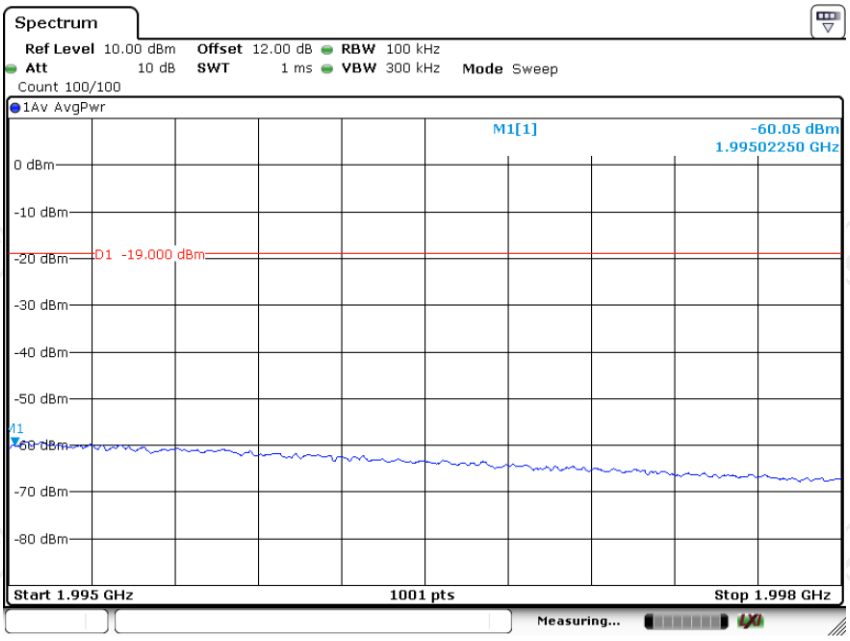
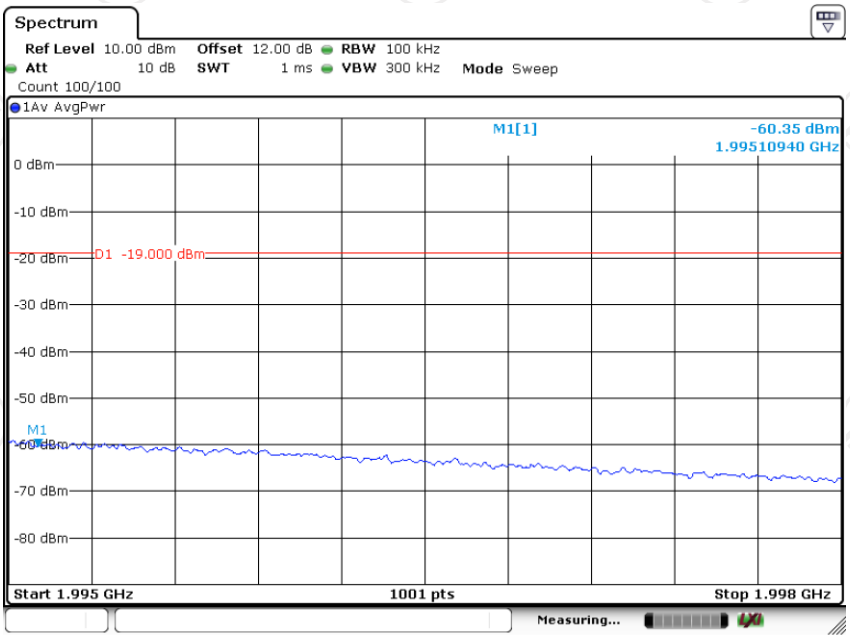
PCS LTE DL Right Side Pre AGC



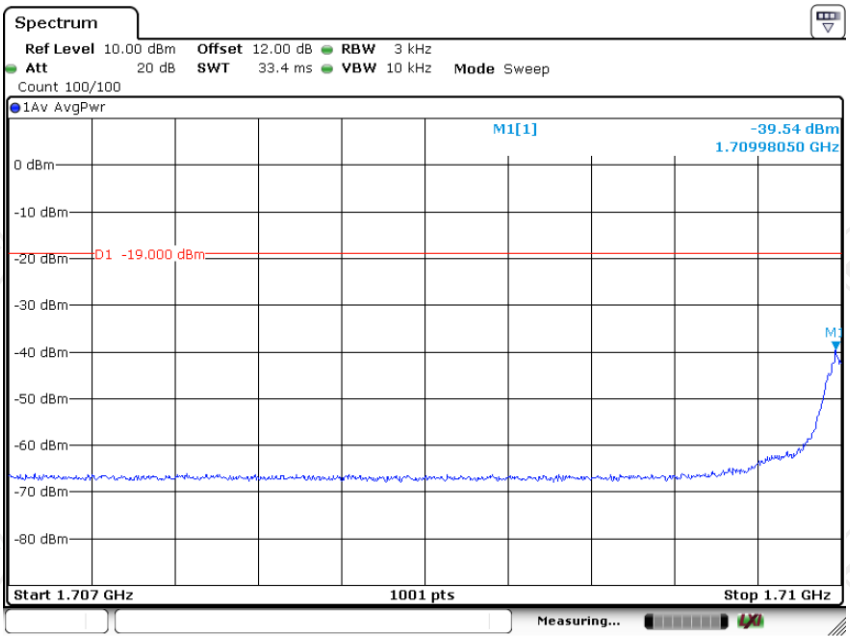
Date: 27.JUN.2024 14:19:21

PCS LTE DL Right Side Pre AGC + 10 dB



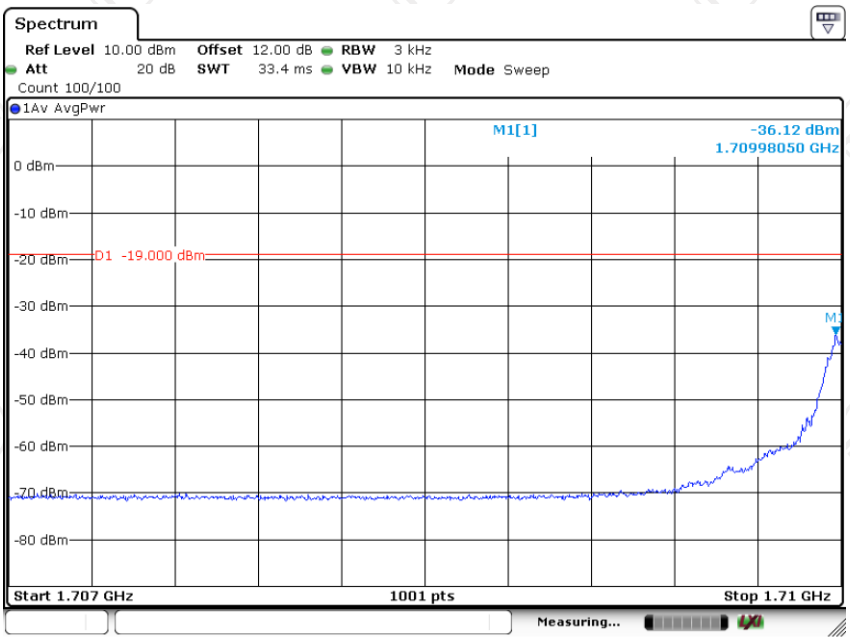
Date: 27.JUN.2024 14:19:37

AWS GSM UL Left Side Pre AGC



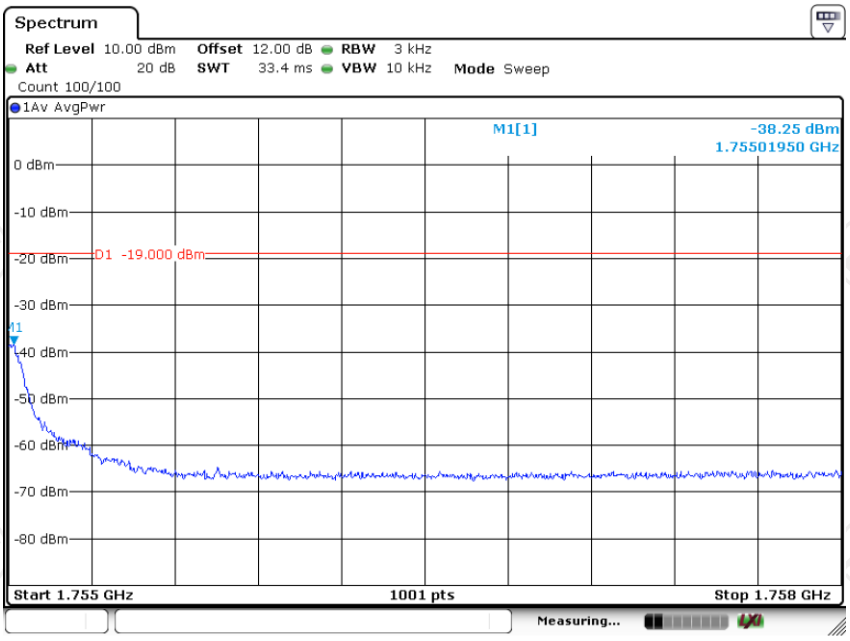
Date: 27.JUN.2024 14:33:08

AWS GSM UL Left Side Pre AGC + 10 dB



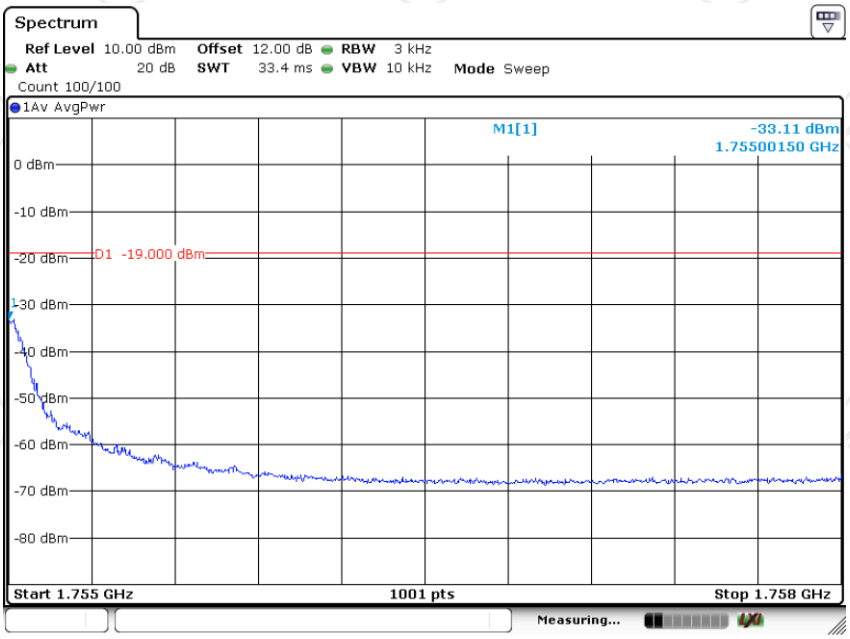
Date: 27.JUN.2024 14:33:30

AWS GSM UL Right Side Pre AGC



Date: 27.JUN.2024 14:38:08

AWS GSM UL Right Side Pre AGC + 10 dB



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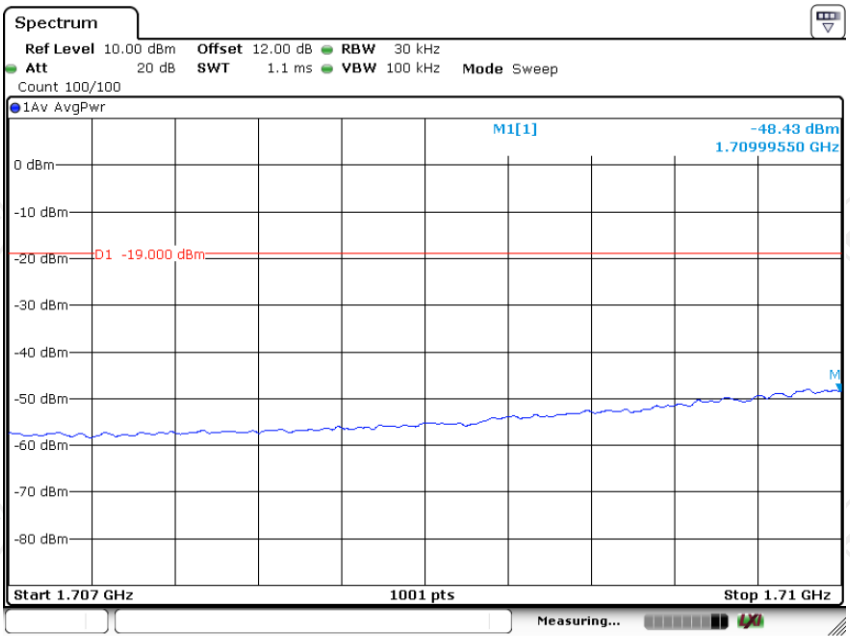
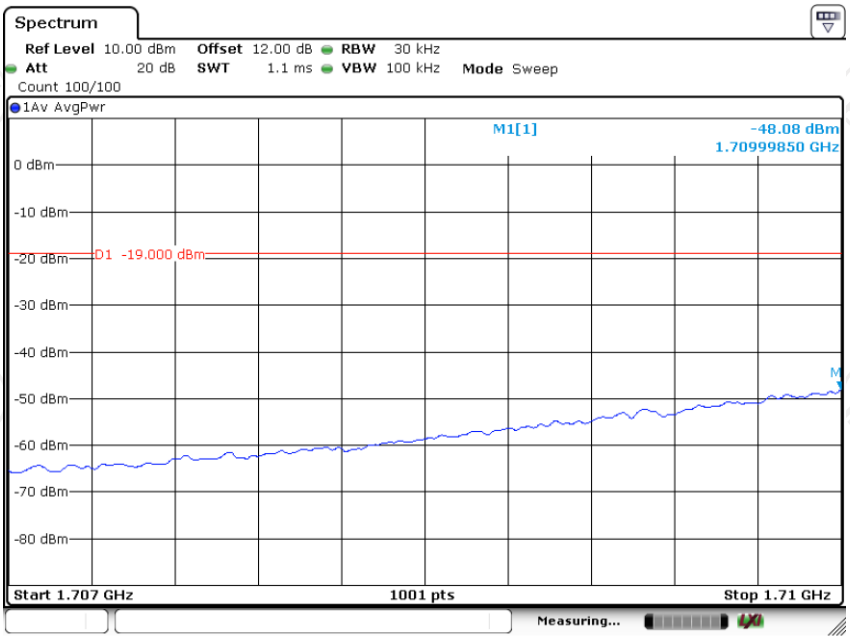
AWS CDMA UL Left Side Pre AGC



Date: 27.JUN.2024 14:34:19

AWS CDMA UL Left Side Pre AGC + 10 dB



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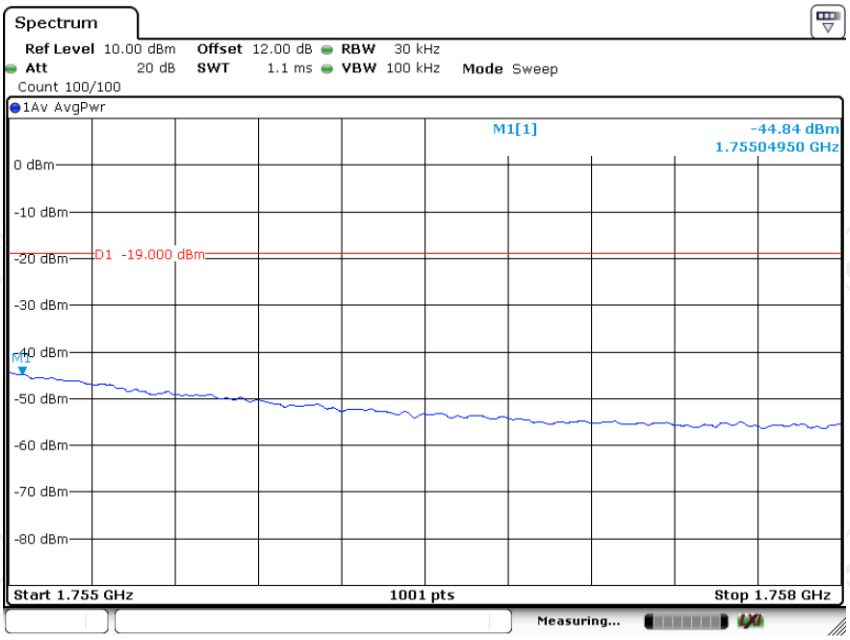
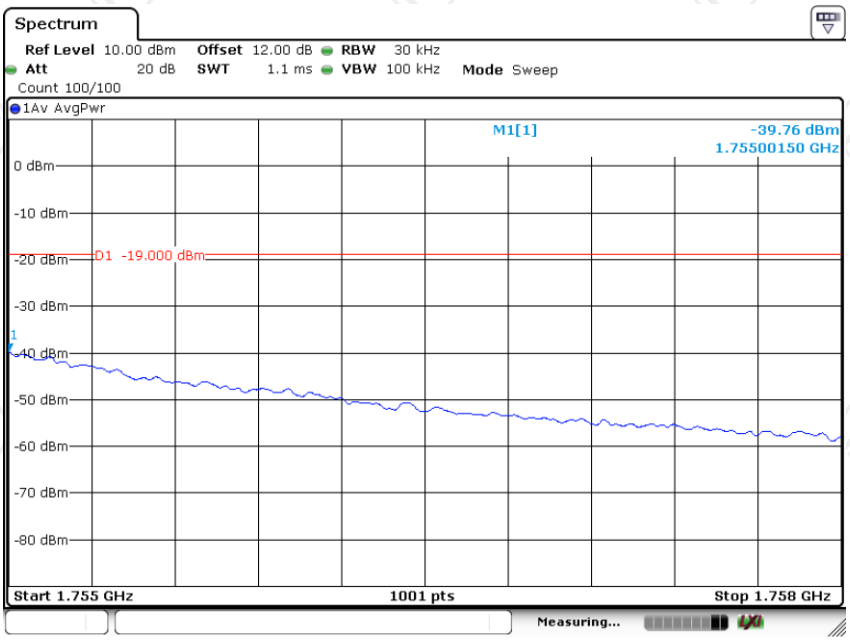
AWS CDMA UL Right Side Pre AGC



Date: 27.JUN.2024 14:36:57

AWS CDMA UL Right Side Pre AGC + 10 dB



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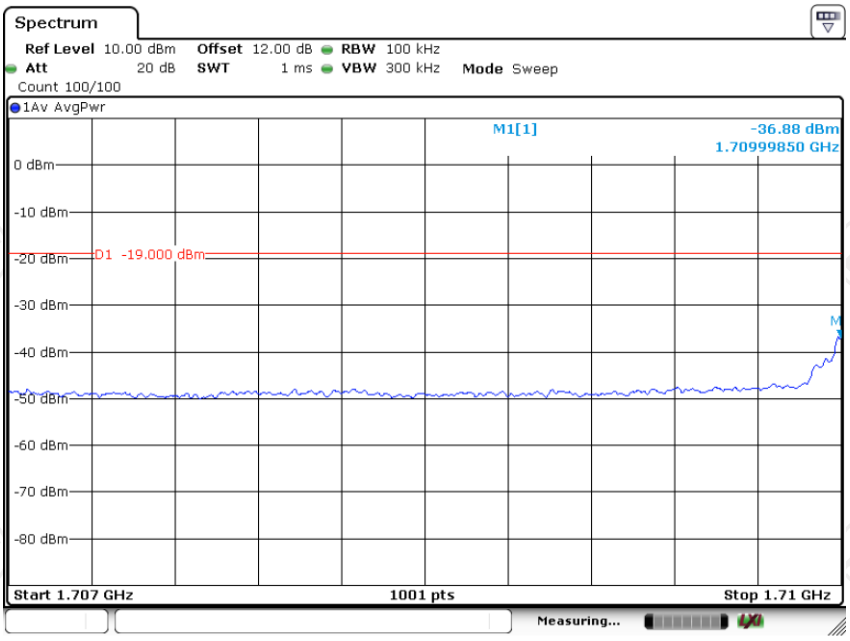
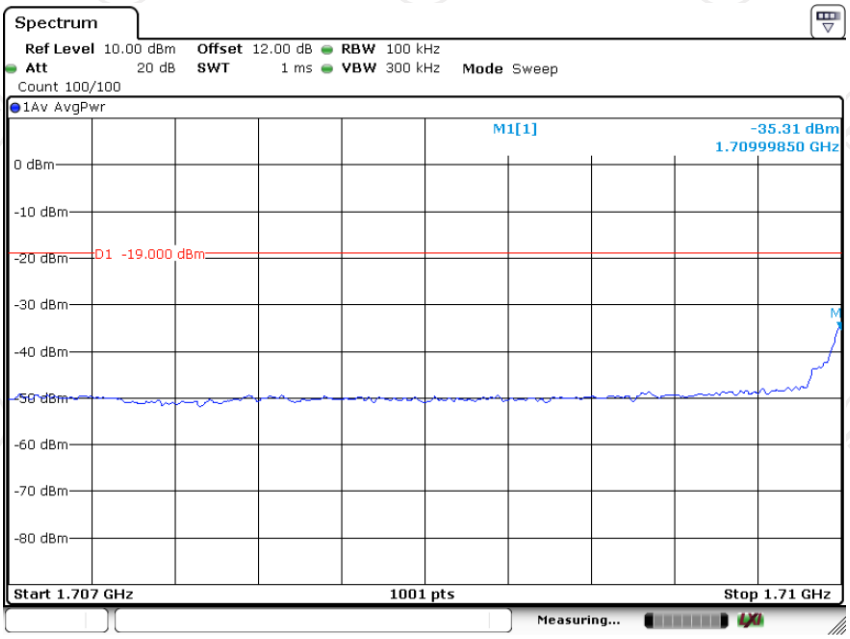
AWS LTE UL Left Side Pre AGC



Date: 27.JUN.2024 14:35:10

AWS LTE UL Left Side Pre AGC + 10 dB



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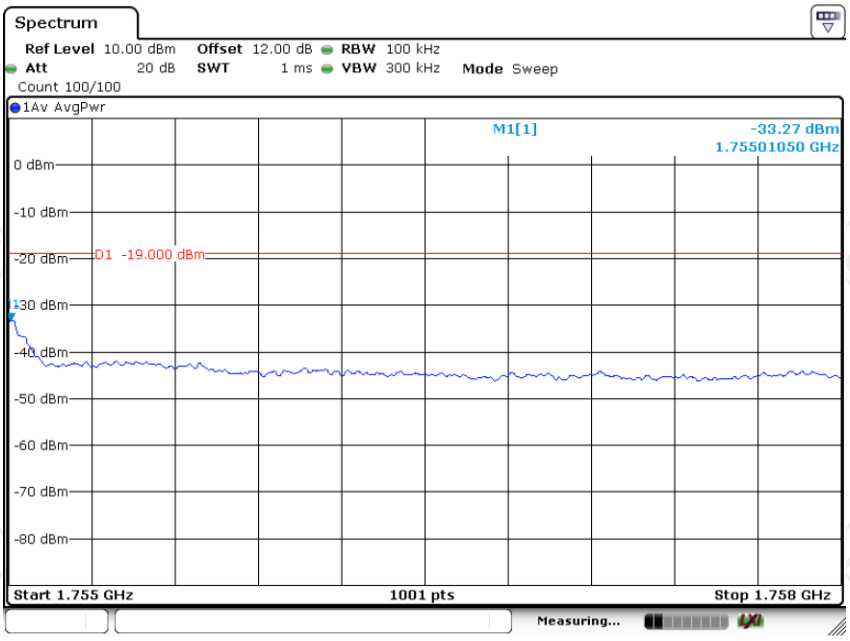
AWS LTE UL Right Side Pre AGC



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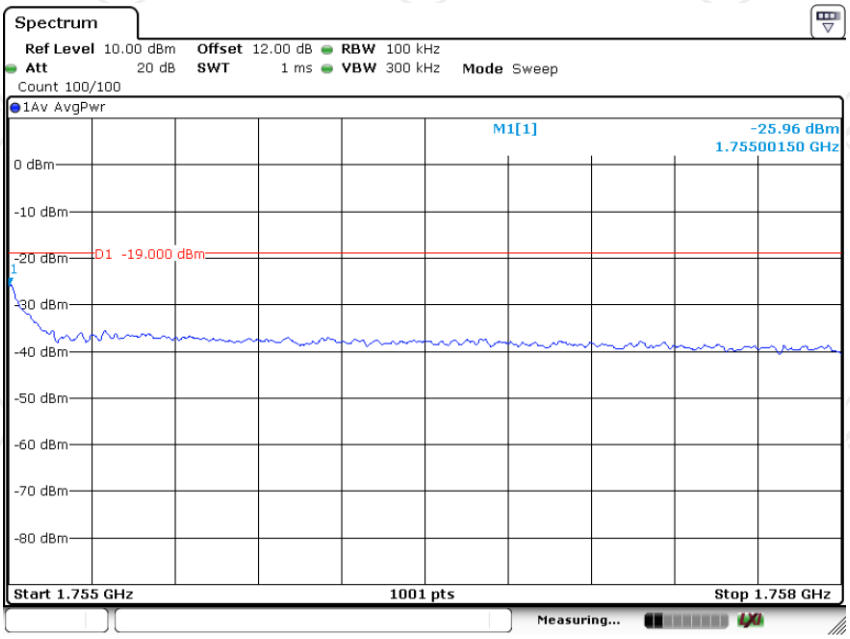
AWS LTE UL Right Side Pre AGC + 10 dB



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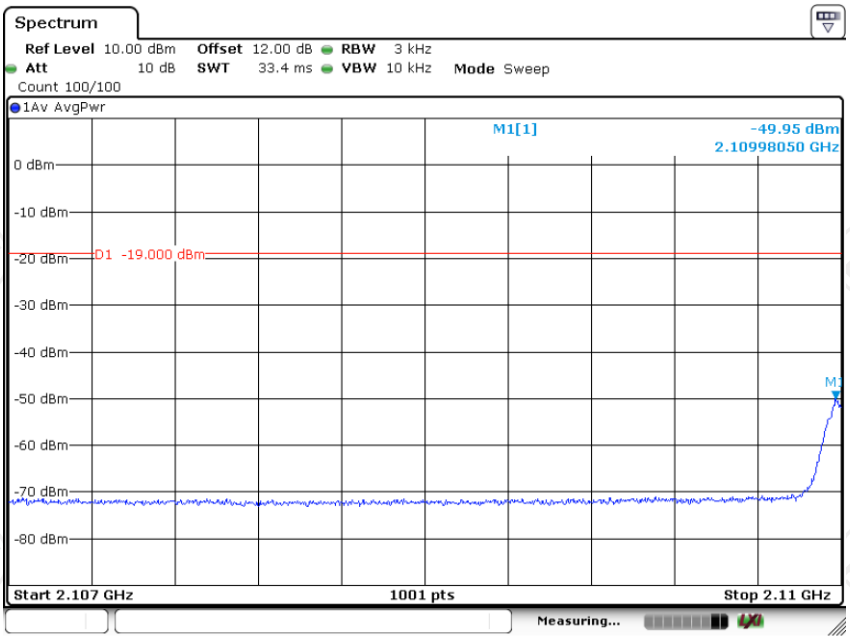
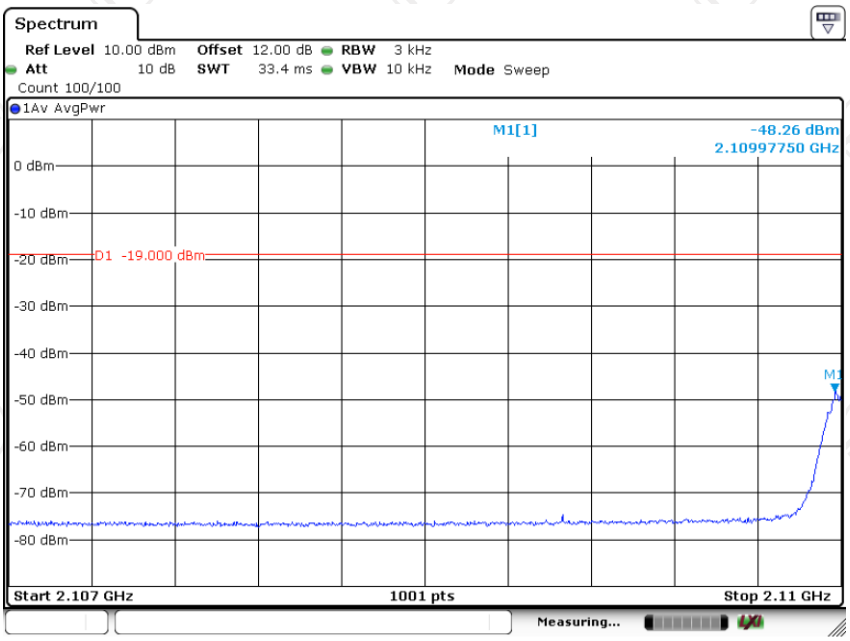
AWS GSM DL Left Side Pre AGC



Date: 27.JUN.2024 14:10:22

AWS GSM DL Left Side Pre AGC + 10 dB



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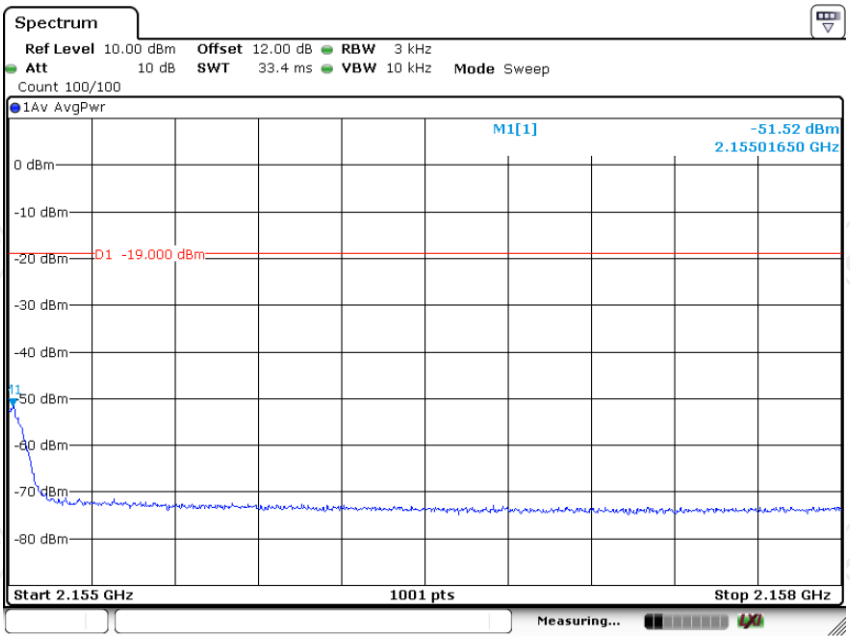

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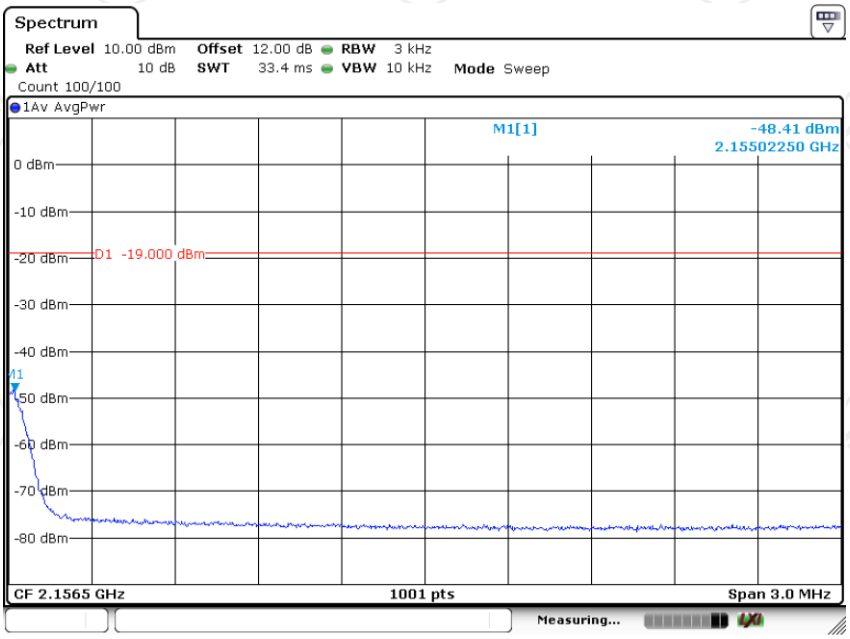
AWS GSM DL Right Side Pre AGC + 10 dB



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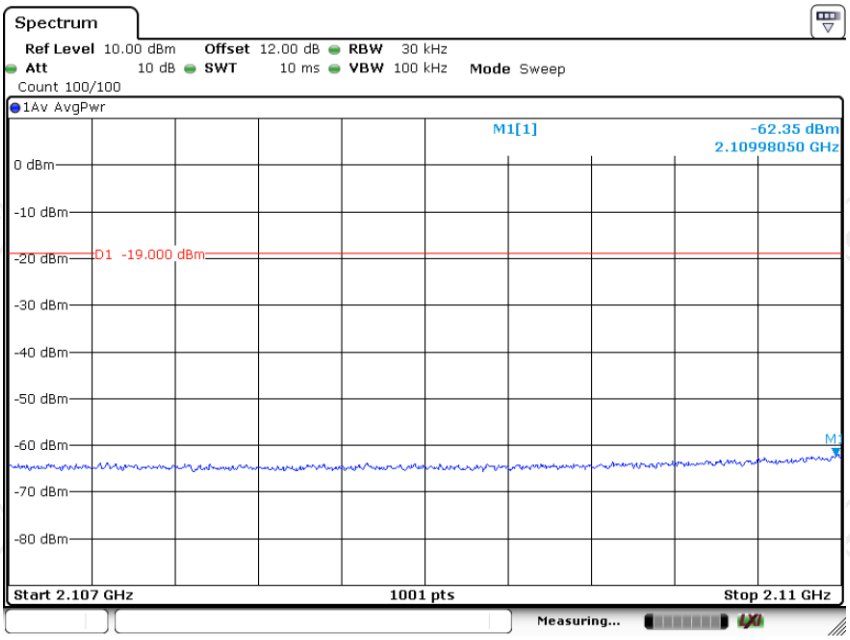
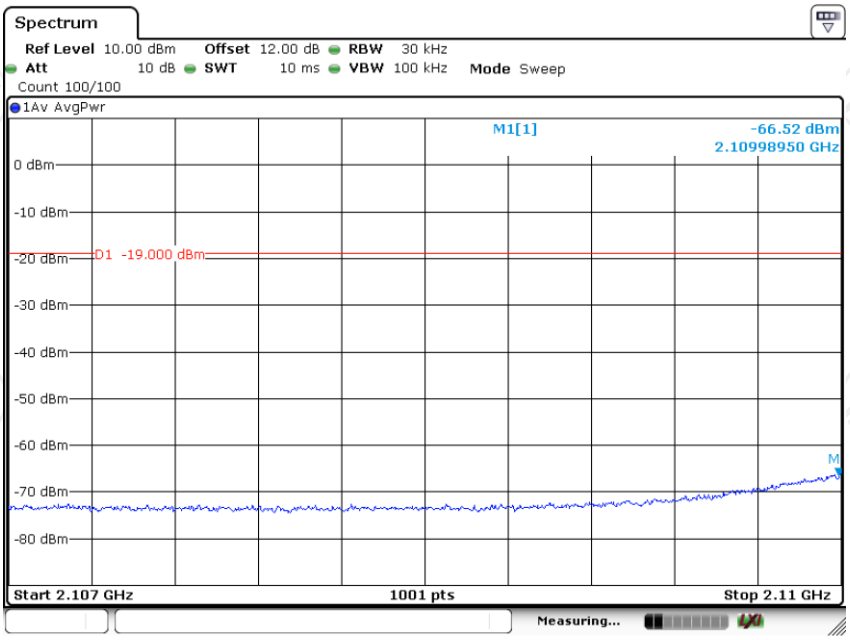
AWS CDMA DL Left Side Pre AGC



Date: 27.JUN.2024 14:08:30

AWS CDMA DL Left Side Pre AGC + 10 dB



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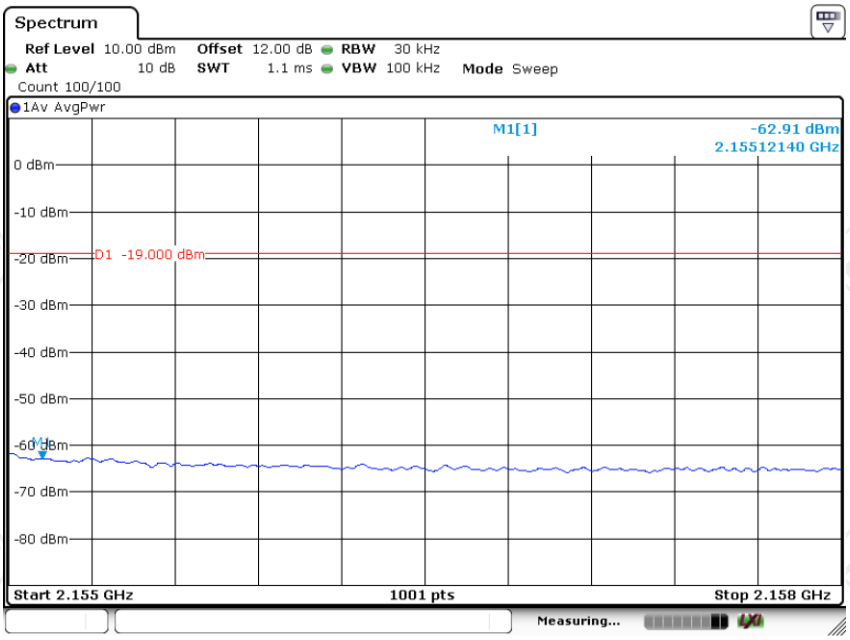

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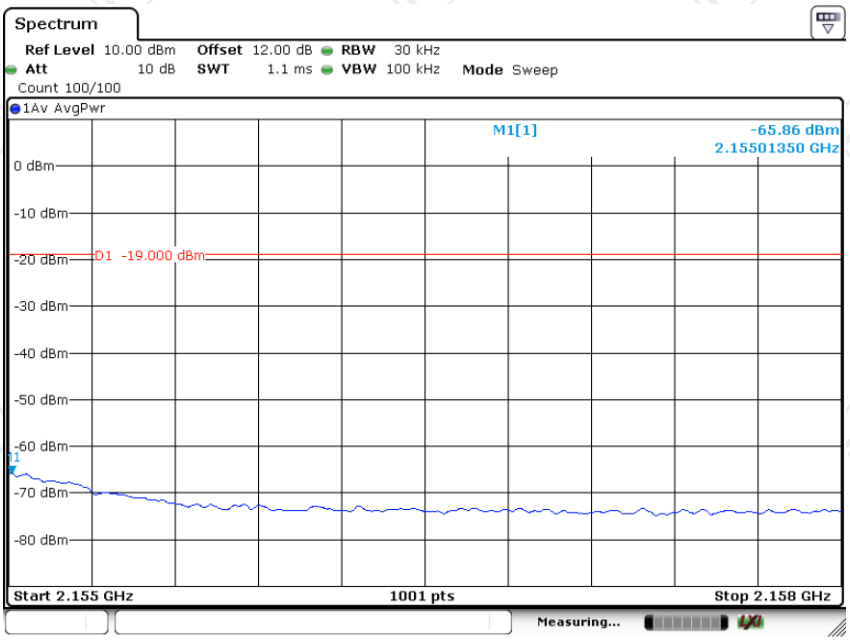
AWS CDMA DL Right Side Pre AGC + 10 dB



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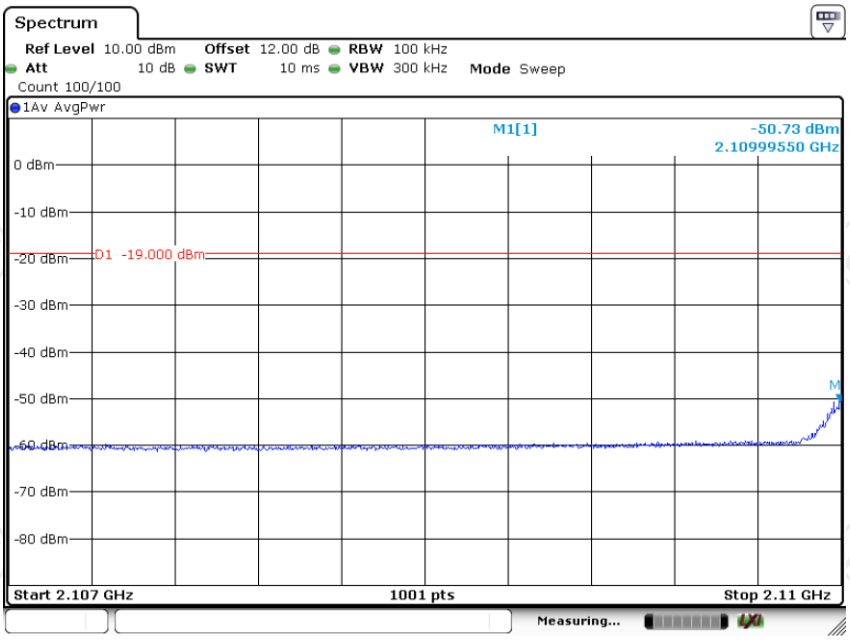
AWS LTE DL Left Side Pre AGC



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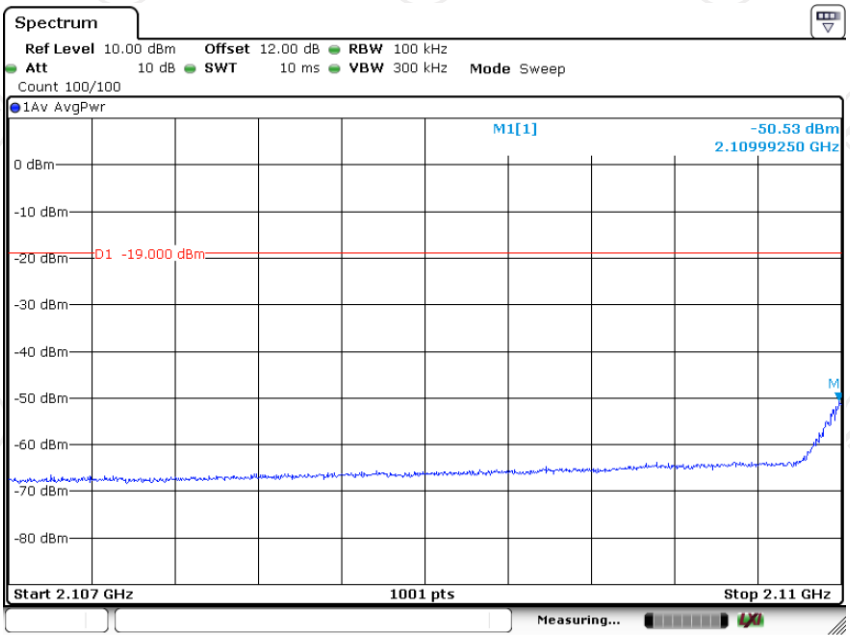
AWS LTE DL Left Side Pre AGC + 10 dB



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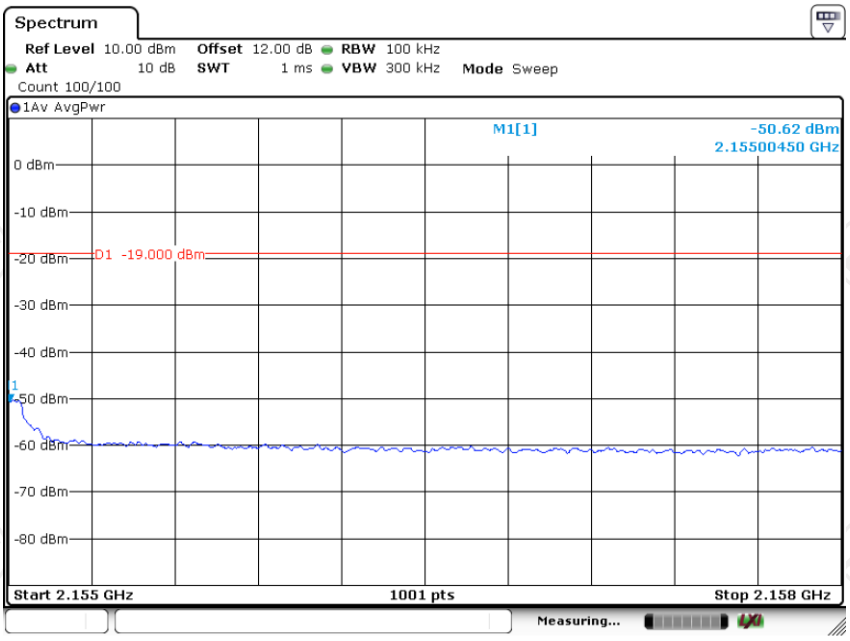
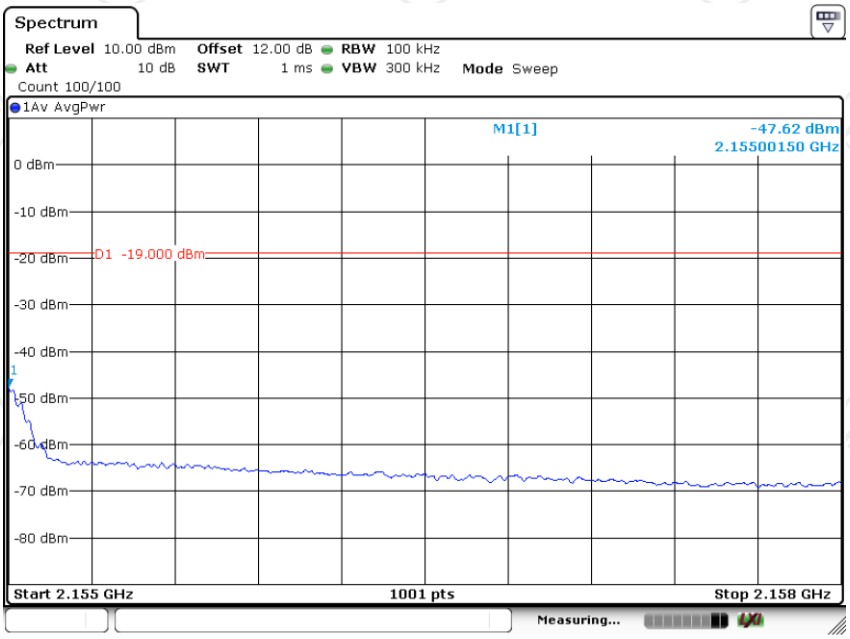


Date: 27.JUN.2024 14:13:26

AWS LTE DL Right Side Pre AGC + 10 dB



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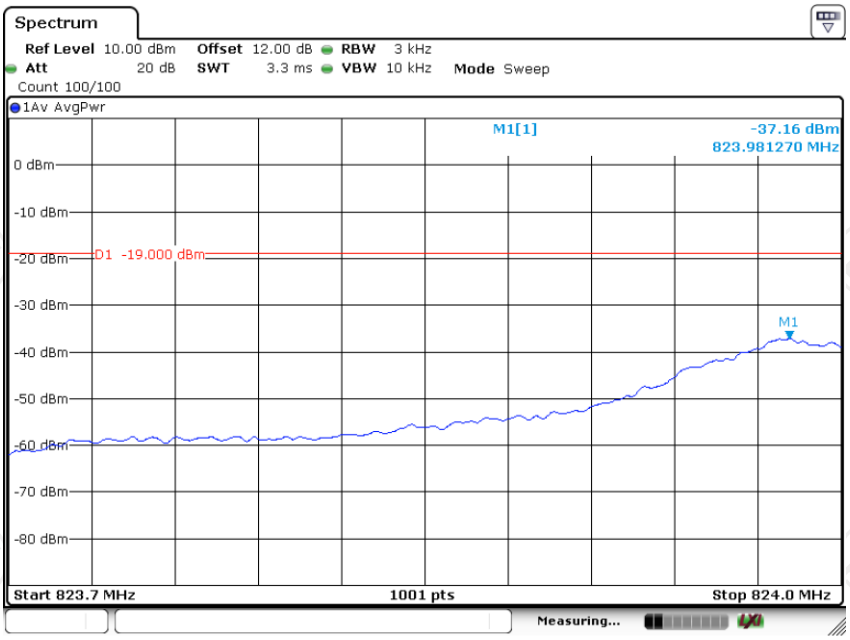
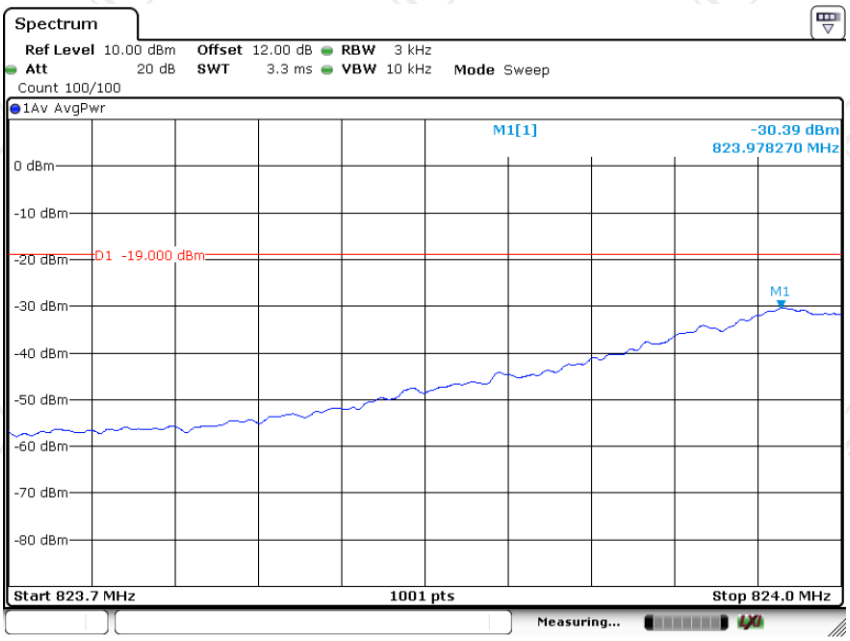
Cellular GSM UL Left Side Pre AGC



Date: 27.JUN.2024 14:39:13

Cellular GSM UL Left Side Pre AGC + 10 dB



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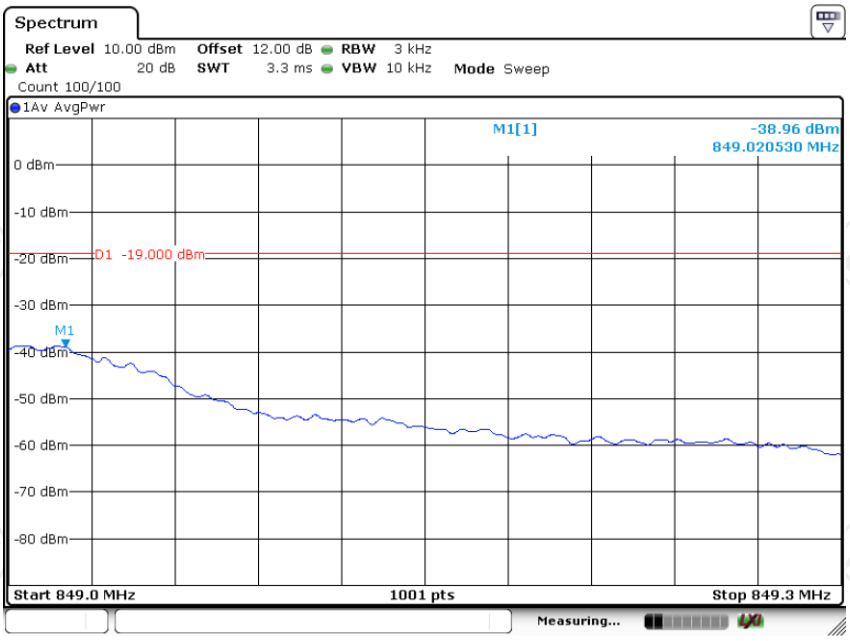
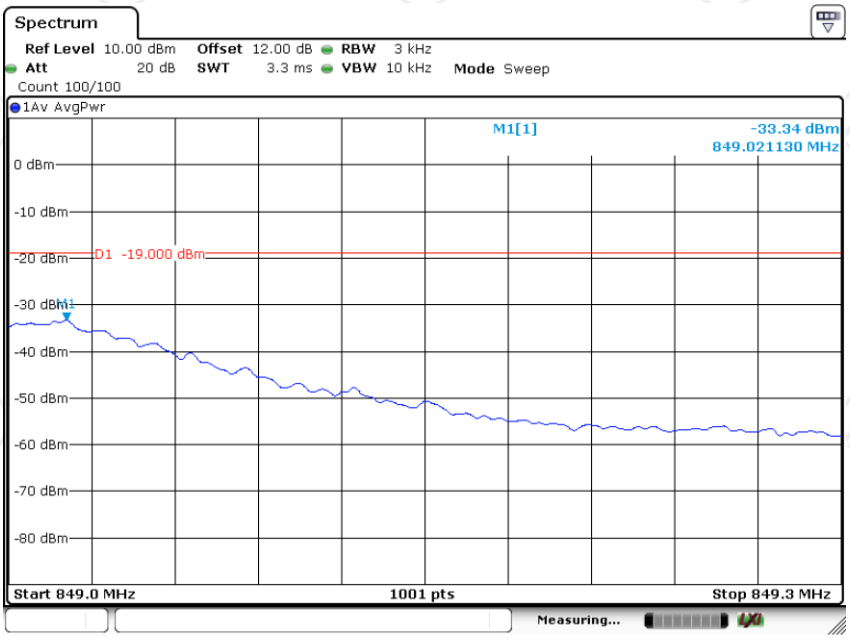
Cellular GSM UL Right Side Pre AGC



Date: 27.JUN.2024 16:23:09

Cellular GSM UL Right Side Pre AGC + 10 dB



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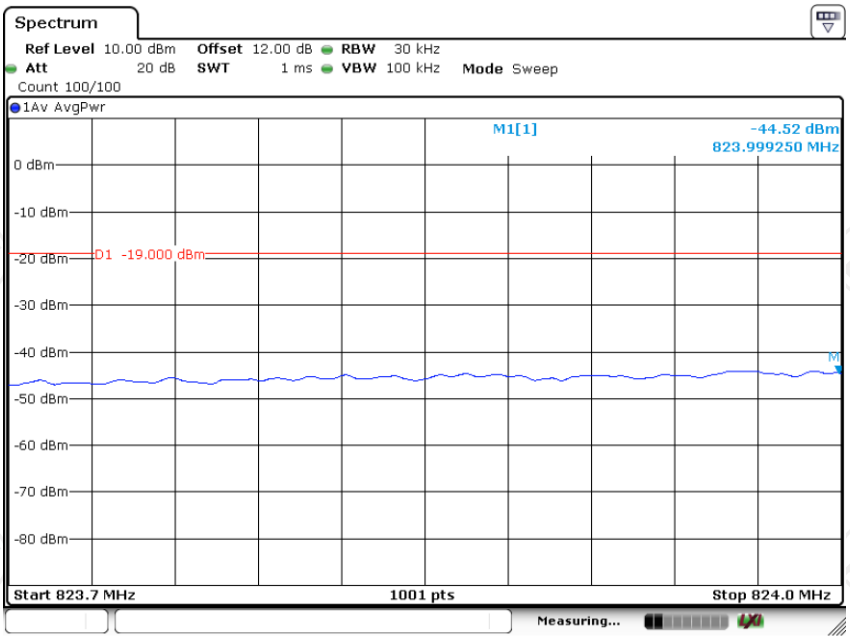
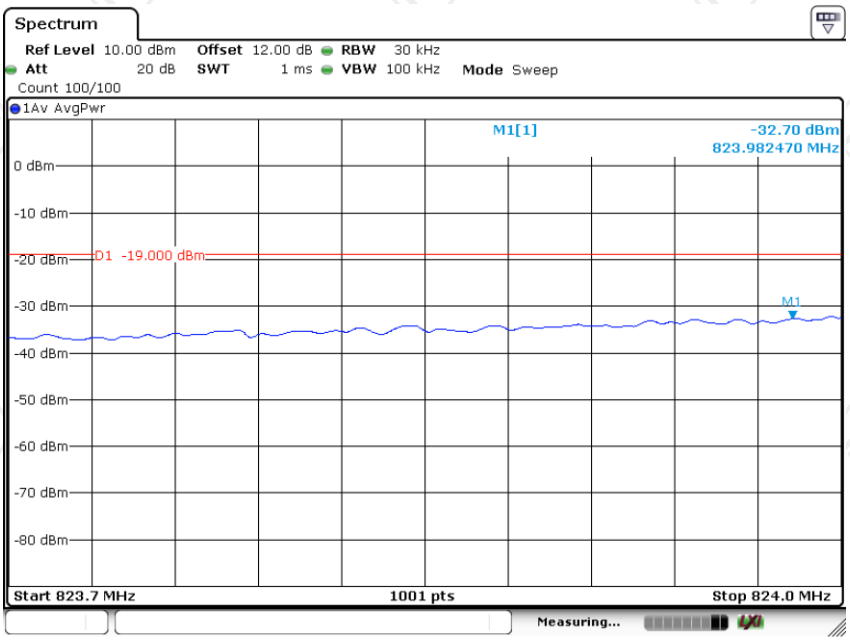
Cellular CDMA UL Left Side Pre AGC



Date: 27.JUN.2024 14:40:24

Cellular CDMA UL Left Side Pre AGC + 10 dB



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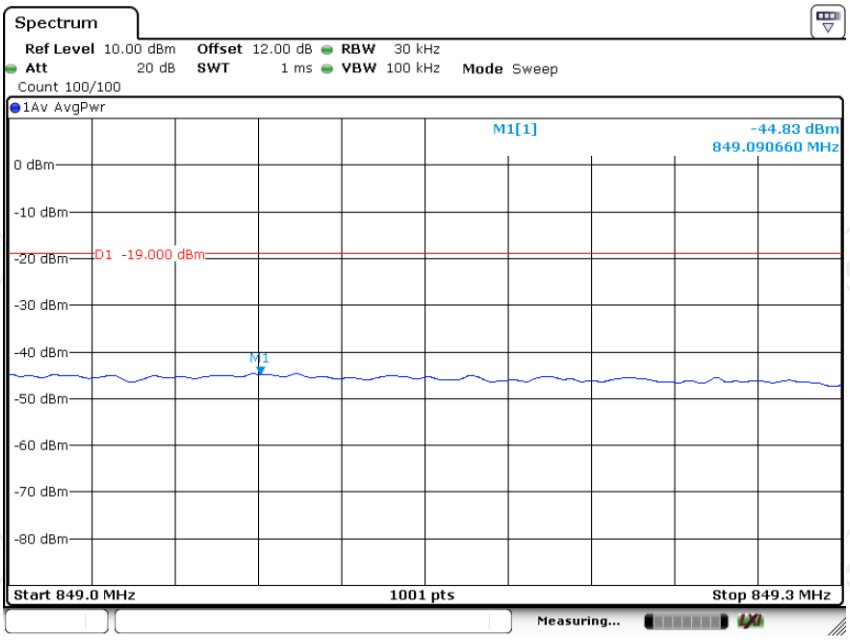
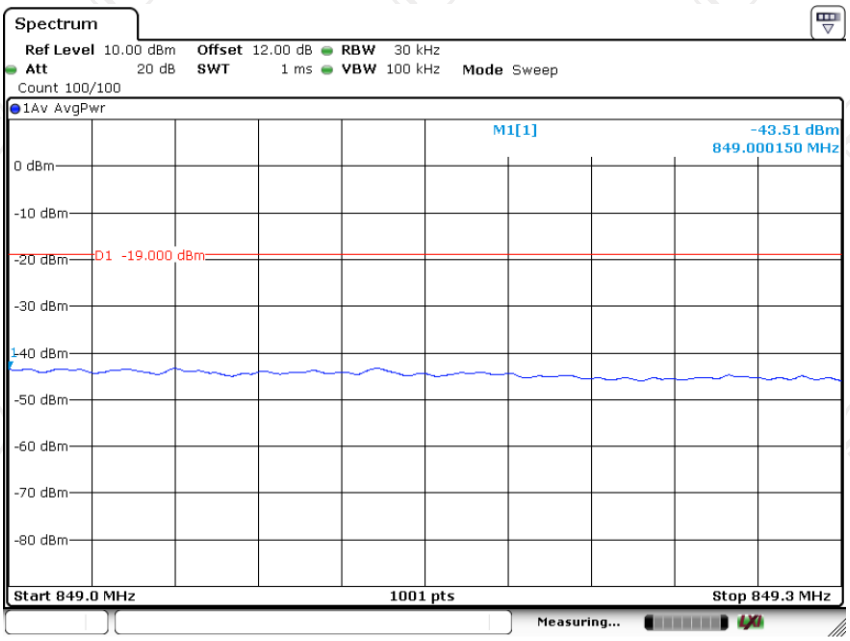
Cellular CDMA UL Right Side Pre AGC



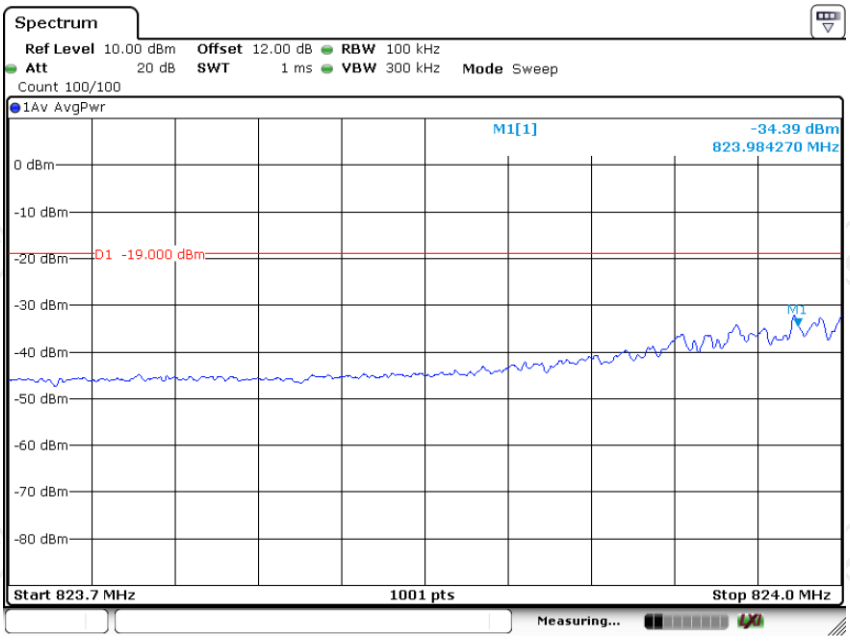
Date: 27.JUN.2024 16:24:22

Cellular CDMA UL Right Side Pre AGC + 10 dB



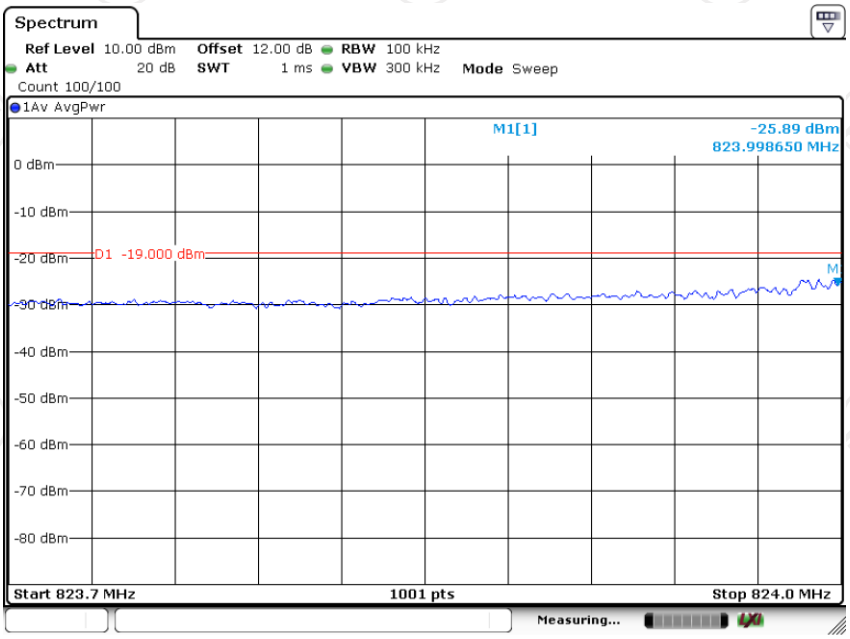
Date: 27.JUN.2024 16:24:41

Cellular LTE UL Left Side Pre AGC



Date: 27.JUN.2024 14:41:24

Cellular LTE UL Left Side Pre AGC + 10 dB



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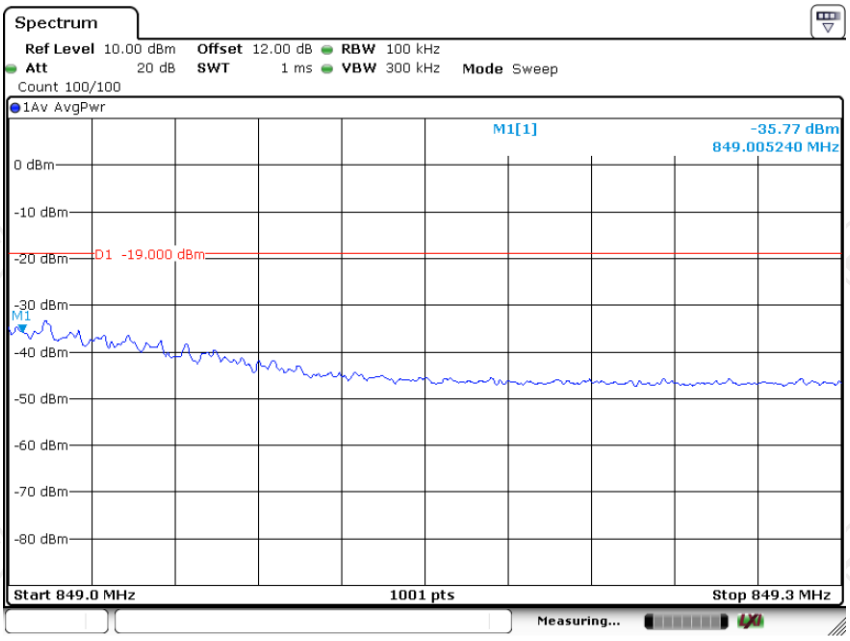
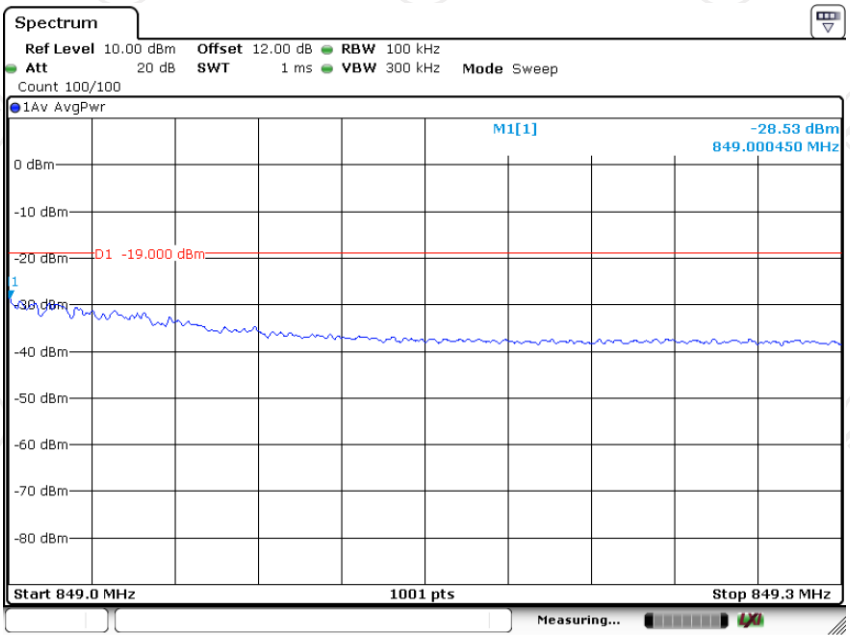
Cellular LTE UL Right Side Pre AGC



Date: 27.JUN.2024 16:25:32

Cellular LTE UL Right Side Pre AGC + 10 dB



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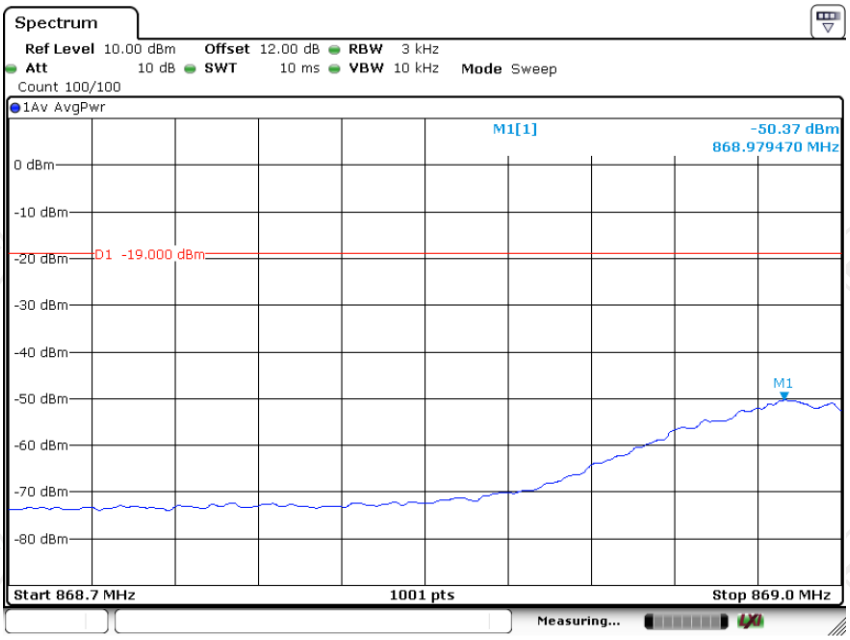
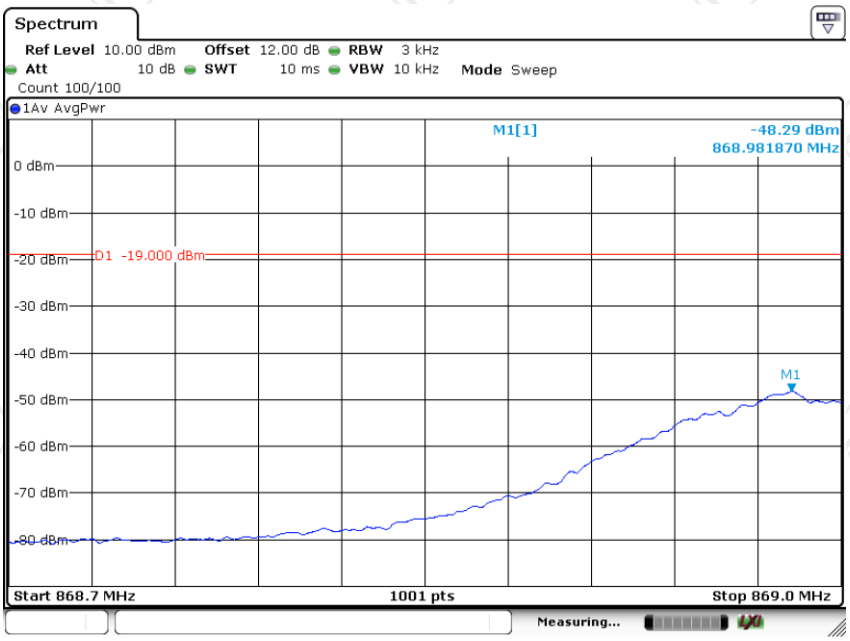
Cellular GSM DL Left Side Pre AGC



Date: 27.JUN.2024 11:44:34

Cellular GSM DL Left Side Pre AGC + 10 dB



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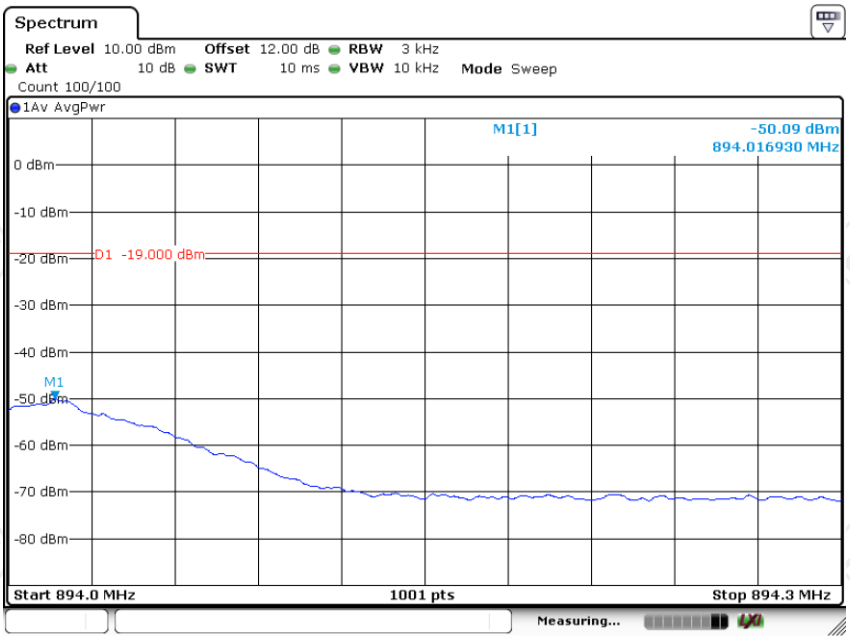
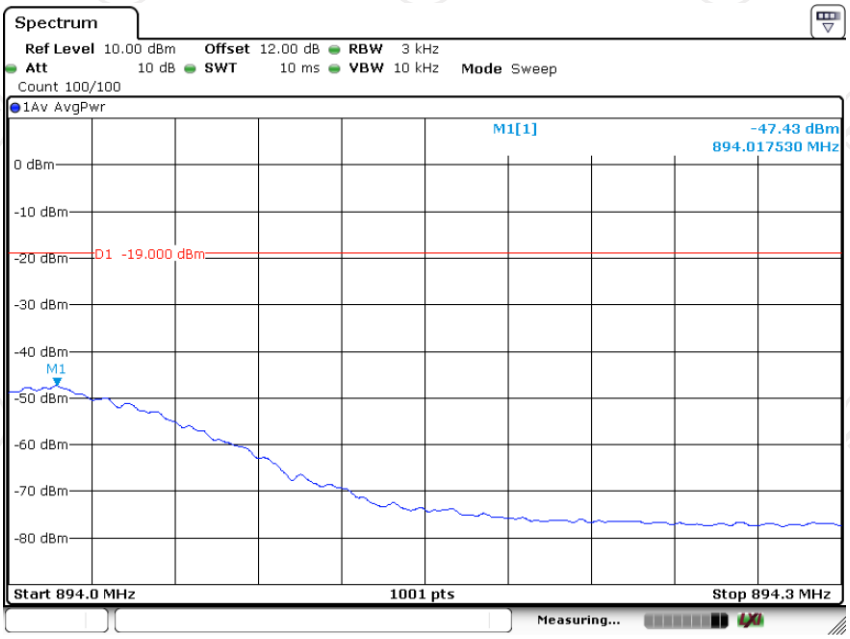
Cellular GSM DL Right Side Pre AGC



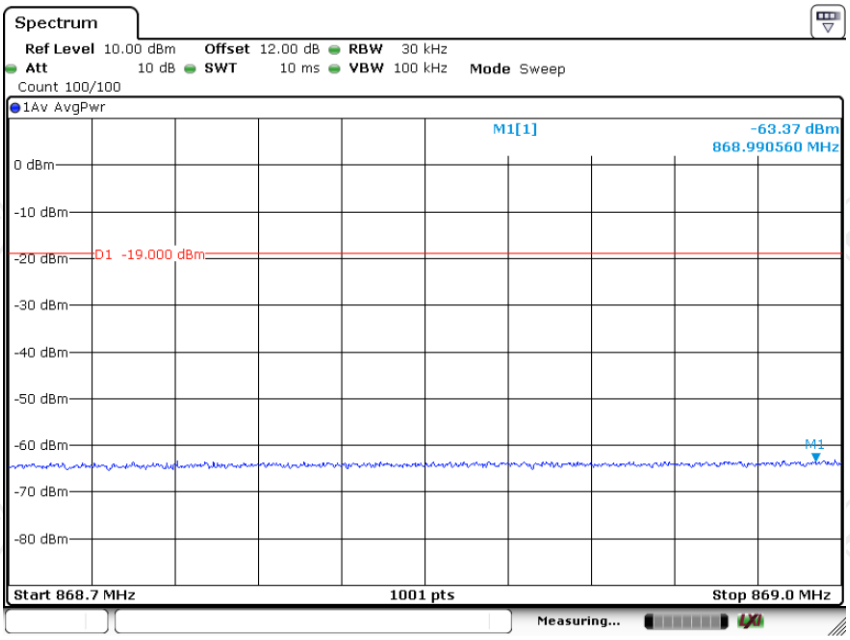
Date: 27.JUN.2024 11:45:39

Cellular GSM DL Right Side Pre AGC + 10 dB



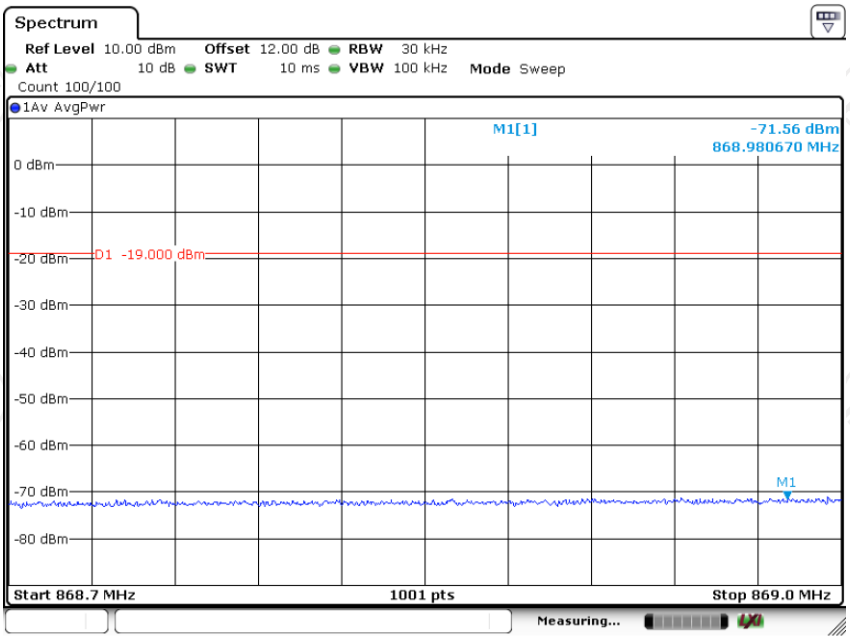
Date: 27.JUN.2024 11:45:56

Cellular CDMA DL Left Side Pre AGC



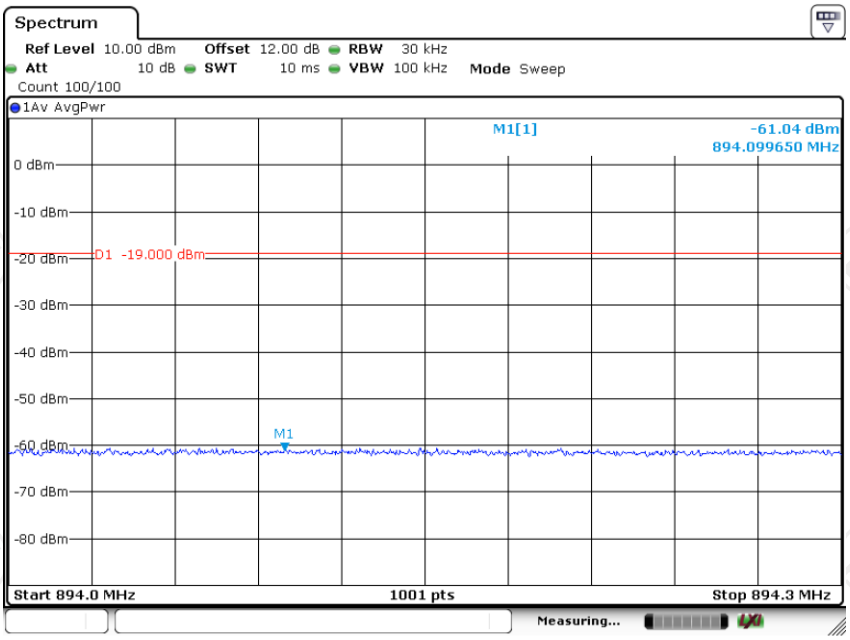
Date: 27.JUN.2024 11:43:38

Cellular CDMA DL Left Side Pre AGC + 10 dB



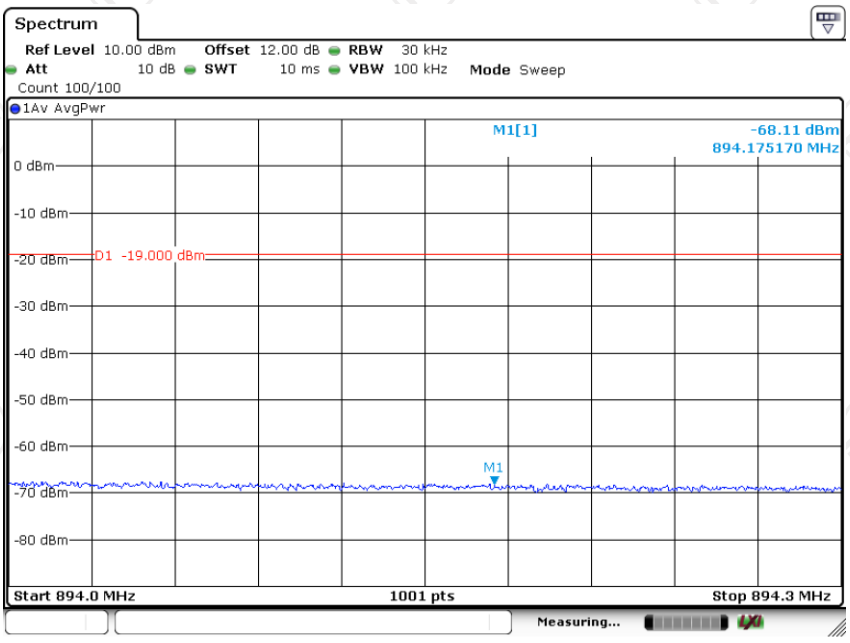
Date: 27.JUN.2024 11:43:56

Cellular CDMA DL Right Side Pre AGC



Date: 27.JUN.2024 11:46:41

Cellular CDMA DL Right Side Pre AGC + 10 dB



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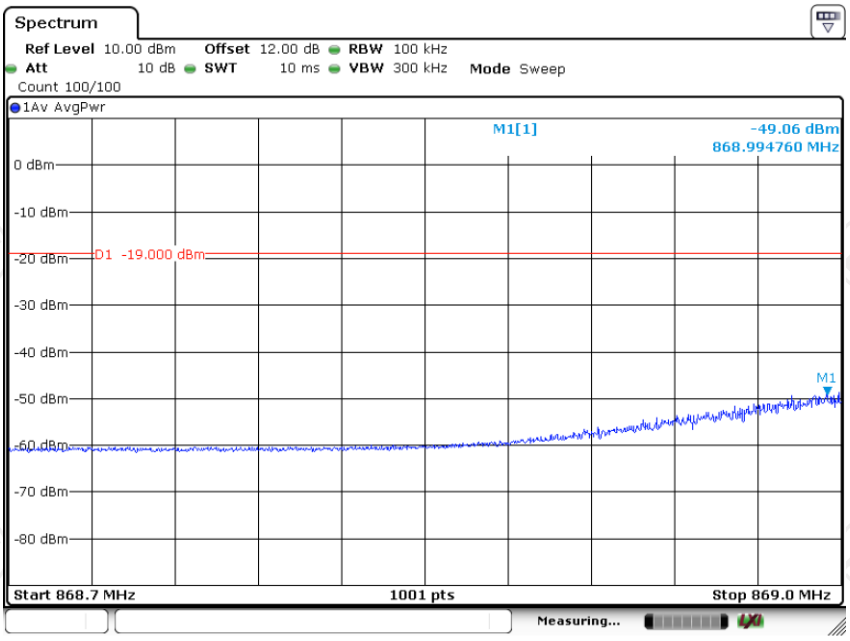
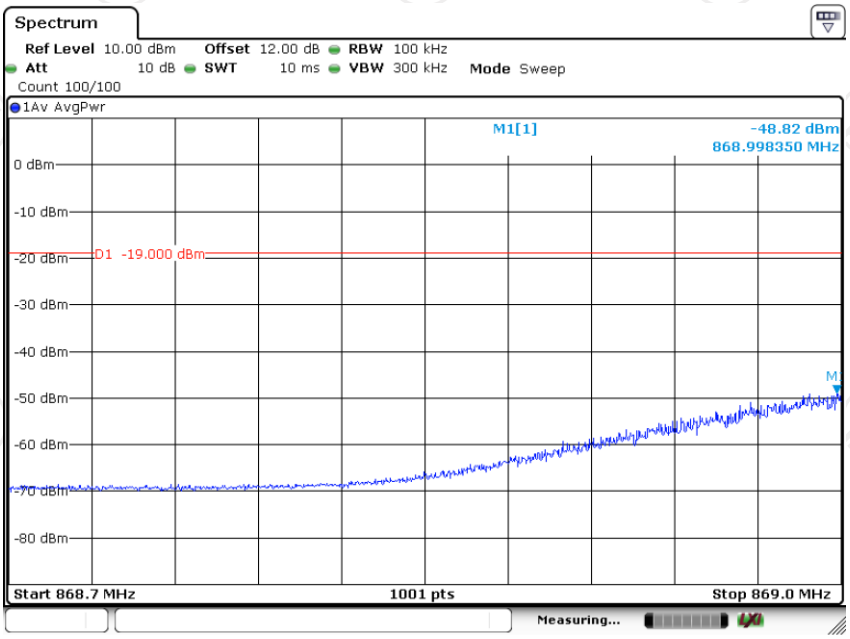
Cellular LTE DL Left Side Pre AGC



Date: 27.JUN.2024 11:42:40

Cellular LTE DL Left Side Pre AGC + 10 dB



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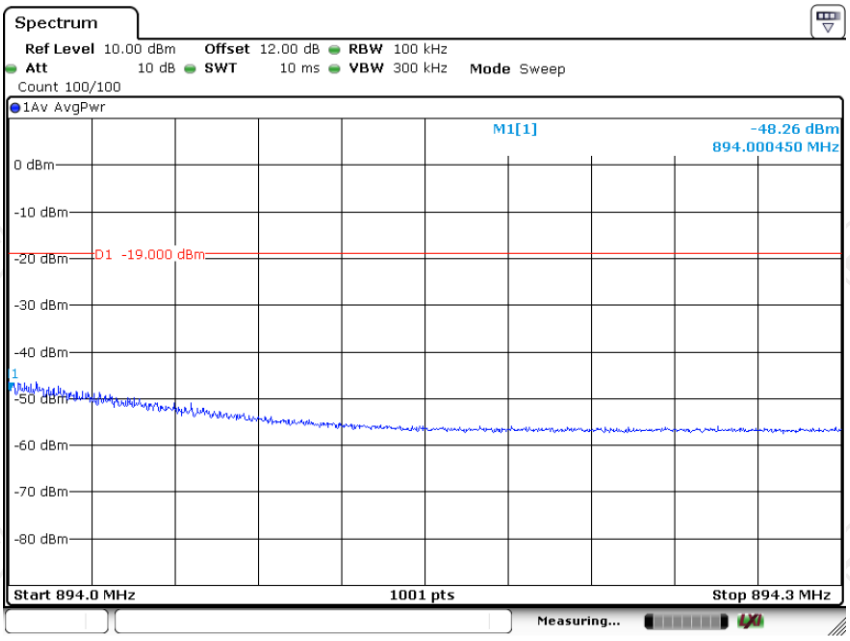
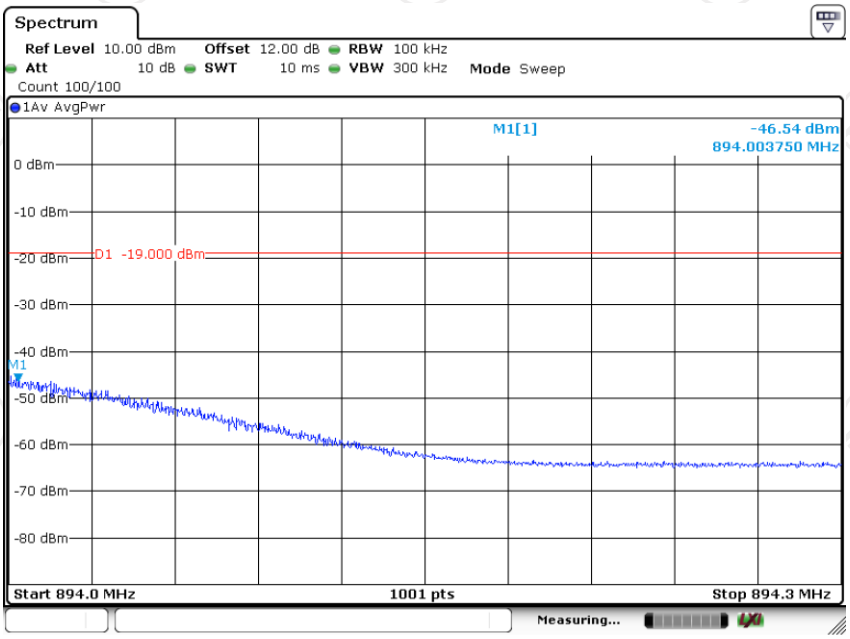
Cellular LTE DL Right Side Pre AGC



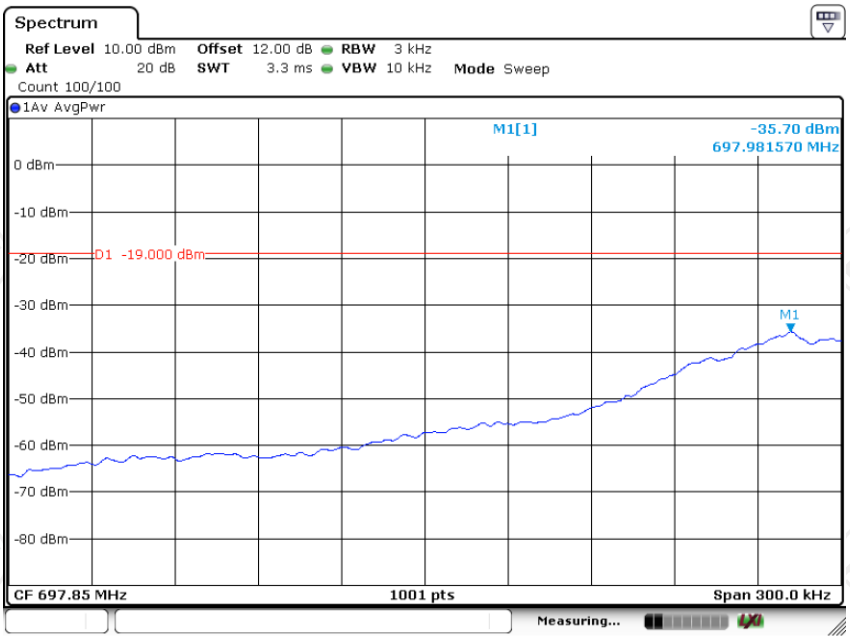
Date: 27.JUN.2024 11:47:37

Cellular LTE DL Right Side Pre AGC + 10 dB



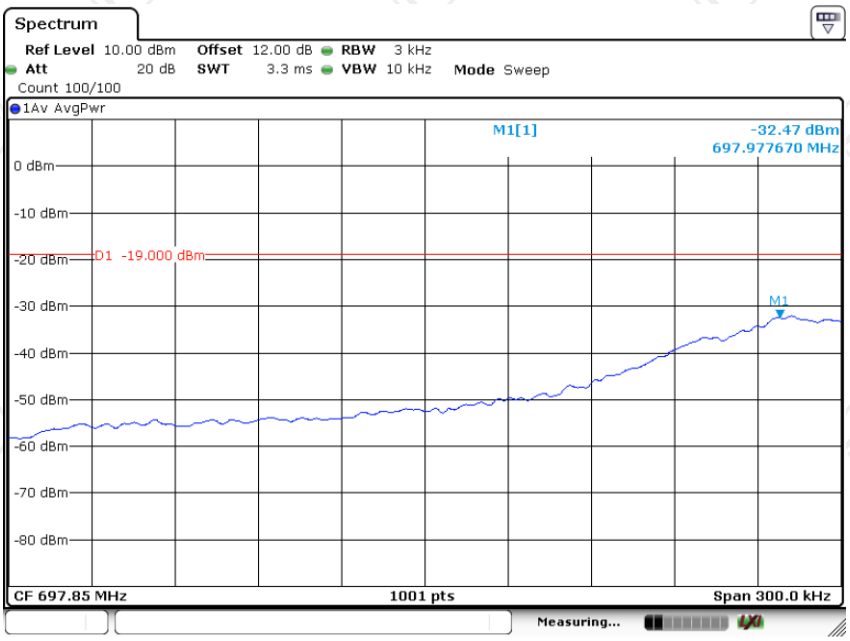
Date: 27.JUN.2024 11:48:57

Lower700MHz GSM UL Left Side Pre AGC



Date: 27.JUN.2024 16:36:08

Lower700MHz GSM UL Left Side Pre AGC + 10 dB



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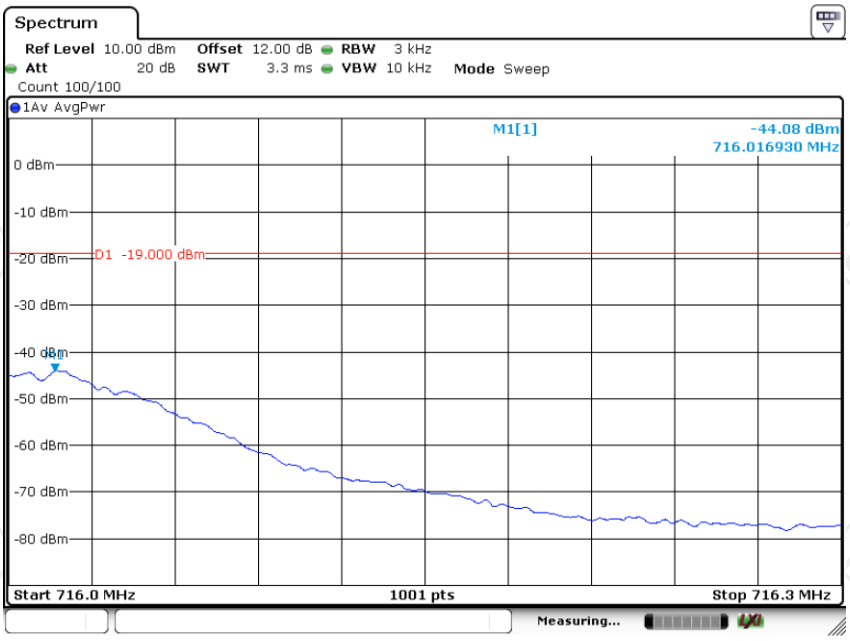
Lower700MHz GSM UL Right Side Pre AGC



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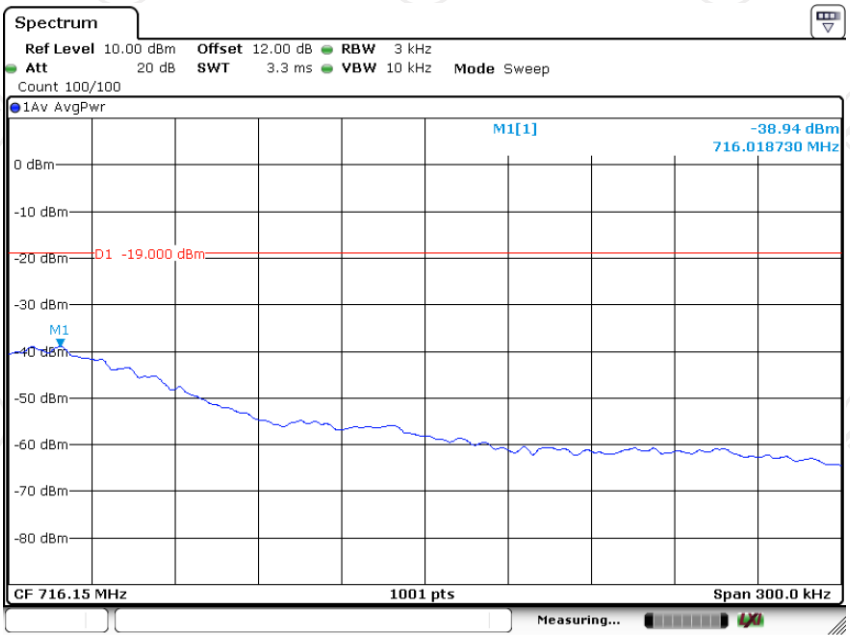
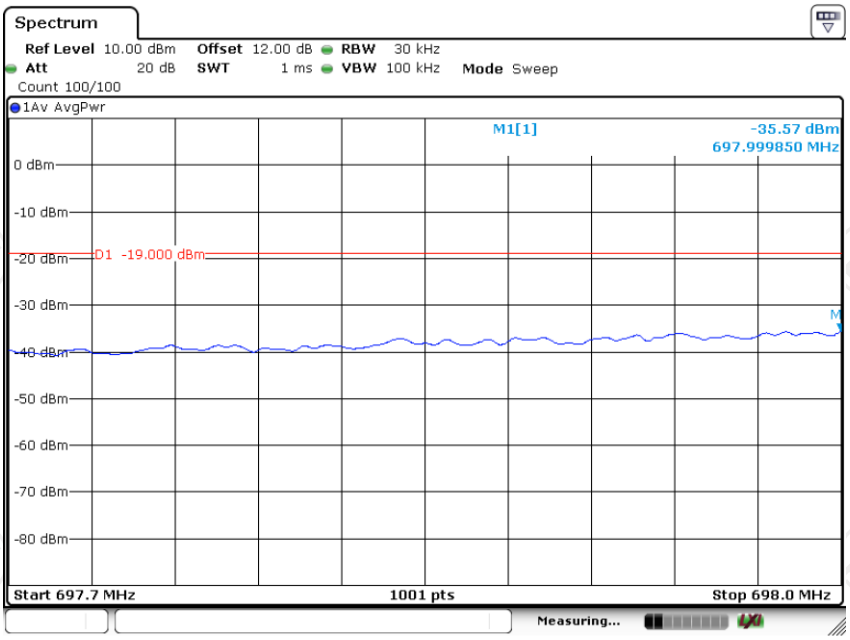
Lower700MHz GSM UL Right Side Pre AGC + 10 dB



Date: 27.JUN.2024 16:37:20

Lower700MHz CDMA UL Left Side Pre AGC



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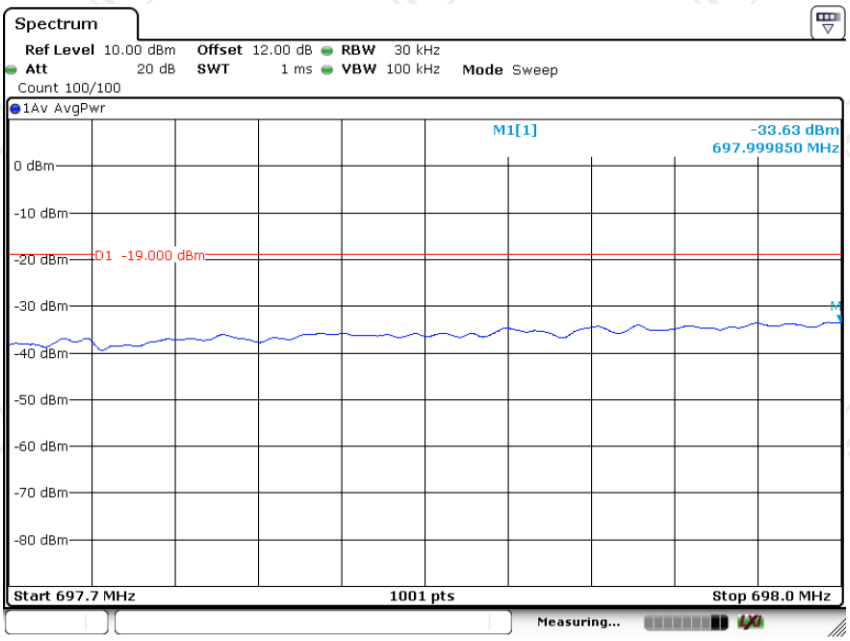
Lower700MHz CDMA UL Left Side Pre AGC + 10 dB



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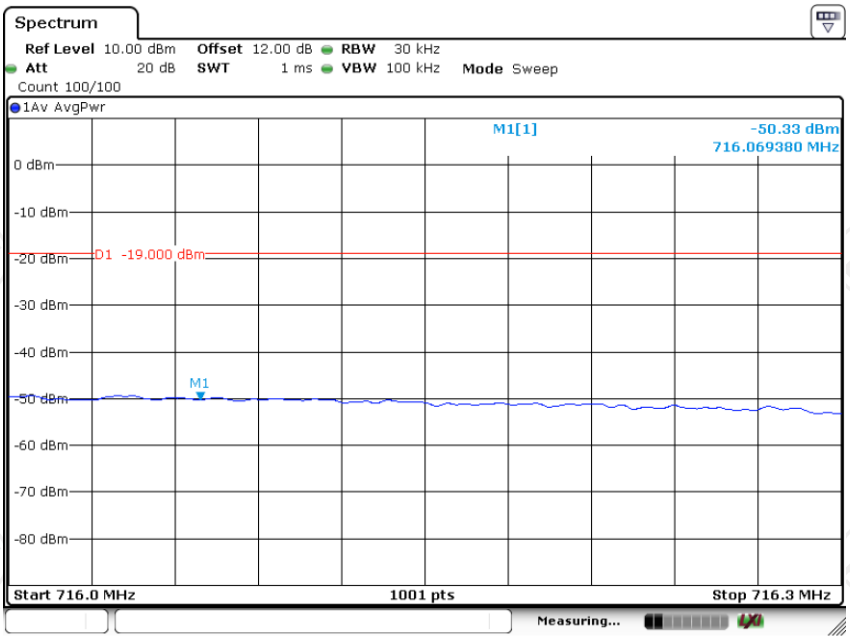
Lower700MHz CDMA UL Right Side Pre AGC



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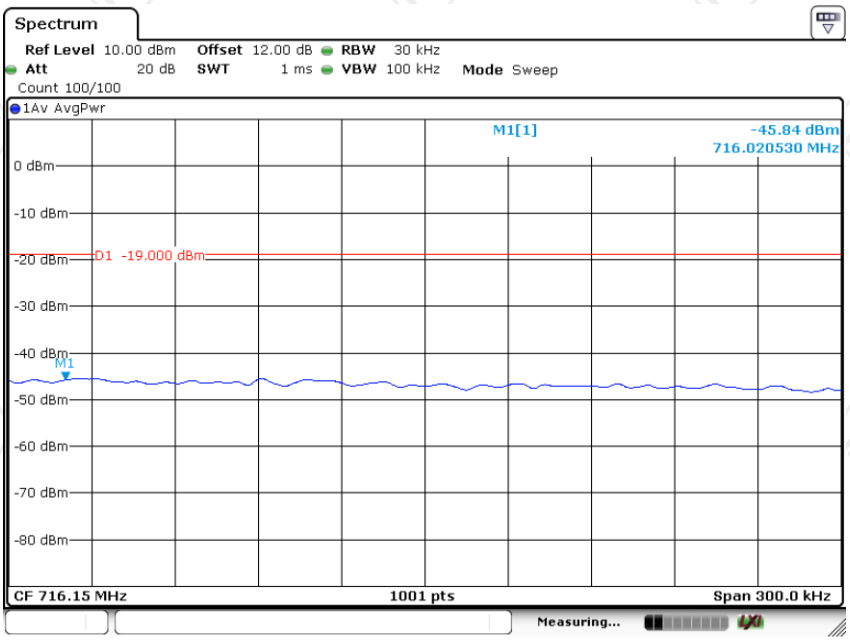
Lower700MHz CDMA UL Right Side Pre AGC + 10 dB



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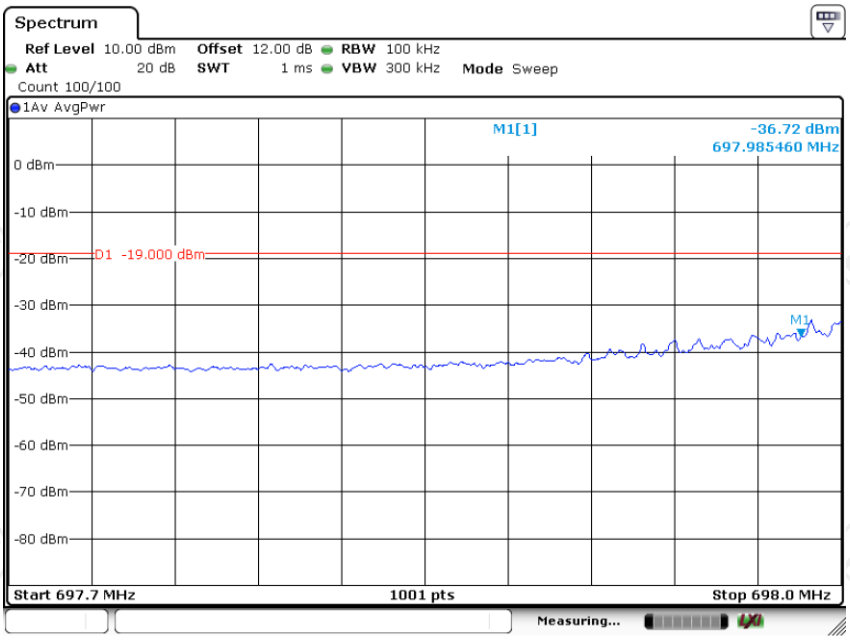
Lower700MHz LTE UL Left Side Pre AGC



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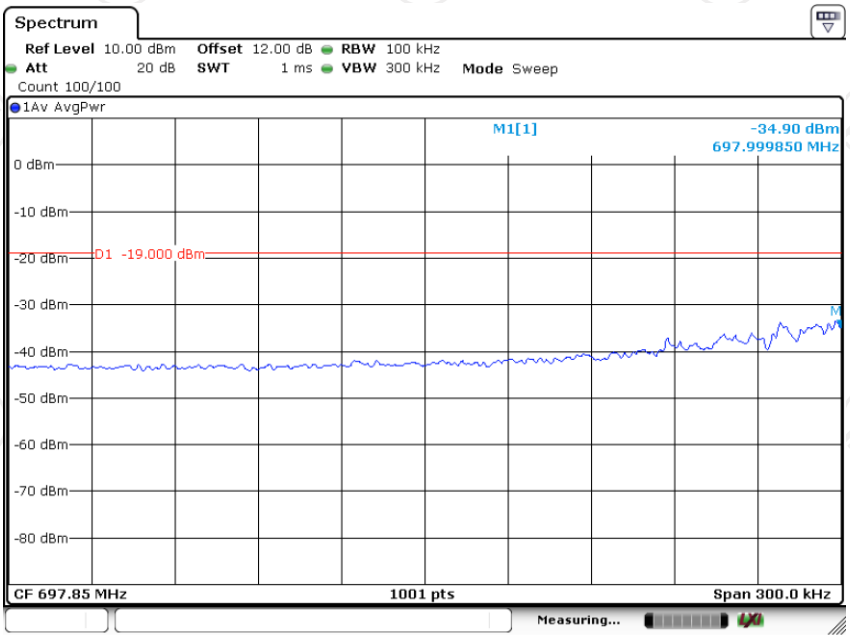
Lower700MHz LTE UL Left Side Pre AGC + 10 dB



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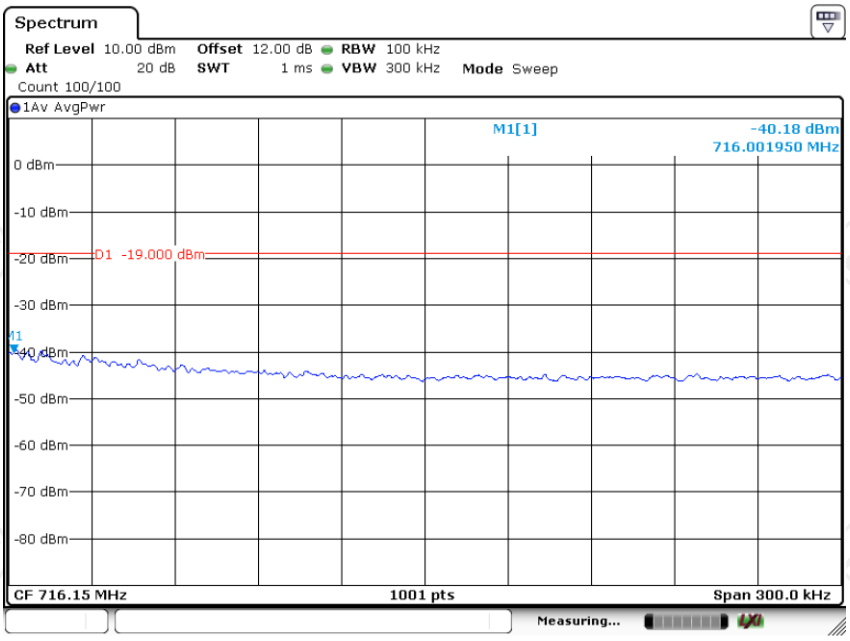
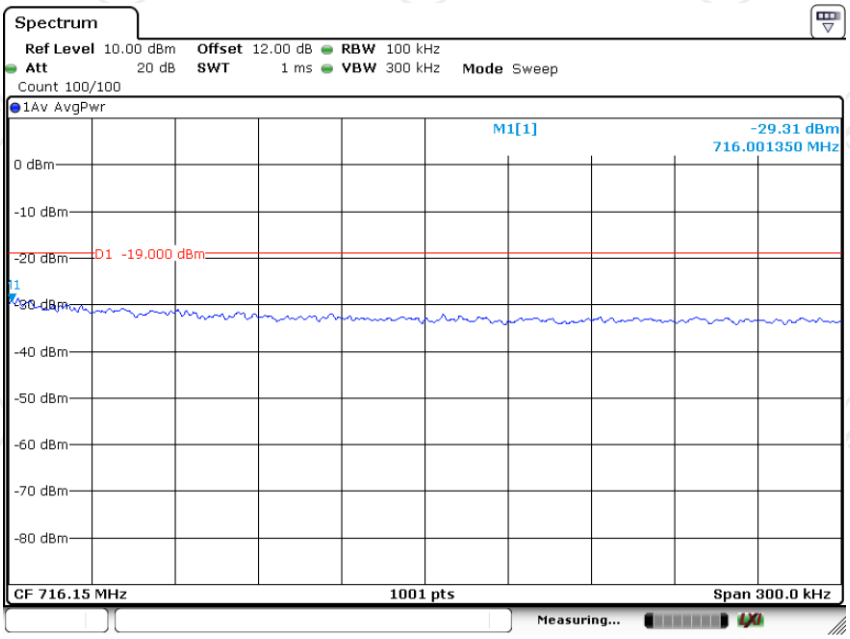
Lower700MHz LTE UL Right Side Pre AGC



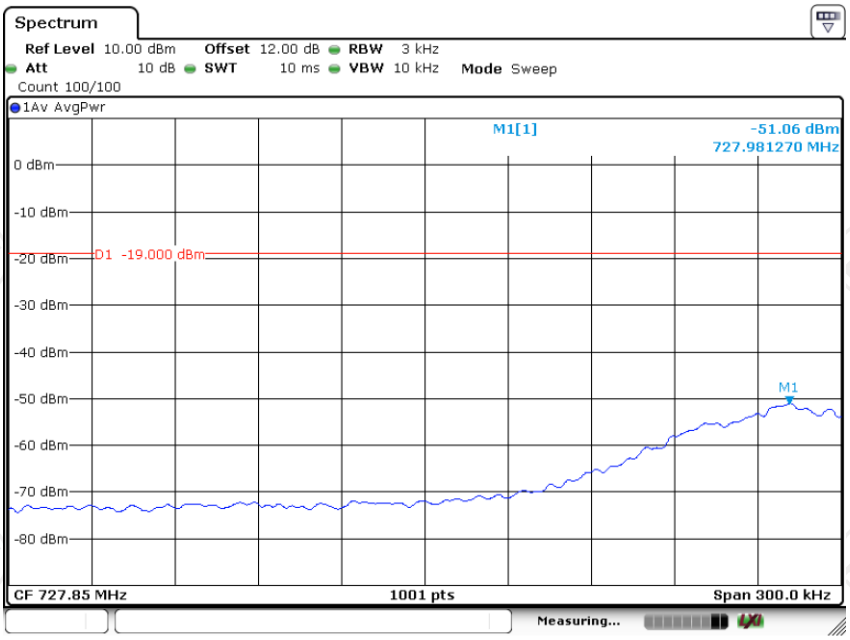
Date: 27.JUN.2024 16:38:47

Lower700MHz LTE UL Right Side Pre AGC + 10 dB



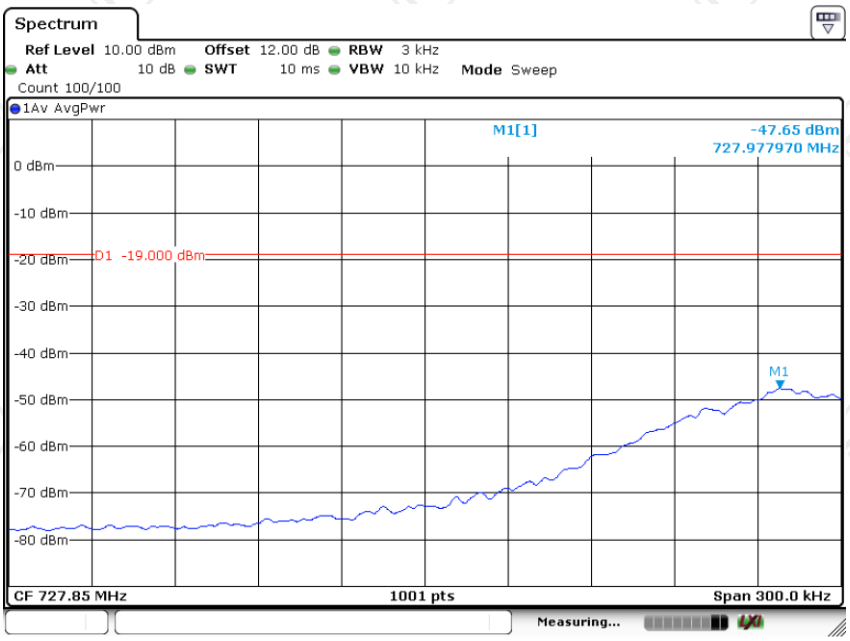
Date: 27.JUN.2024 16:39:03

Lower700MHz GSM DL Left Side Pre AGC



Date: 27.JUN.2024 11:28:38

Lower700MHz GSM DL Left Side Pre AGC + 10 dB



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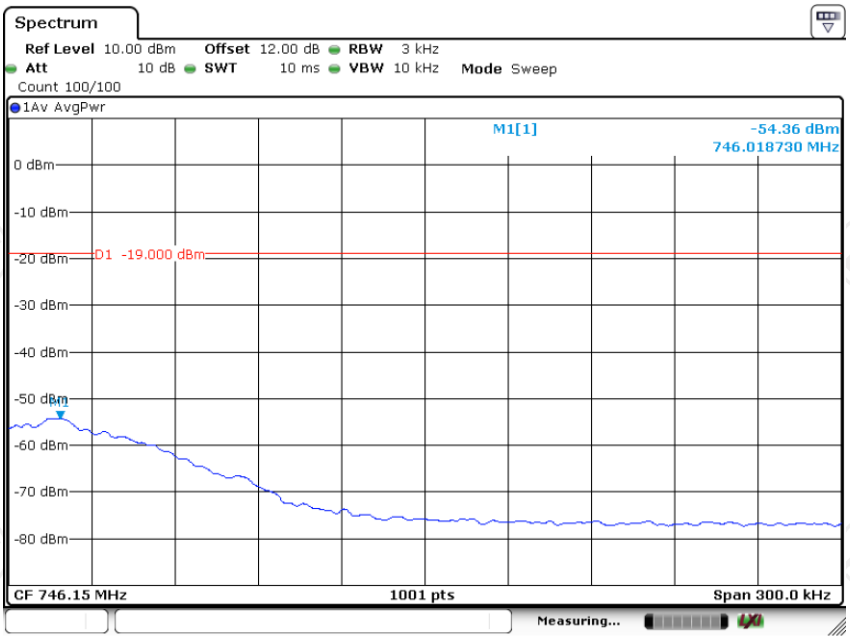
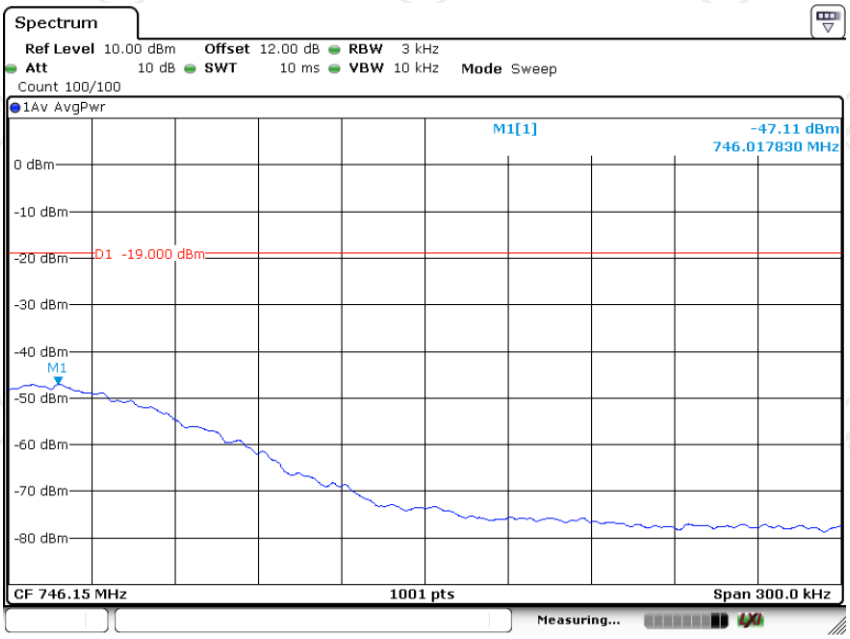
Lower700MHz GSM DL Right Side Pre AGC



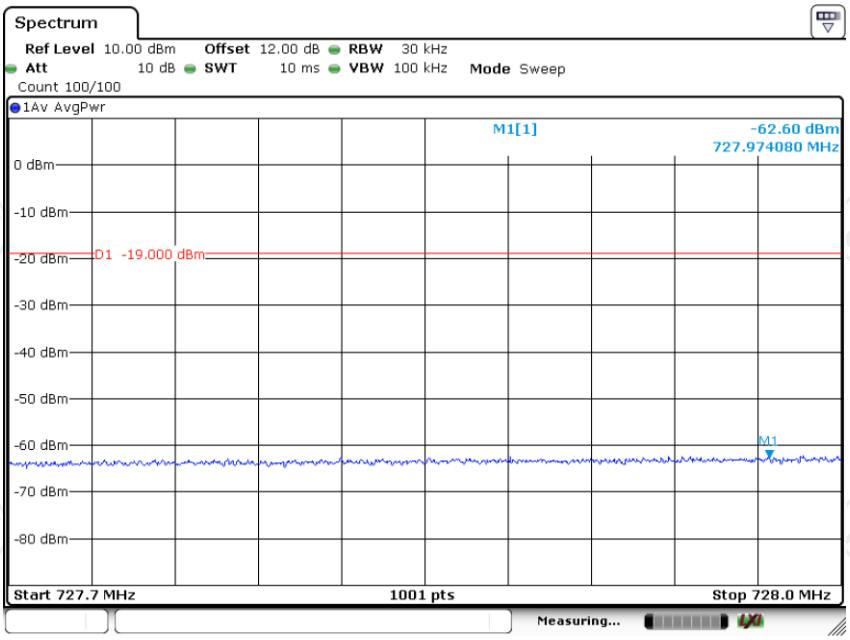
Date: 27.JUN.2024 11:31:00

Lower700MHz GSM DL Right Side Pre AGC + 10 dB



Date: 27.JUN.2024 11:31:17

Lower700MHz CDMA DL Left Side Pre AGC



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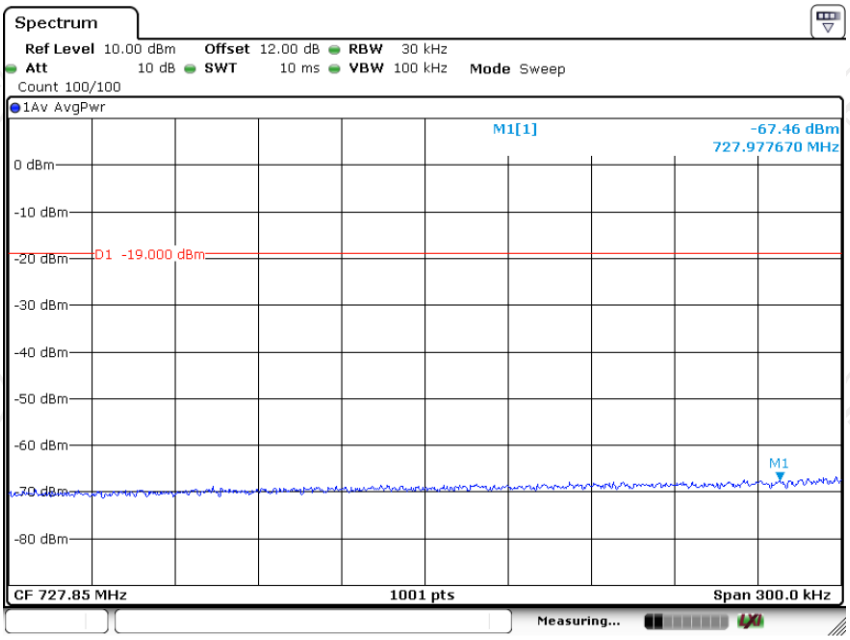
Lower700MHz CDMA DL Left Side Pre AGC + 10 dB



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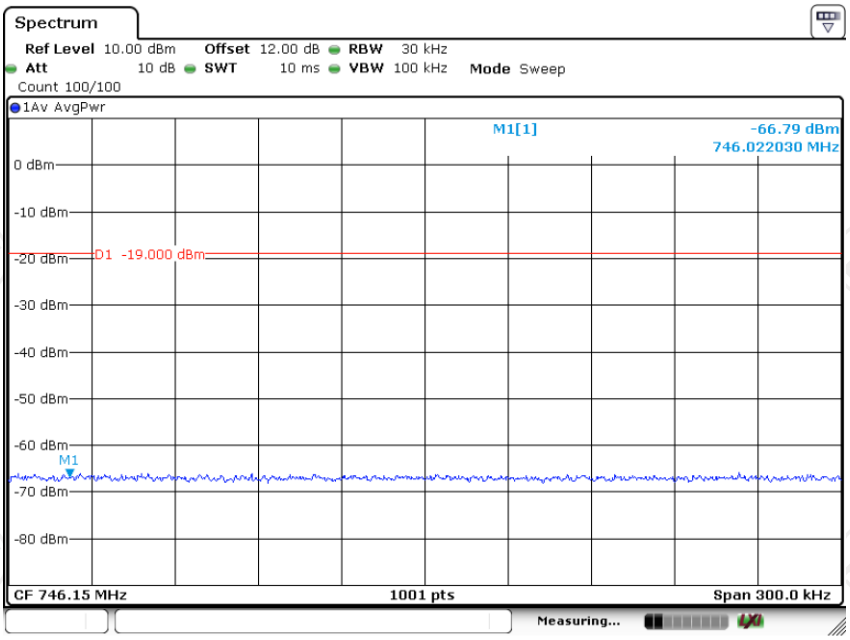
Lower700MHz CDMA DL Right Side Pre AGC



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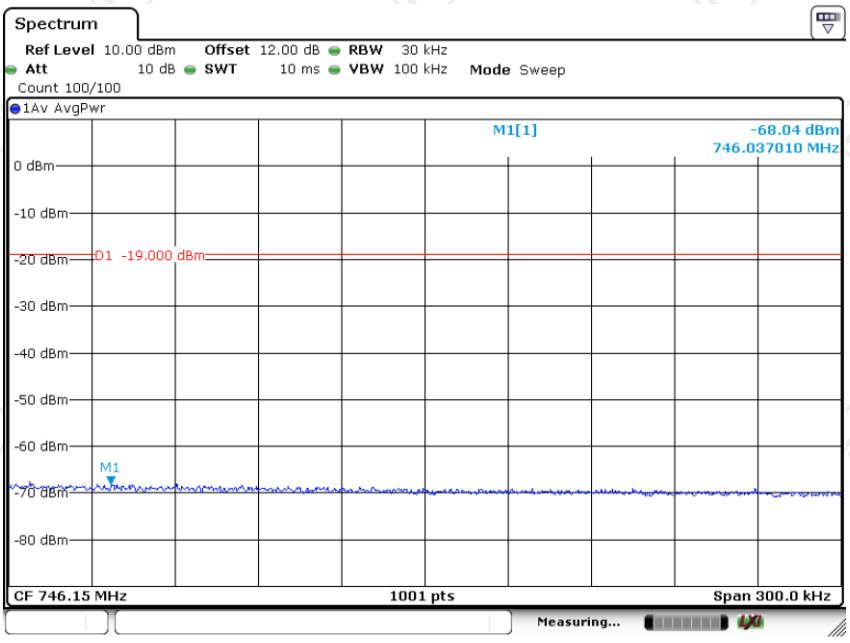
Lower700MHz CDMA DL Right Side Pre AGC + 10 dB



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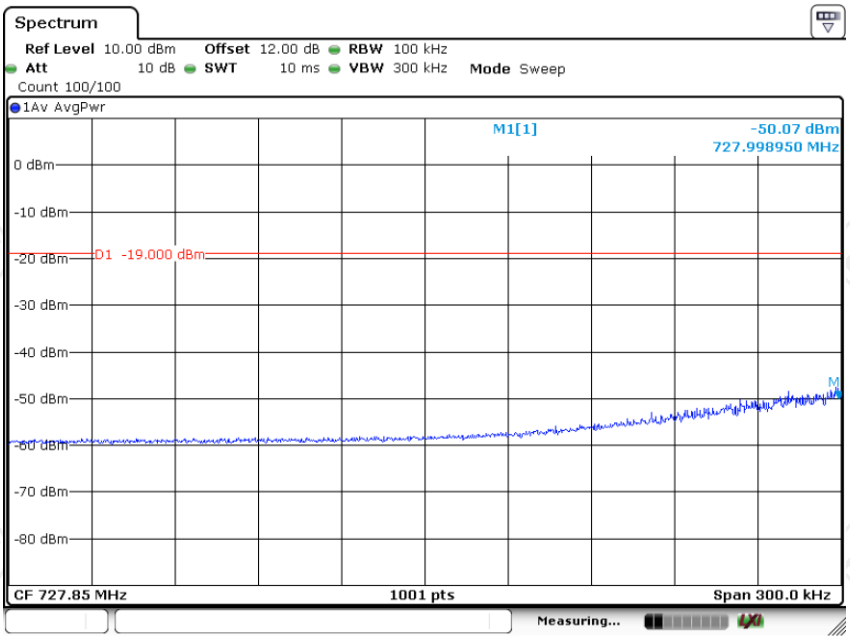
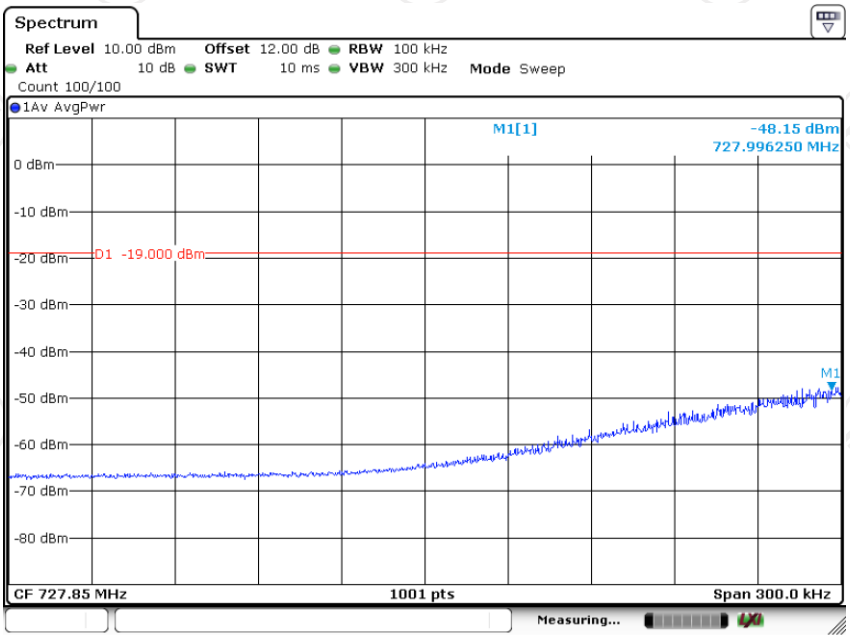
Lower700MHz LTE DL Left Side Pre AGC



Date: 27.JUN.2024 11:25:00

Lower700MHz LTE DL Left Side Pre AGC + 10 dB



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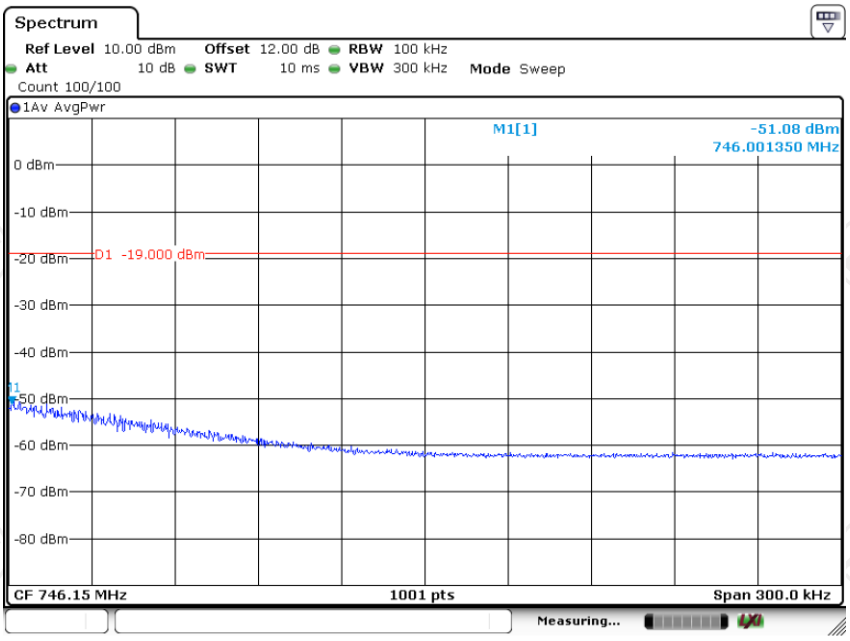
Lower700MHz LTE DL Right Side Pre AGC



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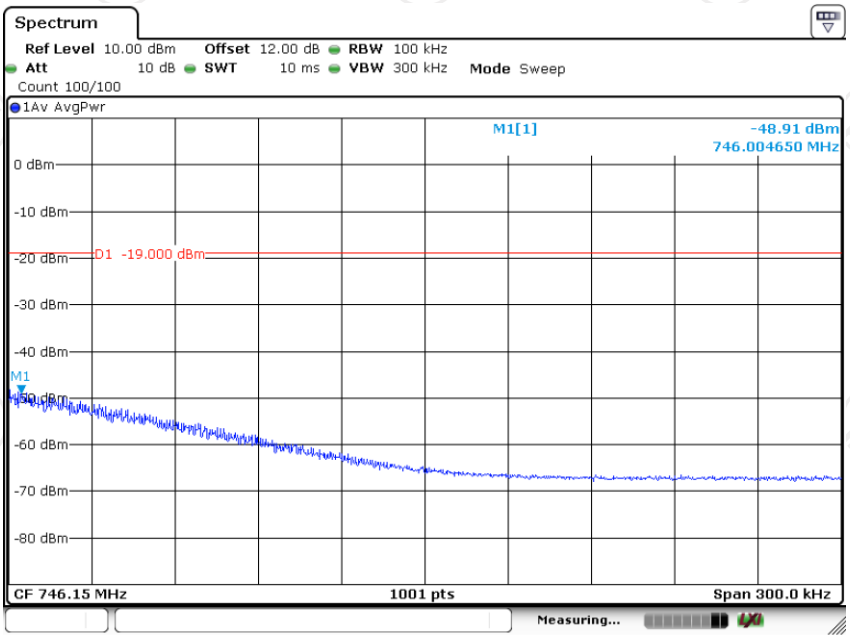
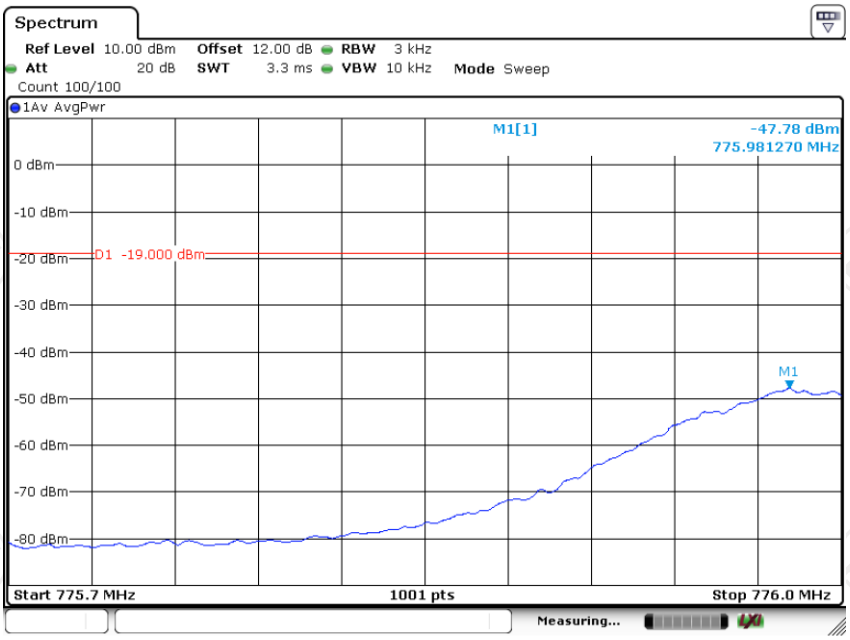
Lower700MHz LTE DL Right Side Pre AGC + 10 dB



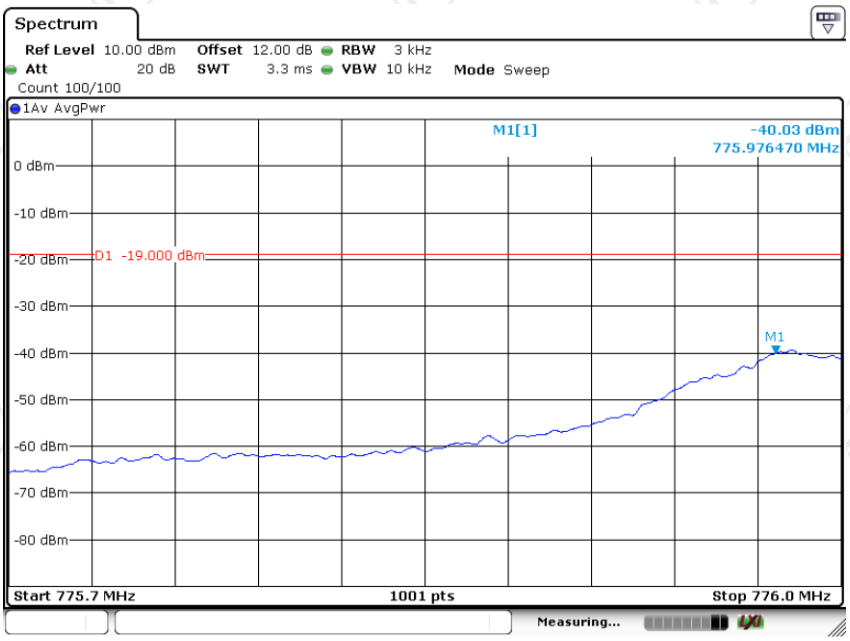
Date: 27.JUN.2024 11:33:32

Upper700MHz GSM UL Left Side Pre AGC



Date: 27.JUN.2024 16:28:46

Upper700MHz GSM UL Left Side Pre AGC + 10 dB



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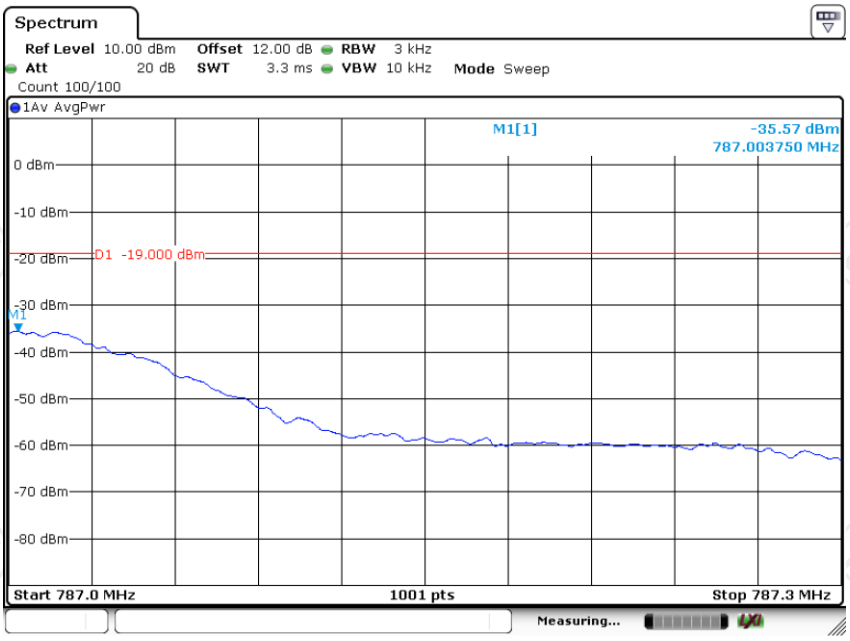
Upper700MHz GSM UL Right Side Pre AGC



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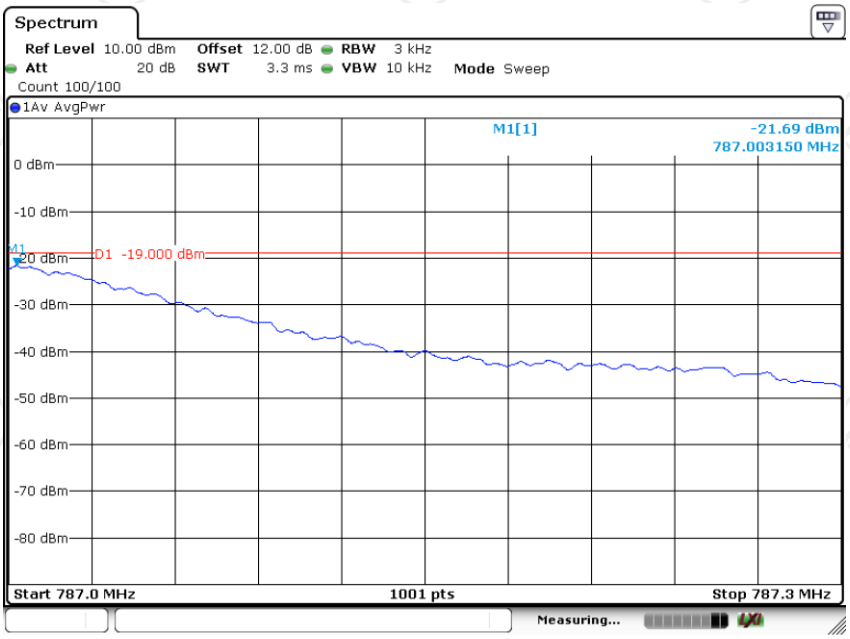
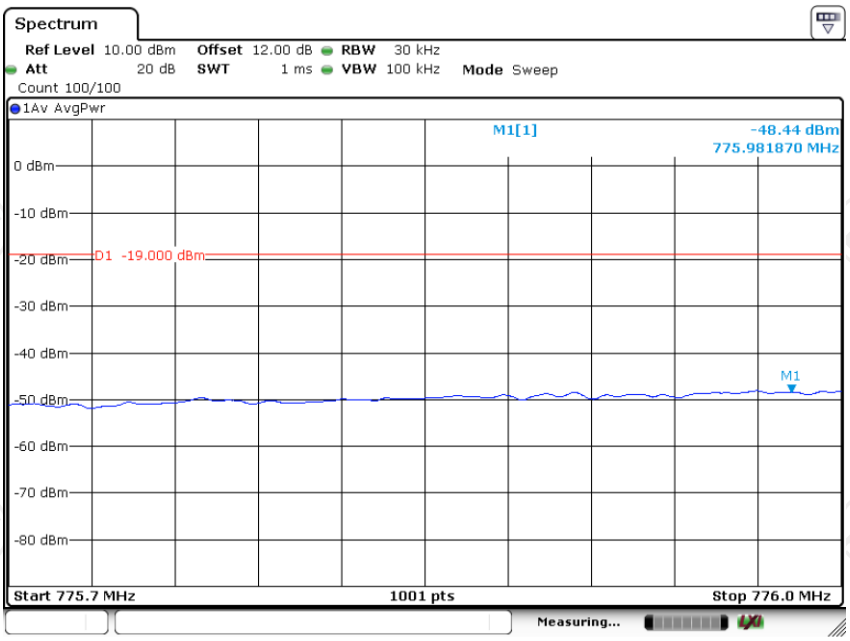
Upper700MHz GSM UL Right Side Pre AGC + 10 dB



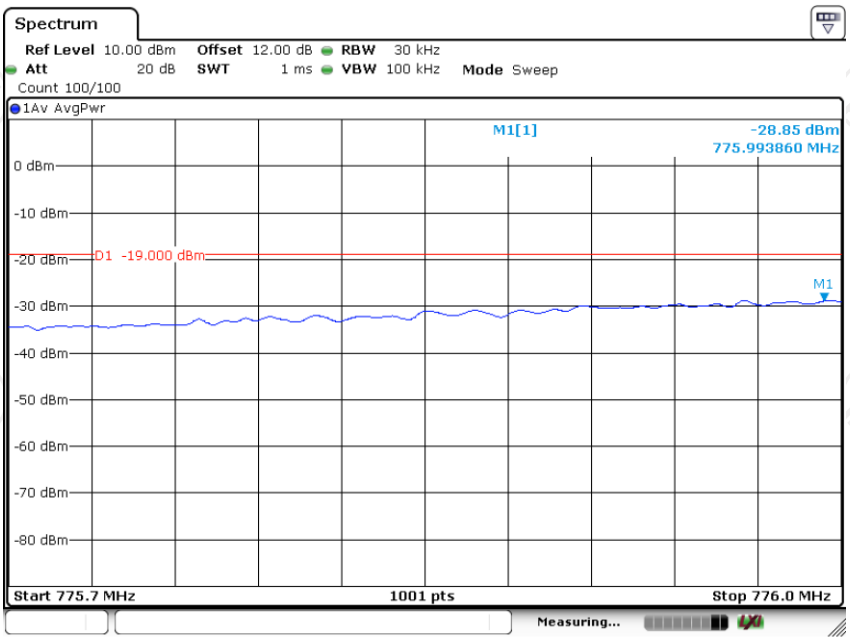
Date: 27.JUN.2024 16:30:08

Upper700MHz CDMA UL Left Side Pre AGC



Date: 27.JUN.2024 16:28:03

Upper700MHz CDMA UL Left Side Pre AGC + 10 dB



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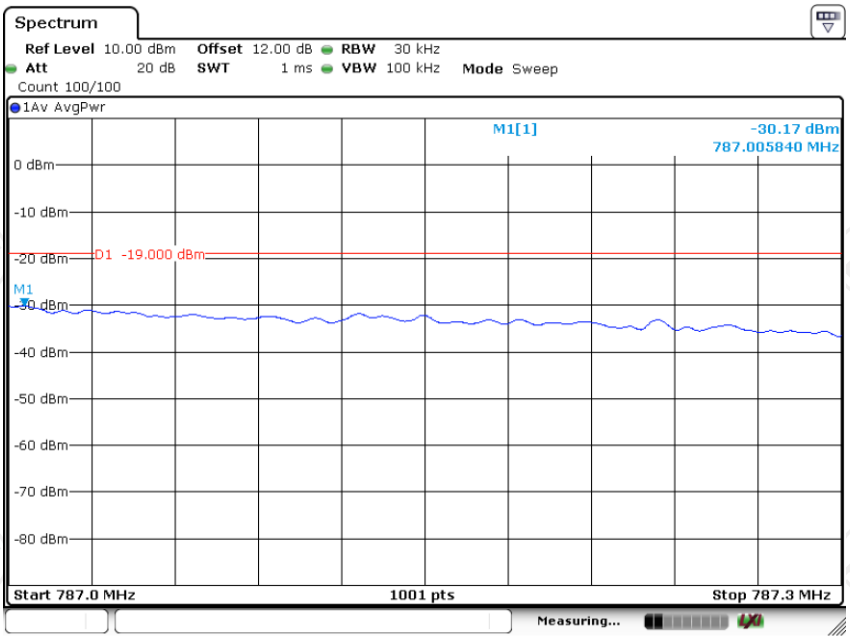
Upper700MHz CDMA UL Right Side Pre AGC



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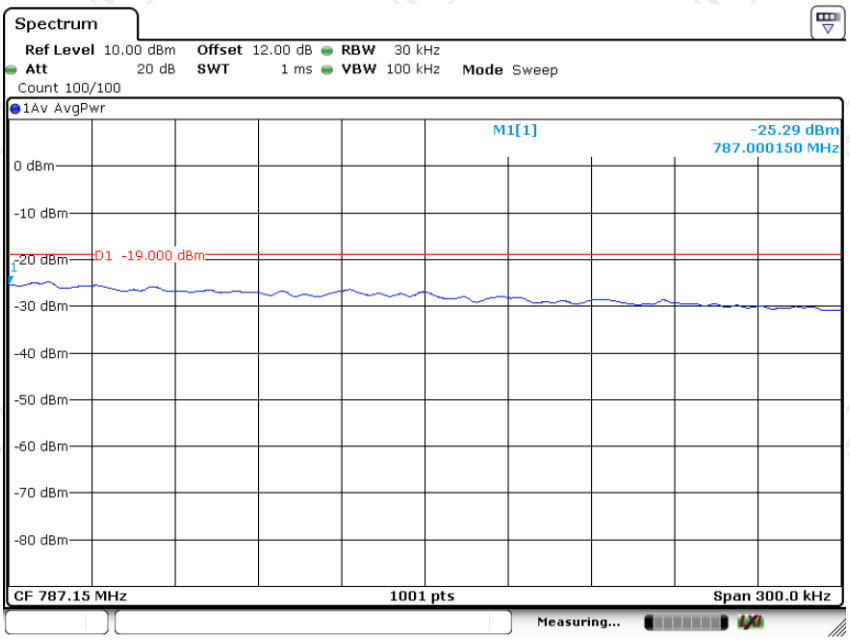
Upper700MHz CDMA UL Right Side Pre AGC + 10 dB



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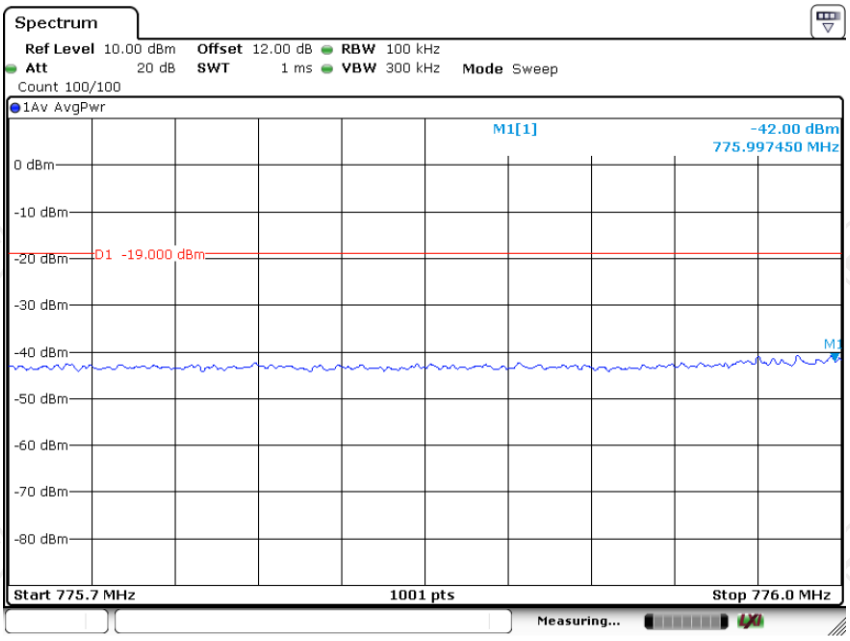
Upper700MHz LTE UL Left Side Pre AGC



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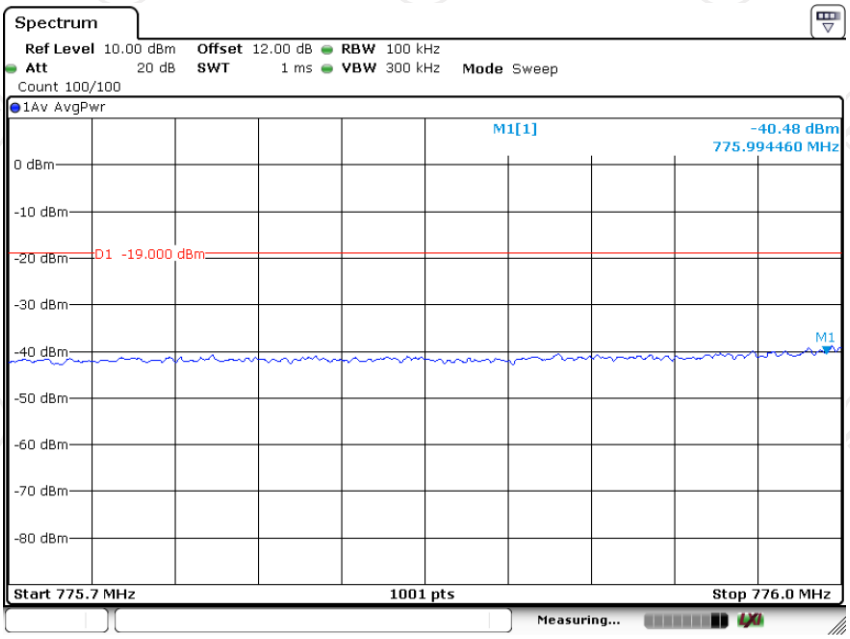
Upper700MHz LTE UL Left Side Pre AGC + 10 dB



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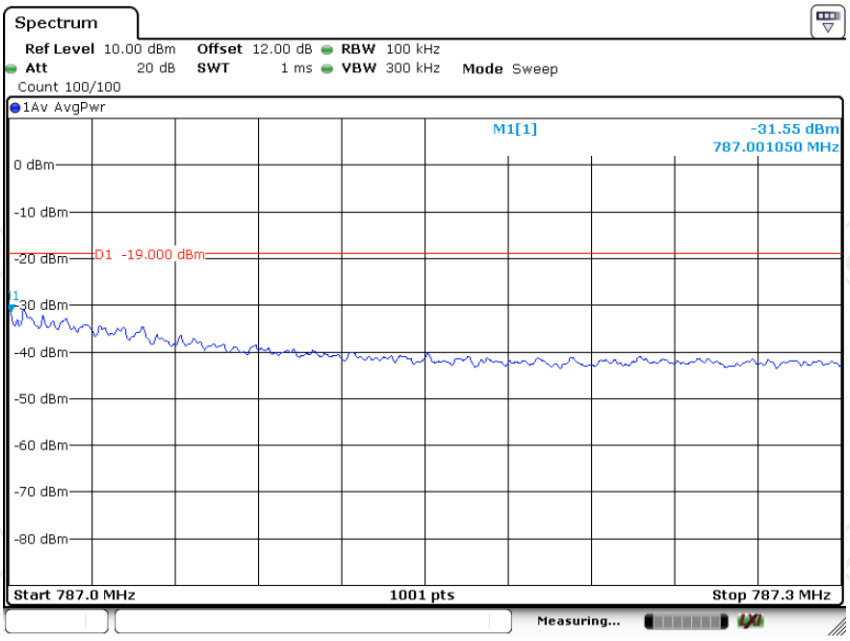
Upper700MHz LTE UL Right Side Pre AGC



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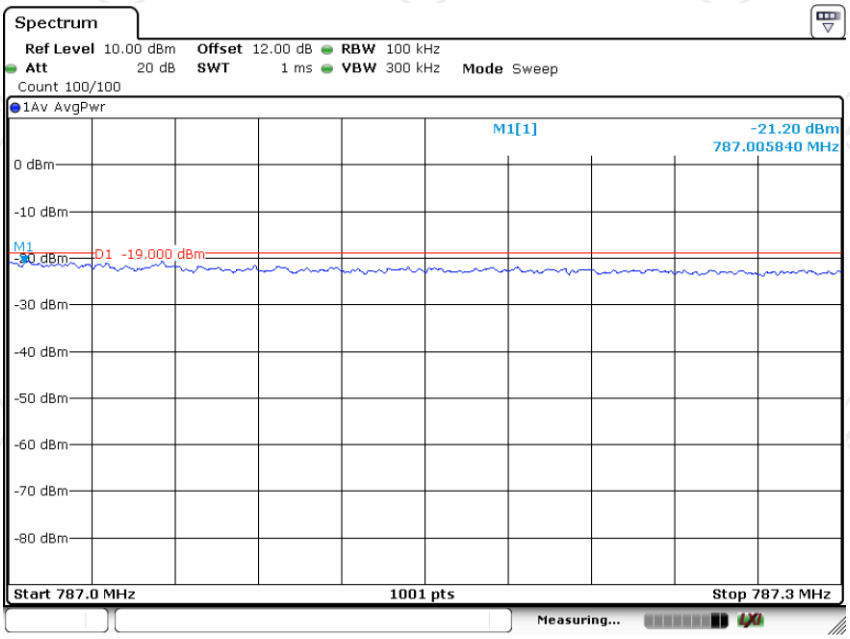
Upper700MHz LTE UL Right Side Pre AGC + 10 dB



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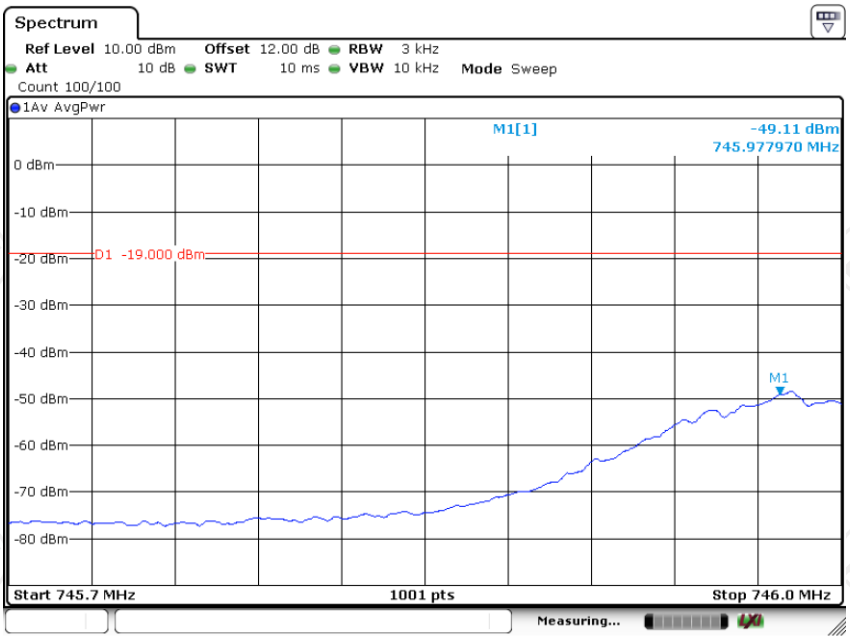
Upper700MHz GSM DL Left Side Pre AGC



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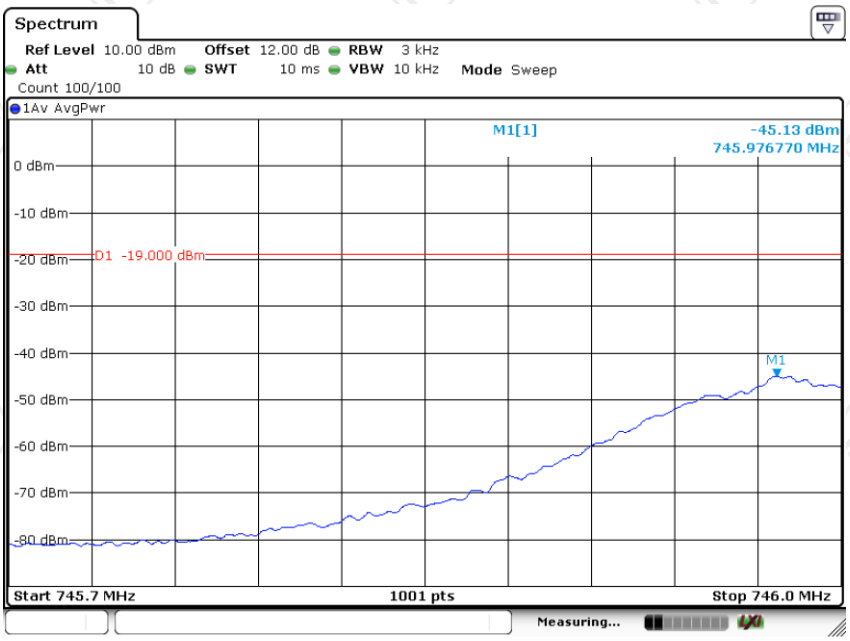
Upper700MHz GSM DL Left Side Pre AGC + 10 dB



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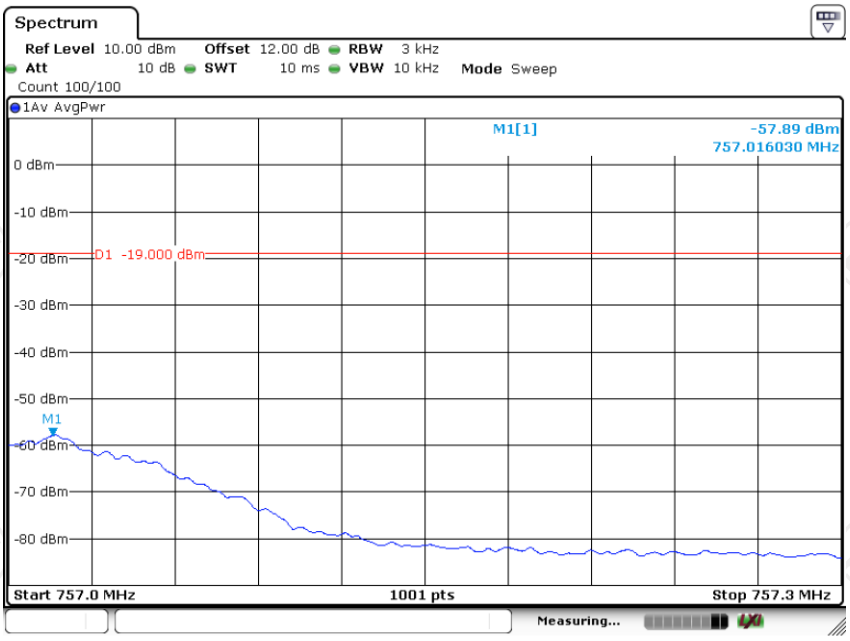
Upper700MHz GSM DL Right Side Pre AGC



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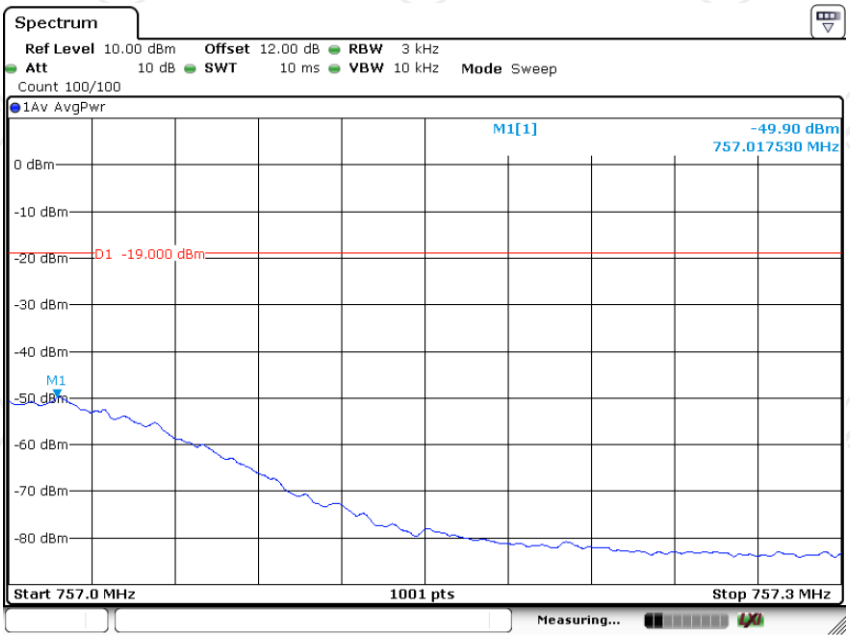
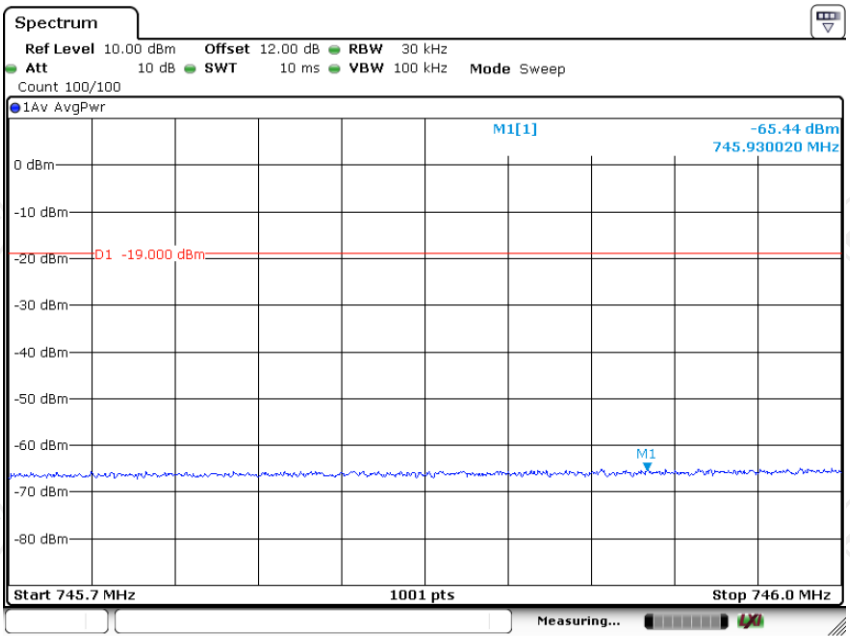
Upper700MHz GSM DL Right Side Pre AGC + 10 dB



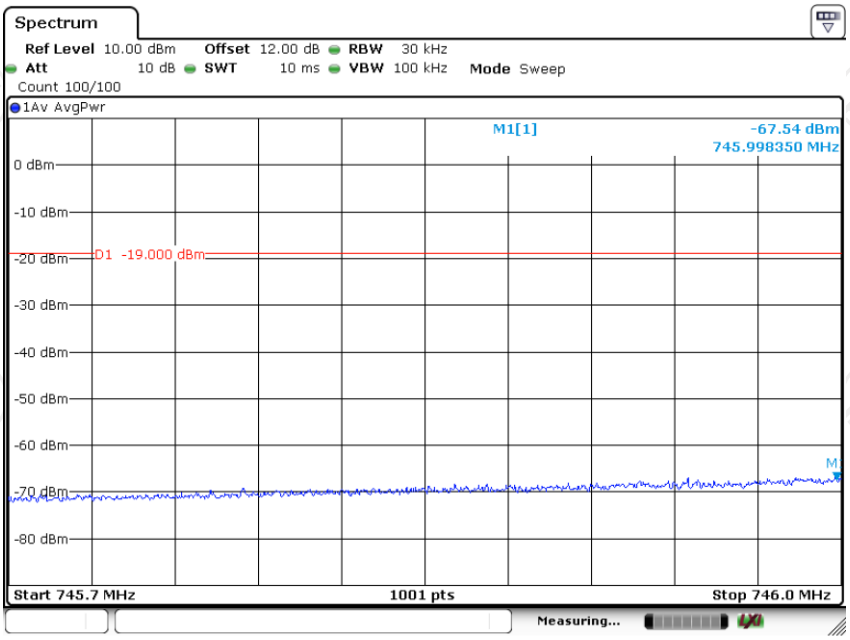
Date: 27.JUN.2024 11:39:00

Upper700MHz CDMA DL Left Side Pre AGC



Date: 27.JUN.2024 11:36:21

Upper700MHz CDMA DL Left Side Pre AGC + 10 dB



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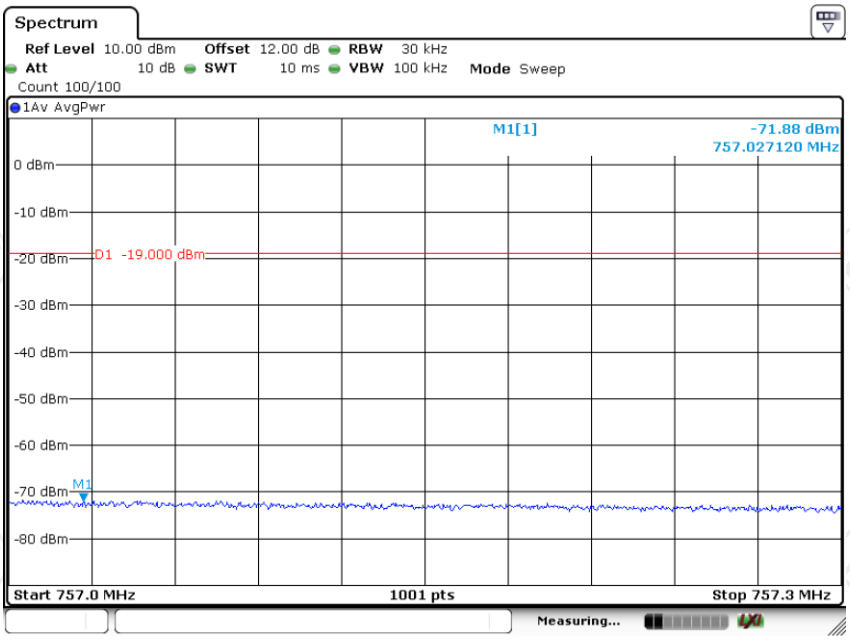
Upper700MHz CDMA DL Right Side Pre AGC



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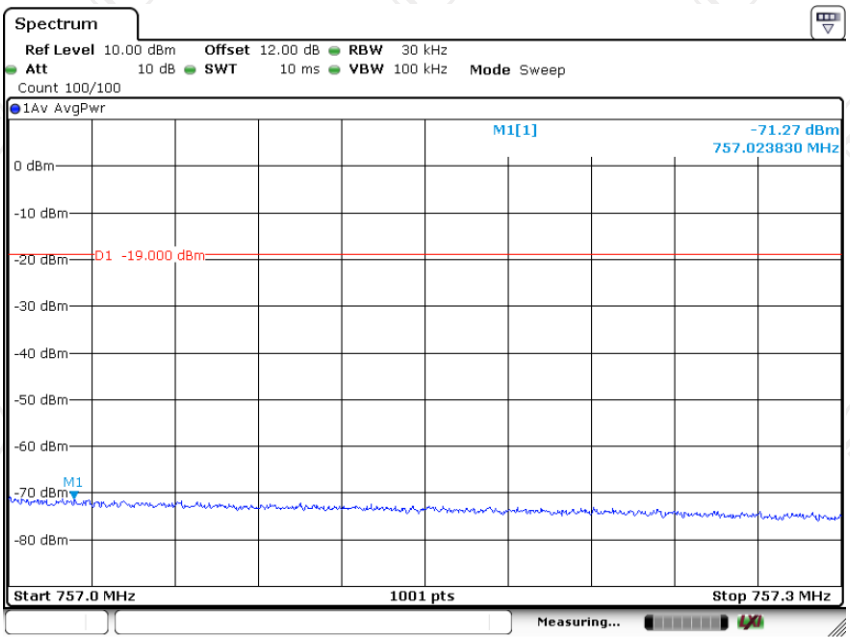
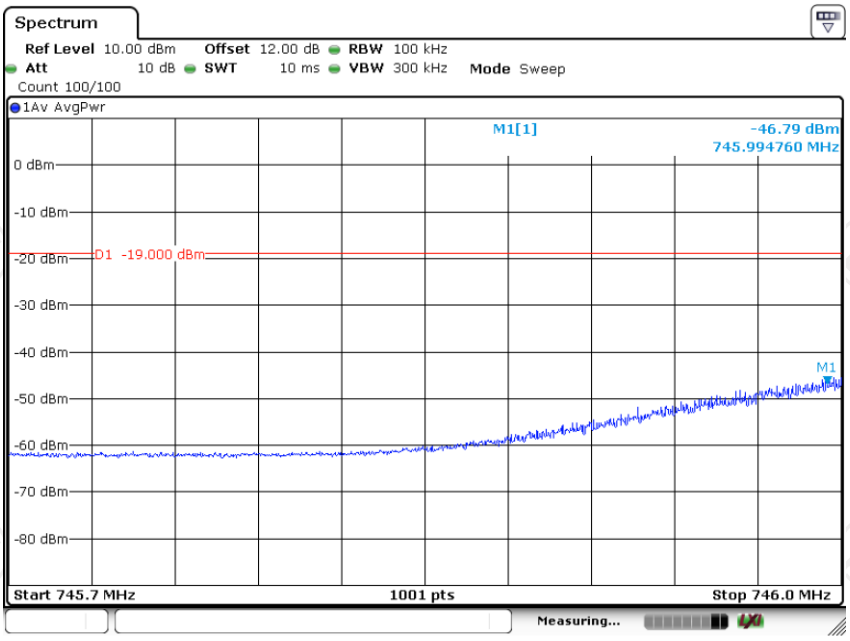
Upper700MHz CDMA DL Right Side Pre AGC + 10 dB



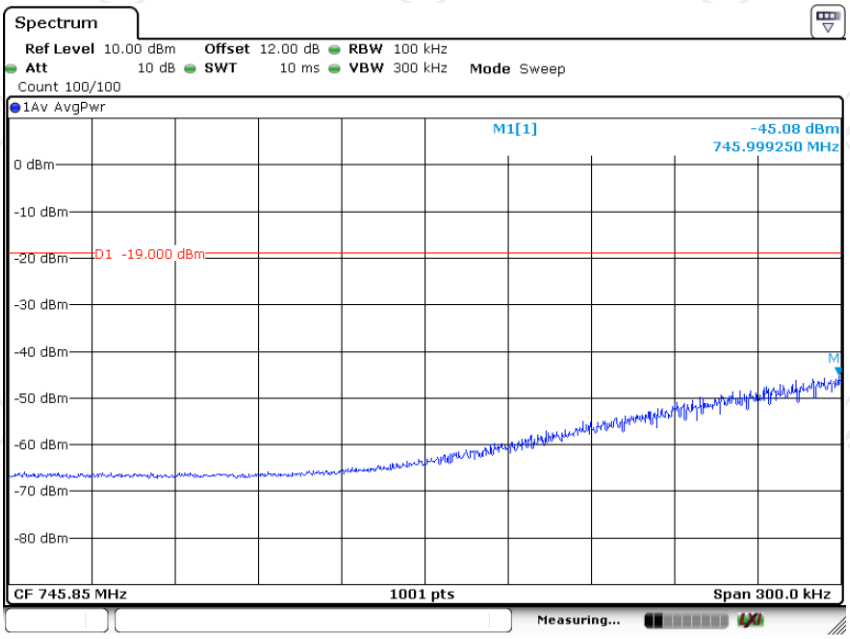
Date: 27.JUN.2024 11:40:39

Upper700MHz LTE DL Left Side Pre AGC



Date: 27.JUN.2024 11:34:41

Upper700MHz LTE DL Left Side Pre AGC + 10 dB



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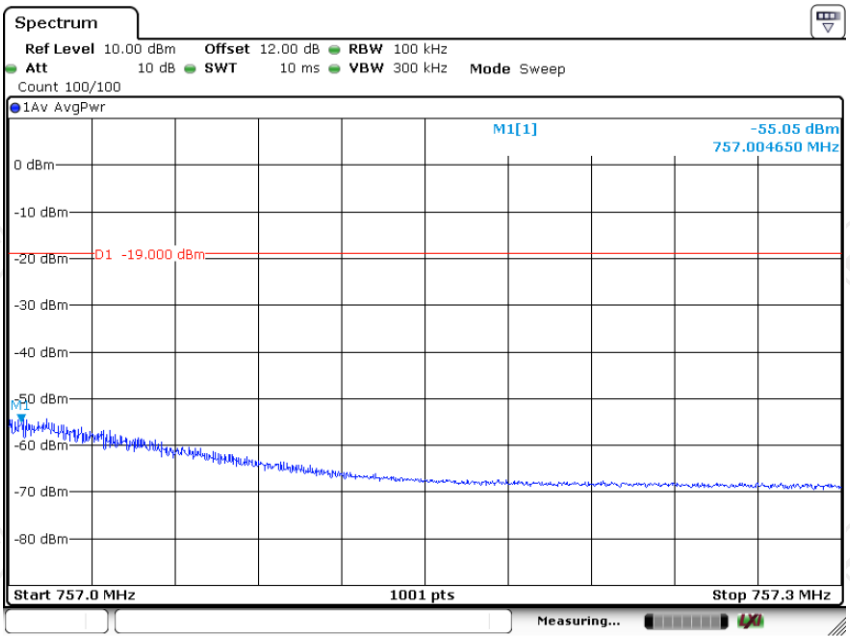
Upper700MHz LTE DL Right Side Pre AGC



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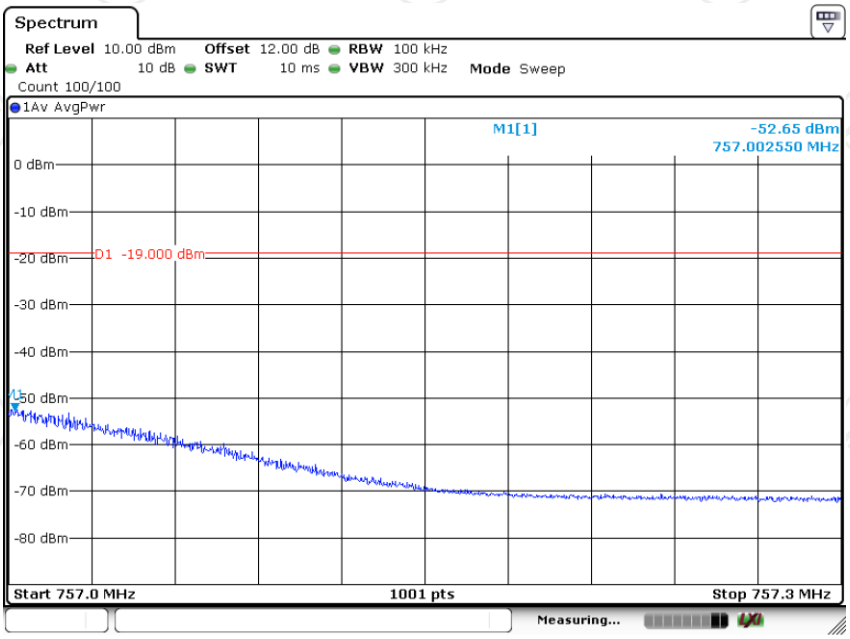
Upper700MHz LTE DL Right Side Pre AGC + 10 dB



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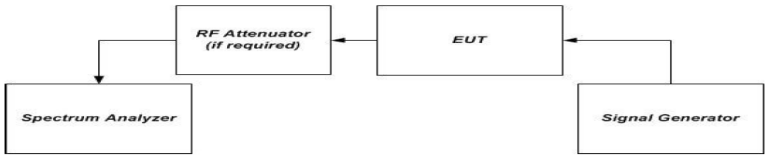
Note1: Path1 and Path2 have been tested, only the worst case (Path1) is reported.
Note2: Path1 is Outdoor + Indoor 1
Note3: Path2 is Outdoor + Indoor 2

5.5. Conducted Spurious Emission

5.5.1. Test Specification

Test Requirement:	FCC Part2 Section 1051; FCC Rules Part 27 Subpart C, Section 27.53
Test Method:	KDB 935210 D03 Signal Booster Measurements v04r04
Limit:	-13 dBm； For equipment operating in the frequency bands 746-756 MHz and 777-787 MHz, The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least: (i) 76 + 10 log10 p (watts), dB, for base and fixed equipment, and (ii) 65 + 10 log10 p (watts), dB, for mobile and portable equipment.
Test Setup:	
Test Procedure:	a) Connect the EUT to the test equipment as shown in Set-Up. Begin with the uplink output connected to the spectrum analyzer. b) Configure the signal generator for AWGN with a 99% occupied bandwidth of 4.1 MHz operation with a center frequency corresponding to the center of the CMRS band under test. c) Set the signal generator amplitude to the level determined in the power measurement procedure in Maximum power. d) Turn on the signal generator RF output and measure the spurious emission power levels with an appropriate measurement instrument as follows. e) Set RBW = measurement bandwidth specified in the applicable rule section for the operational frequency band under consideration (see Annex A for relevant cross-references). Note that many of the individual rule sections permit the use of a narrower RBW (typically ≥ 1% of the emission bandwidth) to enhance measurement accuracy, but the result must then be integrated over the specified measurement bandwidth. f) Set VBW = 3 X RBW. g) Select the power averaging (RMS) detector. (See above note regarding the use of a peak detector for preliminary measurements.) h) Sweep time = auto-couple. i) Set the analyzer start frequency to the lowest radio frequency signal generated in the equipment, without going below 9 kHz, and the stop frequency to the lower band/block edge frequency minus 100 kHz or 1 MHz, as specified in the applicable rule part. Note that the number of measurement points in each sweep must be ≥ (2 X span/RBW) which may require that the measurement range defined by the start and stop frequencies above be subdivided, depending on the available number of measurement points provided by the spectrum analyzer. Trace average at least 10 traces in power averaging (i.e., RMS) mode.

	j) Use the peak marker function to identify the highest amplitude level over each measured frequency range Record the frequency and amplitude and capture a Test Plots for inclusion in the test report. k) Reset the analyzer start frequency to the upper band/block edge frequency plus 100 kHz or 1 MHz, as specified in the applicable rule part, and the analyzer stop frequency to 10 times the highest frequency of the fundamental emission. Note that the number of measurement points in each sweep must be ≥ (2 X span/RBW) which may require that the measurement range defined by the start and stop frequencies above be subdivided, depending on the available number of measurement points provided by the spectrum analyzer. l) Use the peak marker function to identify the highest amplitude level over each of the measured frequency ranges. Record the frequency and amplitude and capture a Test Plots for inclusion in the test report. m) Repeat steps b) through l) for each supported frequency band of operation.
Test Result:	PASS

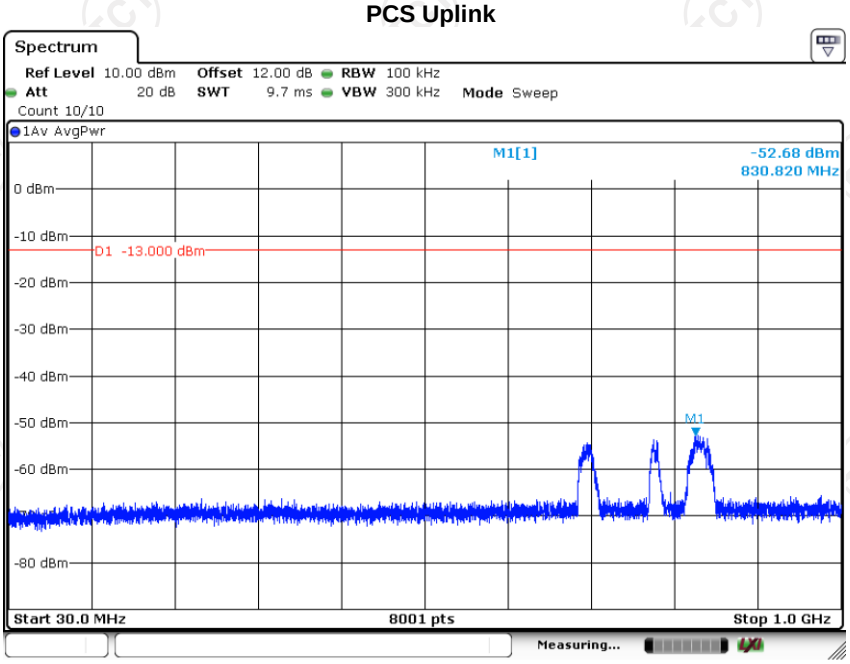
5.5.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Signal Generator	Agilent	N5182A	MY47070282	Feb. 01, 2024	Jan. 31, 2025
Spectrum Analyzer	R&S	FSV40-N	102188	Feb. 01, 2024	Jan. 31, 2025
Attenuator	50FP-006-H3	JFW	907763	/	/

5.5.3. Test data

Test Plots

PCS Uplink



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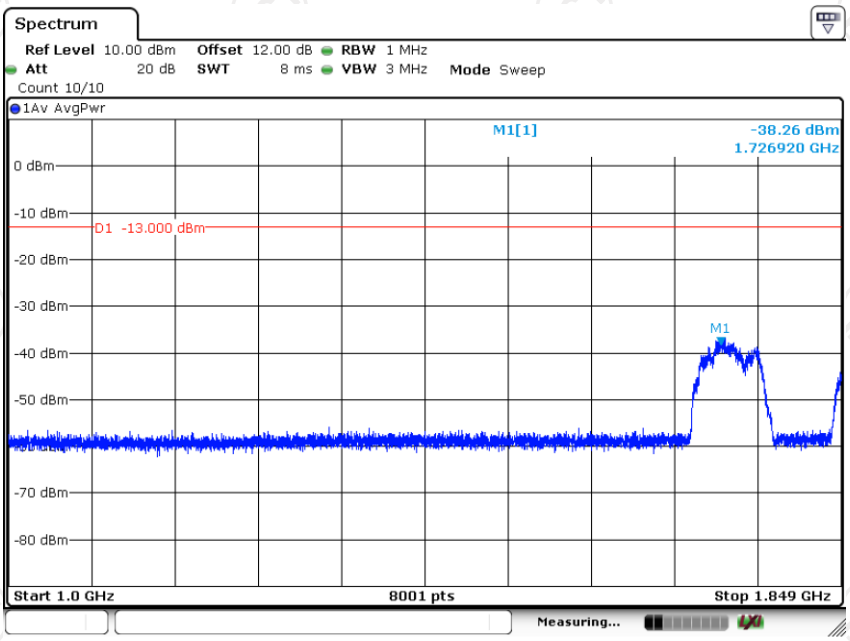

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