

Appendix A

20dB bandwidth measurement

According to FCC Part 15.247 a (1)

Channel 0 (2402MHz)

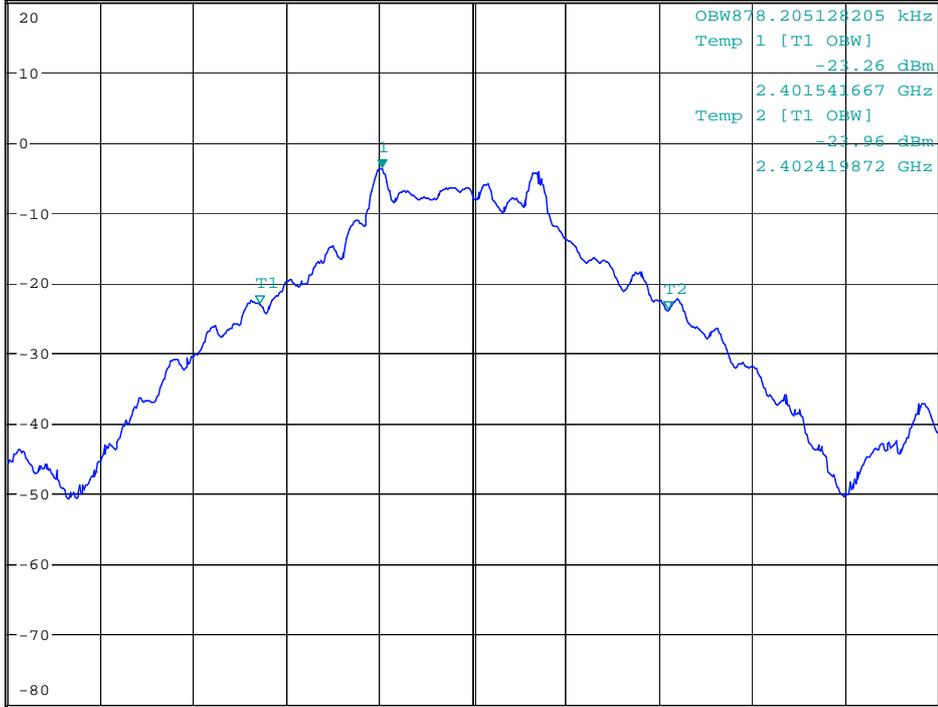


* RBW 30 kHz Marker 1 [T1]
VBW 100 kHz -3.74 dBm
SWT 10 ms 2.401804487 GHz

Ref 20 dBm

Att 25 dB

1 PK
MAXH



Center 2.402 GHz

200 kHz/

Span 2 MHz

Channel 40 (2442MHz)

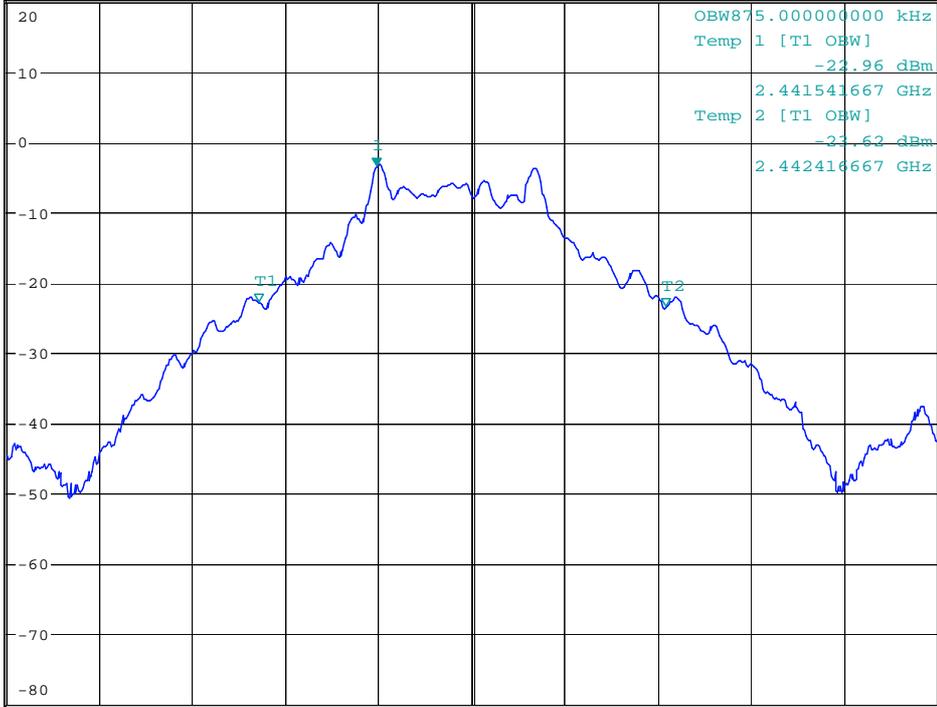


* RBW 30 kHz Marker 1 [T1]
VBW 100 kHz -3.57 dBm
SWT 10 ms 2.441794872 GHz

Ref 20 dBm

Att 25 dB

1 PK
MAXH



Center 2.442 GHz

200 kHz/

Span 2 MHz

Channel 78 (2480MHz)

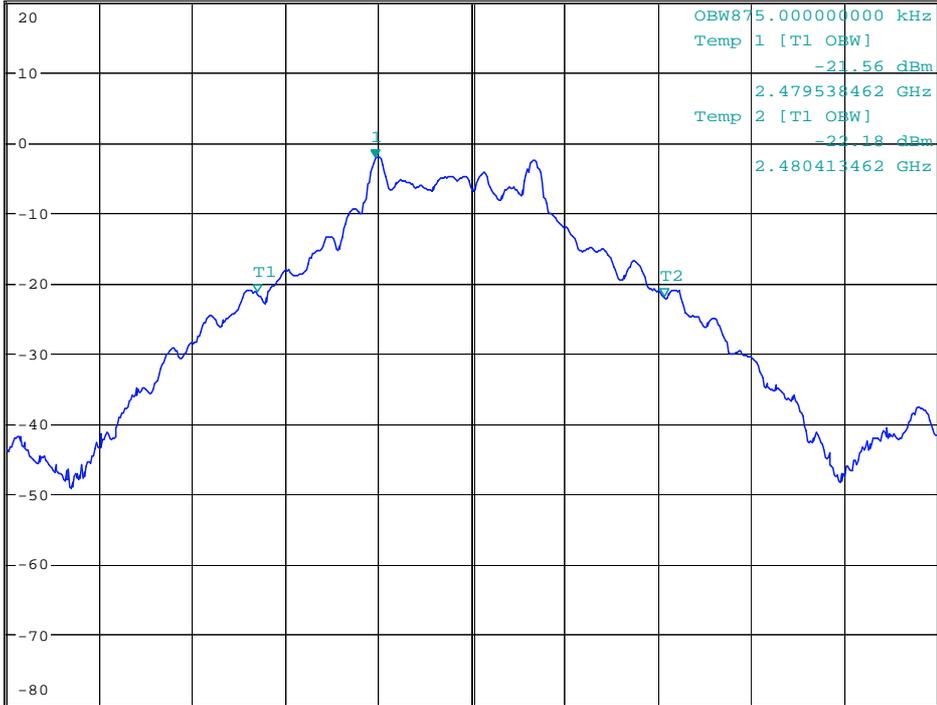


*RBW 30 kHz Marker 1 [T1]
VBW 100 kHz -2.46 dBm
SWT 10 ms 2.479791667 GHz

Ref 20 dBm

Att 25 dB

1 PK
MAXH



Center 2.48 GHz

200 kHz/

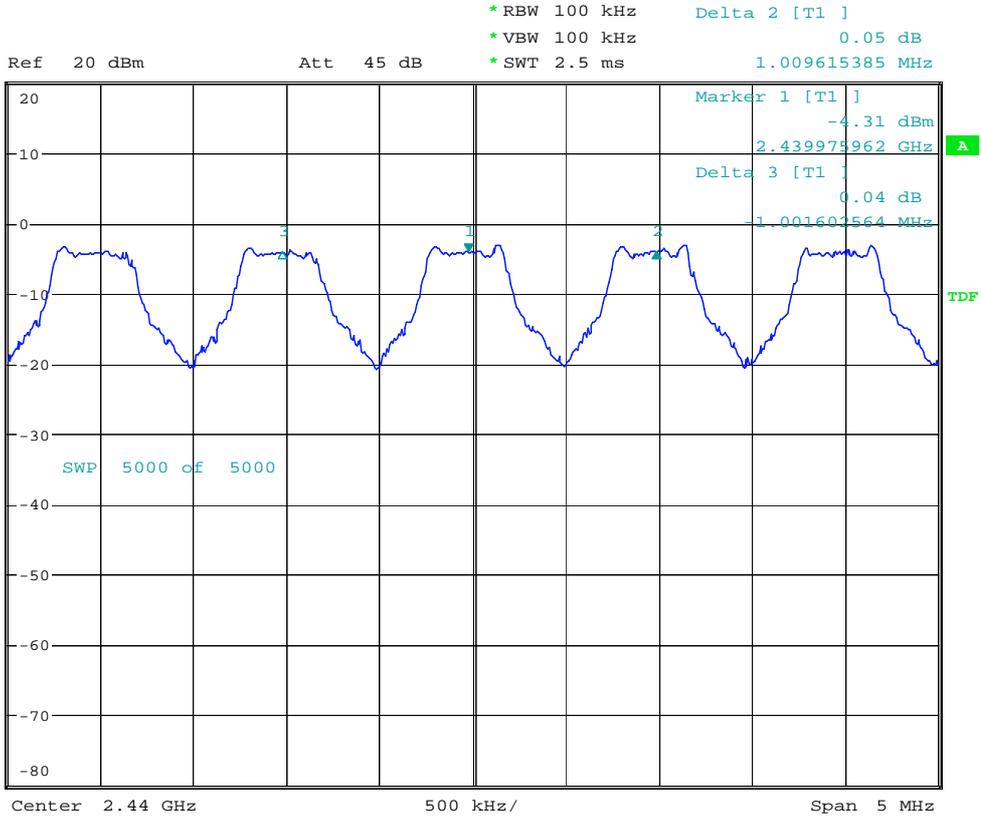
Span 2 MHz

Appendix B

Carrier frequency separation measurement

According to FCC Part 15.247 a (1)

Centred at Channel 39

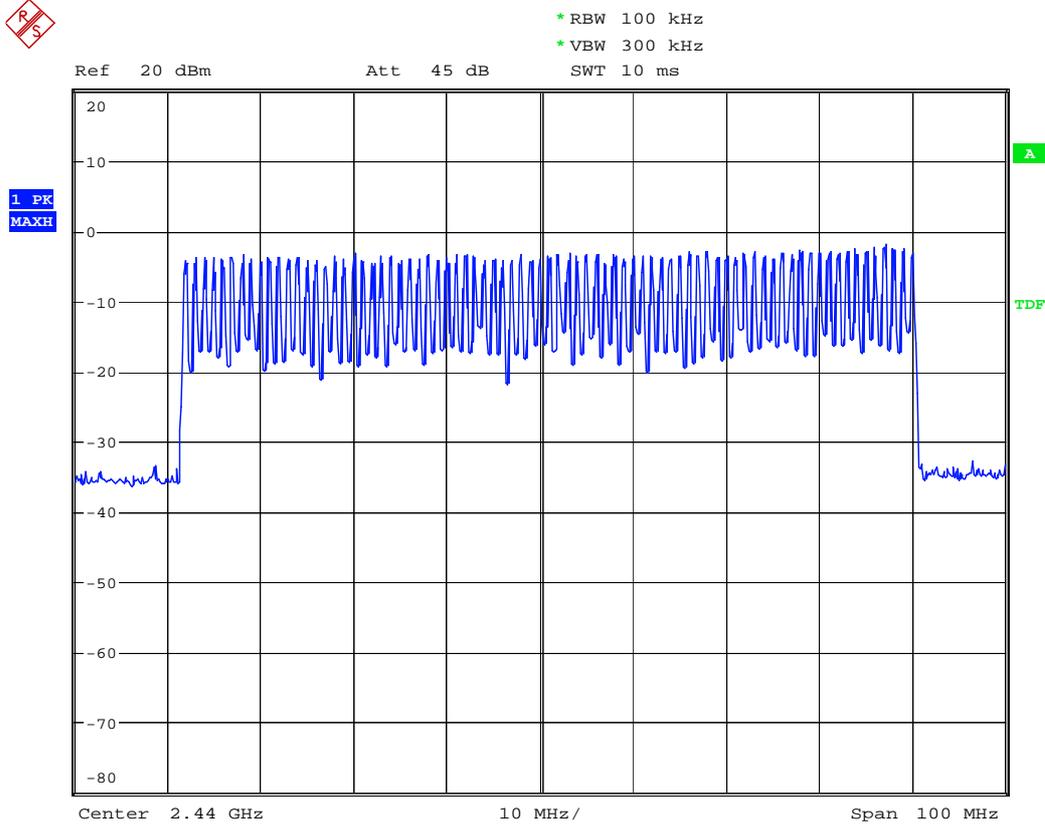


Appendix C

Number of hopping channel

According to FCC Part 15.247 a (1)

Total hopping channels = 79

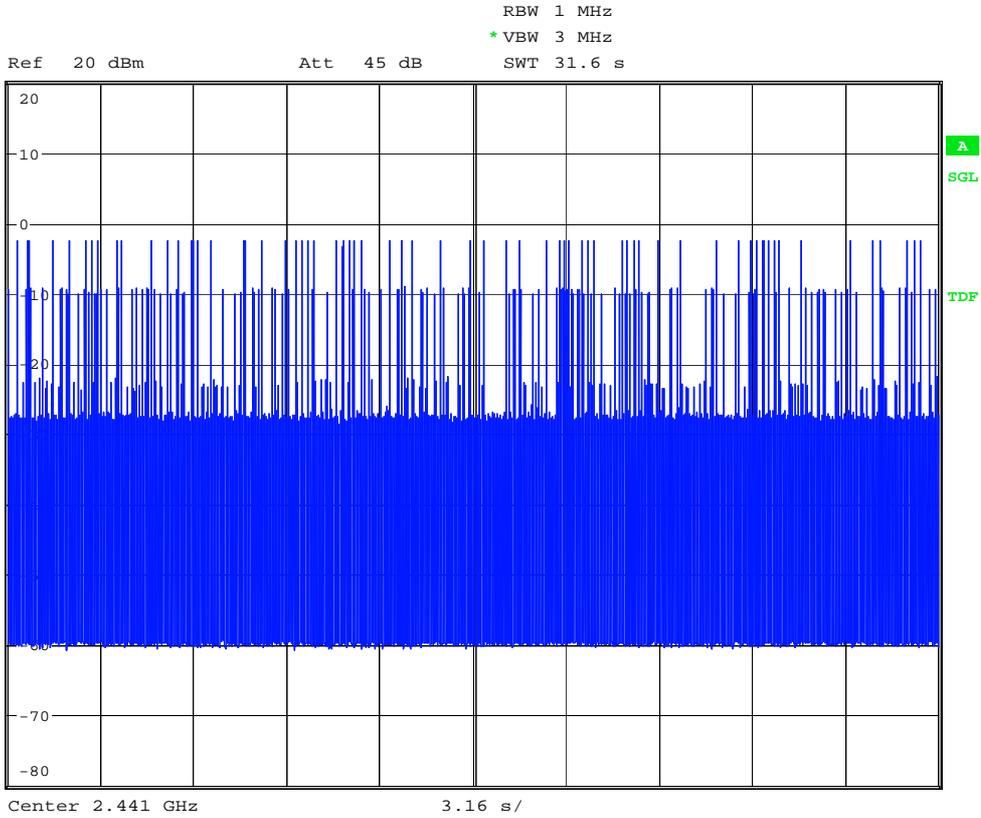


Appendix D

Time of occupancy

According to FCC Part 15.247 a (1)

A period (Total 63 burst)



Appendix E

Peak output power

According to FCC Part 15.247 b (1)

Channel 0 (2402MHz)

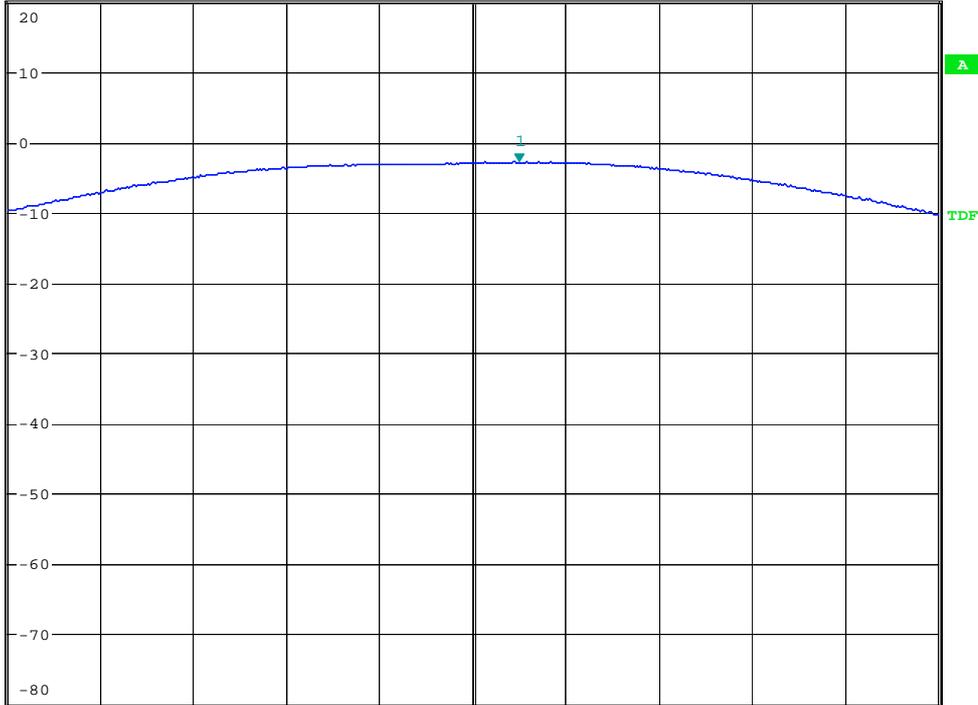


* RBW 1 MHz
* VBW 3 MHz
SWT 2.5 ms
Marker 1 [T1]
-2.90 dBm
2.402099359 GHz

Ref 20 dBm

Att 45 dB

1 PK
MAXH



Center 2.402 GHz

200 kHz/

Span 2 MHz

Channel 40 (2442MHz)



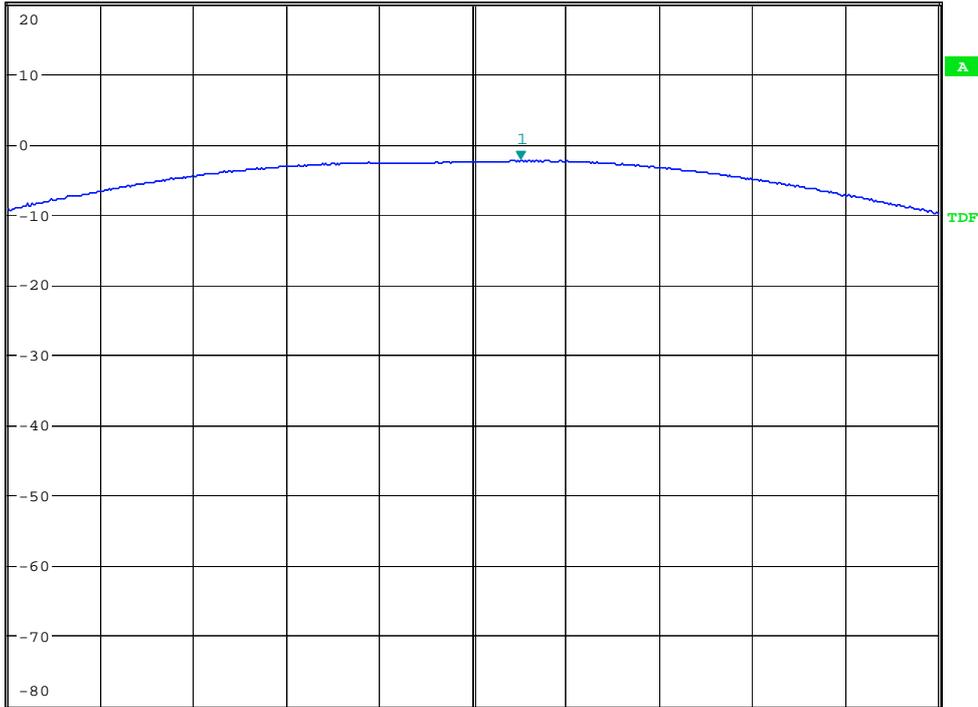
* RBW 1 MHz
* VBW 3 MHz
SWT 2.5 ms

Marker 1 [T1]
-2.42 dBm
2.442102564 GHz

Ref 20 dBm

Att 45 dB

1 PK
MAXH



Center 2.442 GHz

200 kHz/

Span 2 MHz

Channel 78 (2480MHz)



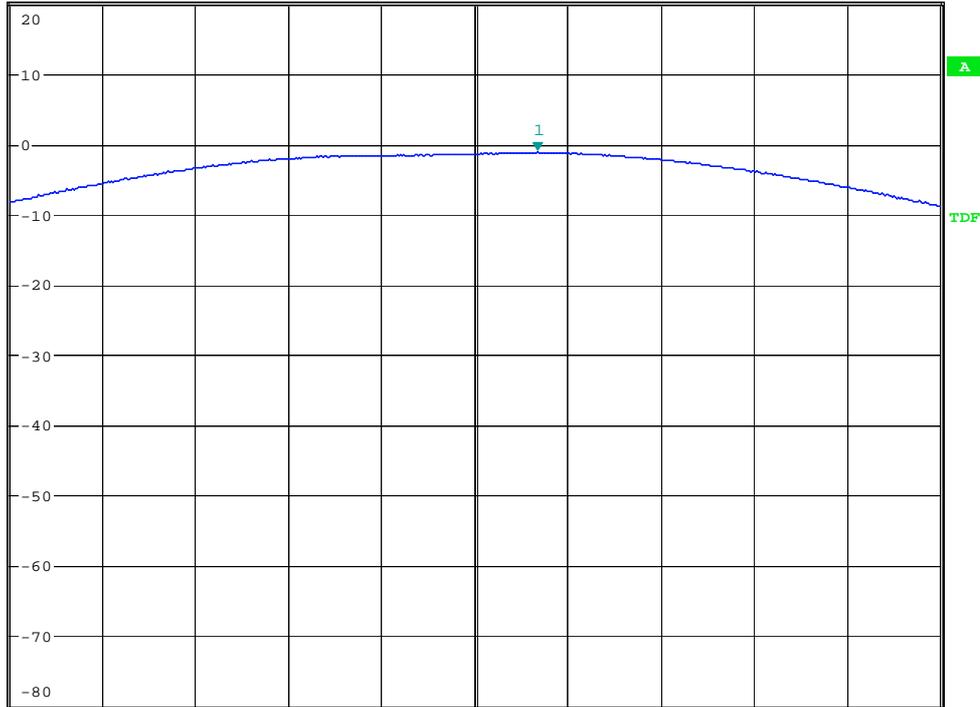
* RBW 1 MHz
* VBW 3 MHz
SWT 2.5 ms

Marker 1 [T1]
-1.20 dBm
2.480134615 GHz

Ref 20 dBm

Att 45 dB

1 PK
MAXH



Center 2.48 GHz

200 kHz/

Span 2 MHz

Appendix F

Band edge spurious emission

According to FCC Part 15.247 d

Low edge (Channel 0, no hopping)

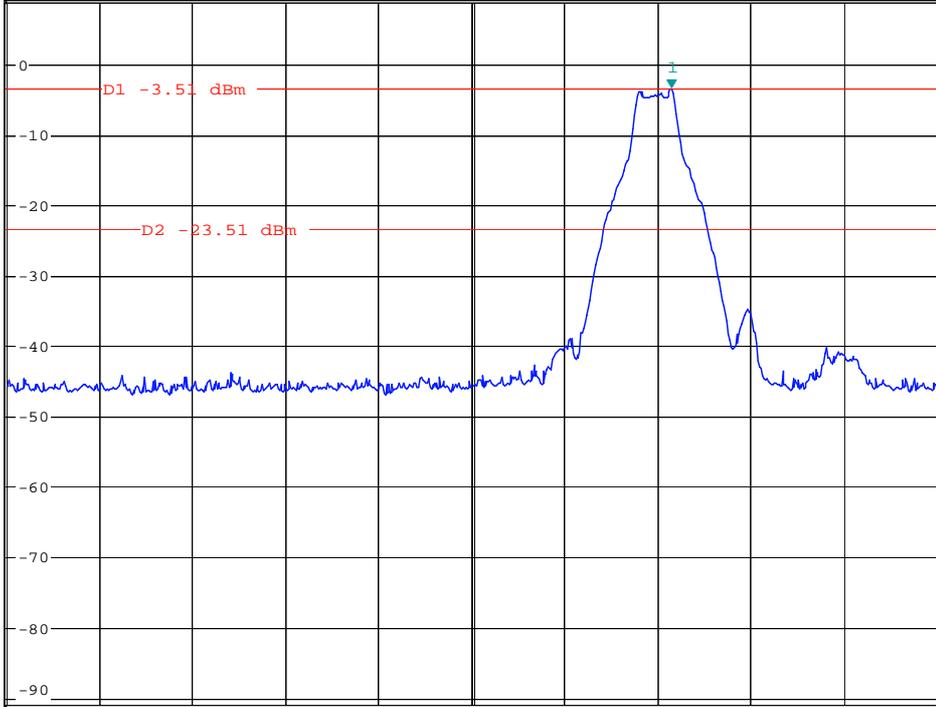


* RBW 100 kHz Marker 1 [T1]
* VBW 100 kHz -3.51 dBm
SWT 5 ms 2.402147436 GHz

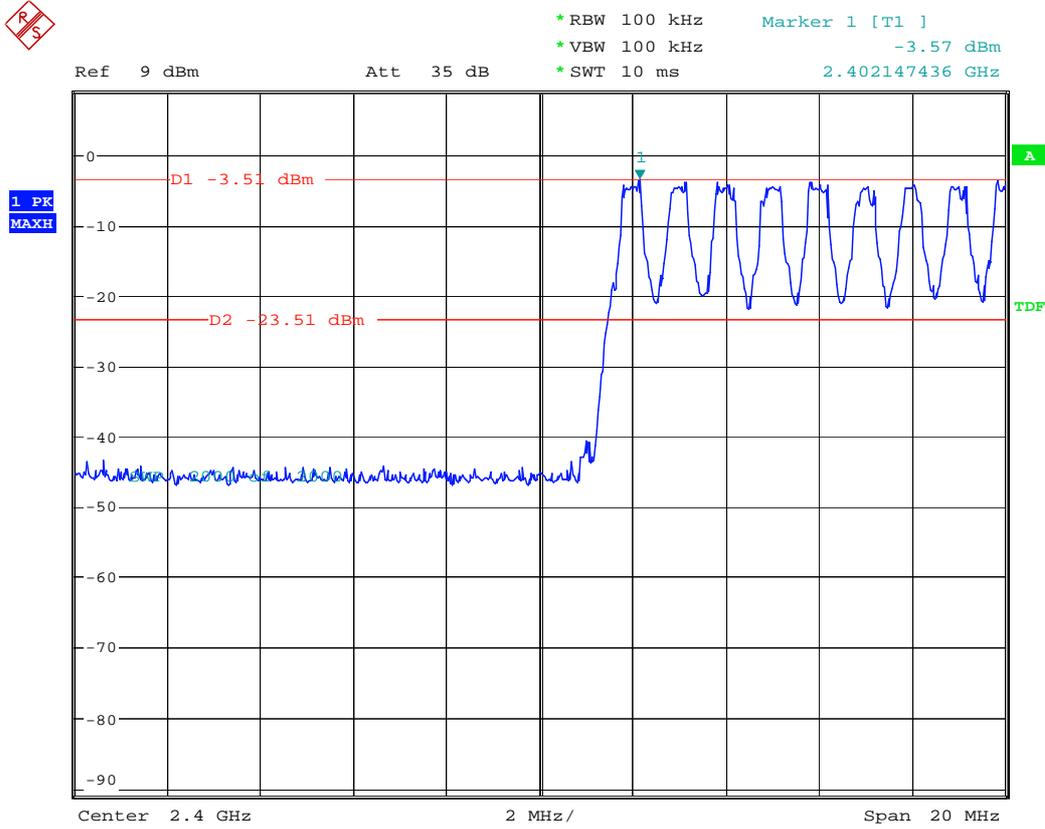
Ref 9 dBm

Att 35 dB

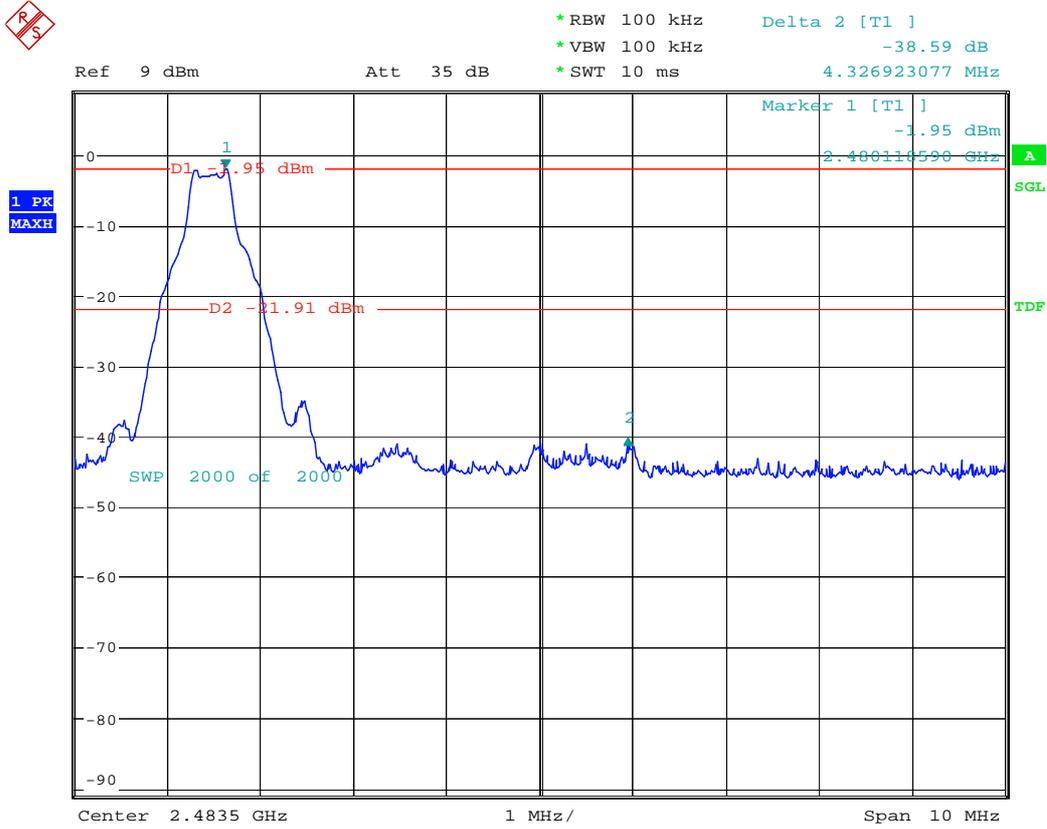
1 PK
MAXH



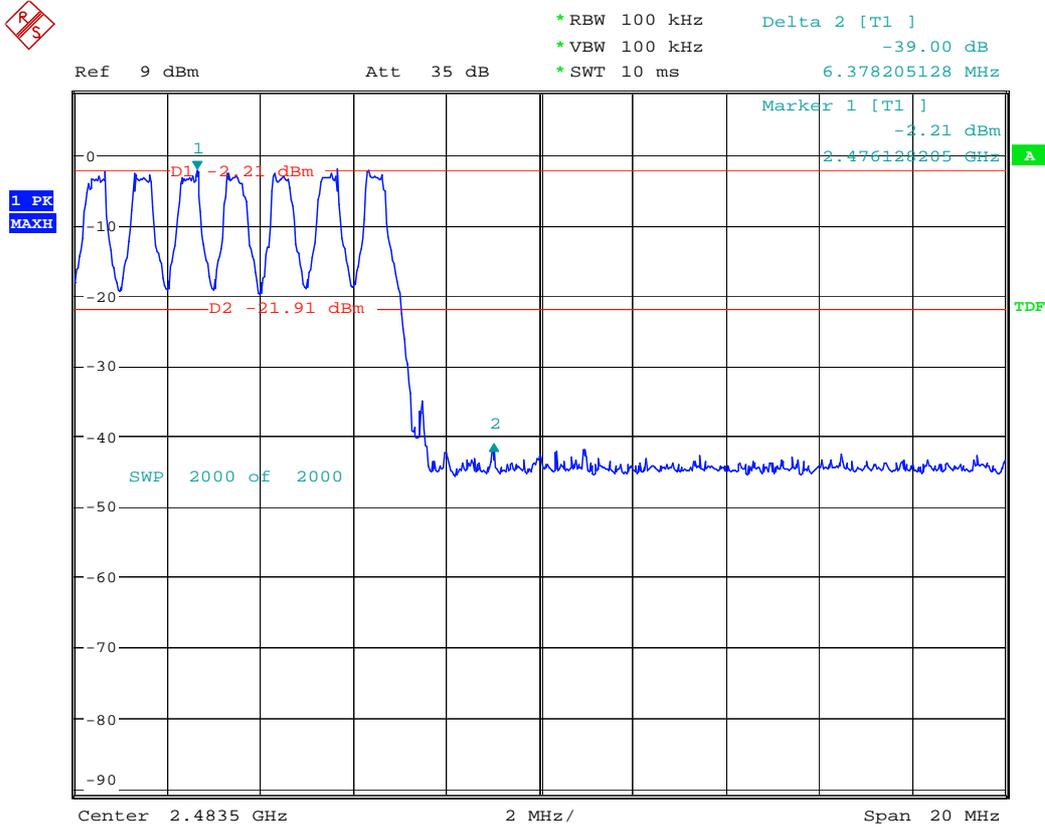
Low edge (with hopping)



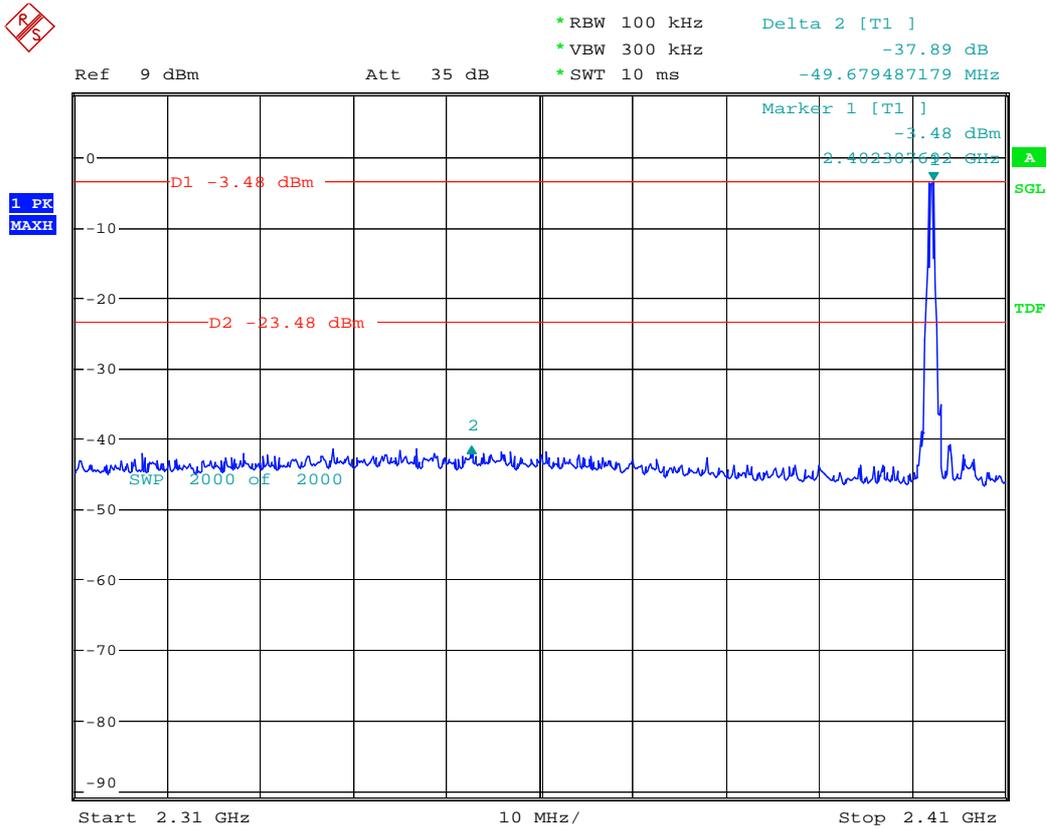
High edge (Channel 78, no hopping)



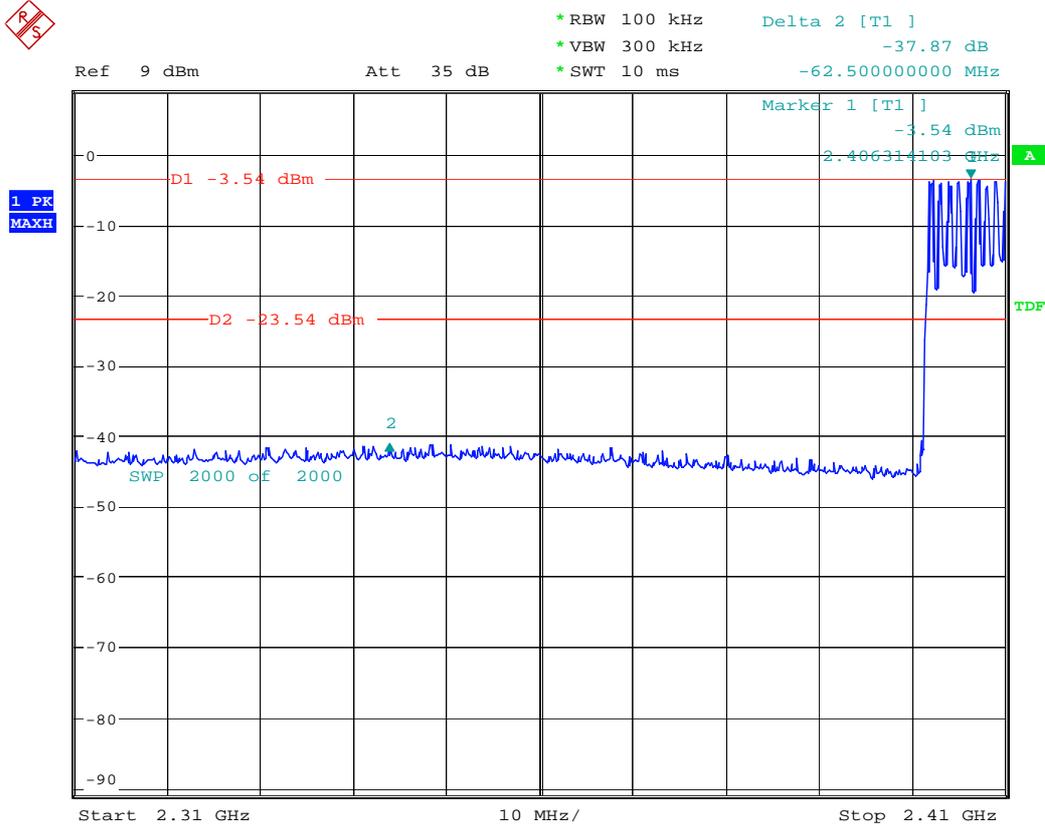
High edge (with hopping)



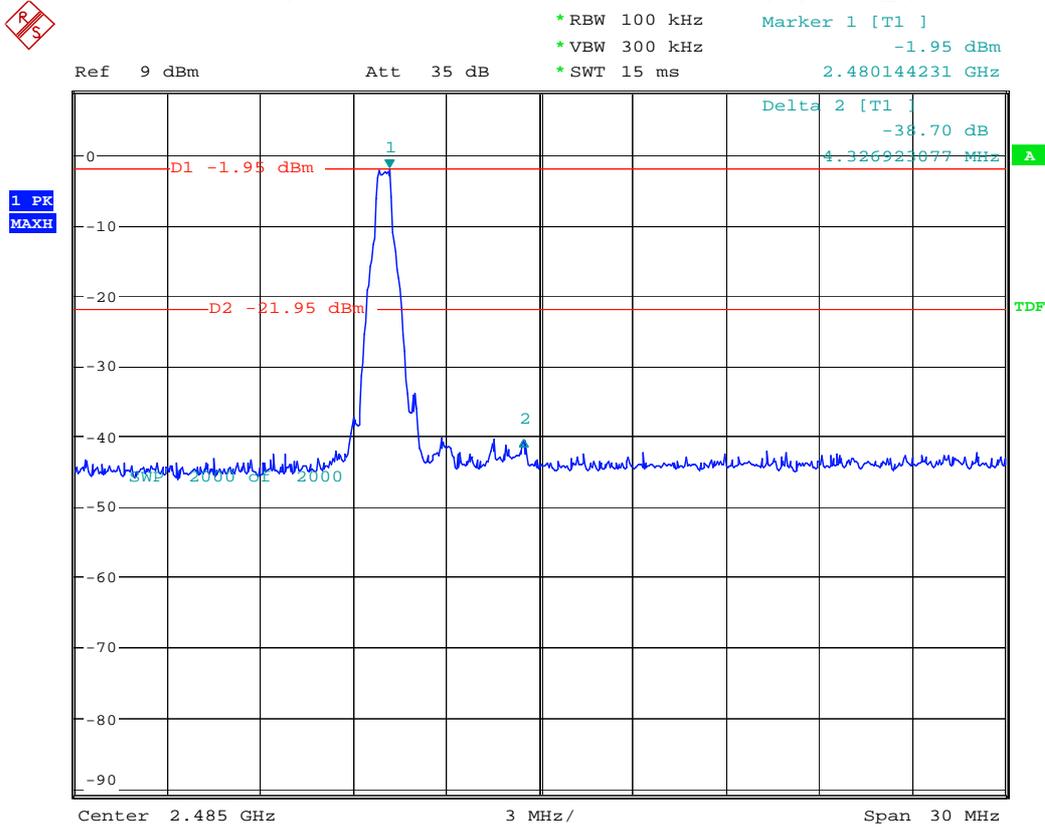
Restrict band 2310MHz to 2390MHz (channel 0, no hopping)



Restrict band 2310MHz to 2390MHz (with hopping)



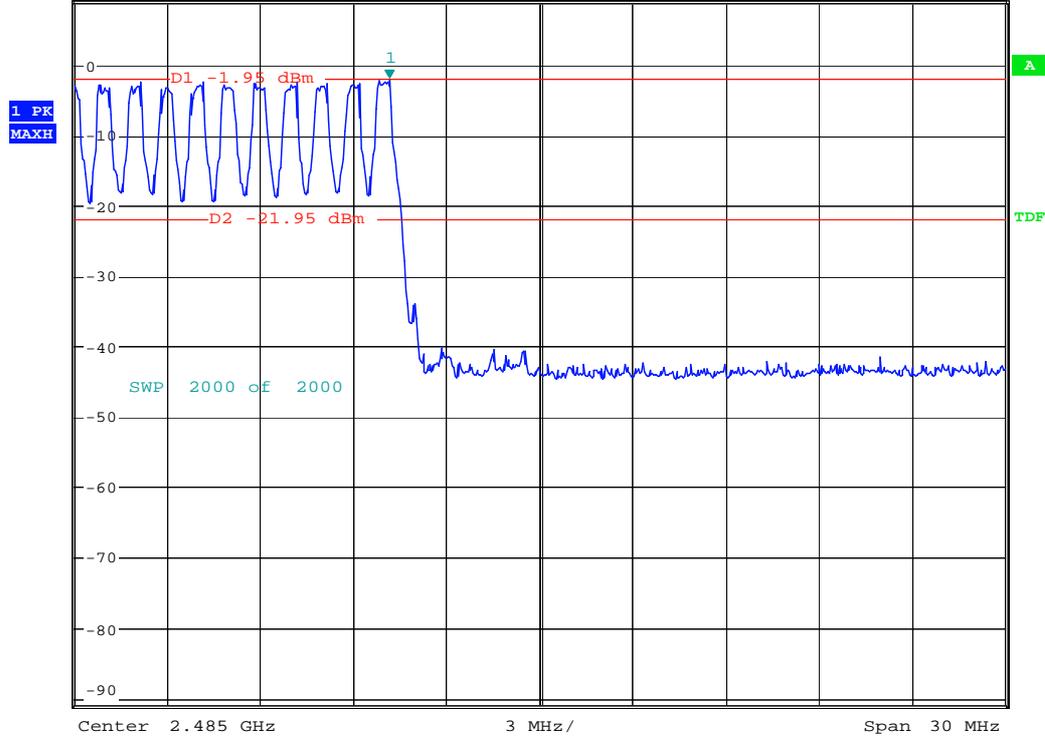
Restrict band 2483.5MHz to 2500MHz (channel 78, no hopping)



Restrict band 2483.5MHz to 2500MHz (channel 78, with hopping)



Ref 9 dBm Att 35 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -1.95 dBm
*SWT 15 ms 2.480144231 GHz



Appendix G

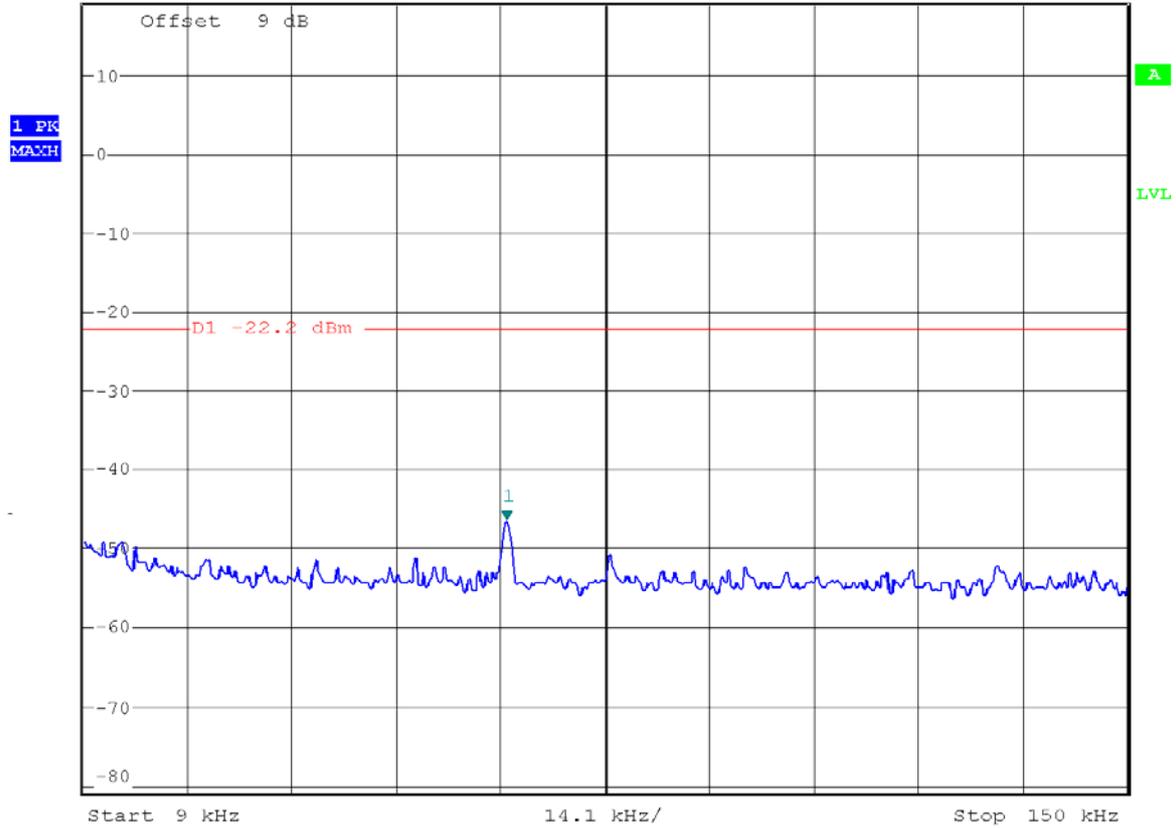
Conducted RF spurious

According to FCC Part 15.247 d

Channel 0



Ref 19 dBm * Att. 40 dB * RBW 1 kHz Marker 1 [T1] -46.76 dBm
* VBW 3 kHz SWT 145 ms 66.168269231 kHz

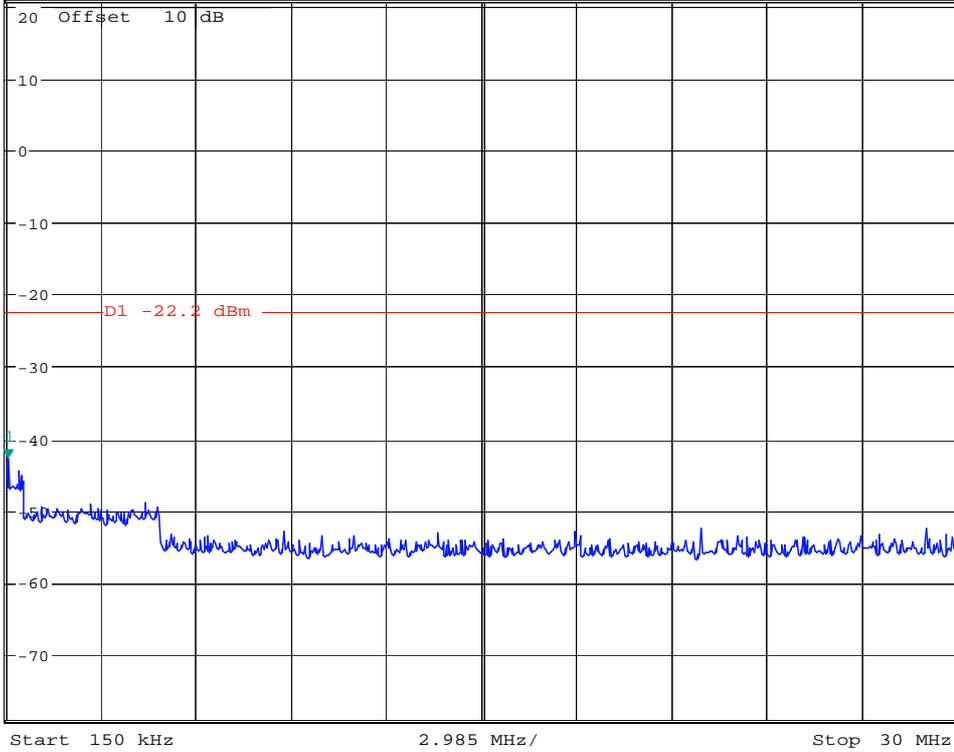




*RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -42.82 dBm
SWT 300 ms 197.836538462 kHz

Ref 20.9 dBm

*Att 40 dB



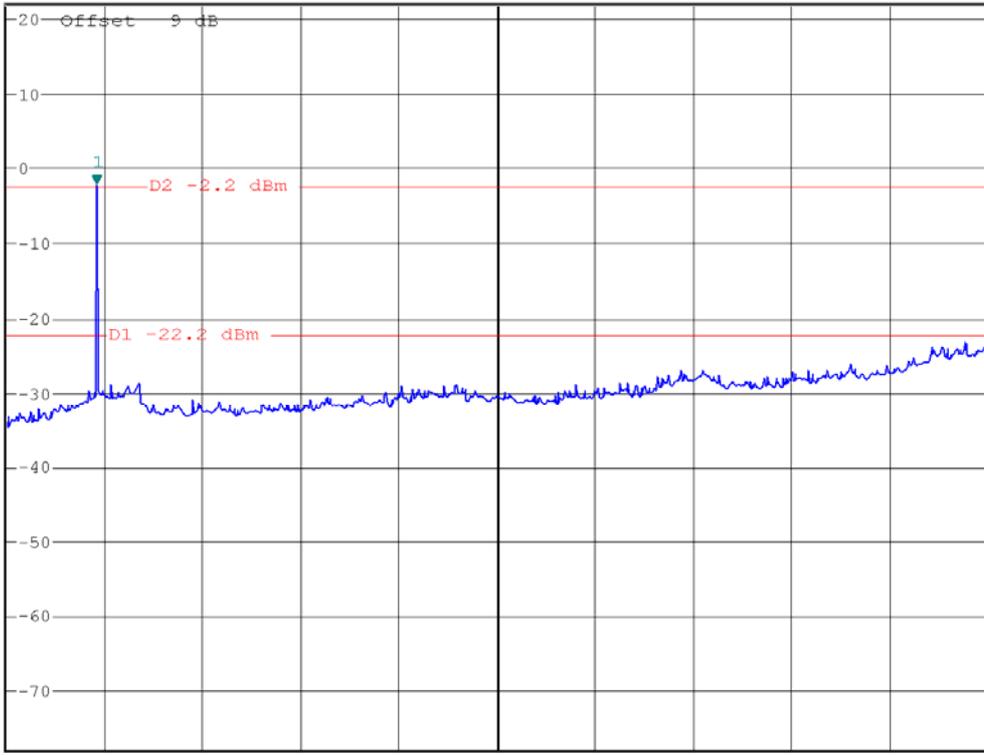


* RBW 1 MHz
* VBW 3 MHz
* SWT 150 ms

Marker 1 [T1]
-2.31 dBm
2.402259615 GHz

Ref 22 dBm

Att 40 dB



Start 30 MHz

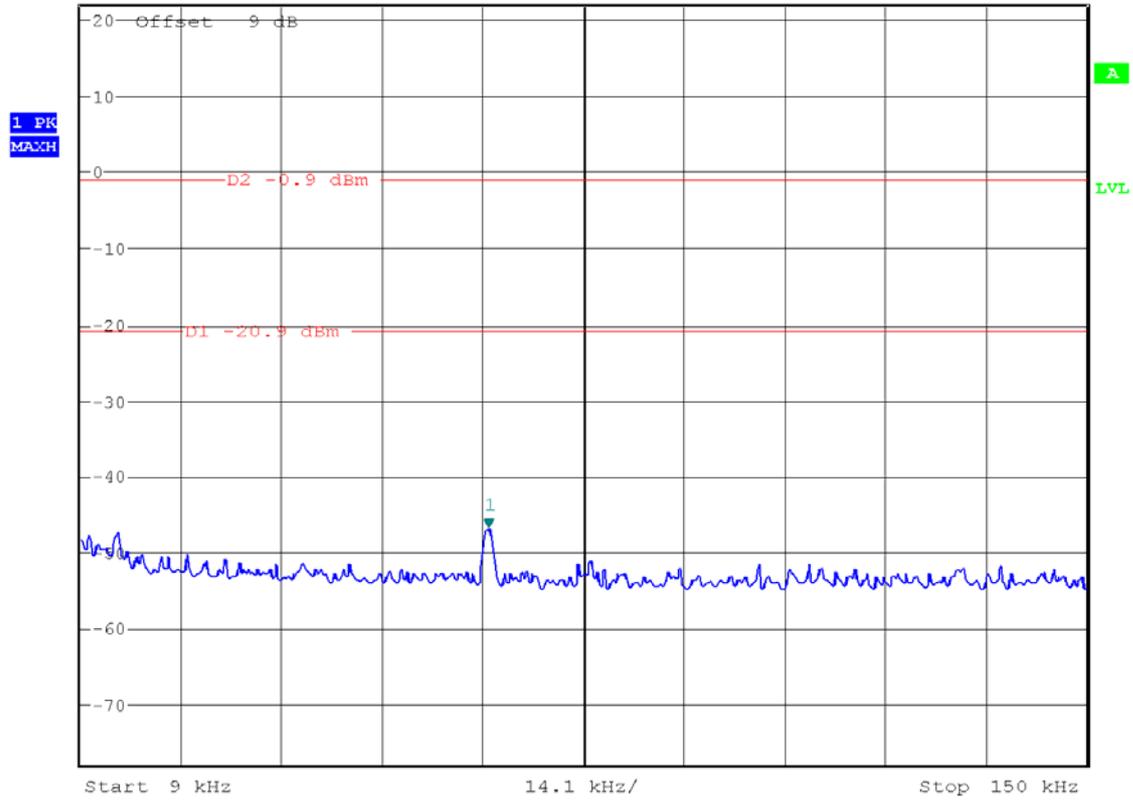
2.597 GHz/

Stop 26 GHz

Channel 40



Ref 22 dBm Att 40 dB *RBW 1 kHz Marker 1 [T1] -46.95 dBm
*VBW 3 kHz
*SWT 150 ms 66.168269231 kHz



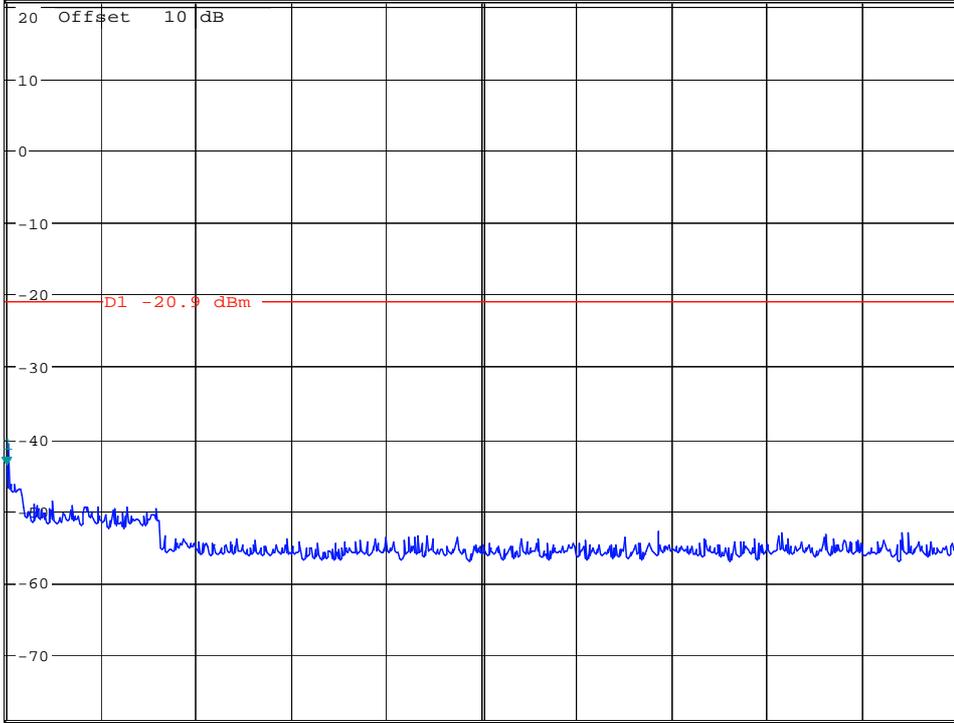


*RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -43.83 dBm
SWT 300 ms 150.00000000 kHz

Ref 20.9 dBm

*Att 40 dB

1 PK
MAXH



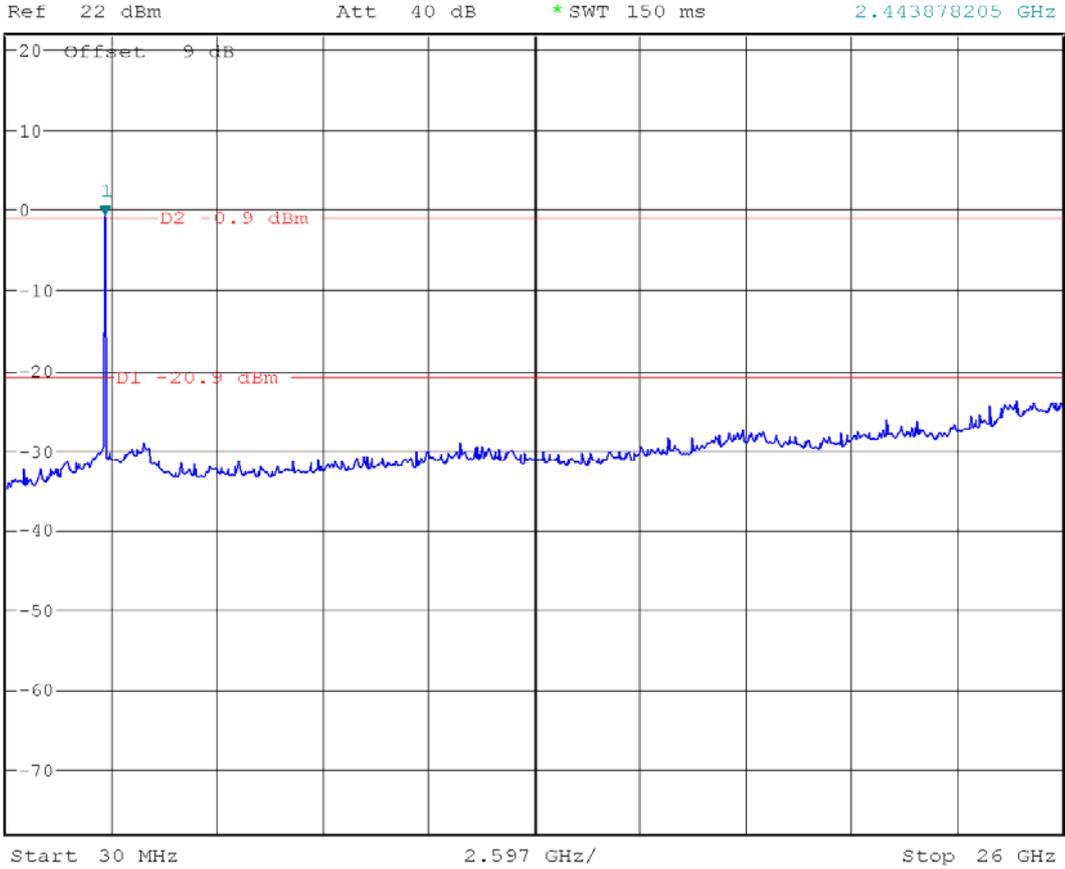
Start 150 kHz

2.985 MHz/

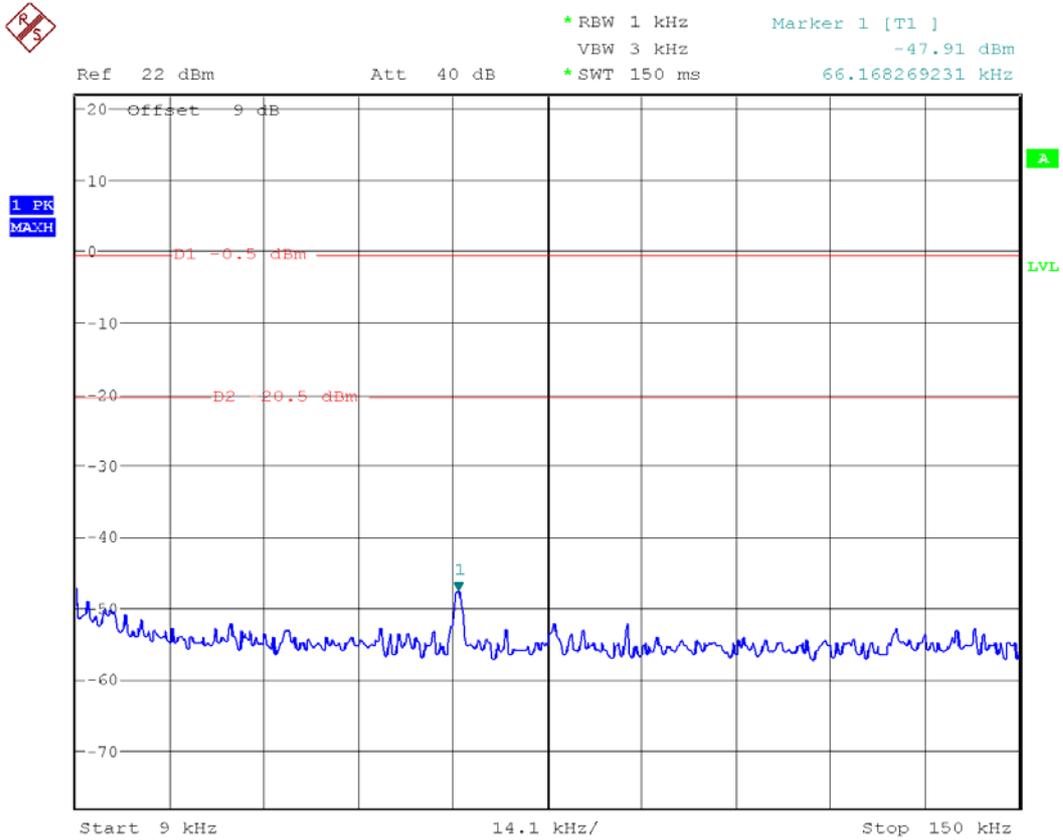
Stop 30 MHz



*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz -0.88 dBm
*SWT 150 ms 2.443878205 GHz



Channel 78



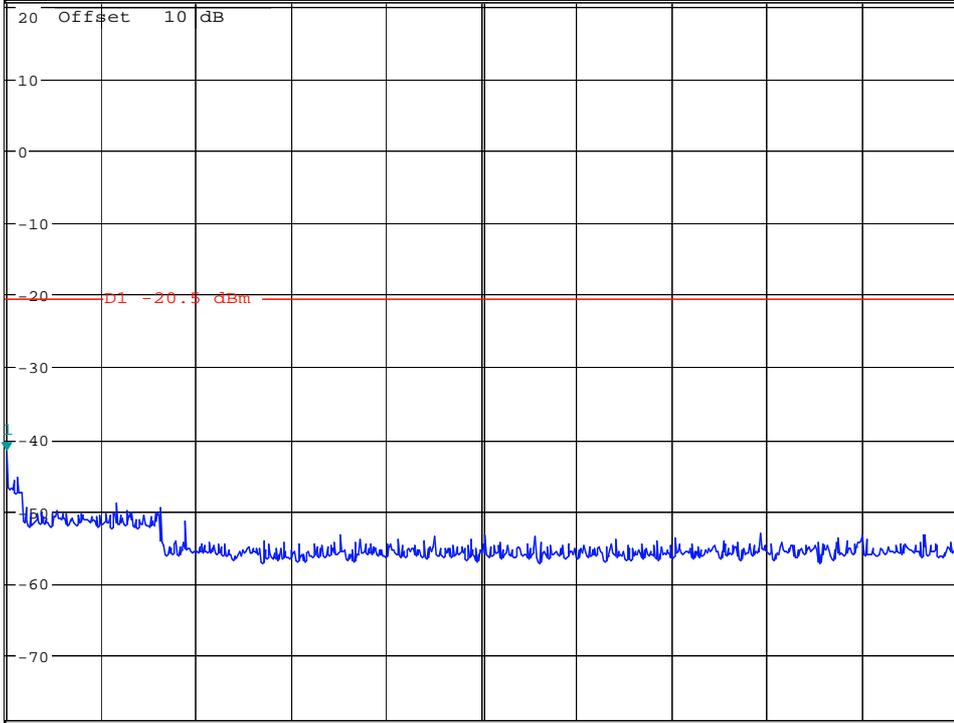


*RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -41.72 dBm
SWT 300 ms 150.00000000 kHz

Ref 20.9 dBm

*Att 40 dB

1 PK
MAXH



Start 150 kHz

2.985 MHz/

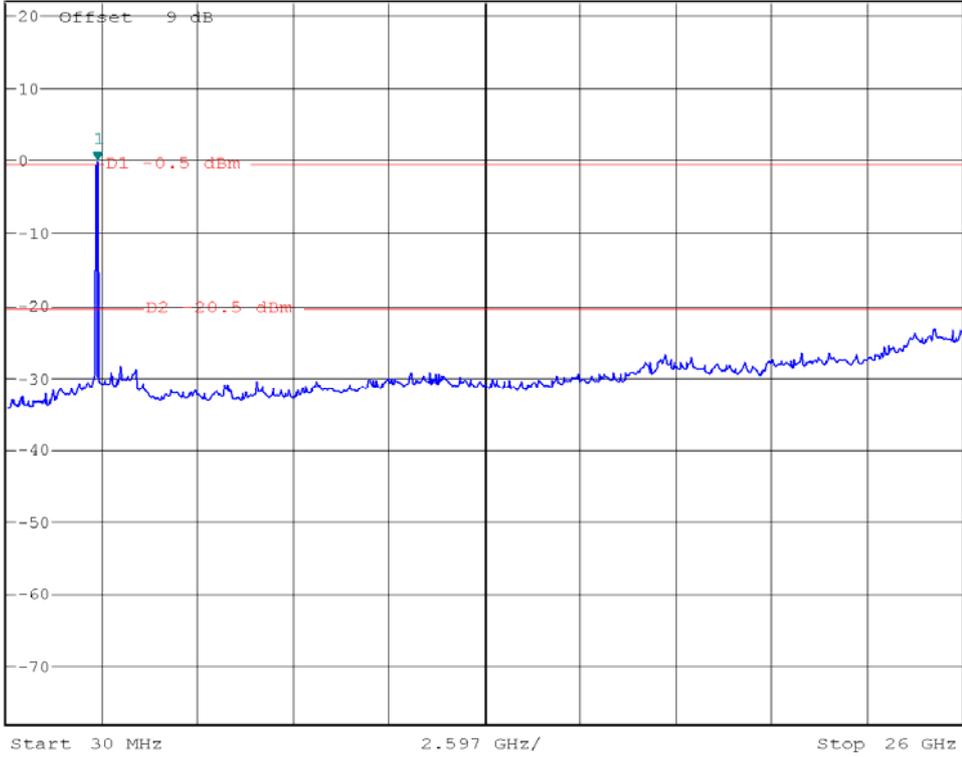
Stop 30 MHz

A

LVL



Ref 22 dBm Att 40 dB *RBW 1 MHz Marker 1 [T1]
VBW 3 MHz -0.24 dBm
*SWT 150 ms 2.485496795 GHz

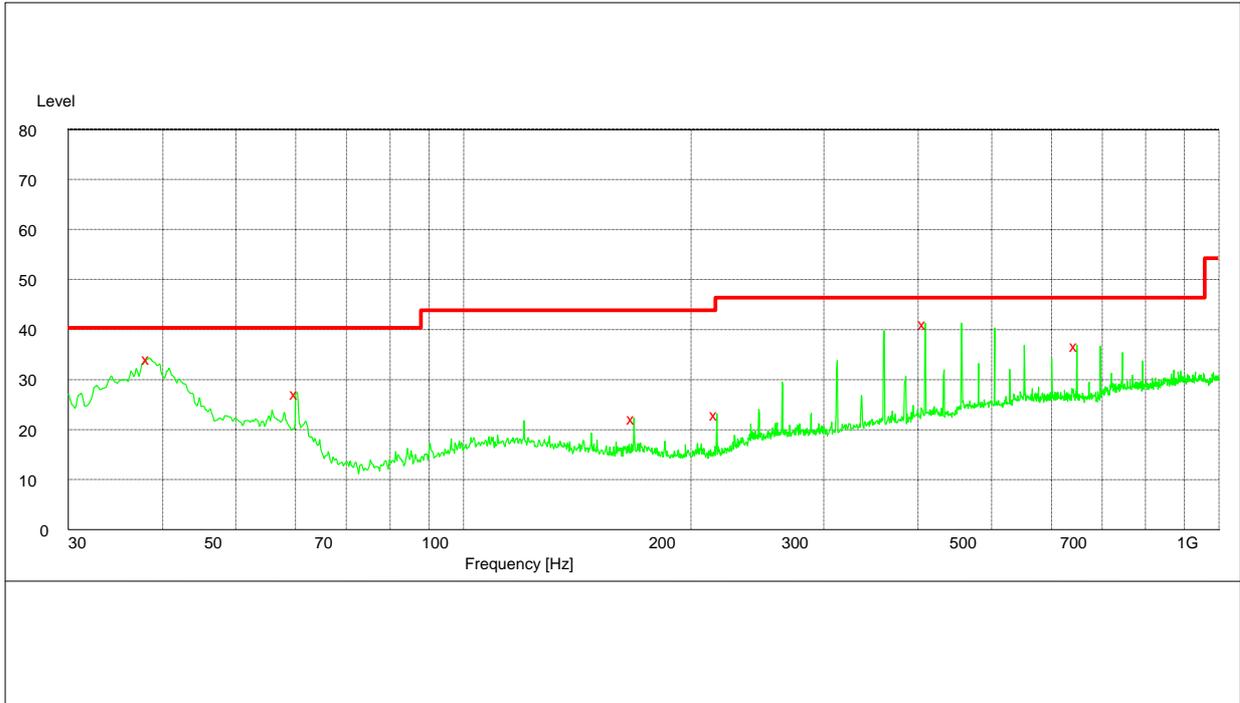


Appendix H

Radiated spurious emission & spurious in restricted band

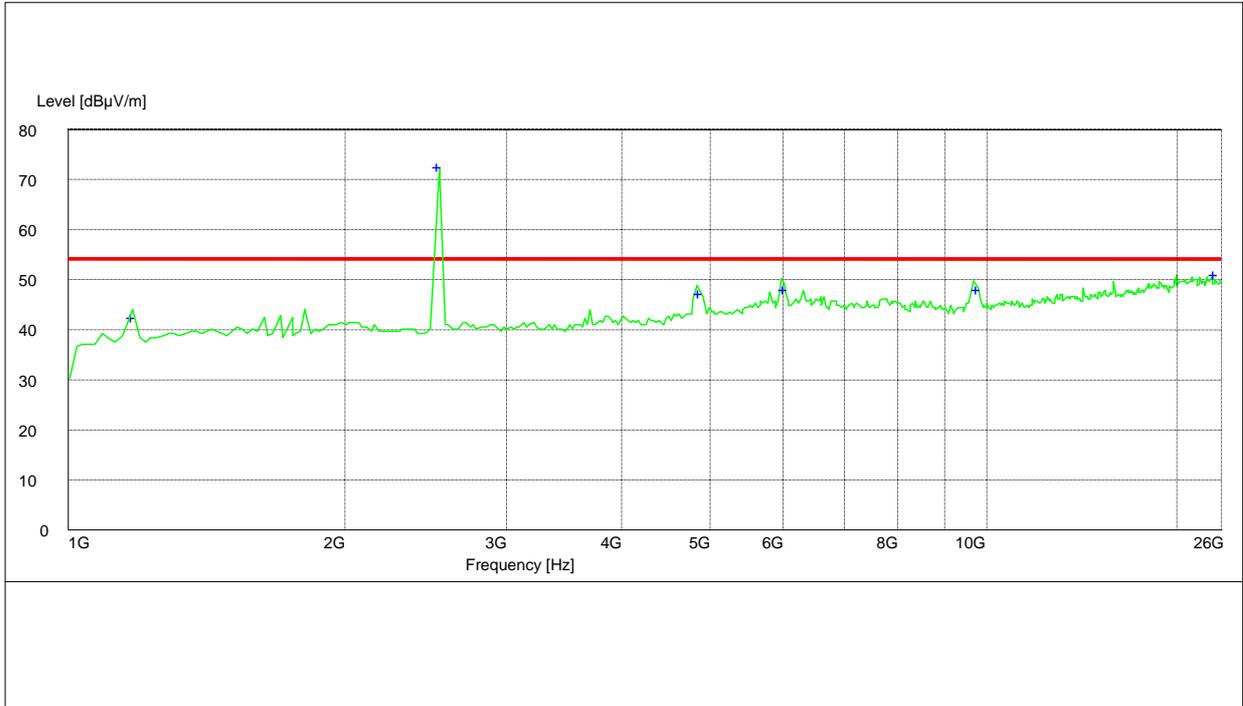
According to FCC Part 15.247 d & 15.205 & 15.209

Channel 0 30MHz to 1GHz



Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
38.400000	34.30	-8.7	40.0	5.7	100.0	0.00	VERTICAL
60.300000	27.30	-16.4	40.0	12.7	104.0	220.00	VERTICAL
168.300000	22.30	-11.8	43.5	21.2	198.0	0.00	HORIZONTAL
216.600000	23.10	-11.5	46.0	22.9	110.0	100.00	HORIZONTAL
408.888889	41.30	-3.9	46.0	4.7	100.0	92.00	HORIZONTAL
648.444444	36.90	-1.6	46.0	9.1	100.0	94.00	HORIZONTAL

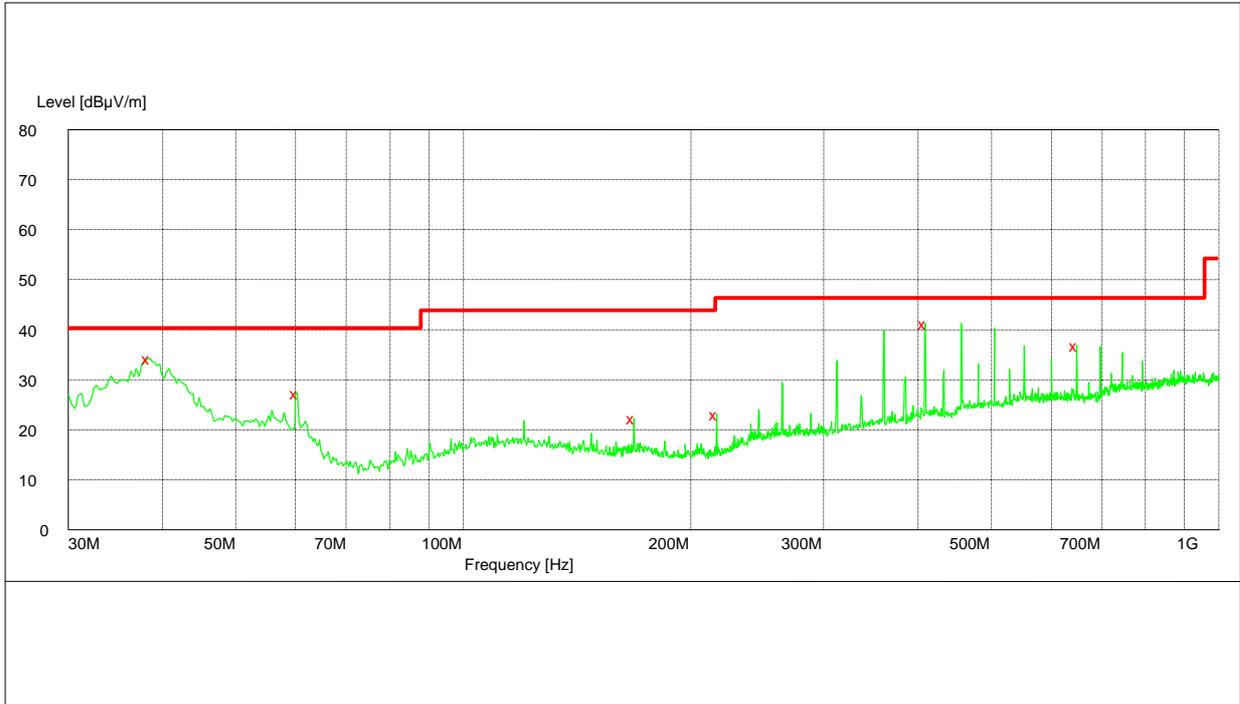
1GHz to 26GHz



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

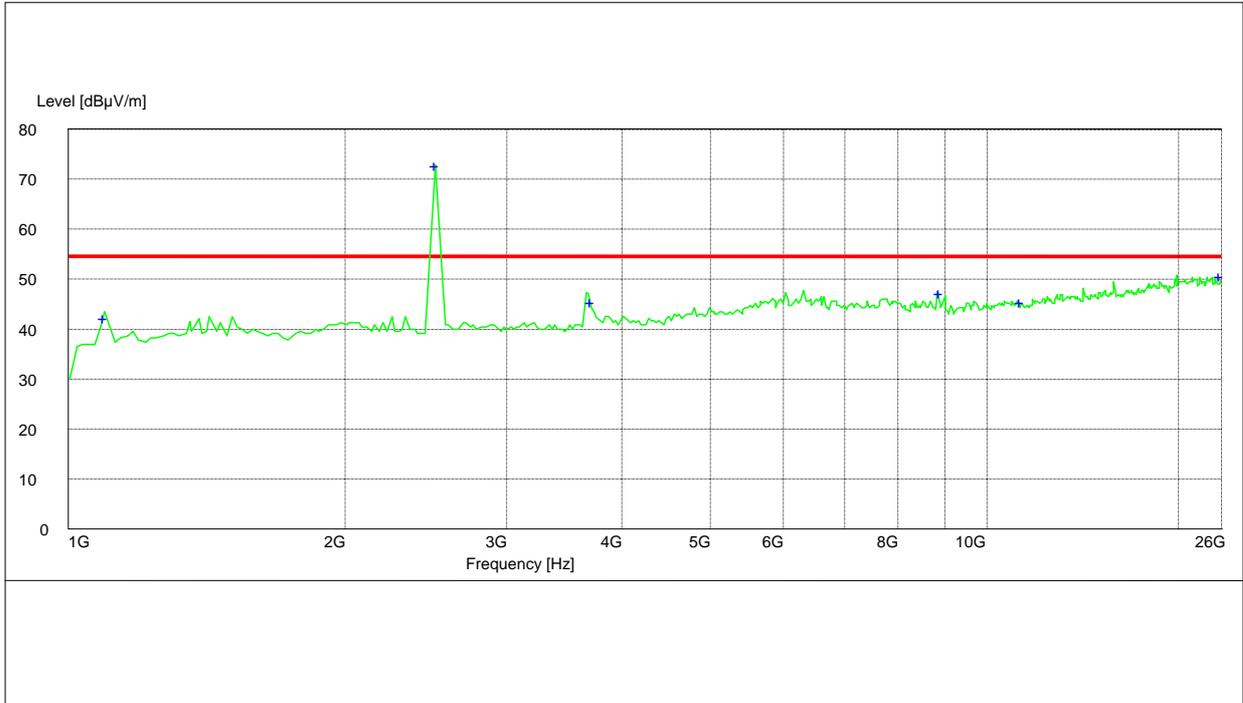
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
1175.500000	41.50	-6.5	54.0	12.5	100.0	300.00	HORIZONTAL
2402.000000	72.5	2.0	54.0	-18.5	100.0	50.00	VERTICAL
4805.000000	48.30	10.0	54.0	5.7	100.0	0.00	VERTICAL
6000.500000	47.10	12.7	54.0	6.9	200.0	325.00	HORIZONTAL
12921.000000	49.00	31.6	54.0	5.0	100.0	120.00	HORIZONTAL
25300.000000	50.80	51.0	54.0	3.2	300.0	300.00	VERTICAL

Channel 40 30MHz to 1GHz



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
38.400000	34.30	-8.7	40.0	5.7	100.0	0.00	VERTICAL
60.300000	27.30	-16.4	40.0	12.7	104.0	220.00	VERTICAL
168.300000	22.30	-11.8	43.5	21.2	198.0	0.00	HORIZONTAL
216.600000	23.10	-11.5	46.0	22.9	110.0	100.00	HORIZONTAL
408.888889	41.30	-3.9	46.0	4.7	100.0	92.00	HORIZONTAL
648.444444	36.90	-1.6	46.0	9.1	100.0	94.00	HORIZONTAL

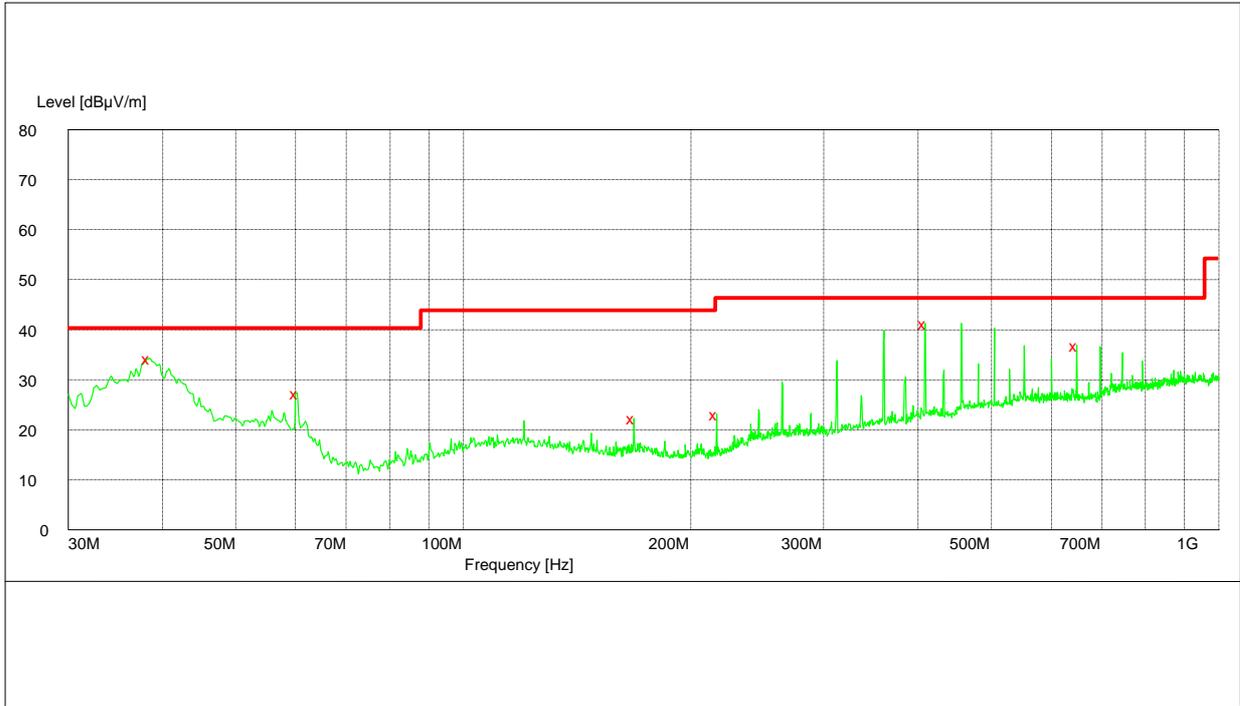
1GHz to 26GHz



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

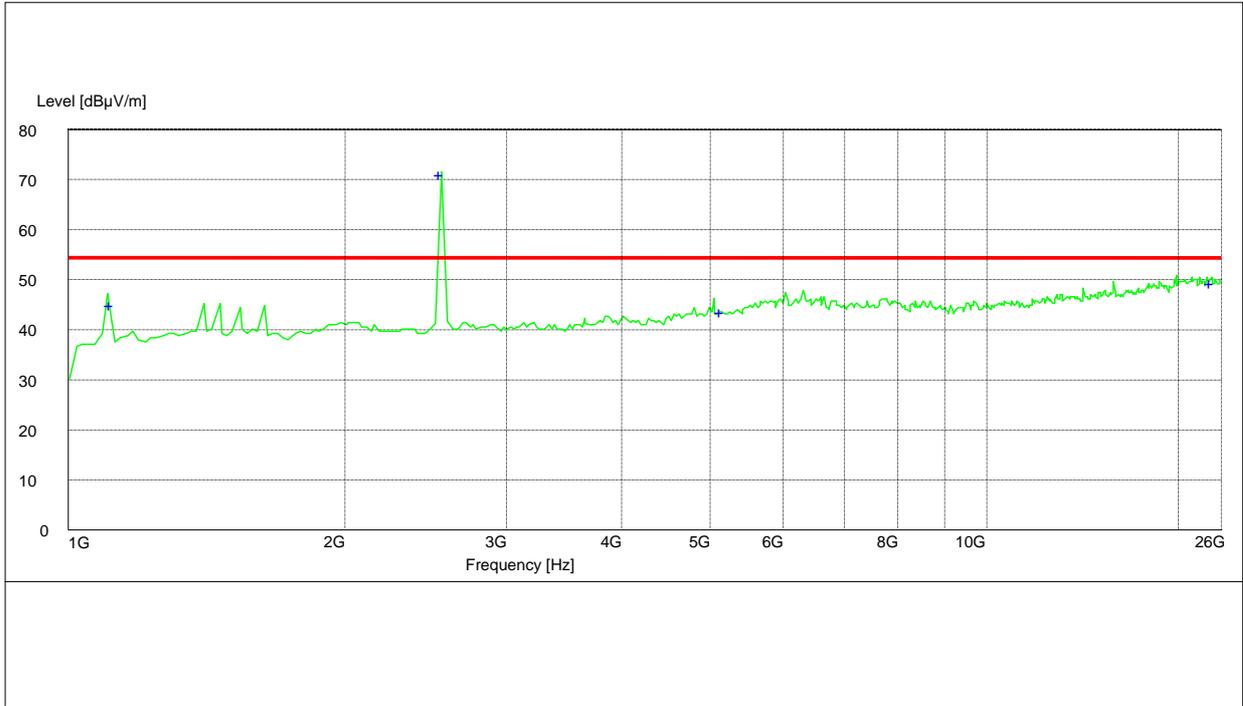
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
1100.000000	42.0	-6.5	54.0	12	200.0	200.00	HORIZONTAL
2442.000000	72.40	2.1	54.0	-18.4	100.0	270.00	VERTICAL
3750.000000	46.10	7.0	54.0	7.9	100.0	60.00	VERTICAL
5925.500000	47.90	12.7	54.0	6.1	110.0	5.00	VERTICAL
12924.500000	45.10	31.6	54.0	8.9	300.0	275.00	HORIZONTAL
25998.000000	50.90	52.1	54.0	3.1	200.0	110.00	VERTICAL

Channel 78 30MHz to 1GHz



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
38.400000	34.30	-8.7	40.0	5.7	100.0	0.00	VERTICAL
60.300000	27.30	-16.4	40.0	12.7	100.0	270.00	VERTICAL
168.300000	22.30	-11.8	43.5	21.2	200.0	0.00	HORIZONTAL
216.600000	23.10	-11.5	46.0	22.9	100.0	90.00	HORIZONTAL
408.888889	41.30	-3.9	46.0	4.7	100.0	90.00	HORIZONTAL
648.444444	36.90	-1.6	46.0	9.1	100.0	90.00	HORIZONTAL

1GHz to 26GHz



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

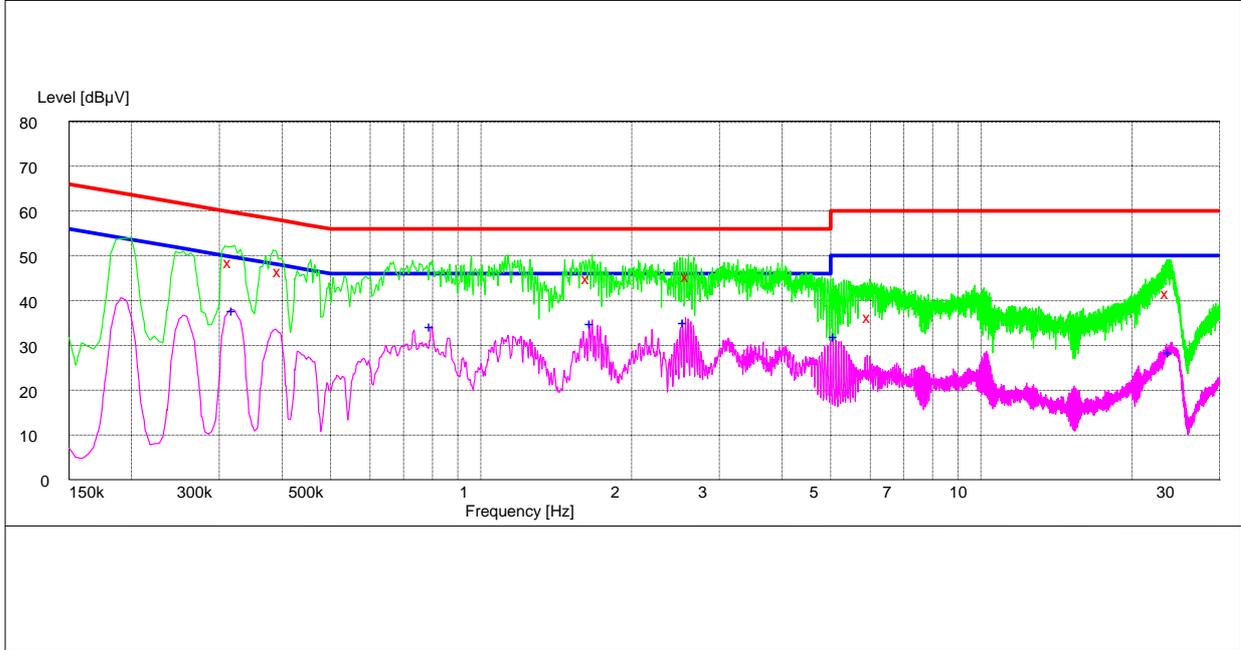
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg	Polarization
1100.000000	44.50	-6.5	54.0	9.5	130.0	125.00	VERTICAL
2480.000000	70.90	2.3	54.0	-16.9	90.0	250.00	VERTICAL
5087.500000	43.60	12.1	54.0	10.4	180.0	240.00	VERTICAL
22248.500000	49.00	48.8	54.0	5.0	100.0	200.00	VERTICAL

Appendix I

Conducted Emission at Power Port

According to FCC Part 15.207

Channel 40



MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.316500	48.80	10.2	60	11.0	QP	L3	FLO
0.397500	46.80	10.1	58	11.1	QP	L3	FLO
1.644000	45.30	9.9	56	10.7	QP	L3	FLO
2.598000	45.80	10.1	56	10.2	QP	L3	FLO
6.013500	36.70	10.3	60	23.3	QP	L3	FLO
23.658000	42.00	15.3	60	18.0	QP	N	FLO

MEASUREMENT RESULT:

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.321000	38.10	10.2	50	11.6	AV	L3	FLO
0.798000	34.60	9.9	46	11.4	AV	L3	FLO
1.666500	35.30	9.9	46	10.7	AV	L3	FLO
2.566500	35.40	10.1	46	10.6	AV	L3	FLO
5.131500	32.30	10.1	50	17.7	AV	L3	FLO
23.941500	28.80	15.2	50	21.2	AV	N	FLO

Appendix J

Photos of Test Setup

1 Radiated Spurious Emissions



Radiated Spurious Emission (below 2GHz)



Radiated Spurious Emission (2GHz to18GHz)



Radiated Spurious Emission (above 18GHz)

2 Conducted Emissions



Conducted Emissions for AC Ports