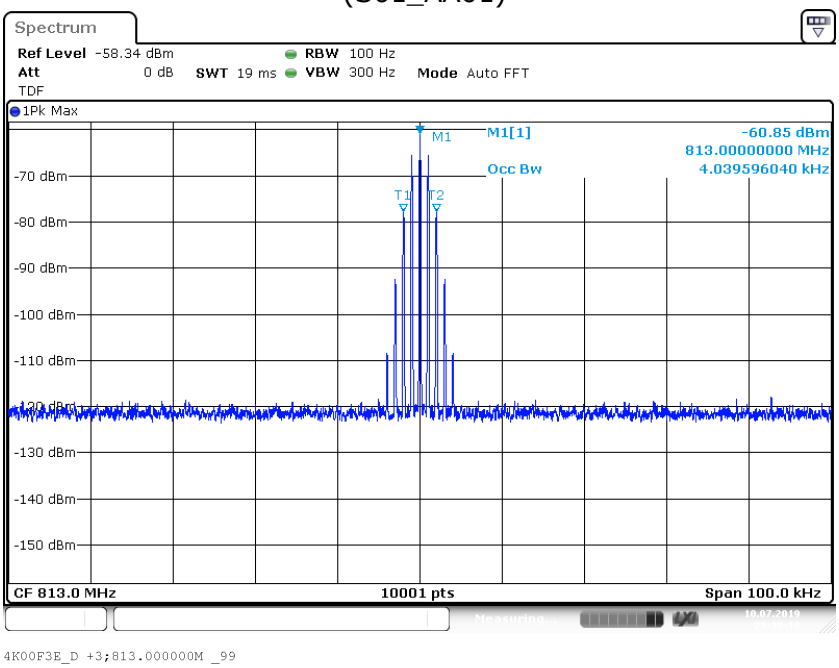
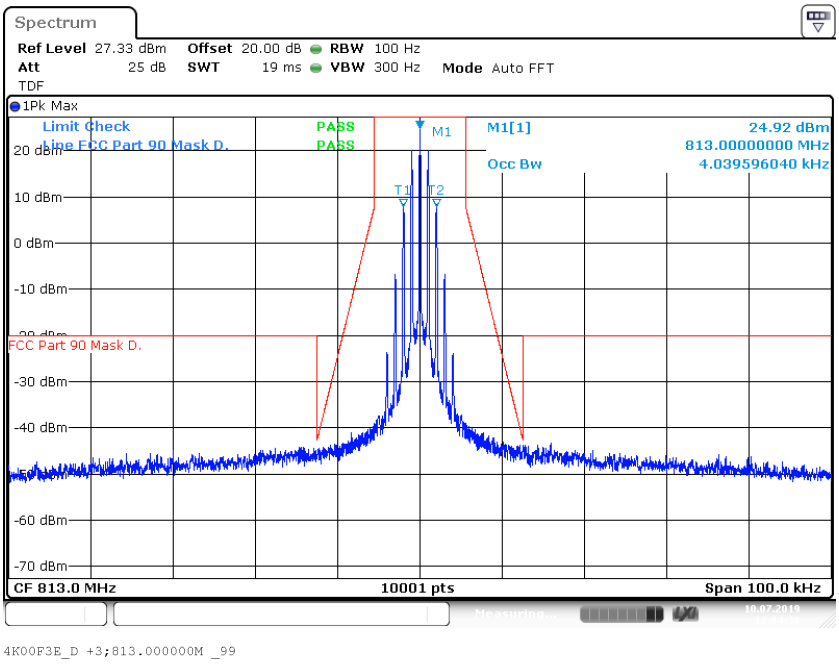
Frequency Band = 809 MHz – 817 MHz, Direction = RF uplink, Input Power = 3 dB > AGC, at **fm** Signal Type = 4K00F3E (S01_AA01)

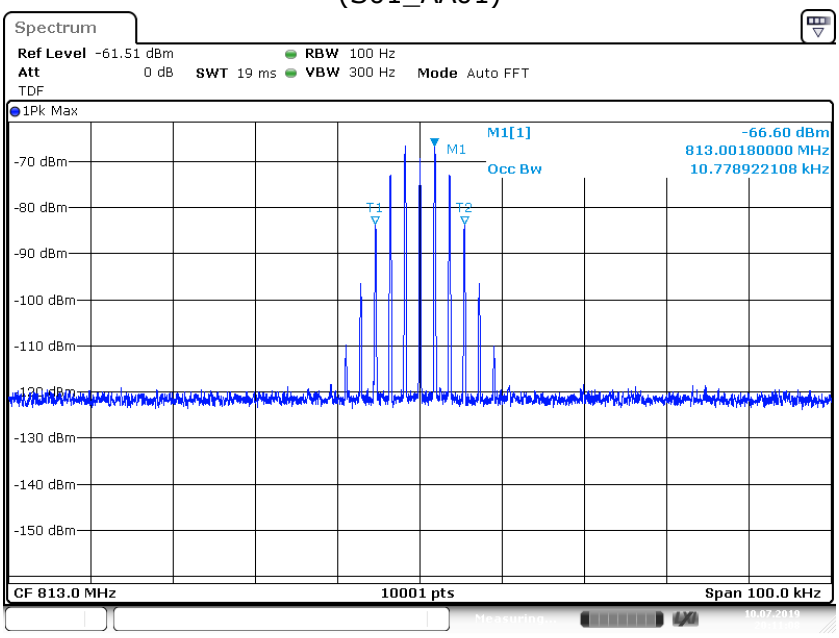


Input Signal

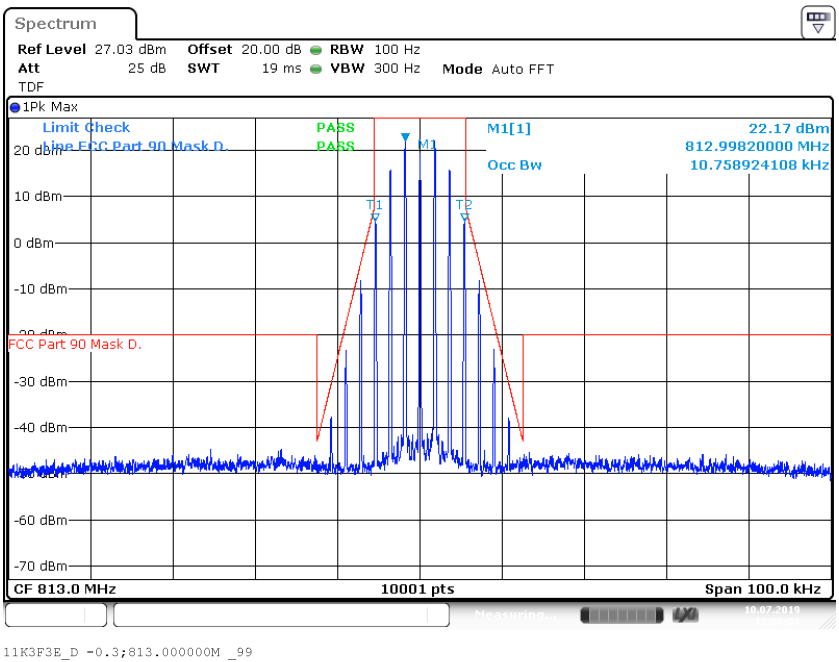


Output Signal

Frequency Band = 809 MHz – 817 MHz, Direction = RF uplink, Input Power = 0.3 dB < AGC, at **fm** Signal Type = 11K3F3E (S01_AA01)

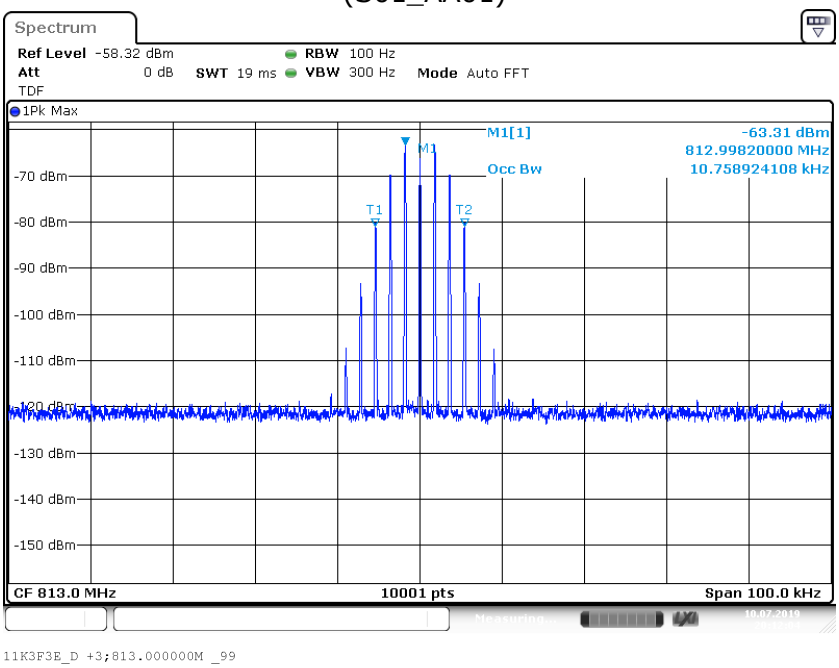


Input Signal

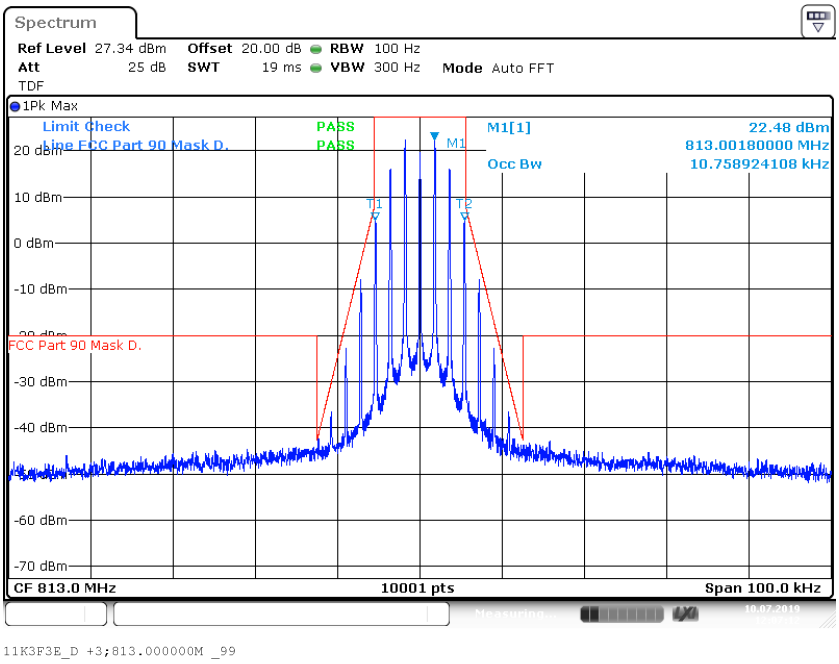


Output Signal

Frequency Band = 809 MHz – 817 MHz, Direction = RF uplink, Input Power = 3 dB > AGC, at **fm** Signal Type = 11K3F3E (S01_AA01)

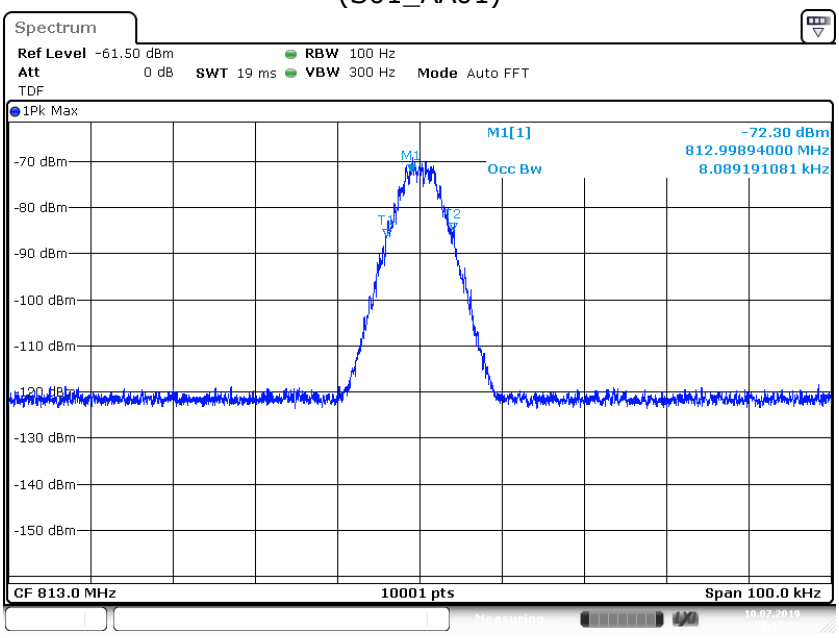


Input Signal

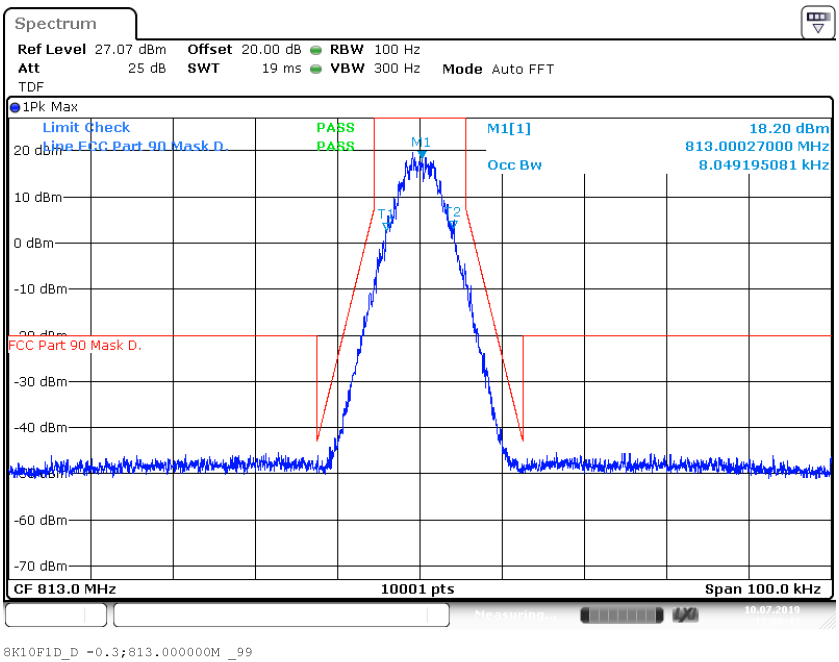


Output Signal

Frequency Band = 809 MHz – 817 MHz, Direction = RF uplink, Input Power = 0.3 dB < AGC, at **fm** Signal Type = 8K10F1D (S01_AA01)

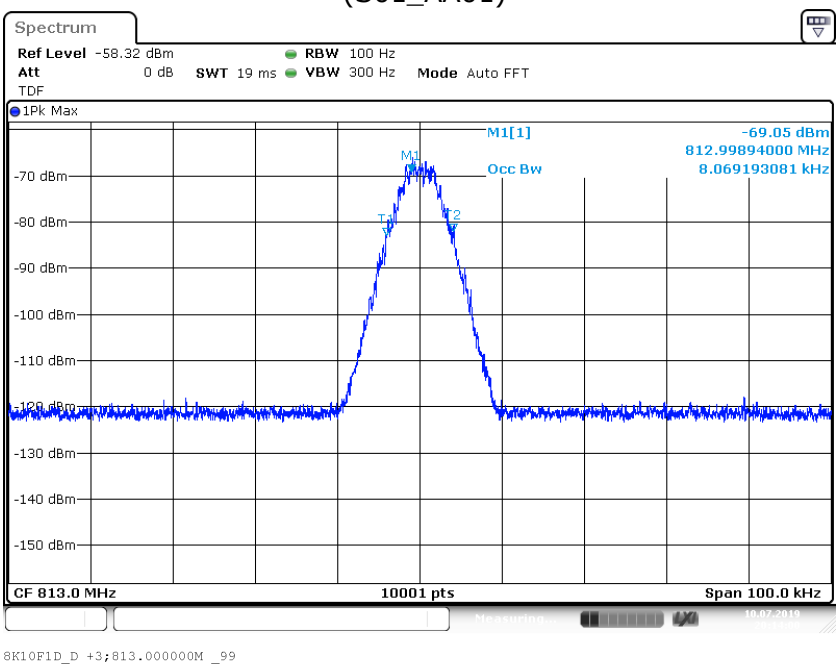


Input Signal

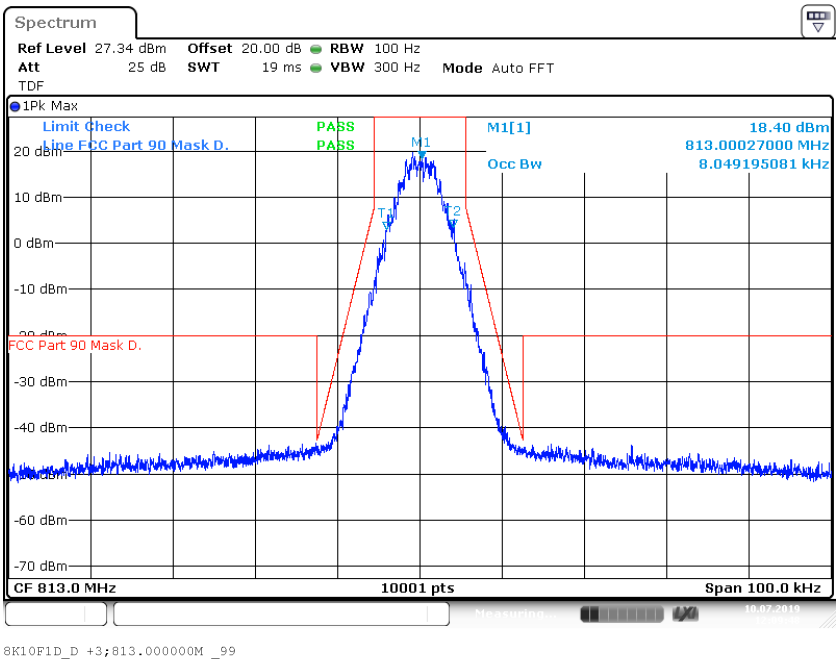


Output Signal

Frequency Band = 809 MHz – 817 MHz, Direction = RF uplink, Input Power = 3 dB > AGC, at **fm** Signal Type = 8K10F1D (S01_AA01)

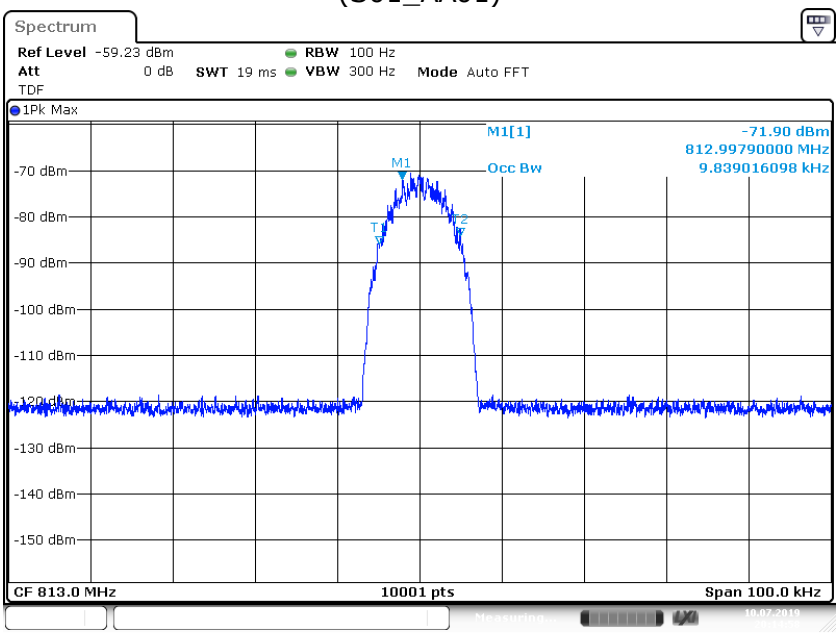


Input Signal

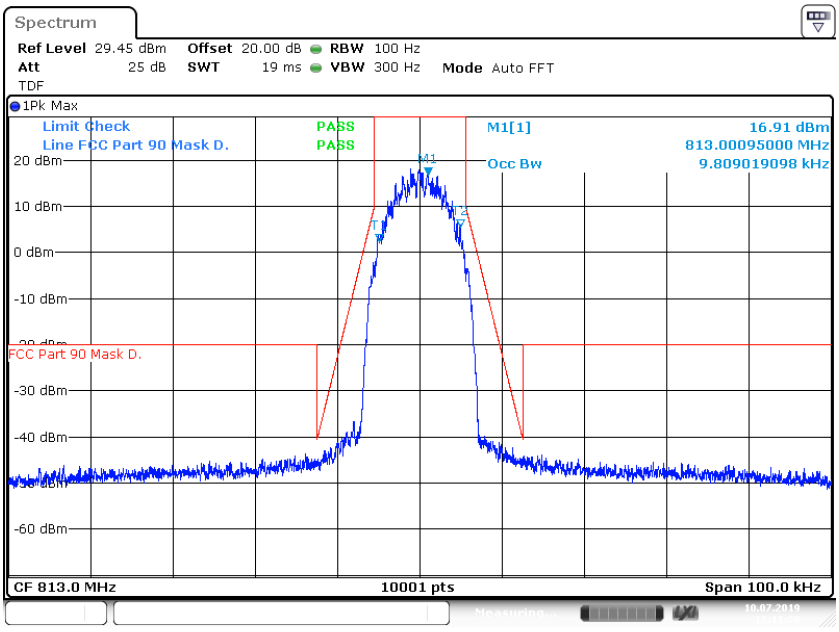


Output Signal

Frequency Band = 809 MHz – 817 MHz, Direction = RF uplink, Input Power = 0.3 dB < AGC, at **fm** Signal Type = 9K80D7W (S01_AA01)

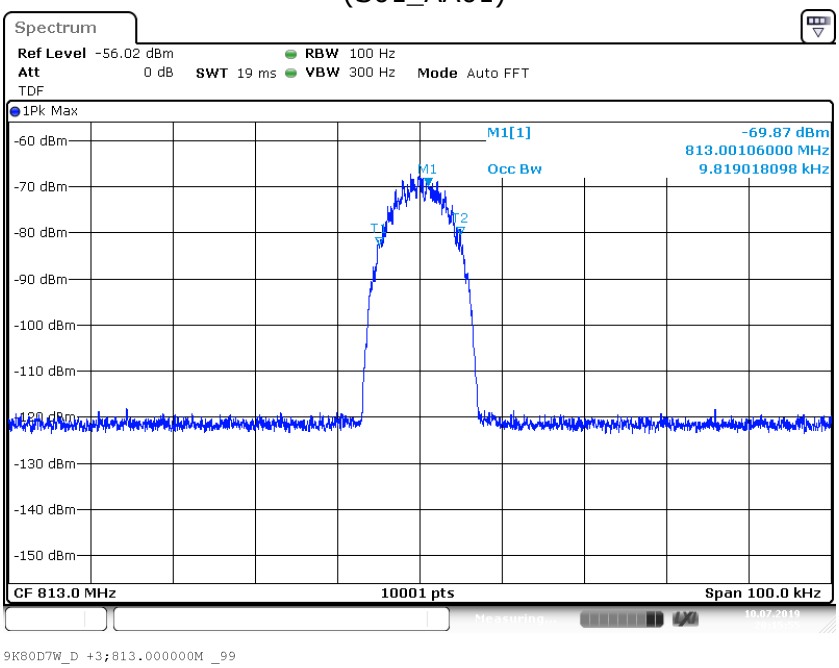


Input Signal

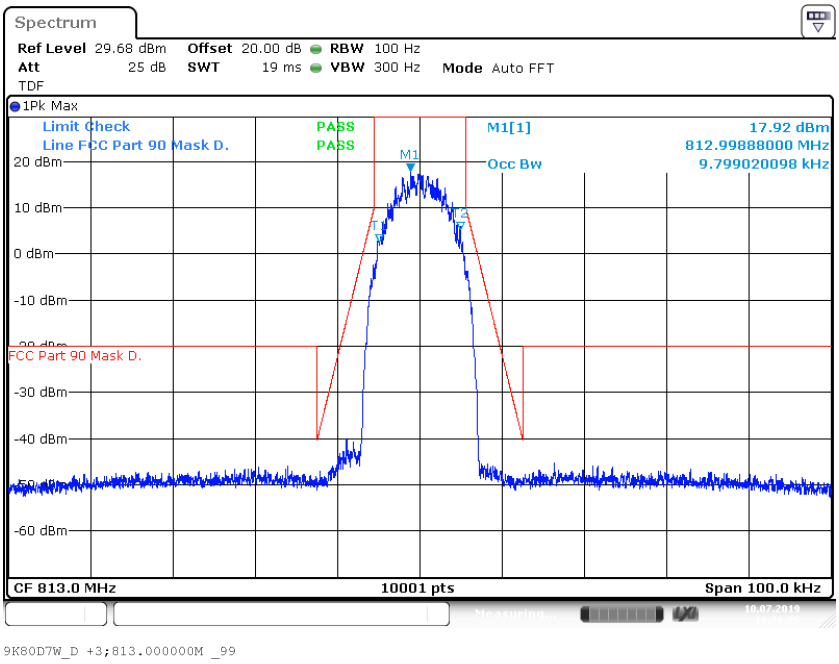


Output Signal

Frequency Band = 809 MHz – 817 MHz, Direction = RF uplink, Input Power = 3 dB > AGC, at **fm** Signal Type = 9K80D7W (S01_AA01)



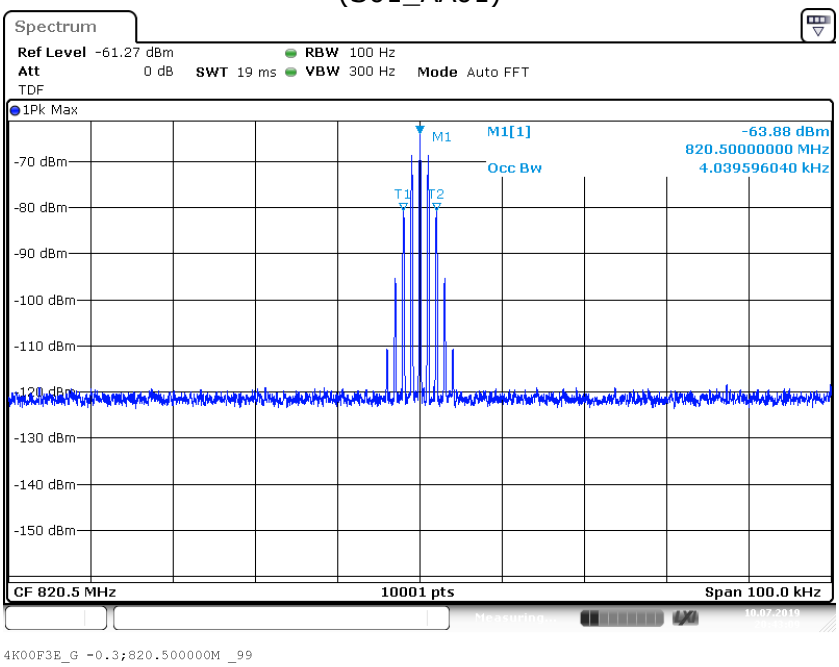
Input Signal



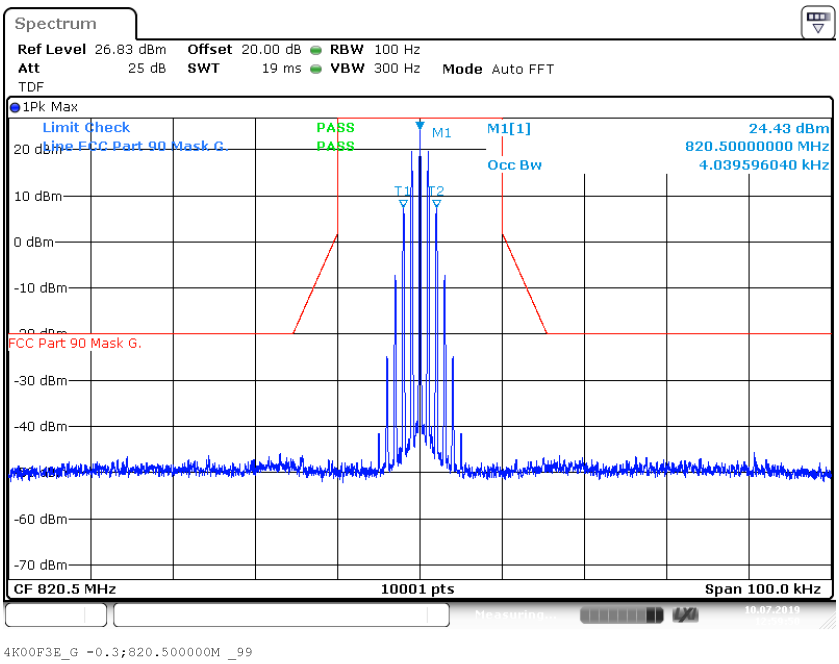
Output Signal

4.2.9.11FREQUENCY BAND = 817 MHZ – 824 MHZ

Frequency Band = 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 0.3 dB < AGC, at **fm** Signal Type = 4K00F3E (S01_AA01)

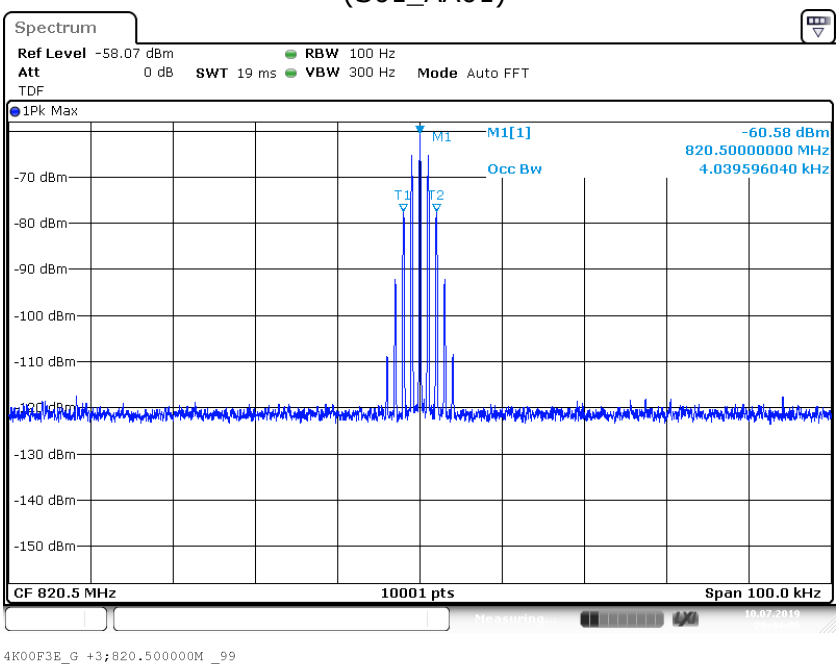


Input Signal

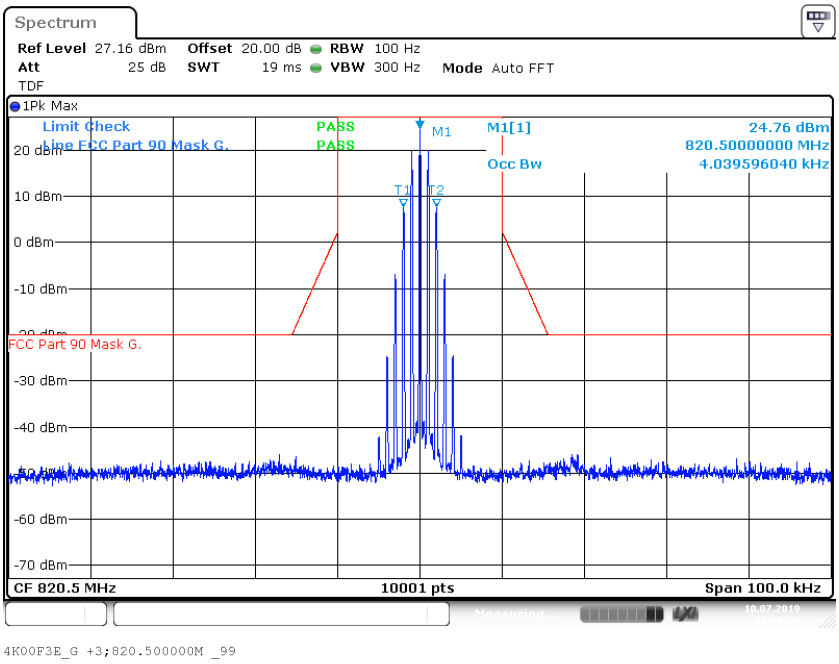


Output Signal

Frequency Band = 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 3 dB > AGC, at **fm** Signal Type = 4K00F3E (S01_AA01)

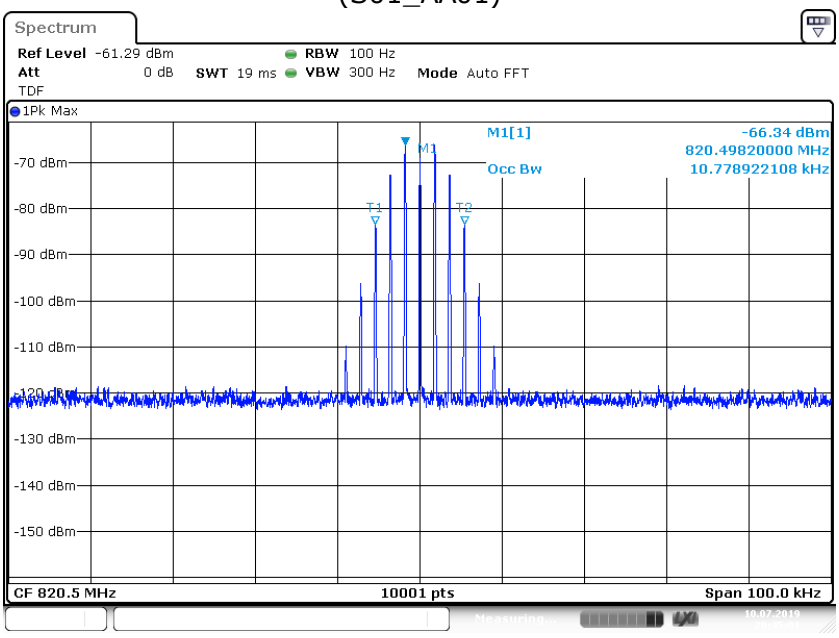


Input Signal

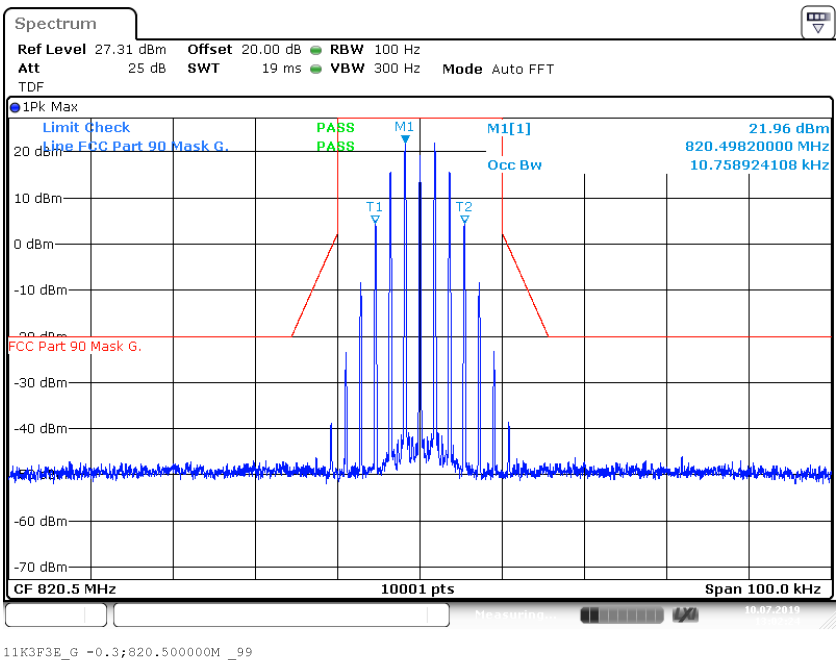


Output Signal

Frequency Band = 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 0.3 dB < AGC, at **fm** Signal Type = 11K3F3E (S01_AA01)

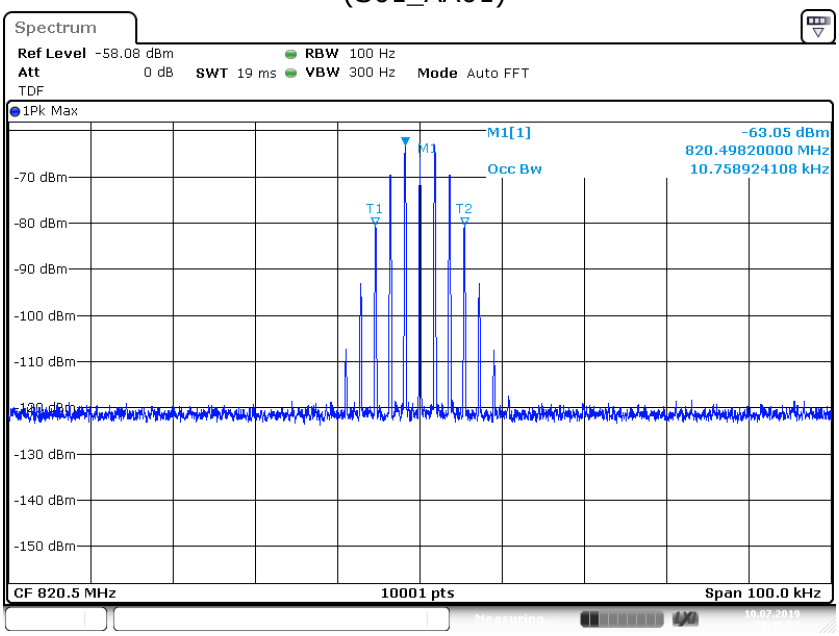


Input Signal

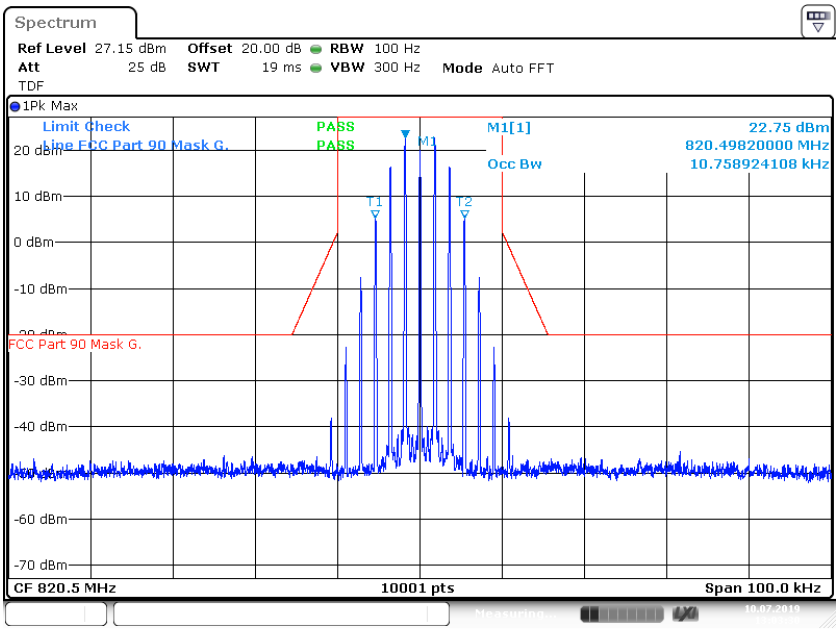


Output Signal

Frequency Band = 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 3 dB > AGC, at **fm** Signal Type = 11K3F3E (S01_AA01)

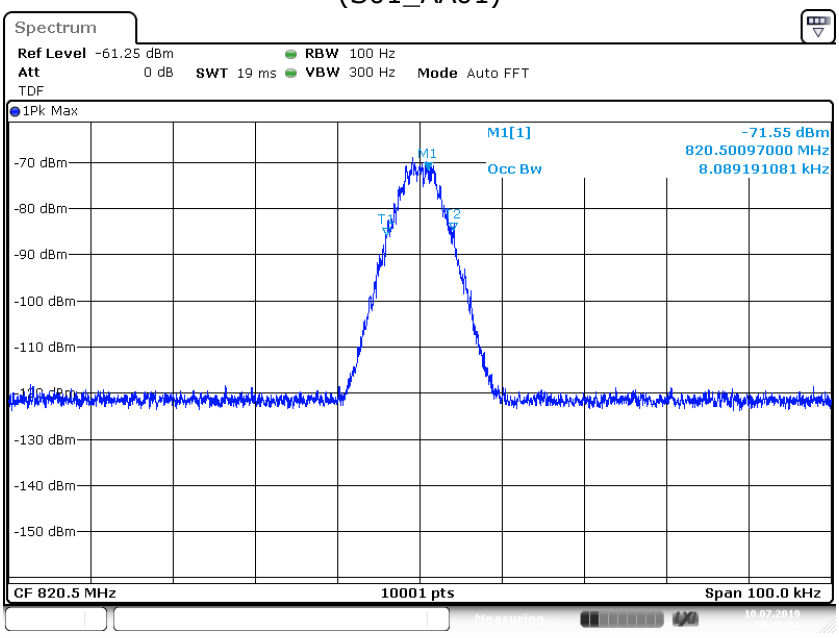


Input Signal

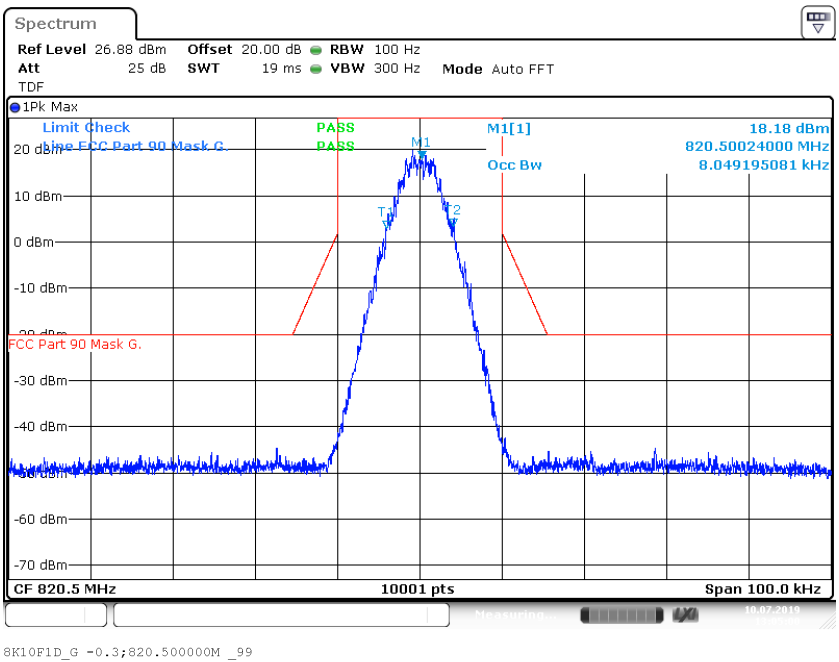


Output Signal

Frequency Band = 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 0.3 dB < AGC, at **fm** Signal Type = 8K10F1D (S01_AA01)

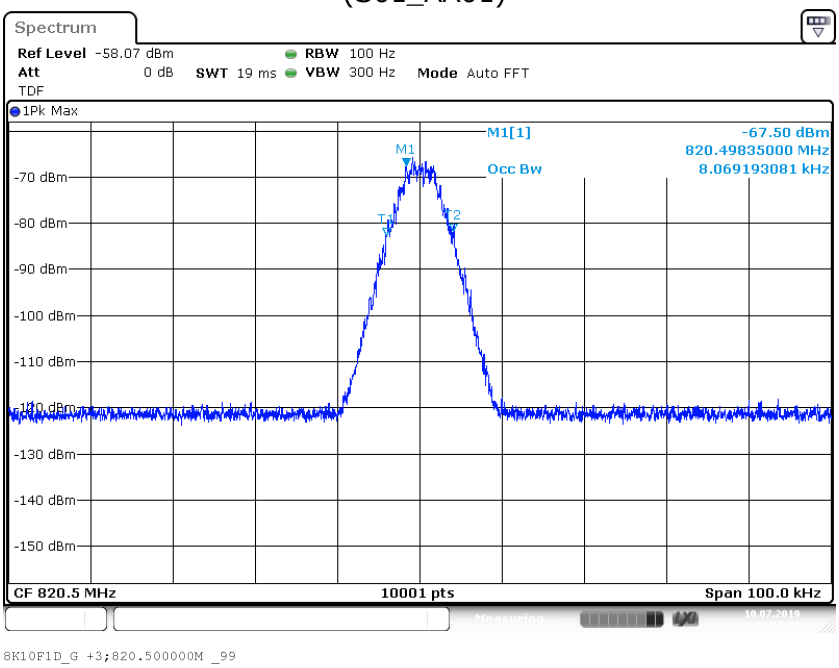


Input Signal

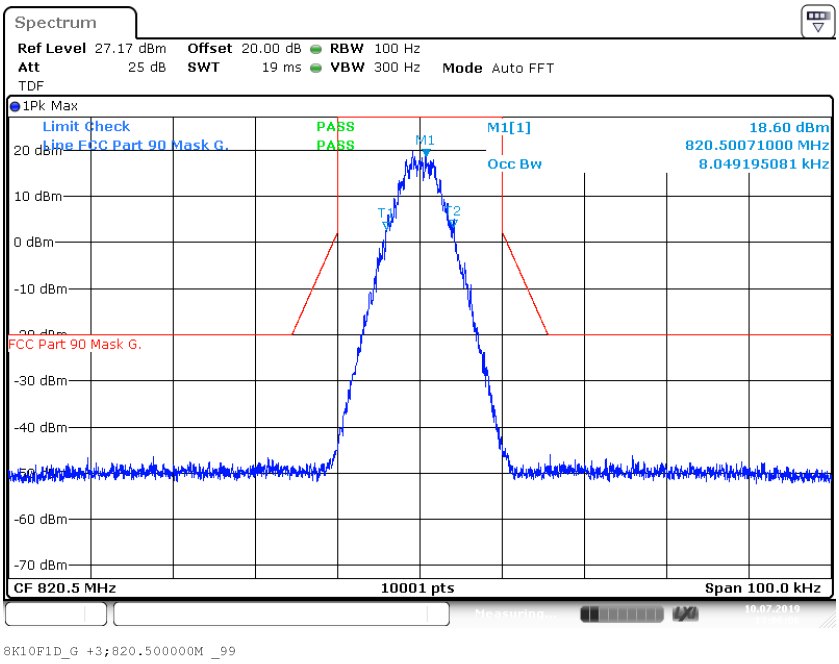


Output Signal

Frequency Band = 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 3 dB > AGC, at **fm** Signal Type = 8K10F1D (S01_AA01)

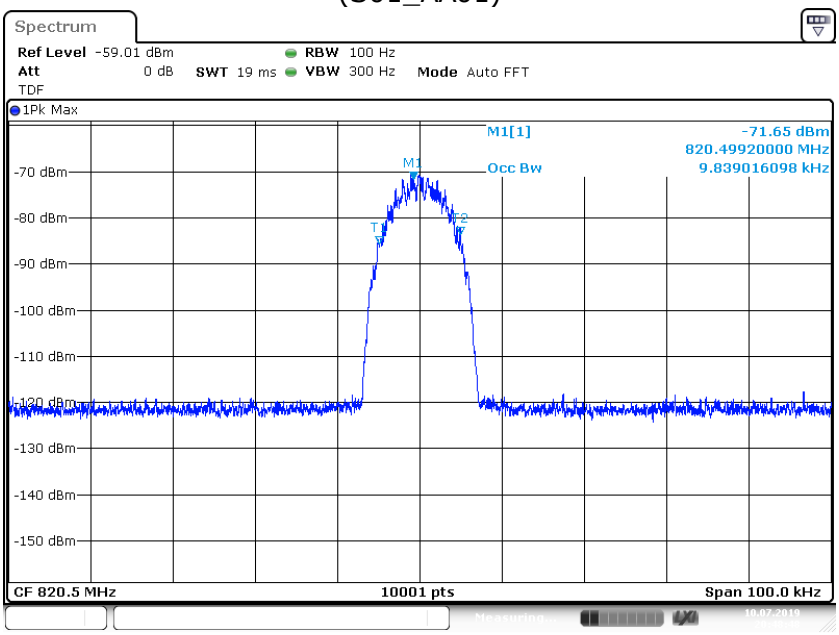


Input Signal

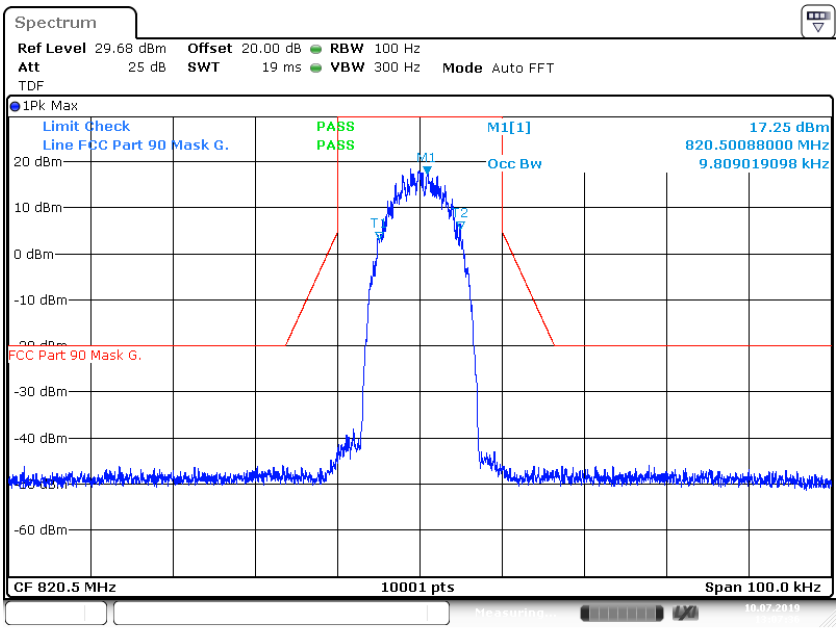


Output Signal

Frequency Band = 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 0.3 dB < AGC, at **fm** Signal Type = 9K80D7W (S01_AA01)

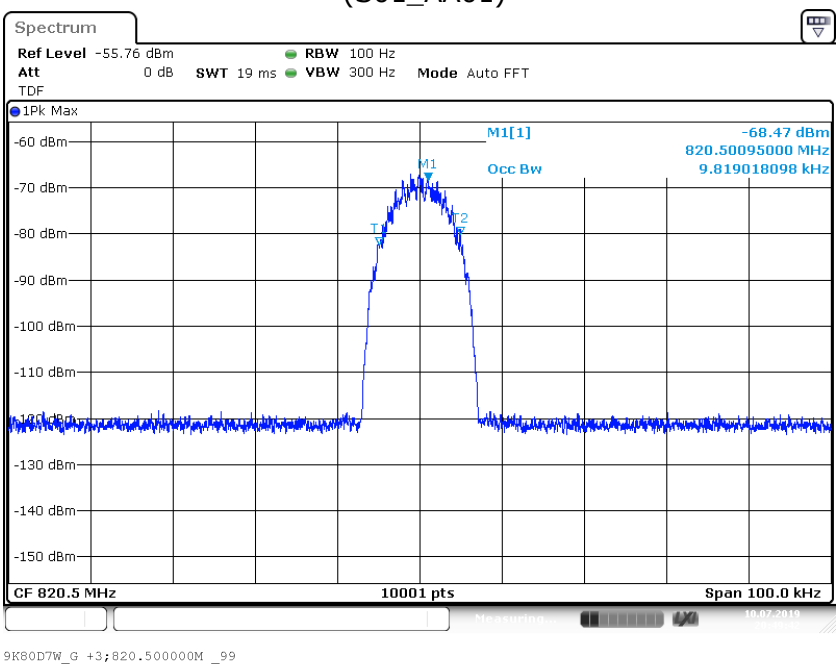


Input Signal

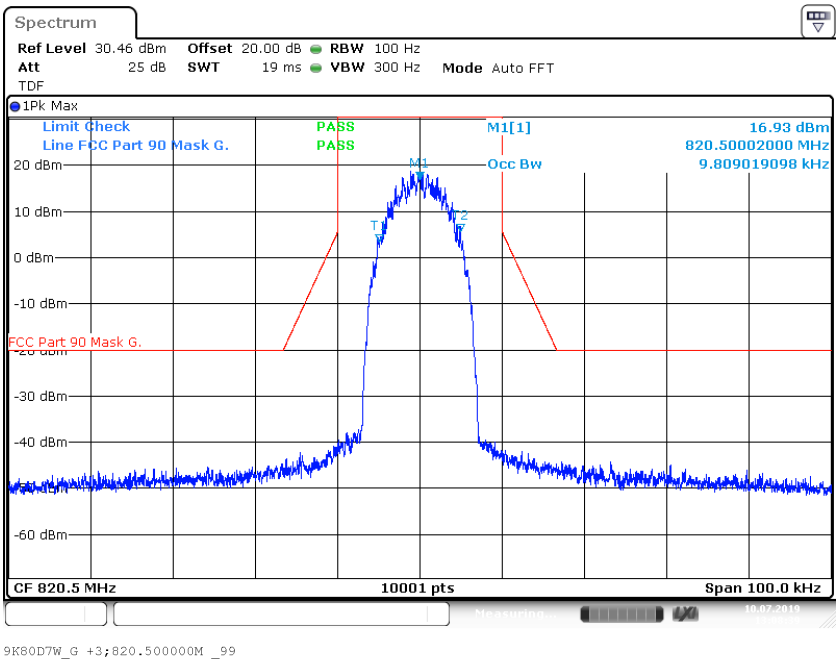


Output Signal

Frequency Band = 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 3 dB > AGC, at **fm** Signal Type = 9K80D7W (S01_AA01)

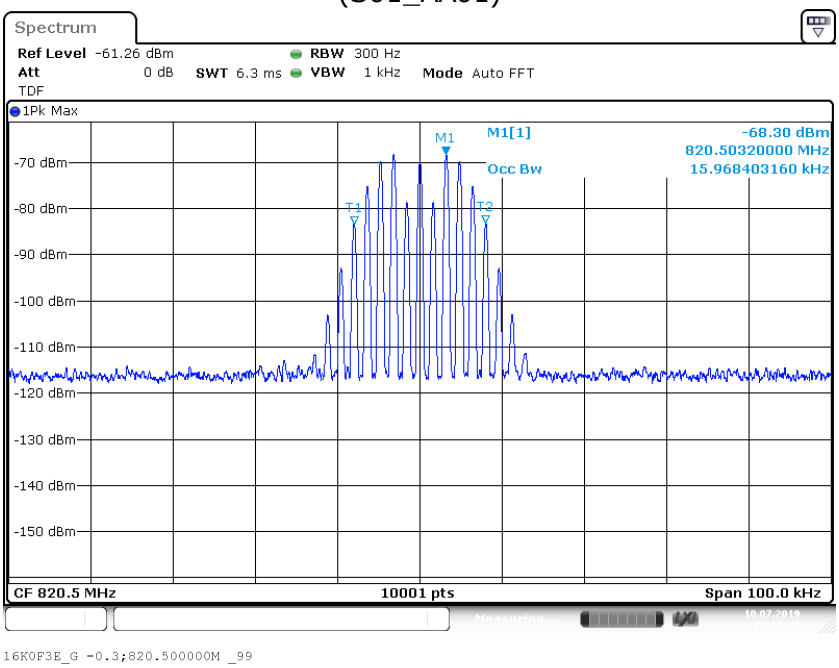


Input Signal

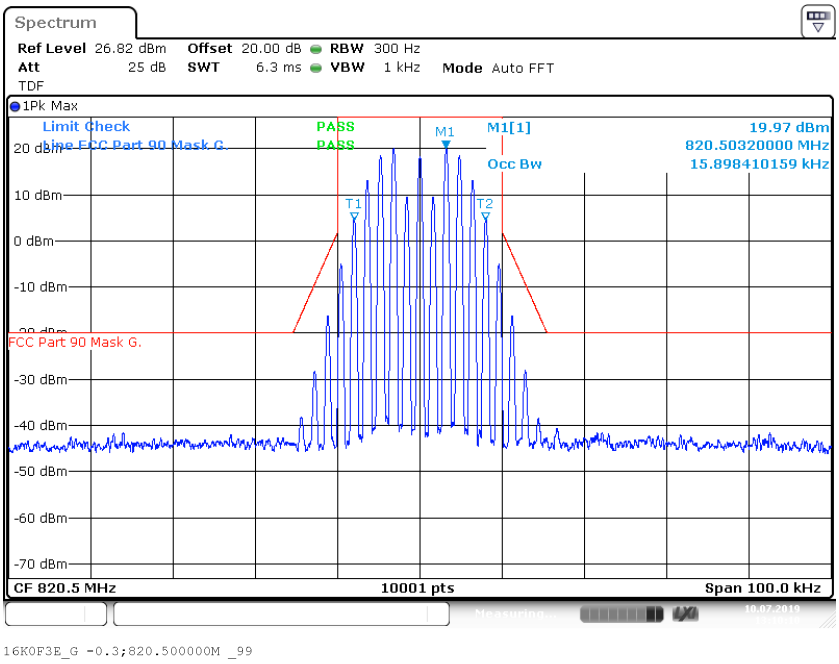


Output Signal

Frequency Band = 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 0.3 dB < AGC, at **fm** Signal Type = 16K0F3E (S01_AA01)

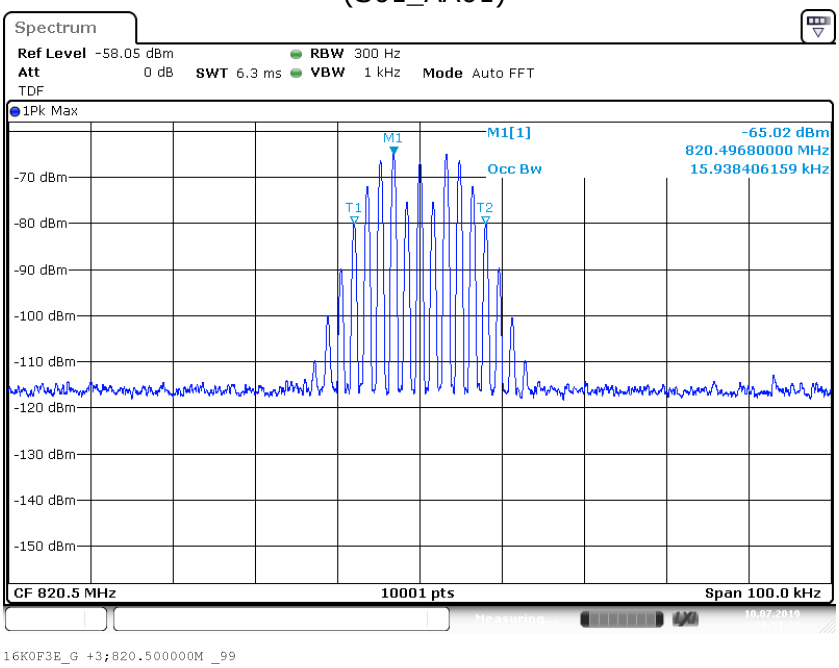


Input Signal

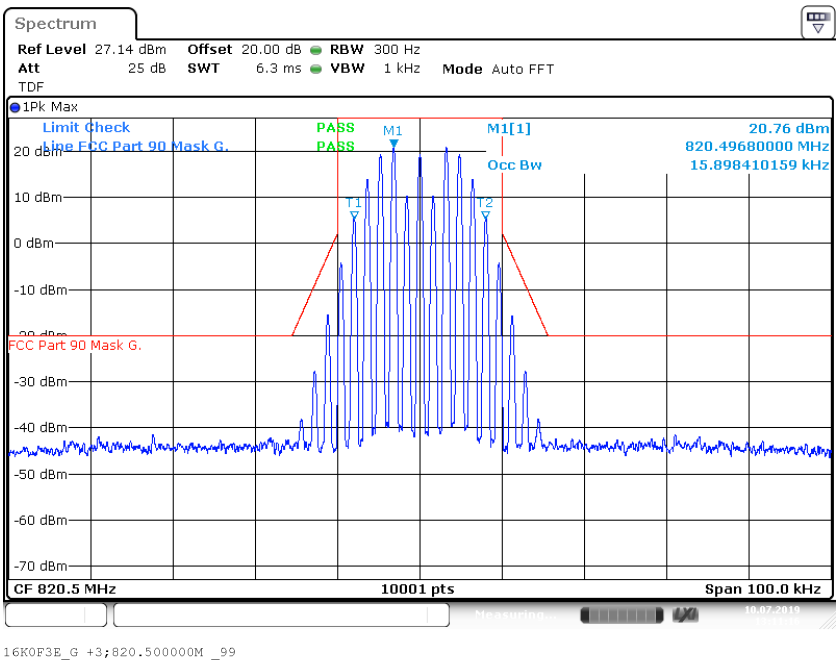


Output Signal

Frequency Band 817 MHz – 824 MHz, Direction = RF uplink, Input Power = 3 dB > AGC, at **fm** Signal Type = 16K0F3E (S01_AA01)



Input Signal



Output Signal

4.2.10 TEST EQUIPMENT USED

FCC cond. Test Lab, BV Nbg

4.3 CONDUCTED SPURIOUS EMISSIONS AT ANTENNA TERMINALS

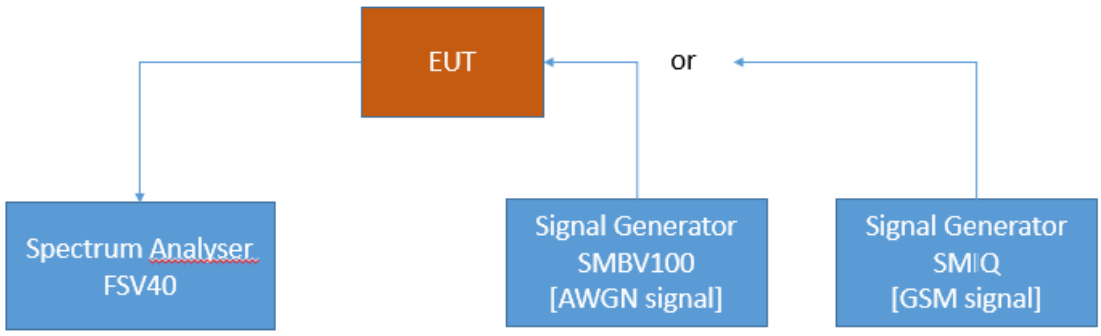
Standard FCC Part 2.1051, FCC Part 90: §90.543, §90.691

The test was performed according to:
ANSI C63.26

4.3.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable conducted spurious emission limits per § 2.1051. The limit comes from the applicable rule part for the operating band

The EUT was connected to the test setup according to the following diagram:



FCC Part 22/24/27/90 Industrial signal booster – Test Setup; Conducted Spurious Emissions

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

4.3.2 TEST REQUIREMENTS / LIMITS

FCC Part 2.1051; Measurement required: Spurious emissions at antenna terminal:

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

Part 90, Subpart I/R

Band 14 (758 MHz – 768 MHz)

§90.543 – Emission limitations

(e) For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(f) For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

Part 90, Subpart I/S

Band 26/27 (862 MHz – 869 MHz)

§90.691

(a) Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

4.3.3 TEST PROTOCOL

758 - 768 MHz, downlink

Test Frequency	Signal Type	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to Limit [dB]	
low	CW	757.893	-28.3	Peak	10	-23.0	5.3	
low	CW	757.977	-34.3	Peak	1	-33.0	1.3	
low	CW	858.789	-20.9	Peak	100	-13.0	7.9	
low	CW	769.059	-49.4	RMS	6.25	-46.0	3.4	1)
mid	CW	757.794	-32.9	Peak	10	-23.0	9.9	
mid	CW	865.497	-21.4	Peak	100	-13.0	8.4	
mid	CW	769.879	-49.4	RMS	6.25	-46.0	3.4	1)
high	CW	757.889	-32.4	Peak	10	-23.0	9.4	
high	CW	768.021	-33.1	Peak	1	-33.0	0.1	
high	CW	857.502	-21.0	Peak	100	-13.0	8.0	
high	CW	769.772	-49.5	RMS	6.25	-46.0	3.5	1)

788 - 798 MHz, uplink

Test Frequency	Signal Type	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to Limit [dB]	
low	CW	787.858	-30.6	Peak	10	-23.0	7.6	
low	CW	787.977	-36.9	Peak	1	-33.0	3.9	
low	CW	805.169	-26.4	Peak	100	-13.0	13.4	
low	CW	799.818	-49.7	RMS	6.25	-46.0	3.7	1)
mid	CW	787.772	-34.4	Peak	10	-23.0	11.4	
mid	CW	805.042	-26.1	Peak	100	-13.0	13.1	
mid	CW	800.752	-49.8	RMS	6.25	-46.0	3.8	1)
high	CW	798.027	-38.5	Peak	1	-33.0	5.5	
high	CW	798.472	-32.1	Peak	10	-23.0	9.1	
high	CW	805.105	-24.0	Peak	100	-13.0	11.0	
high	CW	800.889	-49.8	RMS	6.25	-46.0	3.8	1)

769 - 775 MHz, downlink

Test Frequency	Signal Type	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to Limit [dB]
low	CW	766.920	-22.9	Peak	100	-13.0	9.9
low	CW	768.897	-30.2	Peak	10	-23.0	7.2
low	CW	768.978	-33.5	Peak	1	-33.0	0.5
low	CW	854.523	-21.4	Peak	100	-13.0	8.4
mid	CW	759.650	-22.7	Peak	100	-13.0	9.7
mid	CW	768.175	-32.1	Peak	10	-23.0	9.1
mid	CW	855.072	-21.5	Peak	100	-13.0	8.5
high	CW	762.961	-22.4	Peak	100	-13.0	9.4
high	CW	775.019	-34.5	Peak	1	-33.0	1.5
high	CW	775.134	-31.4	Peak	10	-23.0	8.4
high	CW	868.949	-21.0	Peak	100	-13.0	8.0

799 - 805 MHz, uplink

Test Frequency	Signal Type	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to Limit [dB]
low	CW	792.091	-21.2	Peak	100	-13.0	8.2
low	CW	798.877	-30.7	Peak	10	-23.0	7.7
low	CW	798.957	-38.6	Peak	1	-33.0	5.6
mid	CW	788.052	-22.0	Peak	100	-13.0	9.0
mid	CW	798.531	-32.6	Peak	10	-23.0	9.6
high	CW	805.036	-36.7	Peak	1	-33.0	3.7
high	CW	805.141	-33.0	Peak	10	-23.0	10.0
high	CW	816.331	-21.3	Peak	100	-13.0	8.3

851 - 854 MHz, downlink

Test Frequency	Signal Type	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to Limit [dB]
low	CW	764.887	-21.0	Peak	100	-13.0	8.0
low	CW	850.957	-35.2	Peak	1	-33.0	2.2
low	CW	854.758	-30.5	Peak	10	-23.0	6.5
low	CW	856.896	-21.4	Peak	100	-13.0	8.4
mid	CW	765.445	-20.3	Peak	100	-13.0	7.3
mid	CW	850.630	-31.3	Peak	10	-23.0	8.3
mid	CW	859.115	-20.5	Peak	100	-13.0	7.5
high	CW	764.542	-21.0	Peak	100	-13.0	8.0
high	CW	854.025	-34.4	Peak	1	-33.0	1.4
high	CW	854.129	-29.8	Peak	10	-23.0	6.8
high	CW	868.096	-21.9	Peak	100	-13.0	8.9

806 - 809 MHz, uplink

Test Frequency	Signal Type	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to Limit [dB]
low	CW	788.091	-21.5	Peak	100	-13.0	8.5
low	CW	805.968	-38.5	Peak	1	-33.0	5.5
low	CW	809.510	-32.7	Peak	10	-23.0	9.7
mid	CW	809.526	-33.9	Peak	10	-23.0	10.9
mid	CW	812.863	-23.9	Peak	100	-13.0	10.9
high	CW	809.020	-38.0	Peak	1	-33.0	5.0
high	CW	809.129	-32.9	Peak	10	-23.0	9.9
high	CW	823.908	-22.9	Peak	100	-13.0	9.9

854 - 862 MHz, downlink

Test Frequency	Signal Type	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to Limit [dB]
low	CW	770.065	-21.2	Peak	100	-13.0	8.2
low	CW	853.878	-29.3	Peak	10	-23.0	6.3
low	CW	853.970	-33.2	Peak	1	-33.0	0.2
low	CW	866.198	-21.6	Peak	100	-13.0	8.6
mid	CW	771.990	-21.5	Peak	100	-13.0	8.5
mid	CW	862.357	-30.8	Peak	10	-23.0	7.8
mid	CW	866.980	-21.5	Peak	100	-13.0	8.5
high	CW	767.320	-20.3	Peak	100	-13.0	7.3
high	CW	862.023	-33.8	Peak	1	-33.0	0.8
high	CW	862.132	-29.0	Peak	10	-23.0	6.0
high	CW	867.974	-22.1	Peak	100	-13.0	9.1

809 - 817 MHz, uplink

Test Frequency	Signal Type	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to Limit [dB]
low	CW	808.498	-32.5	Peak	10	-23.0	9.5
low	CW	808.985	-37.5	Peak	1	-33.0	4.5
low	CW	824.169	-22.2	Peak	100	-13.0	9.2
mid	CW	808.737	-33.4	Peak	10	-23.0	10.4
mid	CW	820.105	-23.8	Peak	100	-13.0	10.8
high	CW	817.004	-39.0	Peak	1	-33.0	6.0
high	CW	817.388	-32.5	Peak	10	-23.0	9.5
high	CW	823.060	-22.0	Peak	100	-13.0	9.0

862 - 869 MHz, downlink

Test Frequency	Signal Type	Spurious Freq. [MHz]	Spurious Level [dBm]	Detector	RBW [kHz]	Limit [dBm]	Margin to Limit [dB]
low	CW	762.976	-20.8	Peak	100	-13.0	7.8
low	CW	853.979	-22.0	Peak	100	-13.0	9.0
low	CW	861.893	-28.8	Peak	10	-23.0	5.8
low	CW	861.964	-33.3	Peak	1	-33.0	0.3
mid	CW	769.110	-21.7	Peak	100	-13.0	8.7
mid	CW	854.194	-21.1	Peak	100	-13.0	8.1
mid	CW	861.195	-31.9	Peak	10	-23.0	8.9
high	CW	766.447	-19.7	Peak	100	-13.0	6.7
high	CW	856.185	-21.0	Peak	100	-13.0	8.0
high	CW	869.027	-33.7	Peak	1	-33.0	0.7
high	CW	869.113	-30.1	Peak	10	-23.0	7.1

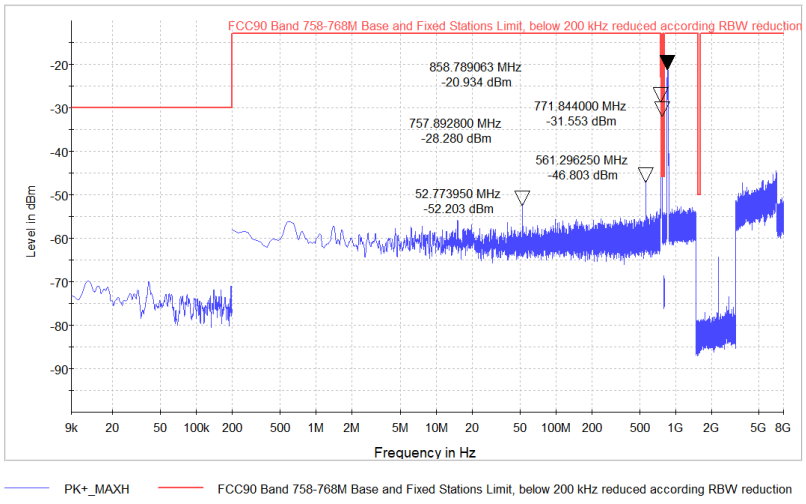
817 - 824 MHz, uplink							
Test Frequency	**Signal Type**	**Spurious Freq. [MHz]**	**Spurious Level [dBm]**	**Detector**	**RBW [kHz]**	**Limit [dBm]**	**Margin to Limit [dB]**
low	CW	806.414	-23.9	Peak	100	-13.0	10.9
low	CW	816.859	-31.2	Peak	10	-23.0	8.2
low	CW	817.971	-36.7	Peak	1	-33.0	3.7
mid	CW	813.298	-23.0	Peak	100	-13.0	10.0
mid	CW	824.421	-32.2	Peak	10	-23.0	9.2
high	CW	809.703	-23.7	Peak	100	-13.0	10.7
high	CW	824.033	-36.4	Peak	1	-33.0	3.4
high	CW	824.169	-32.7	Peak	10	-23.0	9.7

1) Tested with 10dB reduced amplification

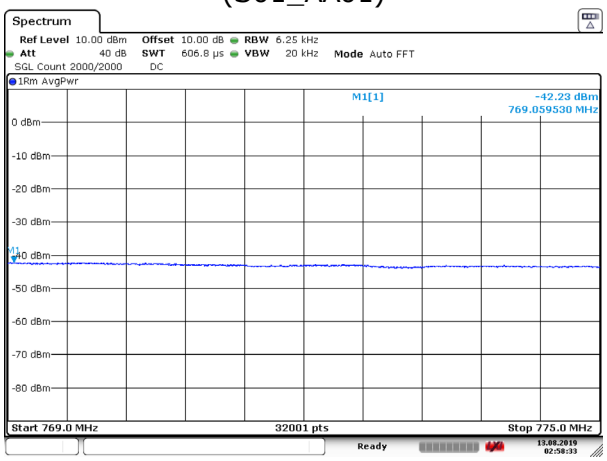
Remark: Please see next sub-clause for the measurement plot.

4.3.4 MEASUREMENT PLOT (SHOWING THE HIGHEST VALUE, "WORST CASE")

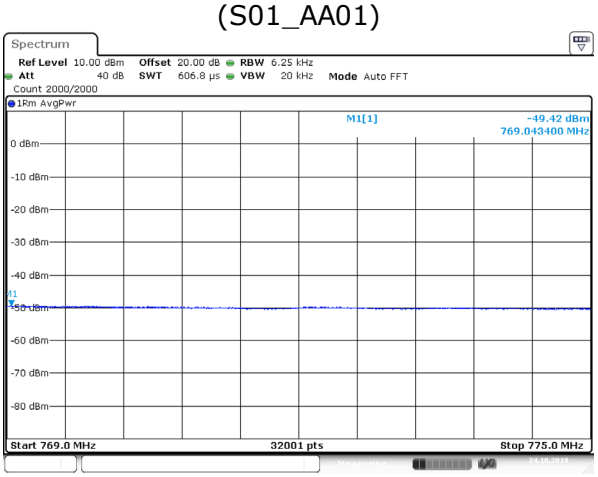
Frequency Band = Band 758 – 768 MHz, Test Frequency = low, Direction = RF downlink, Signal Type = CW
(S01_AA01)



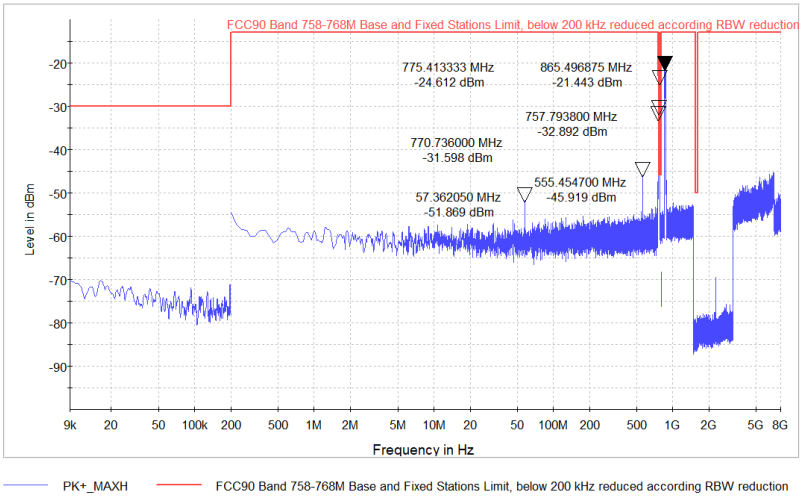
Final measurement range 769 – 775 MHz full amplification
(S01_AA01)



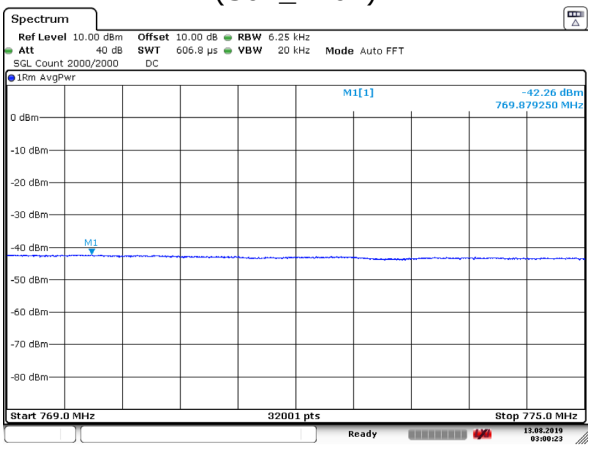
Final measurement range 769 – 775 MHz 10dB reduced amplification
(S01_AA01)



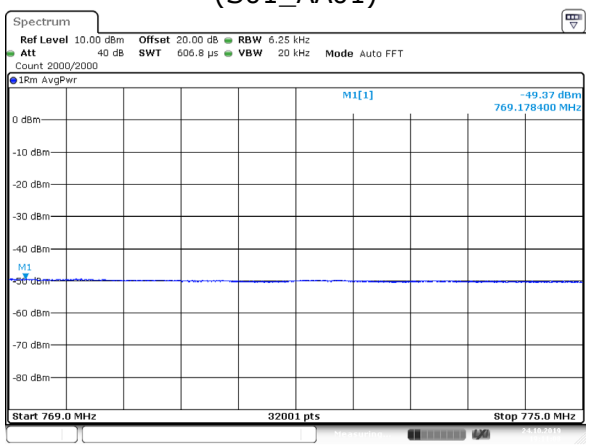
Frequency Band = Band 758 – 768 MHz, Test Frequency = mid, Direction = RF downlink, Signal Type = CW
(S01_AA01)



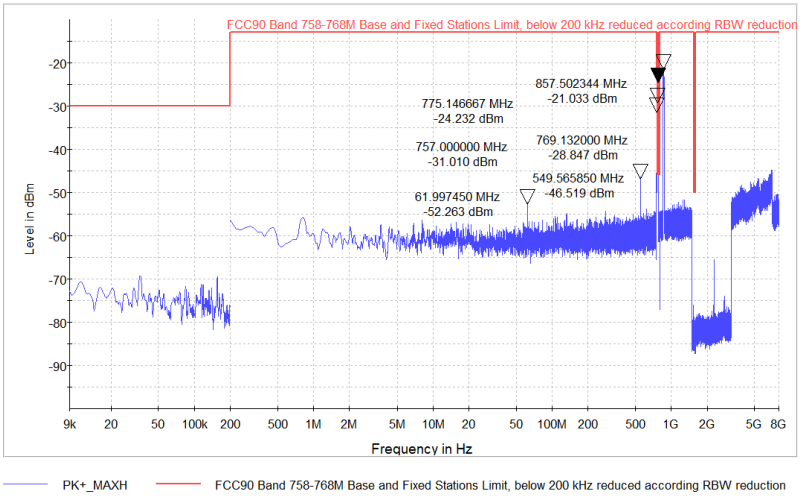
Final measurement range 769 – 775 MHz full amplification
(S01_AA01)



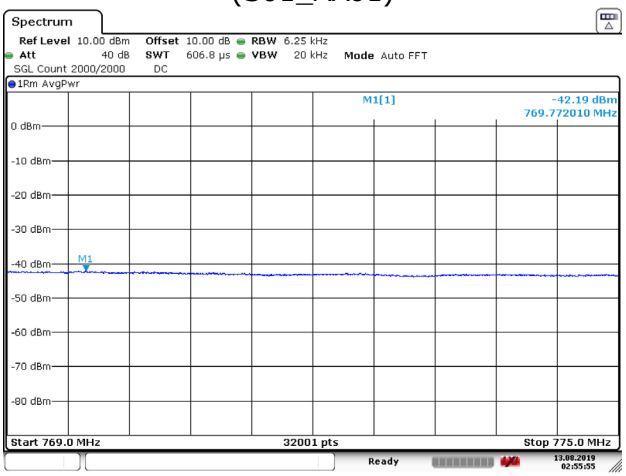
Final measurement range 769 – 775 MHz 10dB reduced amplification
(S01_AA01)



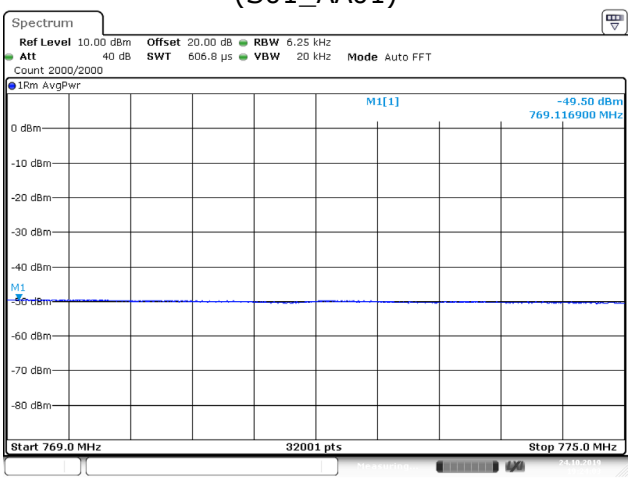
Frequency Band = Band 758 – 768 MHz, Test Frequency = high, Direction = RF downlink, Signal Type = CW
(S01_AA01)



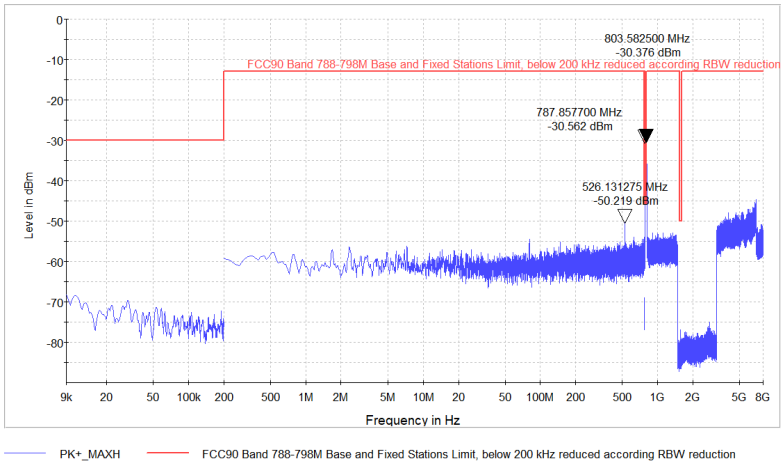
Final measurement range 769 – 775 MHz full amplification
(S01_AA01)



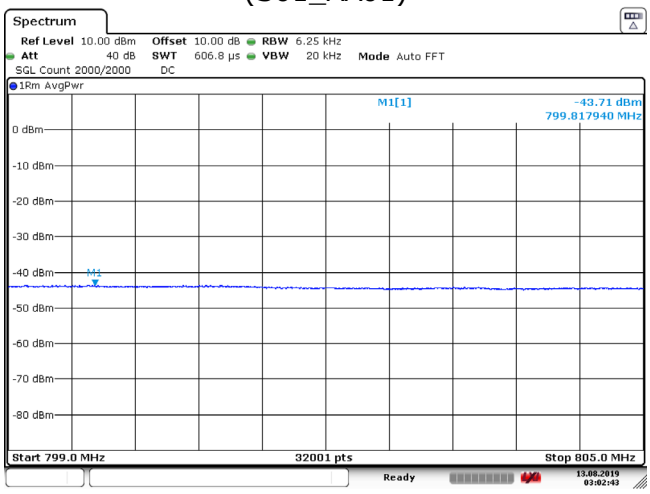
Final measurement range 769 – 775 MHz 10dB reduced amplification
(S01_AA01)



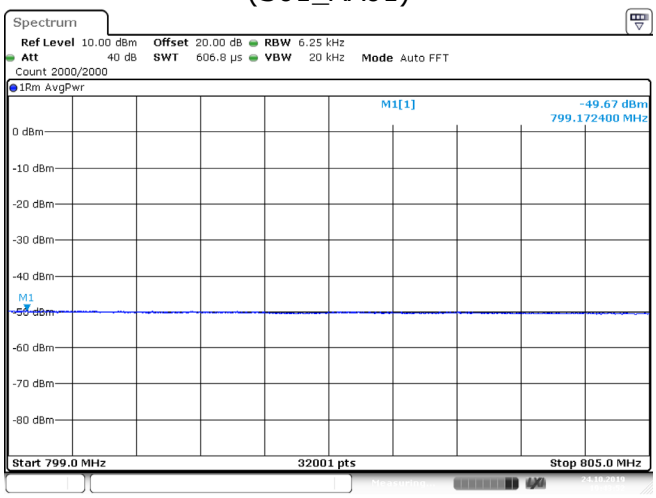
Frequency Band = Band 788 – 798 MHz, Test Frequency = low, Direction = RF uplink, Signal Type = CW
(S01_AA01)



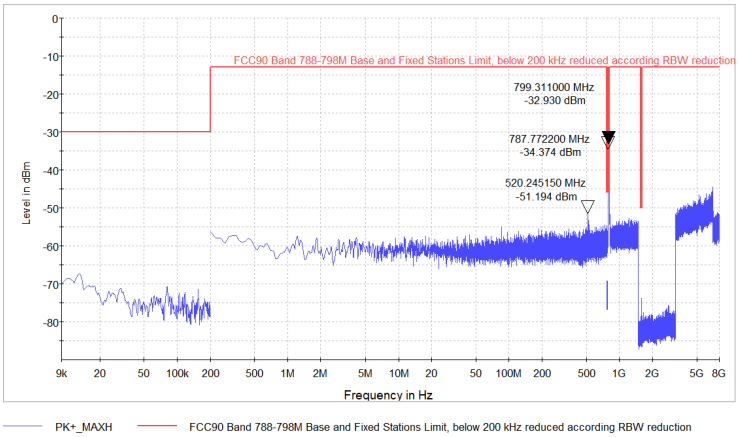
Final measurement range 799 – 805 MHz full amplification
(S01_AA01)



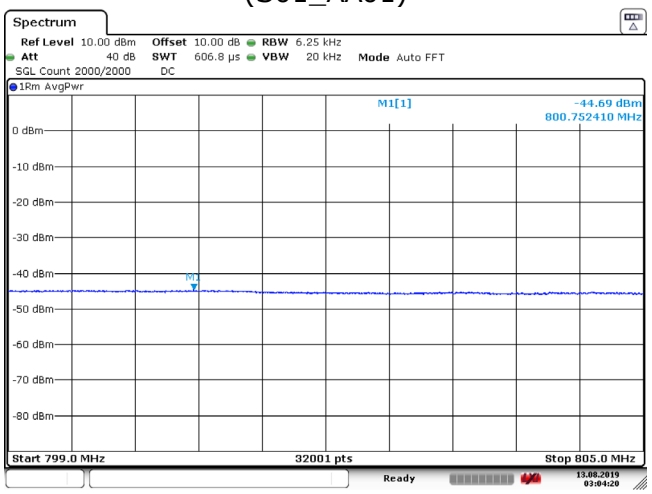
Final measurement range 799 – 805 MHz 10dB reduced amplification
(S01_AA01)



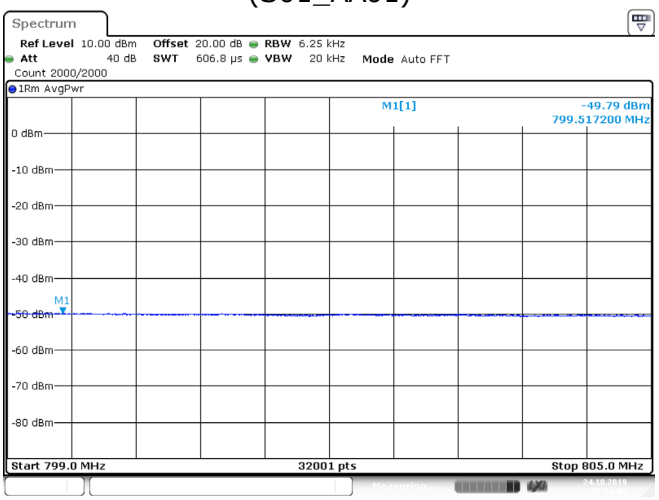
Frequency Band = Band 788 – 798 MHz, Test Frequency = mid, Direction = RF uplink, Signal Type = CW
(S01_AA01)



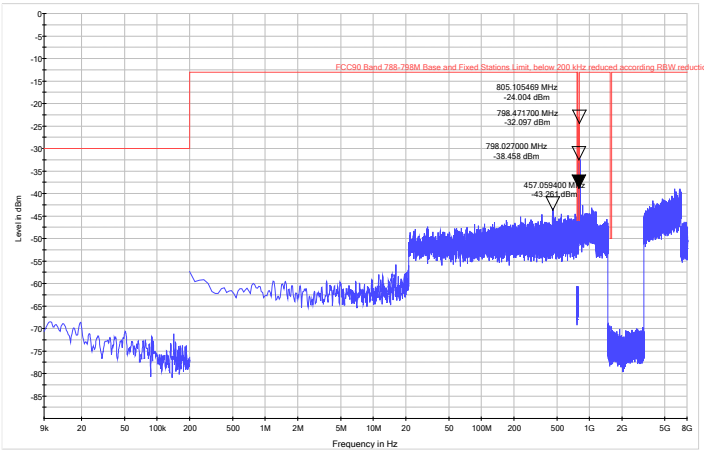
Final measurement range 799 – 805 MHz full amplification
(S01_AA01)



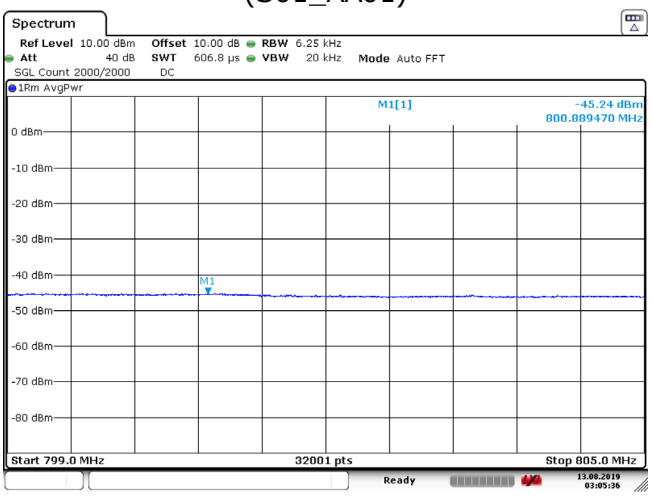
Final measurement range 799 – 805 MHz 10dB reduced amplification
(S01_AA01)



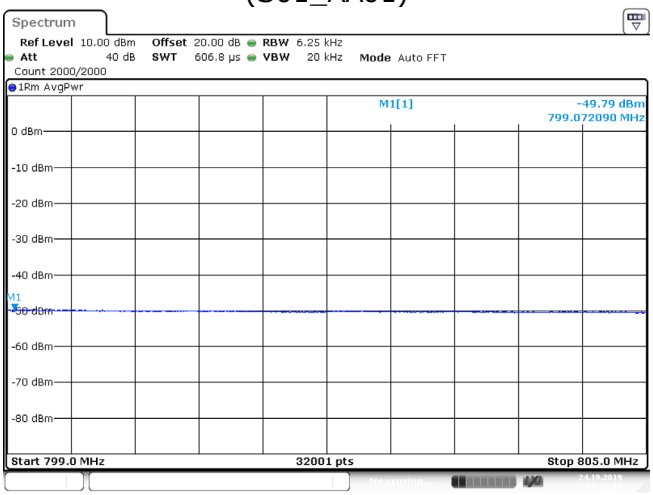
Frequency Band = Band 788 – 798 MHz, Test Frequency = high, Direction = RF uplink, Signal Type = CW
(S01_AA01)



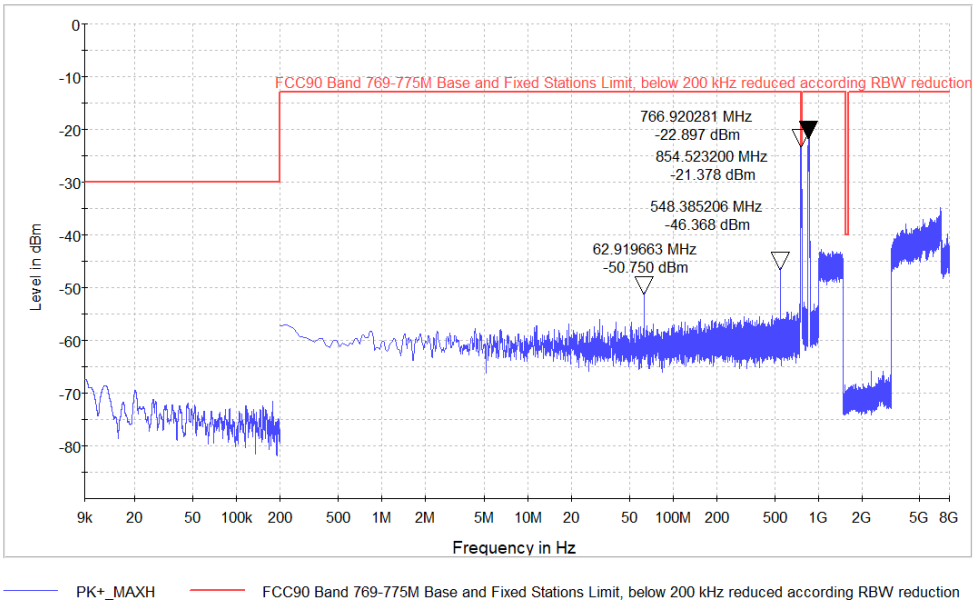
Final measurement range 799 – 805 MHz full amplification
(S01_AA01)



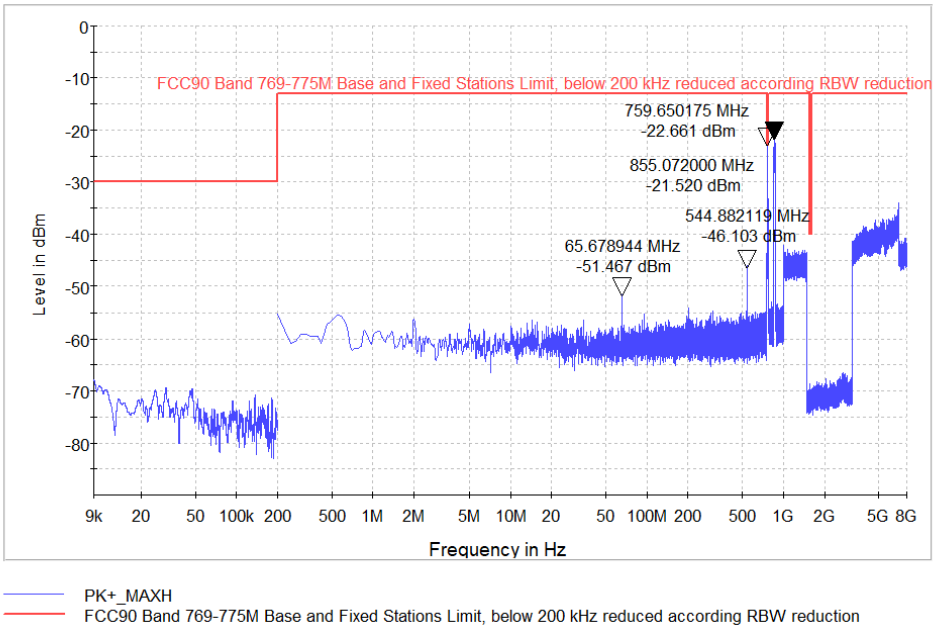
Final measurement range 799 – 805 MHz 10dB reduced amplification
(S01_AA01)



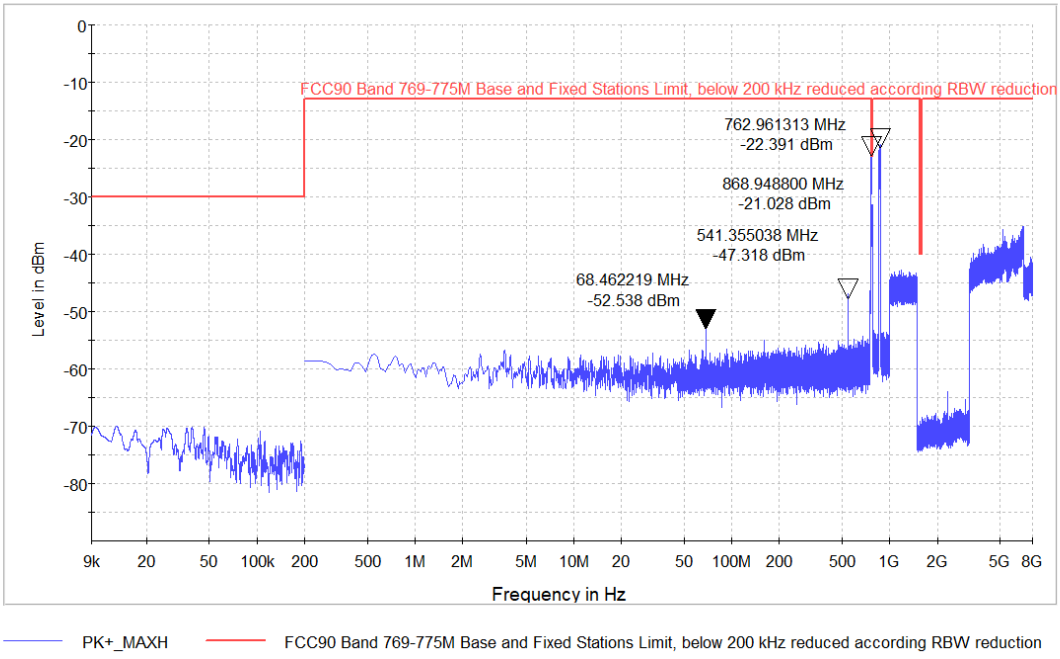
Frequency Band = Band 769 – 775 MHz, Test Frequency = low, Direction = RF downlink, Signal Type = CW
(S01_AA01)



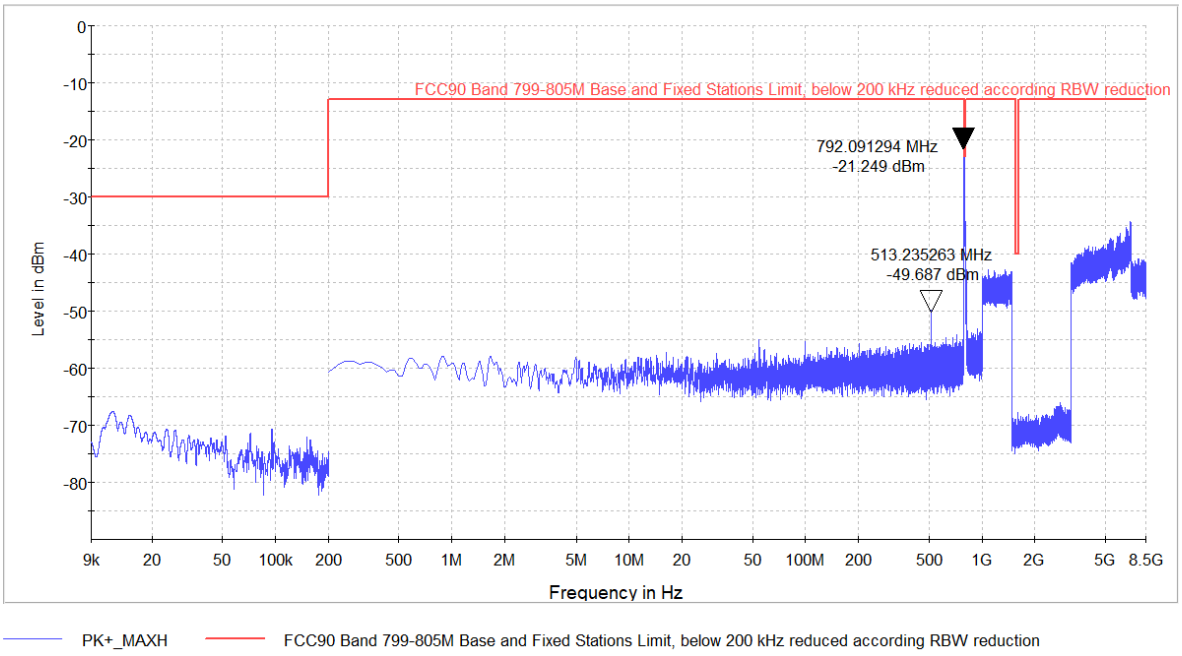
Frequency Band = Band 769 – 775 MHz, Test Frequency = mid, Direction = RF downlink, Signal Type = CW
(S01_AA01)



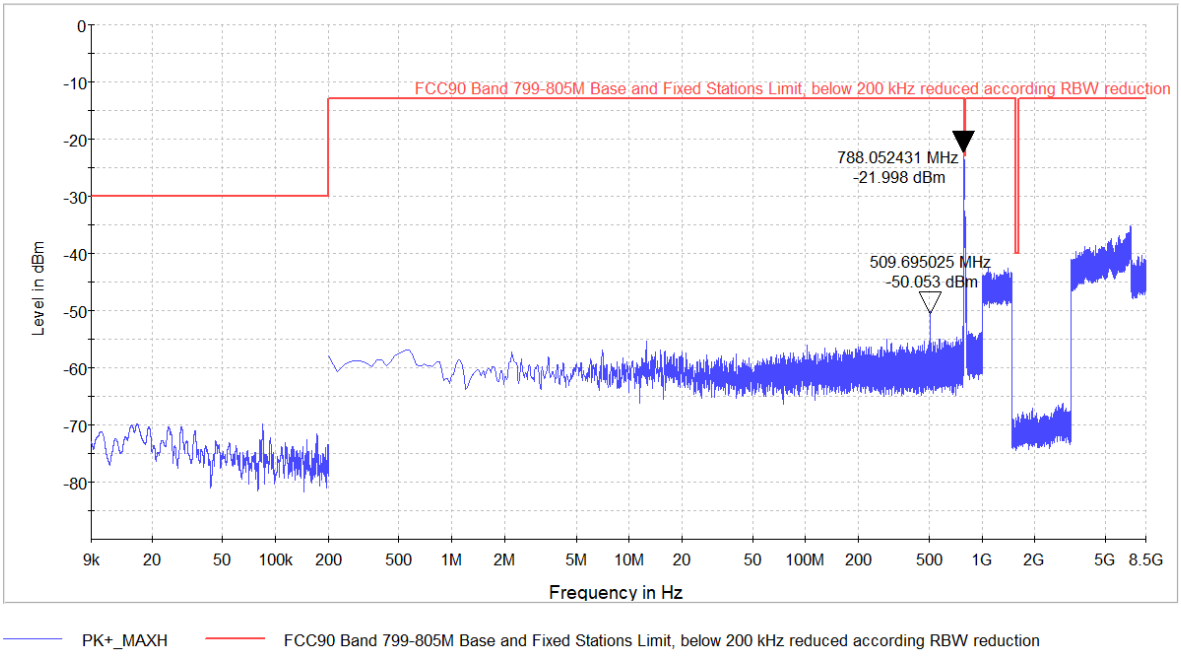
Frequency Band = Band 769 – 775 MHz, Test Frequency = high, Direction = RF downlink, Signal Type = CW
(S01_AA01)



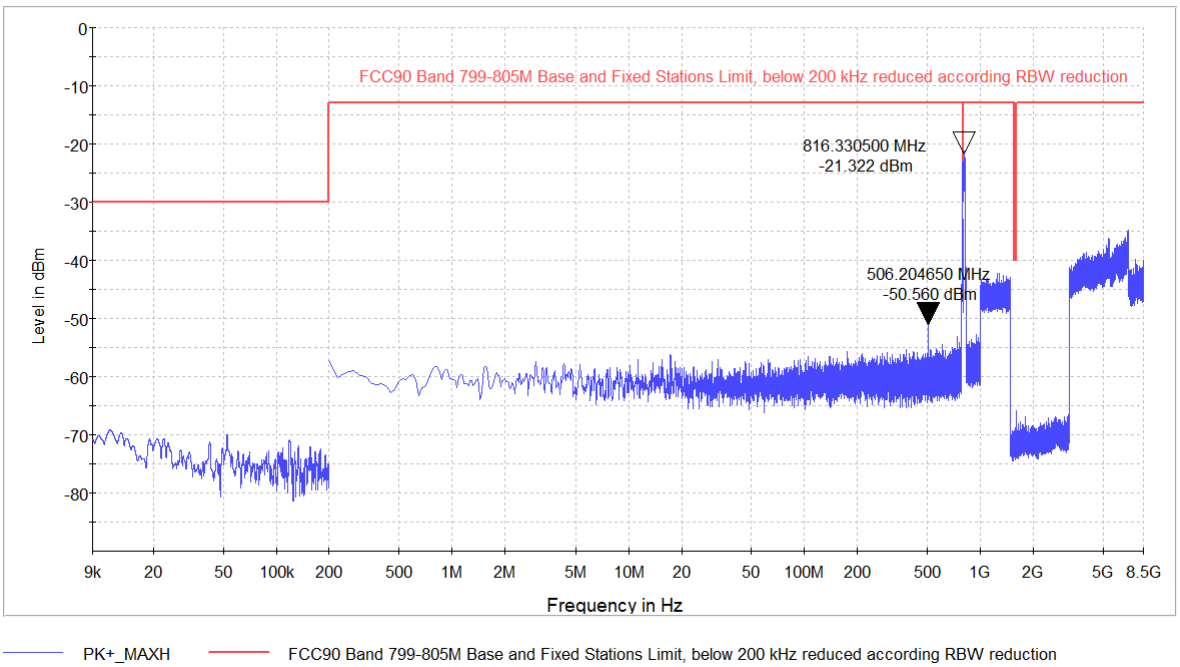
Frequency Band = Band 799 – 805 MHz, Test Frequency = low, Direction = RF uplink, Signal Type = CW
(S01_AA01)



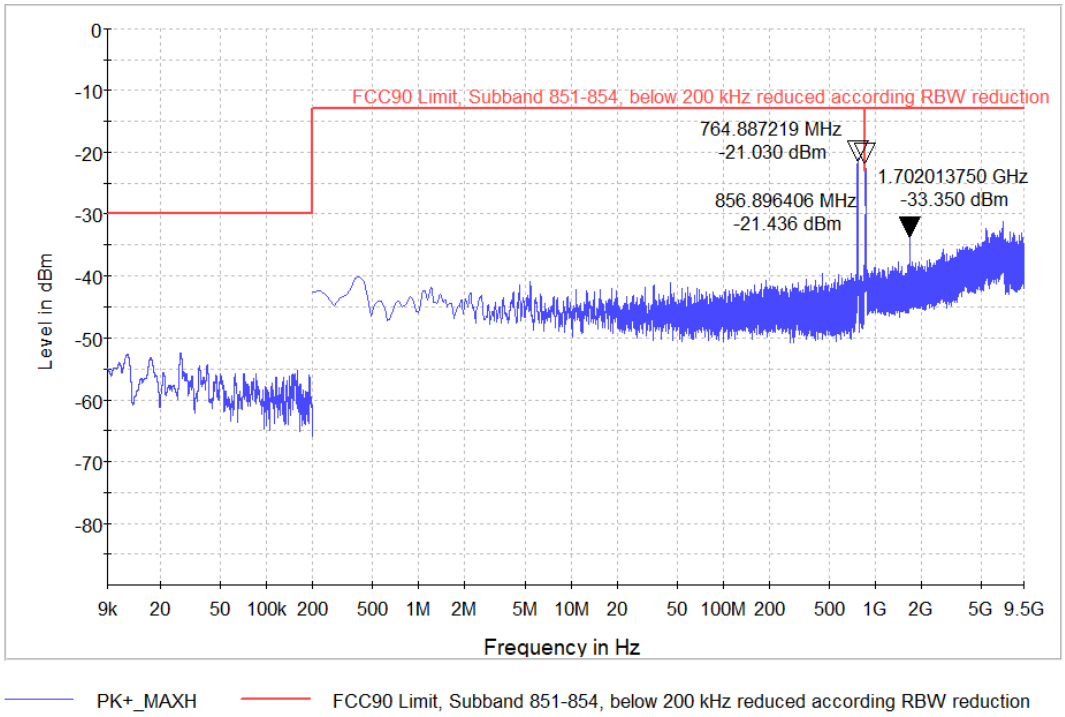
Frequency Band = Band 799 – 805 MHz, Test Frequency = mid, Direction = RF uplink, Signal Type = CW
(S01_AA01)



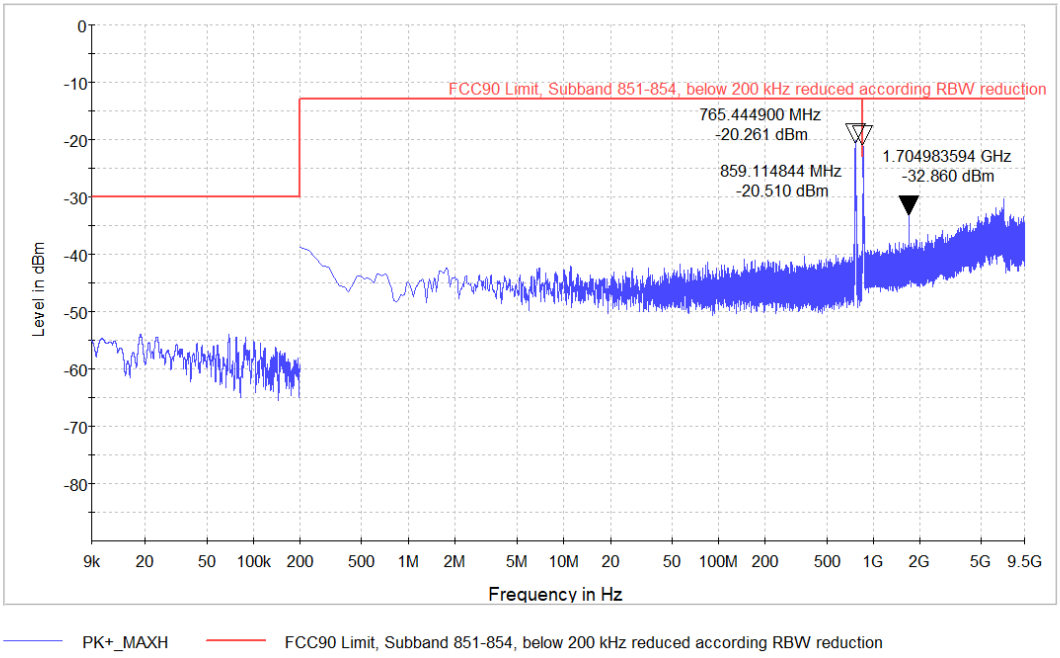
Frequency Band = Band 799 – 805 MHz, Test Frequency = high, Direction = RF uplink, Signal Type = CW
(S01_AA01)



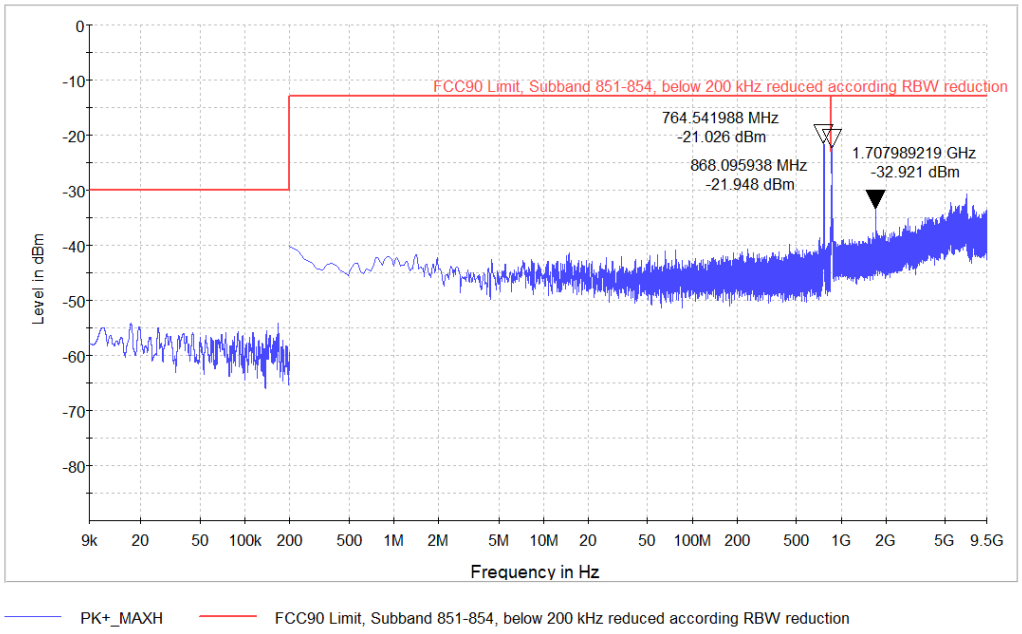
Frequency Band = Band 851 – 854 MHz, Test Frequency = low, Direction = RF downlink, Signal Type = CW
(S01_AA01)



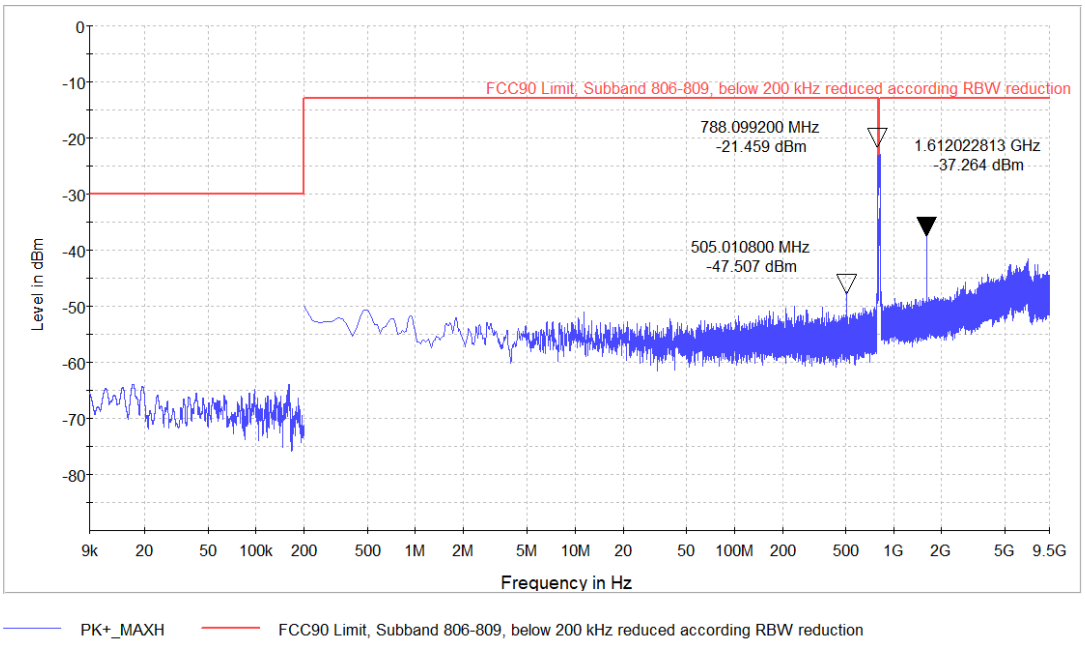
Frequency Band = Band 851 – 854 MHz, Test Frequency = mid, Direction = RF downlink, Signal Type = CW
(S01_AA01)



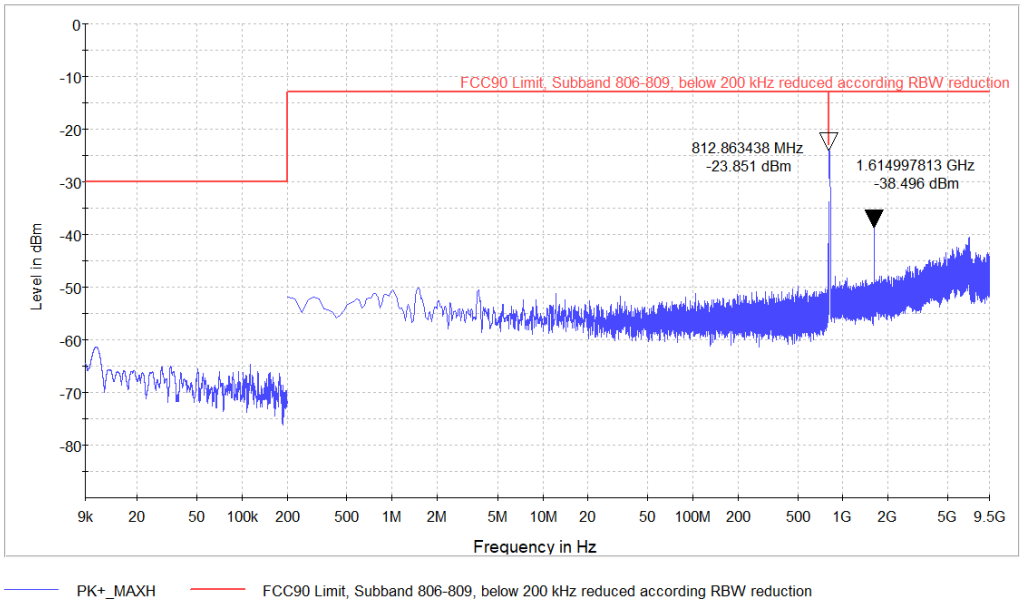
Frequency Band = Band 851 – 854 MHz, Test Frequency = high, Direction = RF downlink, Signal Type = CW
(S01_AA01)



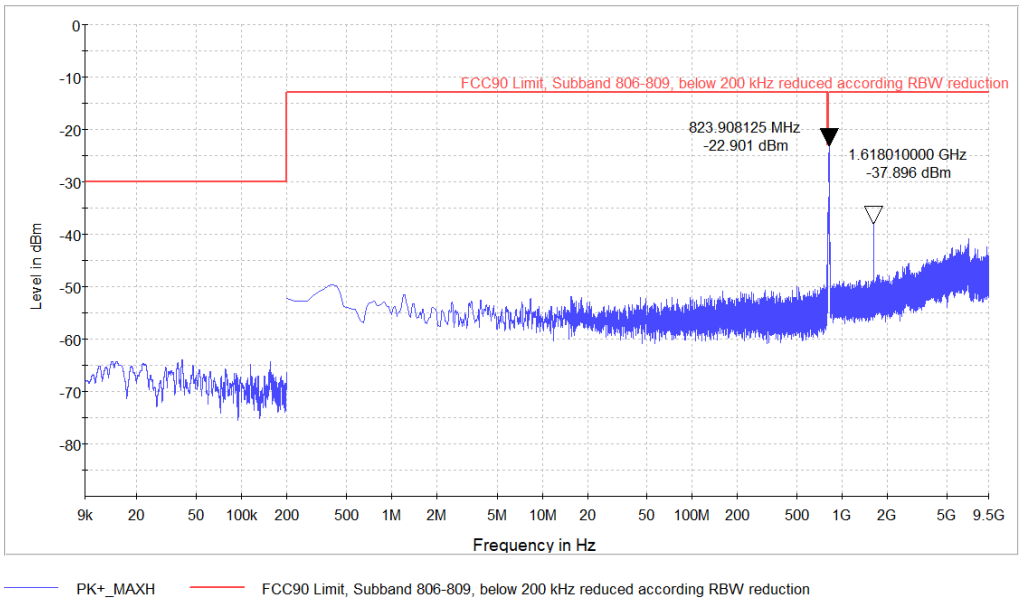
Frequency Band = Band 806 – 809 MHz, Test Frequency = low, Direction = RF uplink, Signal Type = CW
(S01_AA01)



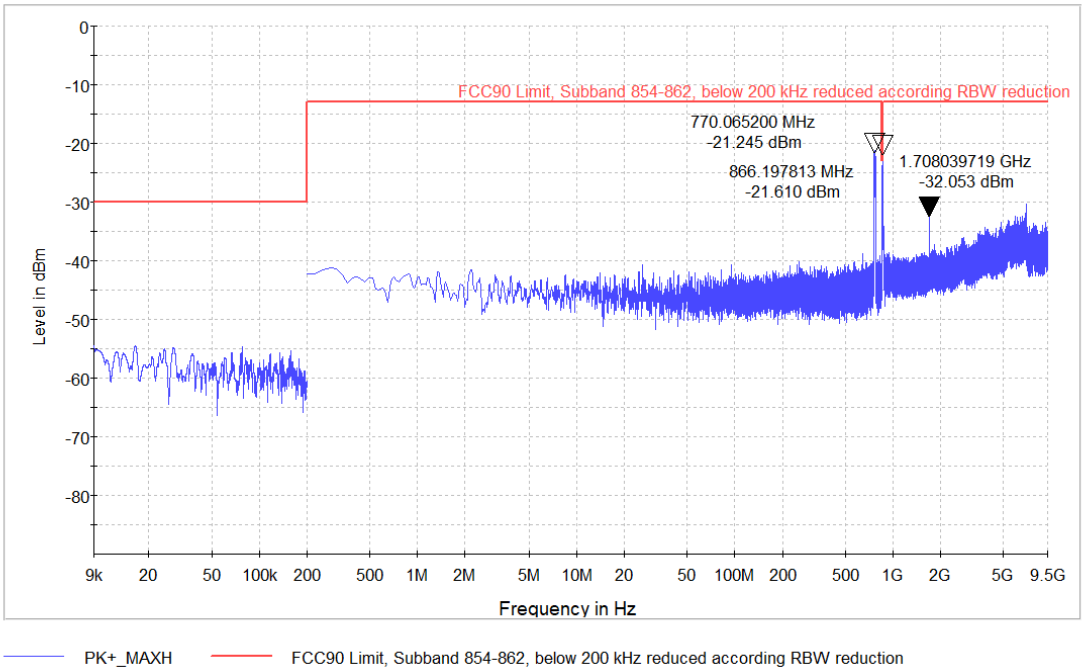
Frequency Band = Band 806 – 809 MHz, Test Frequency = mid, Direction = RF uplink, Signal Type = CW
(S01_AA01)



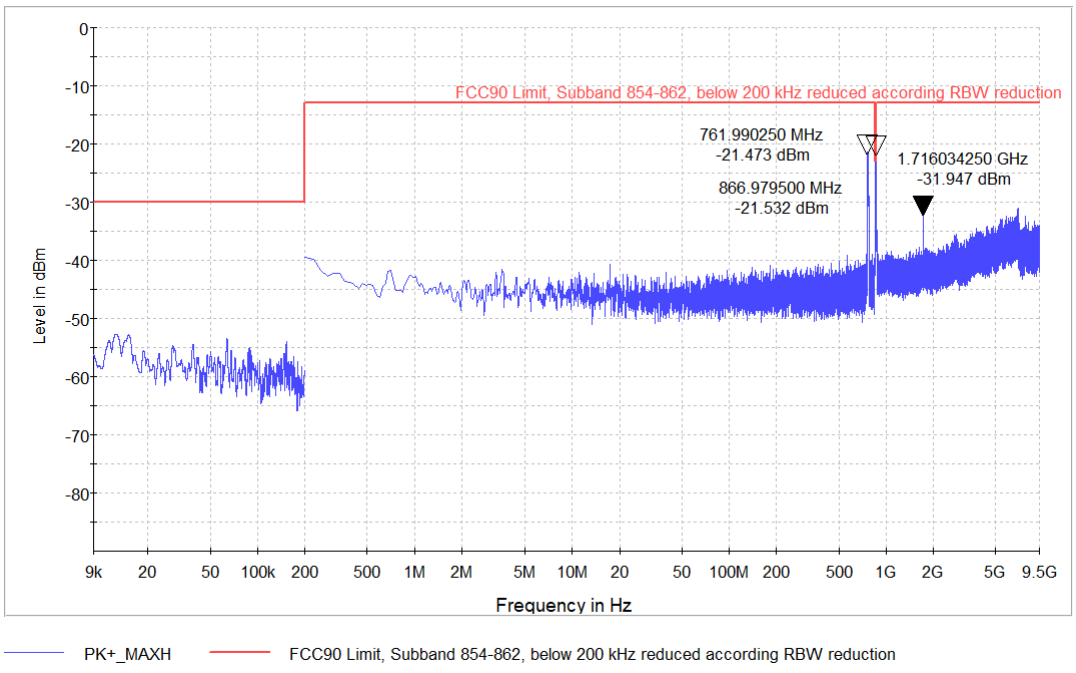
Frequency Band = Band 806 – 809 MHz, Test Frequency = high, Direction = RF uplink, Signal Type = CW
(S01_AA01)



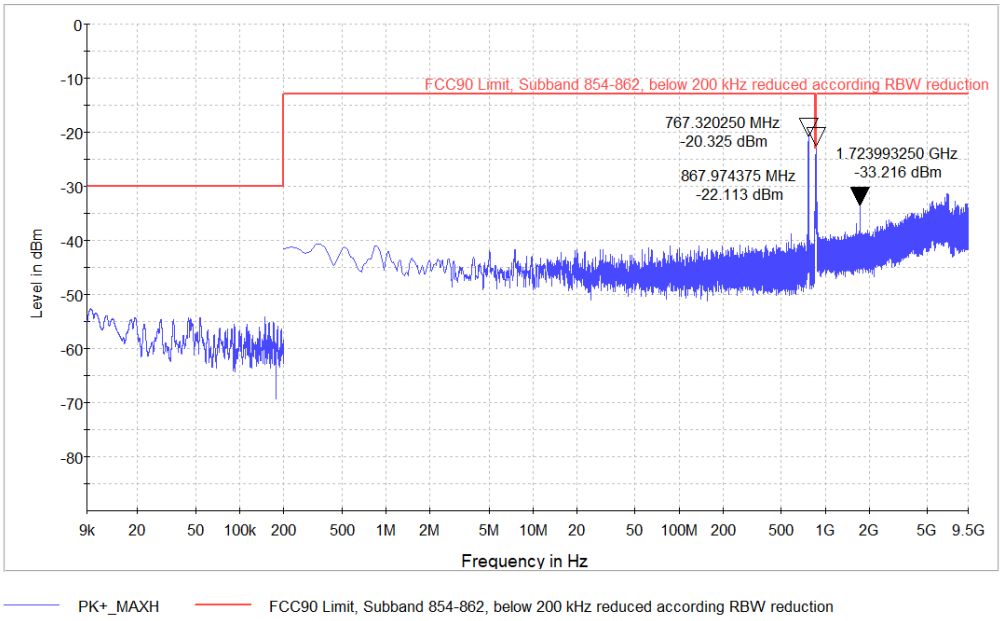
Frequency Band = Band 854 – 862 MHz, Test Frequency = low, Direction = RF downlink, Signal Type = CW
(S01_AA01)



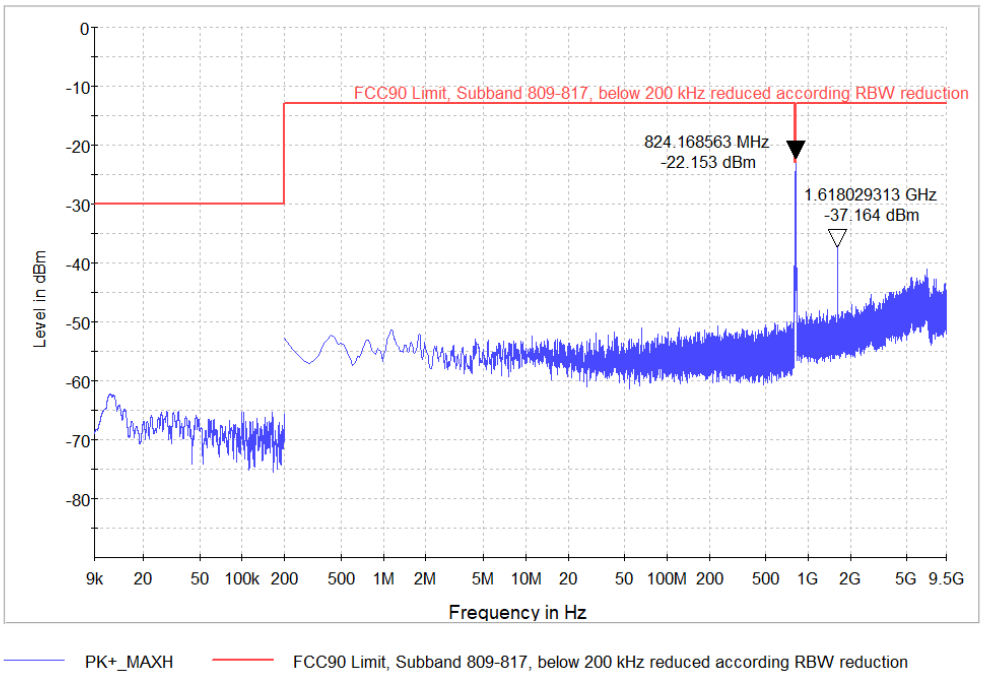
Frequency Band = Band 854 – 862 MHz, Test Frequency = mid, Direction = RF downlink, Signal Type = CW
(S01_AA01)



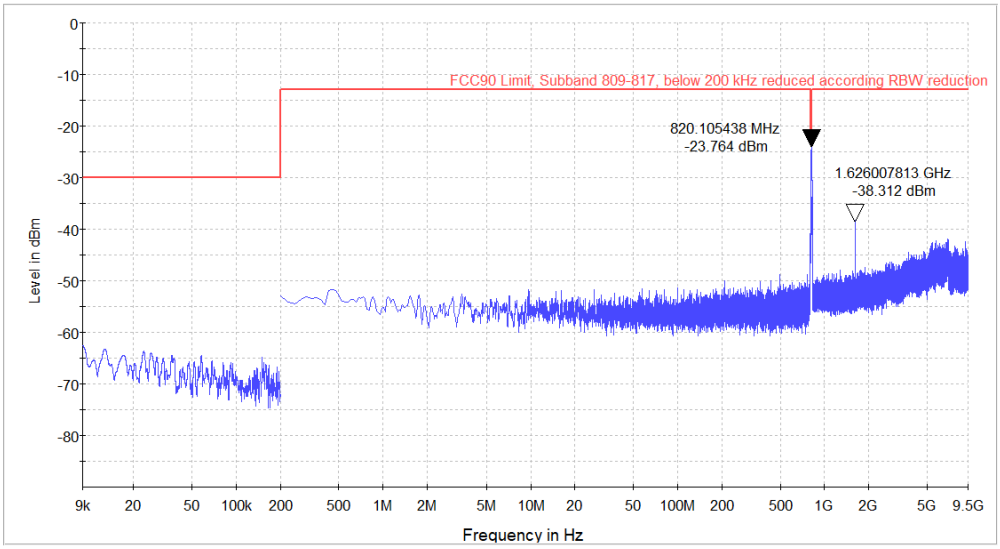
Frequency Band = Band 854 – 862 MHz, Test Frequency = high, Direction = RF downlink, Signal Type = CW
(S01_AA01)



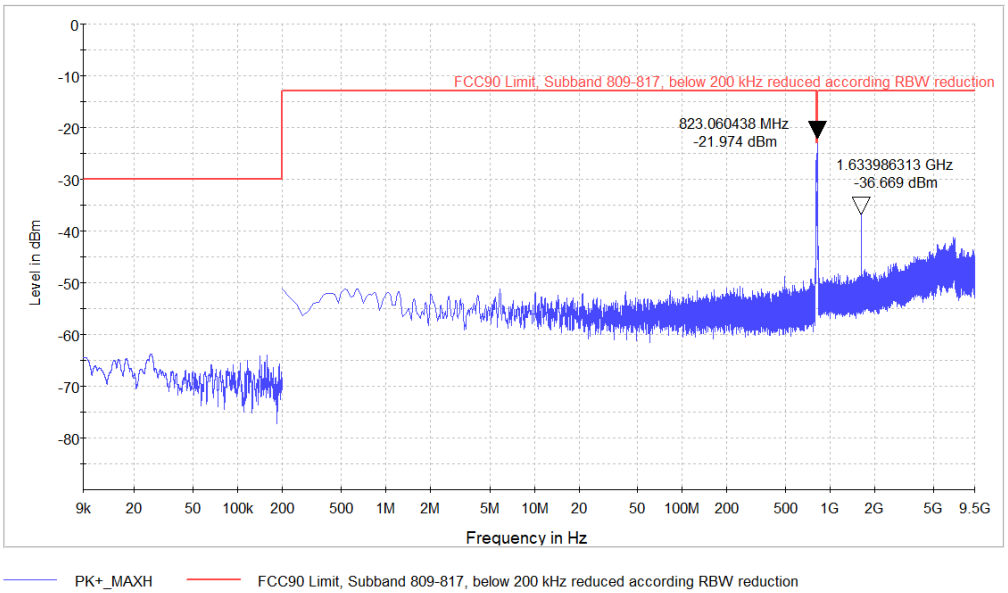
Frequency Band = Band 809 – 817 MHz, Test Frequency = low, Direction = RF uplink, Signal Type = CW
(S01_AA01)



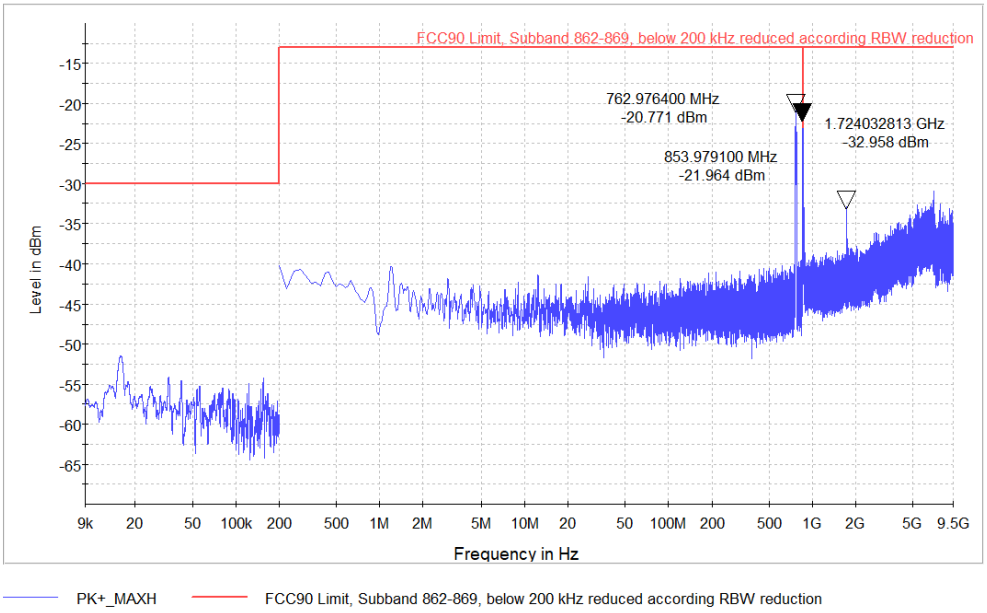
Frequency Band = Band 809 – 817 MHz, Test Frequency = mid, Direction = RF uplink, Signal Type = CW
(S01_AA01)



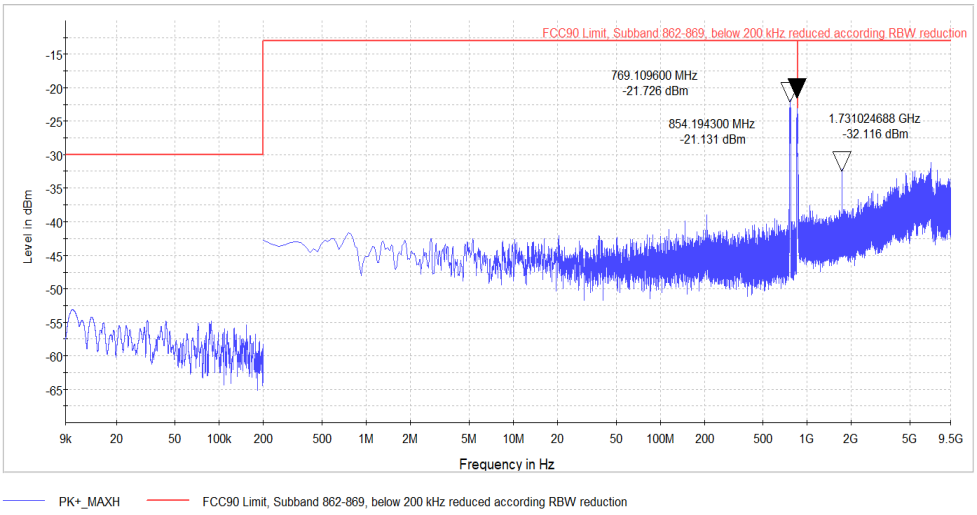
Frequency Band = Band 809 – 817 MHz, Test Frequency = high, Direction = RF uplink, Signal Type = CW
(S01_AA01)



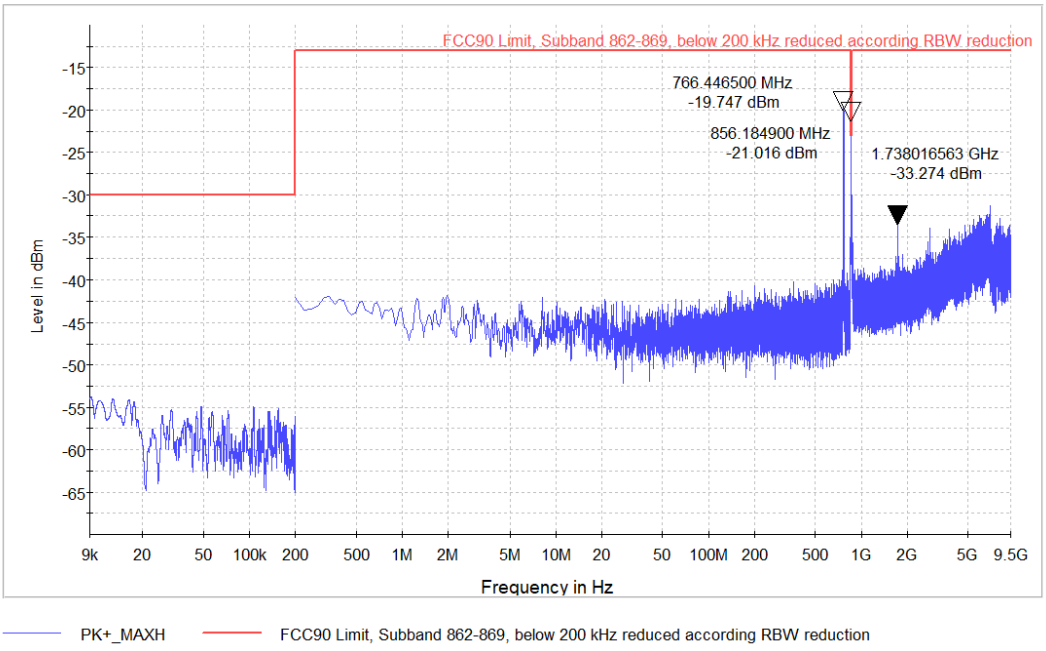
Frequency Band = Band 862 – 869 MHz, Test Frequency = low, Direction = RF downlink, Signal Type = CW
(S01_AA01)



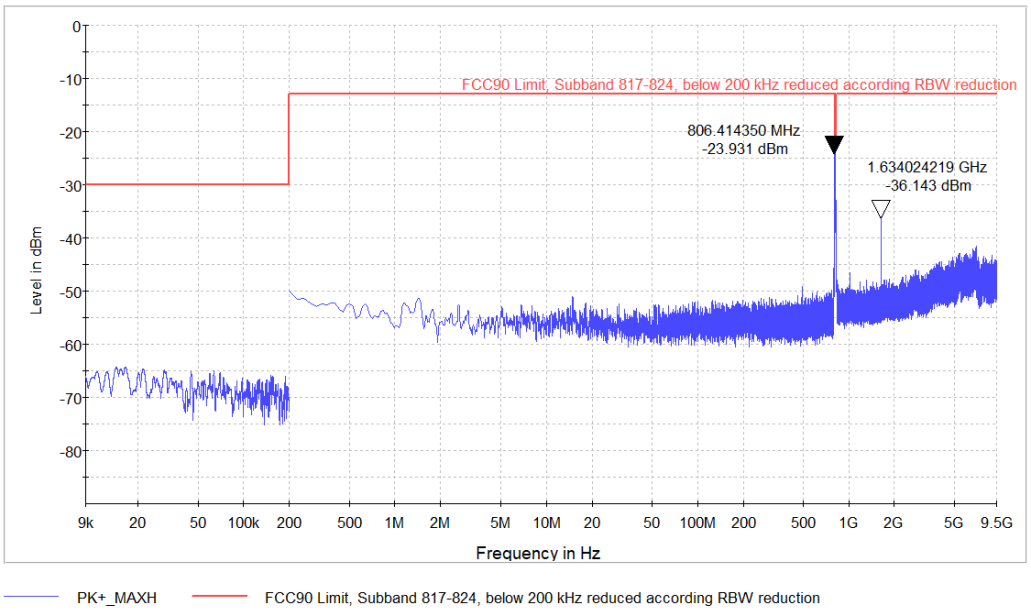
Frequency Band = Band 862 – 869 MHz, Test Frequency = mid, Direction = RF downlink, Signal Type = CW
(S01_AA01)



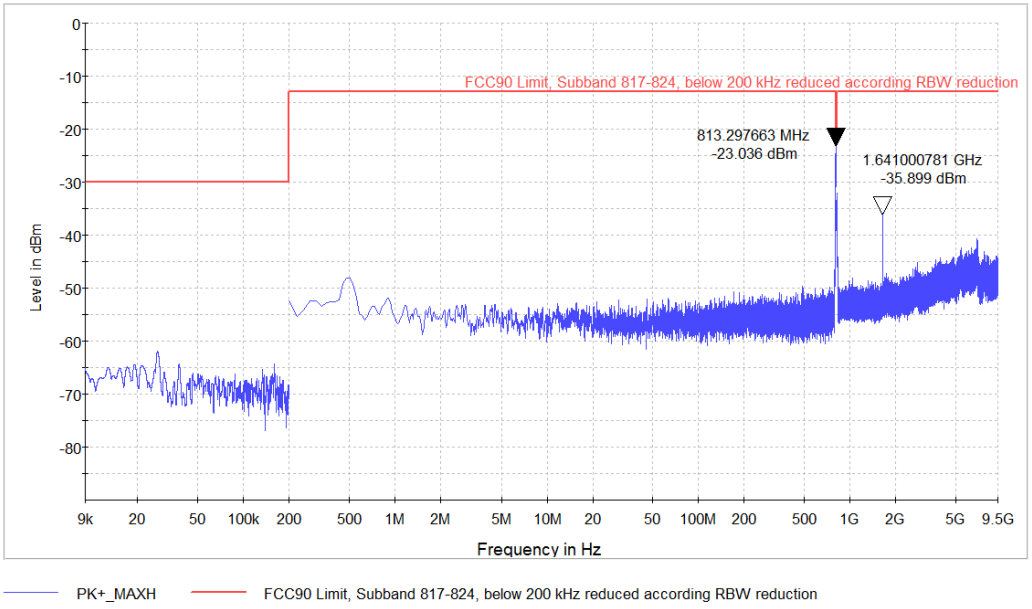
Frequency Band = Band 862 – 869 MHz, Test Frequency = high, Direction = RF downlink, Signal Type = CW
(S01_AA01)



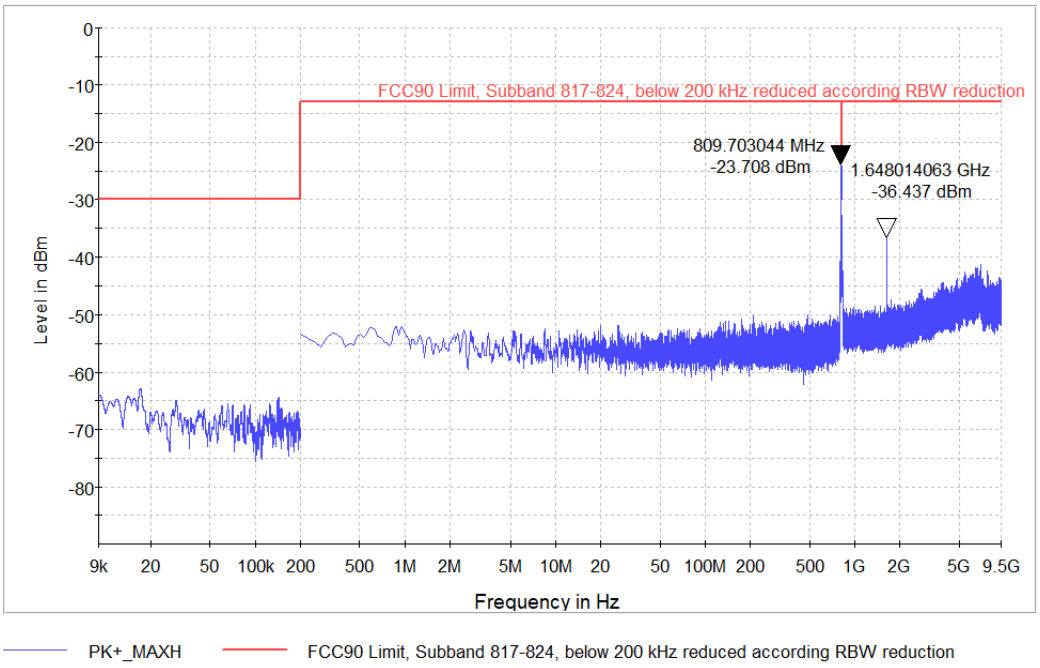
Frequency Band = Band 817 – 824 MHz, Test Frequency = low, Direction = RF uplink, Signal Type = CW
(S01_AA01)



Frequency Band = Band 817 – 824 MHz, Test Frequency = mid, Direction = RF uplink, Signal Type = CW
(S01_AA01)



Frequency Band = Band 817 – 824 MHz, Test Frequency = high, Direction = RF uplink, Signal Type = CW
(S01_AA01)



4.3.5 TEST EQUIPMENT USED

- R&S TS8997

4.4 OUT-OF-BAND EMISSION LIMITS

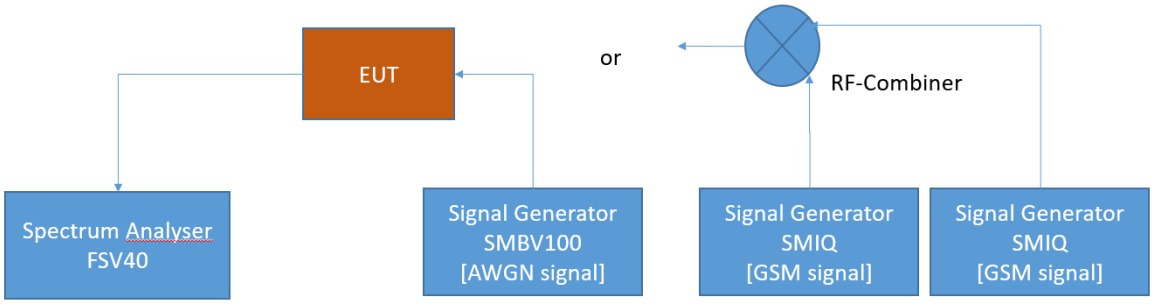
Standard FCC Part 90; §90.213, §90.691

The test was performed according to:
ANSI C63.26, KDB 935210 D05 v01r03: 3.6

4.4.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the out-of-band emission limit for industrial signal boosters. The limits itself come from the applicable rule part for each operating band.

The EUT was connected to the test setup according to the following diagram:



FCC Part 22/24/27/90 Industrial signal booster – Test Setup; Out-of-band emissions

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

4.4.2 TEST REQUIREMENTS / LIMITS

Part 90, Subpart I/R

Band 14 (758 MHz – 768 MHz)

§90.219 – Use of signal boosters

(e)(3) Spurious emissions from a signal booster must not exceed −13 dBm within any 100 kHz measurement bandwidth.

(d)(6)(i) In general, the ERP of intermodulation products should not exceed −30 dBm in 10 kHz measurement bandwidth.

Part 90, Subpart I/S

Band 26/27 (862 MHz – 869 MHz)

§90.691 - Emission mask requirements for EA-based systems.

(a) Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

4.4.3 TEST PROTOCOL

Band 758 MHz – 768 MHz, Downlink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [MHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 5	0.3 dB < AGC	762.9940	767.9940	-57.7	-24.8	-13.0	11.8
CW at 5	3 dB > AGC	762.9940	767.9940	-54.4	-23.7	-13.0	10.7

Band 769 MHz – 775 MHz, Downlink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [kHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 6.25	0.3 dB < AGC	769.3000	769.3063	-57.5	-26.0	-13.0	13.0
CW at 6.25	3 dB > AGC	769.3000	769.3063	-54.2	-25.8	-13.0	12.8
CW at 12.5	0.3 dB < AGC	769.2938	769.3063	-57.5	-24.6	-13.0	11.6
CW at 12.5	3 dB > AGC	769.2938	769.3063	-54.2	-24.8	-13.0	11.8
CW at 25	0.3 dB < AGC	769.2875	769.3125	-57.5	-27.0	-13.0	14.0
CW at 25	3 dB > AGC	769.2875	769.3125	-54.2	-27.1	-13.0	14.1

Band 851 MHz – 854 MHz, Downlink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [kHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 12.5	0.3 dB < AGC	853.7313	853.7438	-56.7	-20.2	-13.0	7.2
CW at 12.5	3 dB > AGC	853.7313	853.7438	-53.4	-18.3	-13.0	5.3

Band 854 MHz – 862 MHz, Downlink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [kHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 12.5	0.3 dB < AGC	859.2400	859,2525	-56.5	-22.8	-13.0	9.8
CW at 12.5	3 dB > AGC	859.2400	859,2525	-53.2	-19.9	-13.0	6.9

Band 862 MHz – 869 MHz, Downlink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [kHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 25	0.3 dB < AGC	863.4000	863.4250	-56.5	-29.4	-13.0	16.4
CW at 25	3 dB > AGC	863.4000	863.4250	-53.2	-23.1	-13.0	10.1

Band 788 MHz – 798 MHz, Uplink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [MHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 5	0.3 dB < AGC	789.5000	794.5000	-61.1	-33.9	-13.0	20.9
CW at 5	3 dB > AGC	789.5000	794.5000	-57.8	-32.1	-13.0	19.1

Band 799 MHz – 805 MHz, Uplink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [kHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 6.25	0.3 dB < AGC	799,6937	799,7000	-62.1	-29.7	-13.0	16.7
CW at 6.25	3 dB > AGC	799,6937	799,7000	-58.8	-29.9	-13.0	16.9
CW at 12.5	0.3 dB < AGC	799,6937	799.7062	-62.1	-28.0	-13.0	15.0
CW at 12.5	3 dB > AGC	799,6937	799.7062	-58.8	-28.6	-13.0	15.6
CW at 25	0.3 dB < AGC	799,6875	799,7125	-62.1	-30.4	-13.0	17.4
CW at 25	3 dB > AGC	799,6875	799,7125	-58.8	-29.8	-13.0	16.8

Band 806 MHz – 809 MHz, Uplink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [kHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 12.5	0.3 dB < AGC	808.2437	808.2562	-62.1	-29.9	-13.0	16.9
CW at 12.5	3 dB > AGC	808.2437	808.2562	-58.8	-30.4	-13.0	17.4

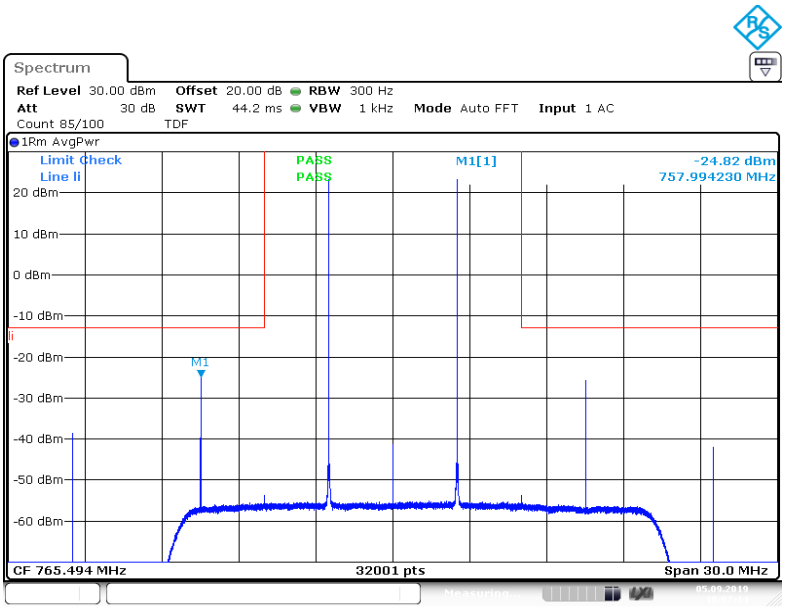
Band 809 MHz – 817 MHz, Uplink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [kHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 12.5	0.3 dB < AGC	816.0375	816.5000	-62.1	-30.0	-13.0	17.0
CW at 12.5	3 dB > AGC	816.0375	816.5000	-58.8	-30.3	-13.0	17.3

Band 817 MHz – 824 MHz, Uplink, Number of input signals = 2							
Emission Designator with Channel Bandwidth [kHz]	**Input Power**	**Signal Frequency f1 [MHz]**	**Signal Frequency f2 [MHz]**	**Input Power [dBm]**	**Maximum Out-of-band Power [dBm]**	**Limit Out-of-band Power [dBm]**	**Margin to Limit [dB]**
CW at 25	0.3 dB < AGC	823.8875	823.9125	-61.5	-27.8	-13.0	14.8
CW at 25	3 dB > AGC	823.8875	823.9125	-58.2	-27.7	-13.0	14.7

Remark: Please see next sub-clause for the measurement plot.

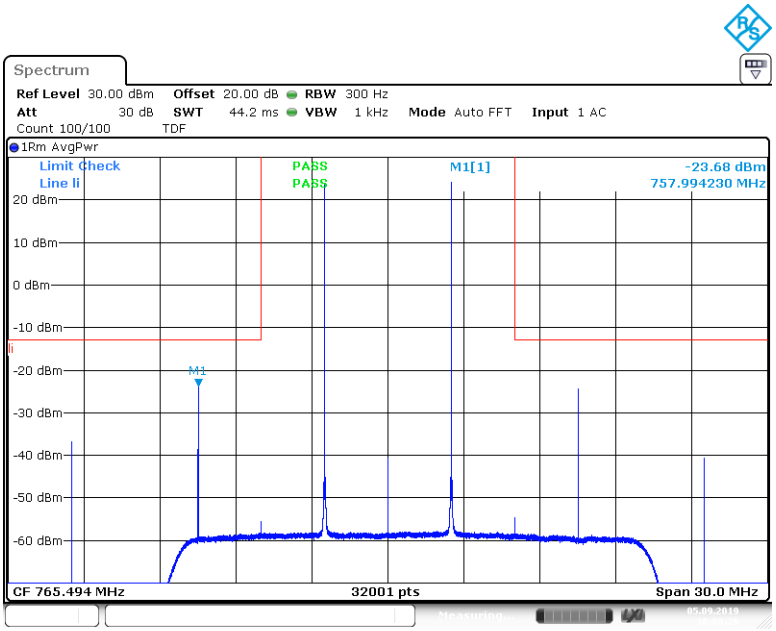
4.4.4 MEASUREMENT PLOT (SHOWING THE HIGHEST VALUE, "WORST CASE")

Frequency band = 758 MHz – 768 MHz, Channel bandwidth = 5 MHz, Number of signals = 2, Direction = RF downlink, Input power = 0.3 dB < AGC, Emission designator = 5M00G7D



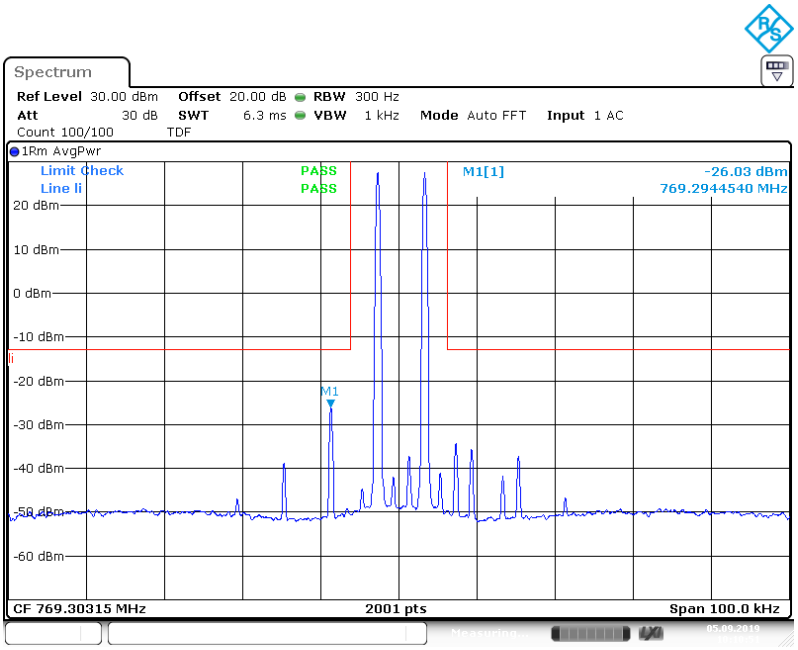
out of band emi;CW;2 carrier -0.3 dB;765.49400M;30.000M; CB5
.00M

Frequency band = 758 MHz – 768 MHz, Channel bandwidth = 5 MHz, Number of signals = 2, Direction = RF downlink, Input power = 3 dB > AGC, Emission designator = 5M00G7D



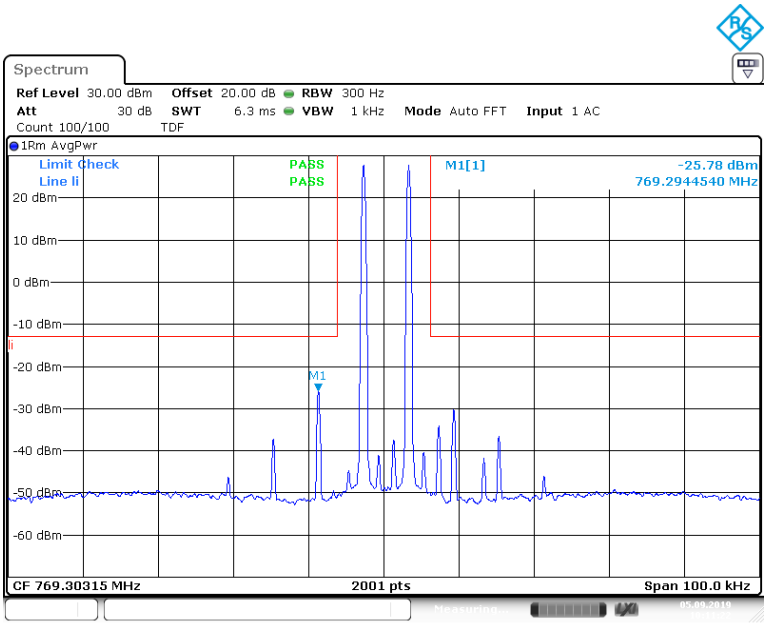
out of band emi;CW;2 carrier +3 dB;765.49400M;30.000M; CB5.0
0M

Frequency band = 769 MHz – 775 MHz, Channel bandwidth = 6.25 kHz, Number of signals = 2, Direction = RF downlink, Input power = 0.3 dB < AGC, Emission designator = 4K00F3E



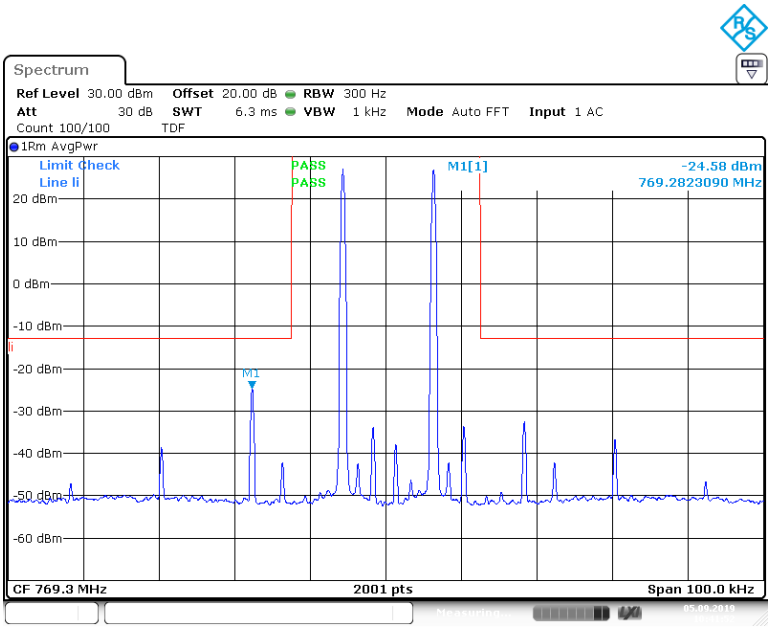
out of band emi;CW;2 carrier -0.3 dB;769.30315M;100.000k; CB 6.25k

Frequency band = 769 MHz – 775 MHz, Channel bandwidth = 6.25 kHz, Number of signals = 2, Direction = RF downlink, Input power = 3 dB > AGC, Emission designator = 4K00F3E



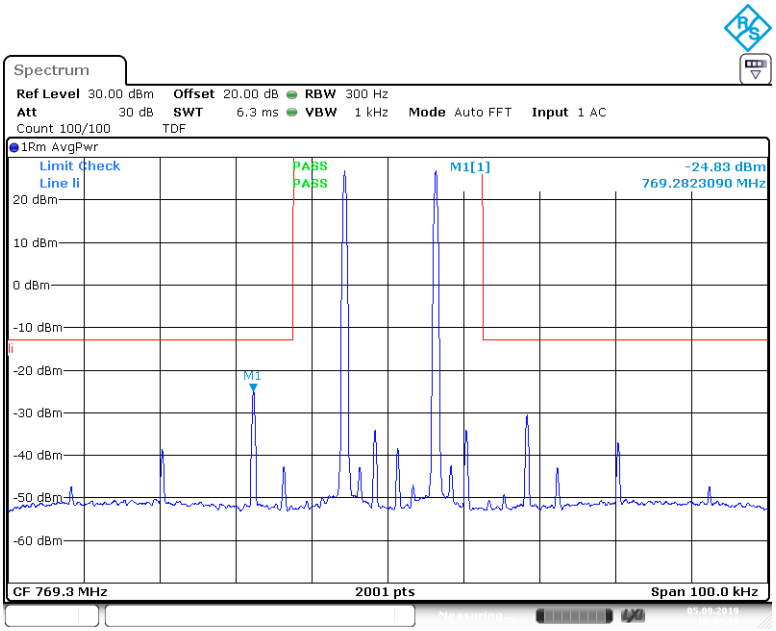
out of band emi;CW;2 carrier +3 dB;769.30315M;100.000k; CB6.25k

Frequency band = 769 MHz – 775 MHz, Channel bandwidth = 12.5 kHz,
Number of signals = 2, Direction = RF downlink, Input power = 0.3 dB < AGC,
Emission designators = 11K3F3E, 8K10F1D and 9K80D7W



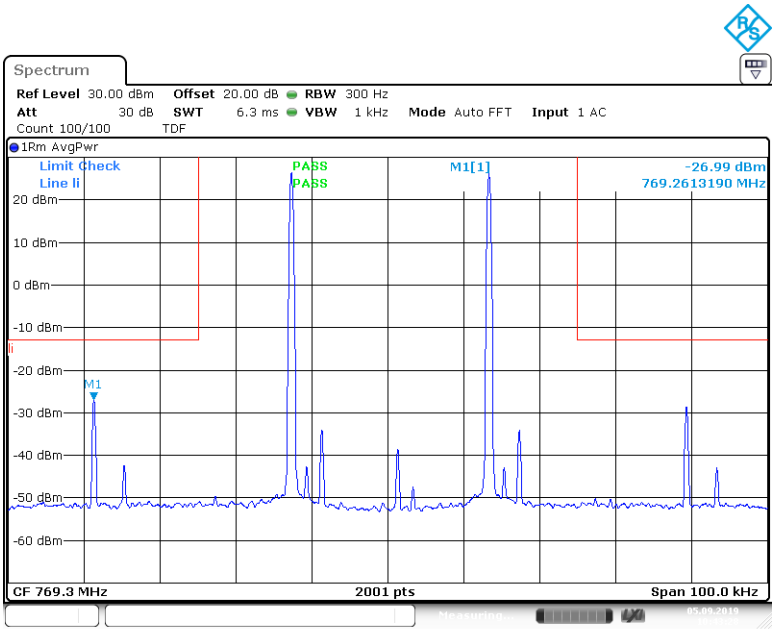
out of band emi;CW;2 carrier -0.3 dB;769.30000M;100.000k; CB
12.50k

Frequency band = 769 MHz – 775 MHz, Channel bandwidth = 12.5 kHz,
Number of signals = 2, Direction = RF downlink, Input power = 3 dB > AGC,
Emission designators = 11K3F3E, 8K10F1D and 9K80D7W



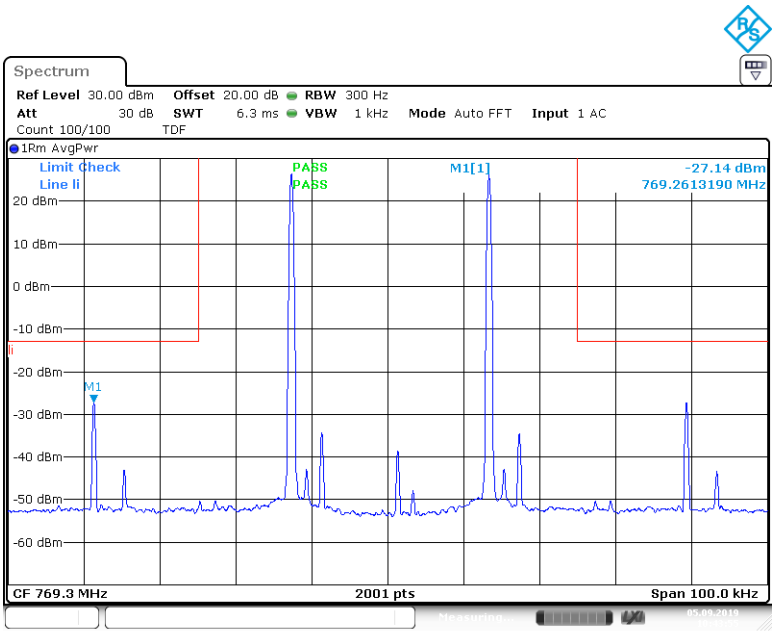
out of band emi;CW;2 carrier +3 dB;769.30000M;100.000k; CB12
.50k

Frequency band = 769 MHz – 775 MHz, Channel bandwidth = 25 kHz,
Number of signals = 2, Direction = RF downlink, Input power = = 0.3 dB < AGC,
Emission designator = 16K0F3E



out of band emi;CW;2 carrier -0.3 dB;769.30000M;100.000k; CB
25.00k

Frequency band = 769 MHz – 775 MHz, Channel bandwidth = 25 kHz,
Number of signals = 2, Direction = RF downlink, Input power = = 3 dB > AGC,
Emission designator = 16K0F3E



out of band emi;CW;2 carrier +3 dB;769.30000M;100.000k; CB25
.00k