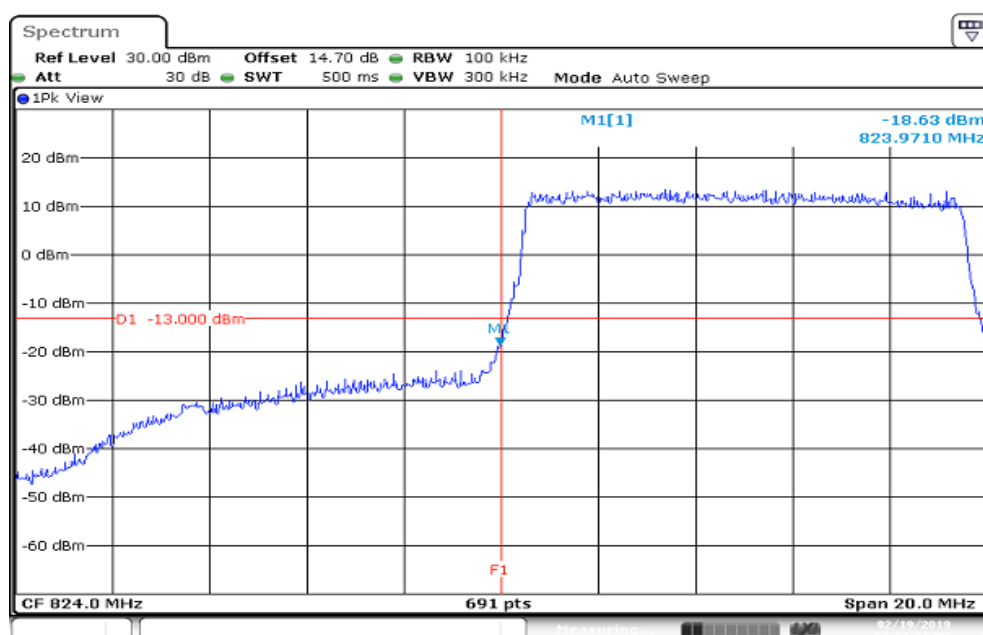
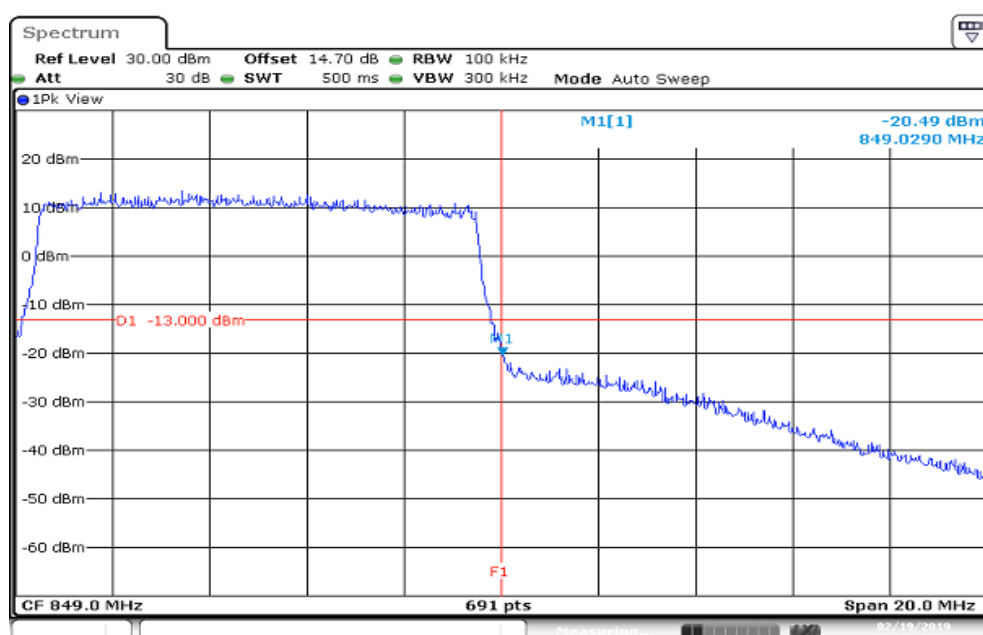


CHANNEL BANDWIDTH: 10MHz / 16QAM / 100%RB ALLOCATED LOWER BAND EDGE



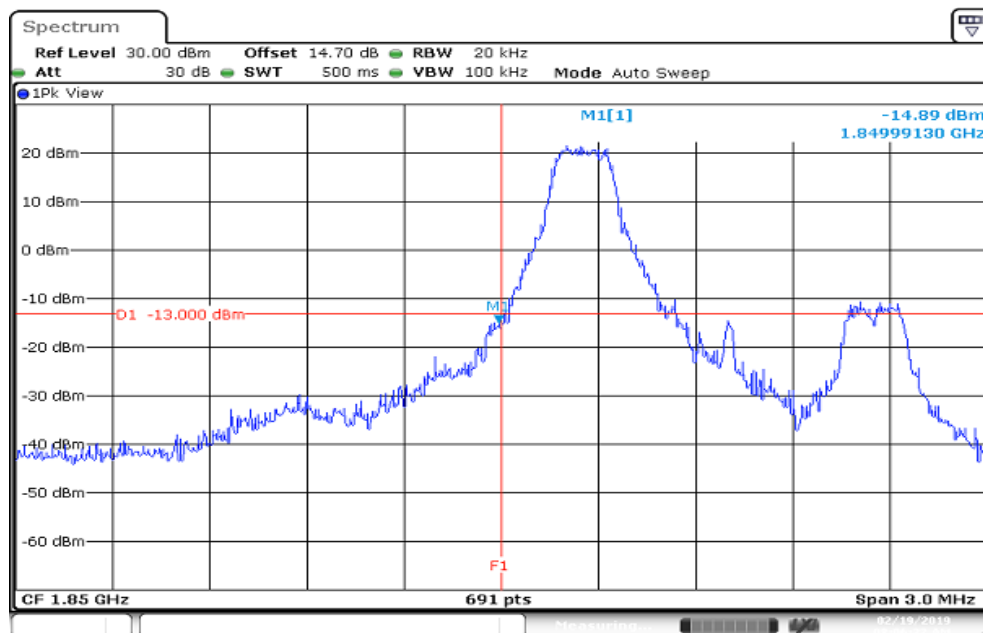
HIGHER BAND EDGE



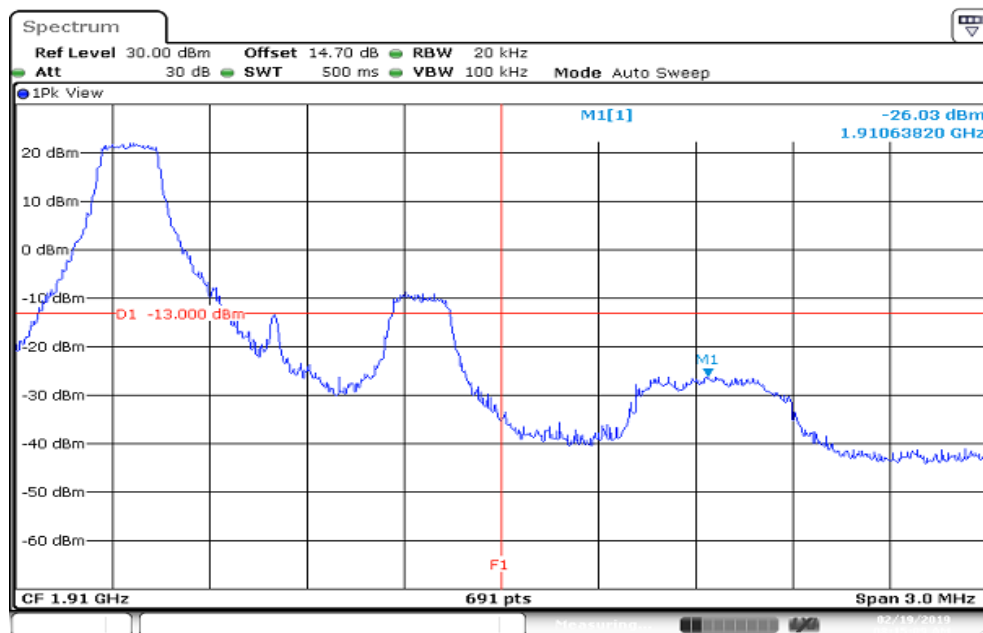
LTE Band 2

CHANNEL BANDWIDTH: 1.4MHz / QPSK / 1 RB ALLOCATED

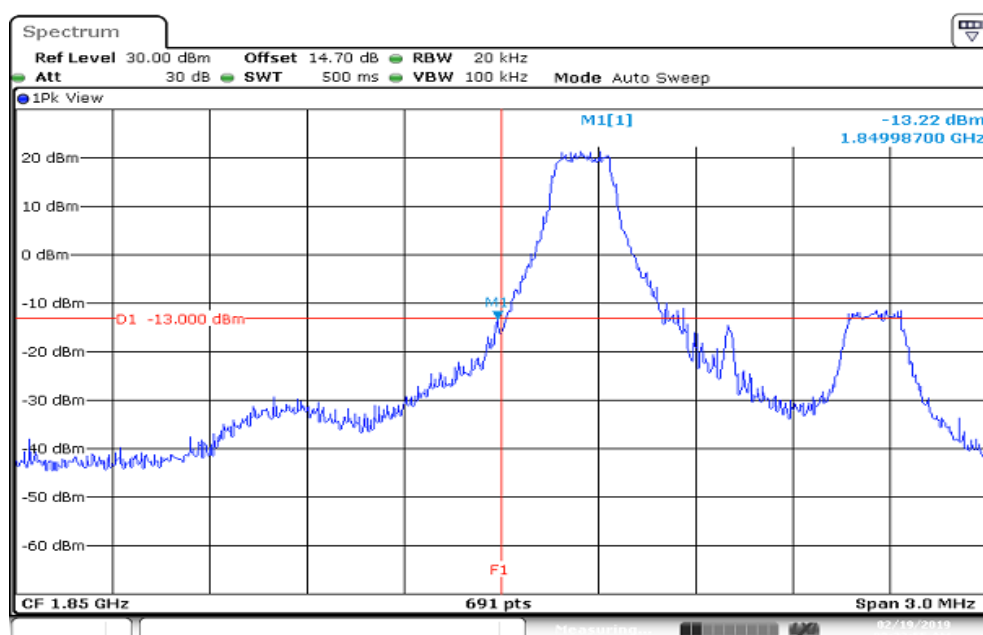
LOWER BAND EDGE



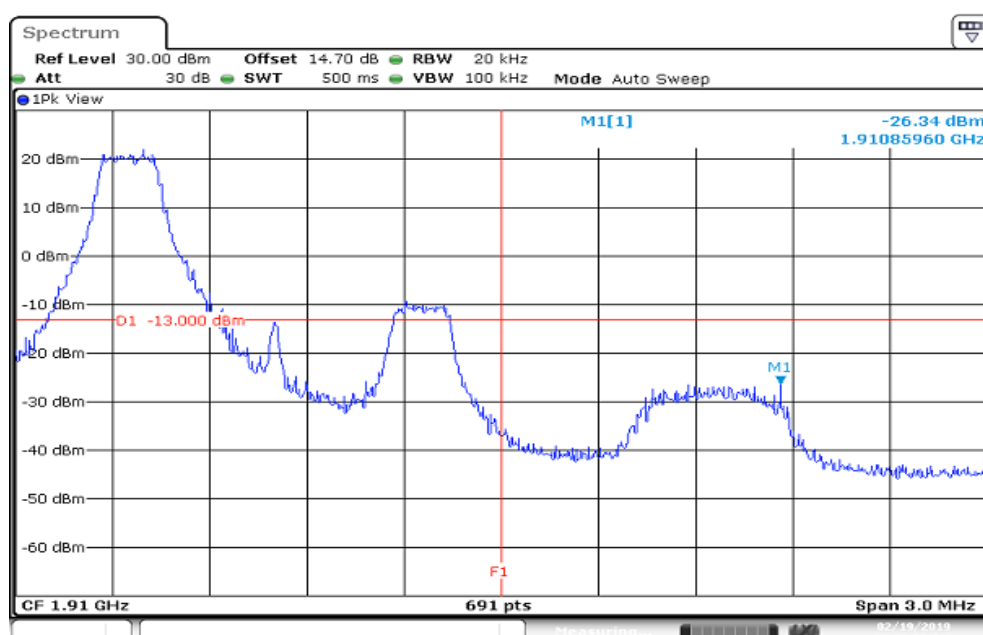
HIGHER BAND EDGE



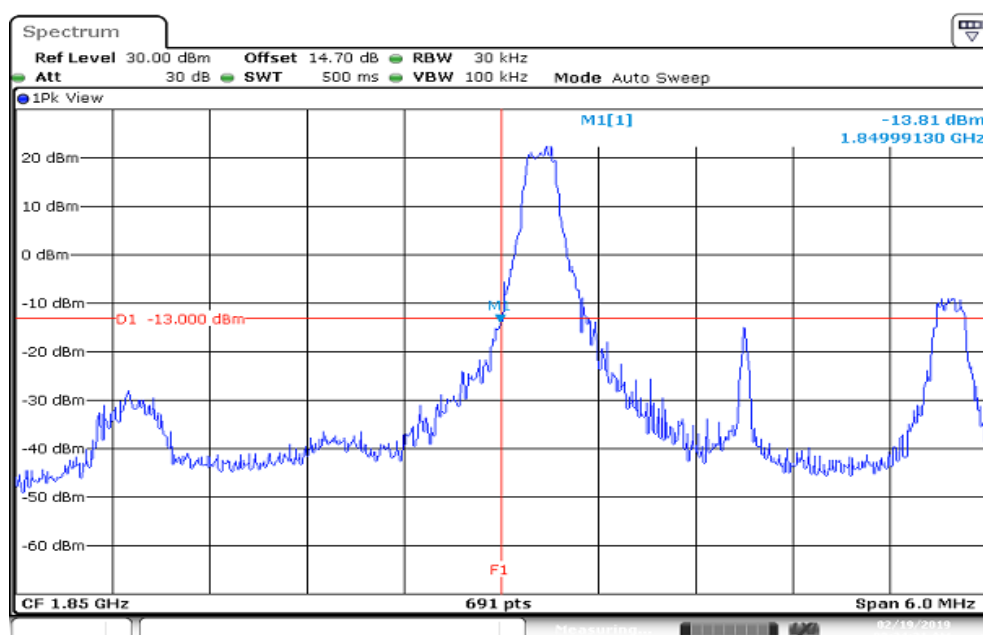
CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 1 RB ALLOCATED LOWER BAND EDGE



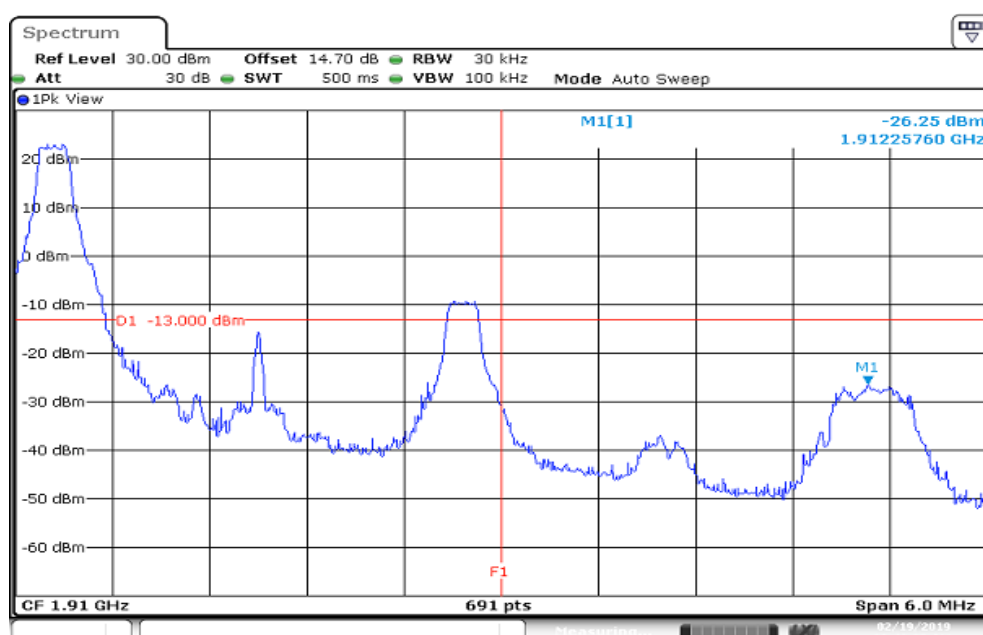
HIGHER BAND EDGE



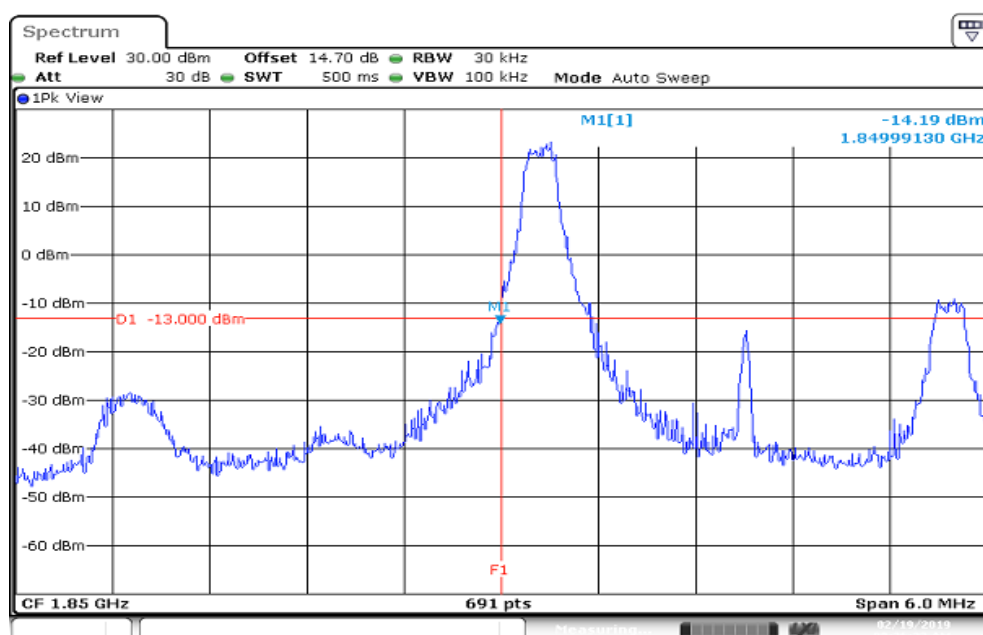
CHANNEL BANDWIDTH: 3MHz / QPSK / 1 RB ALLOCATED LOWER BAND EDGE



HIGHER BAND EDGE

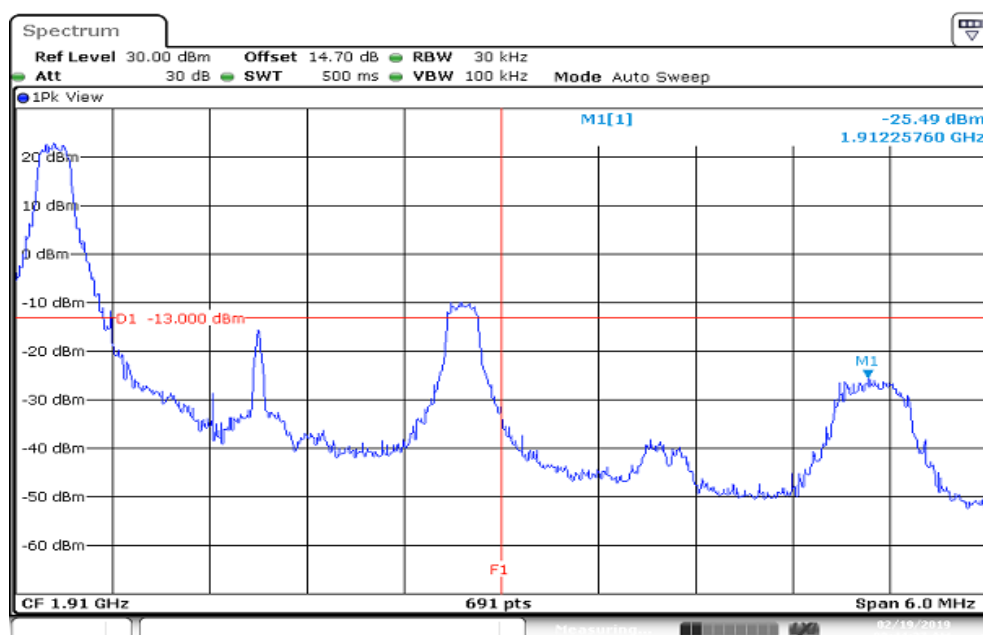


CHANNEL BANDWIDTH: 3MHz / 16QAM / 1 RB ALLOCATED LOWER BAND EDGE



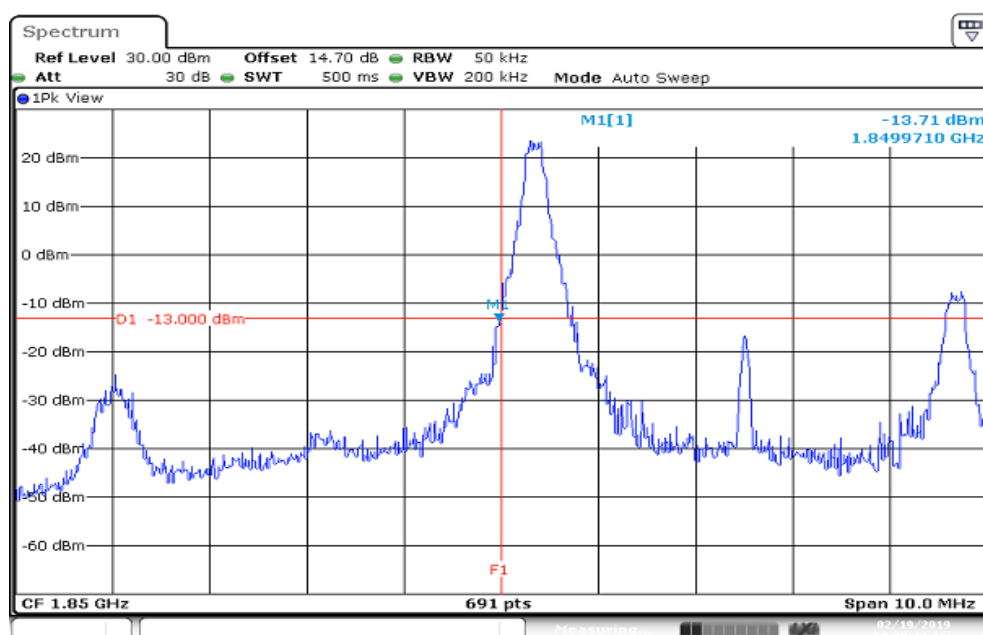
Date: 19.FEB.2019 08:36:23

HIGHER BAND EDGE

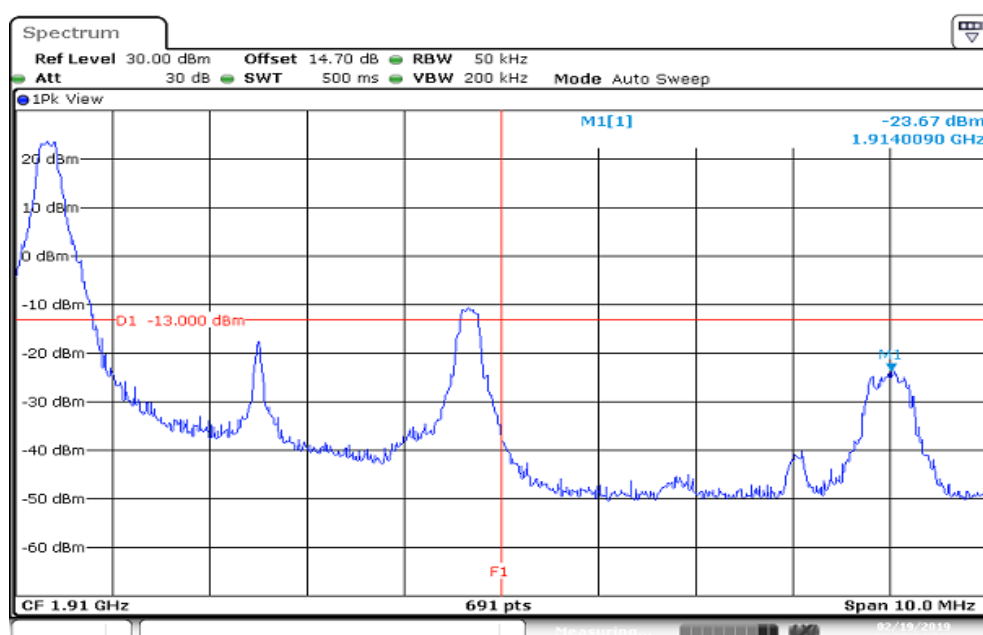


Date: 19.FEB.2019 08:44:27

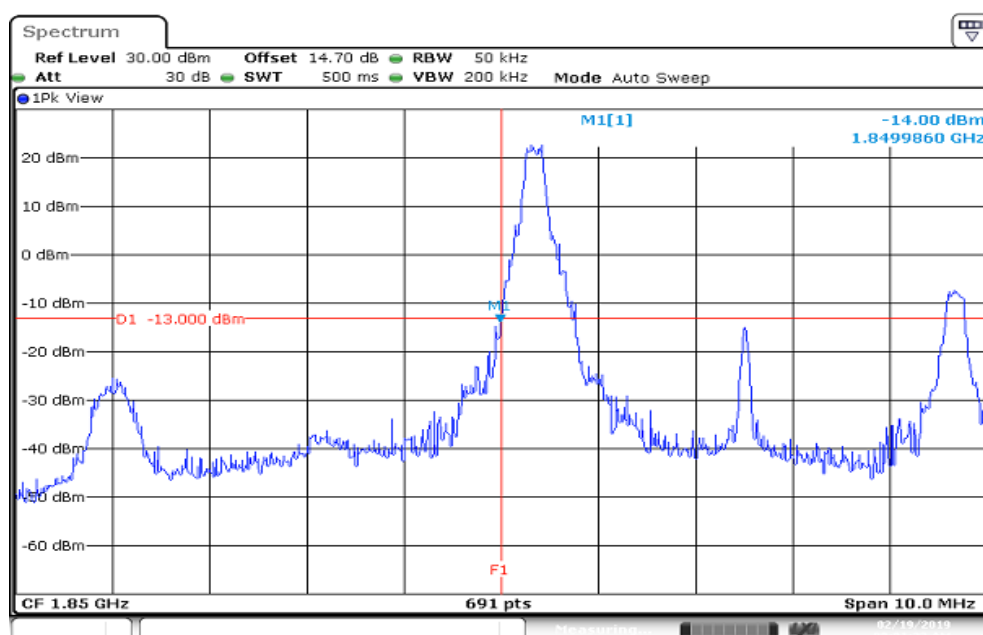
CHANNEL BANDWIDTH: 5MHz / QPSK / 1 RB ALLOCATED LOWER BAND EDGE



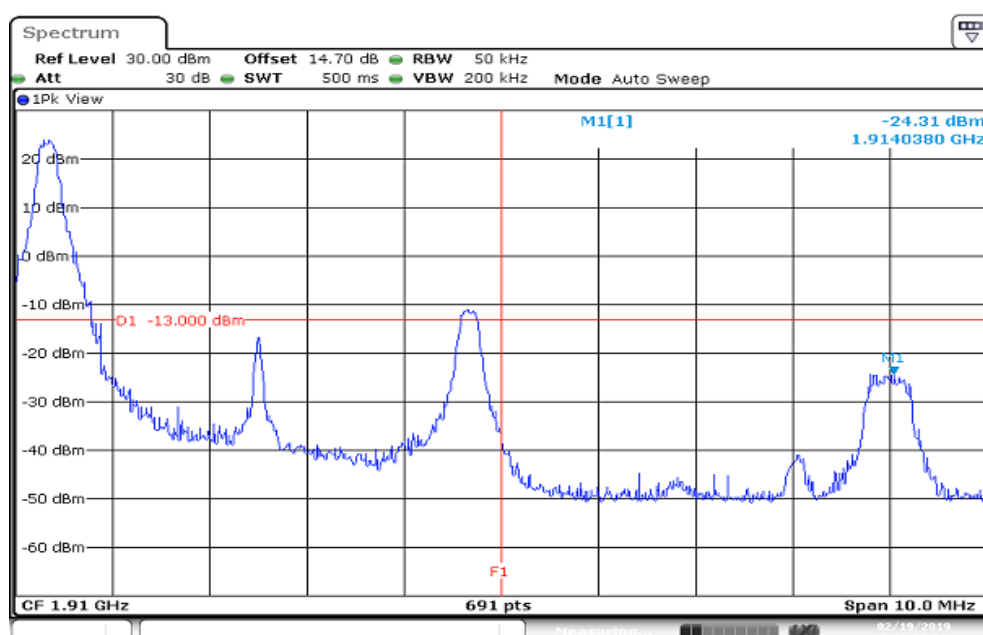
HIGHER BAND EDGE



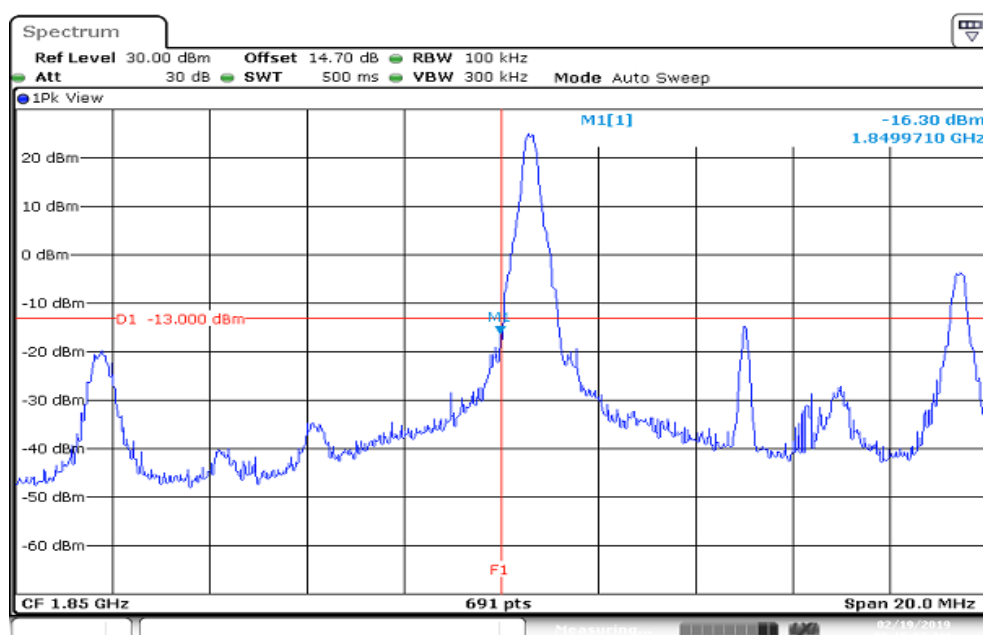
CHANNEL BANDWIDTH: 5MHz / 16QAM / 1 RB ALLOCATED LOWER BAND EDGE



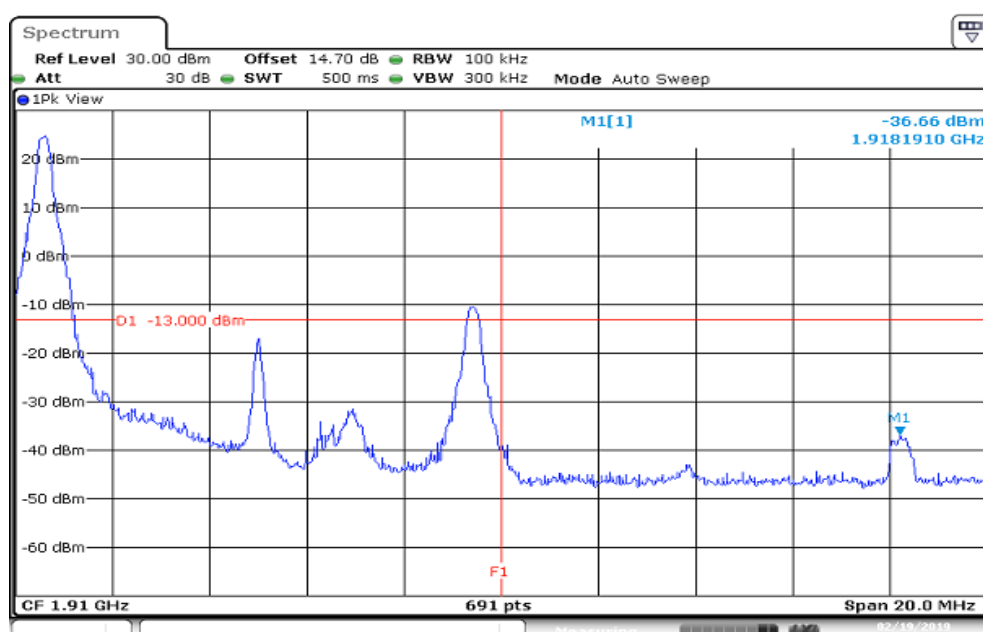
HIGHER BAND EDGE



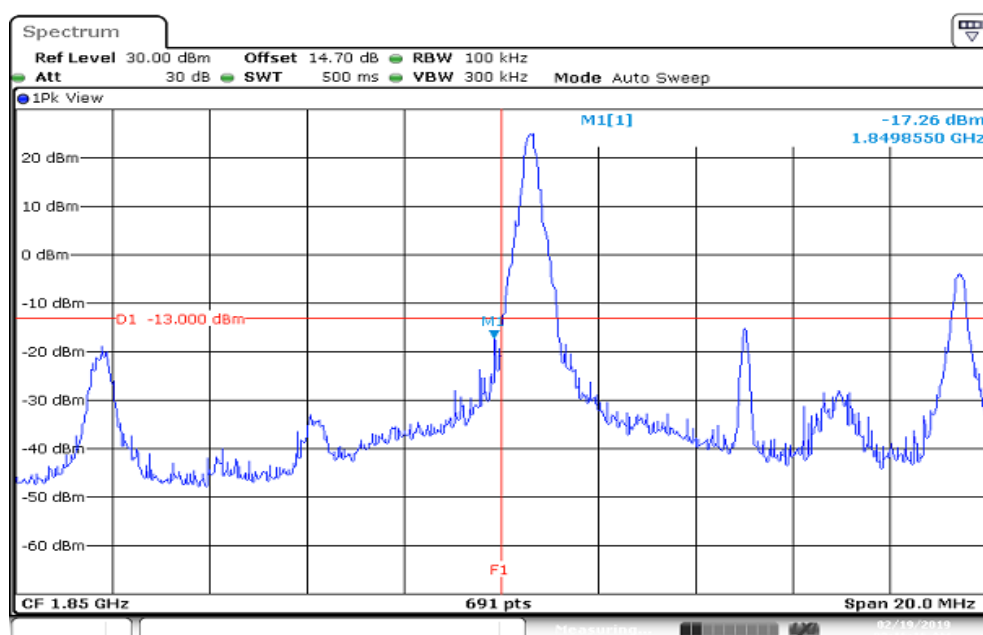
CHANNEL BANDWIDTH: 10MHz / QPSK / 1 RB ALLOCATED LOWER BAND EDGE



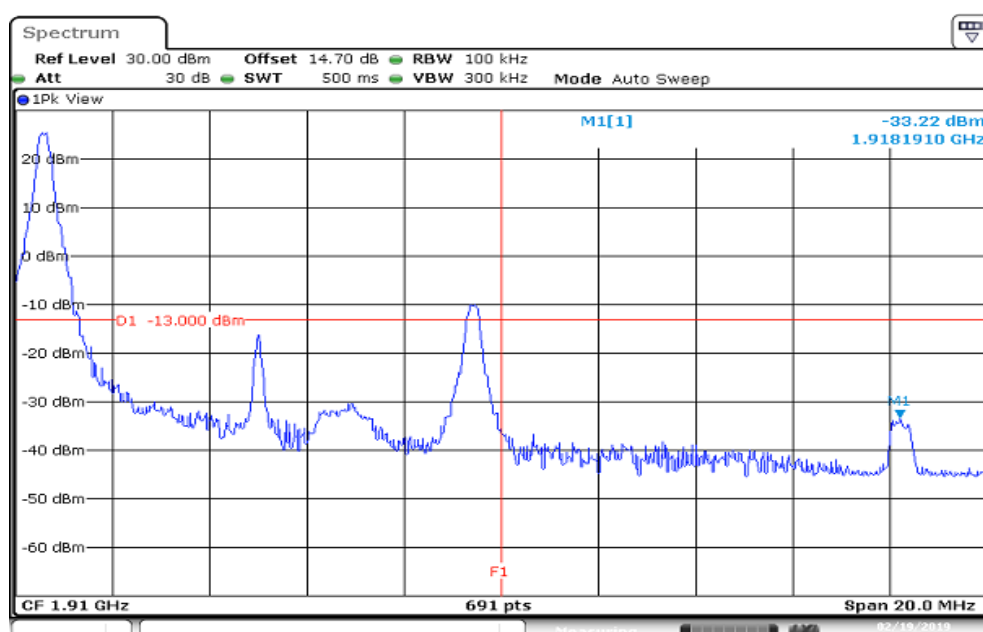
HIGHER BAND EDGE



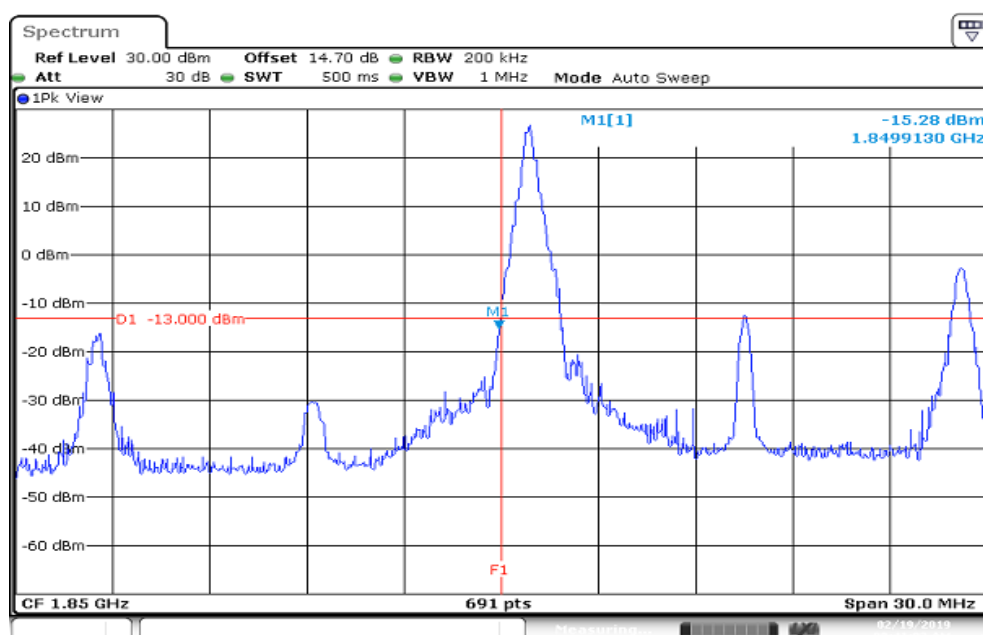
CHANNEL BANDWIDTH: 10MHz / 16QAM / 1 RB ALLOCATED LOWER BAND EDGE



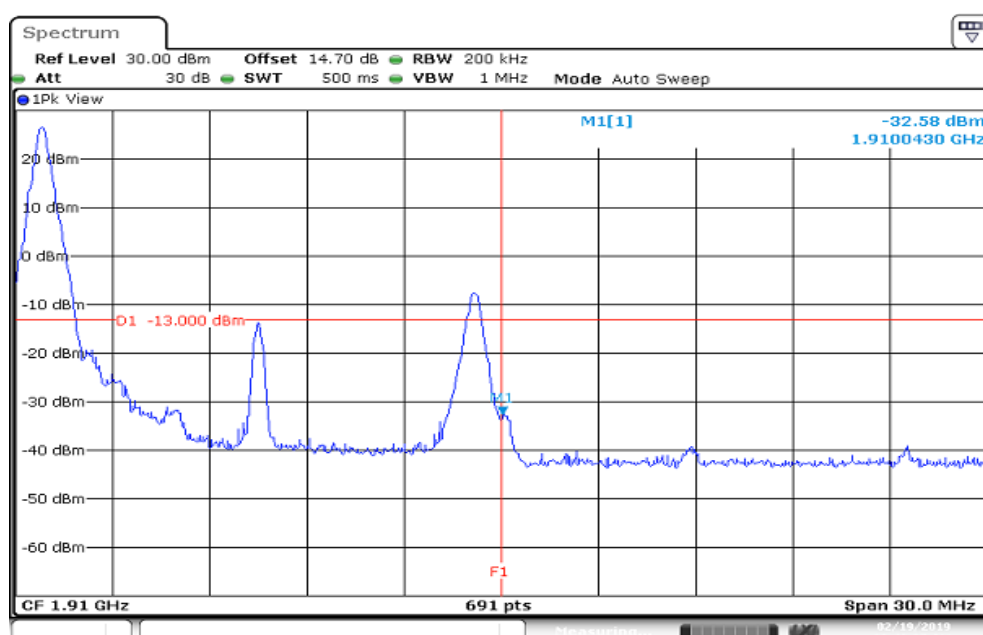
HIGHER BAND EDGE



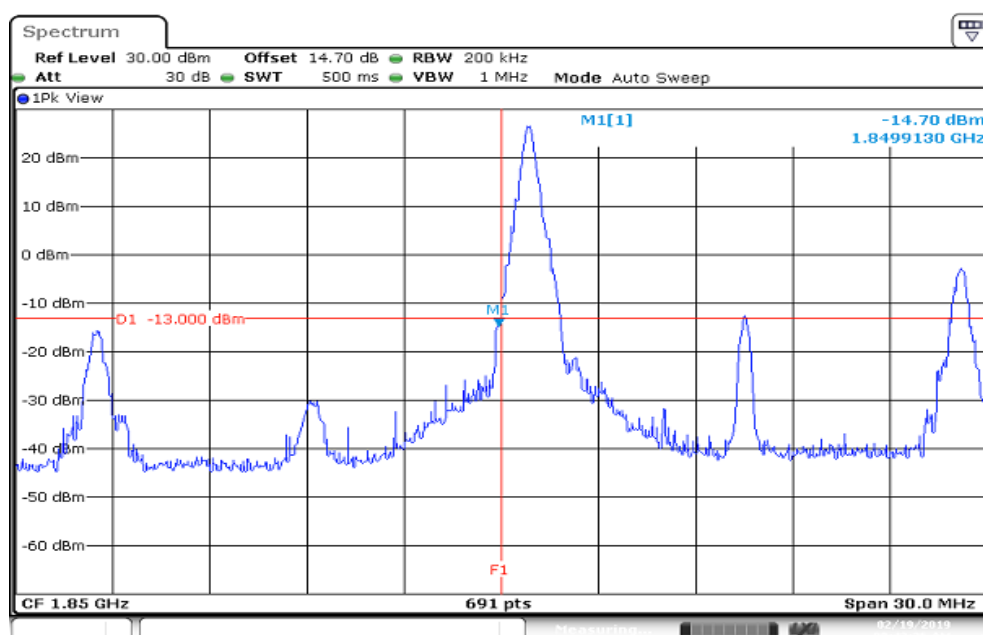
CHANNEL BANDWIDTH: 15MHz / QPSK / 1 RB ALLOCATED LOWER BAND EDGE



HIGHER BAND EDGE

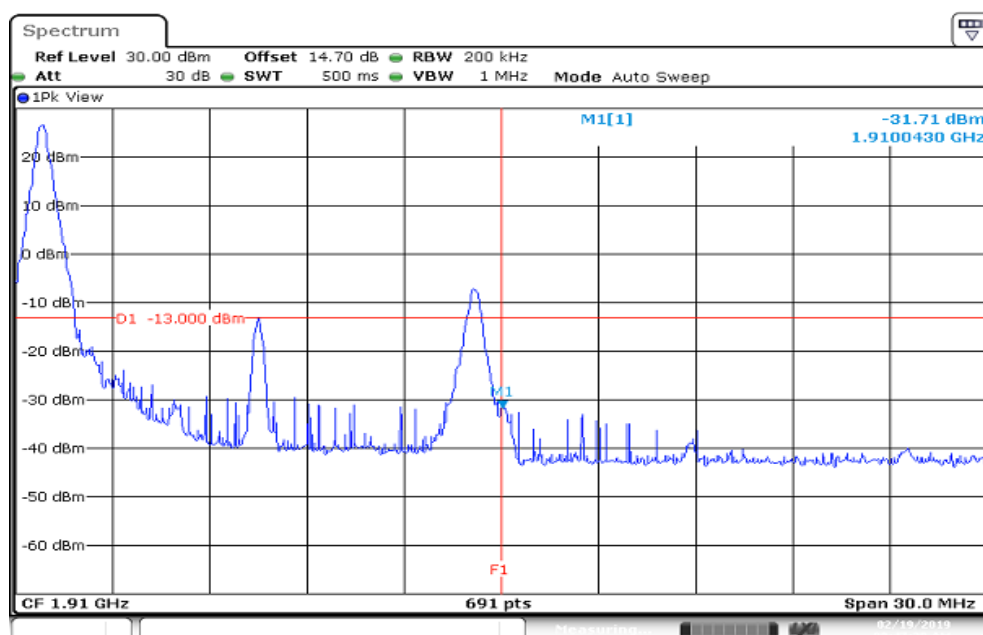


CHANNEL BANDWIDTH: 15MHz / 16QAM / 1 RB ALLOCATED LOWER BAND EDGE



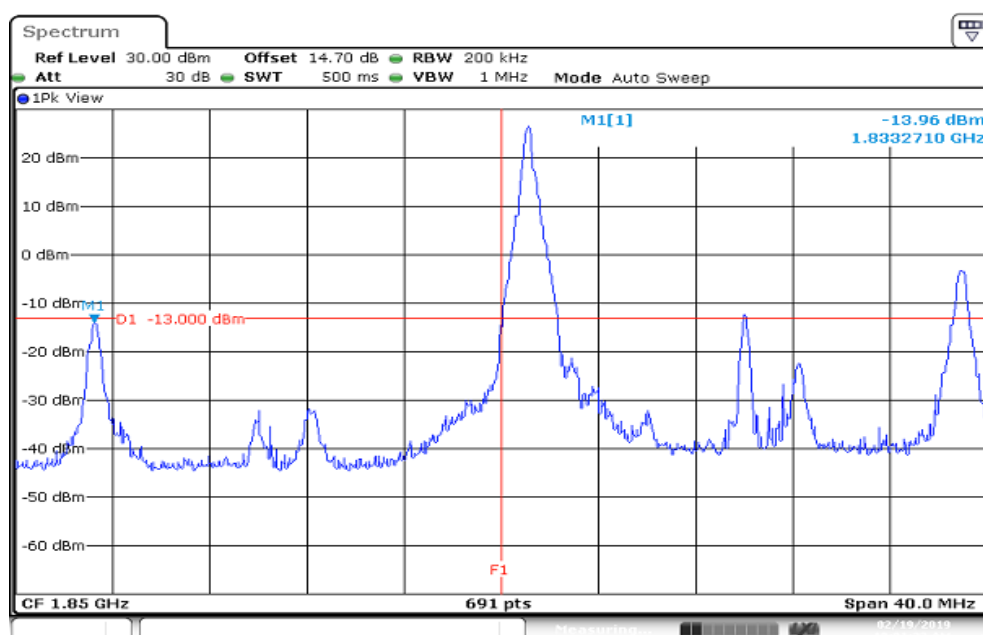
Date: 19.FEB 2019 09:42:27

HIGHER BAND EDGE

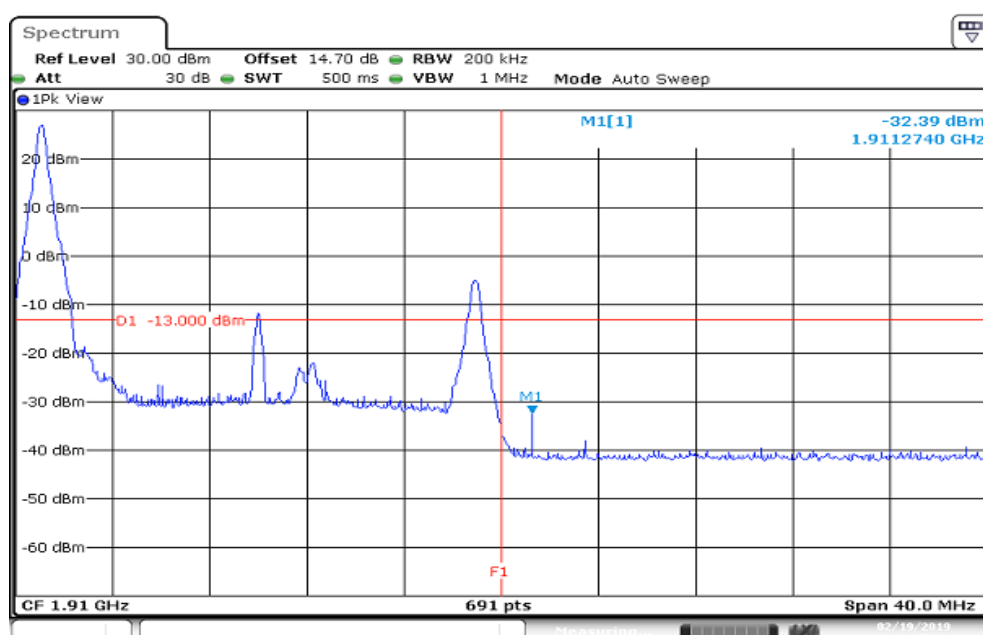


Date: 19.FEB 2019 09:47:21

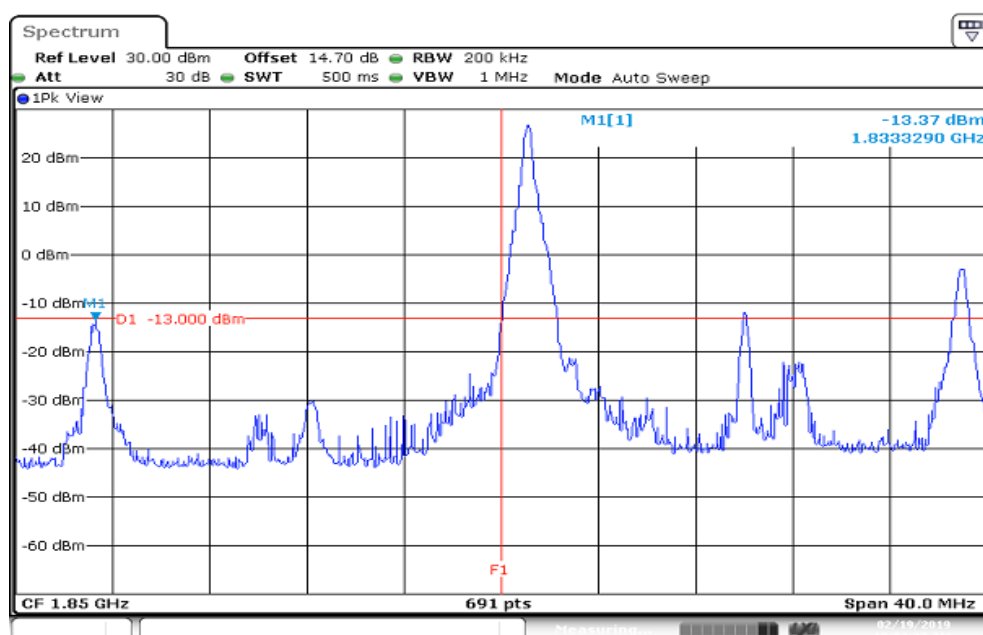
CHANNEL BANDWIDTH: 20MHz / QPSK / 1 RB ALLOCATED LOWER BAND EDGE



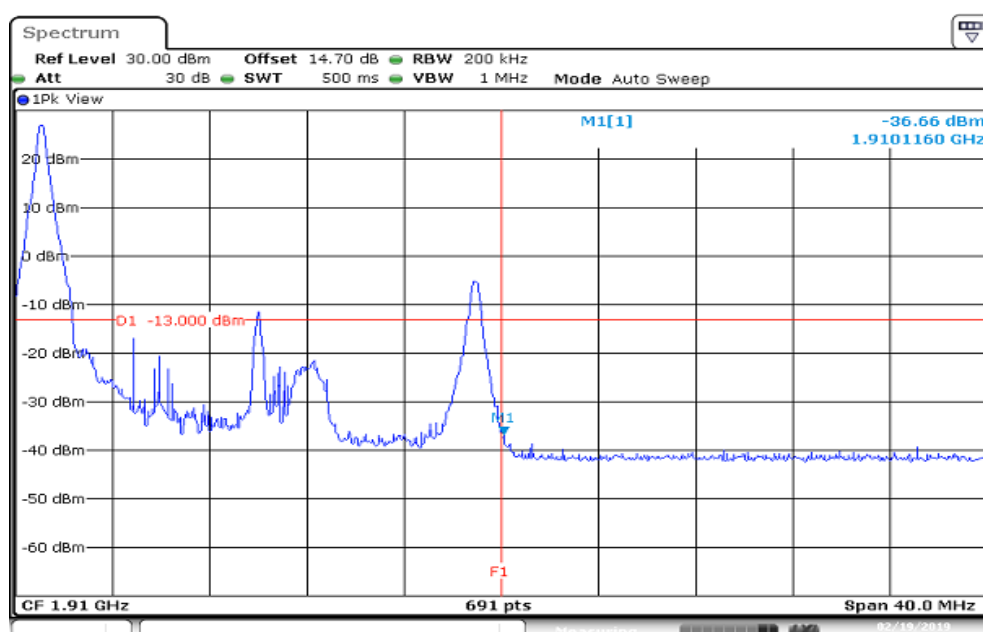
HIGHER BAND EDGE



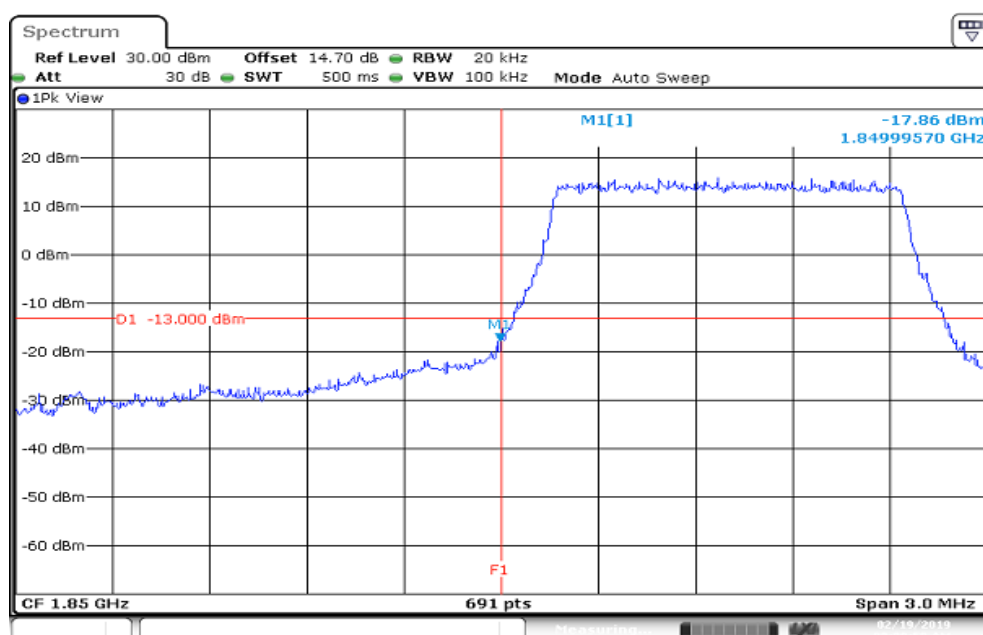
CHANNEL BANDWIDTH: 20MHz / 16QAM / 1 RB ALLOCATED LOWER BAND EDGE



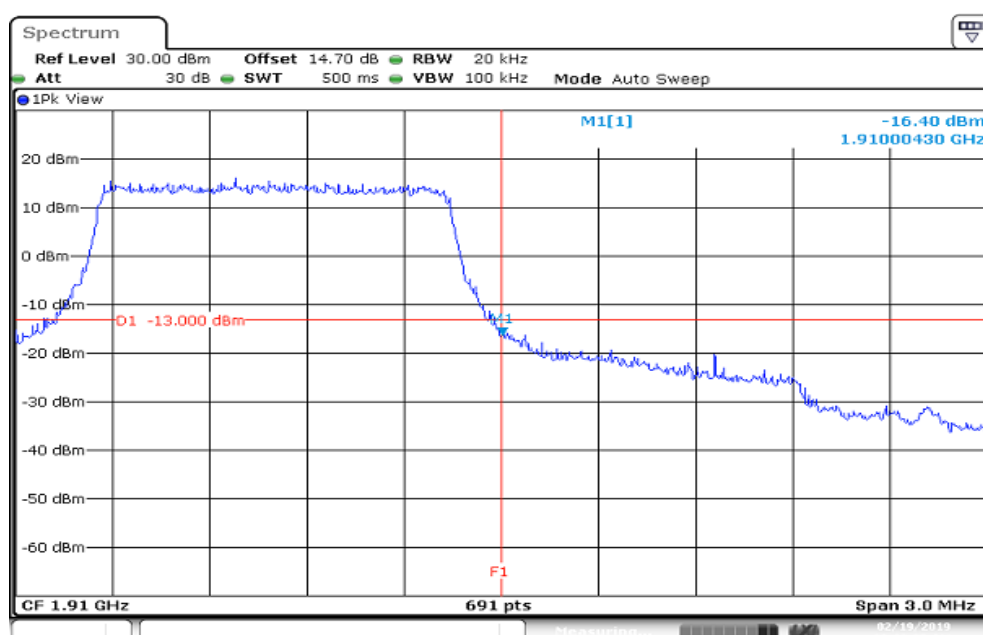
HIGHER BAND EDGE



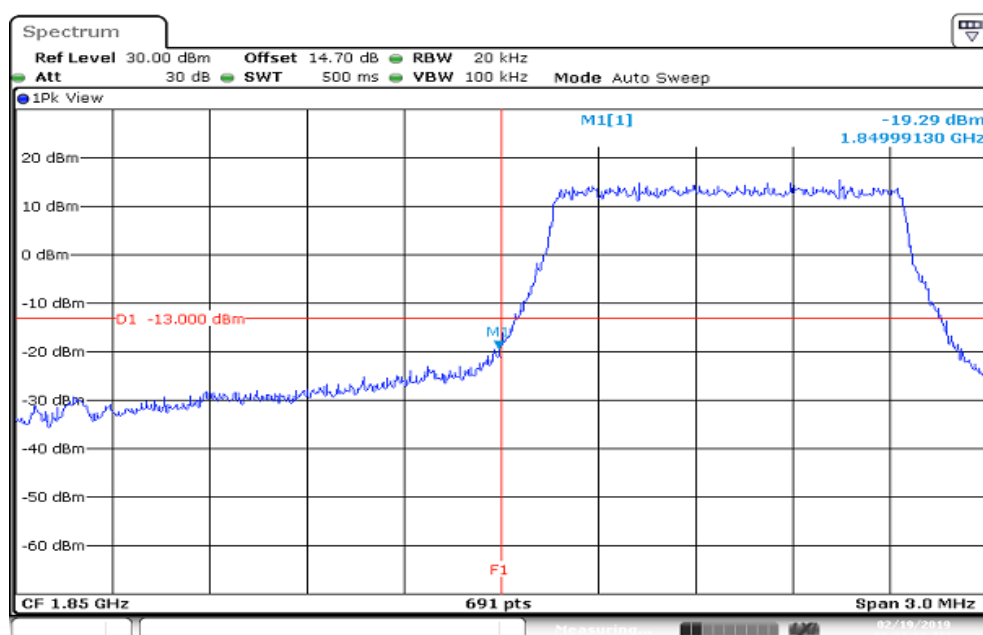
CHANNEL BANDWIDTH: 1.4MHz / QPSK / 100% RB ALLOCATED LOWER BAND EDGE



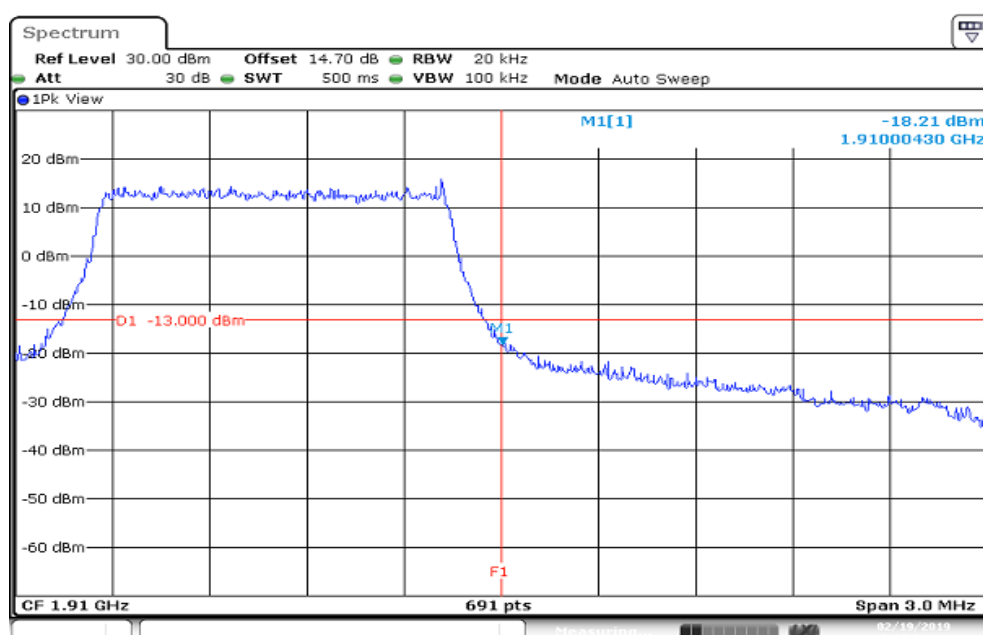
HIGHER BAND EDGE



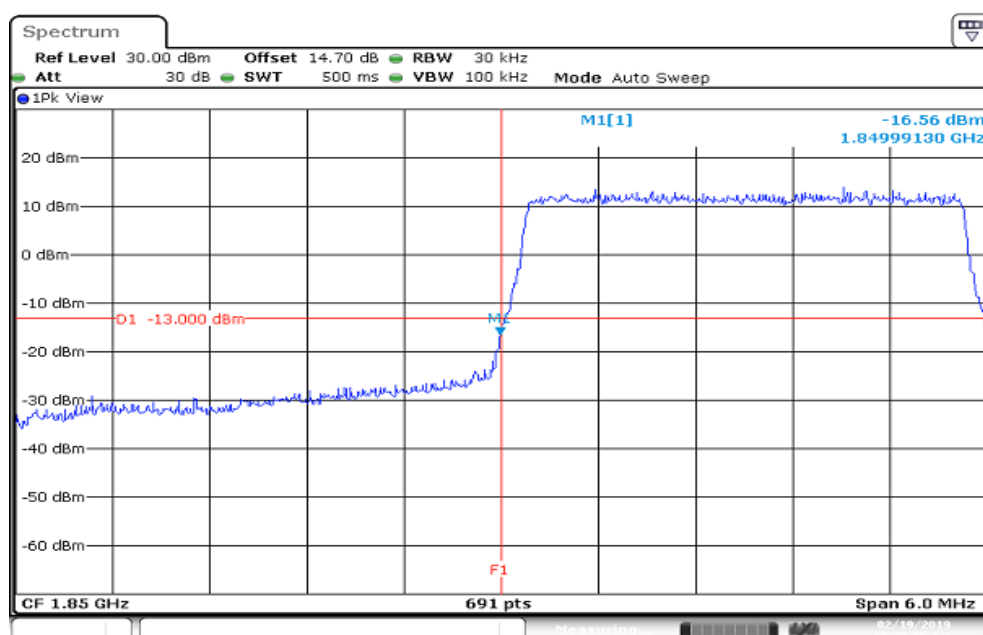
CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 100% RB ALLOCATED LOWER BAND EDGE



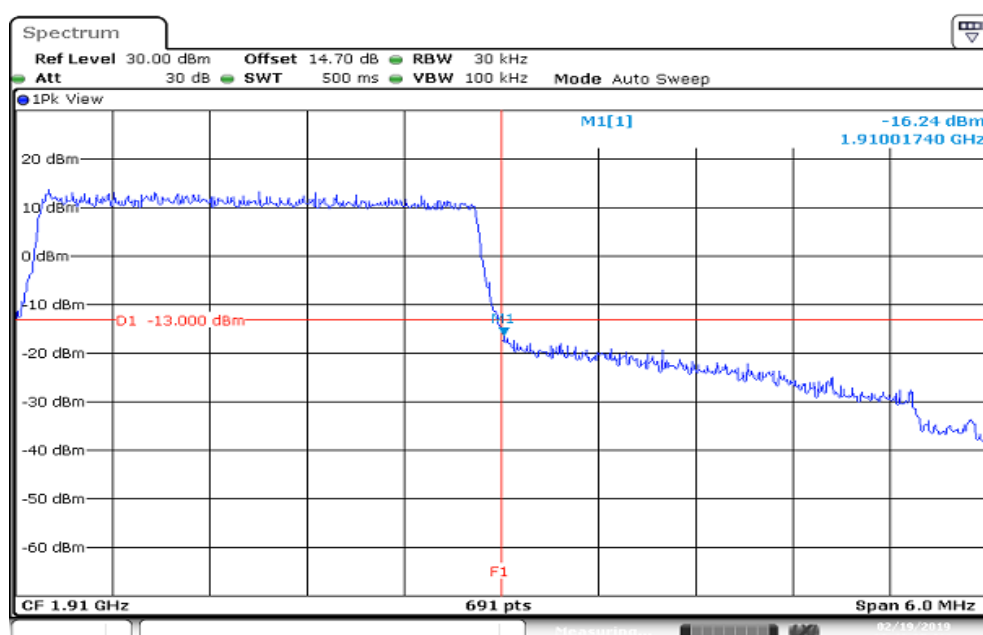
HIGHER BAND EDGE



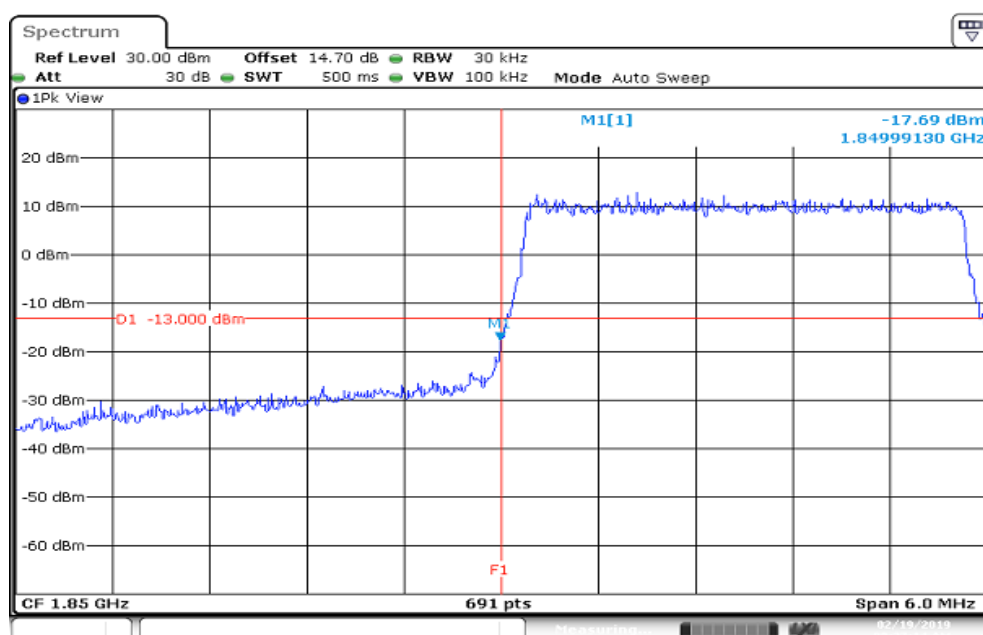
CHANNEL BANDWIDTH: 3MHz / QPSK / 100% RB ALLOCATED LOWER BAND EDGE



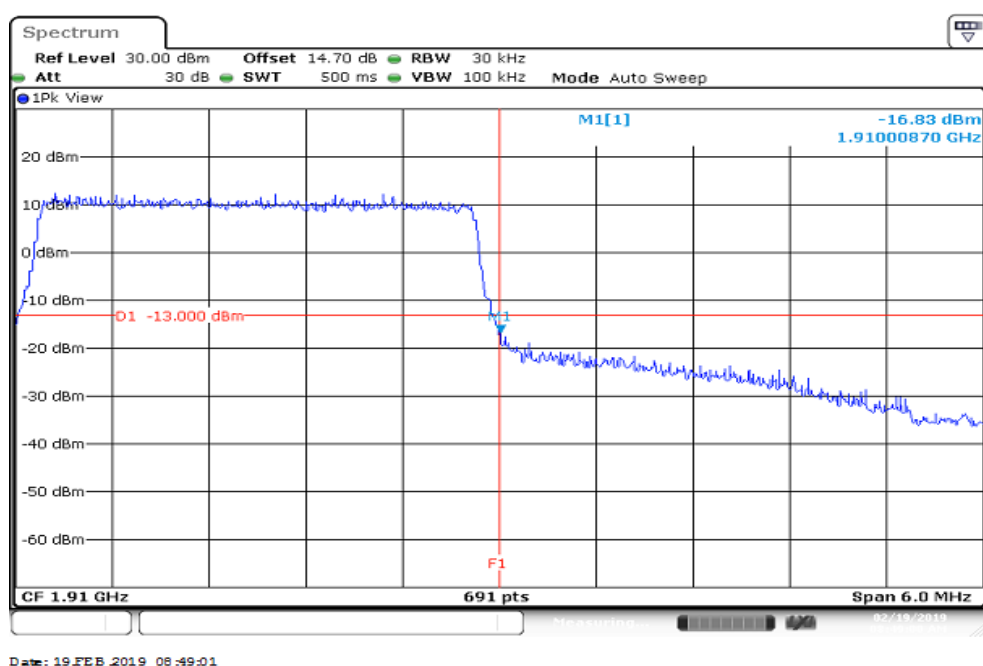
HIGHER BAND EDGE



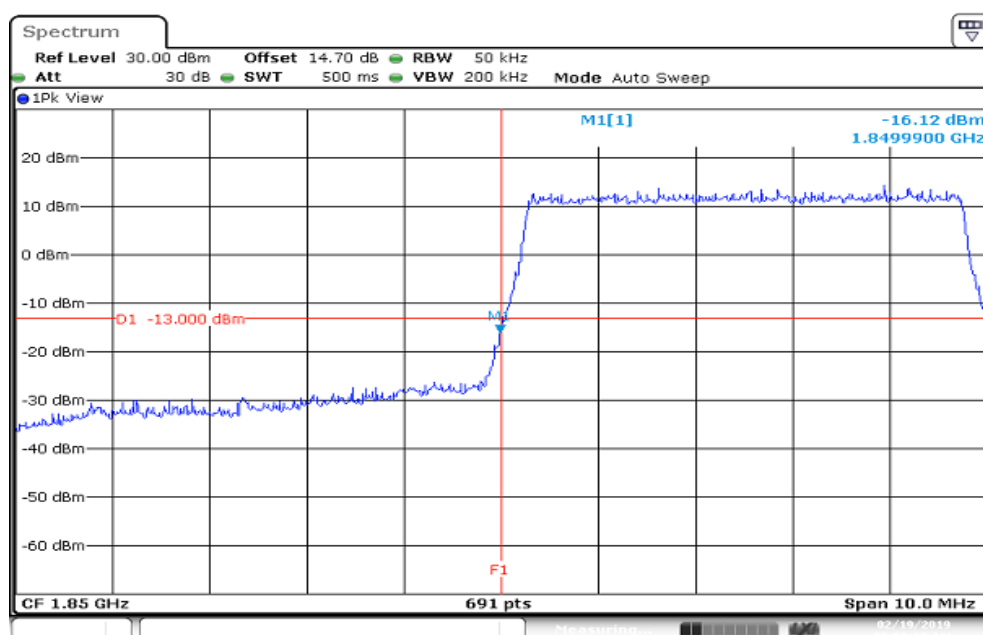
CHANNEL BANDWIDTH: 3MHz / 16QAM / 100% RB ALLOCATED LOWER BAND EDGE



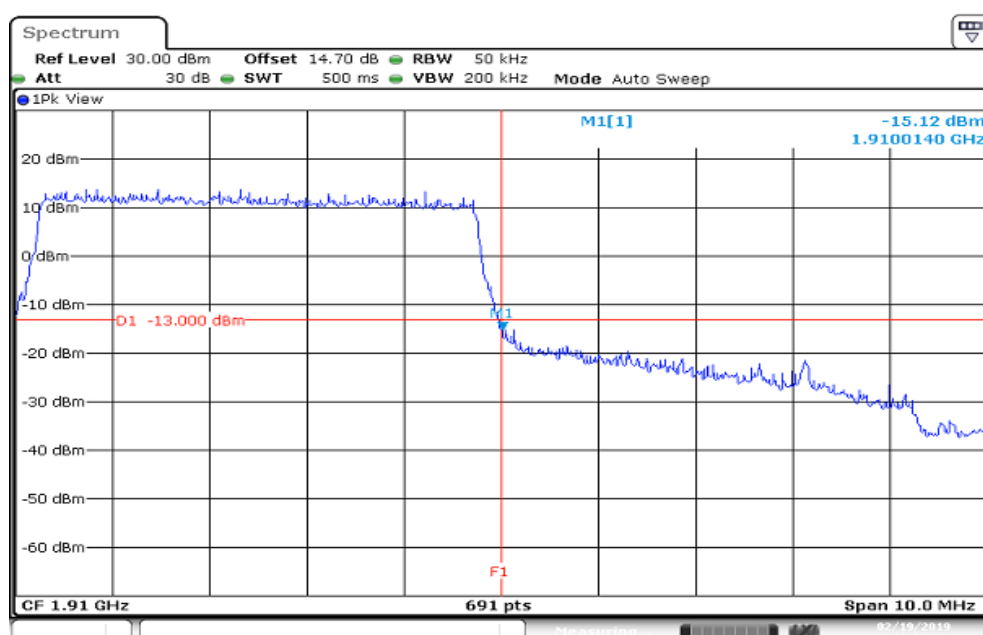
HIGHER BAND EDGE



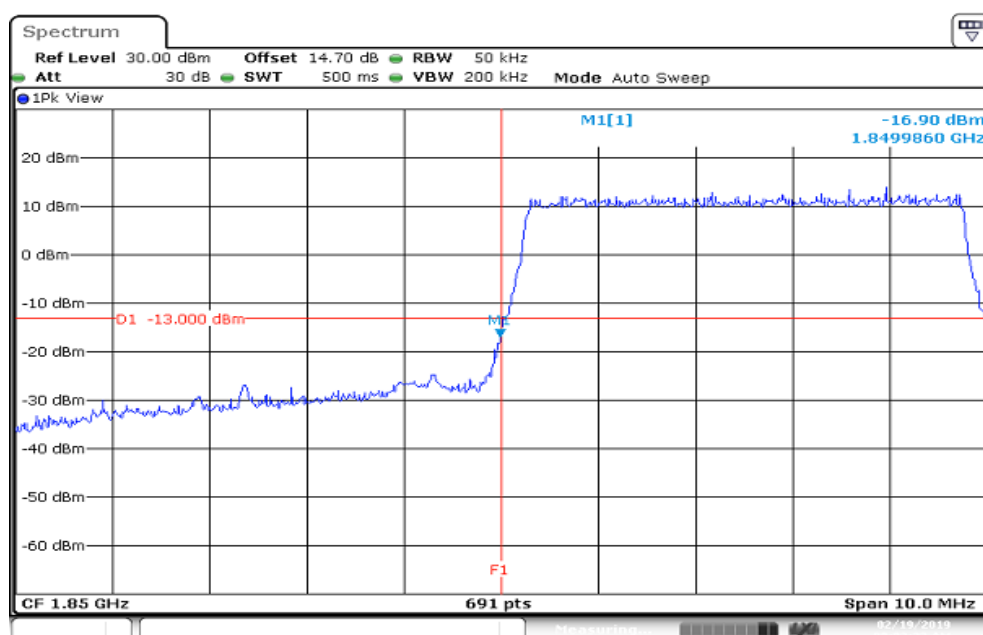
CHANNEL BANDWIDTH: 5MHz / QPSK / 100% RB ALLOCATED LOWER BAND EDGE



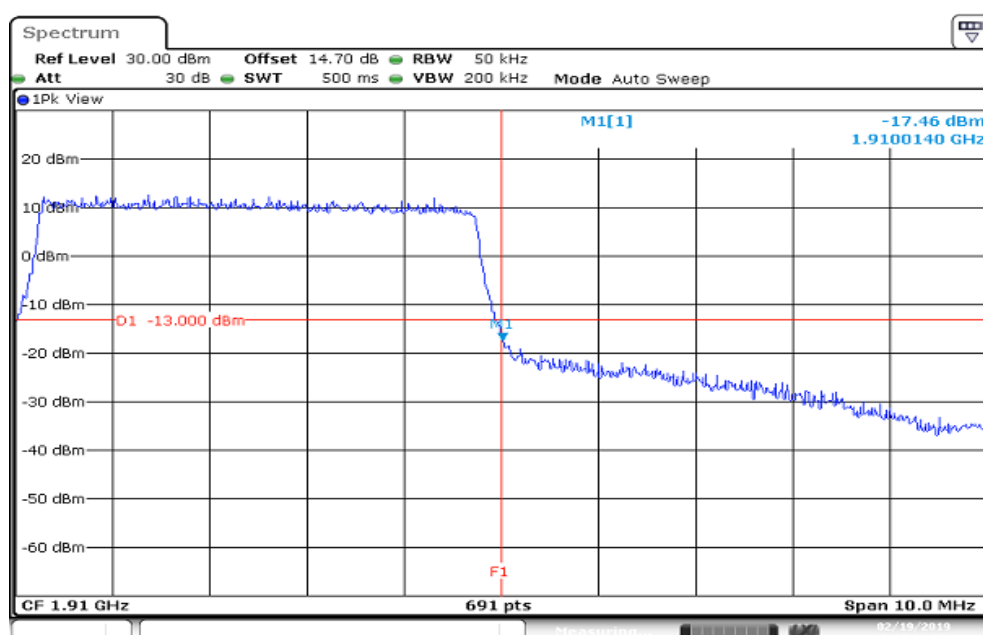
HIGHER BAND EDGE



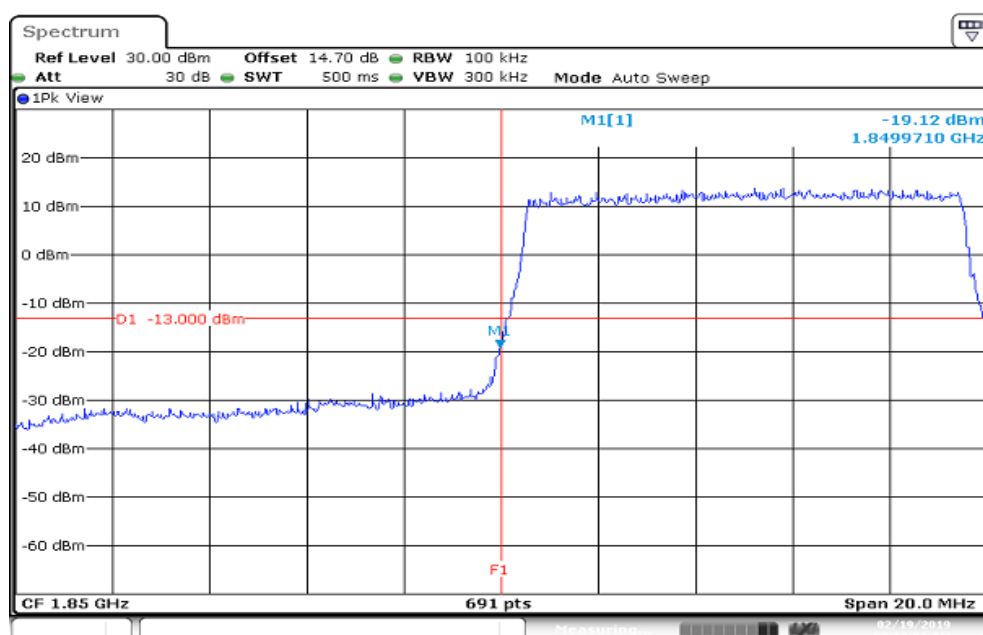
CHANNEL BANDWIDTH: 5MHz / 16QAM / 100% RB ALLOCATED LOWER BAND EDGE



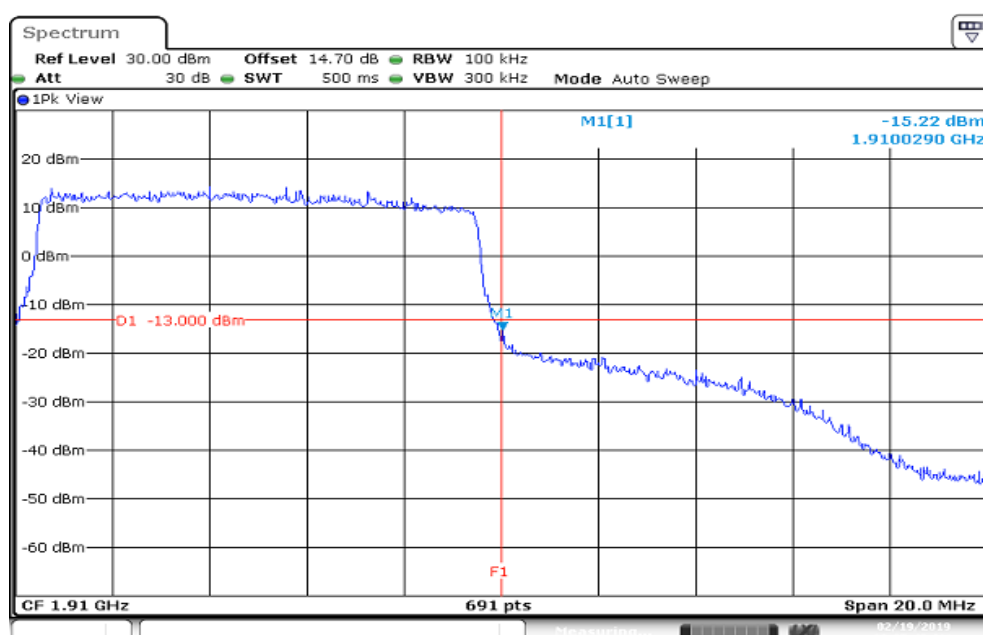
HIGHER BAND EDGE



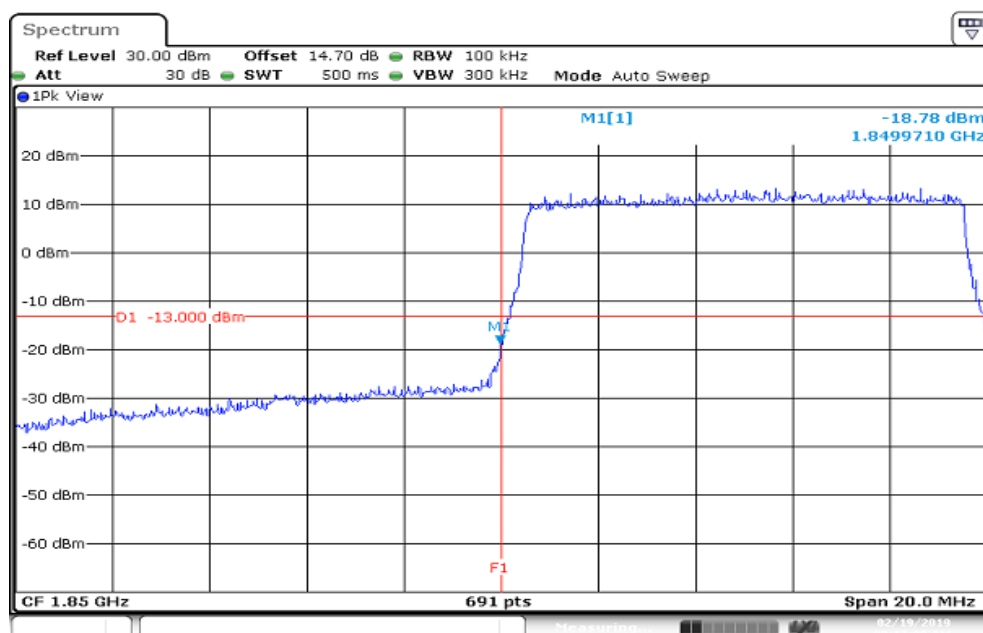
CHANNEL BANDWIDTH: 10MHz / QPSK / 100% RB ALLOCATED LOWER BAND EDGE



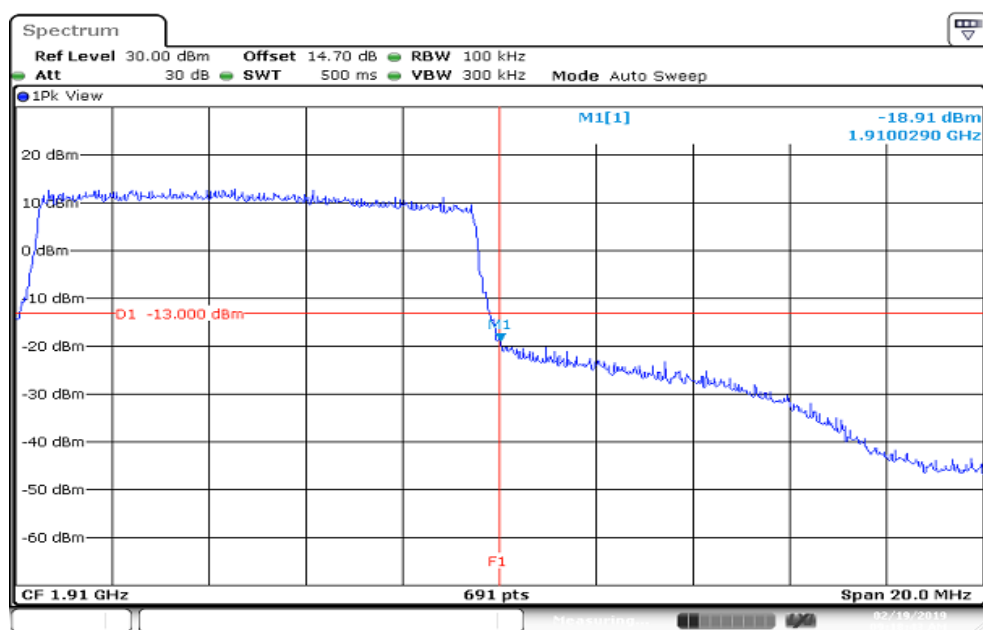
HIGHER BAND EDGE



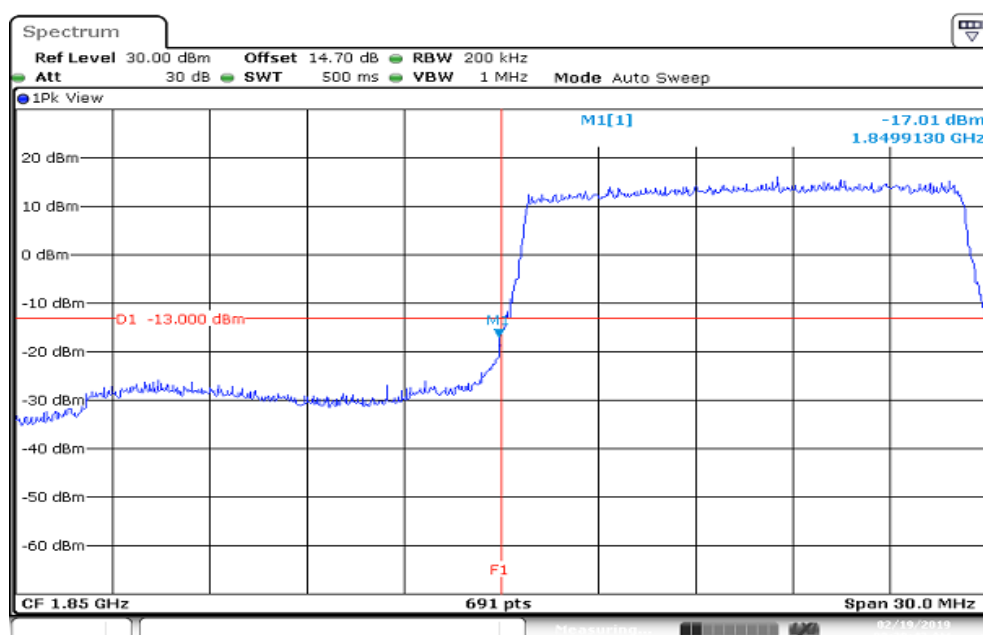
CHANNEL BANDWIDTH: 10MHz / 16QAM / 100% RB ALLOCATED LOWER BAND EDGE



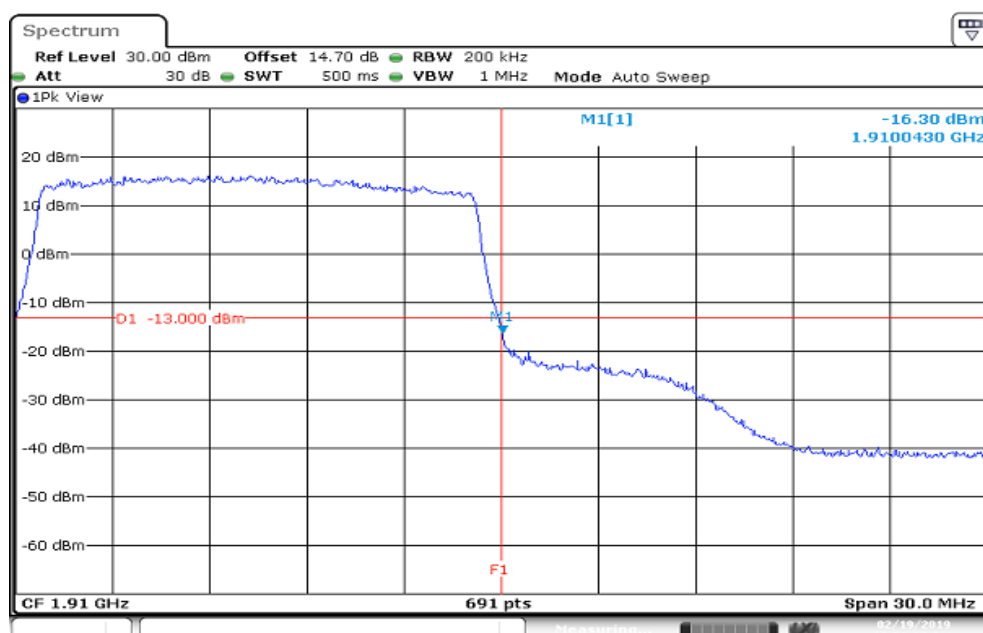
HIGHER BAND EDGE



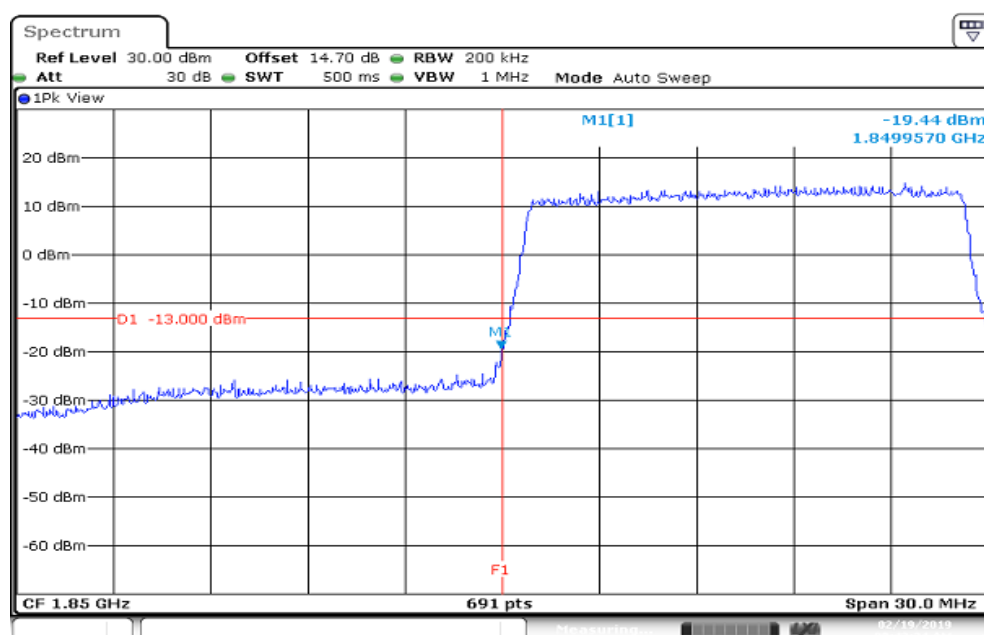
CHANNEL BANDWIDTH: 15MHz / QPSK / 100% RB ALLOCATED LOWER BAND EDGE



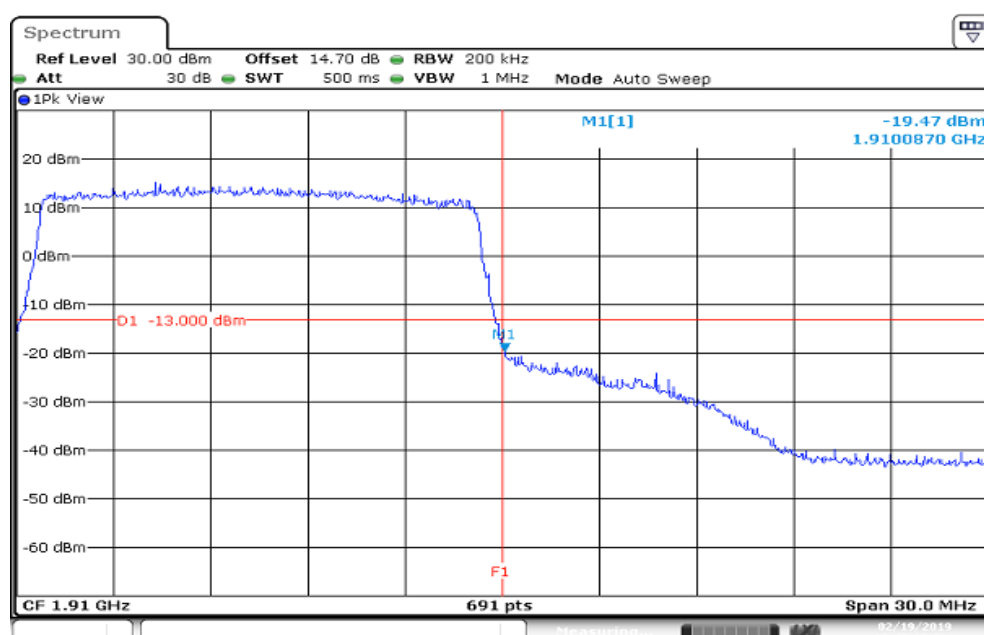
HIGHER BAND EDGE



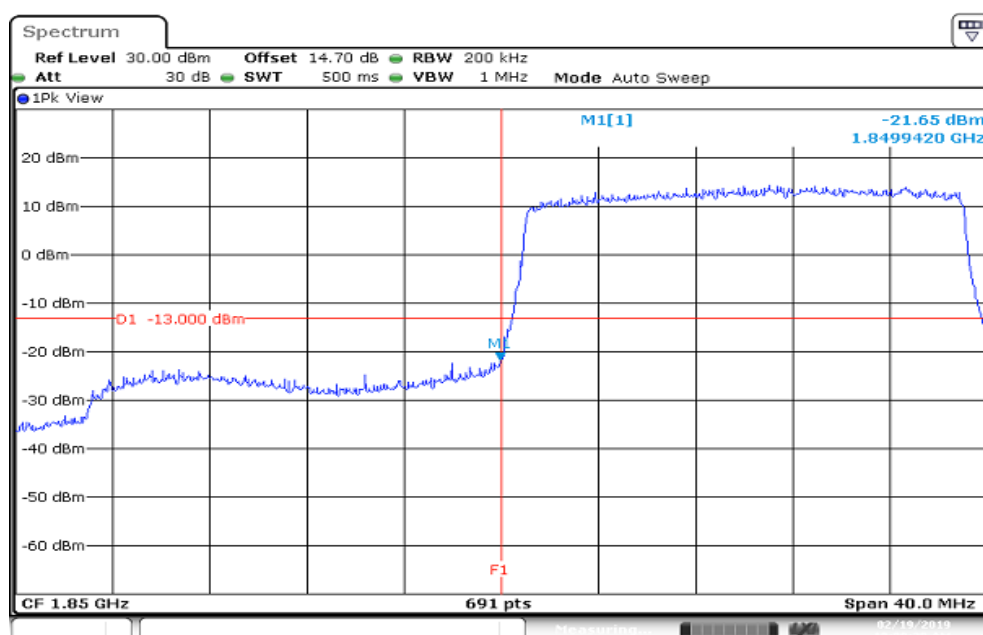
CHANNEL BANDWIDTH: 15MHz / 16QAM / 100% RB ALLOCATED LOWER BAND EDGE



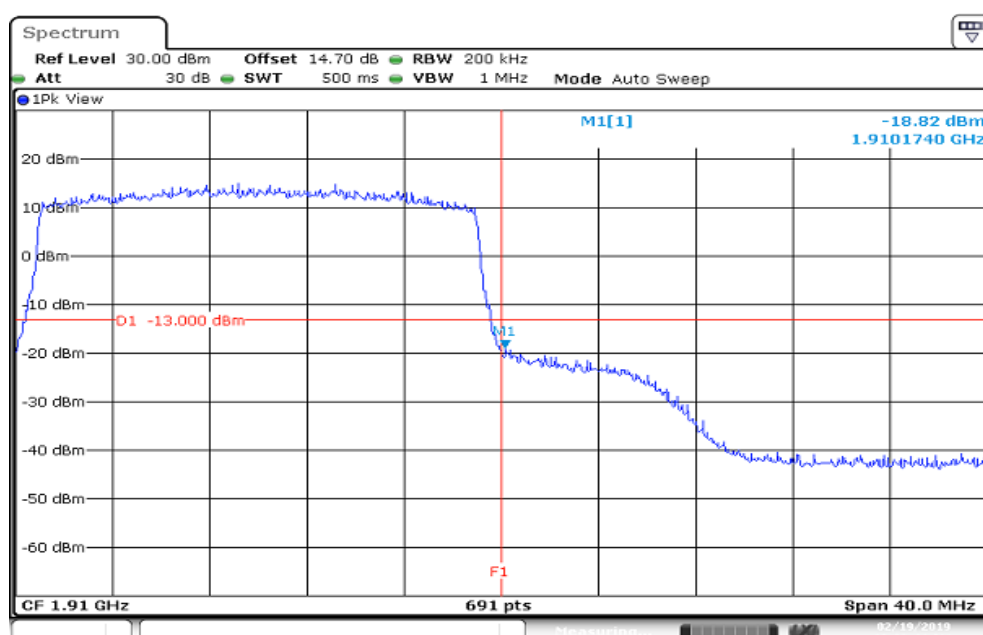
HIGHER BAND EDGE



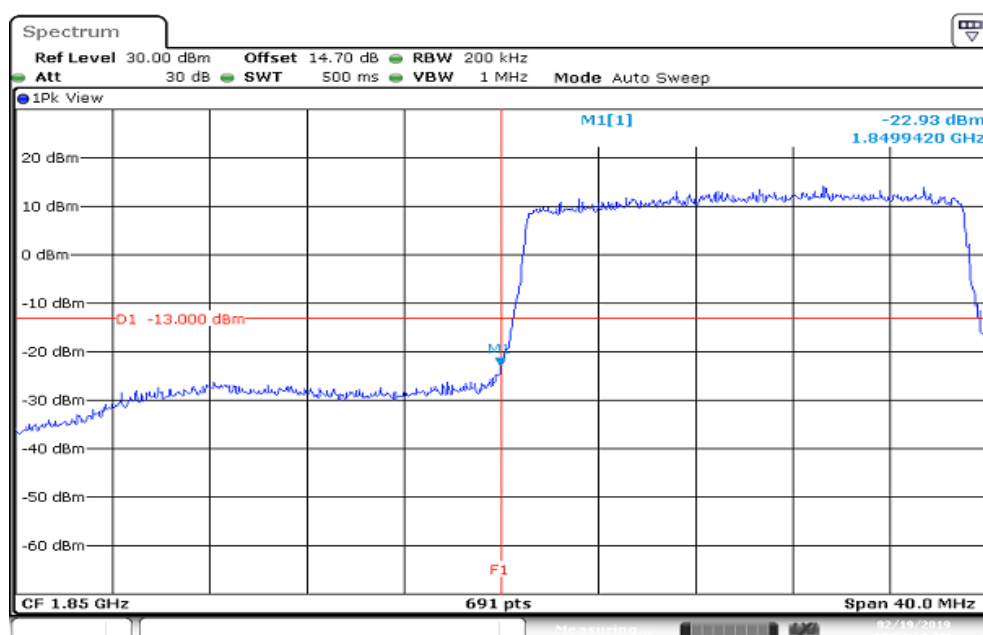
CHANNEL BANDWIDTH: 20MHz / QPSK / 100% RB ALLOCATED LOWER BAND EDGE



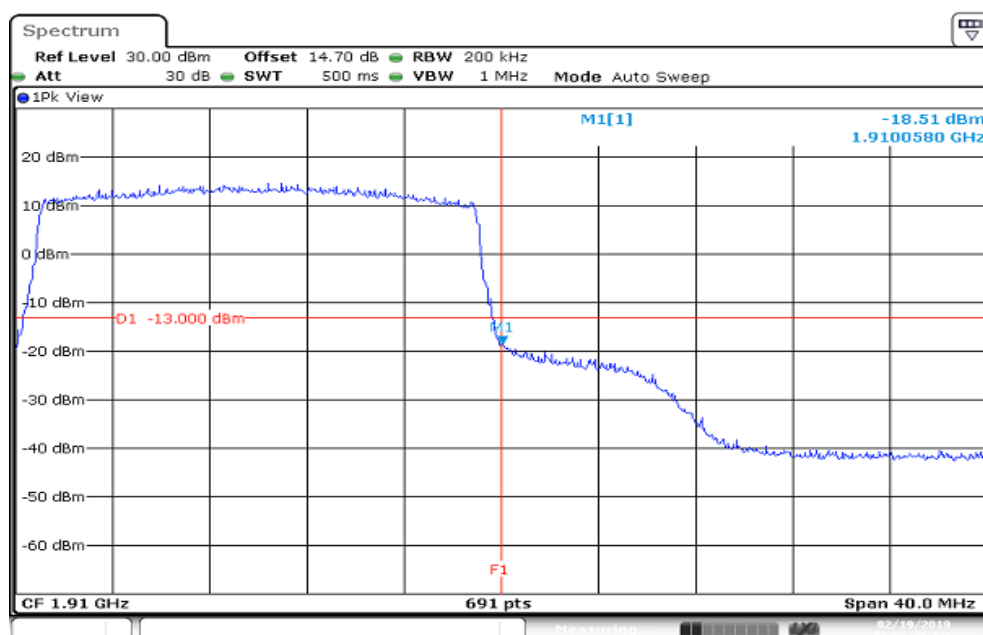
HIGHER BAND EDGE



CHANNEL BANDWIDTH: 20MHz / 16QAM / 100% RB ALLOCATED LOWER BAND EDGE



HIGHER BAND EDGE



8.7 CONDUCTED SPURIOUS EMISSIONS

Limits

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13dBm

Test Procedures

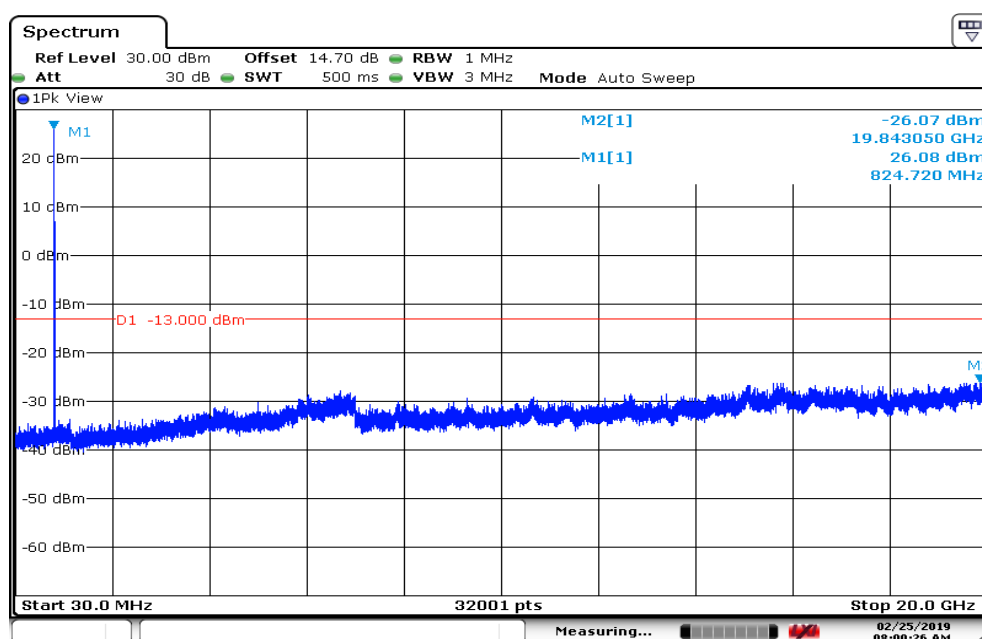
1. The EUT was connect to spectrum analyzer and call box.
2. The RF output of EUT was connected to the spectrum analyzer.
3. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
4. Record the maximum spurious emission.
5. The fundamental frequency should be excluded against the limit in operating band.

Test Results

LTE Band 5

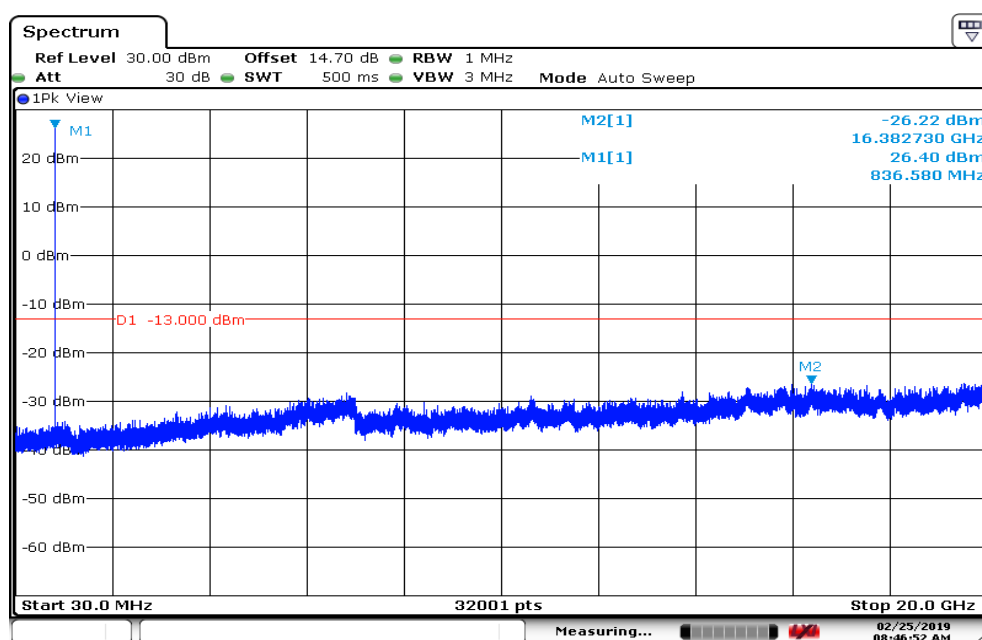
CHANNEL BANDWIDTH: 1.4MHz / QPSK

CH Low



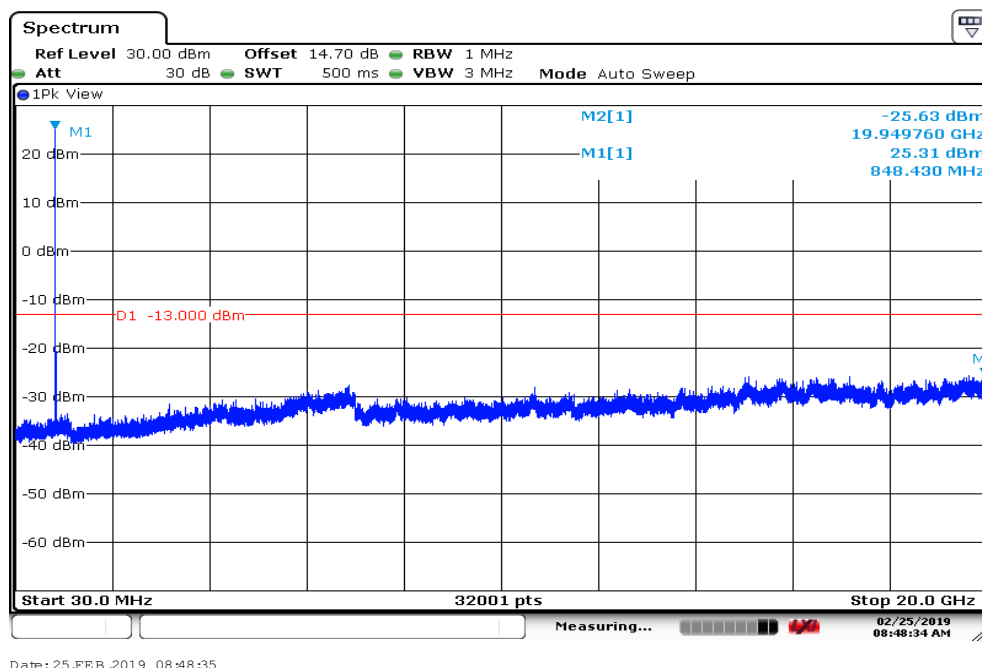
Date: 25.FEB.2019 08:00:27

CH Mid



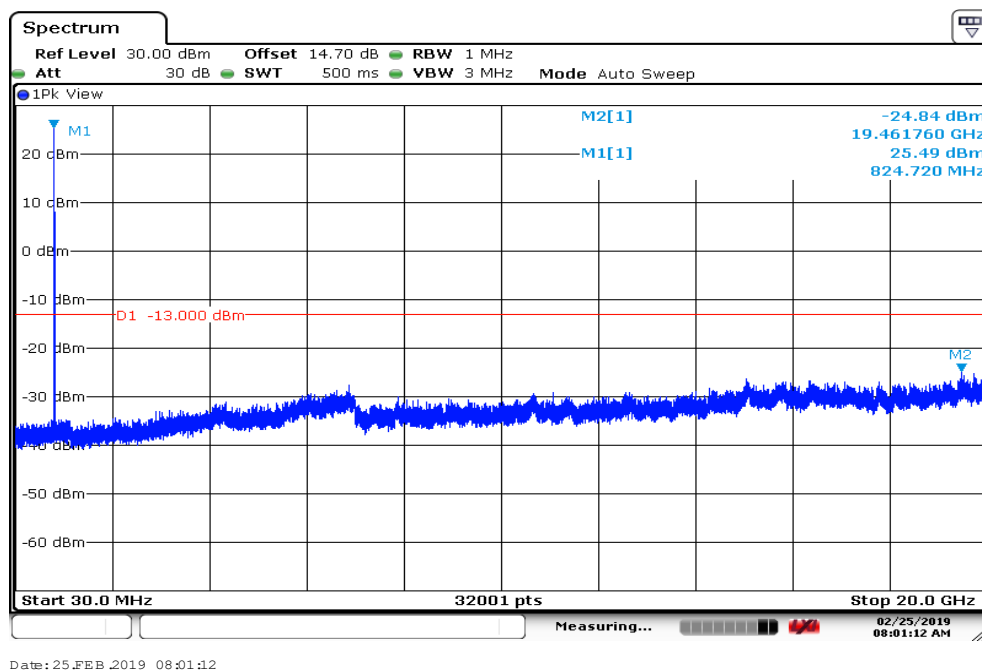
Date: 25.FEB.2019 08:46:52

CH High

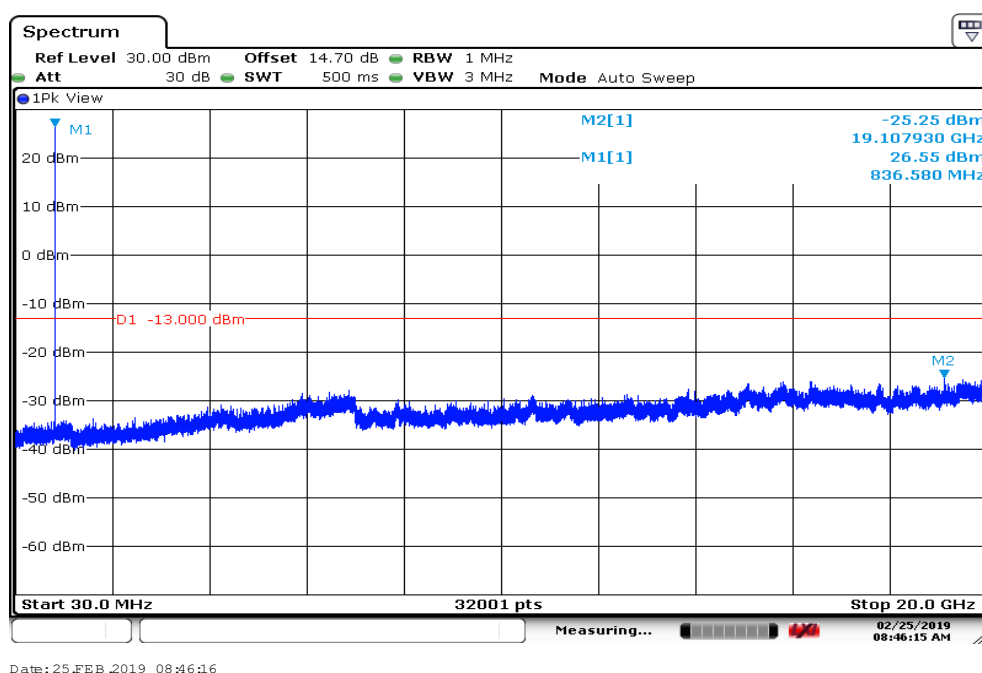


CHANNEL BANDWIDTH: 1.4MHz / 16QAM

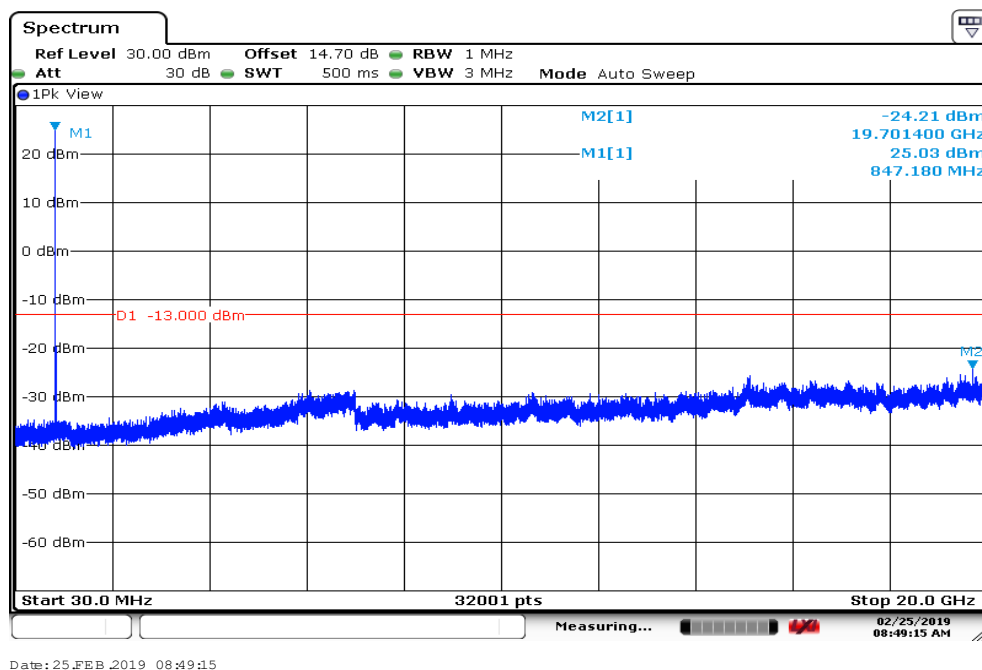
CH Low



CH Mid

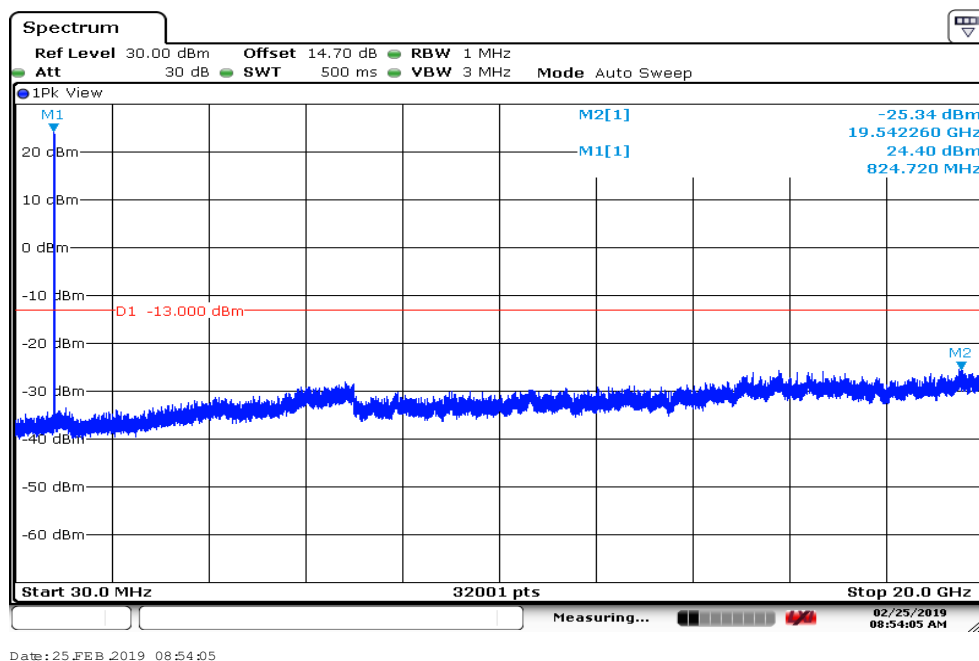


CH High

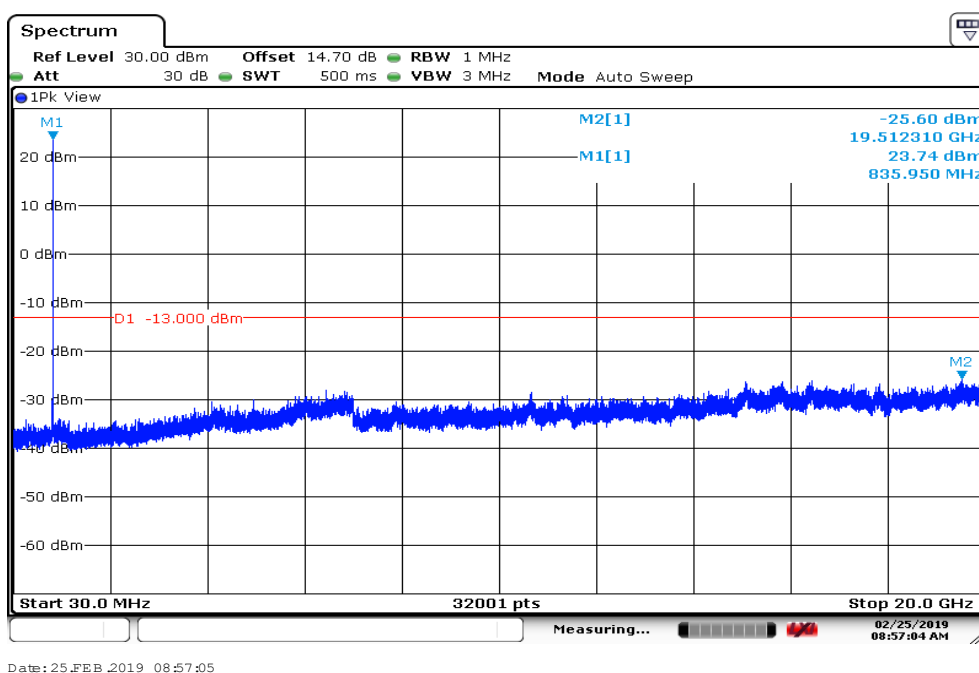


CHANNEL BANDWIDTH: 3MHz / QPSK

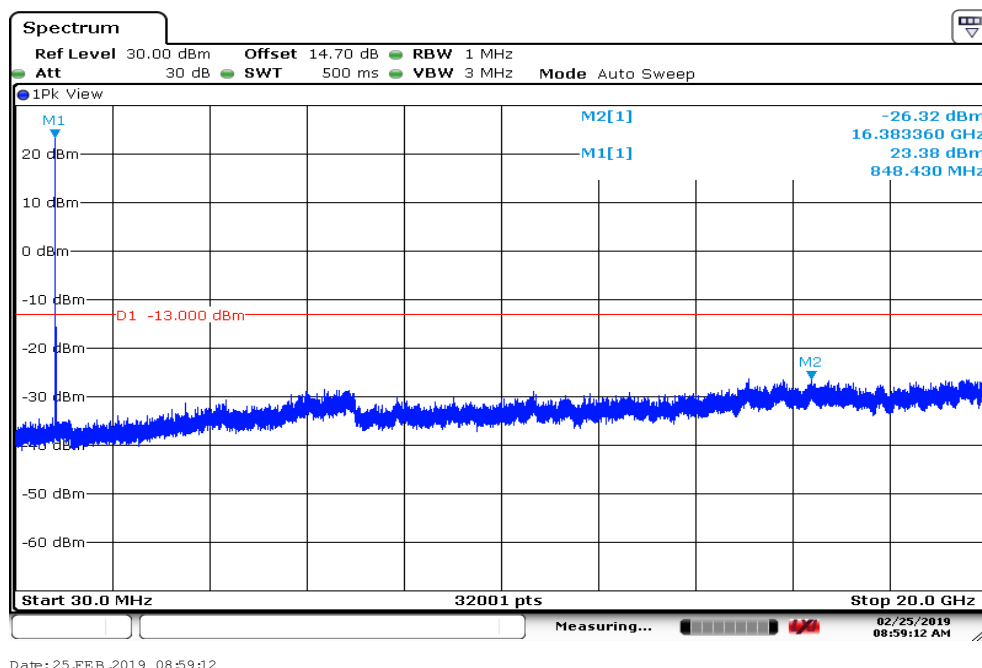
CH Low



CH Mid

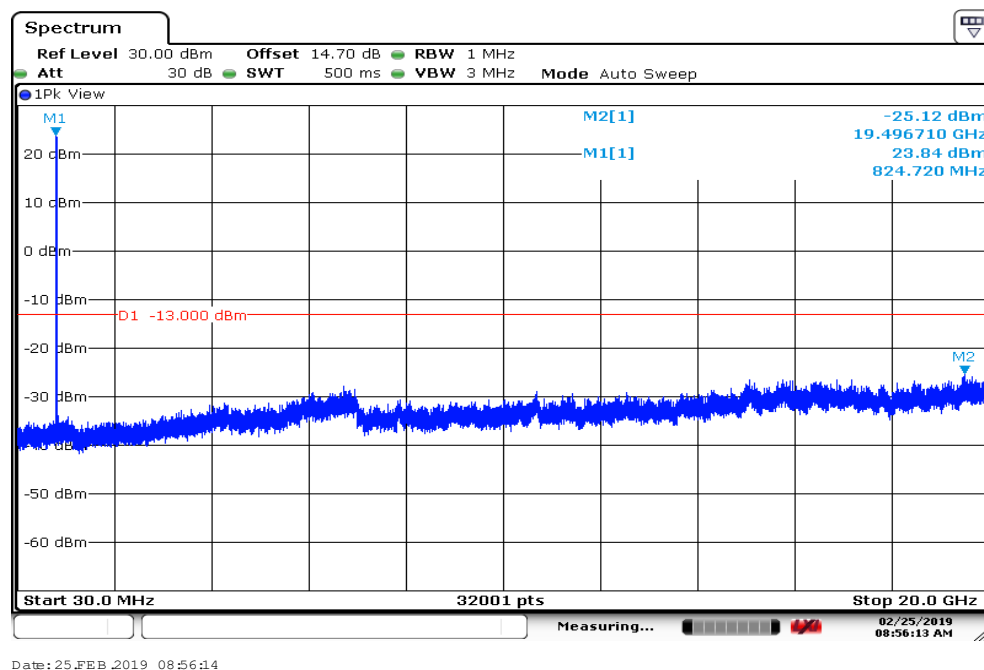


CH High

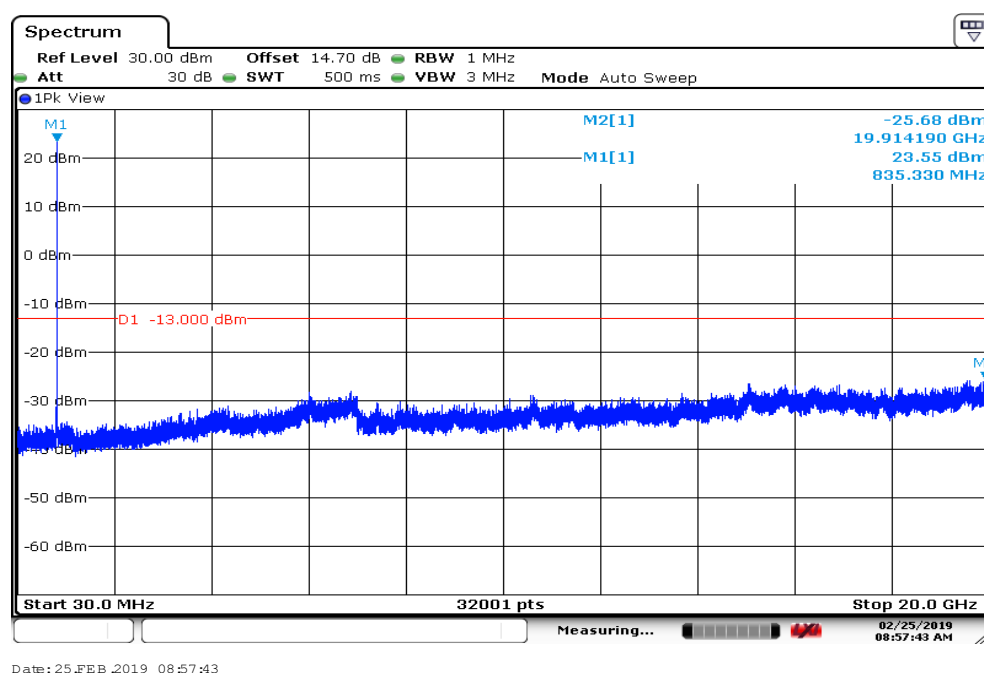


CHANNEL BANDWIDTH: 3MHz / 16QAM

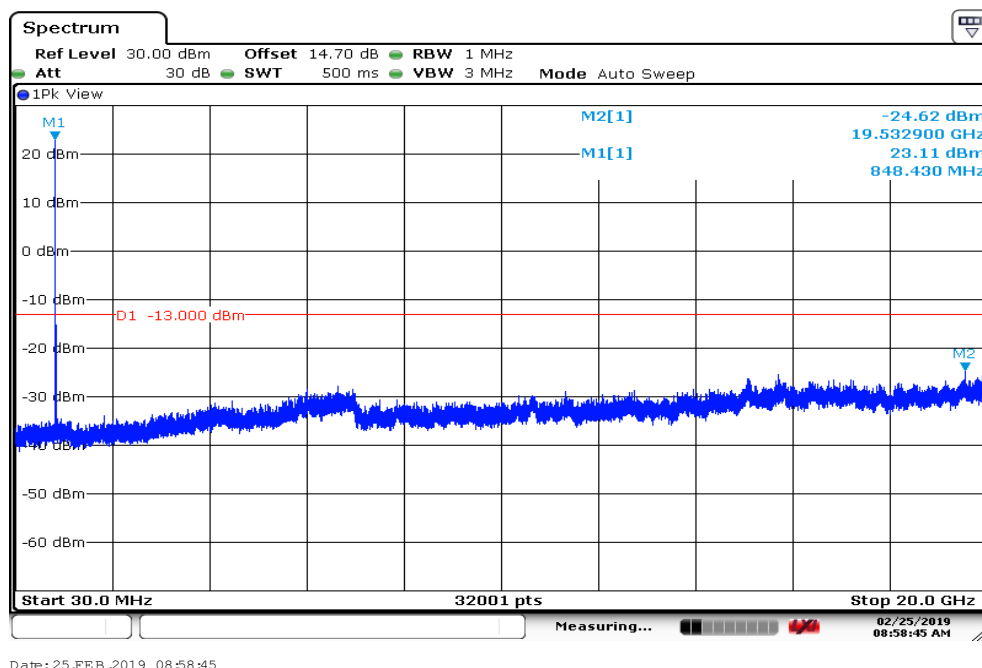
CH Low



CH Mid

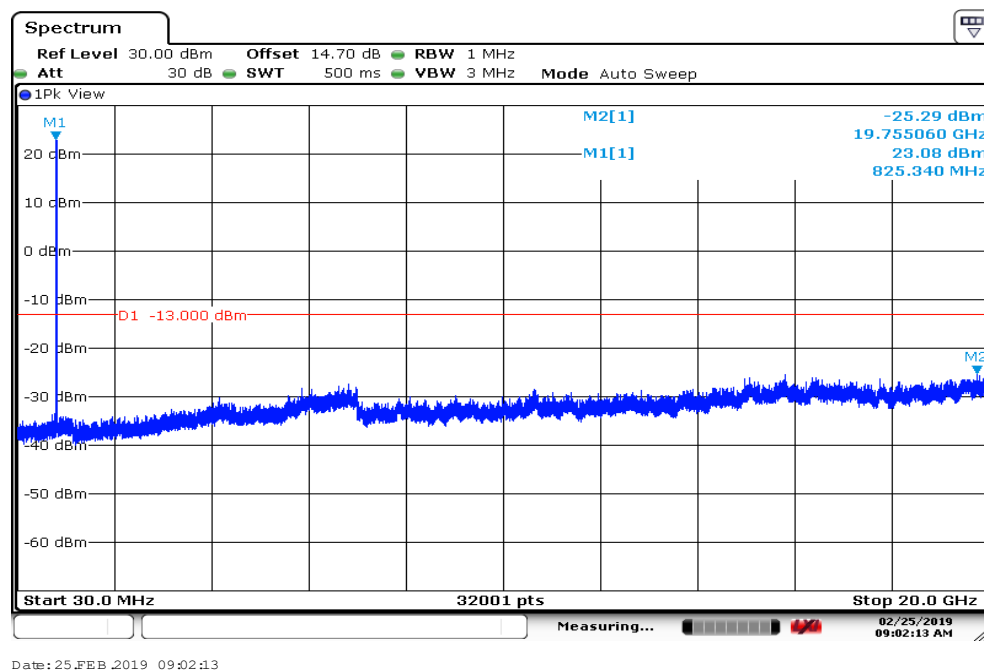


CH High

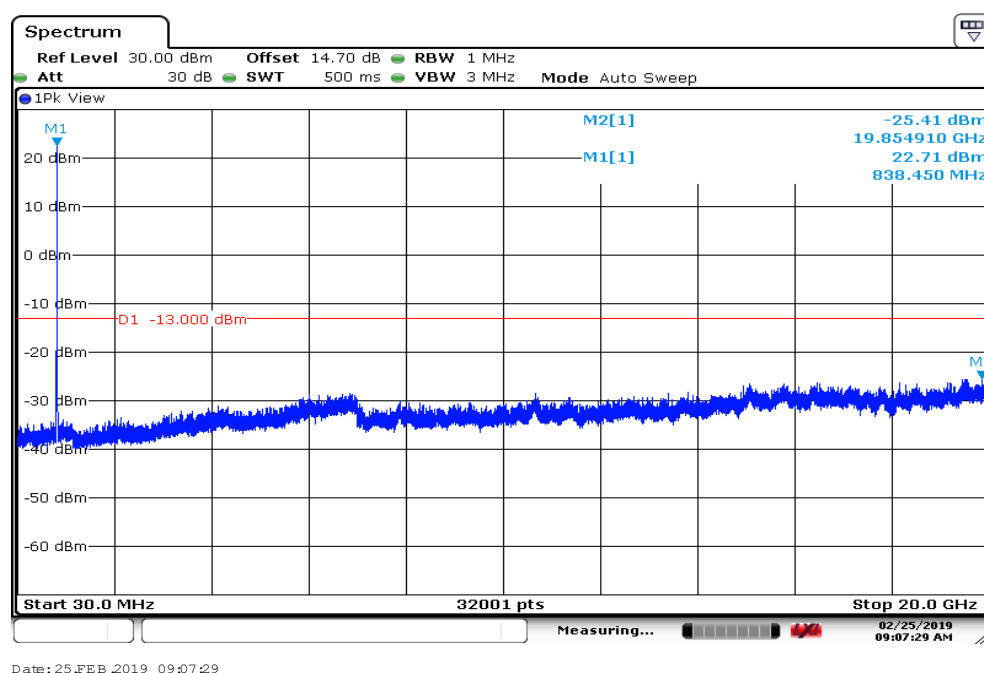


CHANNEL BANDWIDTH: 5MHz / QPSK

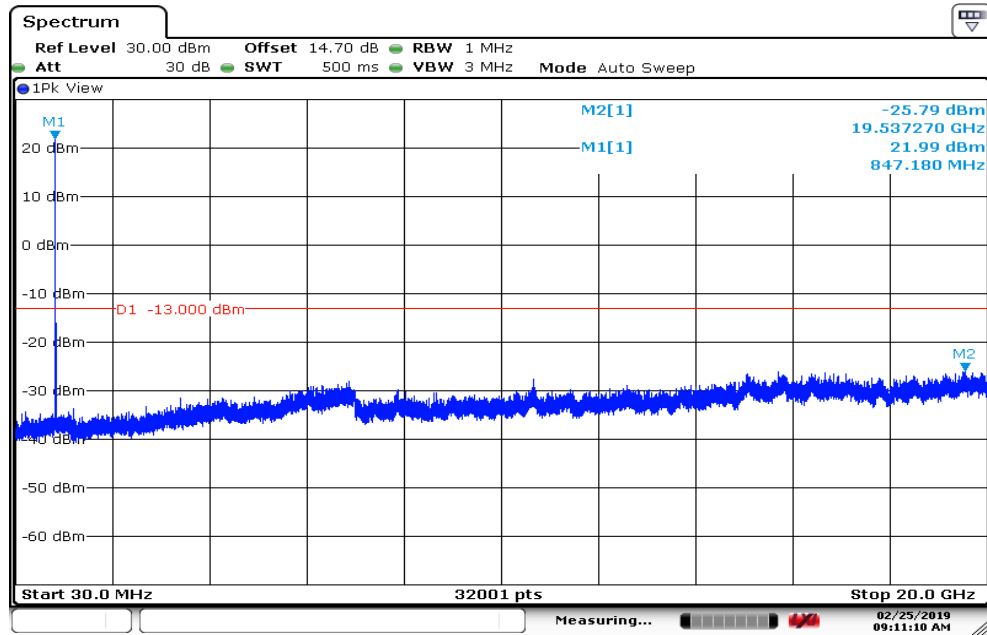
CH Low



CH Mid



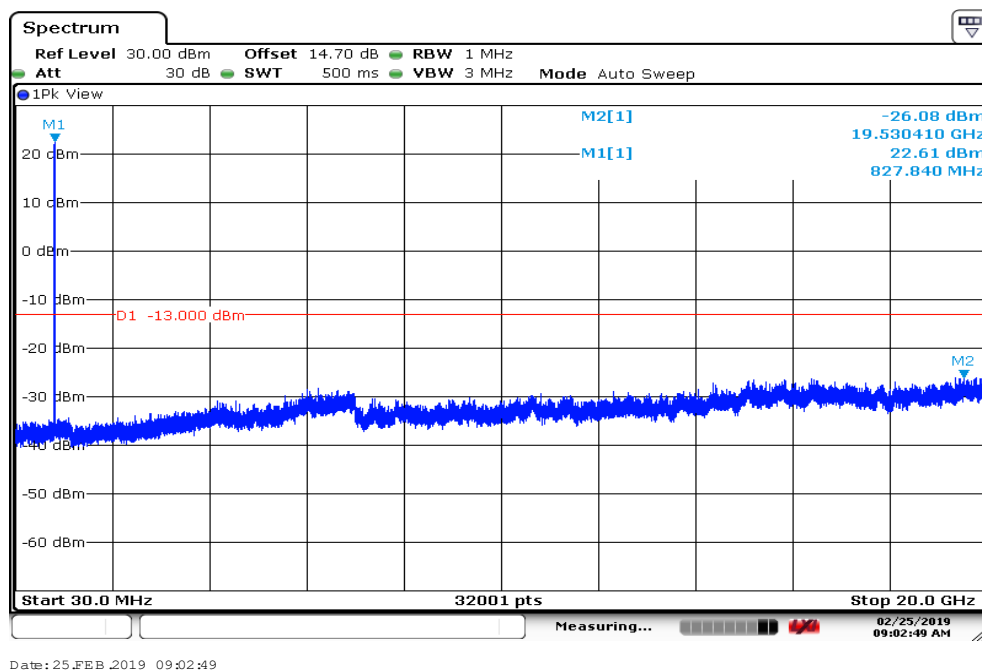
CH High



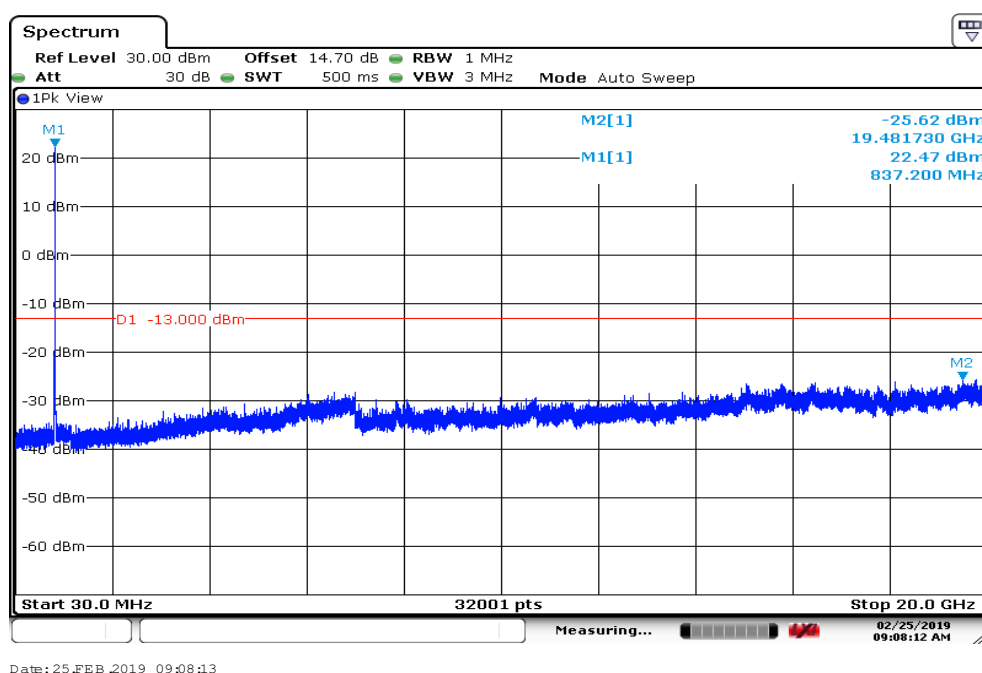
Date: 25.FEB.2019 09:11:10

CHANNEL BANDWIDTH: 5MHz / 16QAM

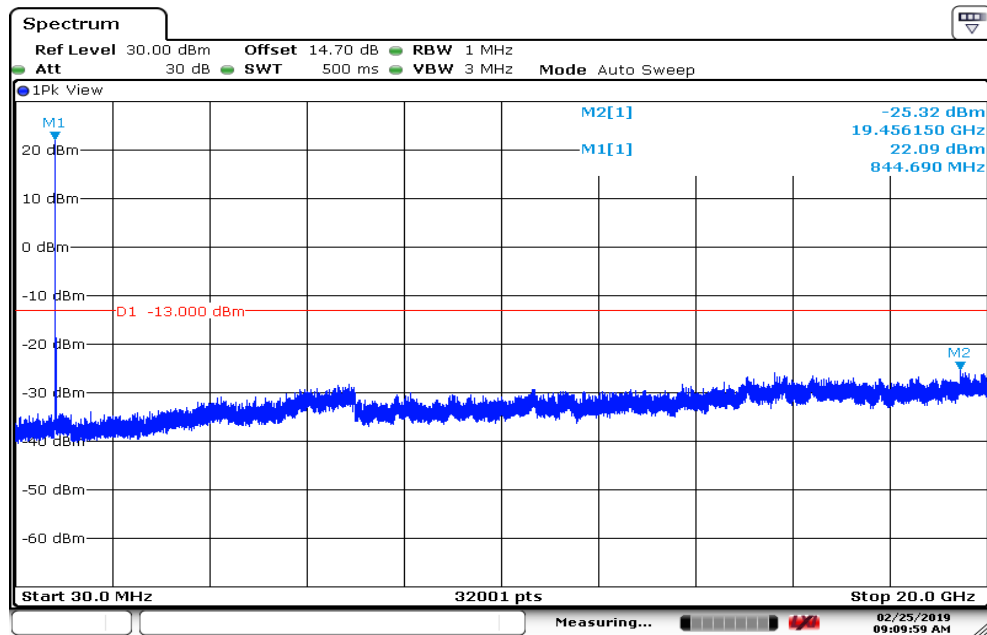
CH Low



CH Mid



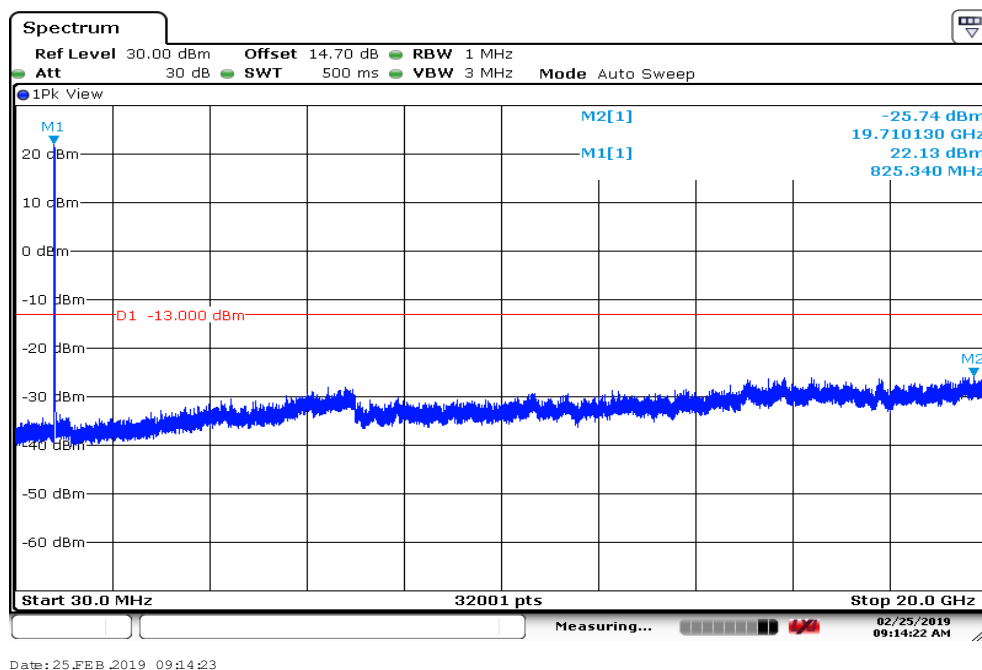
CH High



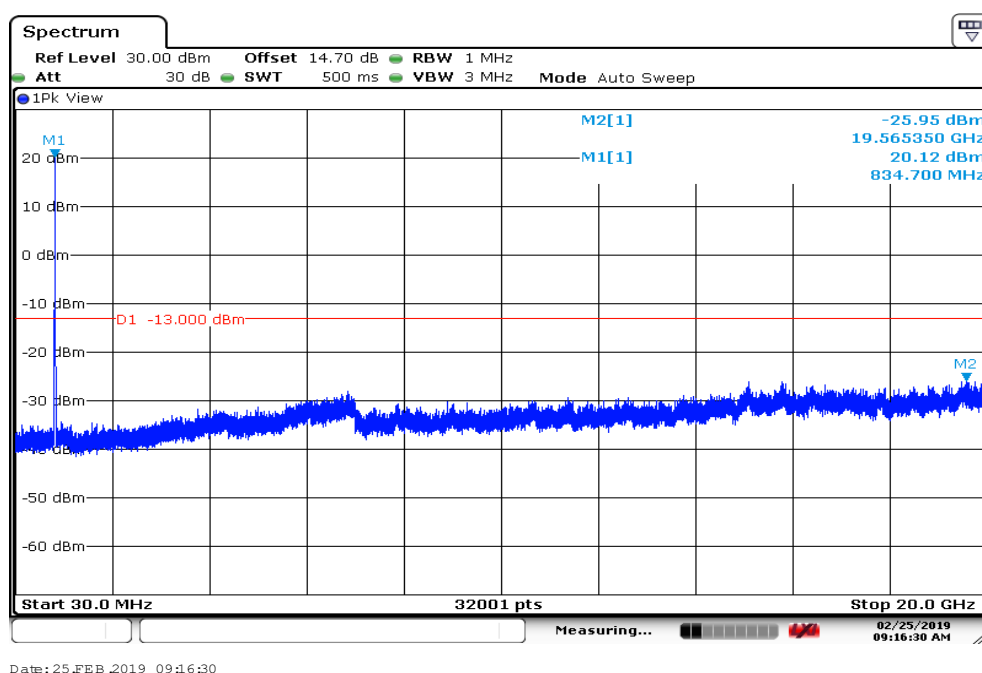
Date: 25.FEB.2019 09:10:00

CHANNEL BANDWIDTH: 10MHz / QPSK

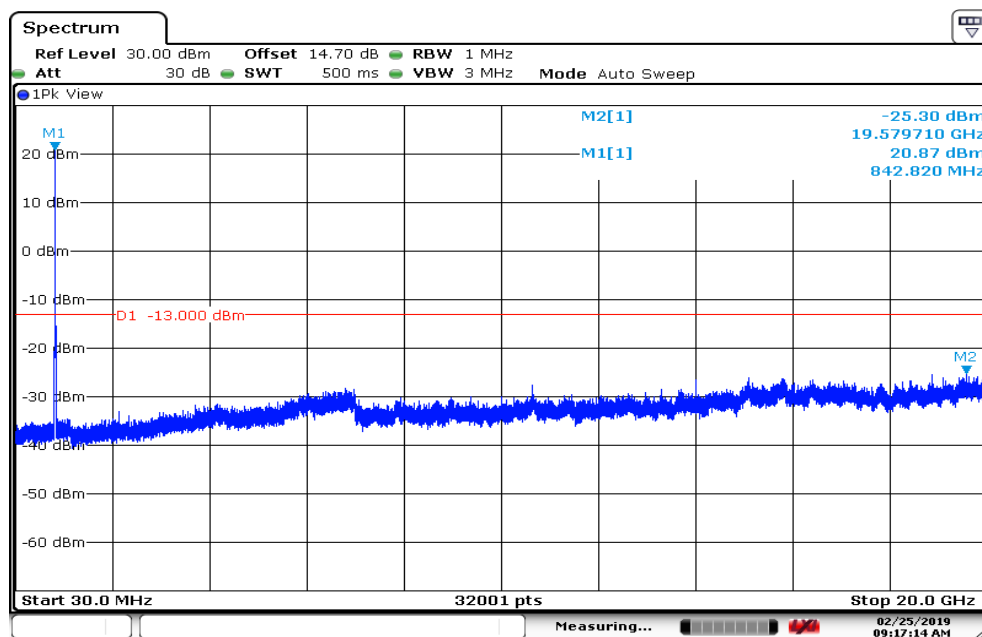
CH Low



CH Mid



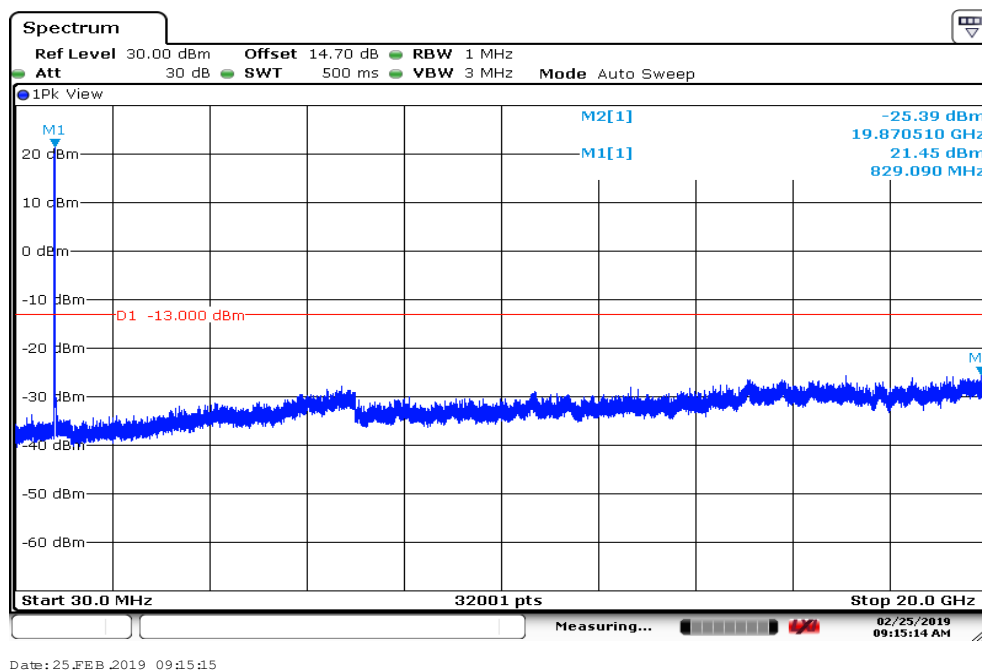
CH High



Date: 25.FEB.2019 09:17:14

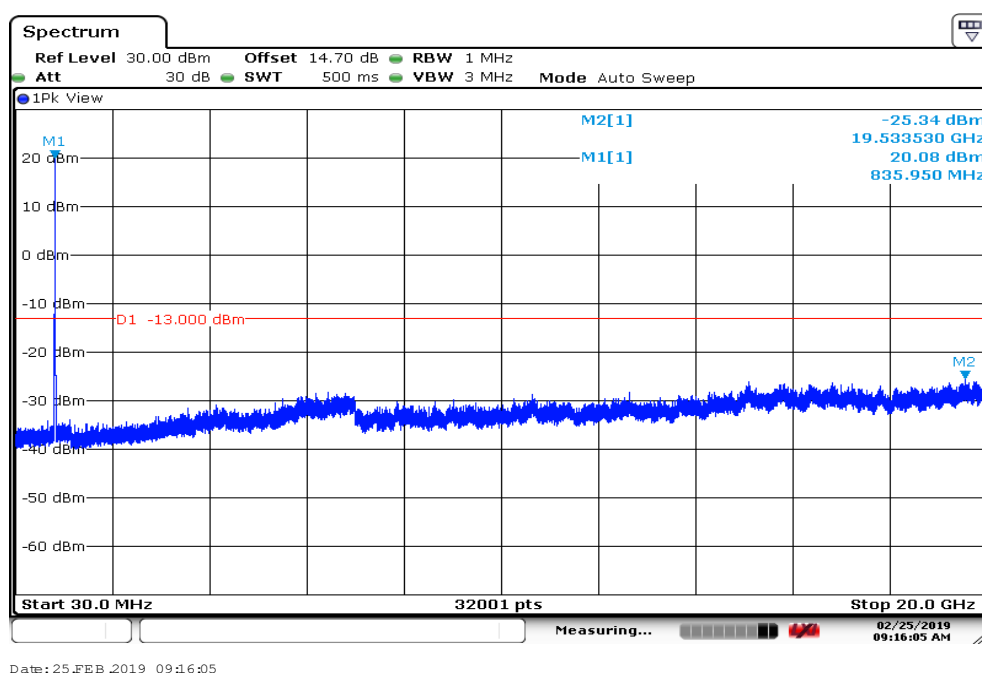
CHANNEL BANDWIDTH: 10MHz / 16QAM

CH Low



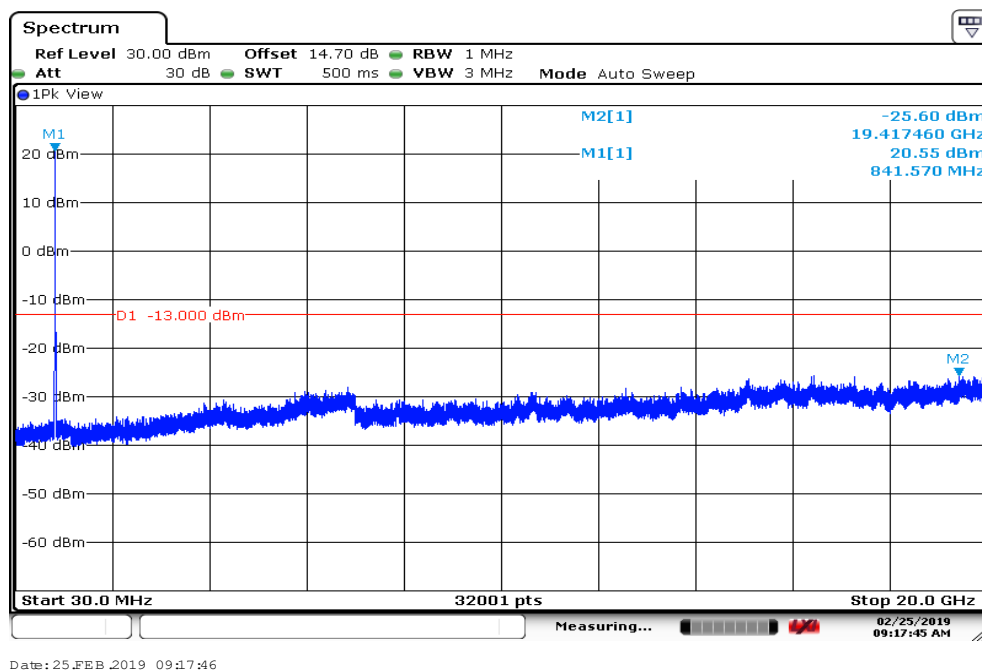
Date: 25.FEB.2019 09:15:15

CH Mid



Date: 25.FEB.2019 09:16:05

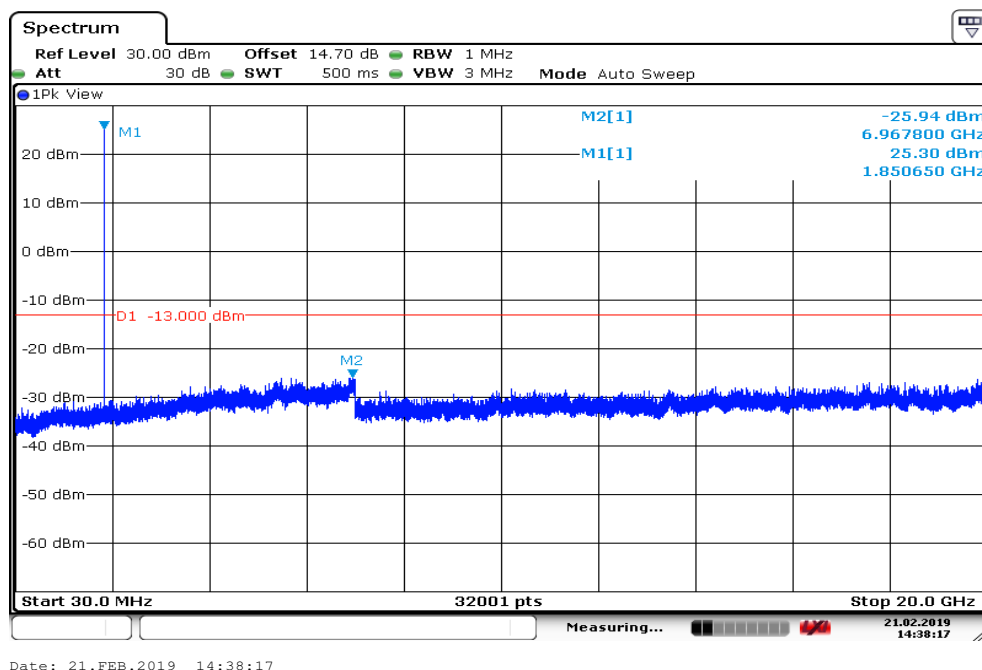
CH High



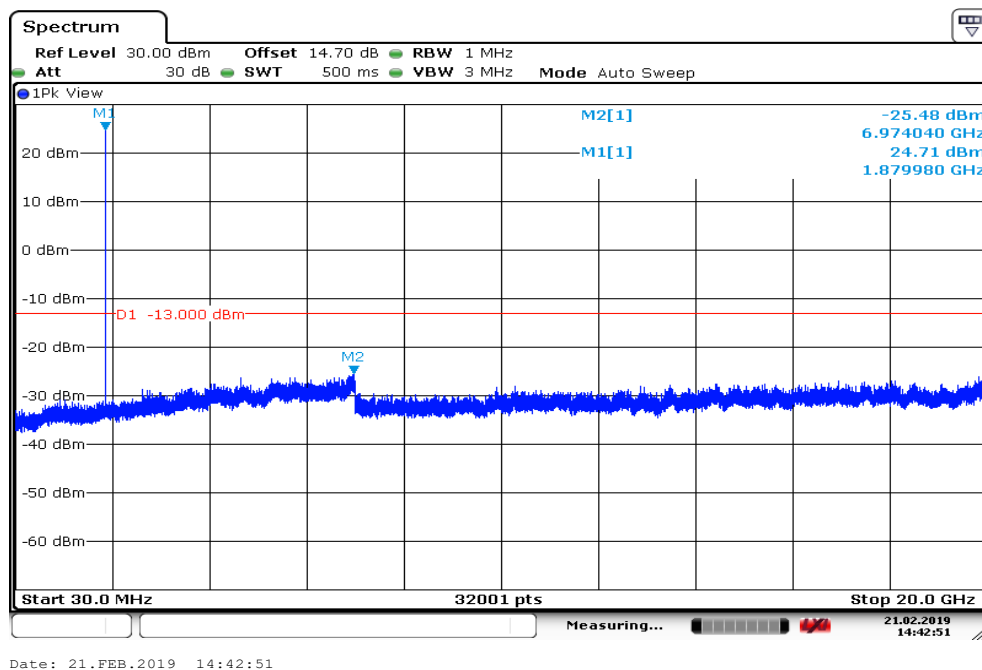
LTE Band 2

CHANNEL BANDWIDTH: 1.4MHz / QPSK

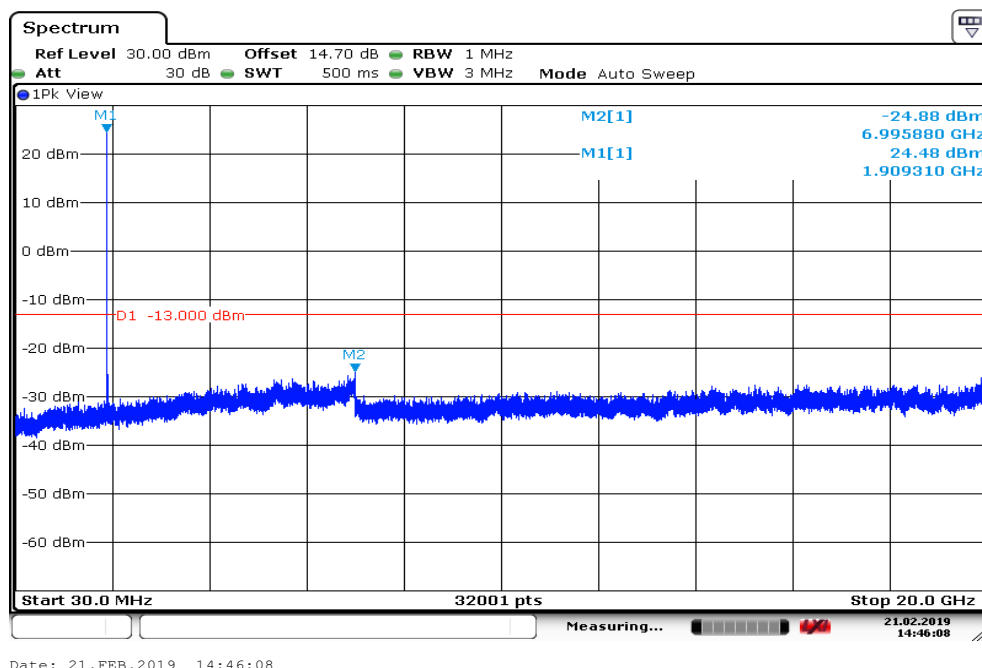
CH Low



CH Mid

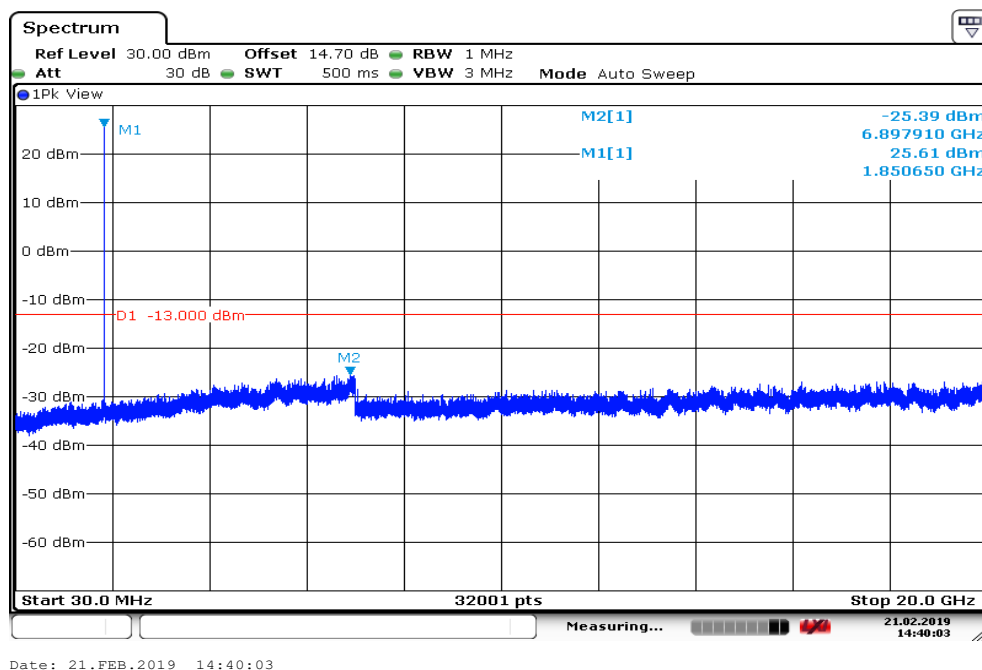


CH High

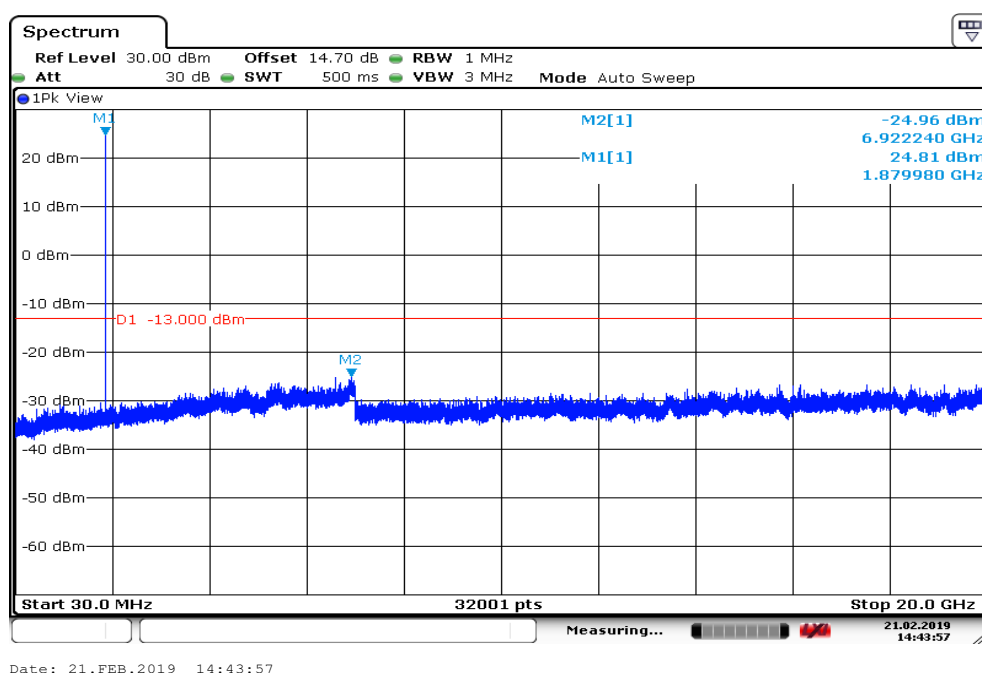


CHANNEL BANDWIDTH: 1.4MHz / 16QAM

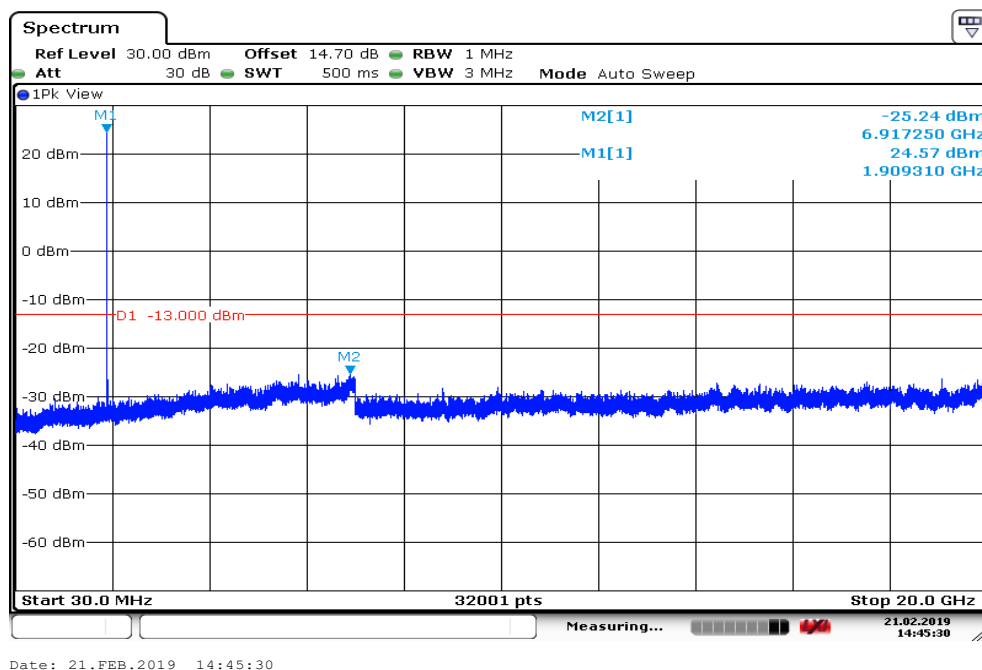
CH Low



CH Mid

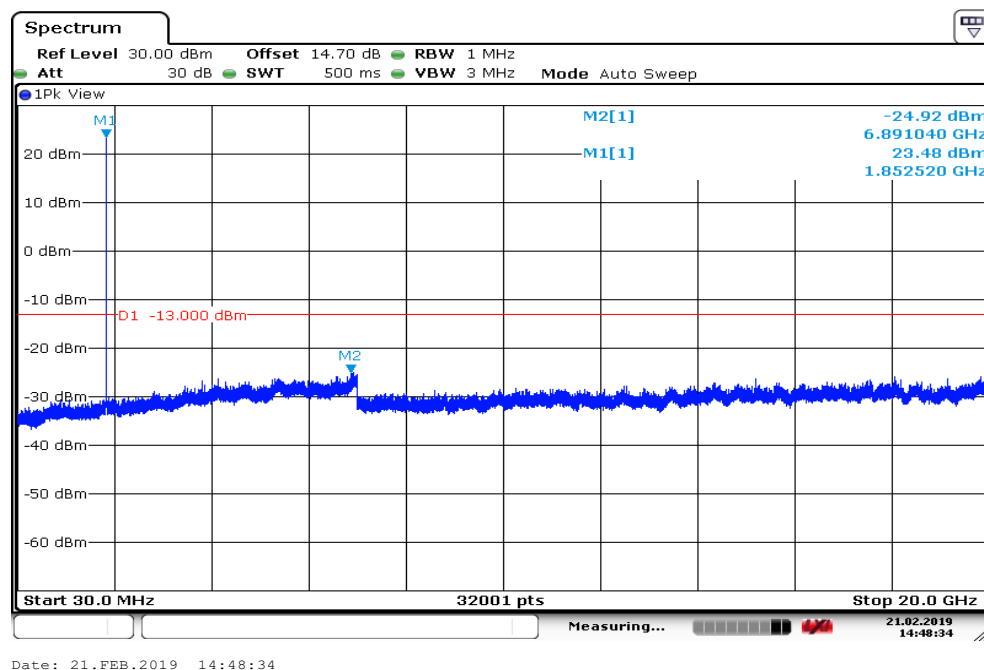


CH High

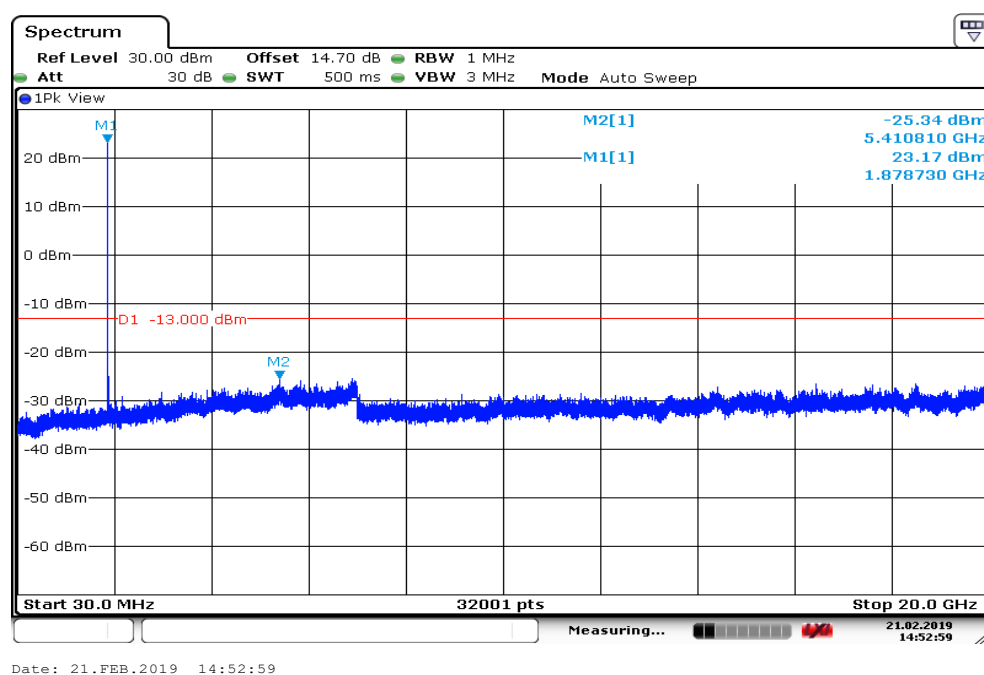


CHANNEL BANDWIDTH: 3MHz / QPSK

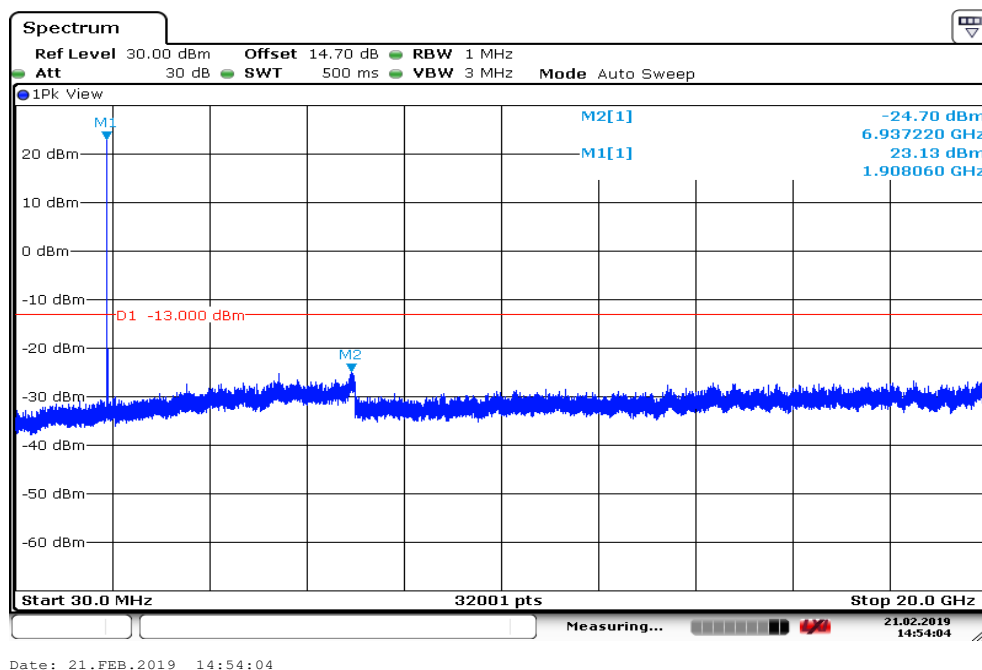
CH Low



CH Mid

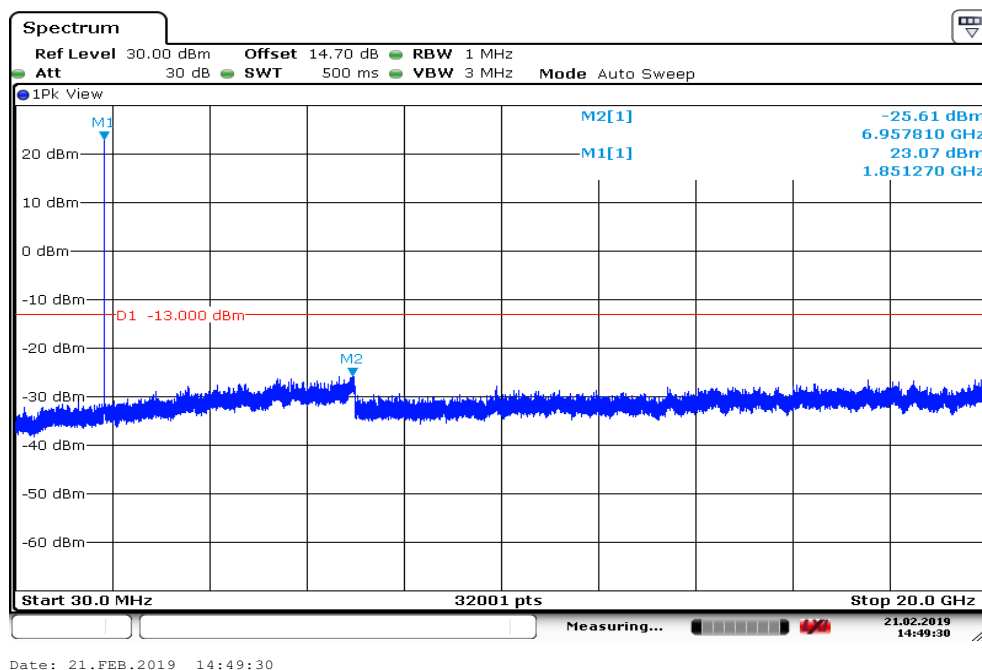


CH High

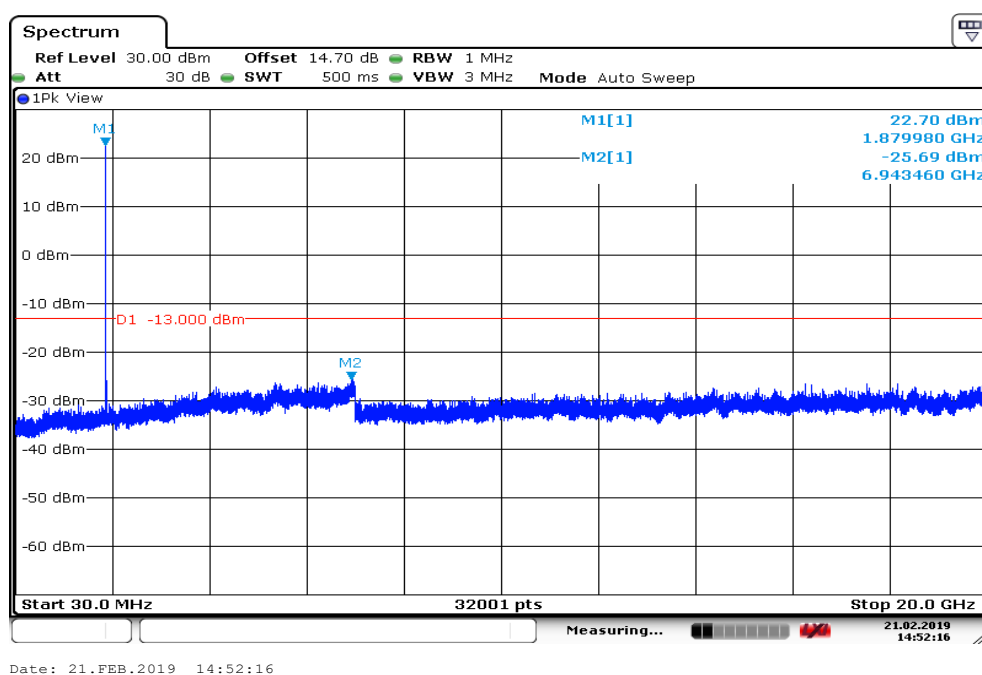


CHANNEL BANDWIDTH: 3MHz / 16QAM

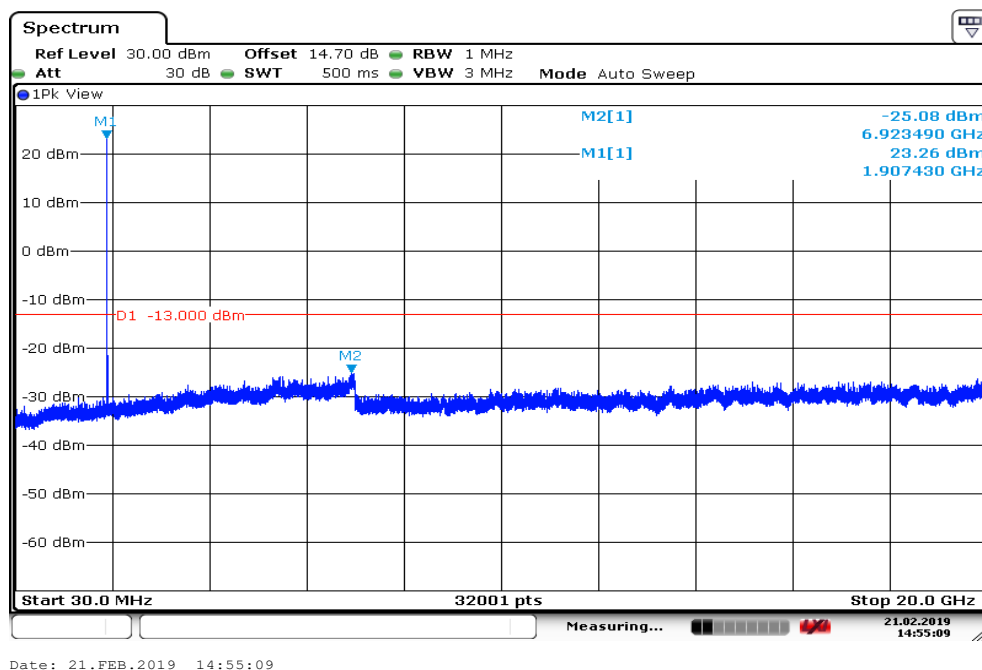
CH Low



CH Mid

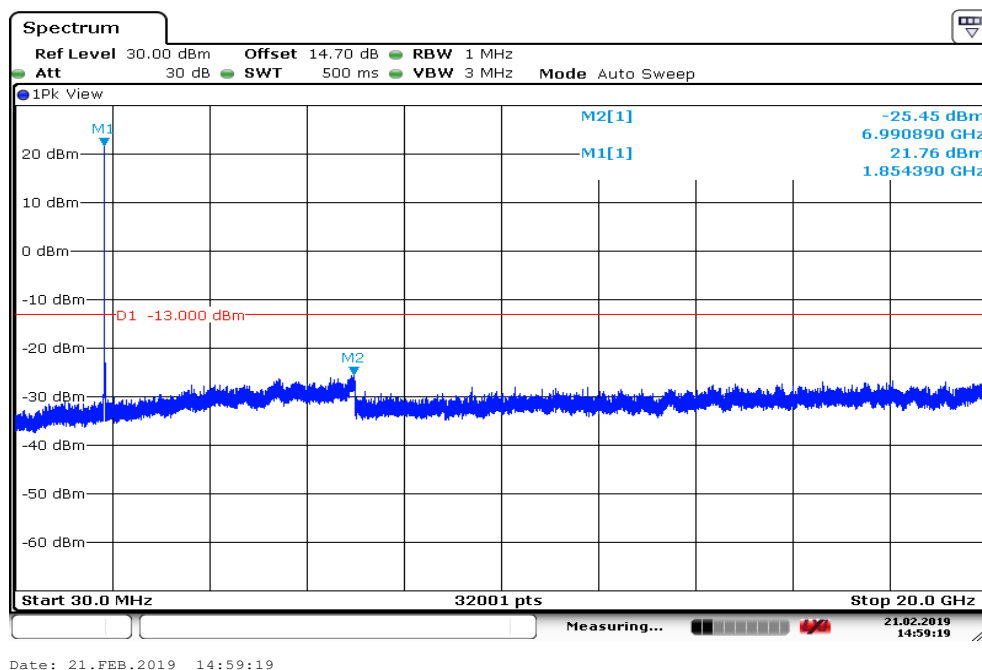


CH High

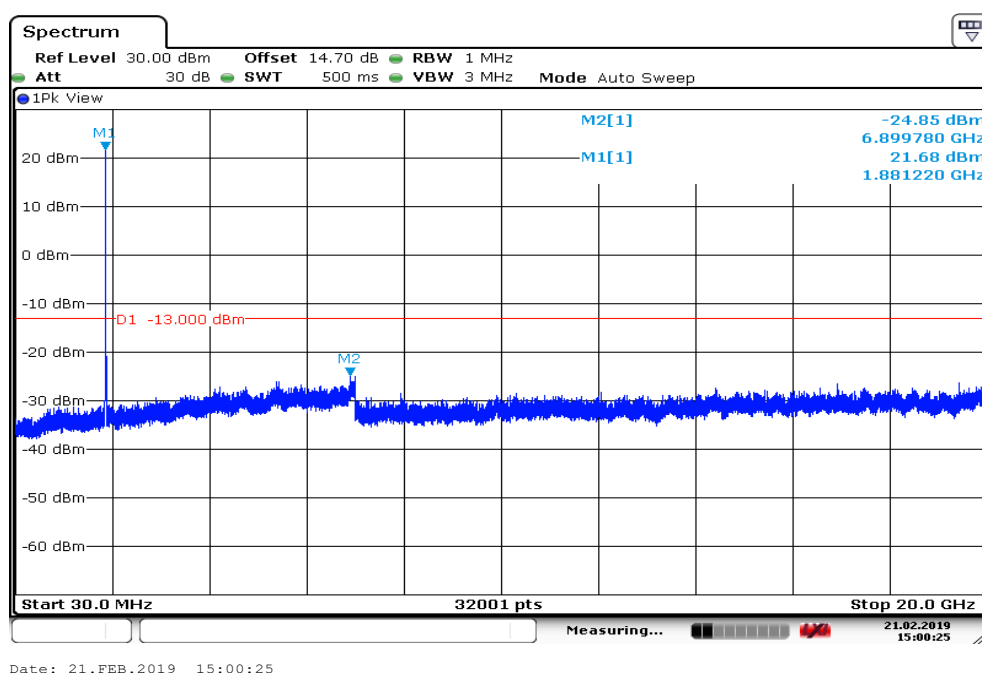


CHANNEL BANDWIDTH: 5MHz / QPSK

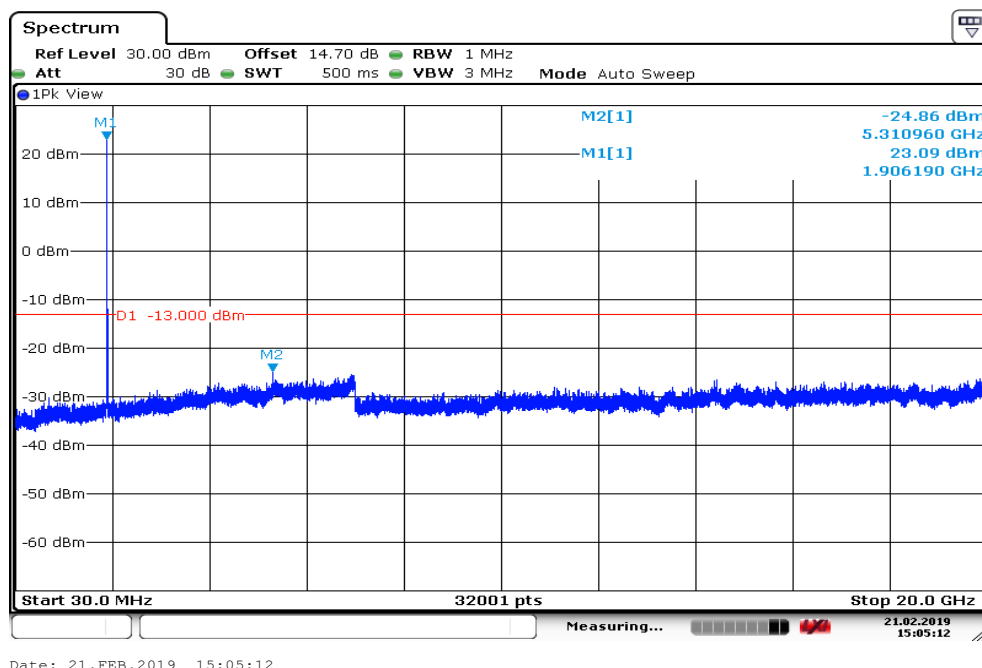
CH Low



CH Mid

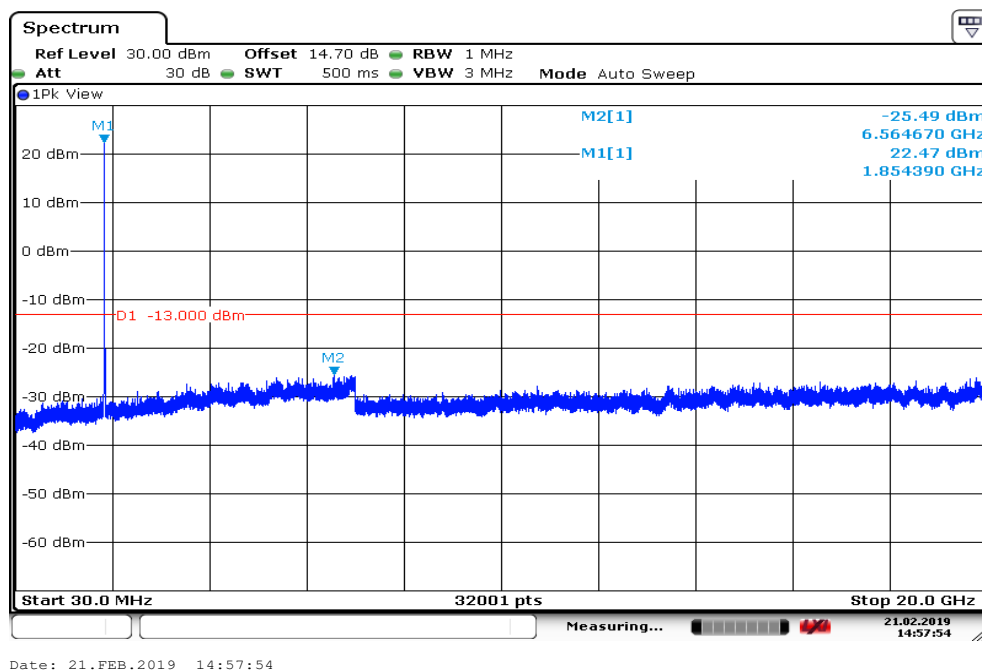


CH High

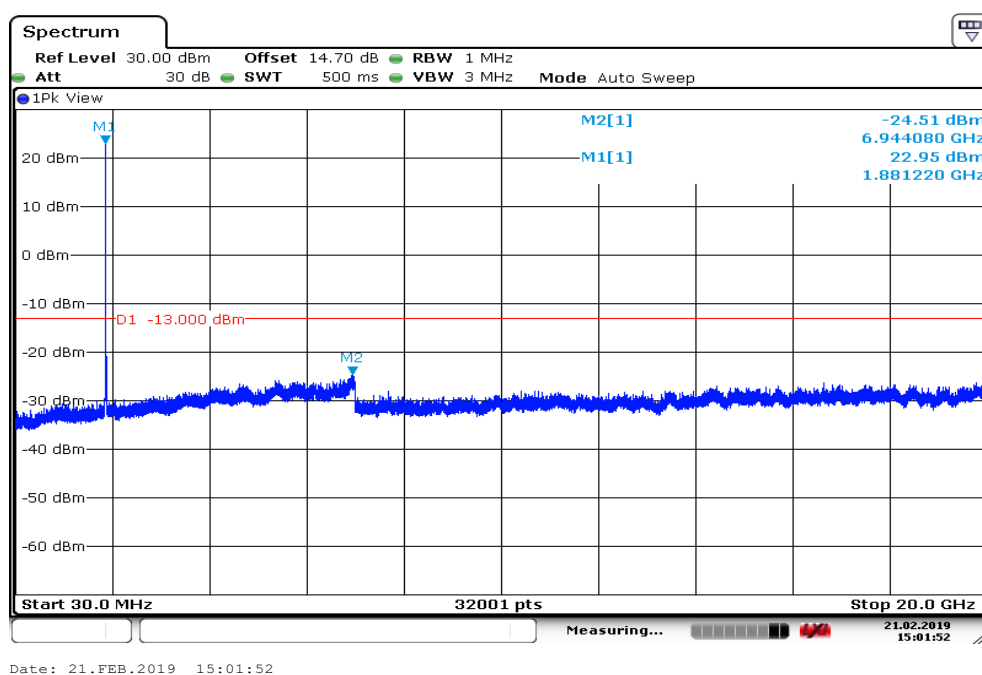


CHANNEL BANDWIDTH: 5MHz / 16QAM

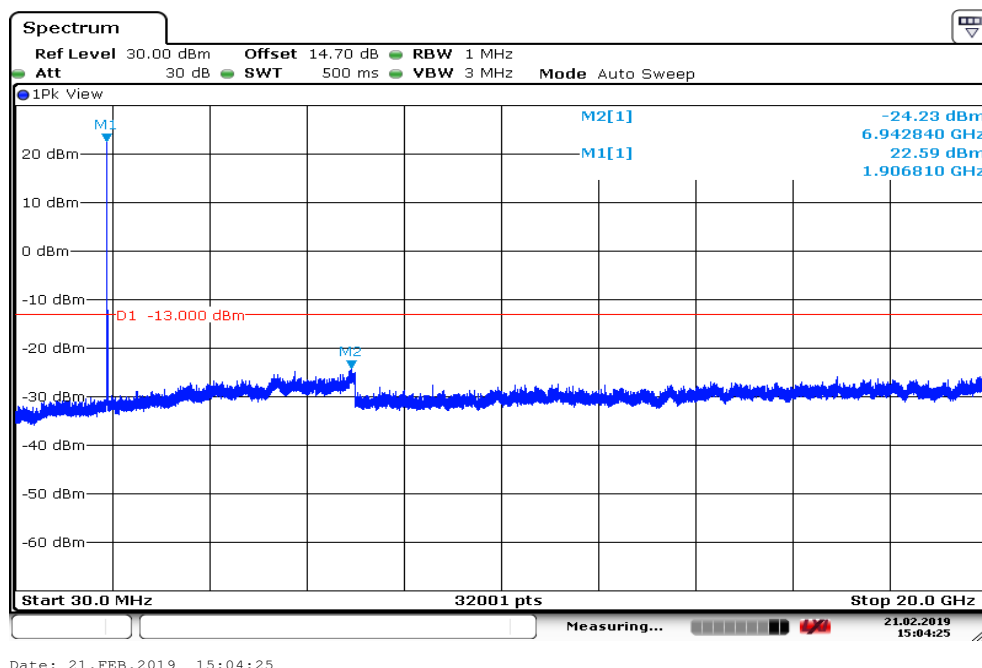
CH Low



CH Mid

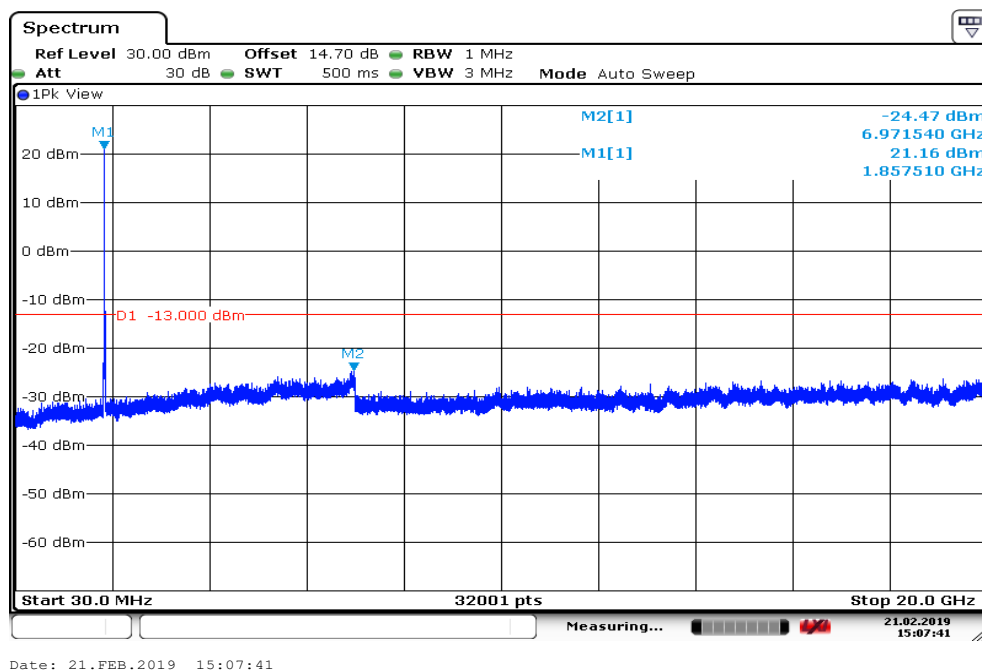


CH High

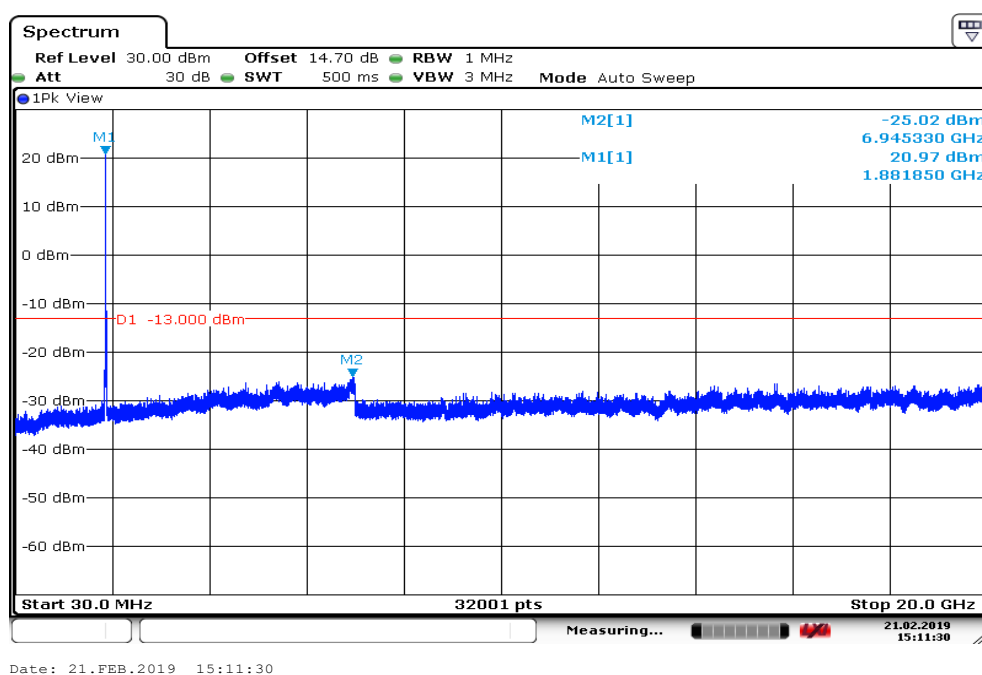


CHANNEL BANDWIDTH: 10MHz / QPSK

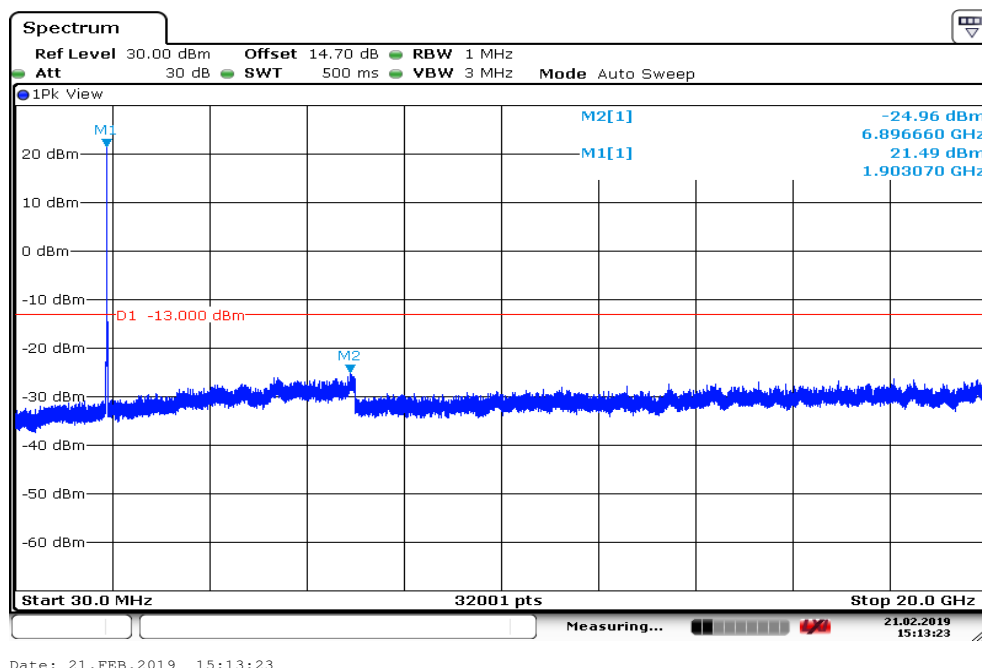
CH Low



CH Mid

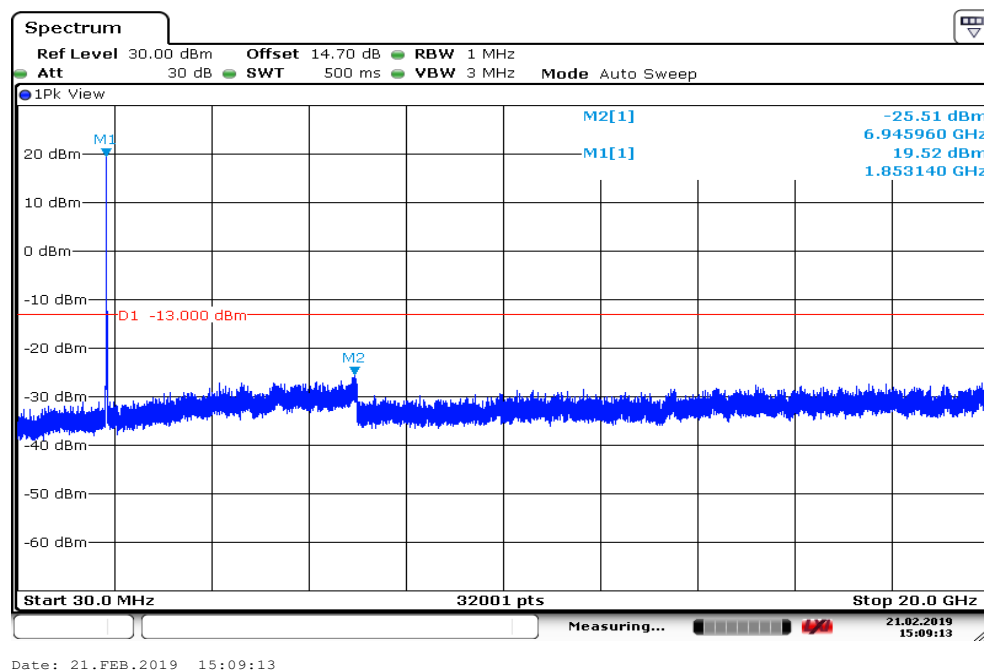


CH High

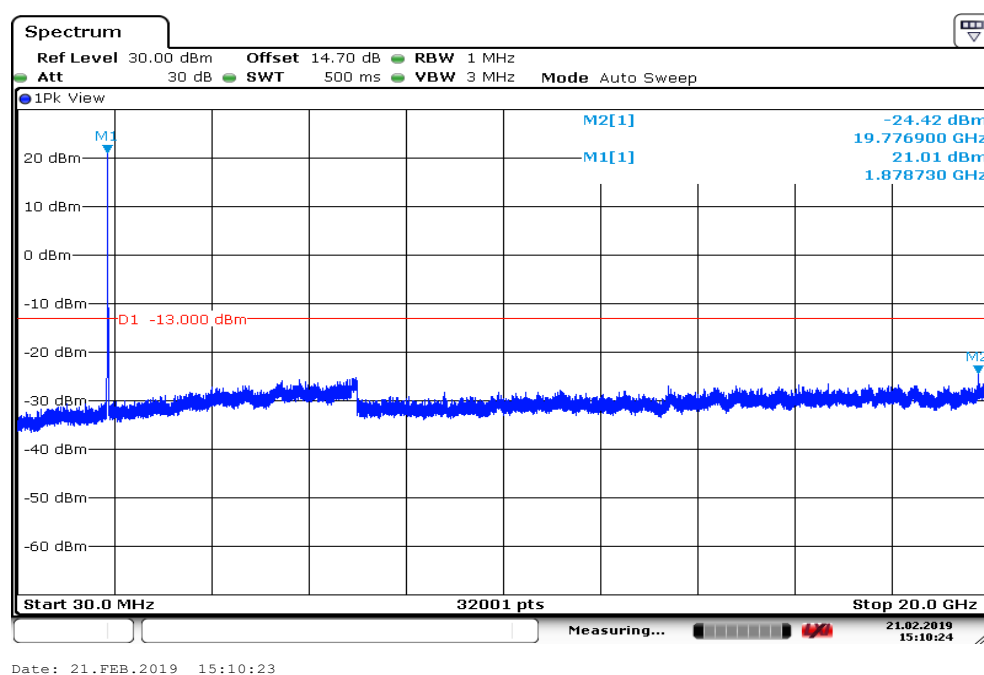


CHANNEL BANDWIDTH: 10MHz / 16QAM

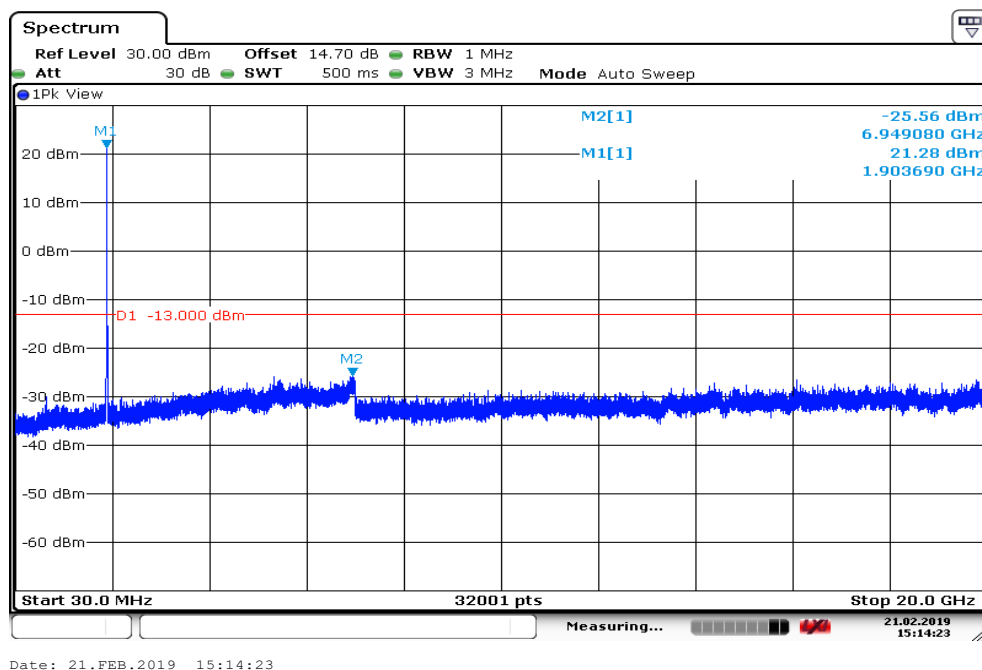
CH Low



CH Mid

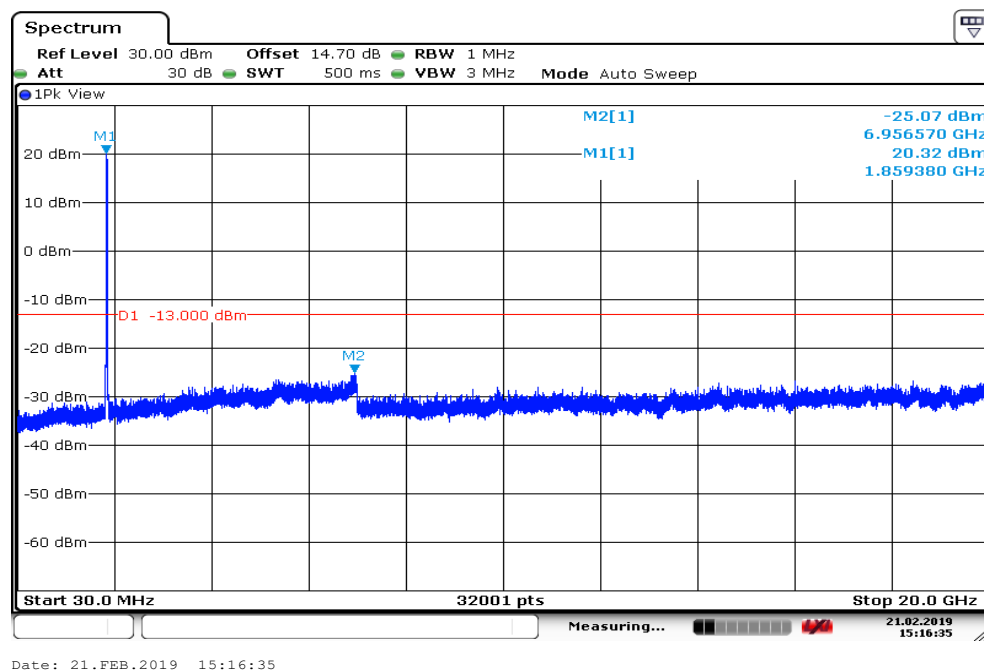


CH High

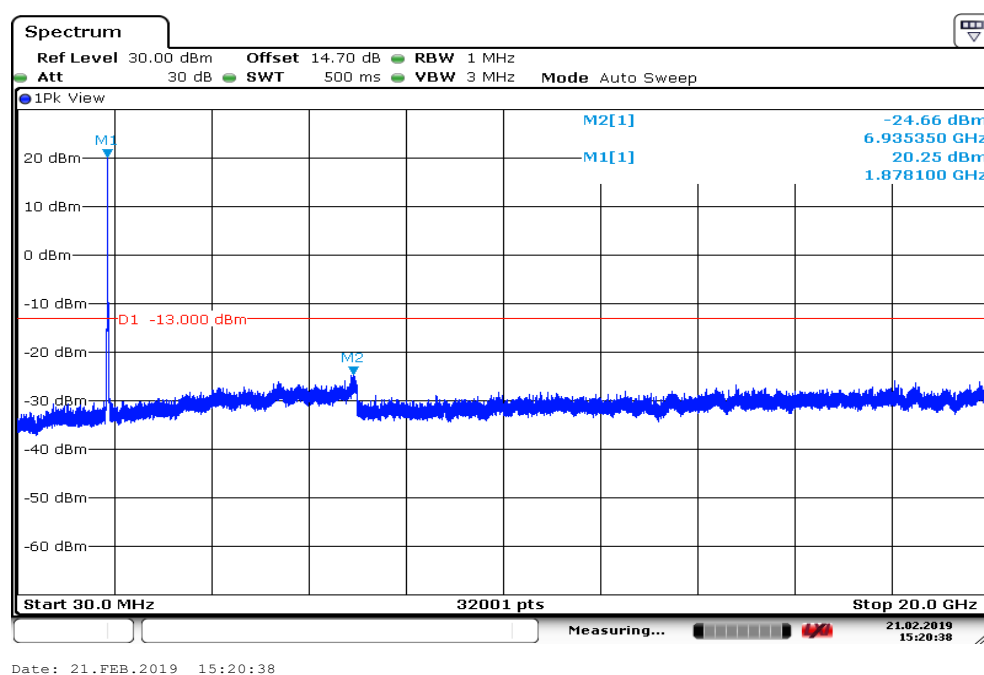


CHANNEL BANDWIDTH: 15MHz / QPSK

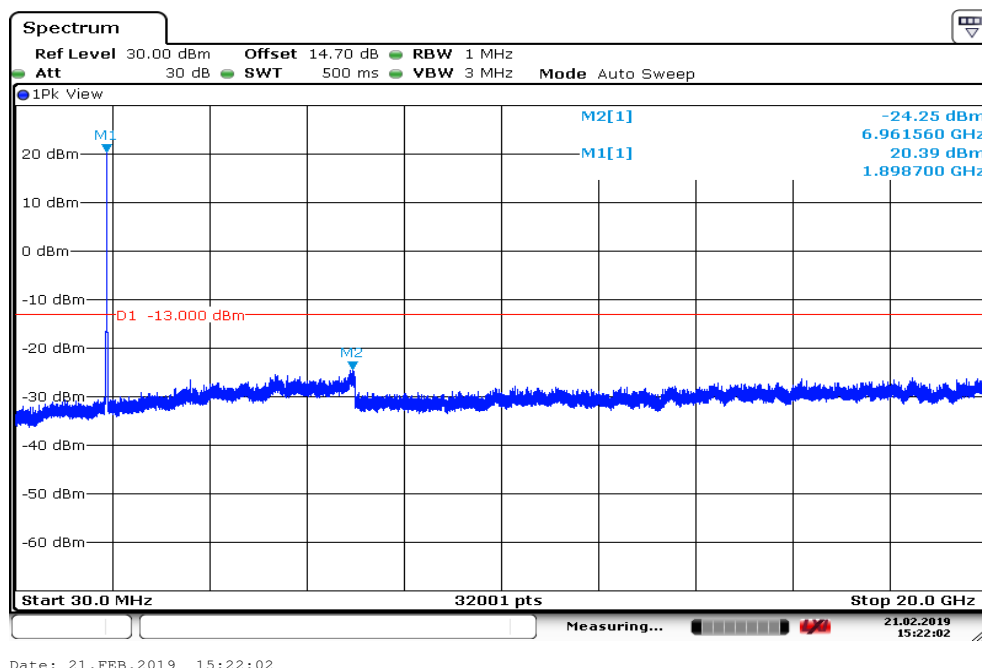
CH Low



CH Mid

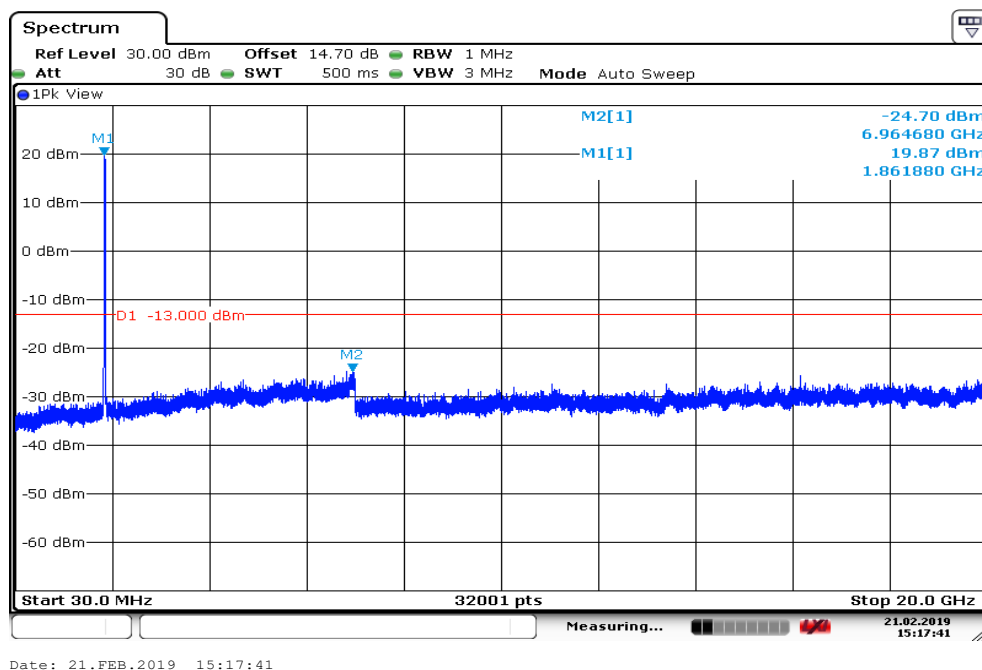


CH High

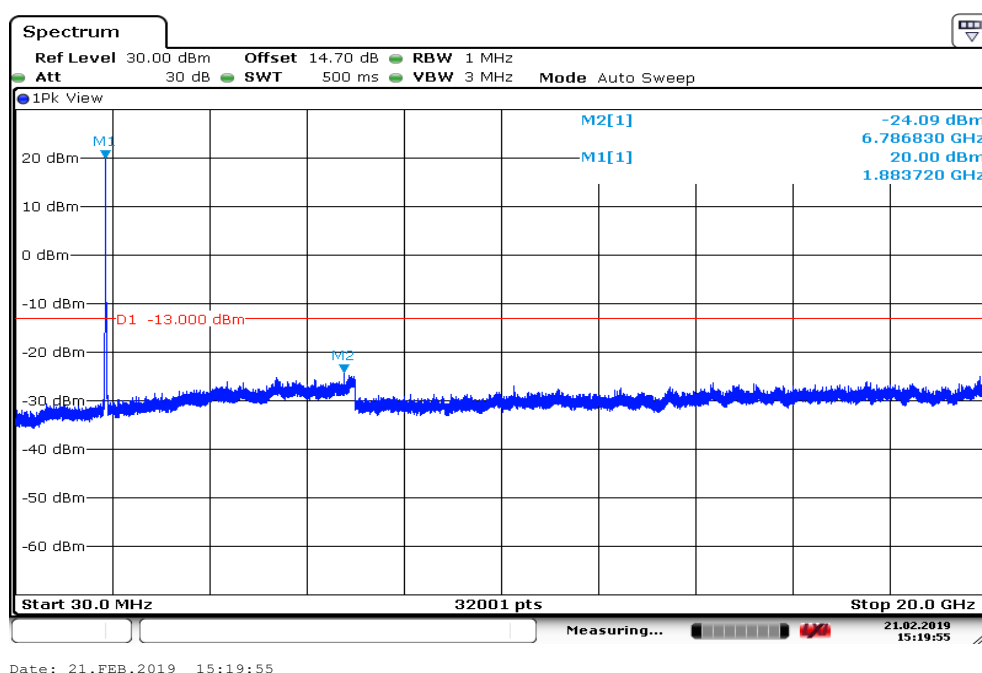


CHANNEL BANDWIDTH: 15MHz / 16QAM

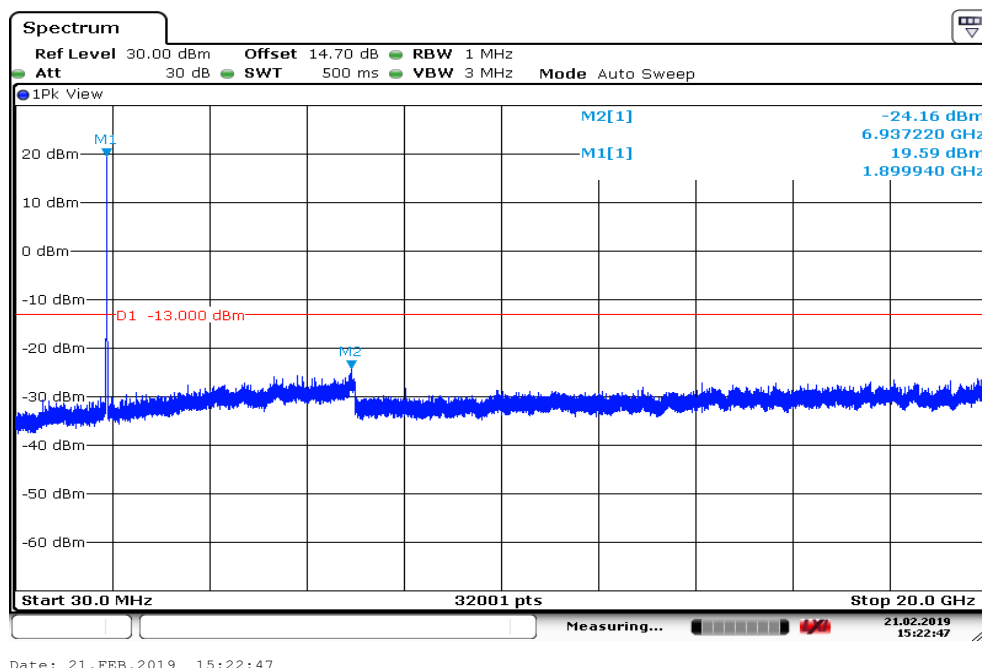
CH Low



CH Mid

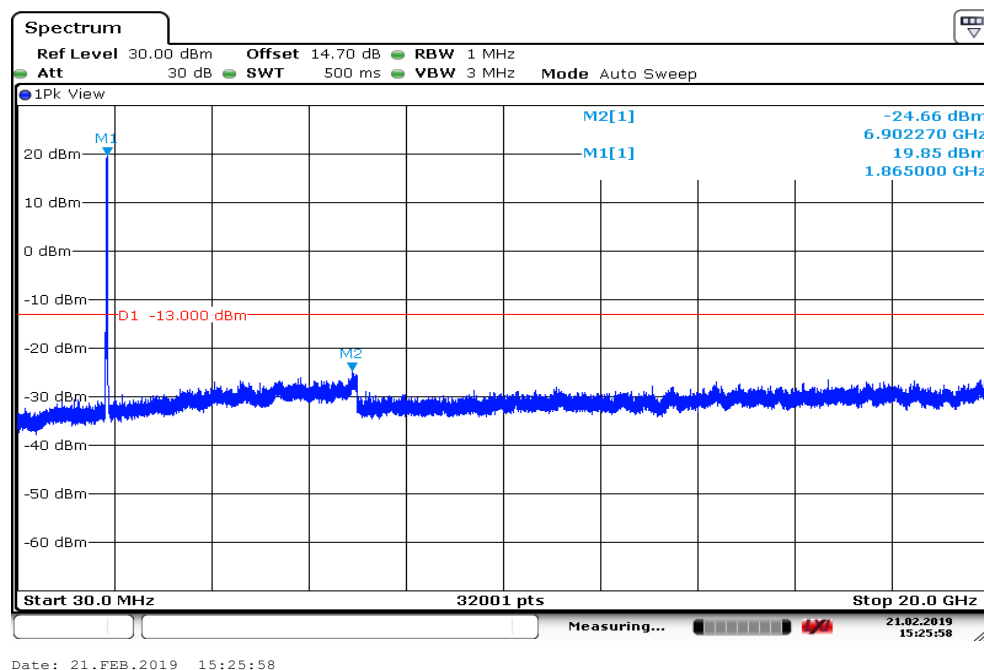


CH High

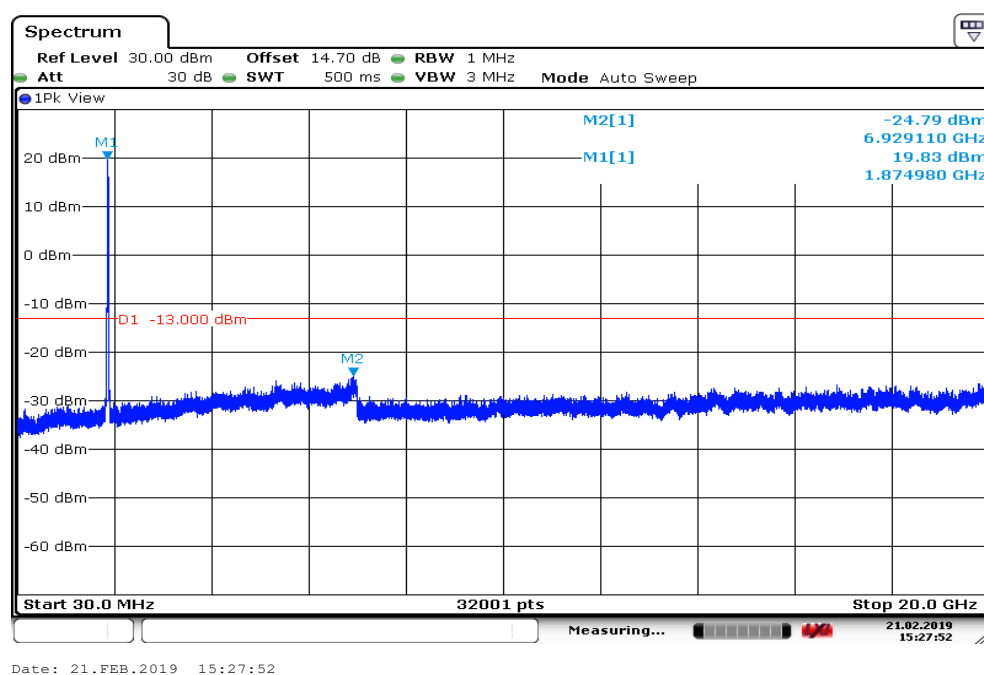


CHANNEL BANDWIDTH: 20MHz / QPSK

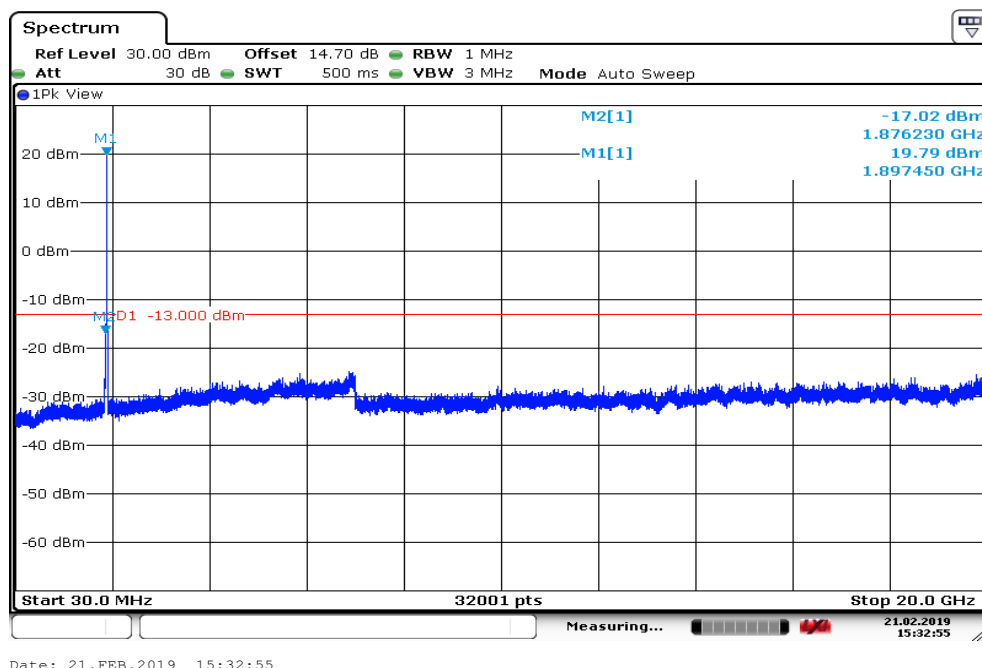
CH Low



CH Mid

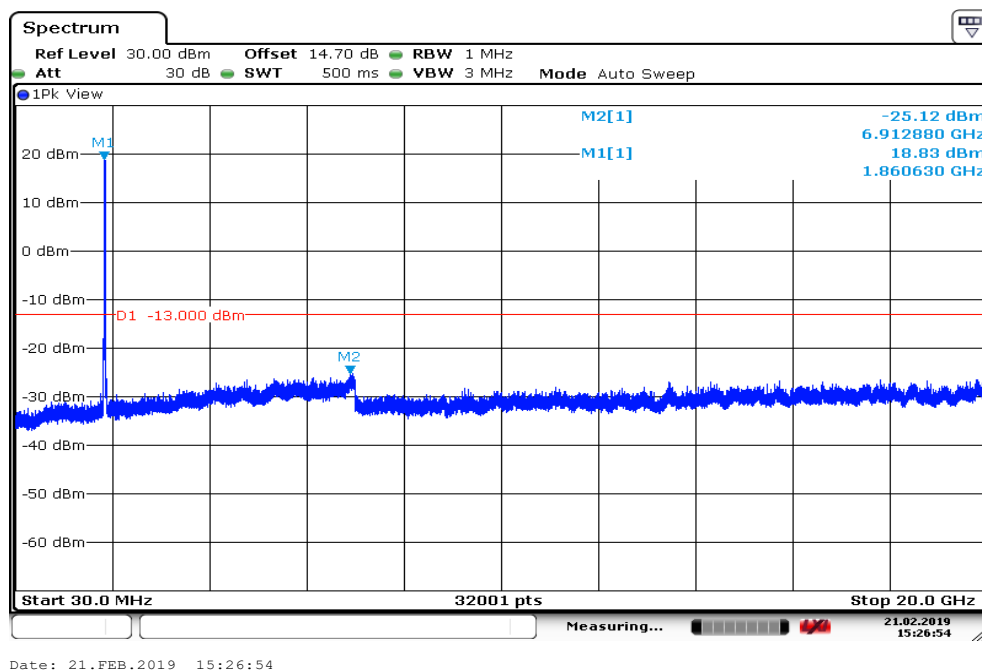


CH High

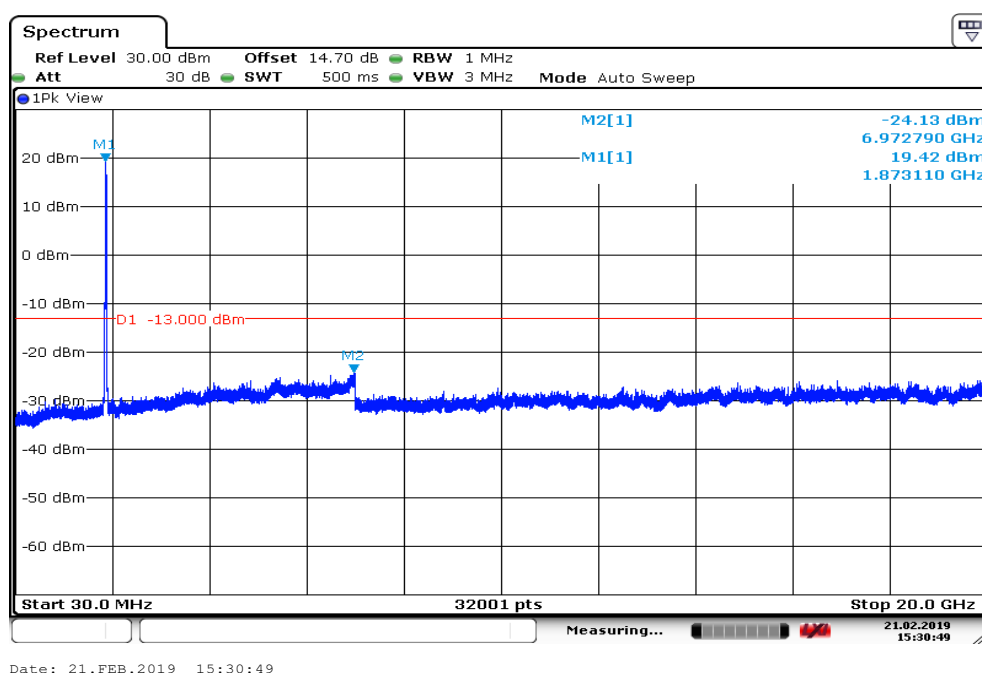


CHANNEL BANDWIDTH: 20MHz / 16QAM

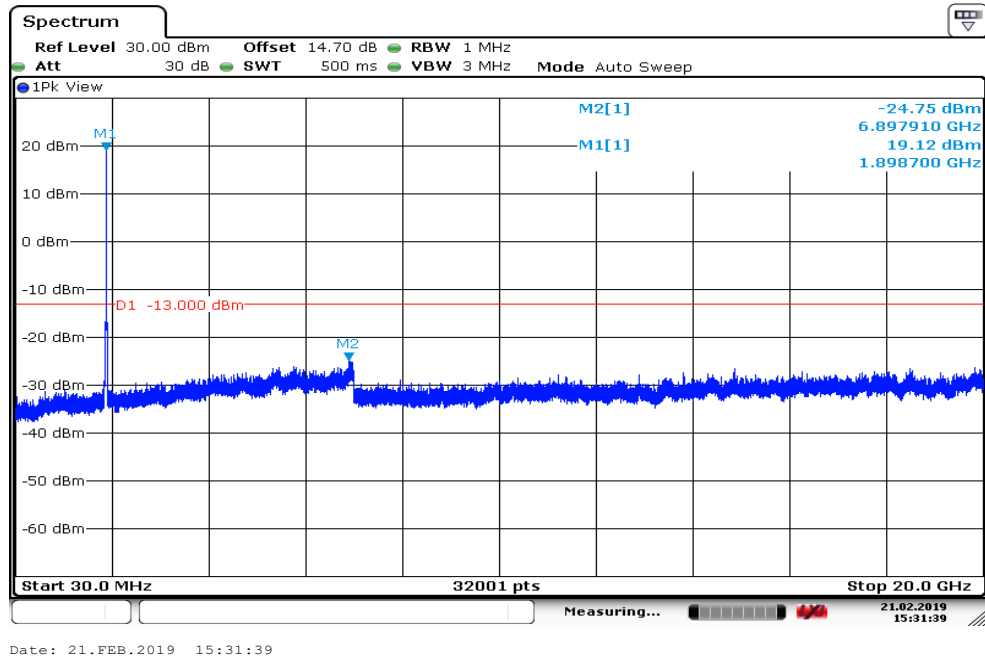
CH Low



CH Mid



CH High



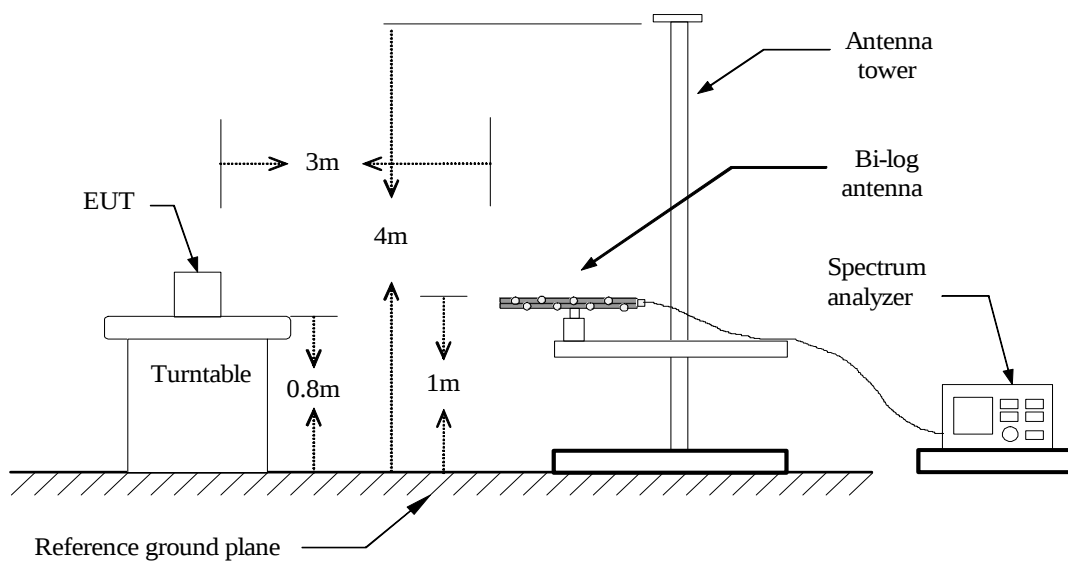
8.8 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

LIMIT

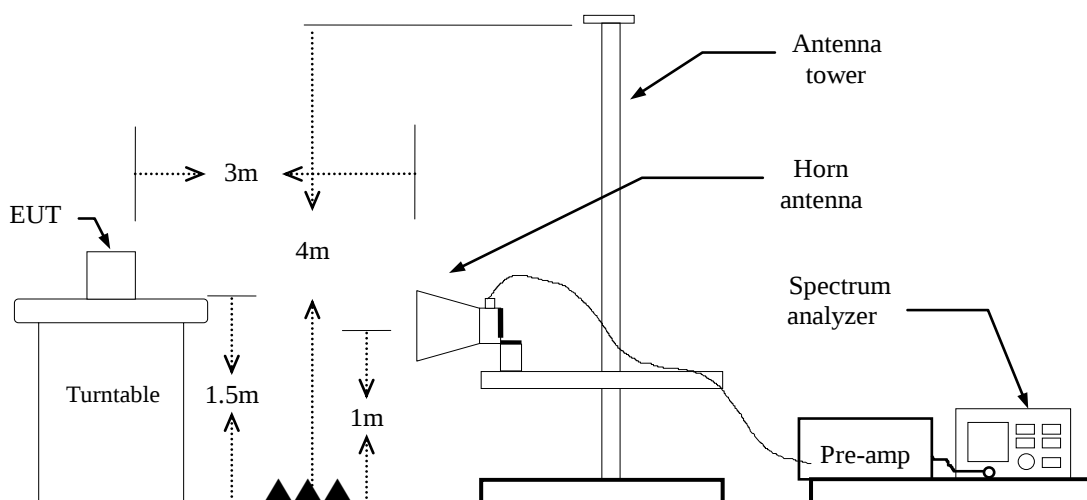
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13dBm

Test Configuration

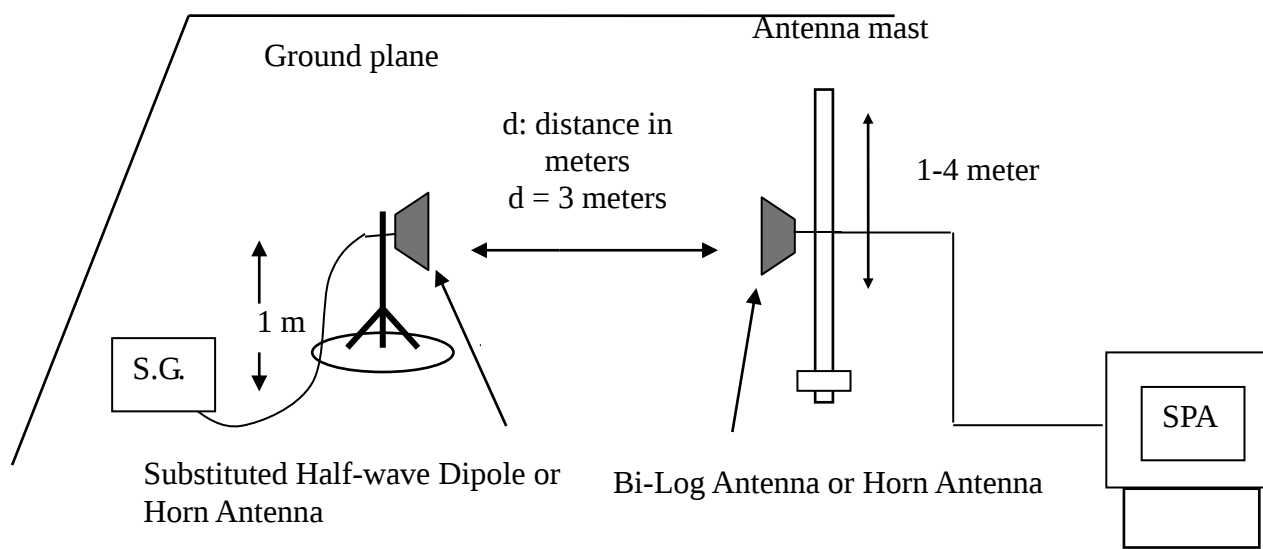
Below 1 GHz



Above 1 GHz



Substituted Method Test Set-up



TEST PROCEDURE

1. The EUT was placed on a turntable
 - (1) Below 1G : 0.8m
 - (2) Above 1G : 1.5m
 - (3) EUT set 3m from the receiving antenna
 - (4) The table was rotated 360 degrees of the highest spurious emission to determine the position.
2. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
3. A horn antenna was driven by a signal generator.
4. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

TEST RESULTS

Refer to the attached tabular data sheets.

Test Results

Below 1GHz

LTE Band 5 / BW: 10MHz / QPSK / RB =1, RB Offset = 0

Operation Mode: Tx / Mid CH

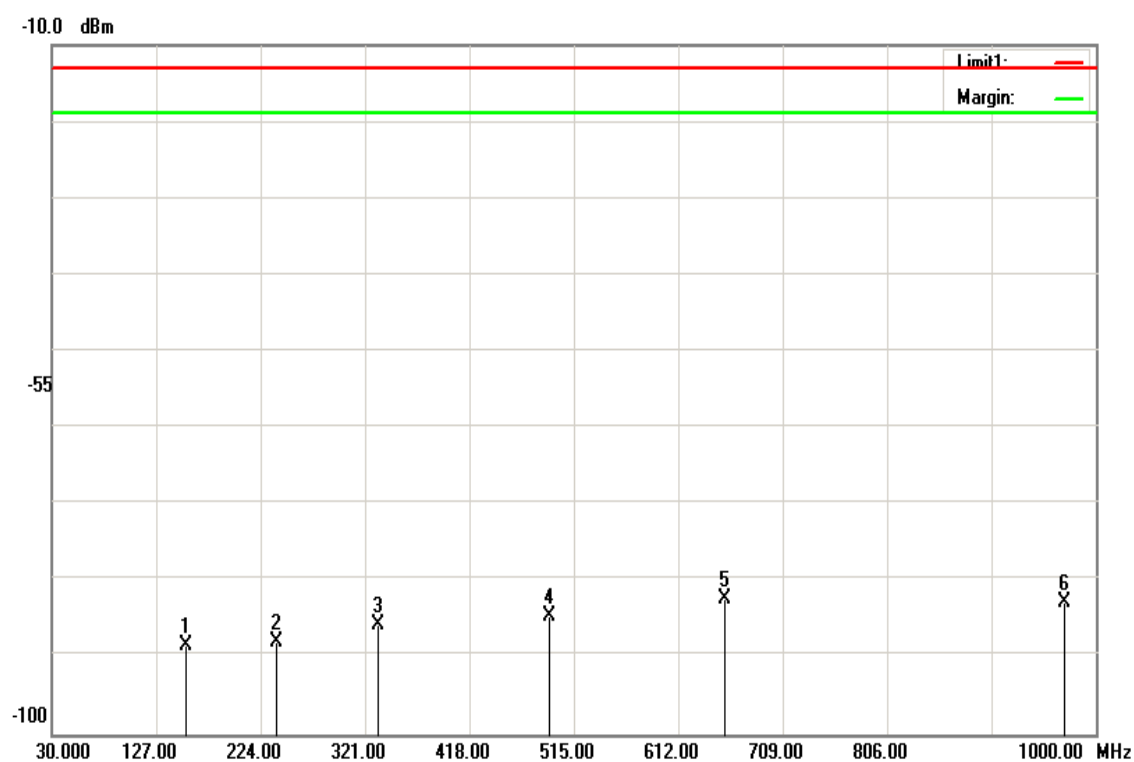
Test Date: March 12, 2019

Temperature: 22°C

Tested by: Dally Hong

Humidity: 46% RH

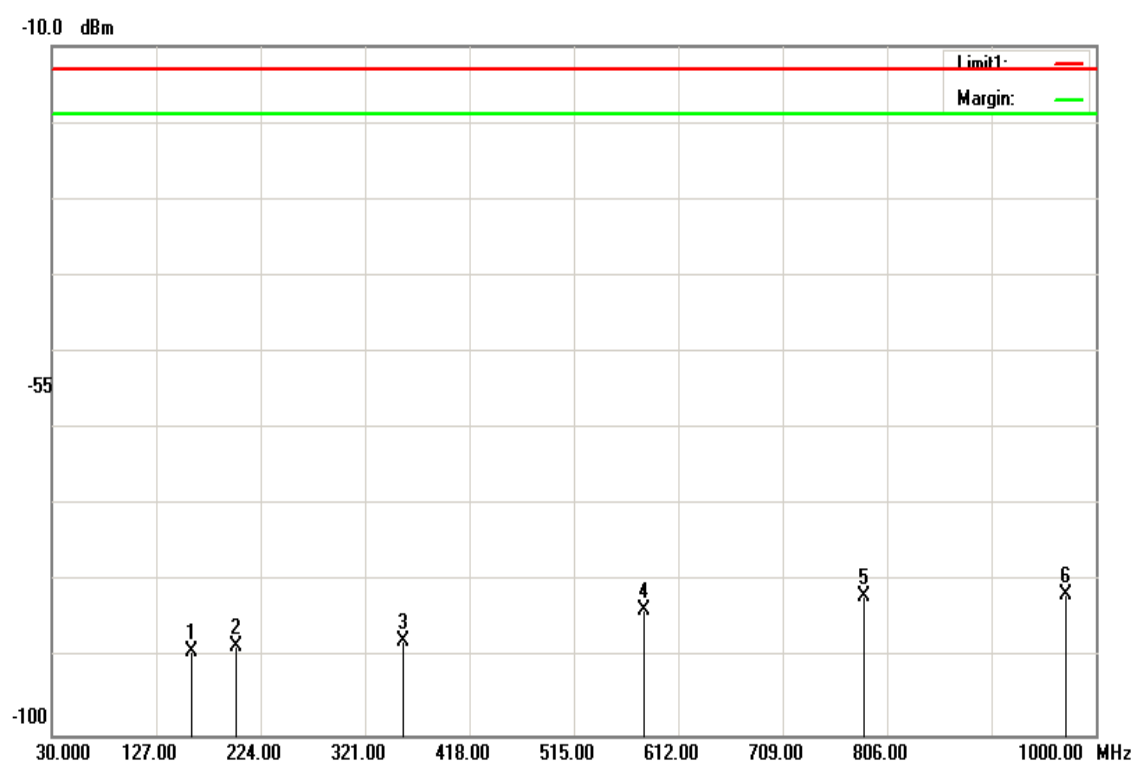
Polarity: Ver.



Frequency (MHz)	S.G. (dBm)	Ant. Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
154.6450	-85.13	1.23	-88.51	-13.00	-75.51	V
238.5500	-84.33	1.53	-88.01	-13.00	-75.01	V
333.1250	-81.79	1.82	-85.76	-13.00	-72.76	V
493.1750	-80.25	2.23	-84.63	-13.00	-71.63	V
655.1650	-77.59	2.58	-82.32	-13.00	-69.32	V
971.3850	-77.51	3.18	-82.84	-13.00	-69.84	V

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 12, 2019
Tested by: Dally Hong
Polarity: Hor.



Frequency (MHz)	S.G. (dBm)	Ant. Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
159.9800	-85.76	1.25	-89.16	-13.00	-76.16	H
201.2050	-84.89	1.4	-88.44	-13.00	-75.44	H
355.9200	-83.67	1.89	-87.71	-13.00	-74.71	H
580.4750	-79.21	2.43	-83.79	-13.00	-70.79	H
784.6600	-76.92	2.84	-81.91	-13.00	-68.91	H
971.8700	-76.39	3.18	-81.72	-13.00	-68.72	H

LTE Band 5 / BW: 10MHz / 16QAM / RB =1, RB Offset = 0

Operation Mode: Tx / Mid CH

Test Date:

March 12, 2019

Temperature: 22°C

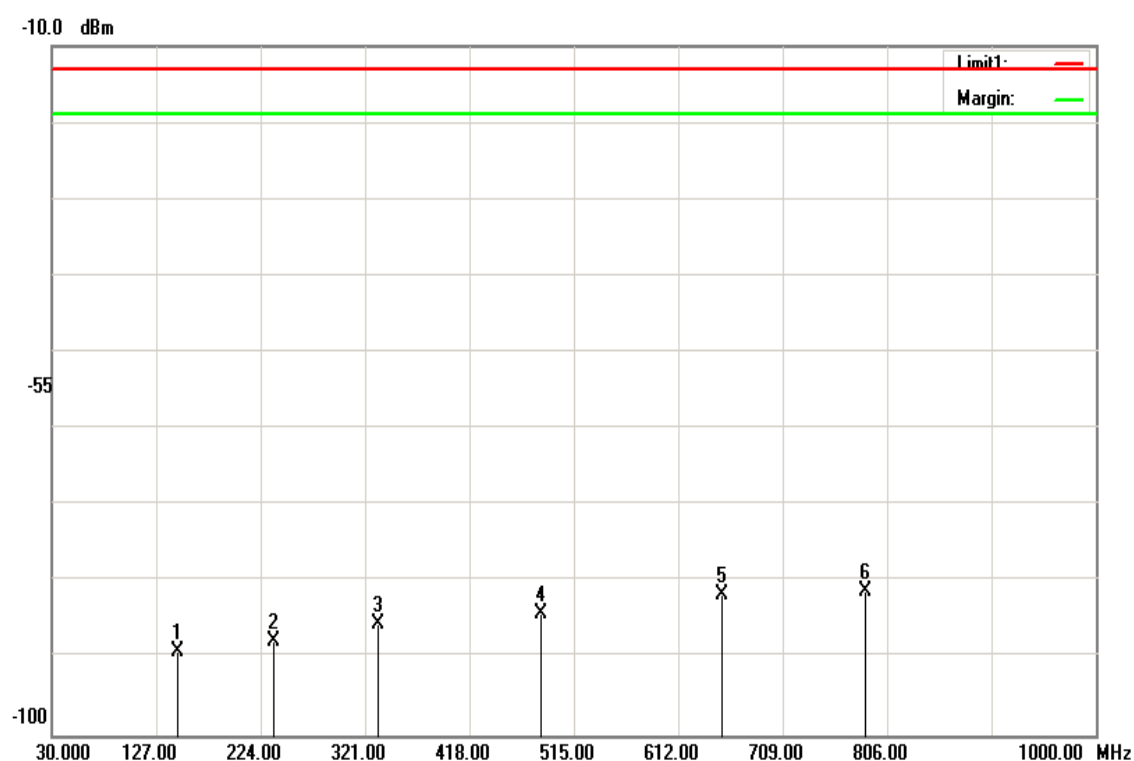
Tested by:

Dally Hong

Humidity: 46% RH

Polarity:

Ver.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
147.3700	-85.78	1.2	-89.13	-13.00	-76.13	V
237.0950	-83.98	1.52	-87.65	-13.00	-74.65	V
333.1250	-81.48	1.82	-85.45	-13.00	-72.45	V
485.4150	-79.82	2.21	-84.18	-13.00	-71.18	V
652.7400	-76.98	2.58	-81.71	-13.00	-68.71	V
785.6300	-76.17	2.84	-81.16	-13.00	-68.16	V

Operation Mode: Tx / Mid CH I

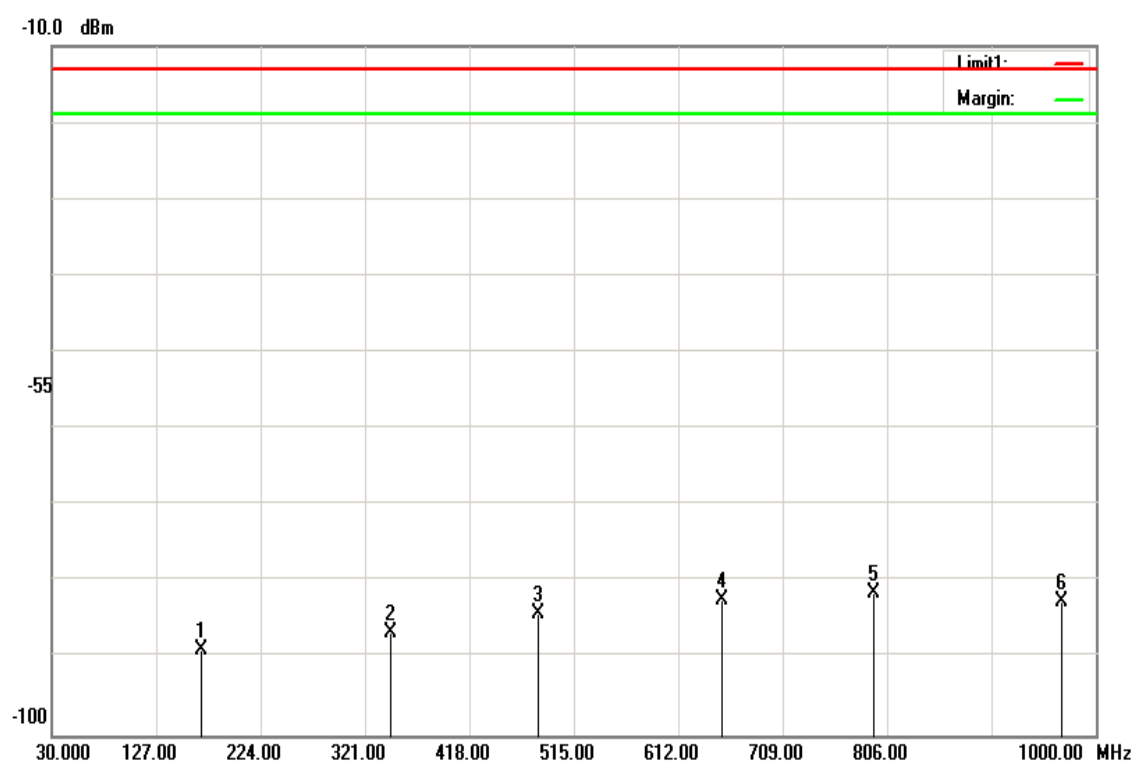
Test Date: March 12, 2019

Temperature: 22°C

Tested by: Dally Hong

Humidity: 46% RH

Polarity: Hor.



Frequency (MHz)	S.G. (dBm)	Ant. Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
168.7100	-85.51	1.28	-88.94	-13.00	-75.94	H
344.7650	-82.71	1.86	-86.72	-13.00	-73.72	H
482.5050	-79.83	2.21	-84.19	-13.00	-71.19	H
653.2250	-77.71	2.58	-82.44	-13.00	-69.44	H
793.3900	-76.41	2.86	-81.42	-13.00	-68.42	H
968.4750	-77.34	3.17	-82.66	-13.00	-69.66	H

Above 1GHz

LTE Band 5 / BW: 10 MHz / QPSK / RB =1, RB Offset = 0

Operation Mode: Tx / Low CH

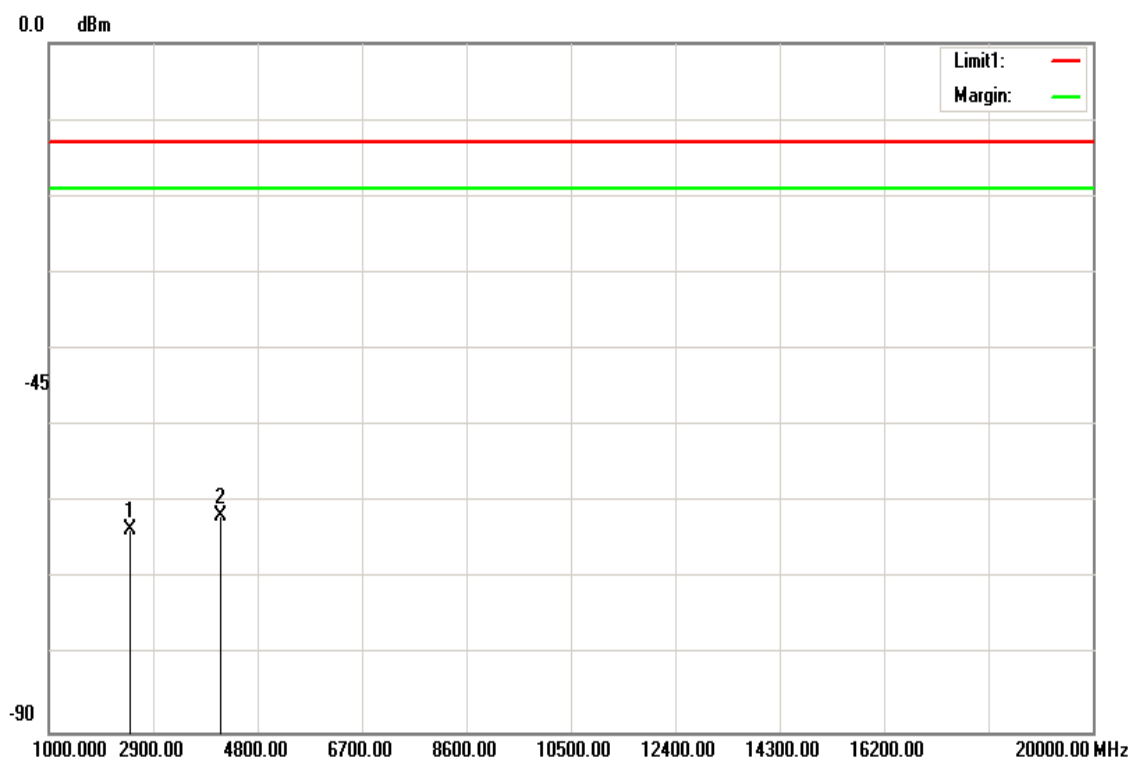
Test Date: March 13, 2019

Temperature: 22°C

Tested by: Dally Hong

Humidity: 46% RH

Polarity: Ver.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2473.500	-58.18	5.3	-63.48	-13.00	-50.48	V
4122.000	-54.72	7.03	-61.75	-13.00	-48.75	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

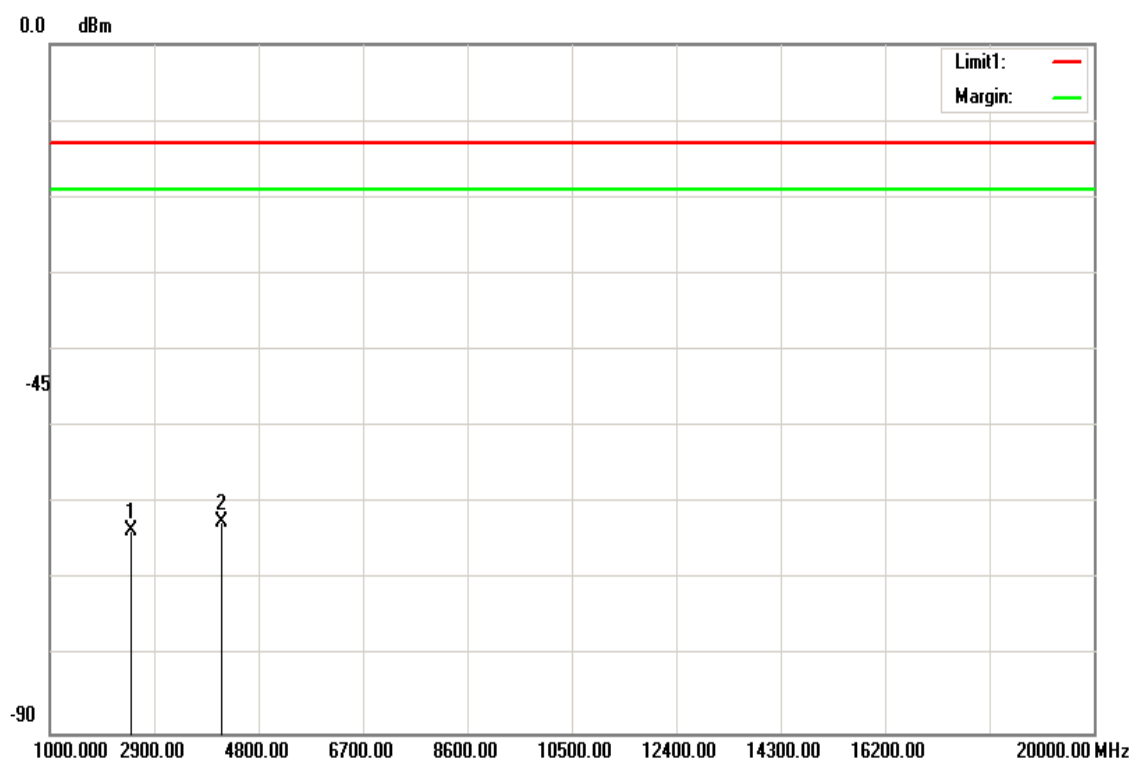
Operation Mode: 22°C

Test Date: March 13, 2019

Temperature: 46% RH

Tested by: Dally Hong

Humidity: 50% RH

Polarity: Hor.


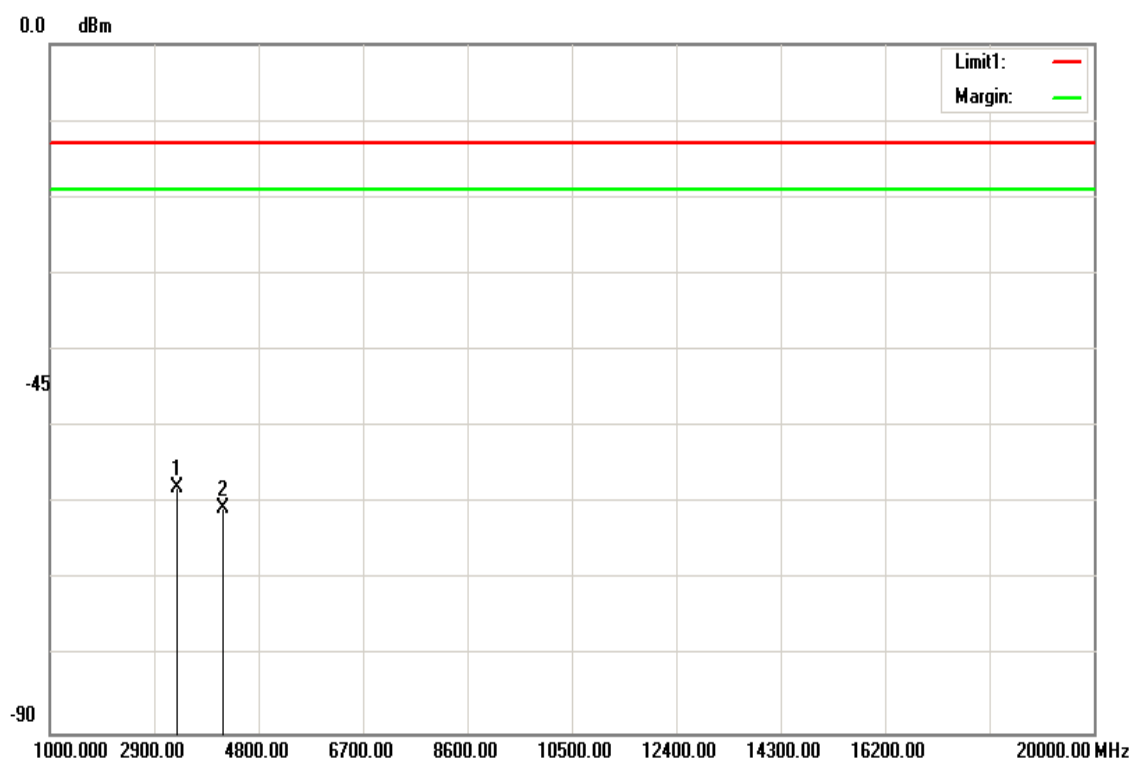
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
2473.500	-58.34	5.3	-63.64	-13.00	-50.64	H
4122.000	-55.41	7.03	-62.44	-13.00	-49.44	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Ver.



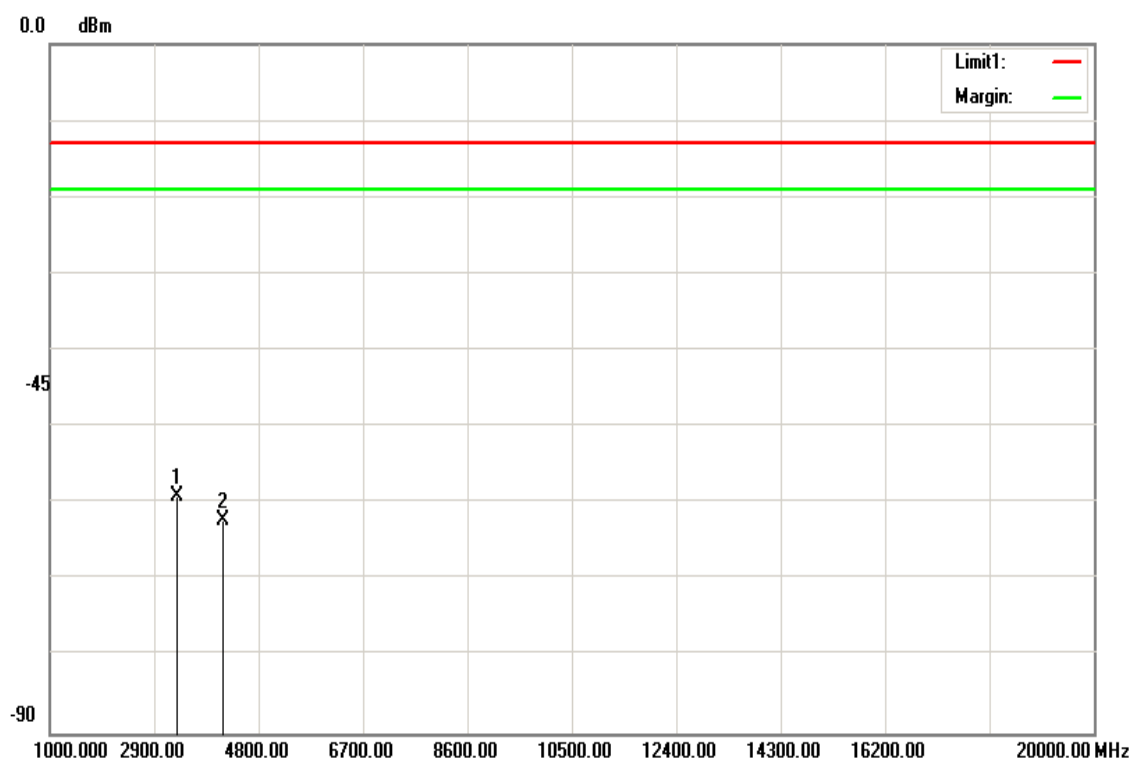
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3327.500	-51.7	6.25	-57.95	-13.00	-44.95	V
4160.500	-53.66	7.06	-60.72	-13.00	-47.72	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



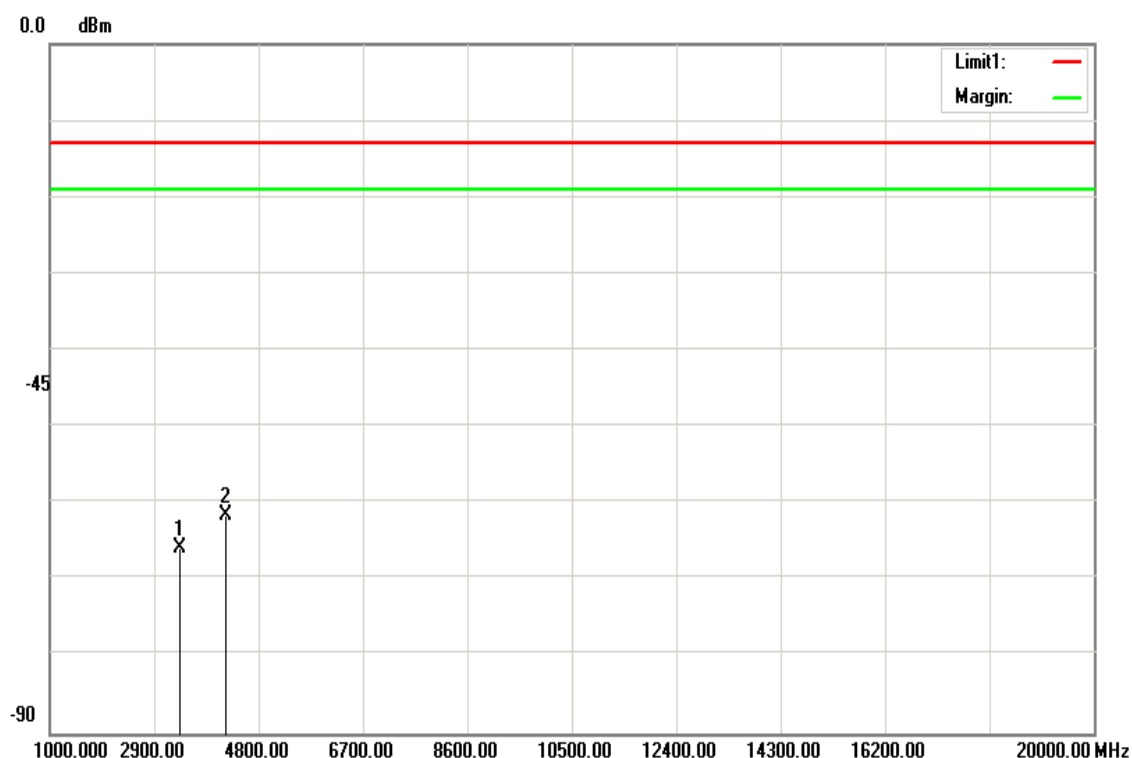
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3327.500	-52.78	6.25	-59.03	-13.00	-46.03	H
4160.500	-55.12	7.06	-62.18	-13.00	-49.18	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / High CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Ver.



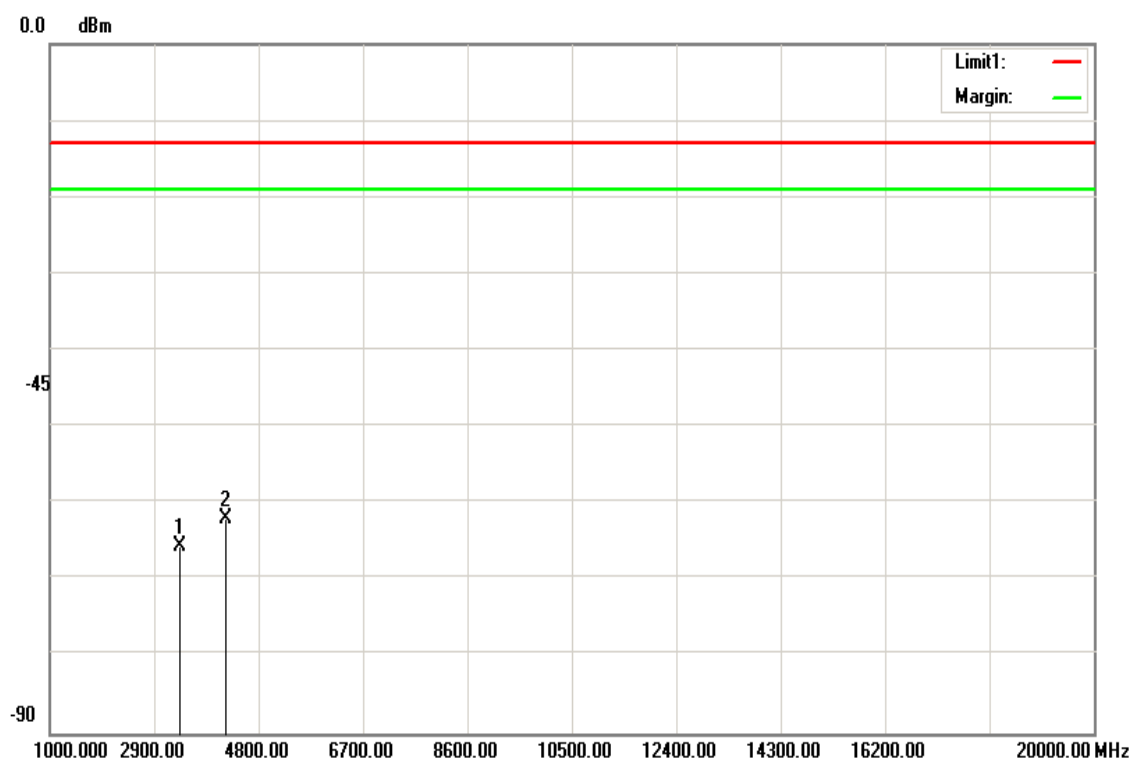
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3359.000	-59.45	6.28	-65.73	-13.00	-52.73	V
4199.000	-54.51	7.1	-61.61	-13.00	-48.61	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / High CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3359.000	-59.32	6.28	-65.60	-13.00	-52.60	H
4199.000	-54.81	7.1	-61.91	-13.00	-48.91	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

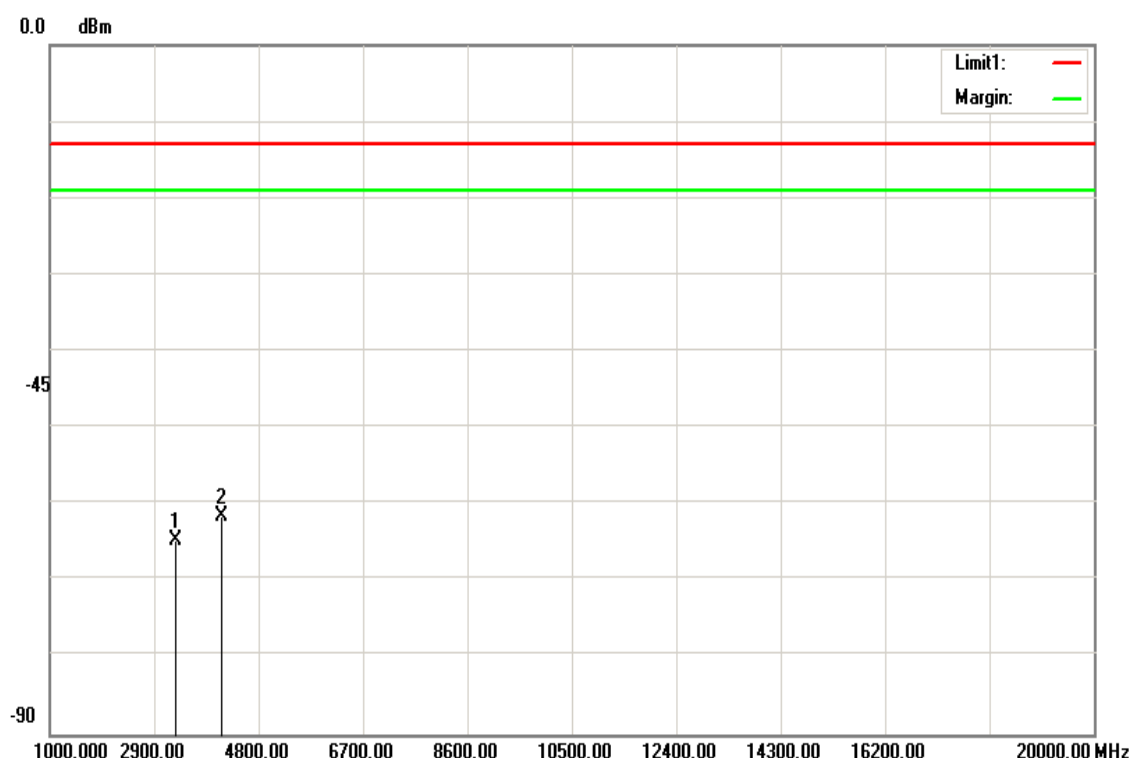
LTE Band 5 / BW: 10MHz / 16QAM / RB =1, RB Offset = 0
Operation Mode: Tx / Low CH

Test Date: March 13, 2019

Temperature: 22°C

Tested by: Dally Hong

Humidity: 46% RH

Polarity: Ver.


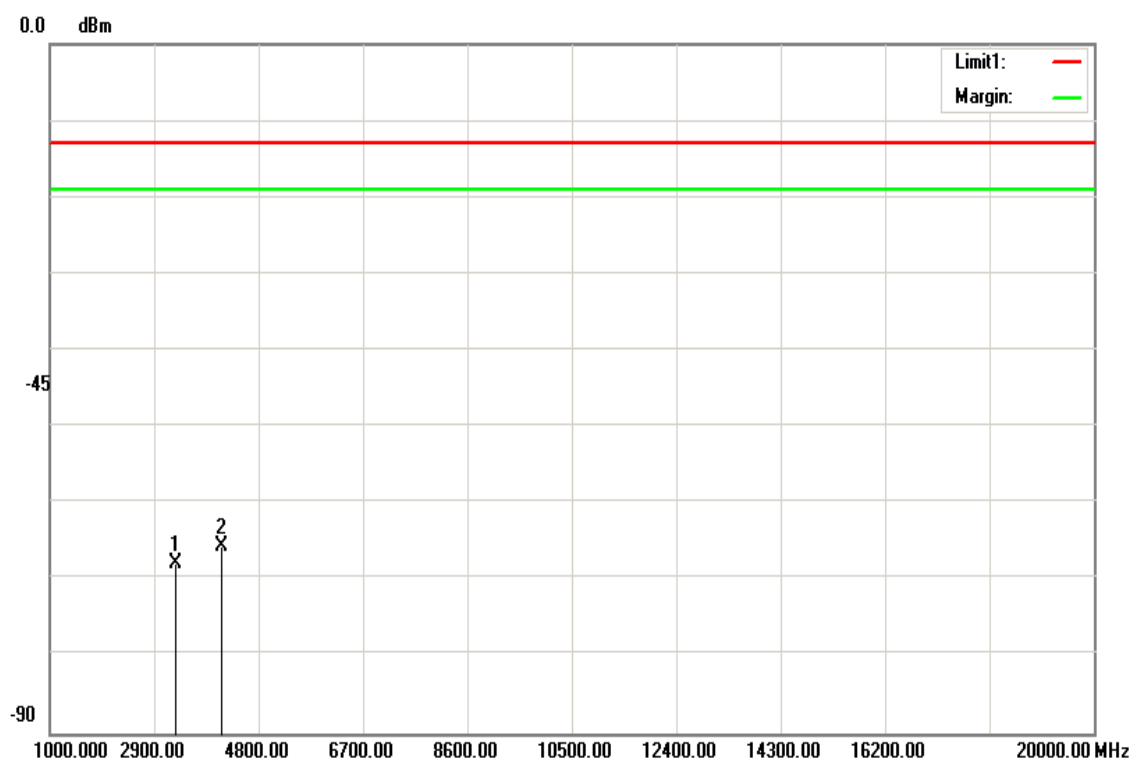
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3299.500	-58.42	6.22	-64.64	-13.00	-51.64	V
4122.000	-54.47	7.03	-61.50	-13.00	-48.50	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Low CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



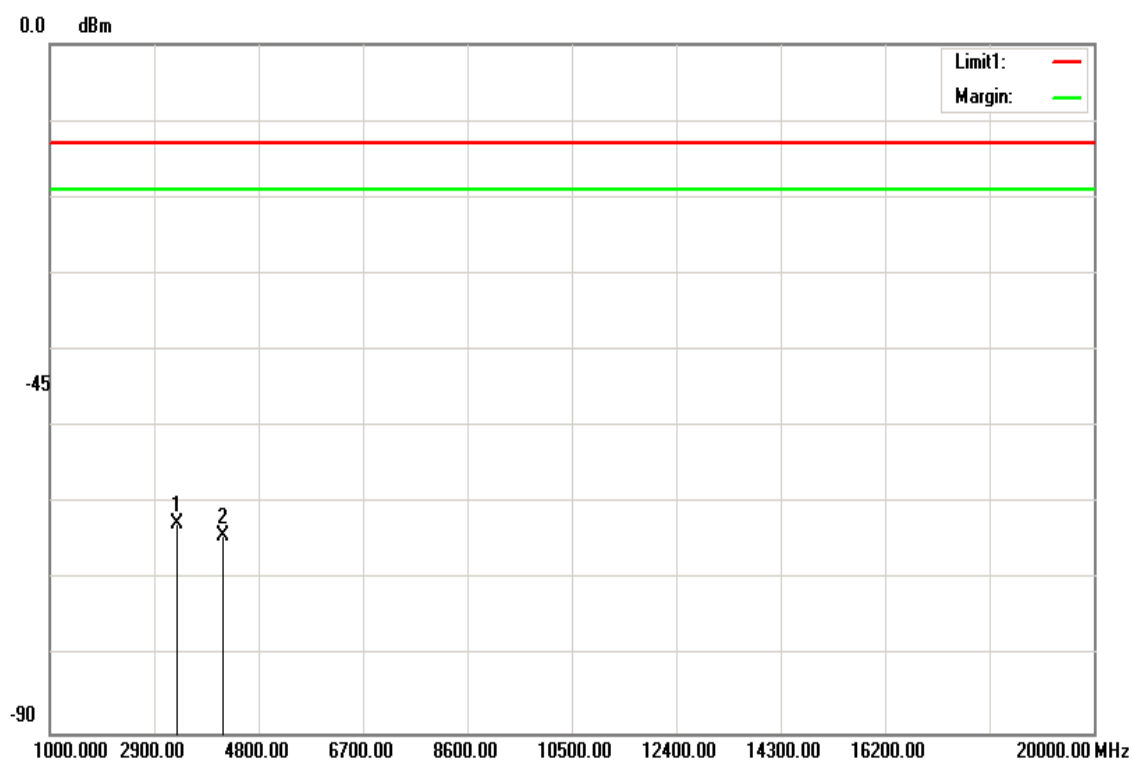
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3299.500	-61.55	6.22	-67.77	-13.00	-54.77	H
4122.000	-58.63	7.03	-65.66	-13.00	-52.66	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Ver.



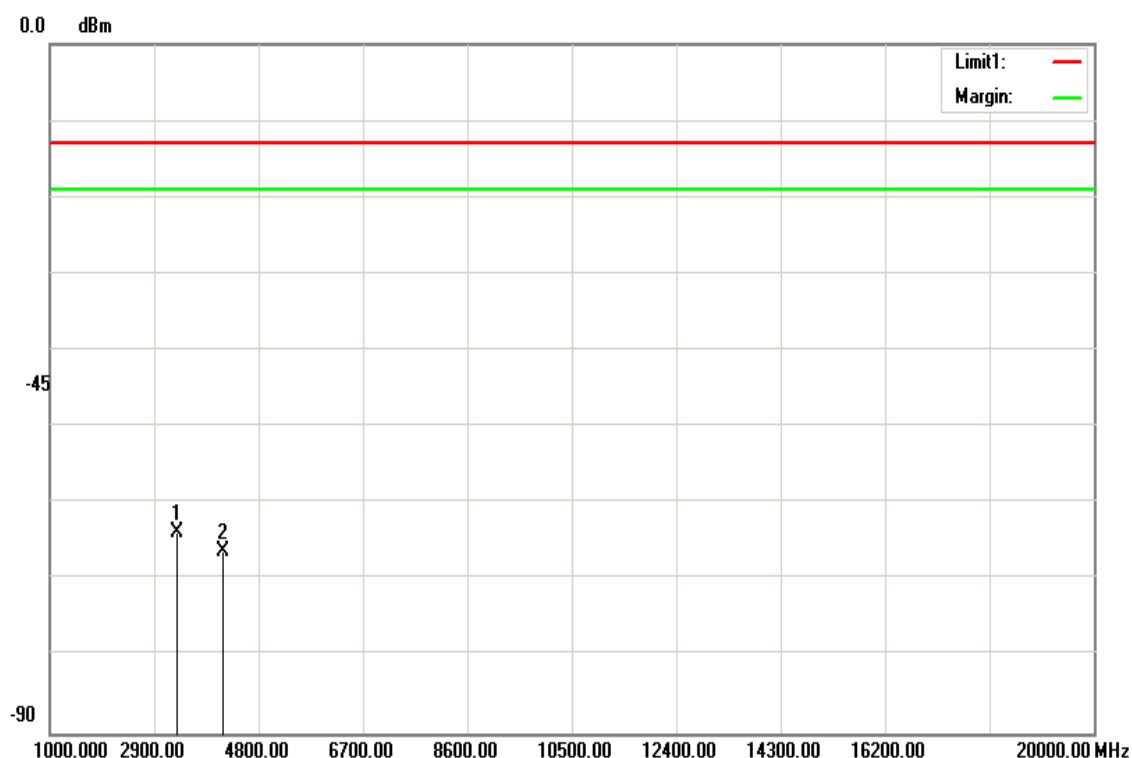
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3327.500	-56.45	6.25	-62.70	-13.00	-49.70	V
4160.500	-57.11	7.06	-64.17	-13.00	-51.17	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



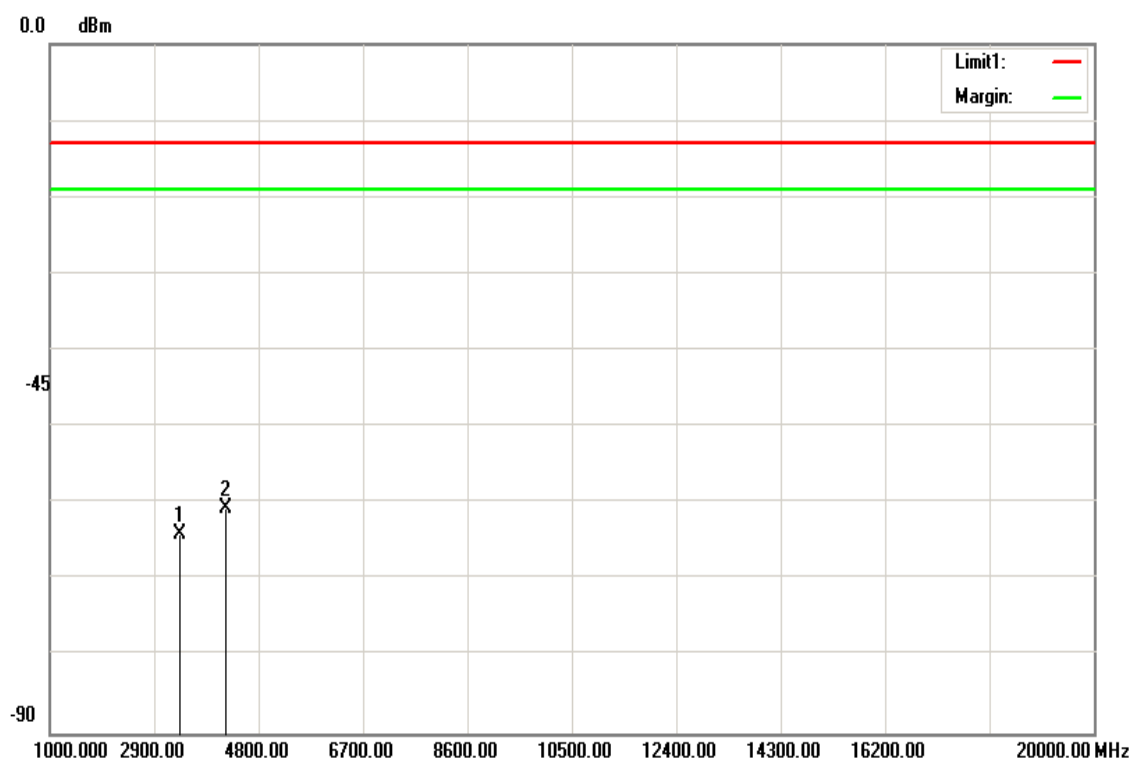
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3327.500	-57.48	6.25	-63.73	-13.00	-50.73	H
4160.500	-59.21	7.06	-66.27	-13.00	-53.27	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / High CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Ver.



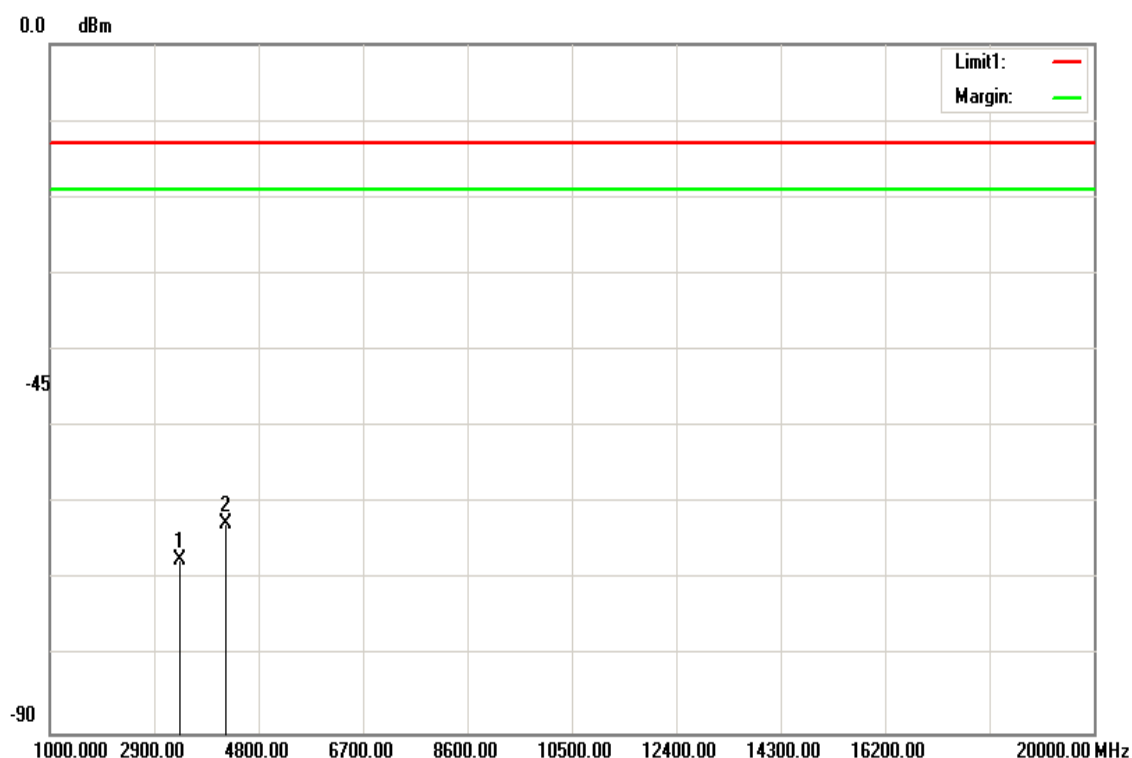
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3359.000	-57.81	6.28	-64.09	-13.00	-51.09	V
4199.000	-53.48	7.1	-60.58	-13.00	-47.58	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / High CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3359.000	-61.16	6.28	-67.44	-13.00	-54.44	H
4199.000	-55.49	7.1	-62.59	-13.00	-49.59	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Test Results

Below 1GHz

LTE Band 2 / BW: 20MHz / QPSK / RB =1, RB Offset = 0

Operation Mode: Tx / Mid CH

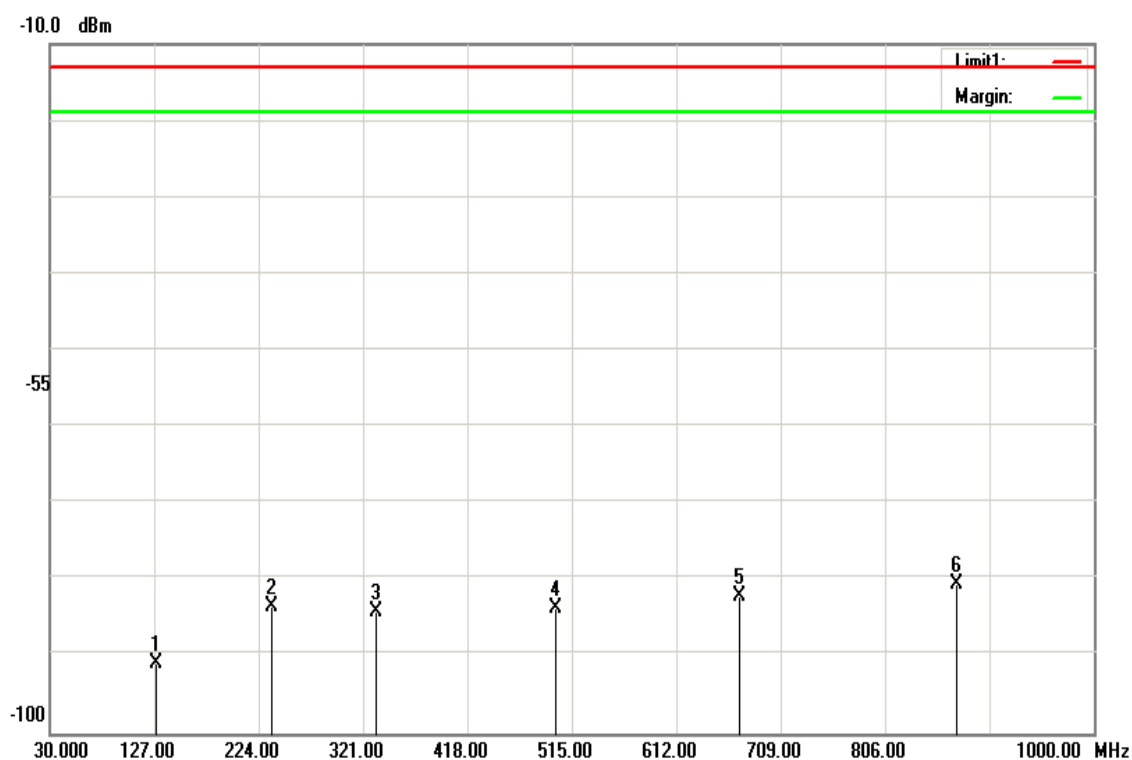
Test Date: March 11, 2019

Temperature: 22°C

Tested by: Dally Hong

Humidity: 46% RH

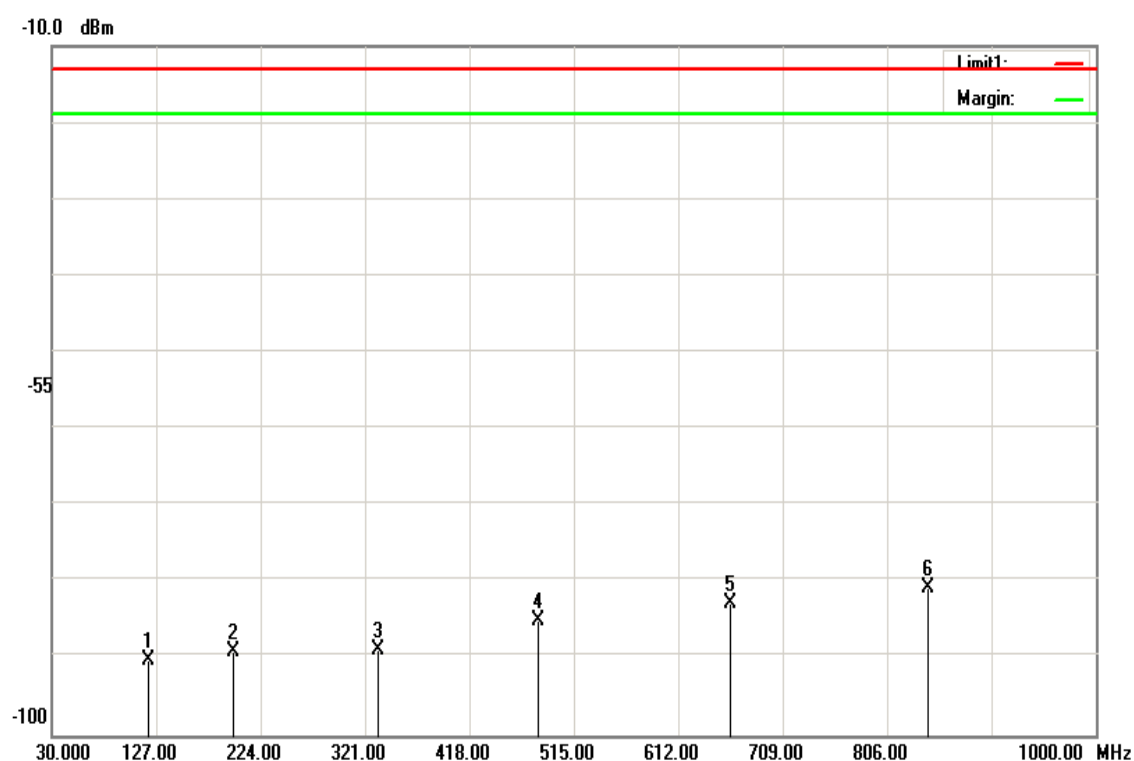
Polarity: Ver.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
128.9400	-87.54	1.13	-90.82	-13.00	-77.82	V
237.0950	-79.69	1.52	-83.36	-13.00	-70.36	V
333.1250	-80.08	1.82	-84.05	-13.00	-71.05	V
499.9650	-79.2	2.25	-83.60	-13.00	-70.60	V
671.6550	-77.45	2.62	-82.22	-13.00	-69.22	V
873.4150	-75.28	3.01	-80.44	-13.00	-67.44	V

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 11, 2019
Tested by: Dally Hong
Polarity: Hor.



Frequency (MHz)	S.G. (dBm)	Ant. Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
120.6950	-87.05	1.09	-90.29	-13.00	-77.29	H
198.7800	-85.48	1.4	-89.03	-13.00	-76.03	H
333.1250	-84.92	1.82	-88.89	-13.00	-75.89	H
482.0200	-80.59	2.21	-84.95	-13.00	-71.95	H
660.9850	-77.99	2.59	-82.73	-13.00	-69.73	H
843.8300	-75.64	2.96	-80.75	-13.00	-67.75	H

LTE Band 2 / BW: 20MHz / 16QAM / RB =1, RB Offset = 0
Operation Mode: Tx / Mid CH

Test Date:

March 11, 2019

Temperature: 22°C

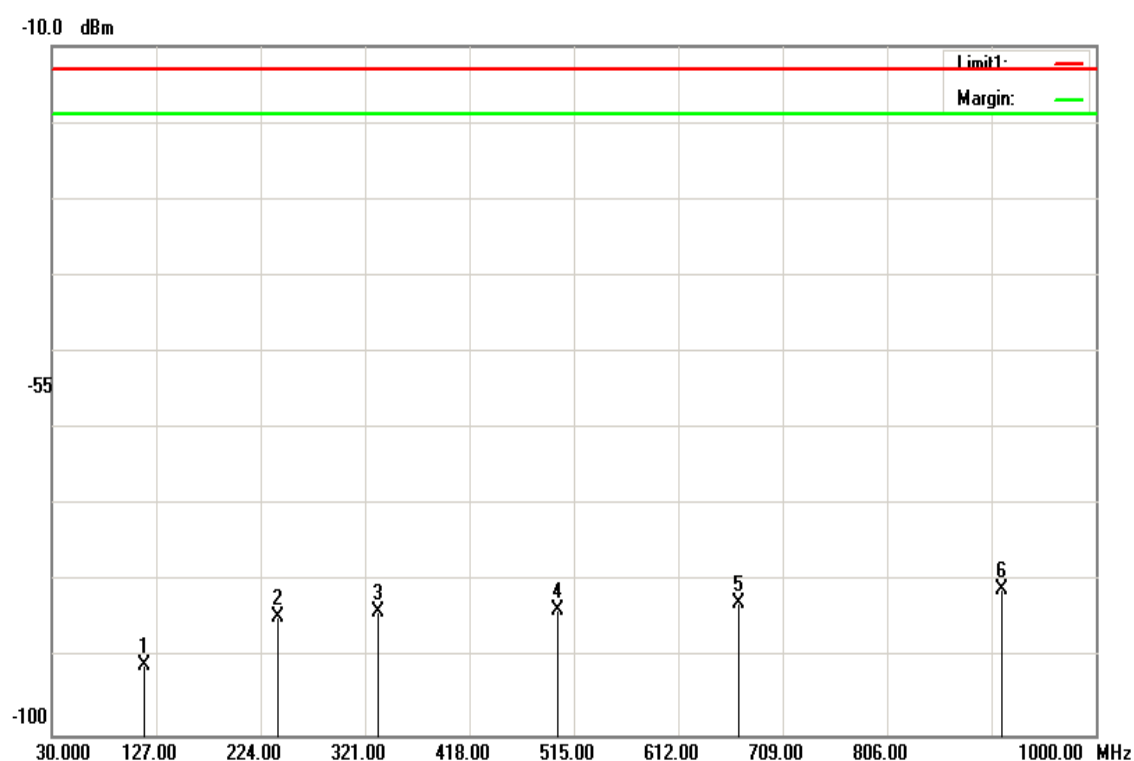
Tested by:

Dally Hong

Humidity: 46% RH

Polarity:

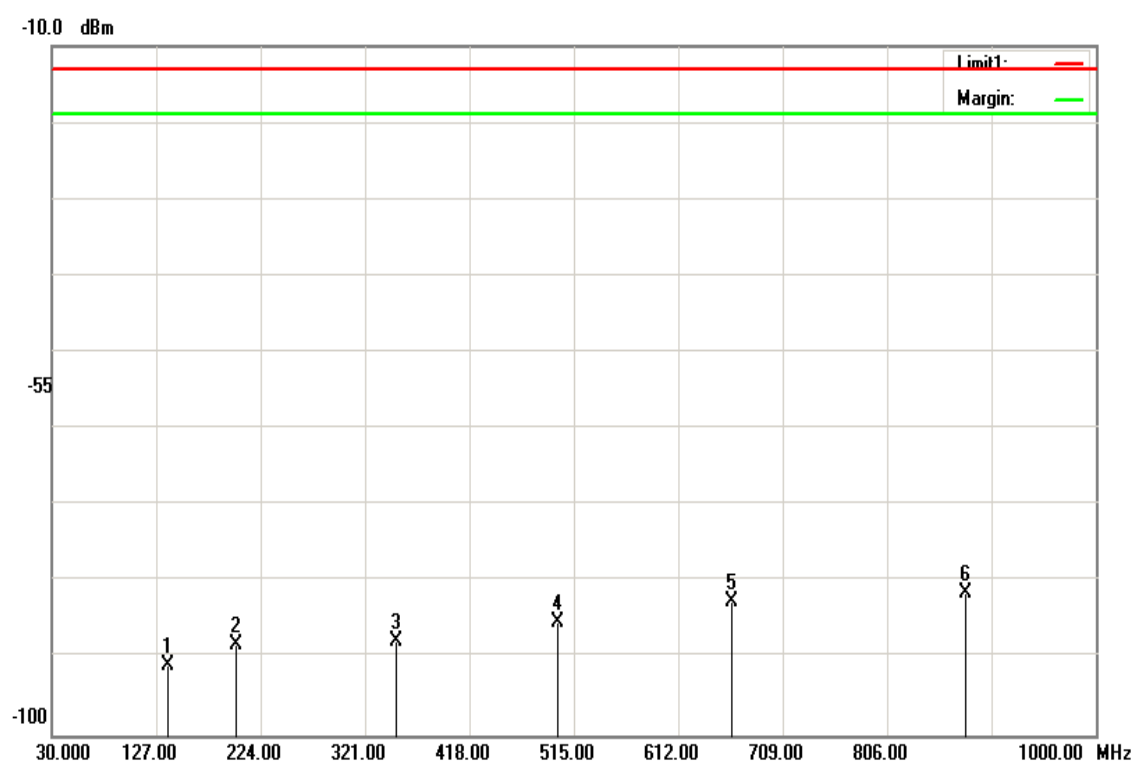
Ver.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
115.8450	-87.65	1.07	-90.87	-13.00	-77.87	V
239.5200	-80.84	1.53	-84.52	-13.00	-71.52	V
333.1250	-79.96	1.82	-83.93	-13.00	-70.93	V
499.9650	-79.27	2.25	-83.67	-13.00	-70.67	V
668.2600	-77.93	2.61	-82.69	-13.00	-69.69	V
912.7000	-75.7	3.08	-80.93	-13.00	-67.93	V

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 11, 2019
Tested by: Dally Hong
Polarity: Hor.



Frequency (MHz)	S.G. (dBm)	Ant. Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
138.1550	-87.62	1.16	-90.93	-13.00	-77.93	H
201.2050	-84.54	1.4	-88.09	-13.00	-75.09	H
350.1000	-83.71	1.87	-87.73	-13.00	-74.73	H
499.9650	-80.75	2.25	-85.15	-13.00	-72.15	H
661.4700	-77.76	2.6	-82.51	-13.00	-69.51	H
878.7500	-76.34	3.02	-81.51	-13.00	-68.51	H

Above 1GHz

LTE Band 2 / BW: 20MHz / QPSK RB =1, RB Offset = 0

Operation Mode: Tx / Low CH

Test Date:

March 13, 2019

Temperature: 22°C

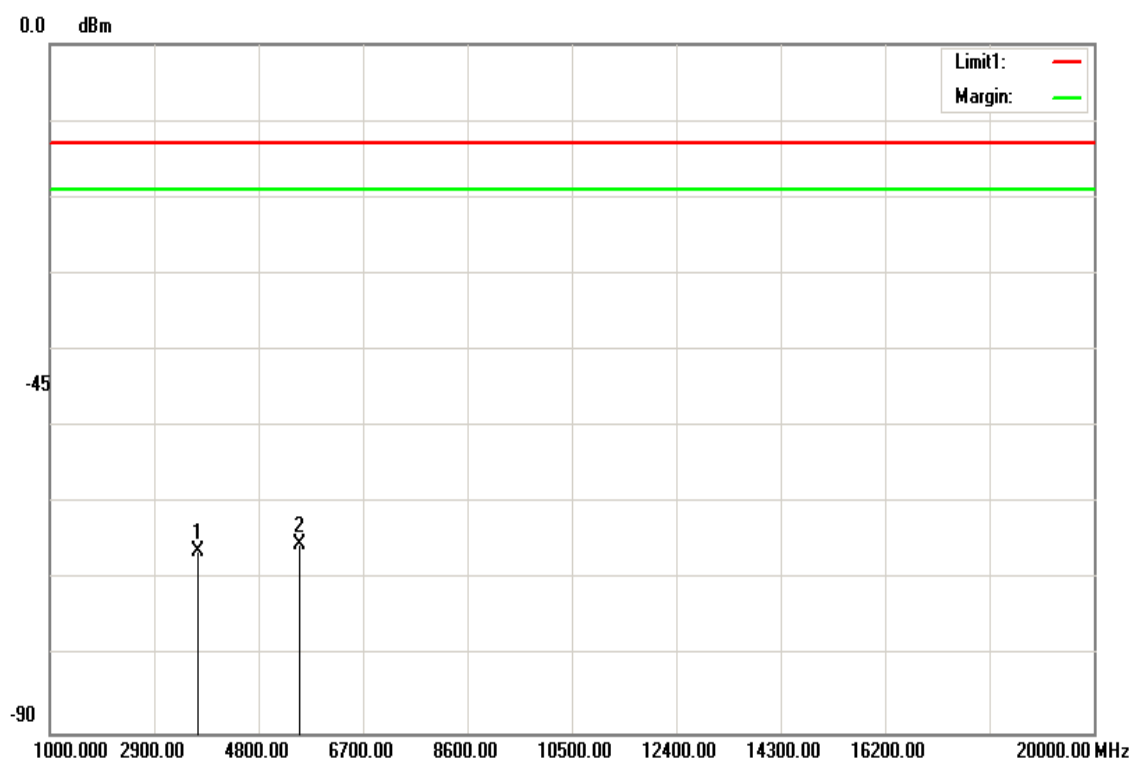
Tested by:

Dally Hong

Humidity: 46% RH

Polarity:

Ver.



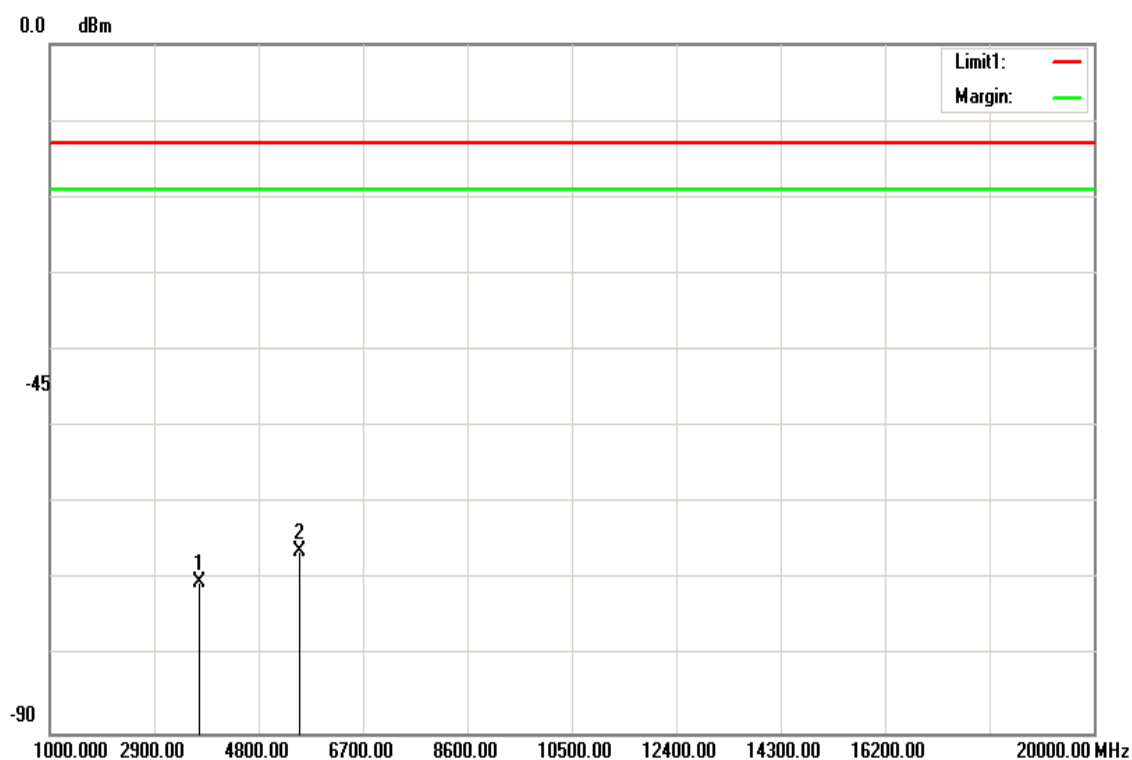
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.000	-59.52	6.63	-66.15	-13.00	-53.15	V
5553.500	-57.18	8.29	-65.47	-13.00	-52.47	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Low CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



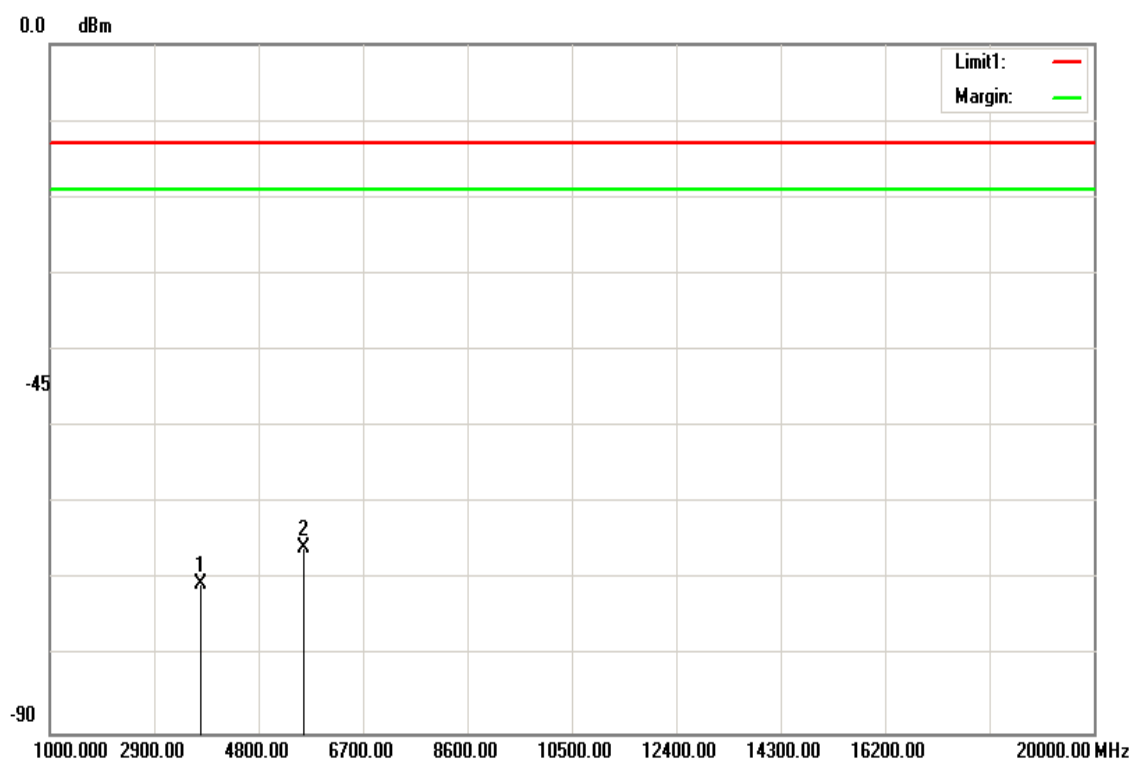
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3720.000	-63.68	6.65	-70.33	-13.00	-57.33	H
5553.500	-58.07	8.29	-66.36	-13.00	-53.36	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Ver.



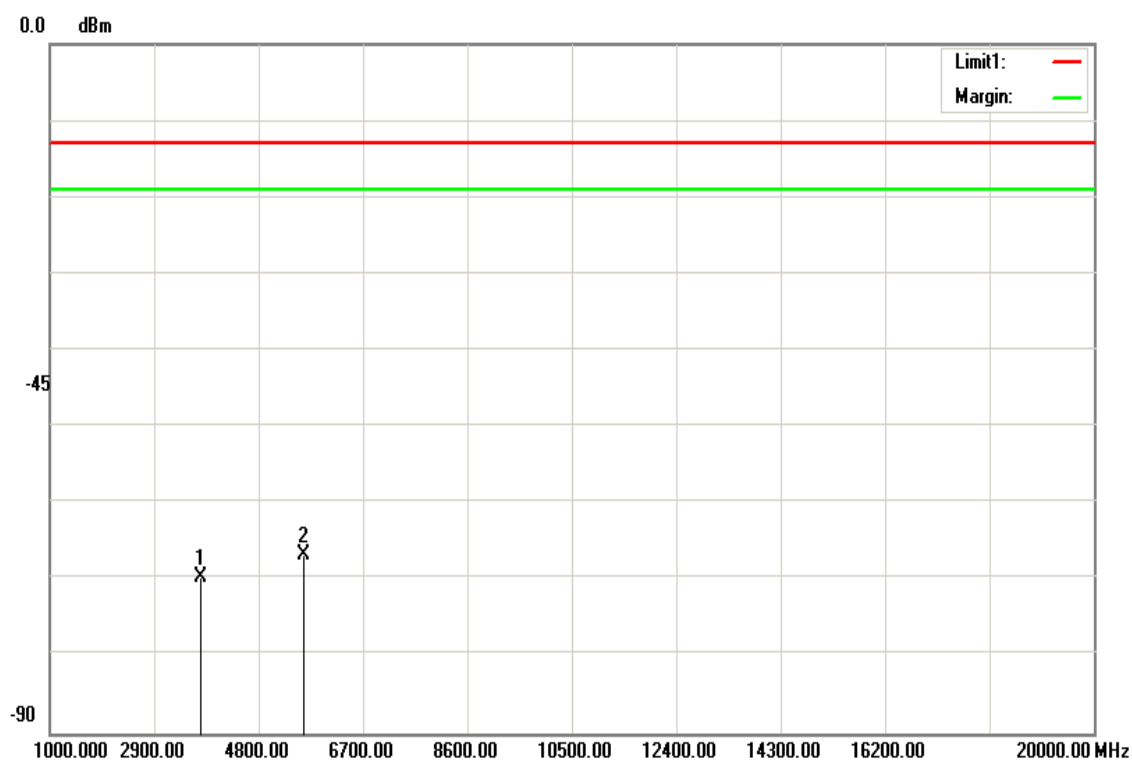
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3760.000	-63.87	6.68	-70.55	-13.00	-57.55	V
5613.000	-57.38	8.34	-65.72	-13.00	-52.72	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



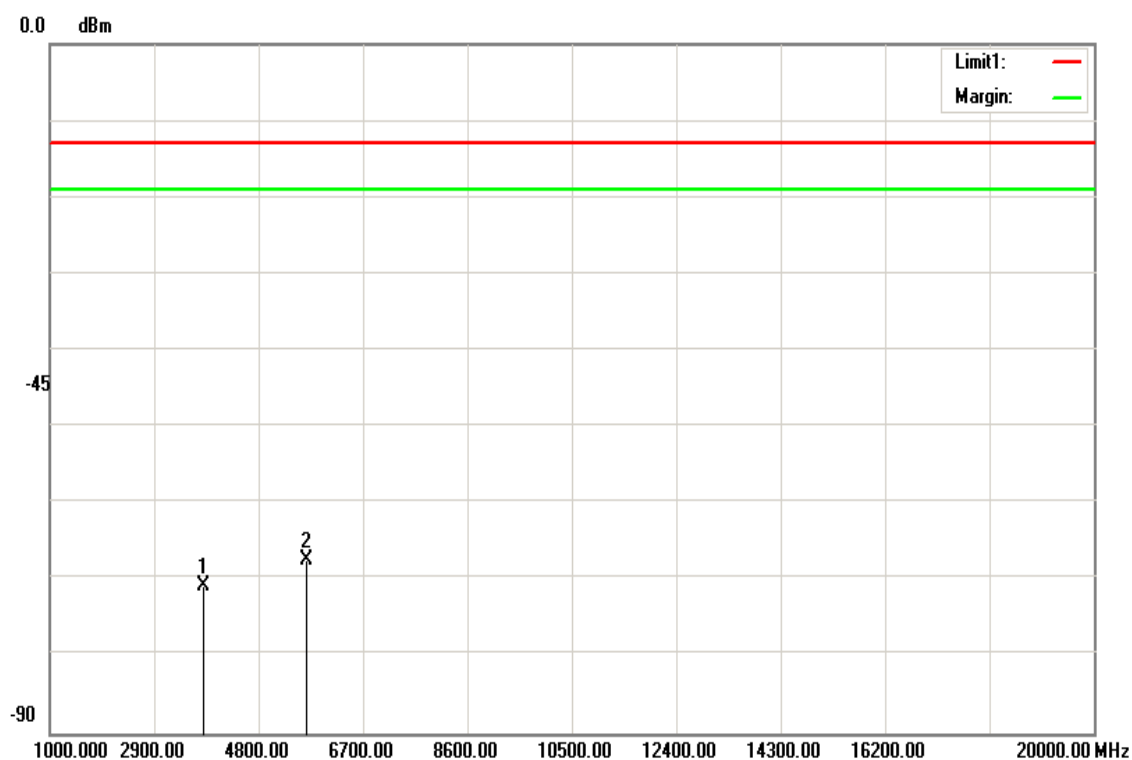
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3760.000	-63.01	6.68	-69.69	-13.00	-56.69	H
5613.000	-58.46	8.34	-66.80	-13.00	-53.80	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / High CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Ver.



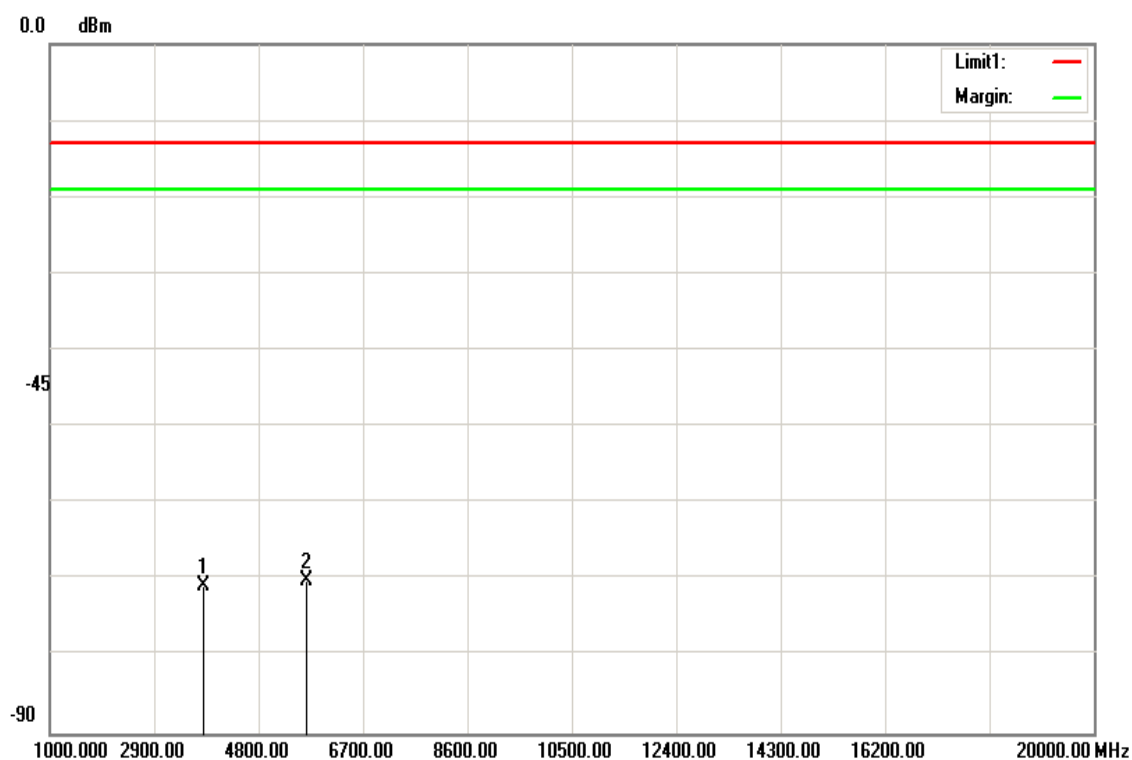
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3800.000	-63.96	6.72	-70.68	-13.00	-57.68	V
5672.500	-58.91	8.4	-67.31	-13.00	-54.31	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / High CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3800.000	-63.93	6.72	-70.65	-13.00	-57.65	H
5672.500	-61.58	8.4	-69.98	-13.00	-56.98	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

LTE Band 2 / BW: 20MHz / 16QAM / RB =1, RB Offset = 0

Operation Mode: Tx / Low CH

Test Date:

March 13, 2019

Temperature: 22°C

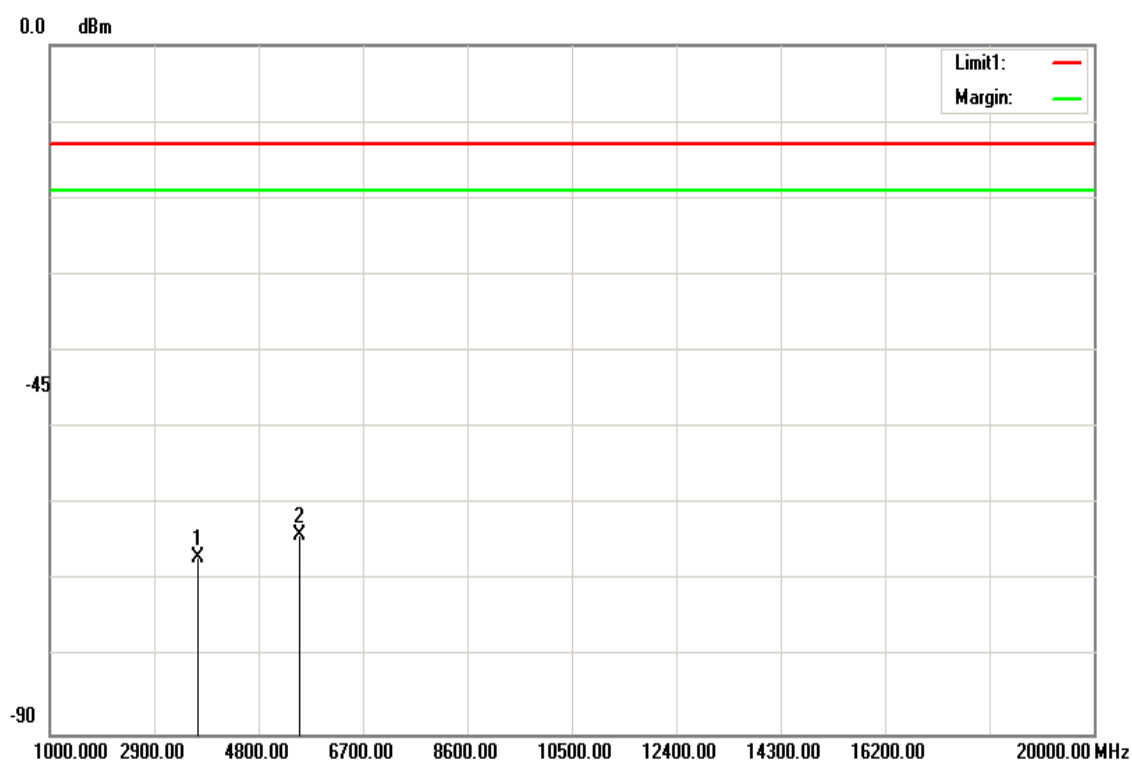
Tested by:

Dally Hong

Humidity: 46% RH

Polarity:

Ver.



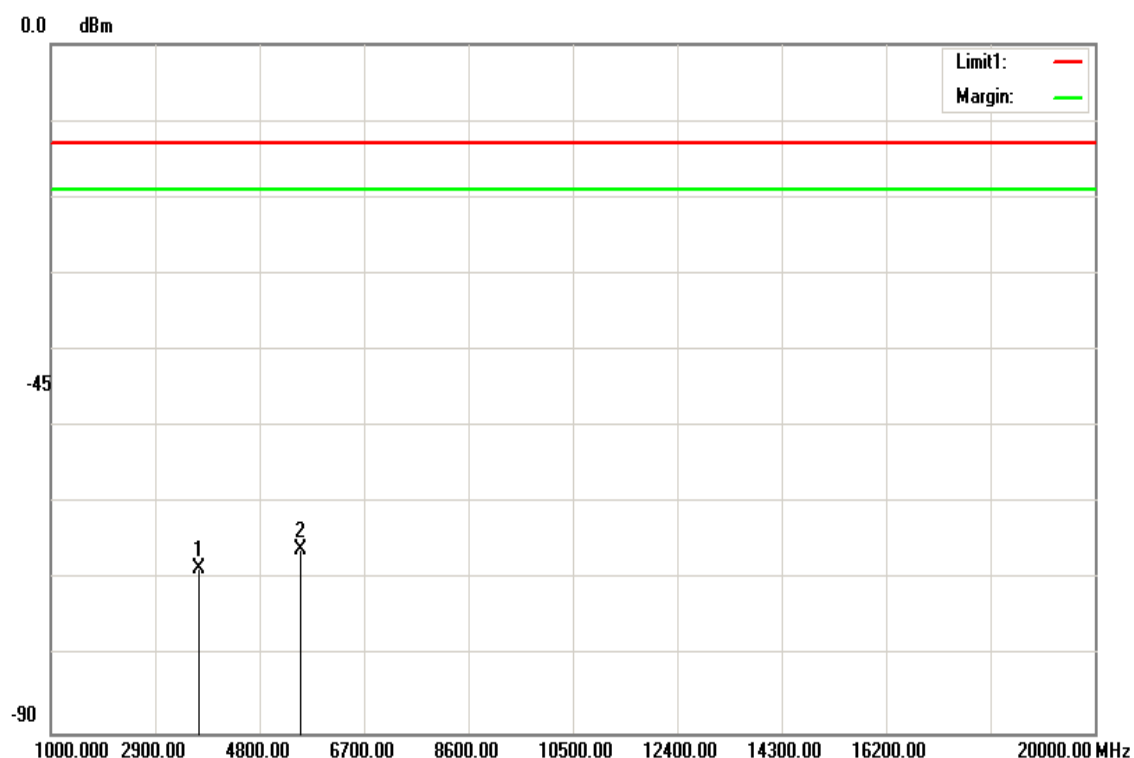
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.000	-60.23	6.63	-66.86	-13.00	-53.86	V
5553.500	-55.76	8.29	-64.05	-13.00	-51.05	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Low CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



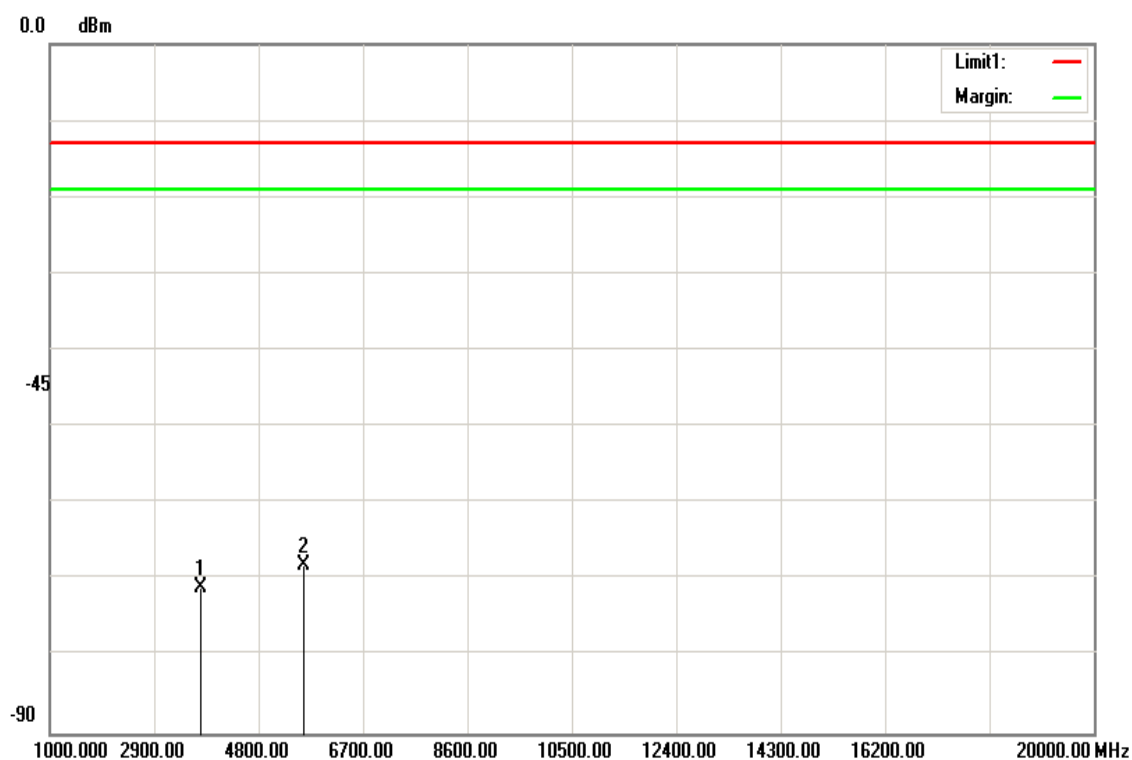
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3702.000	-61.92	6.63	-68.55	-13.00	-55.55	H
5553.500	-57.68	8.29	-65.97	-13.00	-52.97	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Ver.



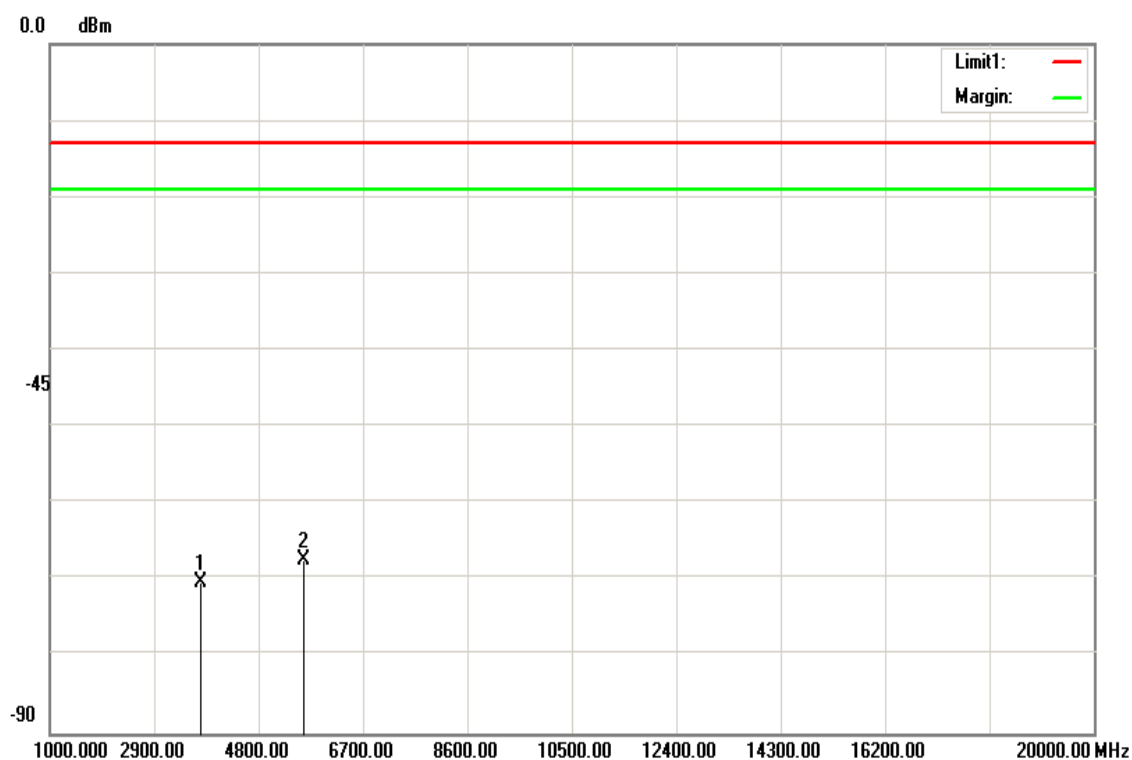
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3760.000	-64.27	6.68	-70.95	-13.00	-57.95	V
5613.000	-59.77	8.34	-68.11	-13.00	-55.11	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / Mid CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



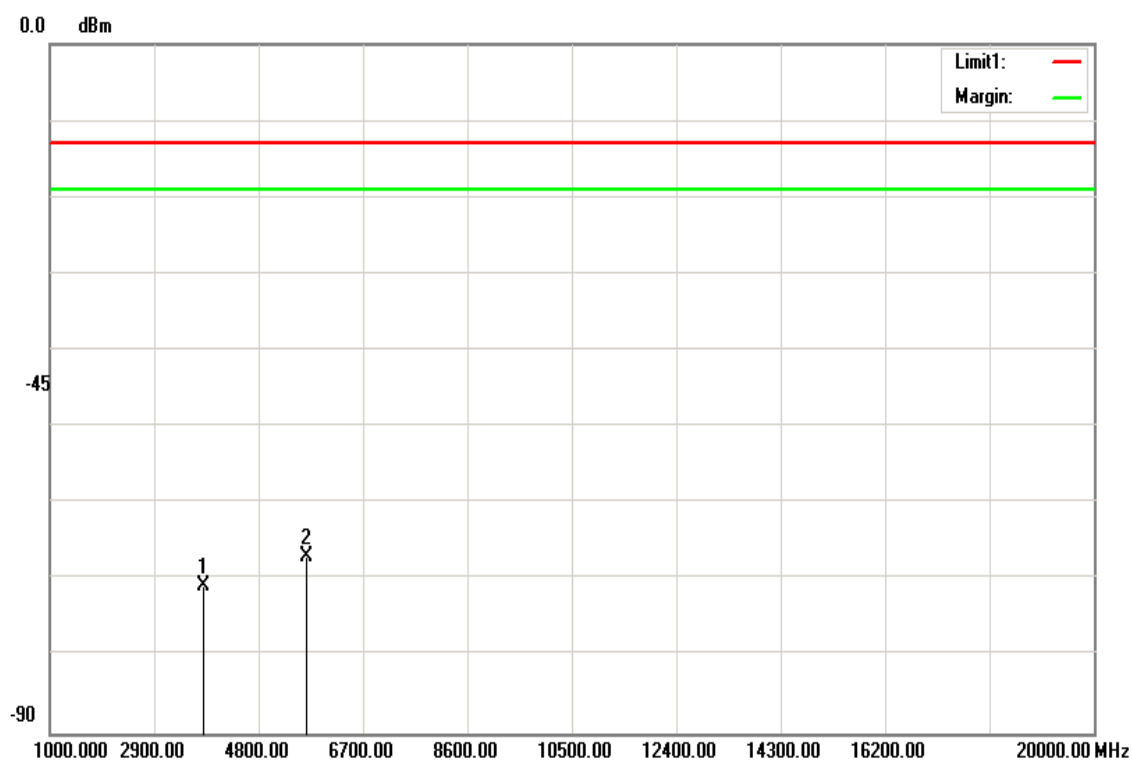
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3760.000	-63.62	6.68	-70.30	-13.00	-57.30	H
5613.000	-59	8.34	-67.34	-13.00	-54.34	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / High CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Ver.



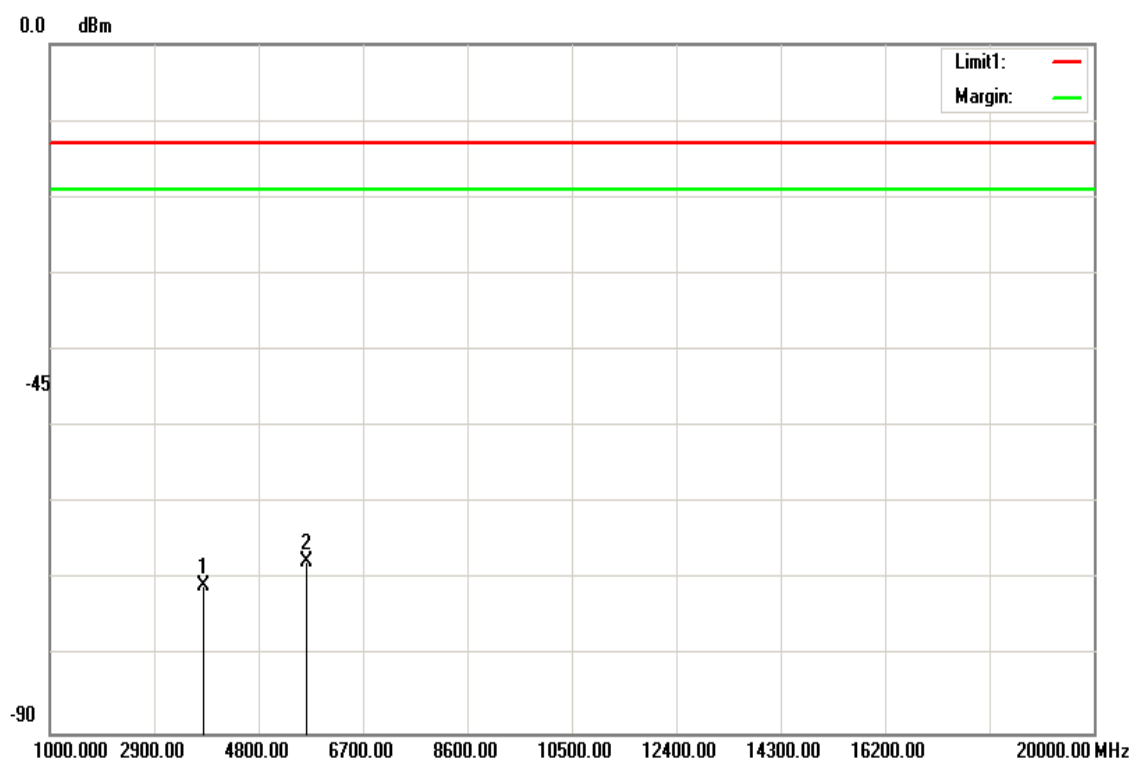
Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3800.000	-63.96	6.72	-70.68	-13.00	-57.68	V
5672.500	-58.52	8.4	-66.92	-13.00	-53.92	V
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Operation Mode: Tx / High CH
Temperature: 22°C
Humidity: 46% RH

Test Date: March 13, 2019
Tested by: Dally Hong
Polarity: Hor.



Frequency (MHz)	S.G. (dBm)	Ant.Gain (dBi)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Polarization (V/H)
3800.000	-64.1	6.72	-70.82	-13.00	-57.82	H
5672.500	-59.17	8.4	-67.57	-13.00	-54.57	H
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

--End of Report--