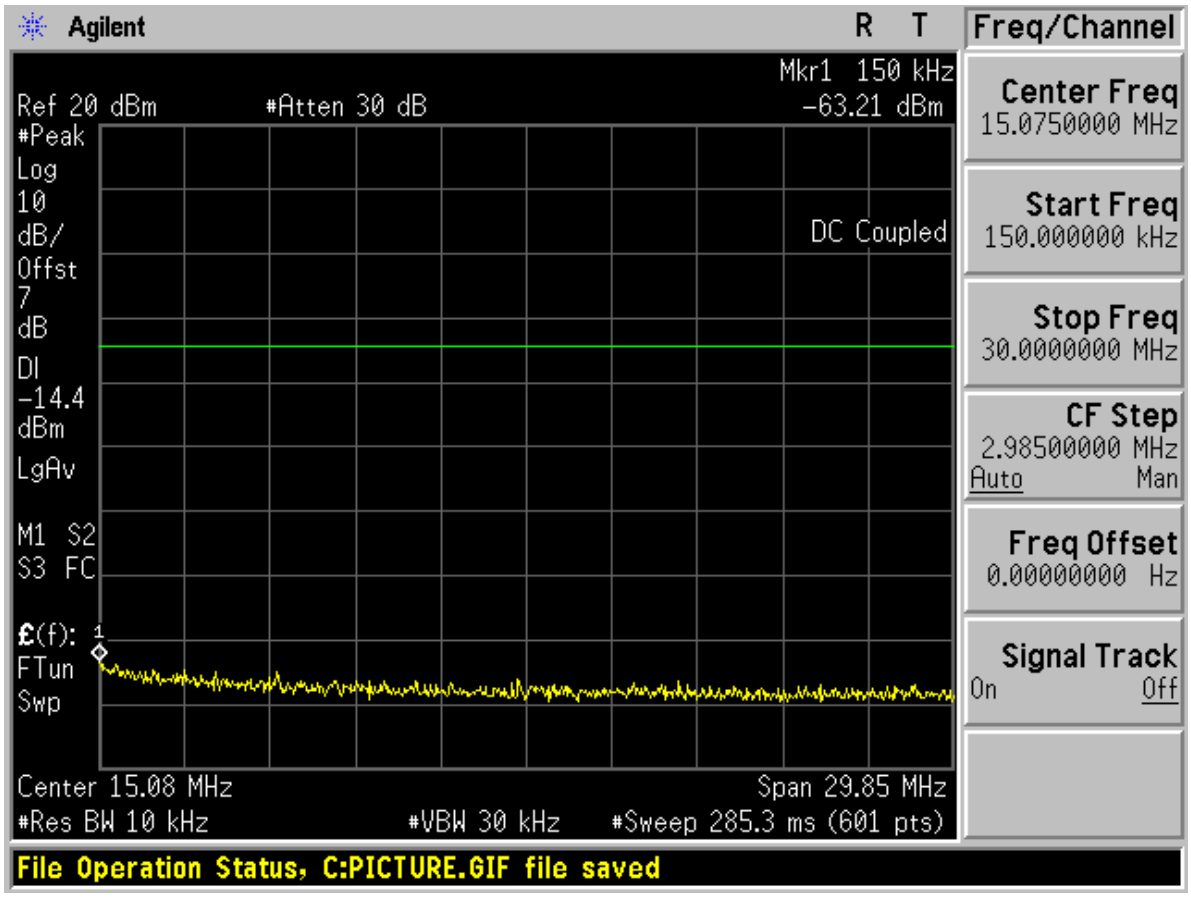

Agilent
R T
Freq/Channel
Mkr1 37.0 kHz
Ref 20 dBm
#Atten 30 dB
-69.07 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.5
dBm
LgAv
M1 S2
S3 FC
£(f):
f<50k
Swp
DC Coupled
Center Freq
90.0000000 kHz
Start Freq
30.0000000 kHz
Stop Freq
150.000000 kHz
CF Step
12.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Center 90.0 kHz
Span 120 kHz
#Res BW 1 kHz
#VBW 3 kHz
#Sweep 114.7 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

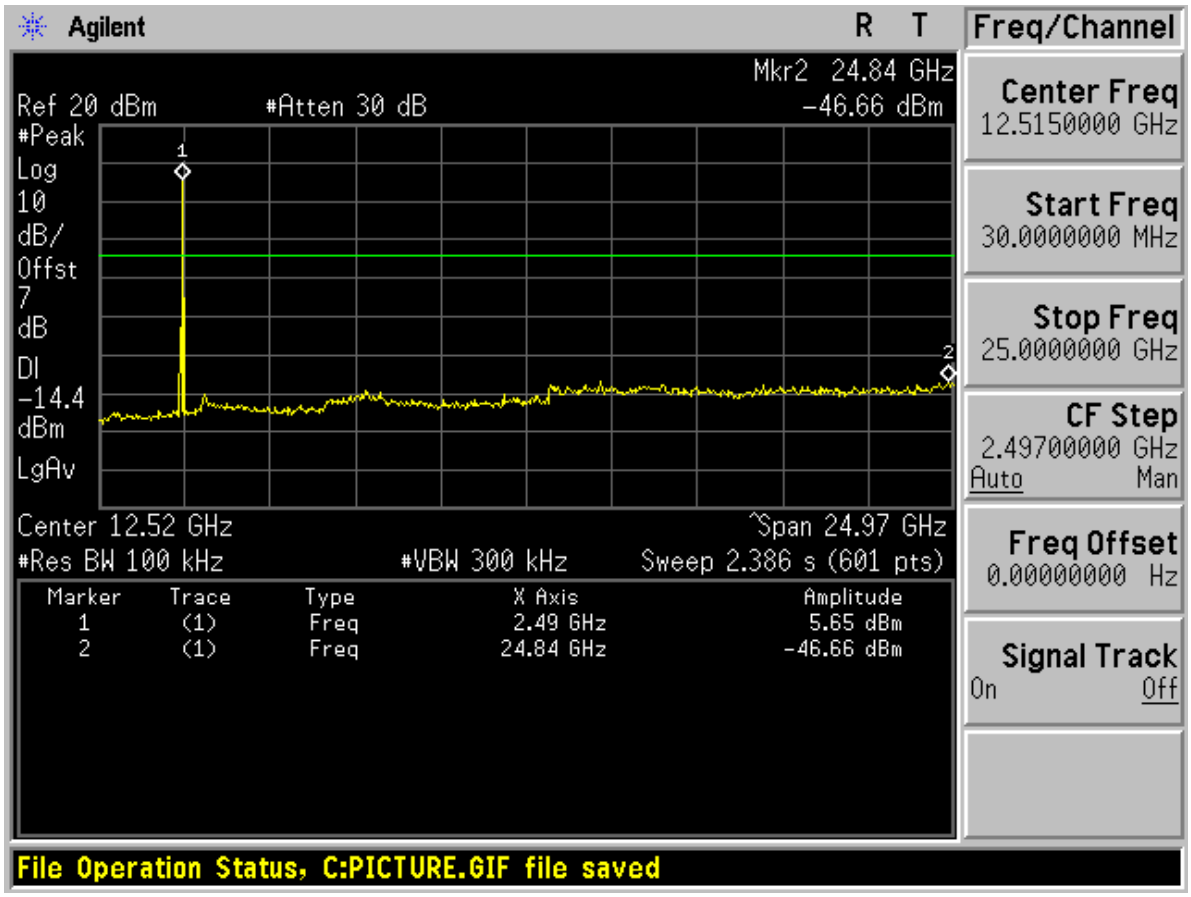

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 20 dBm
#Atten 30 dB
-62.42 dBm
#Peak
Log
10
dB/
Offst
7
dB
DC Coupled
Dl
-14.5
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved


Agilent
R T
Freq/Channel
Mkr2 3.08 GHz
Ref 20 dBm
#Atten 30 dB
-44.94 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.5
dBm
LgAv
1
2
Center 12.52 GHz
Span 24.97 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.386 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.44 GHz 5.51 dBm
2 (1) Freq 3.08 GHz -44.94 dBm
Center Freq
12.5150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
25.0000000 GHz
CF Step
2.49700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:PICTURE.GIF file saved

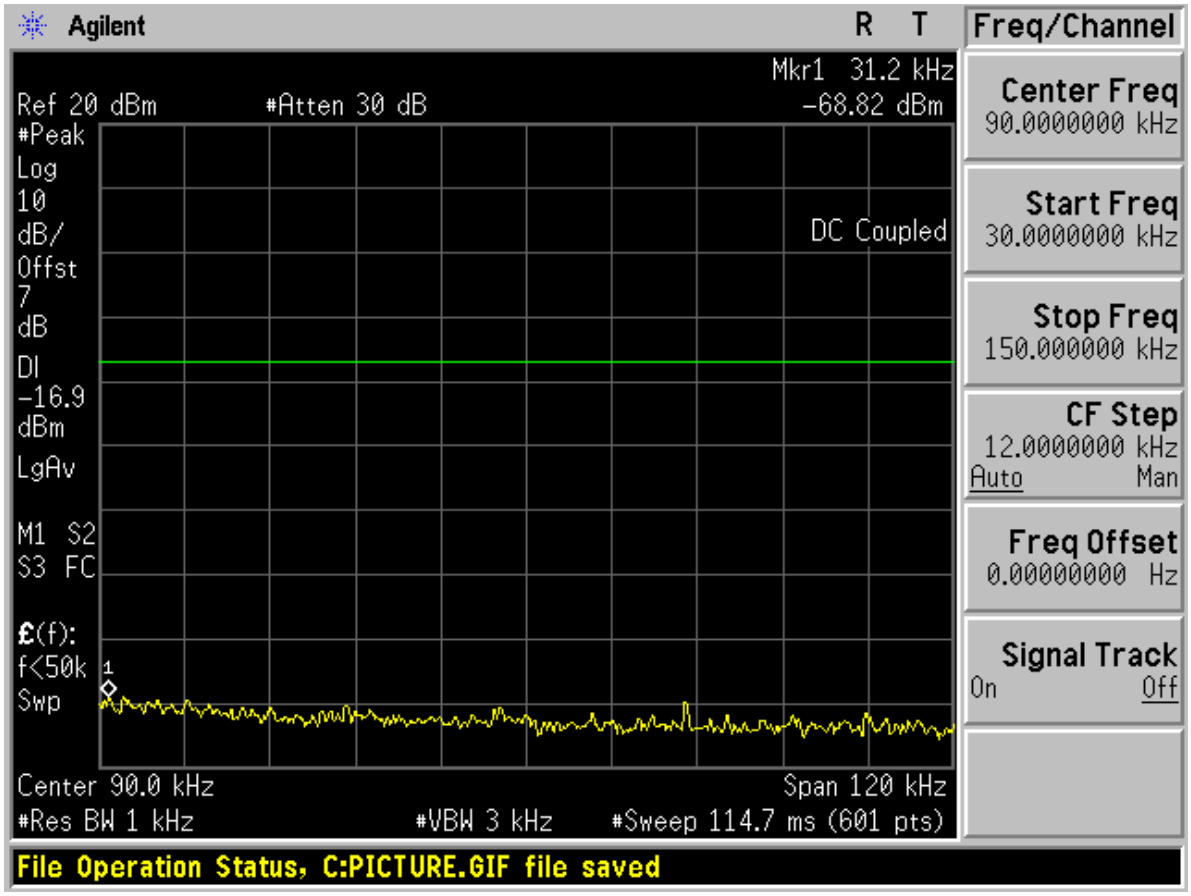
Channel 78

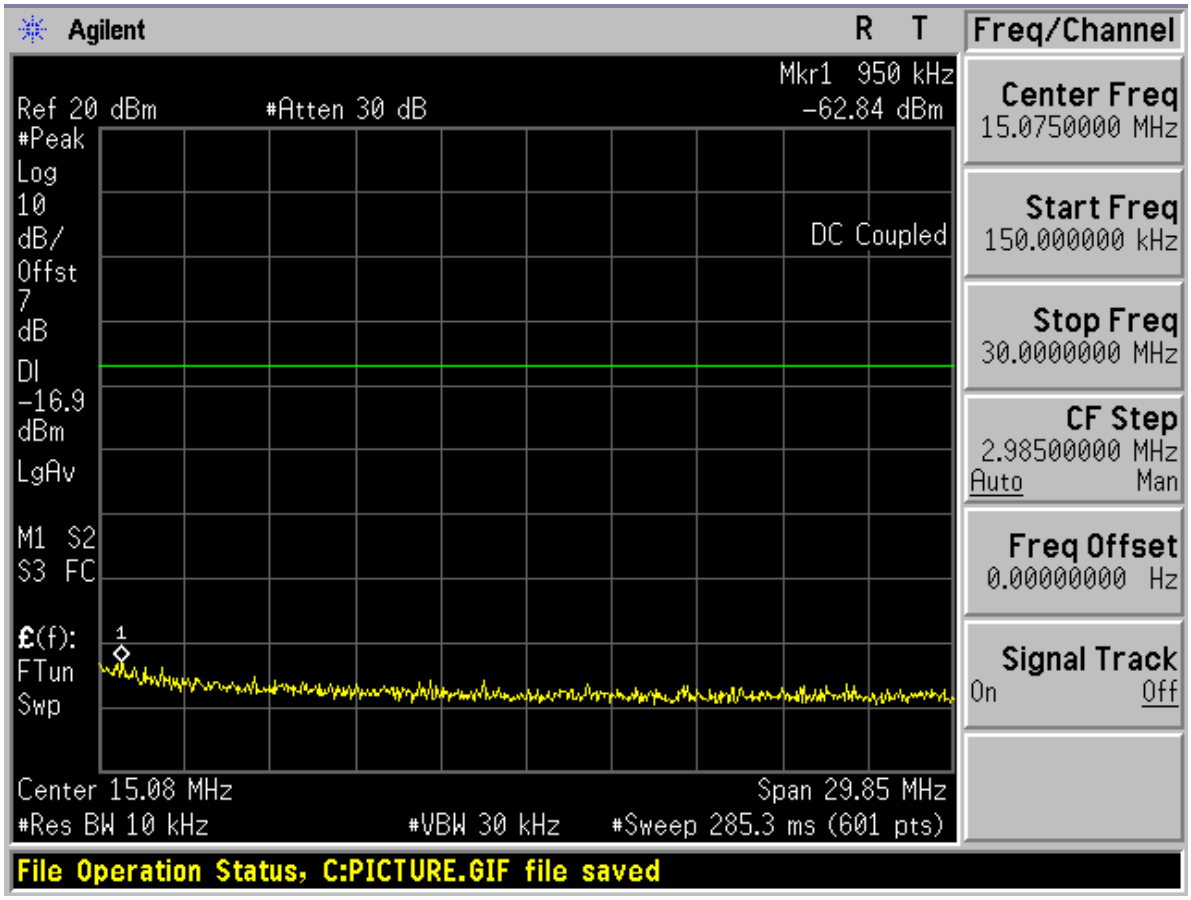

Agilent
R T
Freq/Channel
Mkr1 31.8 kHz
Ref 20 dBm
#Atten 30 dB
-68.16 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.4
dBm
LgAv
M1 S2
S3 FC
£(f):
f<50k
Swp
DC Coupled
Center Freq
90.0000000 kHz
Start Freq
30.0000000 kHz
Stop Freq
150.000000 kHz
CF Step
12.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Center 90.0 kHz
Span 120 kHz
#Res BW 1 kHz
#VBW 3 kHz
#Sweep 114.7 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

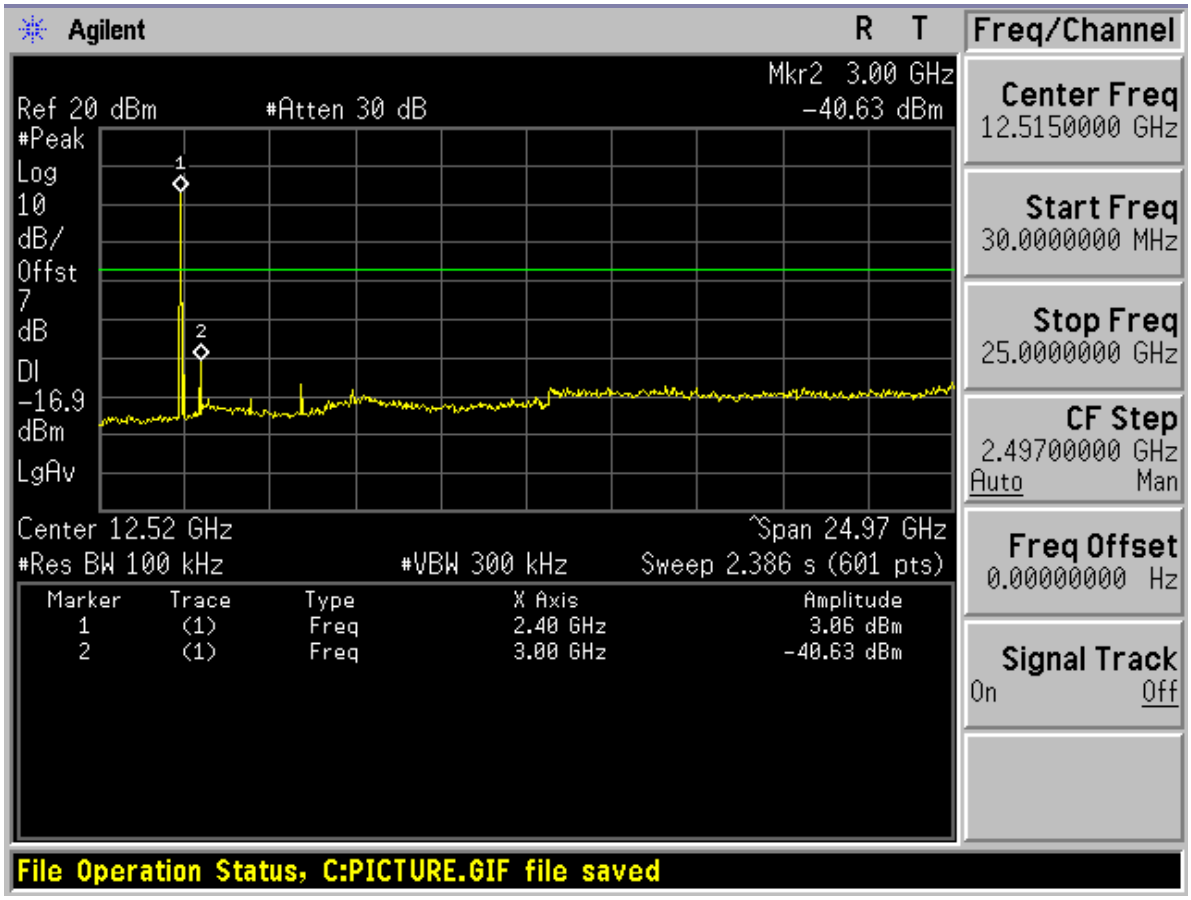

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 20 dBm
#Atten 30 dB
-63.21 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.4
dBm
LgAv
DC Coupled
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved


Agilent
R T
Freq/Channel
Mkr2 24.84 GHz
Ref 20 dBm
#Atten 30 dB
-46.66 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.4
dBm
LgAv
Center 12.52 GHz
^Span 24.97 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.386 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.49 GHz 5.65 dBm
2 (1) Freq 24.84 GHz -46.66 dBm
Center Freq
12.5150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
25.0000000 GHz
CF Step
2.49700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:PICTURE.GIF file saved

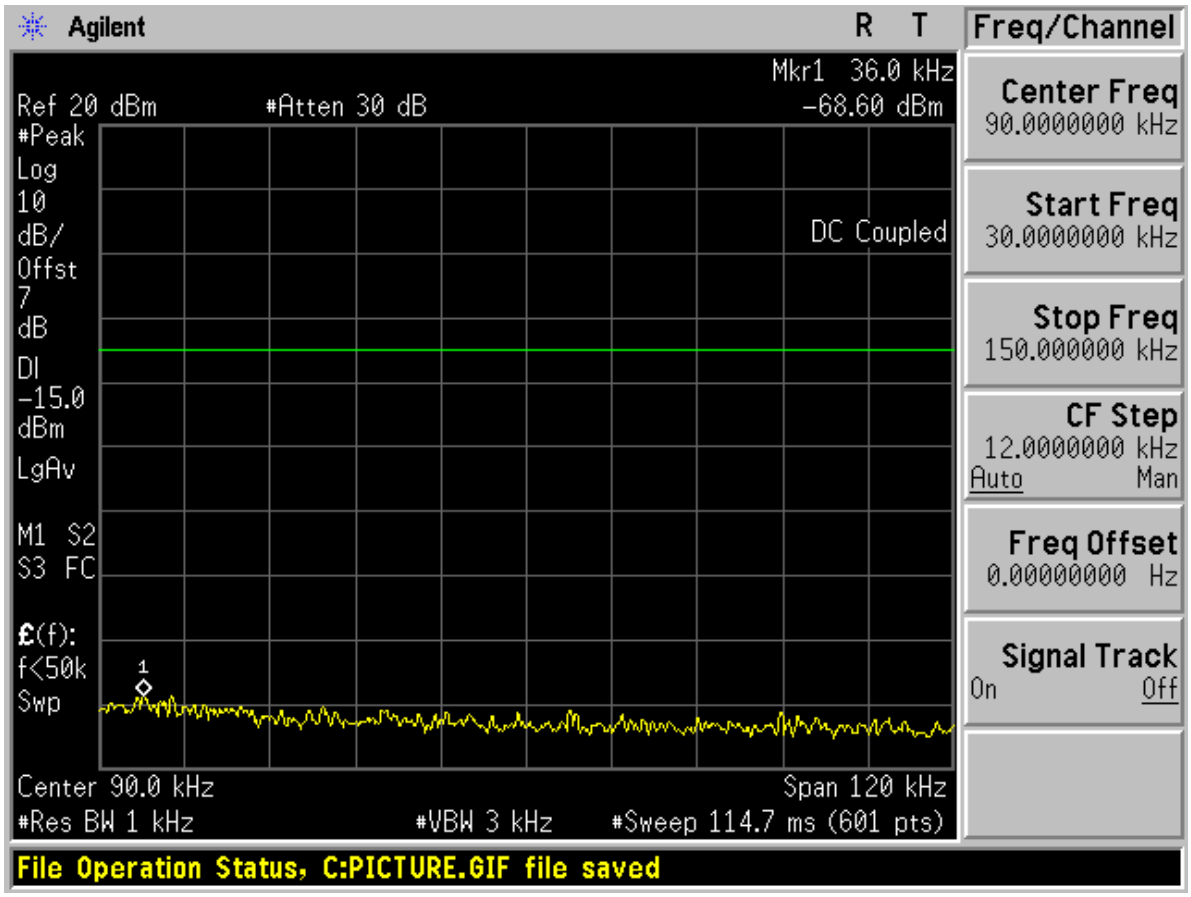
Modulation:8DPSK
Channel 0

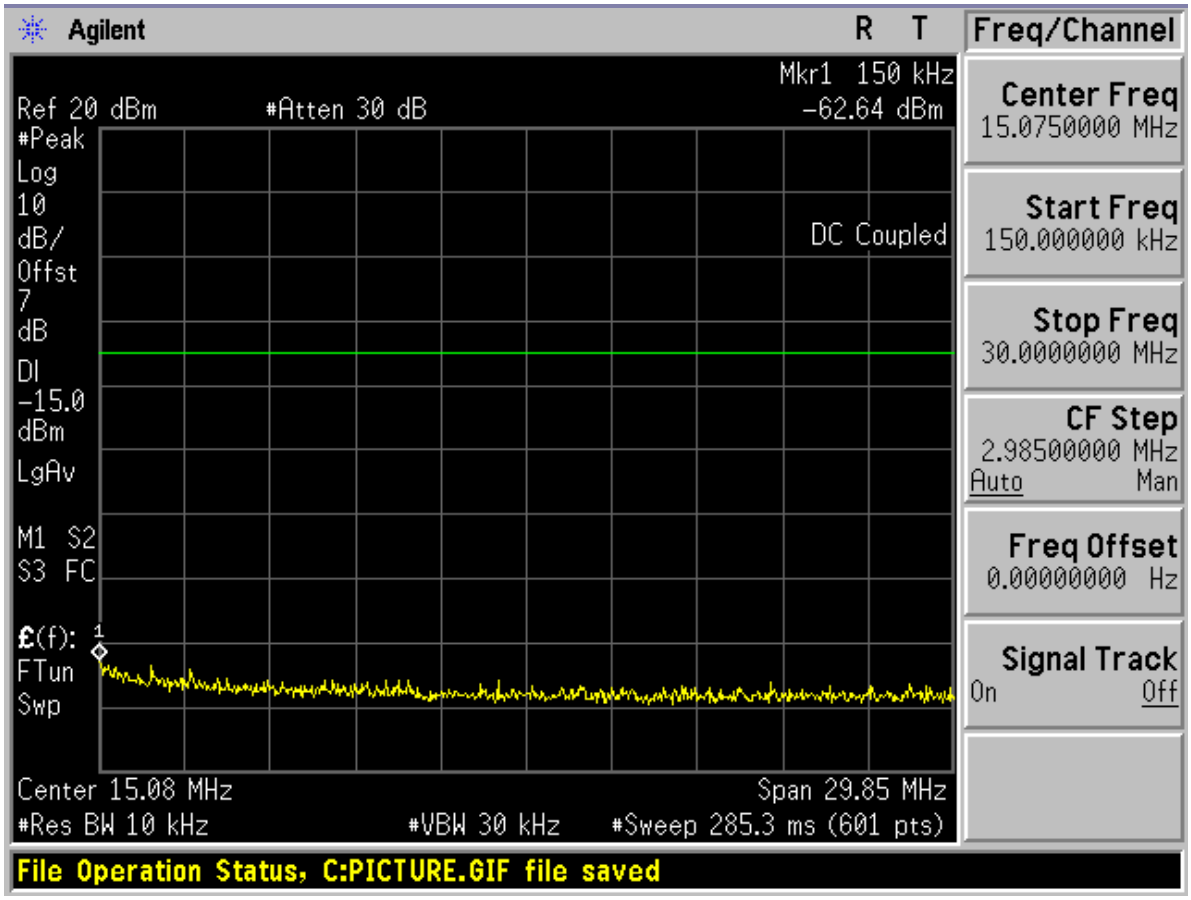


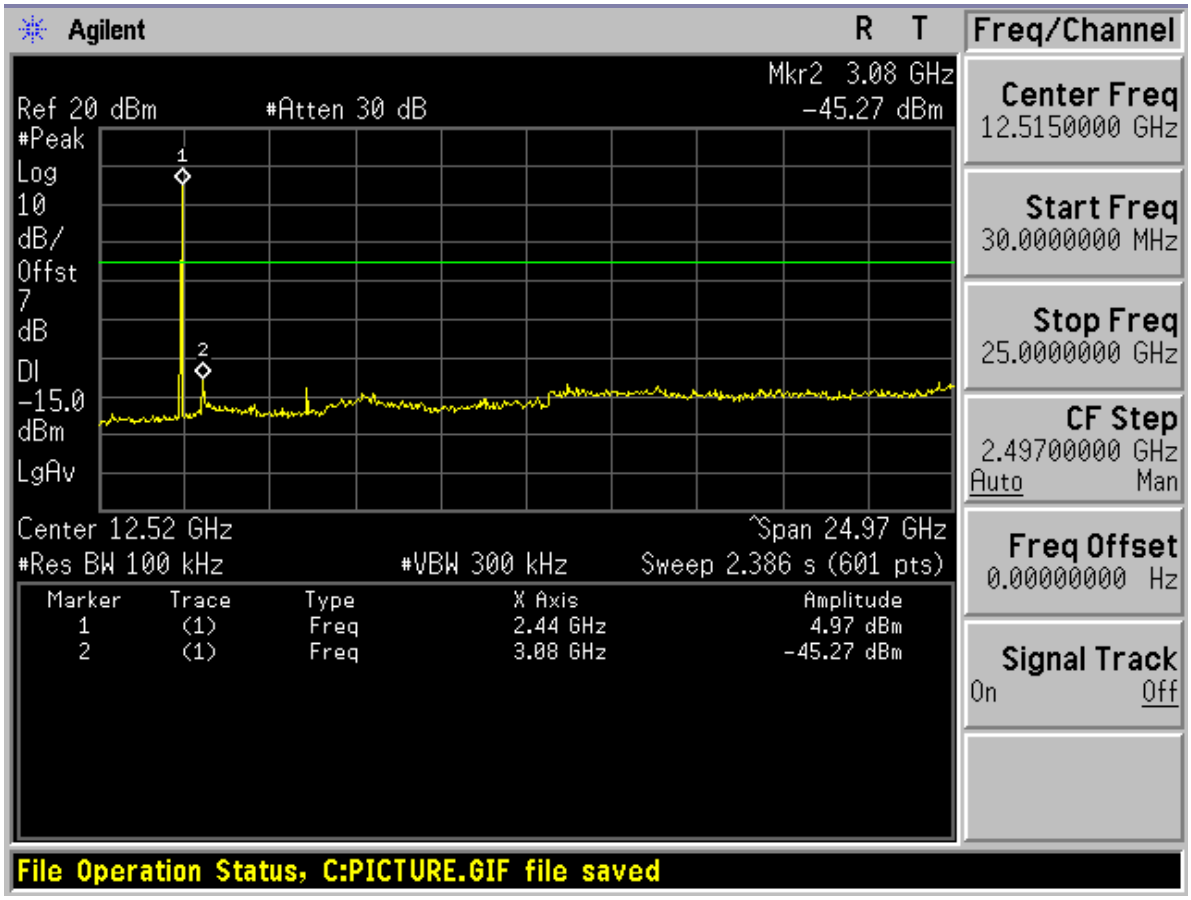

Agilent
R T
Freq/Channel
Mkr1 950 kHz
Ref 20 dBm
#Atten 30 dB
-62.84 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-16.9
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
DC Coupled
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved


Agilent
R T
Freq/Channel
Mkr2 3.00 GHz
Ref 20 dBm
#Atten 30 dB
-40.63 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-16.9
dBm
LgAv
Center Freq
12.5150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
25.0000000 GHz
CF Step
2.49700000 GHz
Auto
Man
Center 12.52 GHz
^Span 24.97 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.386 s (601 pts)
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.40 GHz 3.06 dBm
2 (1) Freq 3.00 GHz -40.63 dBm
File Operation Status, C:PICTURE.GIF file saved

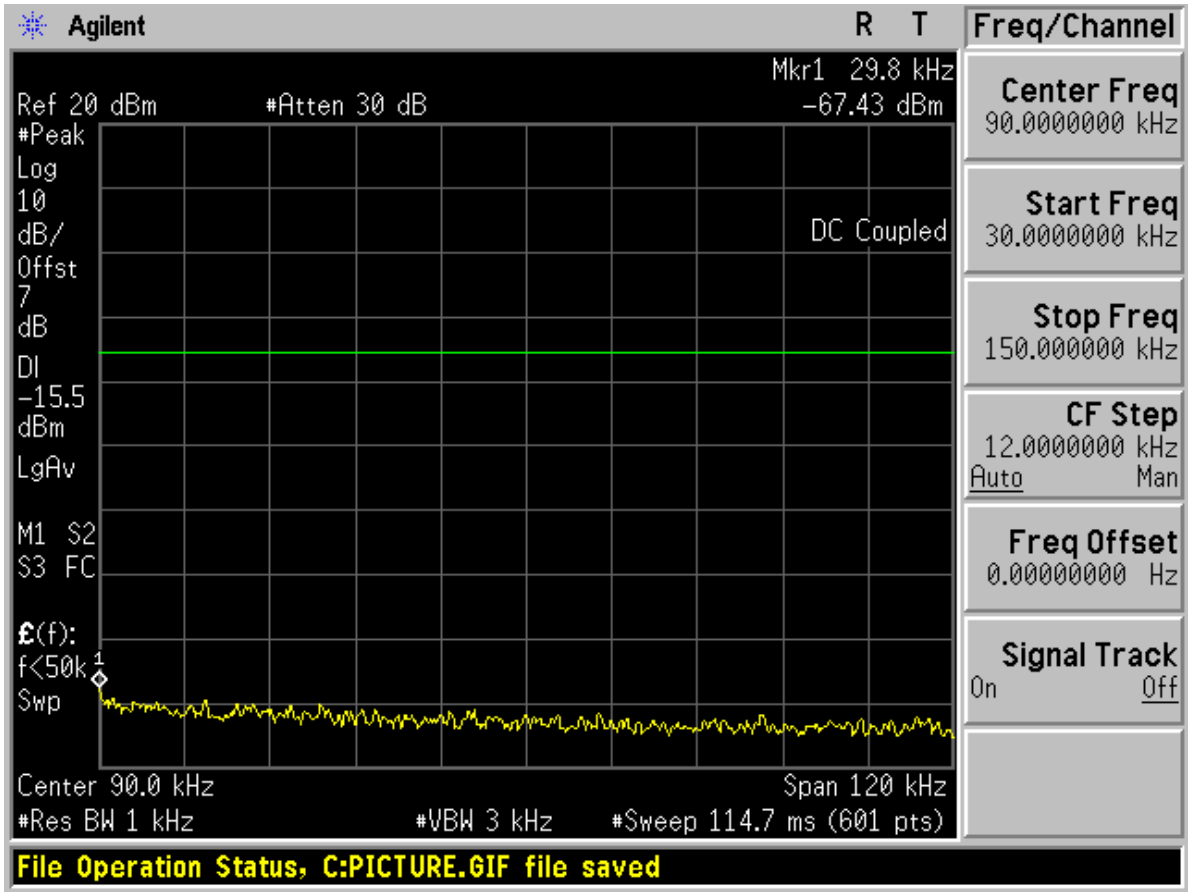
Channel 40

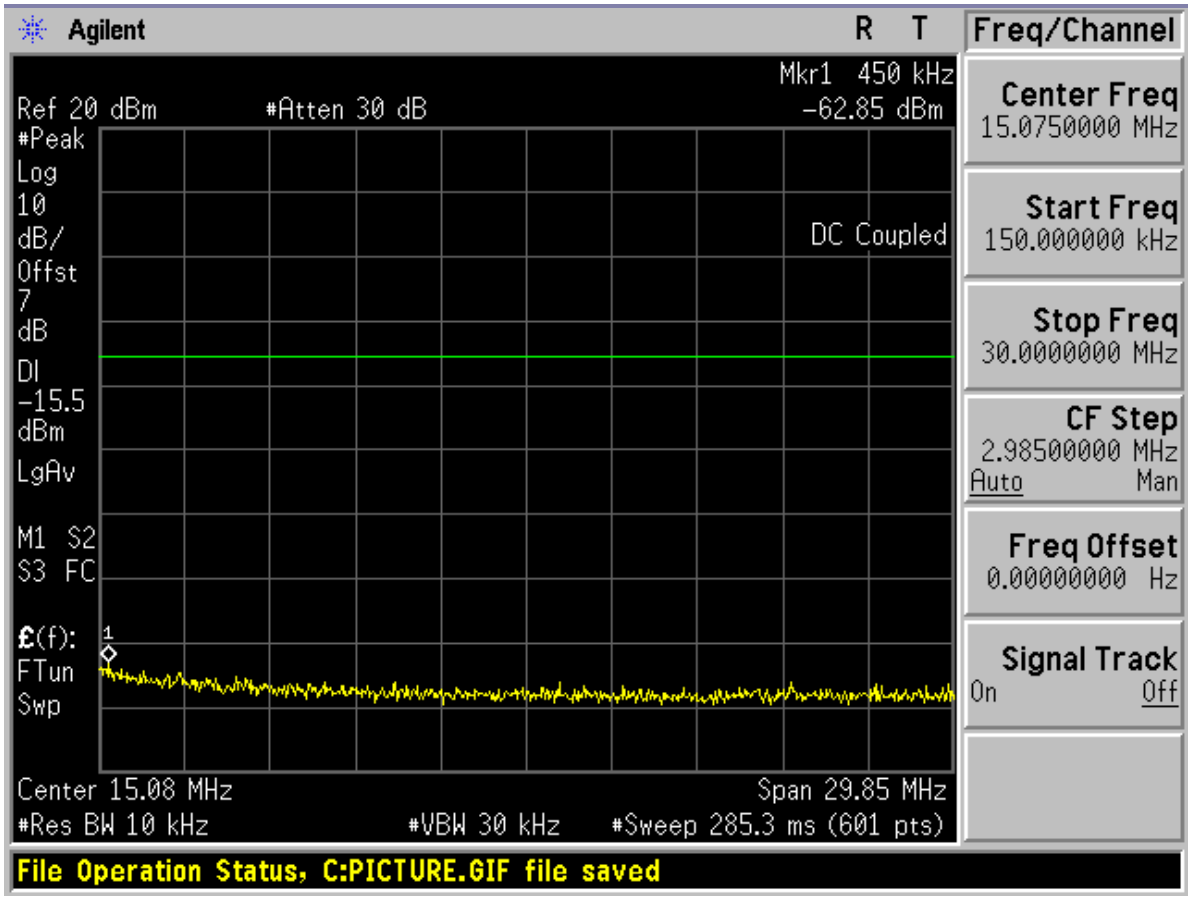

Agilent
R T
Freq/Channel
Mkr1 36.0 kHz
Ref 20 dBm
#Atten 30 dB
-68.60 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-15.0
dBm
LgAv
M1 S2
S3 FC
£(f):
f<50k
Swp
DC Coupled
Center Freq
90.0000000 kHz
Start Freq
30.0000000 kHz
Stop Freq
150.000000 kHz
CF Step
12.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Center 90.0 kHz
Span 120 kHz
#Res BW 1 kHz
#VBW 3 kHz
#Sweep 114.7 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved

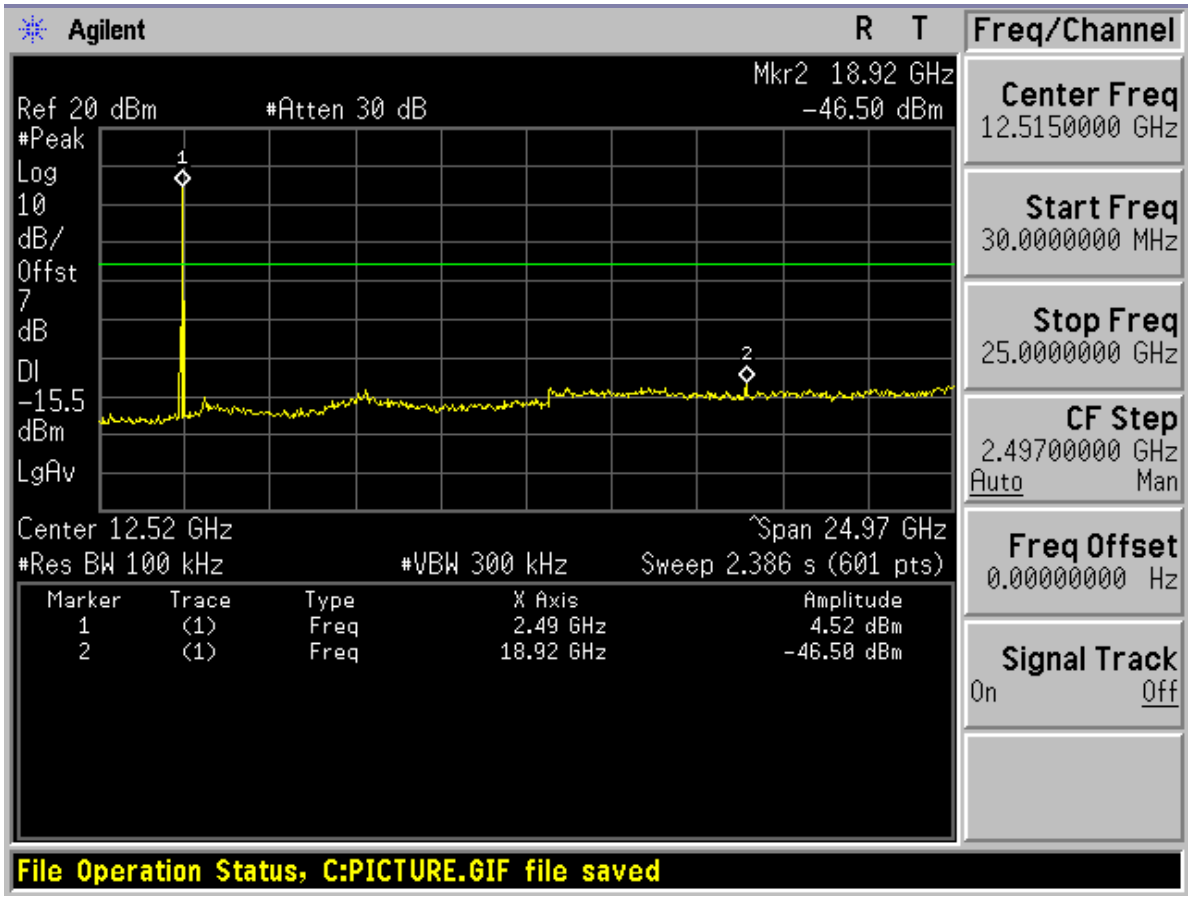

Agilent
R T
Freq/Channel
Mkr1 150 kHz
Ref 20 dBm
#Atten 30 dB
-62.64 dBm
#Peak
Log
10
dB/
Offst
7
dB
DC Coupled
Dl
-15.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved


Agilent
R T
Freq/Channel
Mkr2 3.08 GHz
Ref 20 dBm
#Atten 30 dB
-45.27 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-15.0
dBm
LgAv
Center Freq
12.5150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
25.0000000 GHz
CF Step
2.49700000 GHz
Auto
Man
Center 12.52 GHz
^Span 24.97 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.386 s (601 pts)
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.44 GHz 4.97 dBm
2 (1) Freq 3.08 GHz -45.27 dBm
File Operation Status, C:PICTURE.GIF file saved

Channel 78


Agilent
R T
Freq/Channel
Mkr1 29.8 kHz
-67.43 dBm
Ref 20 dBm
#Atten 30 dB
#Peak
Log
10
dB/
Offst
7
dB
DC Coupled
Dl
-15.5
dBm
LgAv
M1 S2
S3 FC
£(f):
f<50k
Swp
Center Freq
90.0000000 kHz
Start Freq
30.0000000 kHz
Stop Freq
150.000000 kHz
CF Step
12.0000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 90.0 kHz
Span 120 kHz
#Res BW 1 kHz
#VBW 3 kHz
#Sweep 114.7 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved


Agilent
R T
Freq/Channel
Mkr1 450 kHz
Ref 20 dBm
#Atten 30 dB
-62.85 dBm
#Peak
Log
10
dB/
Offst
7
dB
DC Coupled
Dl
-15.5
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 15.08 MHz
Span 29.85 MHz
#Res BW 10 kHz
#VBW 30 kHz
#Sweep 285.3 ms (601 pts)
File Operation Status, C:PICTURE.GIF file saved


Agilent
R T
Freq/Channel
Mkr2 18.92 GHz
Ref 20 dBm
#Atten 30 dB
-46.50 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-15.5
dBm
LgAv
Center 12.52 GHz
^Span 24.97 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.386 s (601 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.49 GHz 4.52 dBm
2 (1) Freq 18.92 GHz -46.50 dBm
Center Freq
12.5150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
25.0000000 GHz
CF Step
2.49700000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:PICTURE.GIF file saved

----------The END----------

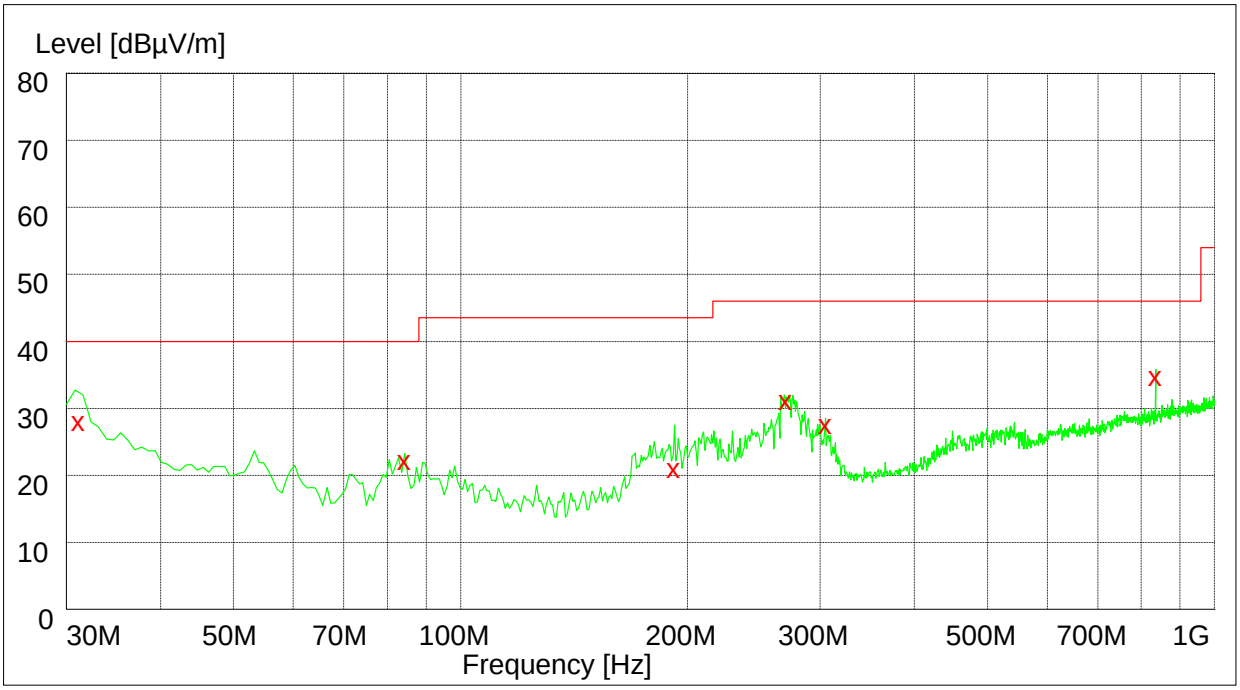
Appendix H

Radiated spurious emission

According to FCC Part 15.247 (d) & 15.205 & 15.209

Part 1: Testing Range of "30 MHz to 1 GHz"

Note 1: The test results and plot for testing range of "30 MHz to 1 GHz" showed as below is **the WORST case for all Test Modes and Channels**. This range will not be presented for each Test Mode and each Channel.



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Plarization
31.140000	28.50	14.6	40.0	11.5	100.0	222.00	VERTICAL
84.240000	22.80	10.9	40.0	17.2	204.0	206.00	HORIZONTAL
191.820000	21.60	12.1	43.5	21.9	100.0	172.00	VERTICAL
270.480000	31.70	14.3	46.0	14.3	100.0	16.00	HORIZONTAL
305.160000	28.10	15.2	46.0	17.9	100.0	27.00	HORIZONTAL
836.580000	35.20	24.0	46.0	10.8	110.0	216.00	VERTICAL

Part 2: Testing Range of “18 GHz to 26.5 GHz”

Note: No peak found in pre- test.

Part 3: Testing Range of "2.3GHz to 2.5GHz"

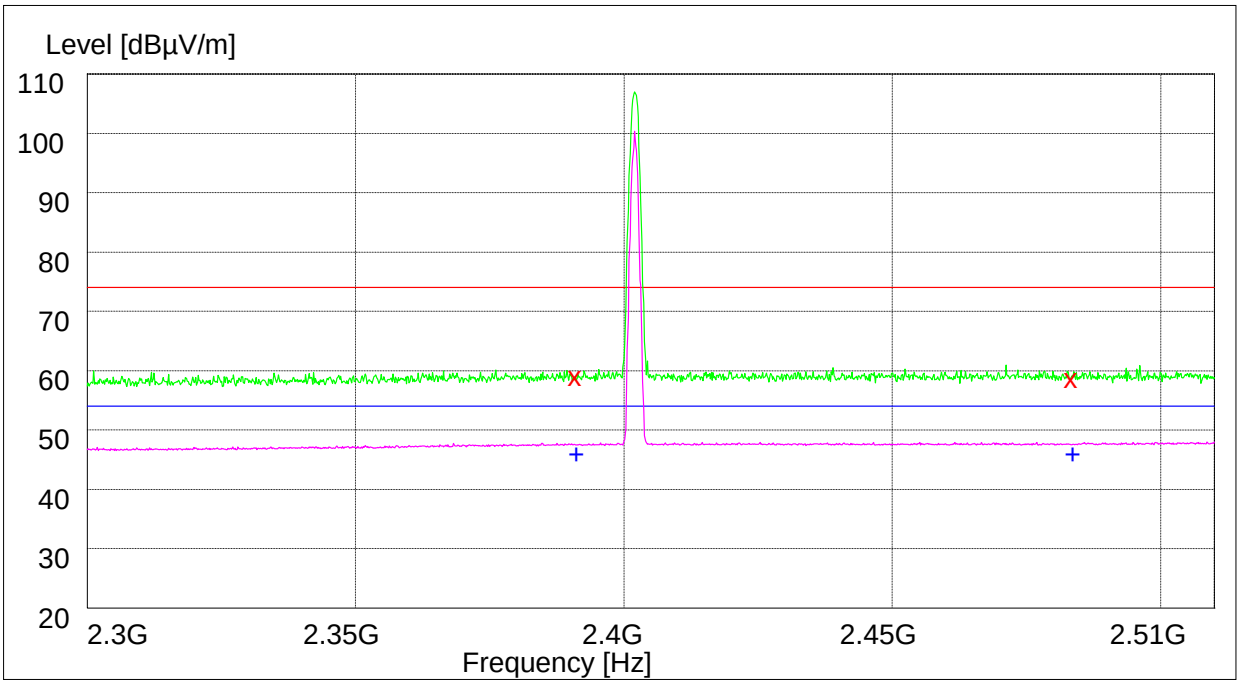
Note 1: The testing range of "2.3 GHz to 2.5 GHz" is for checking radiated emissions located in restricted bands near the EUT operating bands.

Note 2: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBμV/m) and Average Limit (54 dBμV/m).

Note 3: The peak spike exceeds the limit line is EUT's operating frequency.

1 Test Mode:

1.1 Channel 00



Note: The peak exceeds the limit line is carrier frequency.

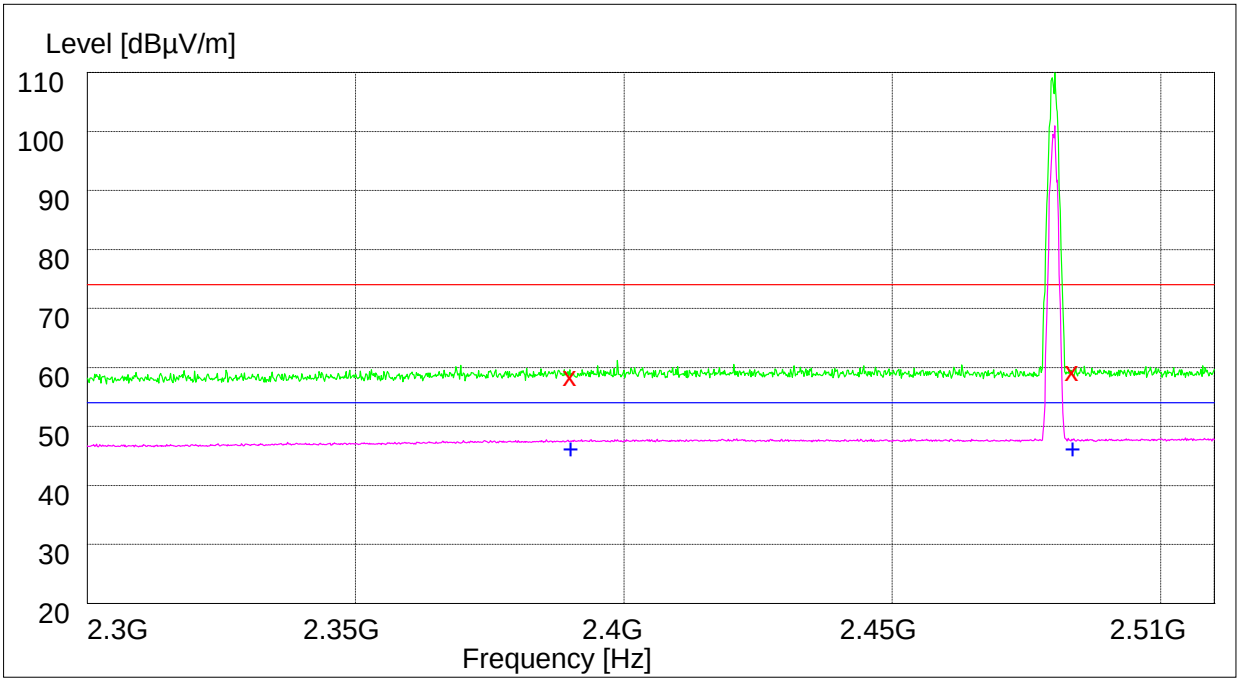
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	59.50	33.5	74.0	14.5	101.0	250.00	VERTICAL
2483.500000	59.20	33.7	74.0	14.8	120.0	41.00	HORIZONTAL

MEASUREMENT RESULT: AVDetector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.40	33.5	54.0	7.6	141.0	146.00	VERTICAL
2483.500000	46.50	33.7	54.0	7.5	156.0	353.00	VERTICAL

1.2 Channel 78



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	59.10	33.5	74.0	14.9	161.0	62.00	VERTICAL
2483.500000	59.60	33.7	74.0	14.4	117.0	143.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.40	33.5	54.0	7.6	185.0	148.00	HORIZONTAL
2483.500000	46.50	33.7	54.0	7.5	119.0	143.00	HORIZONTAL

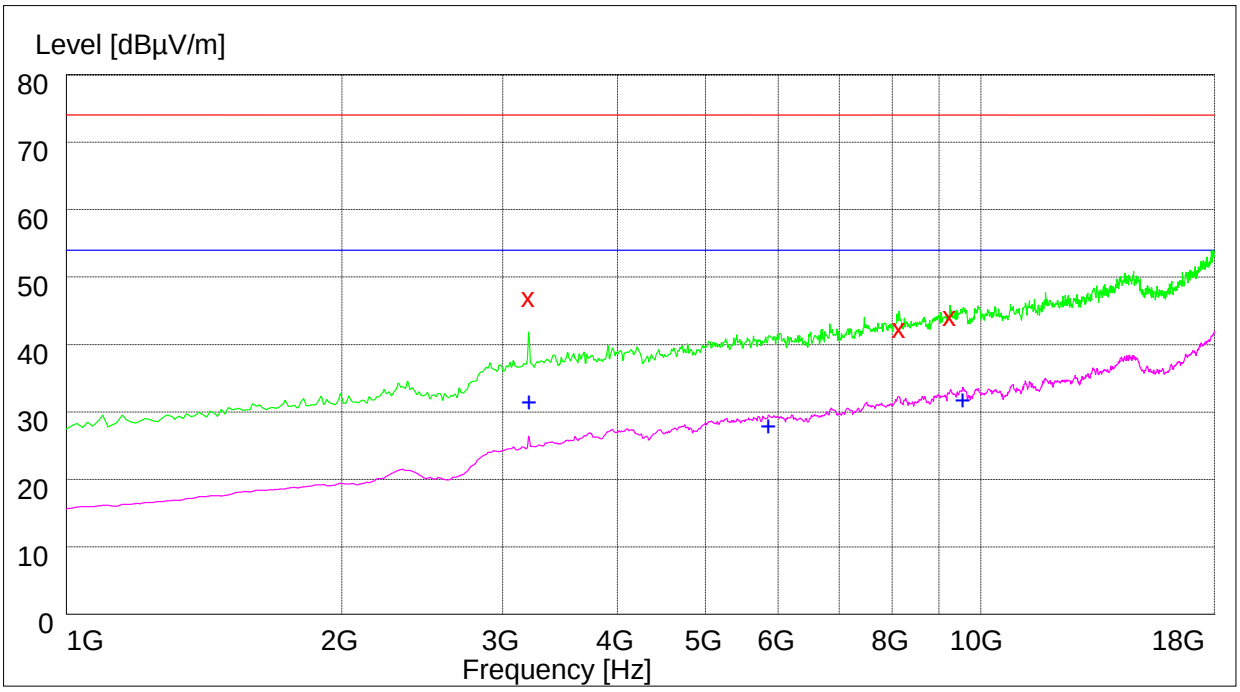
1.3

Part 4: Testing Range of "1 GHz to 18 GHz"

Note 1: The test results and plot for testing range of "1 GHz to 18 GHz" showed as below is **the WORST case for all Test Modes and Channels**. This range will not be presented for each Test Mode and each Channel.

Note 2: The testing range of "1 GHz to 18 GHz" is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.

Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dBμV/m) and Average Limit (54 dBμV/m).



MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Plarization
3202.700000	46.80	-7.5	74.0	27.2	100.0	138.00	VERTICAL
8140.500000	41.90	5.2	74.0	32.1	100.0	95.00	VERTICAL
9256.200000	43.20	6.9	74.0	30.8	188.0	8.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Plarization
3202.700000	31.20	-7.5	54.0	22.8	100.0	138.00	VERTICAL
5857.200000	27.10	0.0	54.0	26.9	200.0	299.00	VERTICAL
9546.900000	30.50	7.4	54.0	23.5	100.0	202.00	VERTICAL

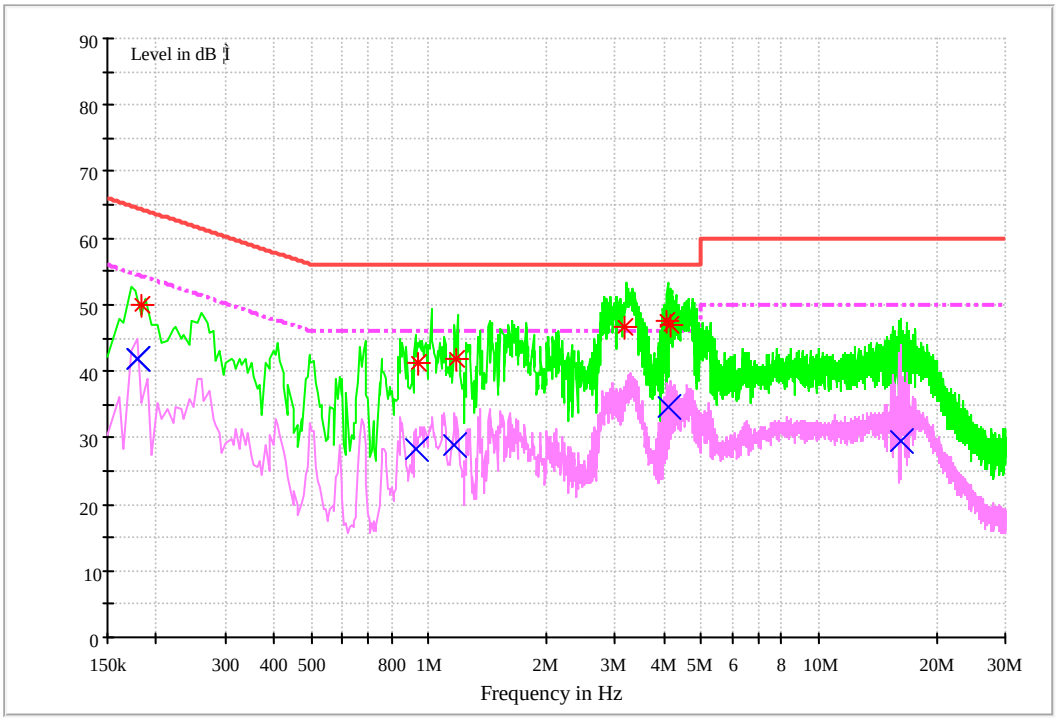
----------The END----------

Appendix I

Conducted Emission at Power Port

According to FCC Part 15.207

Channel 40



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.182368	49.8	9.7	64.4	14.6	N	FLO
0.935501	41.3	9.7	56.0	14.7	L1	FLO
1.172261	42.0	9.7	56.0	14.0	L1	FLO
3.168832	46.5	9.7	56.0	9.5	N	FLO
4.077709	47.6	9.8	56.0	8.4	N	FLO
4.164315	46.9	9.8	56.0	9.1	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.178195	41.9	9.7	54.6	12.7	N	FLO
0.179528	41.8	9.7	54.5	12.7	N	FLO
0.926632	28.4	9.7	46.0	17.6	N	FLO
1.159796	28.8	9.7	46.0	17.2	N	FLO
4.125589	34.5	9.8	46.0	11.5	N	FLO
16.126294	29.5	10.1	50.0	20.5	N	FLO

----------The END----------