

9.6. Conducted Spurious Emissions and Band-Edge

Test Conditions for Conducted Spurious and Band-Edge Emissions			
Rules and Sections:	FCC CFR 47:2.1051 FCC CFR 47: 22.917 FCC CFR 47: 27.53 RSS-132: 5.5 RSS-199: 4.5	Ambient Temp. (°C):	20.0 - 24.5
Test Heading:	Conducted Spurious and Band-Edge Emissions	Rel. Humidity (%):	32 - 45
Standard Section(s):	ANSI C63.26: 5.7.4 & 5.7.3	Pressure (mBars):	999 - 1001
Reference Document(s):	See Normative References		

Test Procedure for Conducted Spurious and Band-Edge Emissions

Conducted Spurious Emissions and Band-edge were measured with a spectrum analyzer connected to the antenna terminal, while the EUT is operating in transmission mode at the appropriate frequency.

Test configuration and setup used for the measurement was per the Conducted Test Set-up specified in this document.

From ANSI C63.26: 5.7.4 Spurious unwanted emission measurements:

- a) Set the spectrum analyzer start frequency to the lowest frequency generated by the EUT, without going below 9 kHz, and the stop frequency to the lower frequency covered by the measurements previously performed in 5.7.3. As an alternative, the stop frequency can be set to the value specified in 5.1.1, depending on the EUT operating range, if the resulting plot can clearly demonstrate compliance for all frequencies not addressed by the out-of-band emissions measurements performed as per 5.7.3.
- b) When using an average power (rms) detector, ensure that the number of points in the sweep $\geq 2 \times (\text{span} / \text{RBW})$. This may require that the measurement range defined by the start and stop frequencies be subdivided, depending on the spectrum analyzer capabilities. This requirement does not apply to peak-detected power measurements. When average power is specified by the applicable regulation, a peak-detector can be utilized for preliminary measurements to accommodate wider frequency spans. Any emissions found in the preliminary measurement to exceed the applicable limit(s) shall be further examined using a power averaging (rms) detector with the minimum number of measurement points as defined above.
- c) The sweep time should be set to auto-couple for performing peak-detector measurements. For measurements that use a power averaging (rms) detector, the sweep time shall be set as described for out-of-band emissions measurements in item d) of 5.7.3.
- d) Identify and measure the highest spurious emission levels in each frequency range. It is not necessary to re-measure the out-of-band emissions as a part of this test. Record the frequencies and amplitudes corresponding to the measured emissions and capture the data plots.
- e) Repeat step b) through step d) for the upper spurious emission frequency range if not already captured by a wide span measurement performed as per the alternative provided in step a). The upper frequency for this measurement is defined in 5.1.1 as a function of the EUT operating range.
- f) Compare the results with the corresponding limit in the applicable regulation. g) The test report shall include the data plots of the measuring instrument display and the measured data.

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.

Limits for Conducted Spurious Emissions

Band 5: §22.917: $< 43 + 10\log_{10}(P[\text{Watts}])$

Band 7: §27.53(m)(4): $< 43 + 10\log_{10}(P[\text{Watts}])$

Band 41: §27.53(m)(4): $< 43 + 10\log_{10}(P[\text{Watts}])$

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From ANSI C63.26: 5.7.3: Out-of-band unwanted emissions measurements

- a) Set the spectrum analyzer center frequency to the block, band, or channel edge frequency.
- b) Set the span wide enough to capture the fundamental emission closest to the authorized block or band edge, and to include all modulation products that spill into the immediately adjacent frequency band. In some cases, it may be possible to set the center frequency and span so as to encompass the fundamental emission and the unwanted out-of-band (band-edge) emissions on either side of the authorized block, band, or channel. This can be accomplished with a single (slow) sweep, if adequate overload protection and sufficient dynamic range can be maintained.
- c) Set the number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$.
- d) Sweep time should be auto for peak detection. For rms detection the sweep time should be set as follows:
 - 1) If the device can be configured to transmit continuously (duty cycle $\geq 98\%$), set the (sweep time) $>$ (number of points in sweep) \times (symbol period) (e.g., by a factor of $10 \times$ symbol period \times number of points). Increasing the sweep time (i.e., slowing the sweep speed) will allow for averaging over multiple symbols
 - 2) If the device cannot transmit continuously (duty cycle $< 98\%$), a gated sweep shall be used when possible (i.e., gate triggered such that the analyzer only sweeps when the device is transmitting at full power), set the sweep time $>$ (number of points in sweep) \times (symbol period) but the sweep time shall always be maintained at a value that is less than or equal to the minimum transmission time.
 - 3) If the device cannot be configured to transmit continuously (duty cycle $< 98\%$) and a freerunning sweep must be used, set the sweep time so that the averaging is performed over multiple on/off cycles by setting the sweep time $>$ (number of points in sweep) \times (transmitter period) (i.e., the transmit on-time + the off-time). The spectrum analyzer readings shall subsequently be corrected by $[10 \log (1/\text{duty cycle})]$. This assumes that the transmission period and duty cycle is relatively constant (duty cycle variation $\leq \pm 2\%$).
 - 4) If the device cannot be configured to transmit continuously and a free-running sweep must be used, and if the transmissions exhibit a non-constant duty cycle (duty cycle variations $> \pm 2\%$), set the sweep time so that the averaging is performed over the on-period by setting the sweep time $>$ (symbol period) \times (number of points), while also maintaining the sweep time $<$ (transmitter on-time). The trace mode shall be set to max hold, since not every display point will be averaged only over just the on-time. Thus, multiple sweeps (e.g., 100) in maximum hold are necessary to ensure that the maximum power is measured.
- e) The test report shall include the plots of the measuring instrument display and the measured data.

9.6.1. Band 5 Conducted Spurious Emissions

9.6.1.1 QPSK

Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	3 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A					
Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
825.5 MHz	30 - 1000 MHz	-41.5	974.72	-13	-28.50
	1000 - 10000 MHz	-28.35	6969.93	-13	-15.35

CHAIN A					
Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
847.5 MHz	30 - 1000 MHz	-41.22	846.432	-13	-28.22
	1000 - 10000 MHz	-28.31	6699.39	-13	-15.31

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	5 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
826.5 MHz	30 - 1000 MHz	-43.73	529.579	-13	-30.73
	1000 - 10000 MHz	-28.19	6933.86	-13	-15.19

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
846.5 MHz	30 - 1000 MHz	-43.45	574.288	-13	-30.45
	1000 - 10000 MHz	-27.71	6843.68	-13	-14.71

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	10 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
829.0 MHz	30 - 1000 MHz	-45.904	696.754	-13.0	-32.90
	1000 - 10000 MHz	-31.9	7186.37	-13.0	-18.90

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
844.0 MHz	30 - 1000 MHz	-45.37	539.29	-13.0	-32.37
	1000 - 10000 MHz	-31.93	8196.39	-13.0	-18.93

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

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9.6.1.1 16QAM

Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	3 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
825.5 MHz	30 - 1000 MHz	-43.12	576.232	-13	-30.12
	1000 - 10000 MHz	-28.84	6843.68	-13	-15.84

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
847.5 MHz	30 - 1000 MHz	-42.73	677.314	-13	-29.73
	1000 - 10000 MHz	-28.51	6627.25	-13	-15.51

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	5 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
826.5 MHz	30 - 1000 MHz	-43.18	644.268	-13	-30.18
	1000 - 10000 MHz	-28.19	6663.32	-13	-15.19

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
846.5 MHz	30 - 1000 MHz	-43.23	486.813	-13	-30.23
	1000 - 10000 MHz	-28.96	6933.86	-13	-15.96

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	10 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
829.0 MHz	30 - 1000 MHz	-45.72	657.87	-13	-32.72
	1000 - 10000 MHz	-31.97	7294.58	-13	-18.97

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
844.0 MHz	30 - 1000 MHz	-45.85	368.236	-13	-32.85
	1000 - 10000 MHz	-31.95	7547.09	-13	-18.95

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

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9.6.2. Band 7 Conducted Spurious Emissions

9.6.2.1 QPSK

Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	5 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A					
Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2502.5 MHz	30 - 26000 MHz	-36.08	22617.13	-25	-11.08

CHAIN A					
Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2535 MHz	30 - 26000 MHz	-34.9	22669.17	-25	-9.9

CHAIN A					
Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2567.5 MHz	30 - 26000 MHz	-35.91	22513.04	-25	-10.91

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	10 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2505 MHz	30 - 26000 MHz	-35.59	22044.64	-25	-10.59

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2535 MHz	30 - 26000 MHz	-35.27	22461.00	-25	-10.27

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2565 MHz	30 - 26000 MHz	-35.84	22565.09	-25	-10.84

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	15 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2507.5 MHz	30 - 26000 MHz	-36.25	22669.17	-25	-11.25

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2535 MHz	30 - 26000 MHz	-36.11	21888.51	-25	-11.11

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2562.5 MHz	30 - 26000 MHz	-35.86	22096.69	-25	-10.86

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	20 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2502.5 MHz	30 - 26000 MHz	-36.22	21836.47	-25	-11.22

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2535 MHz	30 - 26000 MHz	-35.55	22565.09	-25	-10.55

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2567.5 MHz	30 - 26000 MHz	-36.14	22096.69	-25	-11.14

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

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9.6.2.1 16QAM

Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	5 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2502.5 MHz	30 - 26000 MHz	-35.09	22617.13	-25	-10.09

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2535 MHz	30 - 26000 MHz	-35.98	22148.73	-25	-10.98

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2567.5 MHz	30 - 26000 MHz	-36.32	22617.13	-25	-11.32

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	10 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2505 MHz	30 - 26000 MHz	-35.62	22617.13	-25	-10.62

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2535 MHz	30 - 26000 MHz	-35.07	22148.73	-25	-10.07

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2565 MHz	30 - 26000 MHz	-36.47	22461.00	-25	-11.47

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	15 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2507.5 MHz	30 - 26000 MHz	-35.31	22981.44	-25	-10.31

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2535 MHz	30 - 26000 MHz	-35.97	22617.34	-25	-10.97

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2562.5 MHz	30 - 26000 MHz	-35.84	22669.17	-25	-10.84

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	20 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2502.5 MHz	30 - 26000 MHz	-35.19	22148.73	-25	-10.19

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2535 MHz	30 - 26000 MHz	-34.91	22669.17	-25	-9.91

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2567.5 MHz	30 - 26000 MHz	-35.98	22513.04	-25	-10.98

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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9.6.3. Band 41 Conducted Spurious Emissions

9.6.3.1 QPSK

Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	5 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2498.5 MHz	30 - 26000 MHz	-35.39	22669.17	-25	-10.39

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2593 MHz	30 - 26000 MHz	-35.74	22617.13	-25	-10.74

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2687.5 MHz	30 - 26000 MHz	-36.28	22148.73	-25	-11.28

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	10 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2501.0 MHz	30 - 26000 MHz	-35.47	22669.17	-25	-10.47

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2593 MHz	30 - 26000 MHz	-35.18	22096.69	-25	-10.18

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2685.0 MHz	30 - 26000 MHz	-35.32	22929.39	-25	-10.32

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	15 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2503.5 MHz	30 - 26000 MHz	-34.37	21732.38	-25	-9.37

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2593 MHz	30 - 26000 MHz	-35.82	22513.04	-25	-10.82

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2682.5 MHz	30 - 26000 MHz	-35.75	22565.09	-25	-10.75

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	20 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2506 MHz	30 - 26000 MHz	-35.13	21784.42	-25	-10.13

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2593 MHz	30 - 26000 MHz	-35.2	22565.09	-25	-10.2

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2680 MHz	30 - 26000 MHz	-35.2	22617.13	-25	-10.2

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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9.6.3.1 16QAM

Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	5 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2498.5 MHz	30 - 26000 MHz	-35.39	22669.17	-25	-10.39

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2593 MHz	30 - 26000 MHz	-35.44	22617.13	-25	-10.44

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2687.5 MHz	30 - 26000 MHz	-34.87	22513.04	-25	-9.87

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	10 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2501.0 MHz	30 - 26000 MHz	-35.44	22408.95	-25	-10.44

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2593 MHz	30 - 26000 MHz	-34.86	22929.39	-25	-9.86

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2685.0 MHz	30 - 26000 MHz	-34.91	22617.13	-25	-9.91

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	15 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2503.5 MHz	30 - 26000 MHz	-35.78	22617.13	-25	-10.78

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2593 MHz	30 - 26000 MHz	-35.8	22669.17	-25	-10.8

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2682.5 MHz	30 - 26000 MHz	-35.11	22044.64	-25	-10.11

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

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Equipment Configuration for Transmitter Unwanted Emissions in the Spurious Domain

Variant:	20 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

CHAIN A

Temperature	20.0 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120.00 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2506 MHz	30 - 26000 MHz	-35.02	22513.04	-25	-10.02

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2593 MHz	30 - 26000 MHz	-35.76	23449.83	-25	-10.76

CHAIN A

Temperature	20 °C	Maximum Observed Spurious Emission		Limit	Margin
Voltage	120 Vdc	Amplitude	Emission Frequency		
Test Frequency	Frequency Range	dBm	MHz	dBm	dB
2680 MHz	30 - 26000 MHz	-35.18	21992.60	-25	-10.18

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz ±2.37 dB, > 40 GHz ±4.6 dB

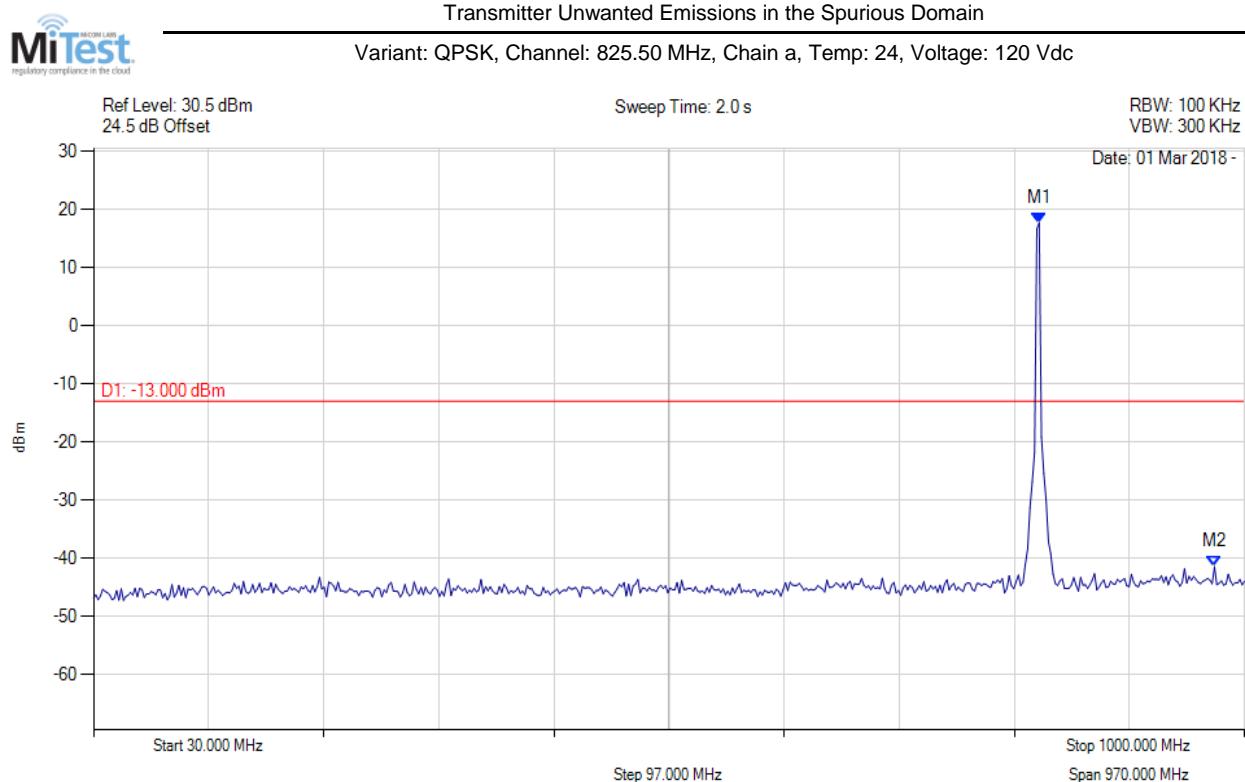
Note: click the links in the above matrix to view the graphical image (plot).

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9.6.4 Conducted Spurious Emissions - Plots

9.6.4.1 Band 5: Conducted Spurious Emissions

9.6.4.1.1 QPSK:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 826.994 MHz : 17.698 dBm M2 : 974.729 MHz : -41.503 dBm	Channel Frequency: 825.50 MHz

[back to matrix](#)

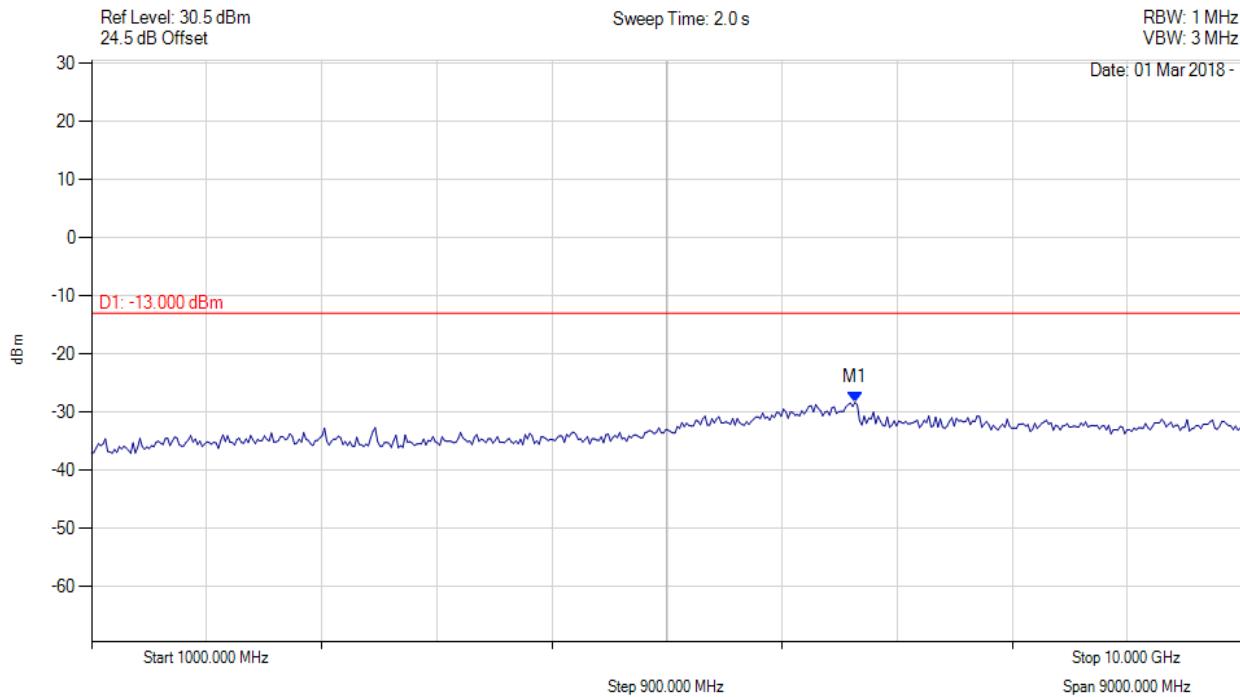
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 825.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 6969.940 MHz : -28.348 dBm	Channel Frequency: 825.50 MHz

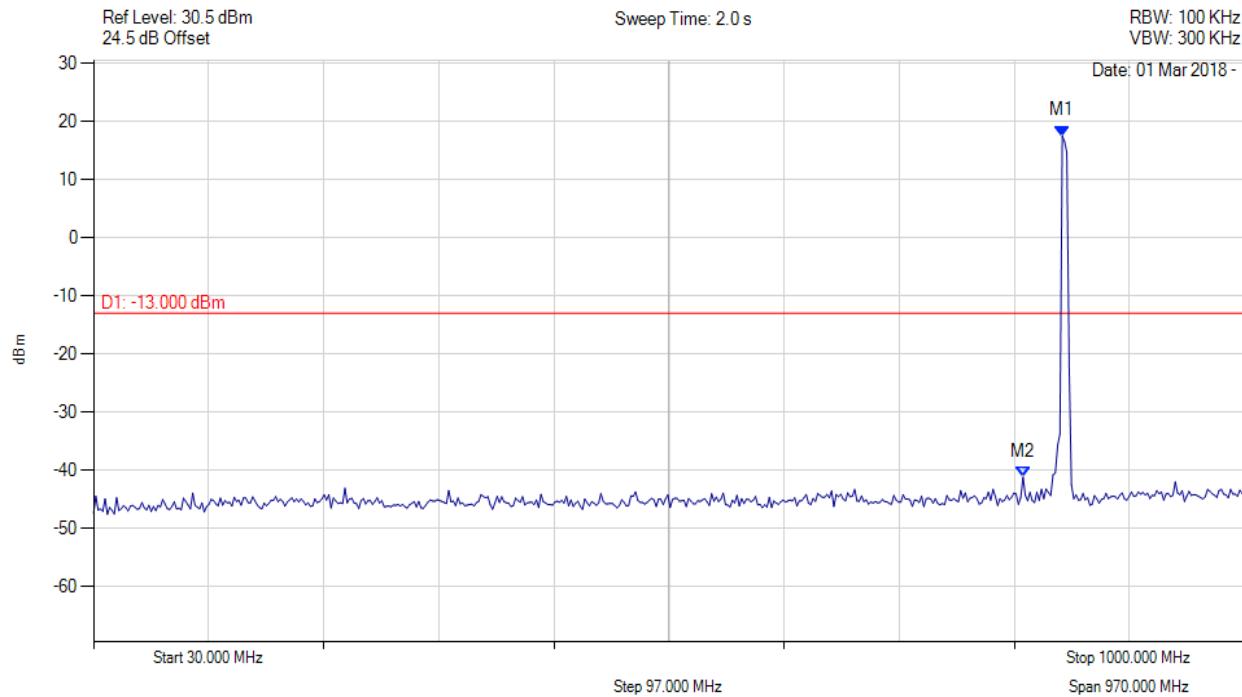
[back to matrix](#)

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 847.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 846.433 MHz : 17.531 dBm M2 : 813.387 MHz : -41.216 dBm	Channel Frequency: 847.50 MHz

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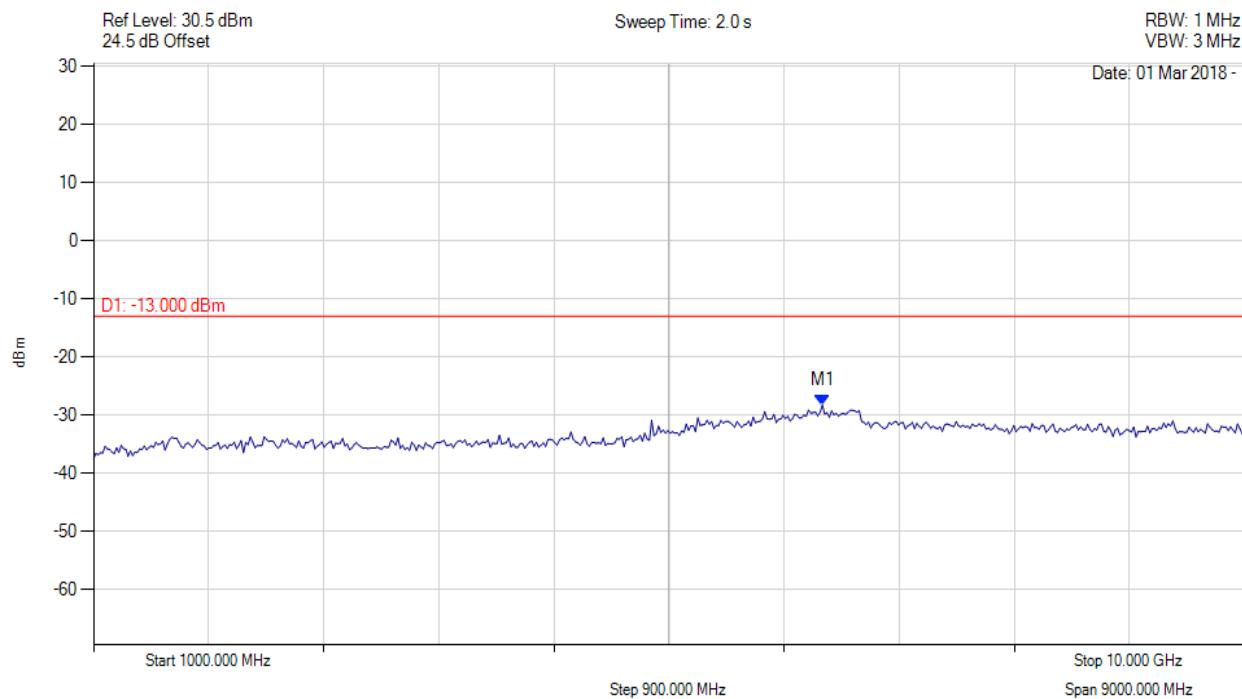
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 846.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 6699.399 MHz : -28.306 dBm	Channel Frequency: 846.50 MHz

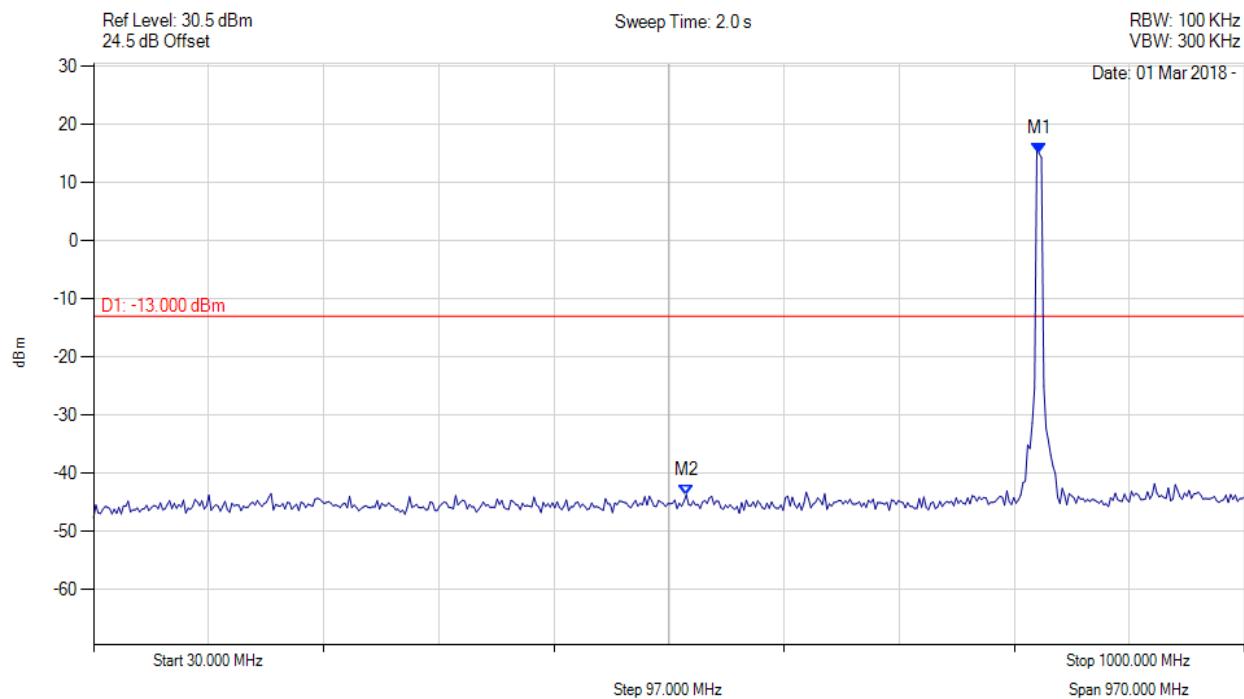
[back to matrix](#)

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 826.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 826.994 MHz : 15.046 dBm M2 : 529.579 MHz : -43.726 dBm	Channel Frequency: 826.50 MHz

[back to matrix](#)

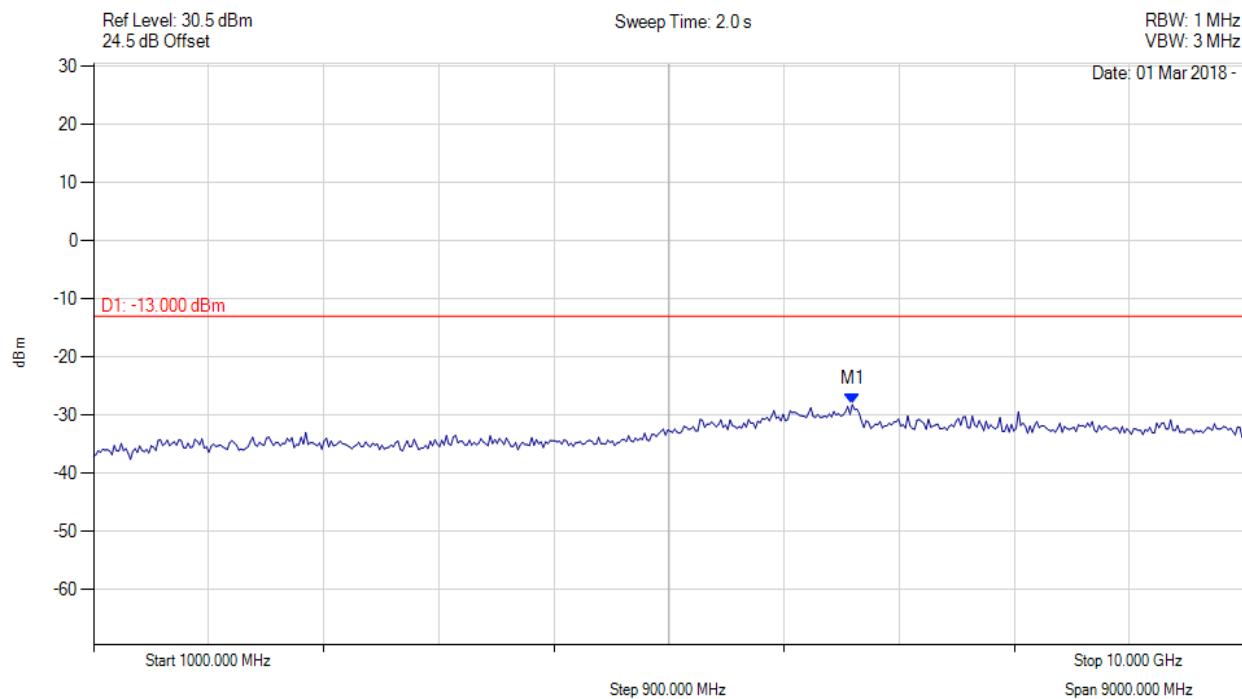
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 826.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 6933.868 MHz : -28.194 dBm	Channel Frequency: 826.50 MHz

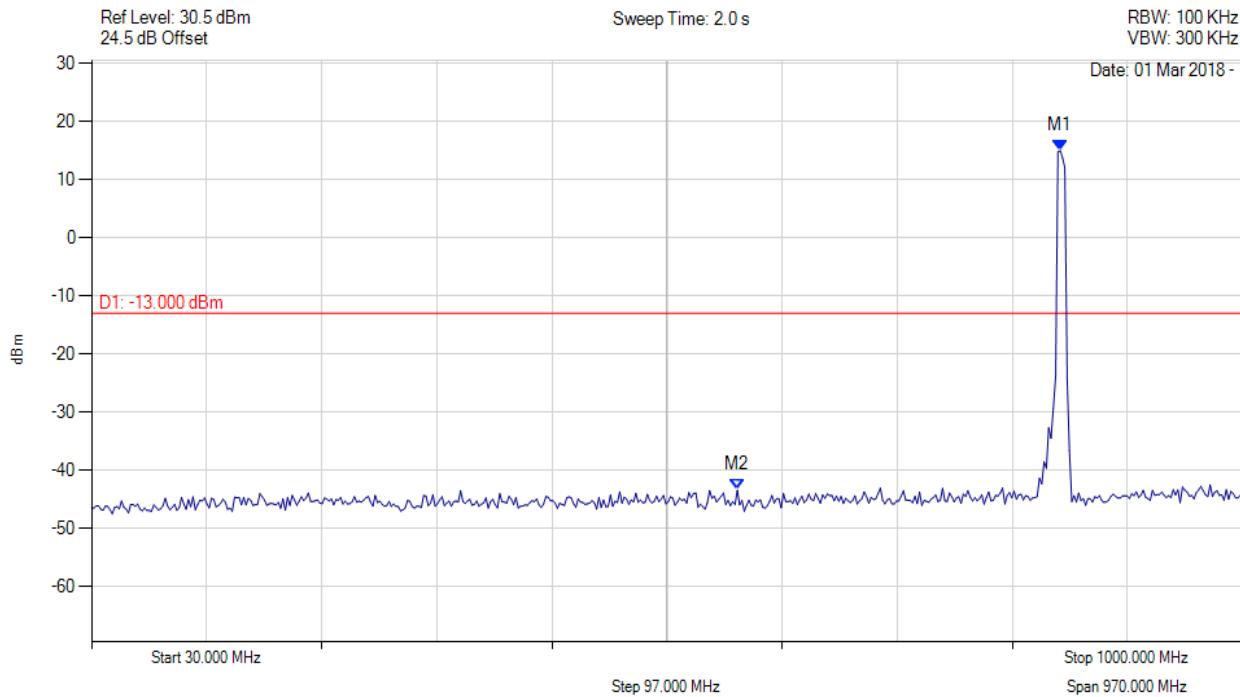
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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 846.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 846.433 MHz : 14.983 dBm M2 : 574.289 MHz : -43.451 dBm	Channel Frequency: 846.50 MHz

[back to matrix](#)

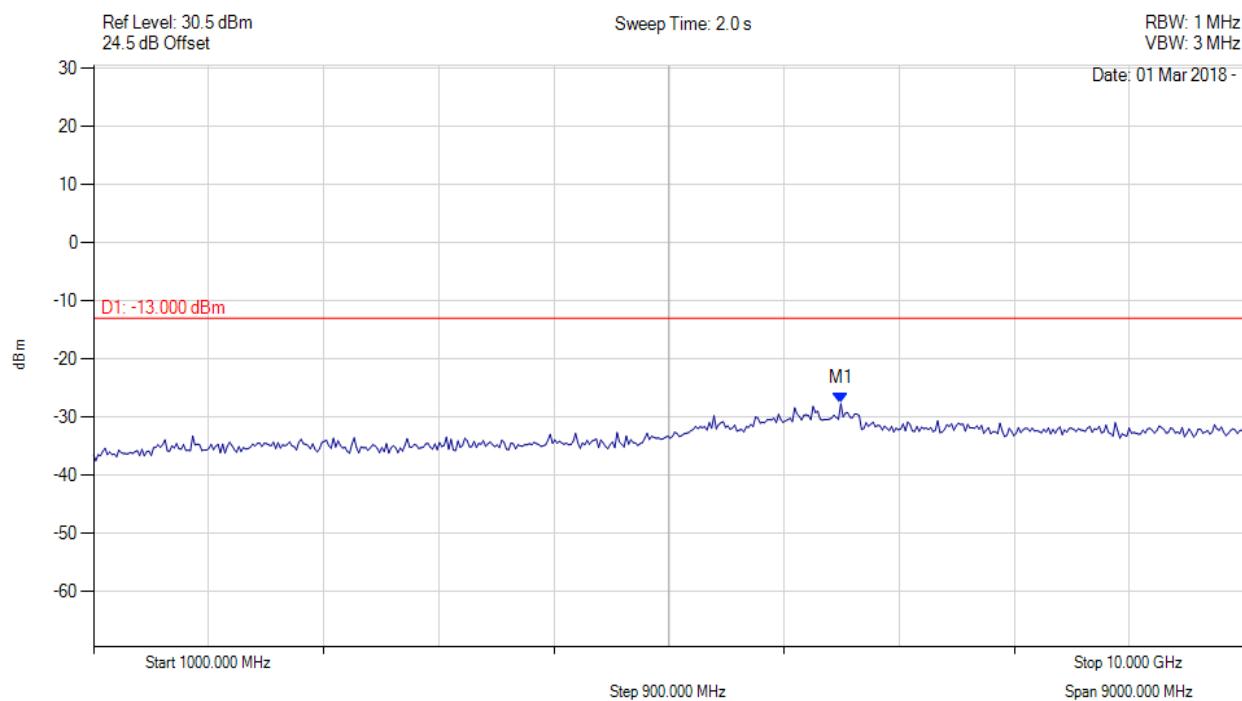
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 847.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 6843.687 MHz : -27.706 dBm	Channel Frequency: 847.50 MHz

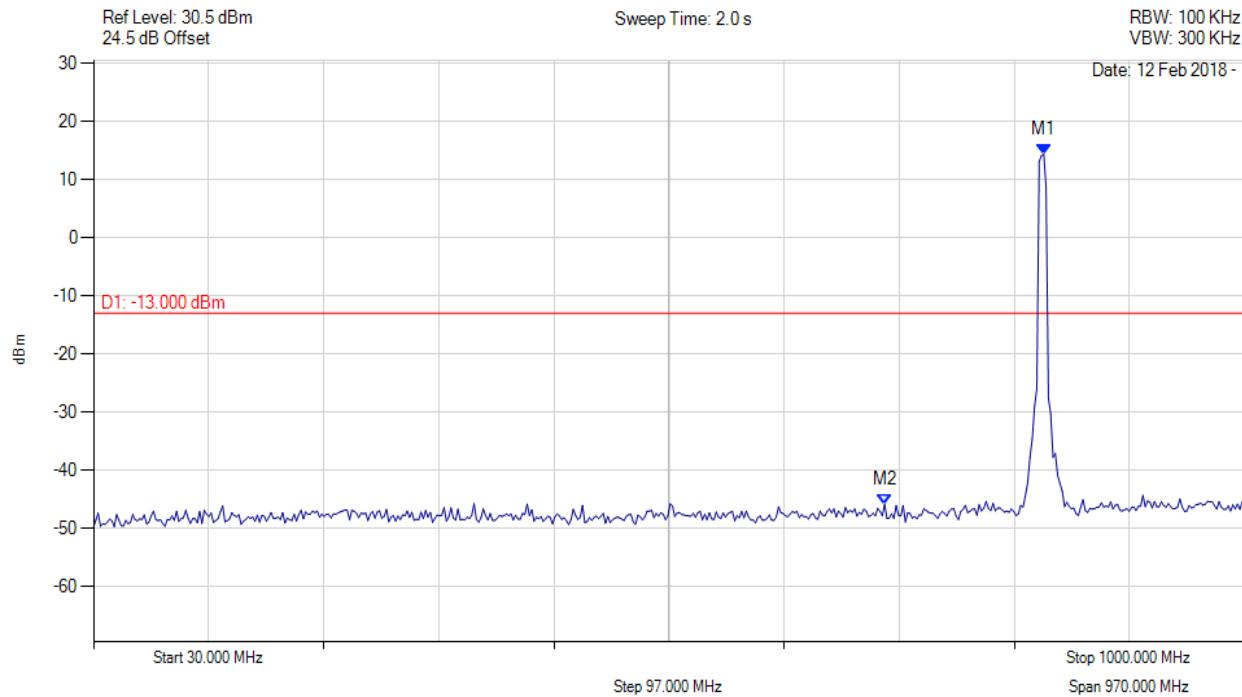
[back to matrix](#)

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 830.882 MHz : 14.358 dBm M2 : 696.754 MHz : -45.904 dBm	Channel Frequency: 829.00 MHz

[back to matrix](#)

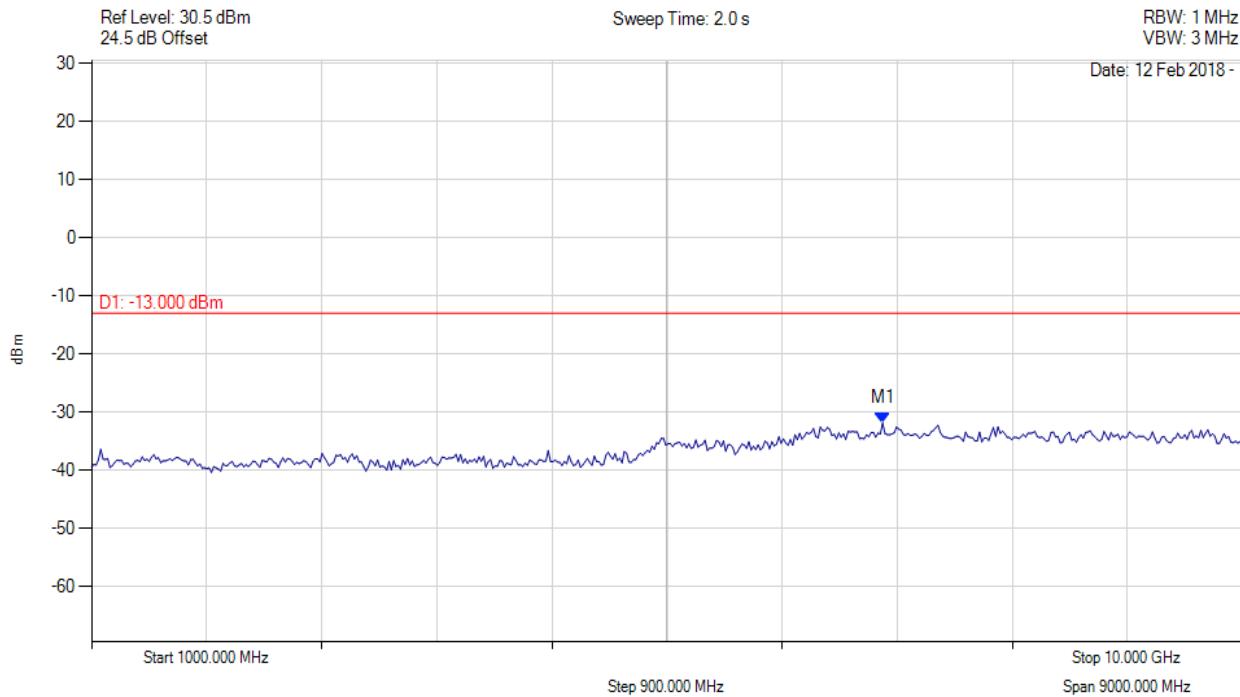
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 7186.373 MHz : -31.895 dBm	Channel Frequency: 829.00 MHz

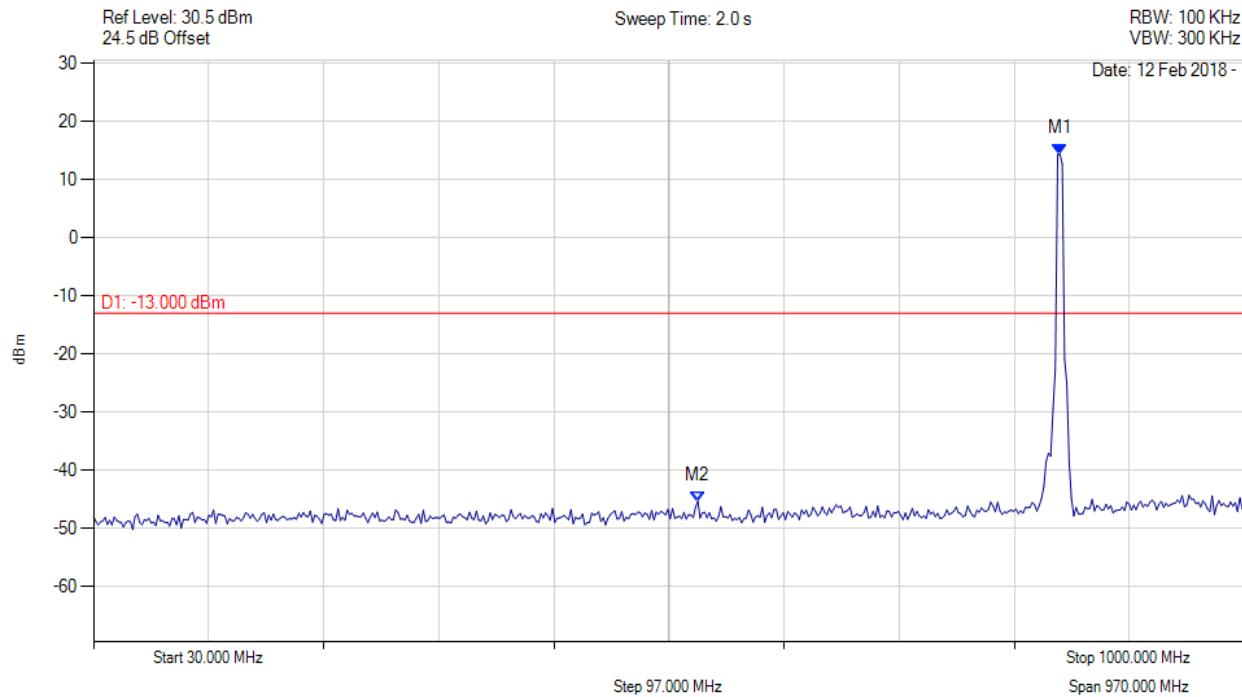
[back to matrix](#)

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 844.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 844.489 MHz : 14.411 dBm M2 : 539.299 MHz : -45.367 dBm	Channel Frequency: 844.00 MHz

[back to matrix](#)

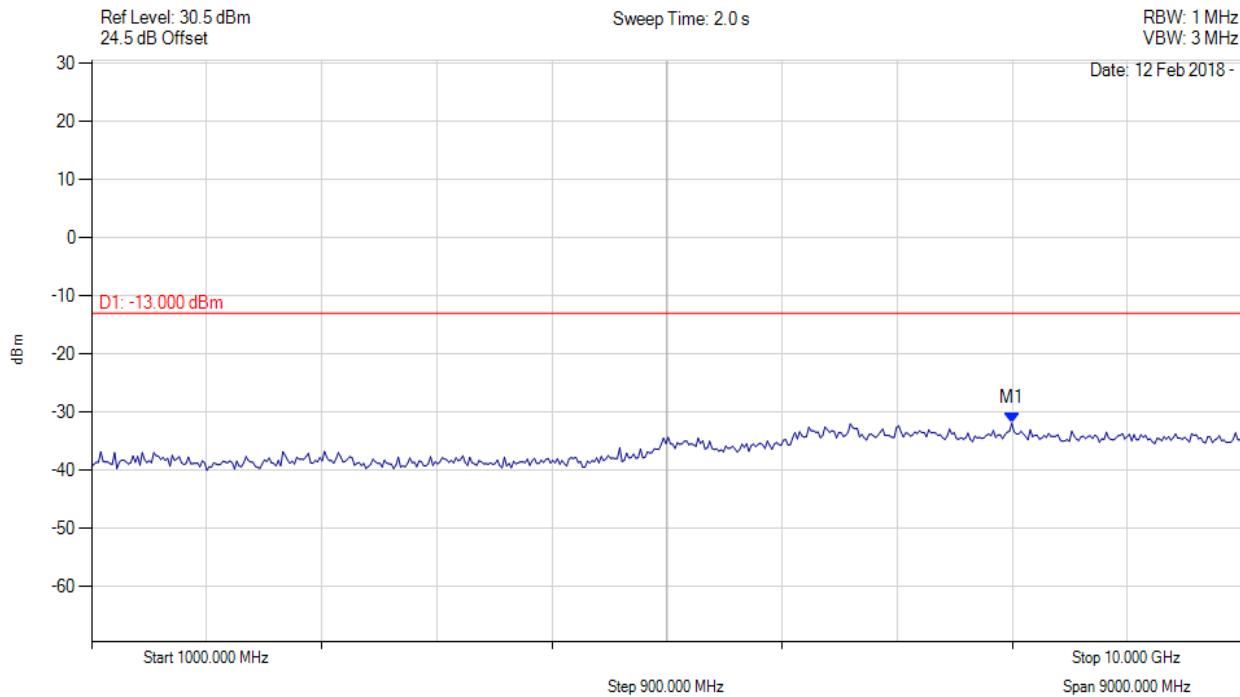
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 844.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc

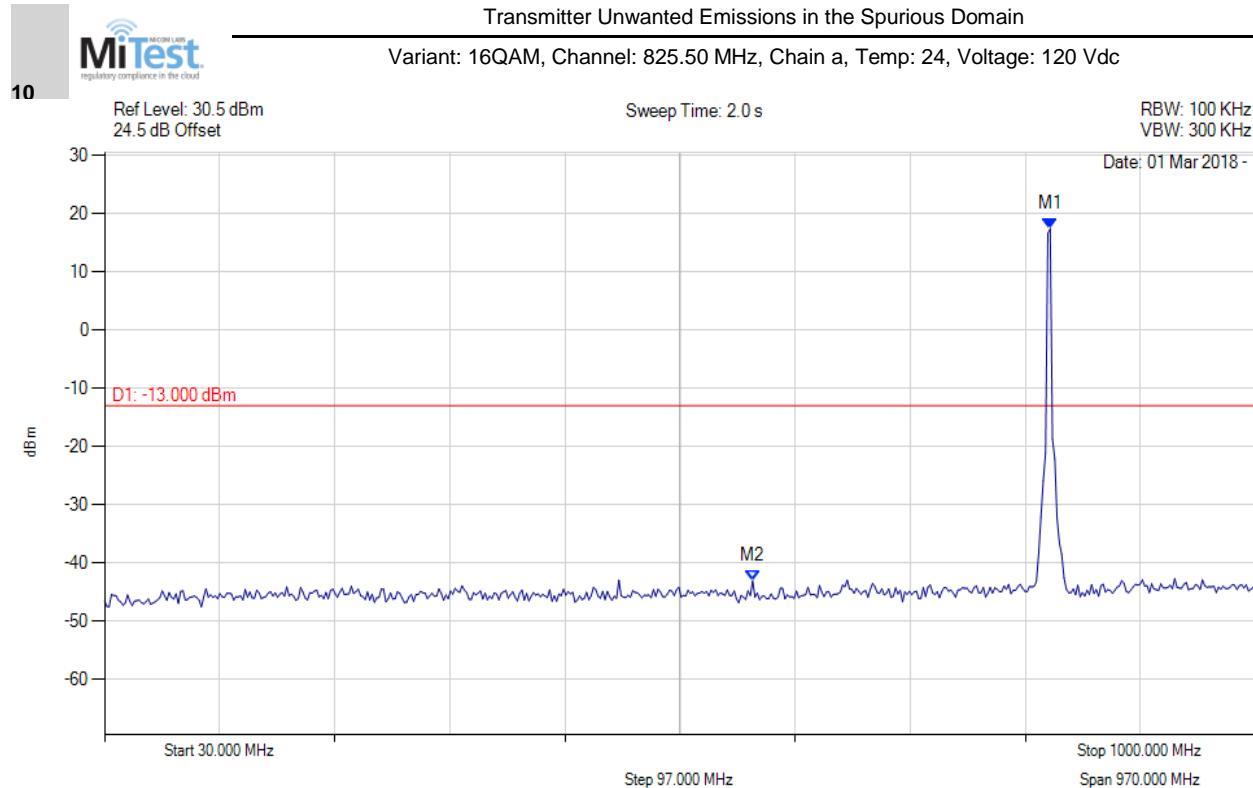


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 8196.393 MHz : -31.932 dBm	Channel Frequency: 844.00 MHz

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9.6.4.1.1 16QAM:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 826.994 MHz : 17.405 dBm M2 : 576.232 MHz : -43.118 dBm	Channel Frequency: 825.50 MHz

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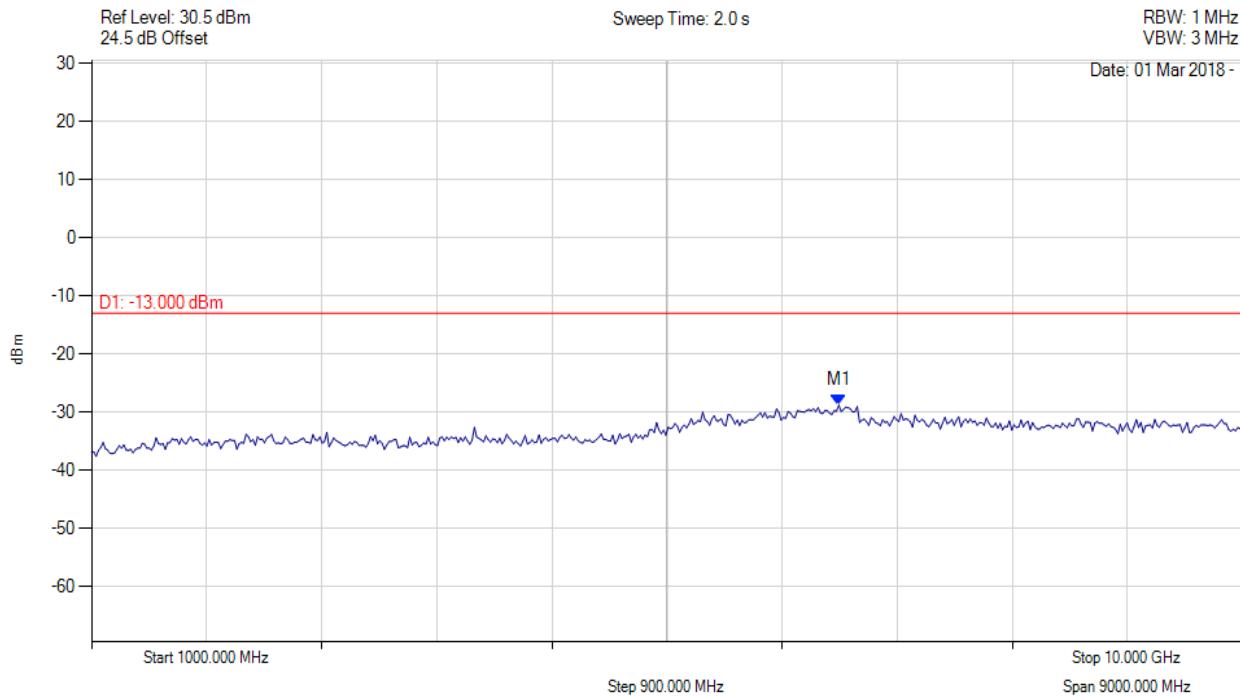
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 825.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 6843.687 MHz : -28.841 dBm	Channel Frequency: 825.50 MHz

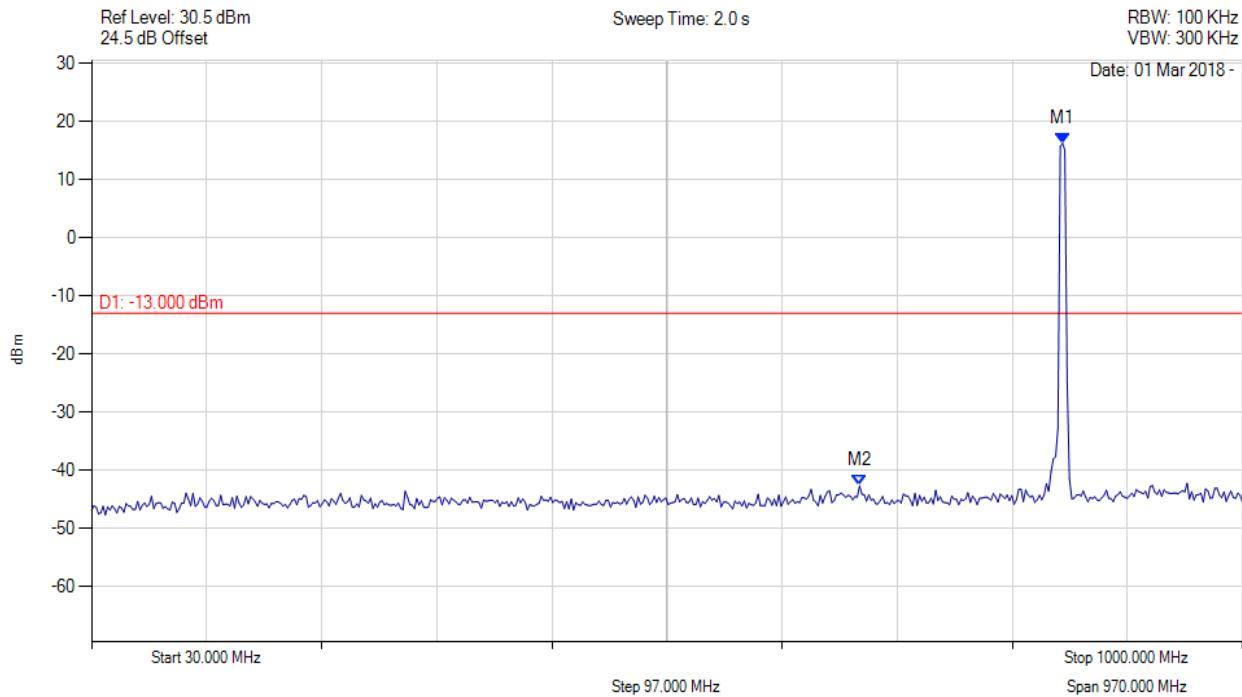
[back to matrix](#)

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 847.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 848.377 MHz : 16.254 dBm M2 : 677.315 MHz : -42.731 dBm	Channel Frequency: 847.50 MHz

[back to matrix](#)

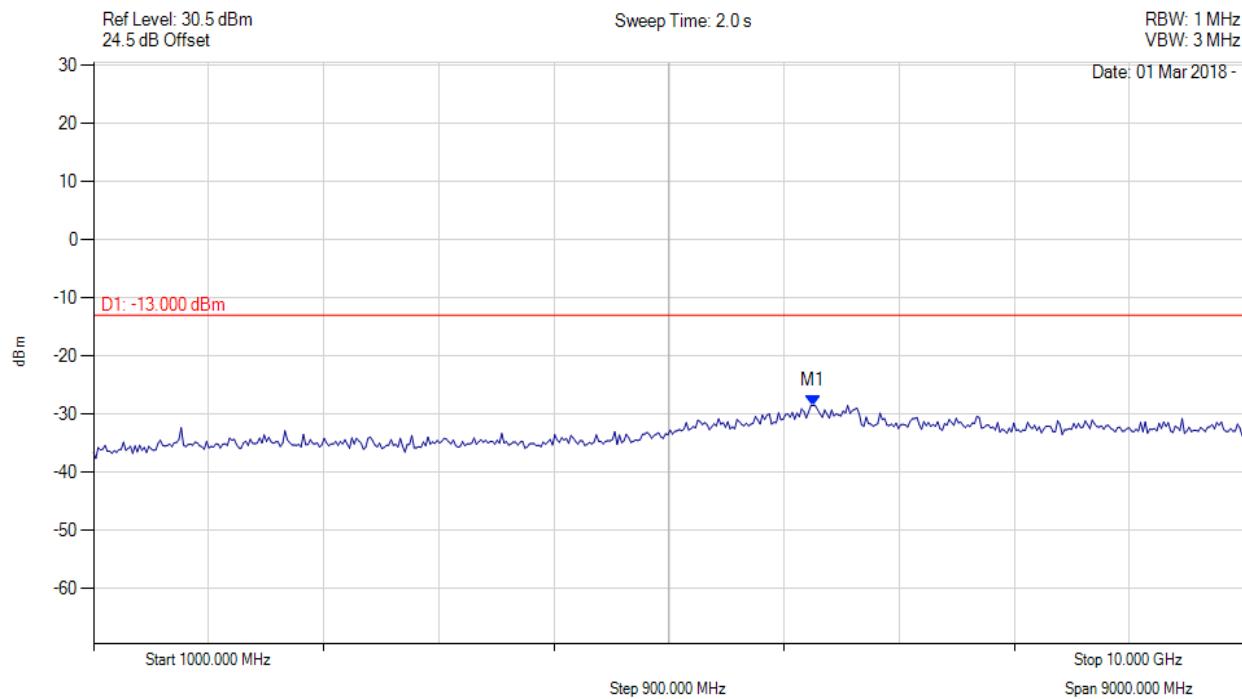
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 847.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 6627.255 MHz : -28.509 dBm	Channel Frequency: 847.50 MHz

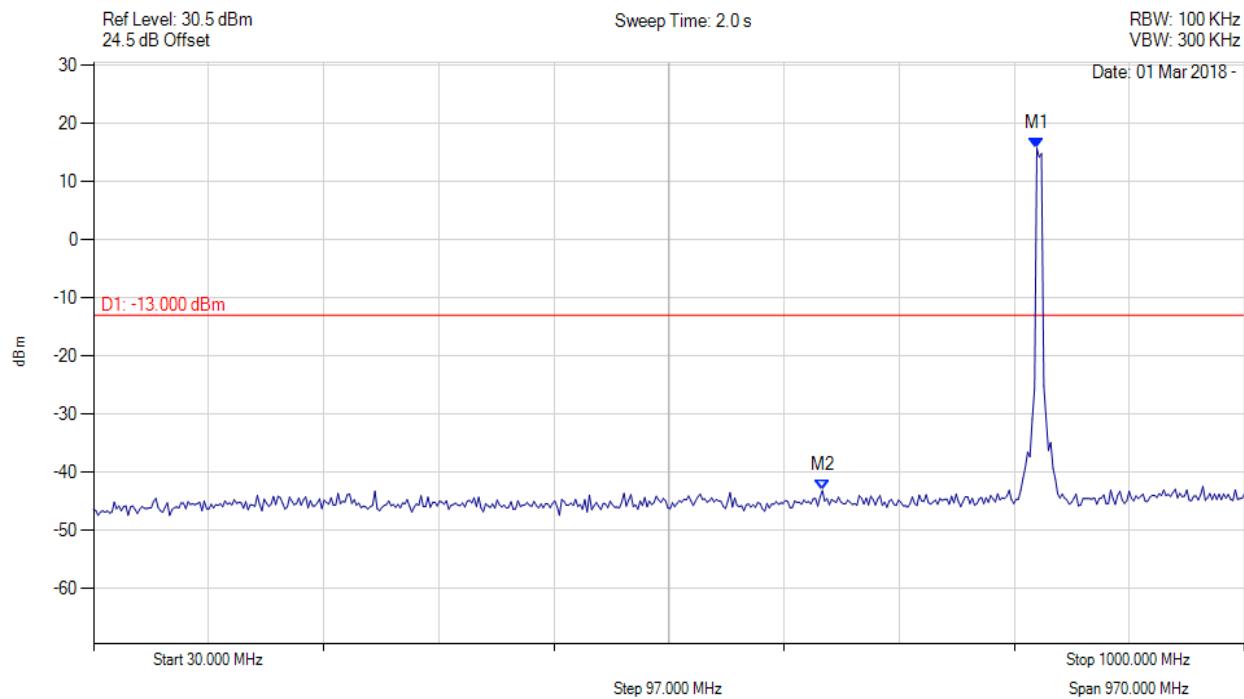
[back to matrix](#)

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 826.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 825.050 MHz : 15.761 dBm M2 : 644.269 MHz : -43.181 dBm	Channel Frequency: 826.50 MHz

[back to matrix](#)

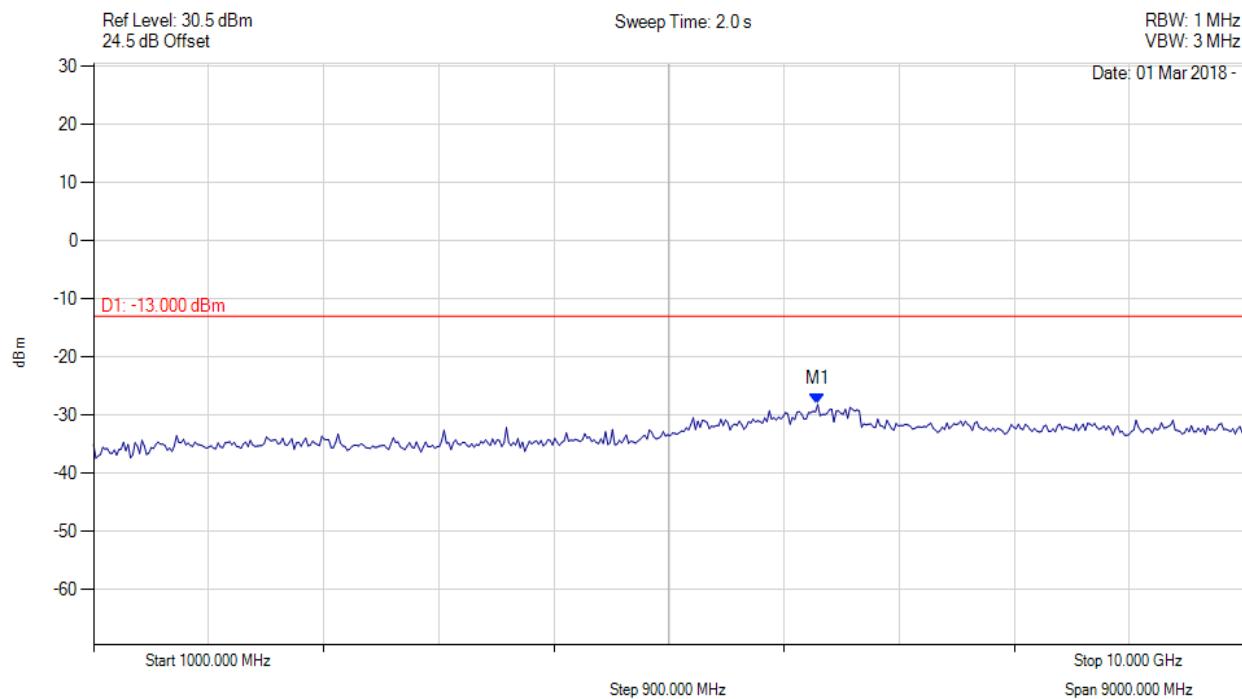
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 826.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 6663.327 MHz : -28.192 dBm	Channel Frequency: 826.50 MHz

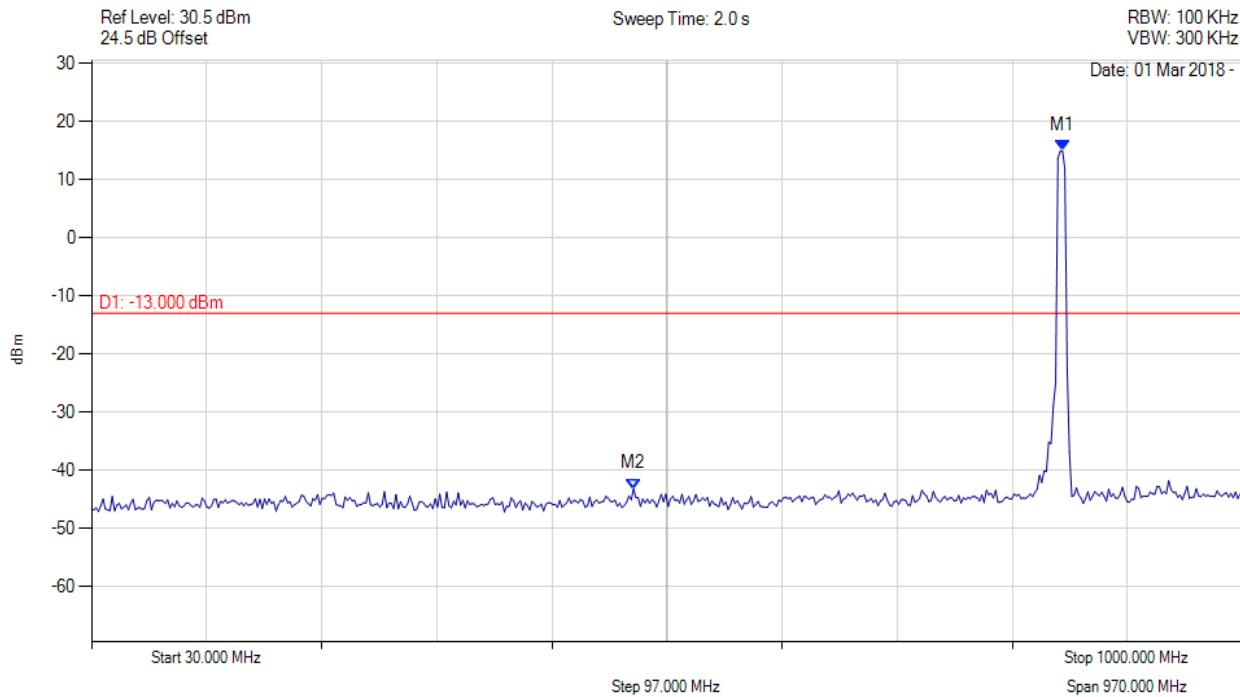
[back to matrix](#)

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 846.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 848.377 MHz : 14.934 dBm M2 : 486.814 MHz : -43.231 dBm	Channel Frequency: 846.50 MHz

[back to matrix](#)

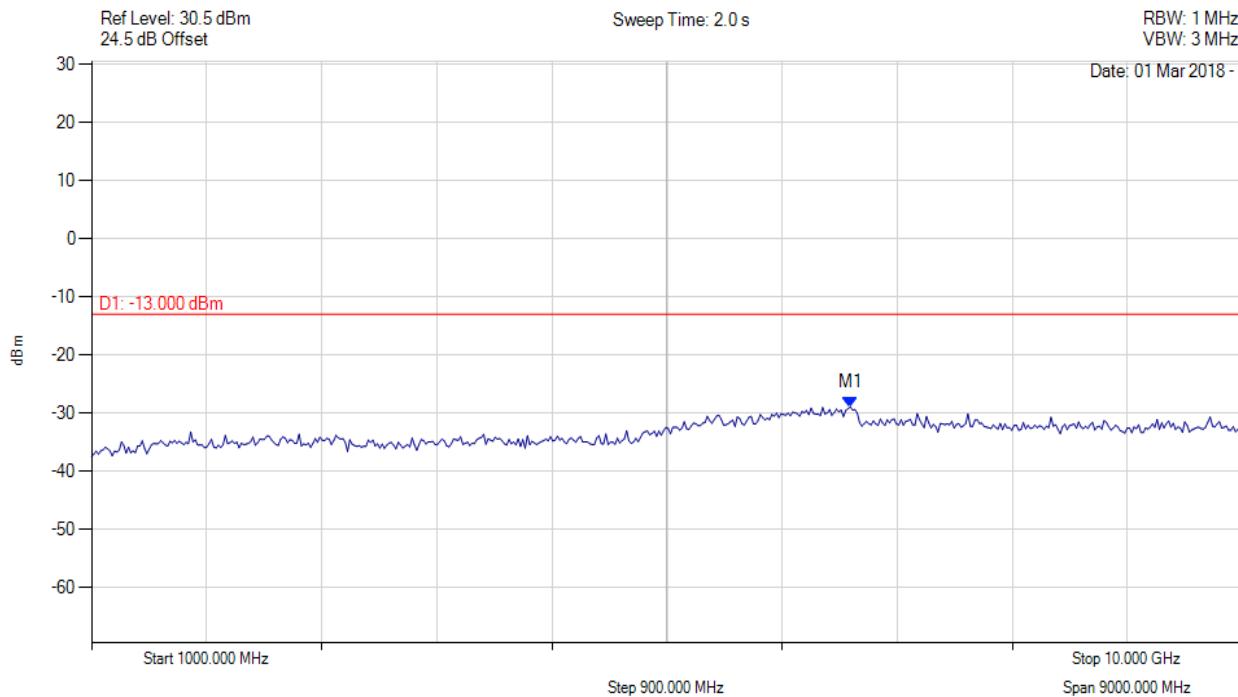
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain



Variant: 16QAM, Channel: 847.50 MHz, Chain a, Temp: 24, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 6933.868 MHz : -28.959 dBm	Channel Frequency: 847.50 MHz

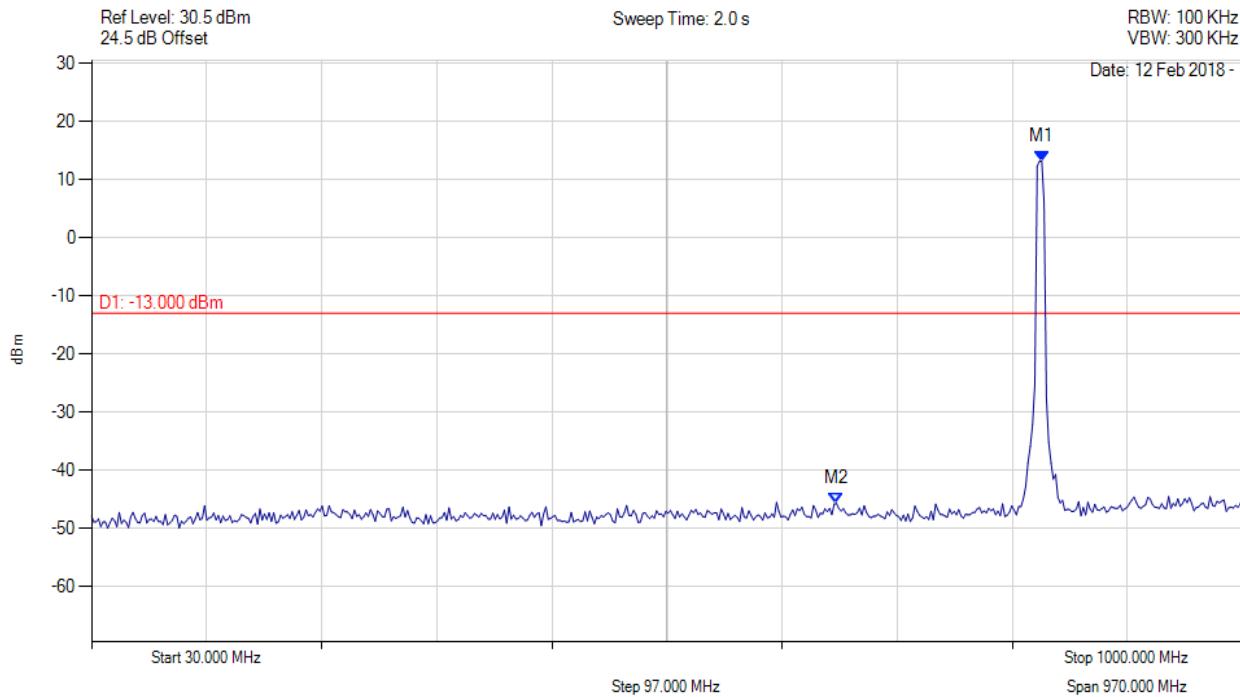
[back to matrix](#)

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 830.882 MHz : 13.170 dBm M2 : 657.876 MHz : -45.723 dBm	Channel Frequency: 829.00 MHz

[back to matrix](#)

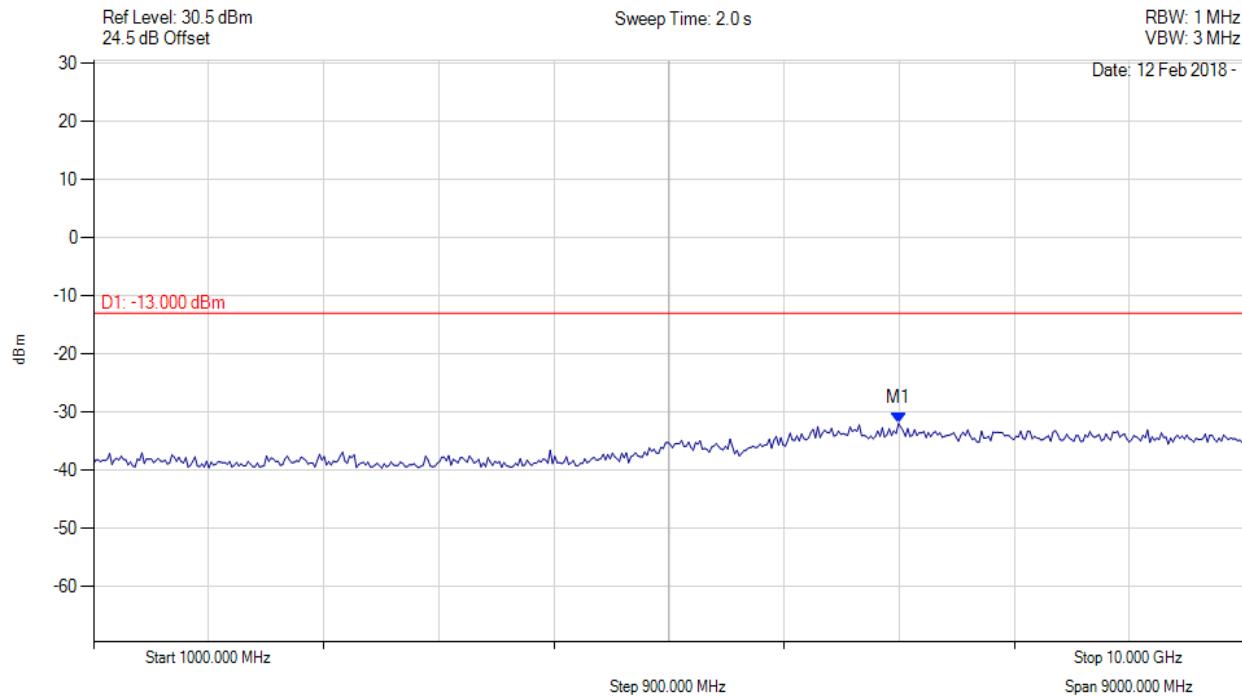
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 7294.589 MHz : -31.969 dBm	Channel Frequency: 829.00 MHz

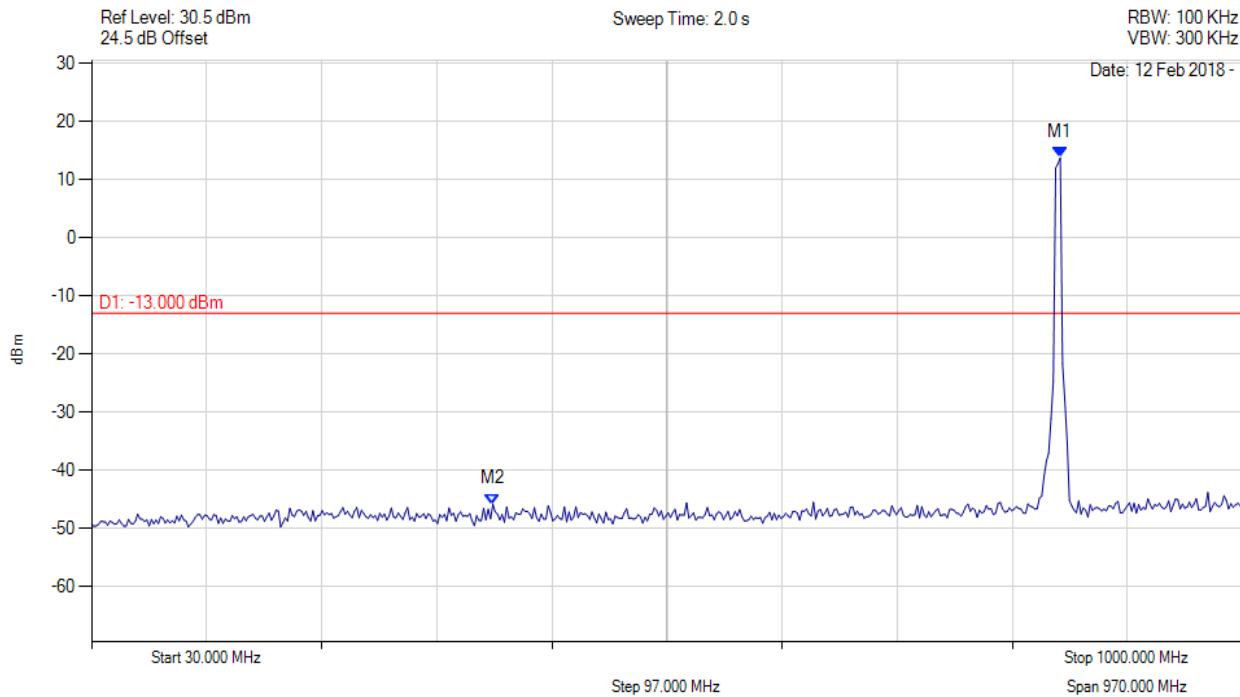
[back to matrix](#)

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 844.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 846.433 MHz : 13.746 dBm M2 : 368.236 MHz : -45.855 dBm	Channel Frequency: 844.00 MHz

[back to matrix](#)

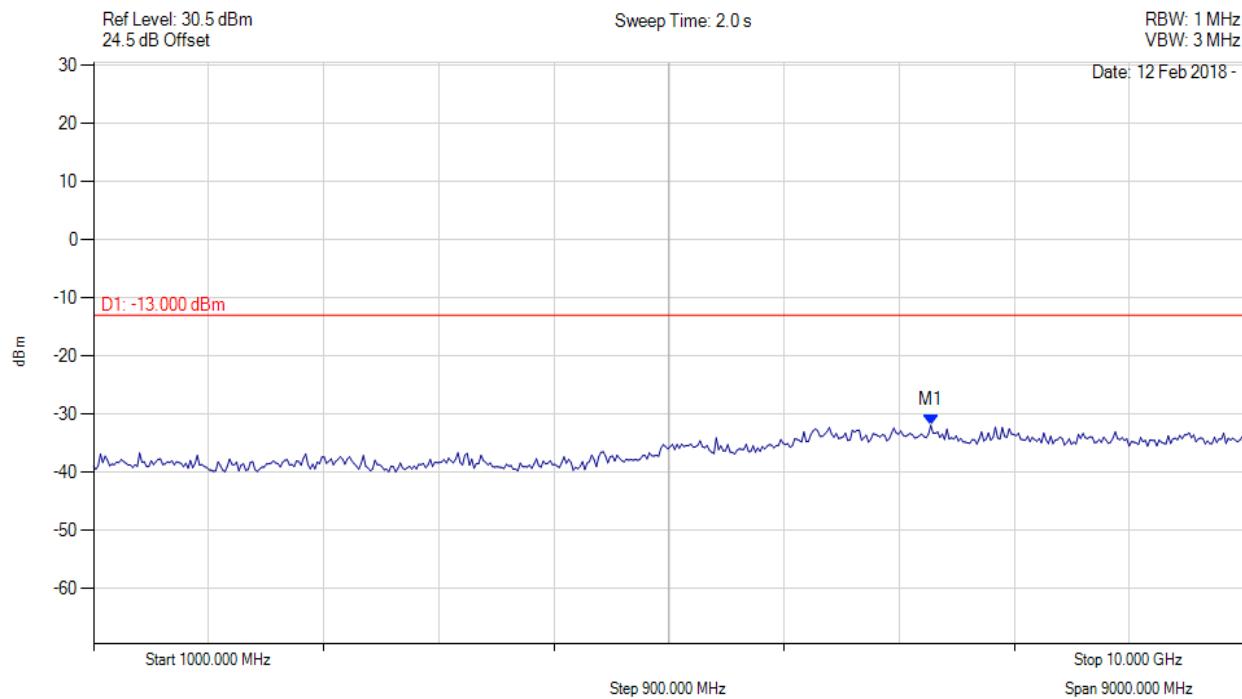
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 844.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 7547.094 MHz : -31.952 dBm	Channel Frequency: 844.00 MHz

[back to matrix](#)

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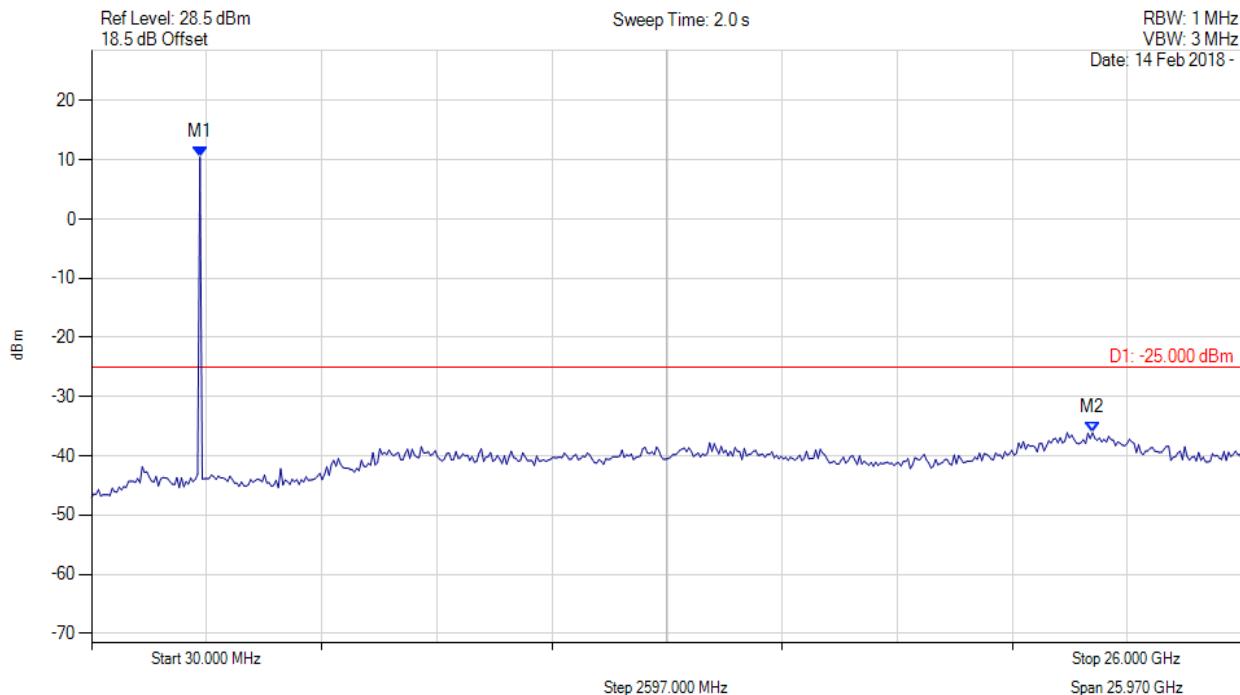
9.6.4.2 Band 7: Conducted Spurious Emissions

9.6.4.2.1 QPSK:



Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2502.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 10.465 dBm M2 : 22.617 GHz : -36.076 dBm	Channel Frequency: 2502.50 MHz

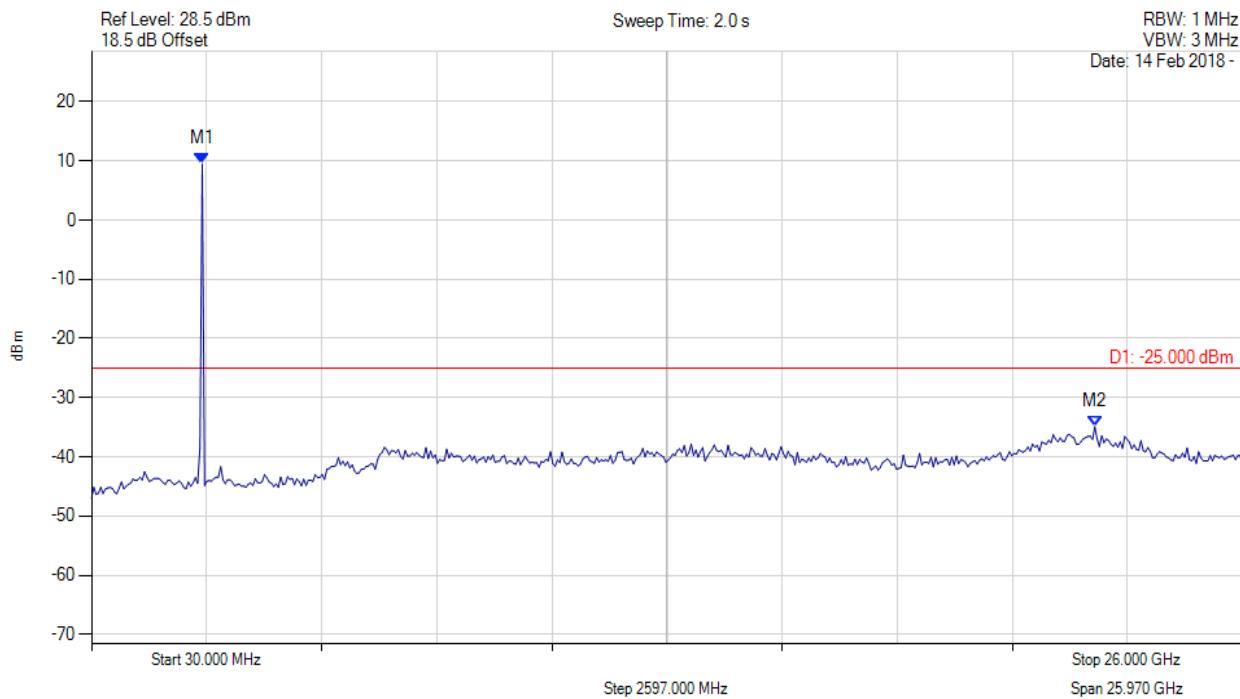
[back to matrix](#)

Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results



Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2535.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 9.454 dBm M2 : 22.669 GHz : -34.900 dBm	Channel Frequency: 2535.00 MHz

[back to matrix](#)

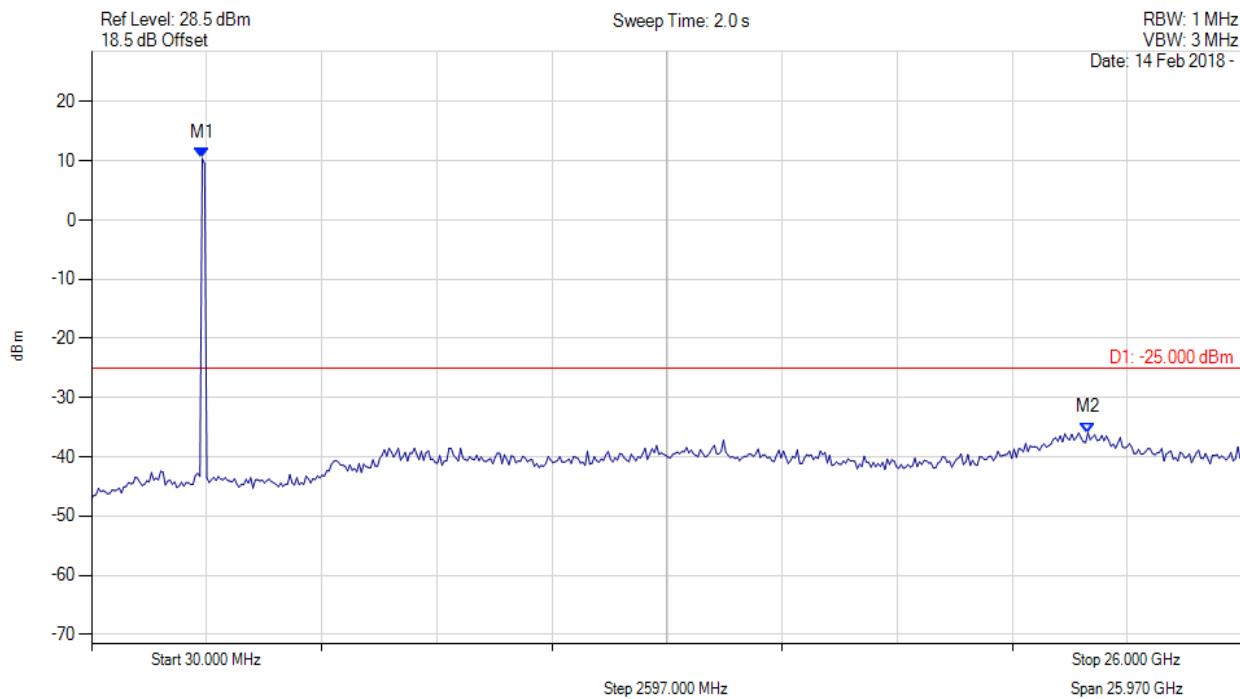
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2567.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 10.404 dBm M2 : 22.513 GHz : -35.913 dBm	Channel Frequency: 2567.50 MHz

[back to matrix](#)

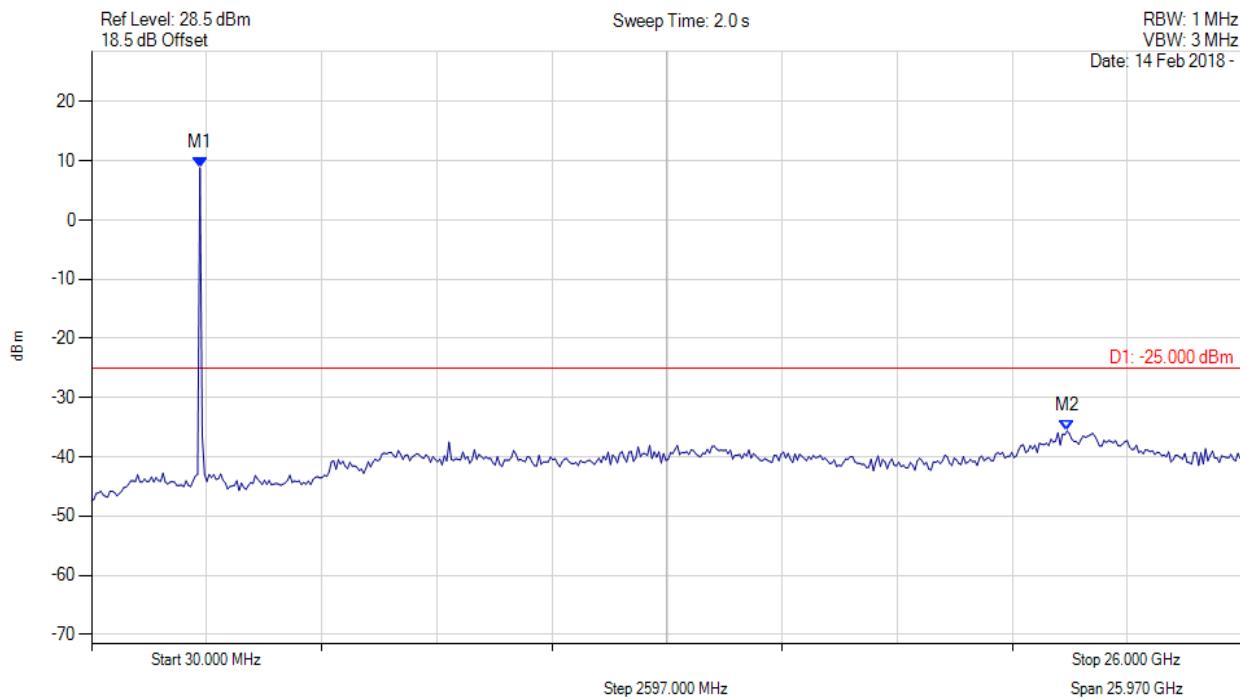
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2505.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 8.817 dBm M2 : 22.045 GHz : -35.594 dBm	Channel Frequency: 2505.00 MHz

[back to matrix](#)

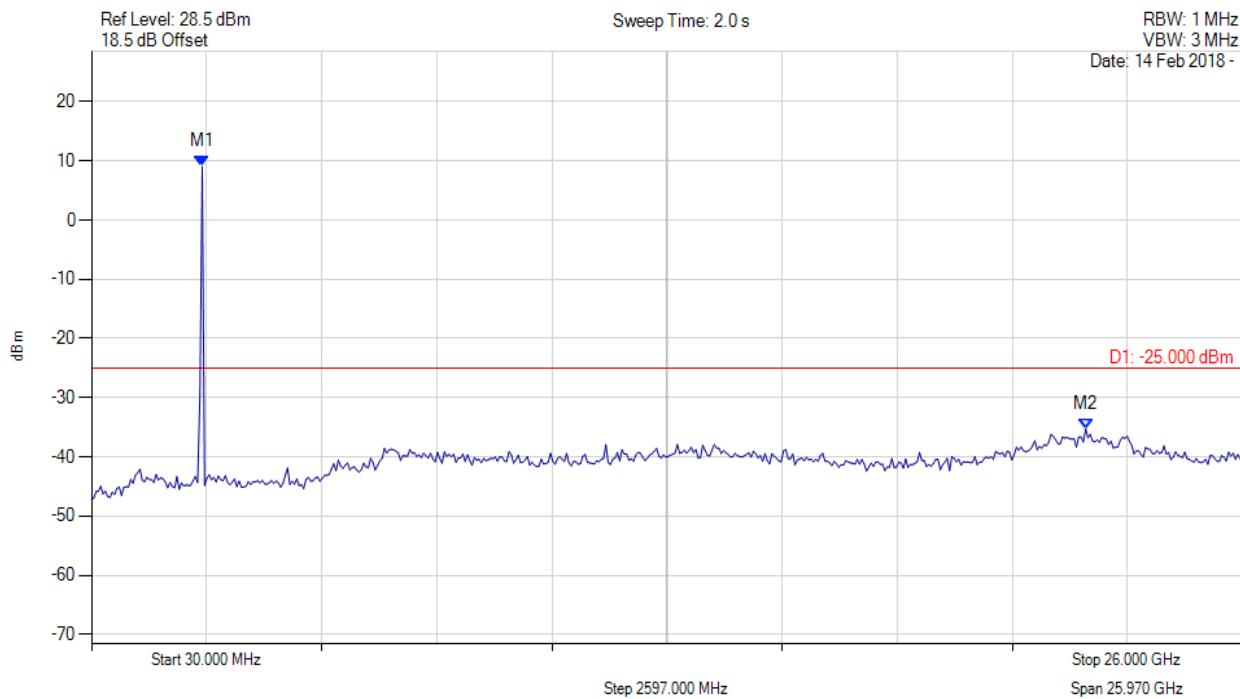
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2535.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 8.988 dBm M2 : 22.461 GHz : -35.270 dBm	Channel Frequency: 2535.00 MHz

[back to matrix](#)

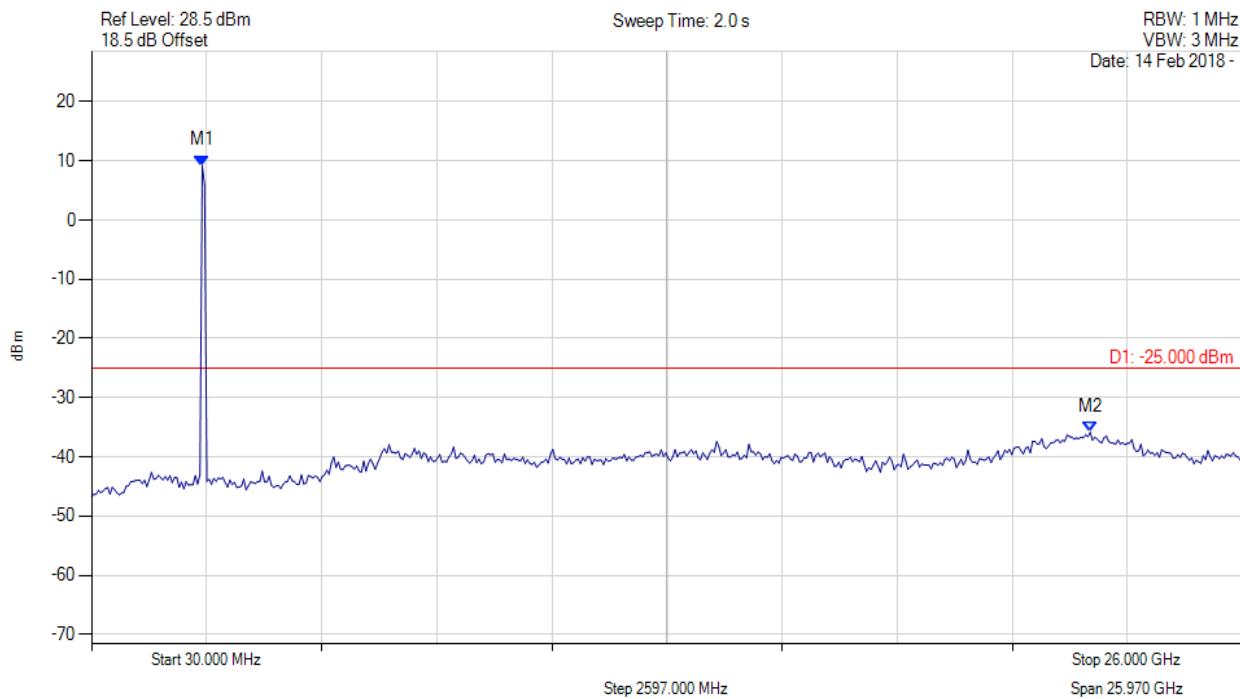
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2565.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 9.186 dBm M2 : 22.565 GHz : -35.842 dBm	Channel Frequency: 2565.00 MHz

[back to matrix](#)

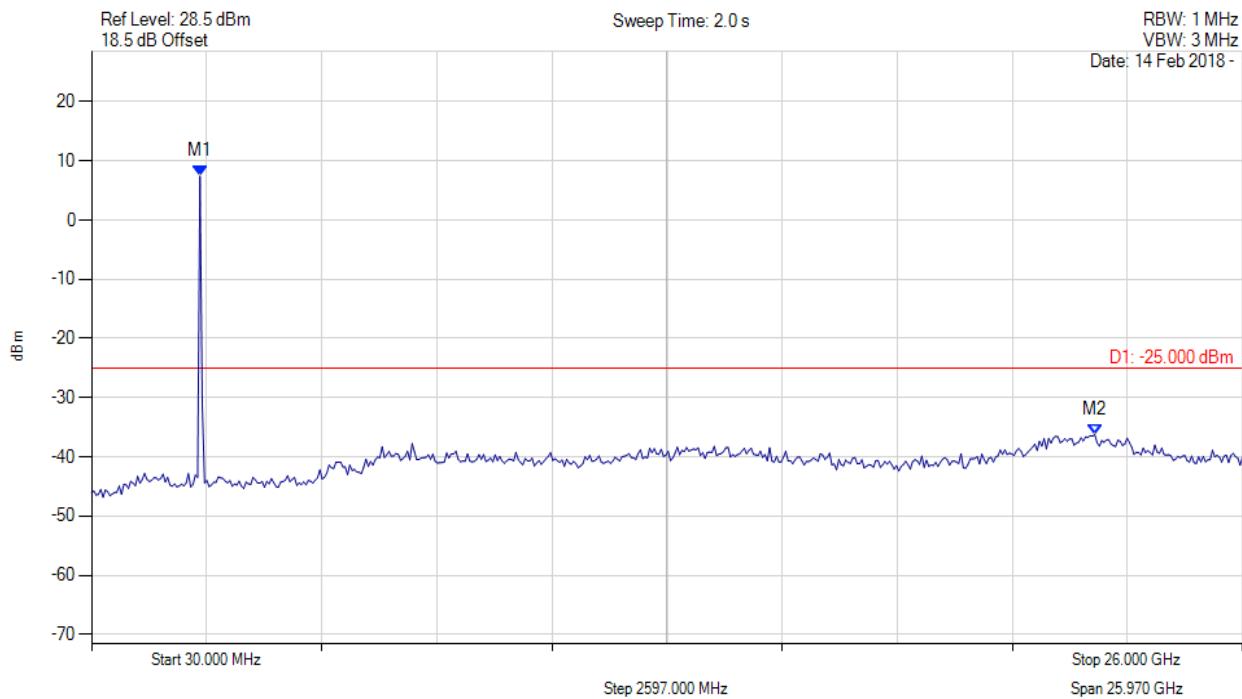
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2507.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 7.396 dBm M2 : 22.669 GHz : -36.246 dBm	Channel Frequency: 2507.50 MHz

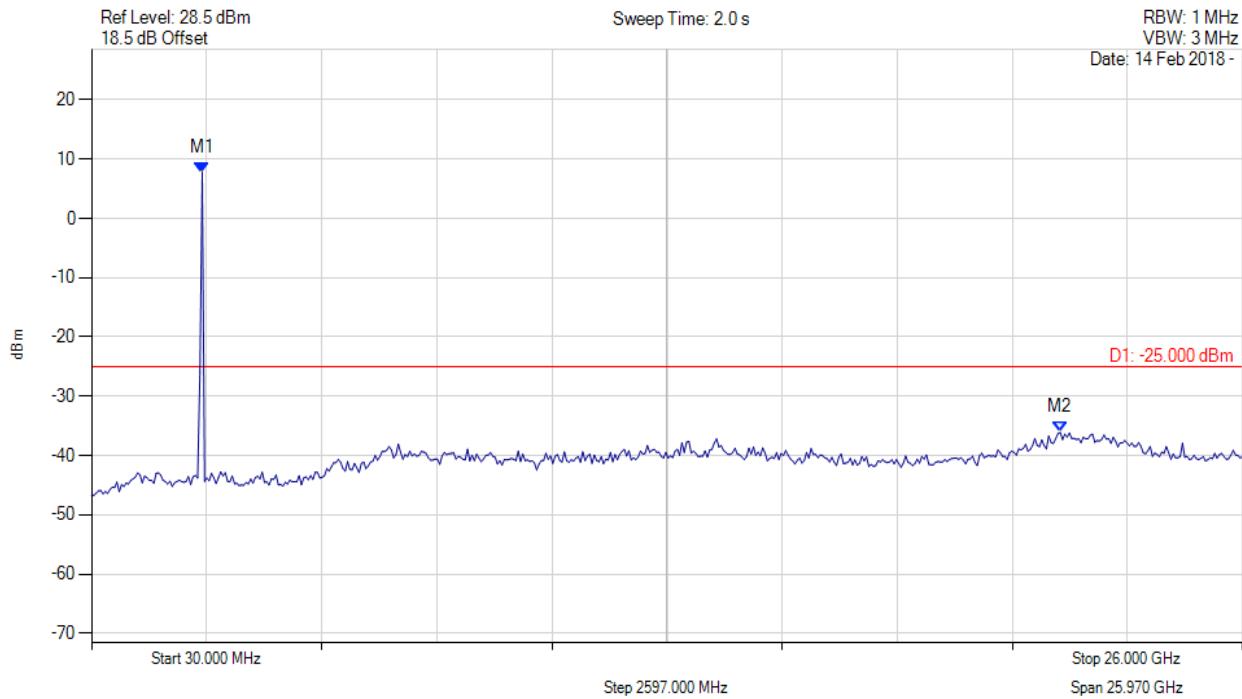
[back to matrix](#)

Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2535.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 7.731 dBm M2 : 21.889 GHz : -36.108 dBm	Channel Frequency: 2535.00 MHz

[back to matrix](#)

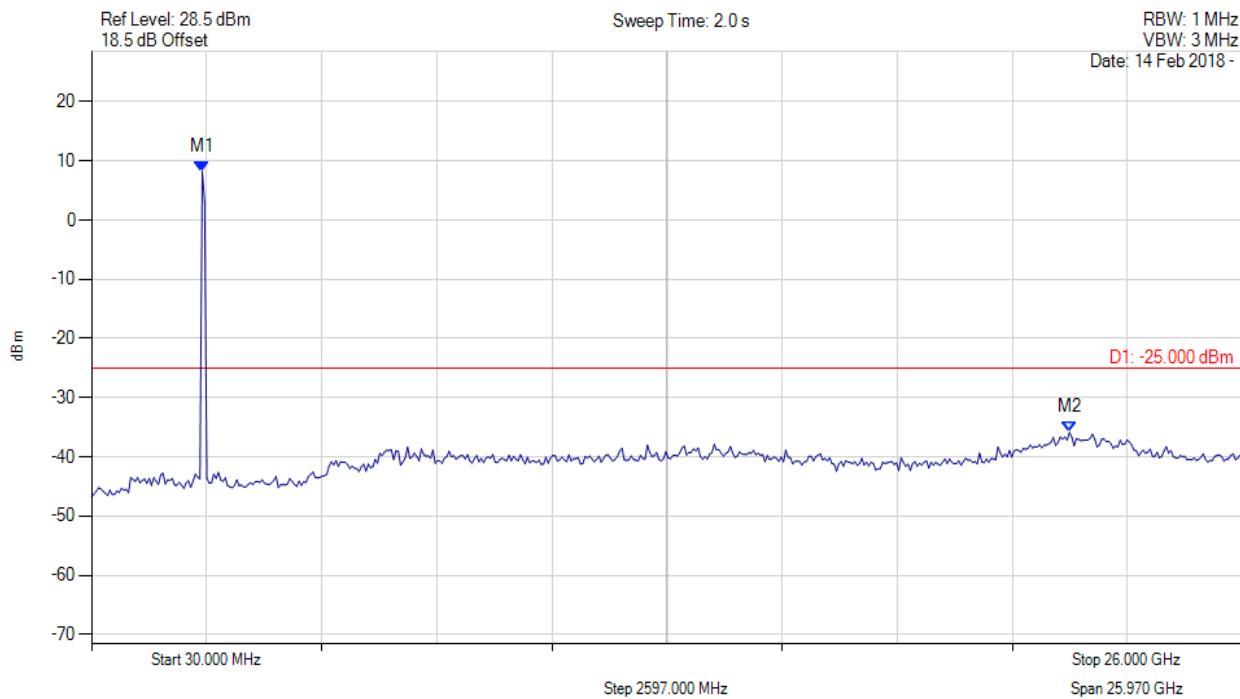
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2562.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 8.189 dBm M2 : 22.097 GHz : -35.864 dBm	Channel Frequency: 2562.50 MHz

[back to matrix](#)

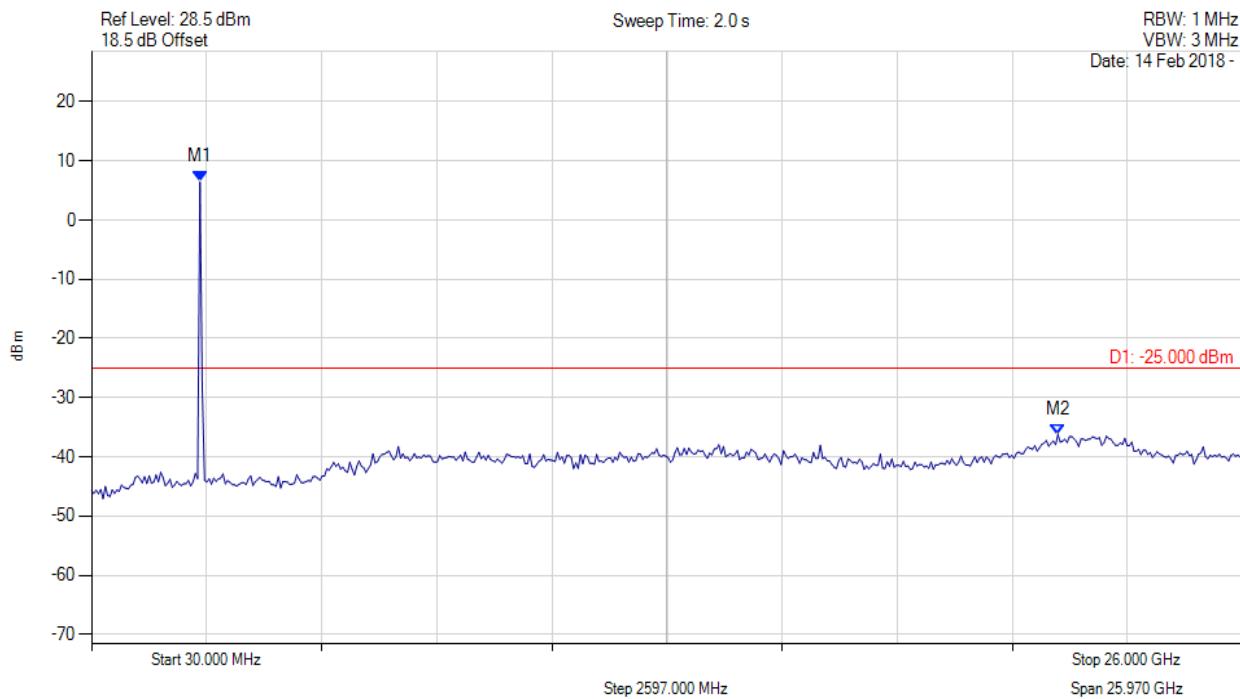
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2510.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 6.442 dBm M2 : 21.836 GHz : -36.220 dBm	Channel Frequency: 2510.00 MHz

[back to matrix](#)

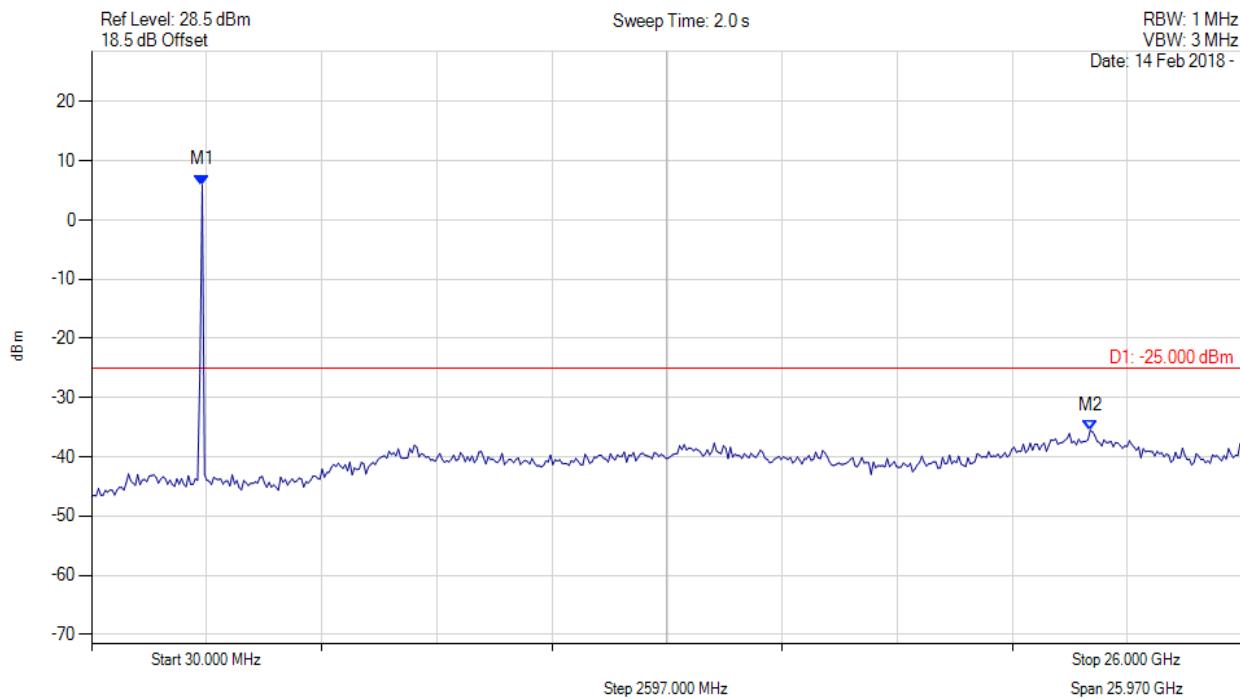
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2535.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 5.911 dBm M2 : 22.565 GHz : -35.549 dBm	Channel Frequency: 2535.00 MHz

[back to matrix](#)

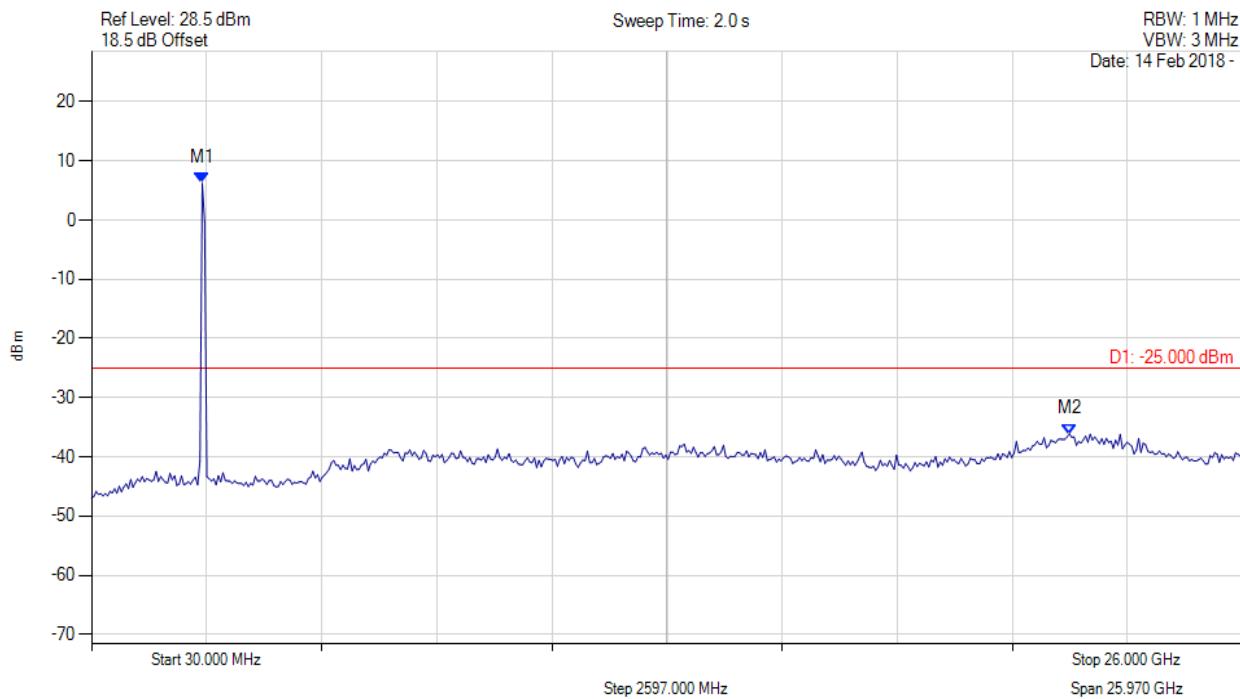
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2560.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



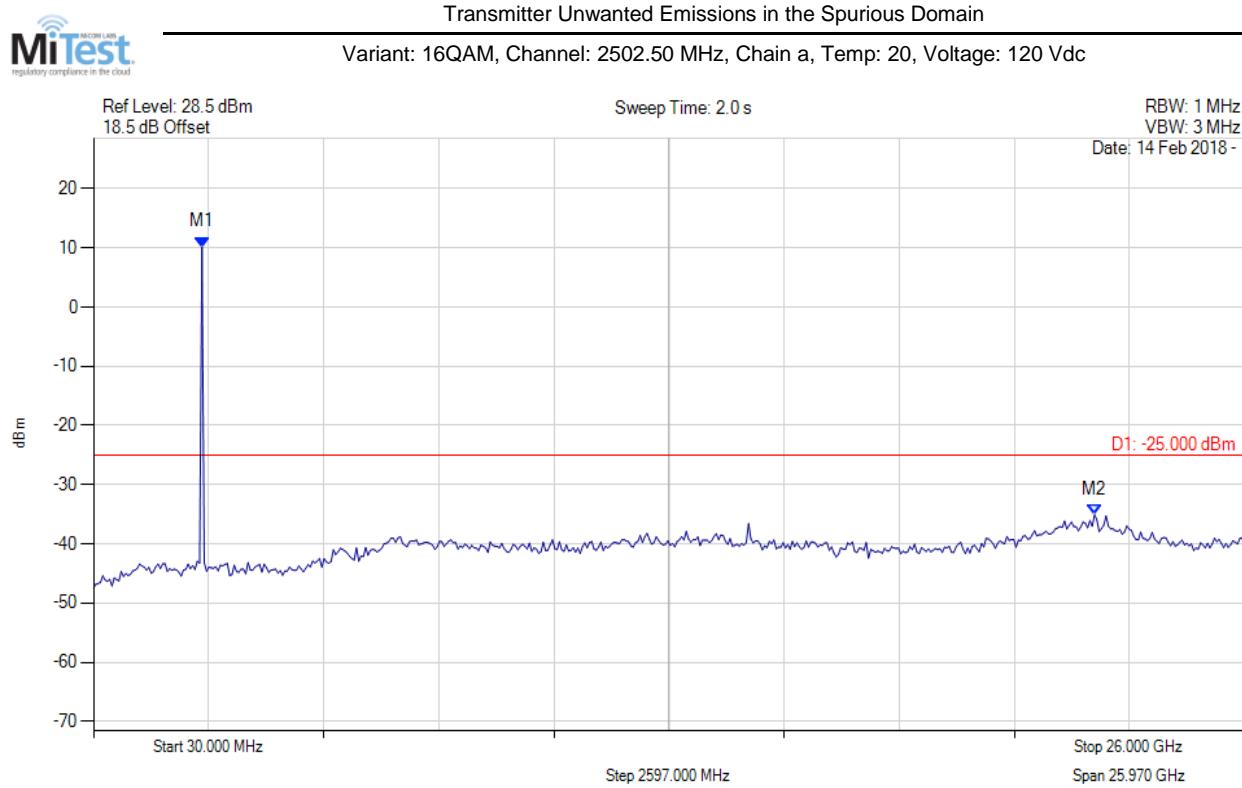
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 6.235 dBm M2 : 22.097 GHz : -36.137 dBm	Channel Frequency: 2560.00 MHz

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Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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9.6.4.2.2 16QAM:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 10.127 dBm M2 : 22.617 GHz : -35.085 dBm	Channel Frequency: 2502.50 MHz

[back to matrix](#)

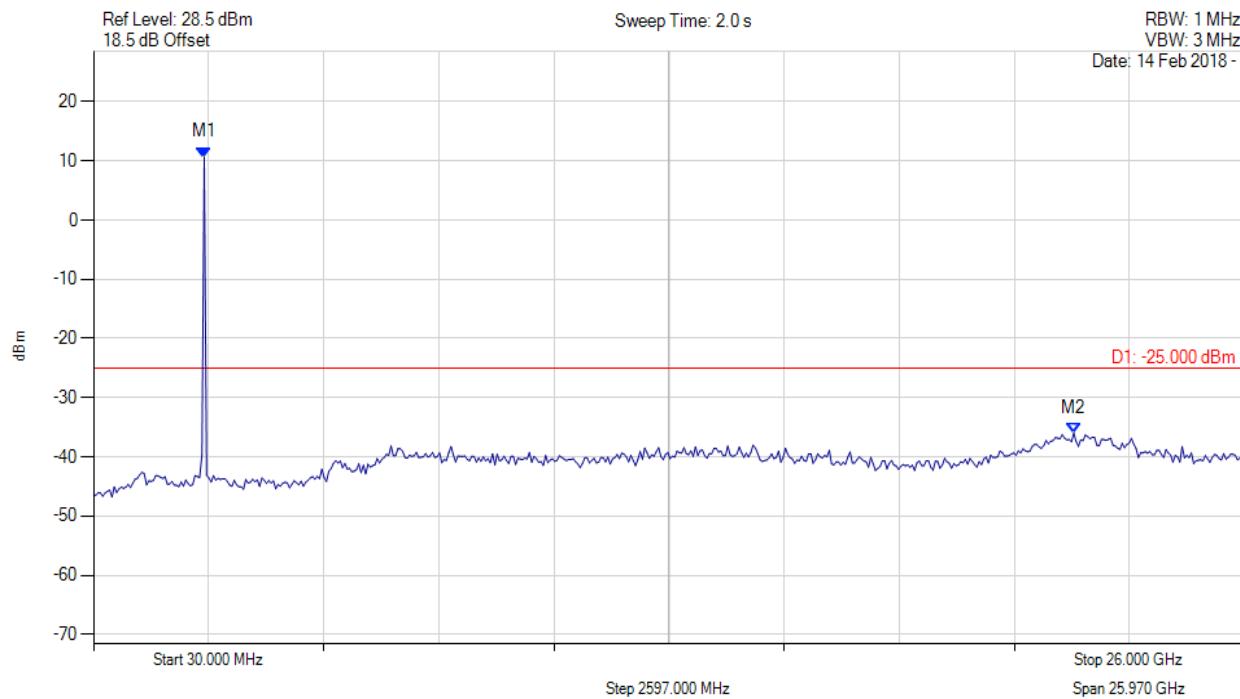
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2535.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 10.601 dBm M2 : 22.149 GHz : -35.984 dBm	Channel Frequency: 2535.00 MHz

[back to matrix](#)

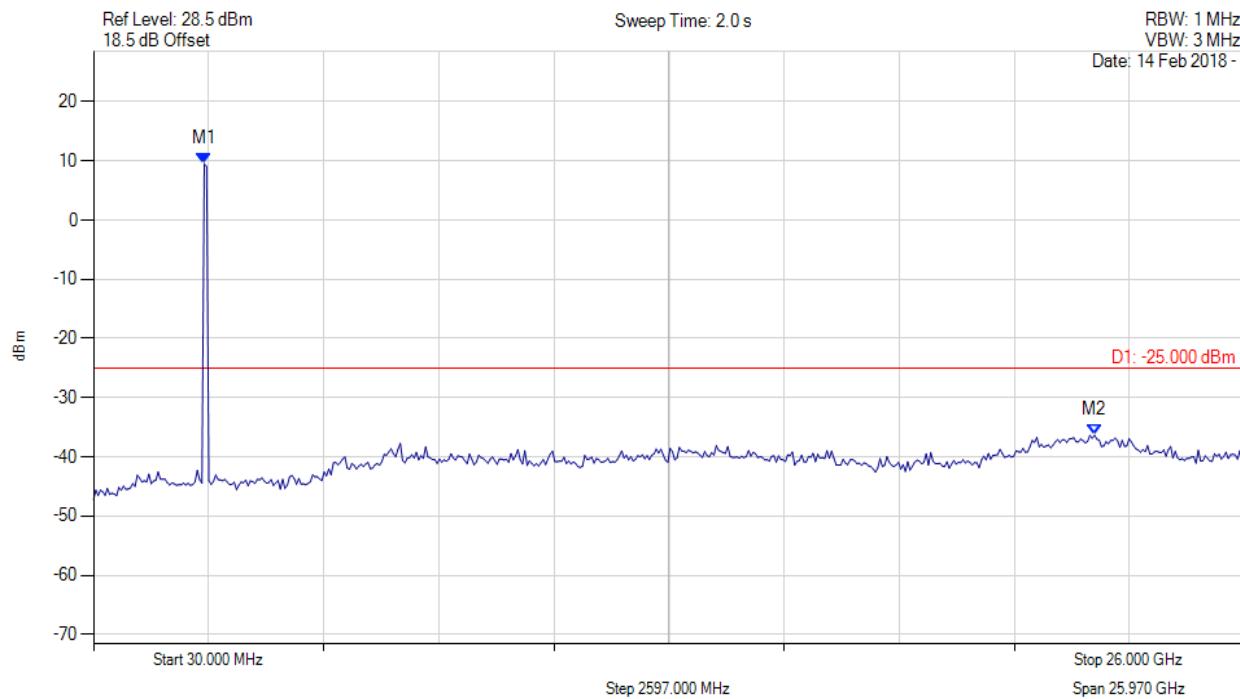
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2567.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 9.511 dBm M2 : 22.617 GHz : -36.324 dBm	Channel Frequency: 2567.50 MHz

[back to matrix](#)

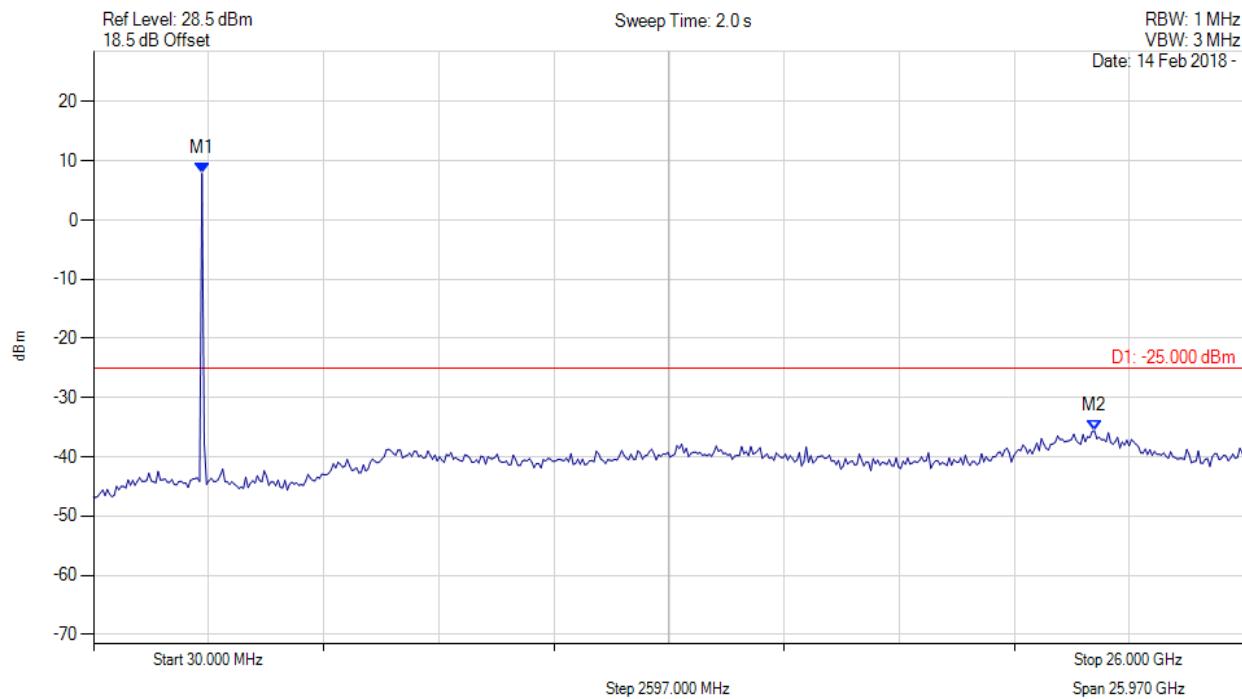
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2505.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 7.886 dBm M2 : 22.617 GHz : -35.622 dBm	Channel Frequency: 2505.00 MHz

[back to matrix](#)

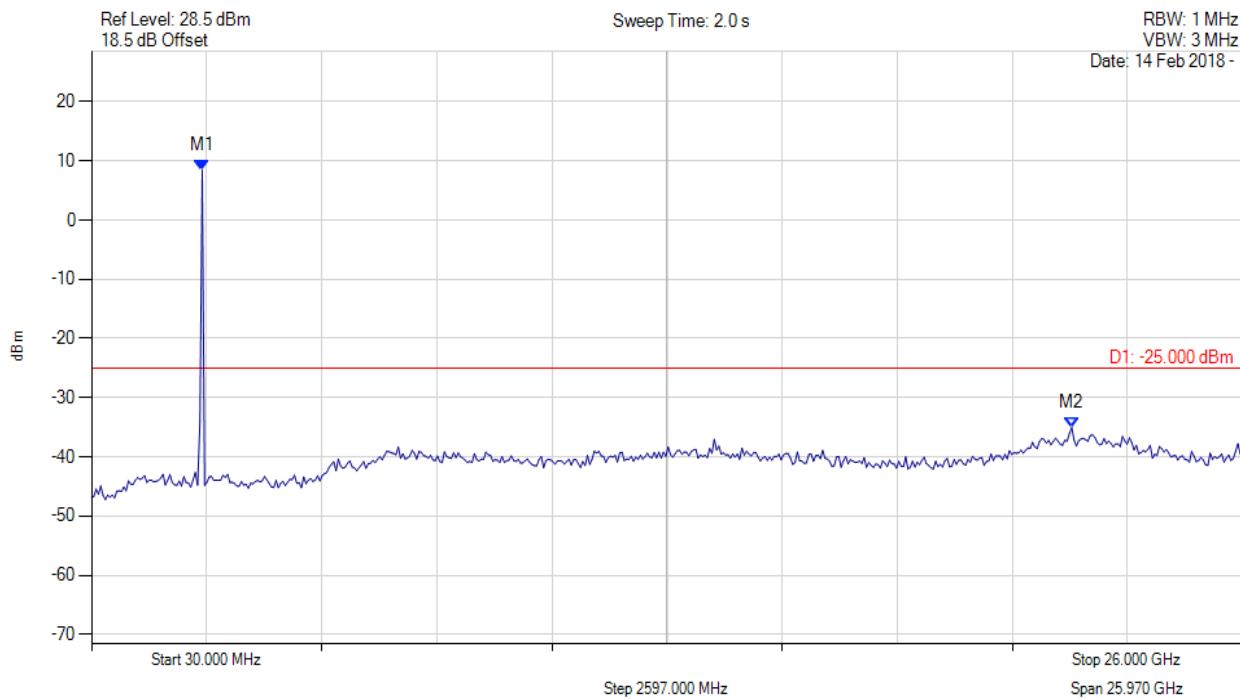
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2535.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 8.392 dBm M2 : 22.149 GHz : -35.067 dBm	Channel Frequency: 2535.00 MHz

[back to matrix](#)

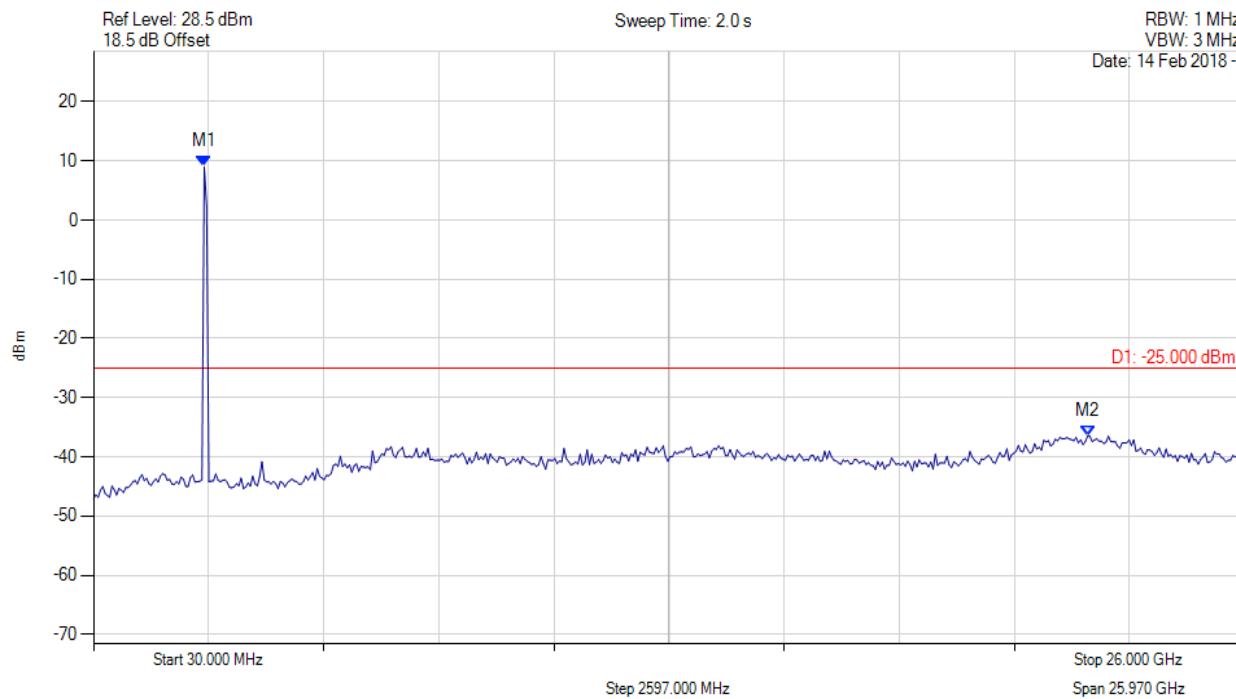
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2565.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 8.974 dBm M2 : 22.461 GHz : -36.466 dBm	Channel Frequency: 2565.00 MHz

[back to matrix](#)

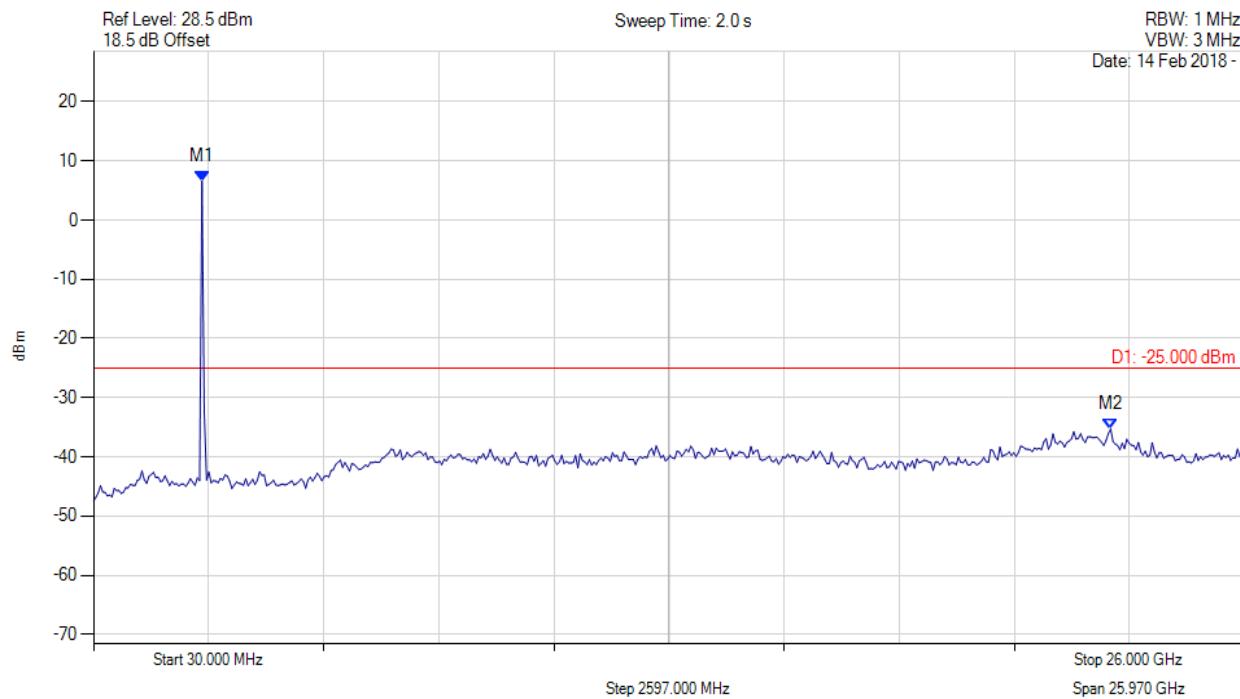
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2507.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 6.586 dBm M2 : 22.981 GHz : -35.311 dBm	Channel Frequency: 2507.50 MHz

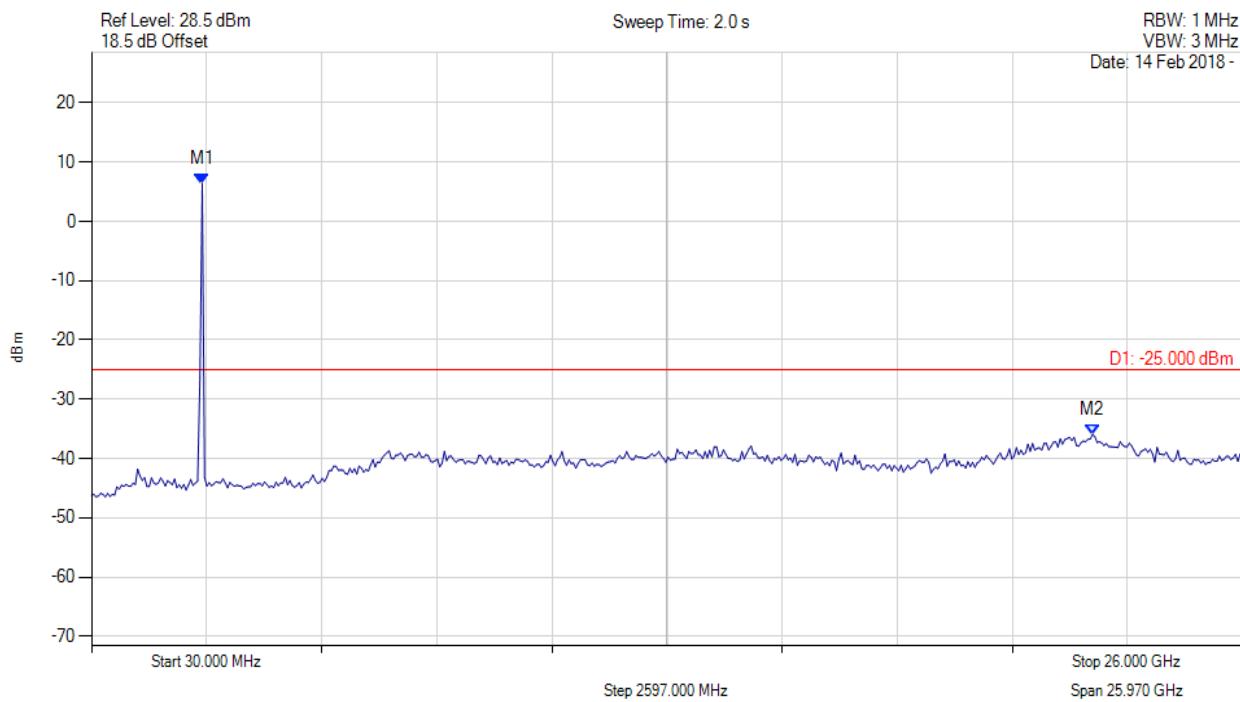
[back to matrix](#)

Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2535.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 6.350 dBm M2 : 22.617 GHz : -35.972 dBm	Channel Frequency: 2535.00 MHz

[back to matrix](#)

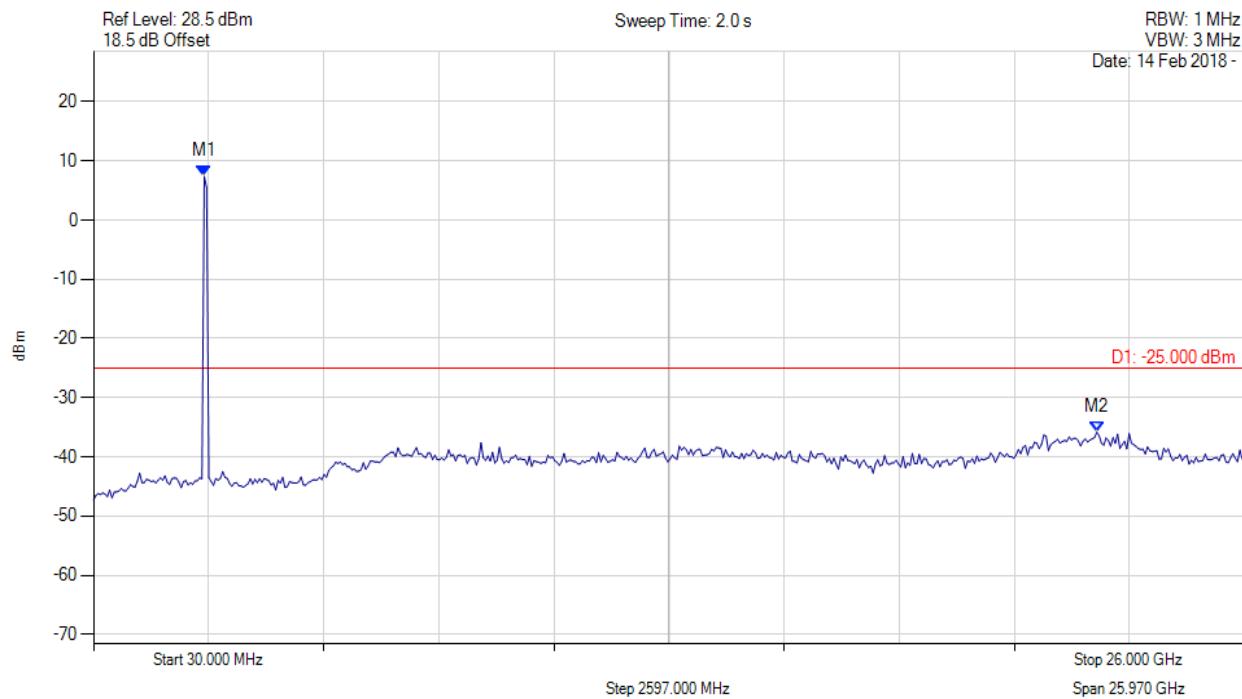
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2562.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 7.369 dBm M2 : 22.669 GHz : -35.838 dBm	Channel Frequency: 2562.50 MHz

[back to matrix](#)

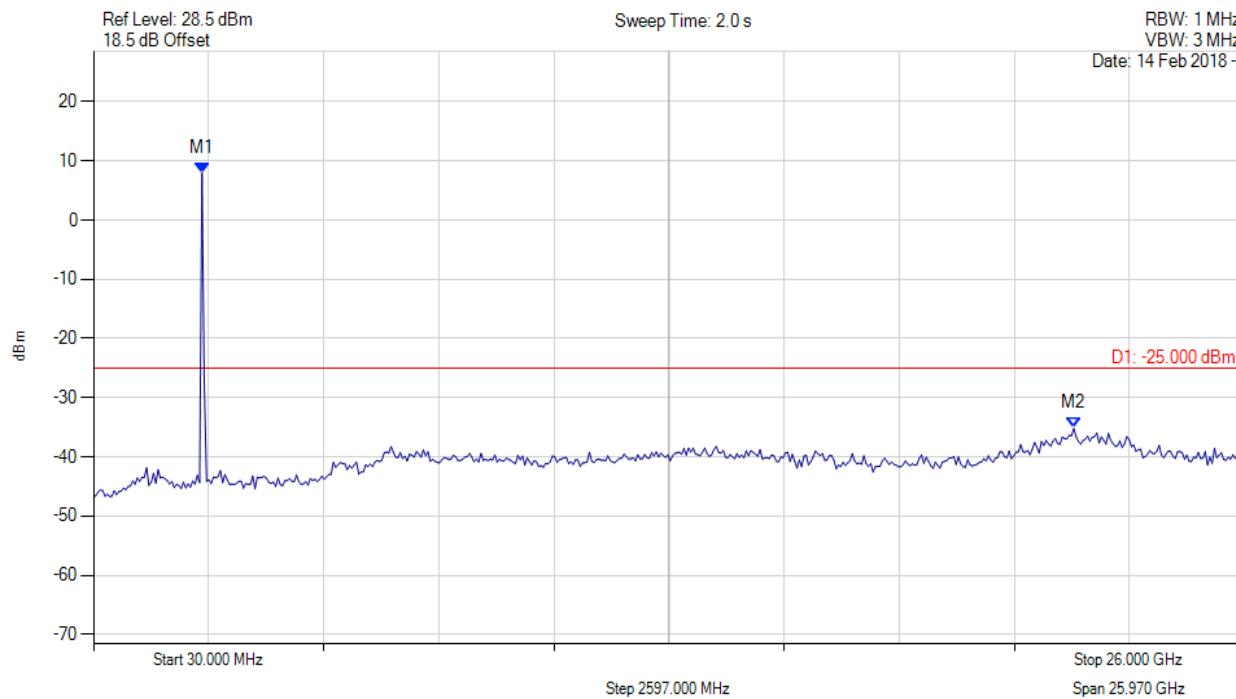
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2510.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 7.957 dBm M2 : 22.149 GHz : -35.187 dBm	Channel Frequency: 2510.00 MHz

[back to matrix](#)

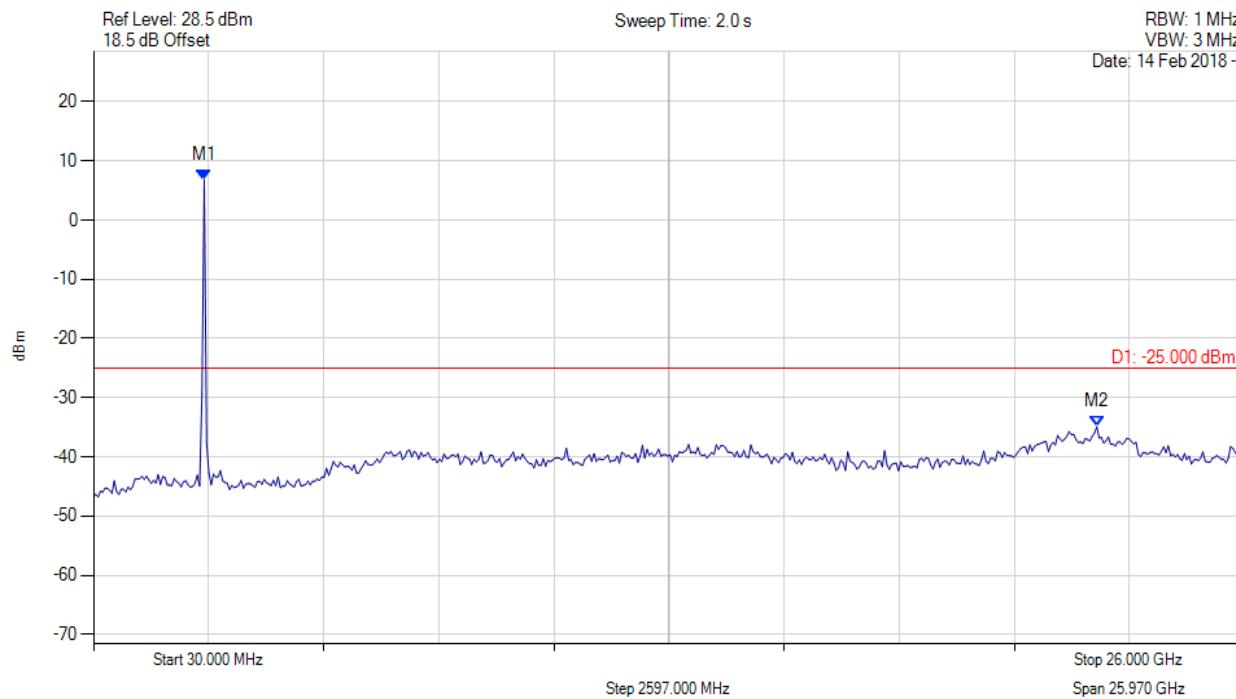
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2535.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 6.788 dBm M2 : 22.669 GHz : -34.908 dBm	Channel Frequency: 2535.00 MHz

[back to matrix](#)

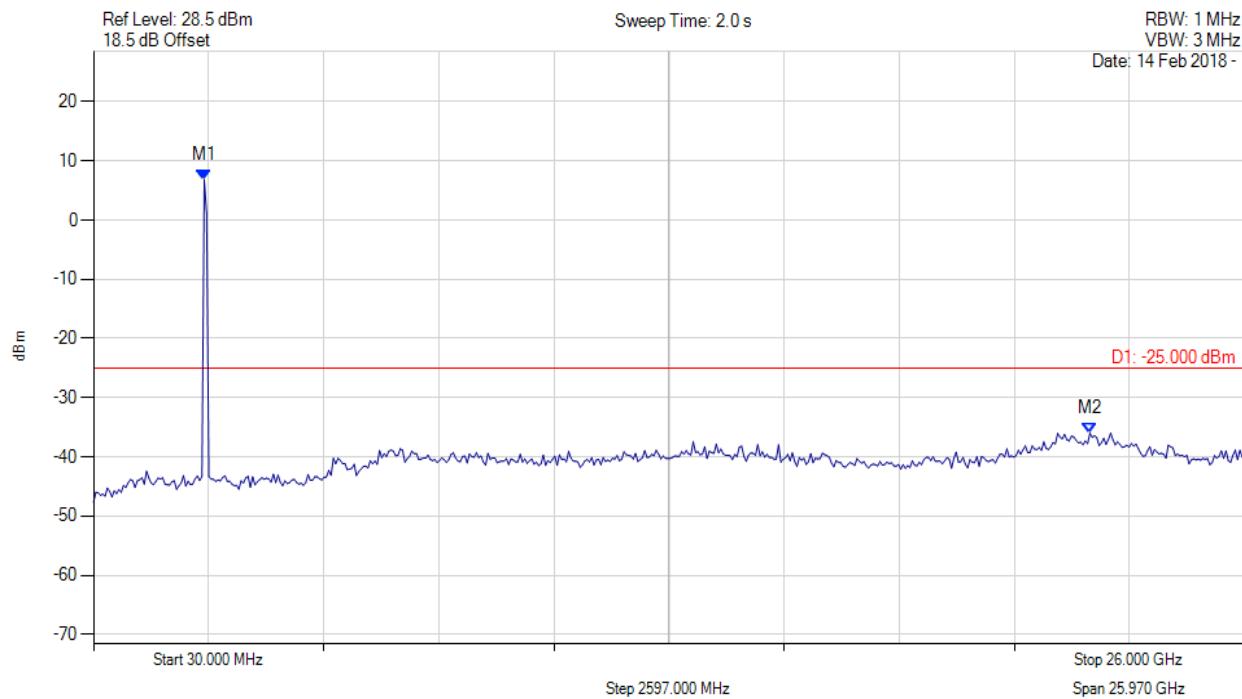
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2560.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2528.116 MHz : 6.796 dBm M2 : 22.513 GHz : -35.978 dBm	Channel Frequency: 2560.00 MHz

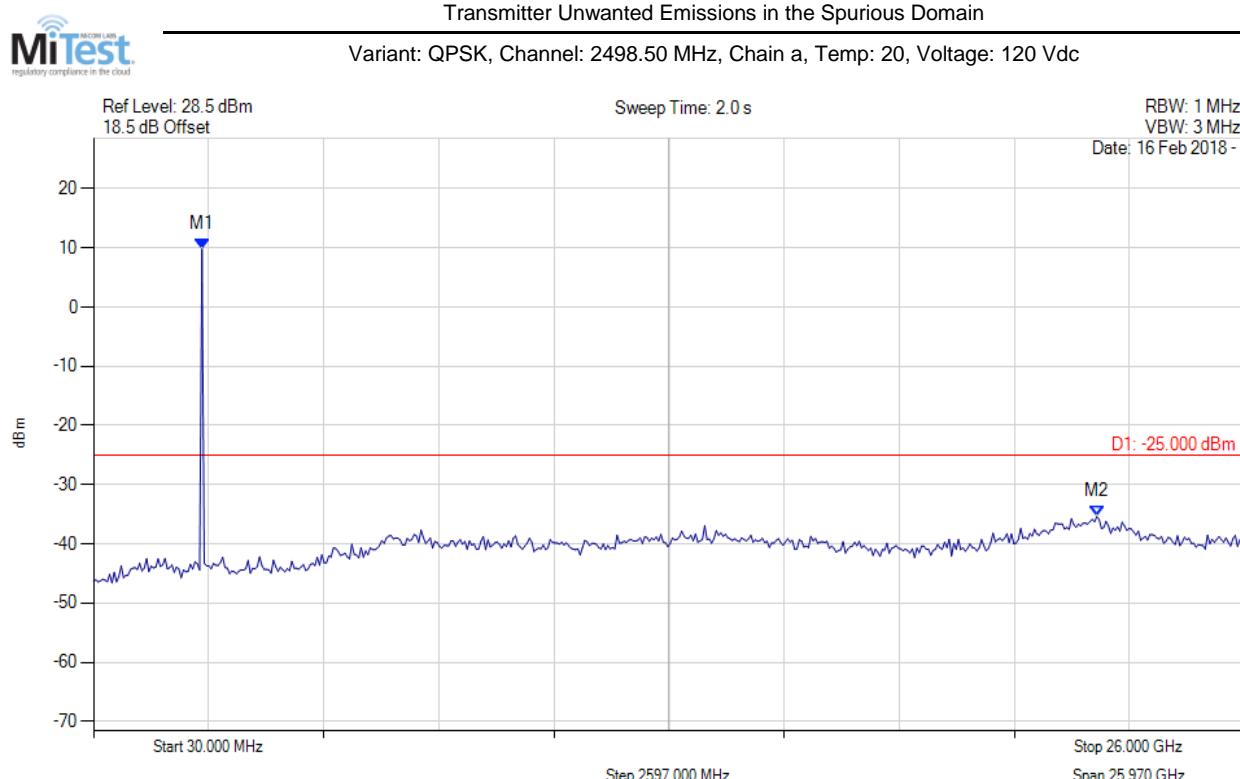
[back to matrix](#)

Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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9.6.4.3 Band 41: Conducted Spurious Emissions

9.6.4.3.1 QPSK:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 9.796 dBm M2 : 22.669 GHz : -35.388 dBm	Channel Frequency: 2498.50 MHz

[back to matrix](#)

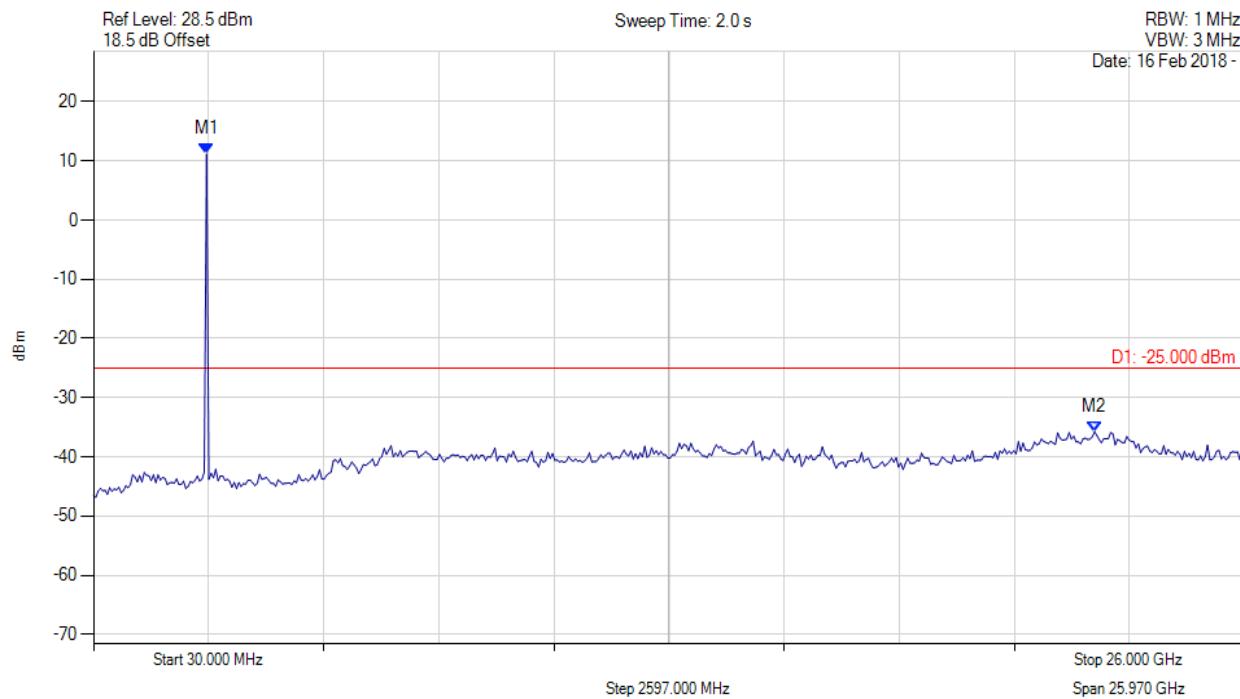
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2593.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2580.160 MHz : 11.136 dBm M2 : 22.617 GHz : -35.740 dBm	Channel Frequency: 2593.00 MHz

[back to matrix](#)

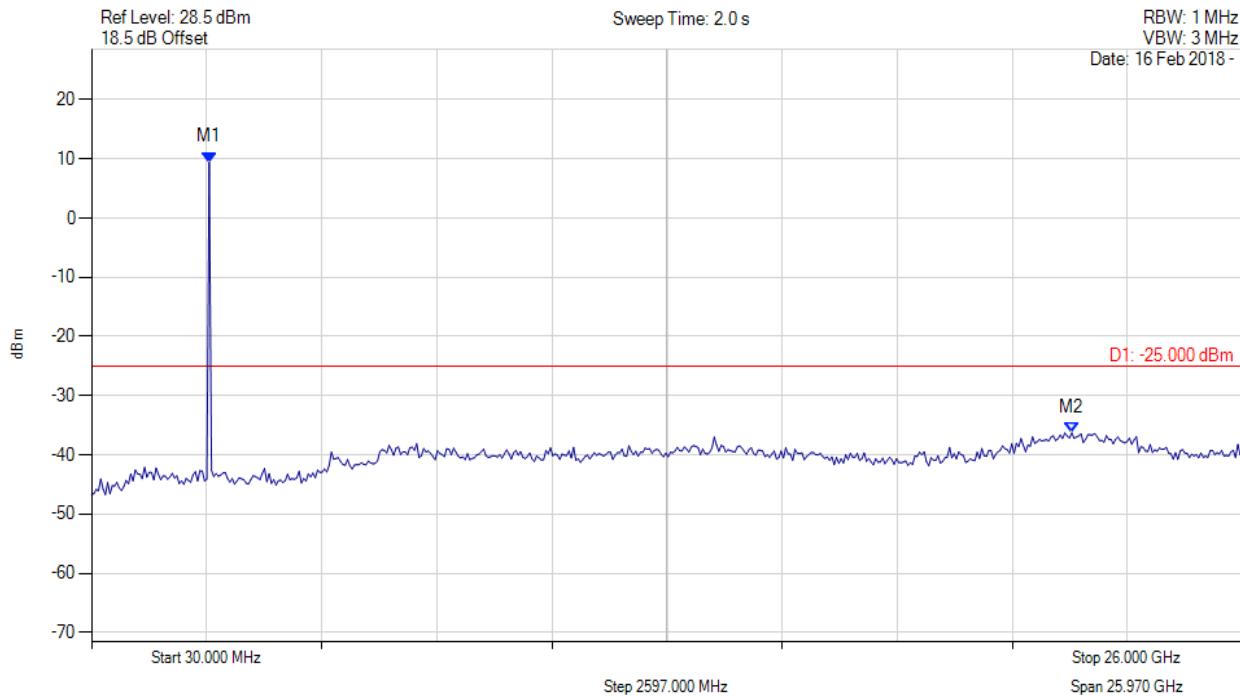
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2687.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2684.248 MHz : 9.421 dBm M2 : 22.149 GHz : -36.277 dBm	Channel Frequency: 2687.50 MHz

[back to matrix](#)

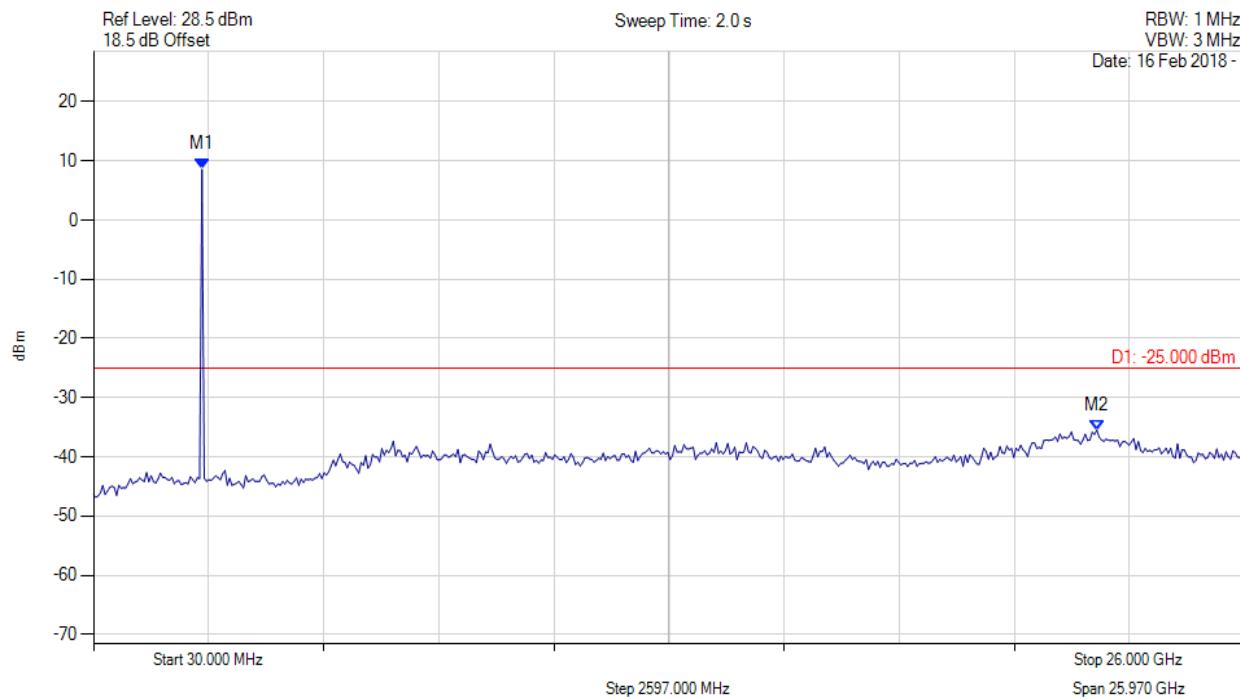
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2501.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 8.539 dBm M2 : 22.669 GHz : -35.471 dBm	Channel Frequency: 2501.00 MHz

[back to matrix](#)

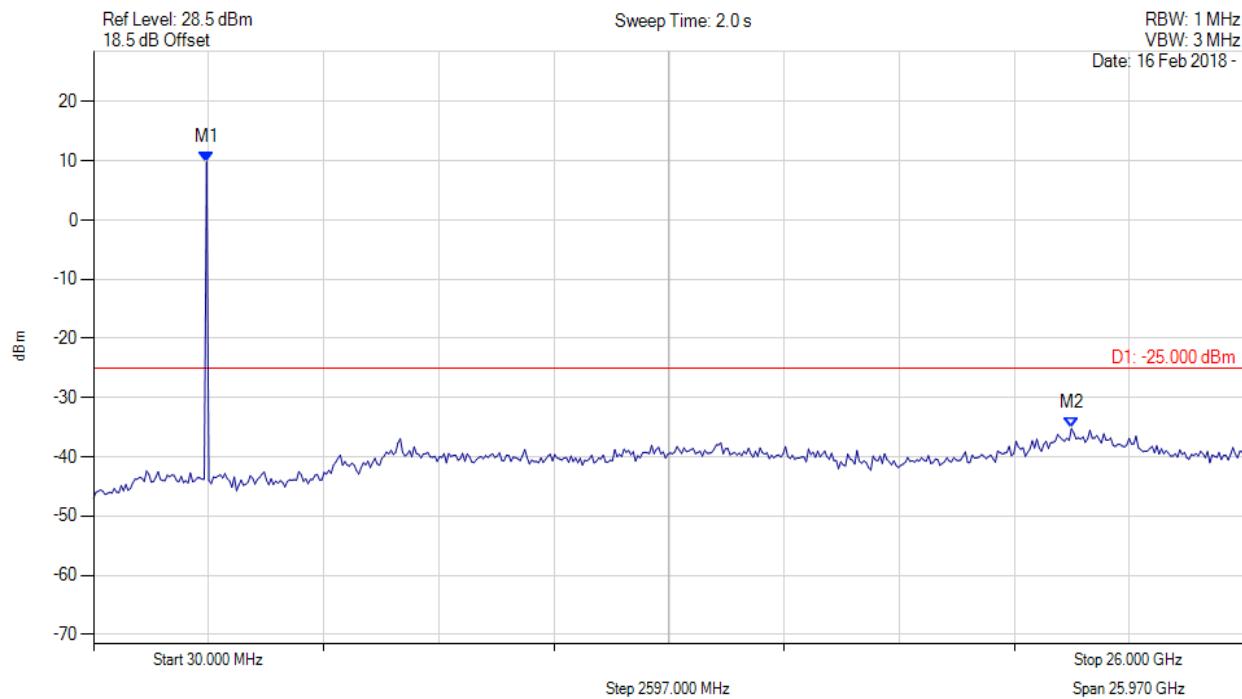
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2593.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2580.160 MHz : 9.840 dBm M2 : 22.097 GHz : -35.185 dBm	Channel Frequency: 2593.00 MHz

[back to matrix](#)

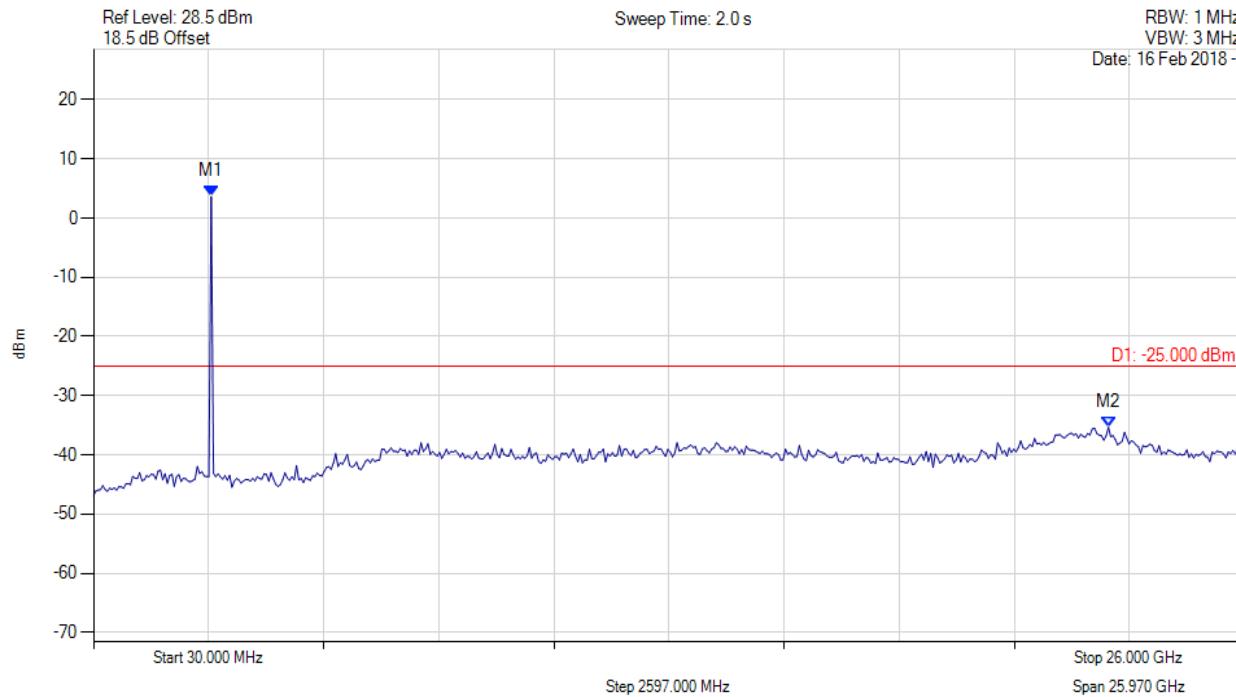
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2685.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2684.248 MHz : 3.603 dBm M2 : 22.929 GHz : -35.323 dBm	Channel Frequency: 2685.00 MHz

[back to matrix](#)

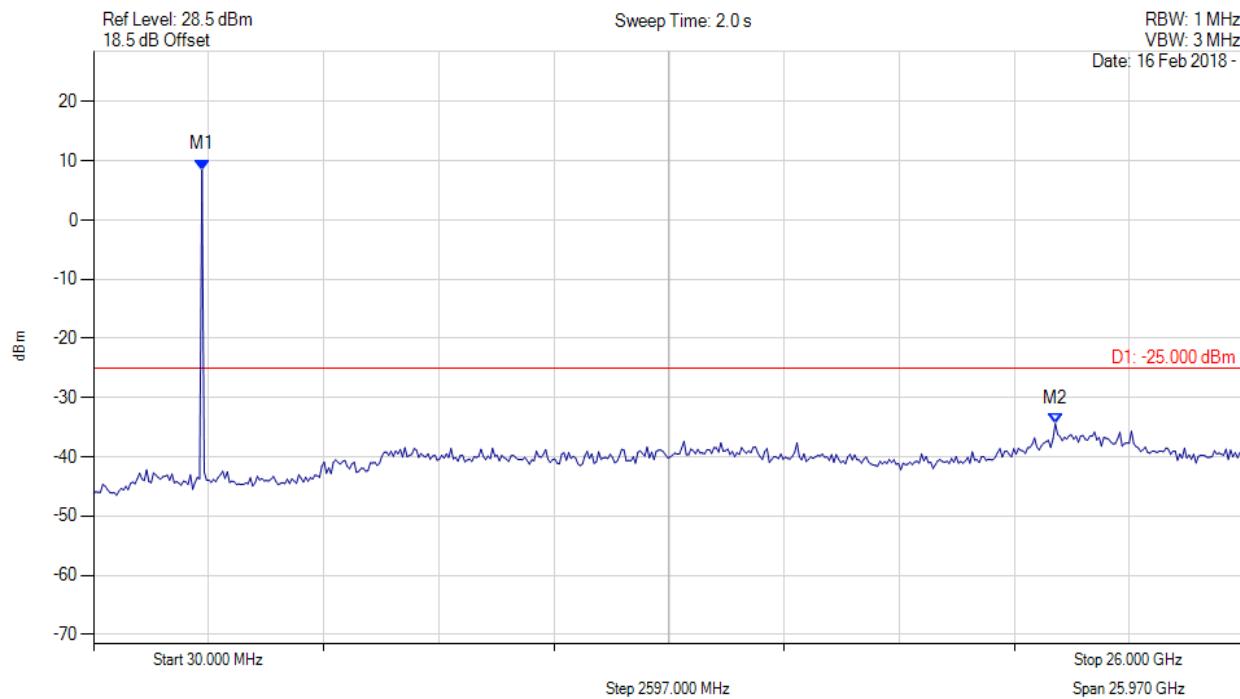
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2503.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 8.496 dBm M2 : 21.732 GHz : -34.373 dBm	Channel Frequency: 2503.50 MHz

[back to matrix](#)

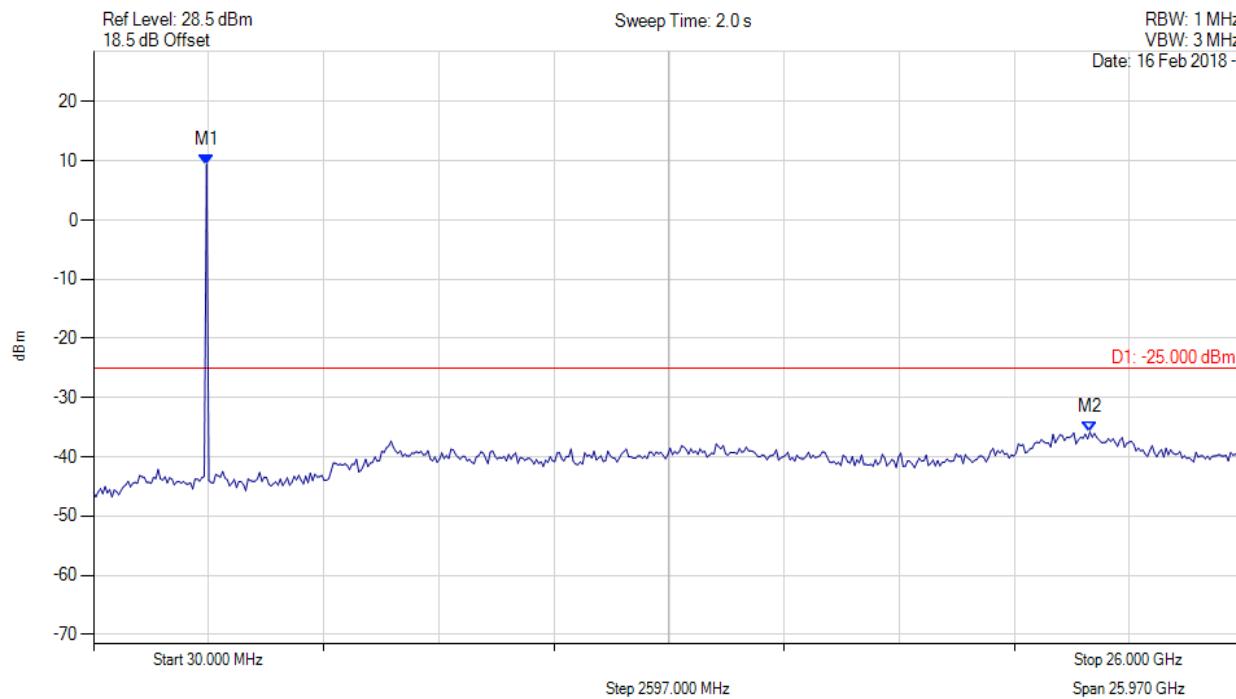
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2593.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2580.160 MHz : 9.401 dBm M2 : 22.513 GHz : -35.815 dBm	Channel Frequency: 2593.00 MHz

[back to matrix](#)

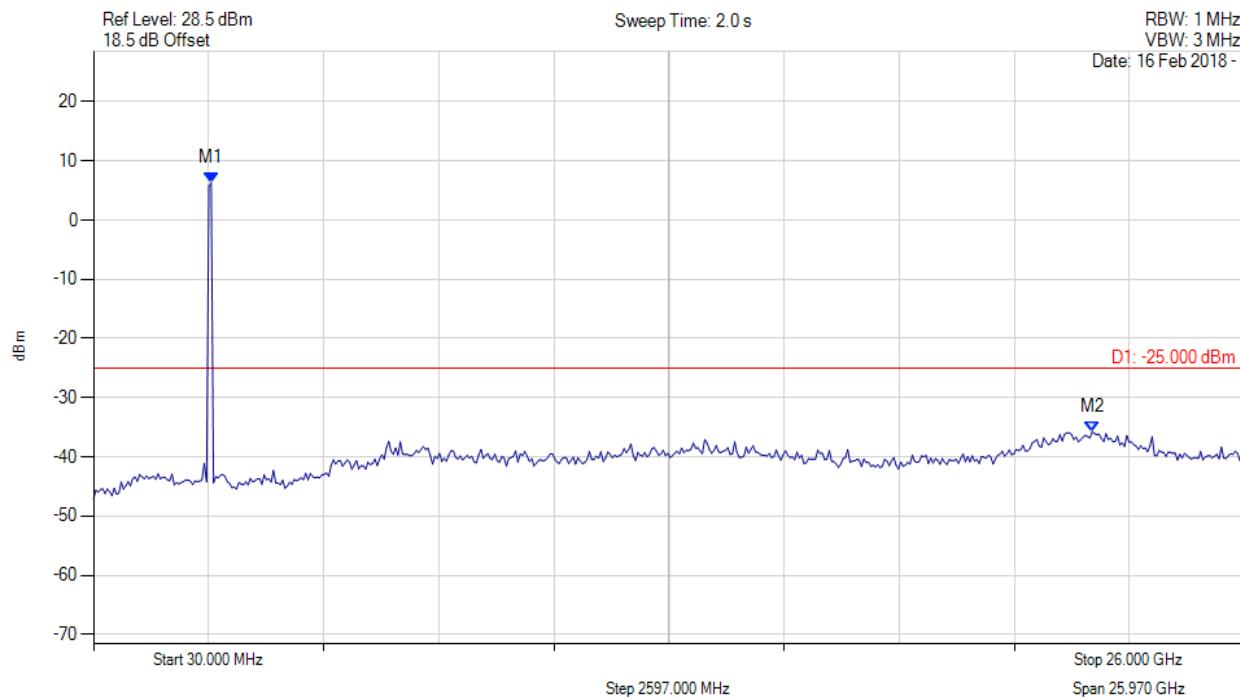
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2682.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2684.248 MHz : 6.277 dBm M2 : 22.565 GHz : -35.754 dBm	Channel Frequency: 2682.50 MHz

[back to matrix](#)

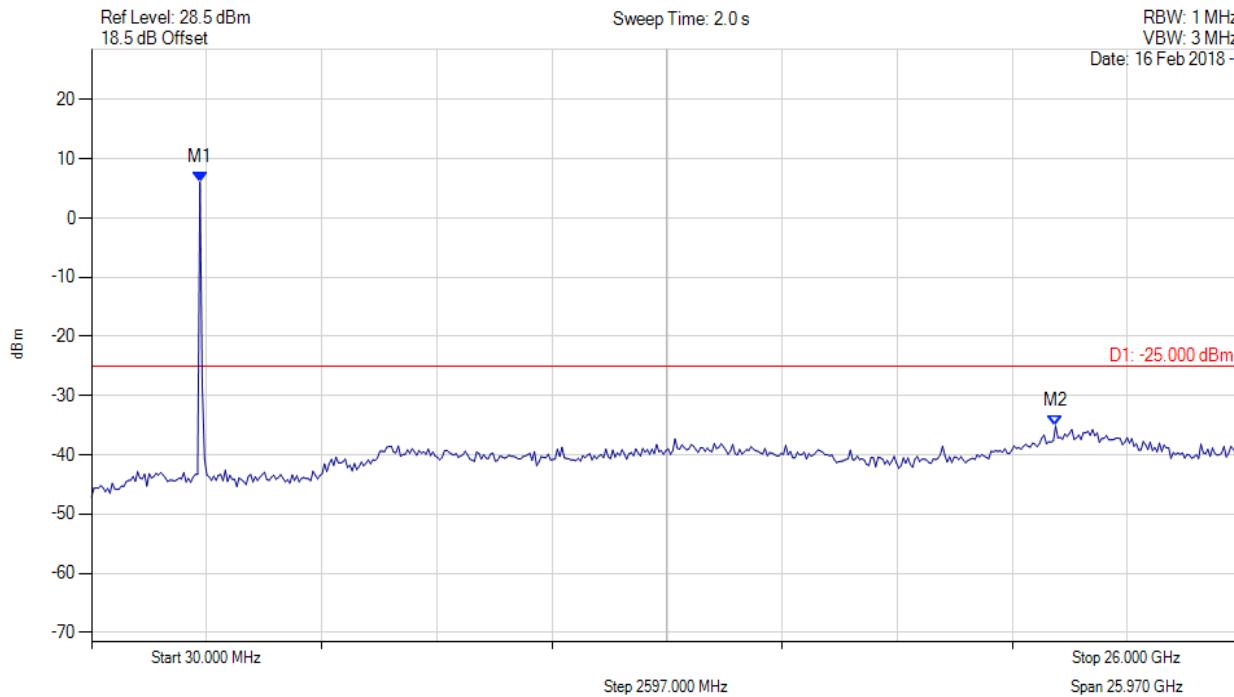
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2506.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 6.072 dBm M2 : 21.784 GHz : -35.130 dBm	Channel Frequency: 2506.00 MHz

[back to matrix](#)

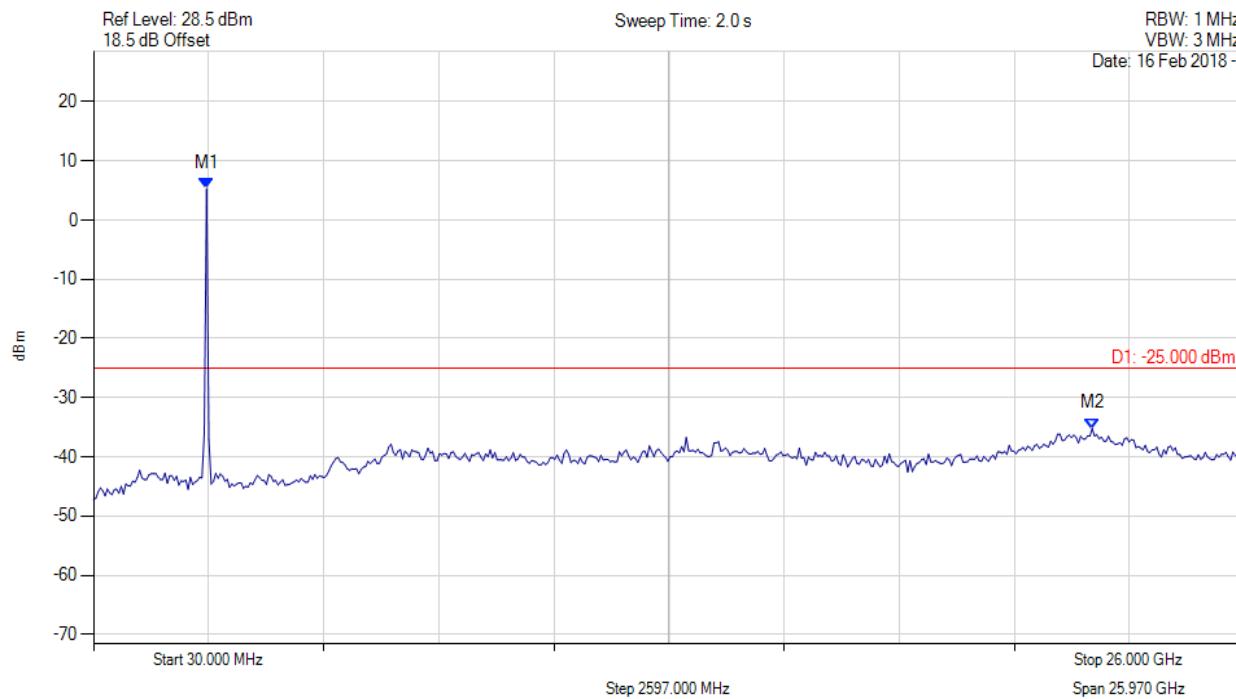
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2593.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2580.160 MHz : 5.283 dBm M2 : 22.565 GHz : -35.201 dBm	Channel Frequency: 2593.00 MHz

[back to matrix](#)

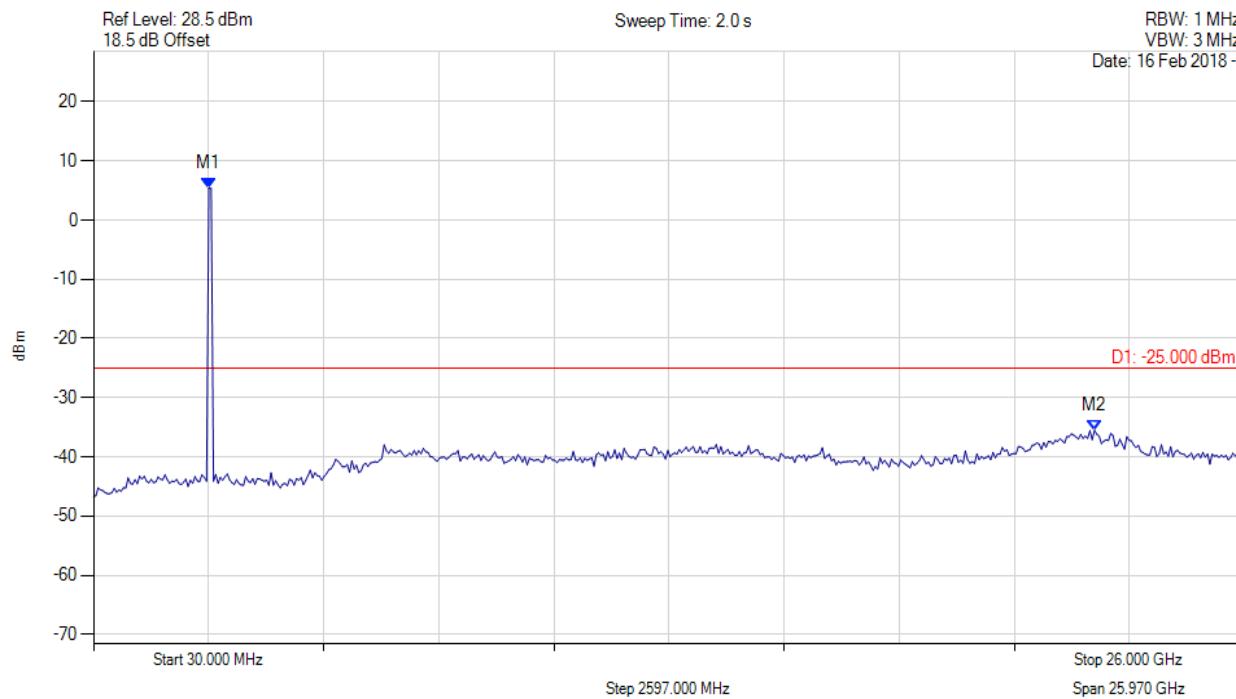
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: QPSK, Channel: 2680.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



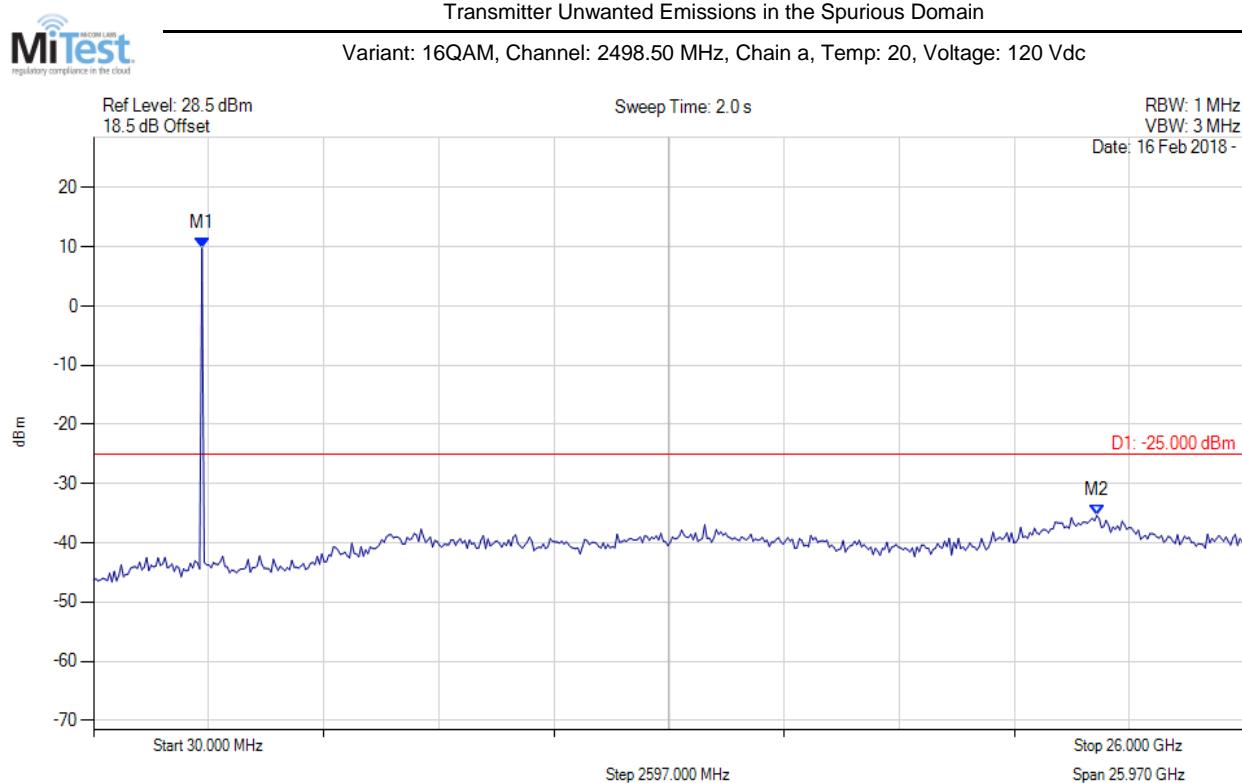
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2632.204 MHz : 5.411 dBm M2 : 22.617 GHz : -35.524 dBm	Channel Frequency: 2680.00 MHz

[back to matrix](#)

Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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9.6.4.3.2 16QAM:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 9.796 dBm M2 : 22.669 GHz : -35.388 dBm	Channel Frequency: 2498.50 MHz

[back to matrix](#)

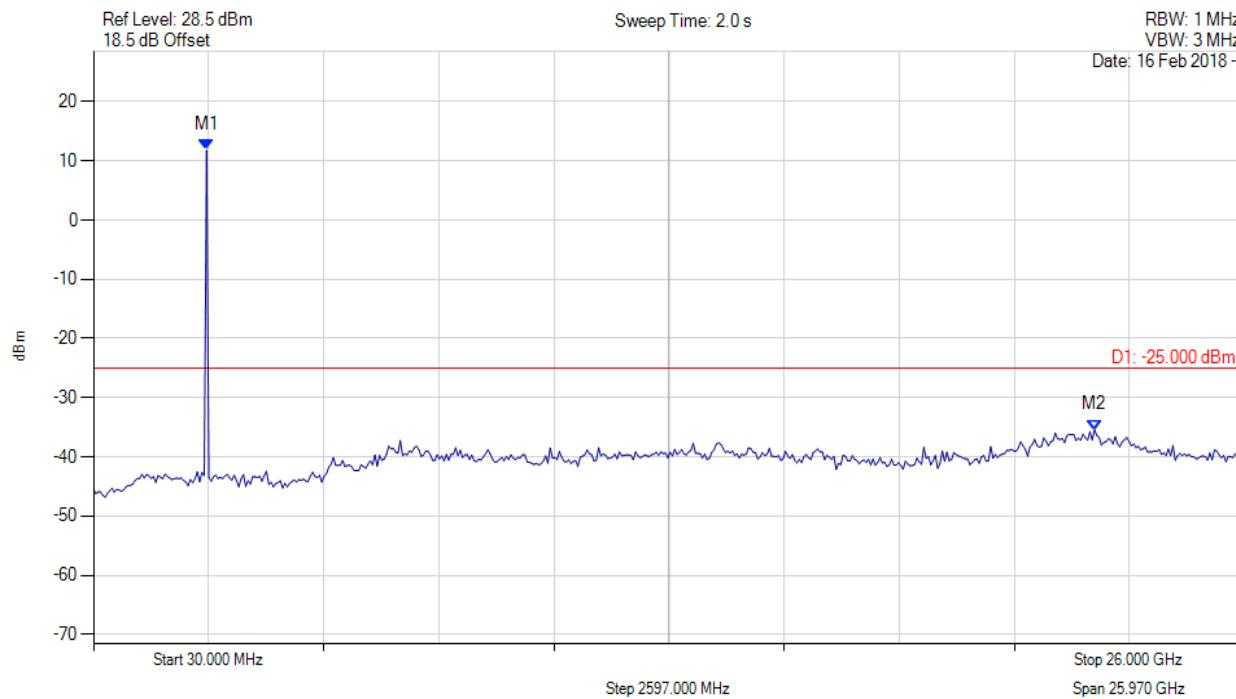
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2593.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2580.160 MHz : 11.787 dBm M2 : 22.617 GHz : -35.443 dBm	Channel Frequency: 2593.00 MHz

[back to matrix](#)

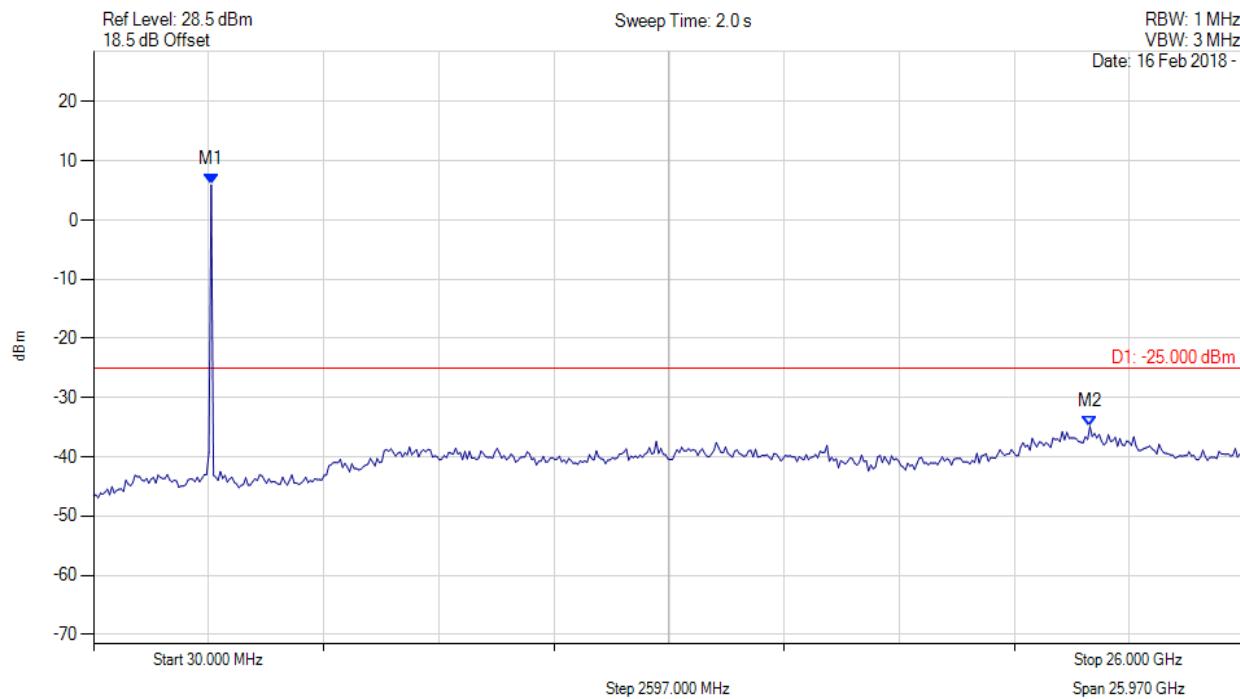
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2687.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2684.248 MHz : 5.944 dBm M2 : 22.513 GHz : -34.874 dBm	Channel Frequency: 2687.50 MHz

[back to matrix](#)

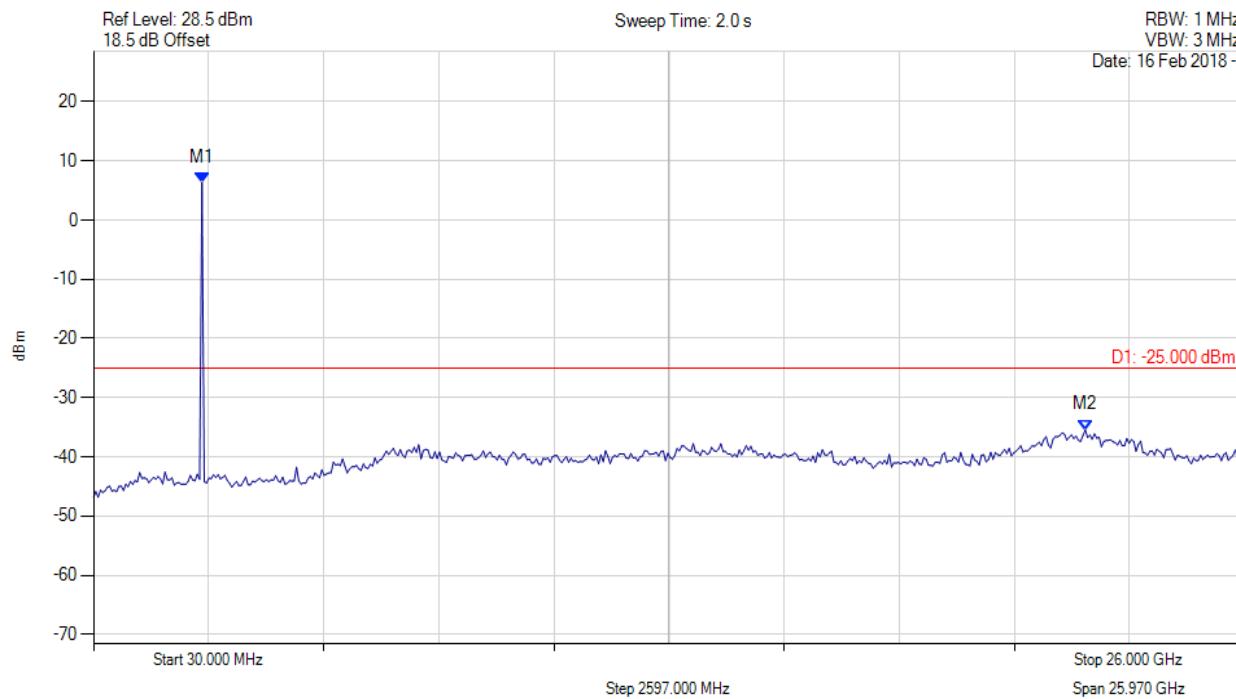
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2501.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 6.346 dBm M2 : 22.409 GHz : -35.437 dBm	Channel Frequency: 2501.00 MHz

[back to matrix](#)

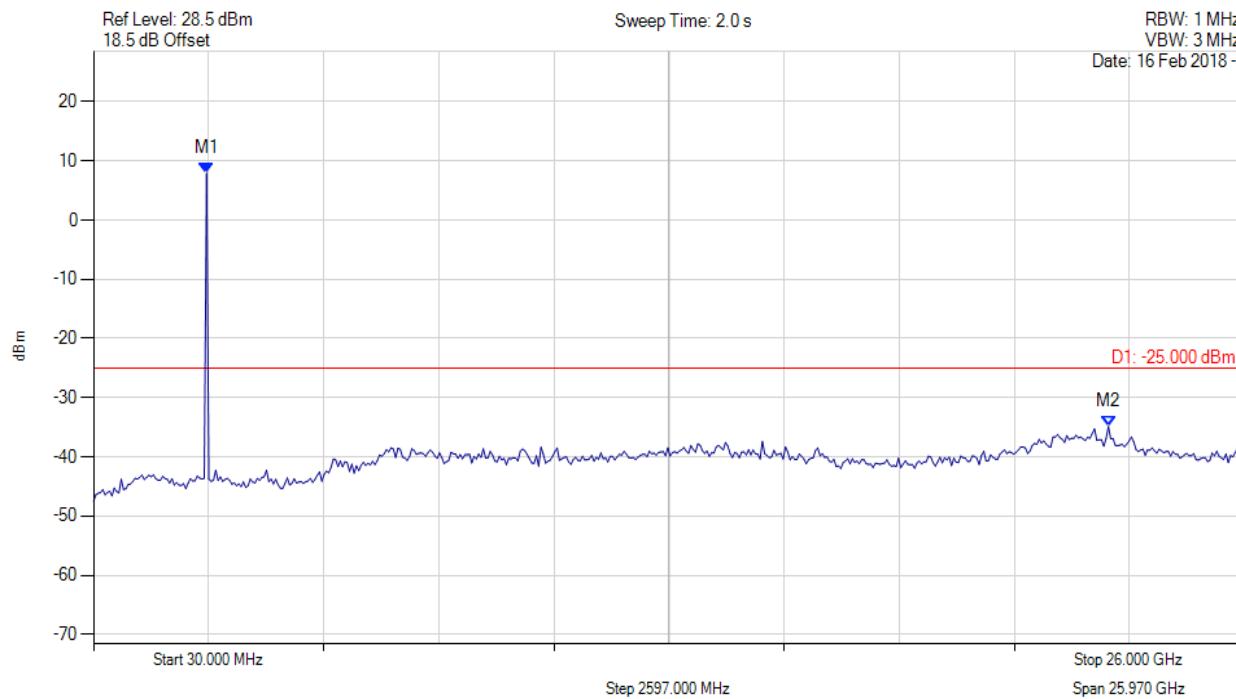
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2593.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2580.160 MHz : 7.886 dBm M2 : 22.929 GHz : -34.861 dBm	Channel Frequency: 2593.00 MHz

[back to matrix](#)

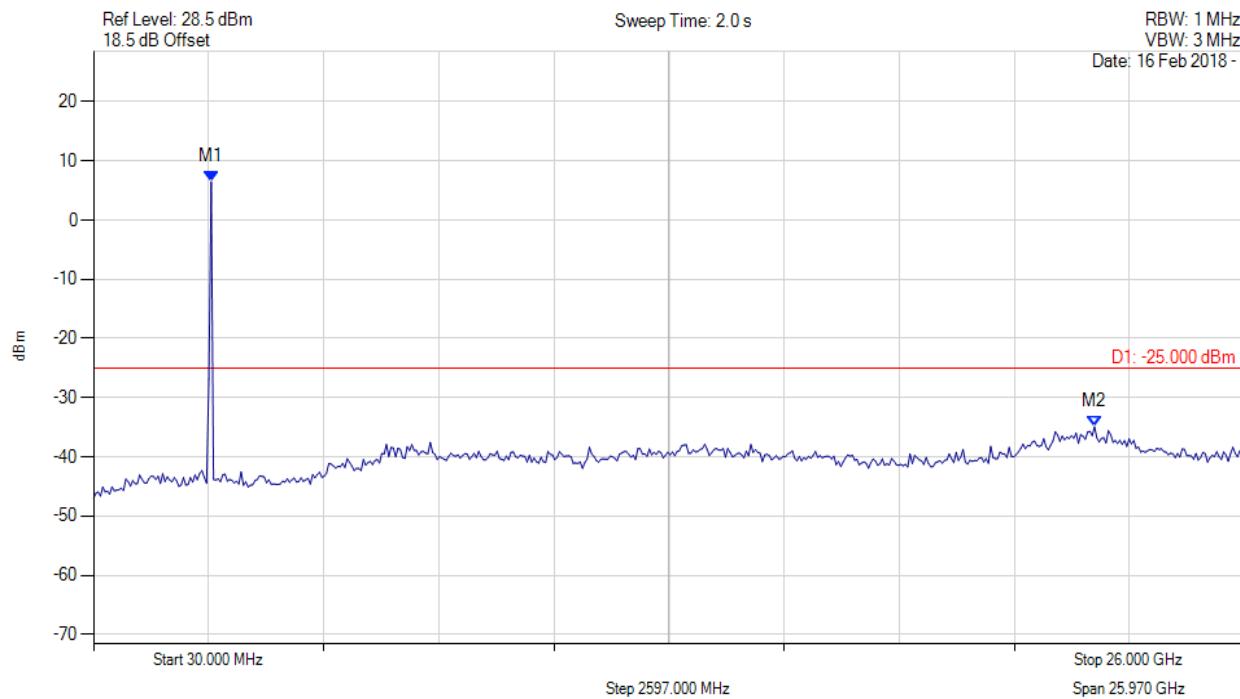
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2685.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2684.248 MHz : 6.464 dBm M2 : 22.617 GHz : -34.914 dBm	Channel Frequency: 2685.00 MHz

[back to matrix](#)

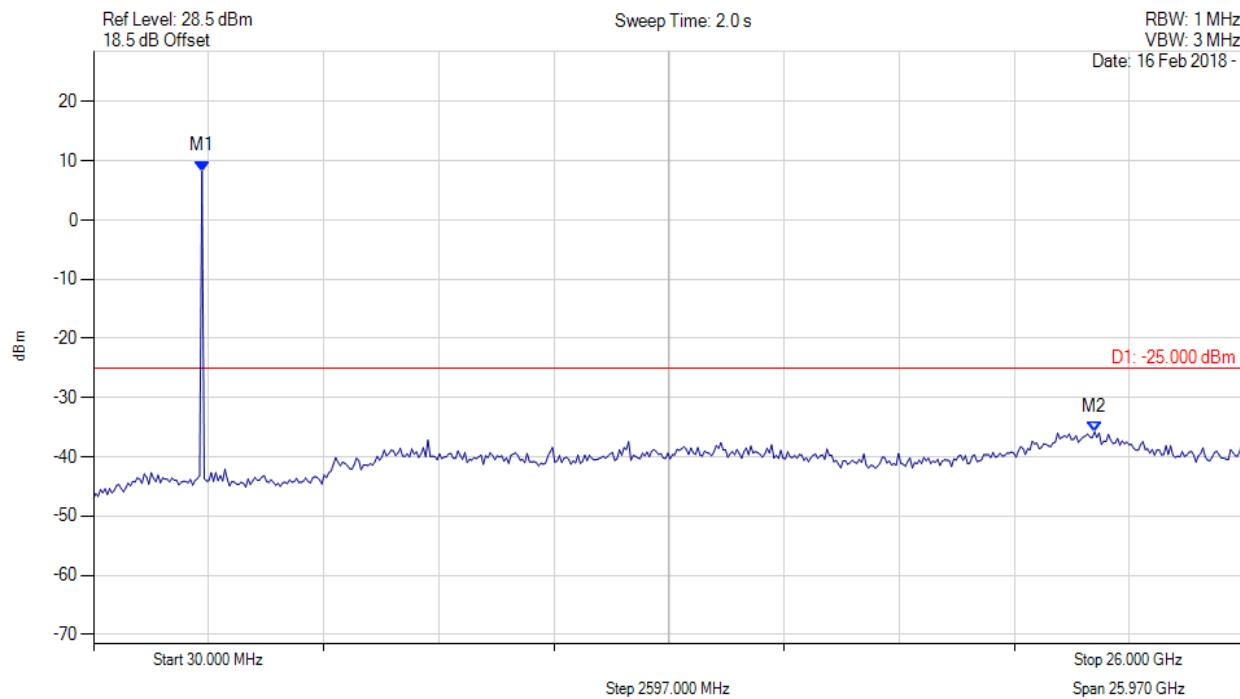
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2503.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 8.260 dBm M2 : 22.617 GHz : -35.779 dBm	Channel Frequency: 2503.50 MHz

[back to matrix](#)

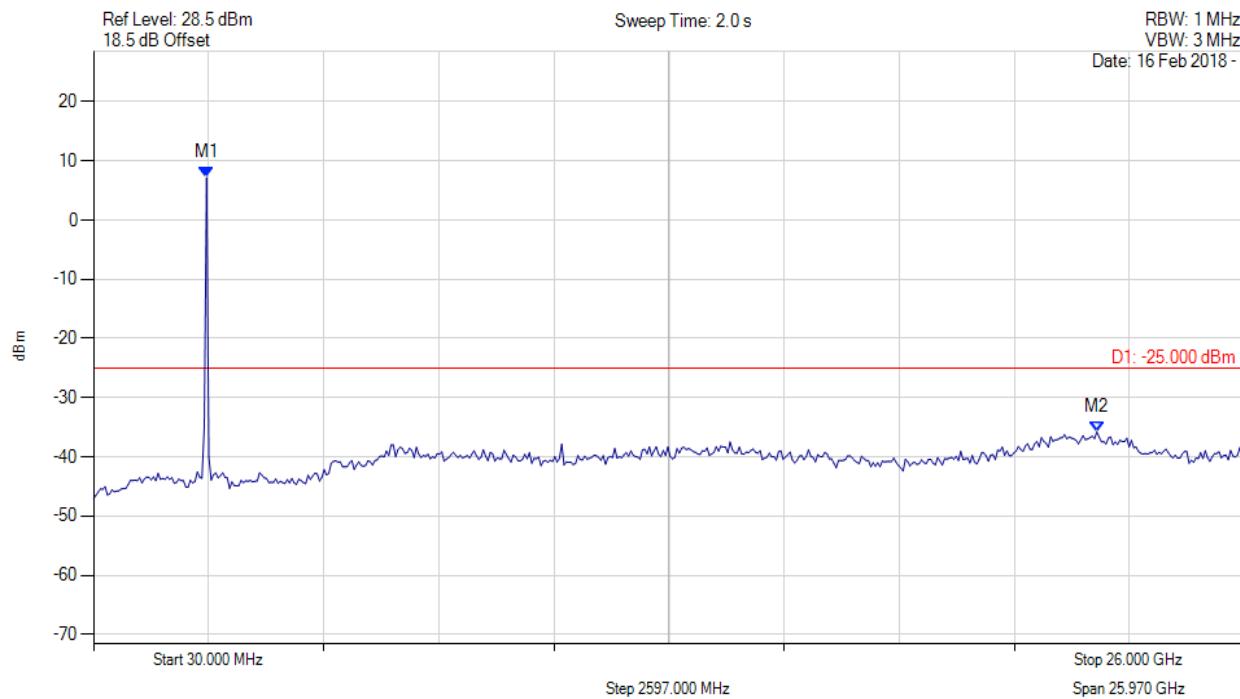
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2593.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2580.160 MHz : 7.156 dBm M2 : 22.669 GHz : -35.797 dBm	Channel Frequency: 2593.00 MHz

[back to matrix](#)

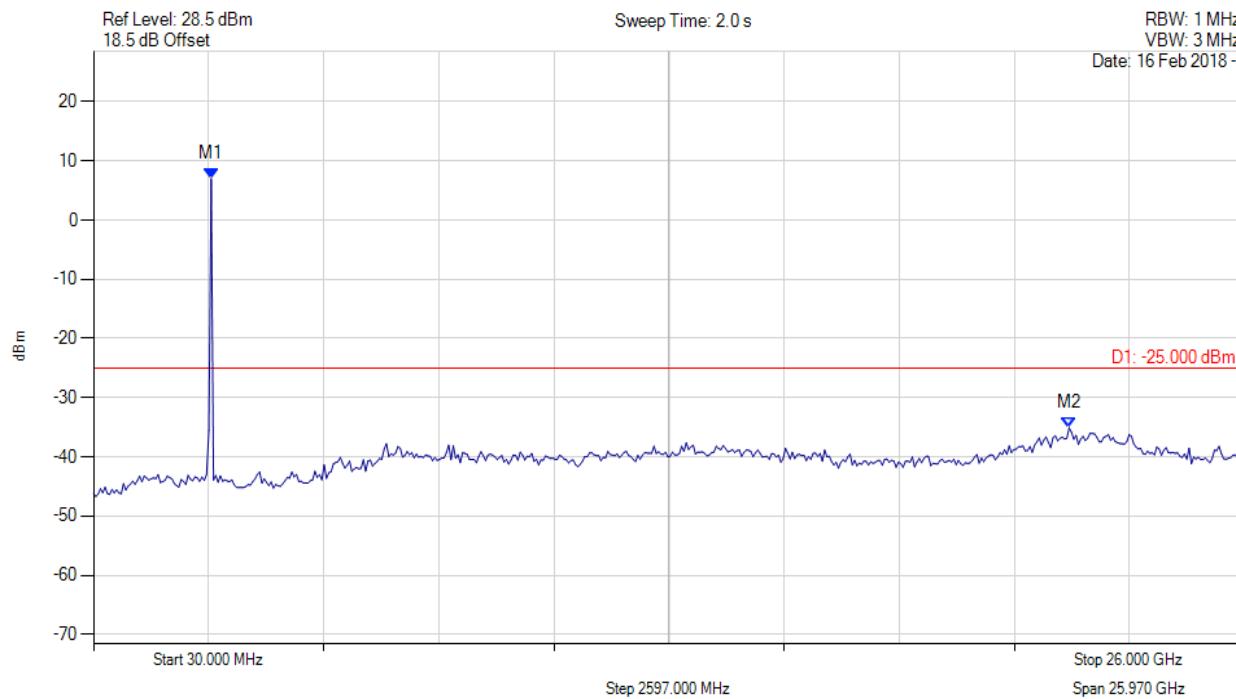
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2682.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2684.248 MHz : 6.971 dBm M2 : 22.045 GHz : -35.105 dBm	Channel Frequency: 2682.50 MHz

[back to matrix](#)

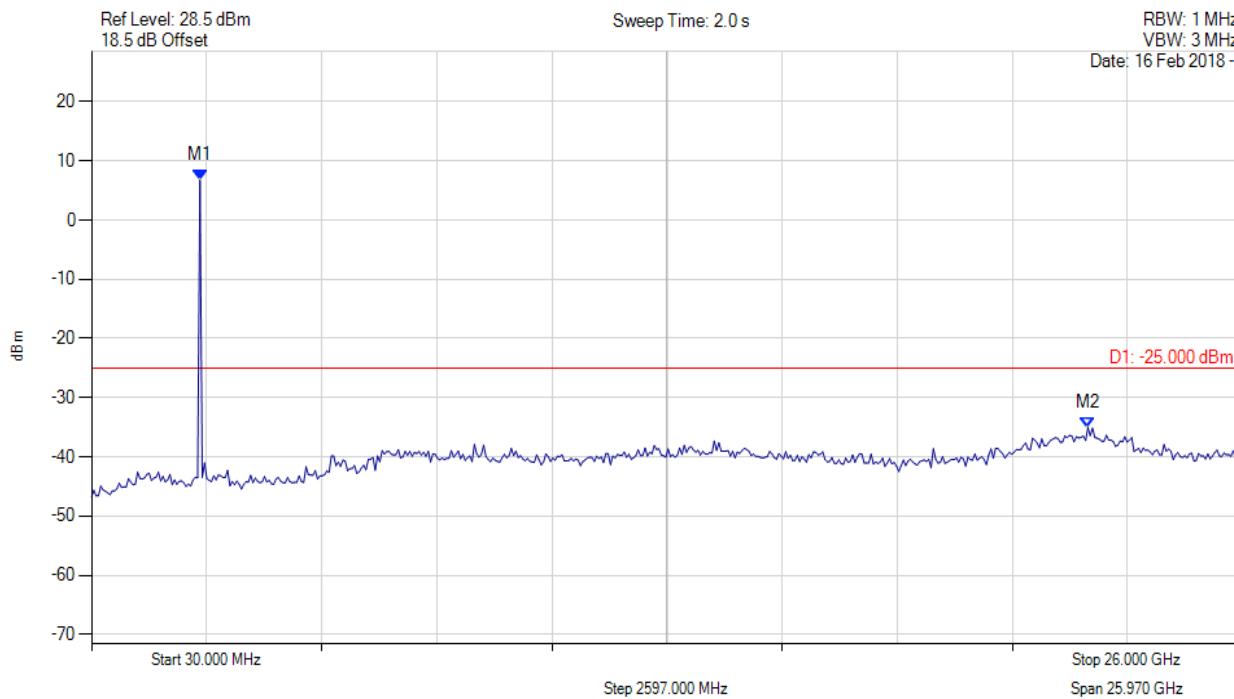
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2506.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2476.072 MHz : 6.741 dBm M2 : 22.513 GHz : -35.020 dBm	Channel Frequency: 2506.00 MHz

[back to matrix](#)

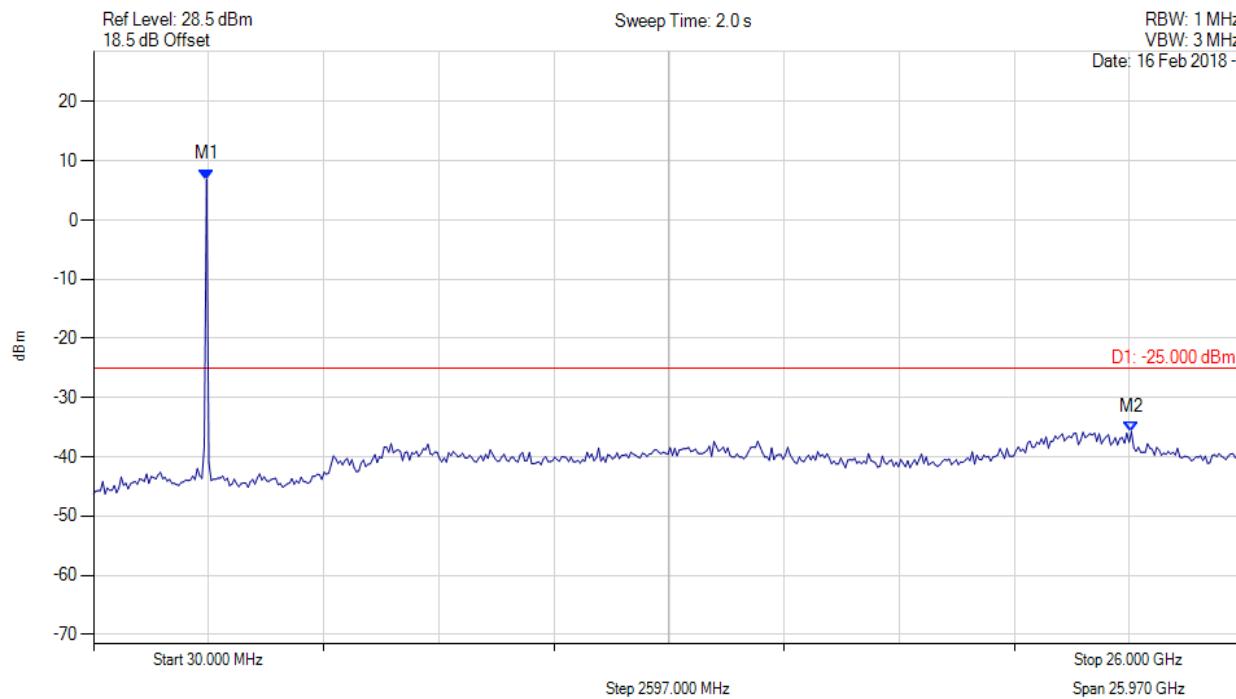
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2593.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2580.160 MHz : 6.857 dBm M2 : 23.450 GHz : -35.760 dBm	Channel Frequency: 2593.00 MHz

[back to matrix](#)

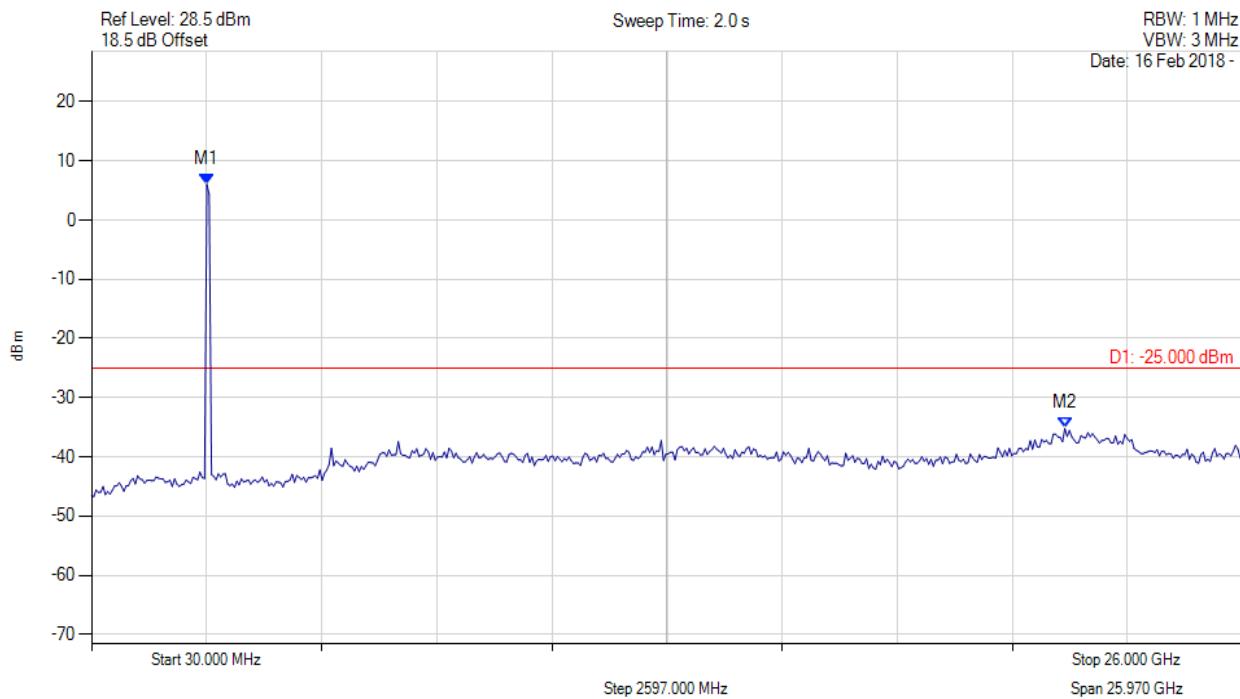
Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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Transmitter Unwanted Emissions in the Spurious Domain

Variant: 16QAM, Channel: 2680.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 2632.204 MHz : 6.025 dBm M2 : 21.993 GHz : -35.185 dBm	Channel Frequency: 2680.00 MHz

[back to matrix](#)

Note: M1 denotes fundamental frequency refer to Transmitter Conducted Band Edge Results

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9.7. Conducted Band Edge Emissions

9.6.4 Band 5 Band Edge Emissions

9.6.4.1 QPSK

Equipment Configuration for Conducted Band-Edge Emissions			
Variant:	3 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

Band-Edge Frequency:	Band-Edge Markers and Limit					Margin
	Channel Frequency	Amplitude (dBm)	Plot Limit (dBm)	Frequency (MHz)	Revised Limit	
824.0 MHz & 849.0 MHz						
825.5 (1 RB)	-22.720	-13.00	824.0	--	--	-9.72
847.5 (1 RB)	-33.310	-13.00	849.0	--	--	-20.31
825.5 (Full RB)	-28.288	-13.00	824.0	--	--	-15.29
847.5 (Full RB)	-28.288	-13.00	849.0	--	--	-15.29

Traceability to Industry Recognized Test Methodologies						
		Work Instruction: WI-05 MEASUREMENT OF SPURIOUS EMISSIONS				
		Measurement Uncertainty: <=40 GHz 2.37 dB, > 40 GHz 4.6 dB				

Note: click the links in the above matrix to view the graphical image (plot).

Note: RB = Resource Blocks

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Equipment Configuration for Conducted Band-Edge Emissions

Variant:	5 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

Channel Frequency	Band-Edge Markers and Limit			Revised Limit		Margin
	Amplitude (dBm)	Plot Limit (dBm)	Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	(MHz)
826.5 (1 RB)	-22.46	-13.00	824.0	--	--	-9.46
846.5 (1 RB)	-25.45	-13.00	849.0	--	--	-12.45
826.5 (Full RB)	-29.80	-13.00	824.0	--	--	-16.80
846.5 (Full RB)	-31.26	-13.00	849.0	--	--	-18.26

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

Note: RB = Resource Blocks

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Equipment Configuration for Conducted Band-Edge Emissions

Variant:	10 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	QPSK	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

Band-Edge Frequency:	Band-Edge Markers and Limit			Revised Limit		Margin
	Amplitude (dBm)	Plot Limit (dBm)	Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	
829.0 (1 RB)	-33.70	-13.00	824.0	--	--	-20.70
844.0 (1 RB)	-31.06	-13.00	849.0	--	--	-18.06
829.0 (Full RB)	-31.81	-13.00	824.0	--	--	-18.81
844.0 (Full RB)	-20.17	-13.00	849.0	--	--	-7.17

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

Note: RB = Resource Blocks

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9.7.1.1 16QAM

Equipment Configuration for Conducted Band-Edge Emissions

Variant:	3 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

Channel Frequency	Band-Edge Markers and Limit			Revised Limit		Margin (MHz)
	Amplitude (dBm)	Plot Limit (dBm)	Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	
825.5 (Part RB)	-22.65	-13.00	824.0	--	--	-9.65
847.5 (Part RB)	-33.31	-13.00	849.0	--	--	-20.31
825.5 (Full RB)	-29.95	-13.00	824.0	--	--	-16.95
847.5 (Full RB)	-29.22	-13.00	849.0	--	--	-16.22

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

Note: RB = Resource Blocks & Part = Partial

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Equipment Configuration for Conducted Band-Edge Emissions

Variant:	5 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

Channel Frequency	Band-Edge Markers and Limit			Revised Limit		Margin
	Amplitude (dBm)	Plot Limit (dBm)	Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)	
826.5 (Part RB)	-28.42	-13.00	824.0	--	--	-15.42
846.5 (Part RB)	-29.56	-13.00	849.0	--	--	-16.56
826.5 (Full RB)	-30.91	-13.00	824.0	--	--	-17.91
846.5 (Full RB)	-33.94	-13.00	849.0	--	--	-20.94

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB

Note: click the links in the above matrix to view the graphical image (plot).

Note: RB = Resource Blocks & Part = Partial

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Equipment Configuration for Conducted Band-Edge Emissions

Variant:	10 MHz Bandwidth	Duty Cycle (%):	100
Data Rate:	-	Antenna Gain (dBi):	0
Modulation:	16QAM	Beam Forming Gain (Y)(dB):	Not Applicable
TPC:	Not Applicable	Tested By:	SB
Engineering Test Notes:			

Test Measurement Results

Band-Edge Frequency:	Band-Edge Markers and Limit			Revised Limit		Margin
	Channel Frequency	Amplitude (dBm)	Plot Limit (dBm)	Frequency (MHz)	Amplitude (dBm)	M2A Frequency (MHz)
829.0 (Part RB)	-28.44	-13.00	824.0	--	--	-15.40
844.0 (Part RB)	-30.98	-13.00	849.0	--	--	-17.98
829.0 (Full RB)	-32.60	-13.00	824.0	--	--	-19.60
844.0 (Full RB)	-33.24	-13.00	849.0	--	--	-20.24

Traceability to Industry Recognized Test Methodologies

Work Instruction:	WI-05 MEASUREMENT OF SPURIOUS EMISSIONS
Measurement Uncertainty:	<=40 GHz 2.37 dB, > 40 GHz 4.6 dB

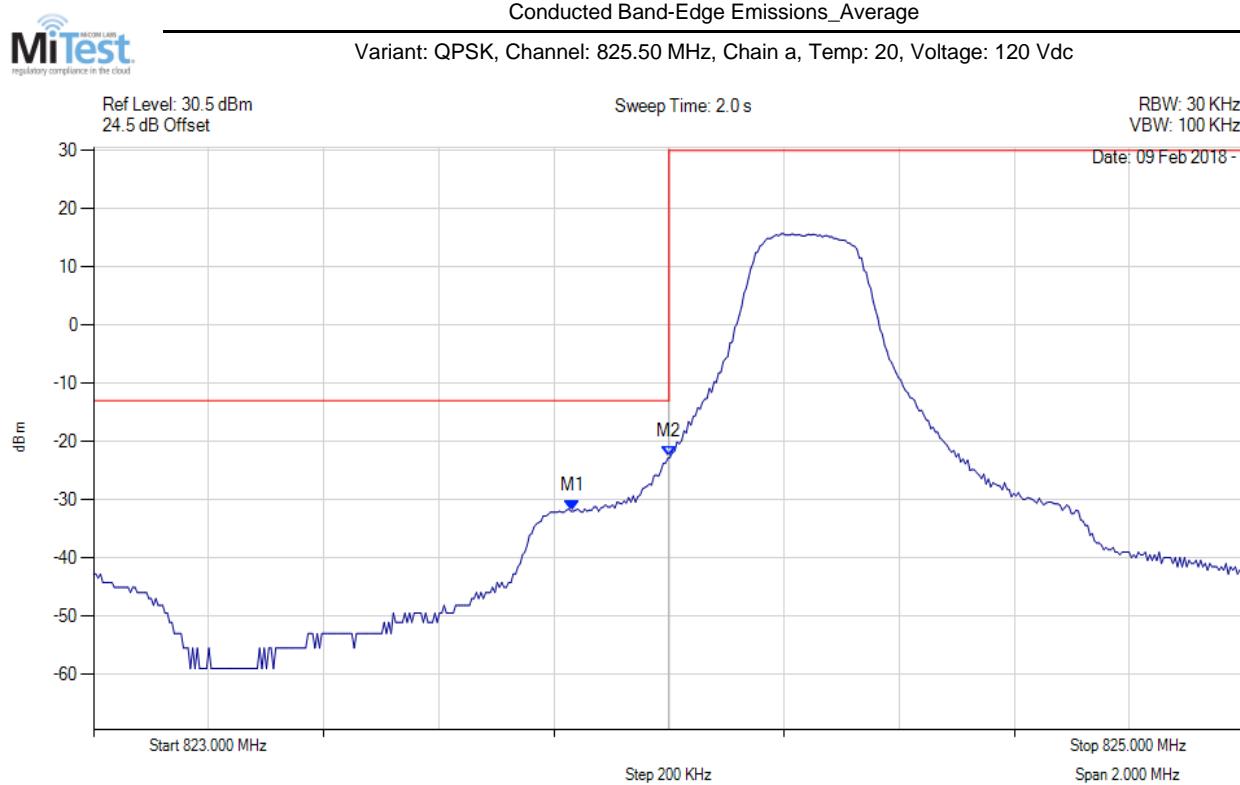
Note: click the links in the above matrix to view the graphical image (plot).

Note: RB = Resource Blocks & Part = Partial

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9.7.1 Band 5: Conducted Band Edge Emissions

9.7.1.1 QPSK:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/ WRITE	M1 : 823.832 MHz : -32.001 dBm M2 : 824.000 MHz : -22.720 dBm	Channel Frequency: 825.50 MHz

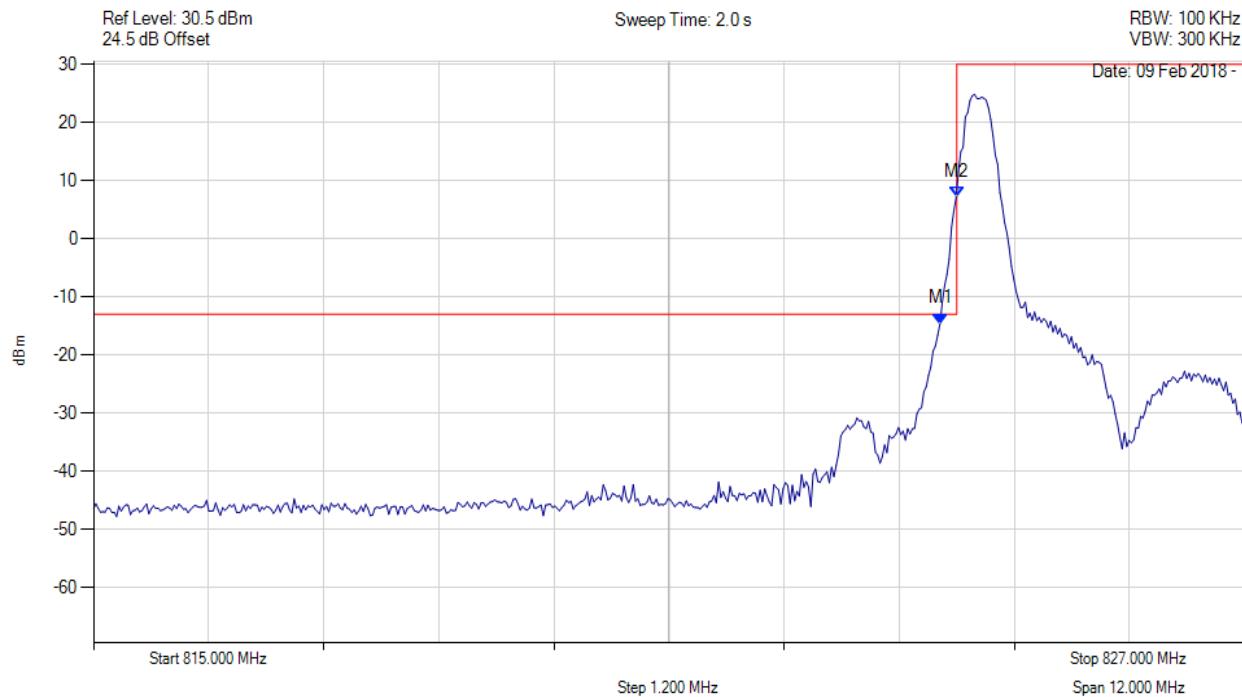
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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 825.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc

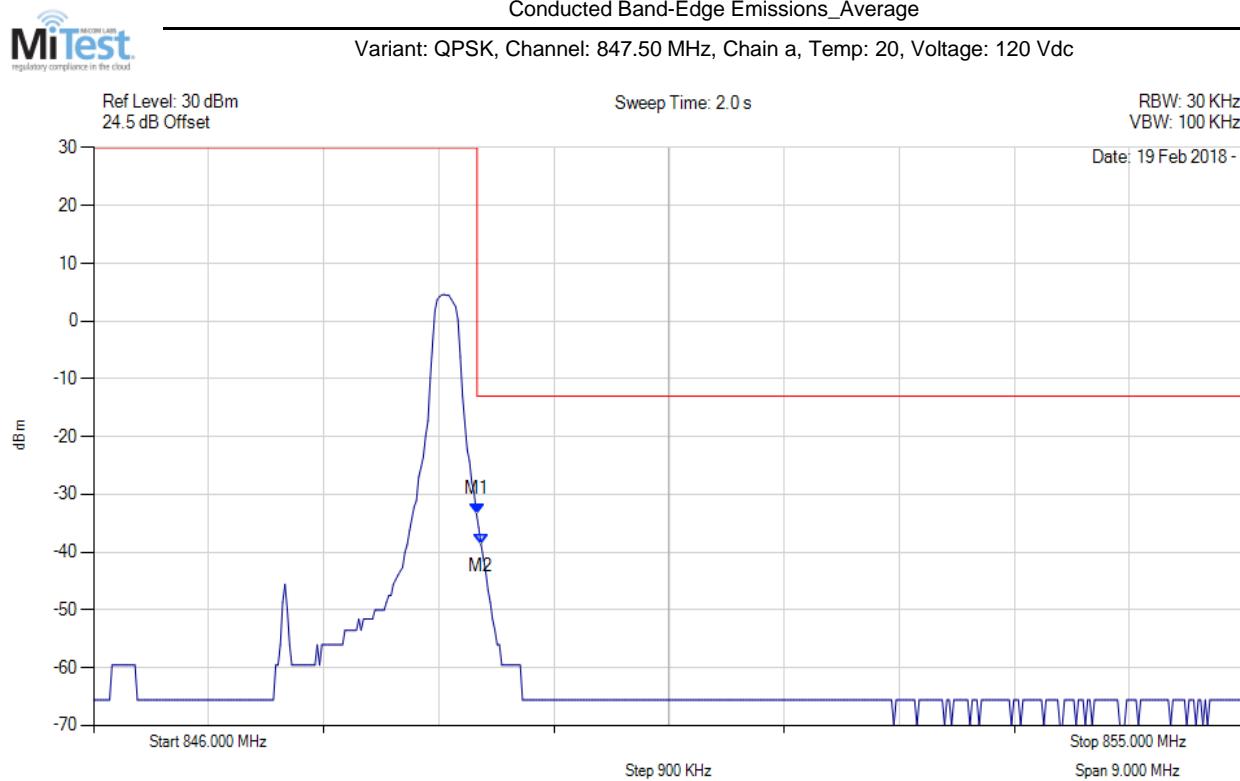


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.832 MHz : -14.645 dBm M2 : 824.000 MHz : 7.142 dBm	Channel Frequency: 825.50 MHz

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Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -33.310 dBm M2 : 849.028 MHz : -38.717 dBm	Channel Frequency: 847.50 MHz

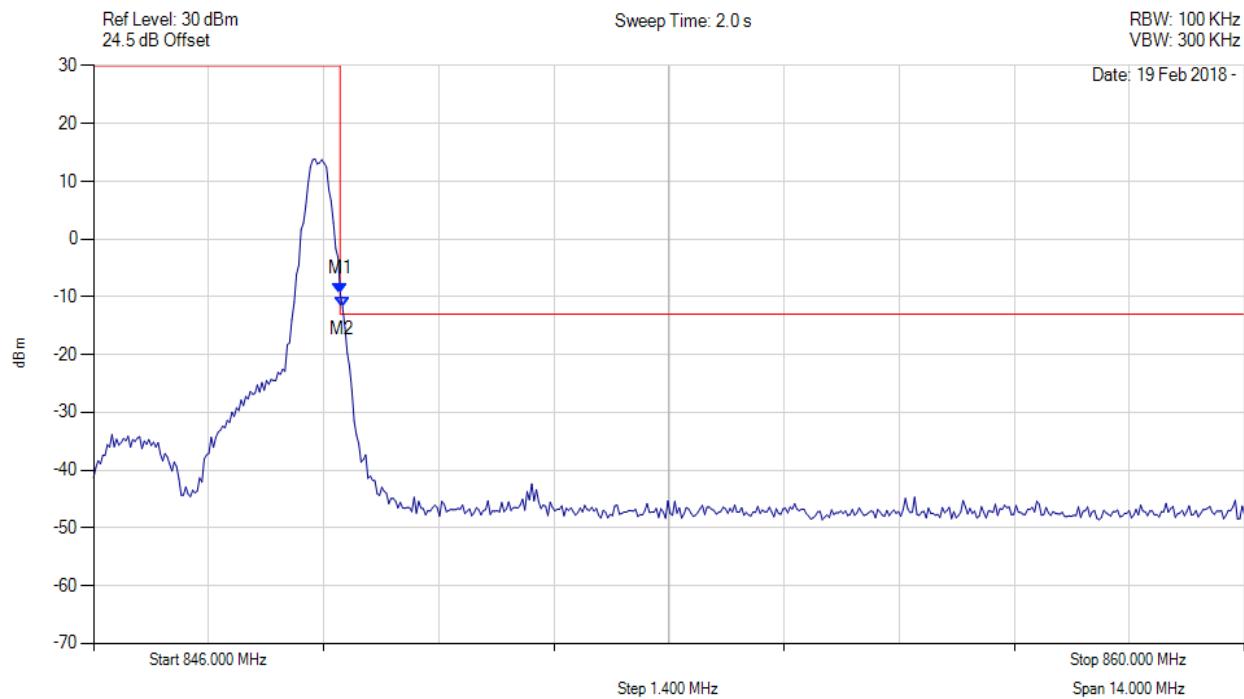
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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 847.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -9.436 dBm M2 : 849.028 MHz : -11.857 dBm	Channel Frequency: 847.50 MHz

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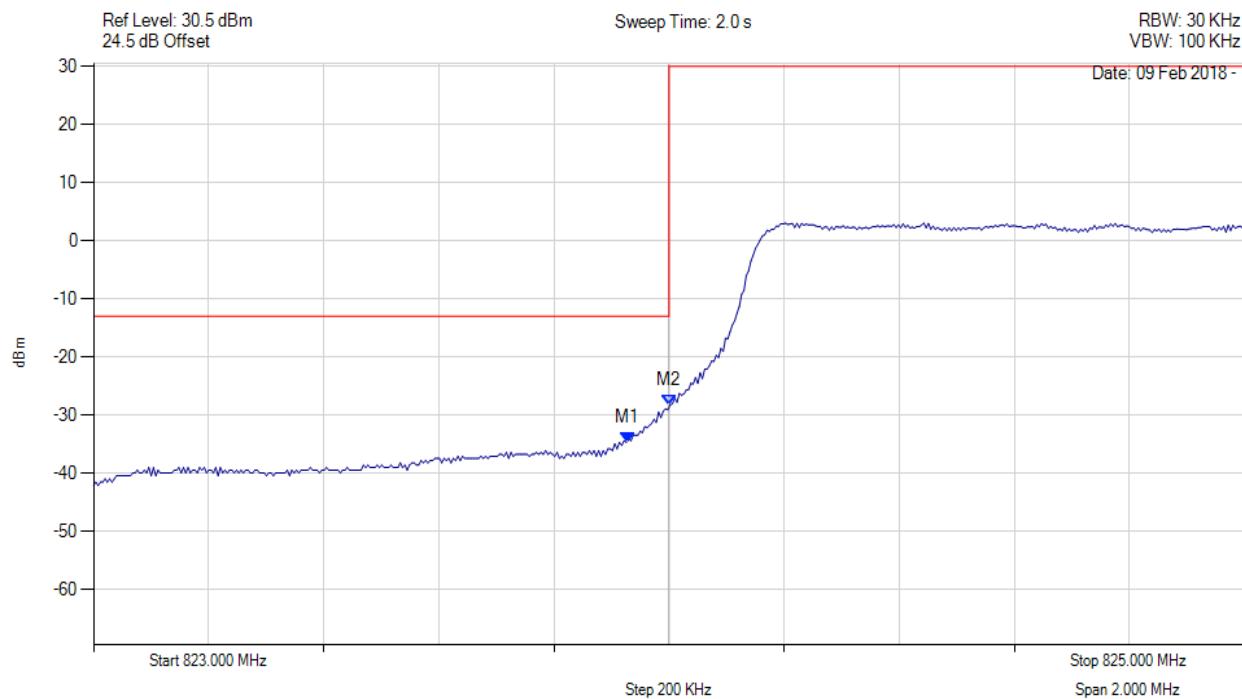
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: QPSK, Channel: 825.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.928 MHz : -34.695 dBm M2 : 824.000 MHz : -28.288 dBm	Channel Frequency: 825.50 MHz

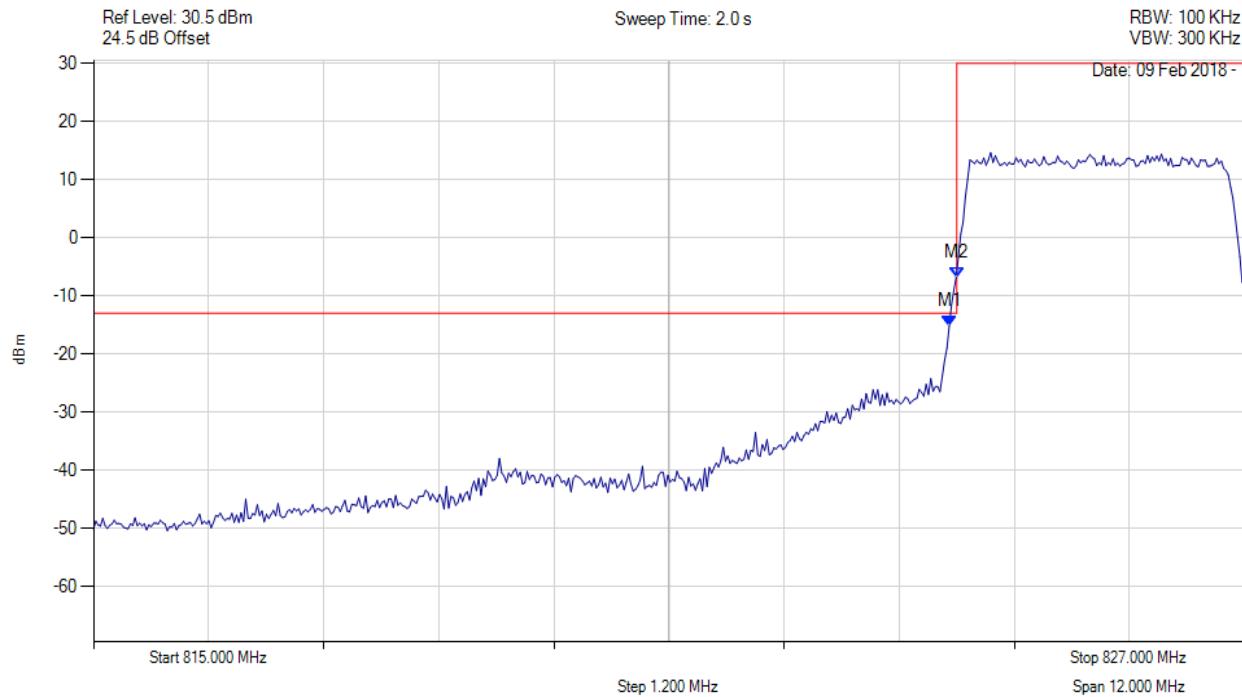
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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 825.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.928 MHz : -15.255 dBm M2 : 824.000 MHz : -6.807 dBm	Channel Frequency: 825.50 MHz

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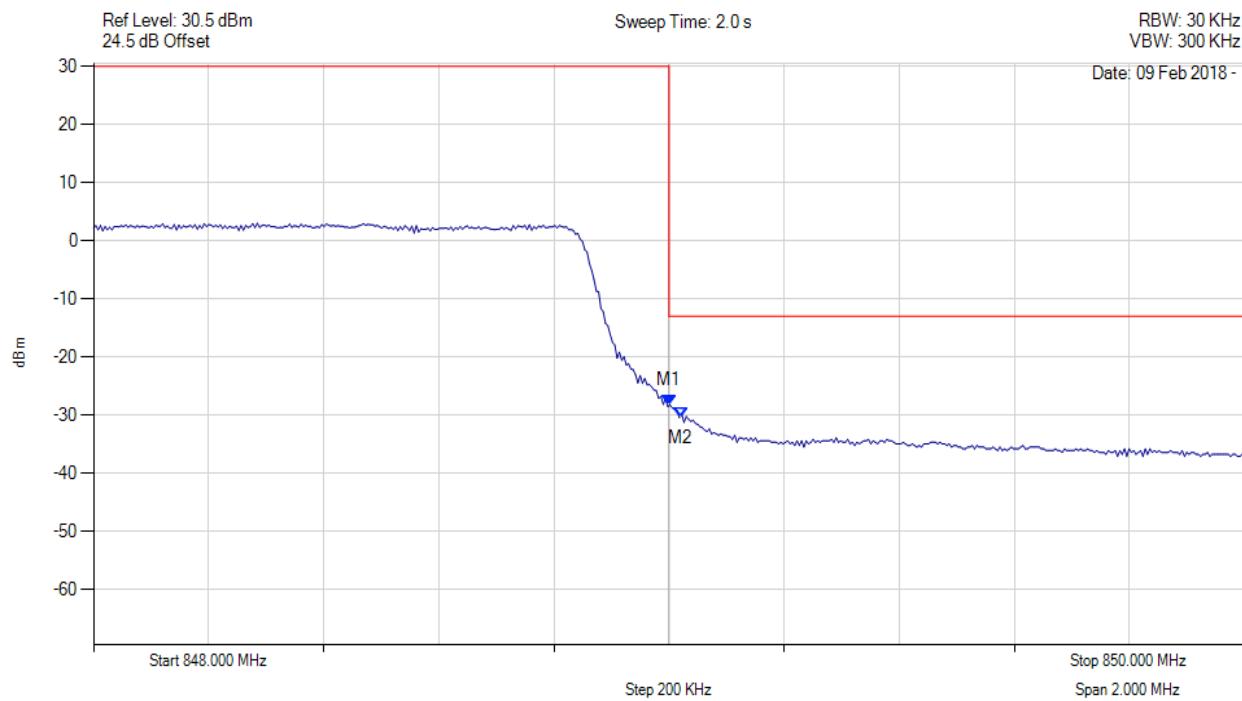
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: QPSK, Channel: 847.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -28.288 dBm M2 : 849.020 MHz : -30.417 dBm	Channel Frequency: 847.50 MHz

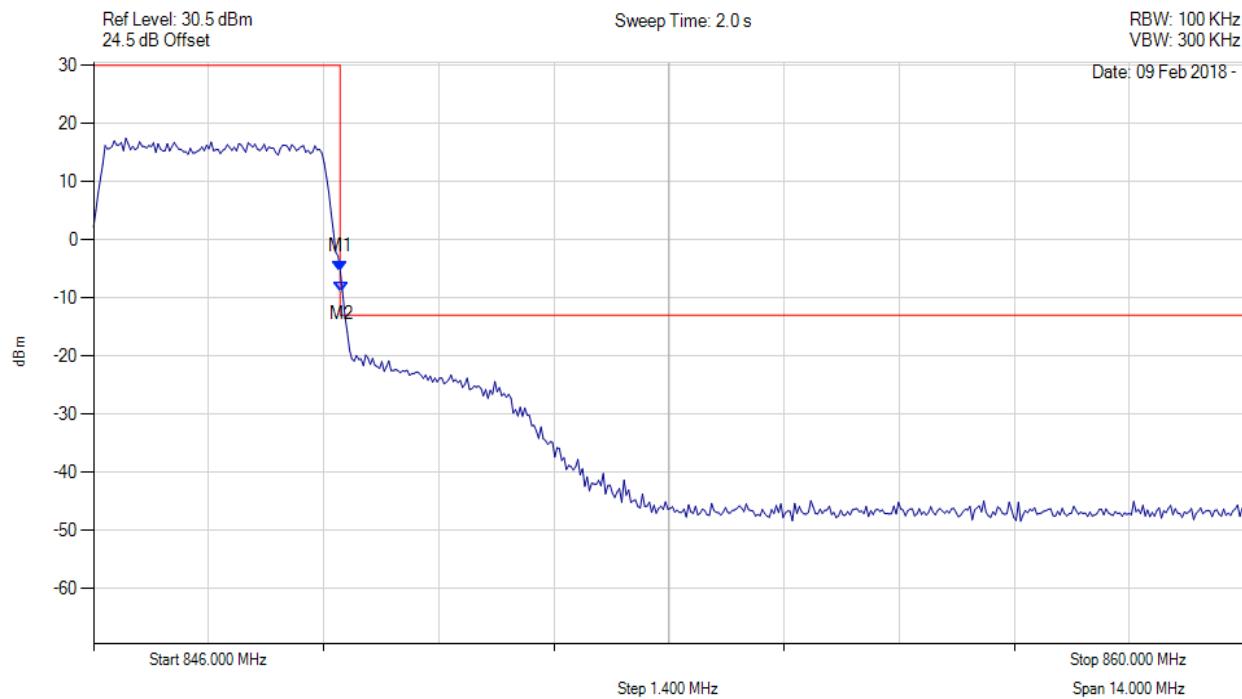
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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 847.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -5.404 dBm M2 : 849.020 MHz : -9.089 dBm	Channel Frequency: 847.50 MHz

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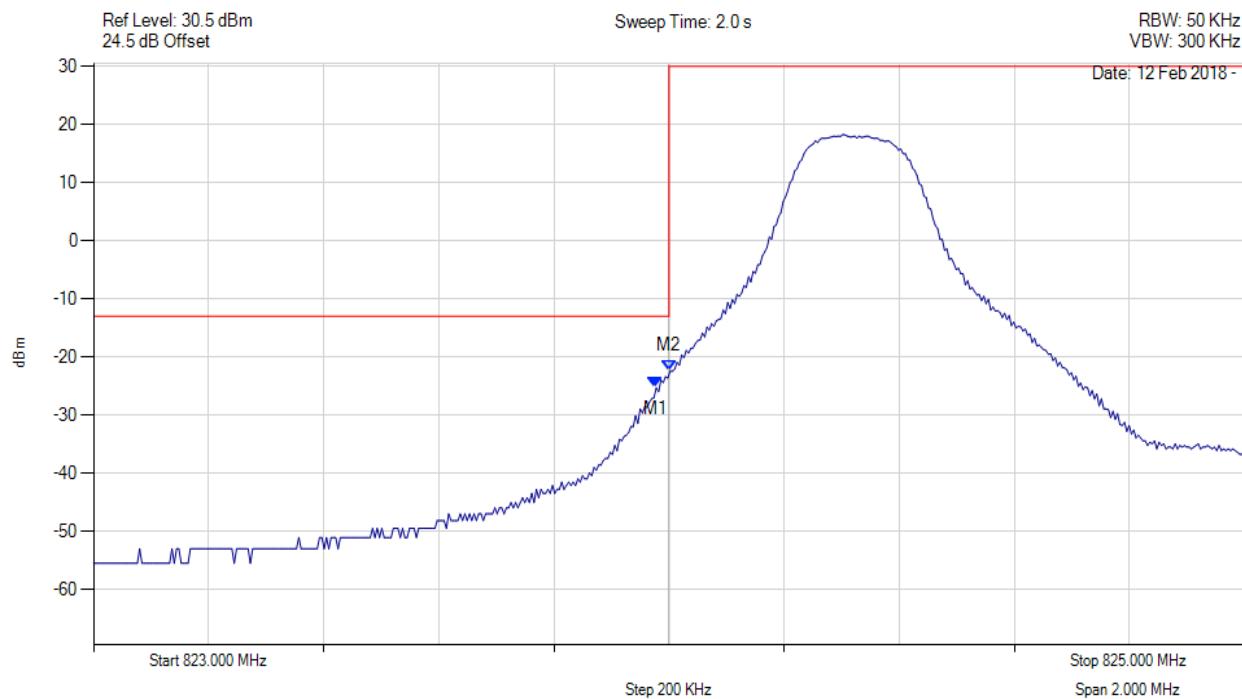
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: QPSK, Channel: 826.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



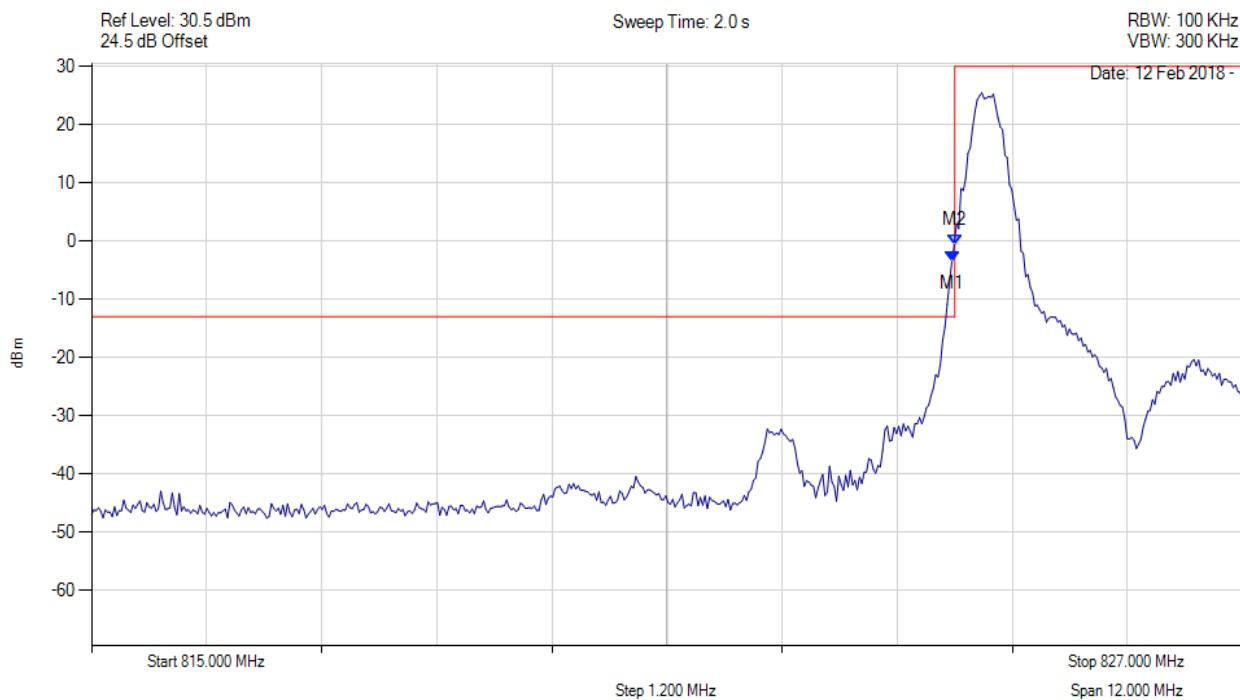
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.976 MHz : -25.330 dBm M2 : 824.000 MHz : -22.459 dBm	Channel Frequency: 826.50 MHz

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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 826.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.976 MHz : -3.547 dBm M2 : 824.000 MHz : -0.736 dBm	Channel Frequency: 826.50 MHz

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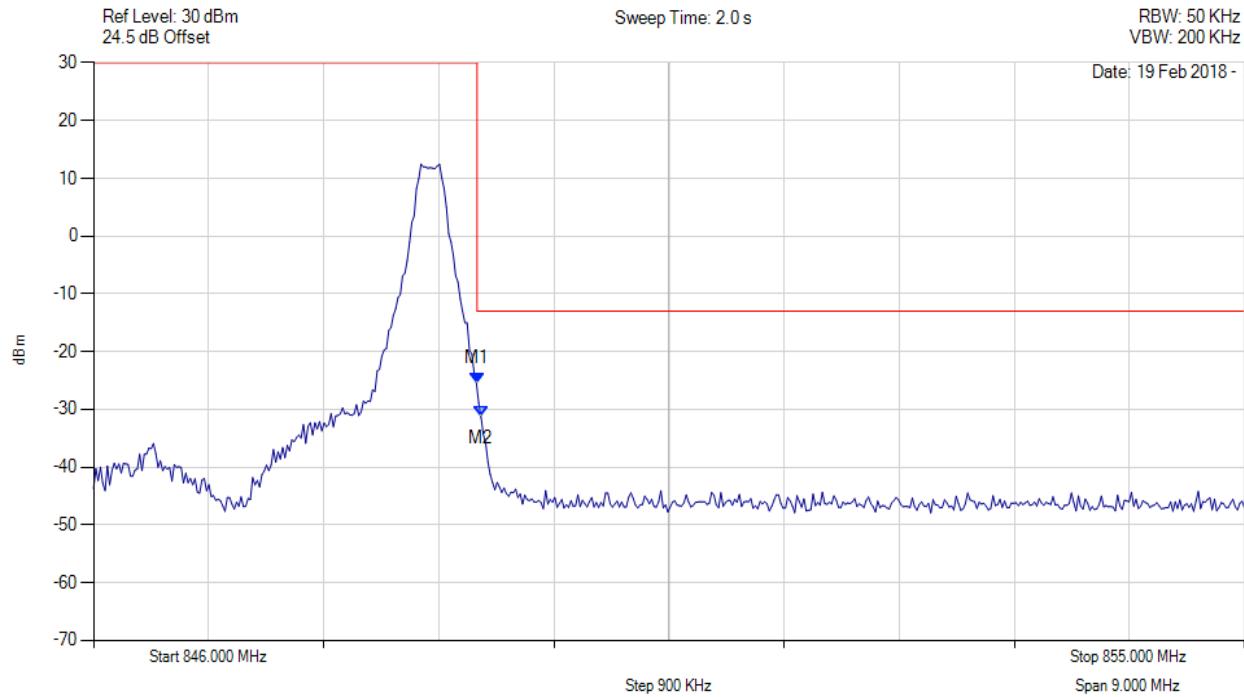
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: QPSK, Channel: 846.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -25.450 dBm M2 : 849.028 MHz : -31.350 dBm	Channel Frequency: 846.50 MHz

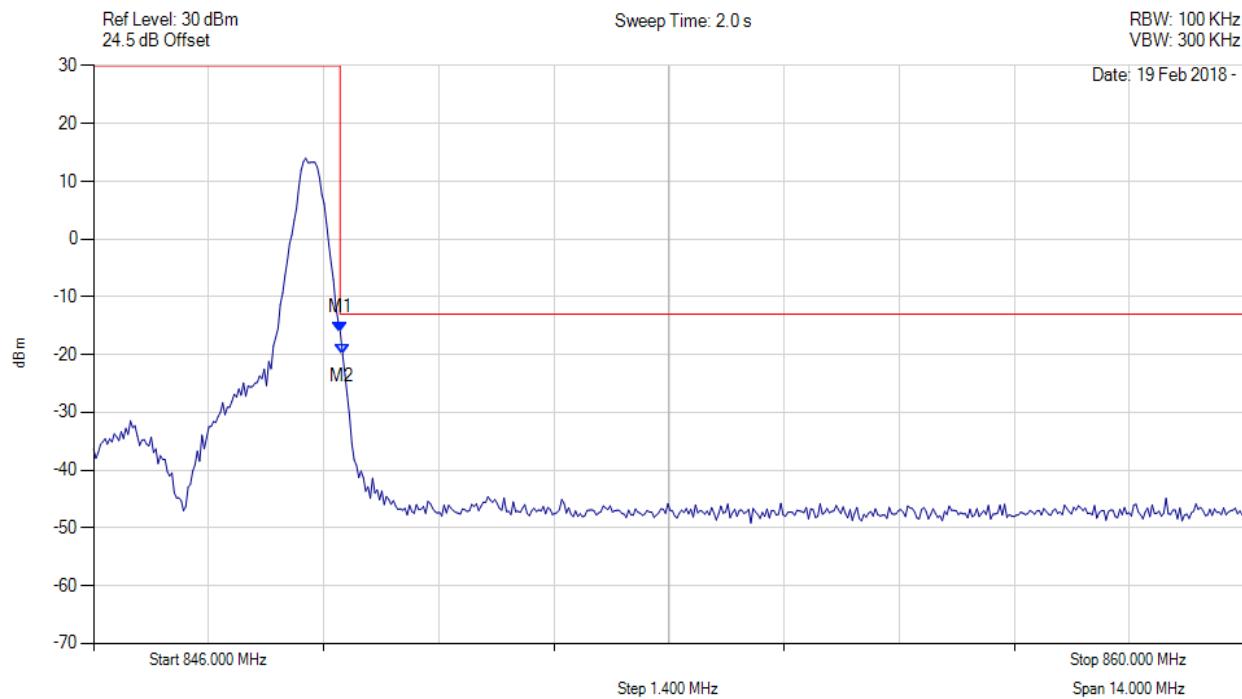
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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 846.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -16.156 dBm M2 : 849.028 MHz : -19.971 dBm	Channel Frequency: 846.50 MHz

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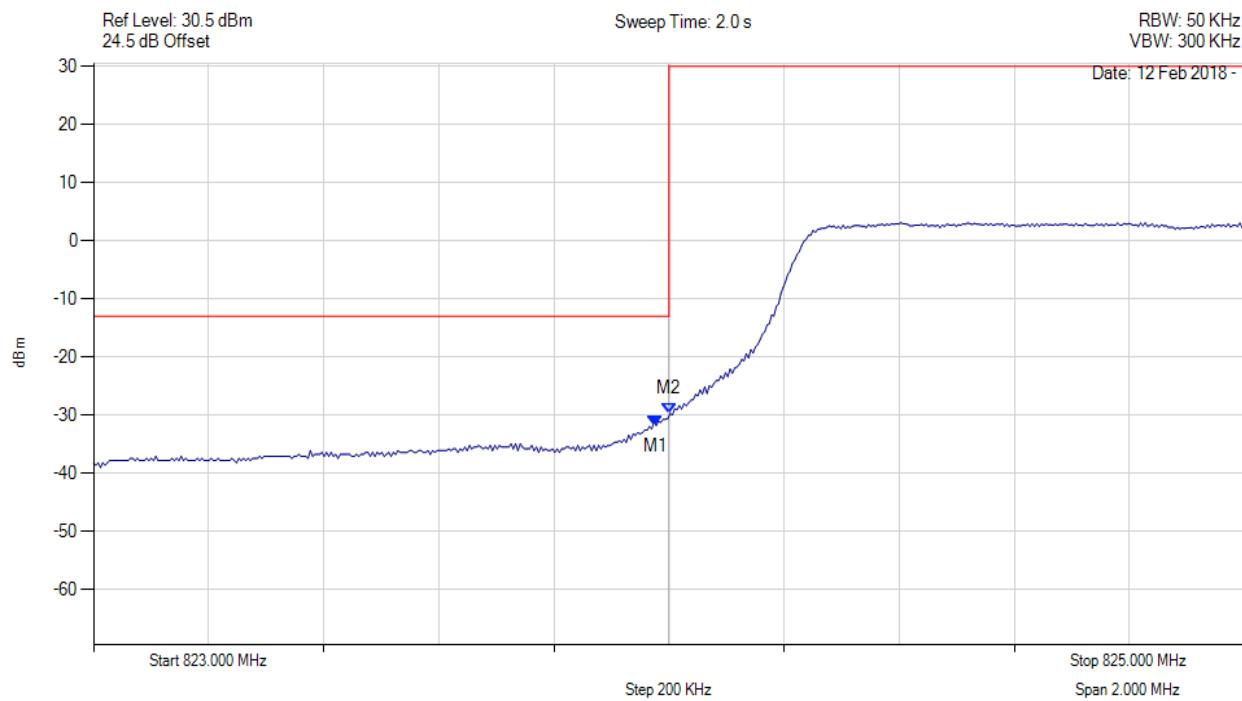
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: QPSK, Channel: 826.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.976 MHz : -31.810 dBm M2 : 824.000 MHz : -29.797 dBm	Channel Frequency: 826.50 MHz

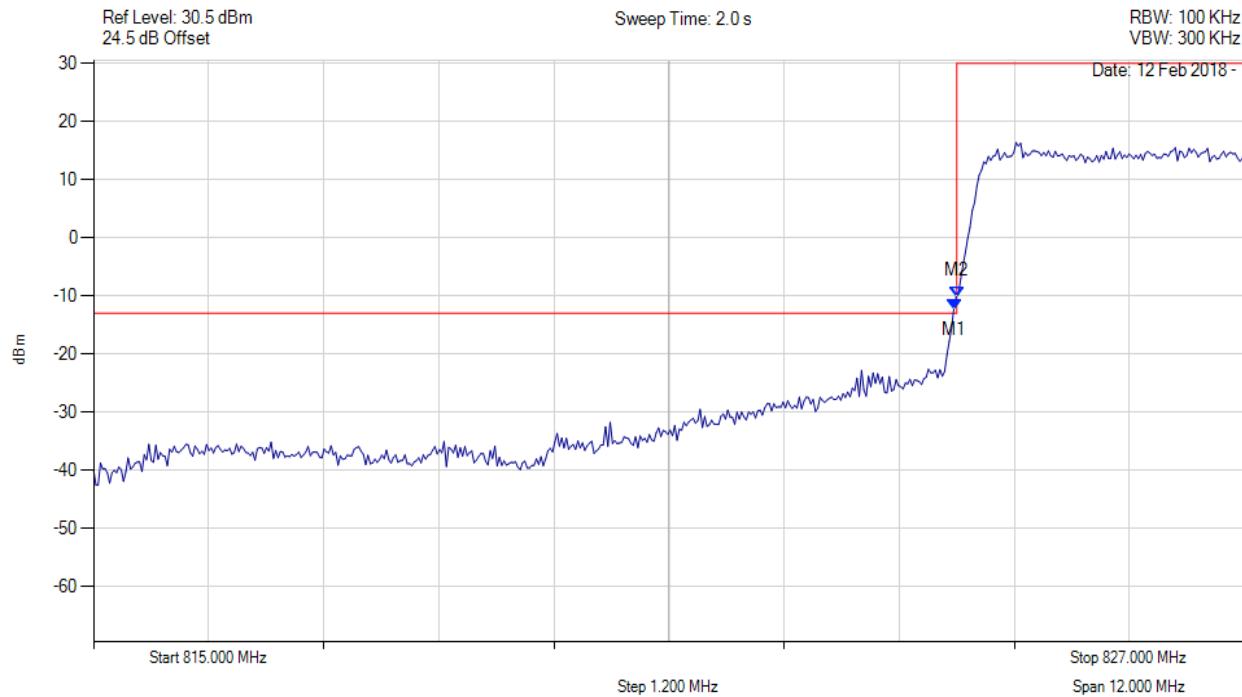
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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 826.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.976 MHz : -12.251 dBm M2 : 824.000 MHz : -10.128 dBm	Channel Frequency: 826.50 MHz

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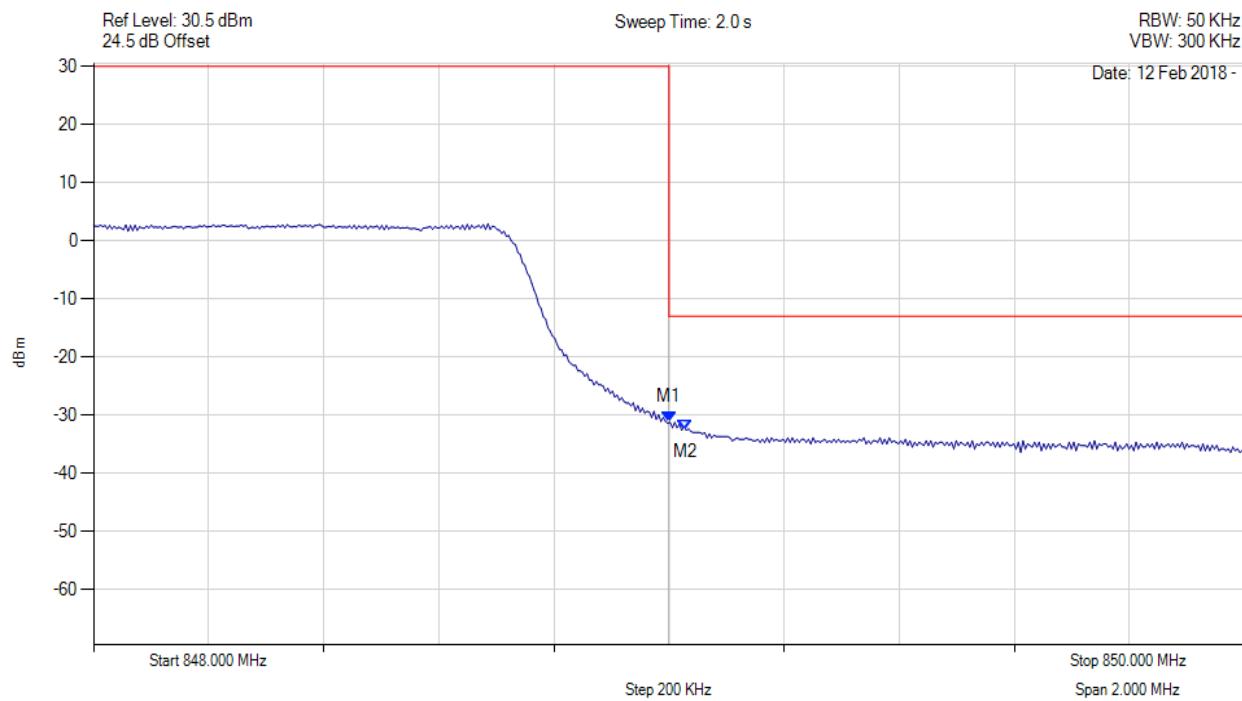
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: QPSK, Channel: 846.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -31.261 dBm M2 : 849.028 MHz : -32.600 dBm	Channel Frequency: 846.50 MHz

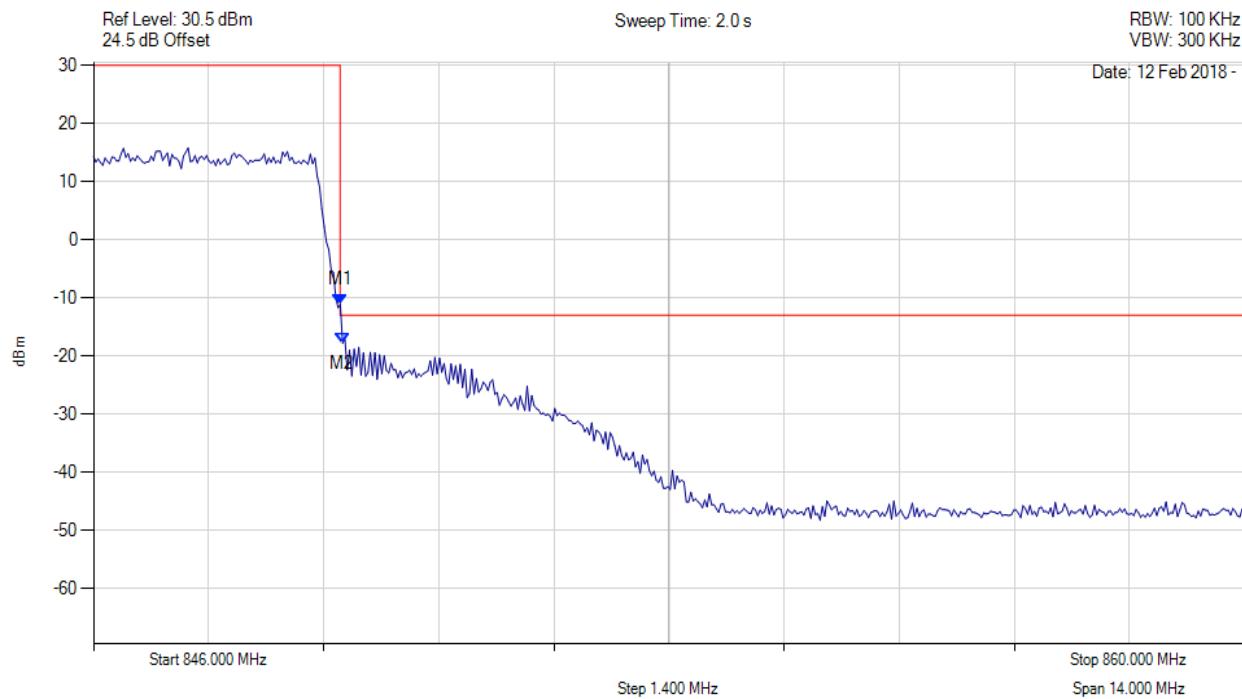
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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 846.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -11.147 dBm M2 : 849.028 MHz : -17.789 dBm	Channel Frequency: 846.50 MHz

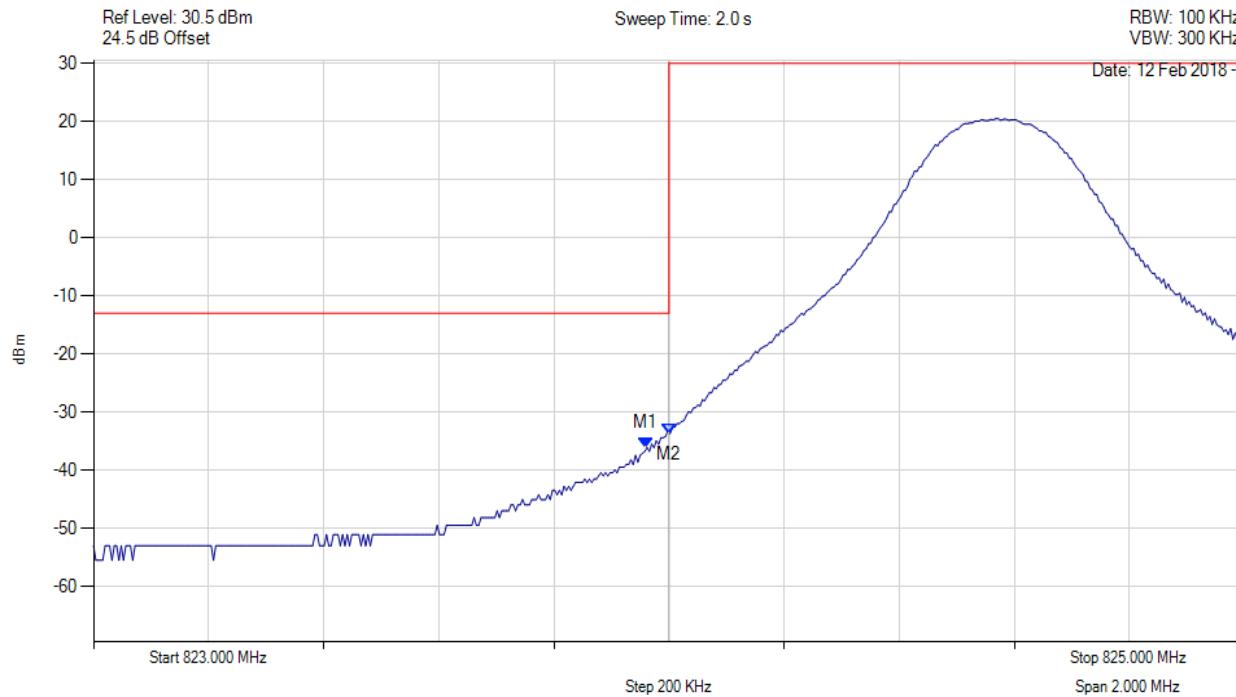
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Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: QPSK, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.960 MHz : -36.122 dBm M2 : 824.000 MHz : -33.701 dBm	Channel Frequency: 829.00 MHz

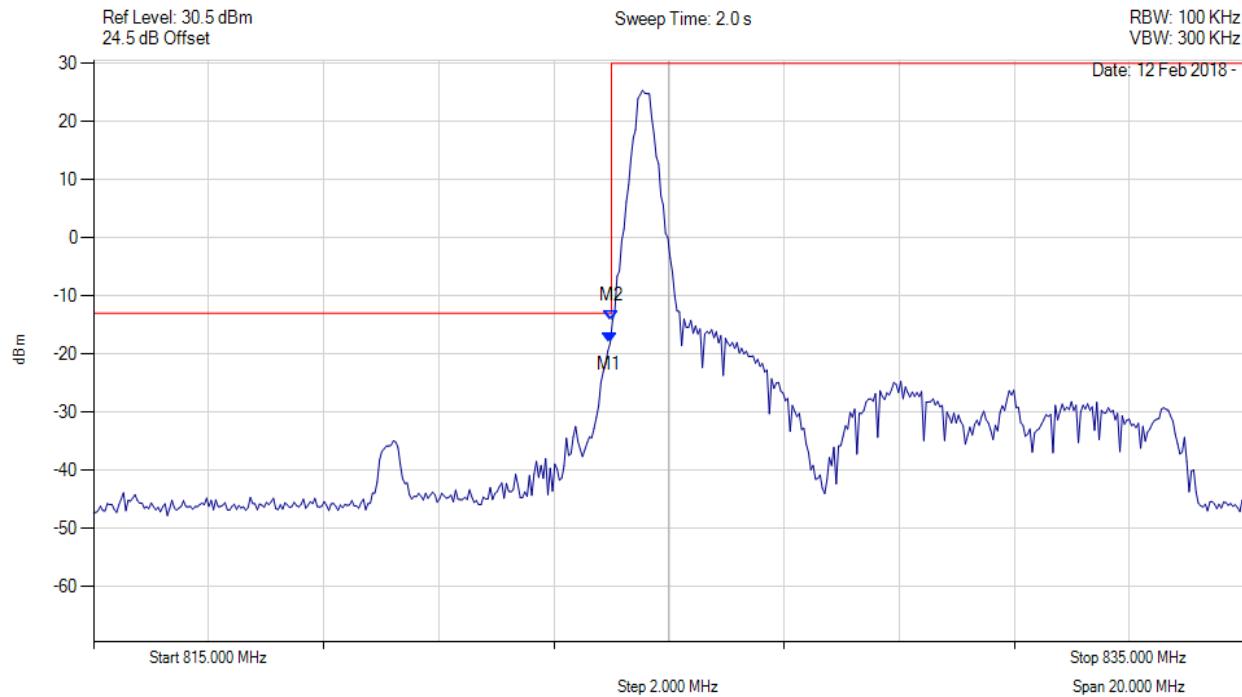
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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.960 MHz : -18.155 dBm M2 : 824.000 MHz : -14.318 dBm	Channel Frequency: 829.00 MHz

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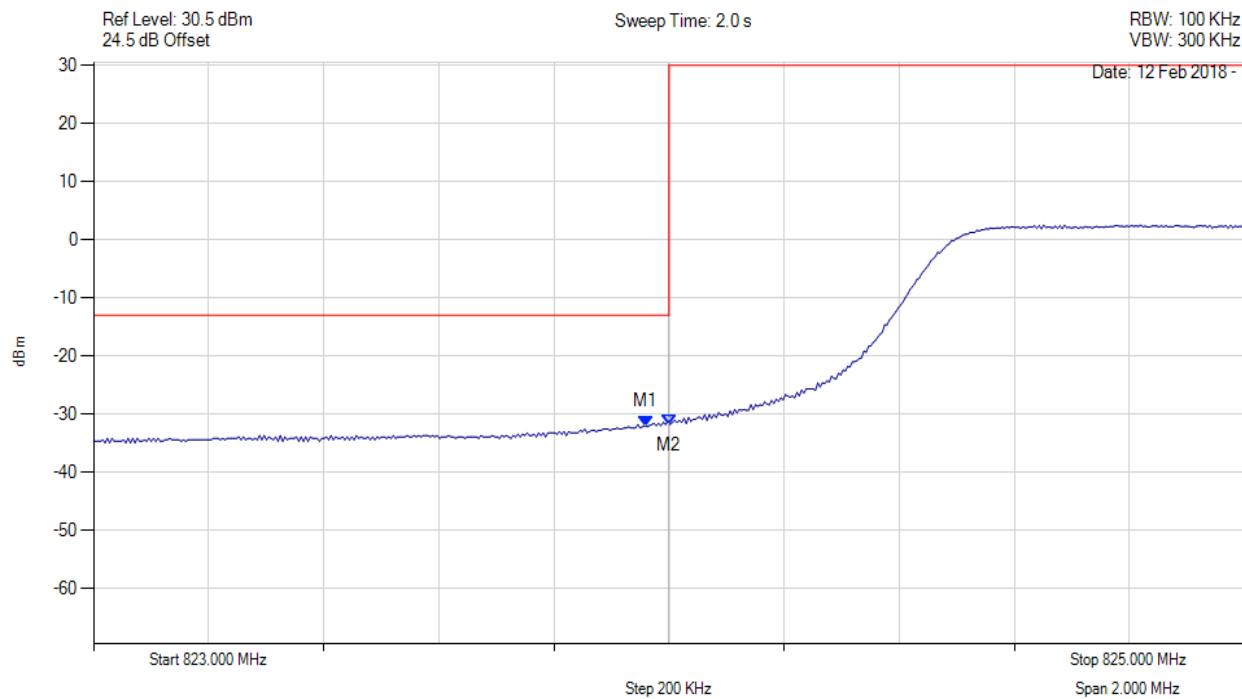
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: QPSK, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.960 MHz : -32.196 dBm M2 : 824.000 MHz : -31.810 dBm	Channel Frequency: 829.00 MHz

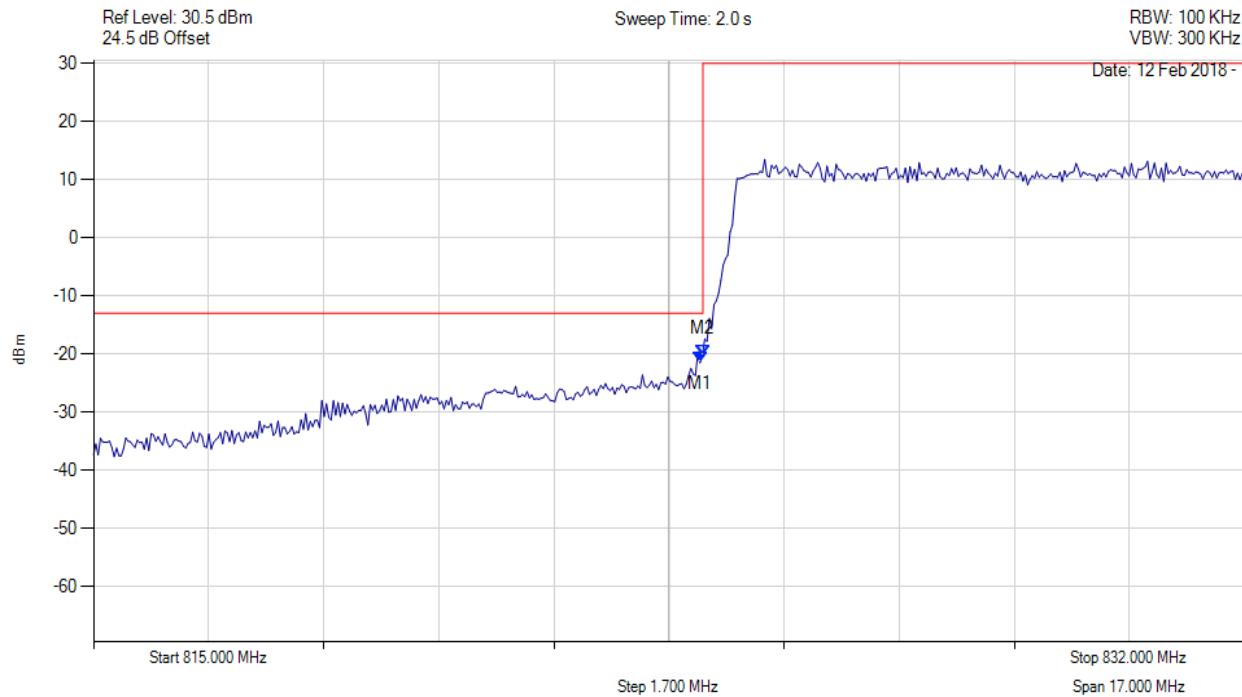
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Conducted Band-Edge Emissions_Peak

Variant: QPSK, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.960 MHz : -21.519 dBm M2 : 824.000 MHz : -20.110 dBm	Channel Frequency: 829.00 MHz

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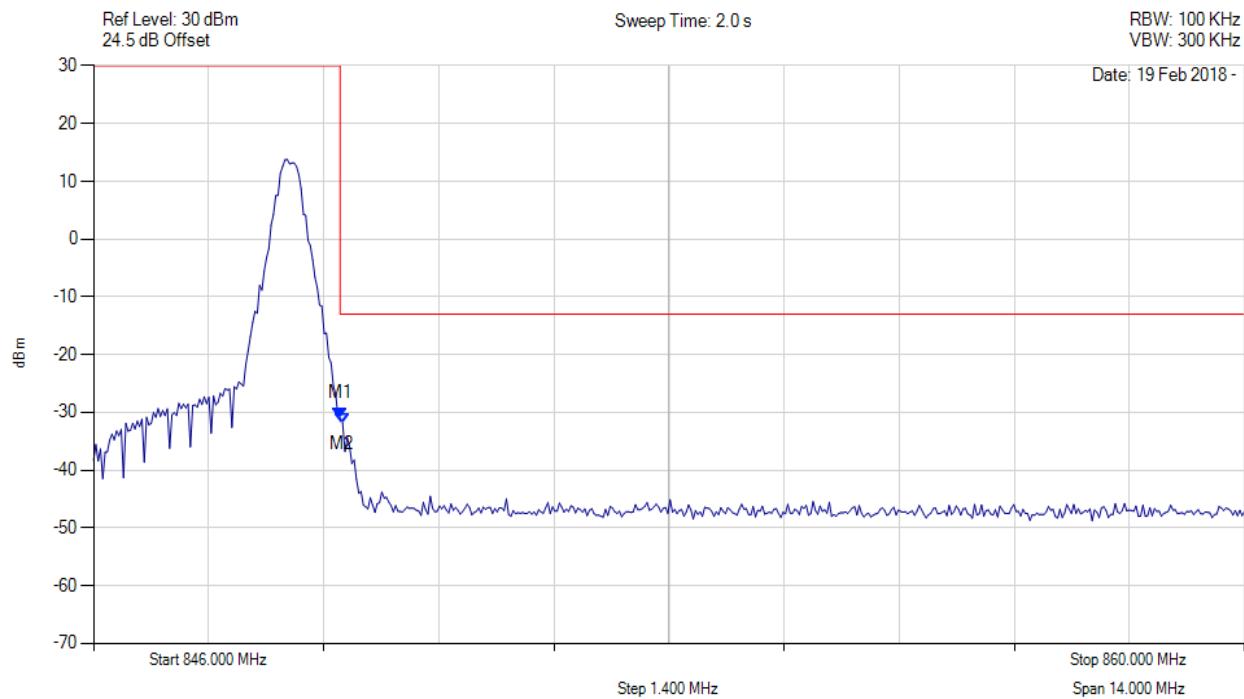
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Peak

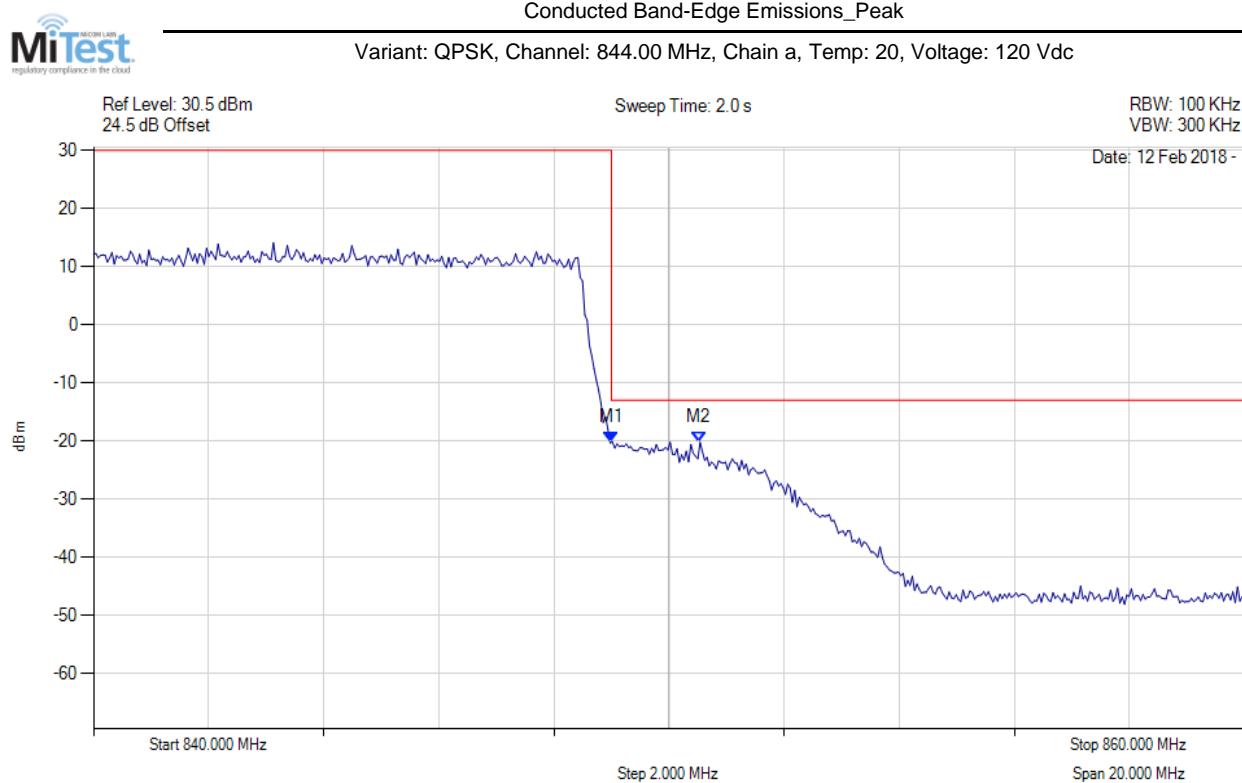
Variant: QPSK, Channel: 844.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -31.061 dBm M2 : 849.028 MHz : -31.844 dBm	Channel Frequency: 844.00 MHz

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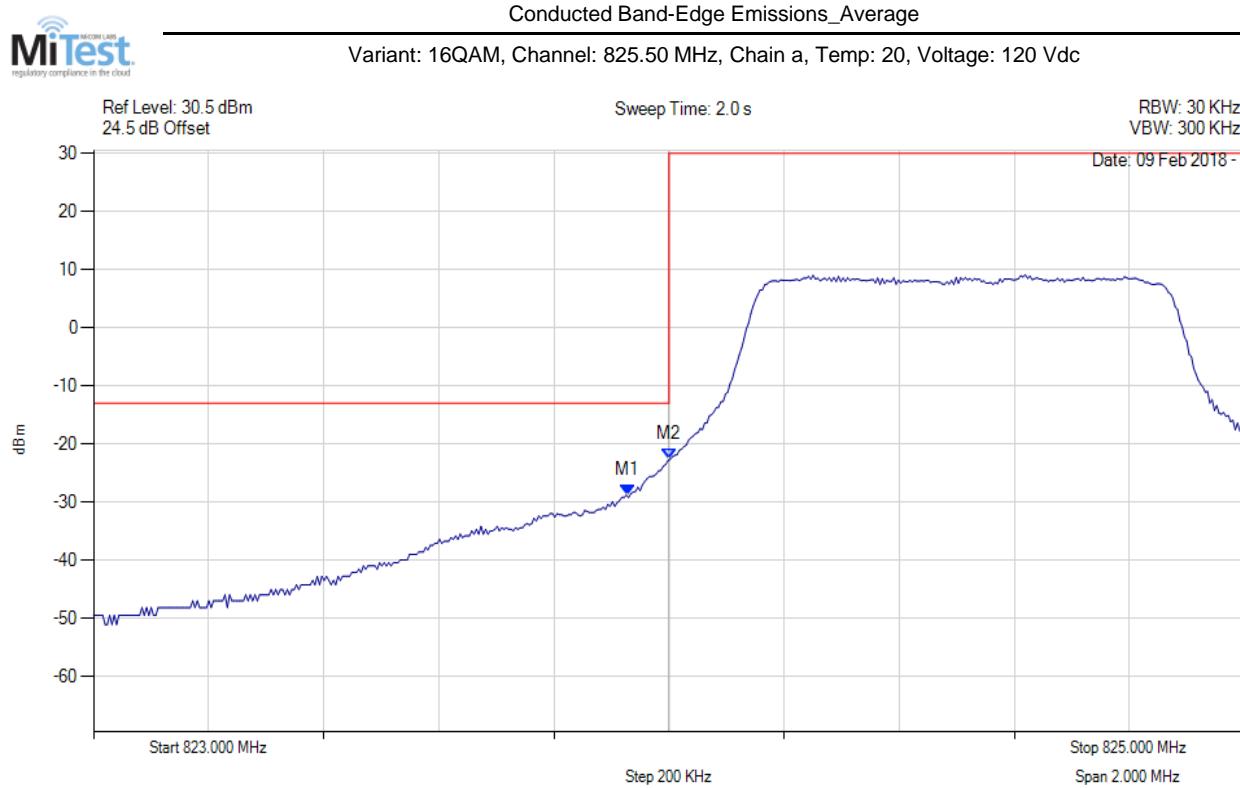
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -20.171 dBm M2 : 850.523 MHz : -20.270 dBm	Channel Frequency: 844.00 MHz

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Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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A.2.4.2 16QAM:



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.928 MHz : -28.807 dBm M2 : 824.000 MHz : -22.654 dBm	Channel Frequency: 825.50 MHz

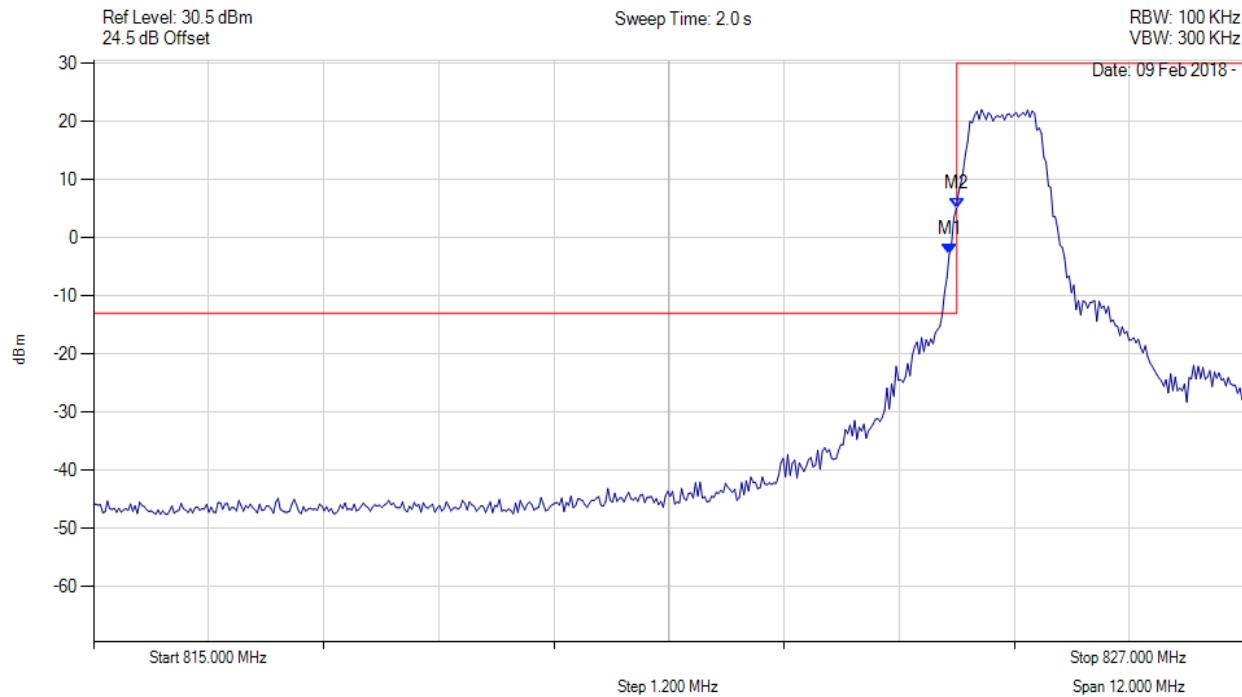
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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 825.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.928 MHz : -2.882 dBm M2 : 824.000 MHz : 4.993 dBm	Channel Frequency: 825.50 MHz

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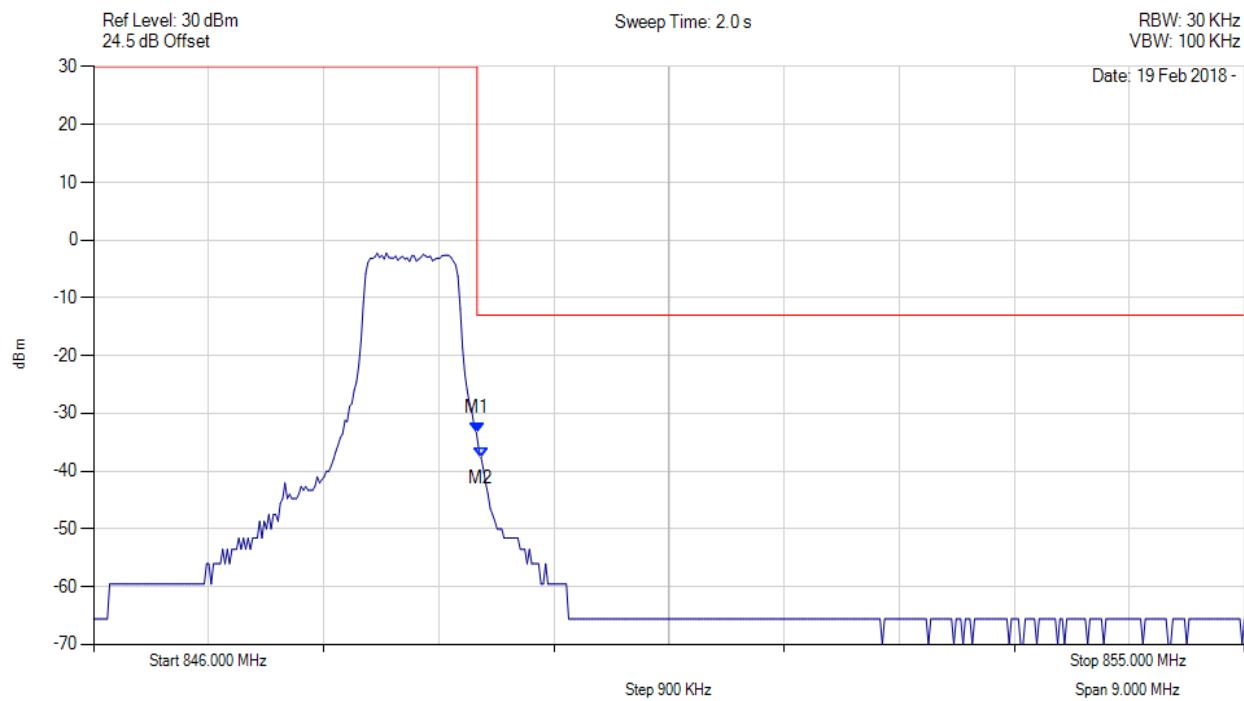
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: 16QAM, Channel: 847.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -33.310 dBm M2 : 849.028 MHz : -37.607 dBm	Channel Frequency: 847.50 MHz

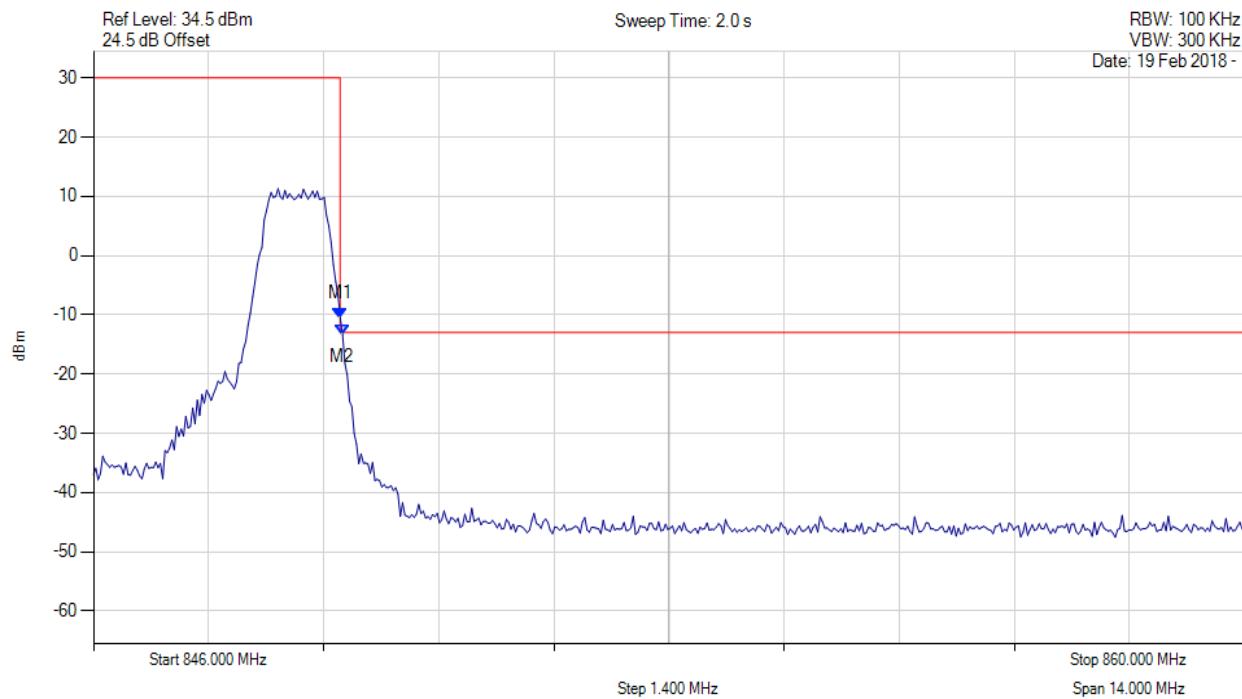
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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 847.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -10.570 dBm M2 : 849.028 MHz : -13.464 dBm	Channel Frequency: 847.50 MHz

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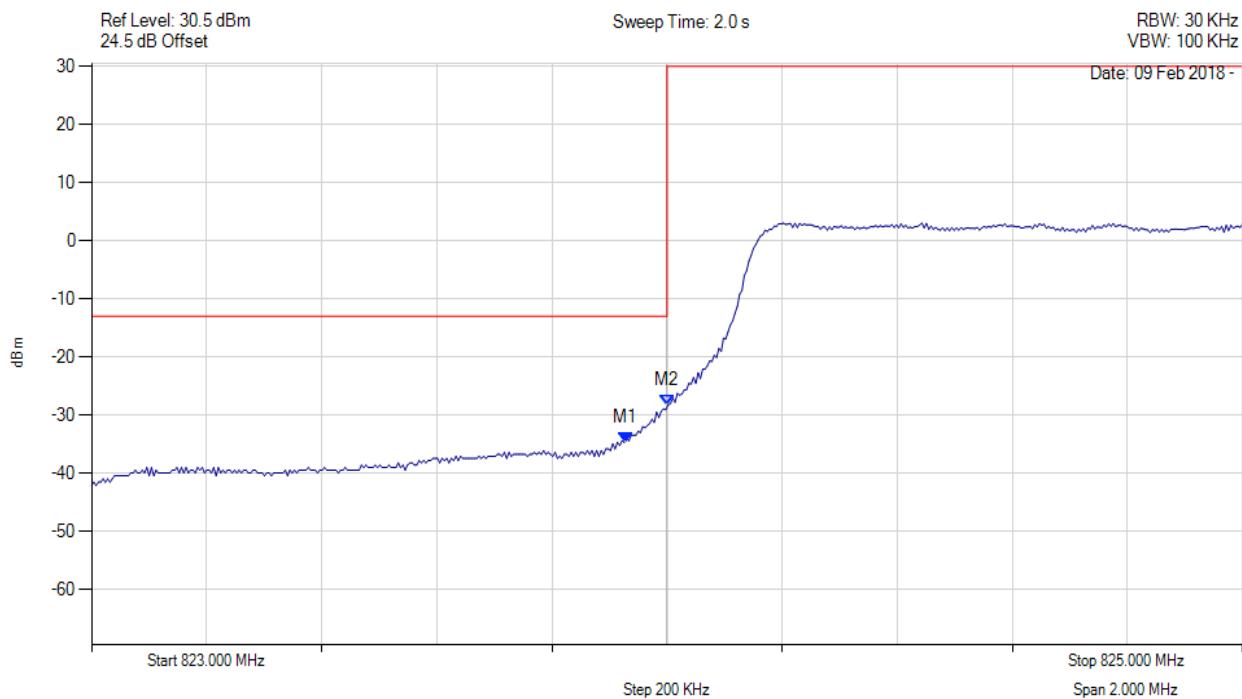
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: 16QAM, Channel: 825.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.928 MHz : -34.695 dBm M2 : 824.000 MHz : -28.288 dBm	Channel Frequency: 825.50 MHz

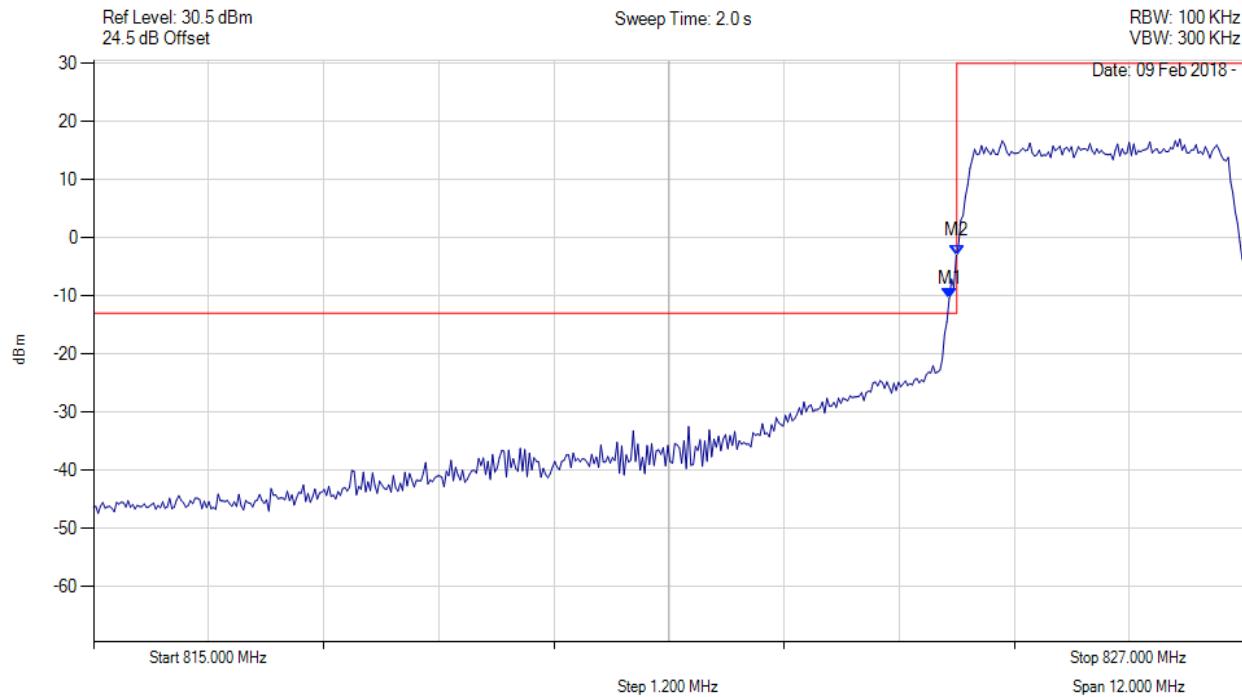
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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 825.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.928 MHz : -10.462 dBm M2 : 824.000 MHz : -3.140 dBm	Channel Frequency: 825.50 MHz

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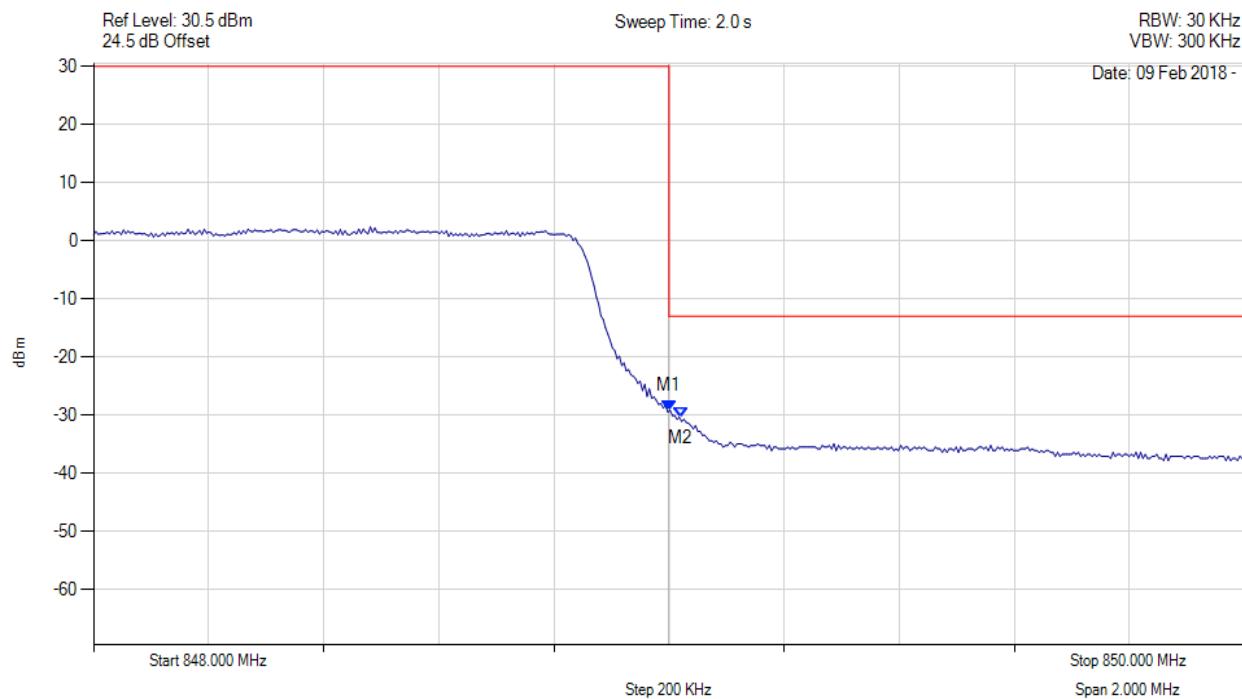
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: 16QAM, Channel: 847.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -29.218 dBm M2 : 849.020 MHz : -30.417 dBm	Channel Frequency: 847.50 MHz

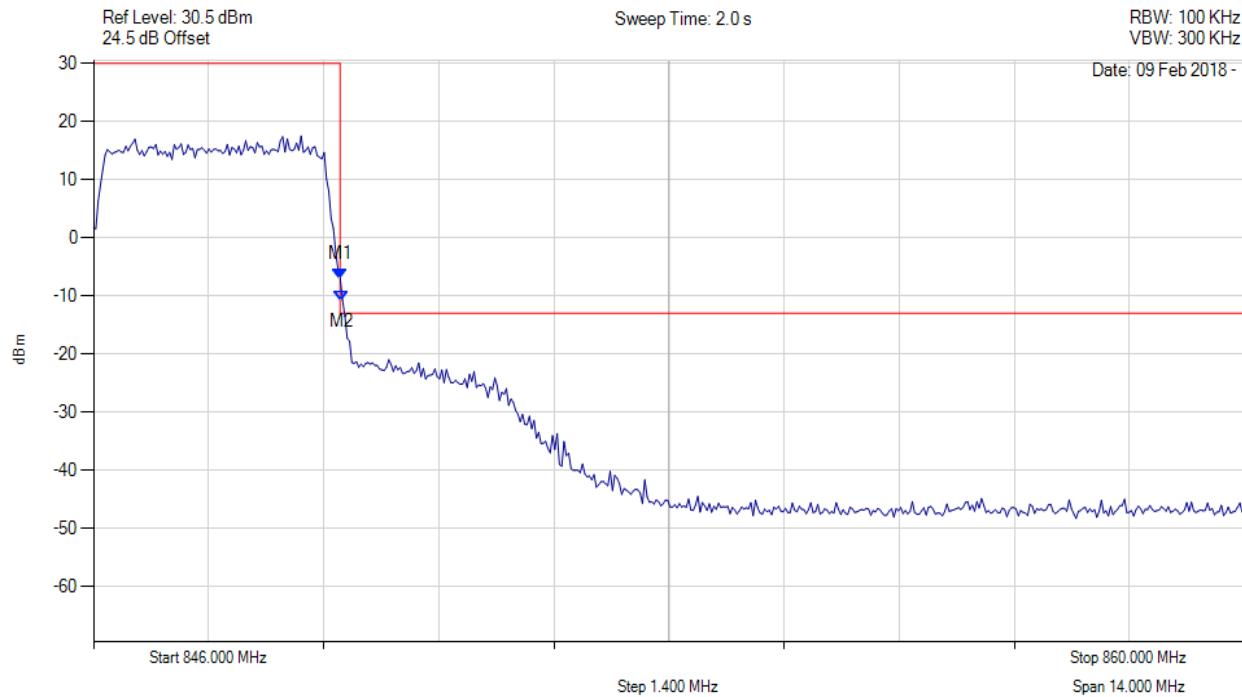
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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 847.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -7.155 dBm M2 : 849.020 MHz : -10.846 dBm	Channel Frequency: 847.50 MHz

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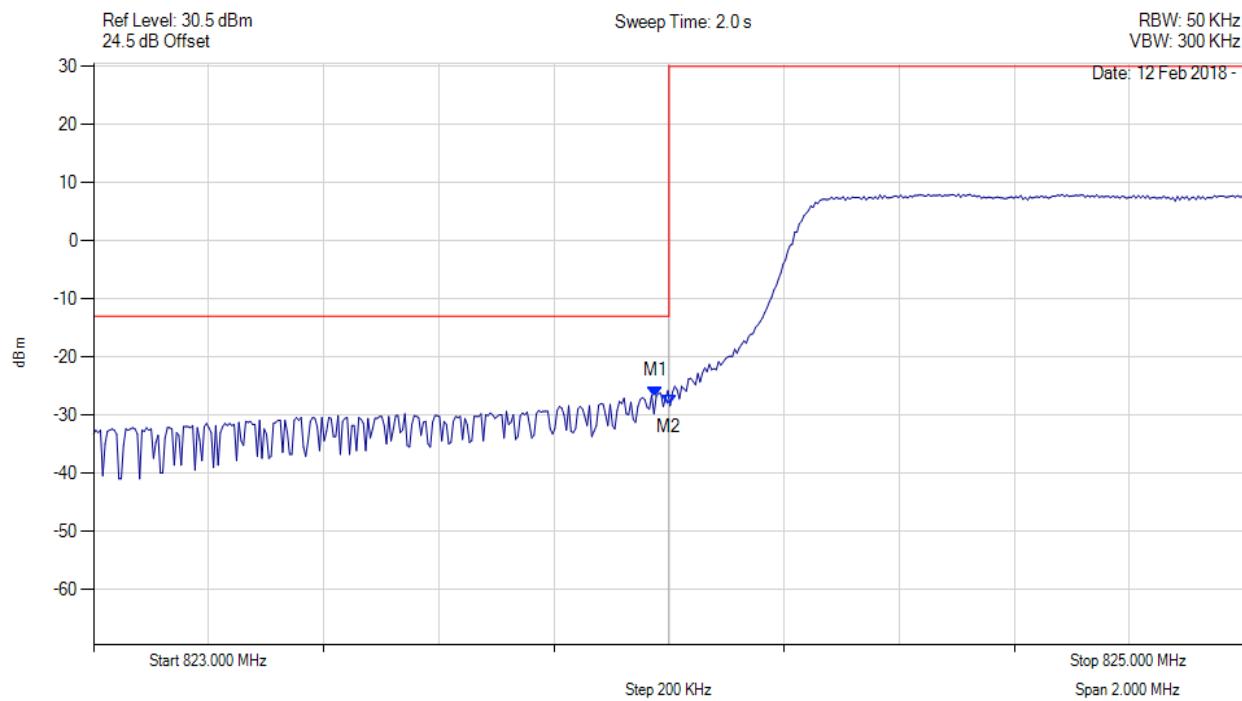
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: 16QAM, Channel: 826.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc

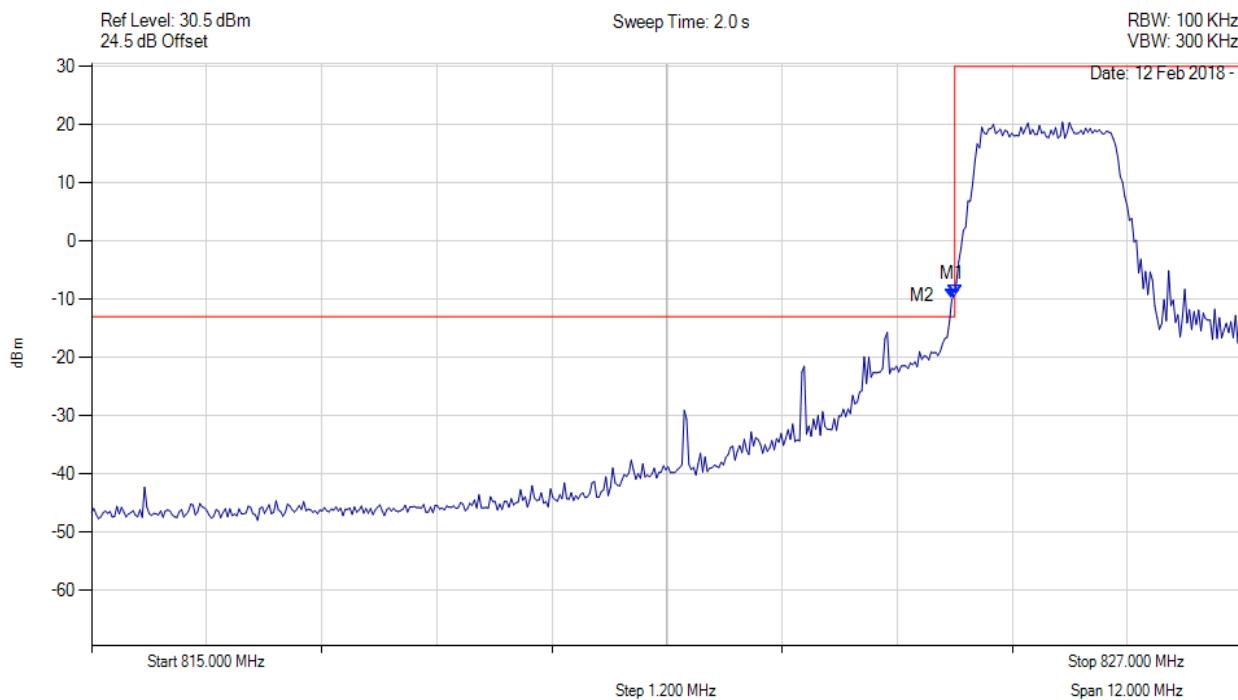


Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.976 MHz : -26.789 dBm M2 : 824.000 MHz : -28.415 dBm	Channel Frequency: 826.50 MHz

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Conducted Band-Edge Emissions_Peak
 Variant: 16QAM, Channel: 826.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.976 MHz : -9.963 dBm M2 : 824.000 MHz : -9.286 dBm	Channel Frequency: 826.50 MHz

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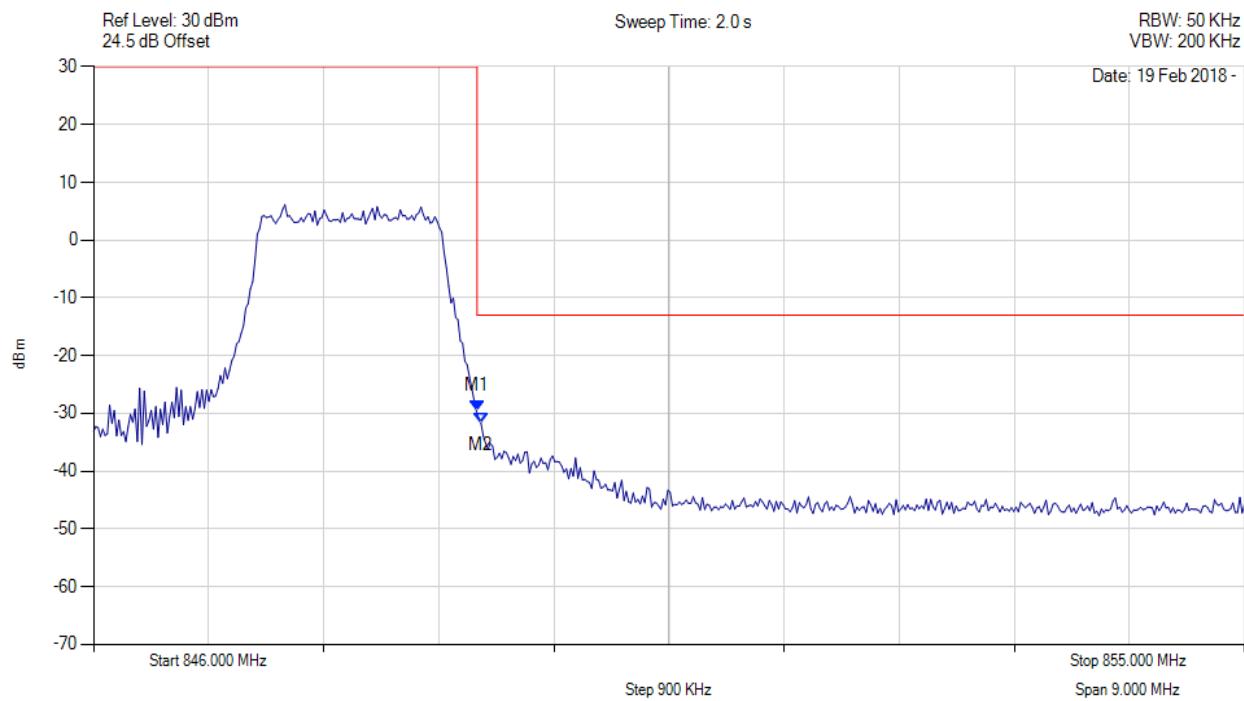
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: 16QAM, Channel: 846.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -29.556 dBm M2 : 849.028 MHz : -31.765 dBm	Channel Frequency: 846.50 MHz

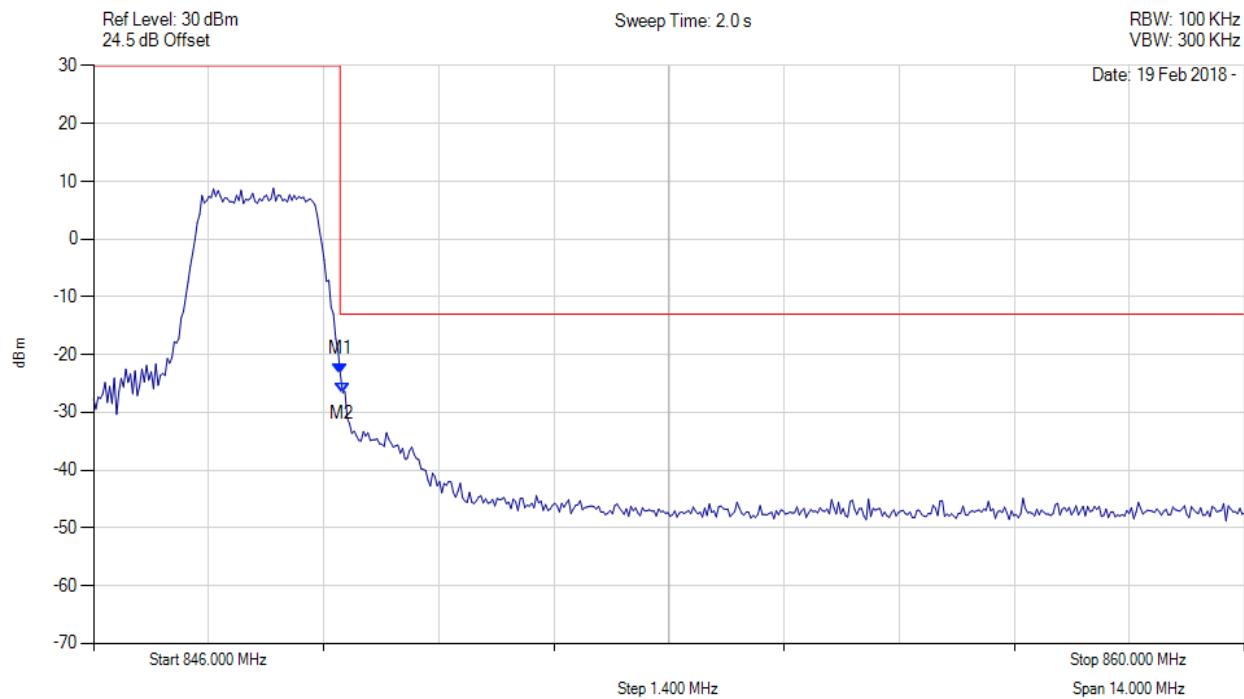
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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 846.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -23.319 dBm M2 : 849.028 MHz : -26.573 dBm	Channel Frequency: 846.50 MHz

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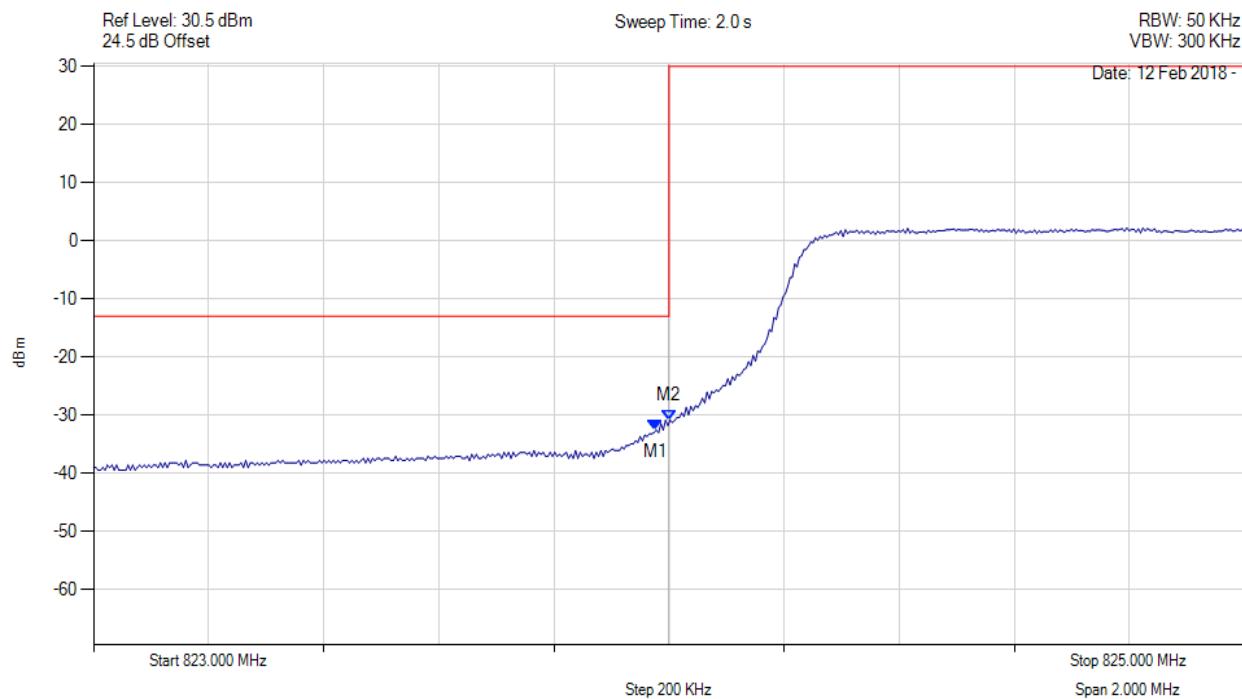
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: 16QAM, Channel: 826.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.976 MHz : -32.600 dBm M2 : 824.000 MHz : -30.914 dBm	Channel Frequency: 826.50 MHz

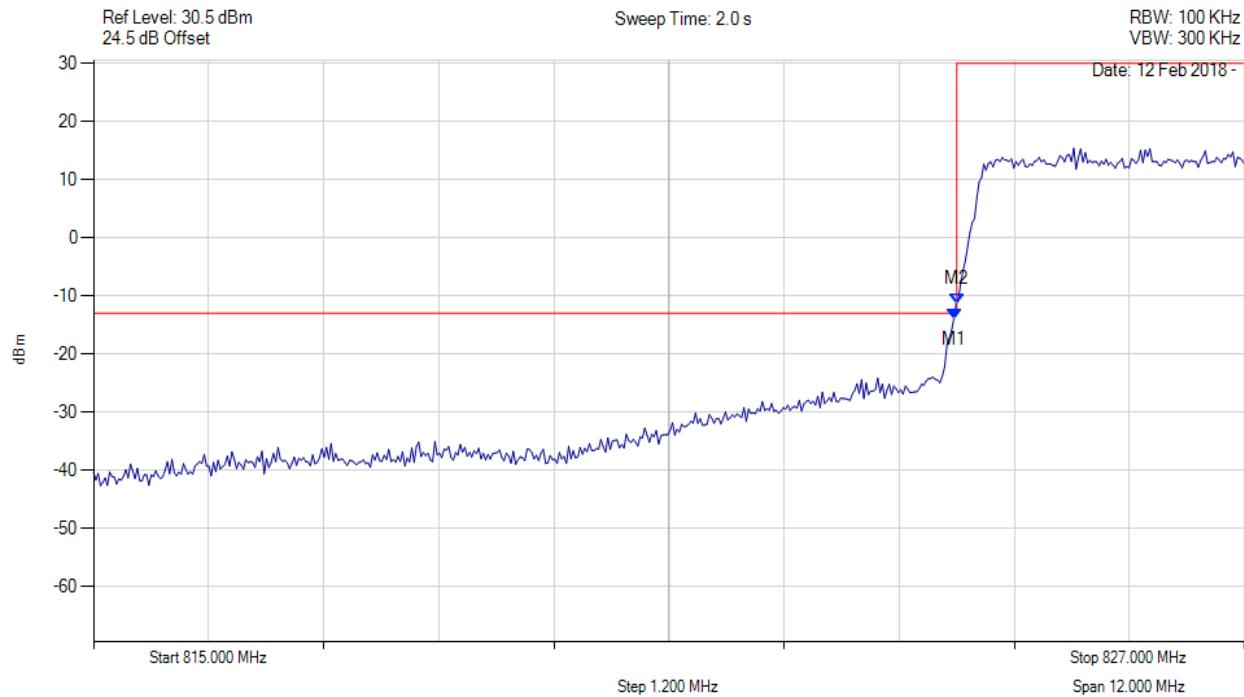
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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 826.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.976 MHz : -13.956 dBm M2 : 824.000 MHz : -11.344 dBm	Channel Frequency: 826.50 MHz

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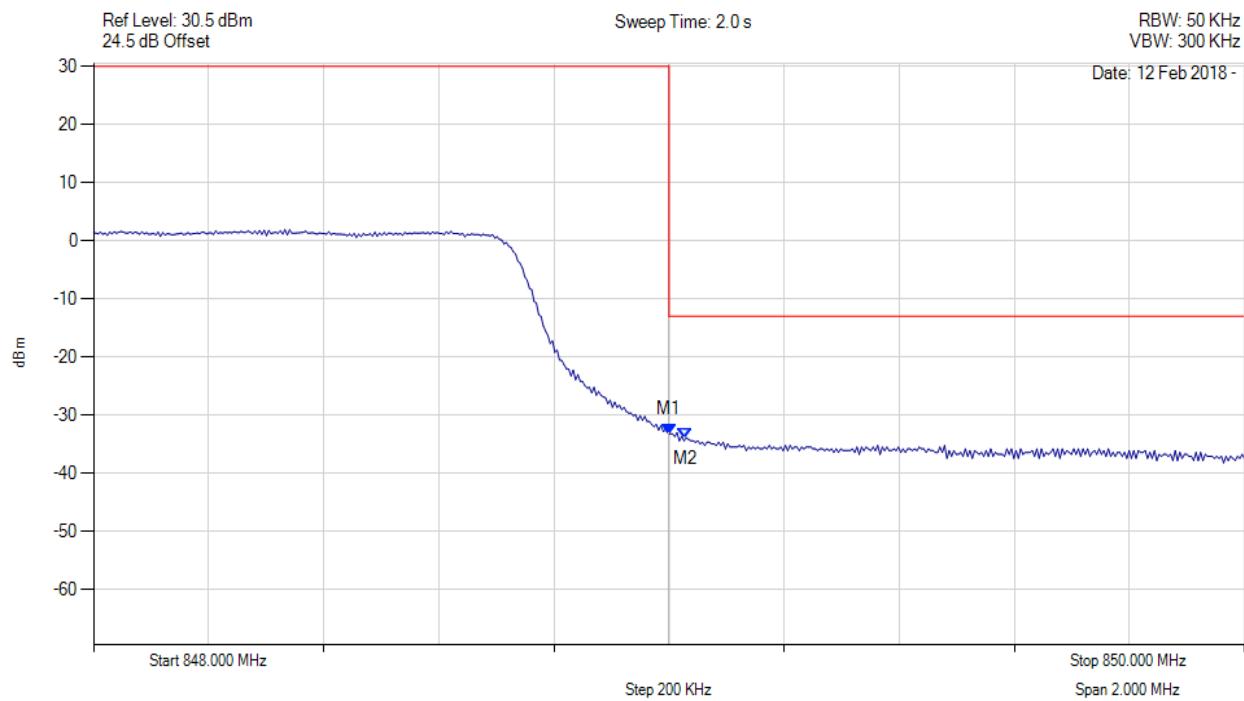
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: 16QAM, Channel: 846.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -33.244 dBm M2 : 849.028 MHz : -33.939 dBm	Channel Frequency: 846.50 MHz

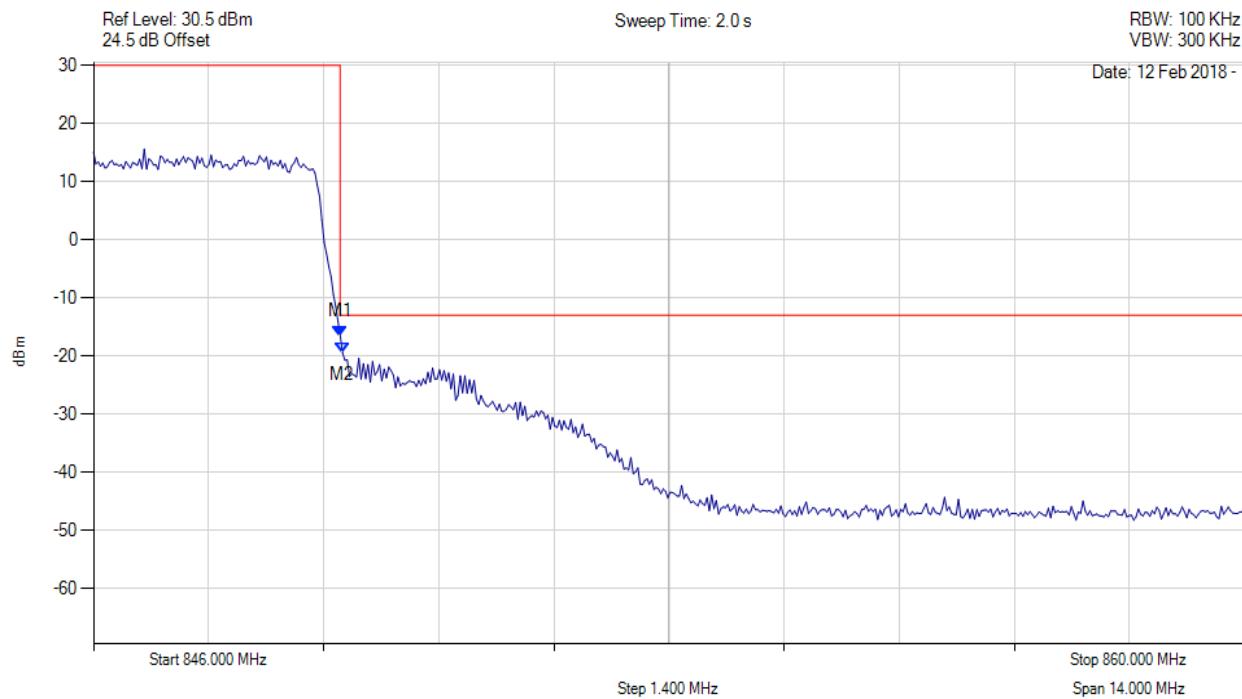
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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 846.50 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -16.581 dBm M2 : 849.028 MHz : -19.530 dBm	Channel Frequency: 846.50 MHz

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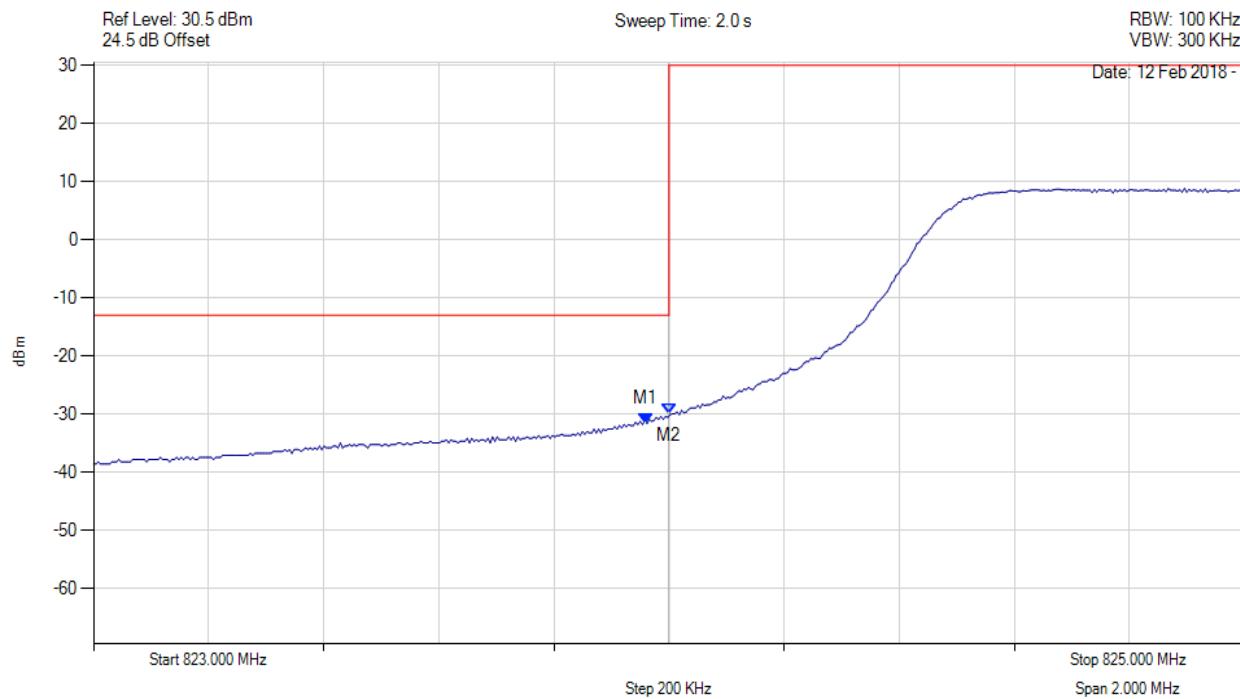
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: 16QAM, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.960 MHz : -31.623 dBm M2 : 824.000 MHz : -30.102 dBm	Channel Frequency: 829.00 MHz

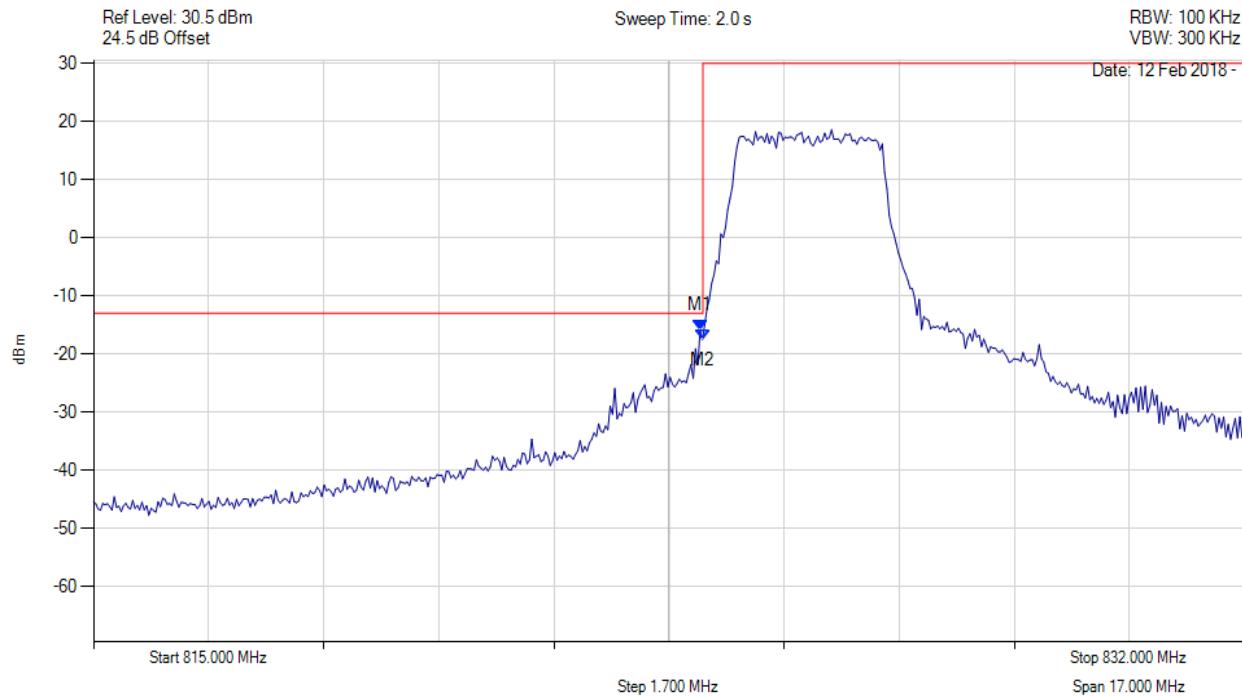
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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.960 MHz : -15.882 dBm M2 : 824.000 MHz : -17.498 dBm	Channel Frequency: 829.00 MHz

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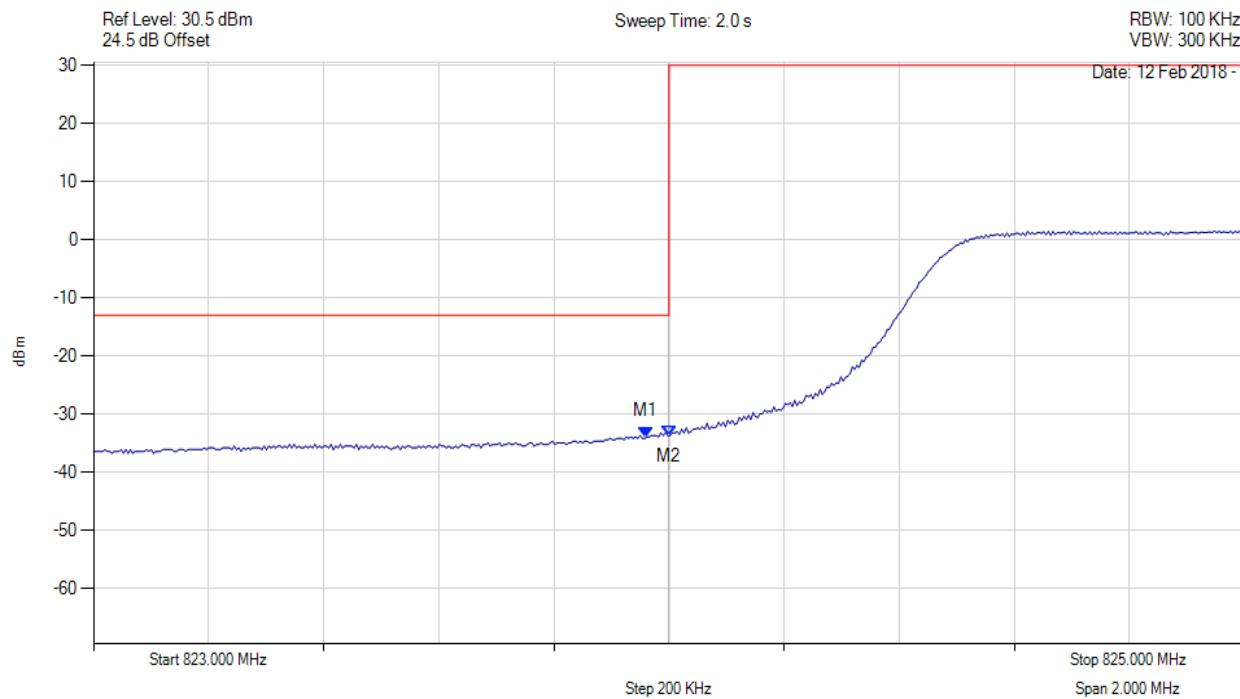
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Average

Variant: 16QAM, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



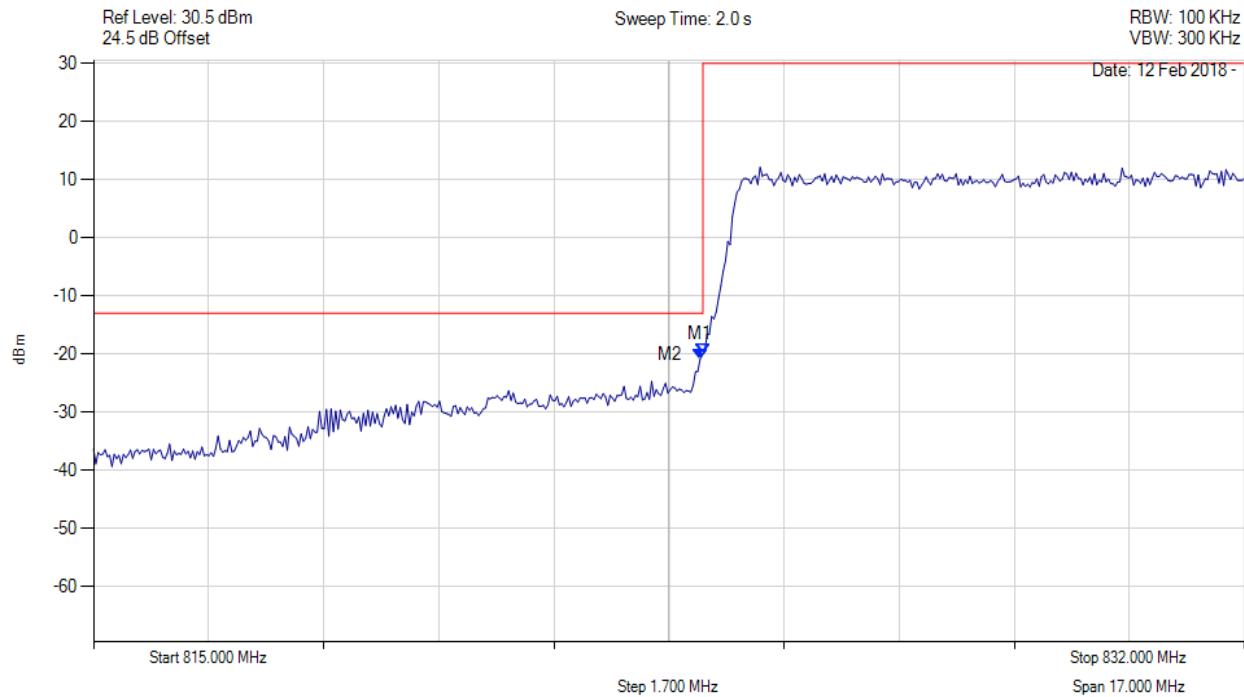
Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = RMS Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.960 MHz : -33.939 dBm M2 : 824.000 MHz : -33.701 dBm	Channel Frequency: 829.00 MHz

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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 829.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 823.960 MHz : -20.893 dBm M2 : 824.000 MHz : -20.000 dBm	Channel Frequency: 829.00 MHz

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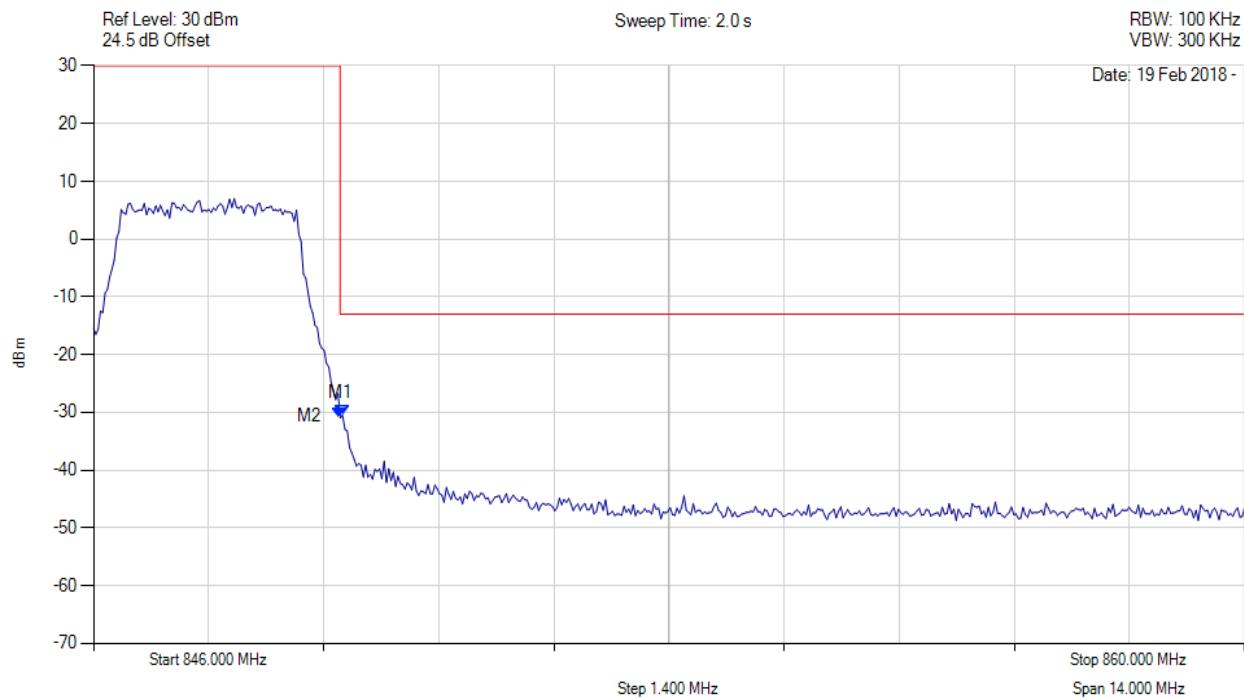
Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 844.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -30.976 dBm M2 : 849.028 MHz : -30.547 dBm	Channel Frequency: 844.00 MHz

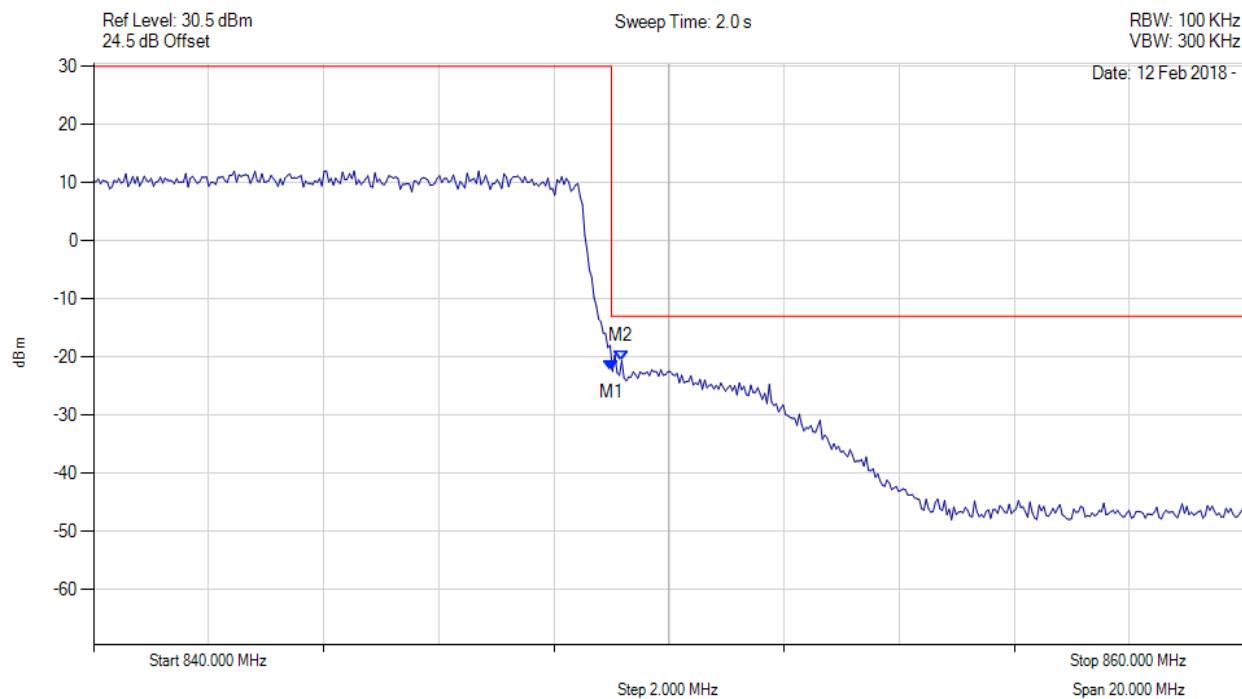
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Conducted Band-Edge Emissions_Peak

Variant: 16QAM, Channel: 844.00 MHz, Chain a, Temp: 20, Voltage: 120 Vdc



Analyzer Setup	Marker:Frequency:Amplitude	Test Results
Detector = MAX PEAK Sweep Count = 0 RF Atten (dB) = 20 Trace Mode = CLR/WRITE	M1 : 849.000 MHz : -22.485 dBm M2 : 849.160 MHz : -20.639 dBm	Channel Frequency: 844.00 MHz

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Note: For improvement of accuracy, Section 5.7.2 of ANSI C63.26 allows for a narrower RBW to be used near band edges. See average plot for a higher resolution measurement.

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