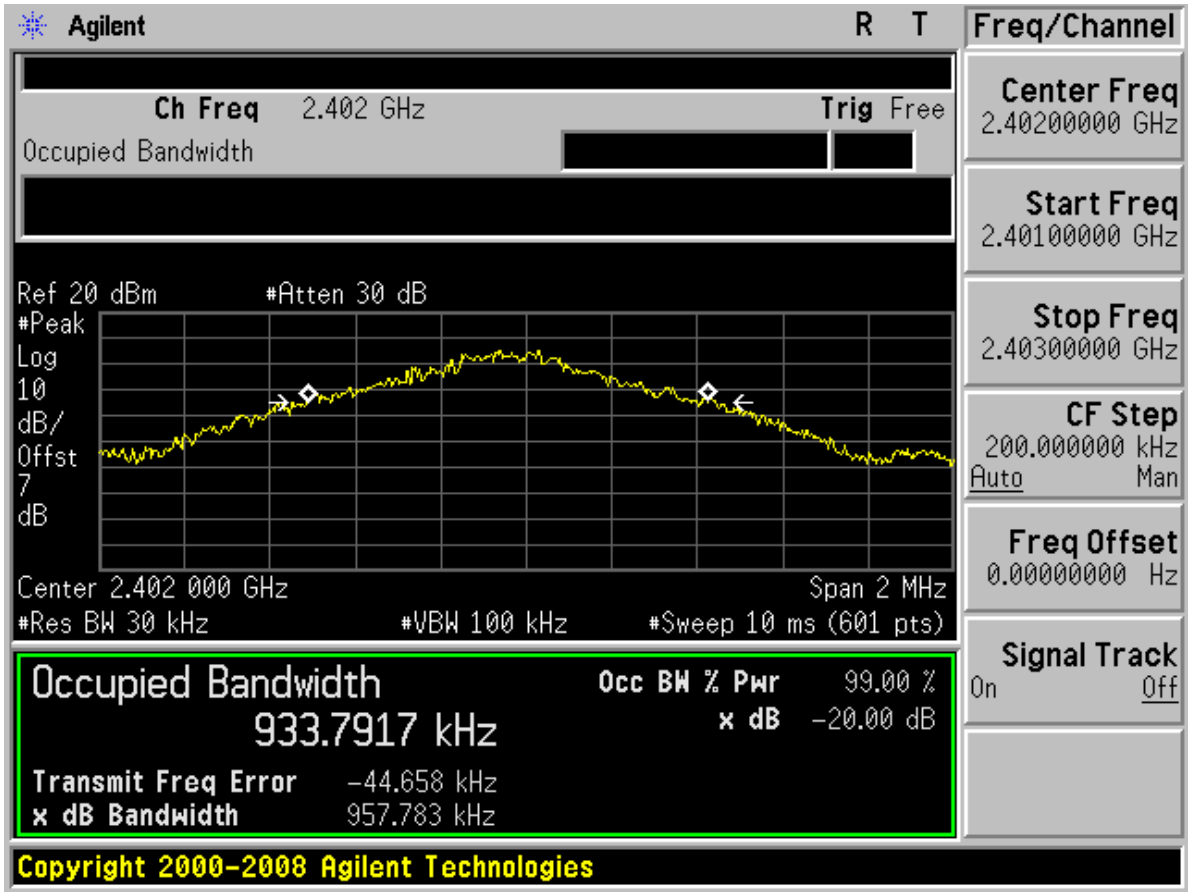
Appendix A

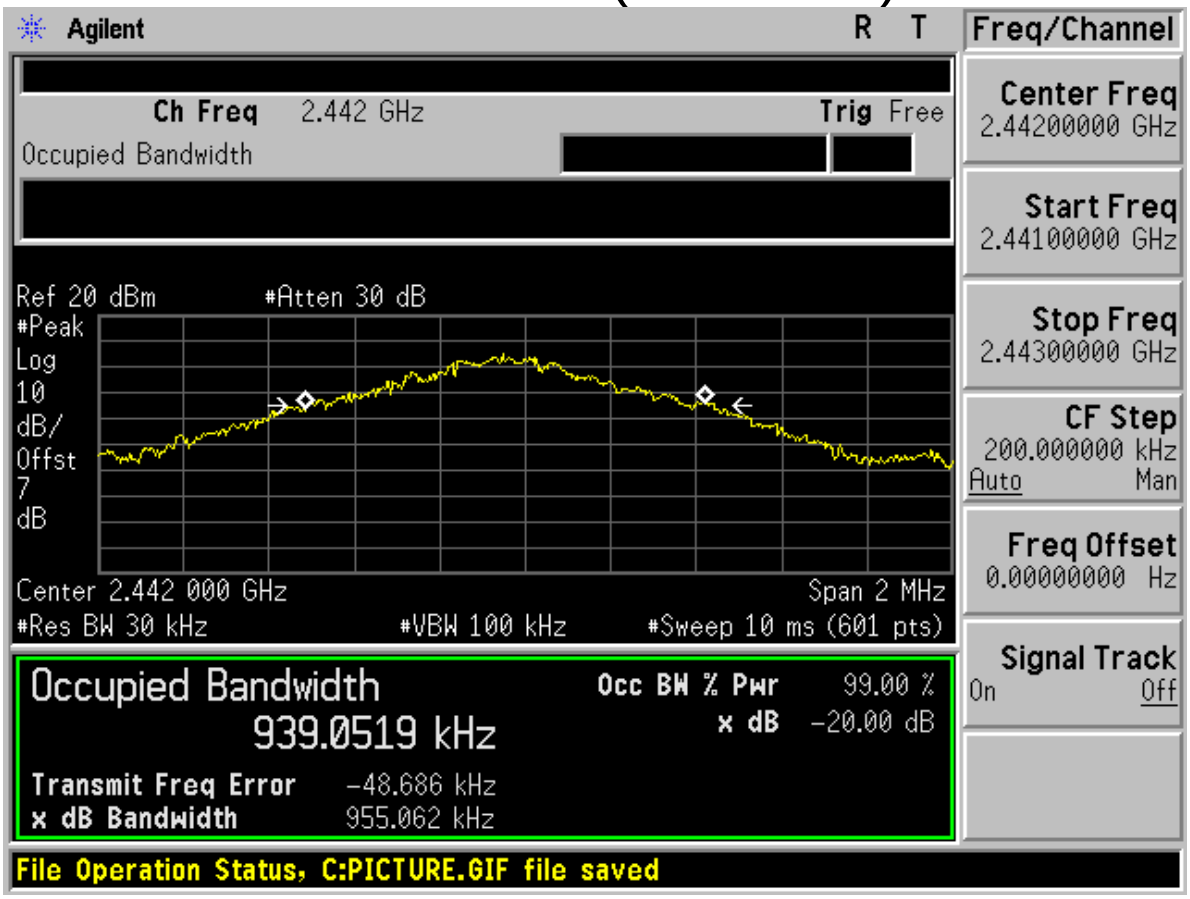
20dB bandwidth measurement

According to FCC Part 15.247 (a) (1)

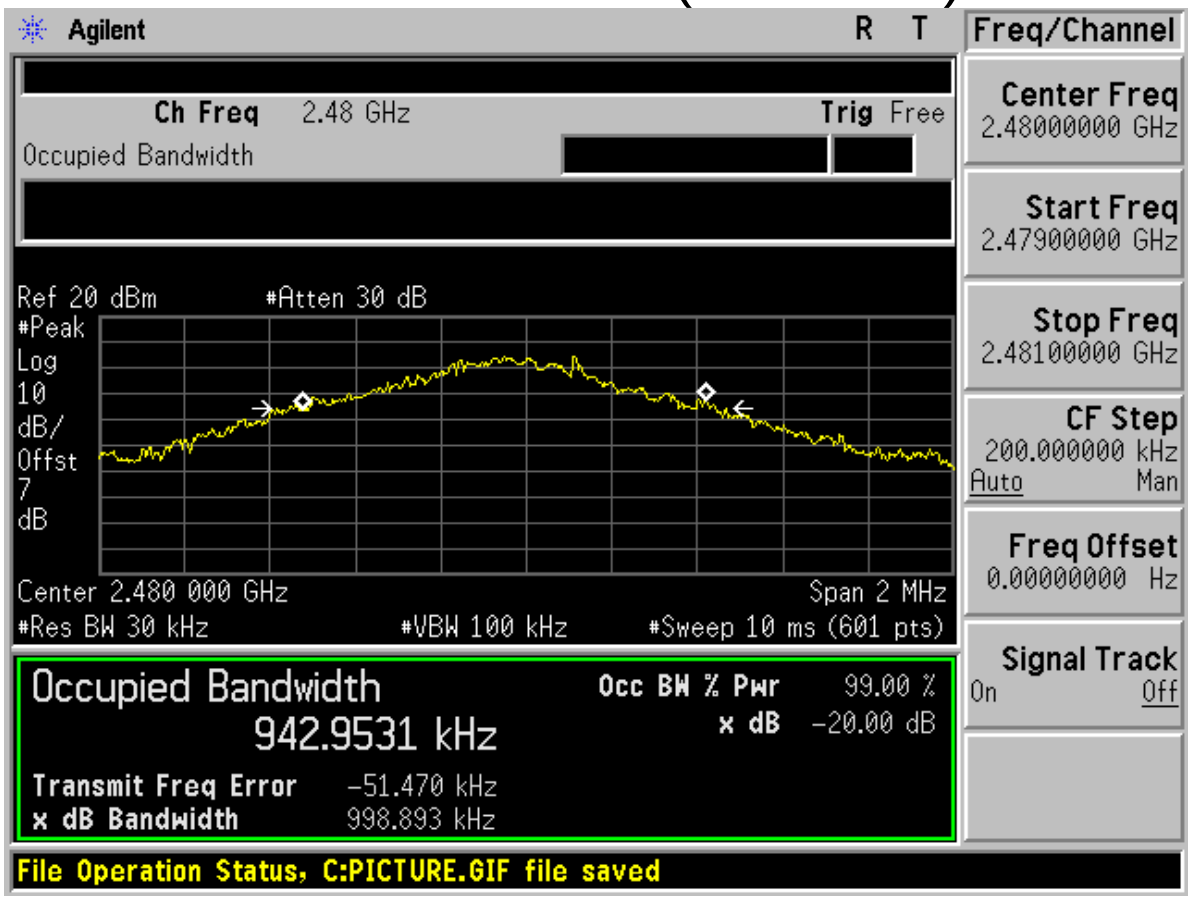
Channel 0 (2402MHz)



Channel 40 (2442MHz)



Channel 78 (2480MHz)

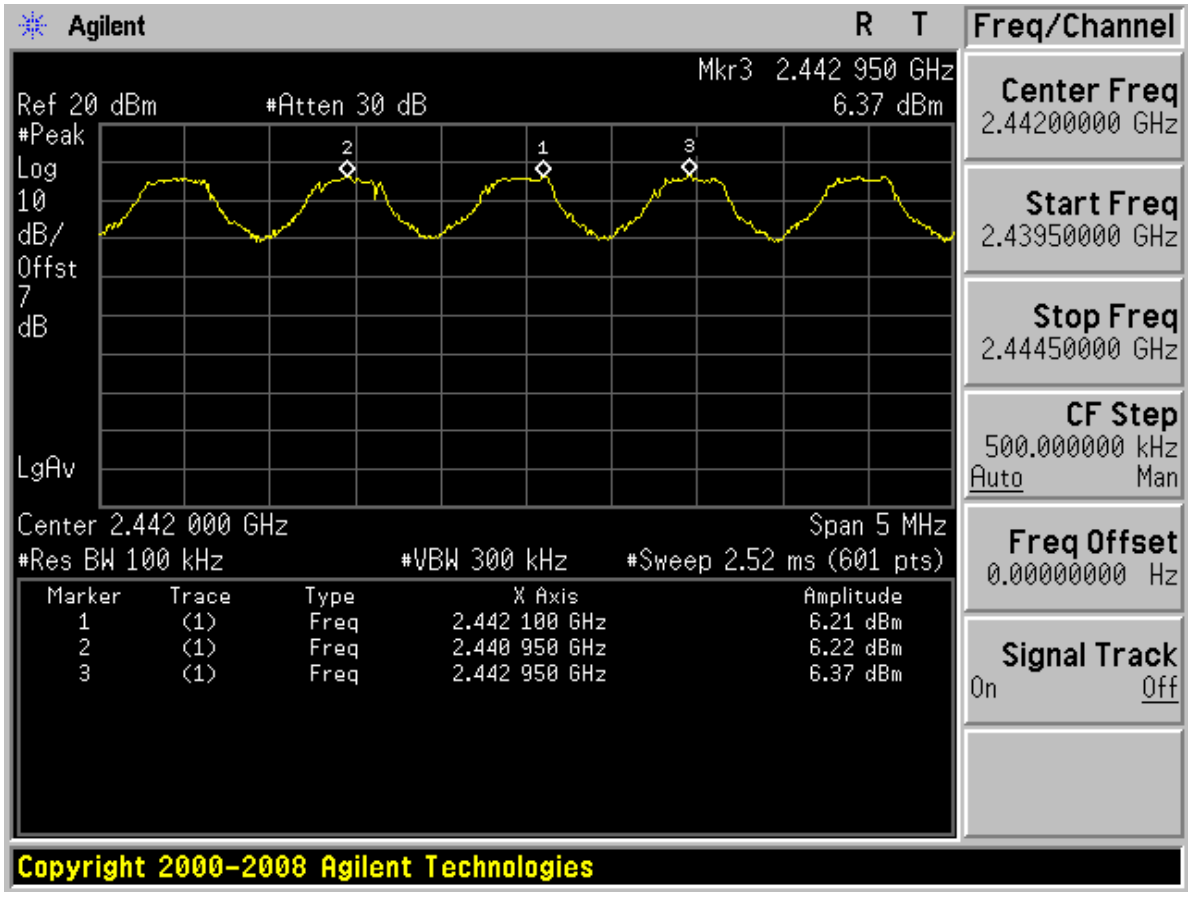


Appendix B

Carrier frequency separation measurement

According to FCC Part 15.247 (a) (1)

Centred at Channel 40

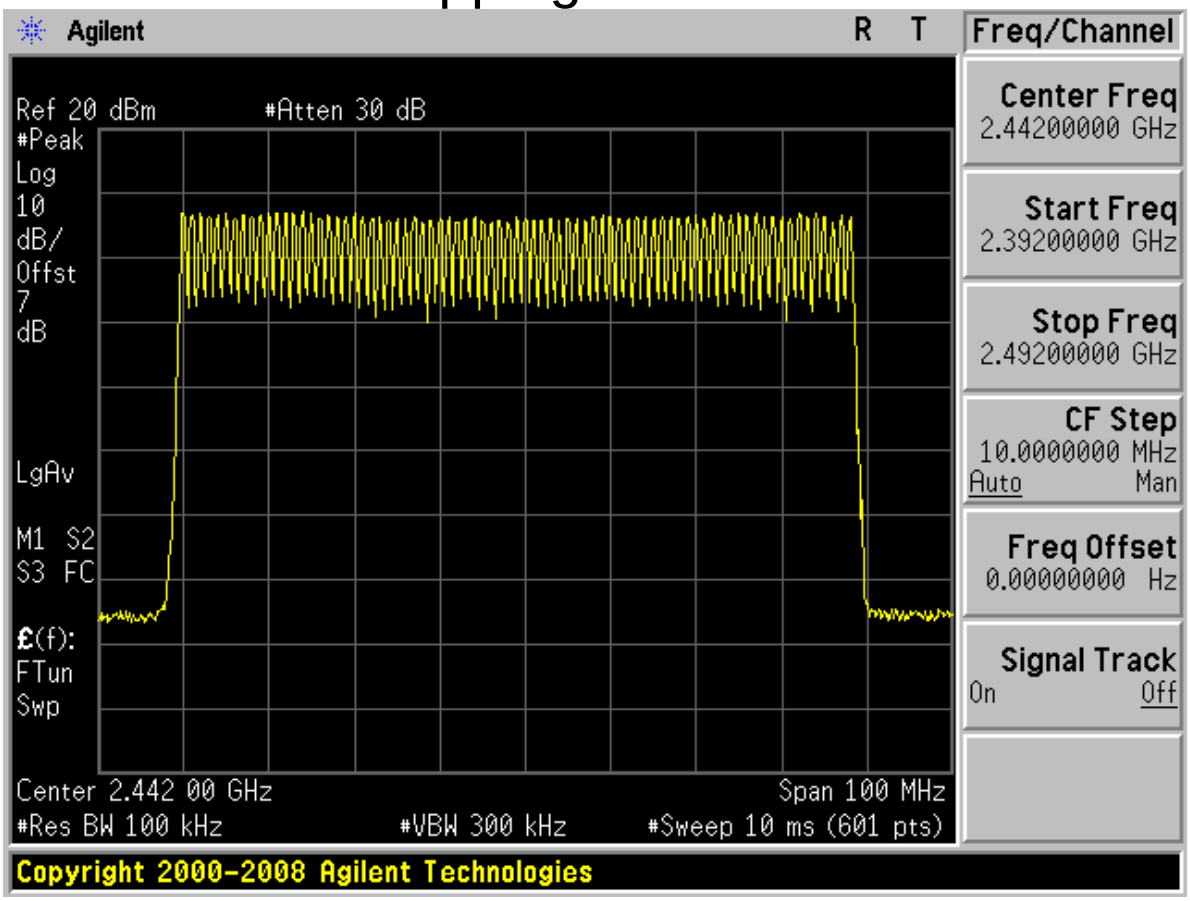


Appendix C

Number of hopping channel

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

Total hopping channels = 79

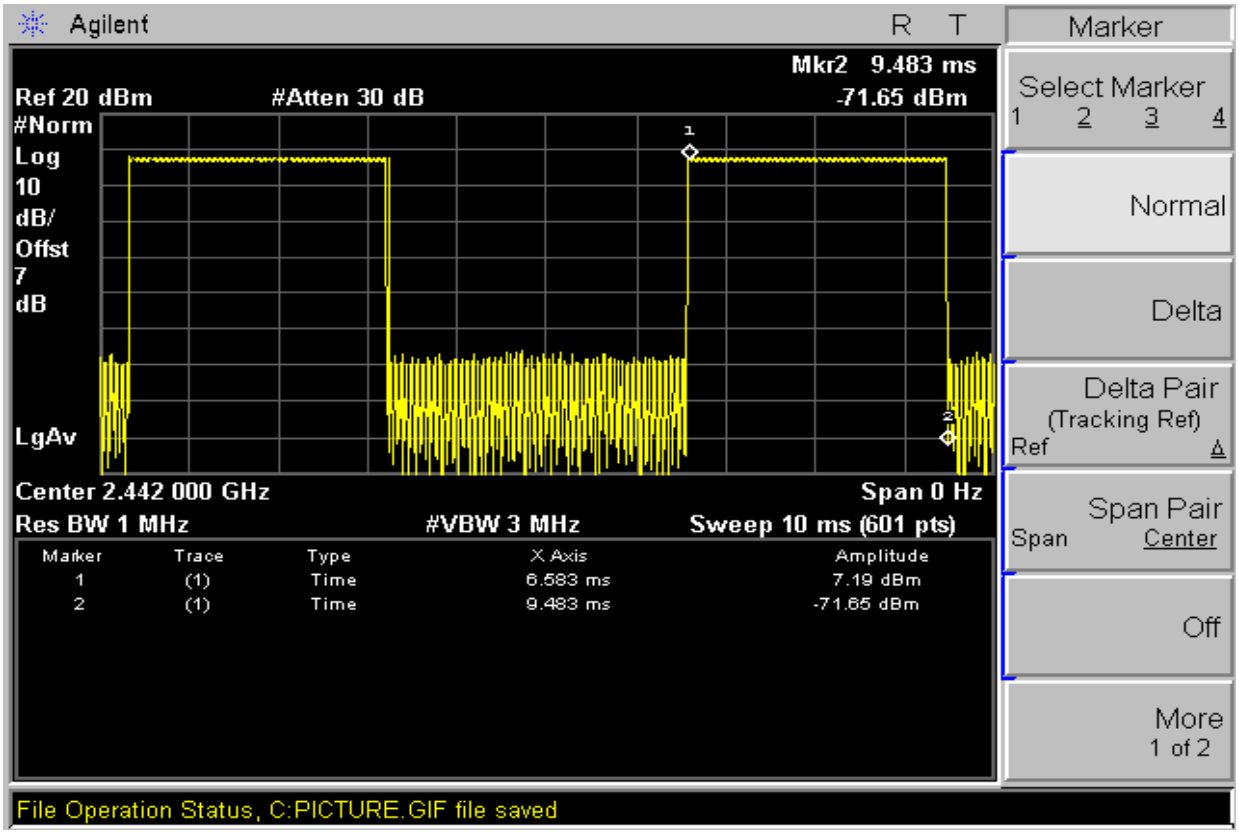


Appendix D

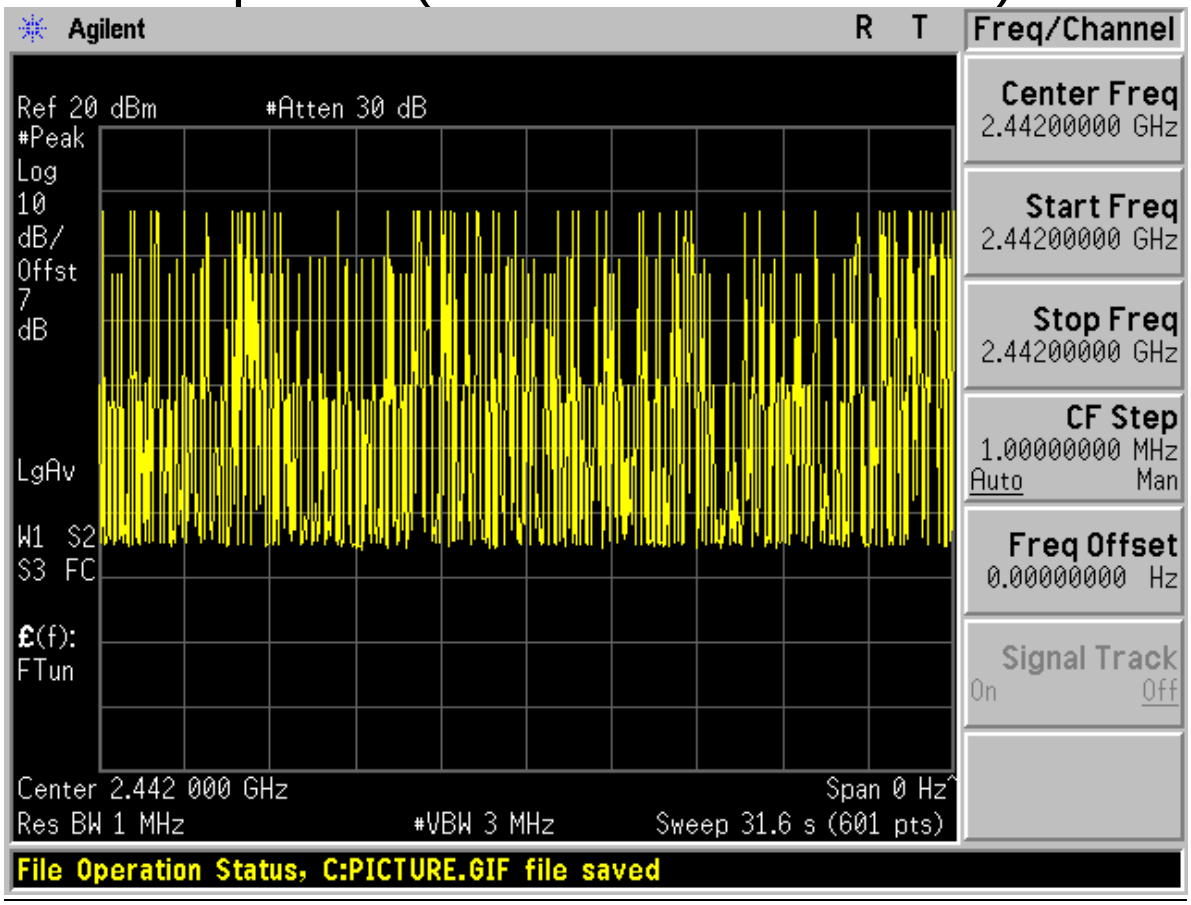
Time of occupancy

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

A burst (One time slot)



A period (Less than 106.7 burst)

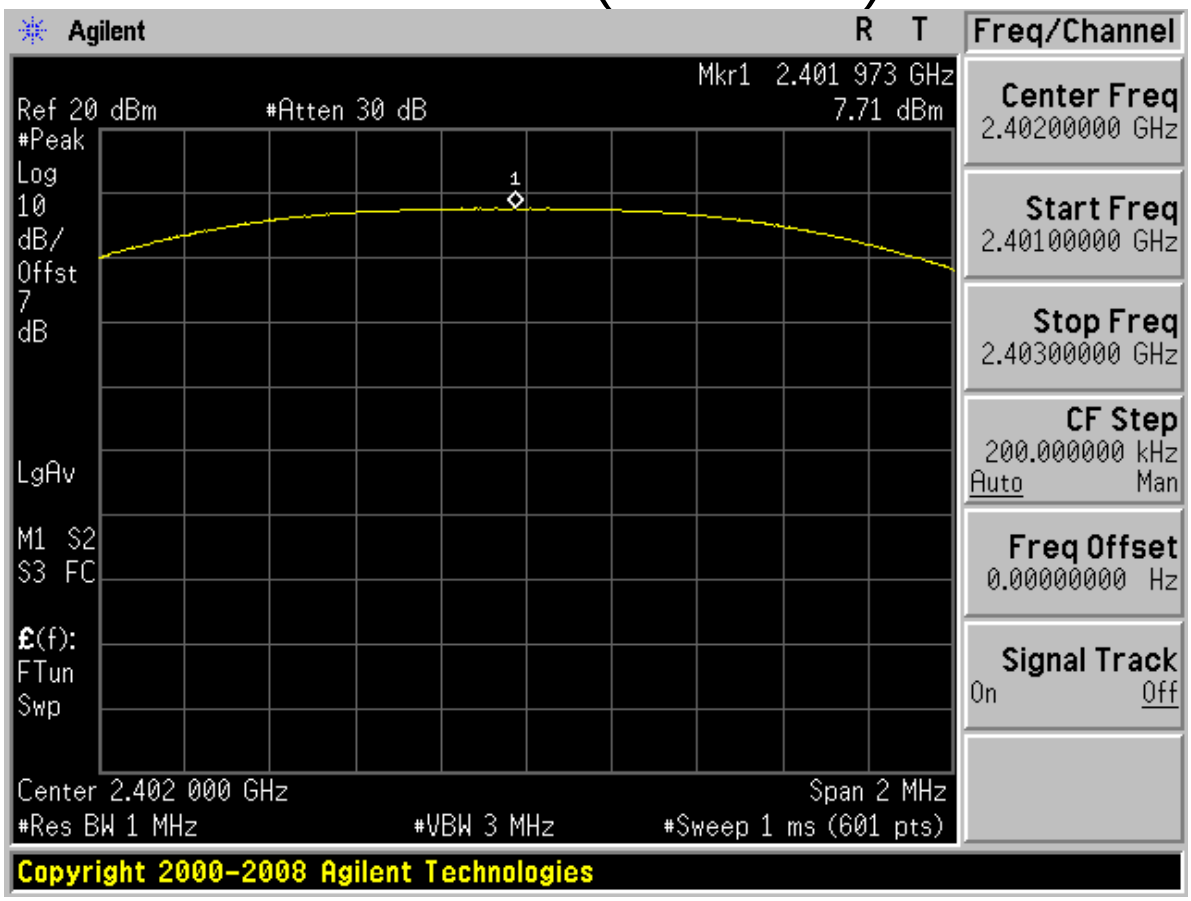


Appendix E

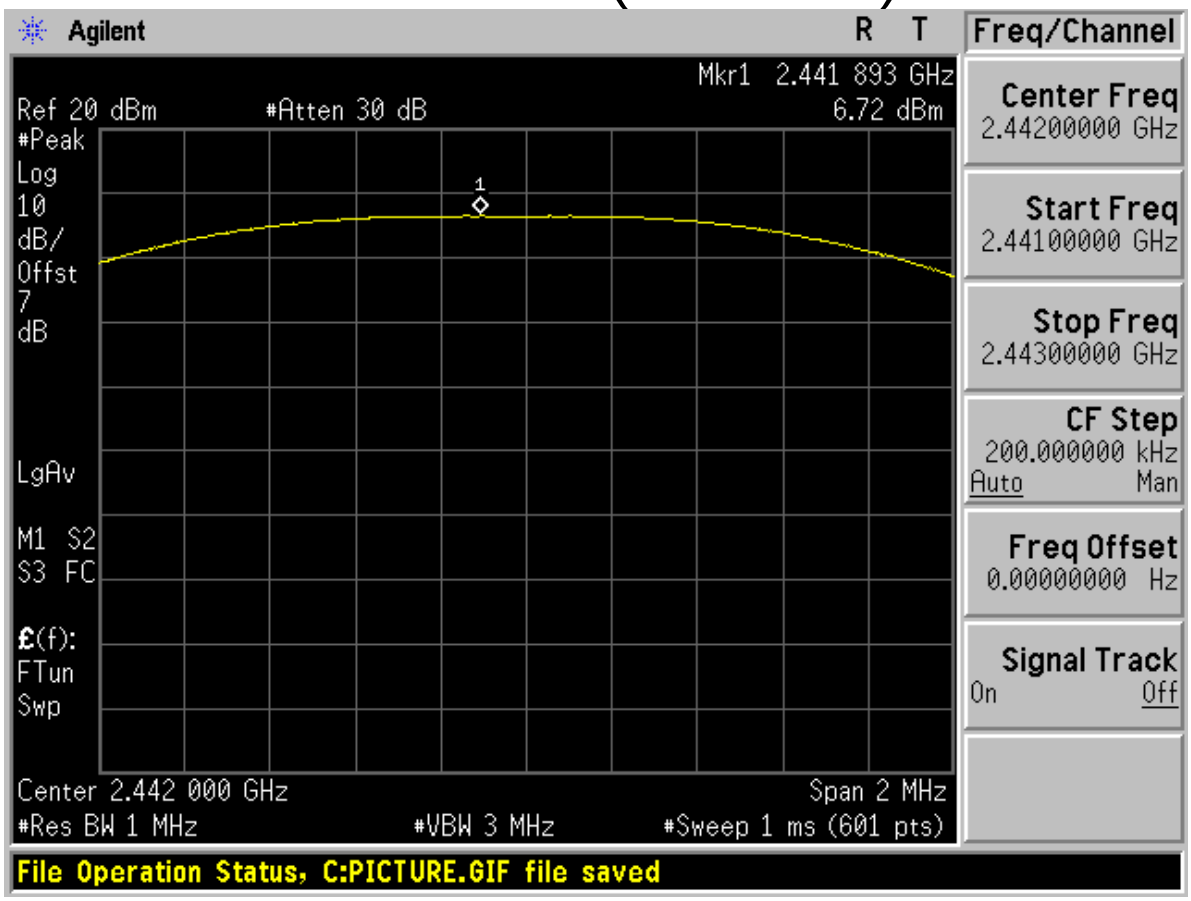
Peak output power

According to FCC Part 15.247 (b) (1)

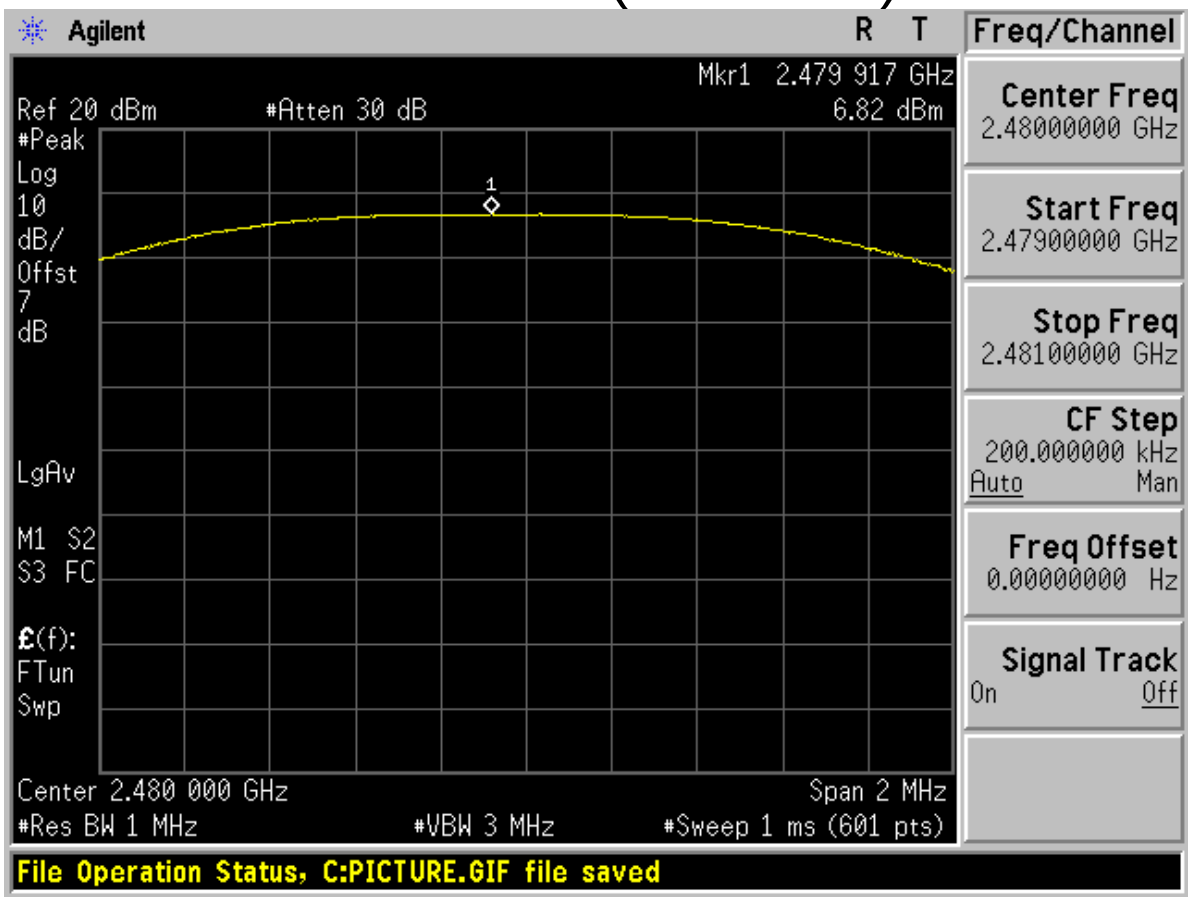
Channel 0 (2402MHz)



Channel 40 (2442MHz)



Channel 78 (2480MHz)

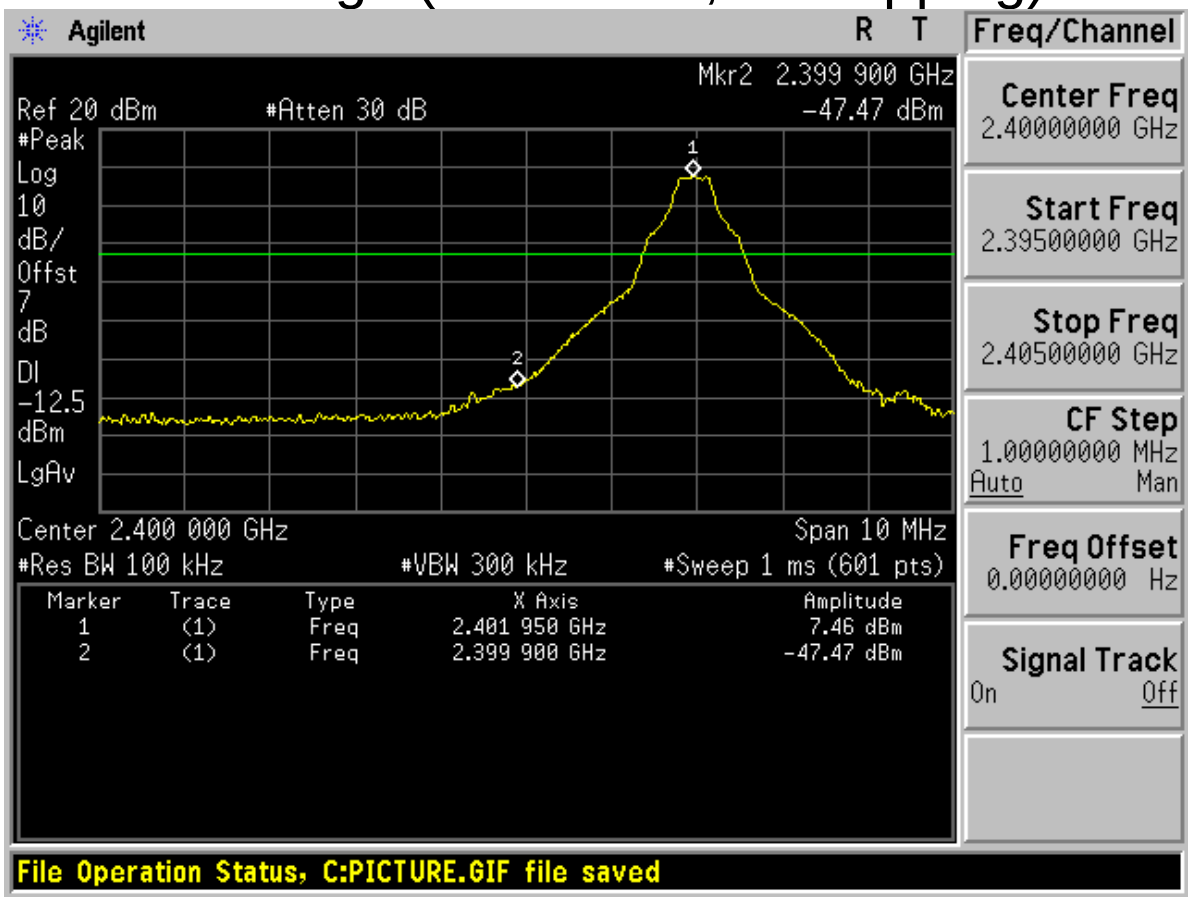


Appendix F

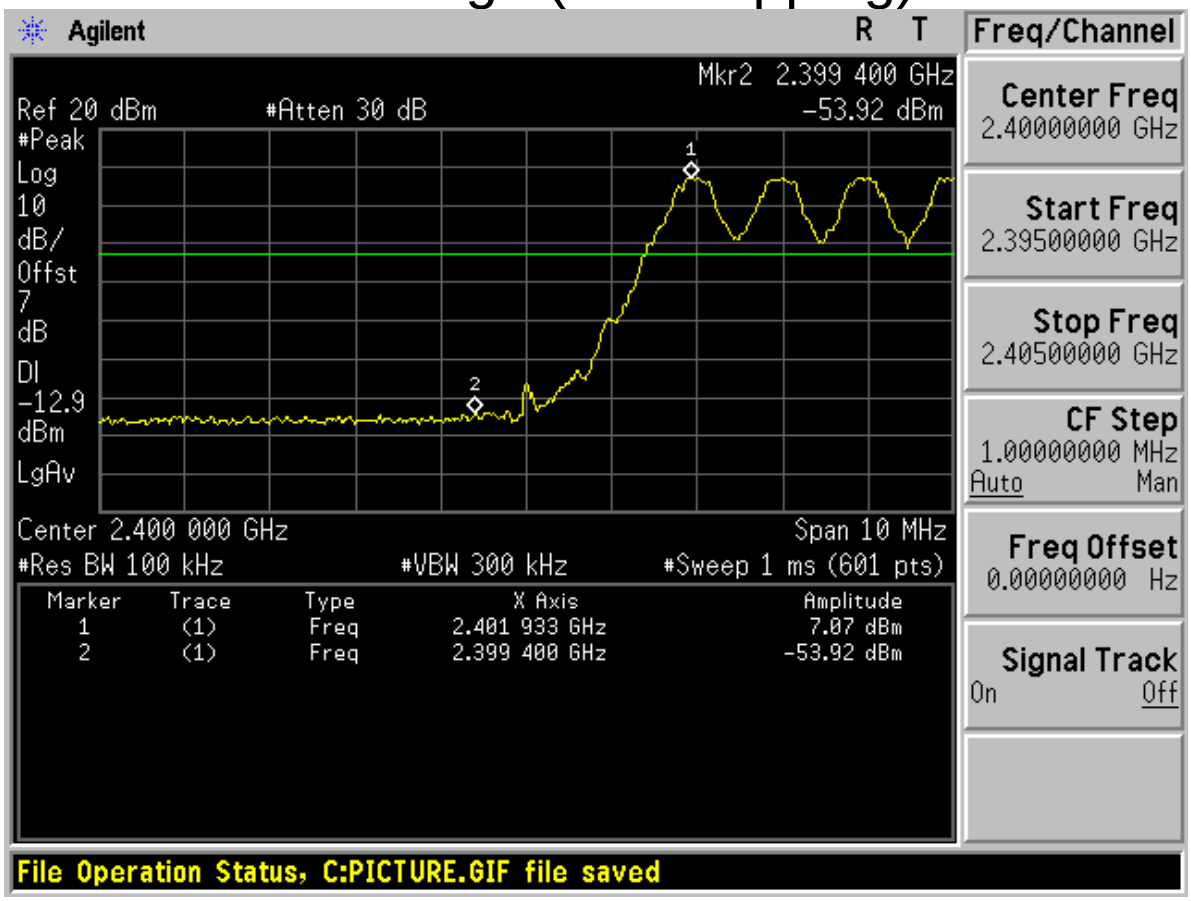
Band edge spurious emission

According to FCC Part 15.247 (d)

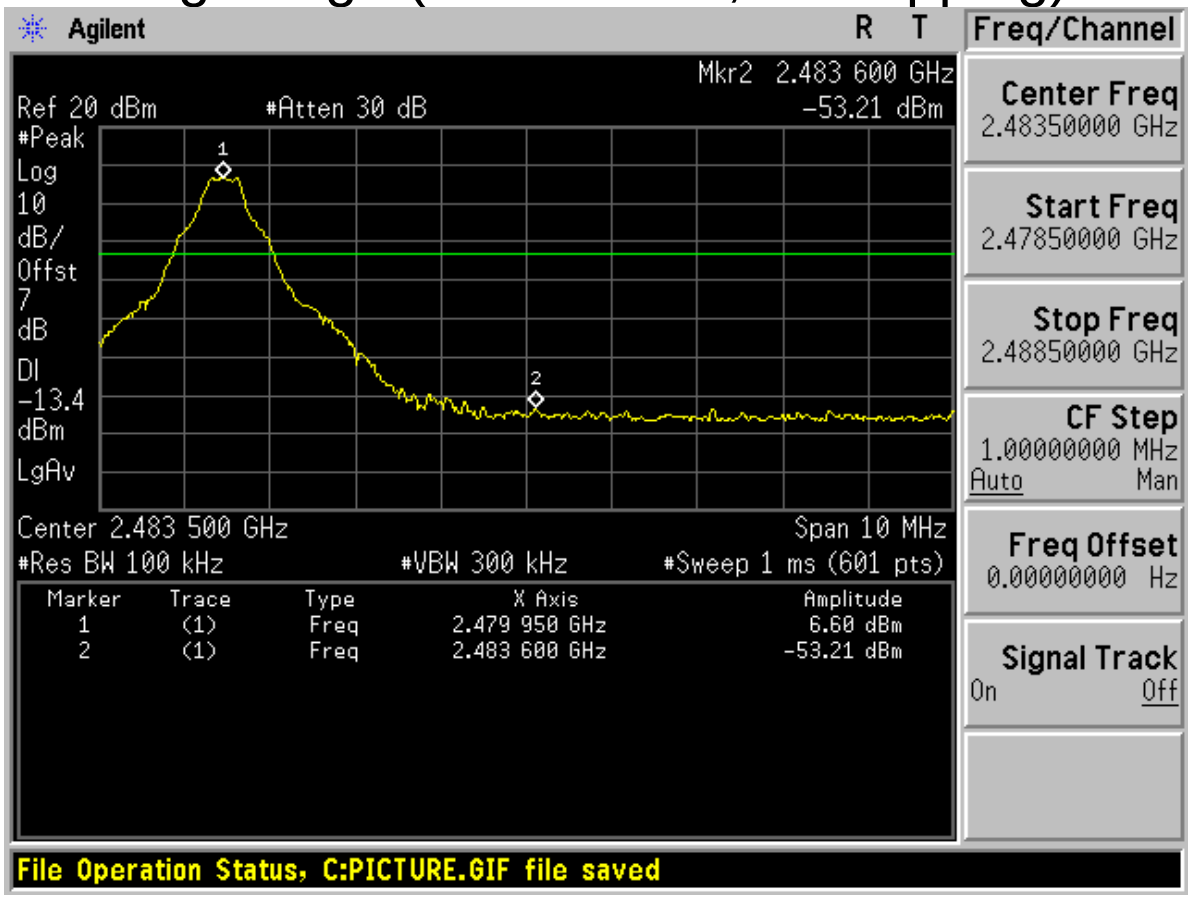
Low edge (Channel 0, no hopping)



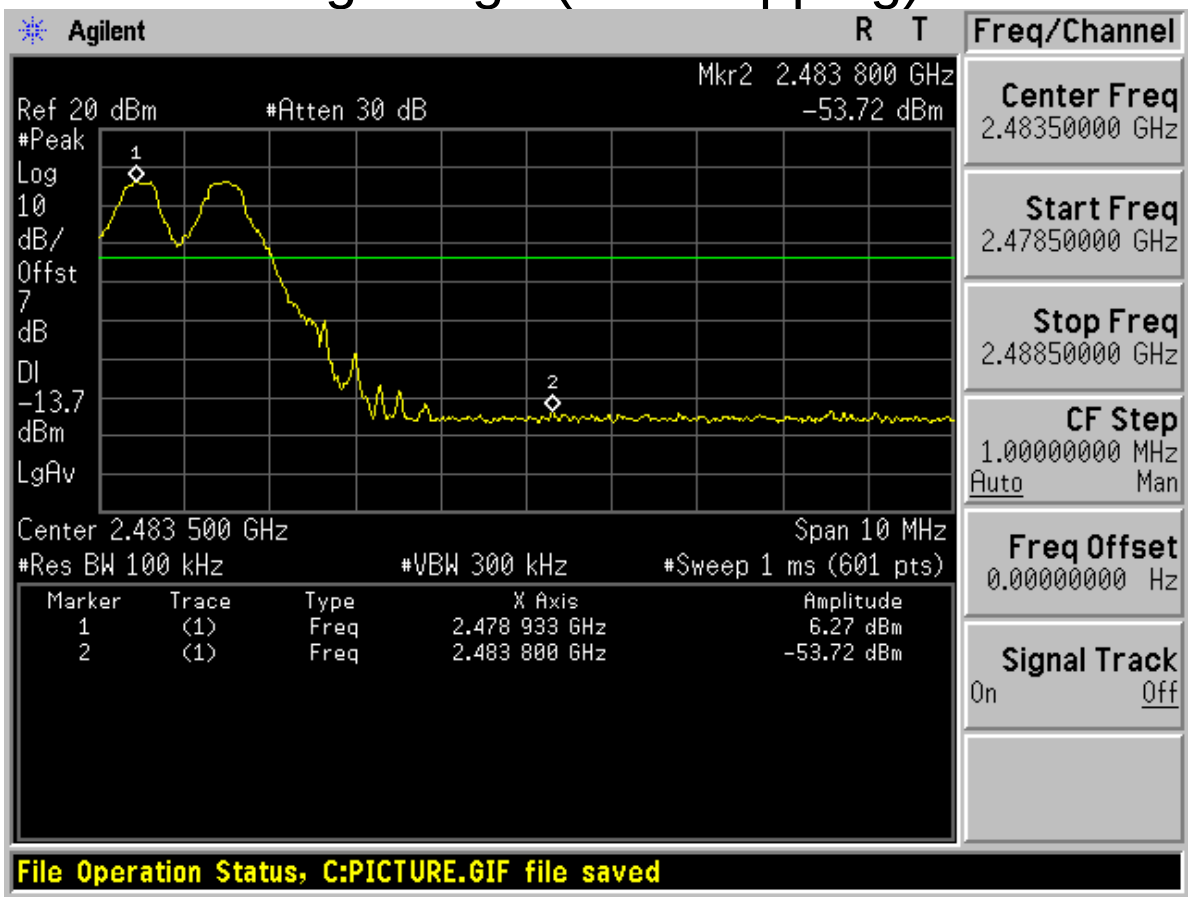
Low edge (with hopping)



High edge (Channel 78, no hopping)



High edge (with hopping)

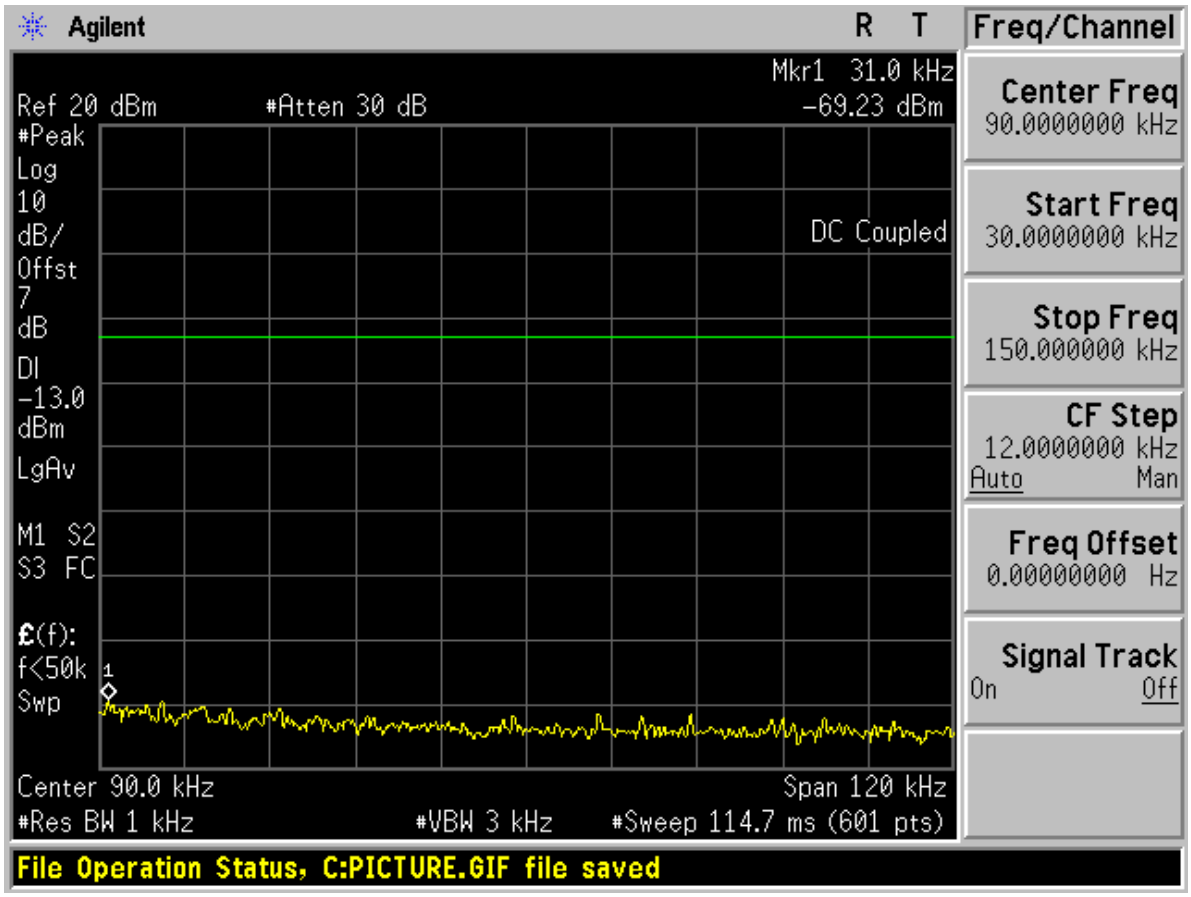


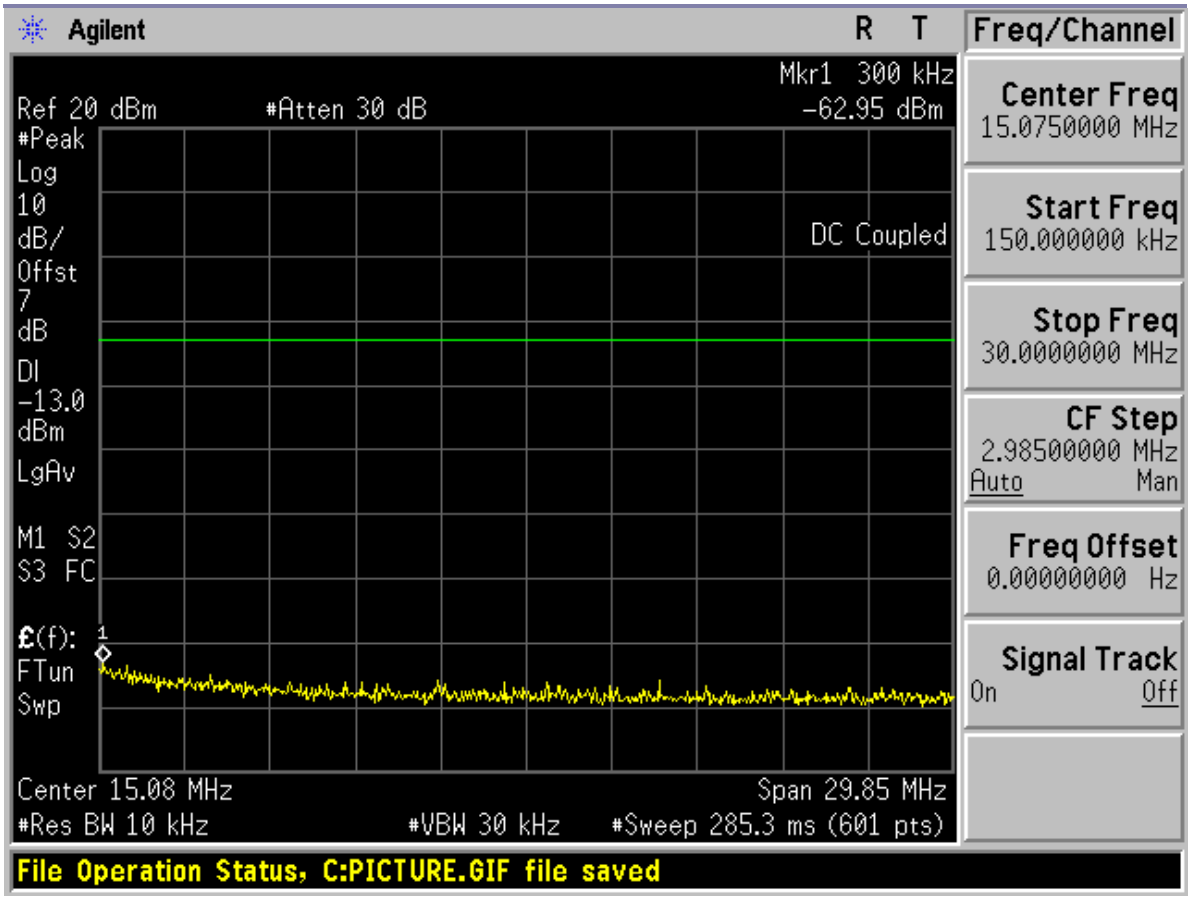
Appendix G

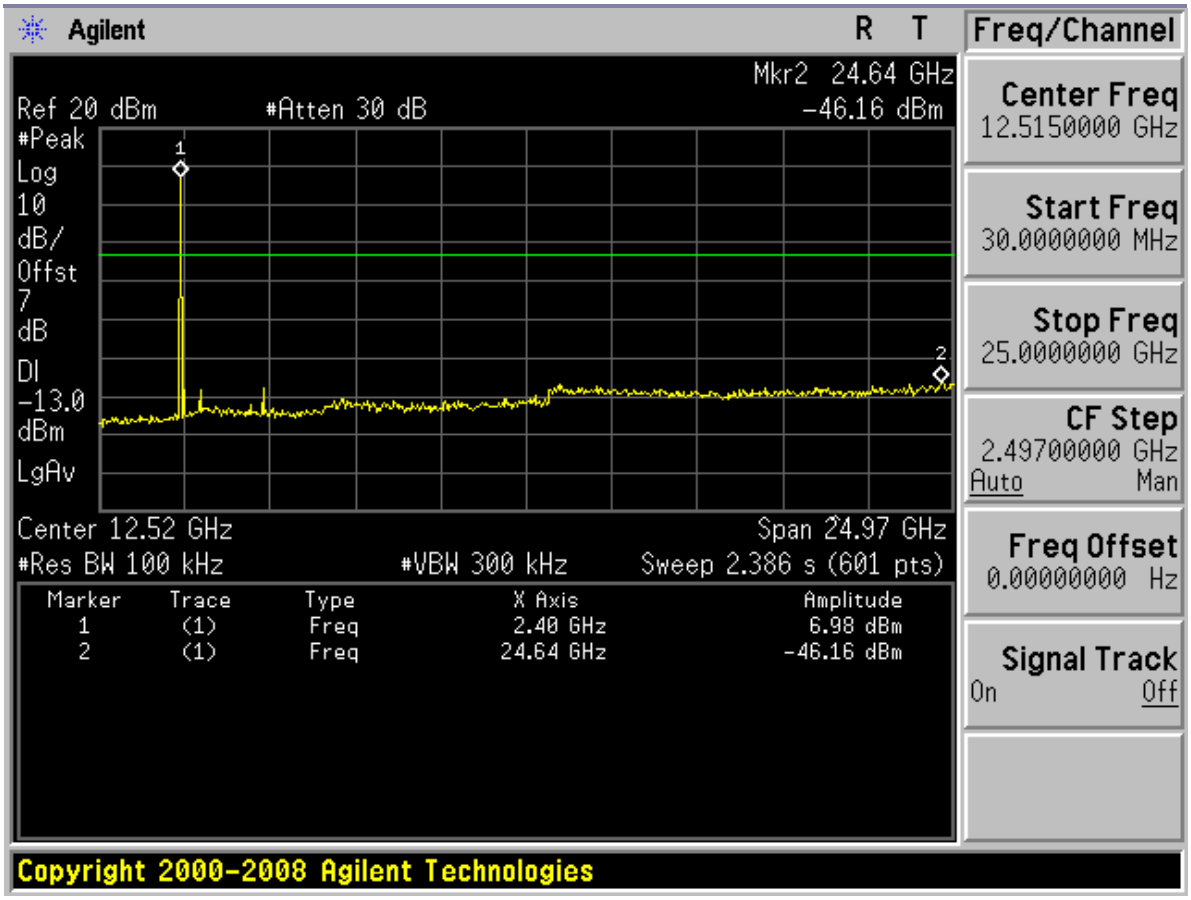
Conducted RF spurious

According to FCC Part 15.247 (d)

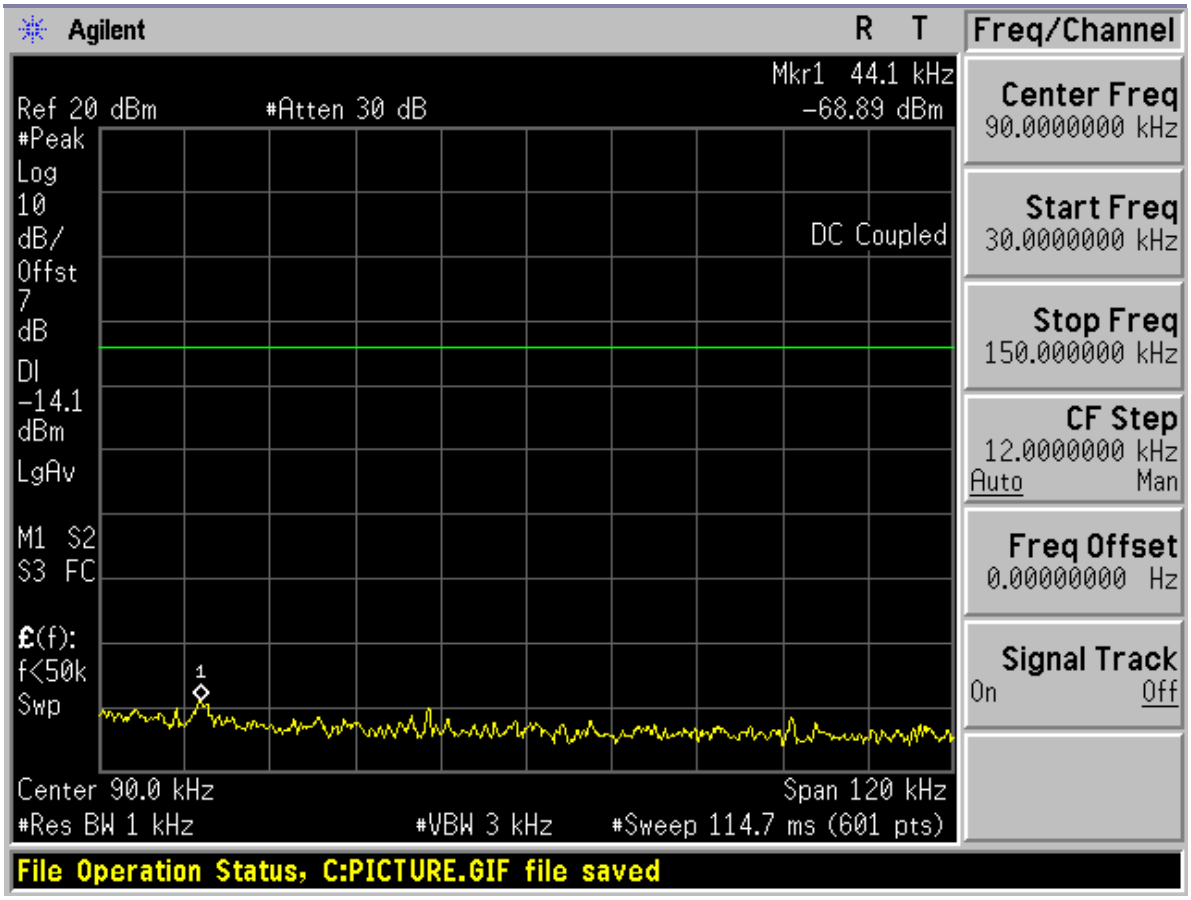
Channel 0

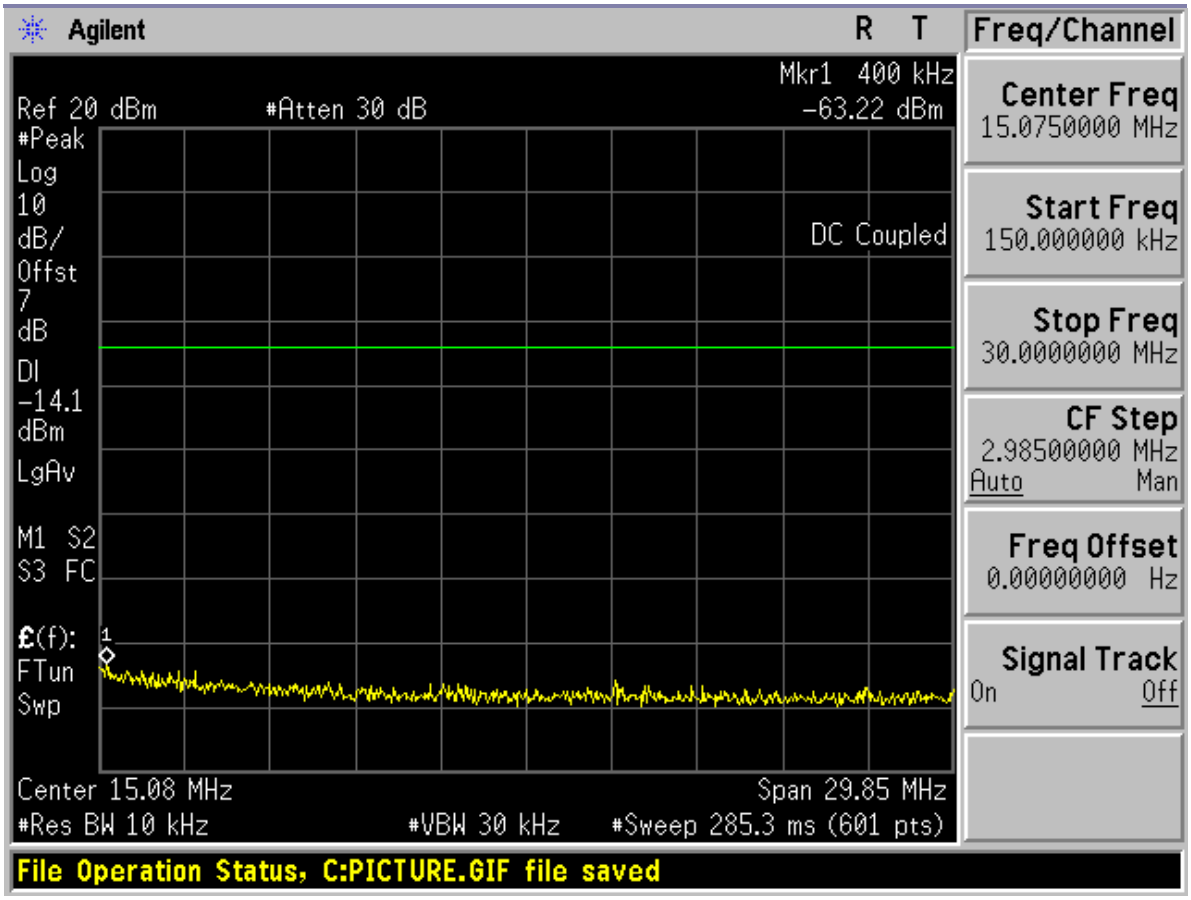

Agilent
R T
Freq/Channel
Mkr1 31.0 kHz
Ref 20 dBm
#Atten 30 dB
-69.23 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
f<50k
Swp
DC Coupled
Center Freq
90.0000000 kHz
Start Freq
30.0000000 kHz
Stop Freq
150.000000 kHz
CF Step
12.0000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal 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

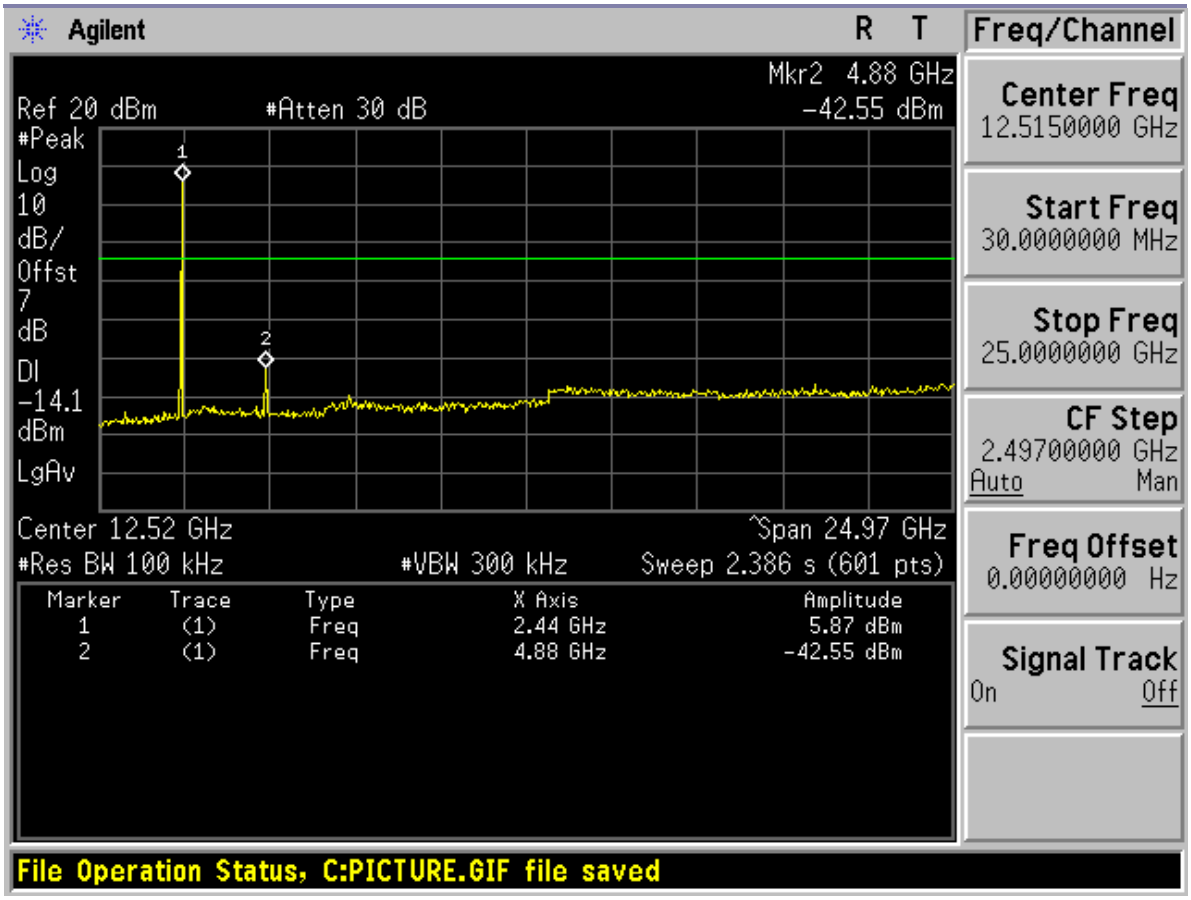

Agilent
R T
Freq/Channel
Mkr1 300 kHz
Ref 20 dBm
#Atten 30 dB
-62.95 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
DC Coupled
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
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 24.64 GHz
Ref 20 dBm
#Atten 30 dB
-46.16 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-13.0
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 6.98 dBm
2 (1) Freq 24.64 GHz -46.16 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
Copyright 2000-2008 Agilent Technologies

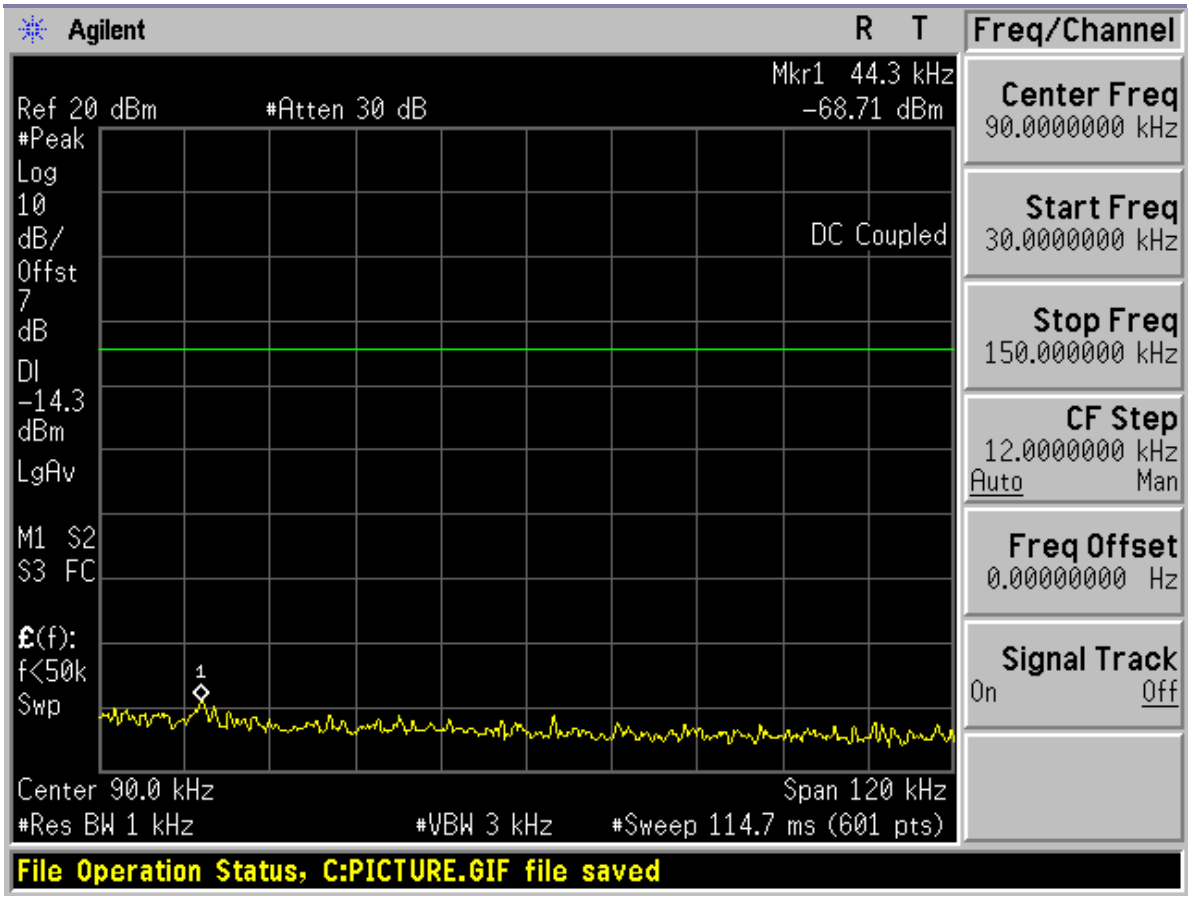
Channel 40

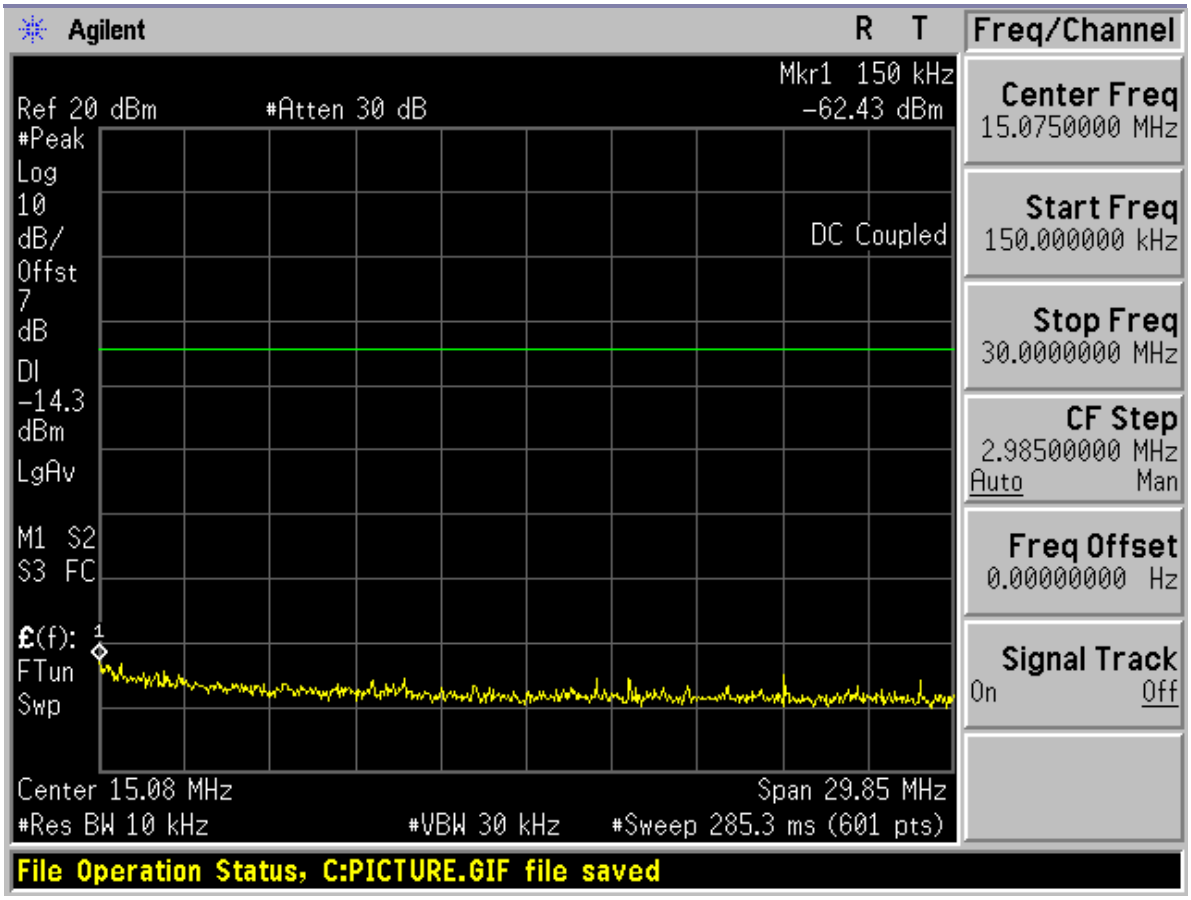

Agilent
R T
Freq/Channel
Mkr1 44.1 kHz
Ref 20 dBm
#Atten 30 dB
-68.89 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.1
dBm
LgAv
M1 S2
S3 FC
£(f):
f<50k
Swp
DC Coupled
Center Freq
90.0000000 kHz
Start Freq
30.0000000 kHz
Stop Freq
150.000000 kHz
CF Step
12.0000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal 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

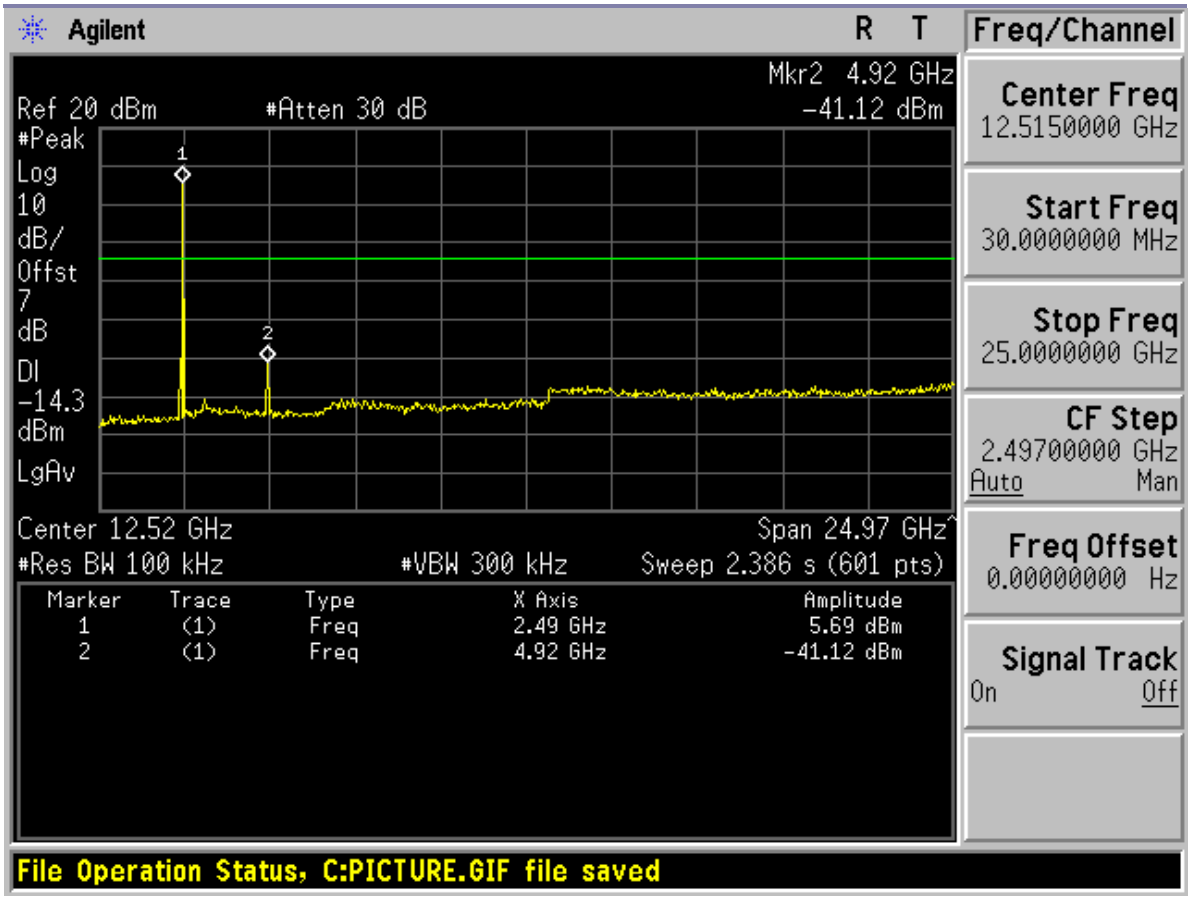

Agilent
R T
Freq/Channel
Mkr1 400 kHz
Ref 20 dBm
#Atten 30 dB
-63.22 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.1
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
DC Coupled
Center Freq
15.0750000 MHz
Start Freq
150.000000 kHz
Stop Freq
30.0000000 MHz
CF Step
2.98500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
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 4.88 GHz
Ref 20 dBm
#Atten 30 dB
-42.55 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.1
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 2.44 GHz 5.87 dBm
2 (1) Freq 4.88 GHz -42.55 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 44.3 kHz
Ref 20 dBm
#Atten 30 dB
-68.71 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.3
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
-62.43 dBm
#Peak
Log
10
dB/
Offst
7
dB
DC Coupled
Dl
-14.3
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

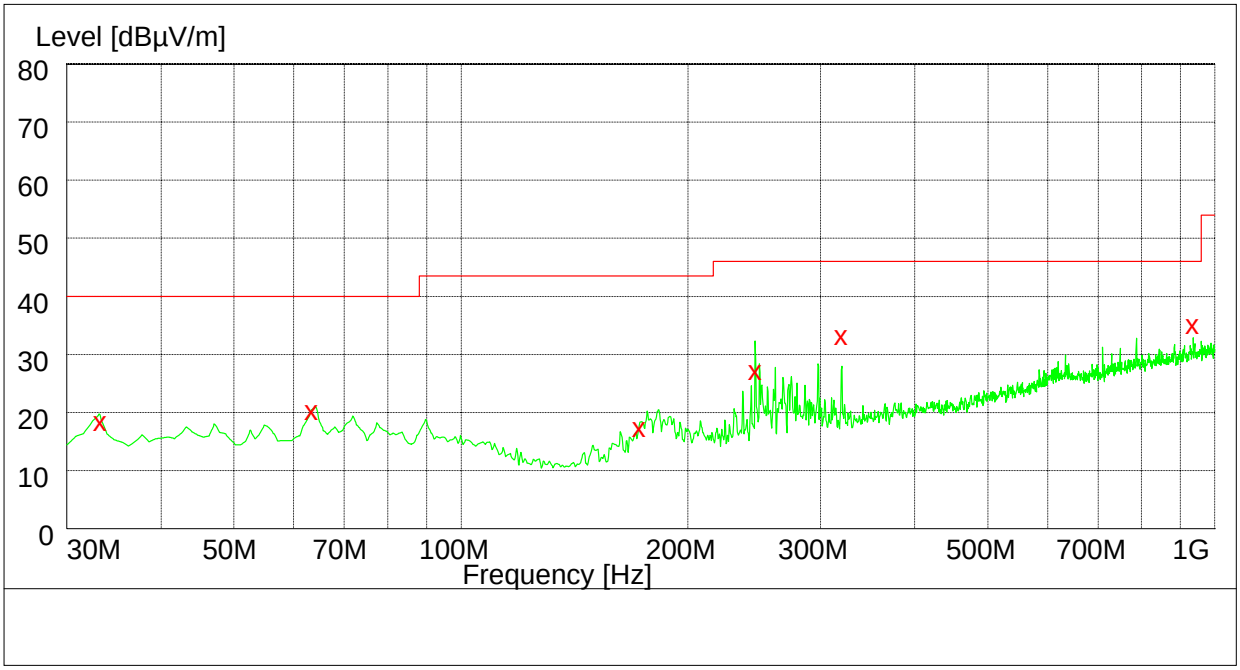

Agilent
R T
Freq/Channel
Mkr2 4.92 GHz
Ref 20 dBm
#Atten 30 dB
-41.12 dBm
#Peak
Log
10
dB/
Offst
7
dB
Dl
-14.3
dBm
LgAv
Center Freq
12.5150000 GHz
Start Freq
30.0000000 MHz
Stop Freq
25.0000000 GHz
CF Step
2.49700000 GHz
Auto Man
Center 12.52 GHz
Span 24.97 GHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 2.386 s (601 pts)
Freq Offset
0.00000000 Hz
Signal Track
On Off
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.49 GHz 5.69 dBm
2 (1) Freq 4.92 GHz -41.12 dBm
File Operation Status, C:PICTURE.GIF file saved

Appendix H

Radiated spurious emission

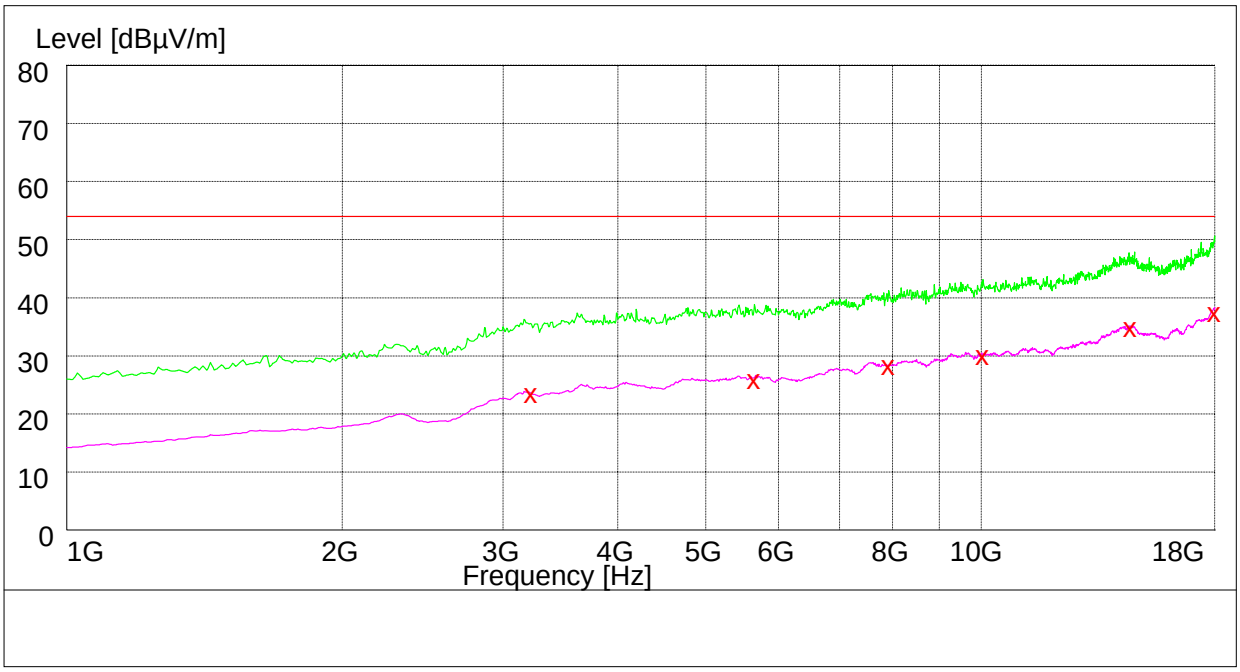
According to FCC Part 15.247 (d) & 15.205 & 15.209

Channel 0
30MHz to 1GHz



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Plarization
33.300000	19.30	11.7	40.0	20.7	178.0	190.00	HORIZONTAL
63.420000	20.10	11.0	40.0	19.9	154.0	356.00	VERTICAL
172.800000	18.60	10.3	43.5	24.9	145.0	221.00	HORIZONTAL
245.820000	27.00	14.1	46.0	19.0	142.0	89.00	HORIZONTAL
319.980000	33.00	16.0	46.0	13.0	137.0	360.00	VERTICAL
936.540000	35.00	26.5	46.0	11.0	100.0	339.00	HORIZONTAL

1GHz to 18GHz



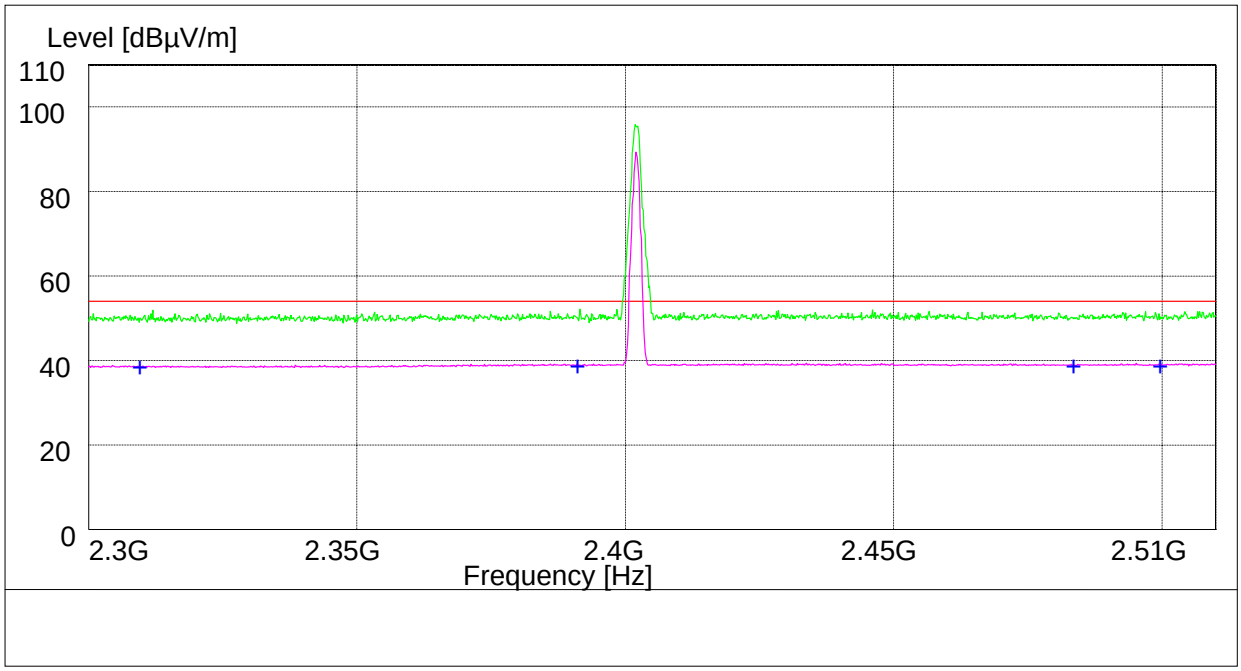
Note: Signal suppressed with a 2.4 GHz band rejection filter

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
3155.000000	23.30	-8.5	54.0	30.7	100.0	36.00	HORIZONTAL
5650.500000	25.70	-2.2	54.0	28.3	112.0	231.00	HORIZONTAL
7921.000000	28.10	1.9	54.0	25.9	136.0	50.00	HORIZONTAL
10048.000000	29.90	5.2	54.0	24.1	144.0	29.00	VERTICAL
14566.500000	34.60	12.2	54.0	19.4	108.0	87.00	VERTICAL
17991.000000	37.30	17.3	54.0	16.7	100.0	75.00	HORIZONTAL

18GHz to 26GHz

Note: No peak found in pre- test.

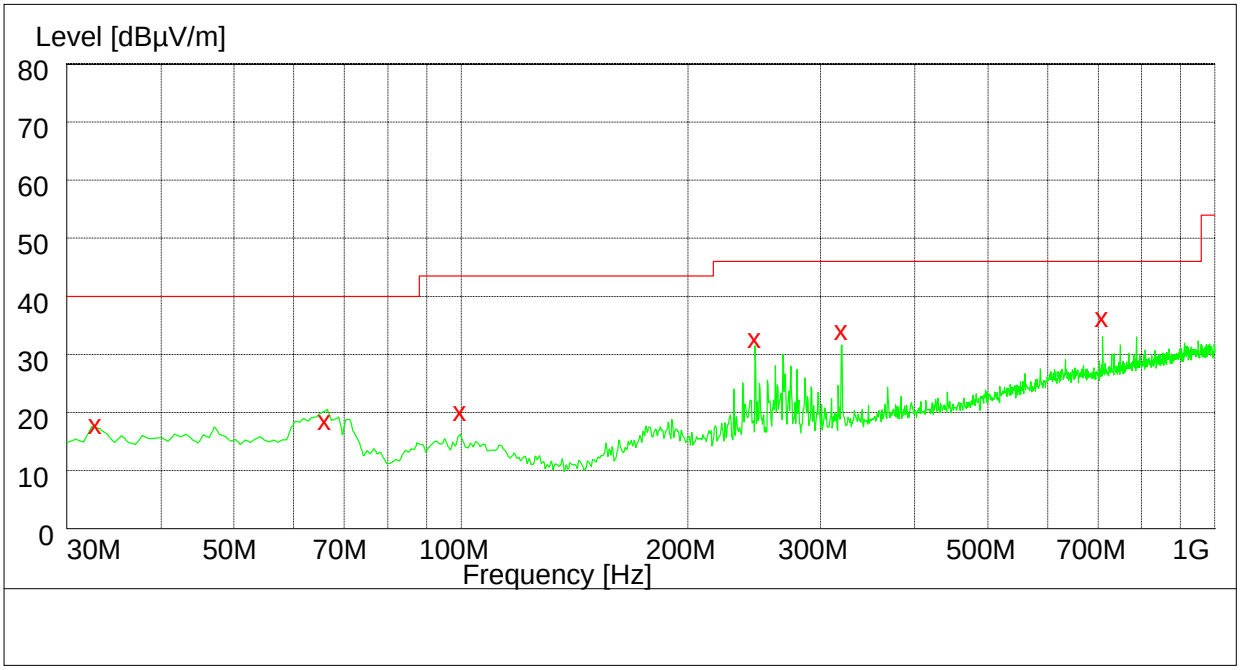
2GHz to 3GHz



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

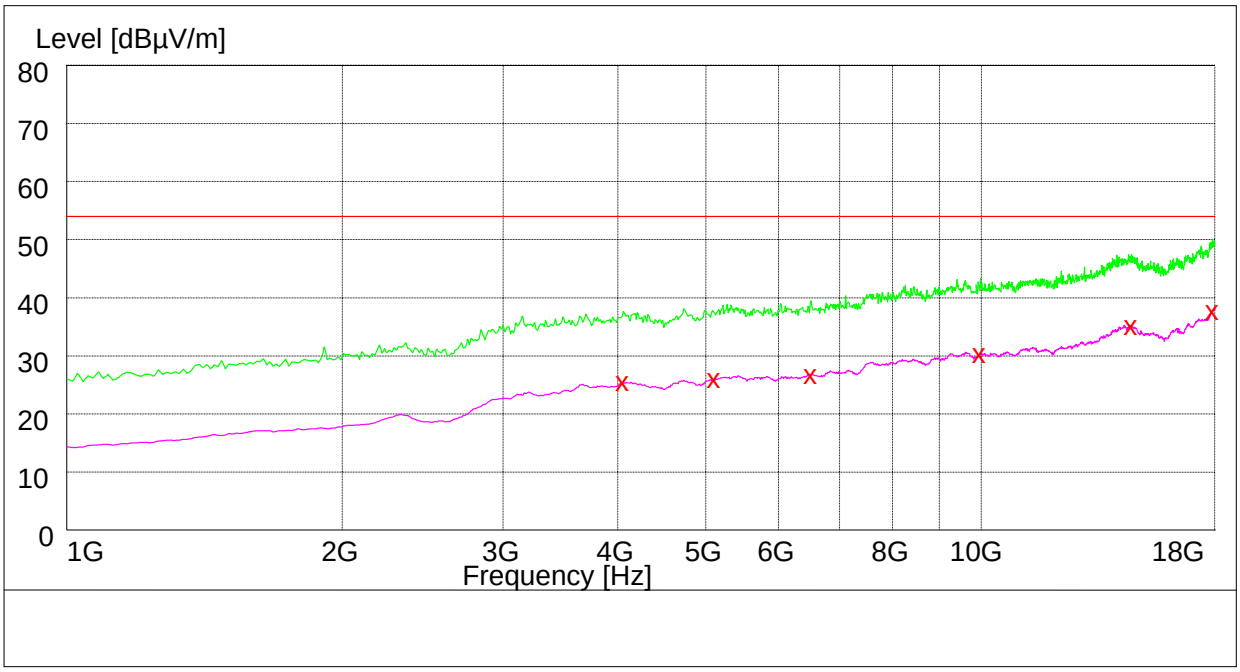
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2310.000000	38.00	33.3	54.0	16.0	120.0	317.00	VERTICAL
2390.000000	38.40	33.5	54.0	15.6	124.0	178.00	VERTICAL
2483.500000	38.30	33.7	54.0	15.7	125.0	98.00	HORIZONTAL
2500.000000	38.40	33.8	54.0	16.6	108.0	168.00	VERTICAL

Channel 40
30MHz to 1GHz



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
32.760000	19.20	11.7	40.0	20.8	214.0	40.00	VERTICAL
66.000000	19.80	10.0	40.0	20.2	247.0	166.00	HORIZONTAL
99.960000	20.00	13.1	43.5	23.5	123.0	252.00	VERTICAL
245.760000	32.60	14.1	46.0	13.4	114.0	157.00	VERTICAL
319.980000	33.90	16.0	46.0	12.1	115.0	314.00	HORIZONTAL
710.400000	36.10	23.4	46.0	9.9	100.0	21.00	VERTICAL

1GHz to 18GHz



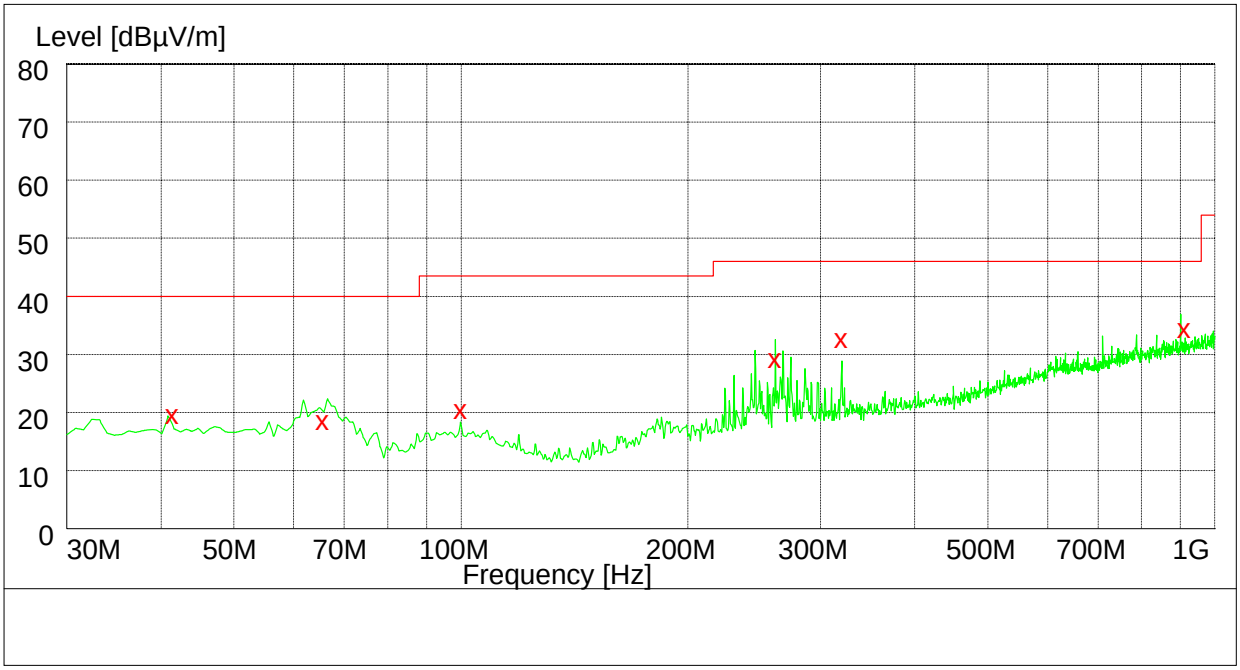
Note: Signal suppressed with a 2.4 GHz band rejection filter

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
4060.500000	25.00	-5.7	54.0	29.0	124.0	179.00	VERTICAL
5104.500000	25.50	-3.5	54.0	28.5	112.0	78.00	VERTICAL
6512.500000	26.20	-0.9	54.0	27.8	102.0	289.00	HORIZONTAL
9968.500000	29.80	5.1	54.0	24.2	107.0	358.00	HORIZONTAL
14595.500000	34.60	12.1	54.0	19.4	106.0	316.00	HORIZONTAL
17908.500000	37.30	16.7	54.0	16.7	125.0	67.00	VERTICAL

18GHz to 26GHz

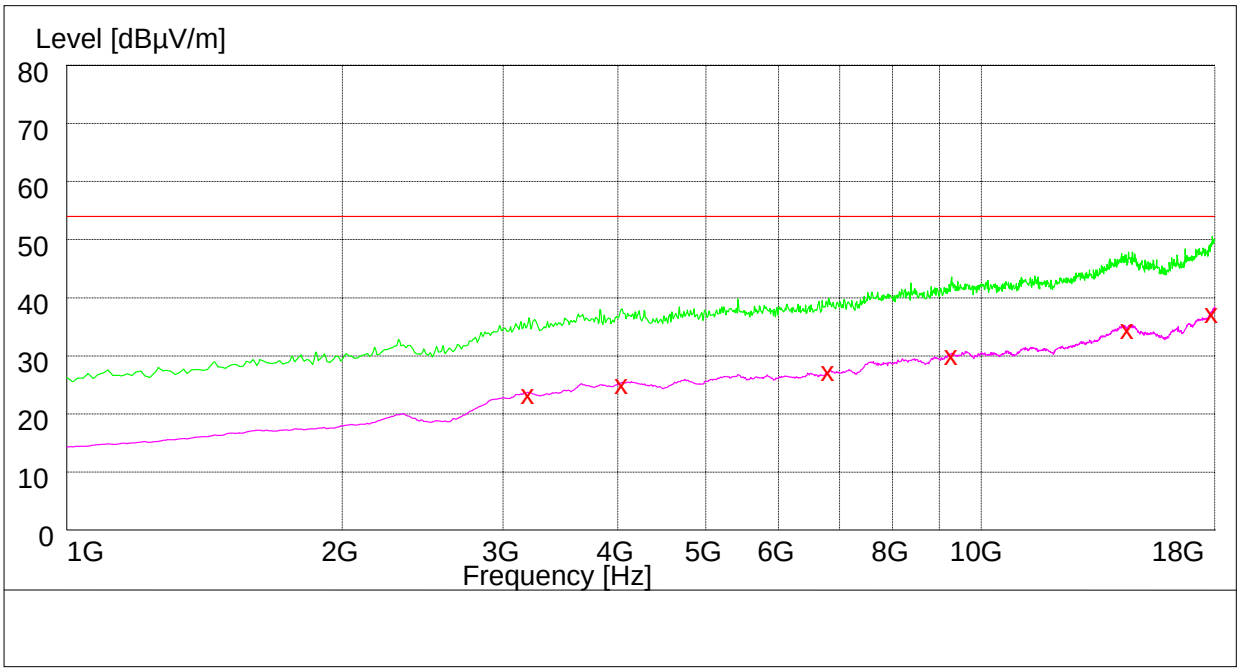
Note: No peak found in pre- test.

Channel 78
30MHz to 1GHz



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
41.460000	19.70	13.1	40.0	20.3	186.0	151.00	VERTICAL
65.700000	18.40	10.1	40.0	21.6	154.0	206.00	HORIZONTAL
100.020000	20.40	13.1	43.5	23.1	141.0	137.00	VERTICAL
261.120000	29.50	14.2	46.0	16.5	100.0	354.00	VERTICAL
319.980000	32.60	16.0	46.0	13.4	152.0	0.00	HORIZONTAL
901.260000	34.20	26.2	46.0	11.8	135.0	326.00	HORIZONTAL

1GHz to 18GHz



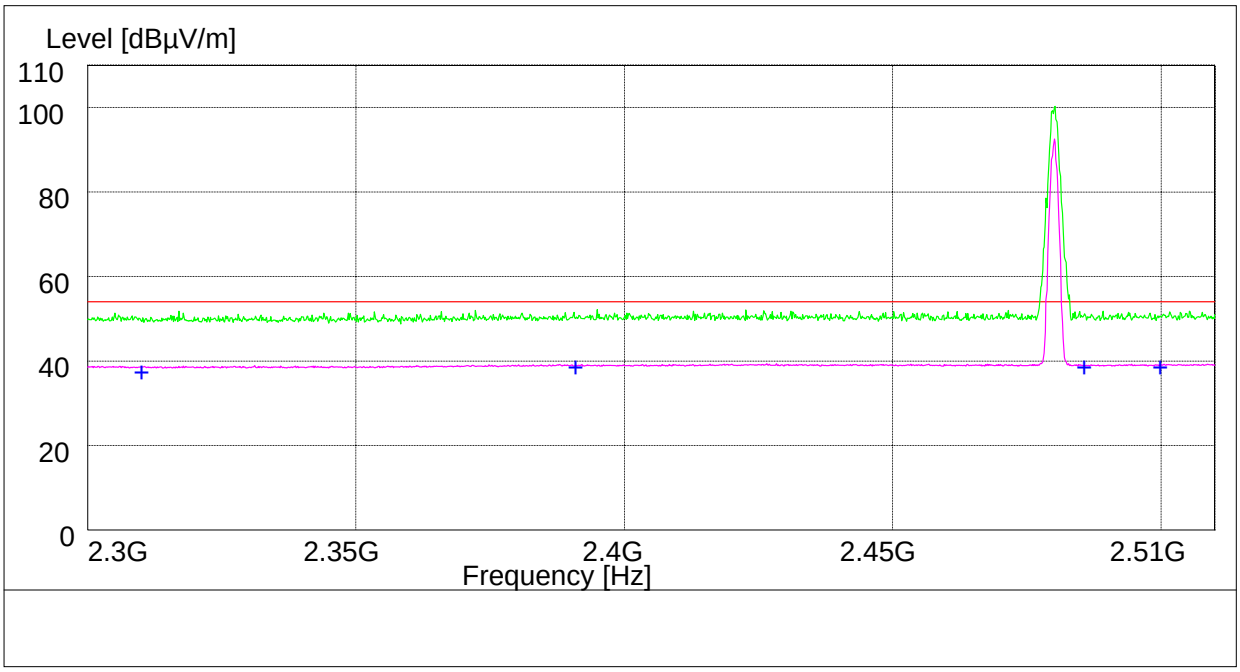
Note: Signal suppressed with a 2.4 GHz band rejection filter

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
3198.500000	23.20	-8.3	54.0	30.8	123.0	350.00	VERTICAL
4045.000000	24.90	-5.7	54.0	29.1	100.0	304.00	HORIZONTAL
6809.500000	27.00	-0.3	54.0	27.0	154.0	30.00	HORIZONTAL
9279.500000	29.90	4.6	54.0	24.1	125.0	1.00	HORIZONTAL
14466.000000	34.60	12.3	54.0	19.4	127.0	334.00	VERTICAL
17885.500000	37.10	16.6	54.0	16.9	102.0	101.00	VERTICAL

18GHz to 26GHz

Note: No peak found in pre- test.

2GHz to 3GHz



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

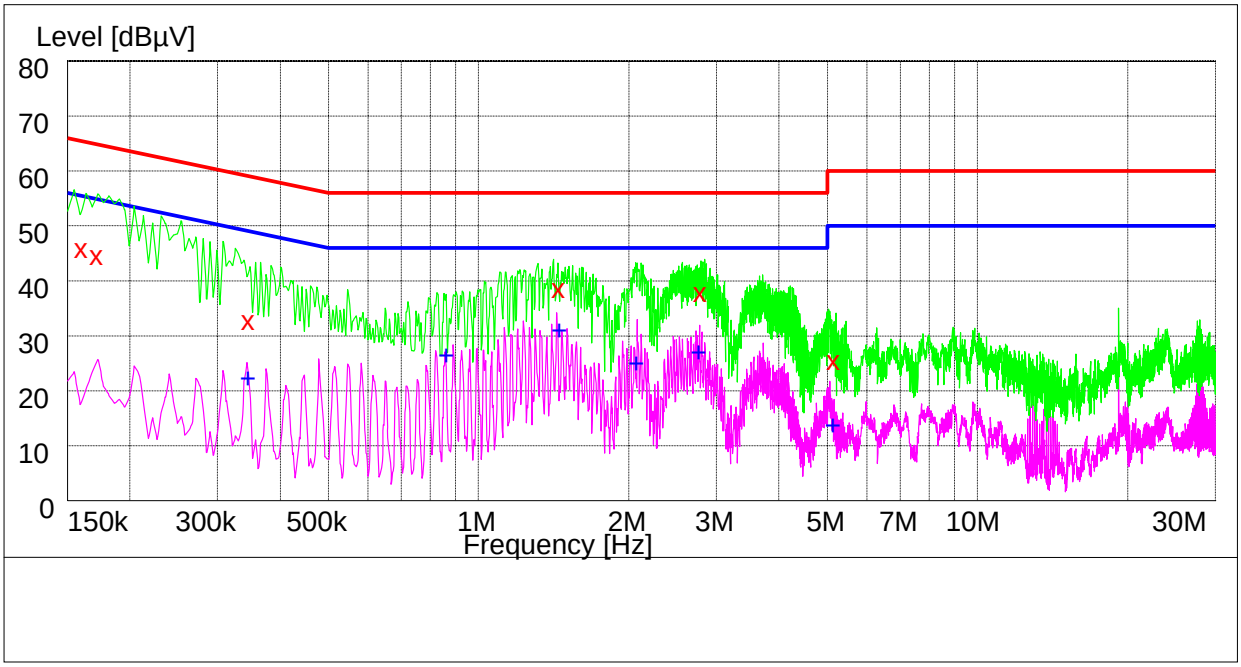
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
2310.000000	38.00	33.3	54.0	16.0	125.0	88.00	HORIZONTAL
2390.000000	38.40	33.5	54.0	15.6	135.0	124.00	VERTICAL
2483.500000	38.30	33.7	54.0	15.7	121.0	333.00	HORIZONTAL
2500.000000	38.40	33.8	54.0	15.6	124.0	203.00	HORIZONTAL

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
0.160000	47.20	10.1	66	18.8	N	FLO
0.172000	46.10	10.1	65	18.9	N	FLO
0.346000	34.20	10.0	59	24.8	N	FLO
1.450000	39.90	10.1	56	16.1	N	FLO
2.796000	39.20	10.2	56	16.8	N	FLO
5.168000	26.80	10.2	60	33.2	N	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.344000	23.70	10.0	49	25.3	N	FLO
0.862000	27.80	10.1	46	18.2	N	FLO
1.452000	32.30	10.1	46	13.7	N	FLO
2.068000	26.30	10.1	46	19.7	N	FLO
2.760000	28.20	10.2	46	17.8	N	FLO
5.136000	15.10	10.2	50	34.9	N	FLO