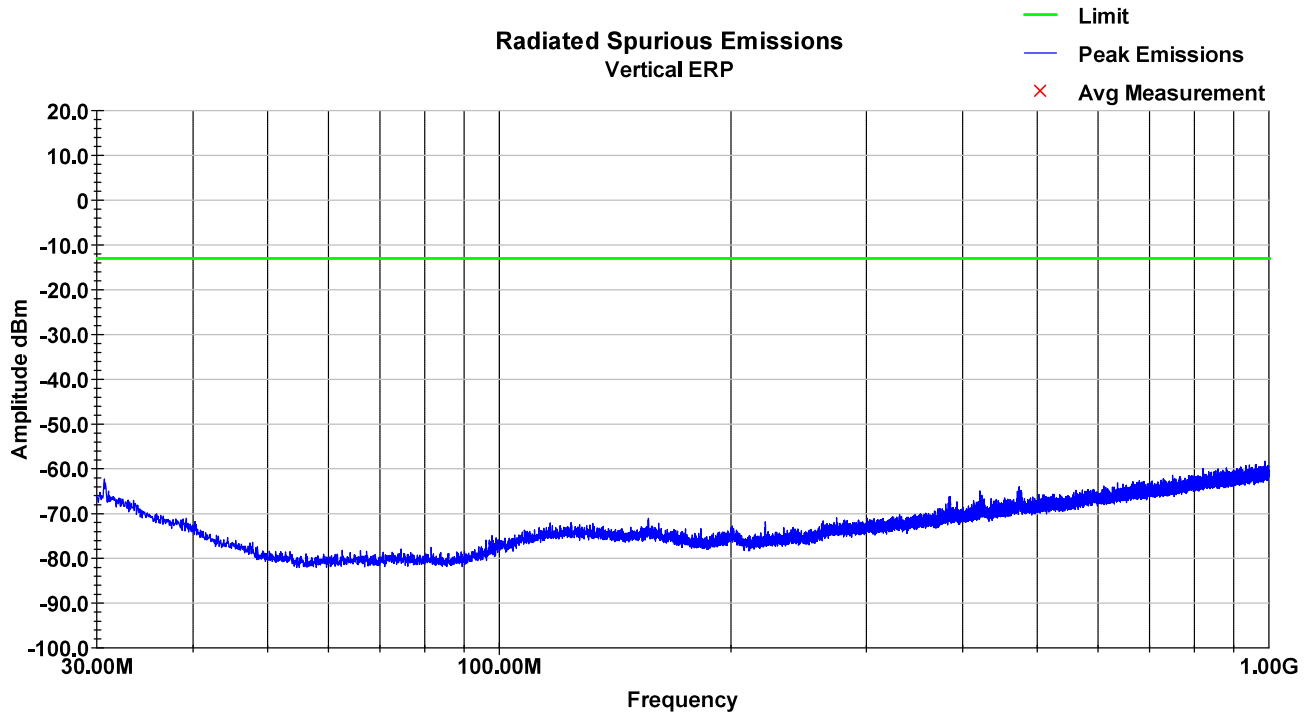
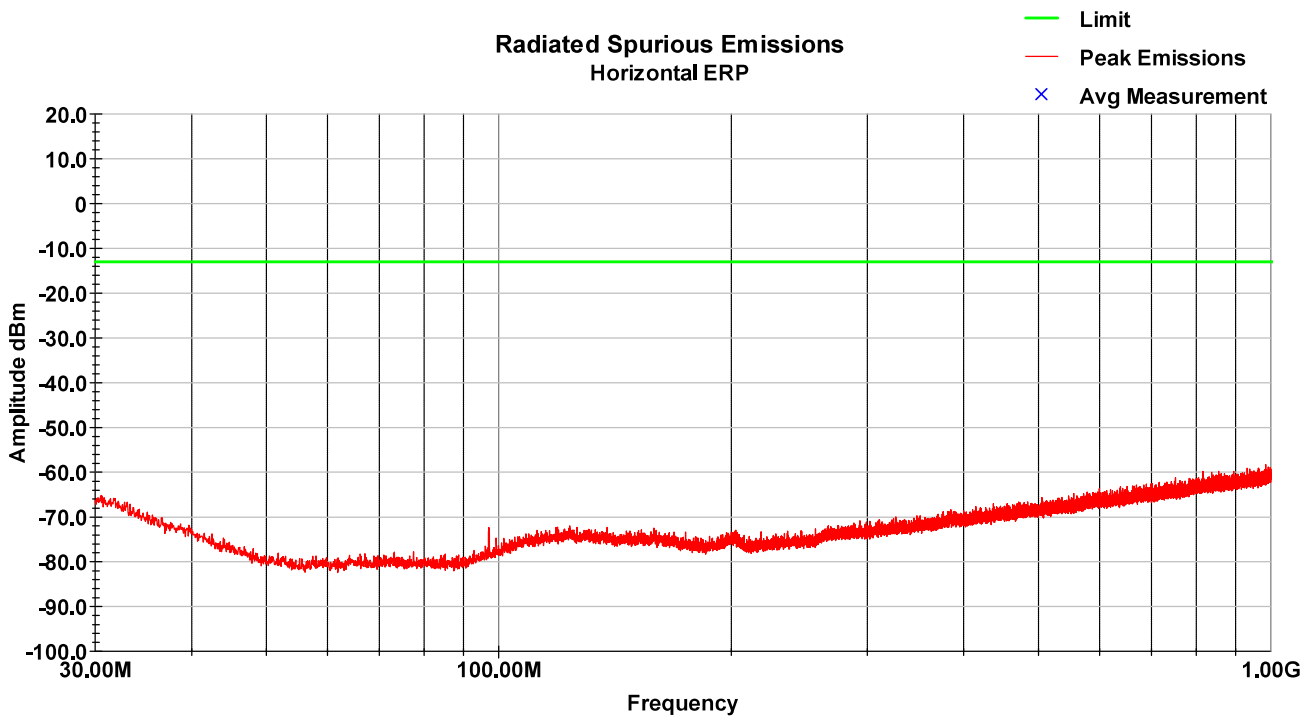


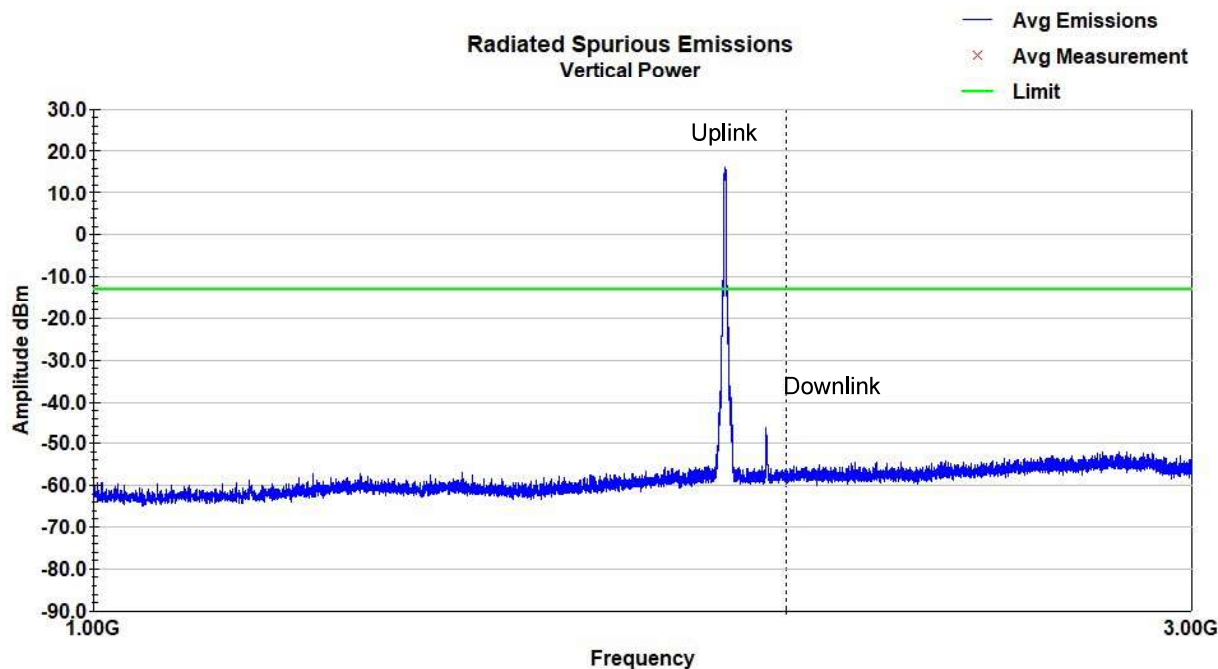
WCDMA Band II – MCH – 30-1000MHz – Vertical



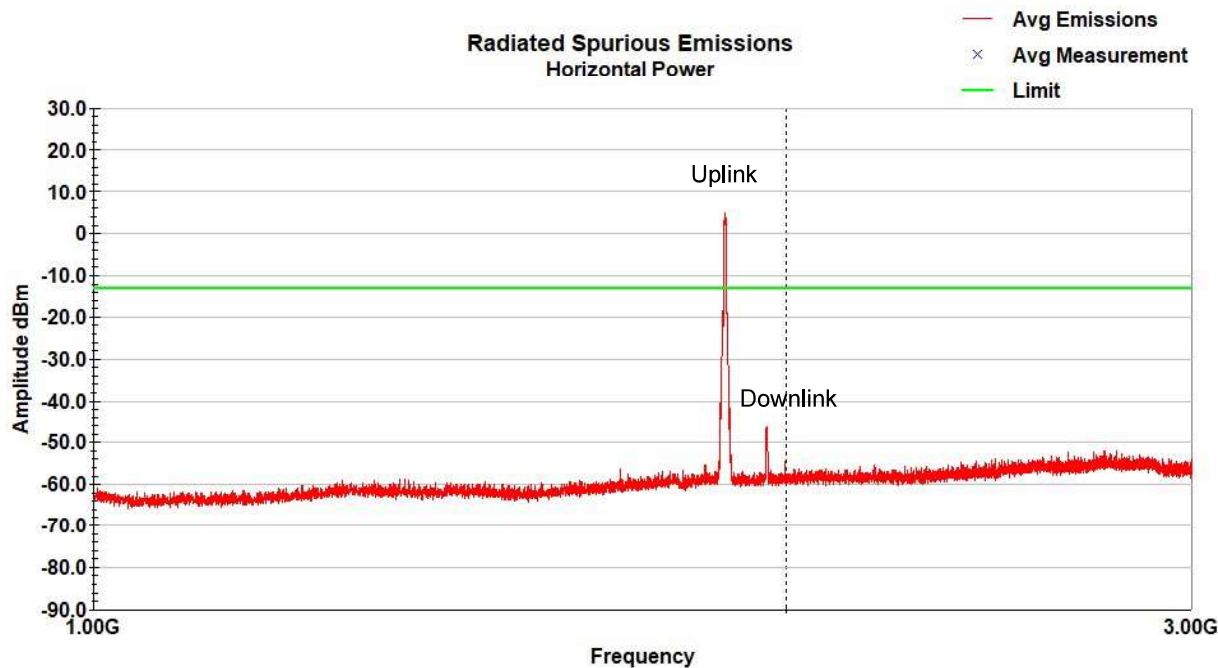
WCDMA Band II – MCH – 30-1000MHz – Horizontal



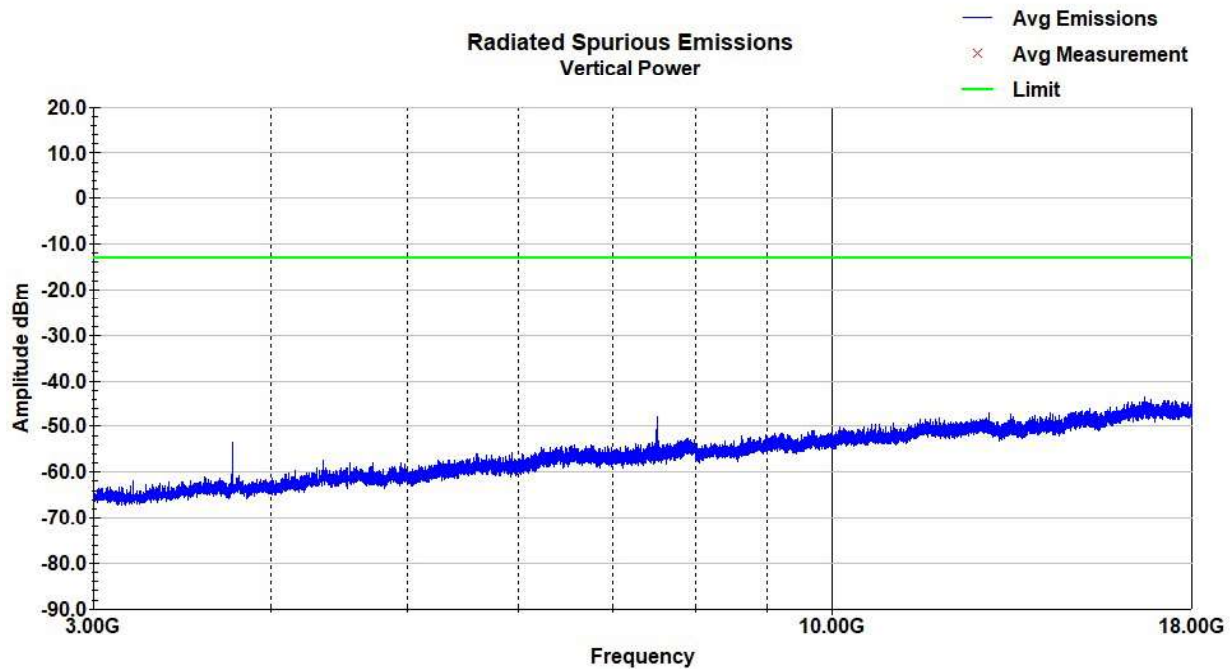
WCDMA Band II – MCH – 1-3GHz – Vertical



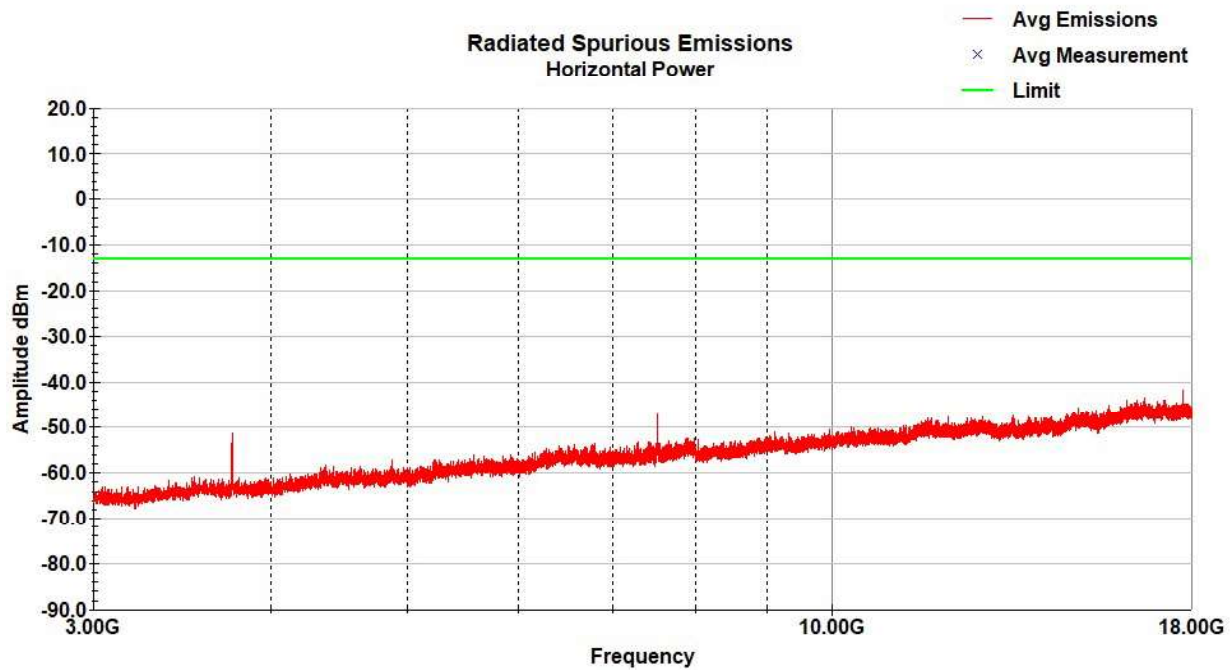
WCDMA Band II – MCH – 1-3GHz – Horizontal



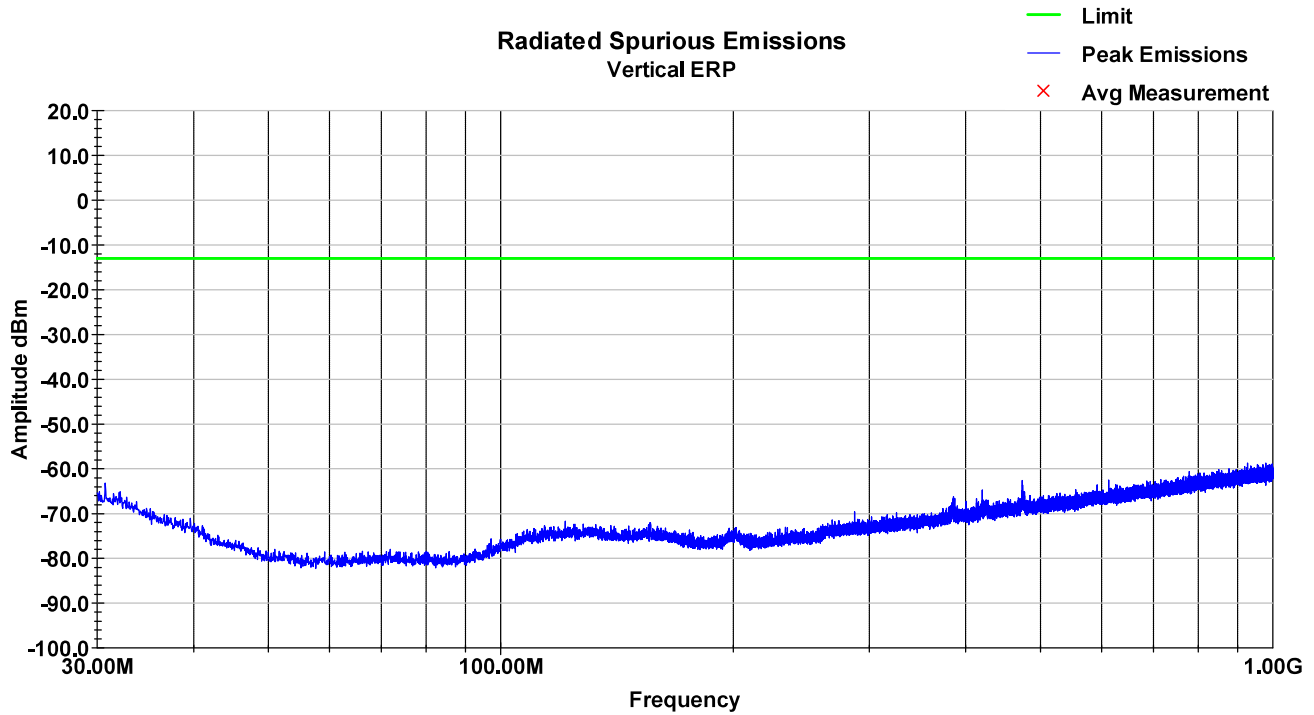
WCDMA Band II – MCH – 3-18GHz – Vertical



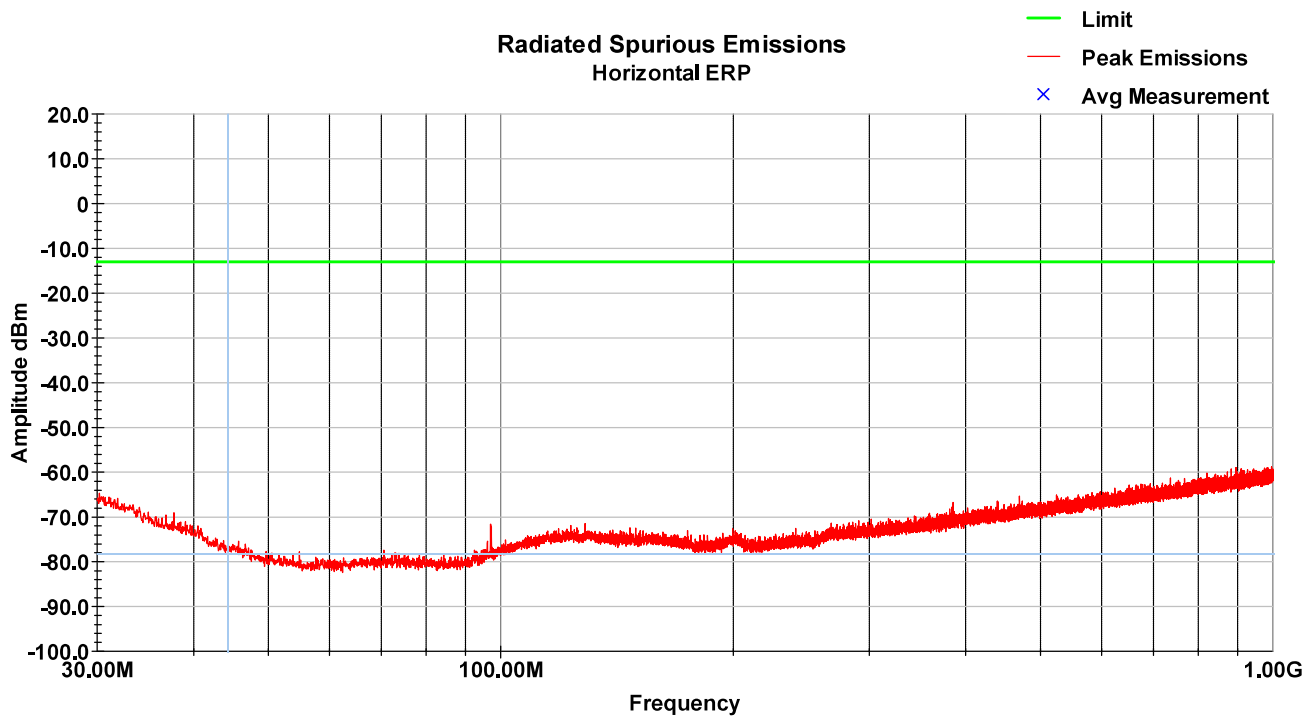
WCDMA Band II – MCH – 3-18GHz – Horizontal



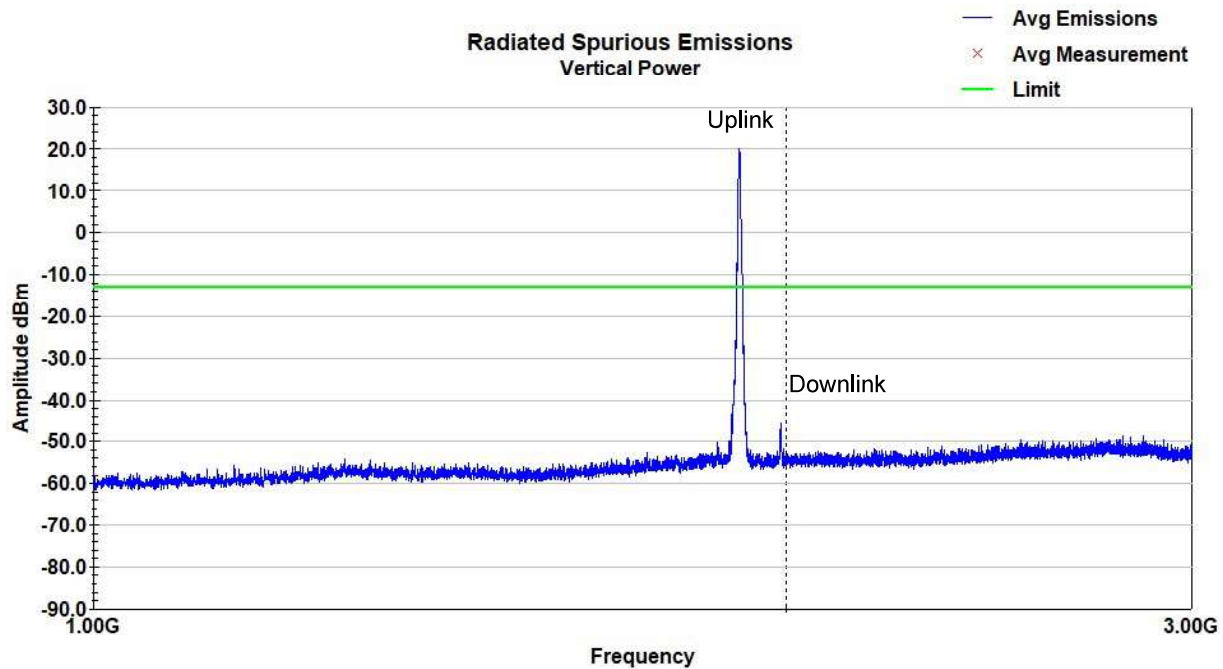
WCDMA Band II – HCH – 30-1000MHz – Vertical



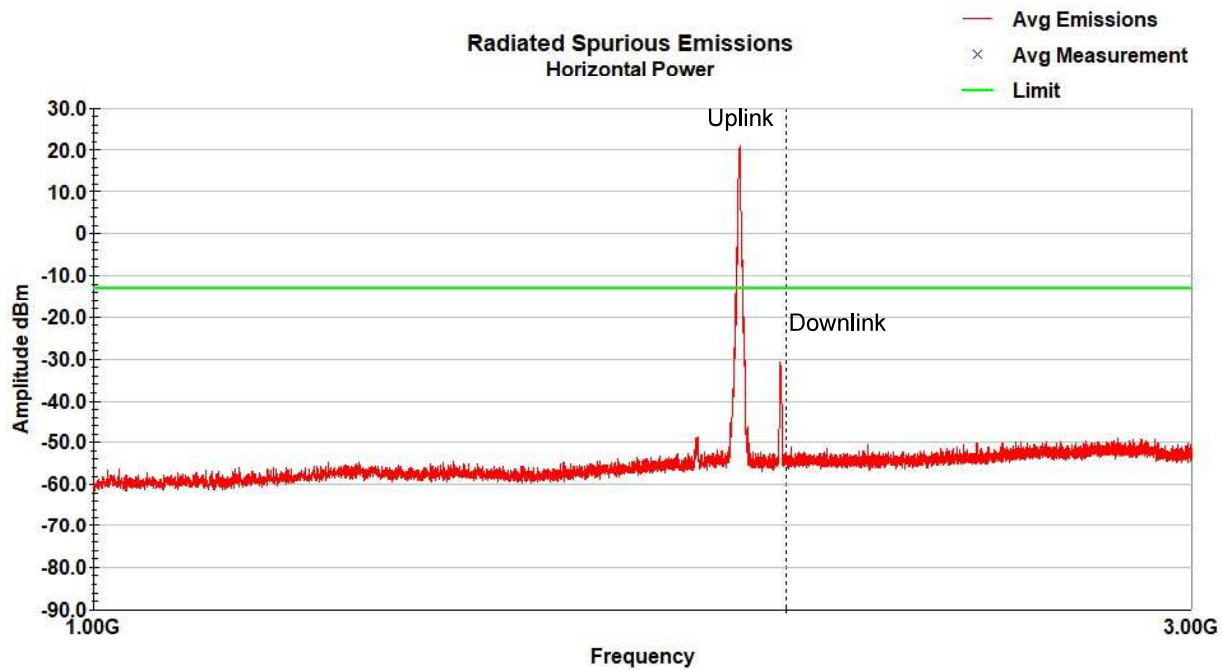
WCDMA Band II – HCH – 30-1000MHz – Horizontal



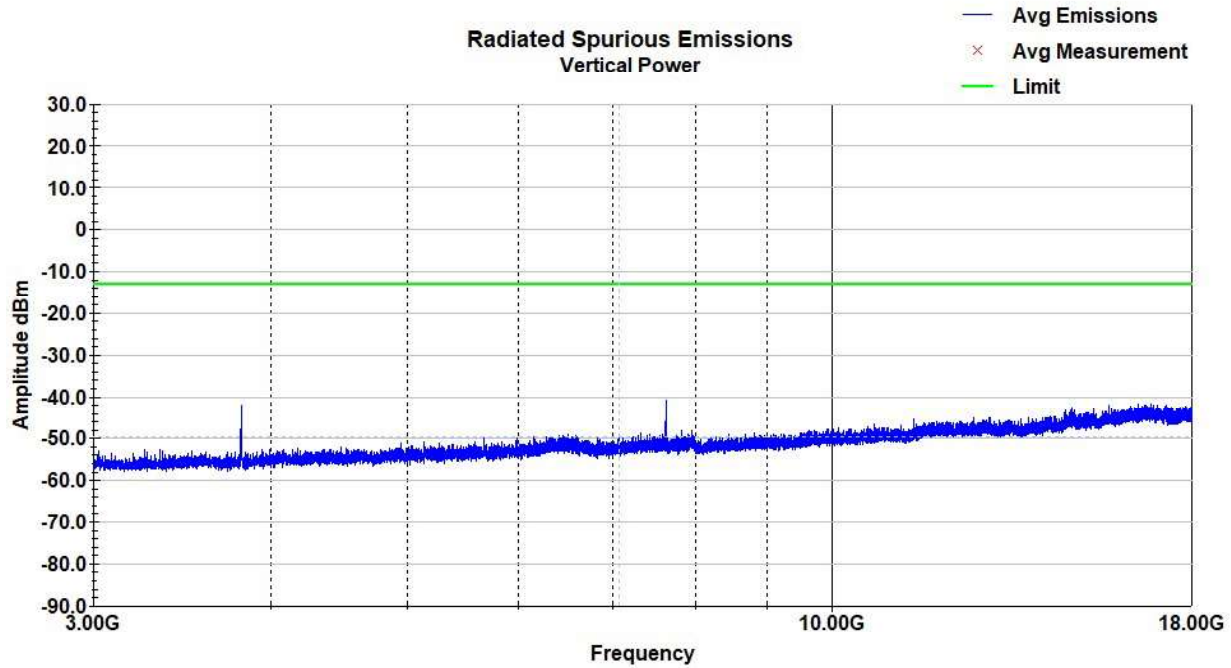
WCDMA Band II – HCH – 1-3GHz – Vertical



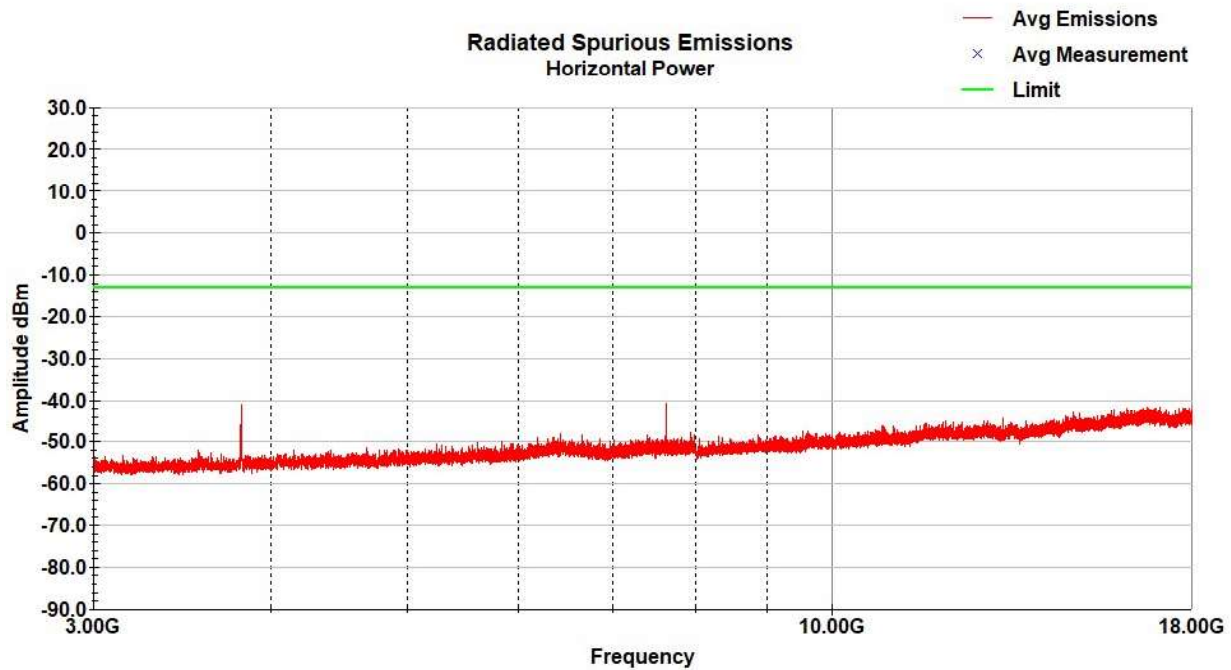
WCDMA Band II – HCH – 1-3GHz – Horizontal



WCDMA Band II – HCH – 3-18GHz – Vertical

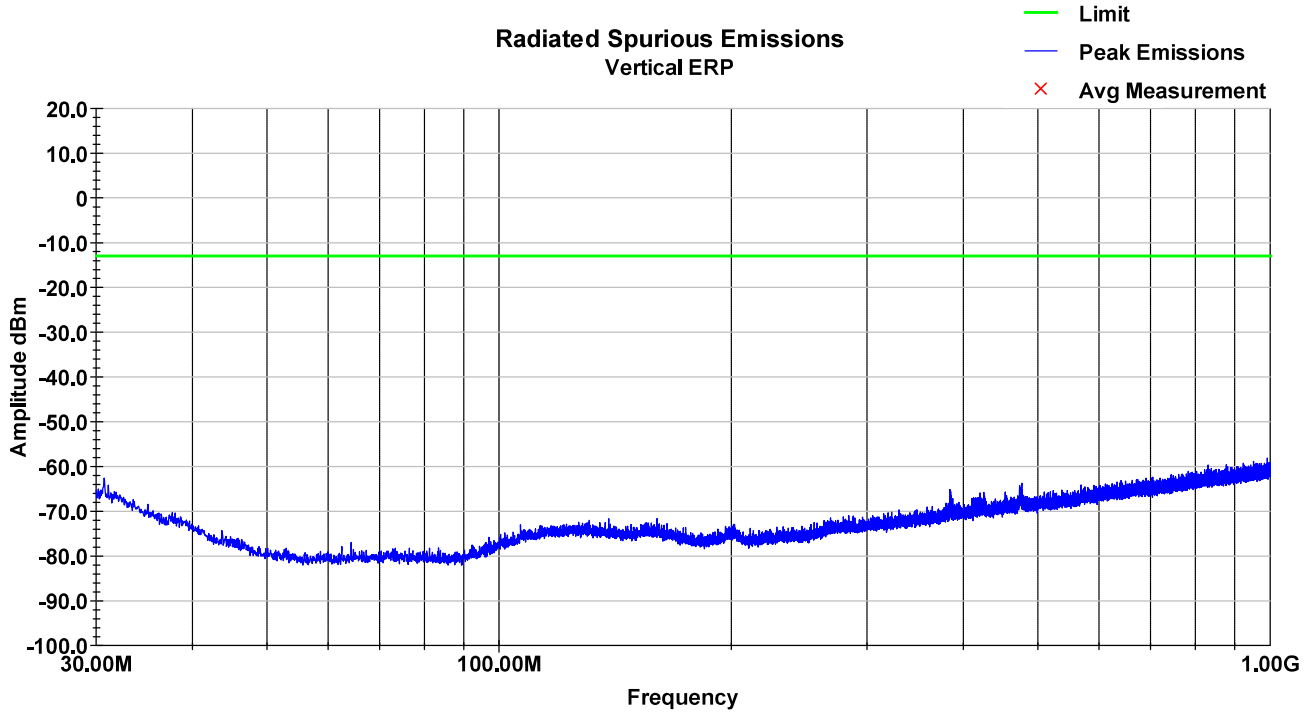


WCDMA Band II – HCH – 3-18GHz – Horizontal

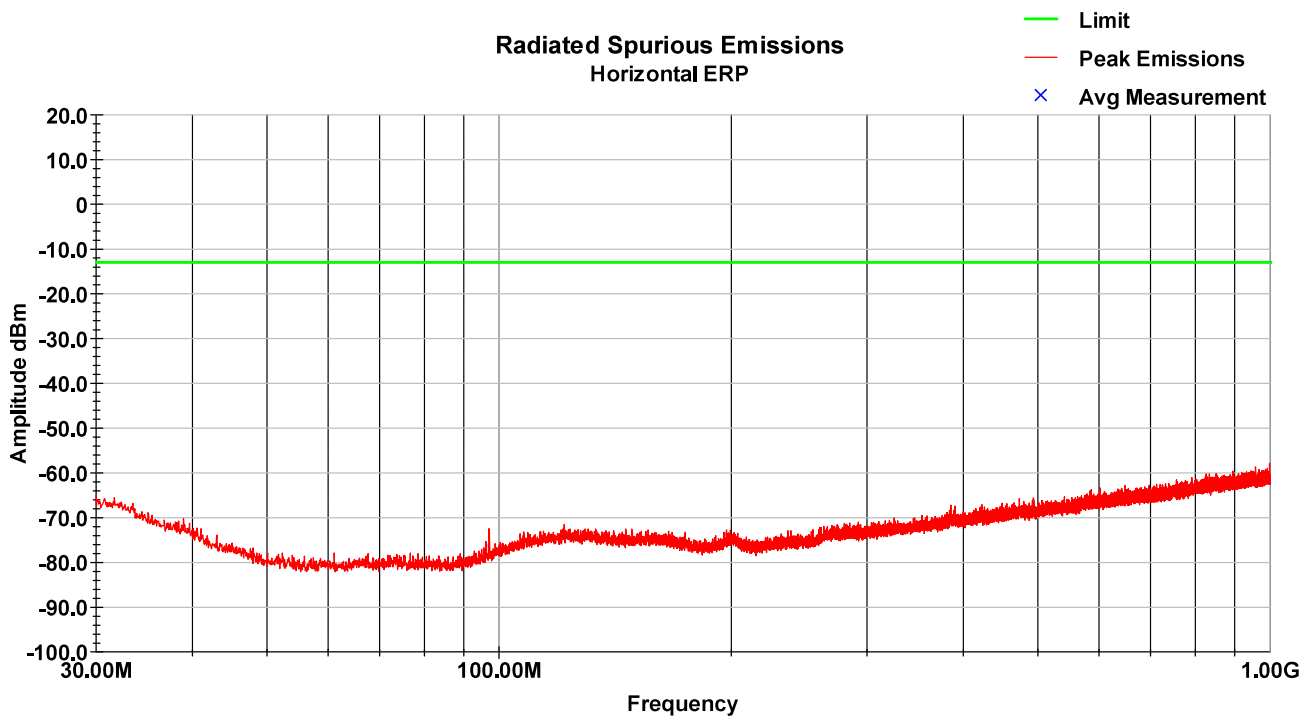


7.6 Test Data – WCDMA Band IV

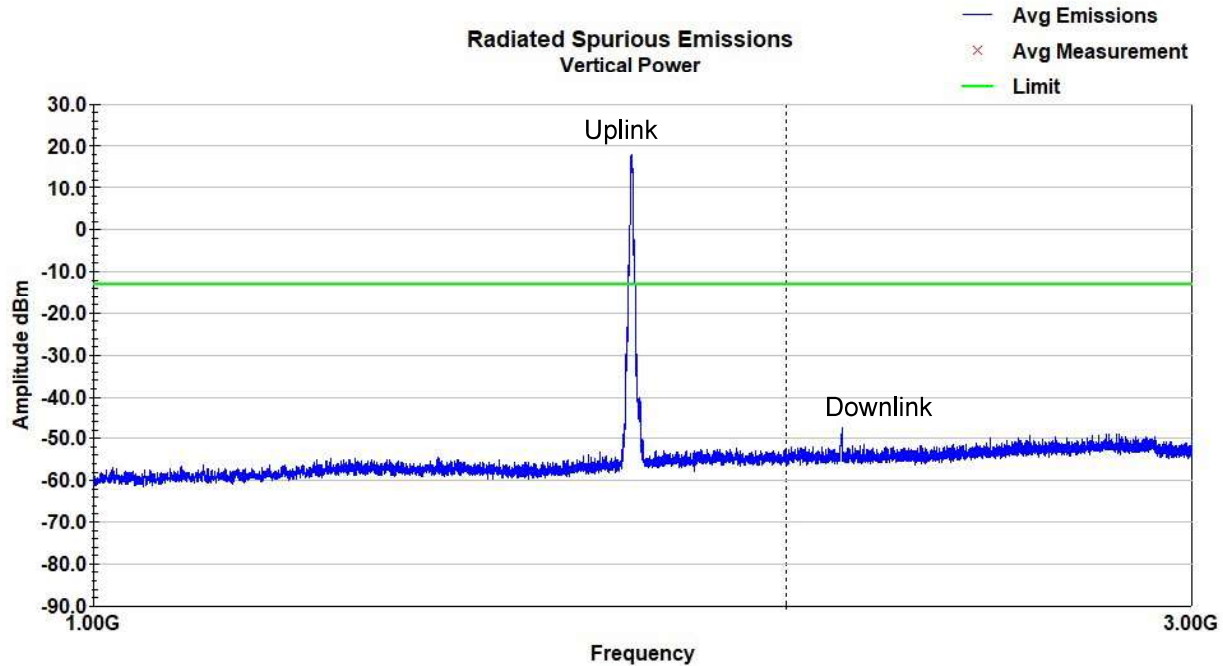
WCDMA Band IV – LCH – 30-1000MHz – Vertical



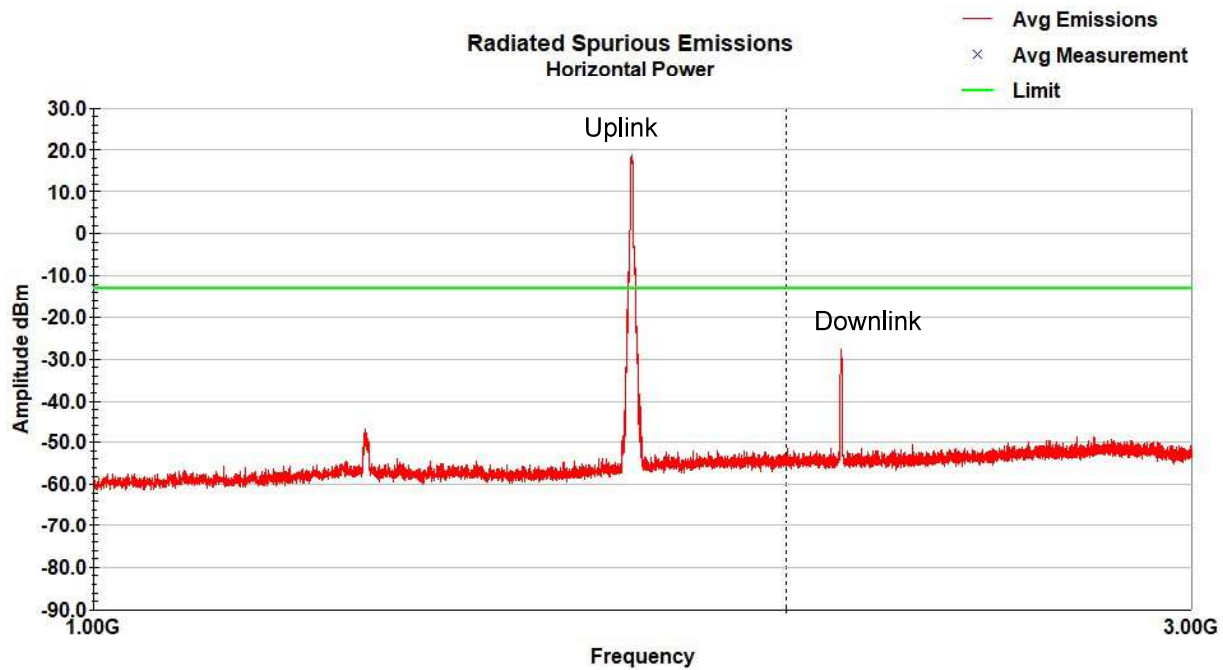
WCDMA Band IV – LCH – 30-1000MHz – Horizontal



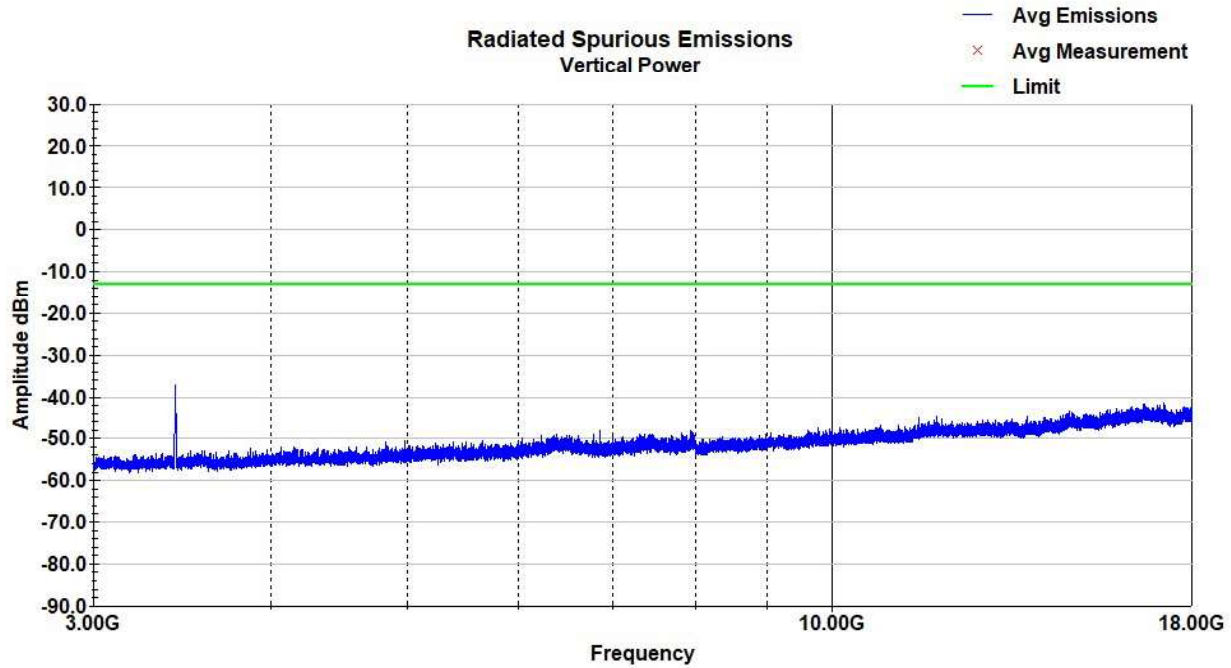
WCDMA Band IV – LCH – 1-3GHz – Vertical



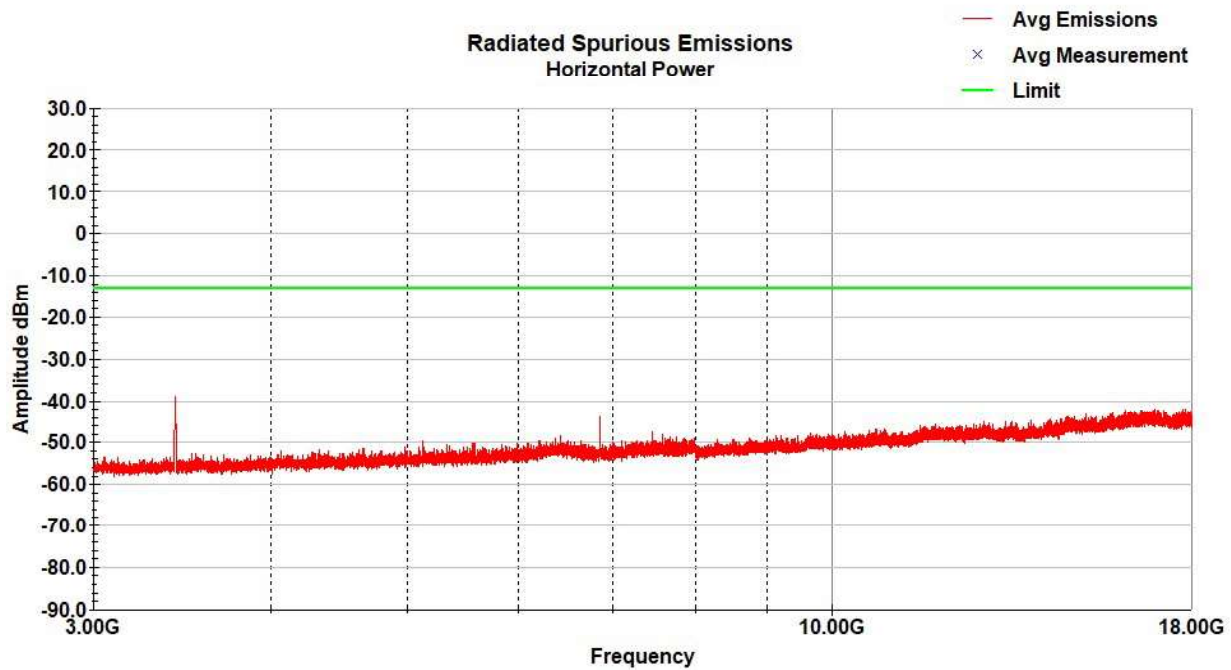
WCDMA Band IV – LCH – 1-3GHz – Horizontal



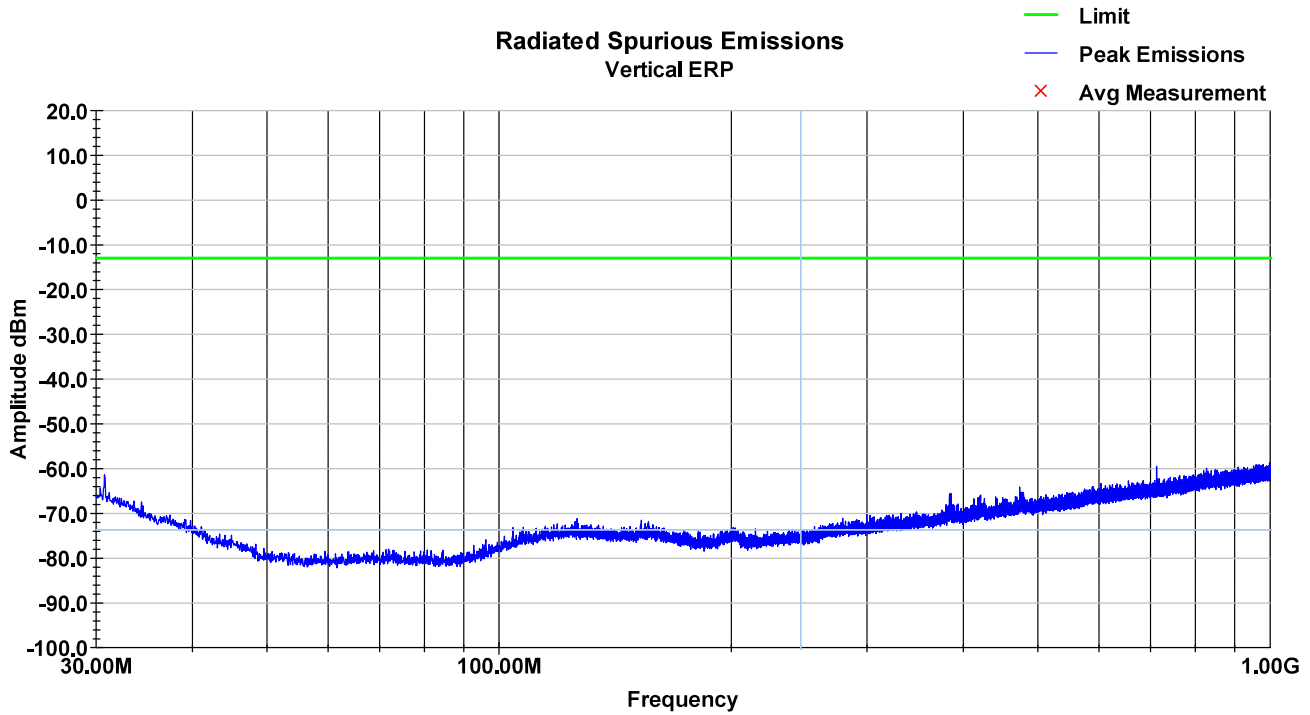
WCDMA Band IV – LCH – 3-18GHz – Vertical



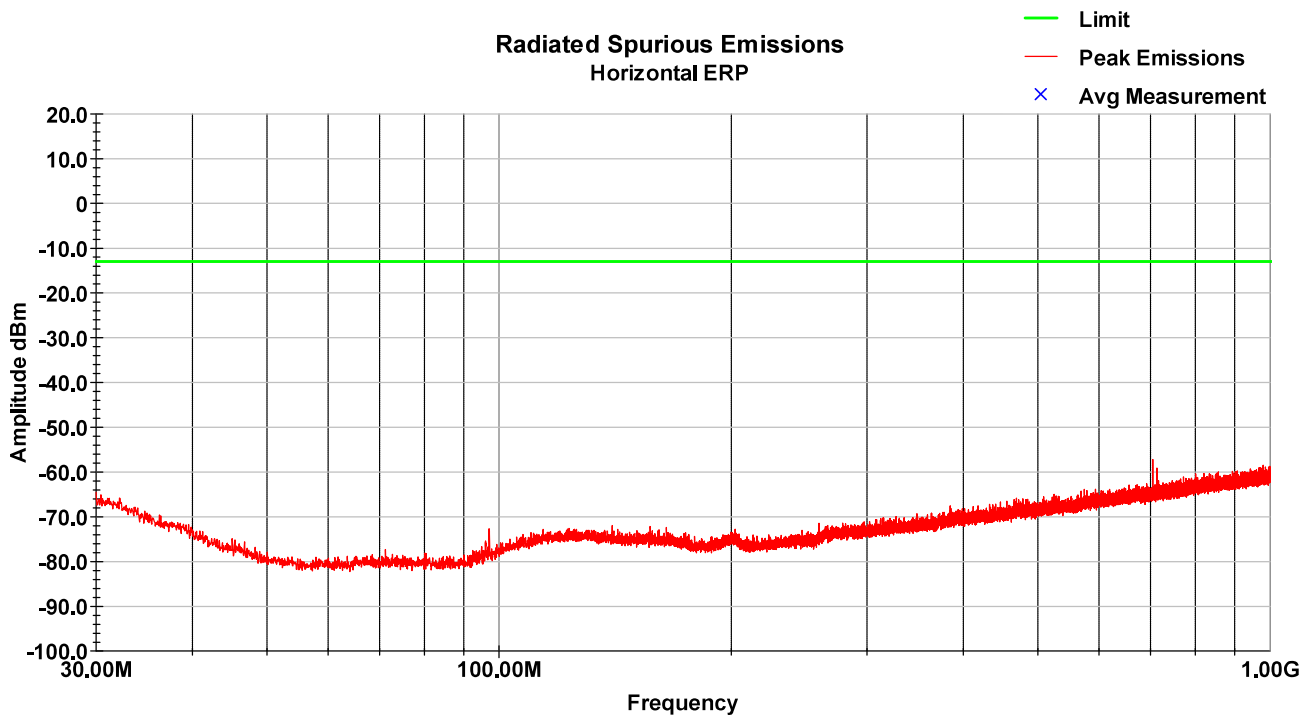
WCDMA Band IV – LCH – 3-18GHz – Horizontal



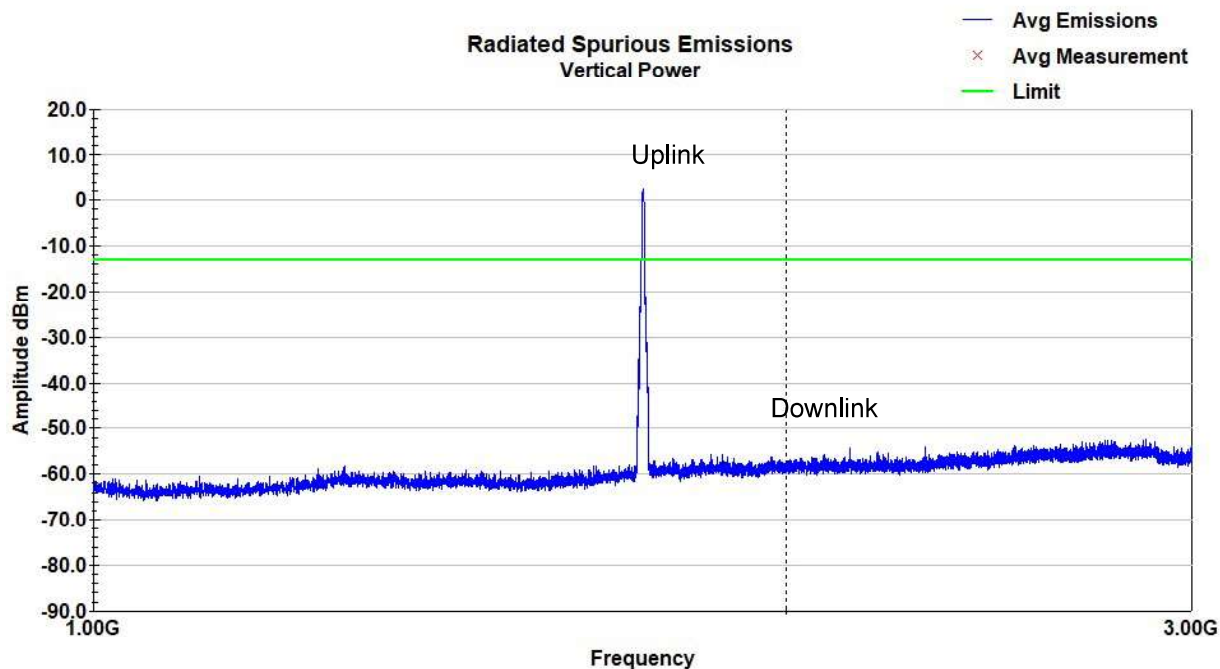
WCDMA Band IV – MCH – 30-1000MHz – Vertical



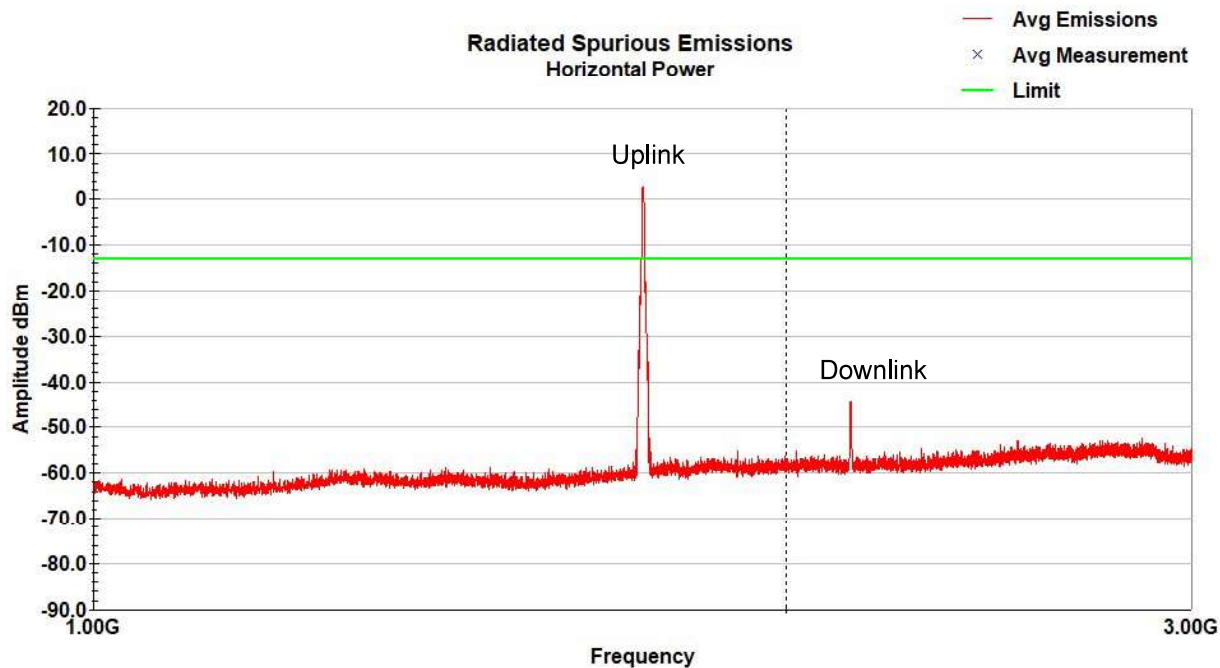
WCDMA Band IV – MCH – 30-1000MHz – Horizontal



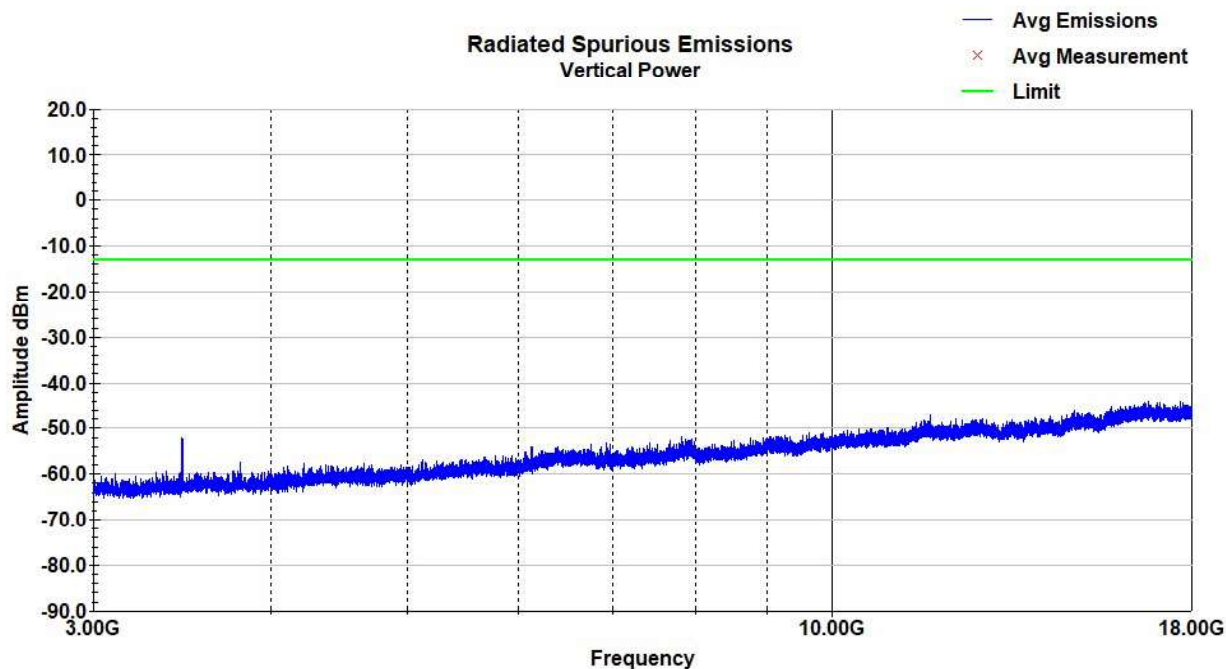
WCDMA Band IV – MCH – 1-3GHz – Vertical



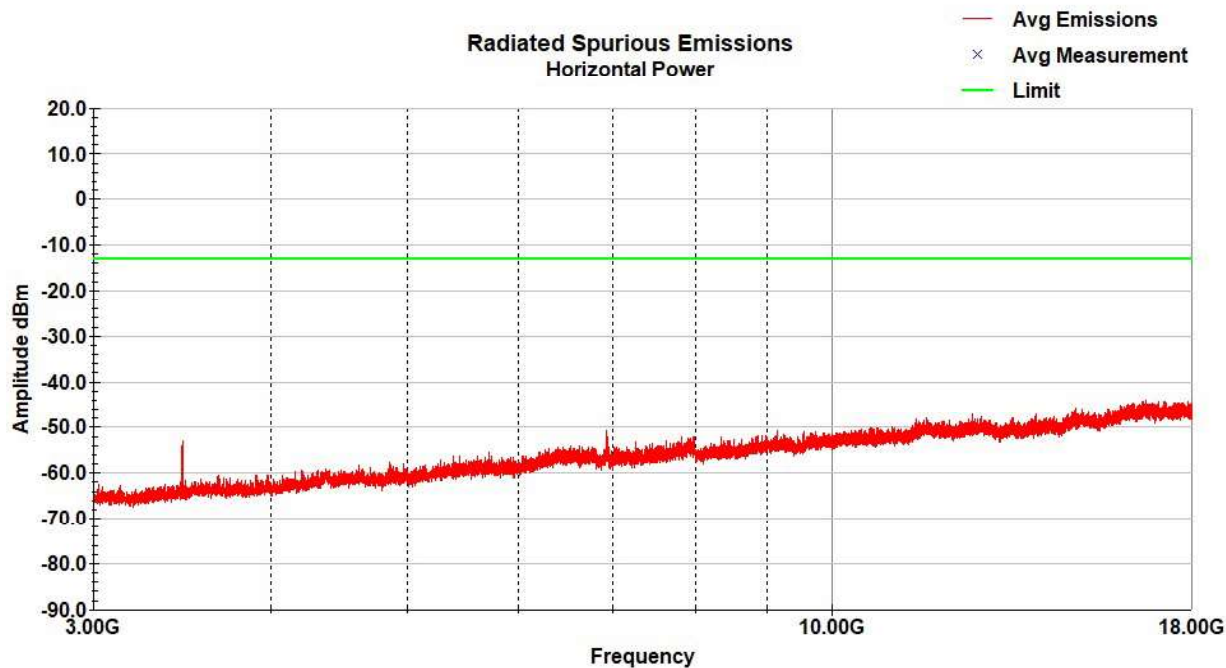
WCDMA Band IV – MCH – 1-3GHz – Horizontal



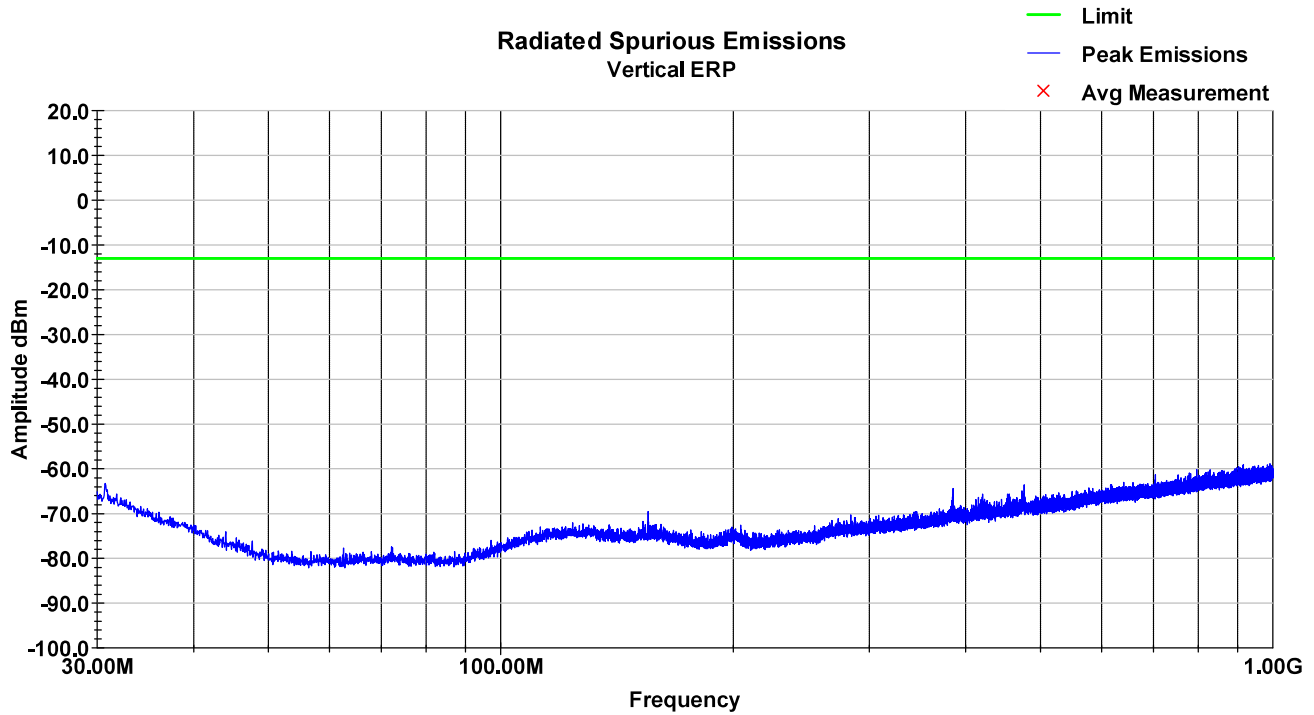
WCDMA Band IV – MCH – 3-18GHz – Vertical



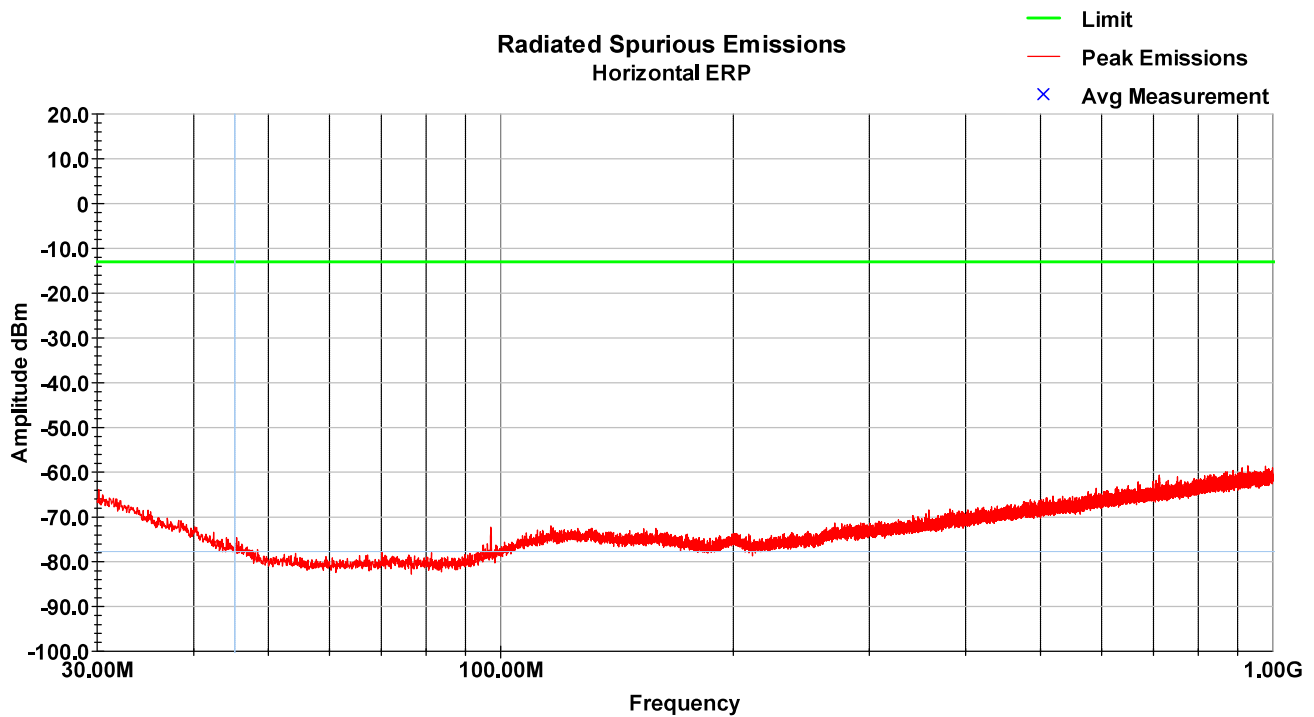
WCDMA Band IV – MCH – 3-18GHz – Horizontal



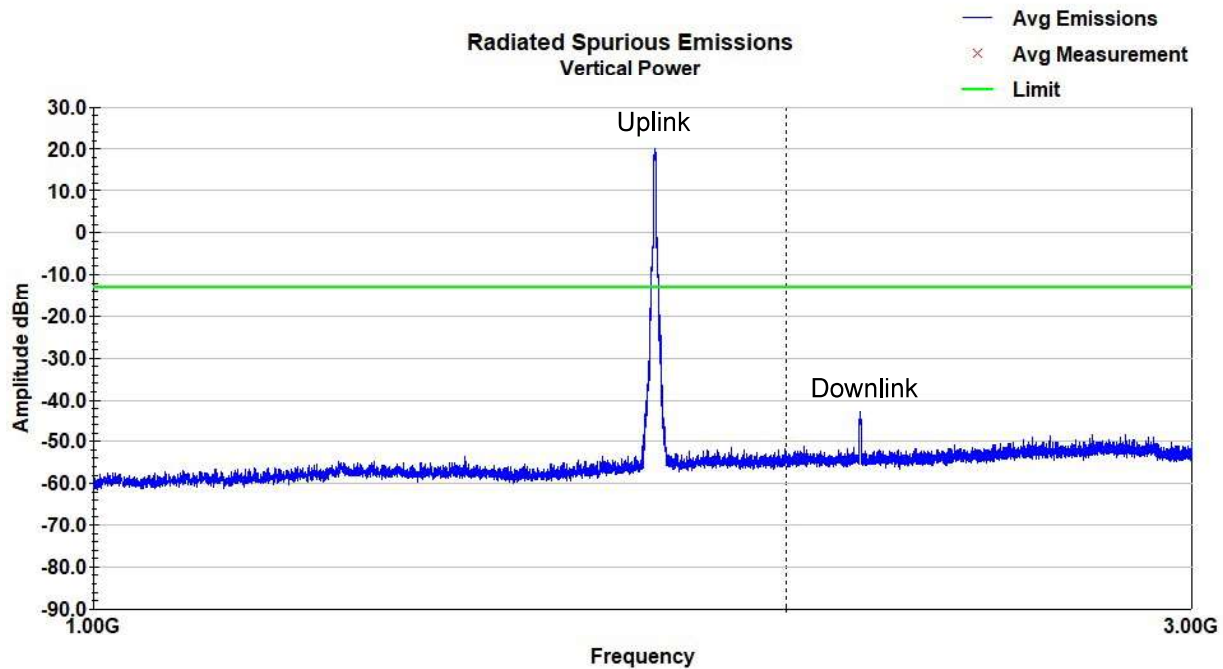
WCDMA Band IV – HCH – 30-1000MHz – Vertical



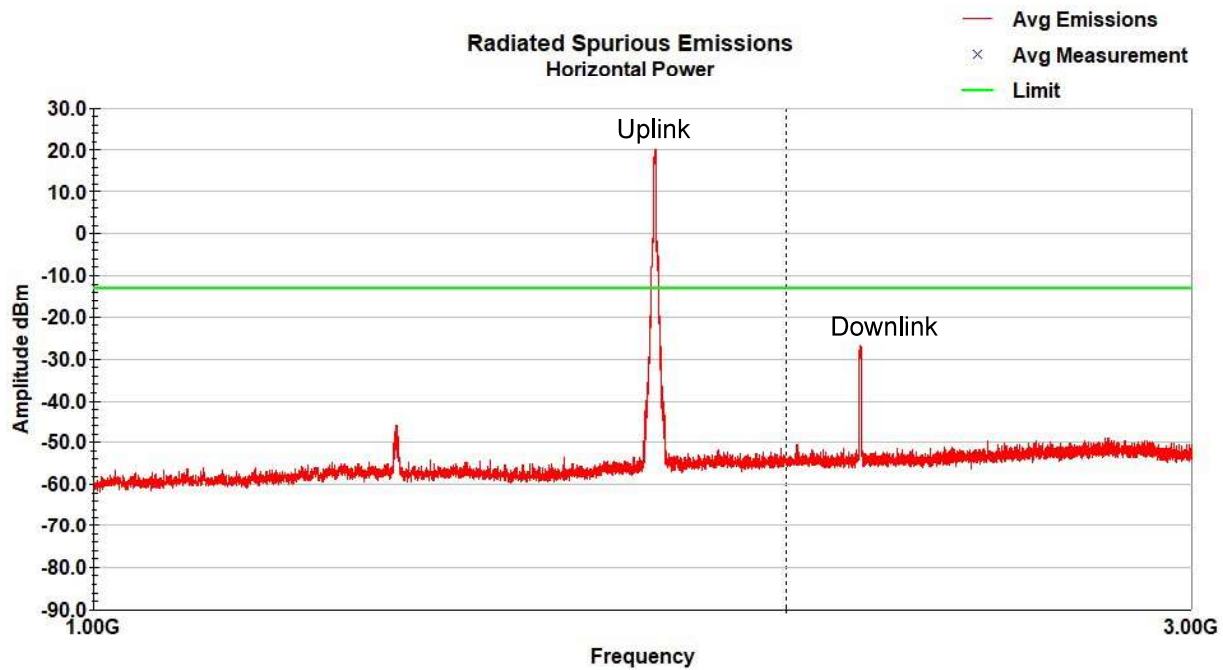
WCDMA Band IV – HCH – 30-1000MHz – Horizontal



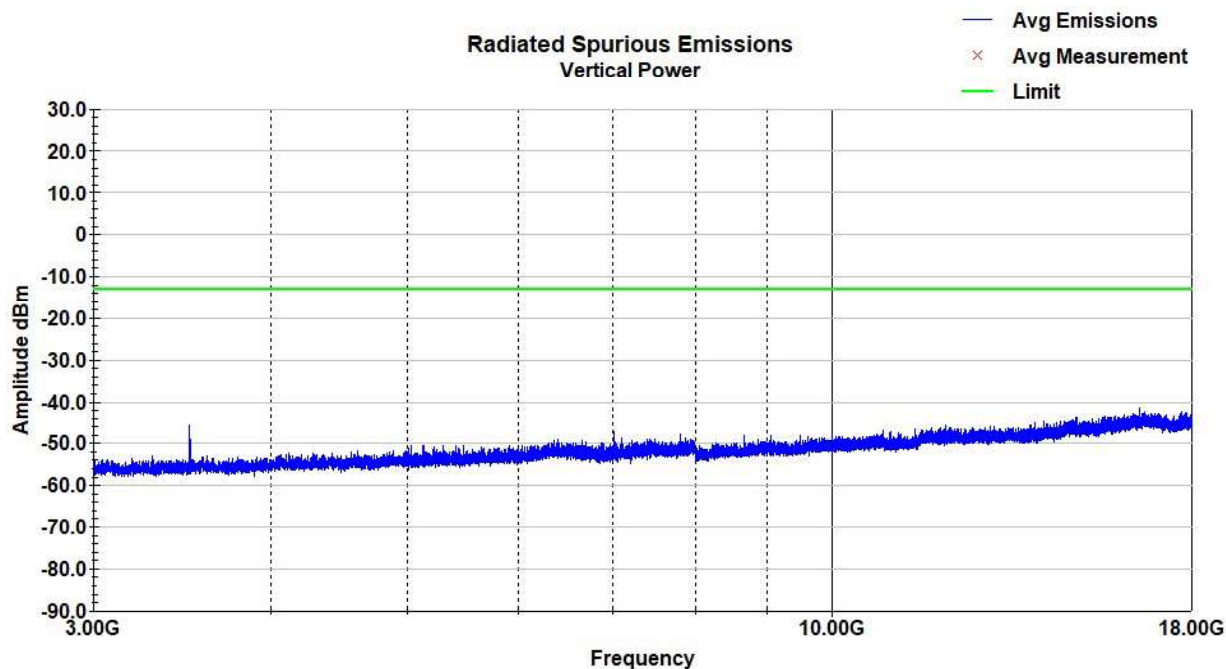
WCDMA Band IV – HCH – 1-3GHz – Vertical



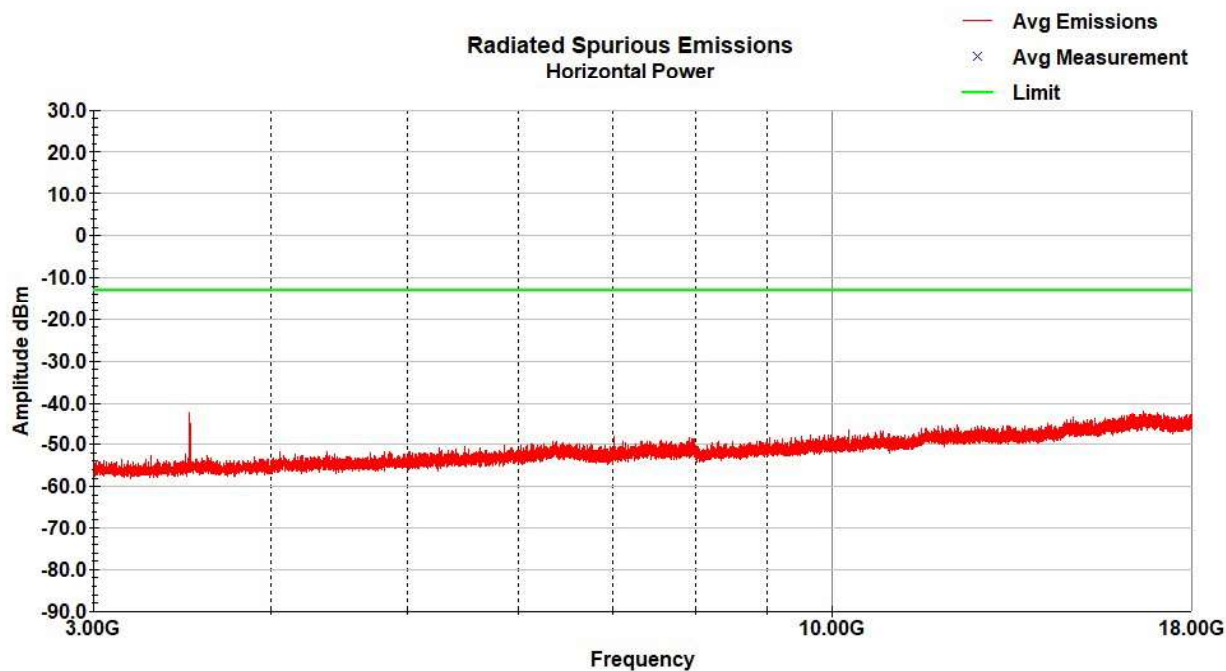
WCDMA Band IV – HCH – 1-3GHz – Horizontal



WCDMA Band IV – HCH – 3-18GHz – Vertical

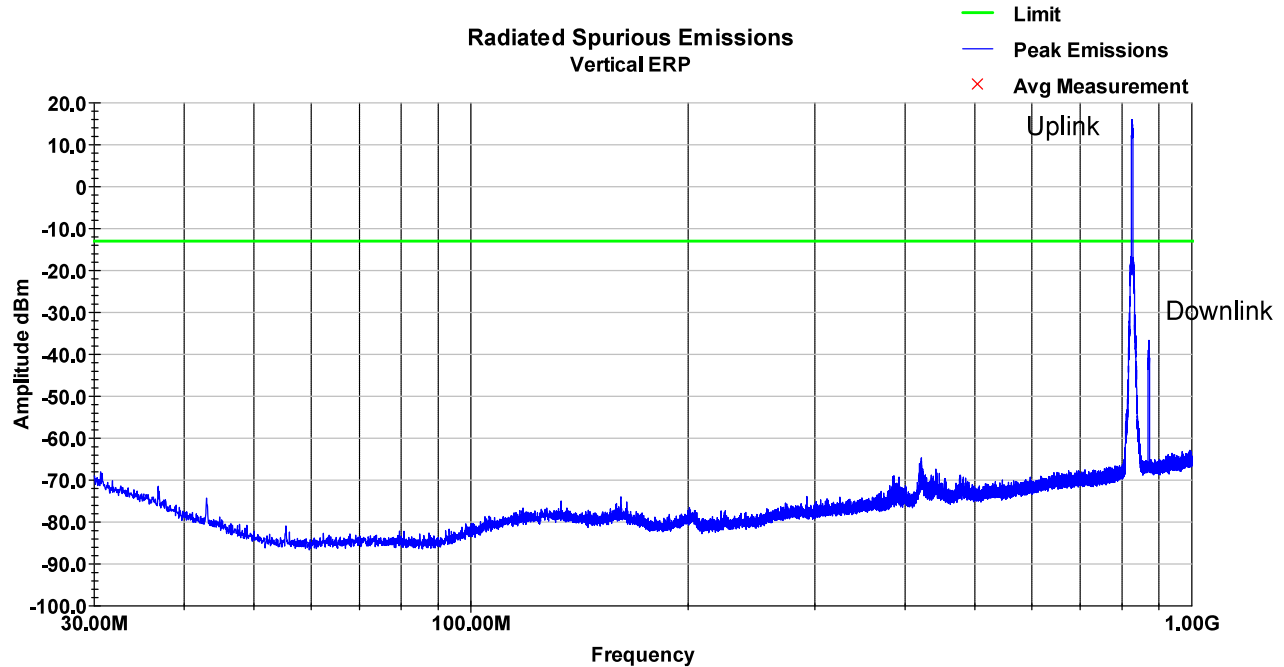


WCDMA Band IV – HCH – 3-18GHz – Horizontal

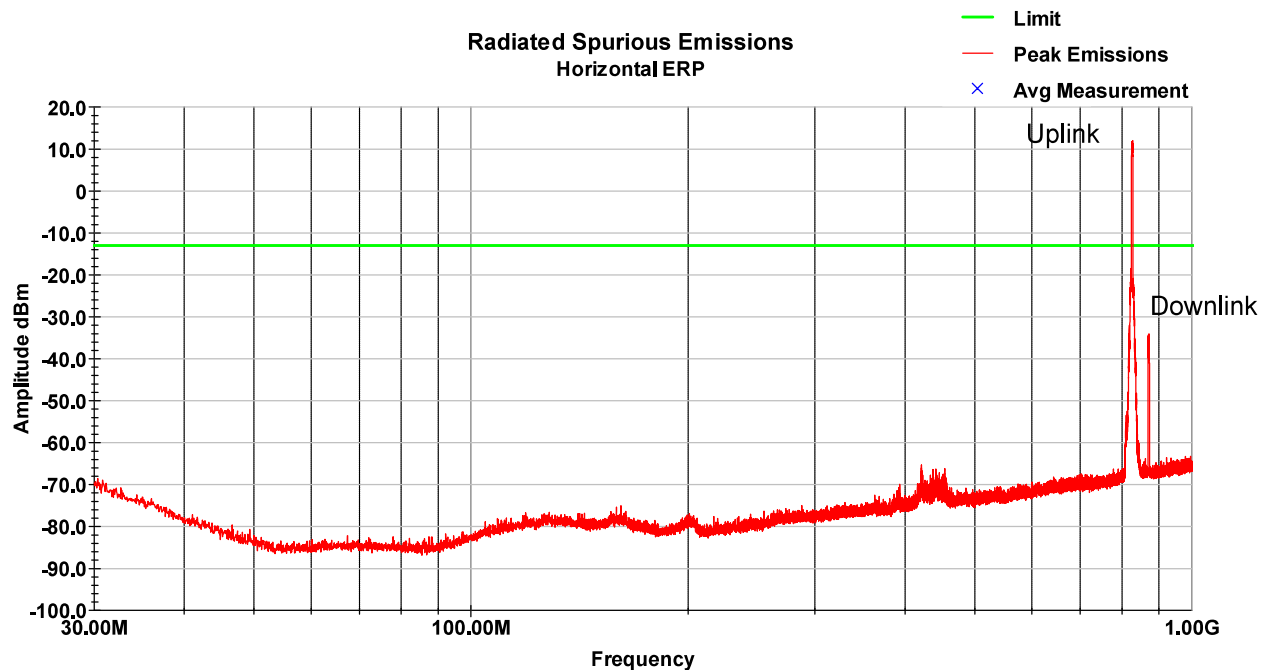


7.7 Test Data – WCDMA Band V

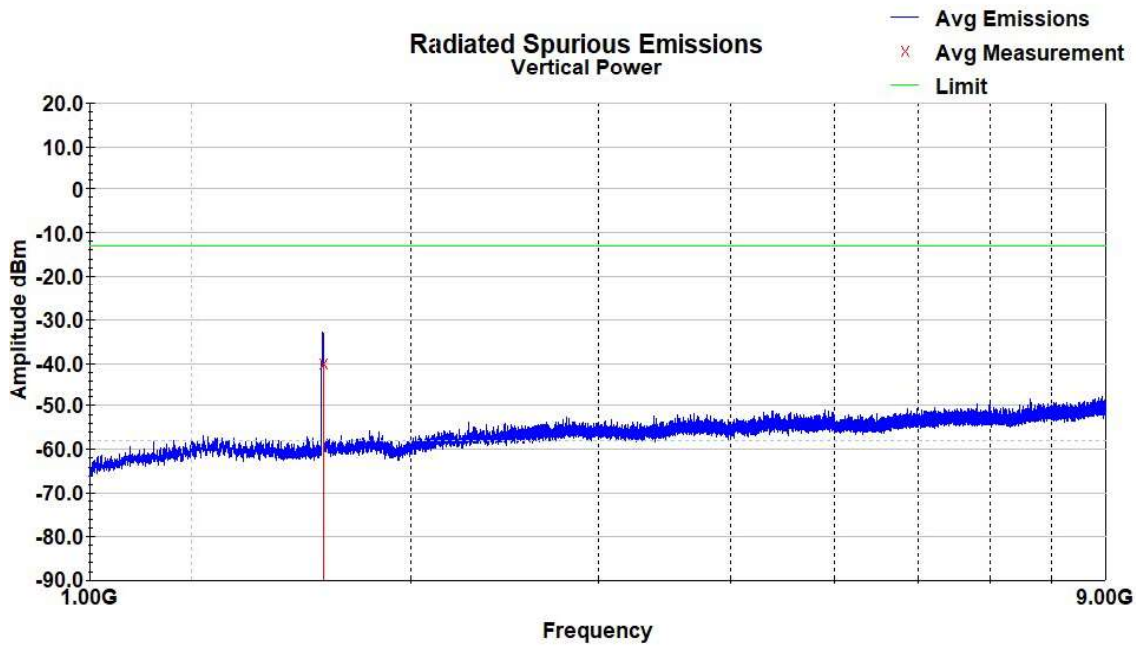
WCDMA Band V – LCH – 30-1000MHz – Vertical



WCDMA Band V – LCH – 30-1000MHz – Horizontal



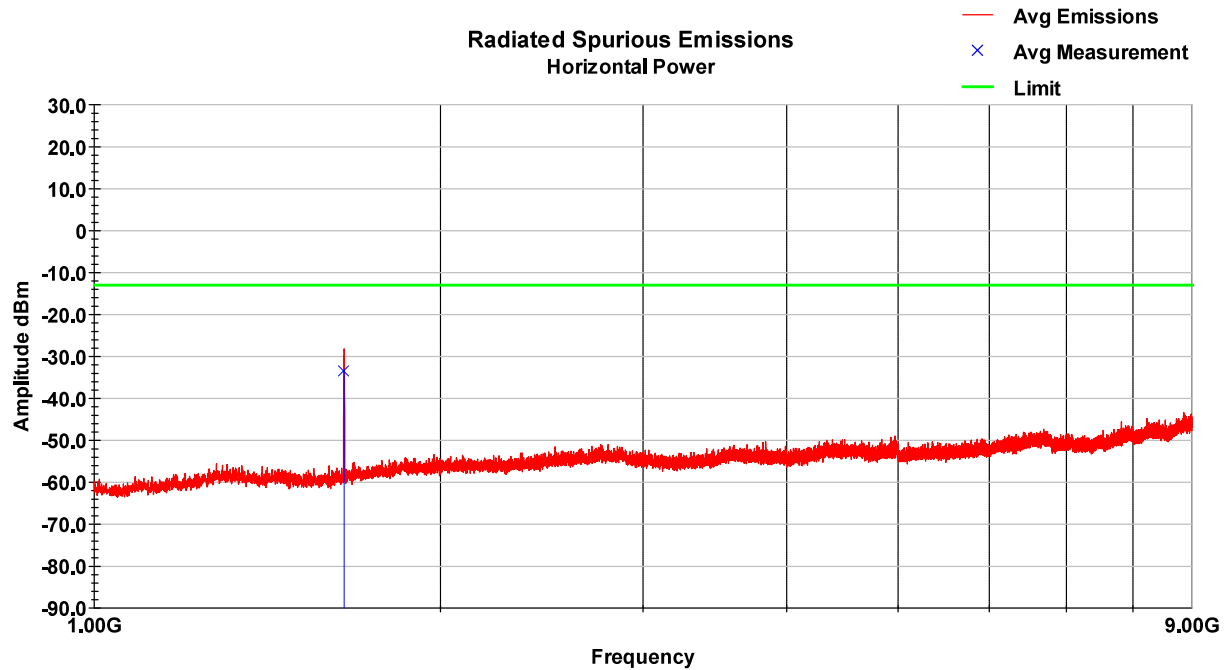
WCDMA Band V – LCH – 1-9GHz – Vertical



WCDMA Band V – LCH – 1-9GHz – Vertical – Tabular Data

Frequency MHz	Raw Avg dBm	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	Amp dB	Avg Value dBm	Limit dBm	Margin dB
1655.36	-37.8	V	323.0	250.0	29.0	2.0	33.4	-40.3	-13.0	-27.3
Avg Value = Raw Avg + AF + Loss - Amp										
Margin = Avg Value - Limit										

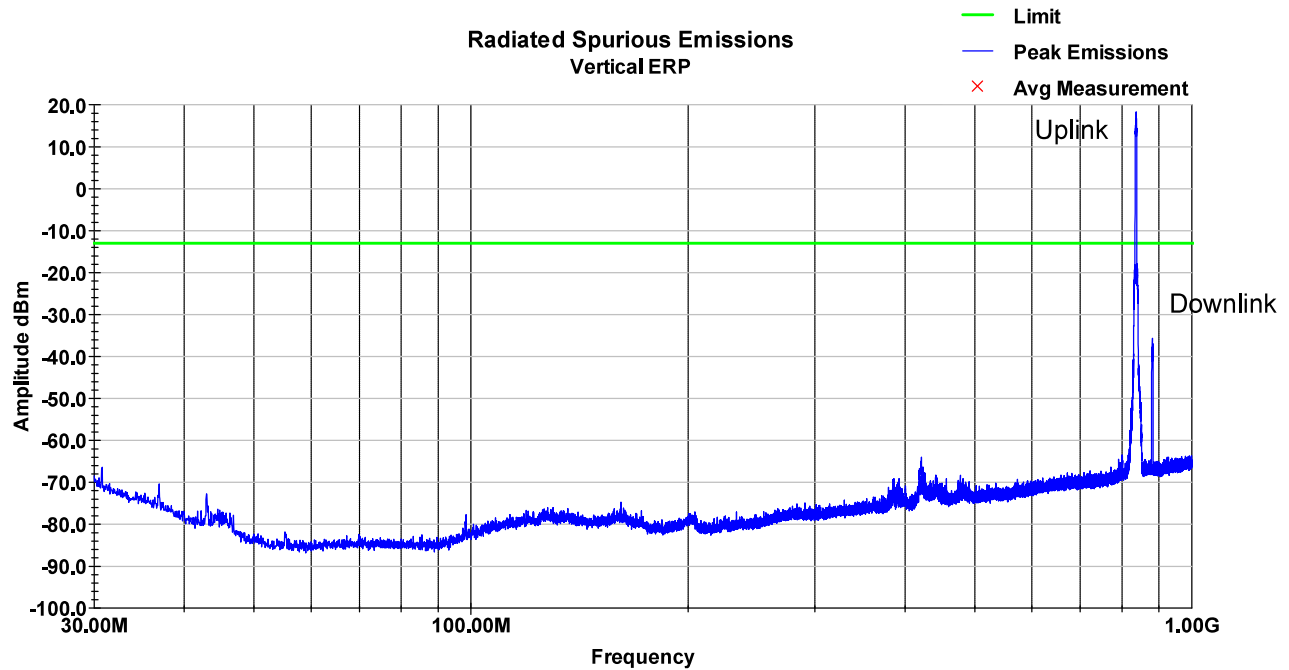
WCDMA Band V – LCH – 1-9GHz – Horizontal



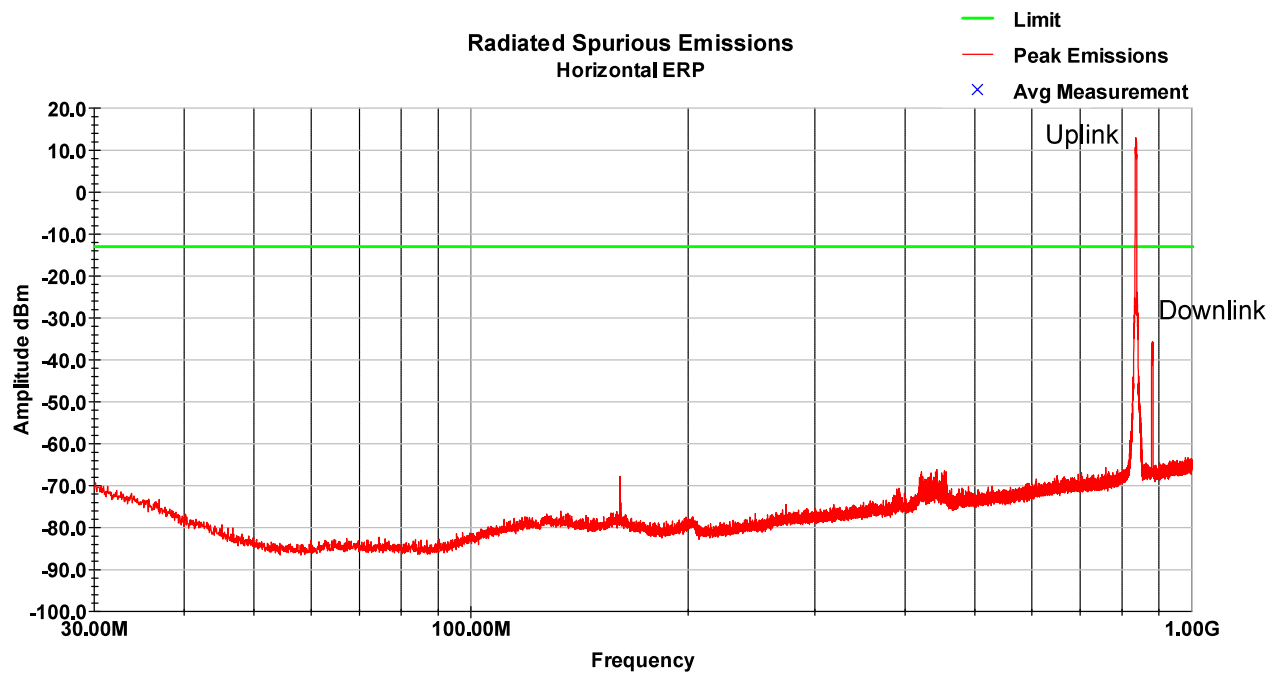
WCDMA Band V – LCH – 1-9GHz – Horizontal – Tabular Data

Frequency MHz	Raw Avg dBm	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	Amp dB	Avg Value dBm	Limit dBm	Margin dB
1655.16	-32.9	H	309.0	100.0	29.0	2.0	33.4	-35.3	-13.0	-22.3
Avg Value = Raw Avg + AF + Loss - Amp										
Margin = Avg Value - Limit										

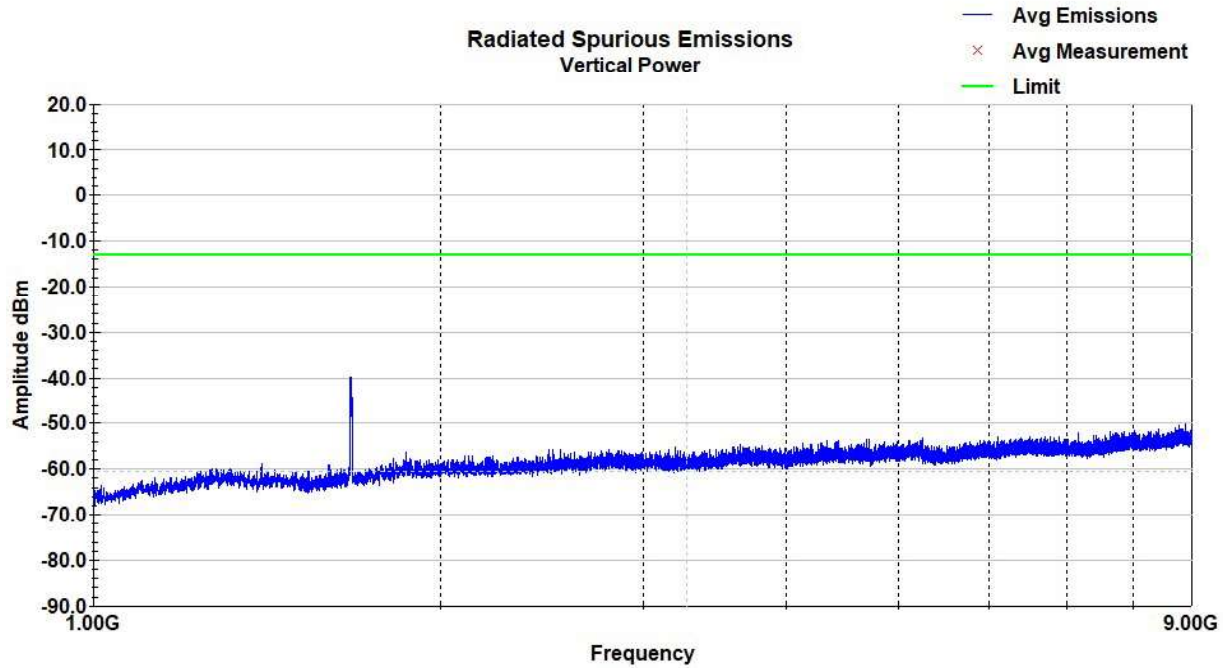
WCDMA Band V – MCH – 30-1000MHz – Vertical



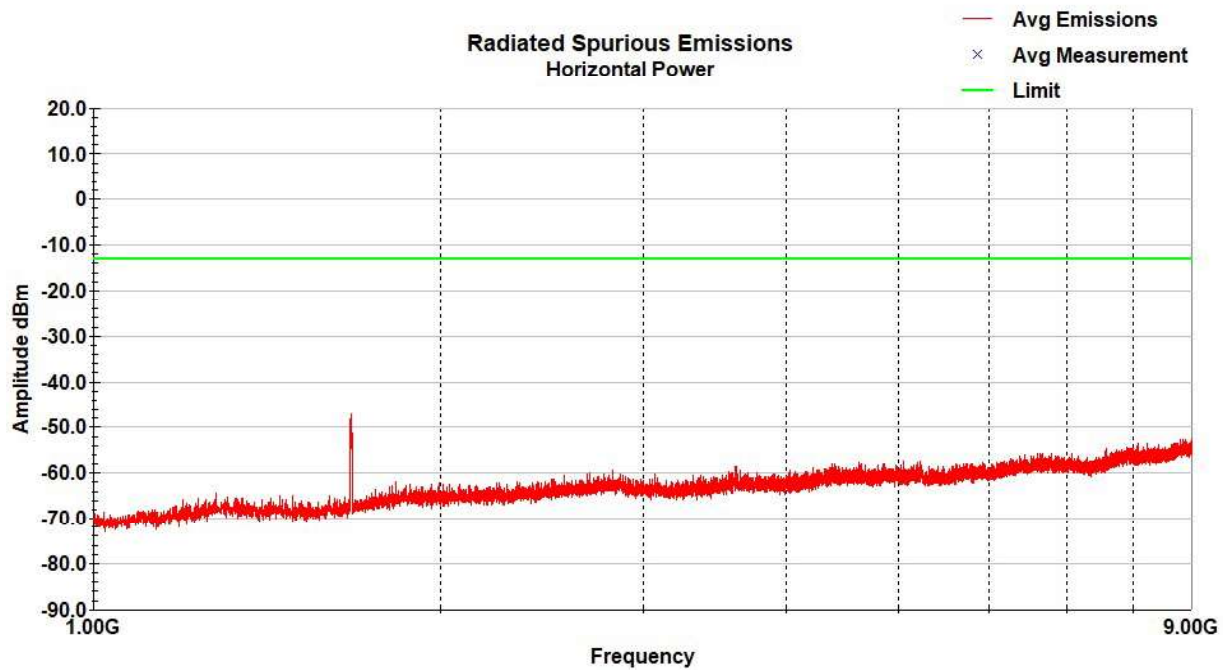
WCDMA Band V – MCH – 30-1000MHz – Horizontal



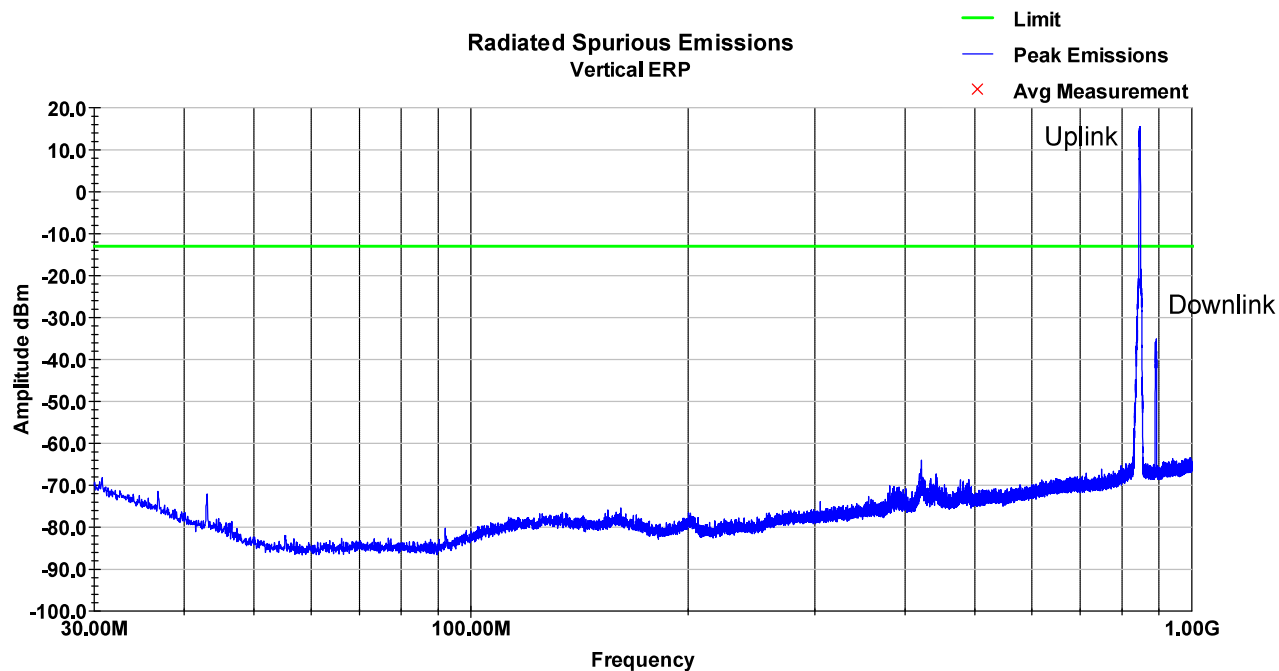
WCDMA Band V – MCH – 1-9GHz – Vertical



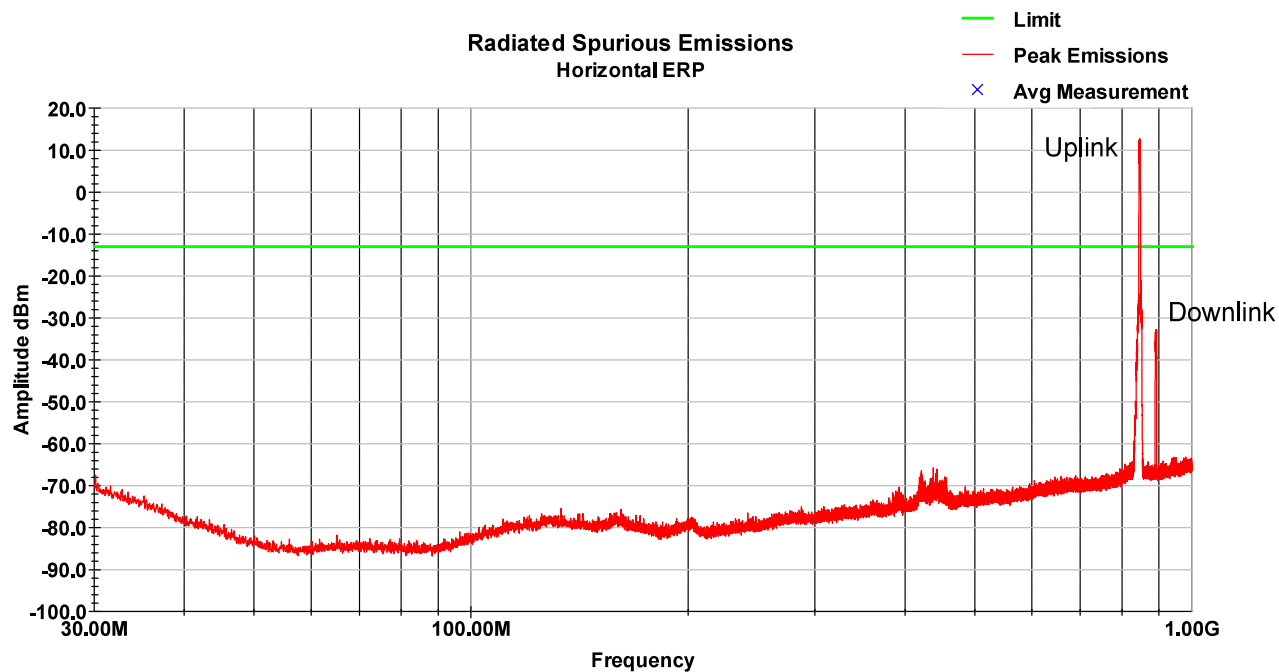
WCDMA Band V – MCH – 1-9GHz – Horizontal



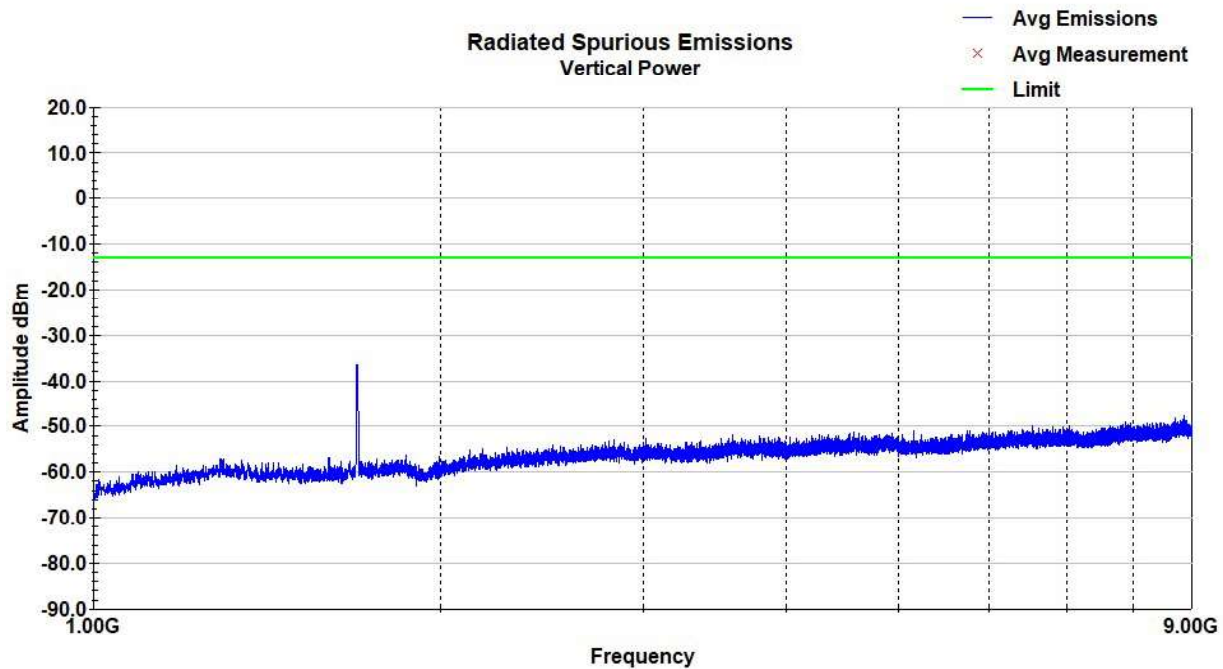
WCDMA Band V – HCH – 30-1000MHz – Vertical



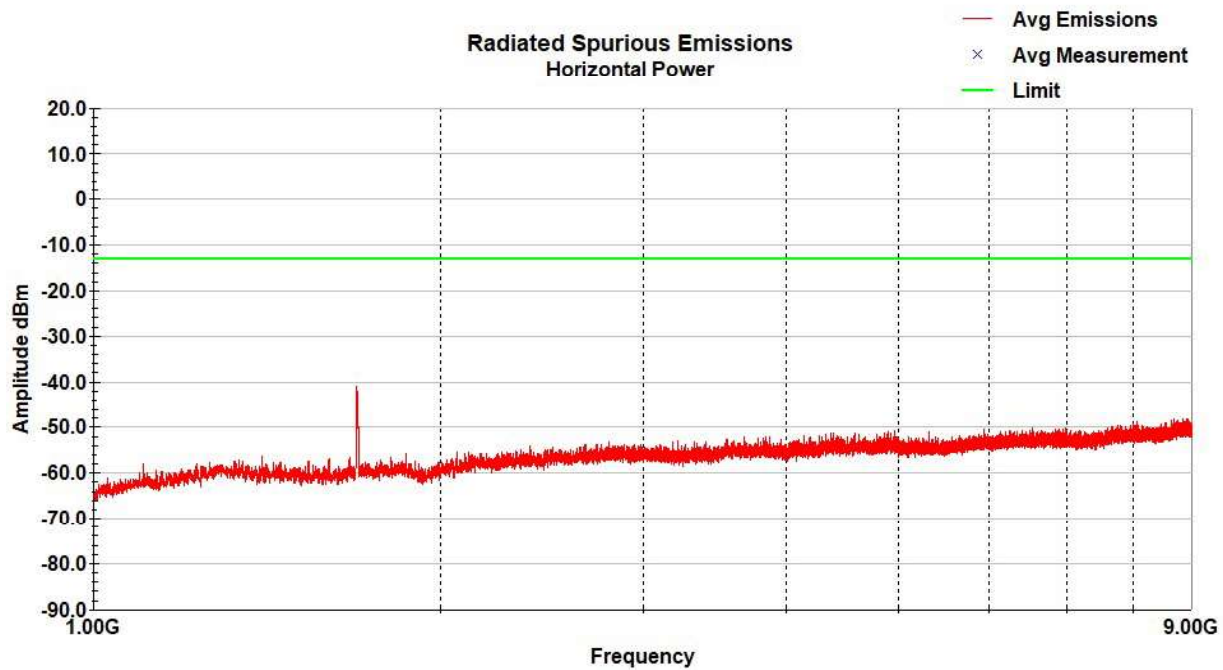
WCDMA Band V – HCH – 30-1000MHz – Horizontal



WCDMA Band V – HCH – 1-9GHz – Vertical



WCDMA Band V – HCH – 1-9GHz – Horizontal



8 Frequency Stability

8.1 Test Result

Test Description	Specification	Test Result
Frequency Stability	FCC Part 2.1055 FCC Part 22.355 FCC Part 24.235 FCC 27.54 RSS-GEN (6.11) RSS-132 (5.3) RSS-133 (6.3) RSS-139 (5.4)	Compliant

8.2 Test Method

The EUT was placed inside the Environmental Chamber and was left inside chamber to stabilize to set temperature for minimum of thirty minutes before any measurements were made. The EUT was tested at Band II Channel 9400, Band IV Channel 1450, and Band V Channel 4175.

8.3 Test Site

SGS EMC Laboratory, Suwanee, GA

8.4 Test Equipment

Test End Date: 28-Nov-2022

Tester: AB

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
WIDEBAND RADIO COMMUNICATION TESTER	CMW500	ROHDE & SCHWARZ	B094874	13-Jan-2021	13-Jan-2023
RF CABLE, SMA TO N	LL142	CENTRICRF	19011	16-Mar-2022	16-Mar-2023
ENVIRONMENTAL CHAMBER	S 1.20	Thermotron	SAF-ENV-08	22-Nov-2022	22-Nov-2023
MULTIMETER	87V	FLUKE	B079677	16-Aug-2022	16-Aug-2023
TSTPASS SWITCHBOX	SB1	TSTPASS	20168	CNR	CNR

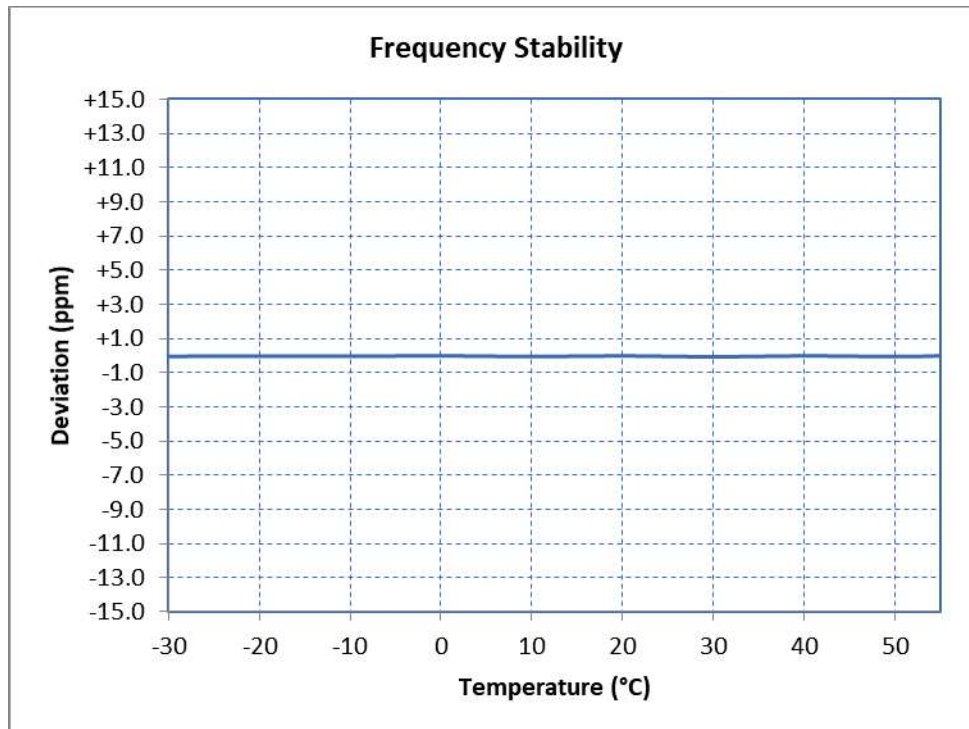
Software Profile:

TESTPass Version: 1.0.0, build: 2020.11.15.01

8.5 Test Data

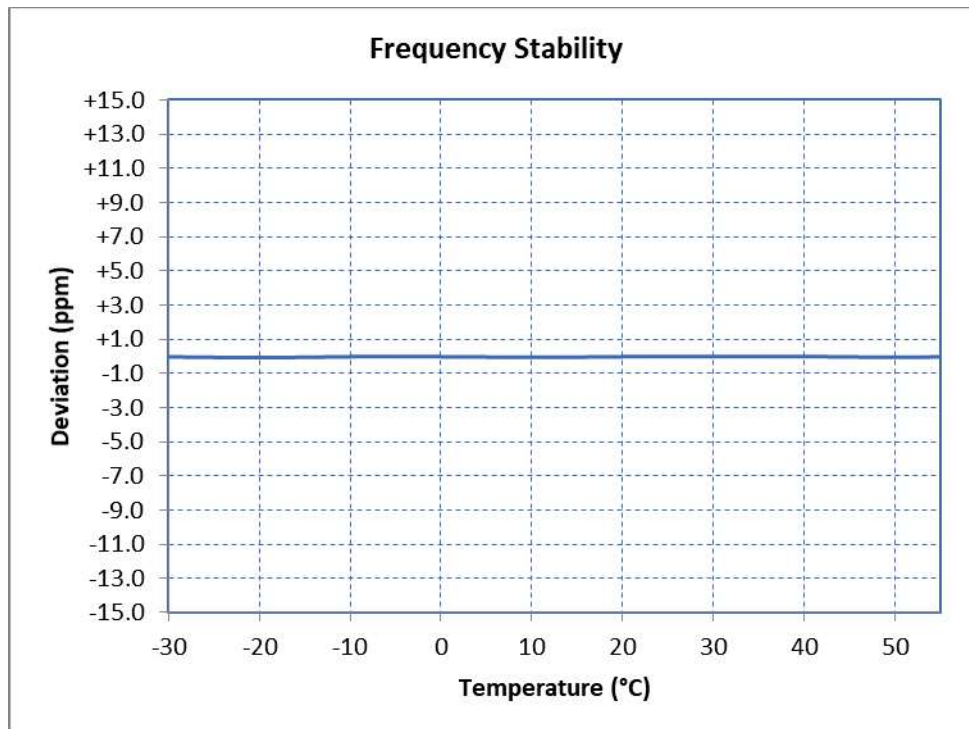
WCDMA Band 2, Channel 9400 (1880MHz)

Voltage %	Power V _{DC}	Temp °C	Frequency Hz	Freq Dev Hz	Freq Dev ppm	Deviation %
100%	12.00	+20 (Ref)	1,880,000,001	+1	+0.00	+0.000000
100%	12.00	-30	1,880,000,002	+2	+0.00	+0.000000
100%	12.00	-20	1,880,000,009	+9	+0.00	+0.000000
100%	12.00	-10	1,880,000,003	+3	+0.00	+0.000000
100%	12.00	0	1,880,000,014	+14	+0.01	+0.000001
100%	12.00	+10	1,879,999,997	-3	-0.00	-0.000000
100%	12.00	+20	1,880,000,013	+13	+0.01	+0.000001
100%	12.00	+30	1,879,999,991	-9	-0.00	-0.000000
100%	12.00	+40	1,880,000,012	+12	+0.01	+0.000001
100%	12.00	+50	1,879,999,997	-3	-0.00	-0.000000
100%	12.00	+55	1,880,000,011	+11	+0.01	+0.000001
115%	13.80	+20	1,879,999,997	-3	-0.00	-0.000000
85%	10.20	+20	1,879,999,998	-2	-0.00	-0.000000



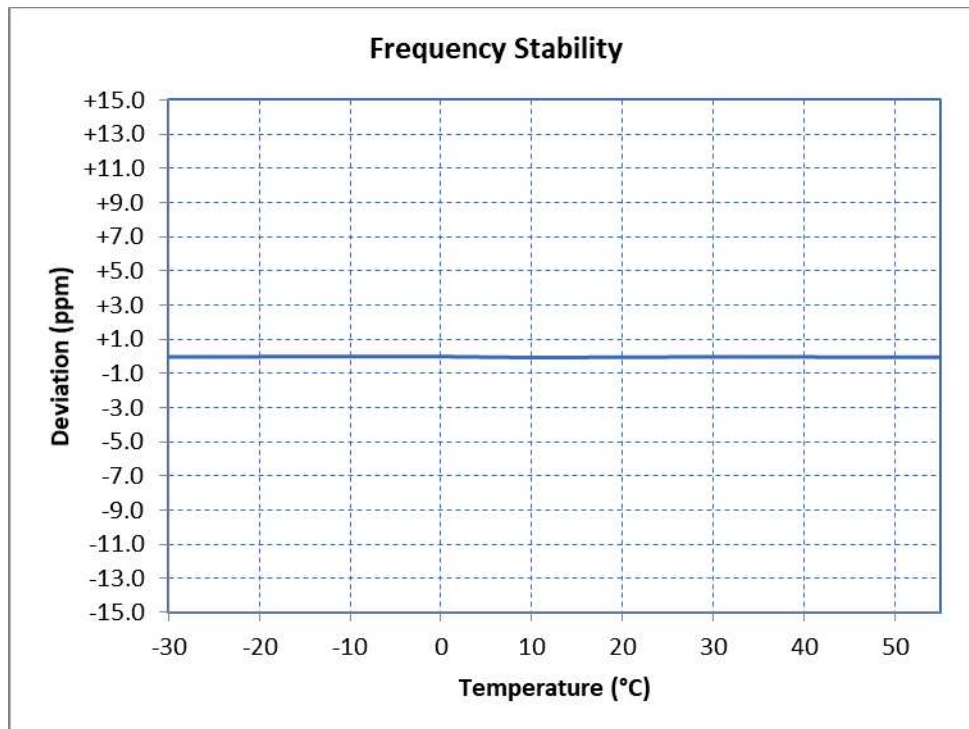
WCDMA Band 4, Channel 1450 (1740MHz)

Voltage %	Power V _{DC}	Temp °C	Frequency Hz	Freq Dev Hz	Freq Dev ppm	Deviation %
100%	12.00	+20 (Ref)	1,739,999,994	-6	-0.00	-0.000000
100%	12.00	-30	1,739,999,993	-7	-0.00	-0.000000
100%	12.00	-20	1,739,999,988	-12	-0.01	-0.000001
100%	12.00	-10	1,739,999,994	-6	-0.00	-0.000000
100%	12.00	0	1,739,999,994	-6	-0.00	-0.000000
100%	12.00	+10	1,739,999,990	-10	-0.01	-0.000001
100%	12.00	+20	1,739,999,994	-6	-0.00	-0.000000
100%	12.00	+30	1,739,999,995	-5	-0.00	-0.000000
100%	12.00	+40	1,739,999,995	-5	-0.00	-0.000000
100%	12.00	+50	1,739,999,990	-10	-0.01	-0.000001
100%	12.00	+55	1,739,999,993	-7	-0.00	-0.000000
115%	13.80	+20	1,739,999,993	-7	-0.00	-0.000000
85%	10.20	+20	1,739,999,992	-8	-0.00	-0.000000



WCDMA, Band 5, Channel 4175 (835MHz)

Voltage %	Power V _{DC}	Temp °C	Frequency Hz	Freq Dev Hz	Freq Dev ppm	Deviation %
100%	12.00	+20 (Ref)	834,999,990	-10	-0.01	-0.000001
100%	12.00	-30	834,999,995	-5	-0.01	-0.000001
100%	12.00	-20	834,999,997	-3	-0.00	-0.000000
100%	12.00	-10	834,999,997	-3	-0.00	-0.000000
100%	12.00	0	834,999,998	-2	-0.00	-0.000000
100%	12.00	+10	834,999,986	-14	-0.02	-0.000002
100%	12.00	+20	834,999,992	-8	-0.01	-0.000001
100%	12.00	+30	834,999,994	-6	-0.01	-0.000001
100%	12.00	+40	834,999,993	-7	-0.01	-0.000001
100%	12.00	+50	834,999,990	-10	-0.01	-0.000001
100%	12.00	+55	834,999,989	-11	-0.01	-0.000001
115%	13.80	+20	834,999,990	-10	-0.01	-0.000001
85%	10.20	+20	834,999,987	-13	-0.02	-0.000002



9 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	08 December 2022
1	- Corrected test dates in section 2.3 - Corrected test voltages in section 8.5 - Corrected company name and address in section 2.1 - Updated Equipment List with Software for Tile! 7 and TSTPass system	24 February 2023