

Figure 8.1-109: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 1

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
3.9102	47.3	82.2	-34.9	PK
4.8240	50.1	74.0	-23.9	PK
4.8240	47.5	54.0	-6.5	AV

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

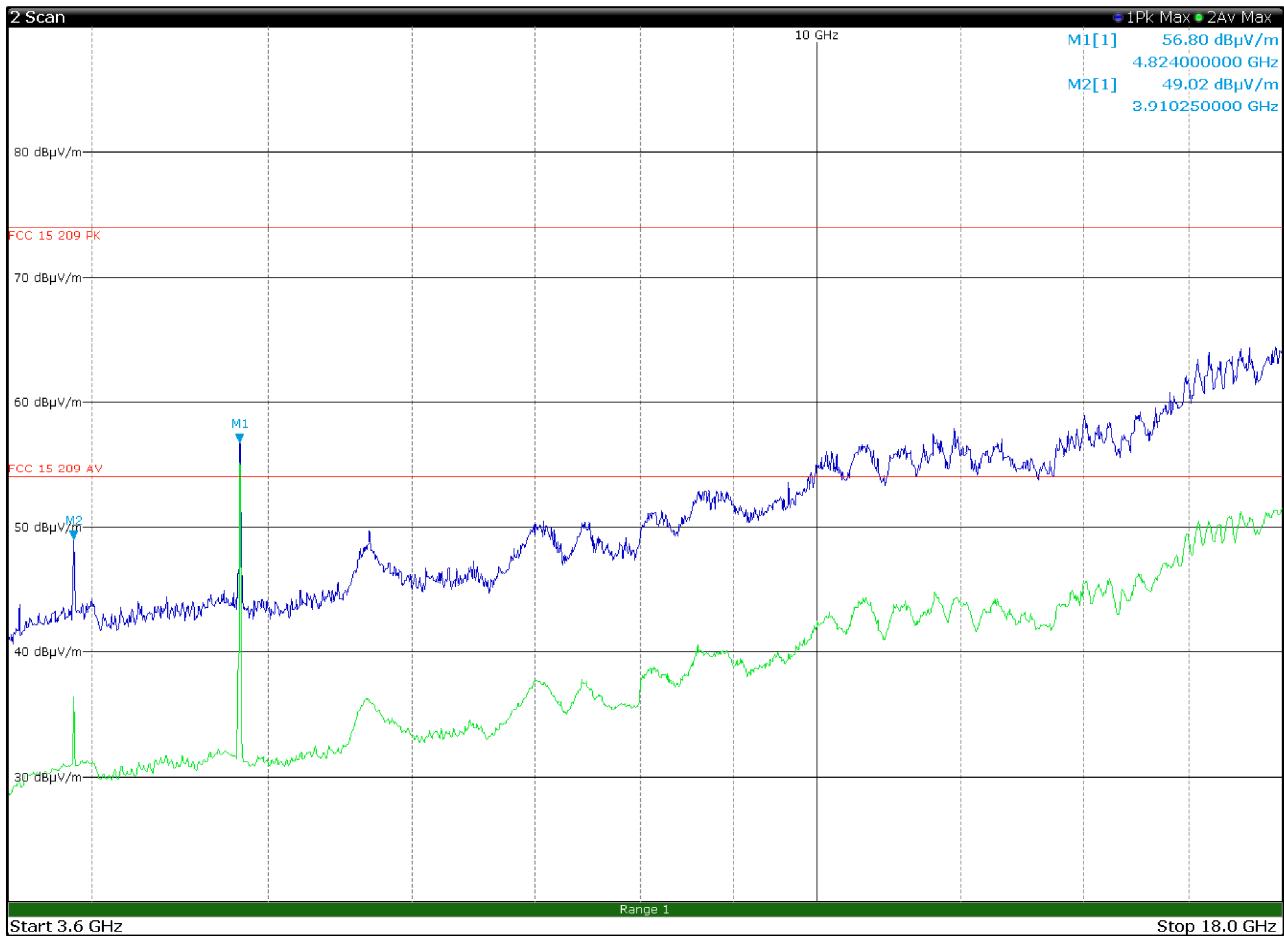


Figure 8.1-110: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 1

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
3.9102	49.0	82.2	-33.2	PK
4.8240	56.8	74.0	-17.2	PK
4.8240	53.1	54.0	-0.9	AV

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

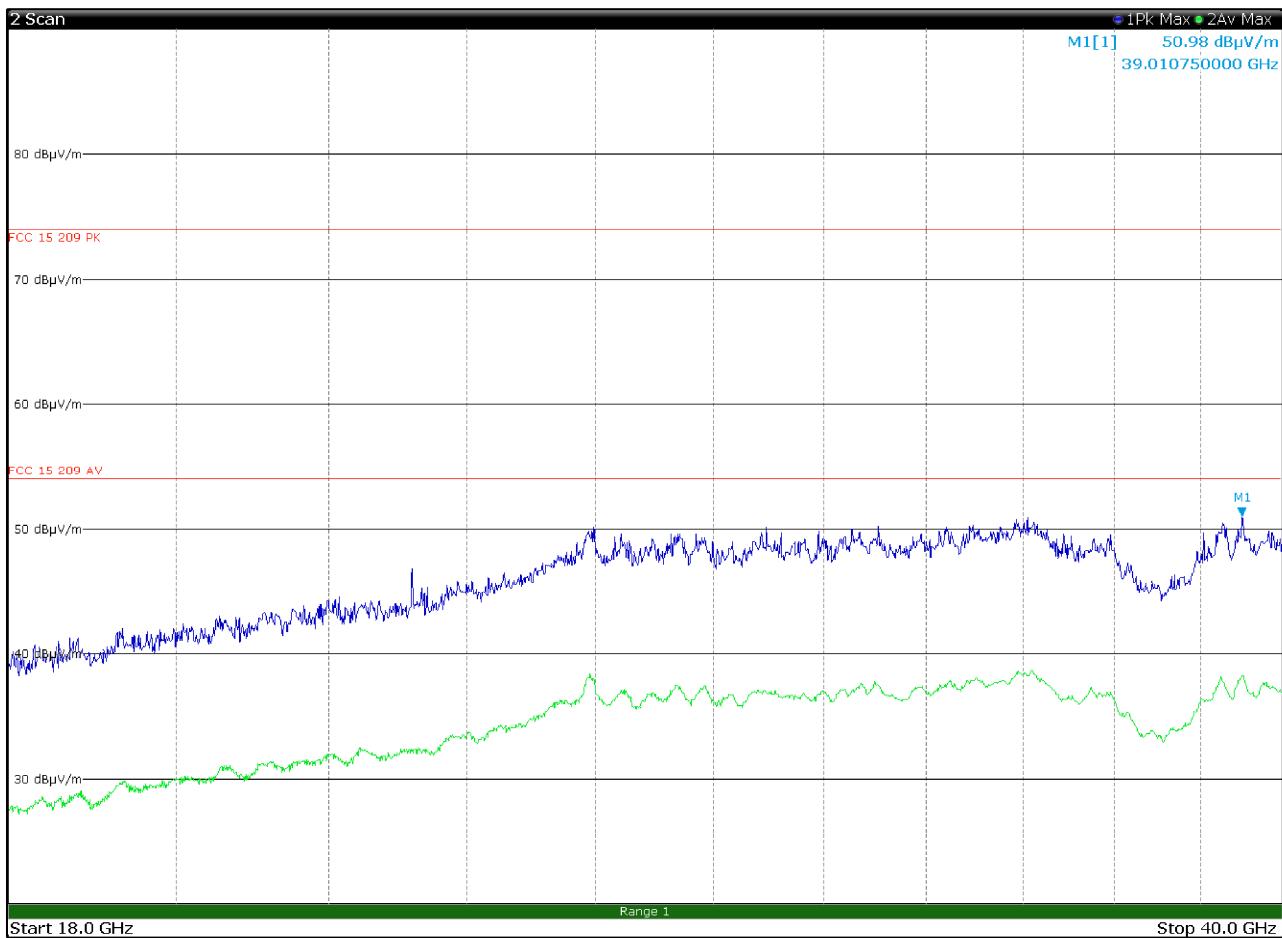


Figure 8.1-111: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 1

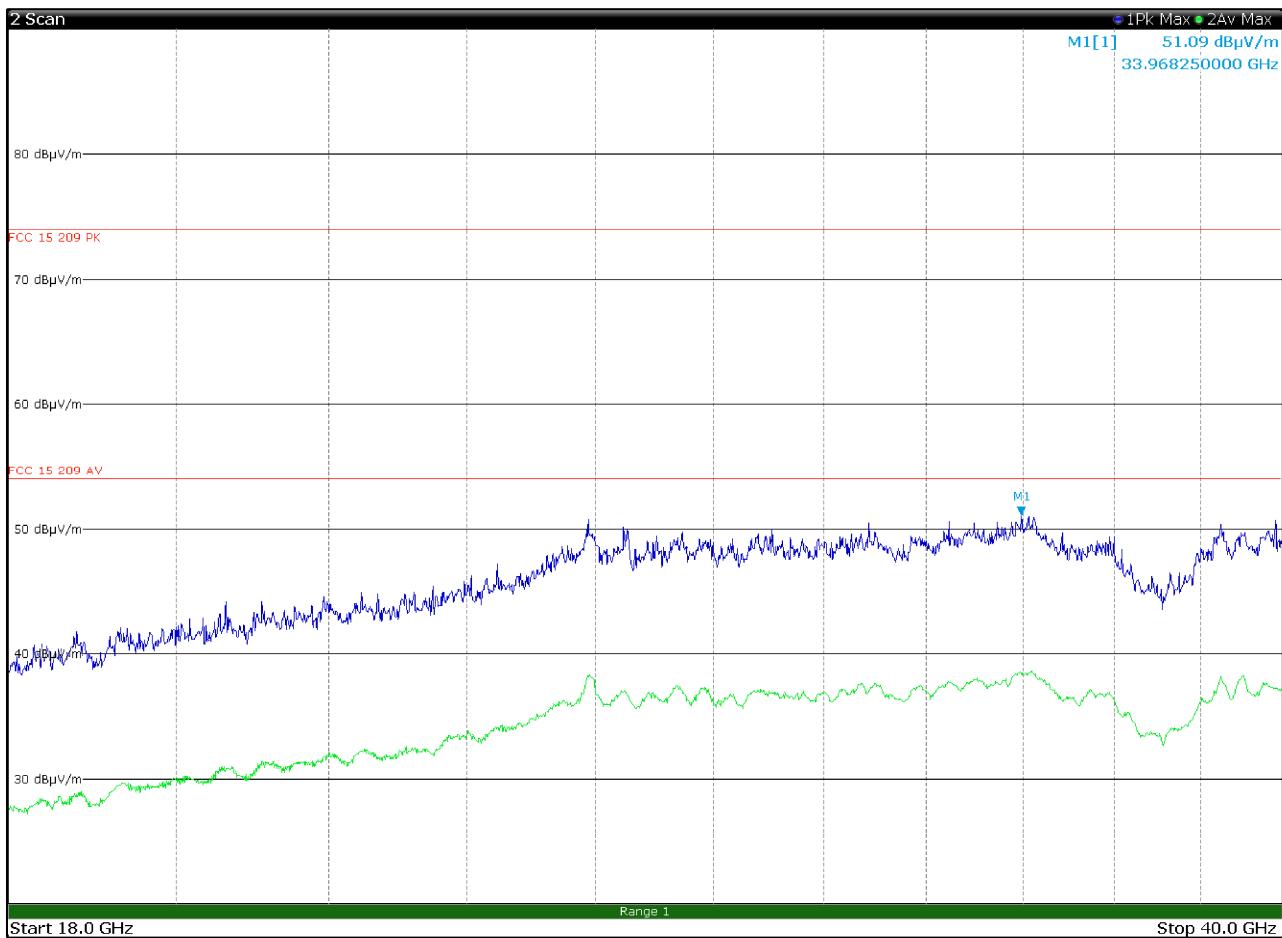


Figure 8.1-112: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 1

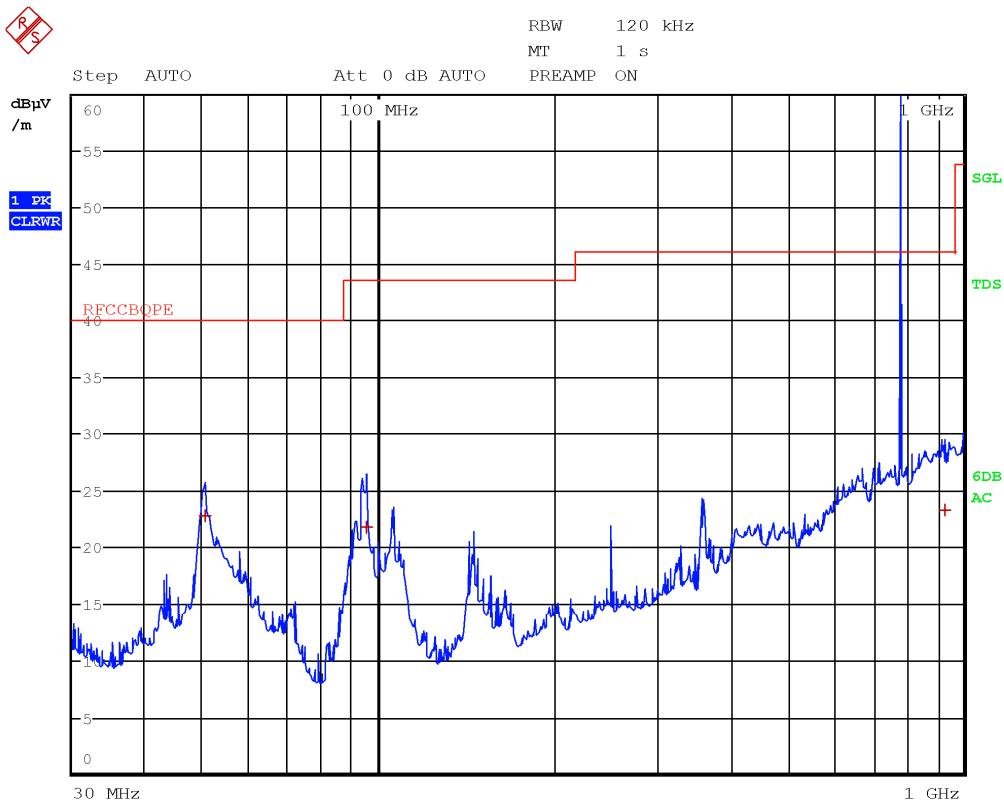


Figure 8.1-113: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
50.5200	22.8	40.0	-17.2	QP
95.3200	21.8	43.5	-21.7	QP
930.4400	23.4	46.0	-22.6	QP

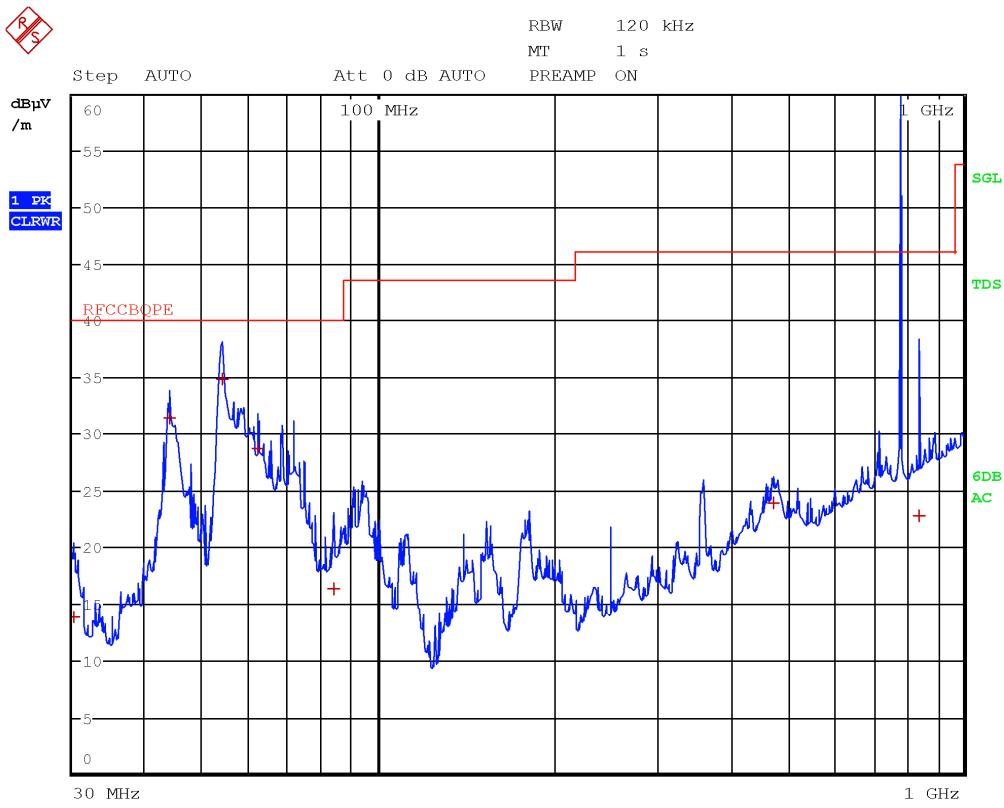


Figure 8.1-114: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
30.1600	13.8	40.0	-26.2	QP
43.8000	31.4	40.0	-8.6	QP
53.9600	34.9	40.0	-5.1	QP
62.2400	28.7	40.0	-11.3	QP
83.9200	16.4	40.0	-23.6	QP
472.8800	23.9	46.0	-22.1	QP
841.6000	22.8	46.0	-23.2	QP

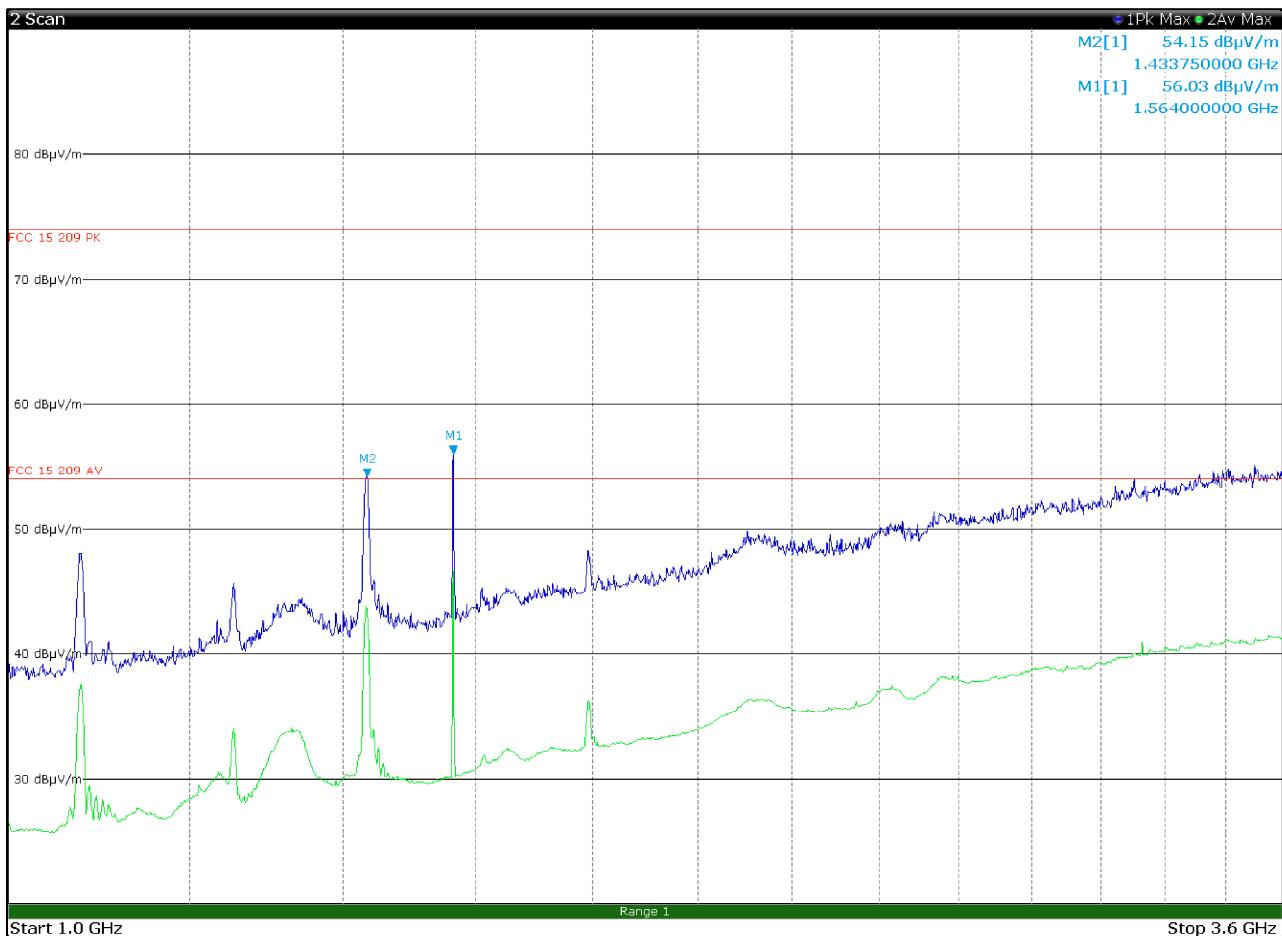


Figure 8.1-115: Radiated spurious emissions, LTE Tx at 782 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4337	54.2	74.0	-19.8	PK
1.4337	43.8	54.0	-10.2	AV
1.5640	56.1	82.2	-26.1	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

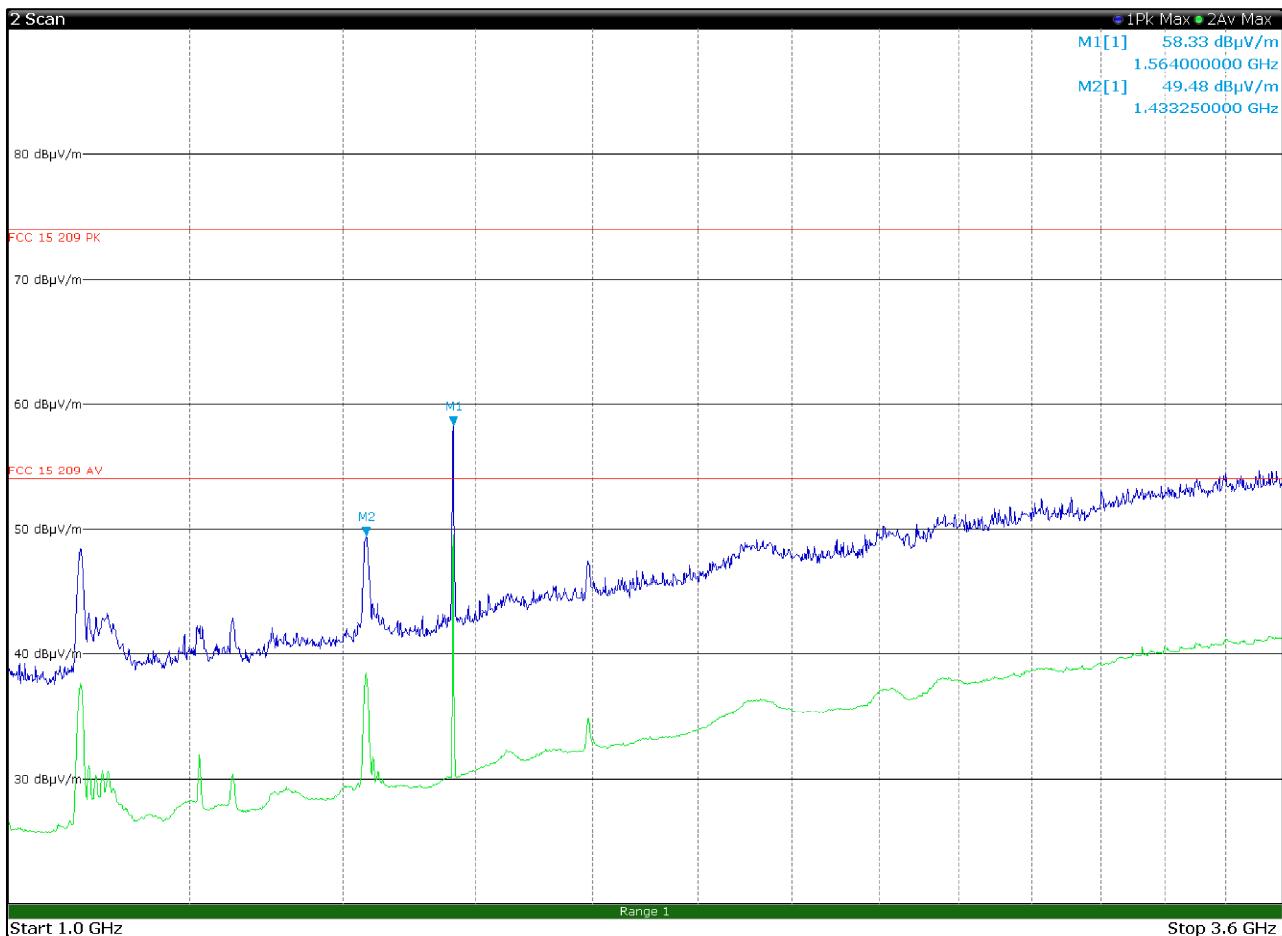


Figure 8.1-116: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4332	49.5	74.0	-24.5	PK
1.4332	38.7	54.0	-15.3	AV
1.5640	58.4	82.2	-23.8	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

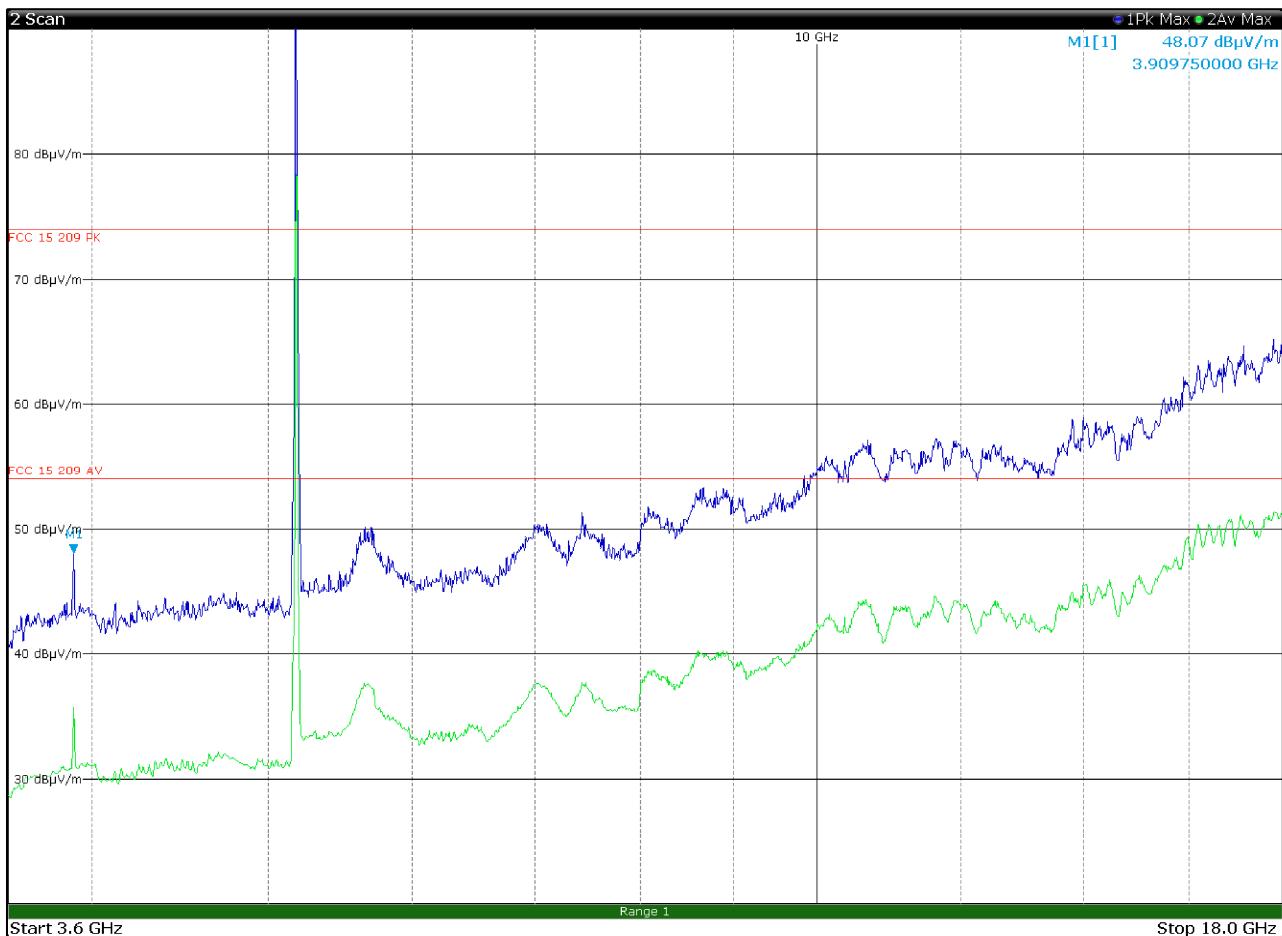


Figure 8.1-117: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

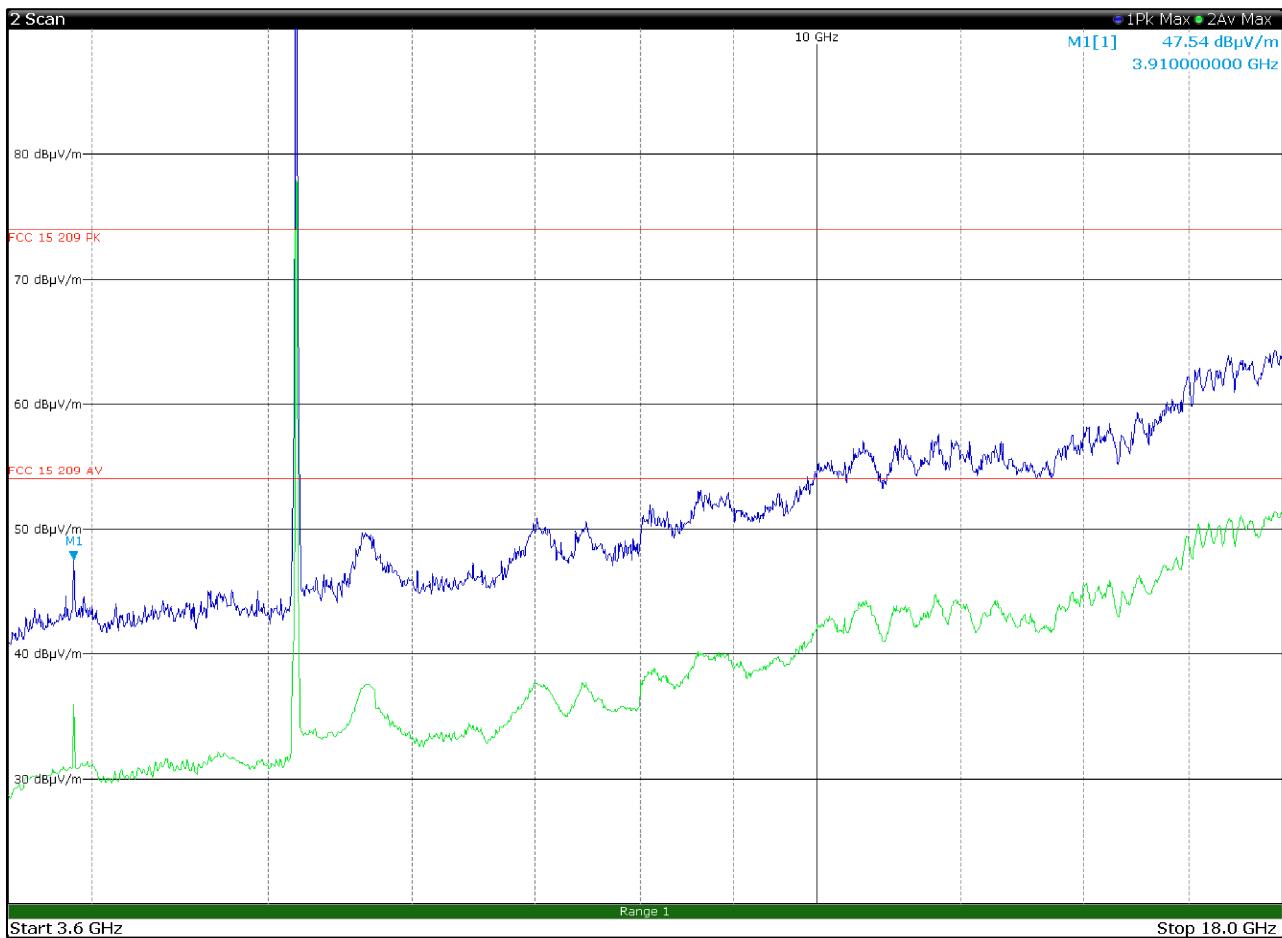


Figure 8.1-118: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

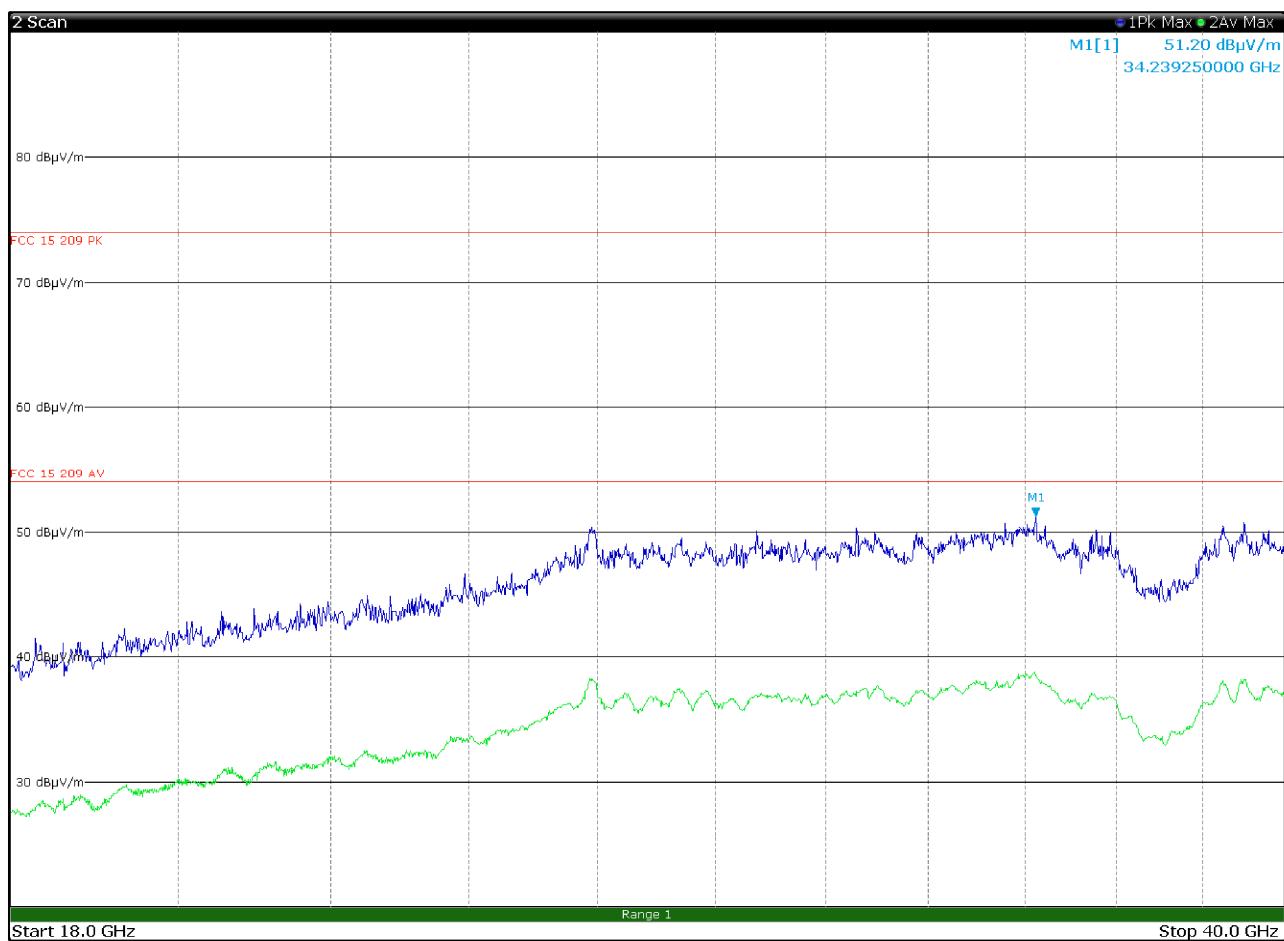


Figure 8.1-119: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 1

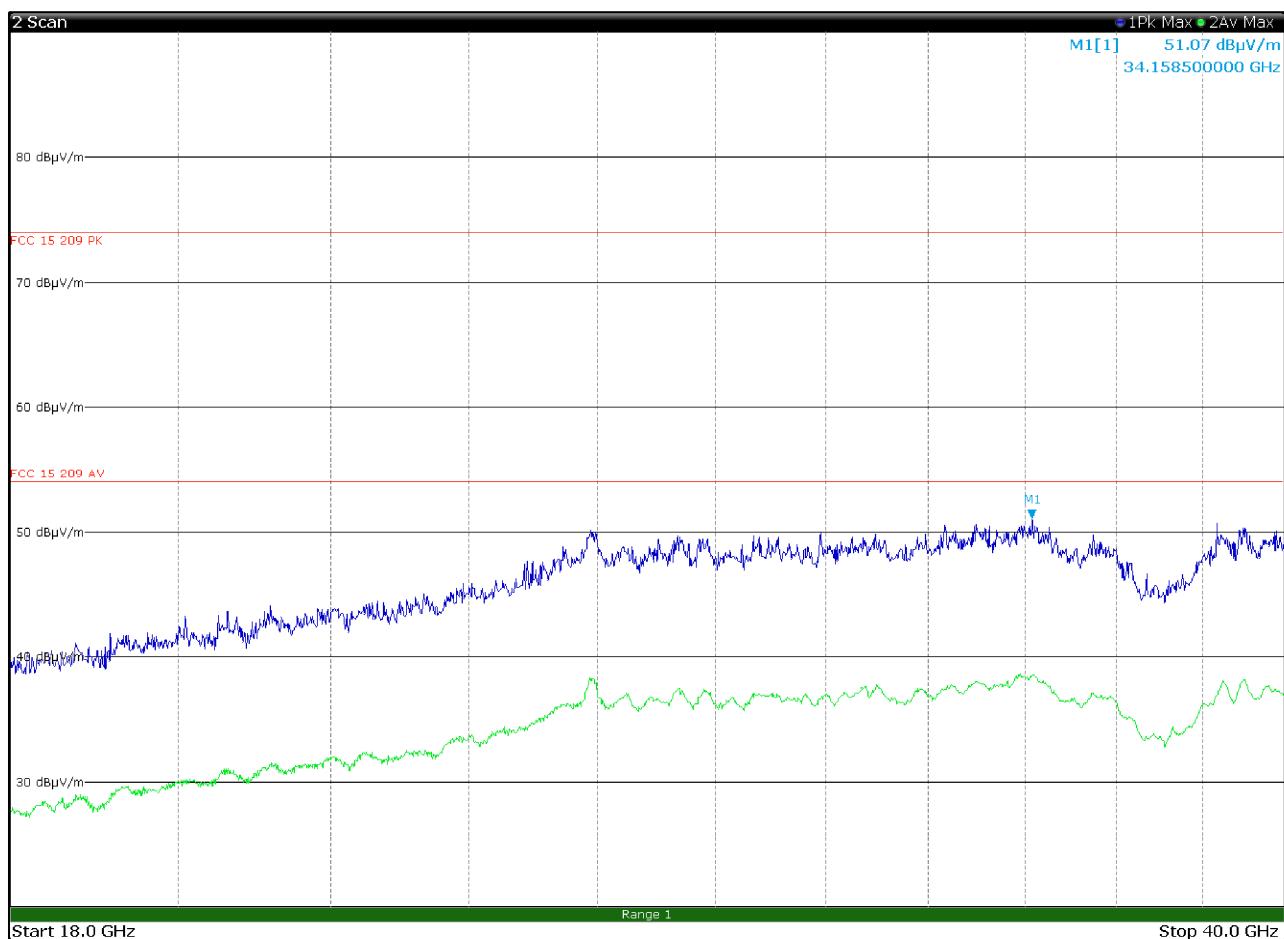


Figure 8.1-120: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 1

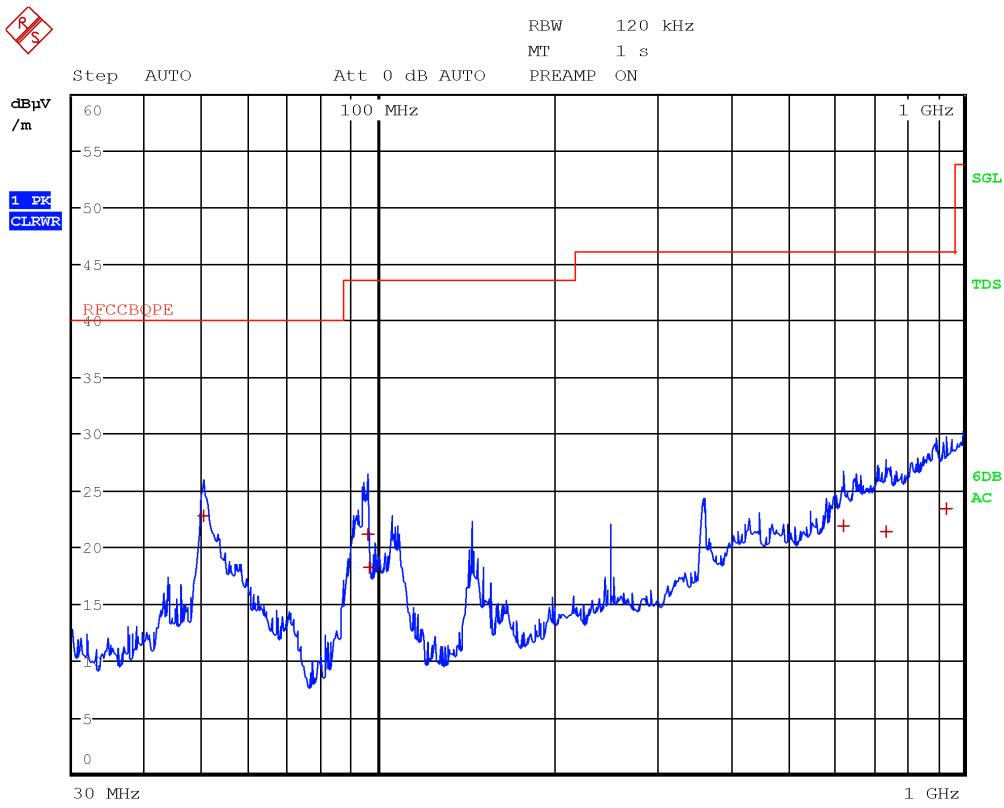


Figure 8.1-121: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 1

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
50.3600	22.9	40.0	-17.1	QP
95.8000	21.1	43.5	-22.4	QP
96.6000	18.3	43.5	-25.2	QP
624.9200	21.9	46.0	-24.1	QP
736.3200	21.5	46.0	-24.5	QP
932.2800	23.4	46.0	-22.6	QP

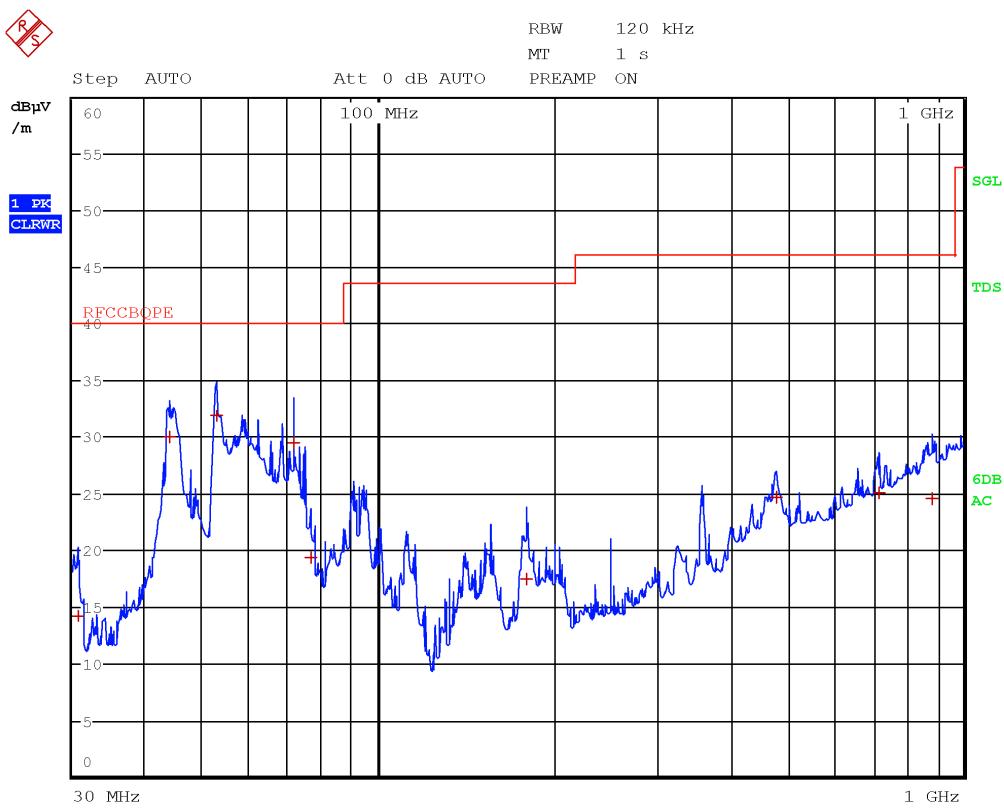


Figure 8.1-122: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 1

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
30.6800	14.2	40.0	-25.8	QP
43.8400	29.9	40.0	-10.1	QP
52.7600	31.9	40.0	-8.1	QP
71.6000	29.5	40.0	-10.5	QP
76.5600	19.4	40.0	-20.6	QP
178.8000	17.5	43.5	-26.0	QP
477.7600	24.7	46.0	-21.3	QP
717.5600	25.0	46.0	-21.0	QP
882.0000	24.6	46.0	-21.4	QP

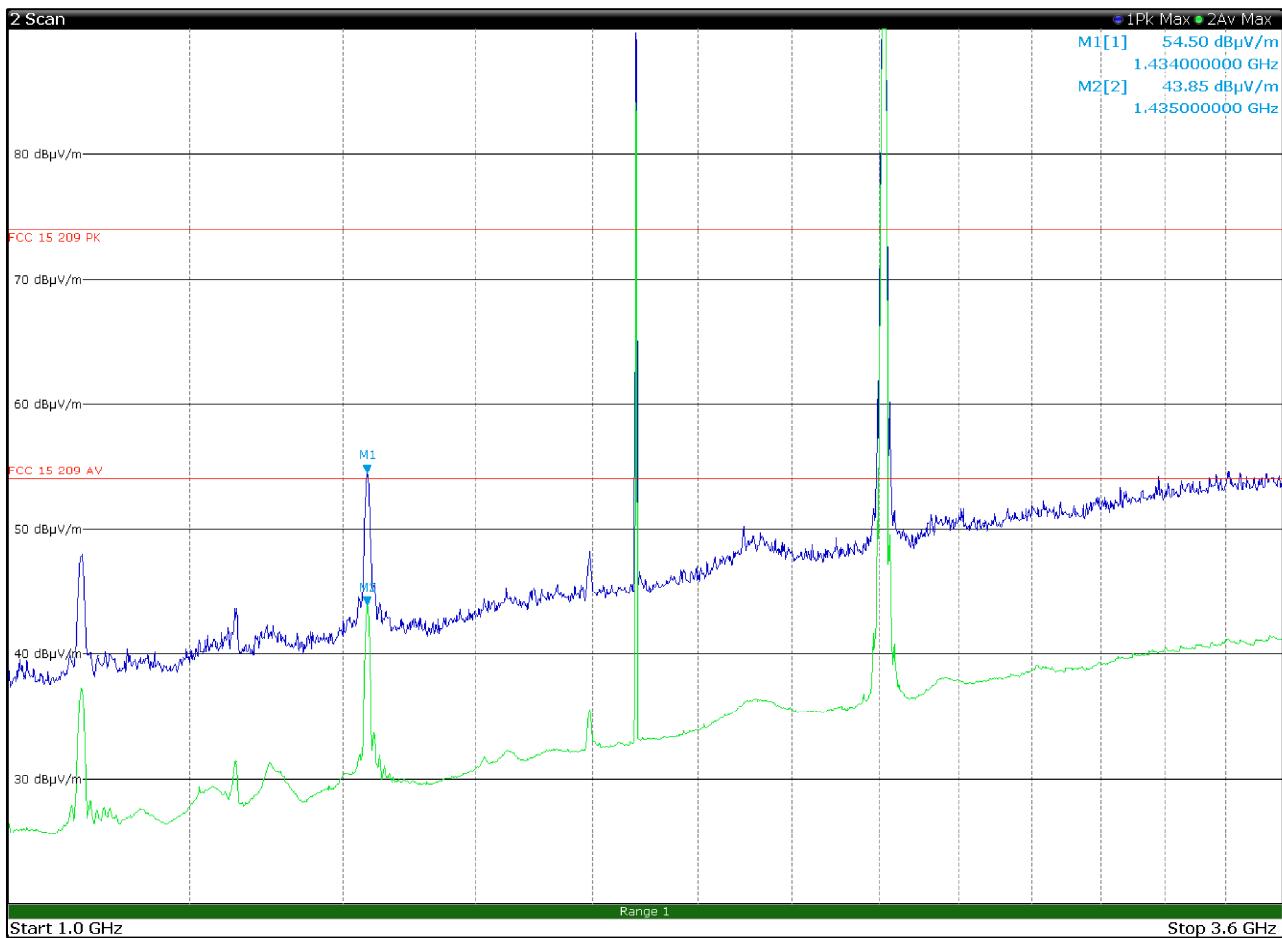


Figure 8.1-123: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4334	54.5	74.0	-19.5	PK
1.4334	43.9	54.0	-10.1	AV

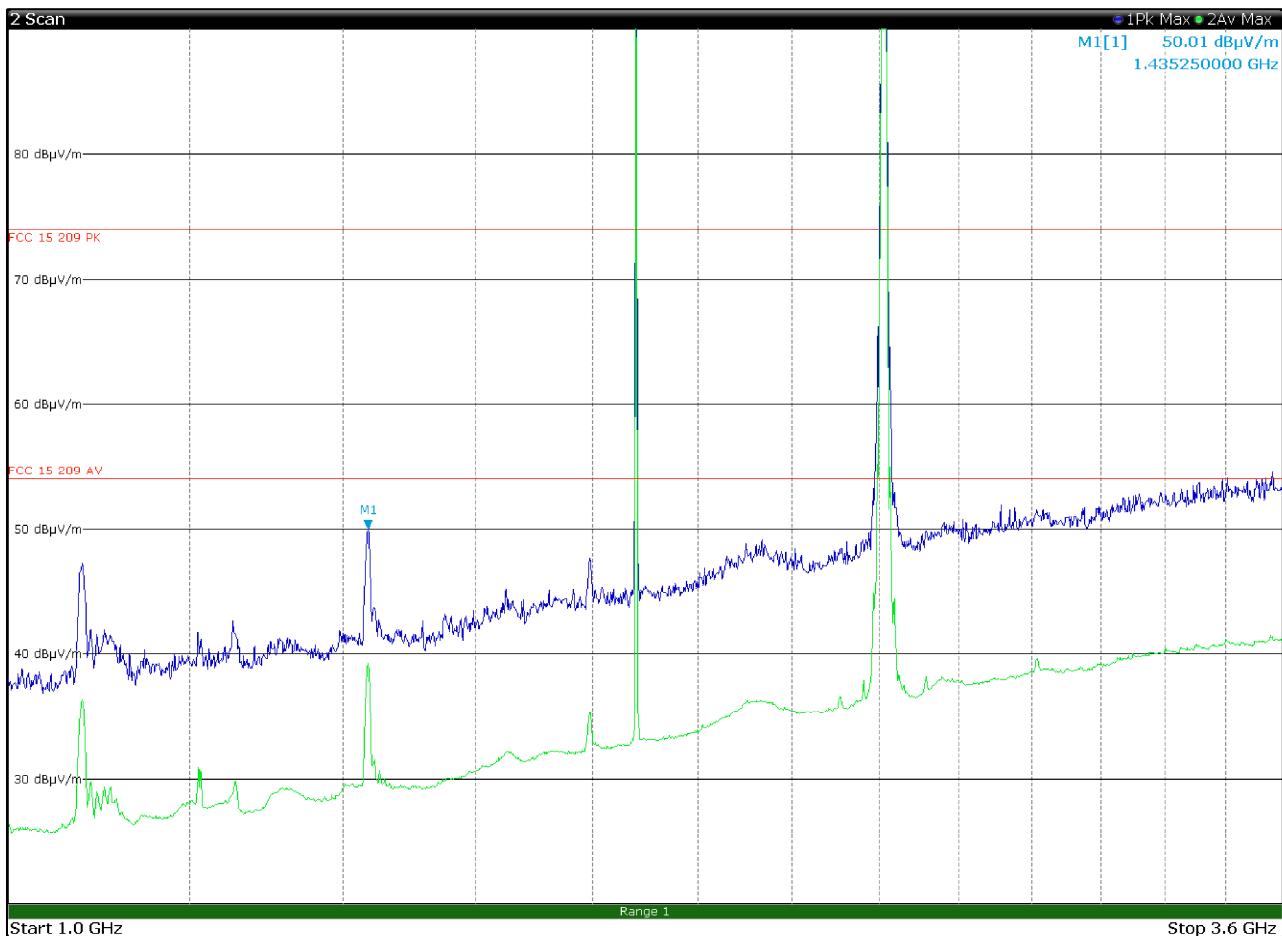


Figure 8.1-124: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4352	50.0	74.0	-24.0	PK
1.4352	39.6	54.0	-14.4	AV

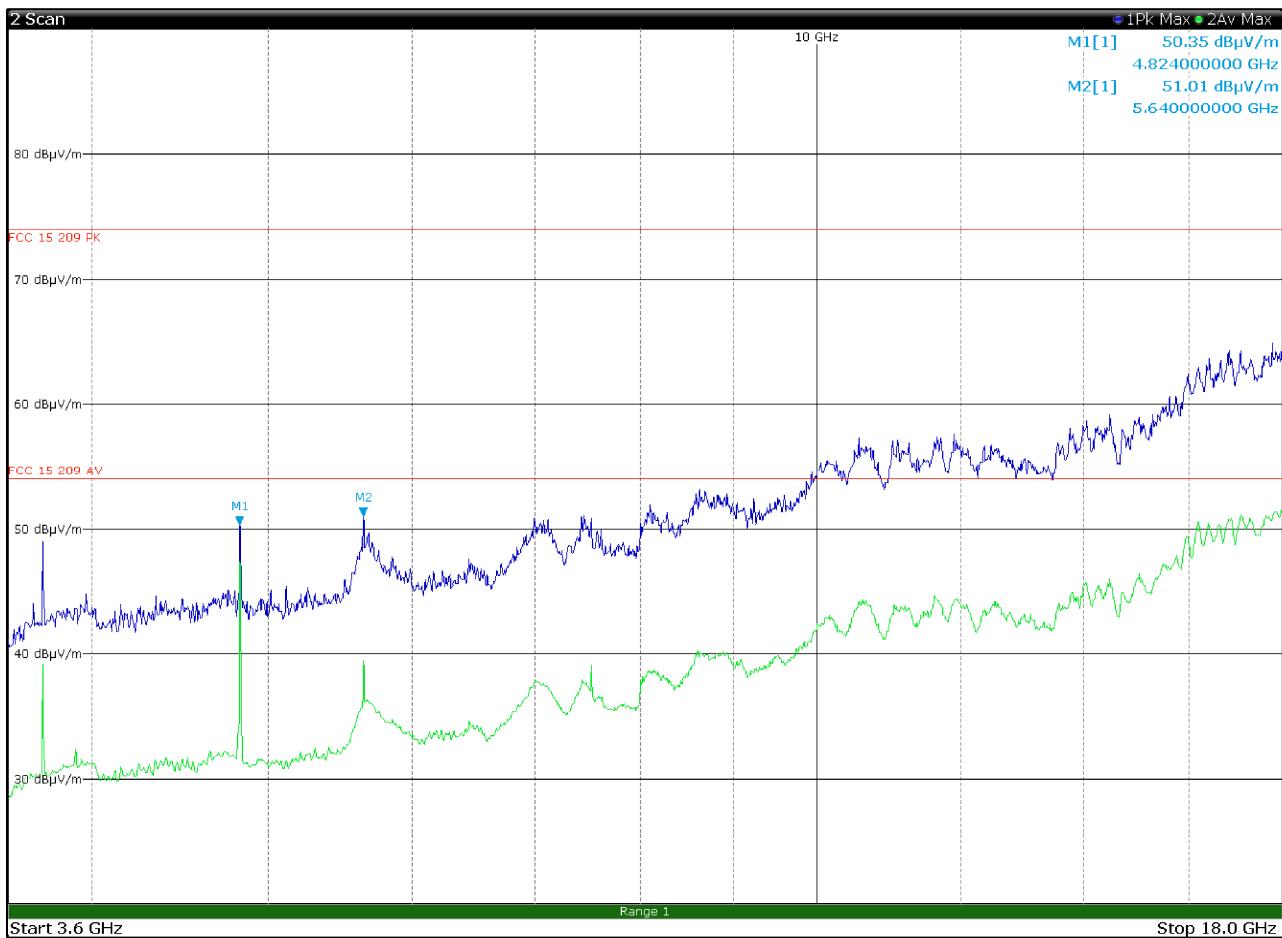


Figure 8.1-125: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
4.8240	50.4	74.0	-23.6	PK
4.8240	47.2	54.0	-6.8	AV
5.6400	51.0	82.2	-31.2	PK

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

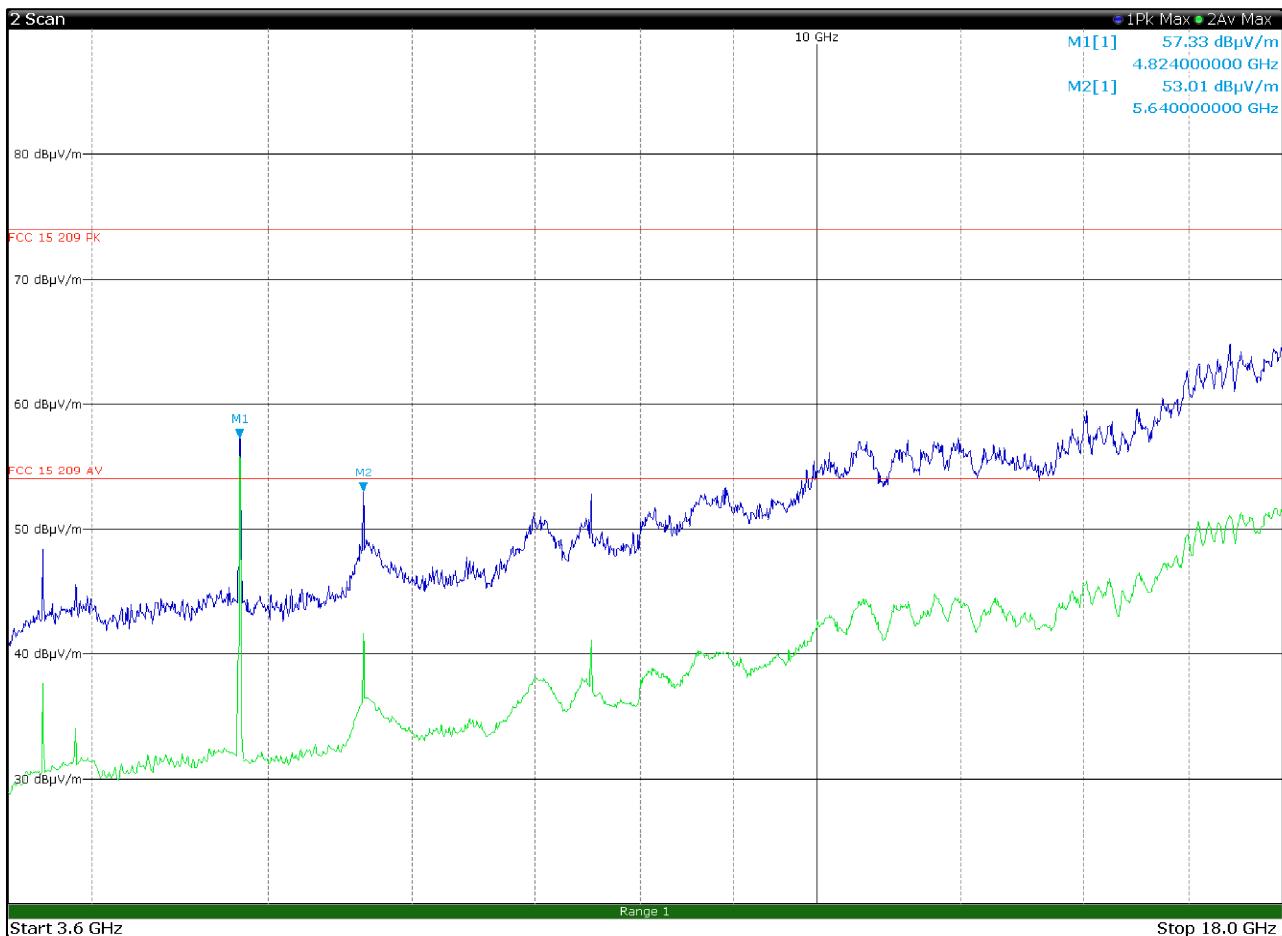


Figure 8.1-126: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
4.8240	57.4	74.0	-16.6	PK
4.8240	53.5	54.0	-0.5	AV
3.7600	48.6	82.2	-33.6	PK
5.6400	53.1	82.2	-29.1	PK
7.5200	52.5	82.2	-29.7	PK

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

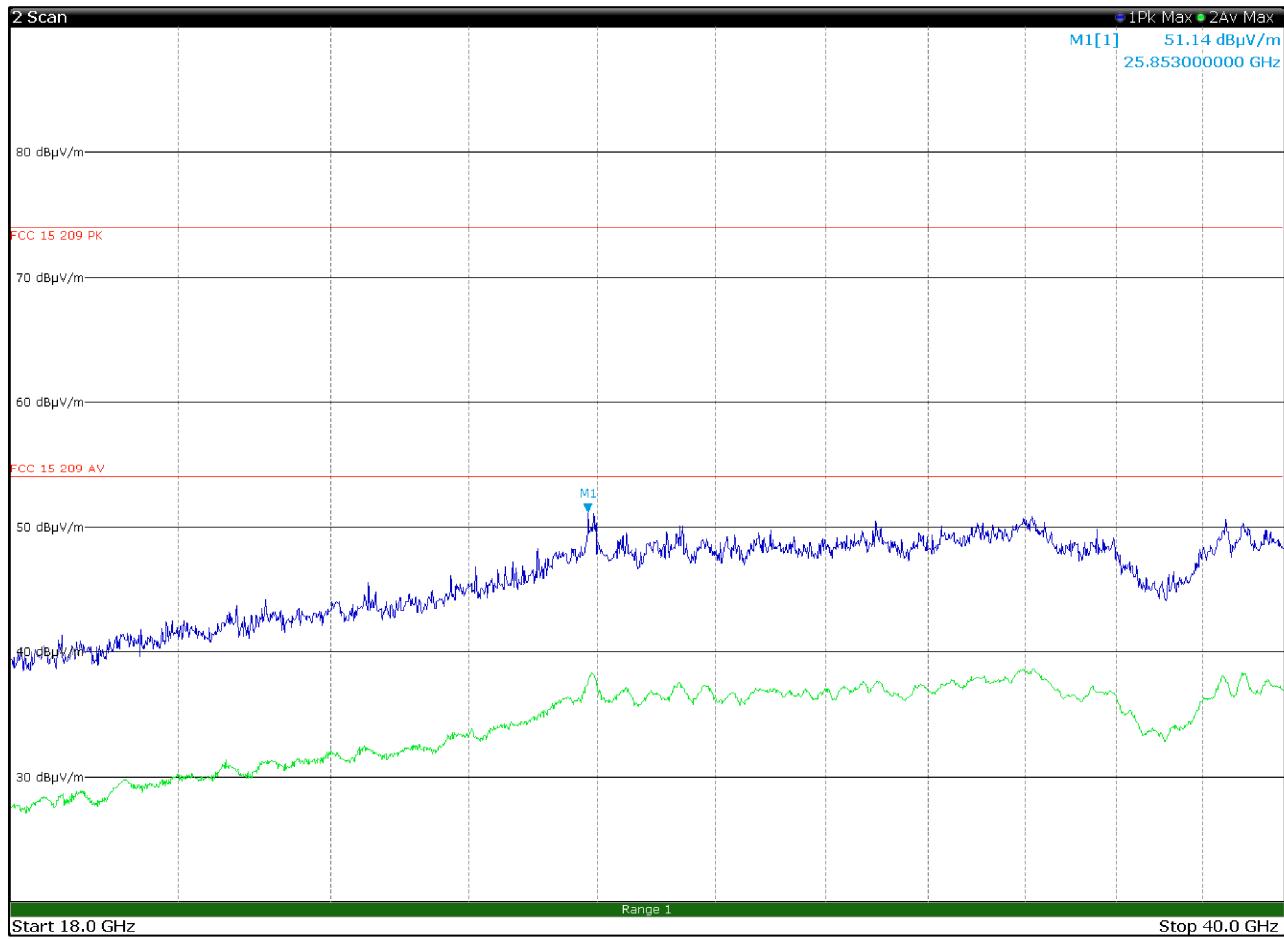


Figure 8.1-127: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 1

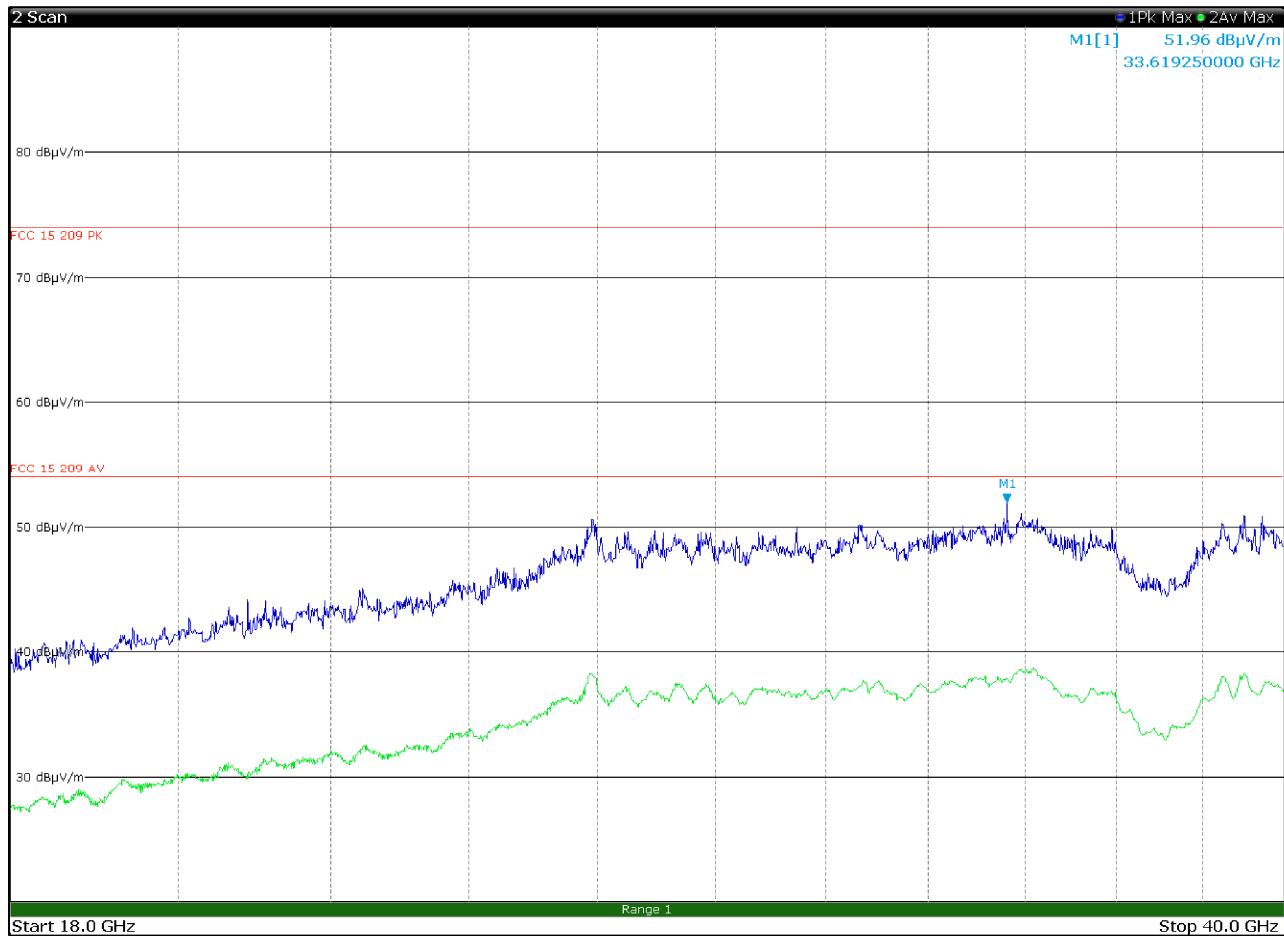


Figure 8.1-128: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 1

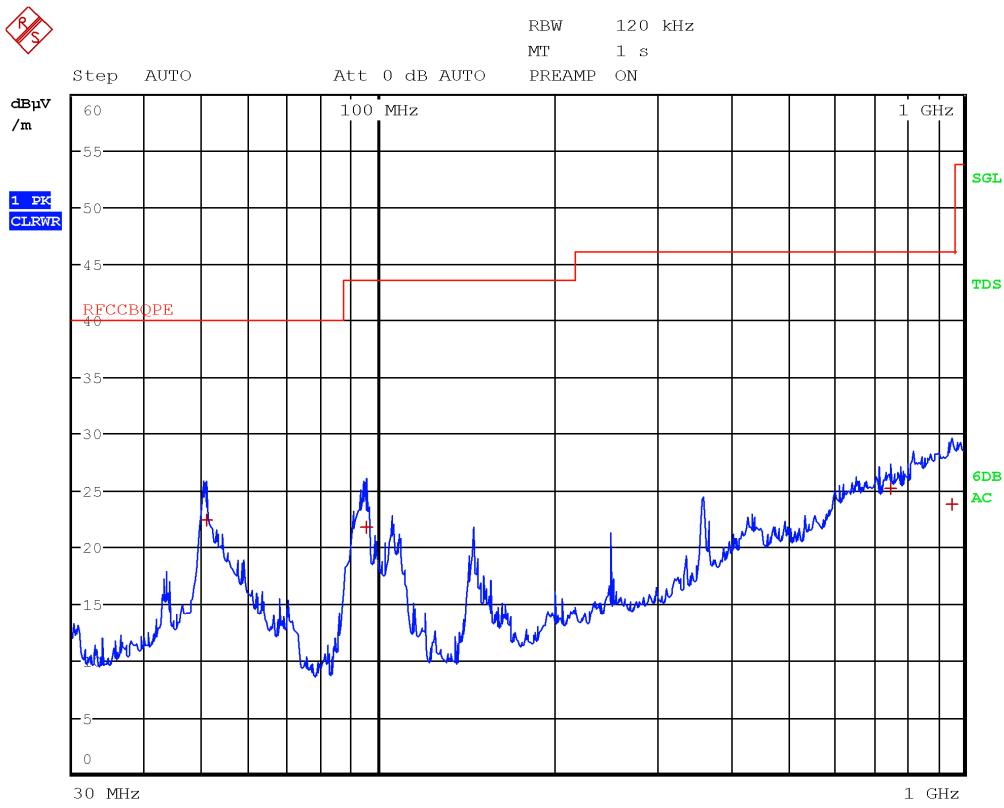


Figure 8.1-129: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 1

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
50.7200	22.4	40.0	-17.6	QP
95.5600	21.8	43.5	-21.7	QP
749.9600	25.3	46.0	-20.7	QP
957.7600	23.8	46.0	-22.2	QP

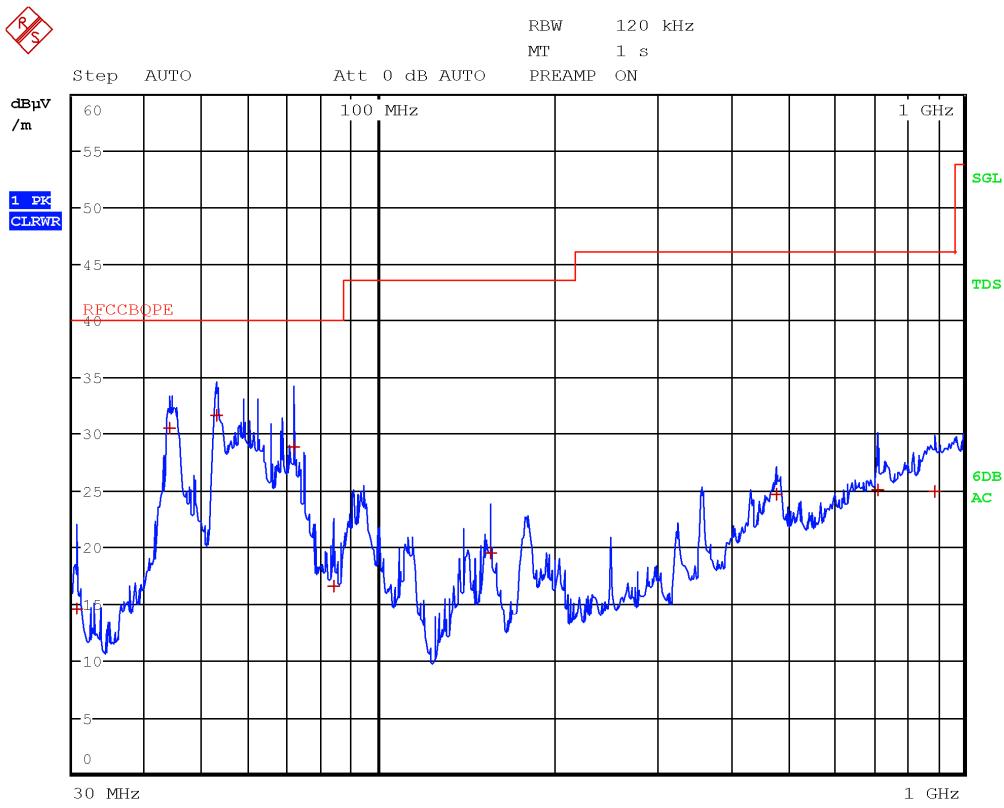


Figure 8.1-130: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 1

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
30.4400	14.6	40.0	-25.4	QP
43.8000	30.5	40.0	-9.5	QP
52.8800	31.7	40.0	-8.3	QP
71.6800	28.8	40.0	-11.2	QP
84.0400	16.6	40.0	-23.4	QP
155.6000	19.5	43.5	-24.0	QP
477.7600	24.7	46.0	-21.3	QP
715.3600	25.1	46.0	-20.9	QP
894.7600	25.0	46.0	-21.0	QP

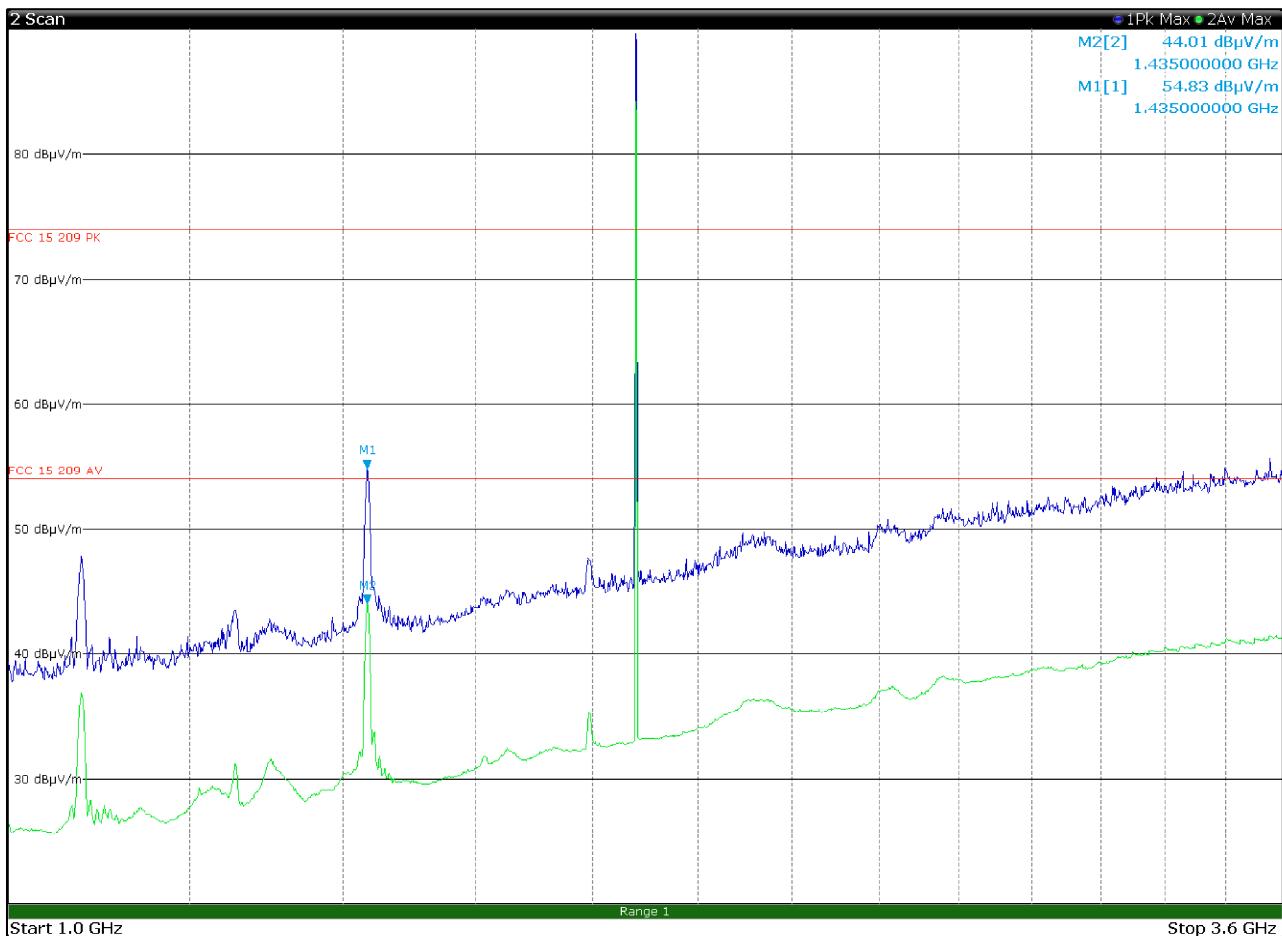


Figure 8.1-131: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4350	54.9	74.0	-19.1	PK
1.4350	44.1	54.0	-9.9	AV

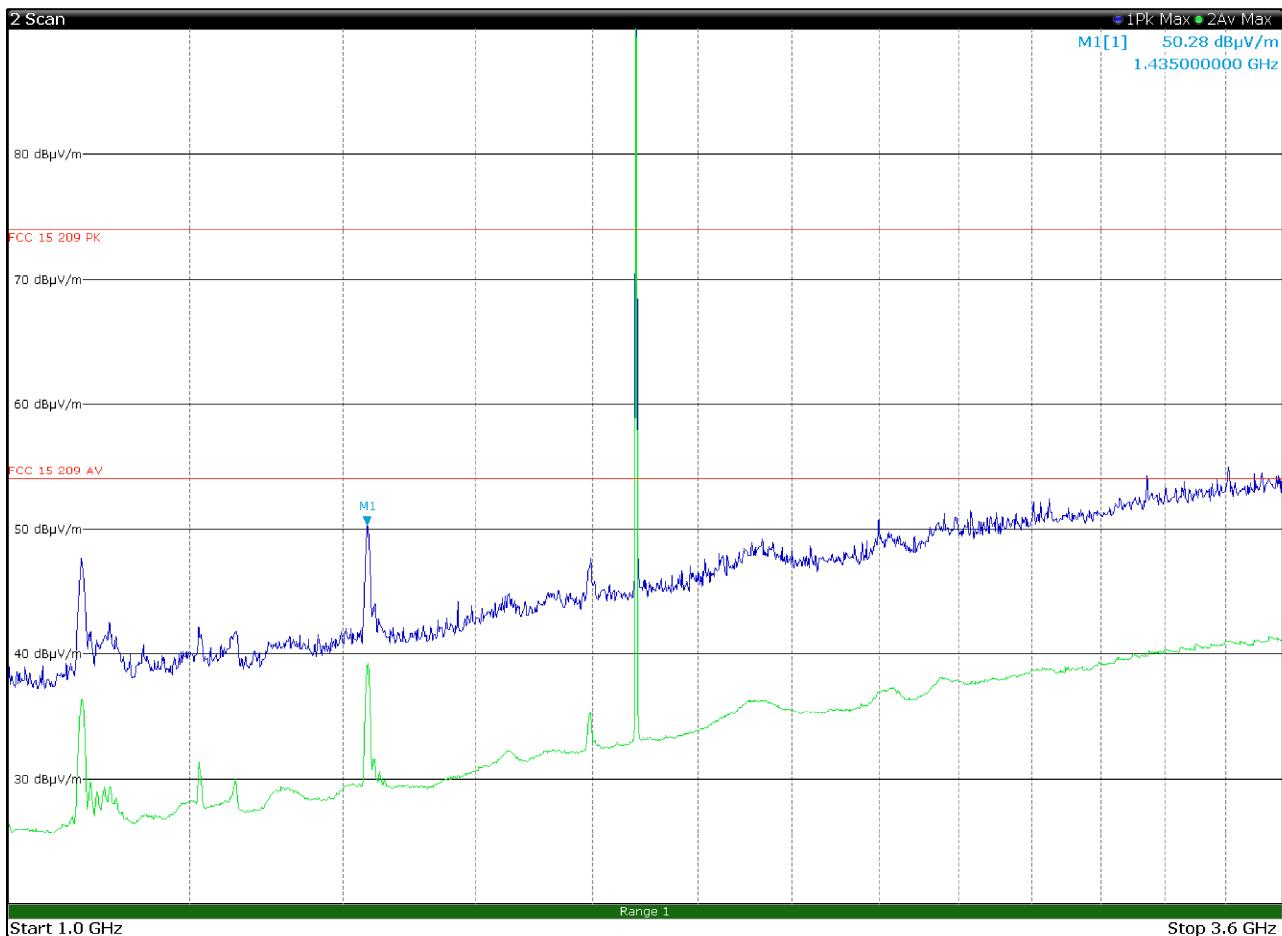


Figure 8.1-132: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4350	50.3	74.0	-23.7	PK
1.4350	38.7	54.0	-15.3	AV

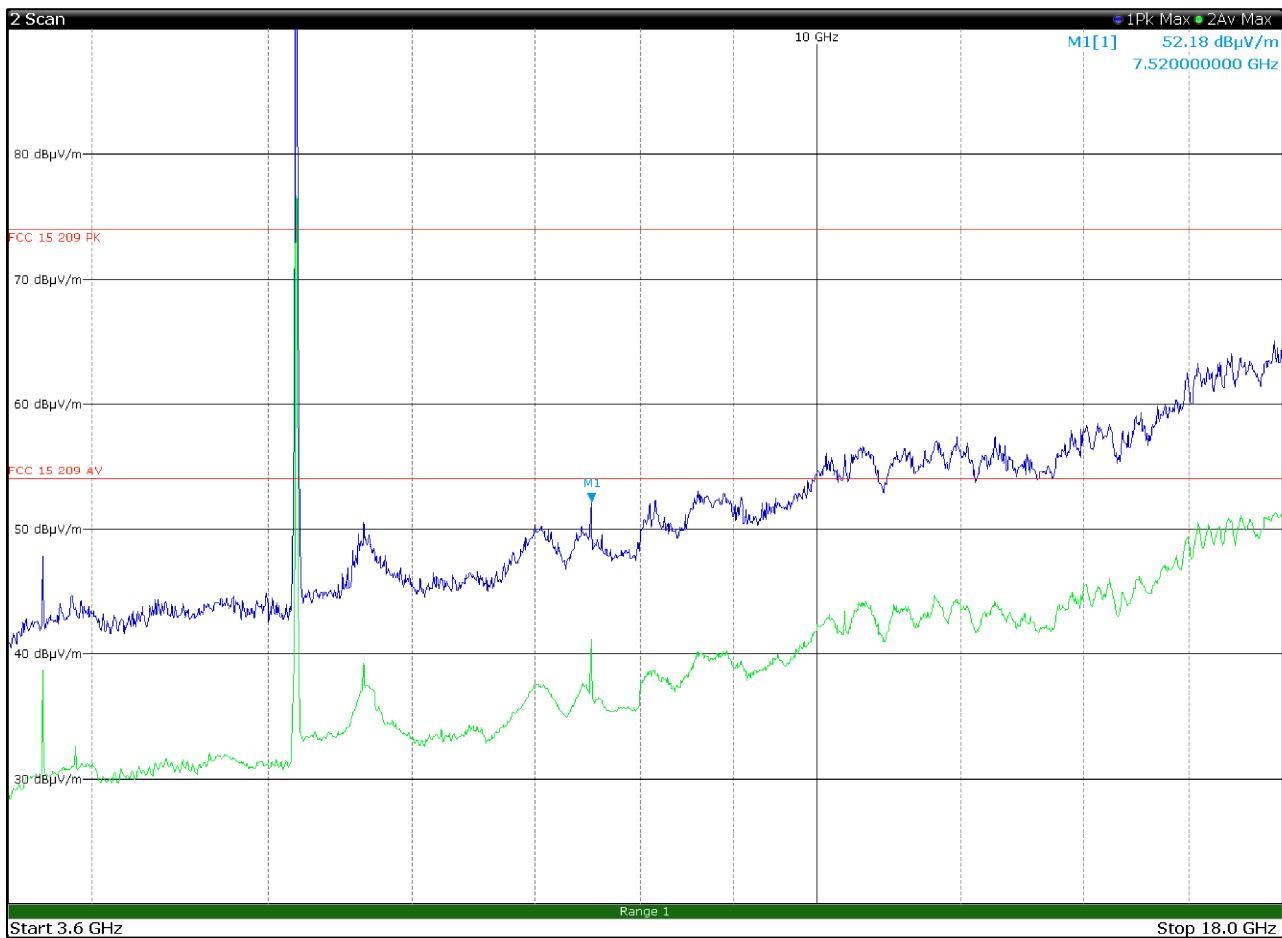


Figure 8.1-133: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
5.6400	50.2	82.2	-32.0	PK
7.5200	52.2	82.2	-30.0	PK

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

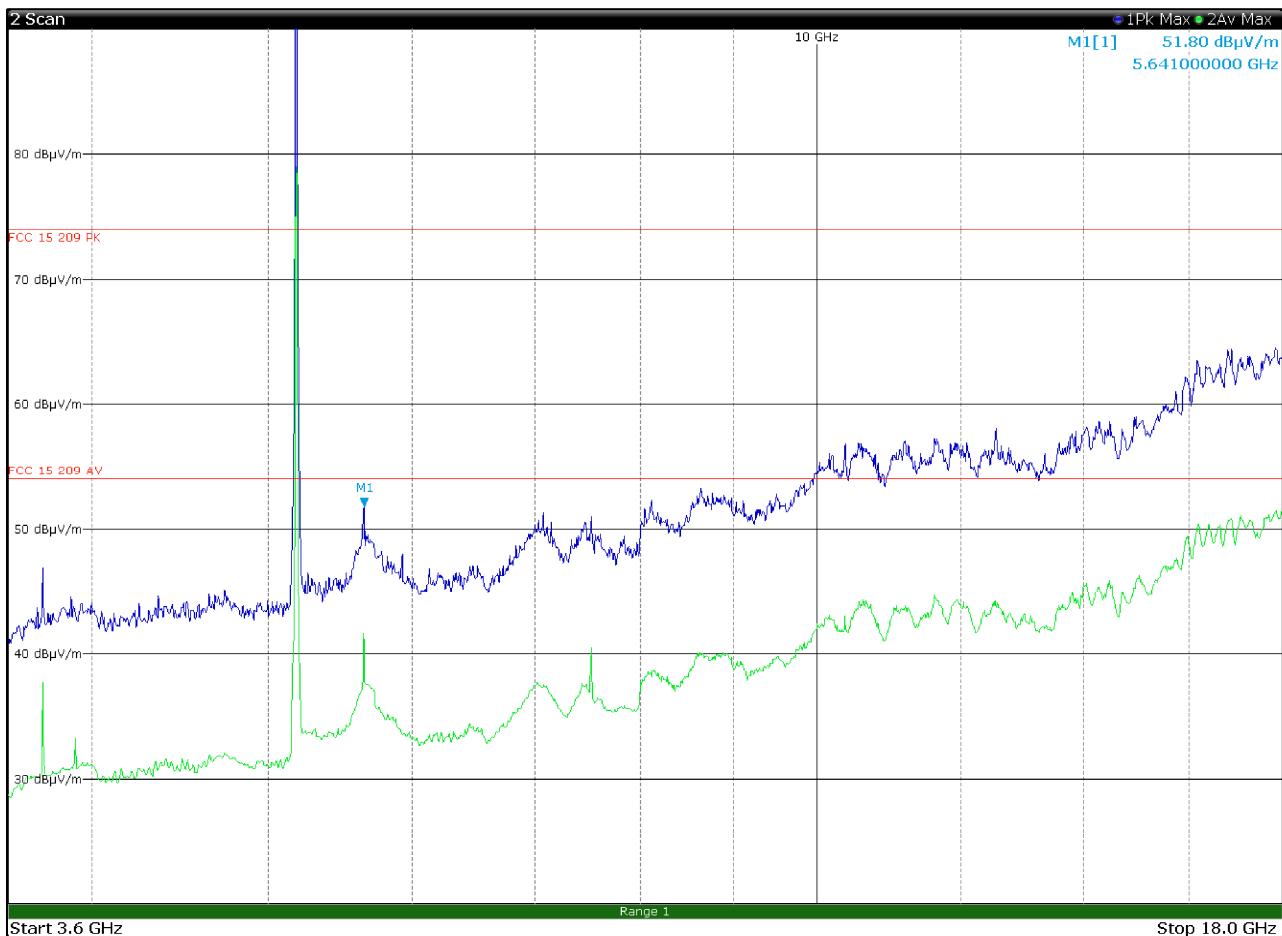


Figure 8.1-134: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 1

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
5.6410	51.8	82.2	-30.4	PK
7.5200	50.7	82.2	-31.5	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

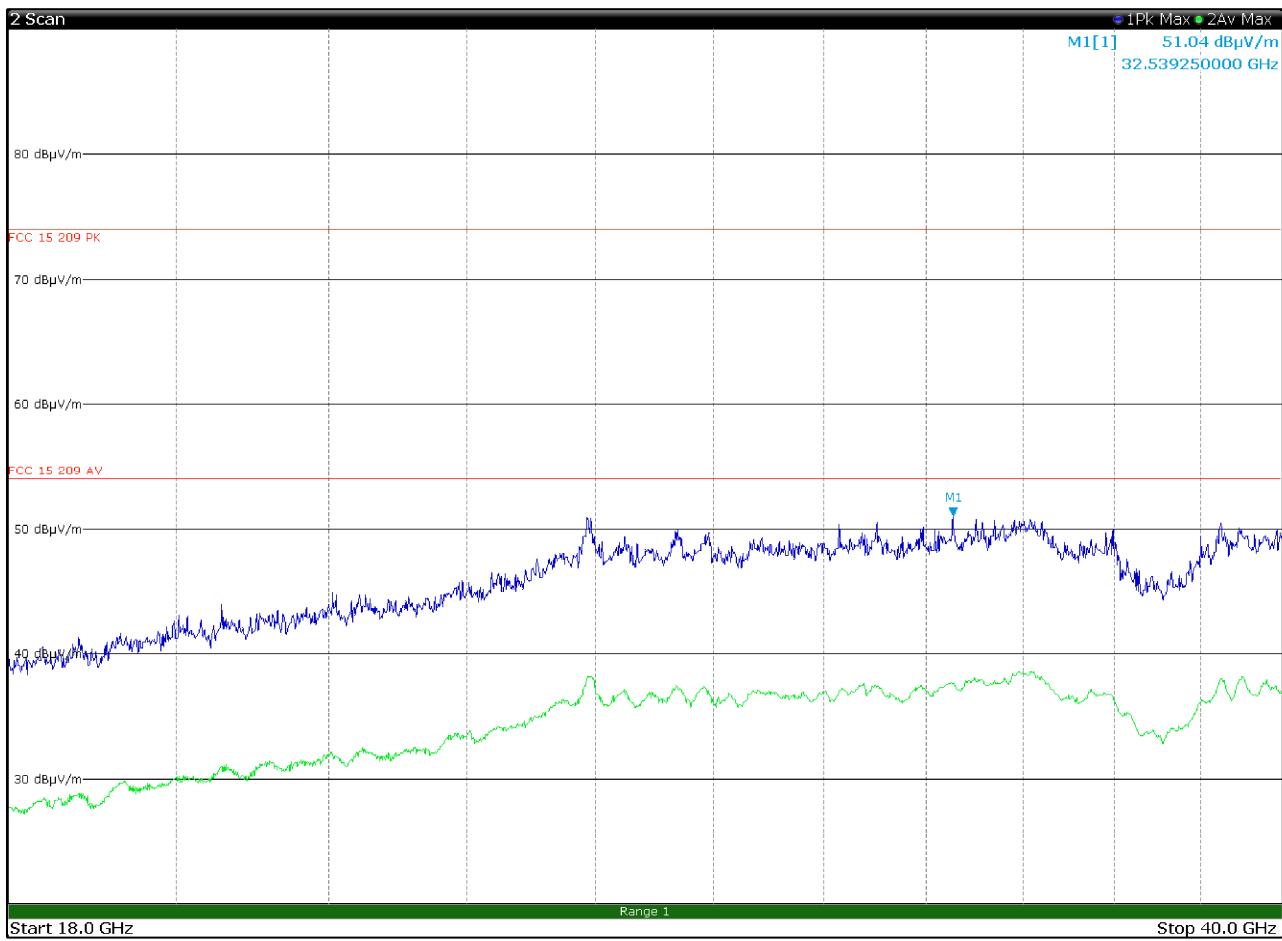


Figure 8.1-135: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 1

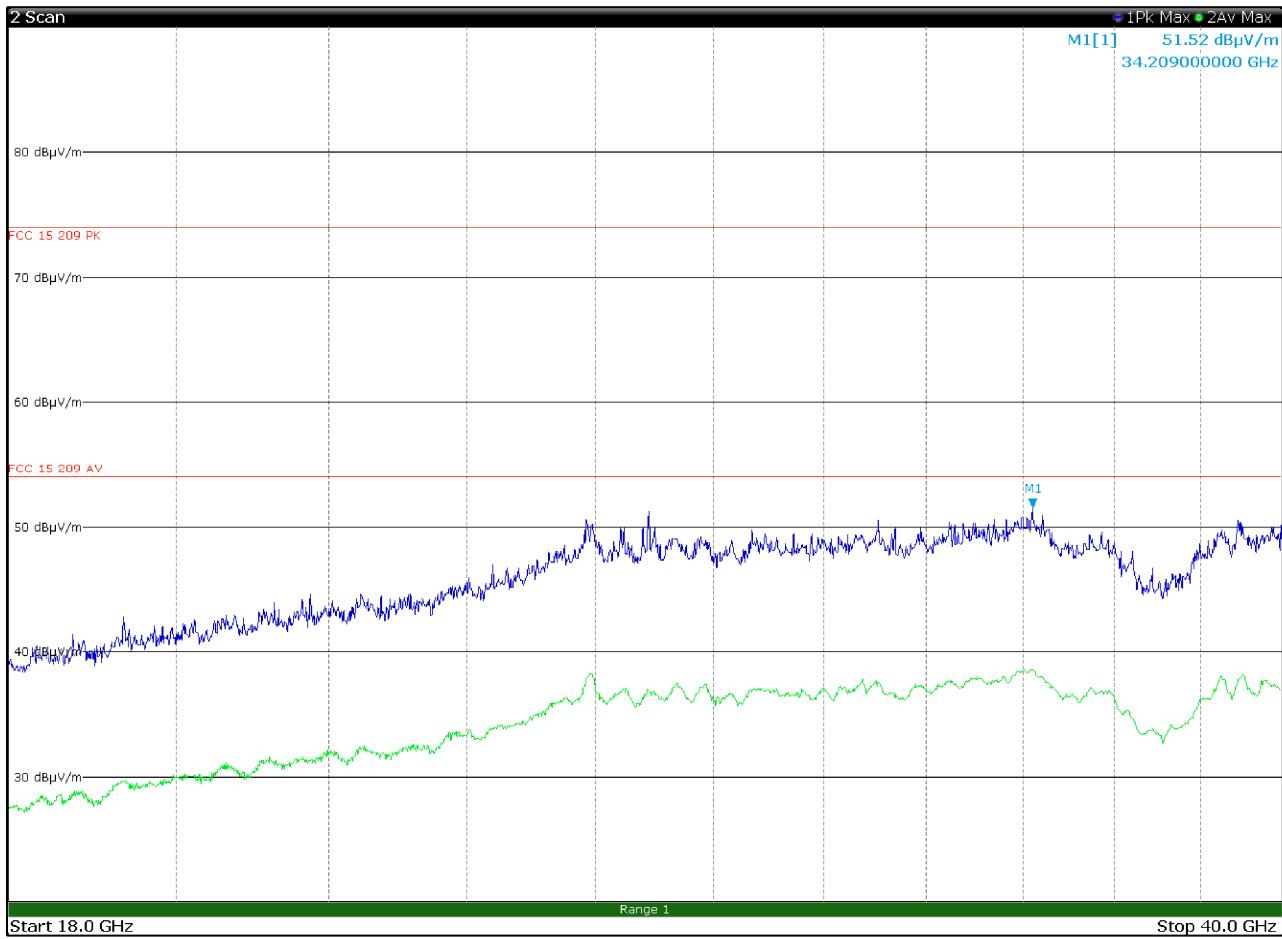


Figure 8.1-136: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 1

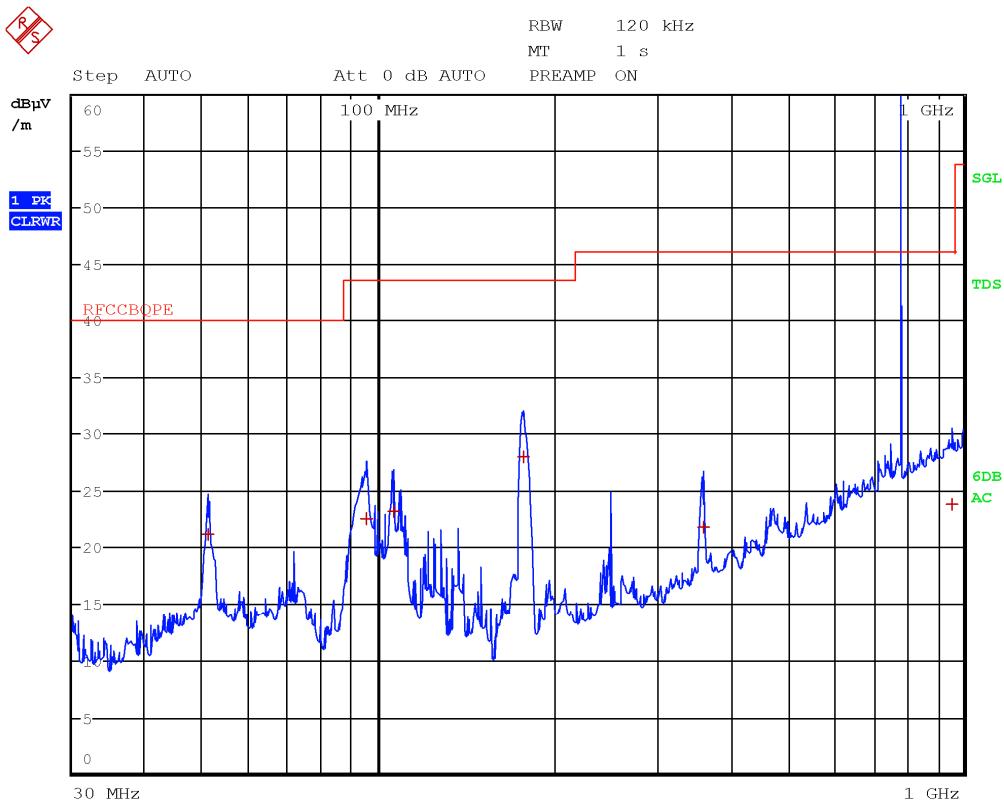


Figure 8.1-137: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
51.2400	21.2	40.0	-18.8	QP
95.4000	22.6	43.5	-20.9	QP
105.9200	23.2	43.5	-20.3	QP
177.3200	28.0	43.5	-15.5	QP
359.5600	21.8	46.0	-24.2	QP
955.6000	23.9	46.0	-22.1	QP

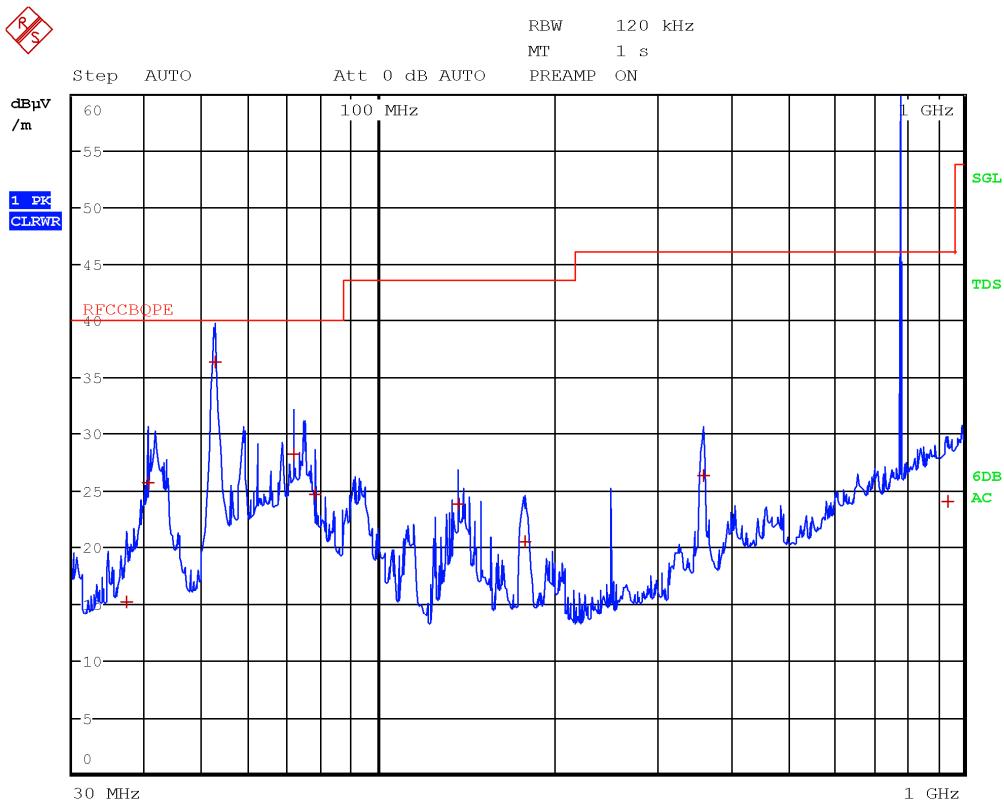


Figure 8.1-138: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
37.0000	15.2	40.0	-24.8	QP
40.4800	25.7	40.0	-14.3	QP
52.5600	36.4	40.0	-3.6	QP
71.6400	28.3	40.0	-11.7	QP
77.8800	24.7	40.0	-15.3	QP
137.0000	23.8	43.5	-19.7	QP
178.0800	20.5	43.5	-23.0	QP
358.7600	26.4	46.0	-19.6	QP
938.6800	24.1	46.0	-21.9	QP

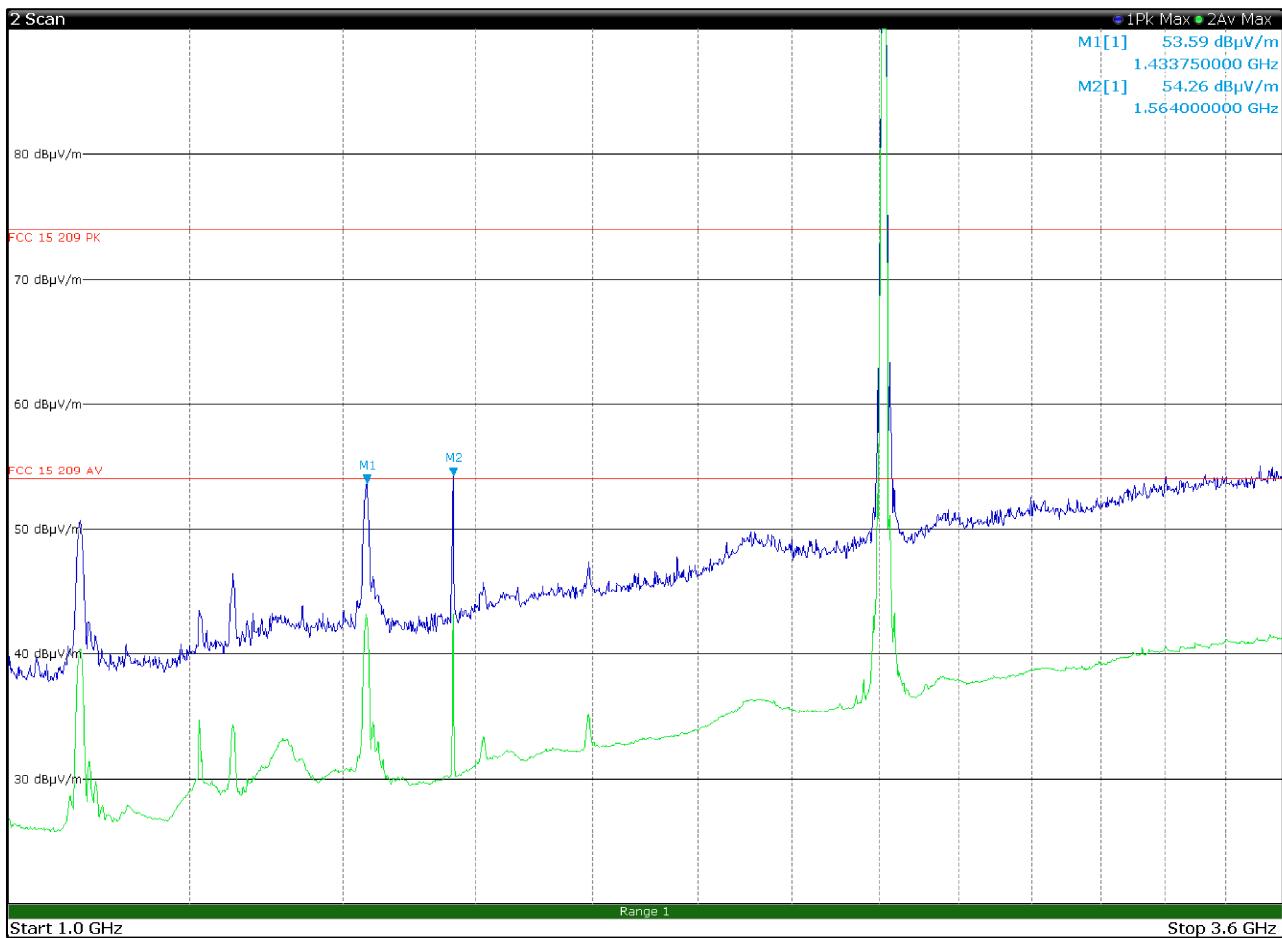


Figure 8.1-139: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1.4352	53.6	74.0	-20.4	PK
1.4352	42.1	54.0	-11.9	AV
1.5640	54.3	82.2	-27.9	PK

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

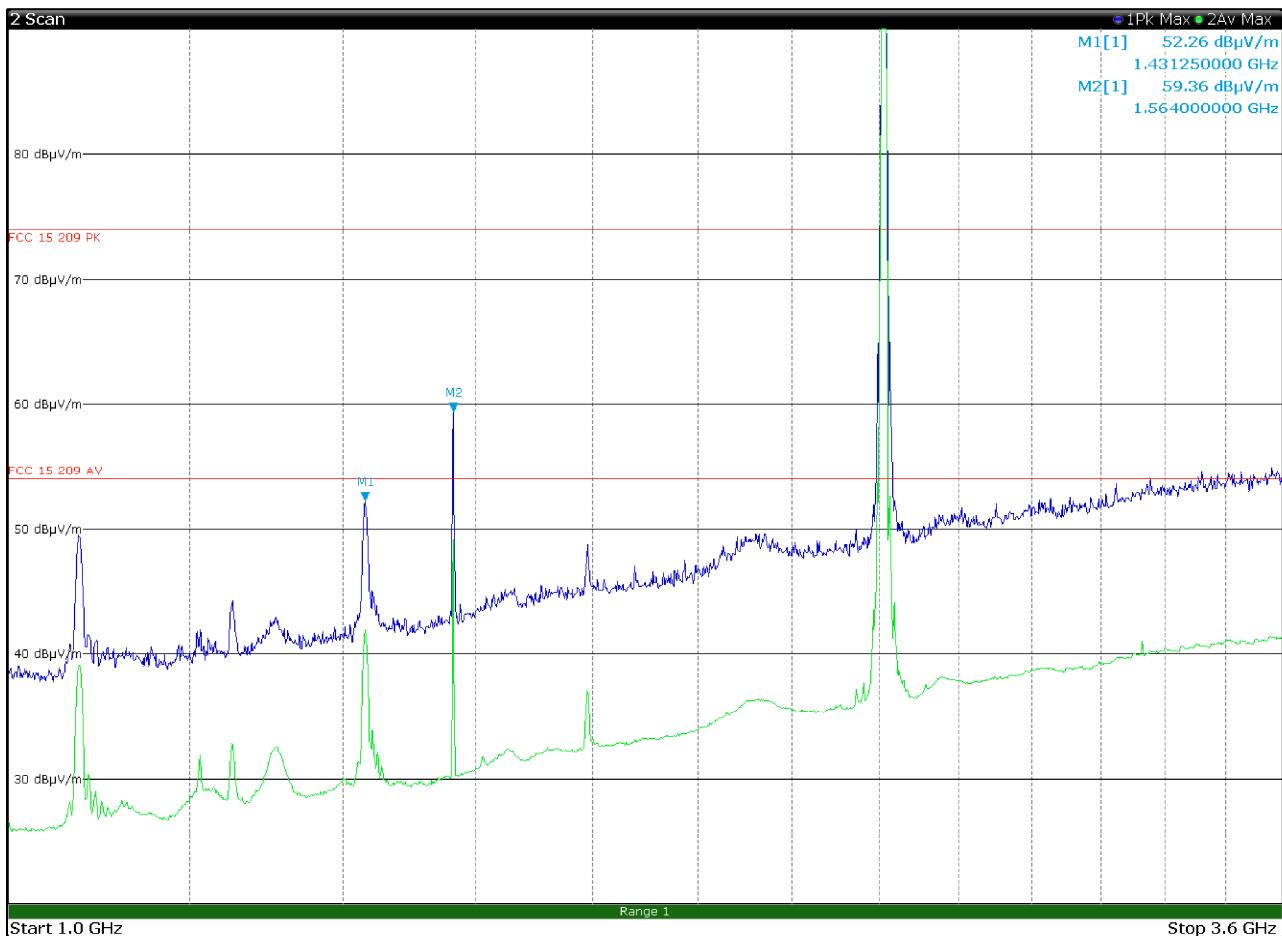


Figure 8.1-140: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4312	52.3	74.0	-21.7	PK
1.4312	41.7	54.0	-12.3	AV
1.5640	59.4	82.2	-22.8	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

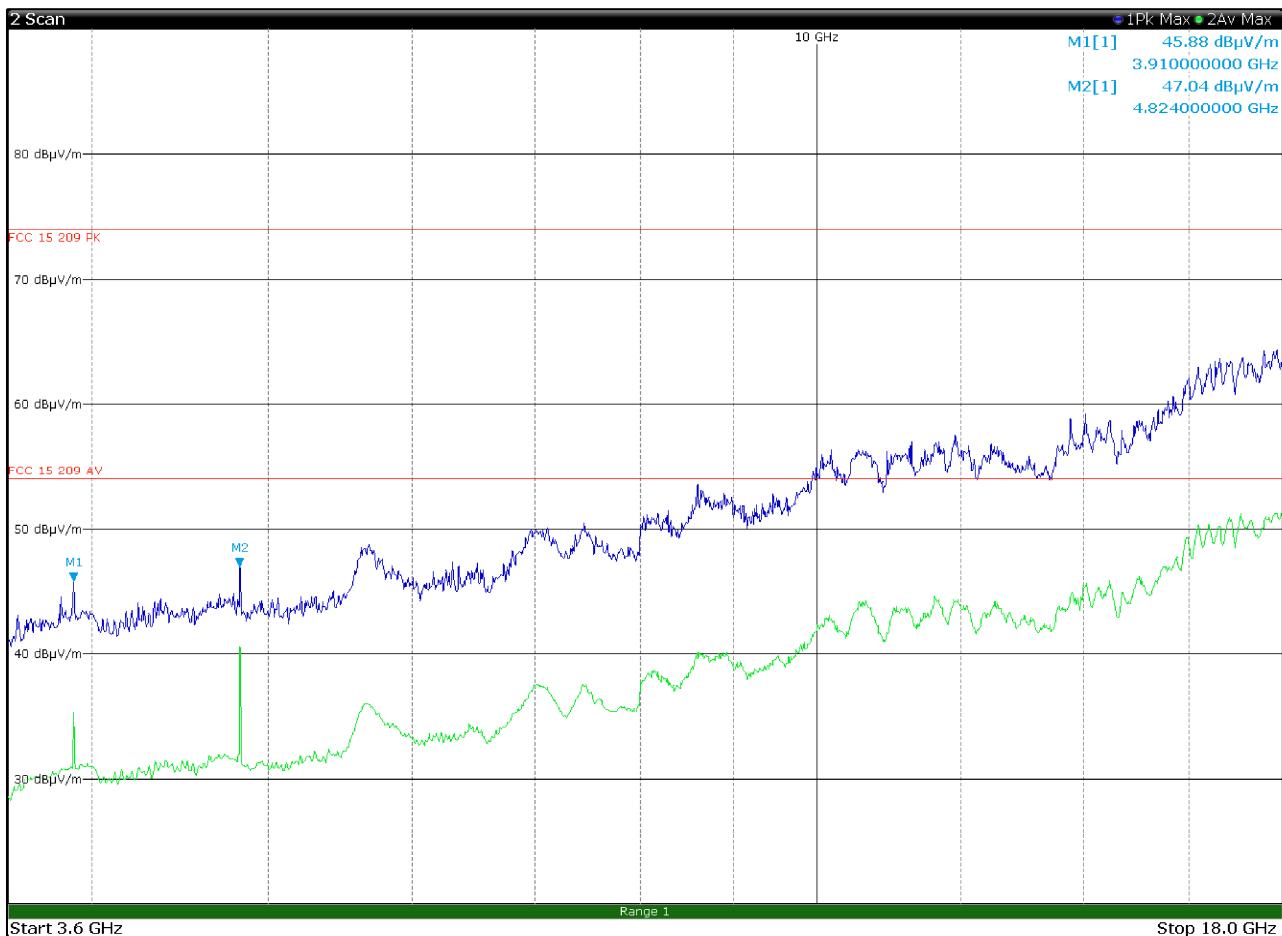


Figure 8.1-141: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 2

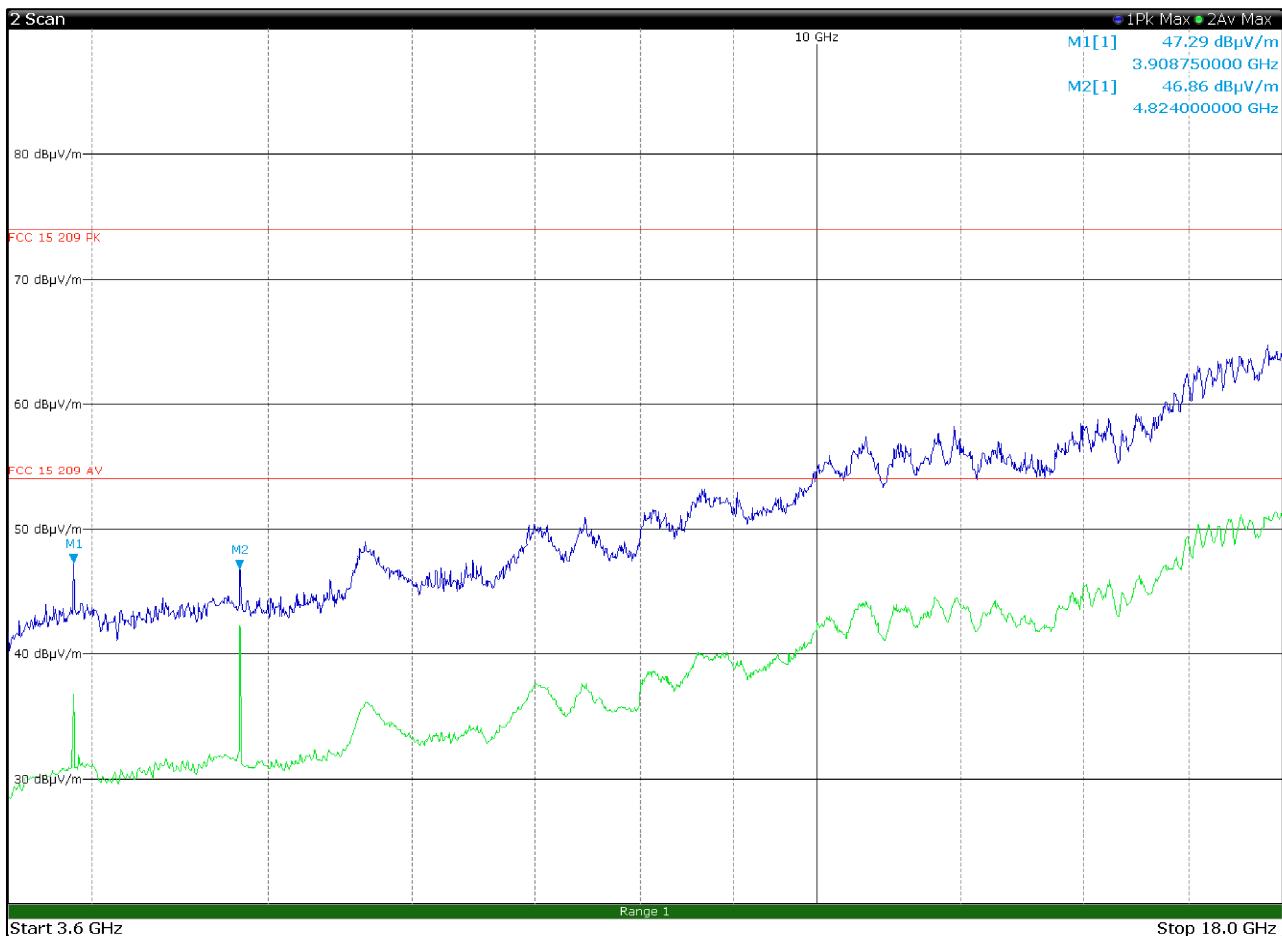


Figure 8.1-142: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 2

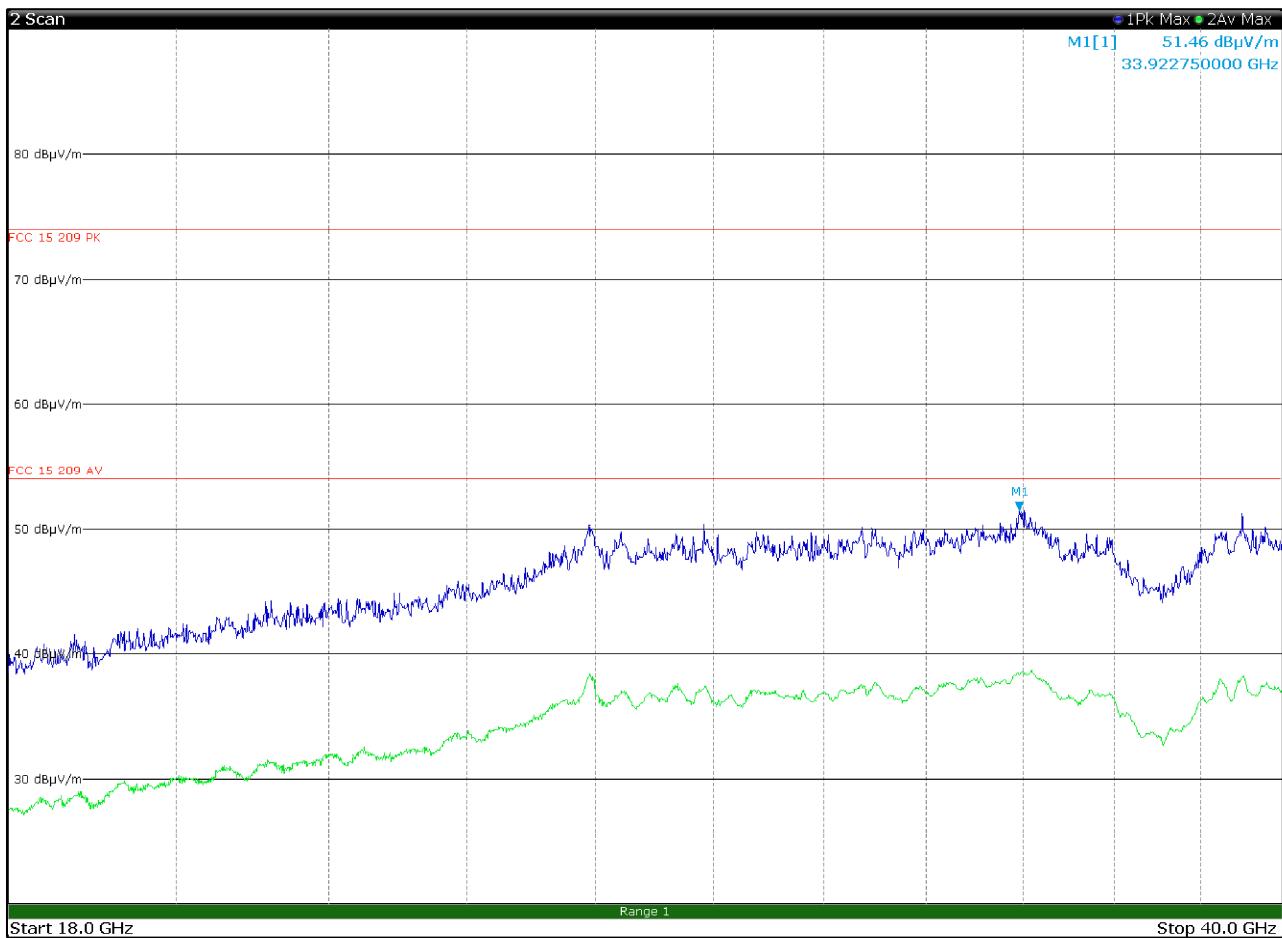


Figure 8.1-143: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 2

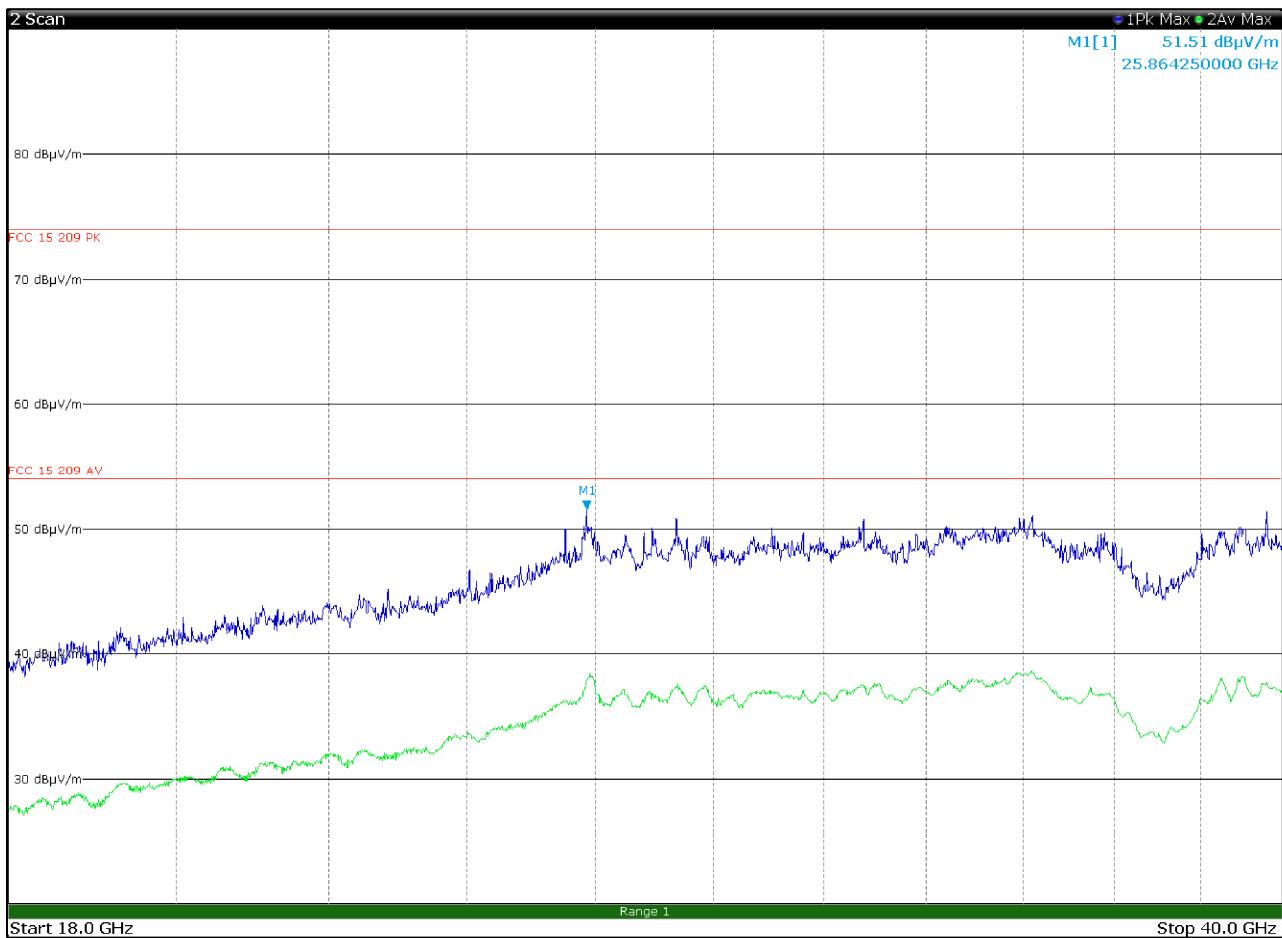


Figure 8.1-144: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 2

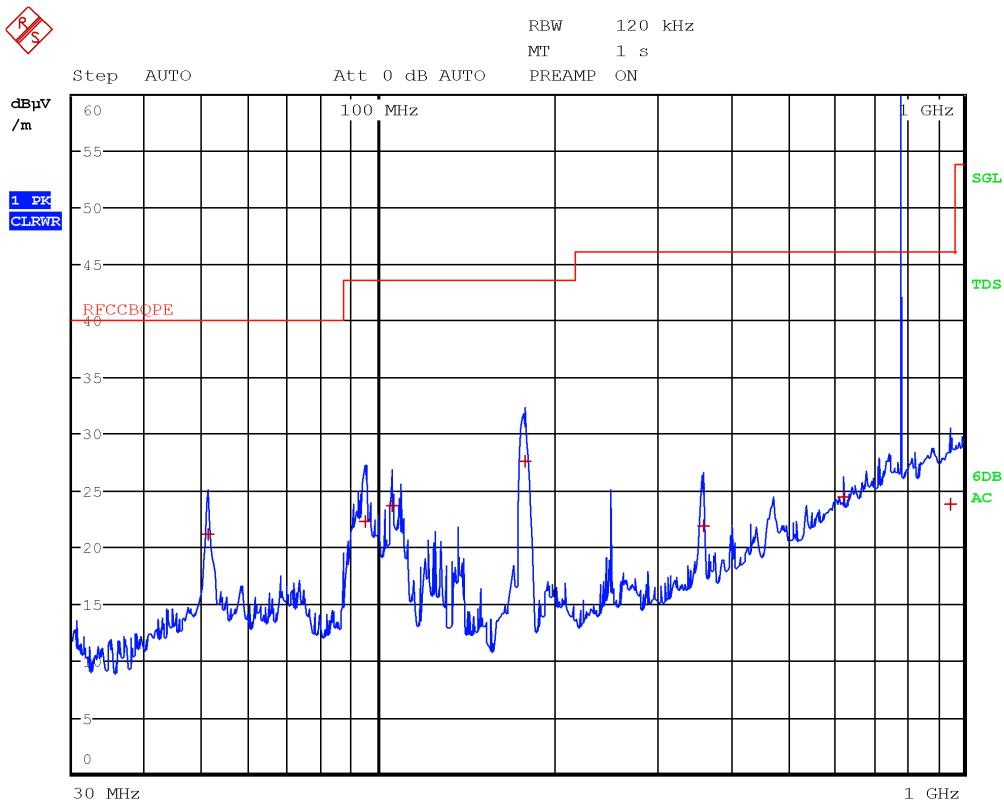


Figure 8.1-145: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
51.2400	21.2	40.0	-18.8	QP
94.7200	22.3	43.5	-21.2	QP
105.8800	23.7	43.5	-19.8	QP
178.1200	27.6	43.5	-15.9	QP
358.8000	22.0	46.0	-24.0	QP
624.9600	24.4	46.0	-21.6	QP
948.5600	23.8	46.0	-22.2	QP

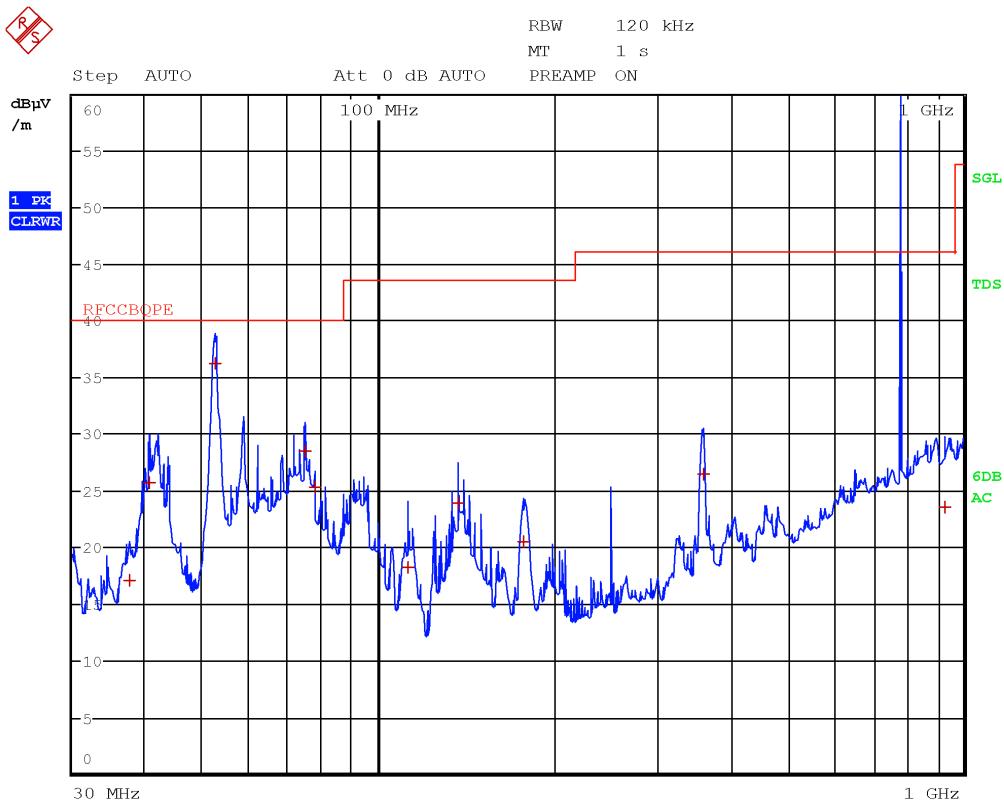


Figure 8.1-146: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
37.6000	17.2	40.0	-22.8	QP
40.5200	25.7	40.0	-14.3	QP
52.6000	36.3	40.0	-3.7	QP
74.7600	28.5	40.0	-11.5	QP
77.8400	25.3	40.0	-14.7	QP
112.0800	18.2	43.5	-25.3	QP
137.0000	23.9	43.5	-19.6	QP
177.4800	20.5	43.5	-23.0	QP
359.3600	26.4	46.0	-19.6	QP
928.1200	23.6	46.0	-22.4	QP

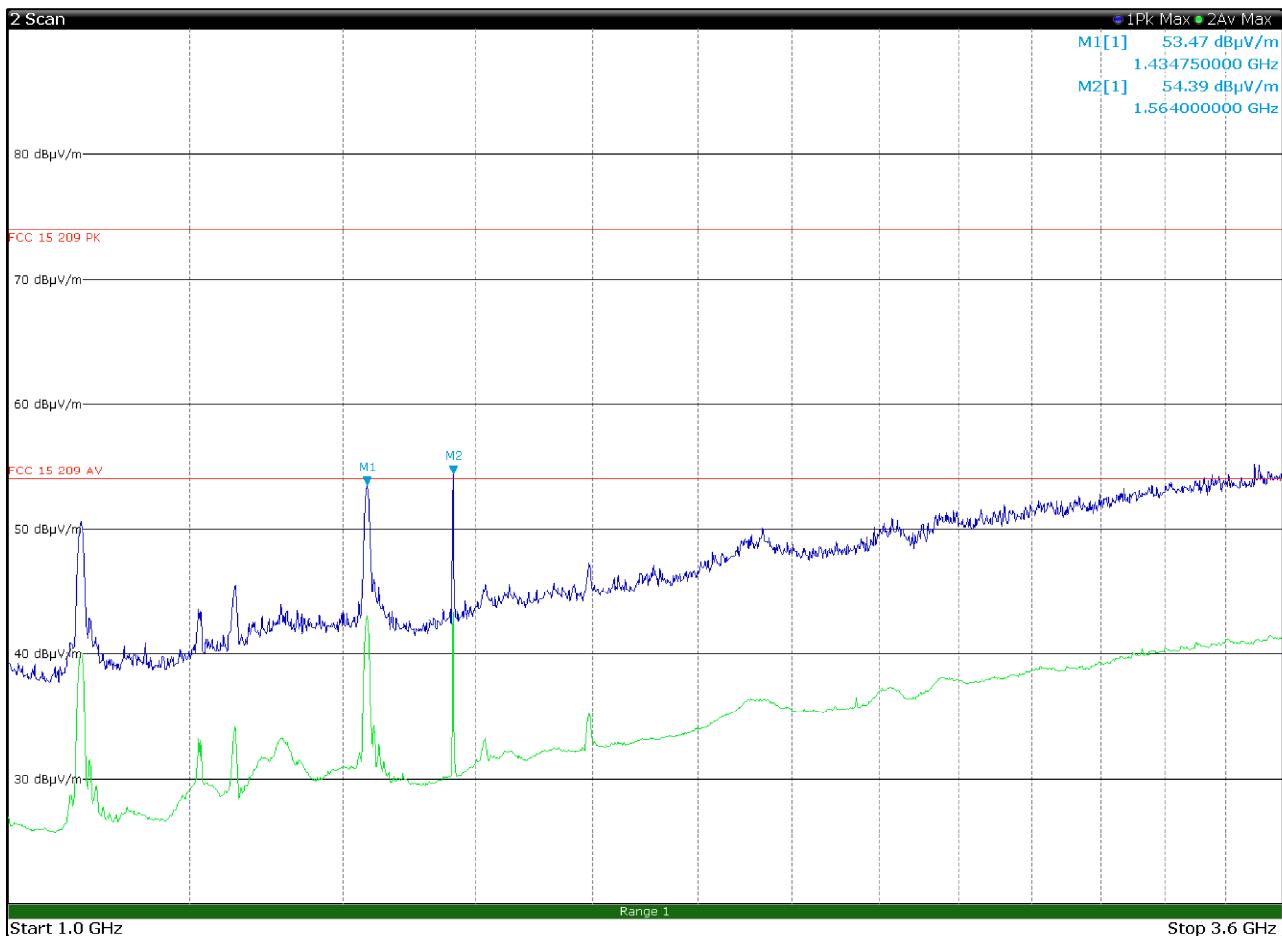


Figure 8.1-147: Radiated spurious emissions, LTE Tx at 782 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4347	53.5	74.0	-20.5	PK
1.4347	43.7	54.0	-10.3	AV
1.5640	54.4	82.2	-27.8	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

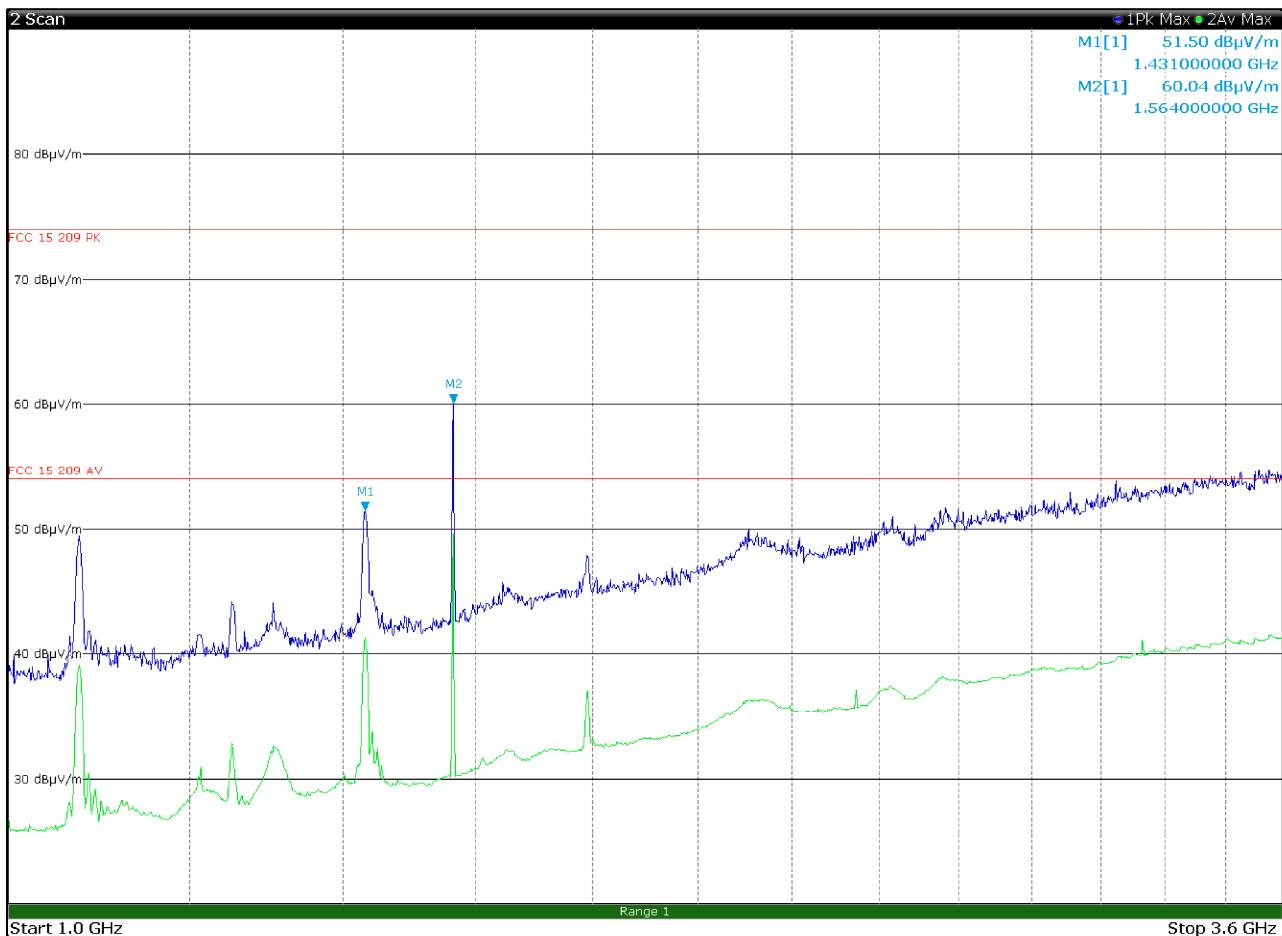


Figure 8.1-148: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1.4310	51.5	74.0	-22.5	PK
1.4310	40.9	54.0	-13.1	AV
1.5640	60.1	82.2	-22.1	PK

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

Section 8
Test name
Specification

Testing data
FCC 15.209 and RSS-GEN section 8.9 Radiated emission limits; general requirements
FCC Part 15 Subpart C and RSS-GEN, Issue 5

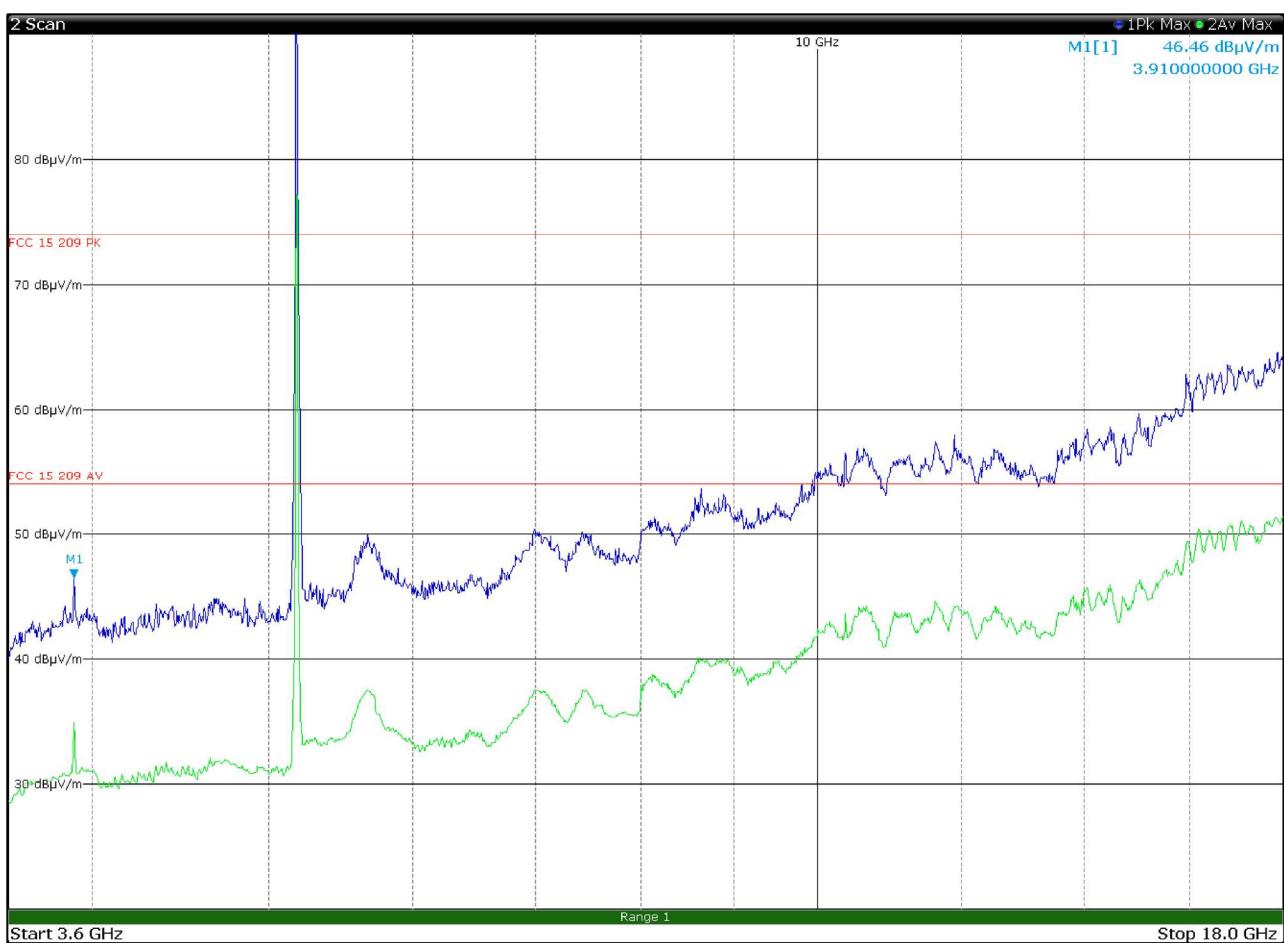


Figure 8.1-149: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

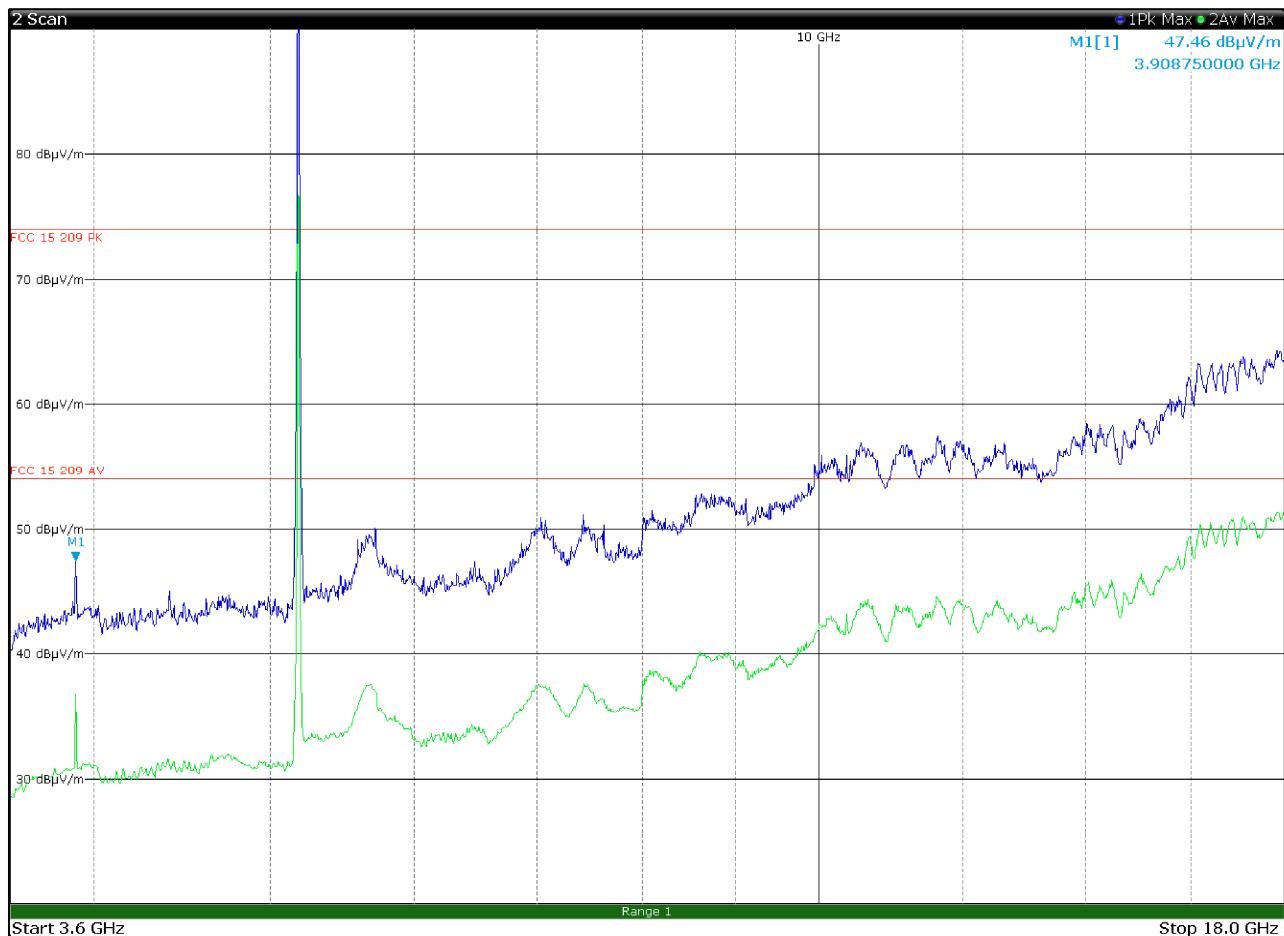


Figure 8.1-150: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

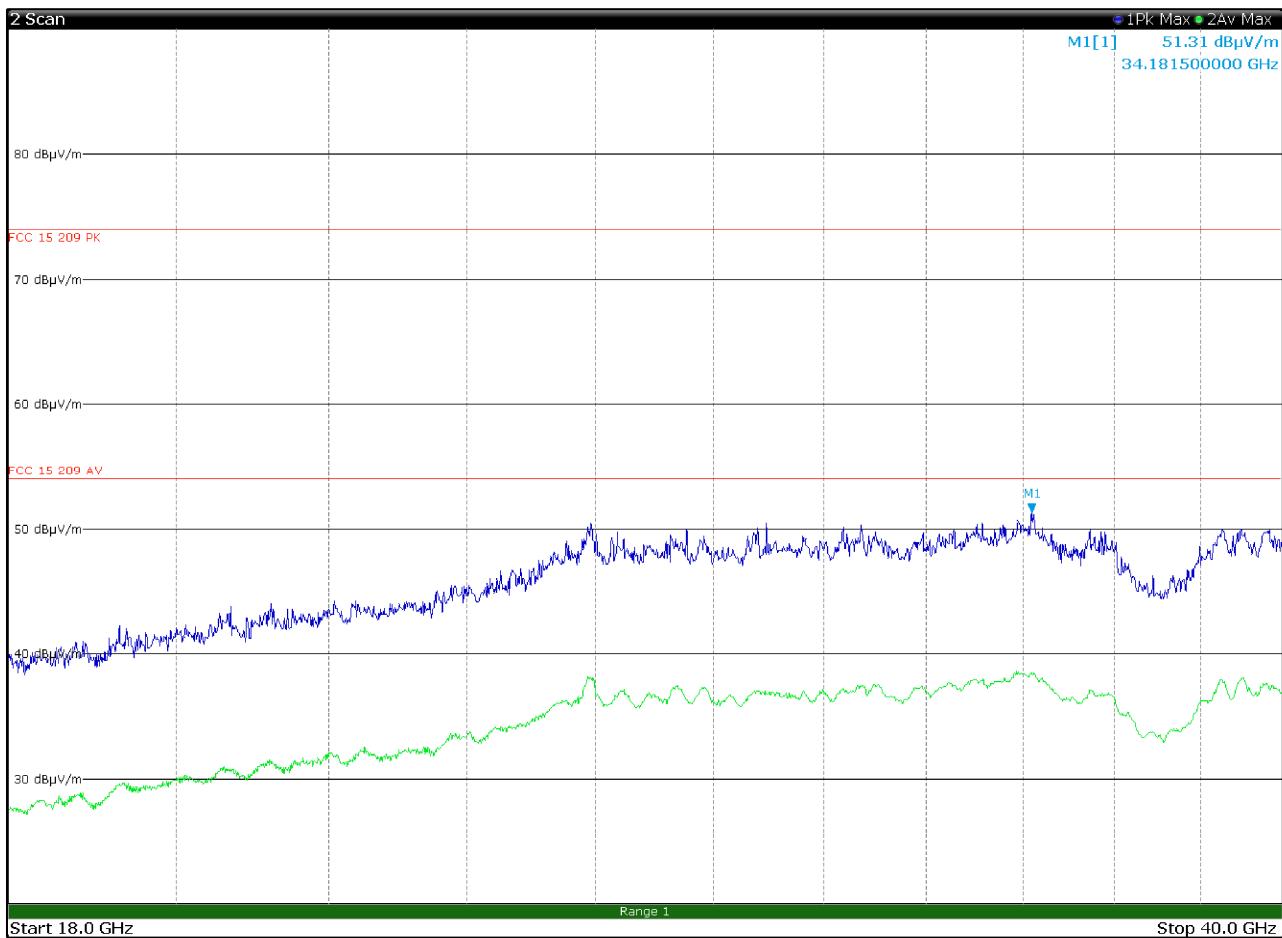


Figure 8.1-151: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 2

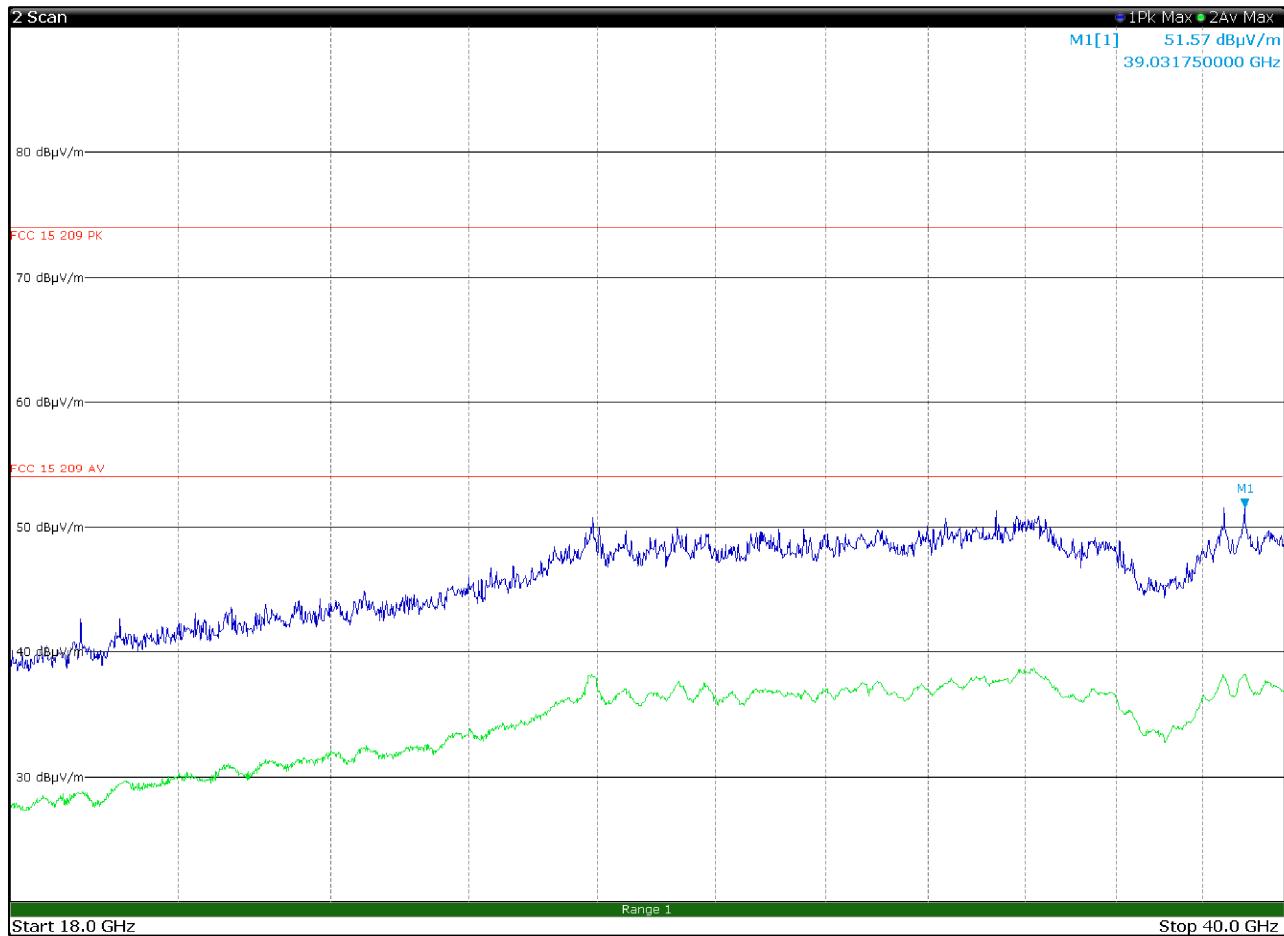


Figure 8.1-152: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 2

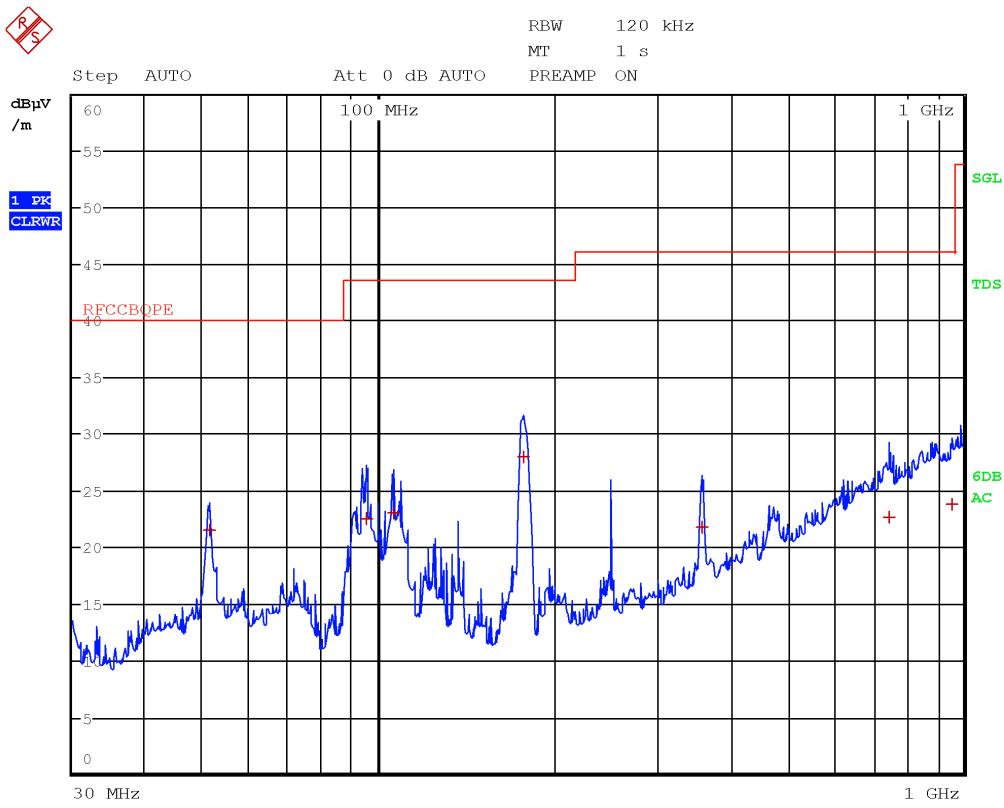


Figure 8.1-153: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 2

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
51.3200	21.5	40.0	-18.5	QP
95.4400	22.5	43.5	-21.0	QP
105.9200	23.0	43.5	-20.5	QP
177.4800	27.9	43.5	-15.6	QP
357.1200	21.7	46.0	-24.3	QP
746.4800	22.7	46.0	-23.3	QP
958.4400	23.8	46.0	-22.2	QP

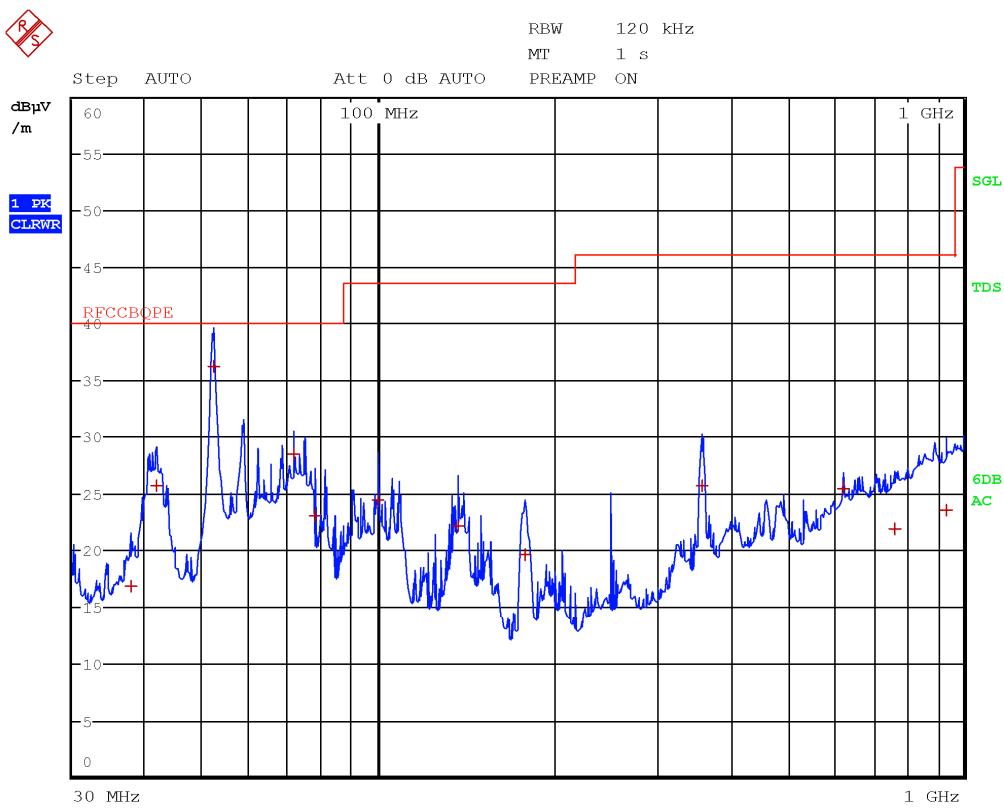


Figure 8.1-154: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 2

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
37.6800	16.8	40.0	-23.2	QP
41.6400	25.7	40.0	-14.3	QP
52.2000	36.3	40.0	-3.7	QP
71.6800	28.5	40.0	-11.5	QP
77.8400	23.1	40.0	-16.9	QP
99.6400	24.4	43.5	-19.1	QP
136.9600	22.2	43.5	-21.3	QP
178.2800	19.6	43.5	-23.9	QP
357.4000	25.6	46.0	-20.4	QP
624.9600	25.4	46.0	-20.6	QP
764.4800	21.9	46.0	-24.1	QP
933.8000	23.6	46.0	-22.4	QP

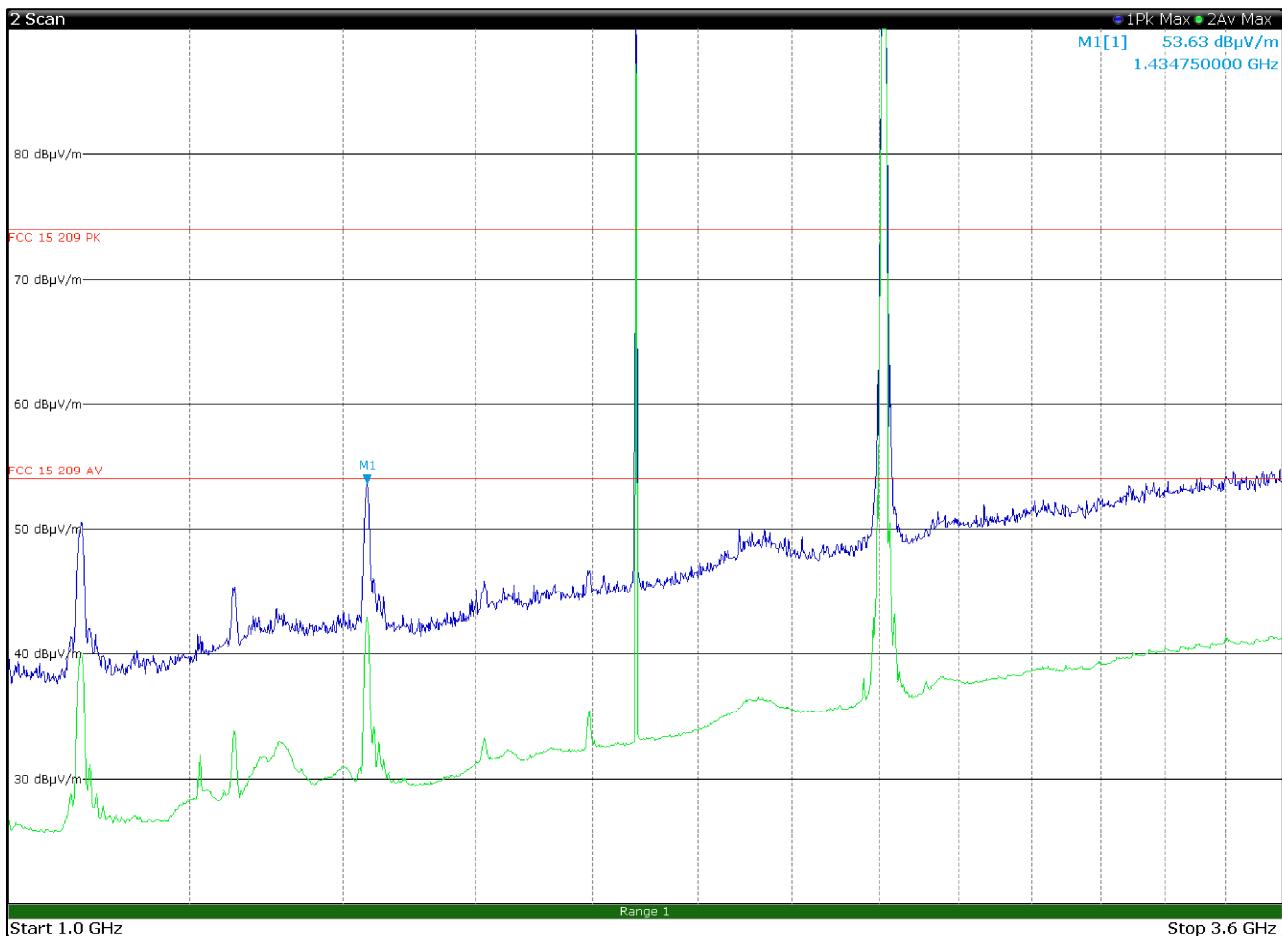


Figure 8.1-155: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1.4347	53.7	74.0	-20.3	PK
1.4347	43.5	54.0	-10.5	AV

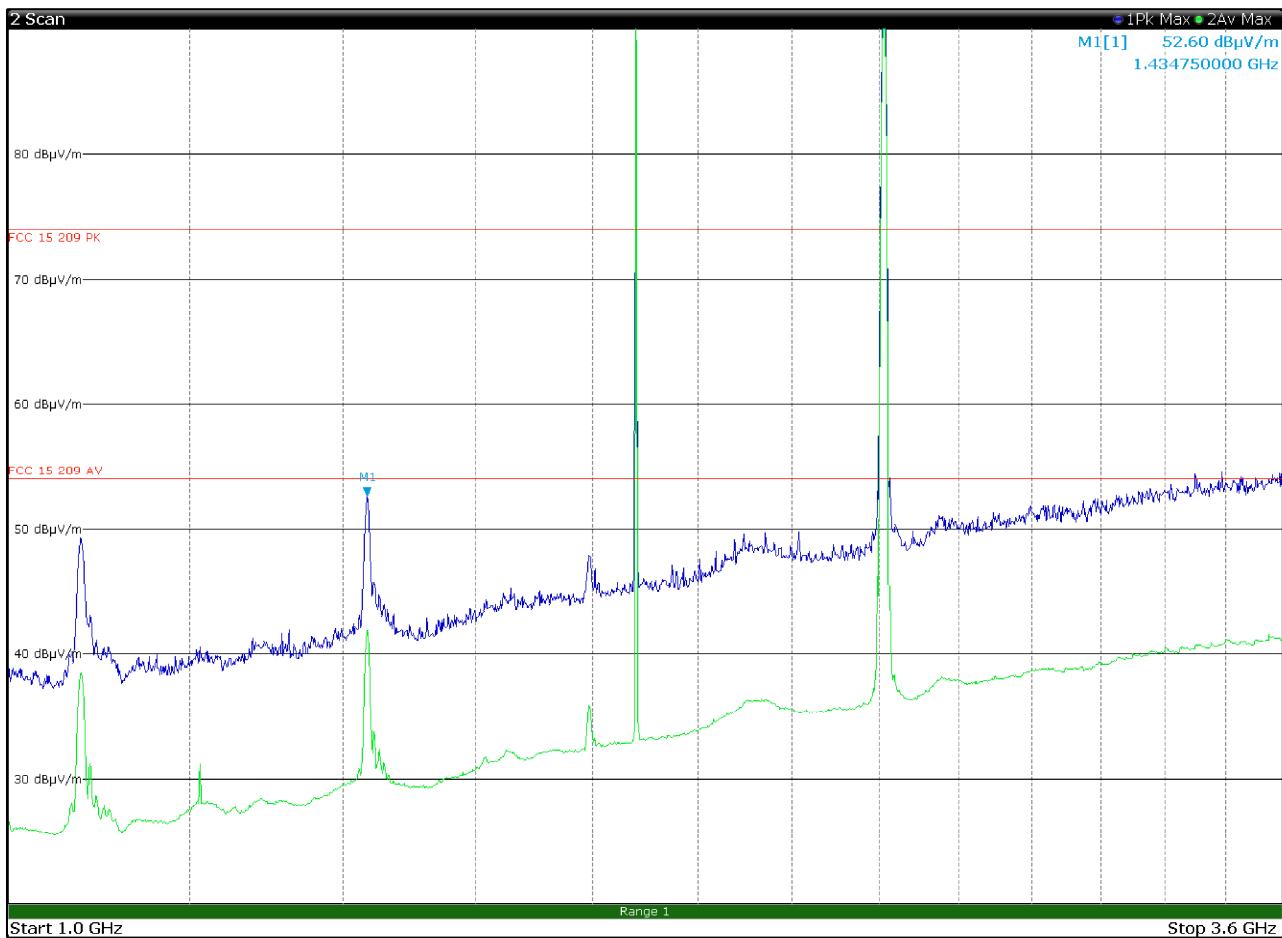


Figure 8.1-156: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4347	52.6	74.0	-21.4	PK
1.4347	41.9	54.0	-12.1	AV

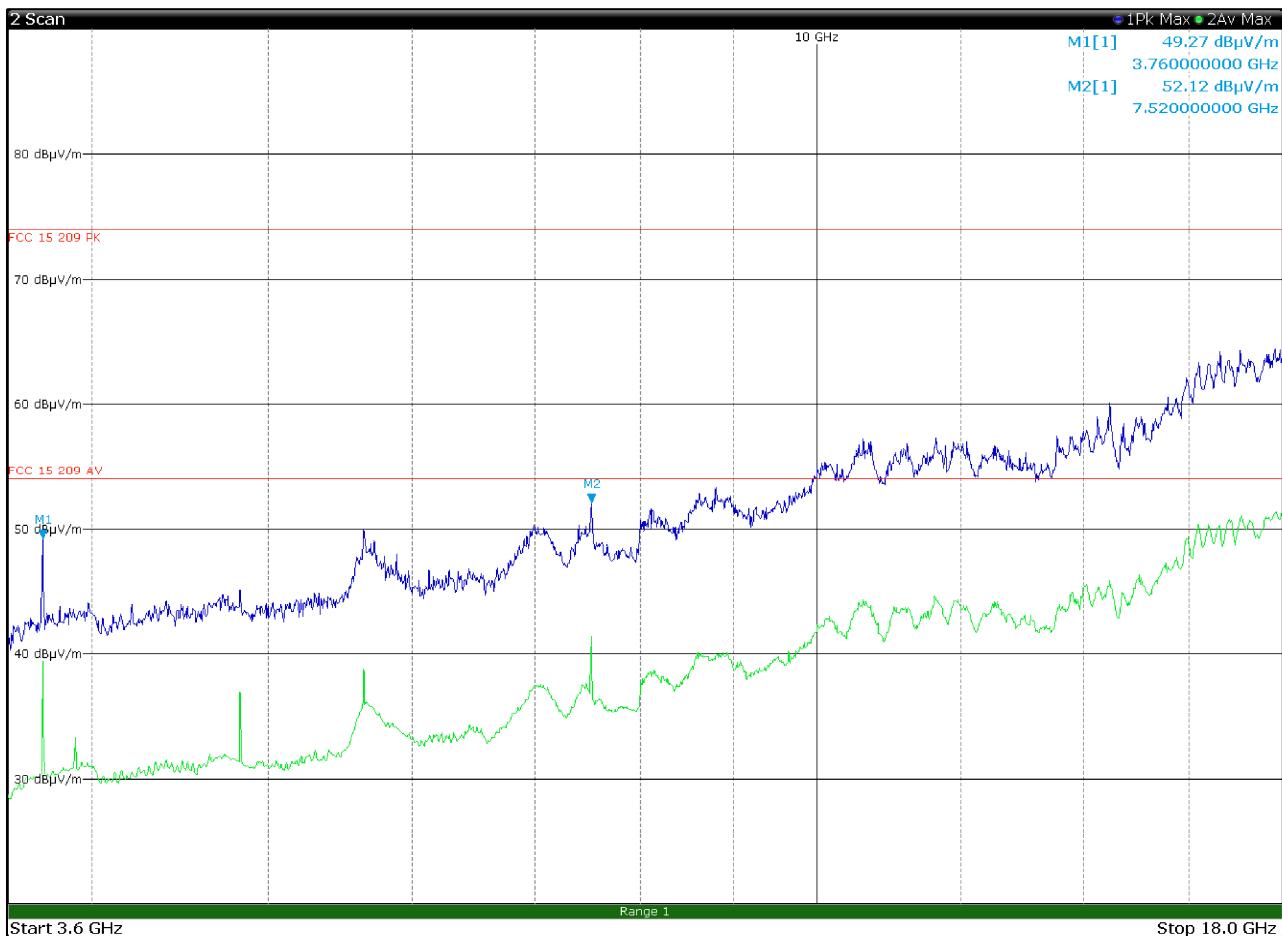


Figure 8.1-157: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
3.7600	49.3	82.2	-32.9	PK
5.6400	50.1	82.2	-32.1	PK
7.5200	52.2	82.2	-30.0	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

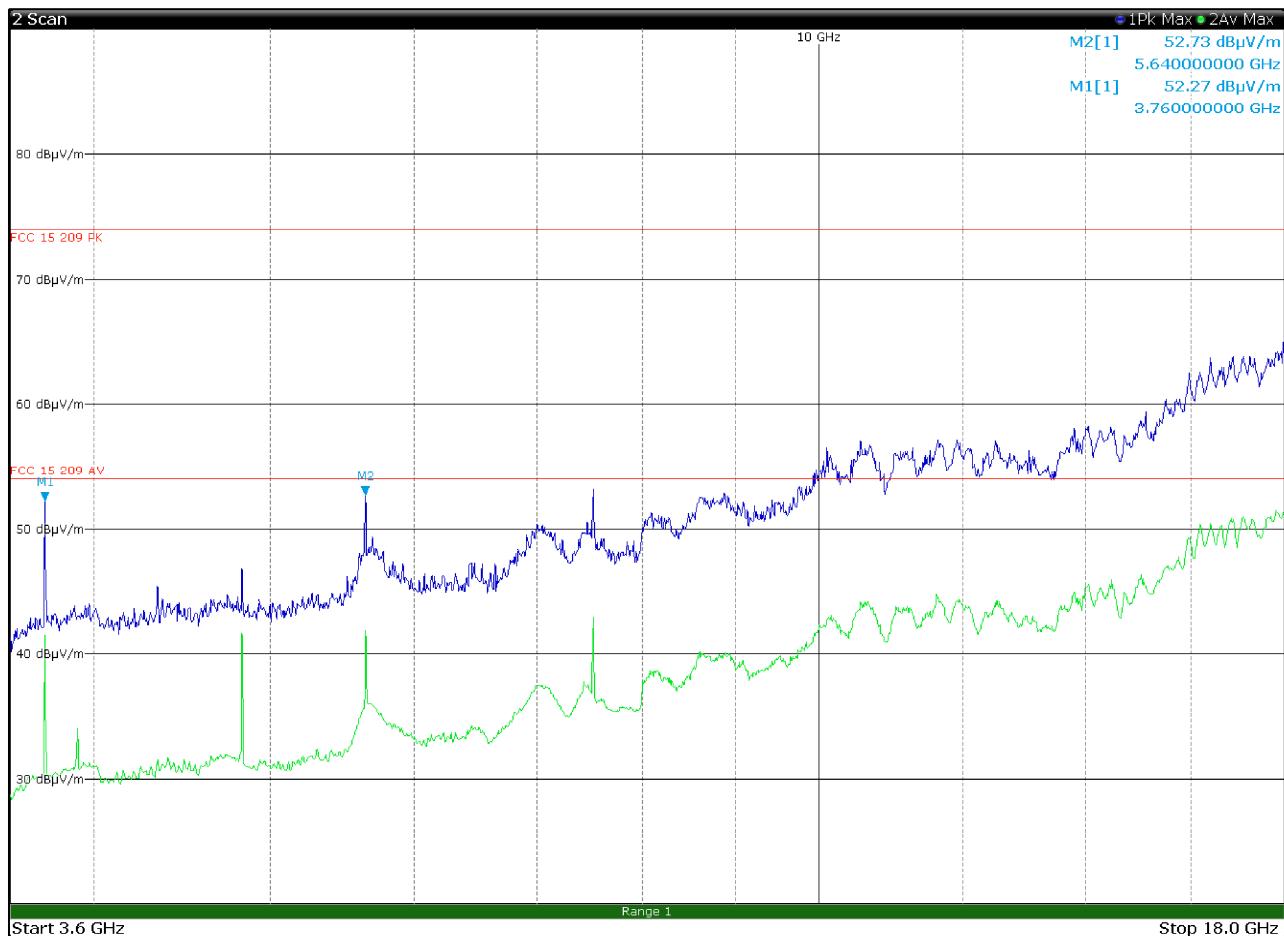


Figure 8.1-158: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
3.7600	52.3	82.2	-29.9	PK
5.6400	52.8	82.2	-29.4	PK
7.5200	52.9	82.2	-29.3	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

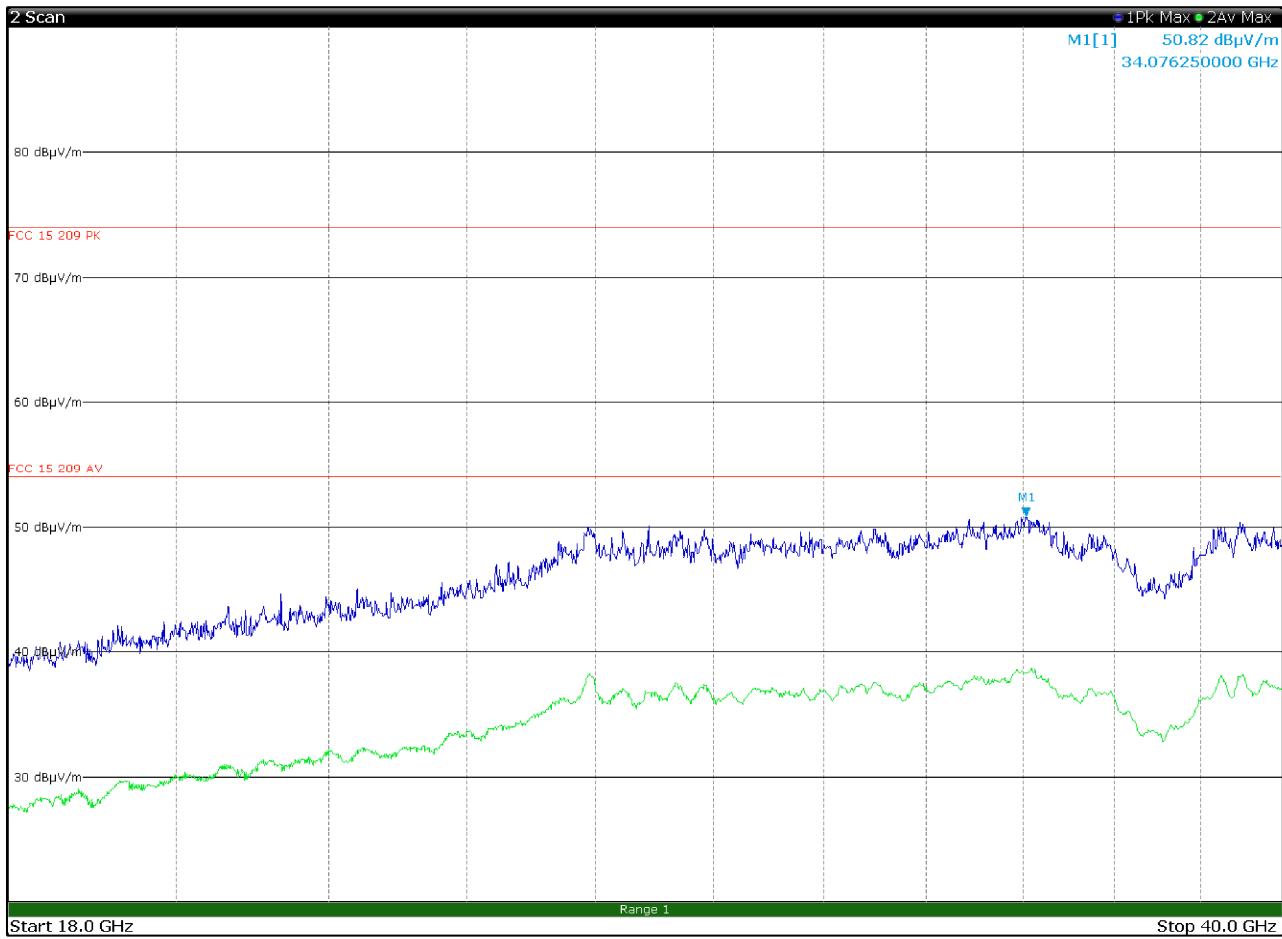


Figure 8.1-159: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 2

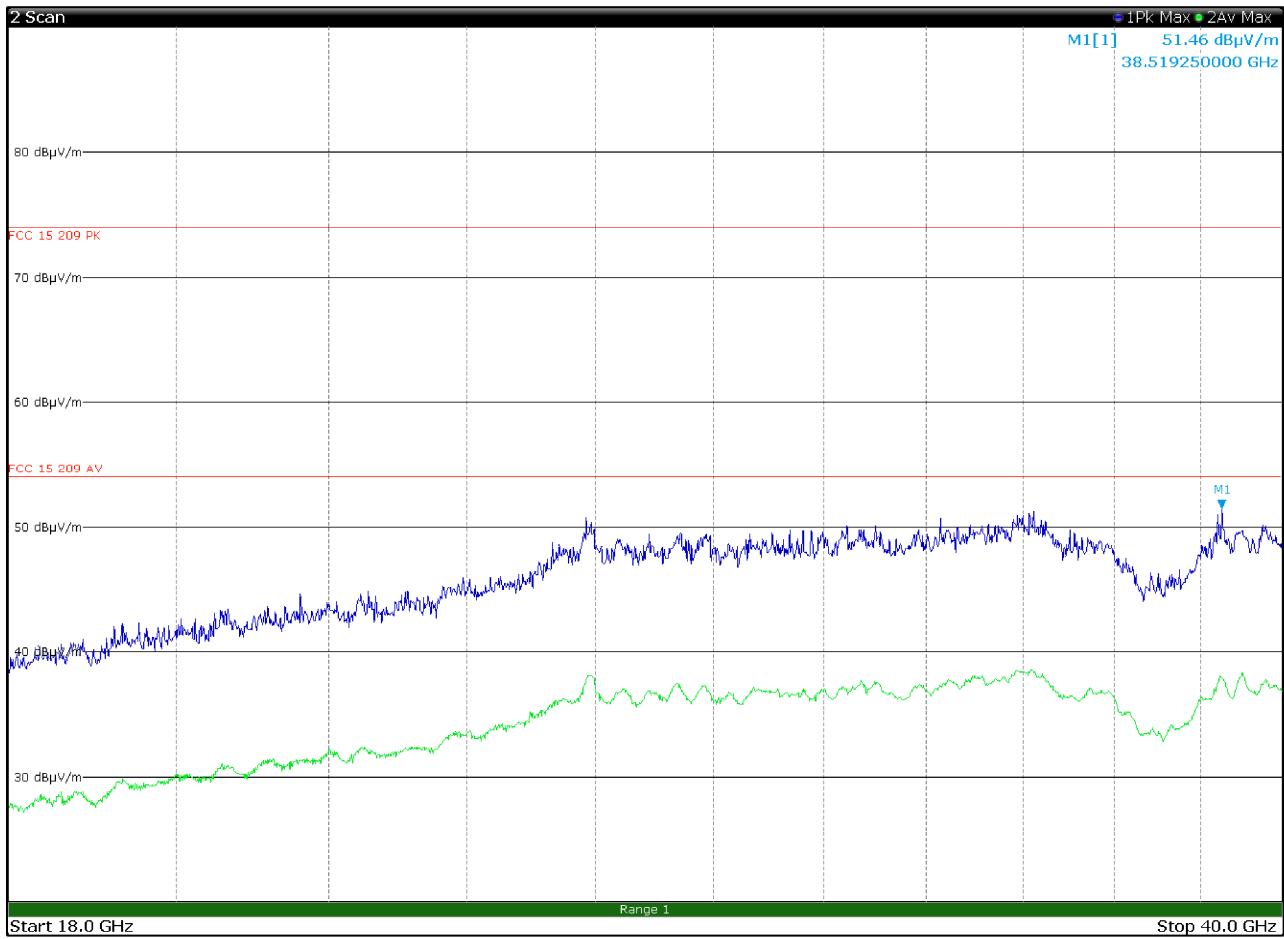


Figure 8.1-160: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 2

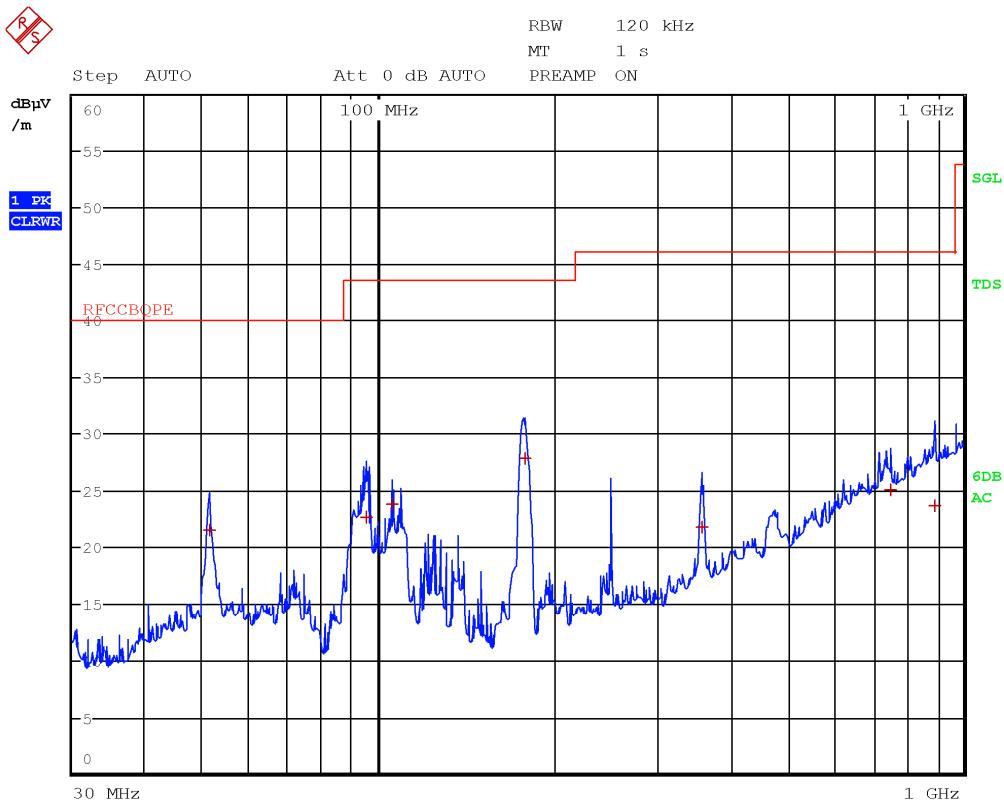


Figure 8.1-161: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 2

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
51.3600	21.6	40.0	-18.4	QP
95.6800	22.7	43.5	-20.8	QP
105.8800	23.8	43.5	-19.7	QP
177.7600	27.8	43.5	-15.7	QP
357.3600	21.8	46.0	-24.2	QP
749.9200	25.1	46.0	-20.9	QP
895.5200	23.7	46.0	-22.3	QP

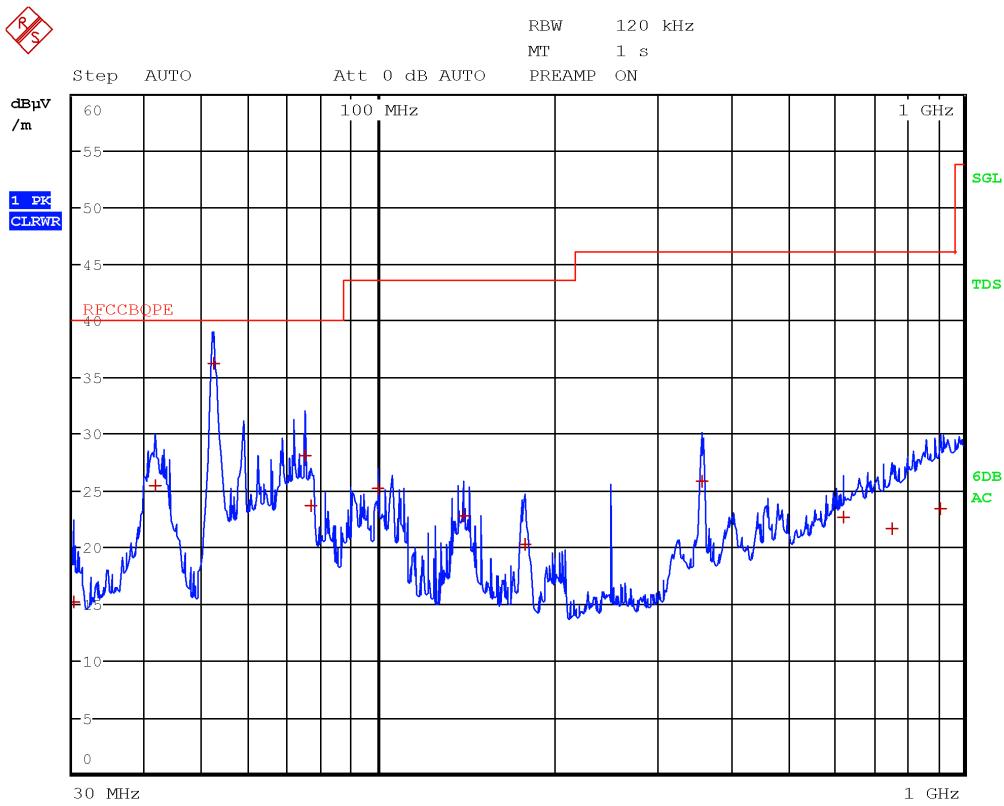


Figure 8.1-162: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 2

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
30.2000	15.2	40.0	-24.8	QP
41.5600	25.4	40.0	-14.6	QP
52.2000	36.3	40.0	-3.7	QP
74.7600	28.1	40.0	-11.9	QP
76.5600	23.7	40.0	-16.3	QP
99.6800	25.2	43.5	-18.3	QP
140.1200	22.8	43.5	-20.7	QP
177.7200	20.3	43.5	-23.2	QP
358.2400	25.8	46.0	-20.2	QP
625.0000	22.7	46.0	-23.3	QP
755.7600	21.7	46.0	-24.3	QP
913.7600	23.5	46.0	-22.5	QP

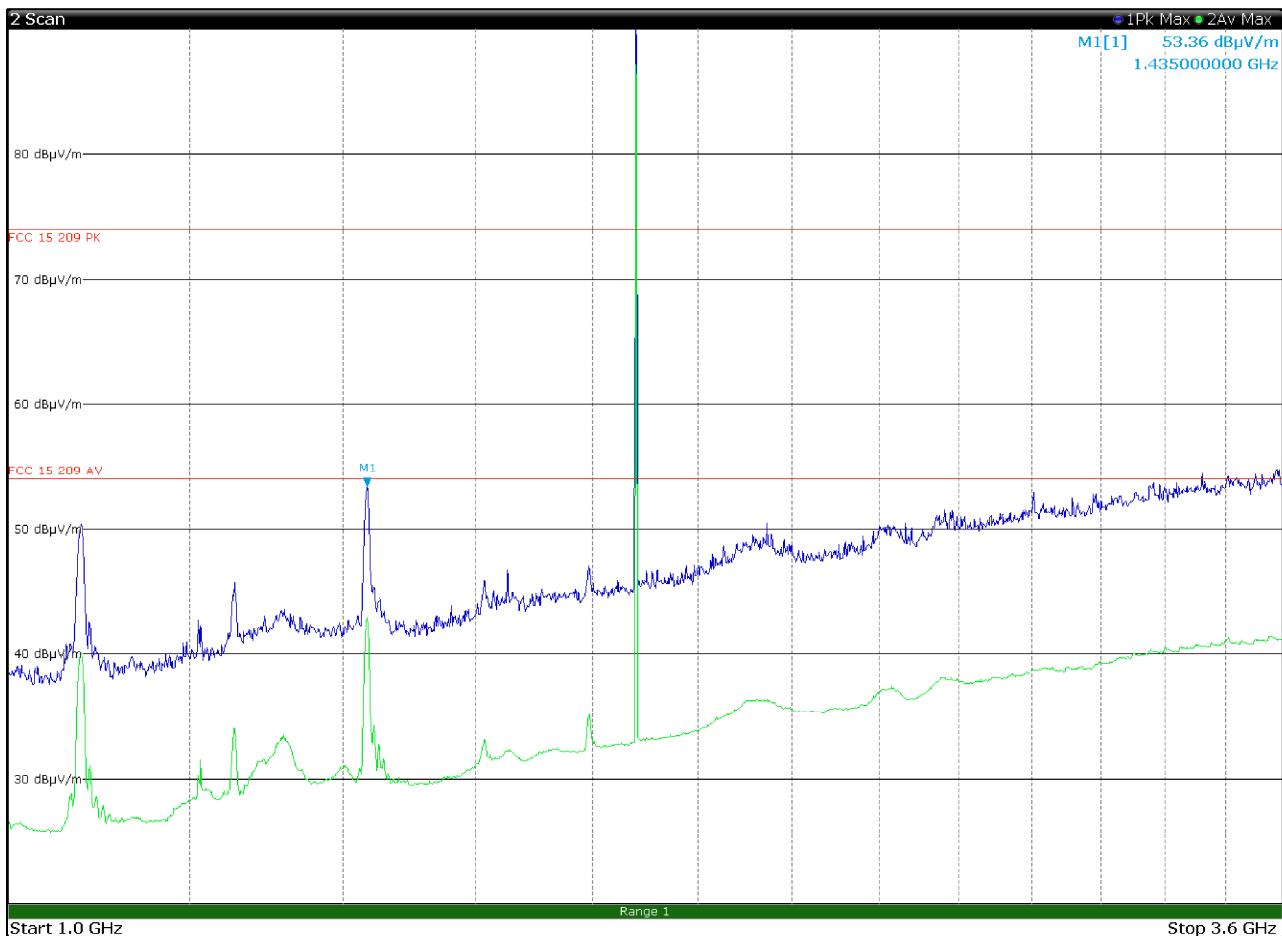


Figure 8.1-163: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4347	53.4	74.0	-20.6	PK
1.4347	42.9	54.0	-11.1	AV

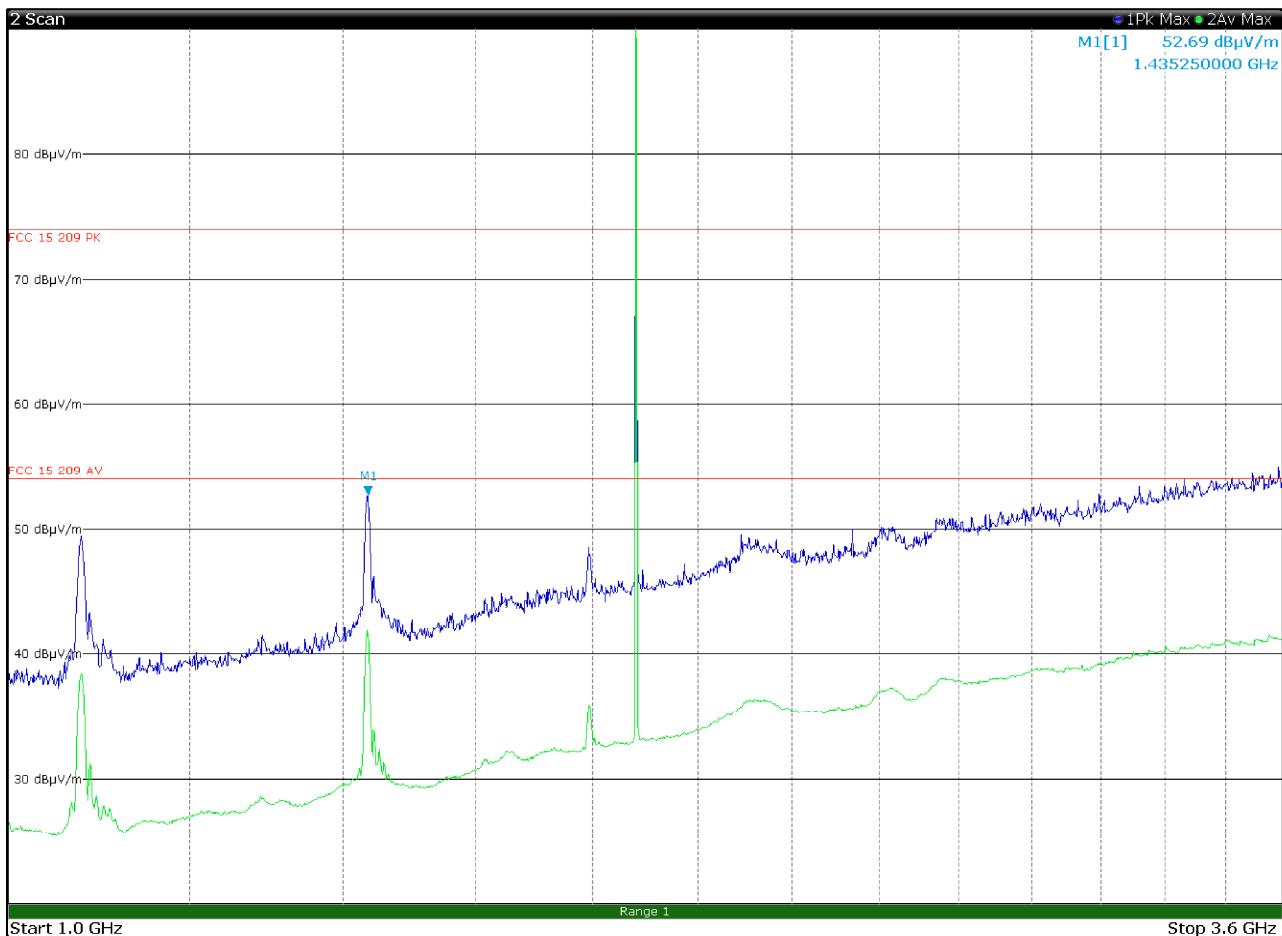


Figure 8.1-164: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4352	52.7	74.0	-21.3	PK
1.4352	41.9	54.0	-12.1	AV

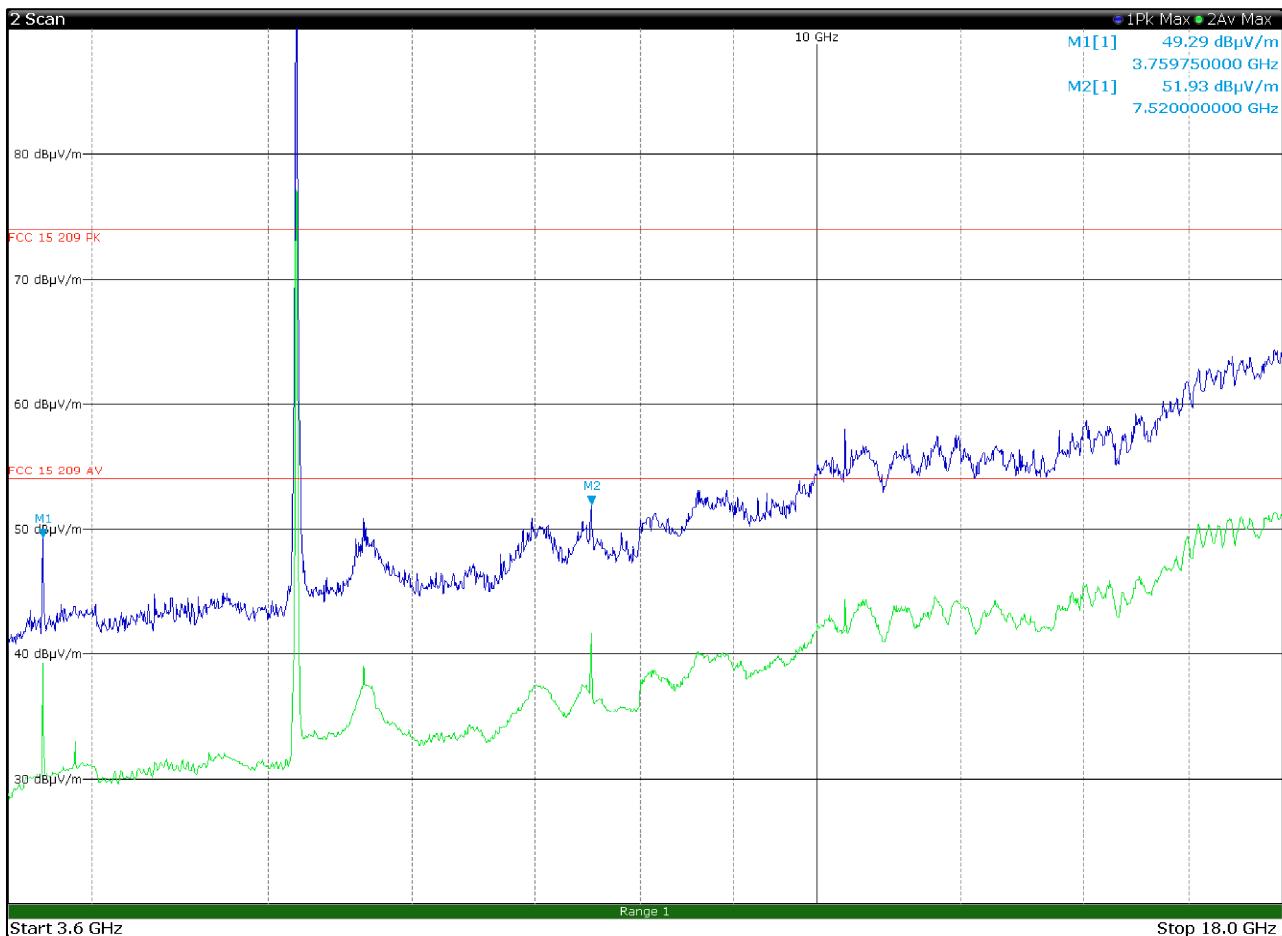


Figure 8.1-165: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
3.7597	49.3	82.2	-32.9	PK
5.6425	50.5	82.2	-31.7	PK
7.5200	52.9	82.2	-29.3	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

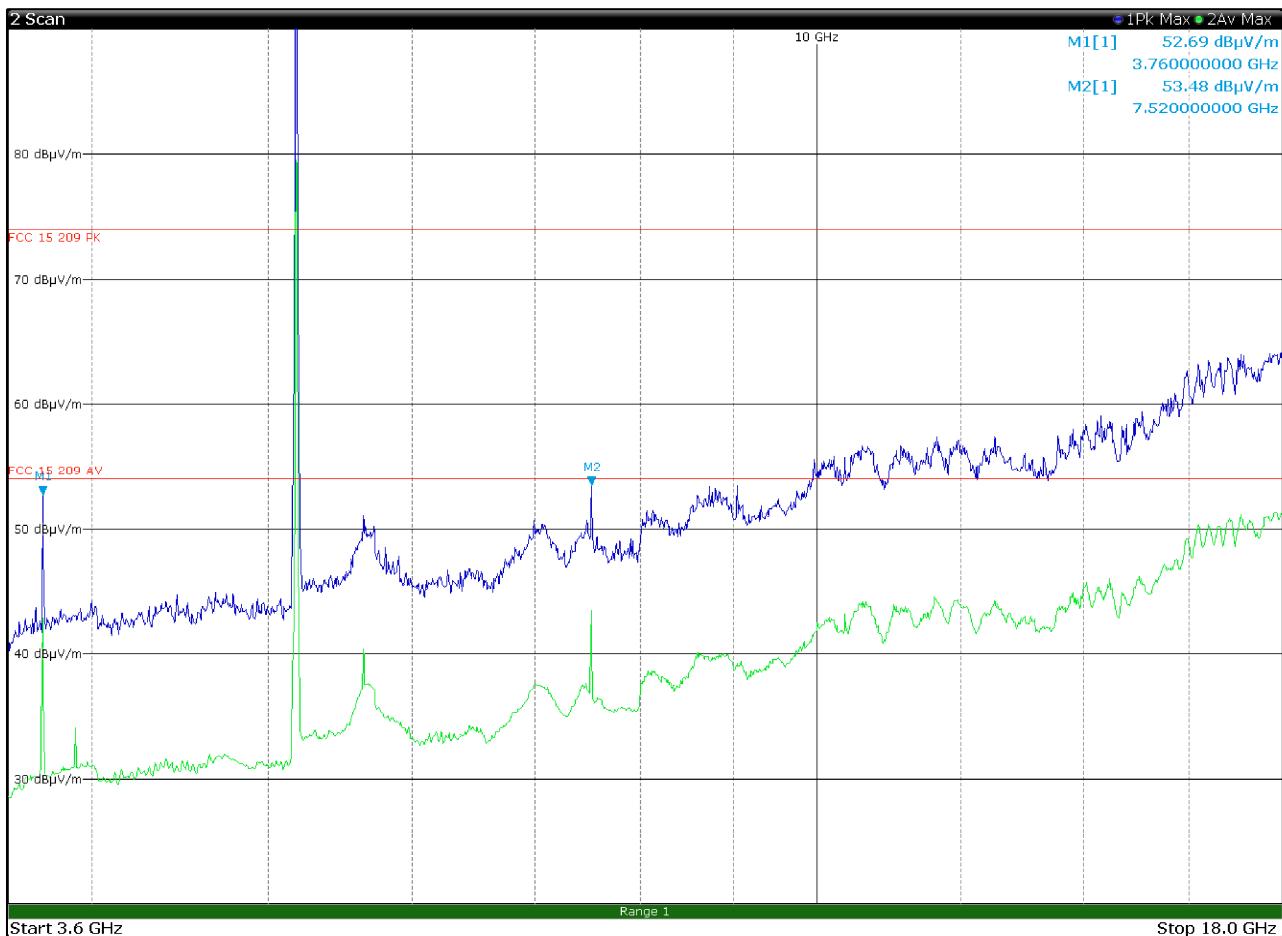


Figure 8.1-166: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 2

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
3.7600	52.7	82.2	-29.5	PK
5.6400	50.3	82.2	-31.9	PK
7.5200	53.5	82.2	-28.7	PK

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

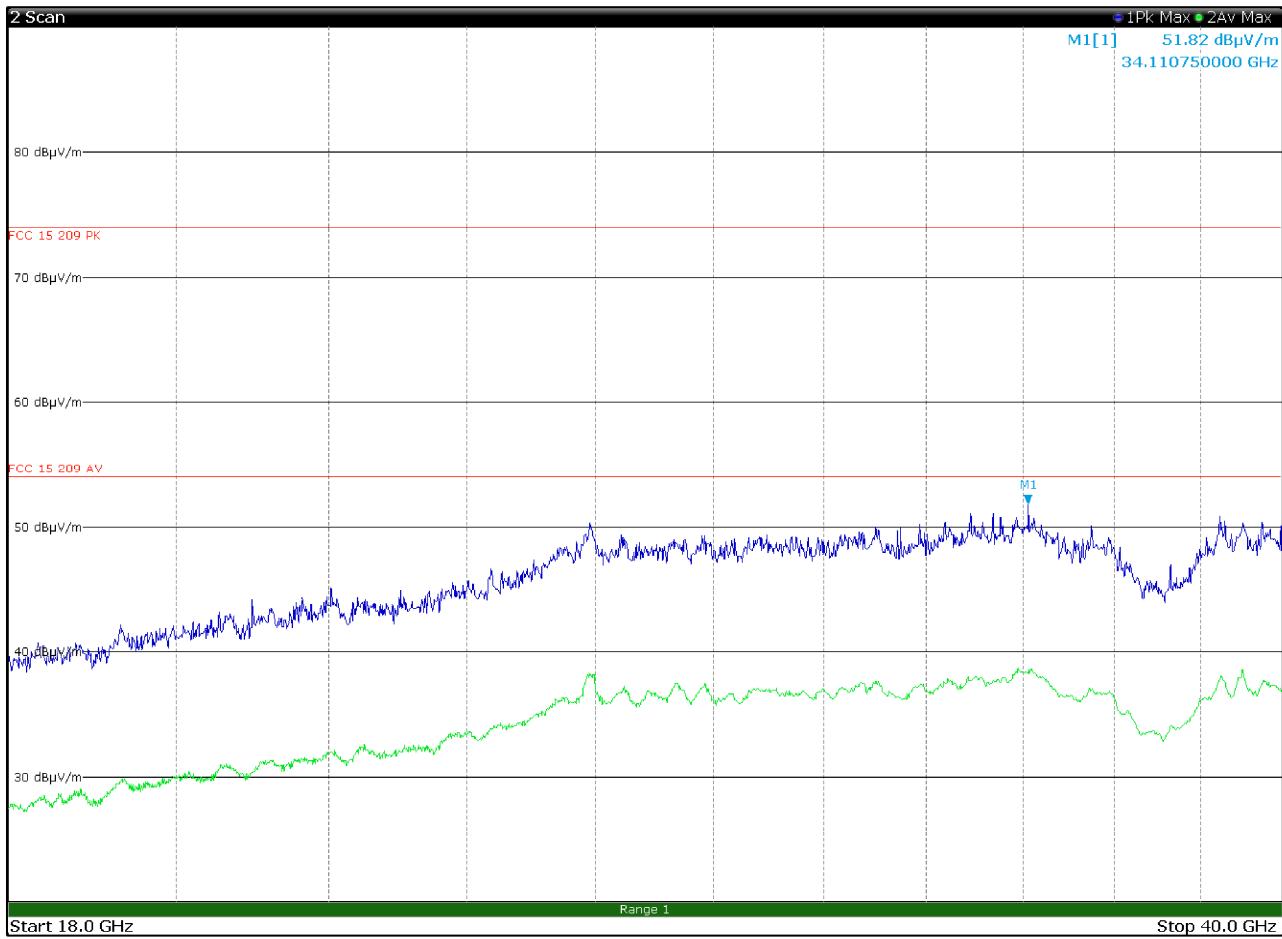


Figure 8.1-167: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 2

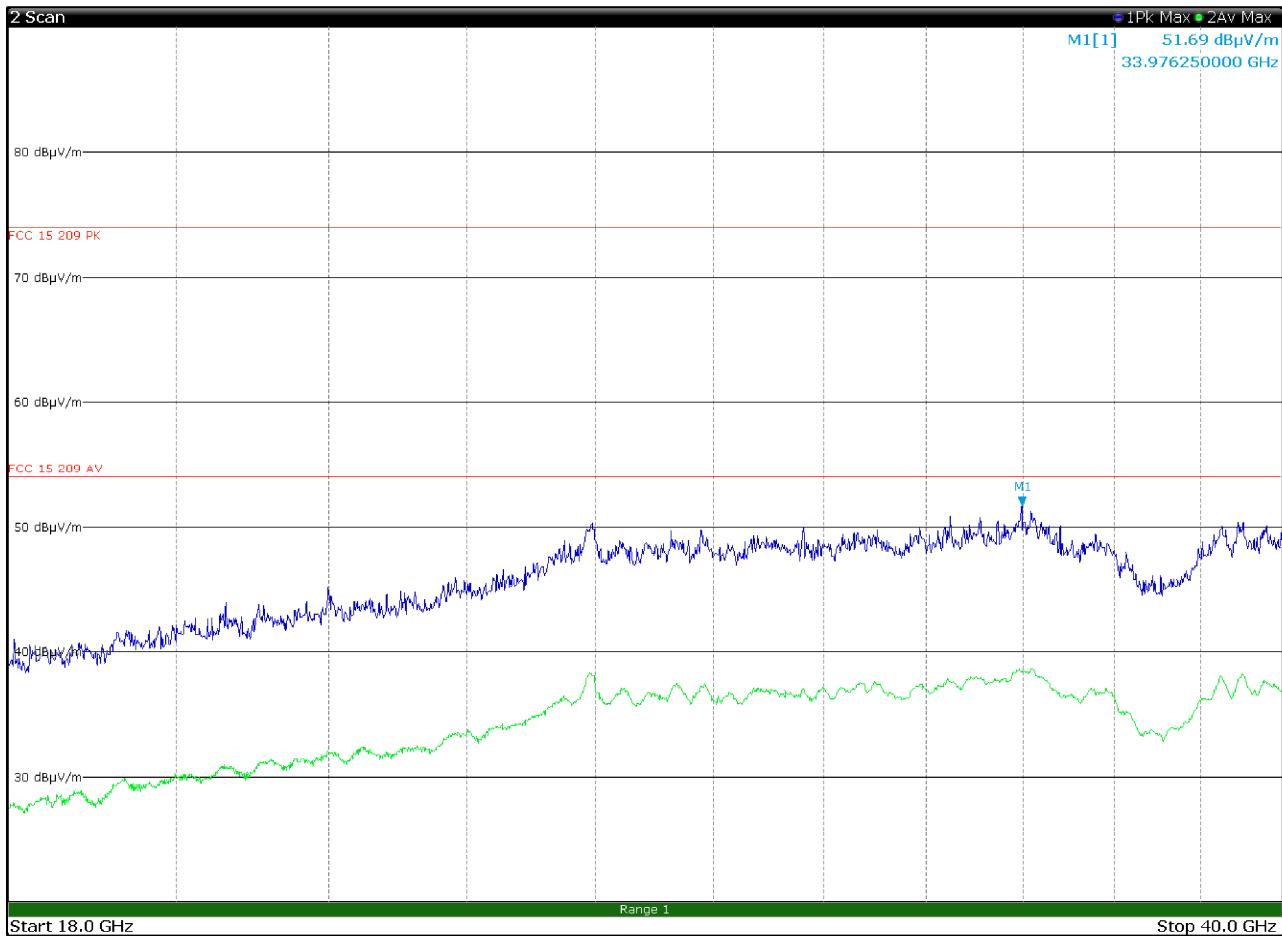


Figure 8.1-168: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 2

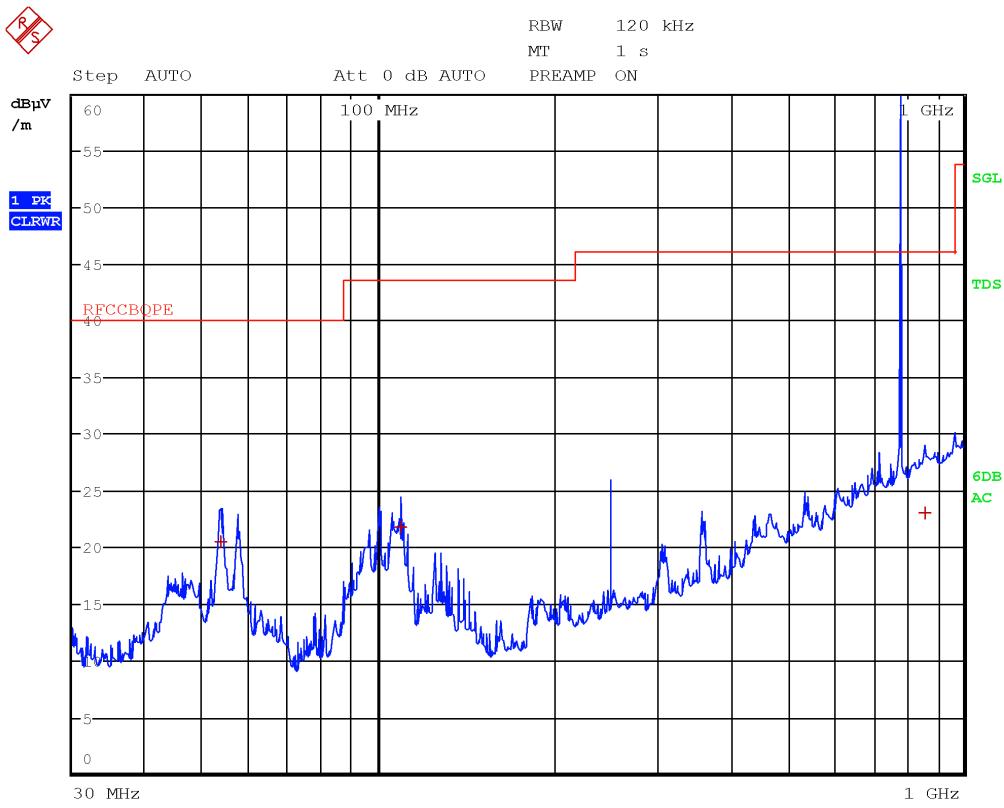


Figure 8.1-169: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
53.8400	20.5	40.0	-19.5	QP
109.0000	21.9	43.5	-21.6	QP
858.7200	23.1	46.0	-22.9	QP

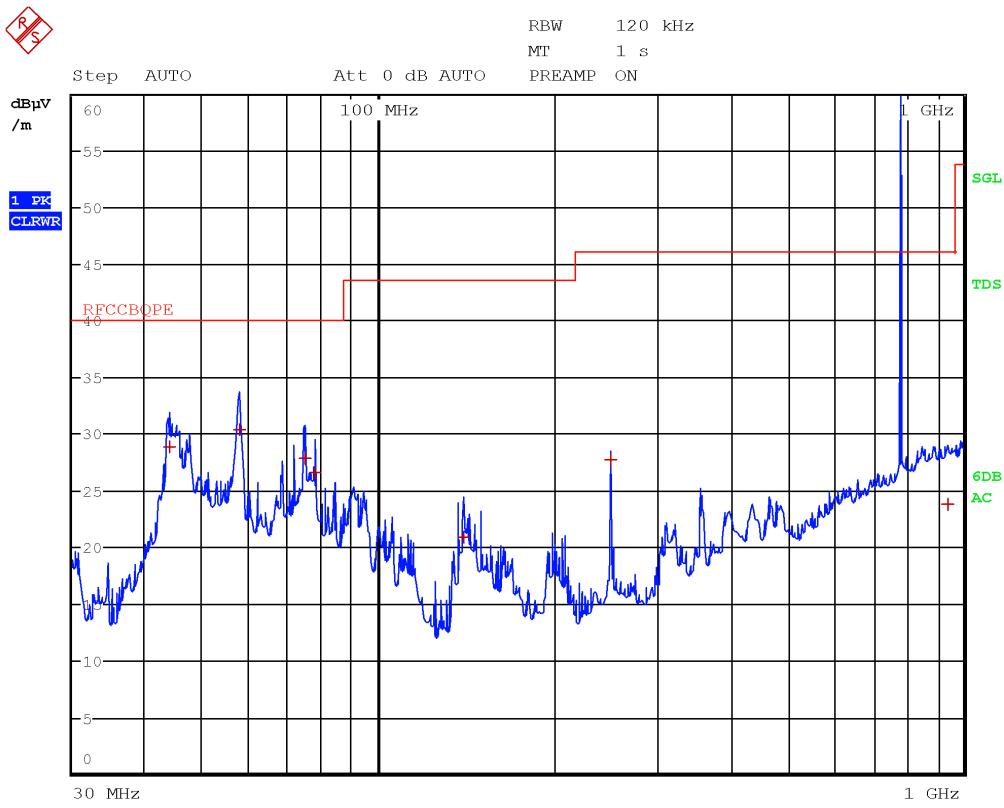


Figure 8.1-170: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
43.8000	28.9	40.0	-11.1	QP
57.9600	30.3	40.0	-9.7	QP
75.0000	27.8	40.0	-12.2	QP
77.8000	26.6	40.0	-13.4	QP
140.1200	20.9	43.5	-22.6	QP
250.0000	27.7	46.0	-18.3	QP
782.0000	88.7	46.0	42.6	QP
942.4400	23.8	46.0	-22.2	QP

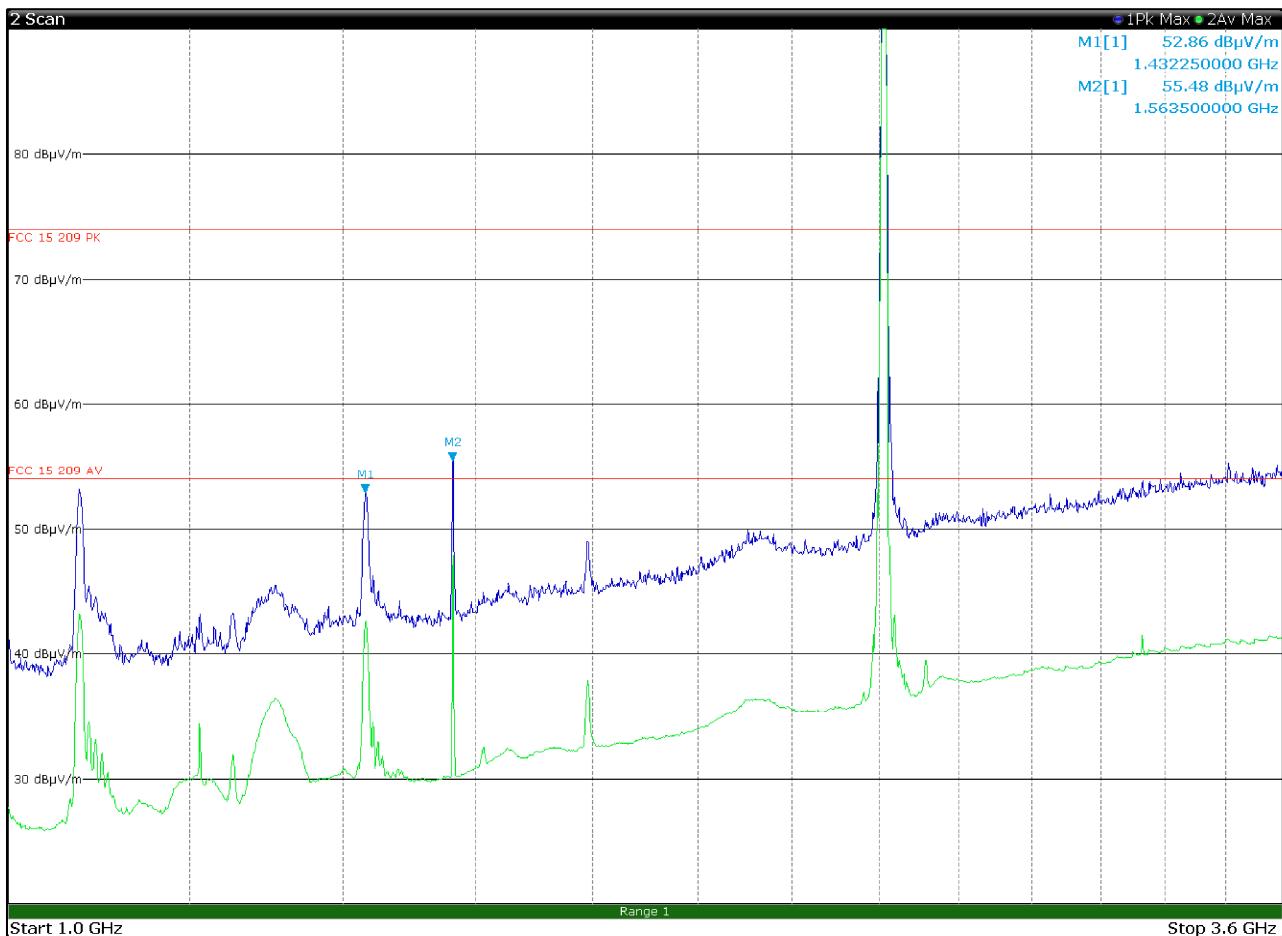


Figure 8.1-171: Radiated spurious emissions, LTE Tx at 782 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.0750	52.8	74.0	-21.2	PK
1.0750	43.7	54.0	-10.3	AV
1.4322	52.9	74.0	-21.1	PK
1.4322	42.7	54.0	-11.3	AV
1.5635	55.5	82.2	-26.7	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

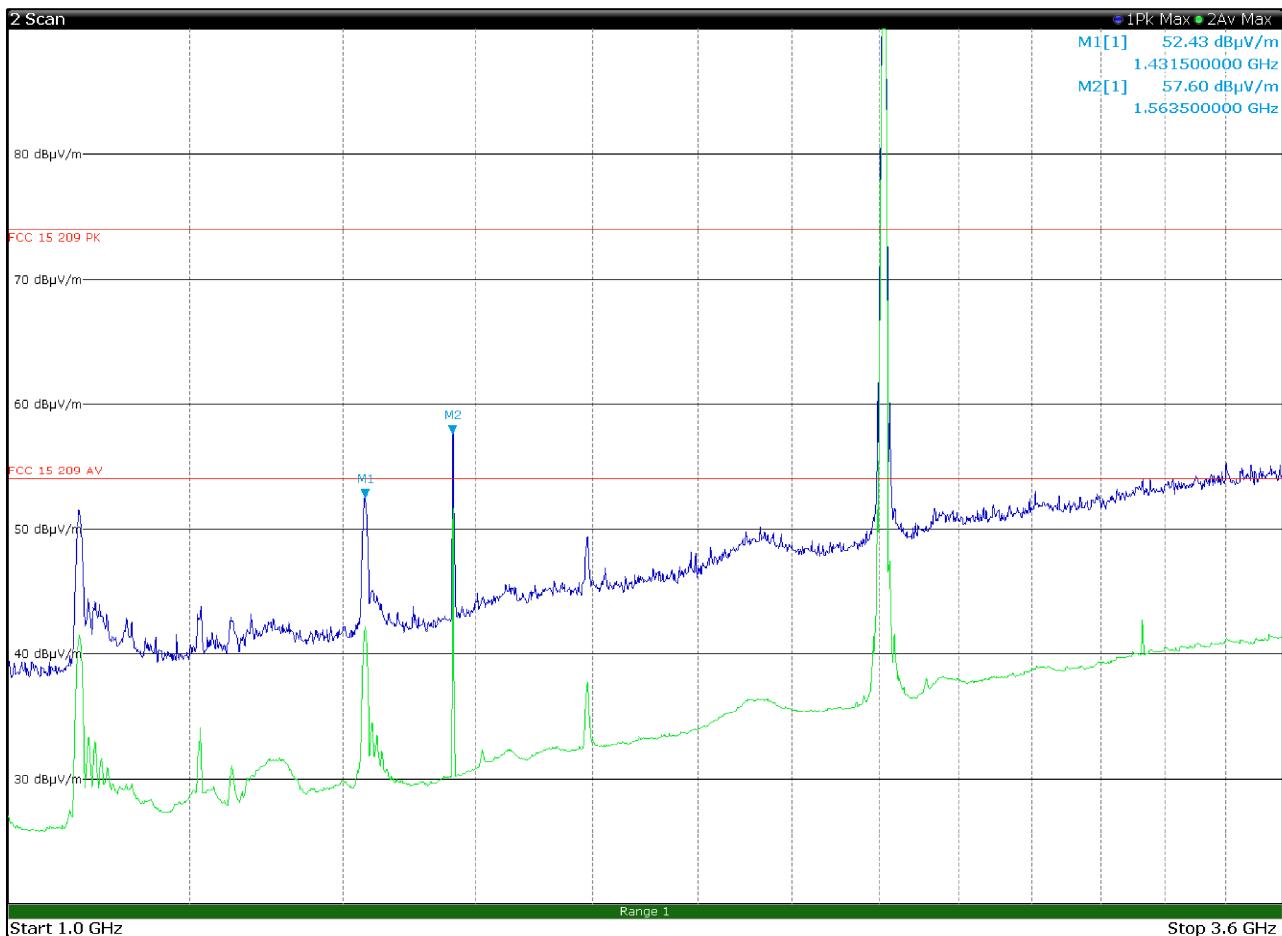


Figure 8.1-172: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1.0750	51.8	74.0	-22.2	PK
1.0750	40.9	54.0	-13.1	AV
1.4315	52.5	74.0	-21.5	PK
1.4315	41.7	54.0	-12.3	AV
1.5635	57.6	82.2	-24.6	PK

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

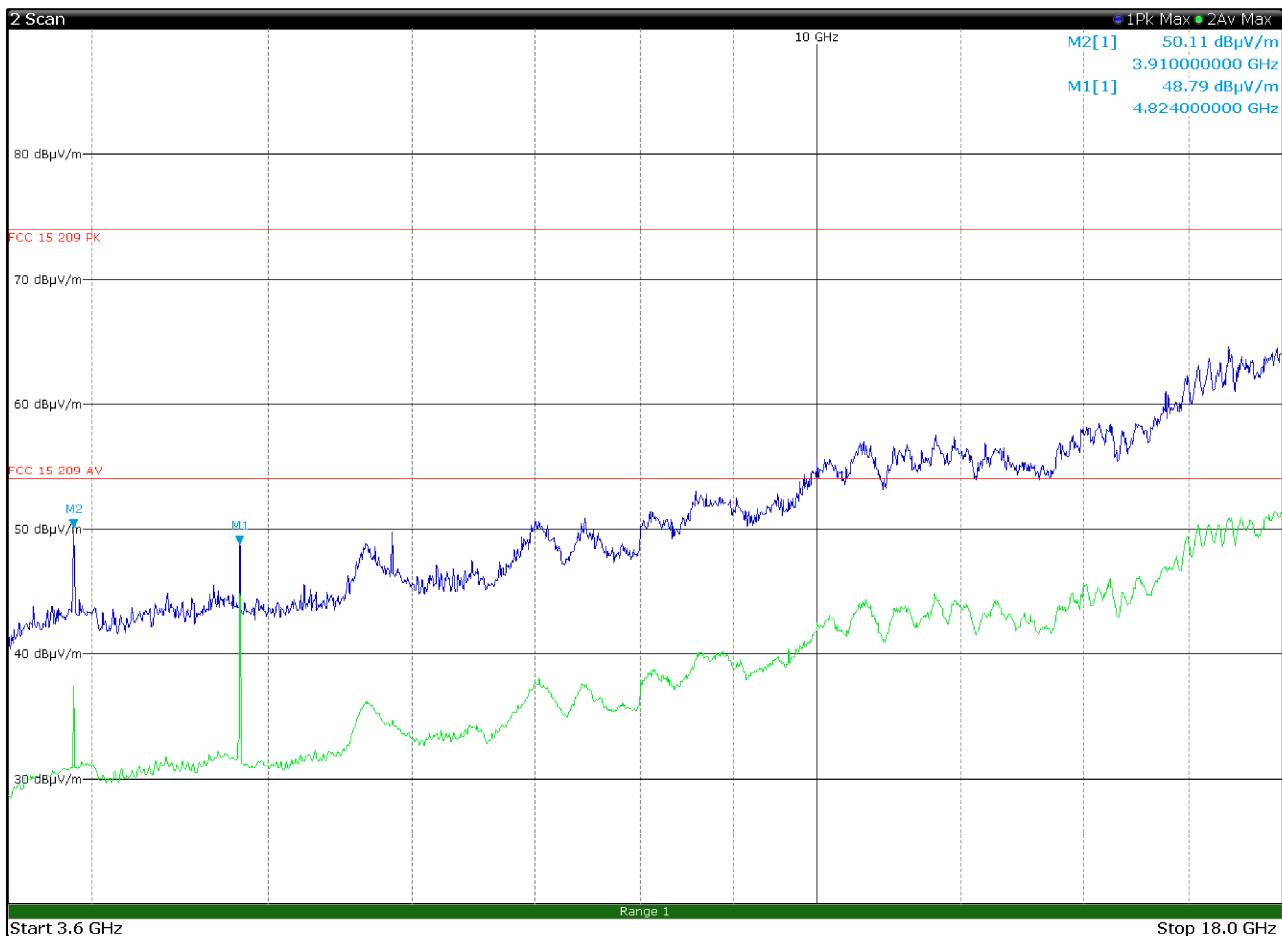


Figure 8.1-173: Radiated spurious emissions, LTE Tx at 782 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 3

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
3.9100	50.2	82.2	-32.0	PK
4.8240	48.8	74.0	-25.2	PK
4.8240	45.1	54.0	-8.9	AV

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

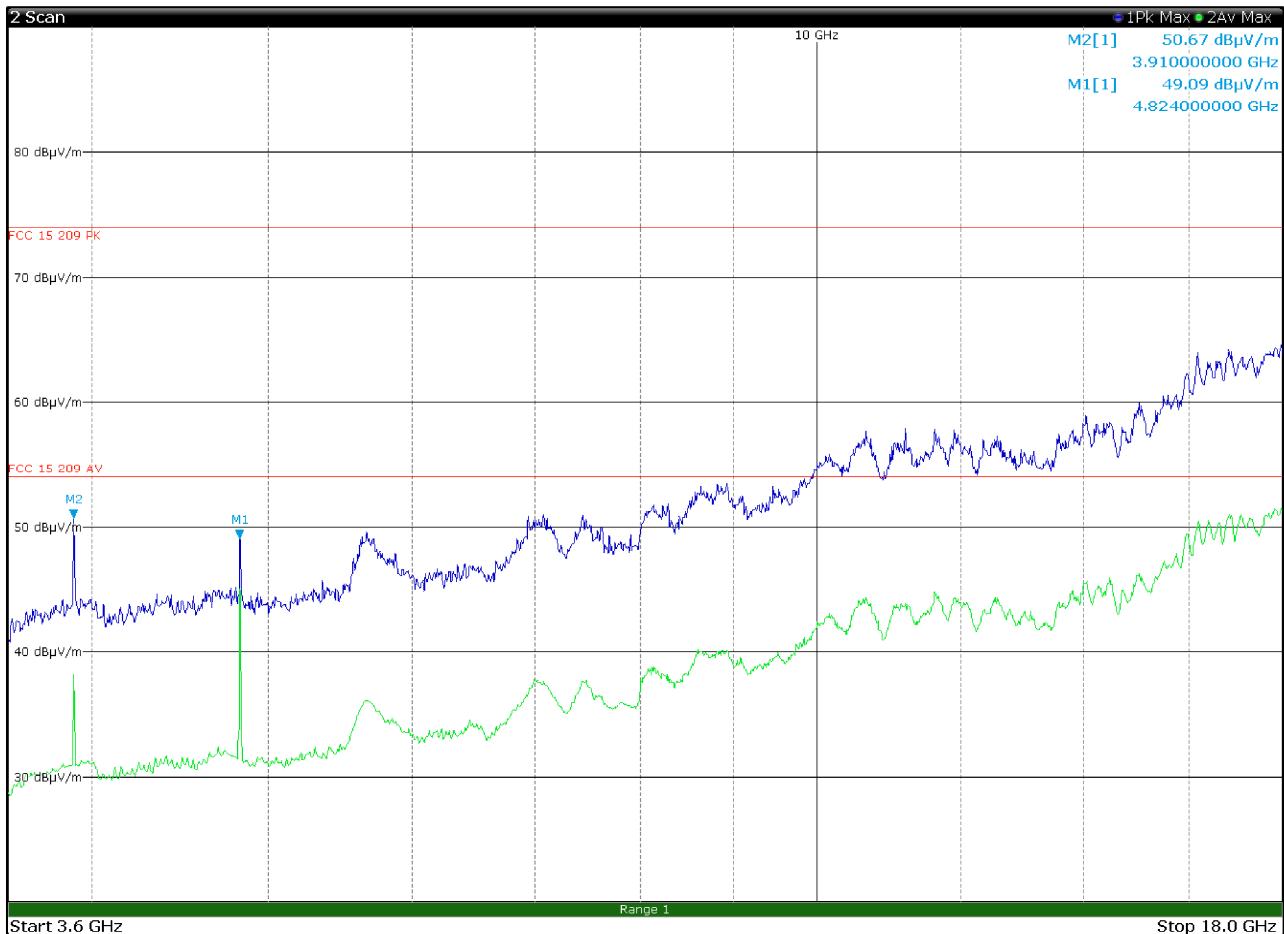


Figure 8.1-174: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 3

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
3.9100	50.7	82.2	-31.5	PK
4.8240	49.1	74.0	-24.9	PK
4.8240	45.9	54.0	-8.1	AV

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

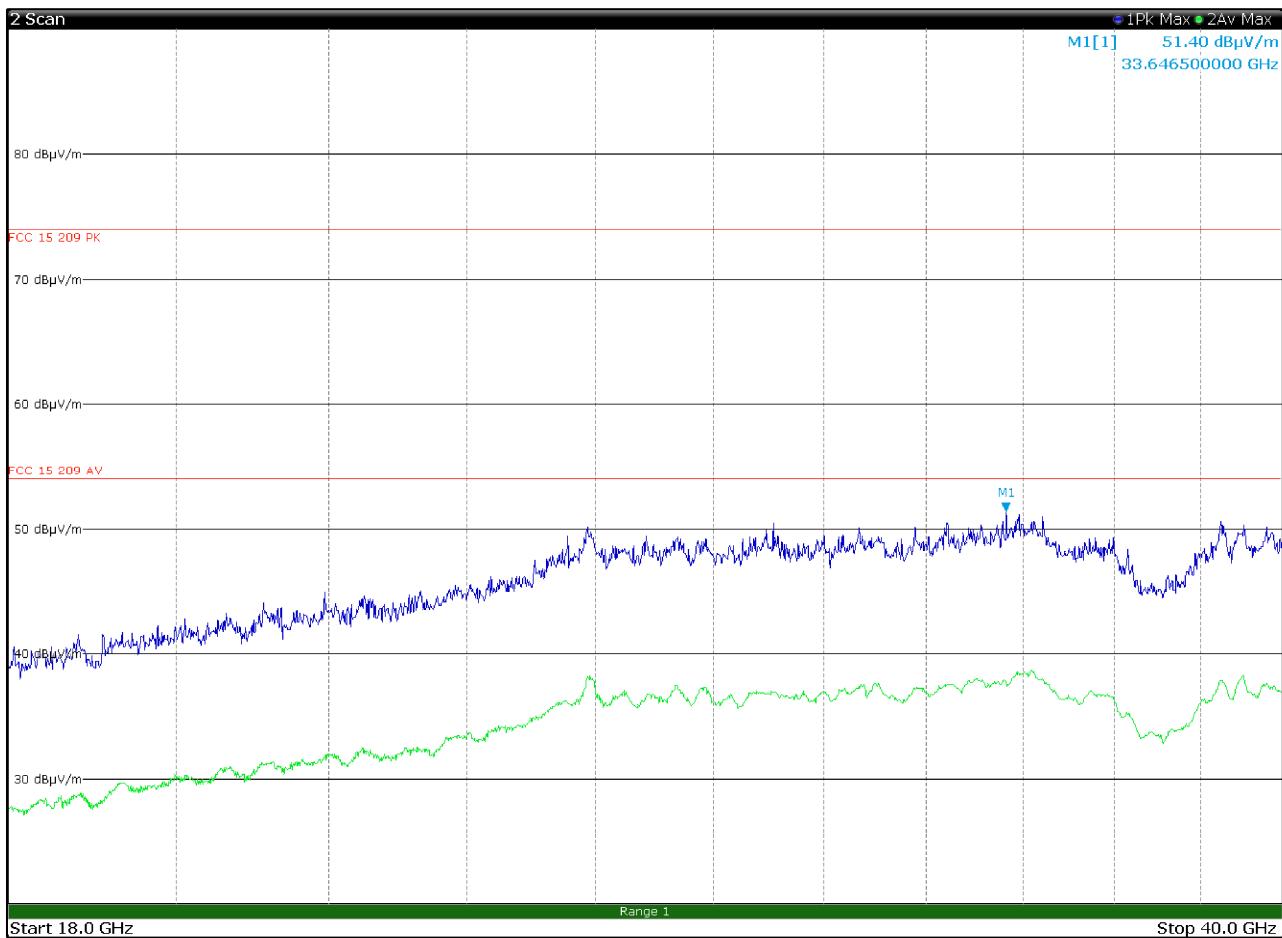


Figure 8.1-175: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 3

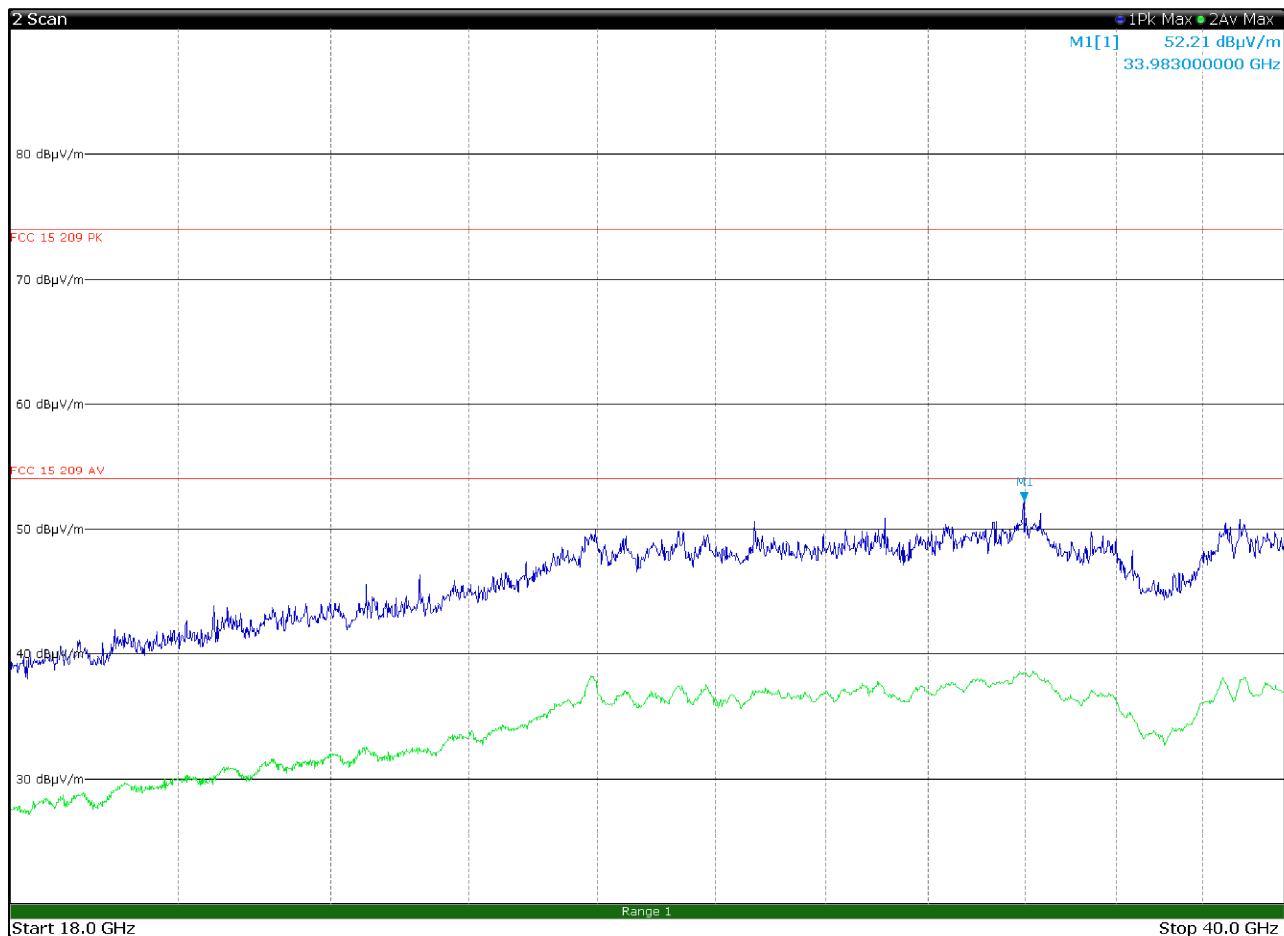


Figure 8.1-176: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 3

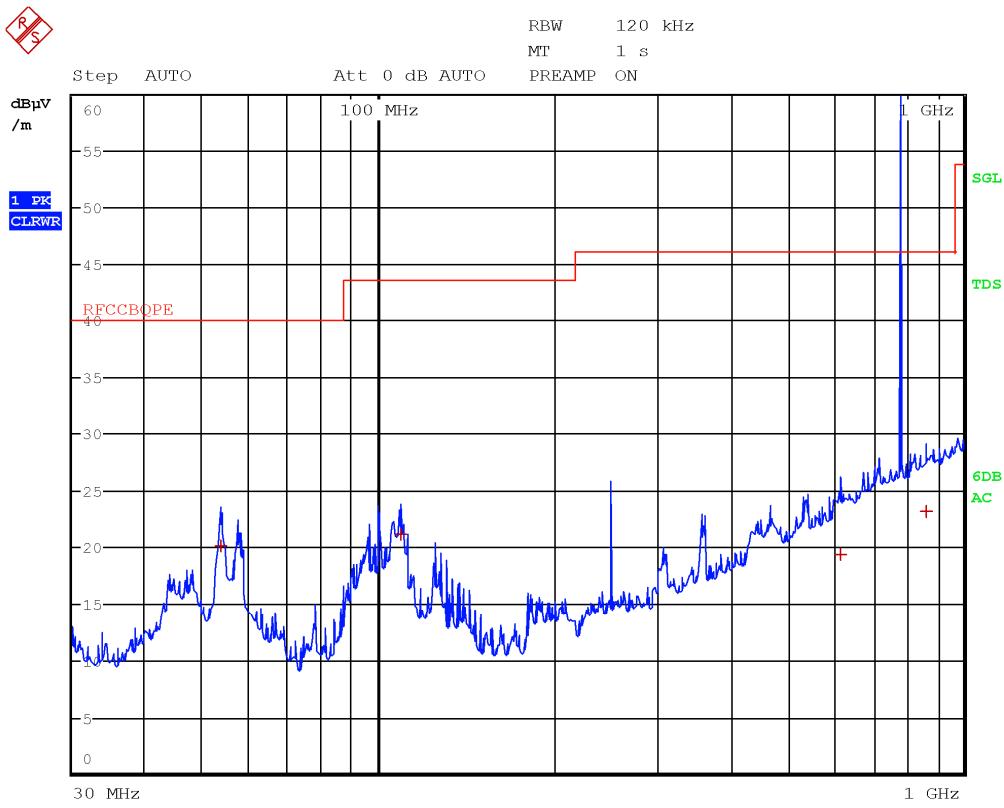


Figure 8.1-177: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
53.9200	20.2	40.0	-19.8	QP
108.9600	21.2	43.5	-22.3	QP
616.2800	19.4	46.0	-26.6	QP
866.4400	23.2	46.0	-22.8	QP

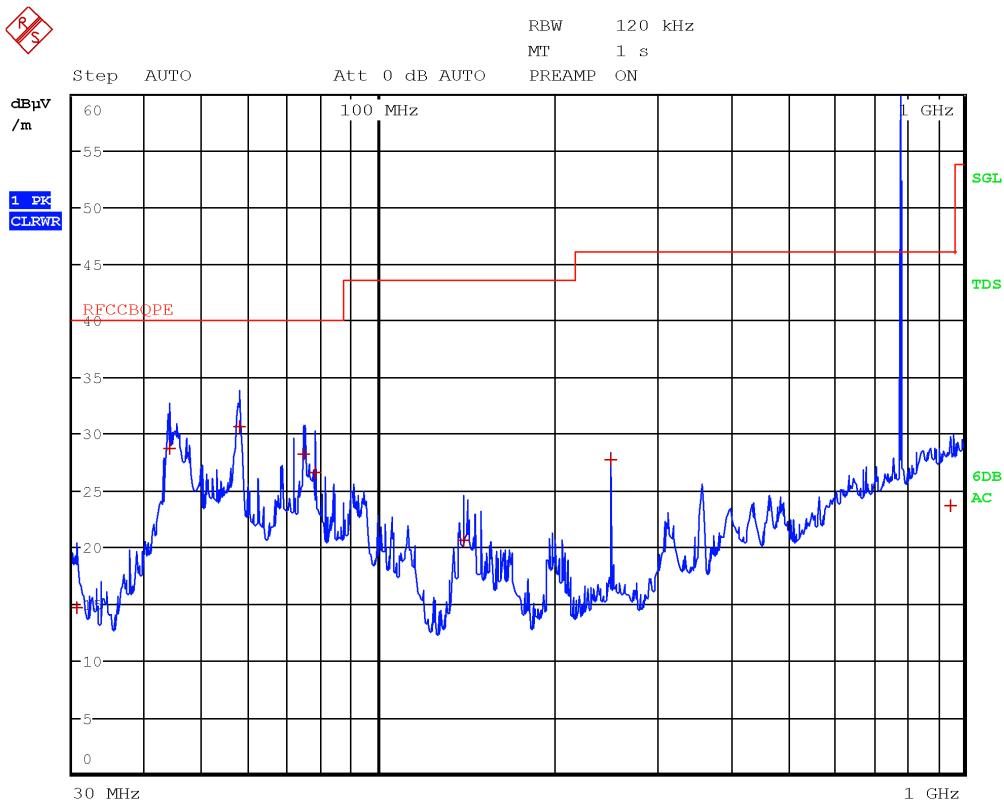


Figure 8.1-178: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
30.4800	14.8	40.0	-25.2	QP
43.8000	28.7	40.0	-11.3	QP
57.8800	30.6	40.0	-9.4	QP
74.7200	28.2	40.0	-11.8	QP
77.8800	26.6	40.0	-13.4	QP
140.1200	20.6	43.5	-22.9	QP
250.0000	27.7	46.0	-18.3	QP
951.9600	23.7	46.0	-22.3	QP

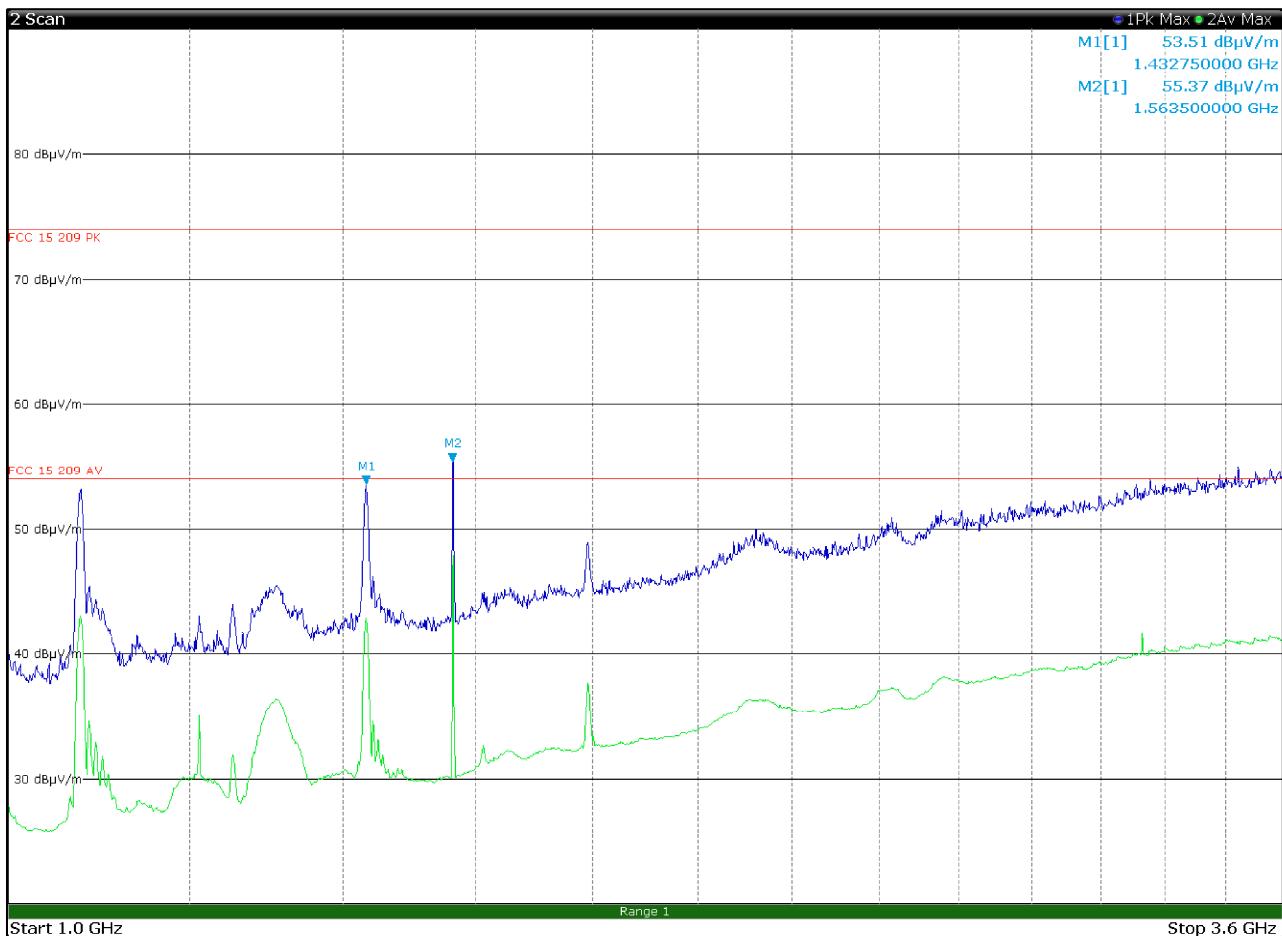


Figure 8.1-179: Radiated spurious emissions, LTE Tx at 782 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4327	53.6	74.0	-20.4	PK
1.4327	42.9	54.0	-11.1	AV
1.5635	55.4	82.2	-26.8	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

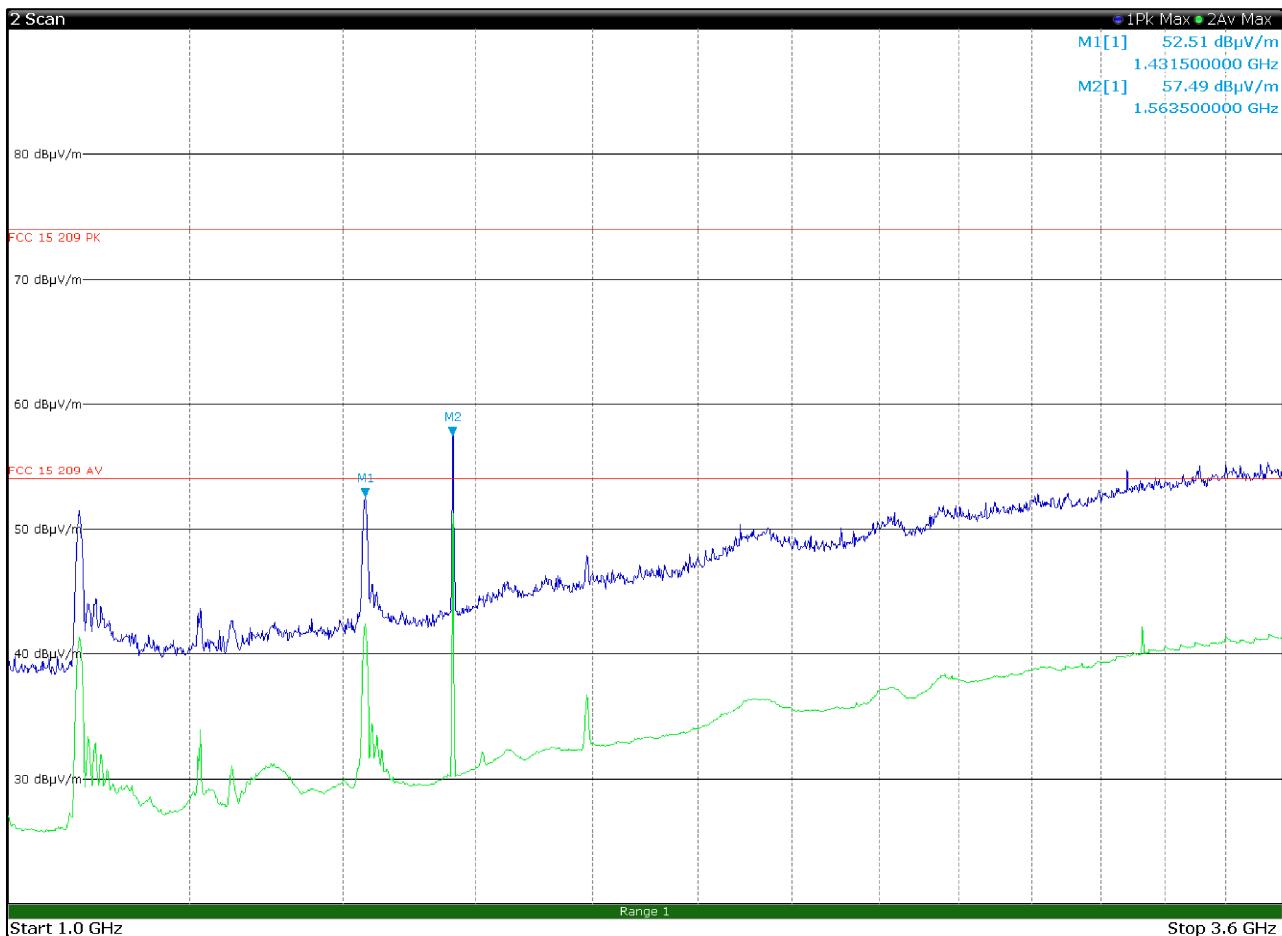


Figure 8.1-180: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.4315	52.5	74.0	-21.5	PK
1.4315	42.1	54.0	-11.9	AV
1.5635	57.5	82.2	-24.7	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

Section 8
Test name
Specification

Testing data
FCC 15.209 and RSS-GEN section 8.9 Radiated emission limits; general requirements
FCC Part 15 Subpart C and RSS-GEN, Issue 5

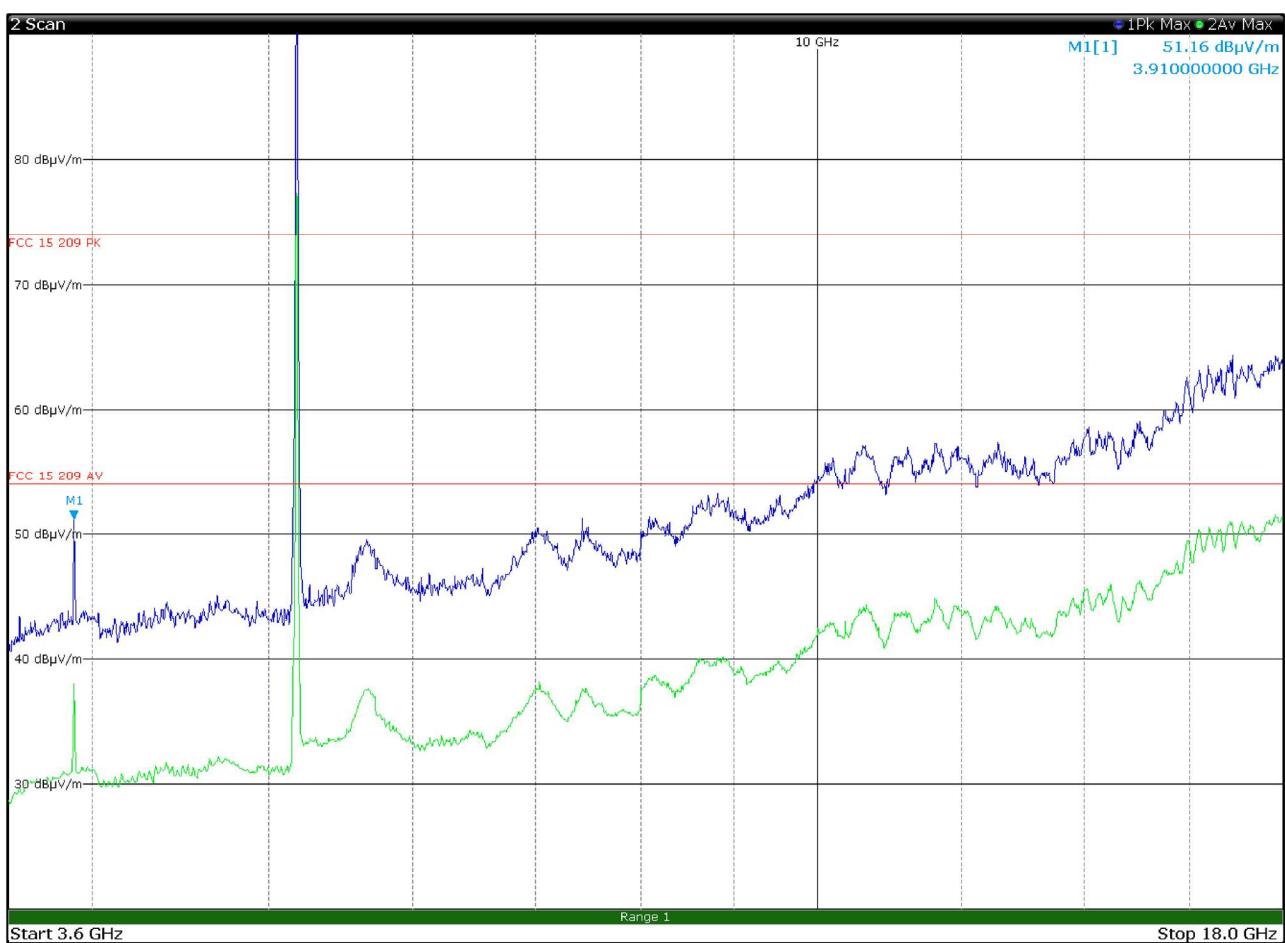


Figure 8.1-181: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Section 8
Test name
Specification

Testing data
FCC 15.209 and RSS-GEN section 8.9 Radiated emission limits; general requirements
FCC Part 15 Subpart C and RSS-GEN, Issue 5

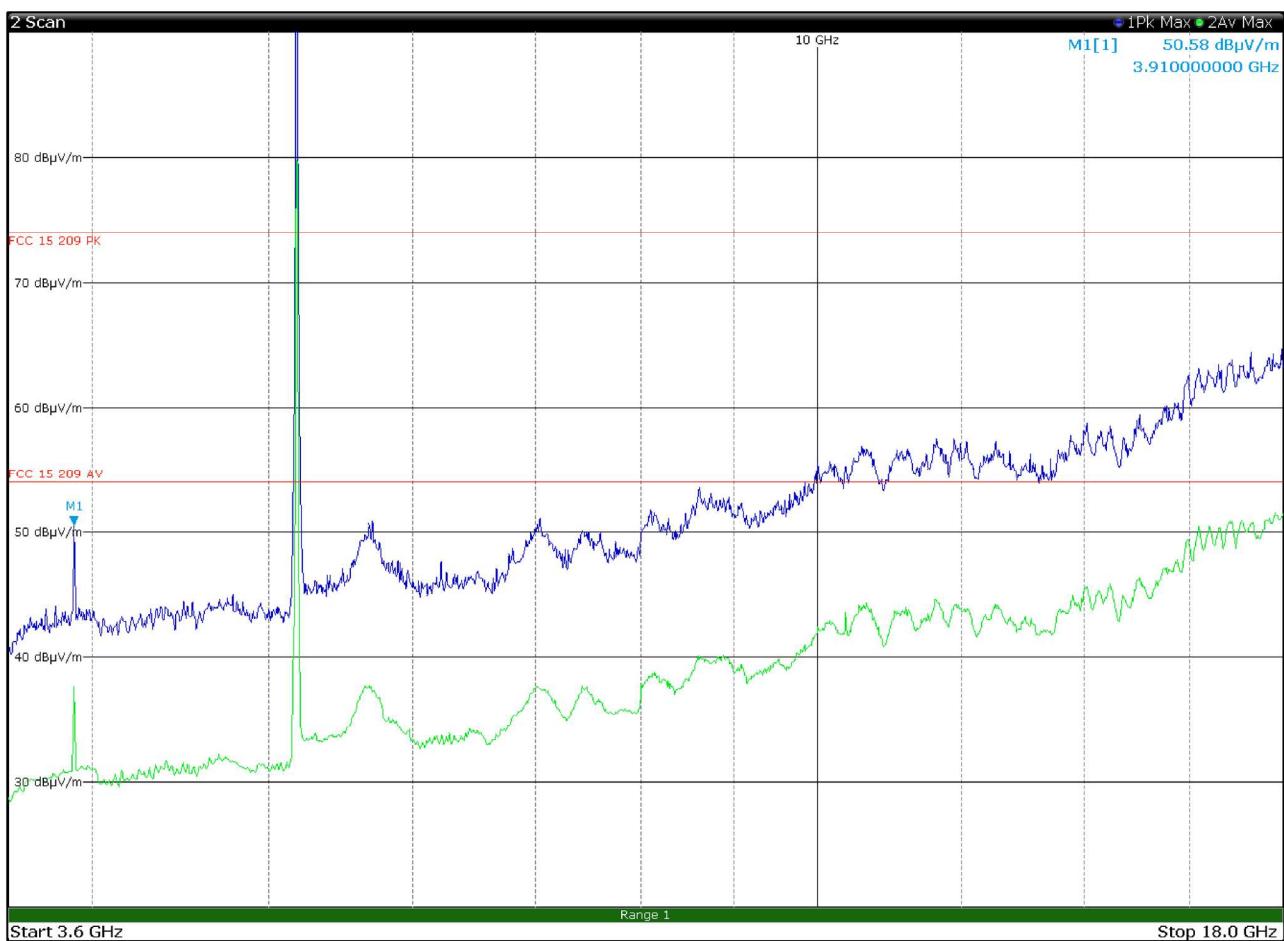


Figure 8.1-182: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

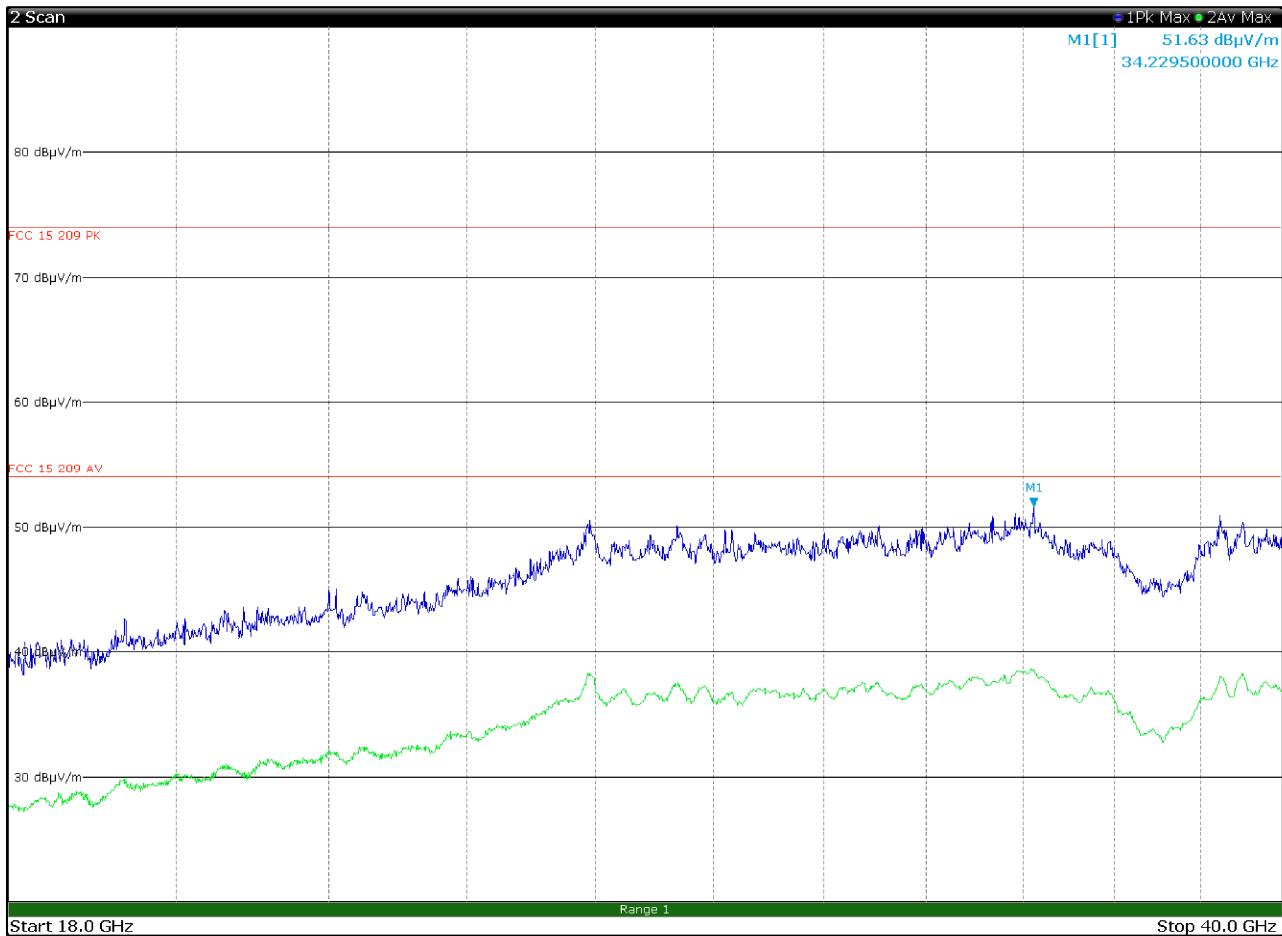


Figure 8.1-183: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 3

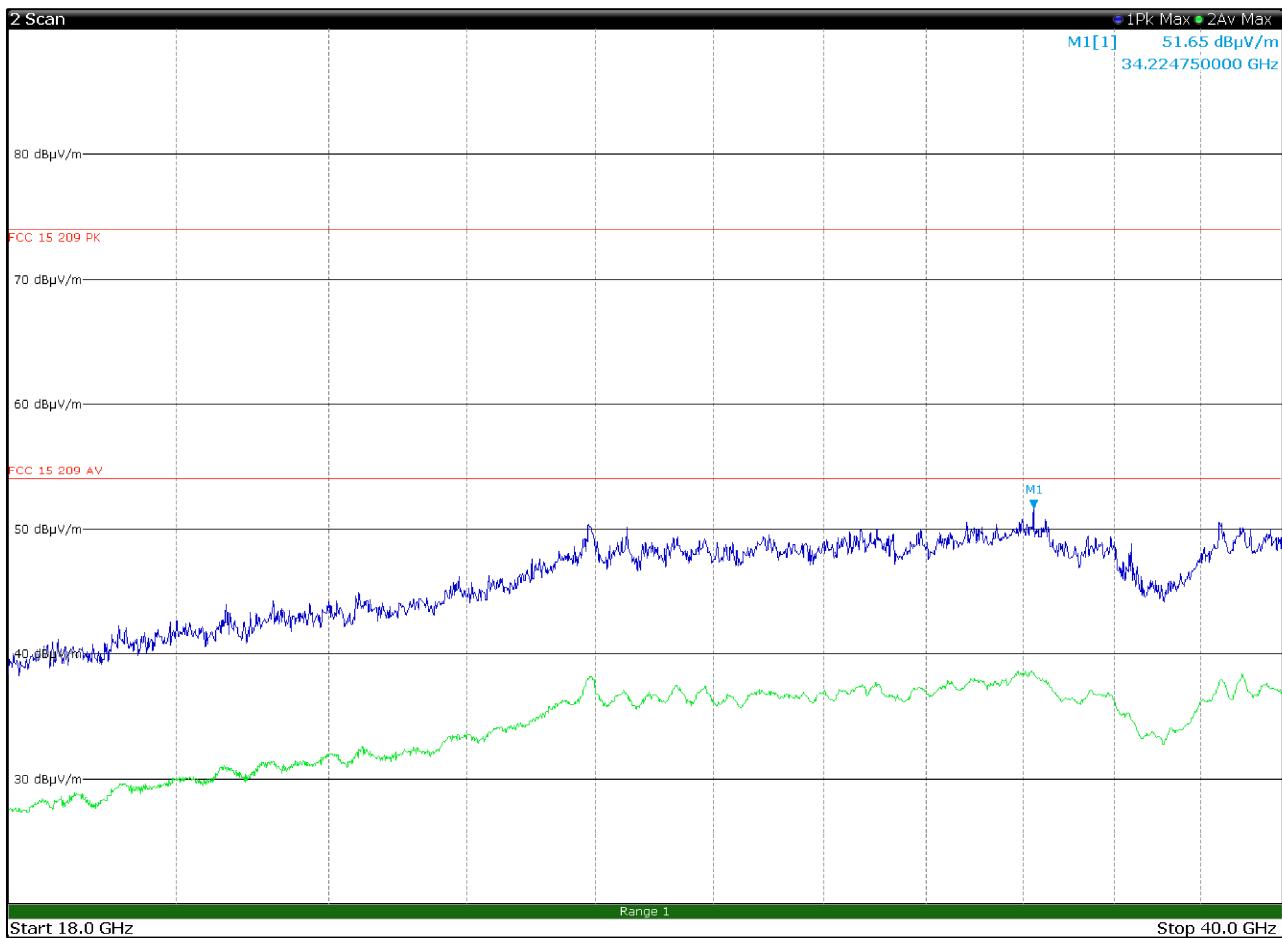


Figure 8.1-184: Radiated spurious emissions, LTE Tx at 782 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 3

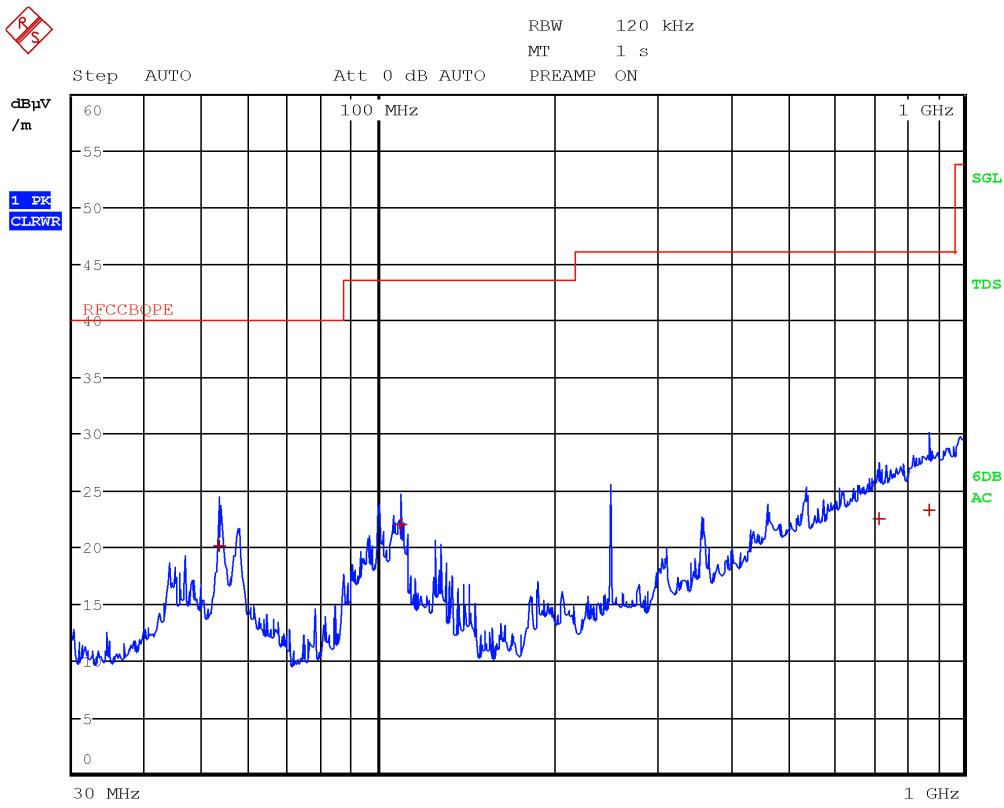


Figure 8.1-185: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 3

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
53.6000	20.2	40.0	-19.8	QP
109.0400	22.1	43.5	-21.4	QP
716.4400	22.6	46.0	-23.4	QP
873.4800	23.2	46.0	-22.8	QP

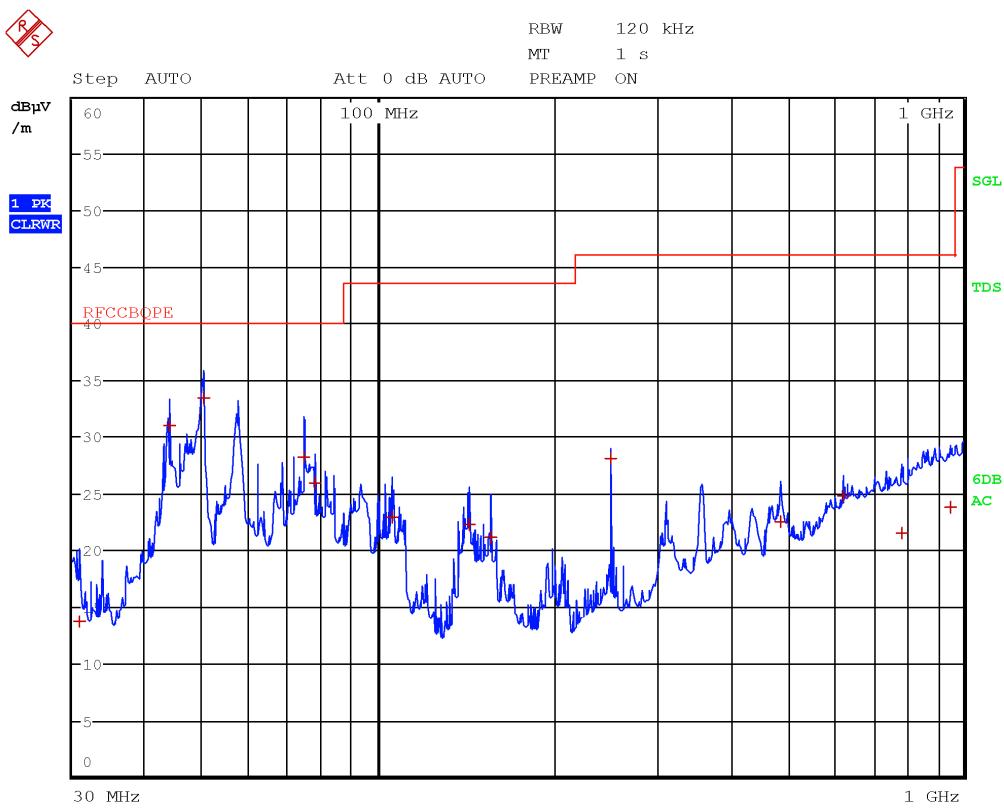


Figure 8.1-186: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 3

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
30.8000	13.7	40.0	-26.3	QP
43.8000	31.0	40.0	-9.0	QP
50.2000	33.5	40.0	-6.5	QP
74.7200	28.3	40.0	-11.7	QP
77.8800	25.9	40.0	-14.1	QP
105.8400	23.0	43.5	-20.5	QP
143.2400	22.3	43.5	-21.2	QP
155.6000	21.2	43.5	-22.3	QP
250.0000	28.1	46.0	-17.9	QP
487.6800	22.6	46.0	-23.4	QP
624.9600	24.9	46.0	-21.1	QP
785.0000	21.6	46.0	-24.4	QP
948.6000	23.8	46.0	-22.2	QP

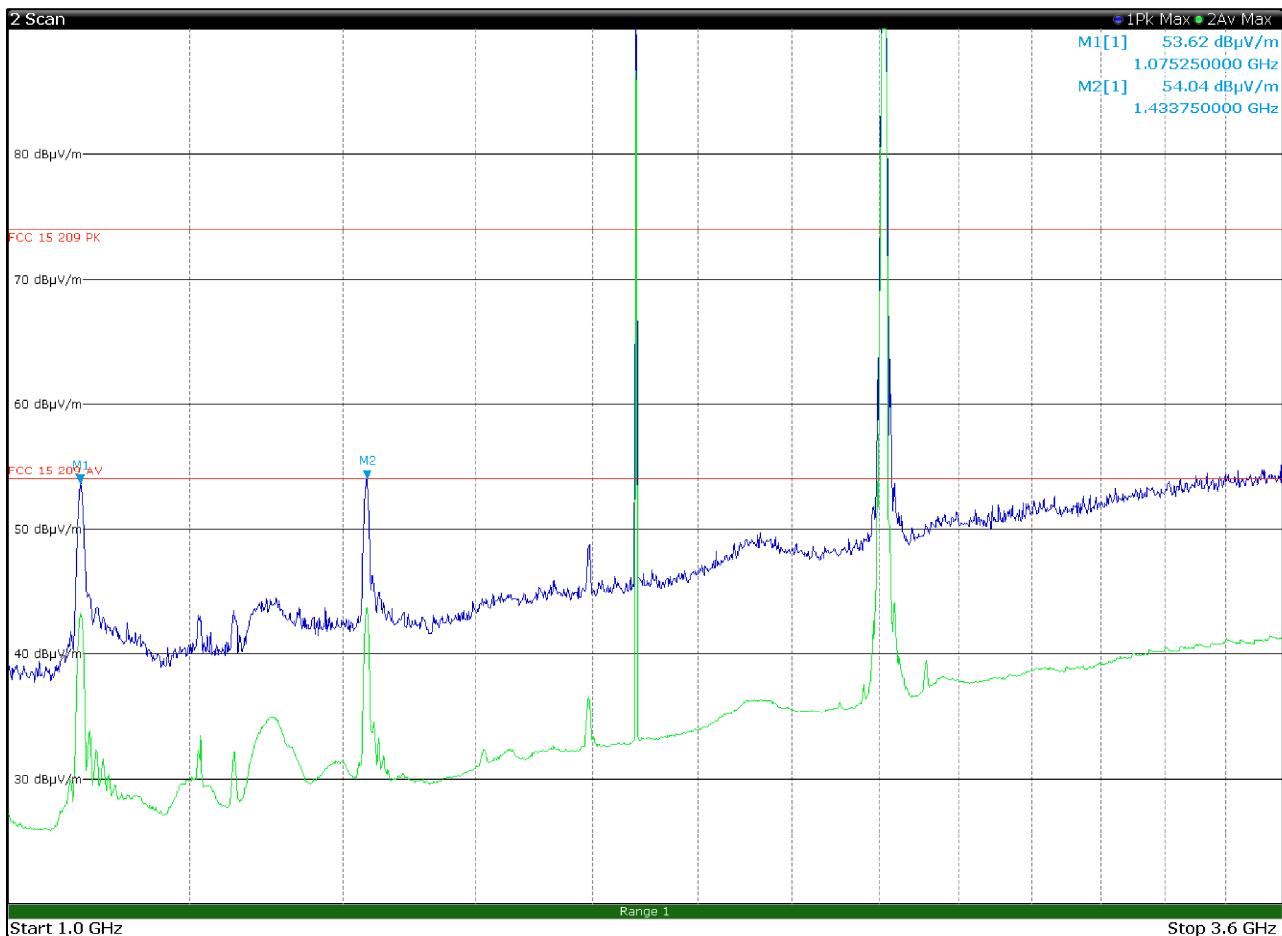


Figure 8.1-187: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.0752	53.7	74.0	-20.3	PK
1.0752	43.3	54.0	-10.7	AV
1.4337	54.1	74.0	-19.9	PK
1.4337	43.9	54.0	-10.1	AV

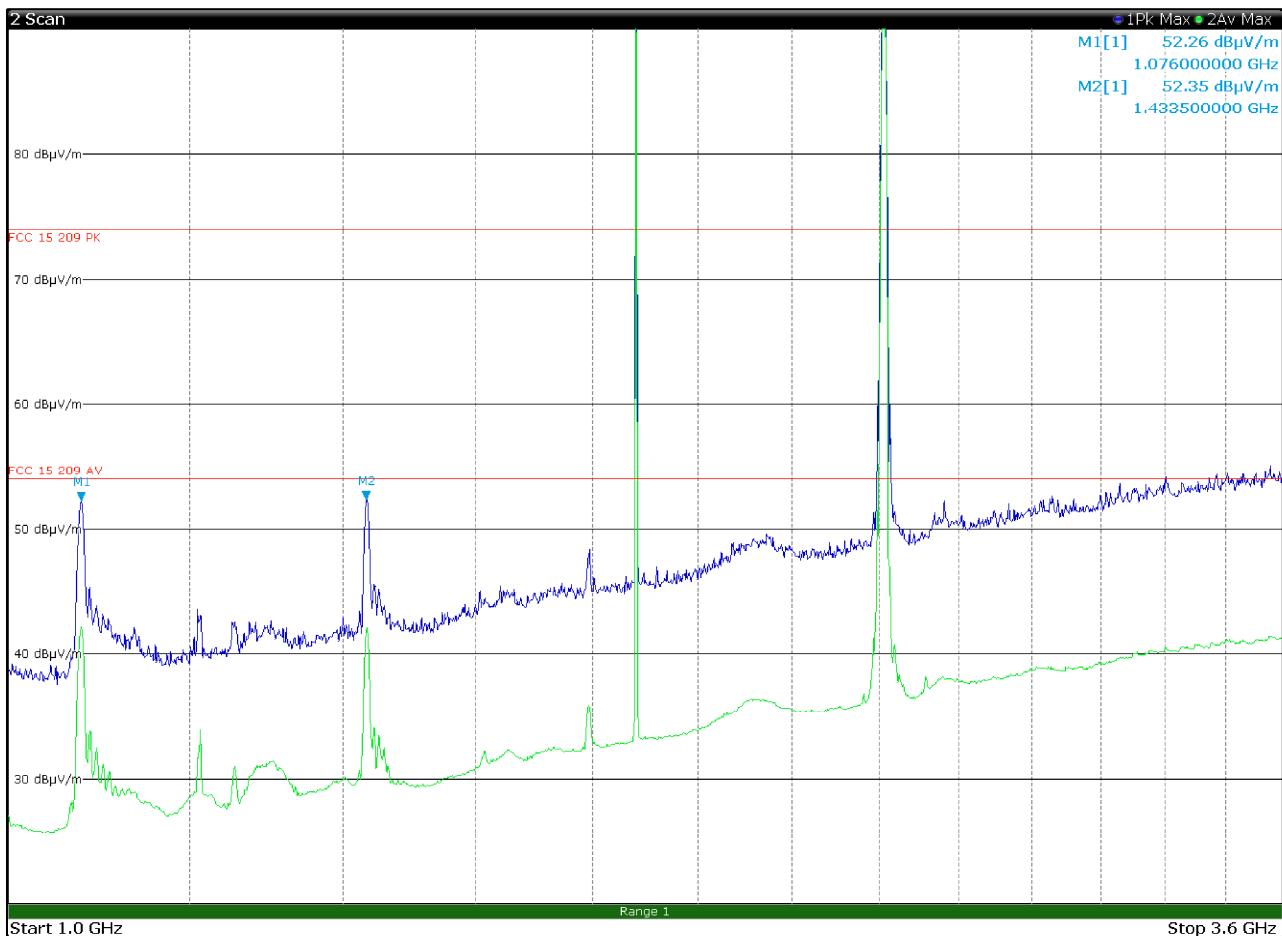


Figure 8.1-188: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.0760	52.3	74.0	-21.7	PK
1.0760	41.8	54.0	-12.2	AV
1.4335	52.4	74.0	-21.6	PK
1.4335	41.7	54.0	-12.3	AV

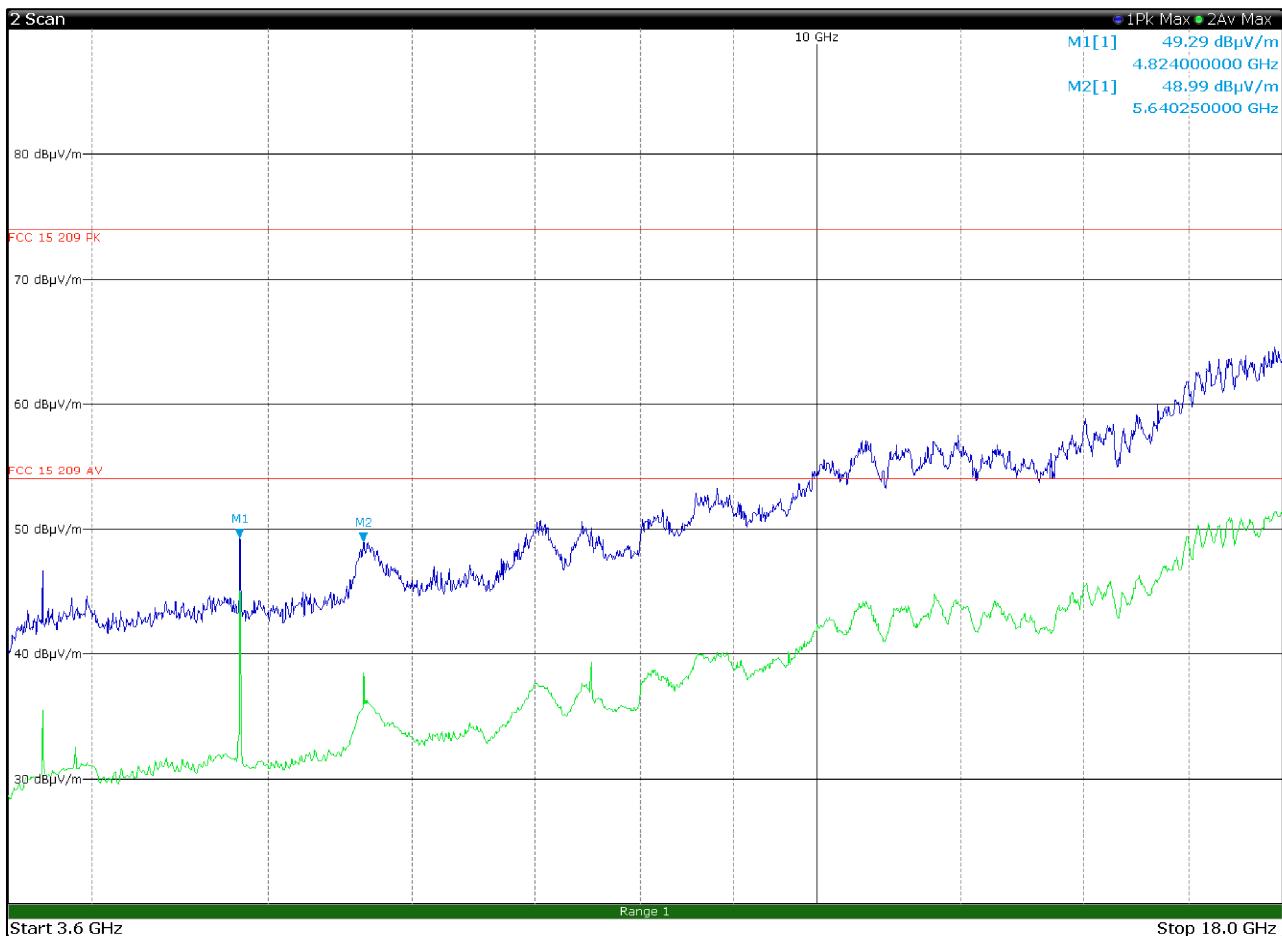


Figure 8.1-189: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
4.8240	49.3	74.0	-24.7	PK
4.8240	46.2	54.0	-7.8	AV
3.7600	47.5	82.2	-34.7	PK
5.6402	49.0	82.2	-33.2	PK
7.5200	50.2	82.2	-32.0	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

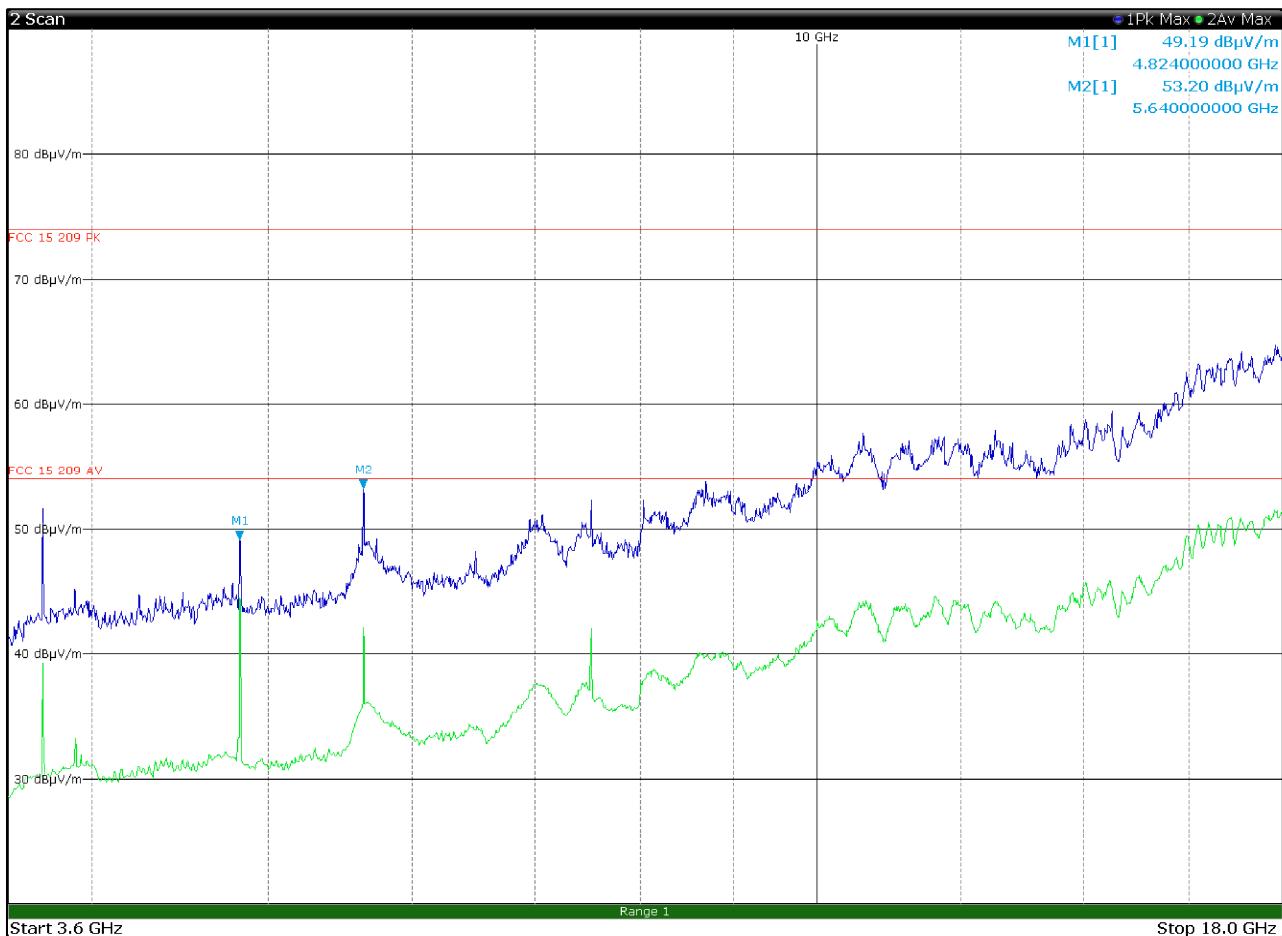


Figure 8.1-190: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
4.8240	49.2	74.0	-24.8	PK
4.8240	46.5	54.0	-7.5	AV
3.7600	52.1	82.2	-30.1	PK
5.6400	53.2	82.2	-29.0	PK
7.5200	52.9	82.2	-29.3	PK

The limit for LTE is -13 dBm. Limit (dB μ V/m) = limit (dBm) + 95.23 = 82.2 dB μ V/m

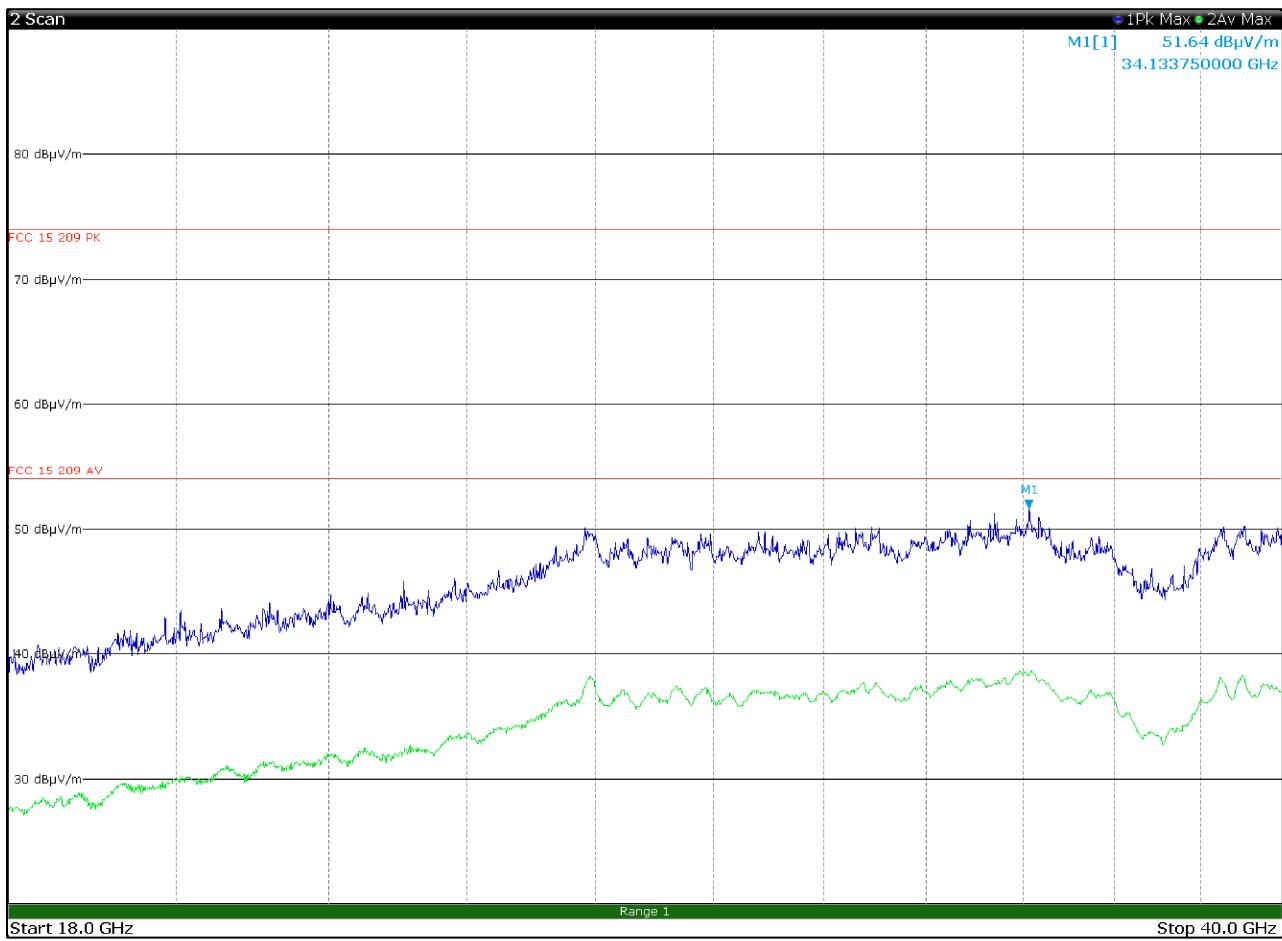


Figure 8.1-191: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 2412 MHz – antenna in horizontal polarization – EUT in configuration 3

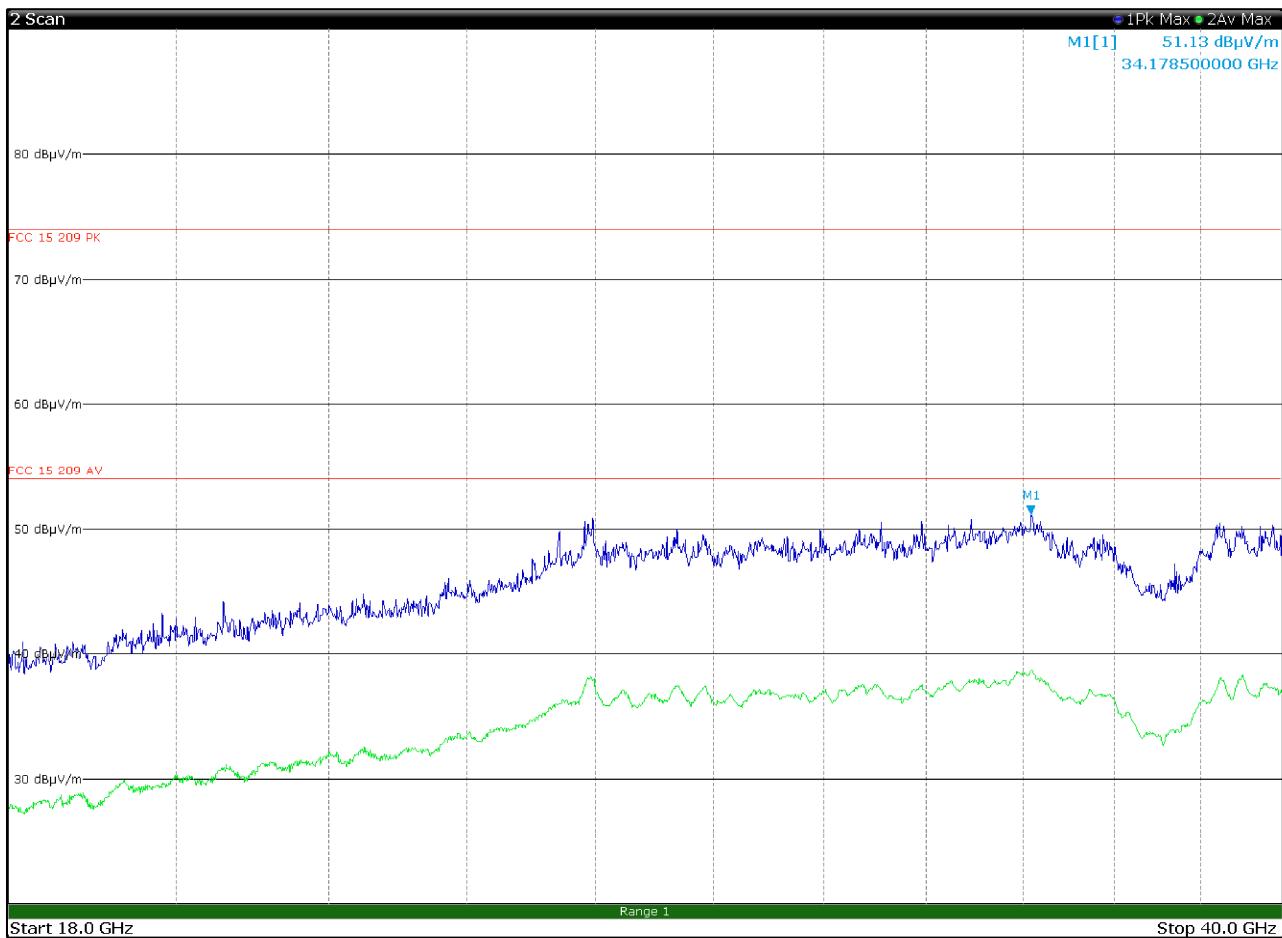


Figure 8.1-192: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 2412 MHz – antenna in vertical polarization – EUT in configuration 3

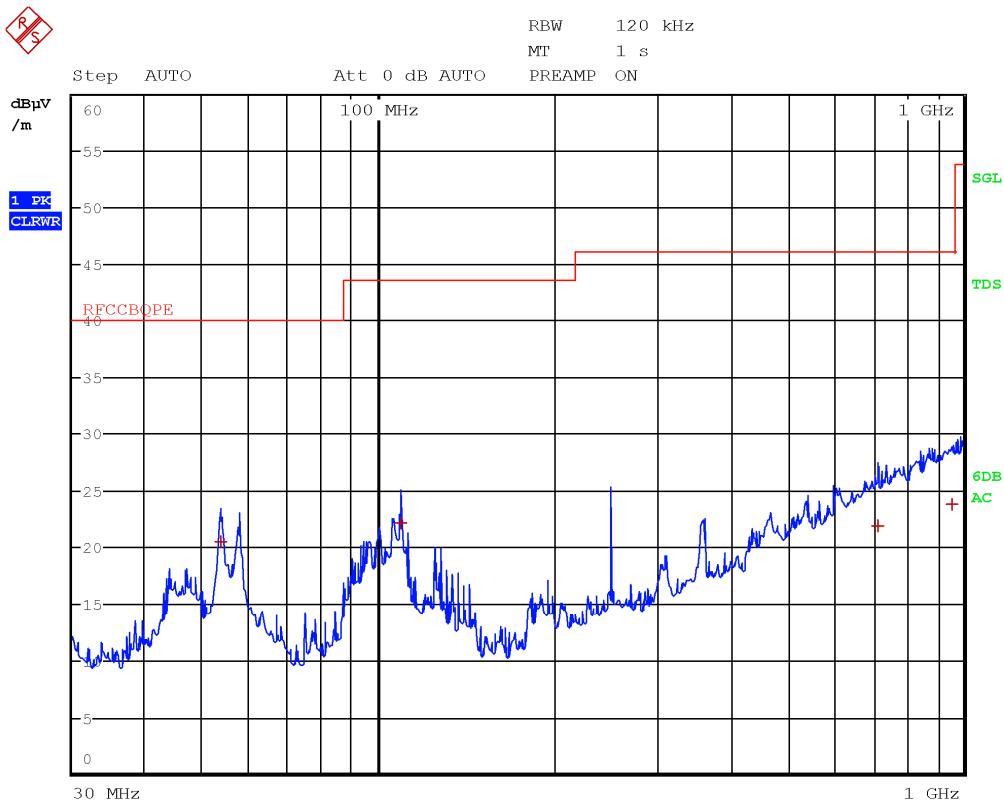


Figure 8.1-193: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 3

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
53.9200	20.5	40.0	-19.5	QP
109.0400	22.1	43.5	-21.4	QP
715.2800	21.9	46.0	-24.1	QP
957.8800	23.8	46.0	-22.2	QP

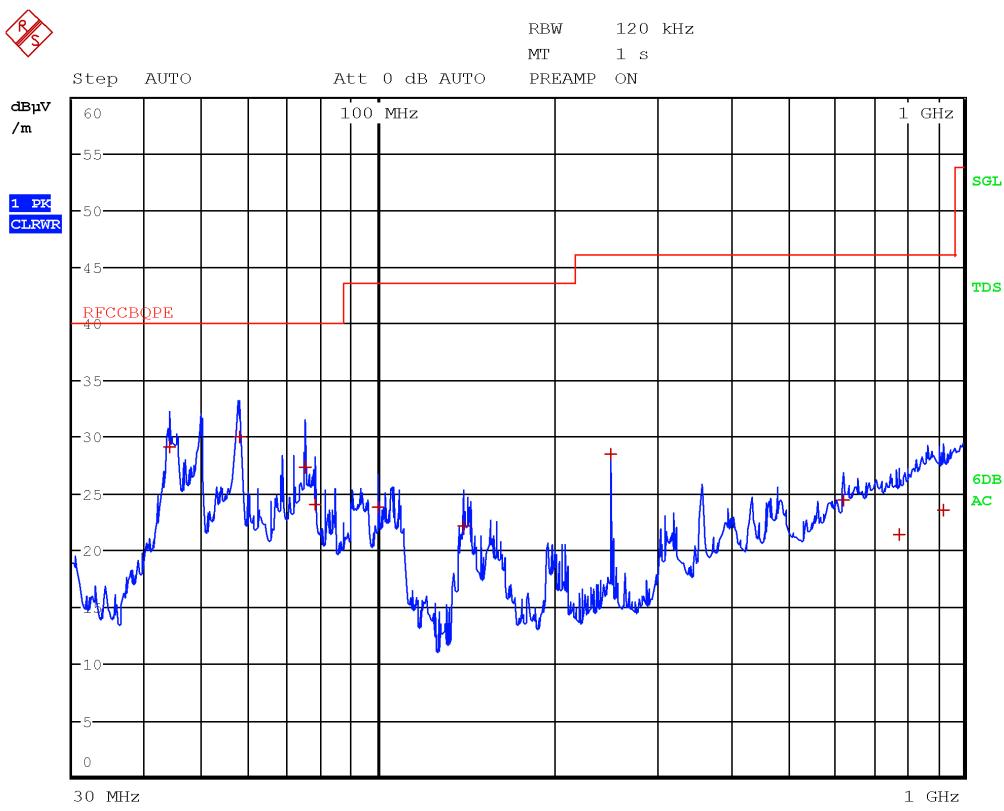


Figure 8.1-194: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 3

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
43.8400	29.1	40.0	-10.9	QP
57.8800	30.0	40.0	-10.0	QP
74.8400	27.3	40.0	-12.7	QP
77.9600	24.0	40.0	-16.0	QP
99.7200	23.8	43.5	-19.7	QP
140.2400	22.2	43.5	-21.3	QP
250.0000	28.5	46.0	-17.5	QP
624.9600	24.4	46.0	-21.6	QP
774.8400	21.4	46.0	-24.6	QP
922.0000	23.6	46.0	-22.4	QP

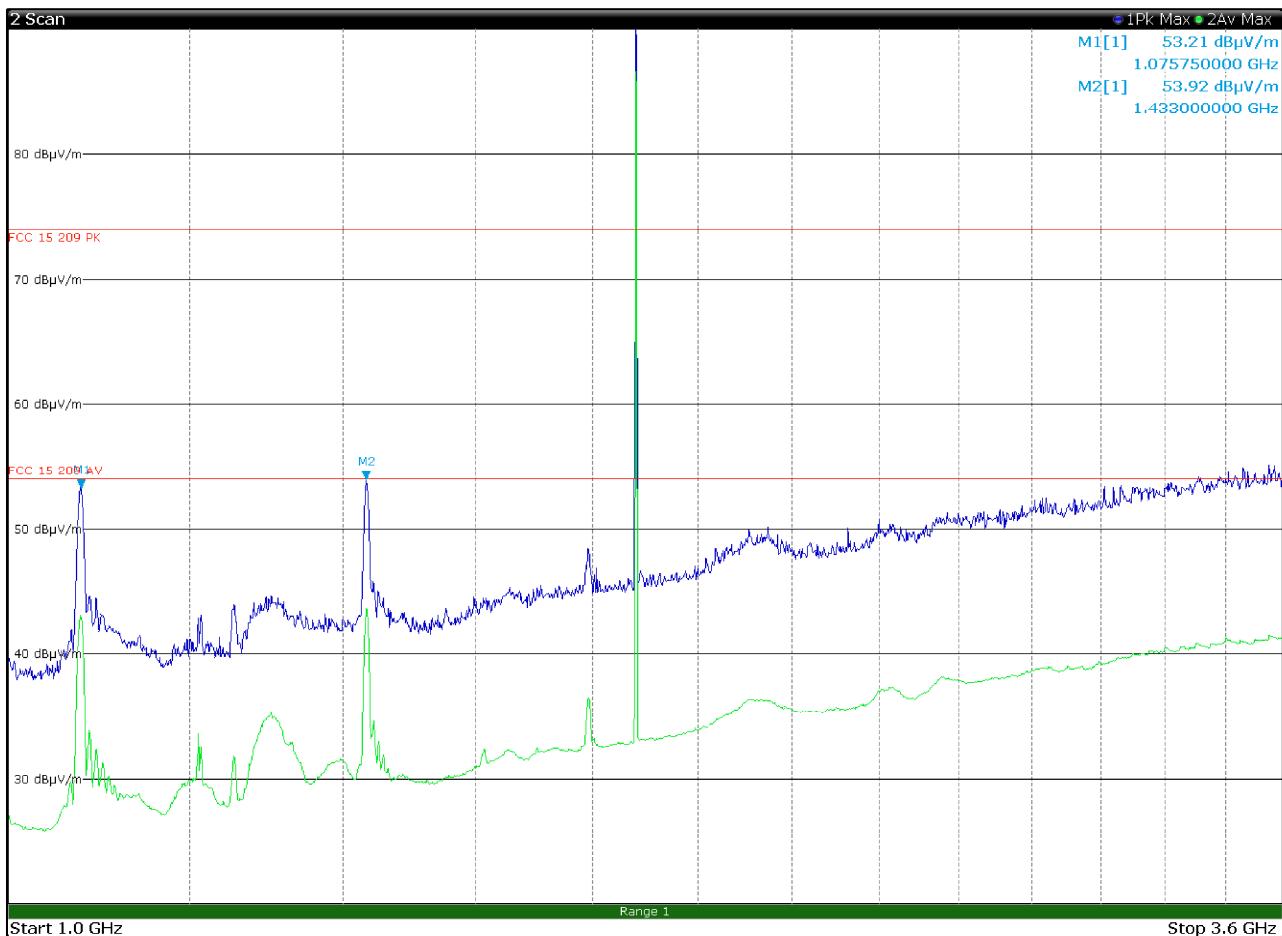


Figure 8.1-195: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.0757	53.2	74.0	-20.8	PK
1.0757	42.8	54.0	-11.2	AV
1.4330	54.0	74.0	-20.0	PK
1.4330	43.7	54.0	-10.3	AV

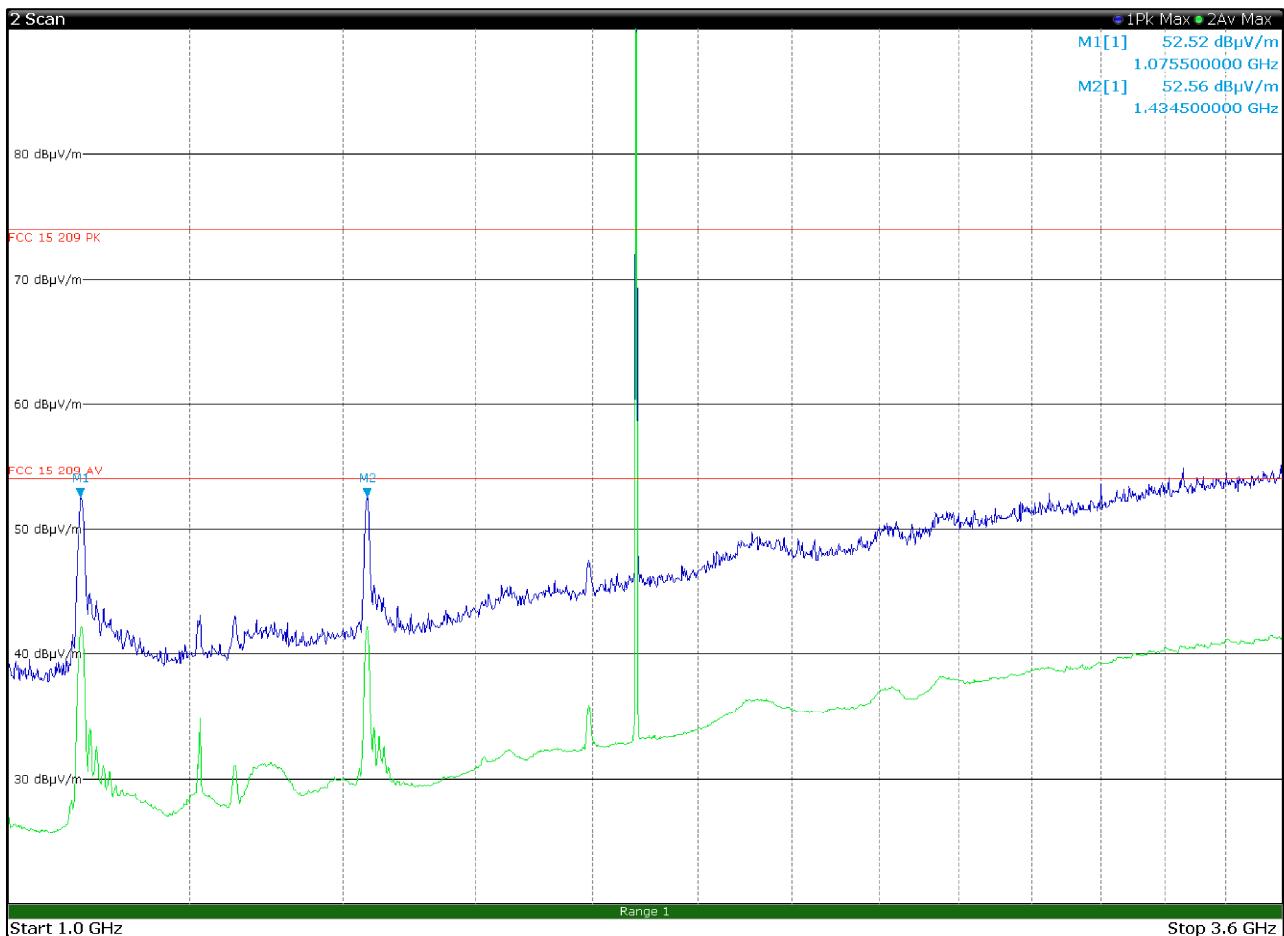


Figure 8.1-196: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1.0755	52.6	74.0	-21.4	PK
1.0755	42.3	54.0	-11.7	AV
1.4345	52.7	74.0	-21.3	PK
1.4345	42.5	54.0	-11.5	AV

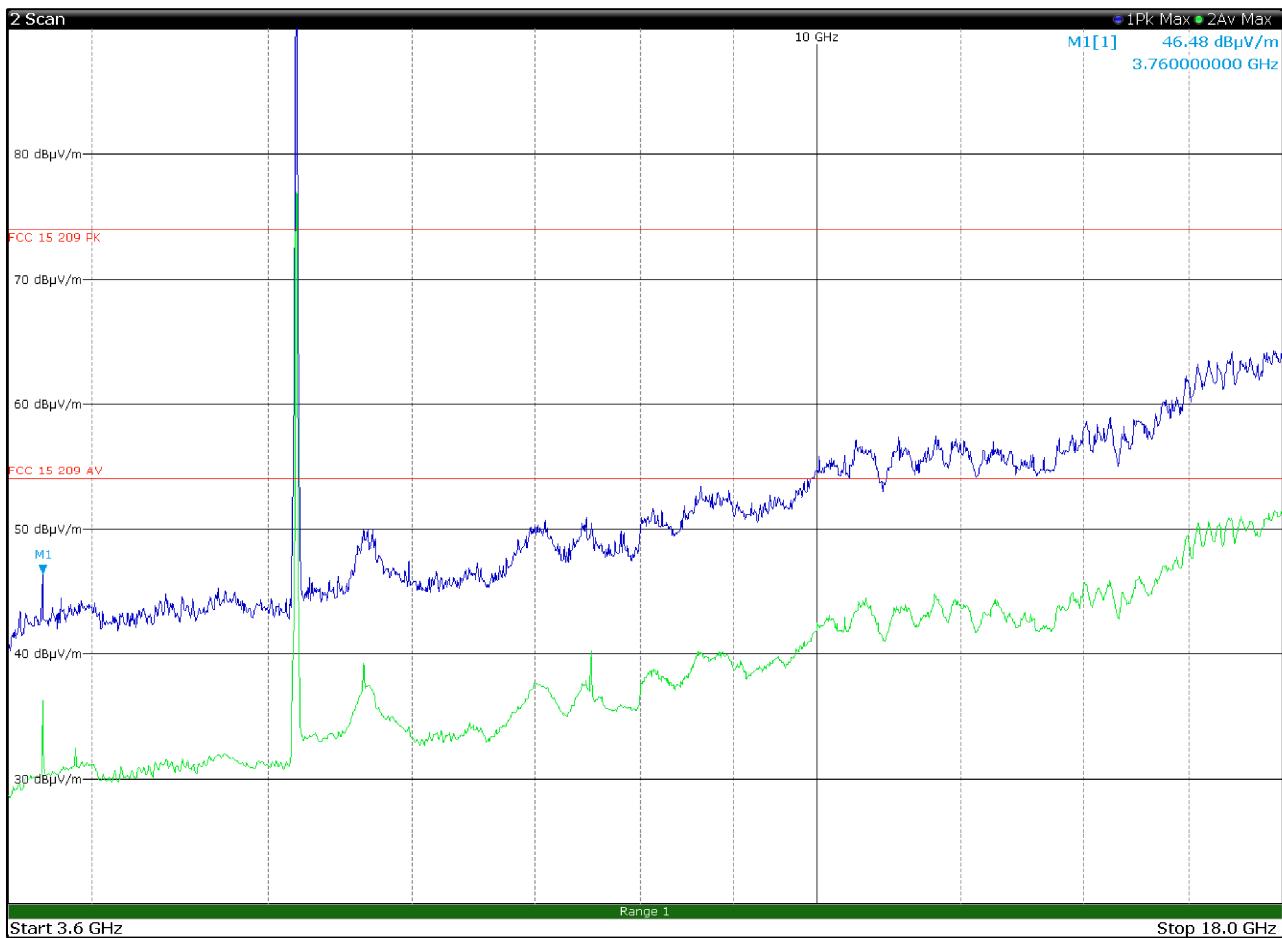


Figure 8.1-197: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 3

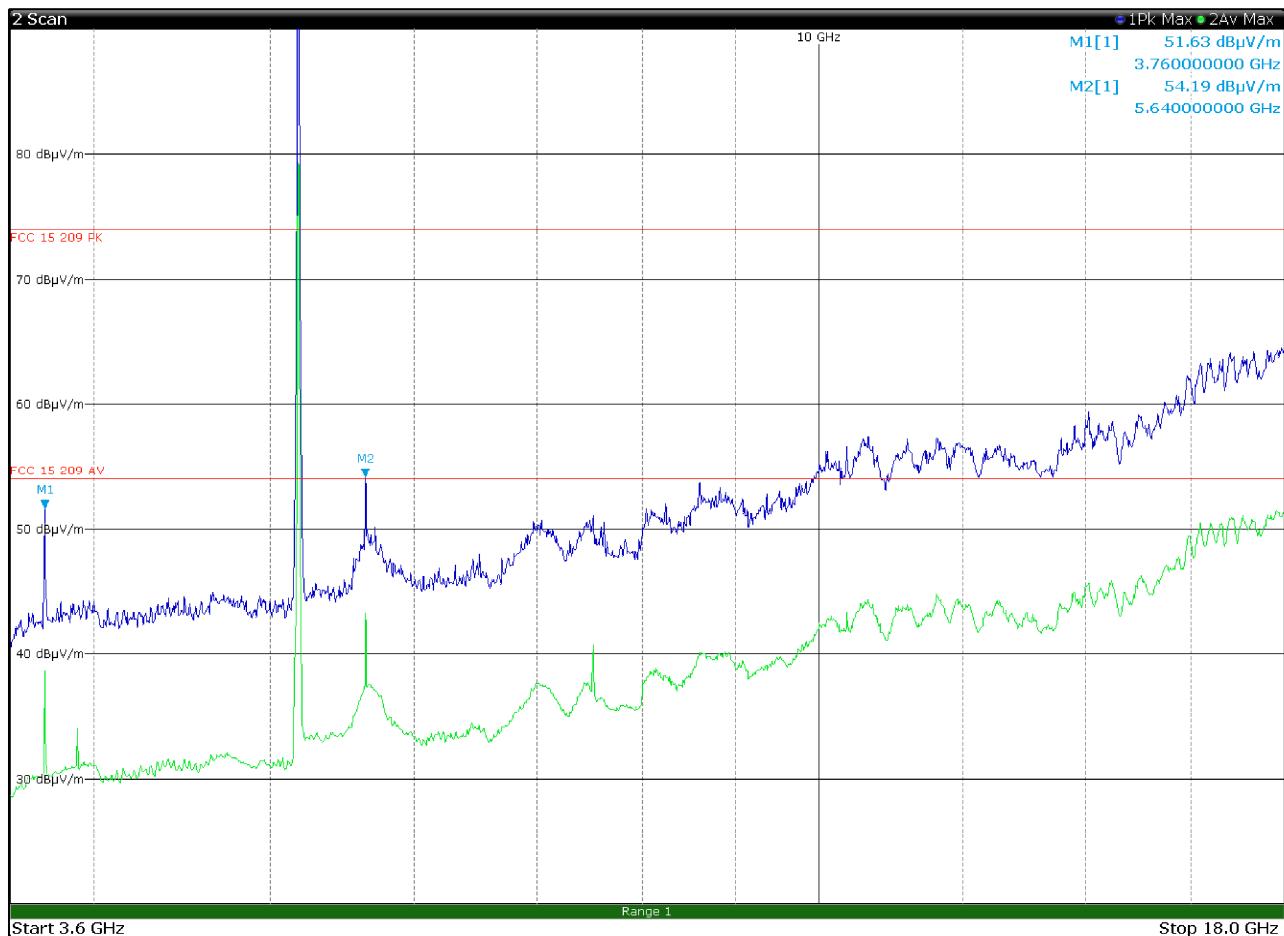


Figure 8.1-198: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 3

Note: Emissions above the limit were from intentional emissions. no intermodulation emissions were detected

Frequency (GHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
3.7600	51.7	82.2	-30.5	PK
5.6400	54.2	82.2	-28.0	PK

The limit for LTE is -13 dBm. Limit (dBμV/m) = limit (dBm) + 95.23 = 82.2 dBμV/m

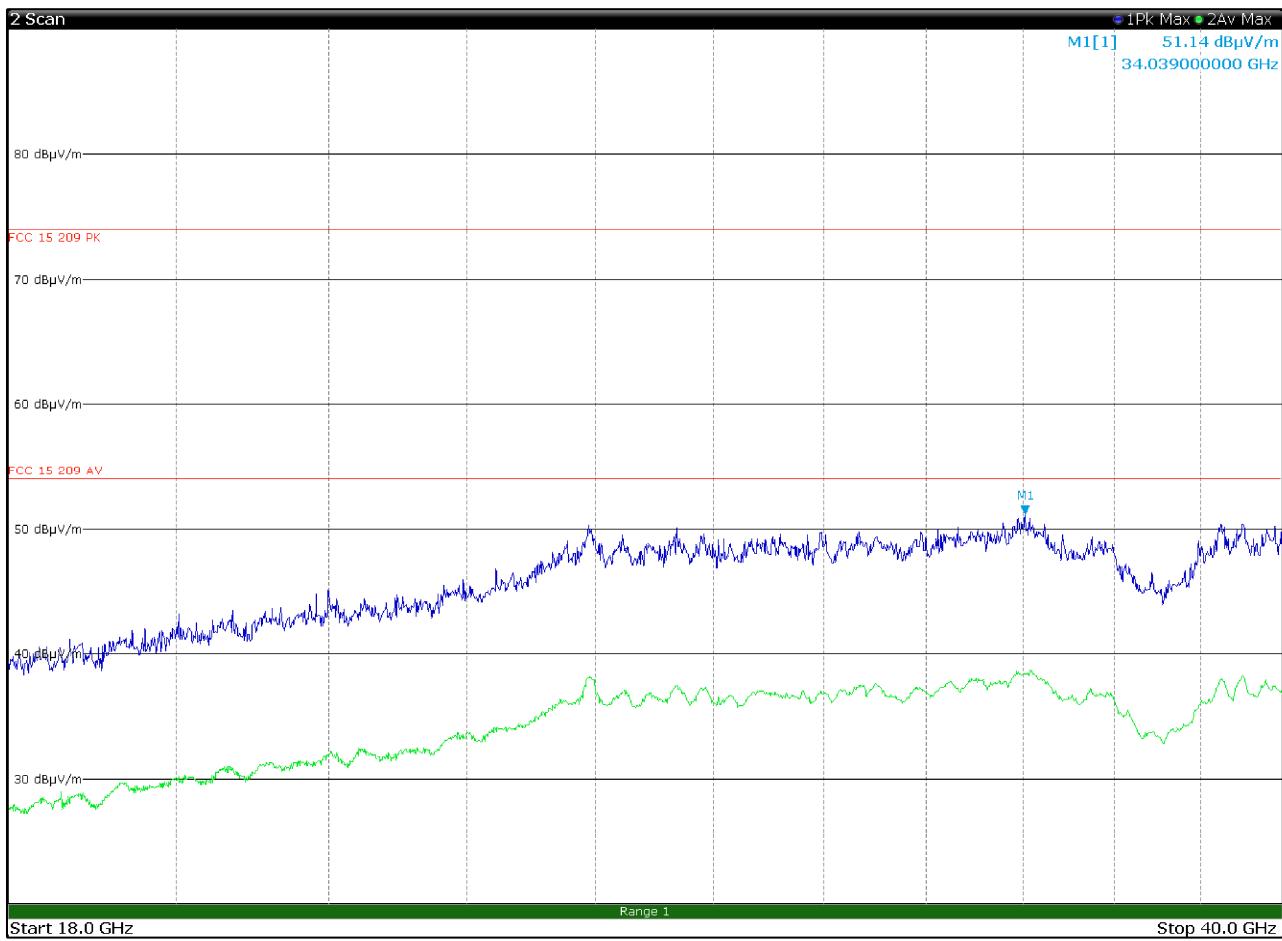


Figure 8.1-199: Radiated spurious emissions, LTE Tx at 1883 MHz, WiFi Tx at 5200 MHz – antenna in horizontal polarization – EUT in configuration 3

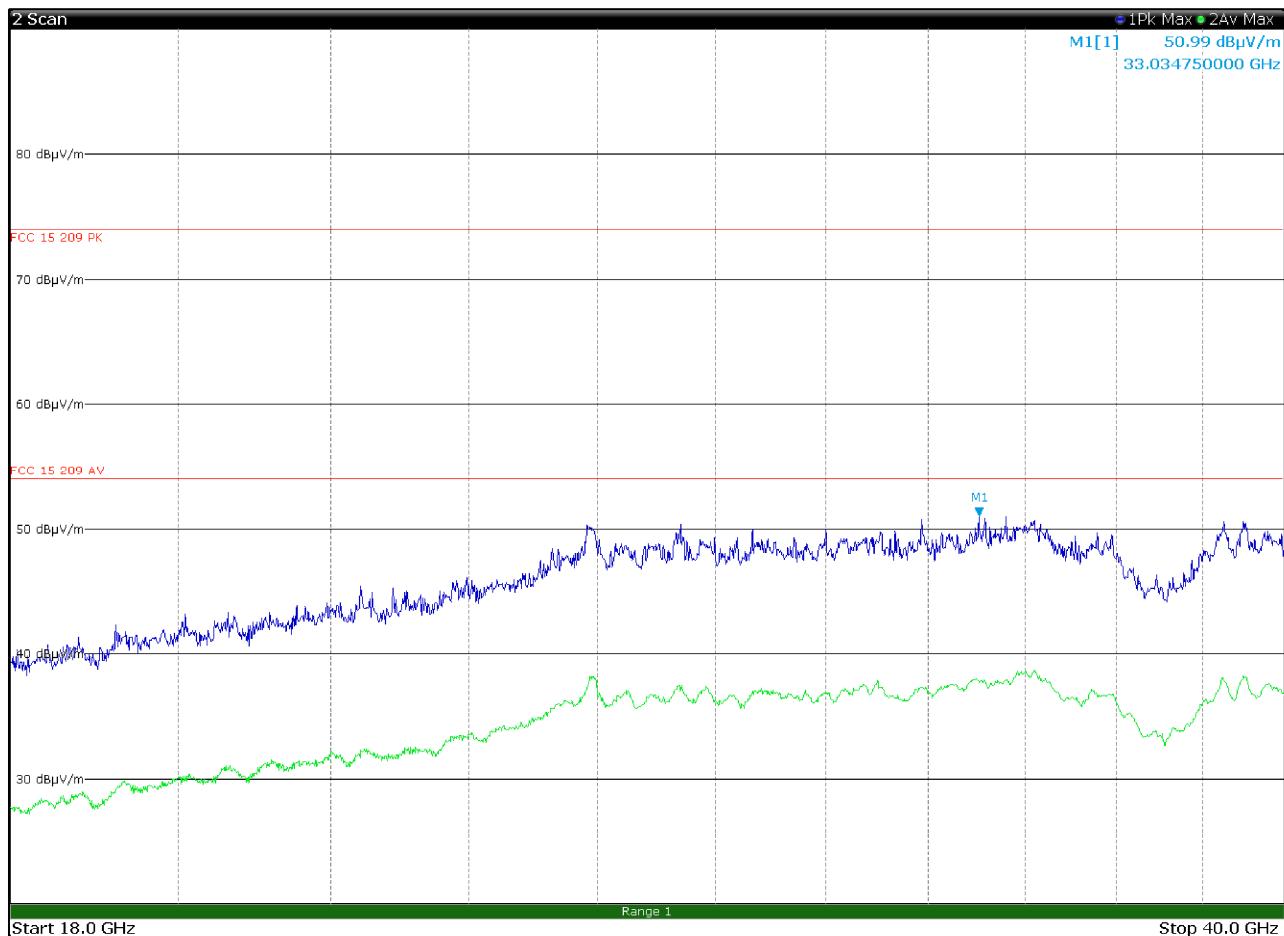
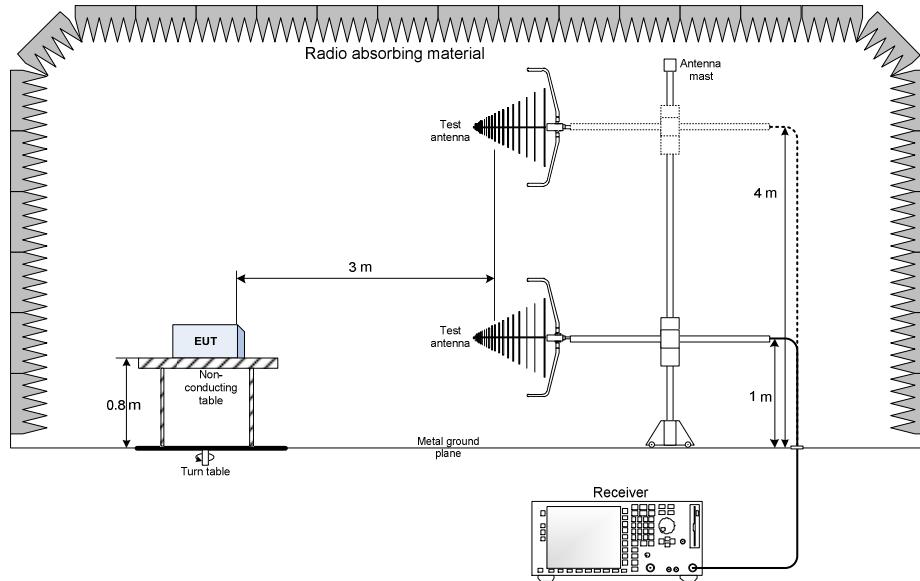


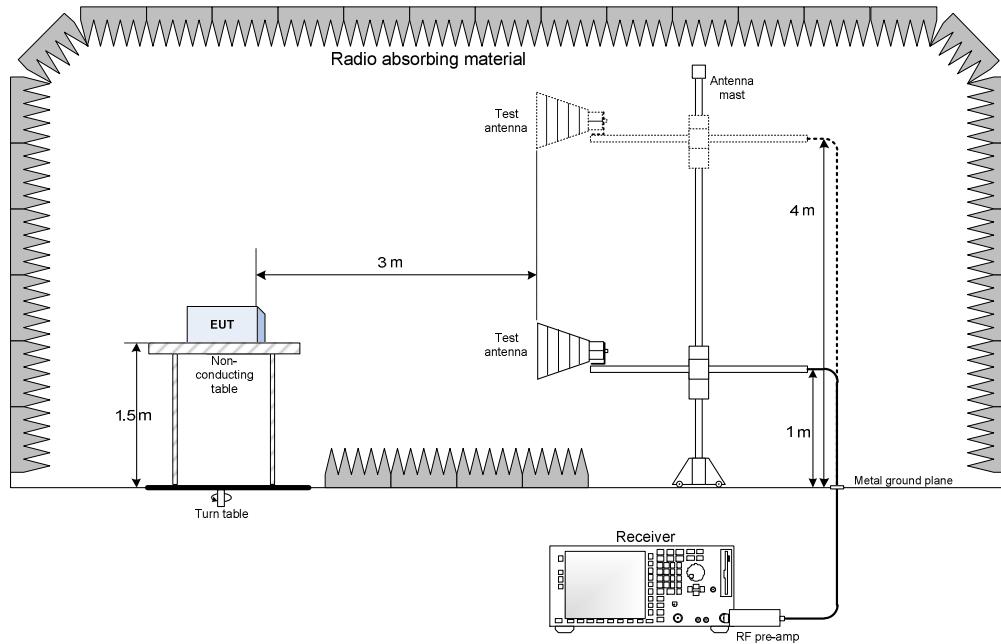
Figure 8.1-200: Radiated spurious emissions, LTE Tx at 1883 MHz, WIFI Tx at 5200 MHz – antenna in vertical polarization – EUT in configuration 3

Section 9. Block diagrams of test set-ups

9.1 Radiated emissions set-up for frequencies below 1 GHz



9.2 Radiated emissions set-up for frequencies above 1 GHz



Section 10. Photos

10.1 Photos of the test set-up



Radiated emission below 1 GHz with EUT in configuration 1



Radiated emission below 1 GHz with EUT in configuration 2



Radiated emission below 1 GHz with EUT in configuration 3



Radiated emission above 1 GHz with EUT in configuration 1



Radiated emission above 1 GHz with EUT in configuration 2



Radiated emission above 1 GHz with EUT in configuration 3

10.2 Photos of the EUT



REGATE-10-12-GS04





REGATE-10-12-GS04





DYGATE-10-12-GS04



Section 10:

Photos



DYGATE-10-12-GS04



(End of report)