

8.5 BAND EDGE MEASUREMENT

LIMIT

Part 27.53(c) (2) Band 13

On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

Part 27.53(c) (4) Band 13

(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations

Part 27.53(h) (4), Band 4

AWS emission limits—(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.

p is the transmitter power measured in watts and **X** is 6 MHz or the equipment occupied bandwidth, whichever is greater.

TEST PROCEDURES

KDB 971168 D01 Power Meas License Digital Systems – Section 6.0

1. RBW $\geq 1\%$ of the emission bandwidth
2. VBW $\geq 3 \times$ RBW
3. Span was set large enough so as to capture all out of emissions near the band edge.



Report No.: T200821W04-RP1

Page: 61 / 142
Rev.: 01

TEST RESULTS:

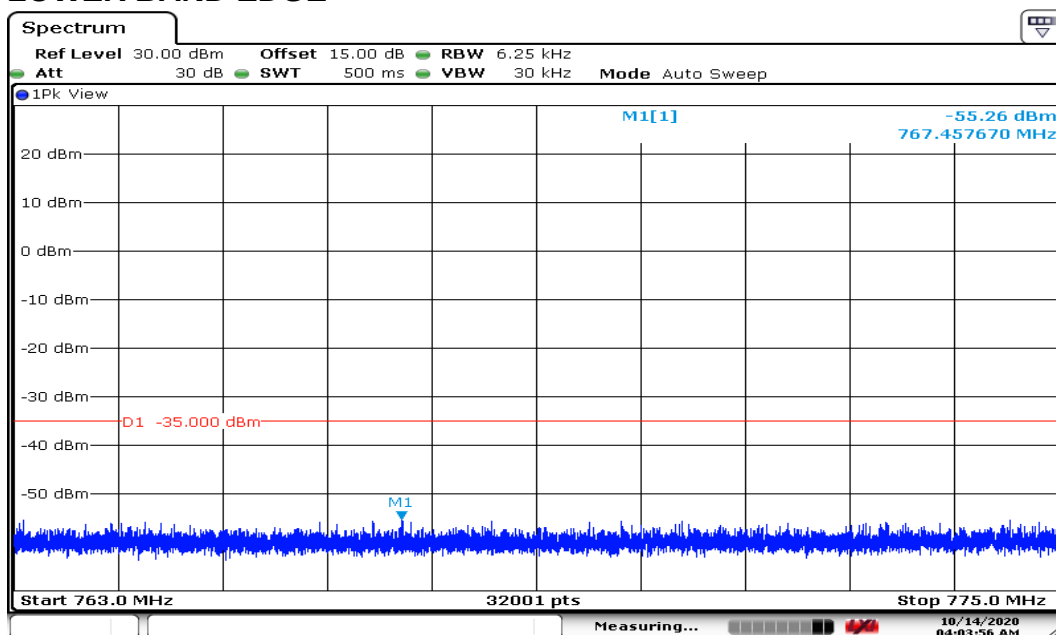
LTE Band 13

Temperature: 24°C

Humidity: 50% RH

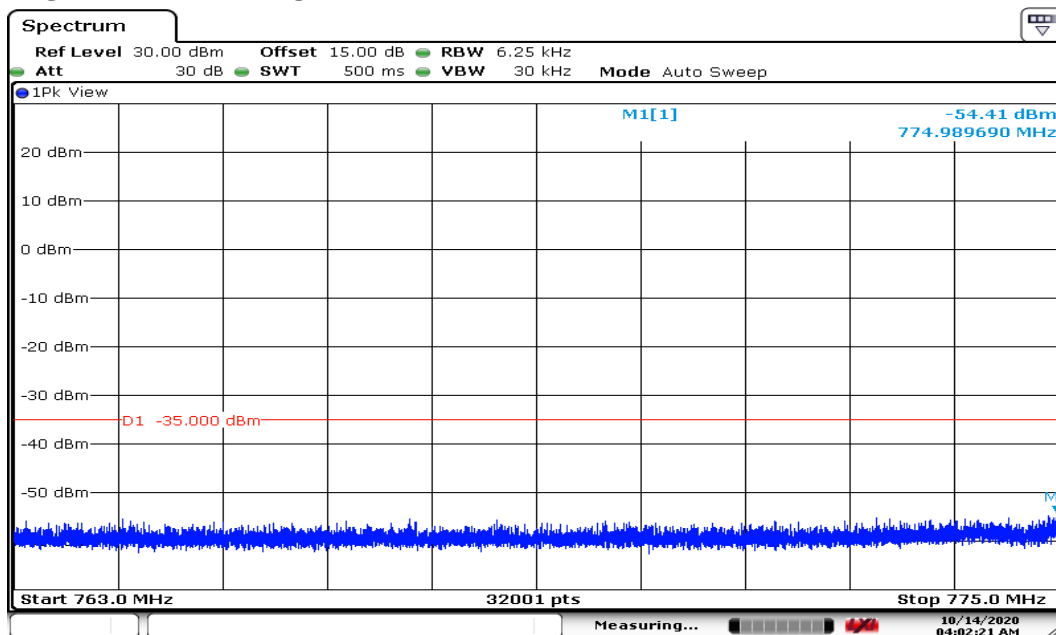
Tested by: Dally Hong

CHANNEL BANDWIDTH: 5MHz / QPSK / 1 RB ALLOCATED / RBW = 6.25K
LOWER BAND EDGE



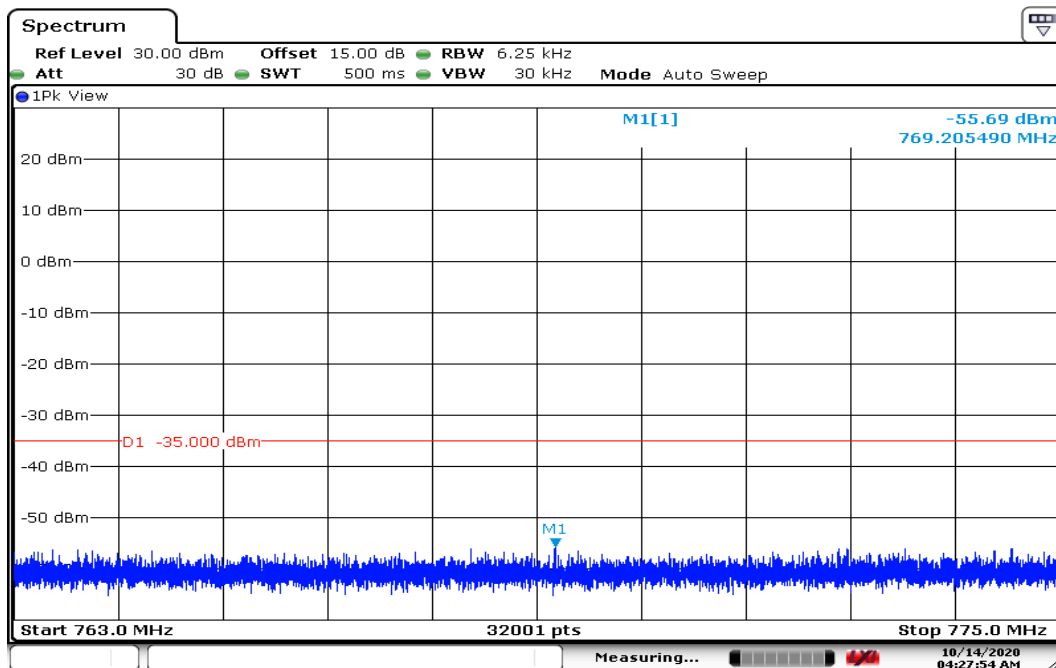
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HIGHER BAND EDGE



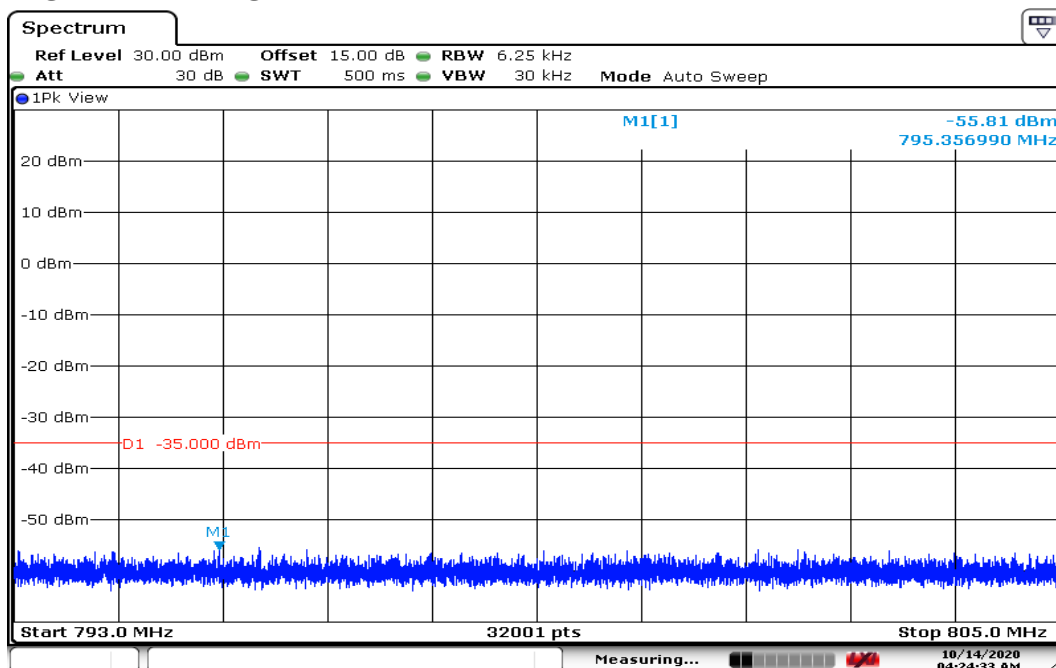
Date: 14 OCT 2020 04:02:21

CHANNEL BANDWIDTH: 10MHz / QPSK / 1 RB ALLOCATED / RBW = 6.25K LOW BAND EDGE



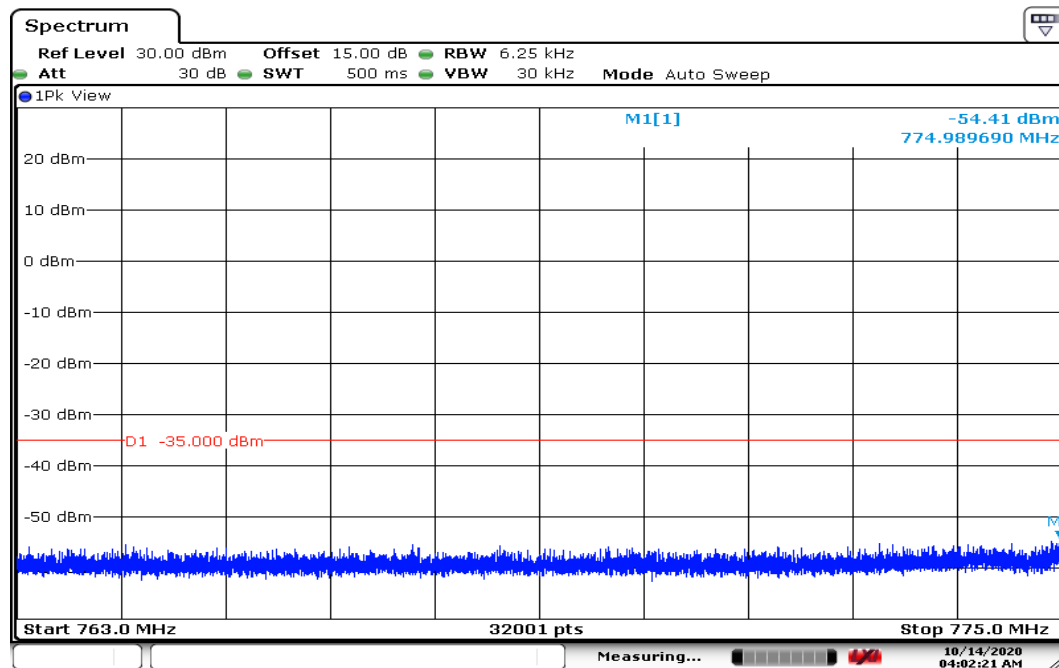
Date: 14 OCT 2020 04:27:54

HIGH BAND EDGE



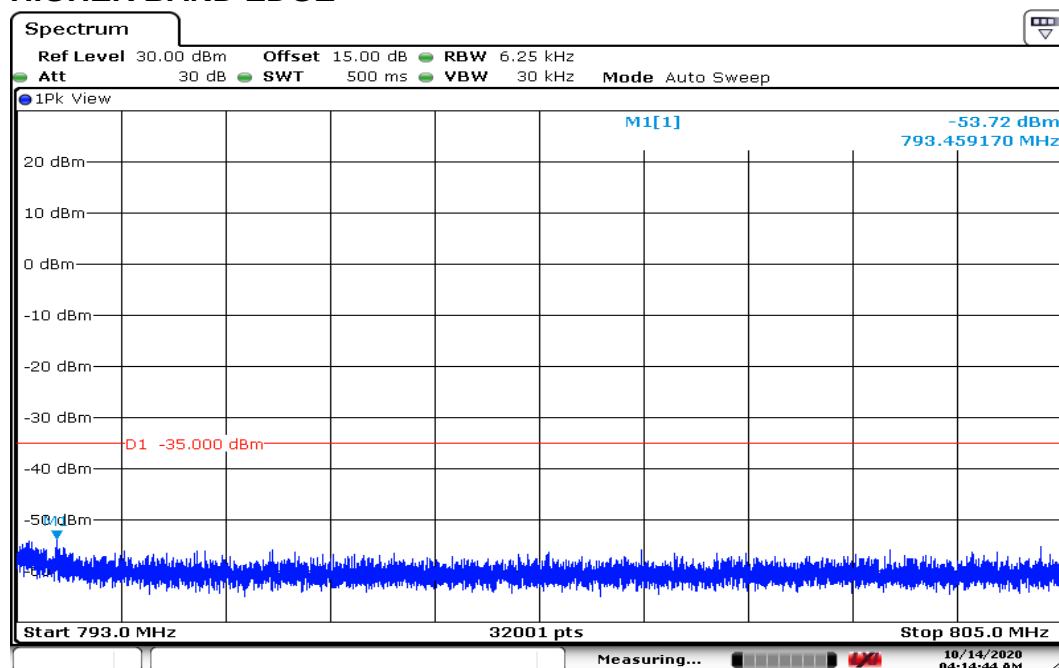
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CHANNEL BANDWIDTH: 5MHz / QPSK / FULL RB ALLOCATED / RBW = 6.25K LOWER BAND EDGE



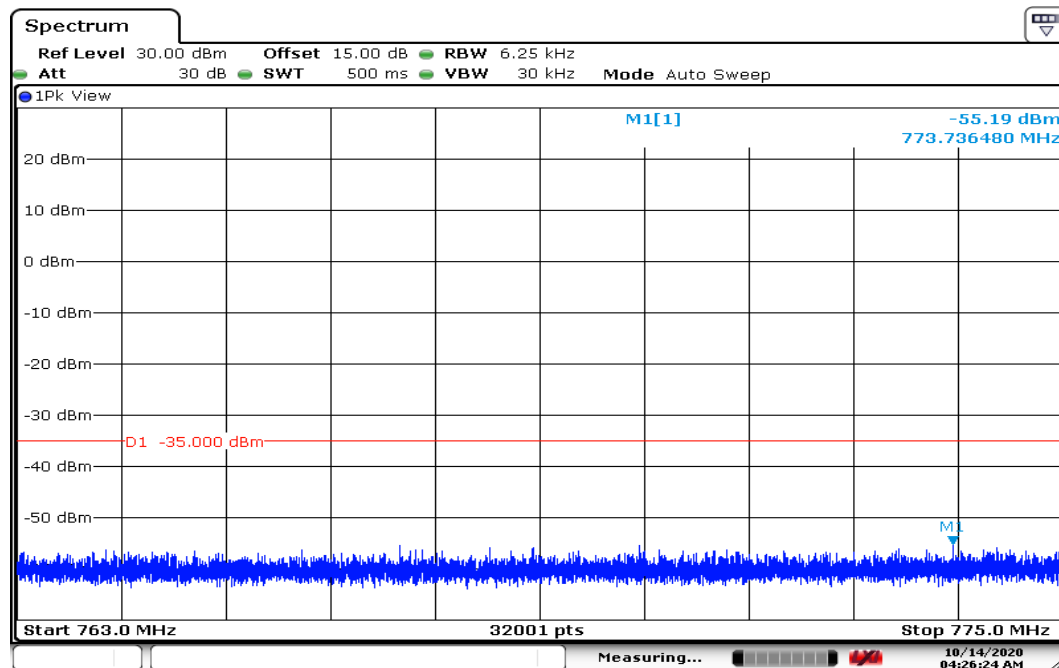
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HIGHER BAND EDGE



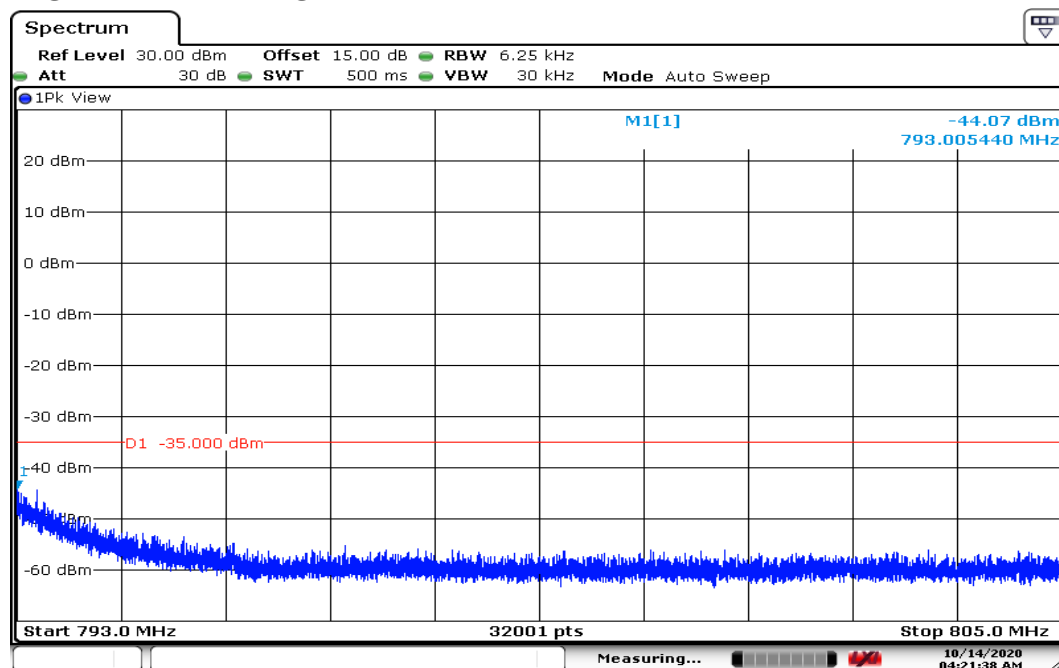
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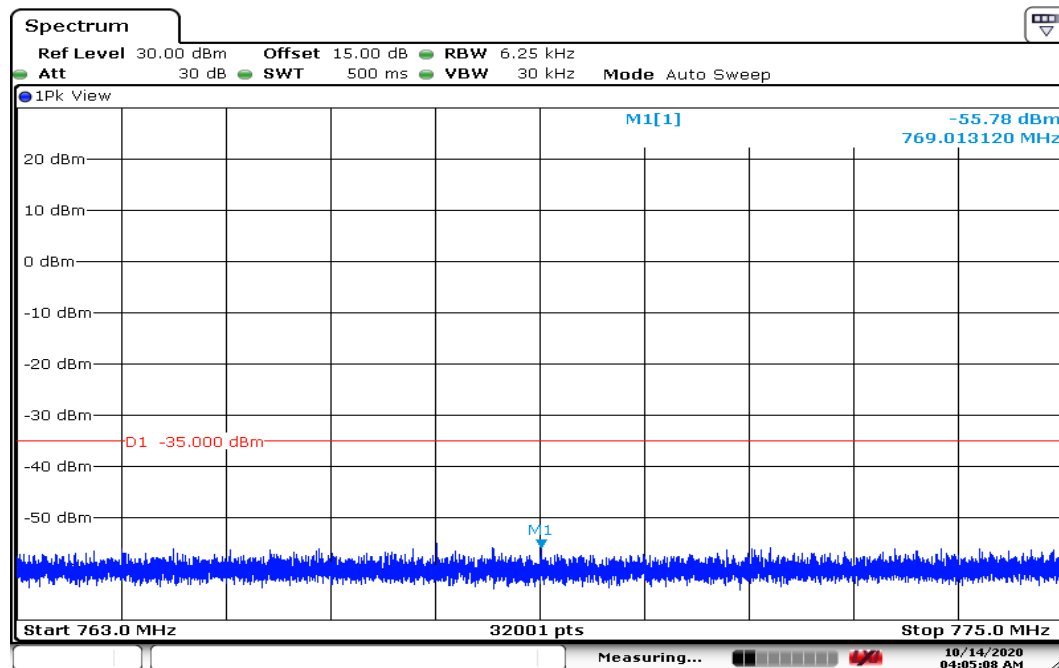
Date: 14 OCT 2020 04:26:24

HIGHER BAND EDGE



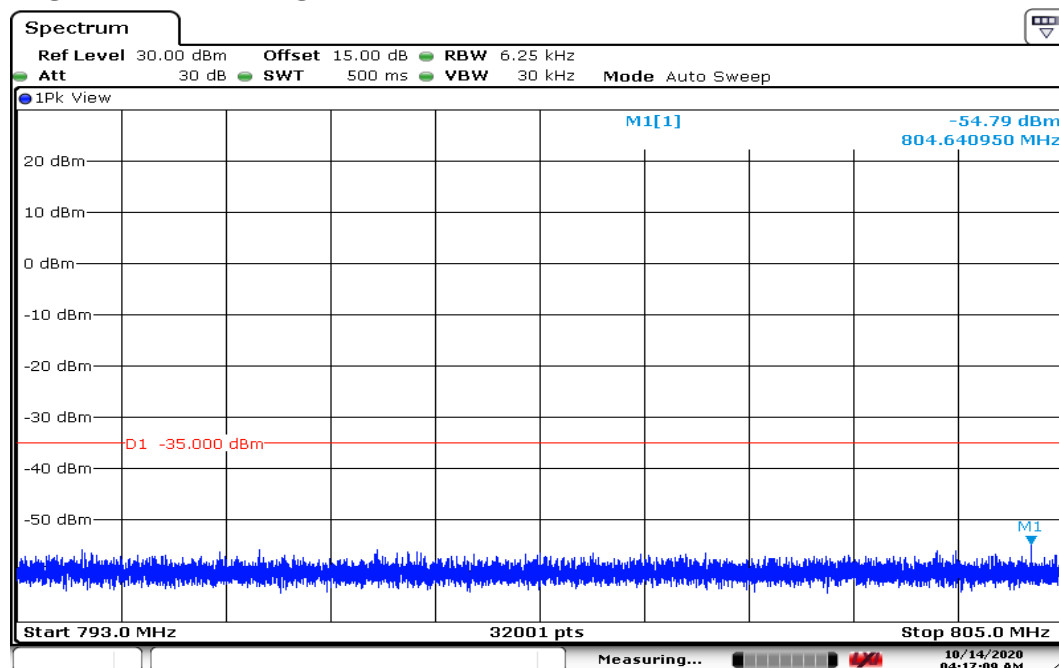
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CHANNEL BANDWIDTH: 5MHz / 16QAM / 1RB ALLOCATED / RBW = 6.25K LOWER BAND EDGE



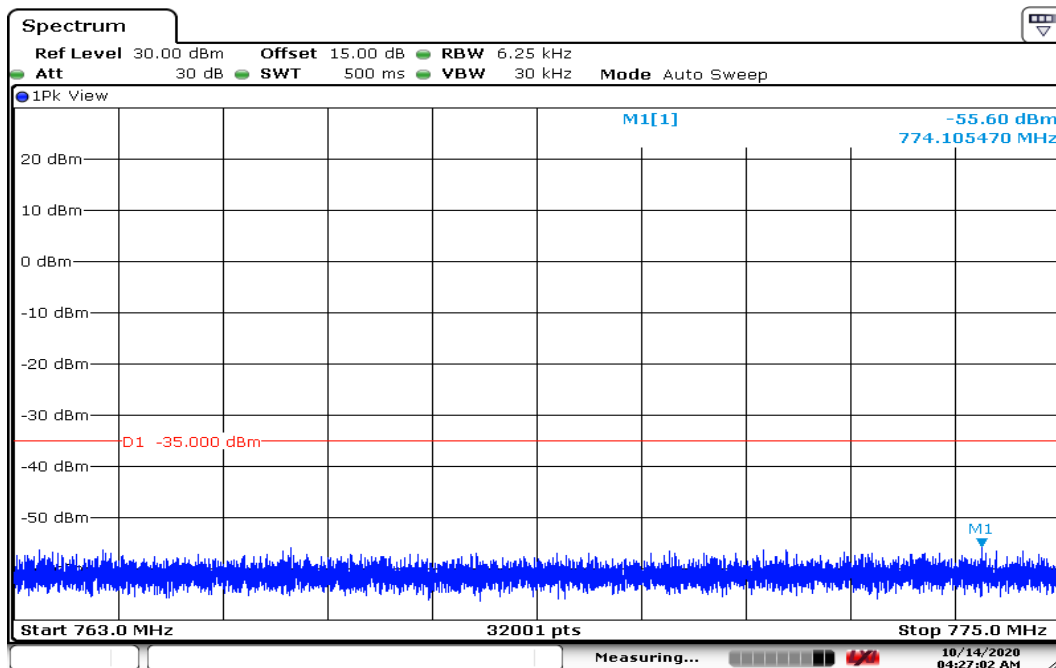
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HIGHER BAND EDGE



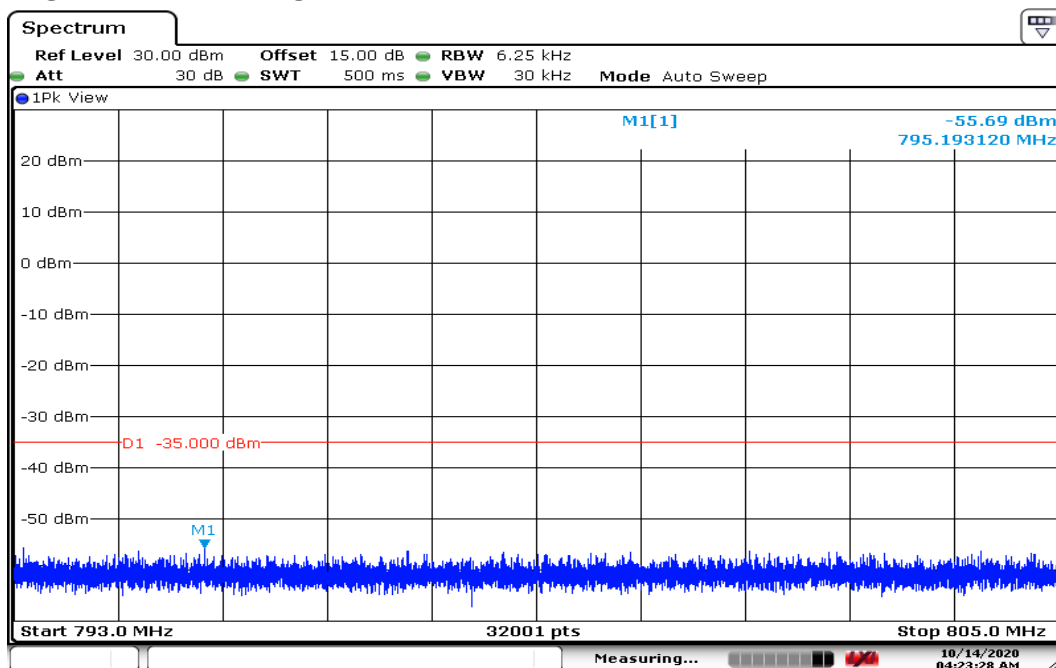
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CHANNEL BANDWIDTH: 10MHz / 16QAM / 1RB ALLOCATED / RBW = 6.25K LOWER BAND EDGE



Date: 14 OCT 2020 04:27:03

HIGHER BAND EDGE



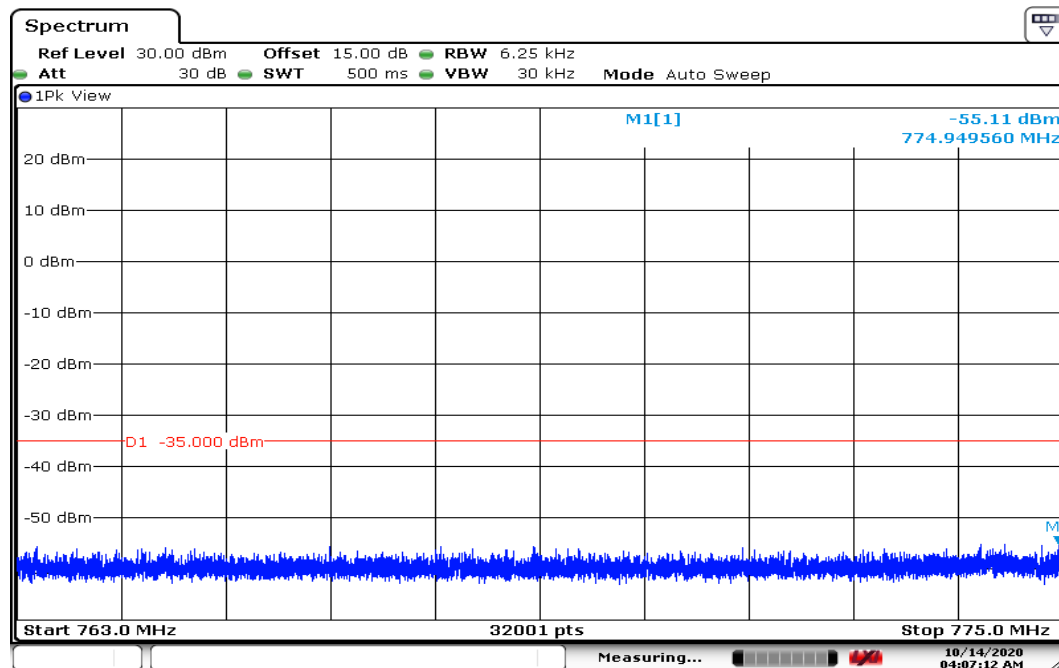
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Report No.: T200821W04-RP1

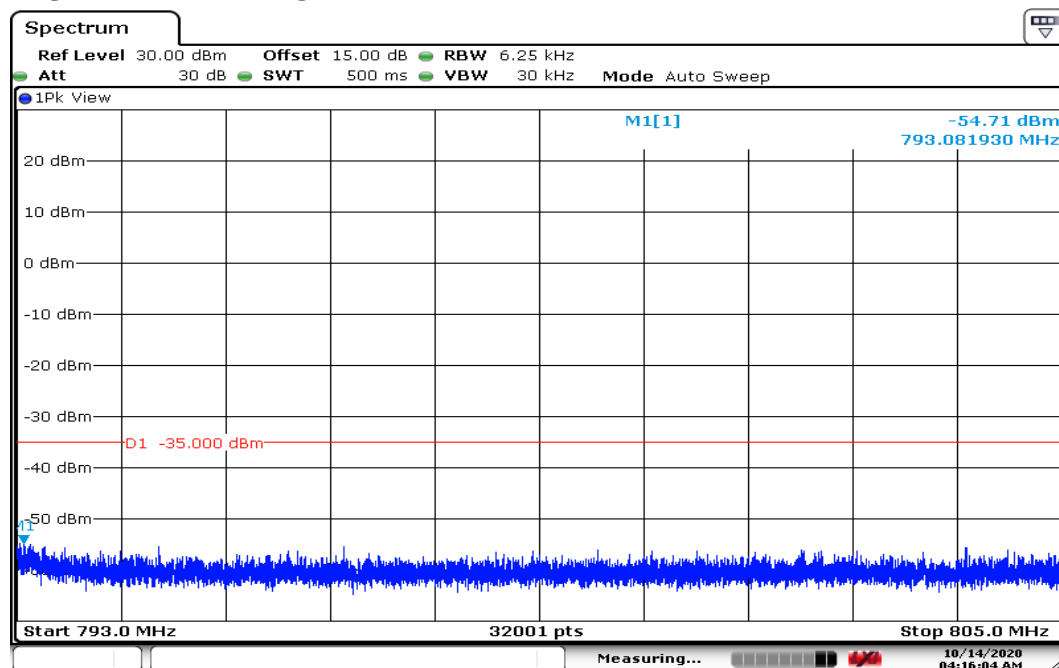
Page: 67 / 142
Rev.: 01

CHANNEL BANDWIDTH: 5MHz / 16QAM / FULLRB ALLOCATED / RBW = 6.25K LOWER BAND EDGE



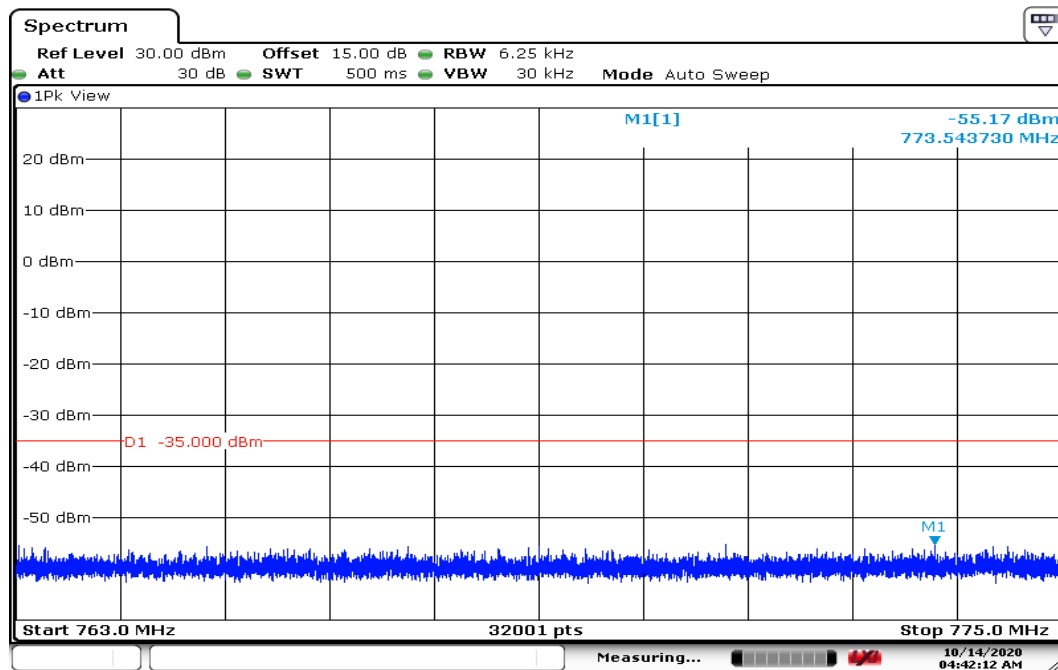
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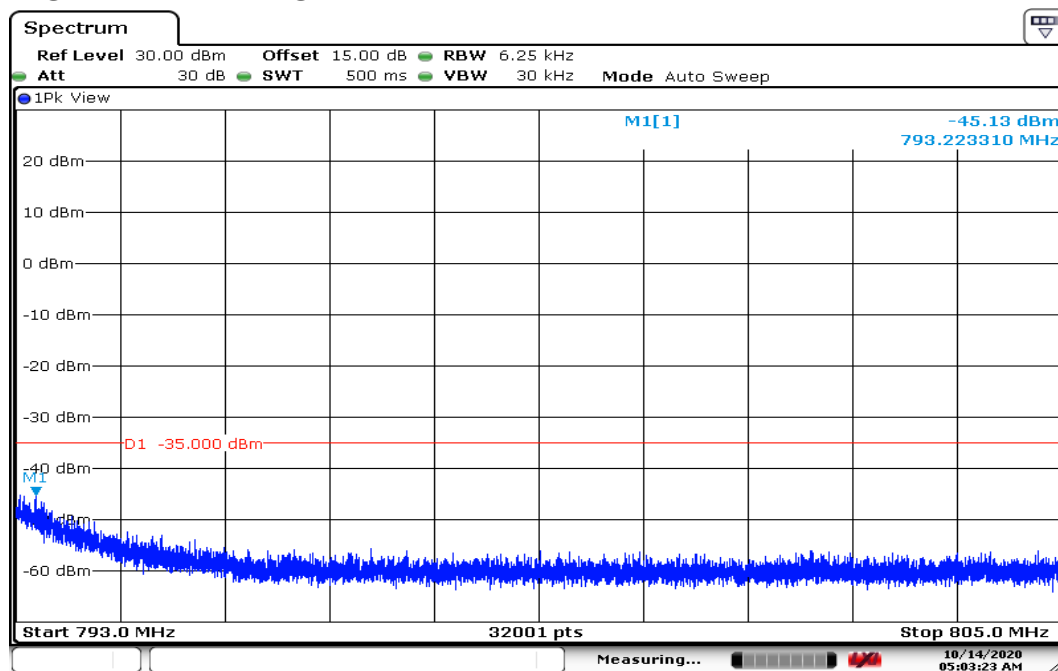
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CHANNEL BANDWIDTH: 10MHz / 16QAM / FULLRB ALLOCATED / RBW = 6.25K LOWER BAND EDGE



Date: 14 OCT 2020 04:42:12

HIGHER BAND EDGE



Date: 14 OCT 2020 05:03:24



Report No.: T200821W04-RP1

Page: 69 / 142
Rev.: 01

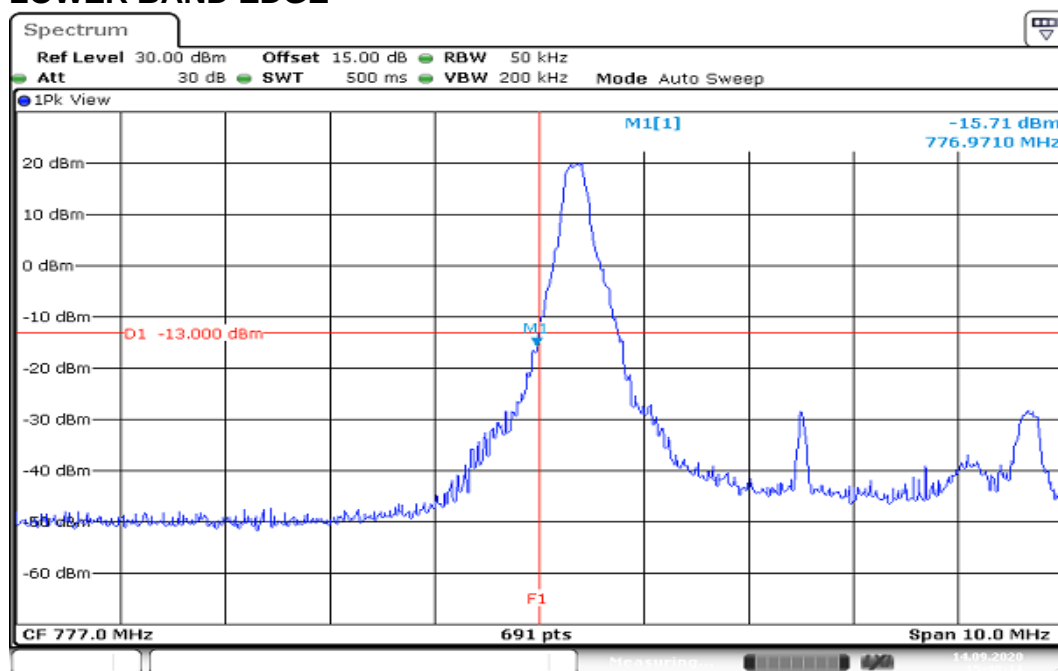
LTE Band 13

Temperature: 24°C

Humidity: 50% RH

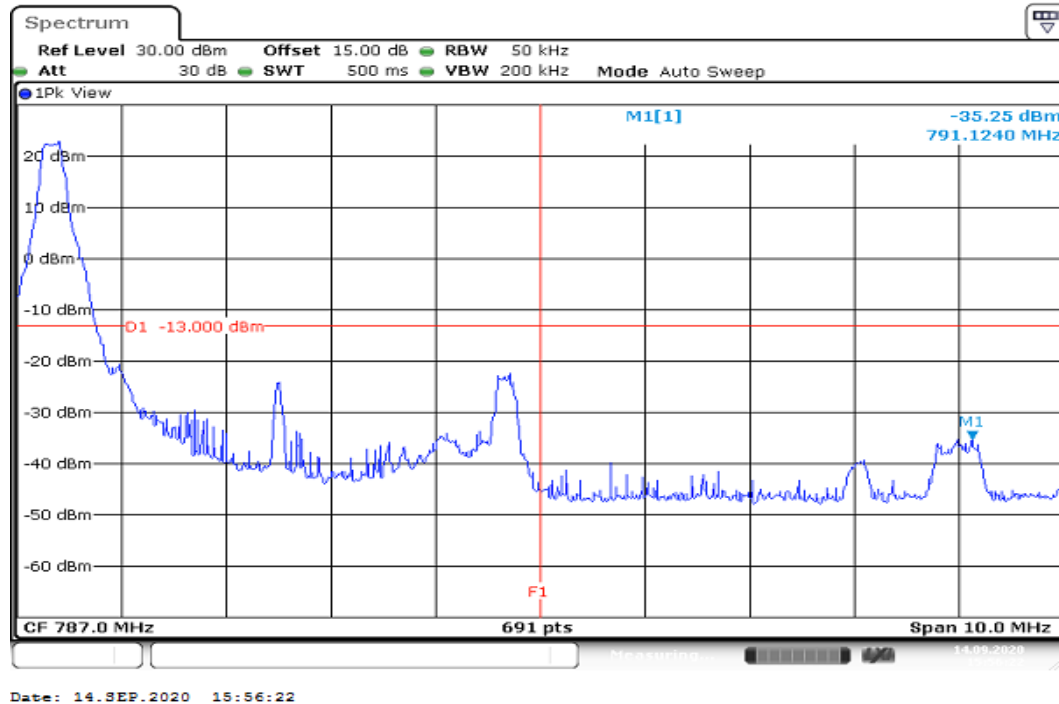
Tested by: Jane Wang

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

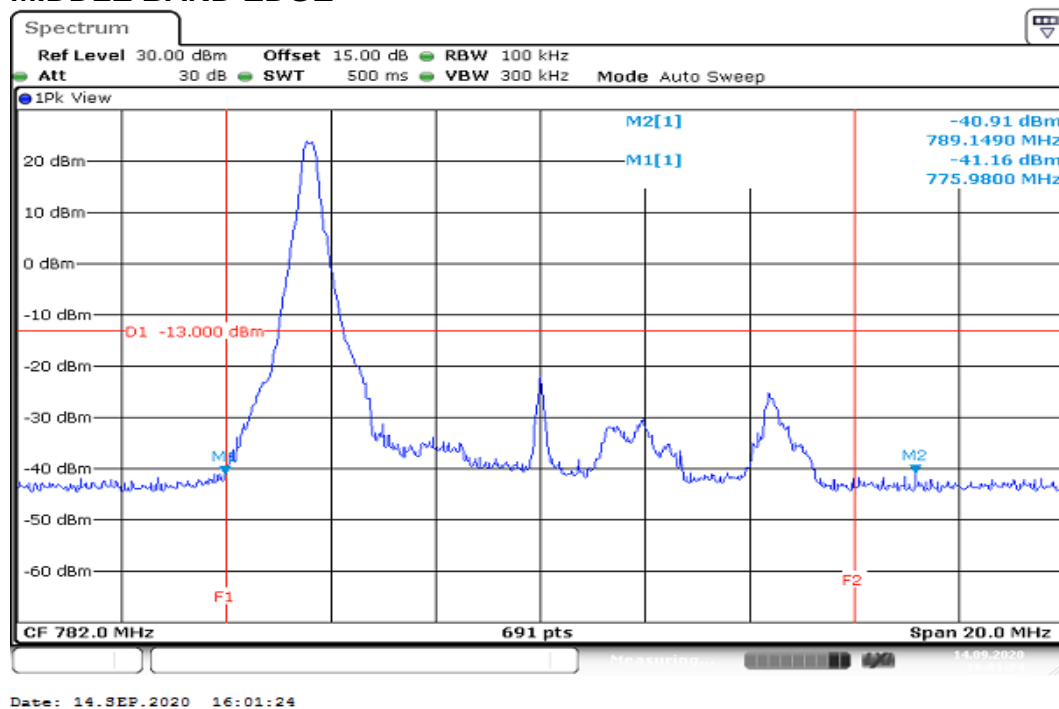


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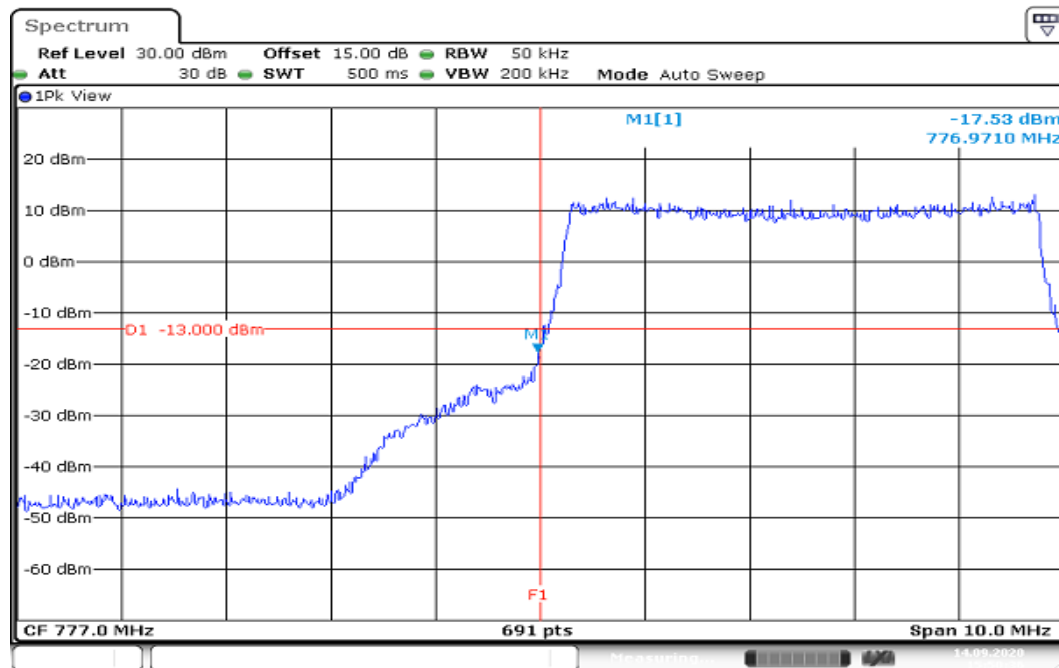
HIGHER BAND EDGE



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

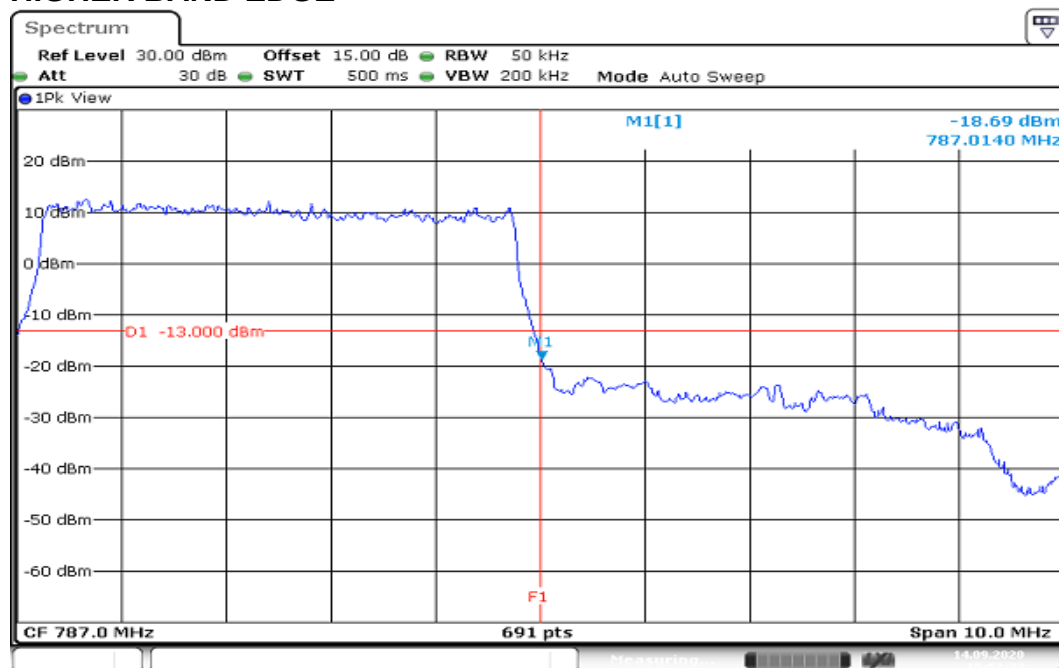


CHANNEL BANDWIDTH: 5MHz / QPSK / FULL RB ALLOCATED LOWER BAND EDGE



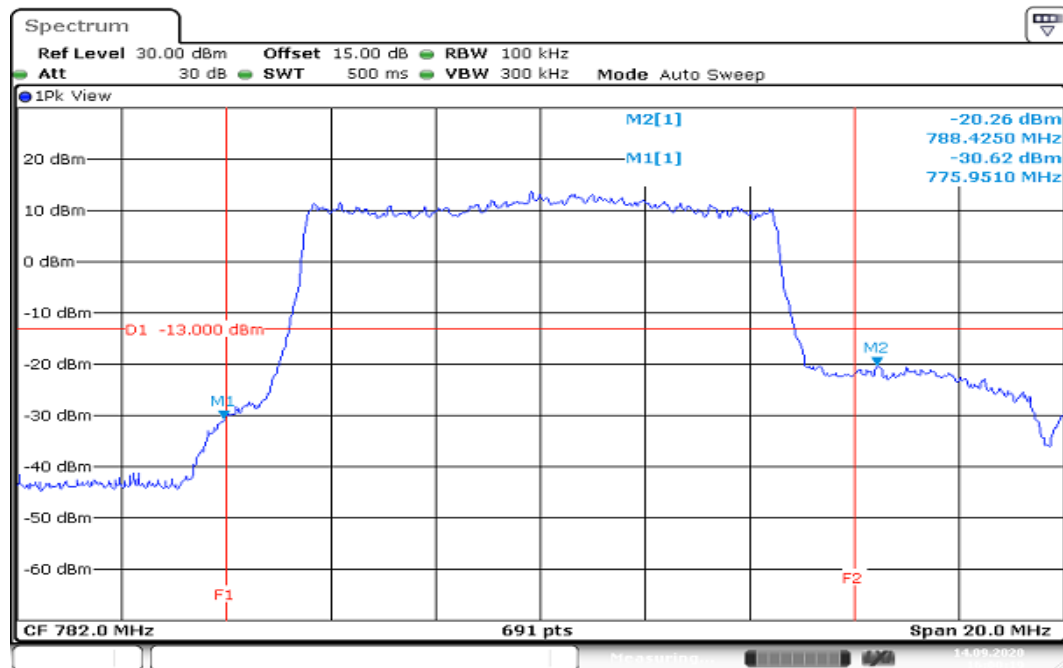
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HIGHER BAND EDGE



Date: 14.SEP.2020 15:52:33

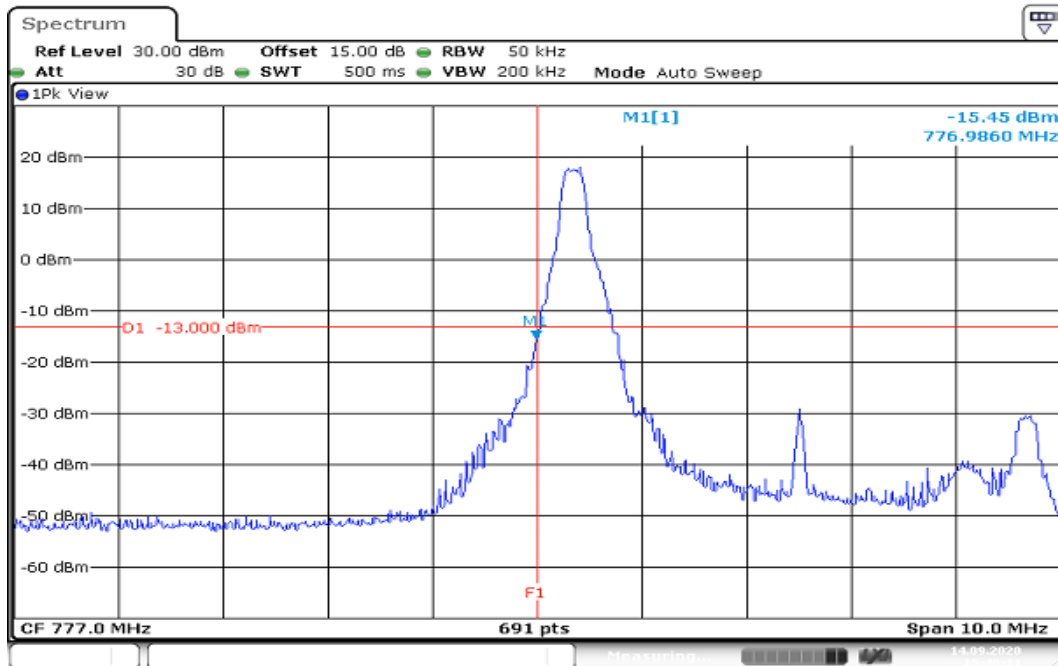
CHANNEL BANDWIDTH: 10MHz / QPSK / FULL RB ALLOCATED MIDDLE BAND EDGE



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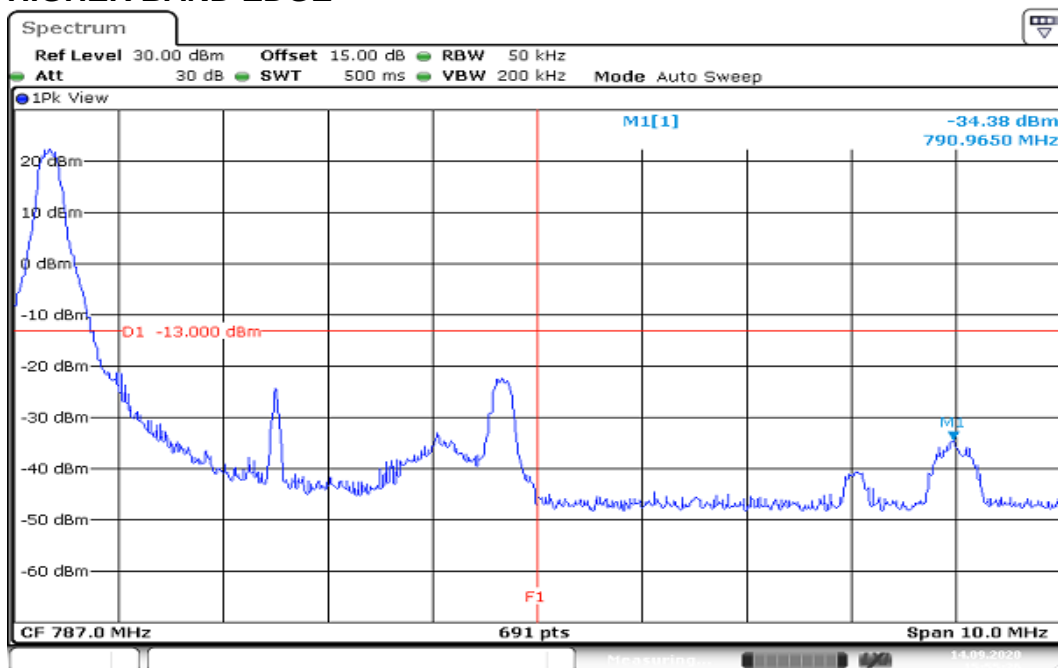
Report No.: T200821W04-RP1

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



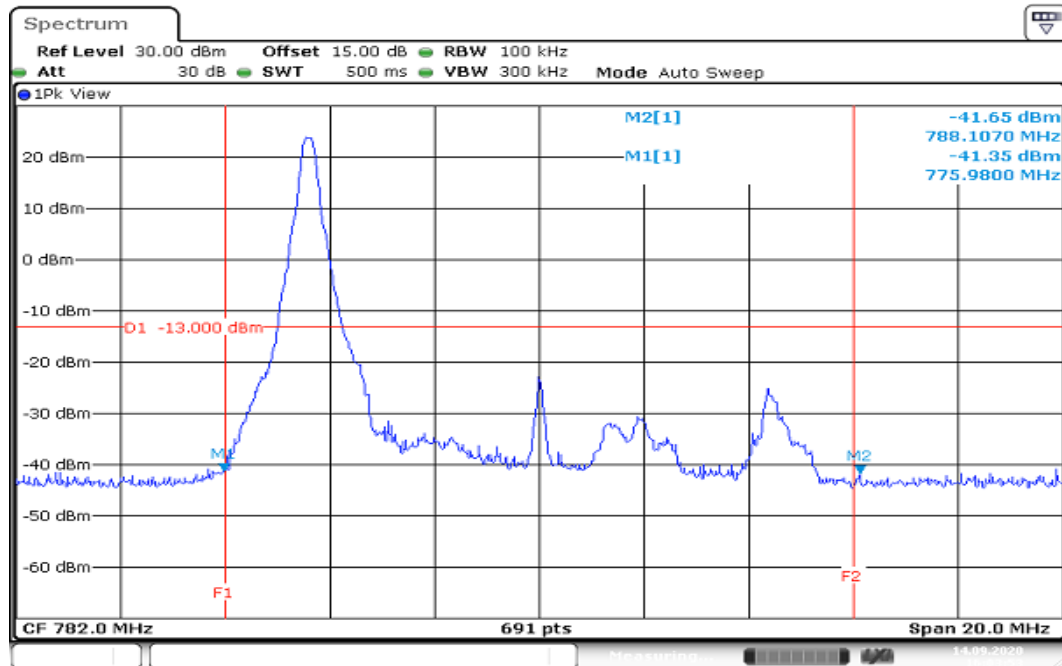
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HIGHER BAND EDGE



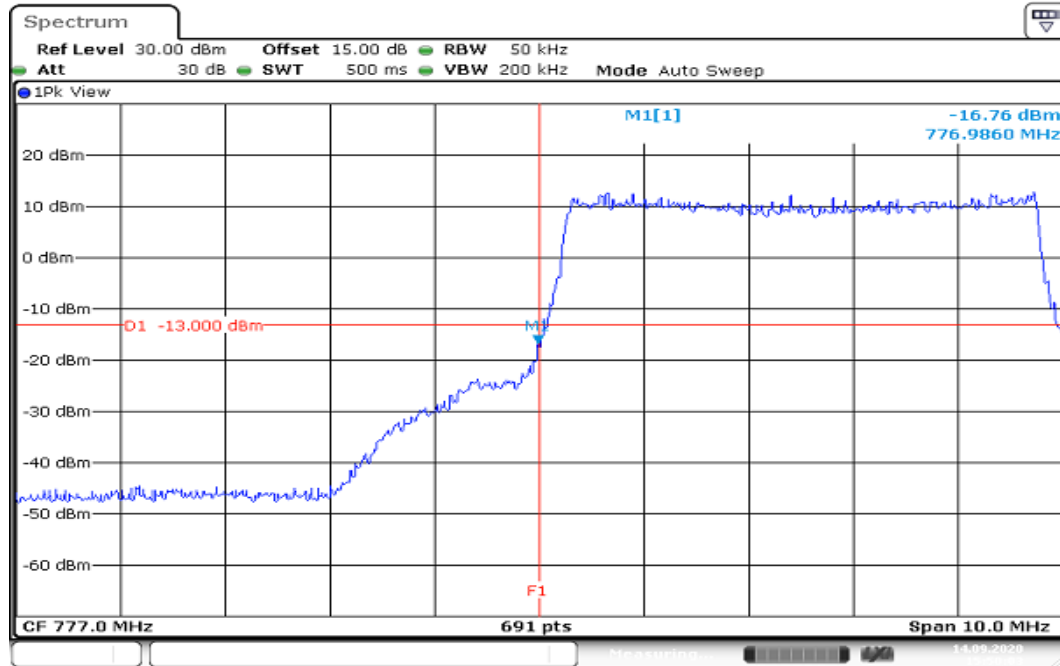
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CHANNEL BANDWIDTH: 10MHz / 16QAM / 1RB ALLOCATED MIDDLE BAND EDGE

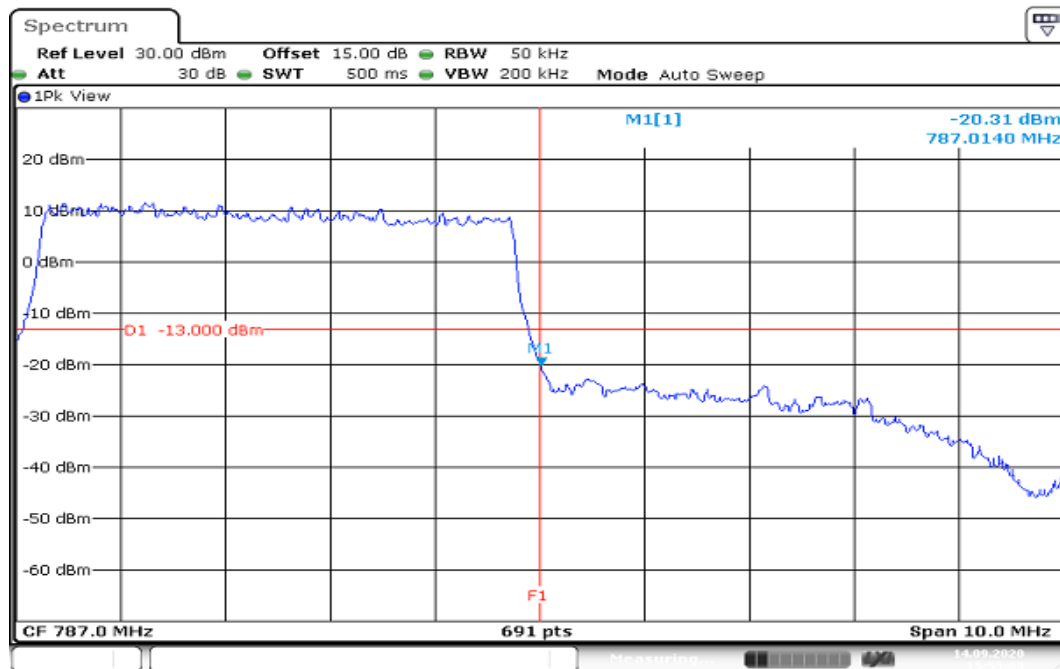


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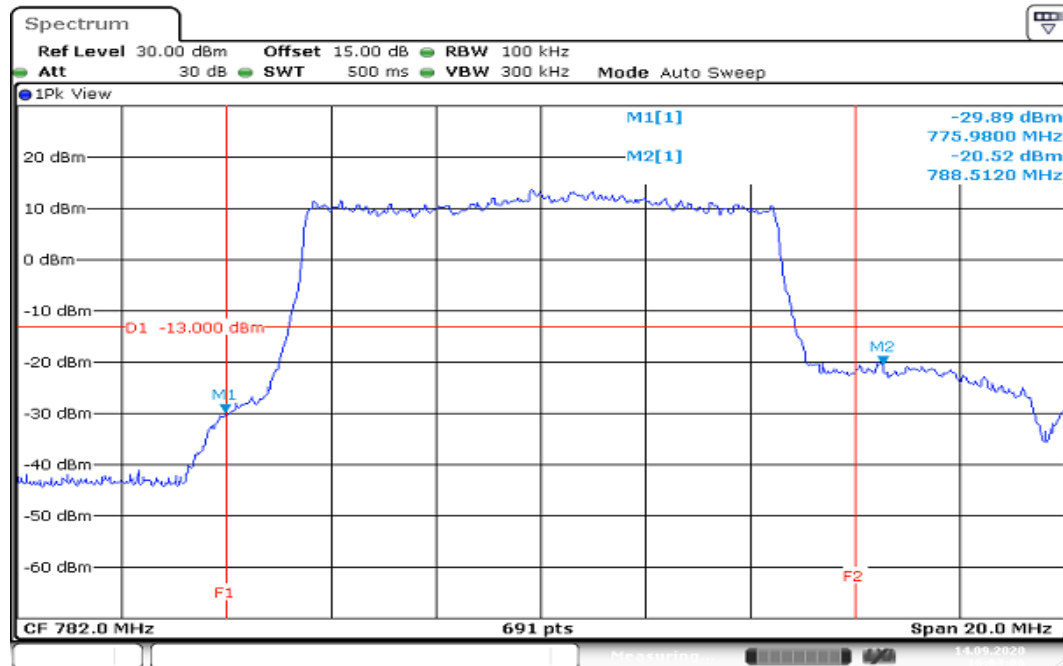
CHANNEL BANDWIDTH: 5MHz / 16QAM / FULLRB ALLOCATED LOWER BAND EDGE



HIGHER BAND EDGE



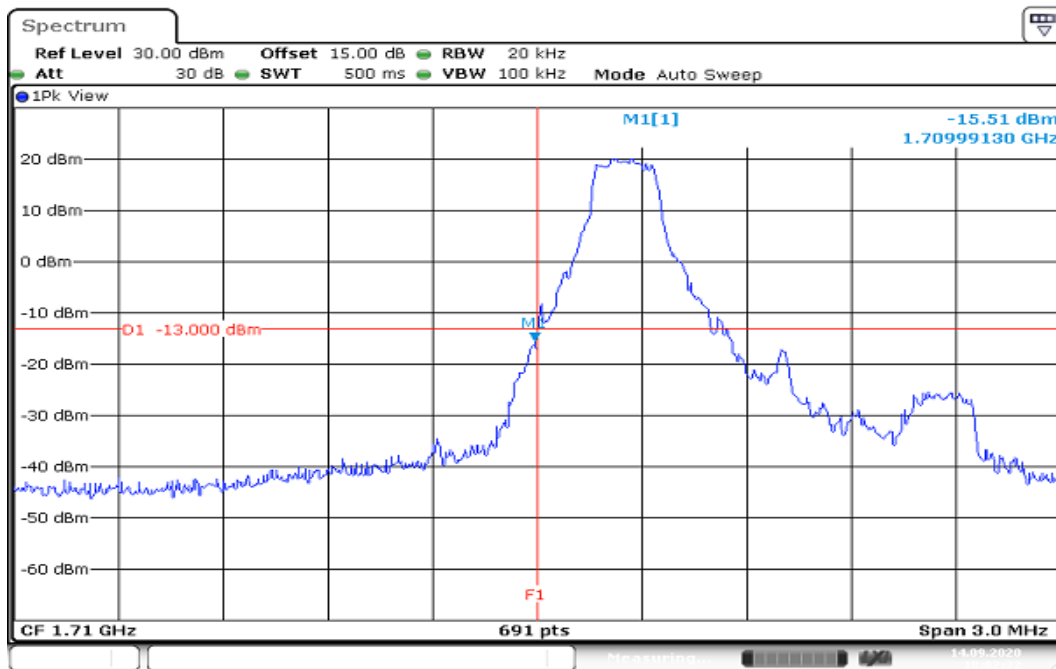
CHANNEL BANDWIDTH: 10MHz / 16QAM / FULLRB ALLOCATED MIDDLE BAND EDGE



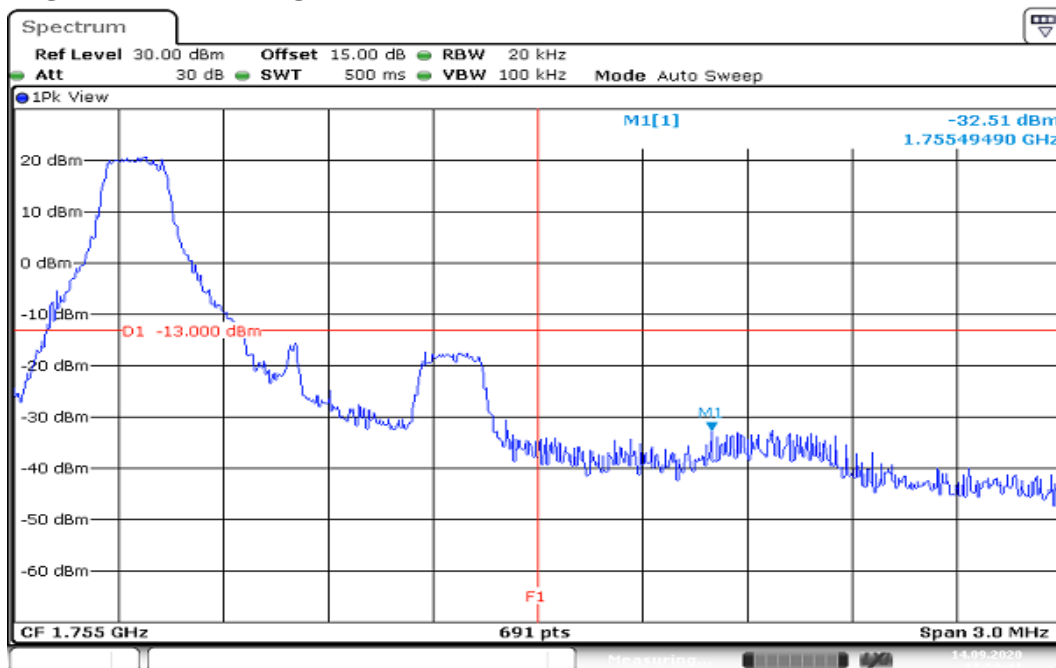
Report No.: T200821W04-RP1

LTE Band 4

CHANNEL BANDWIDTH: 1.4MHz / QPSK / 1RB ALLOCATION
LOWER BAND EDGE

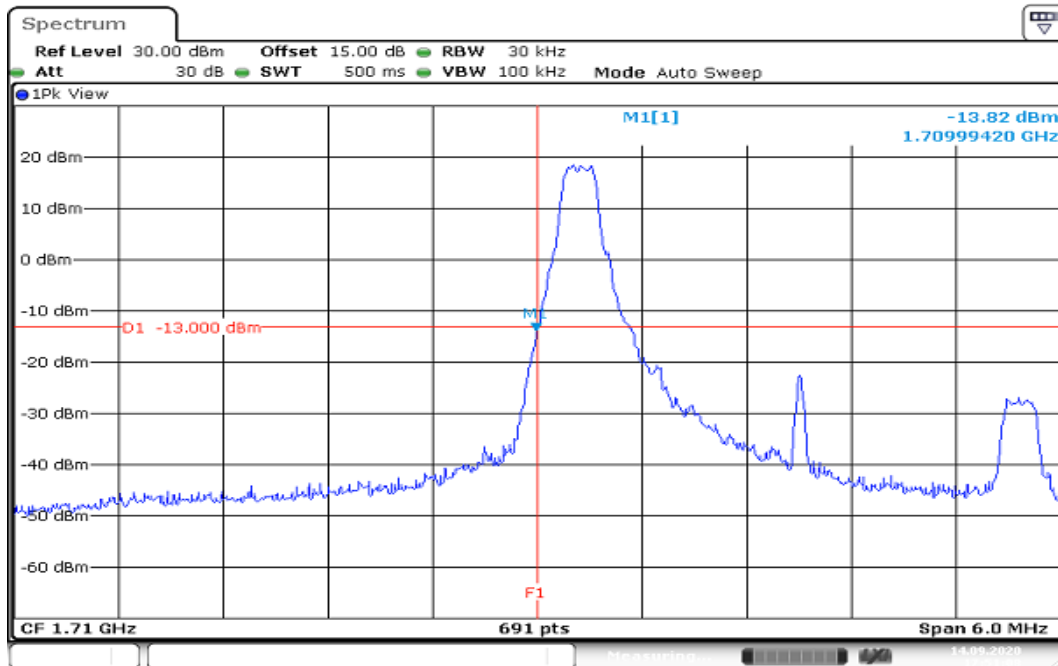


HIGHER BAND EDGE



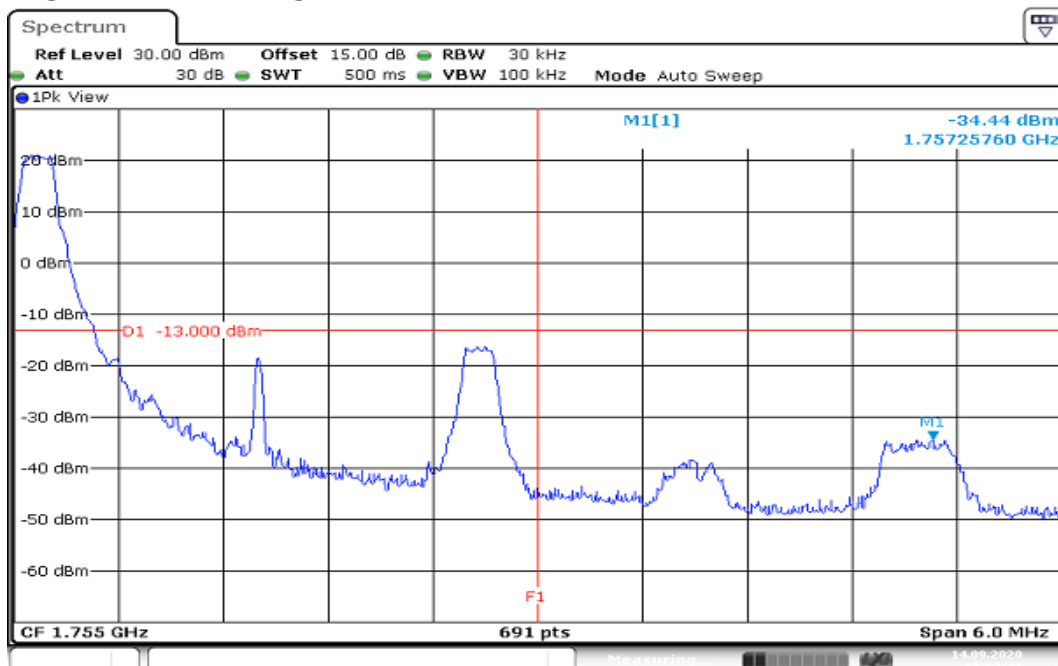
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CHANNEL BANDWIDTH: 3MHz / QPSK / 1RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 17:51:08

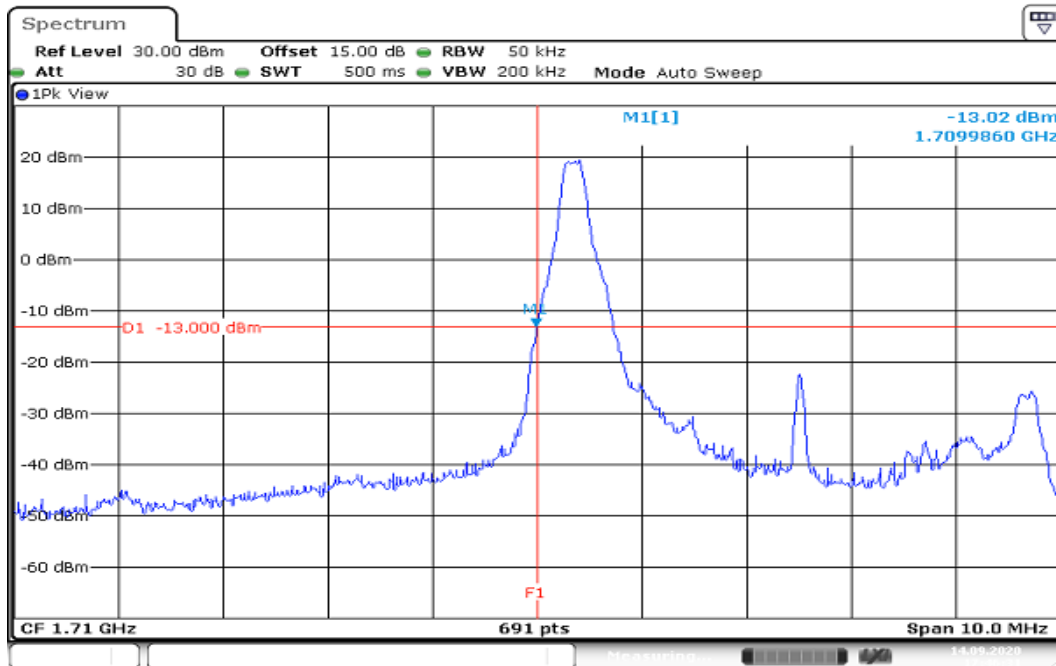
HIGHER BAND EDGE



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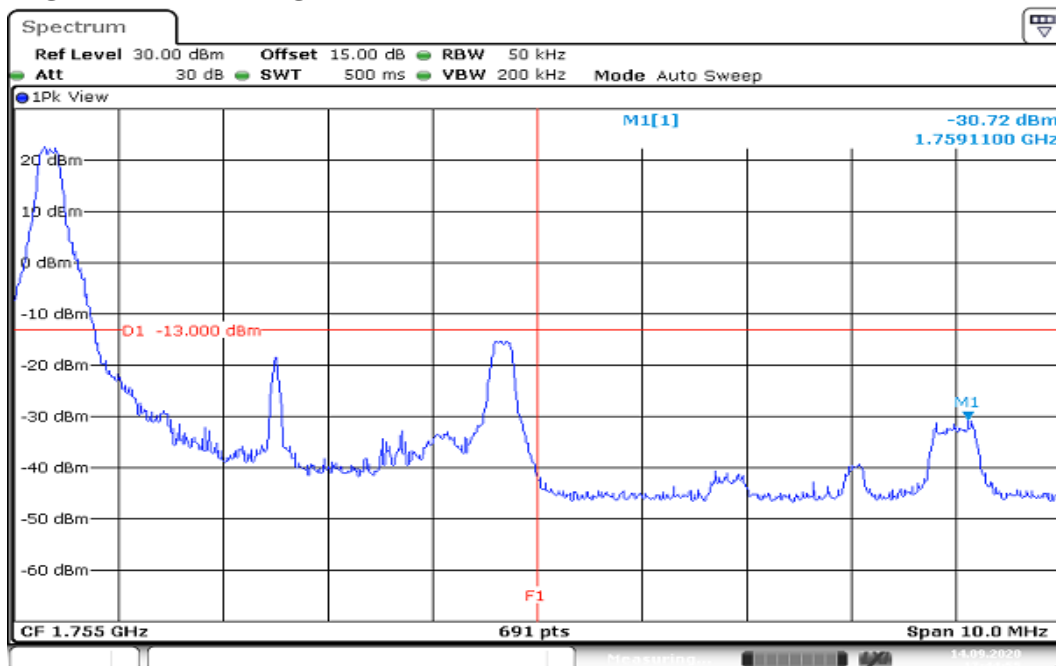
Report No.: T200821W04-RP1

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



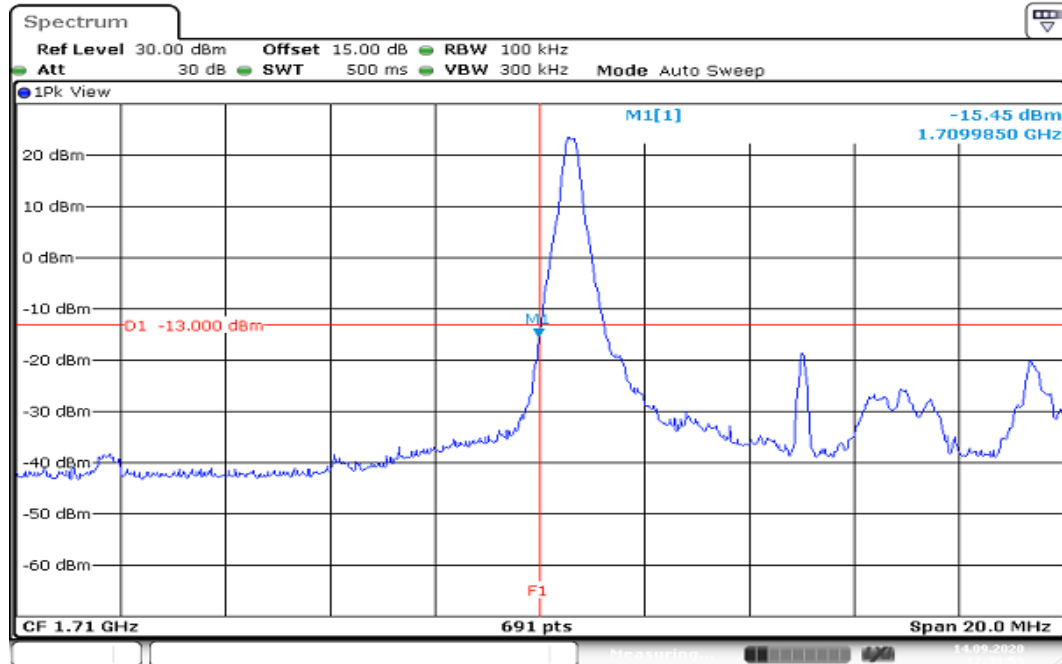
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HIGHER BAND EDGE

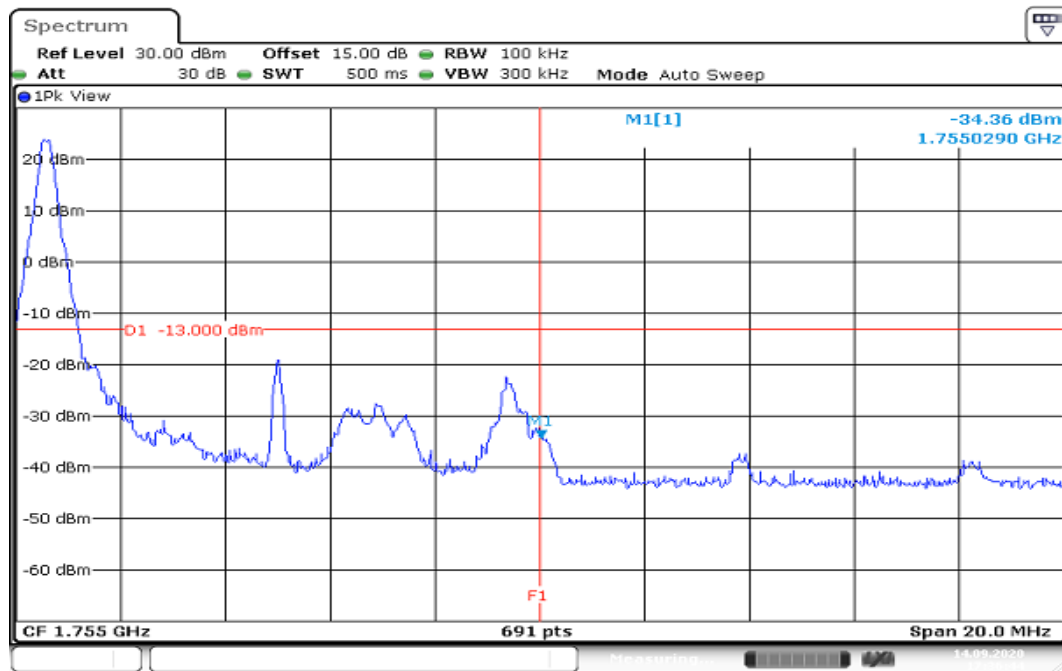


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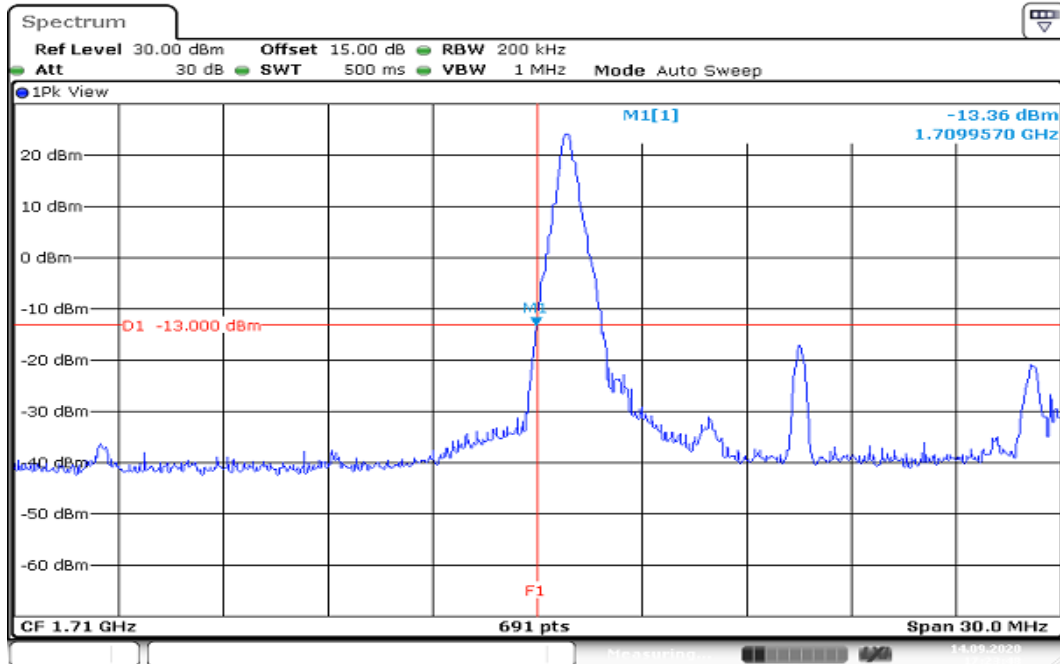
CHANNEL BANDWIDTH: 10MHz / QPSK / 1RB ALLOCATION LOWER BAND EDGE



HIGHER BAND EDGE

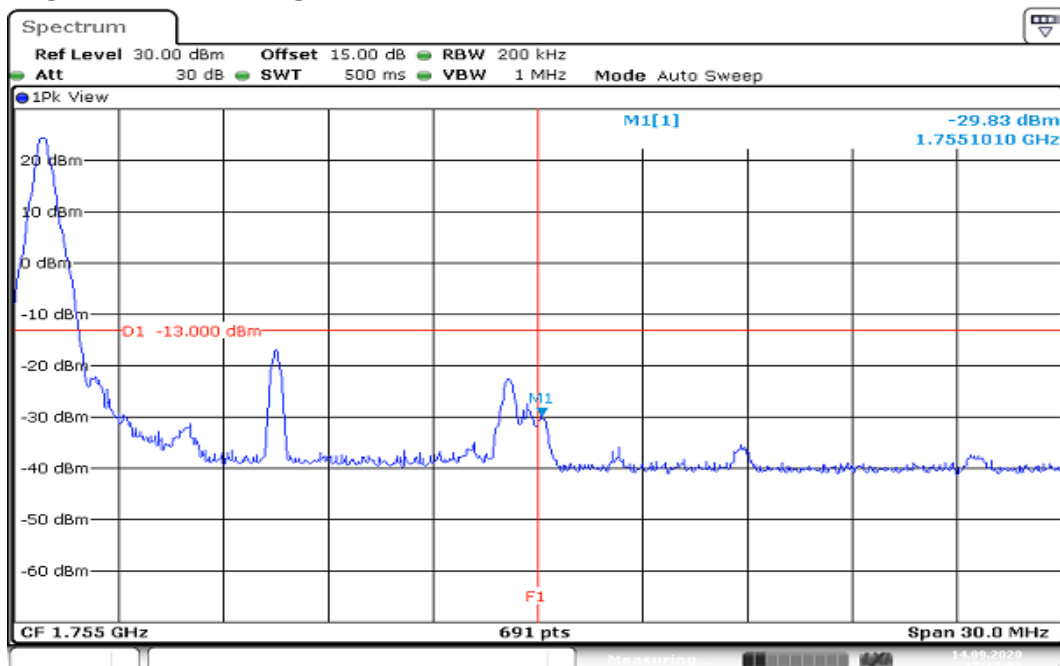


CHANNEL BANDWIDTH: 15MHz / QPSK / 1RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 17:23:48

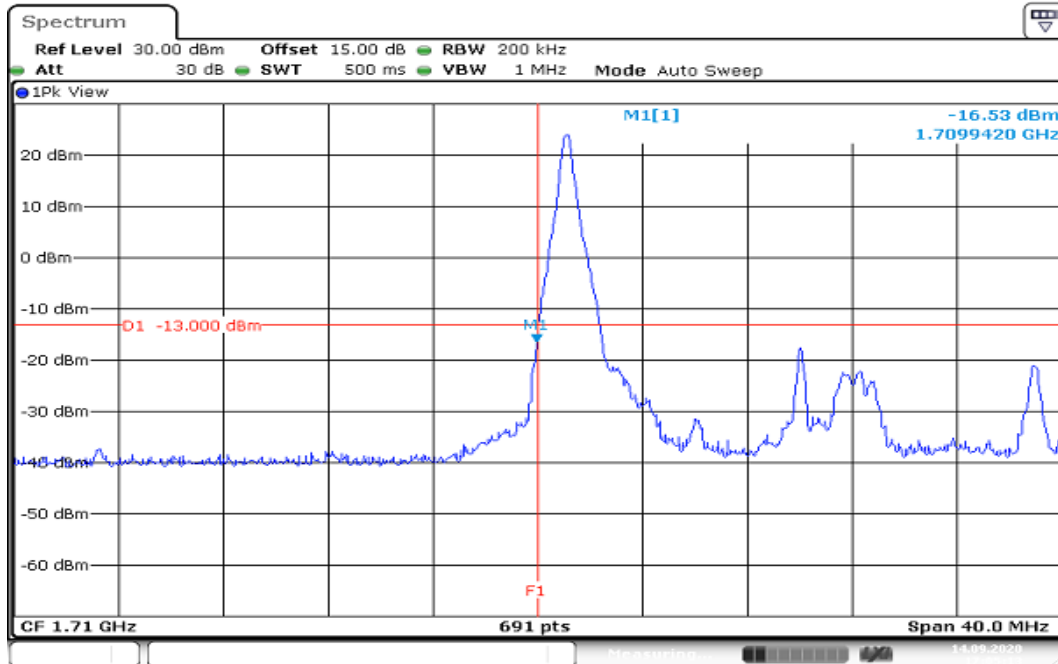
HIGHER BAND EDGE



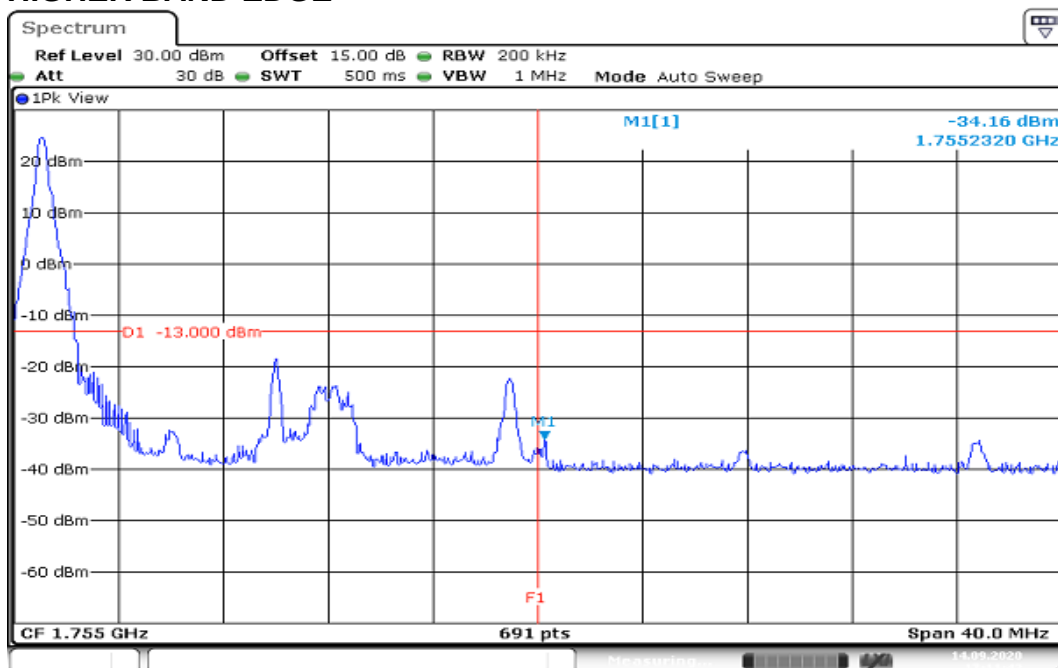
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Report No.: T200821W04-RP1

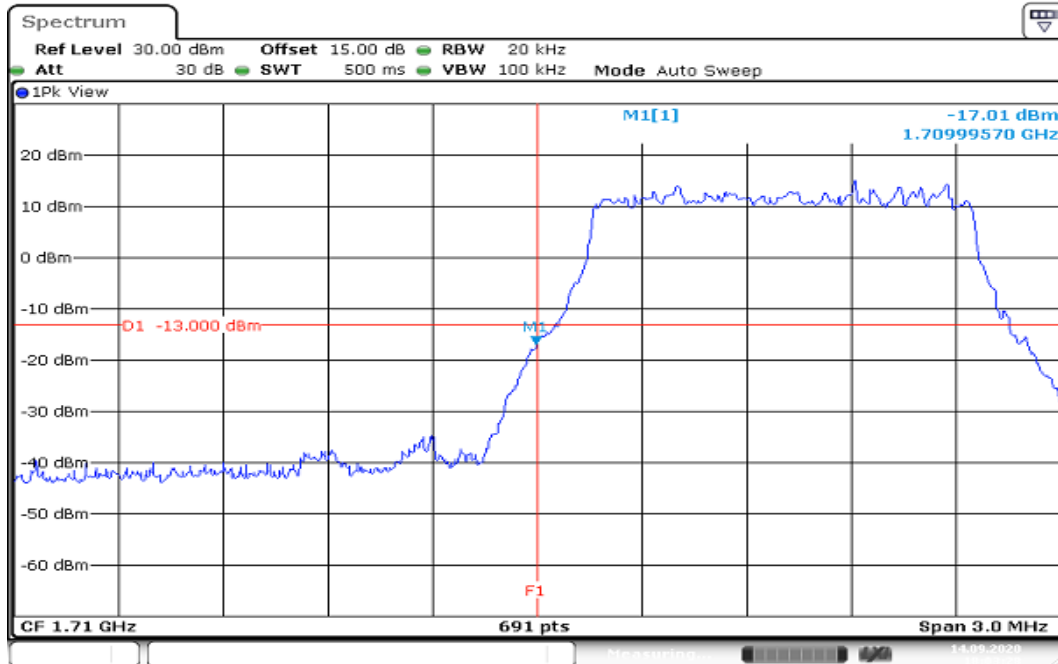
CHANNEL BANDWIDTH: 20MHz / QPSK / 1RB ALLOCATION LOWER BAND EDGE



HIGHER BAND EDGE

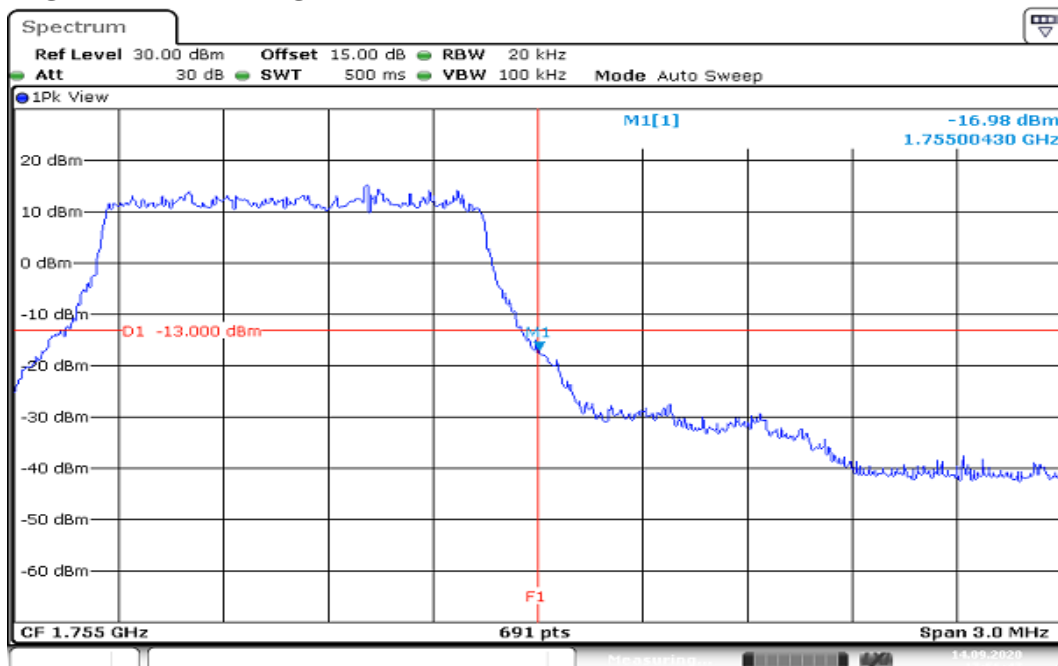


CHANNEL BANDWIDTH: 1.4MHz / QPSK / FULL RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 18:03:28

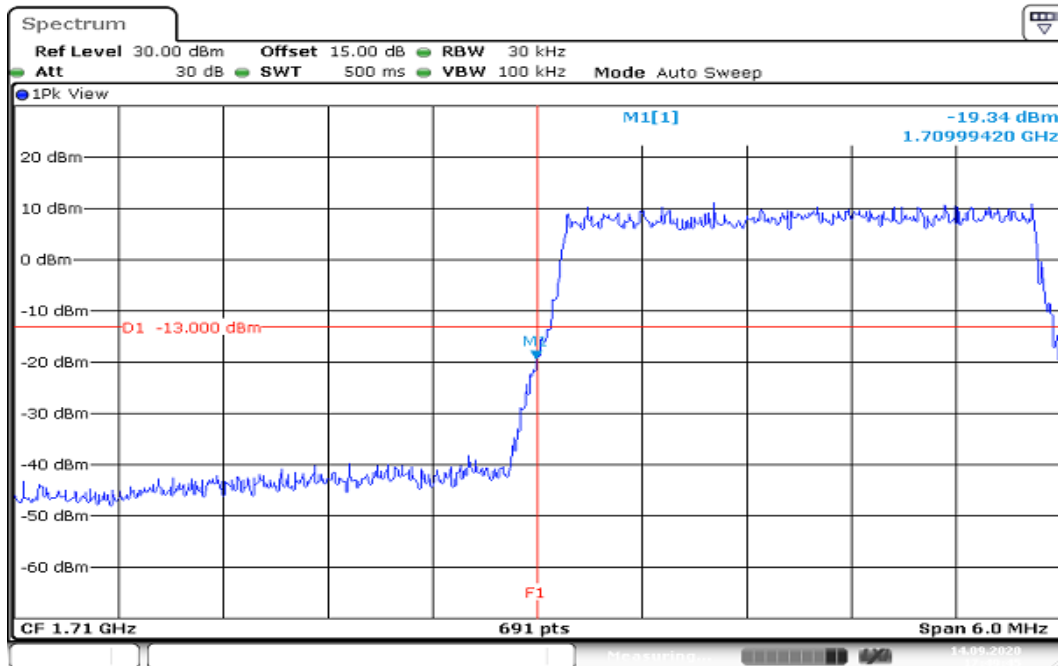
HIGHER BAND EDGE



Date: 14.SEP.2020 17:56:47

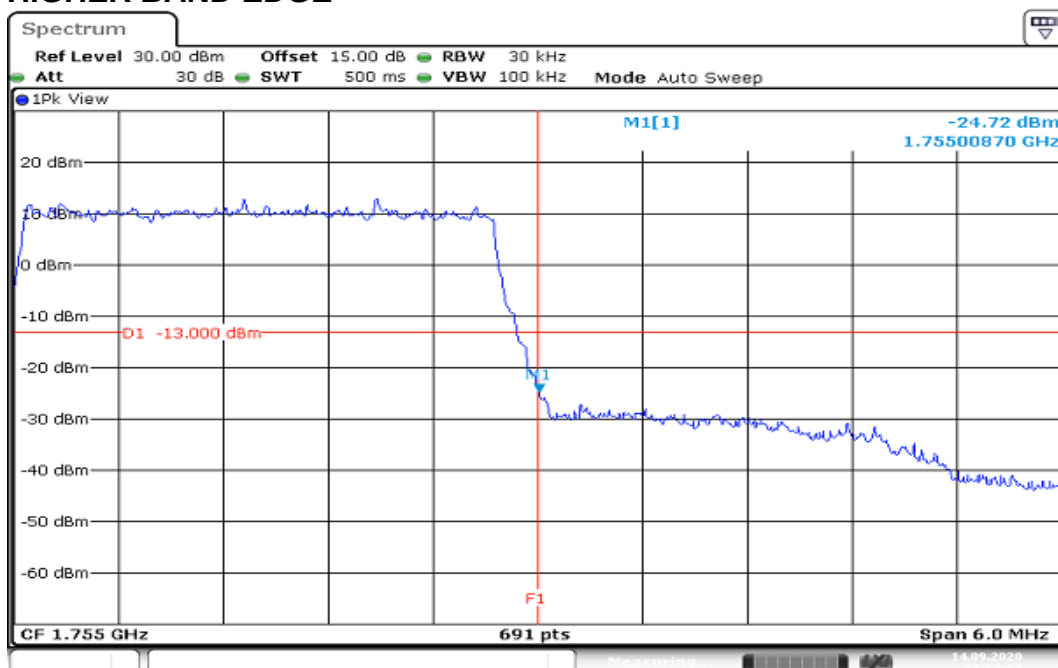
Report No.: T200821W04-RP1

CHANNEL BANDWIDTH: 3MHz / QPSK / FULL RB ALLOCATION LOWER BAND EDGE



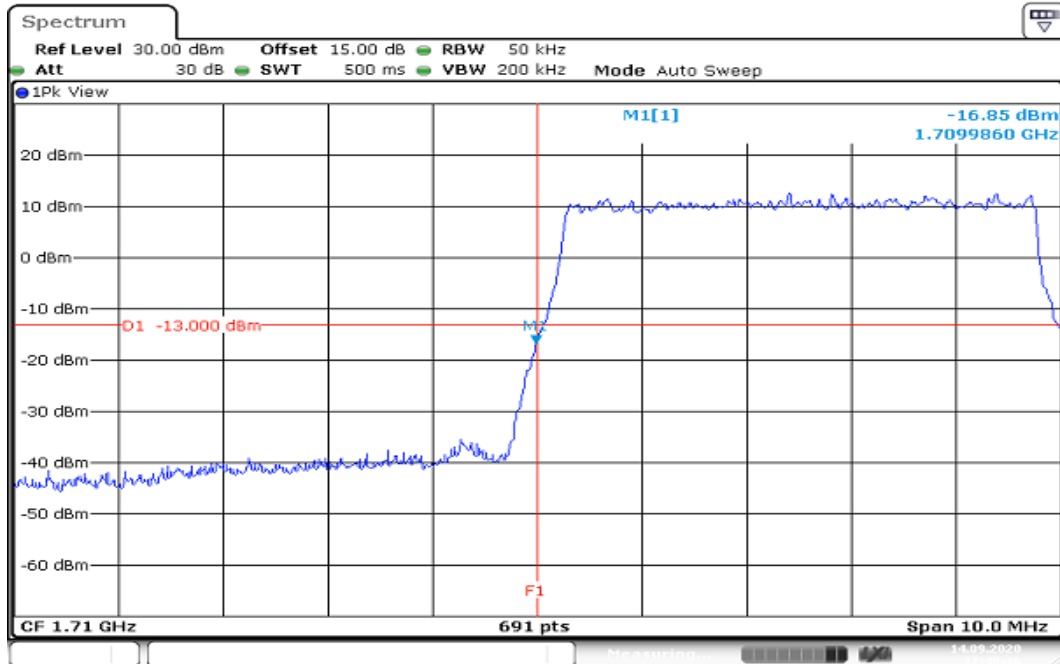
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HIGHER BAND EDGE



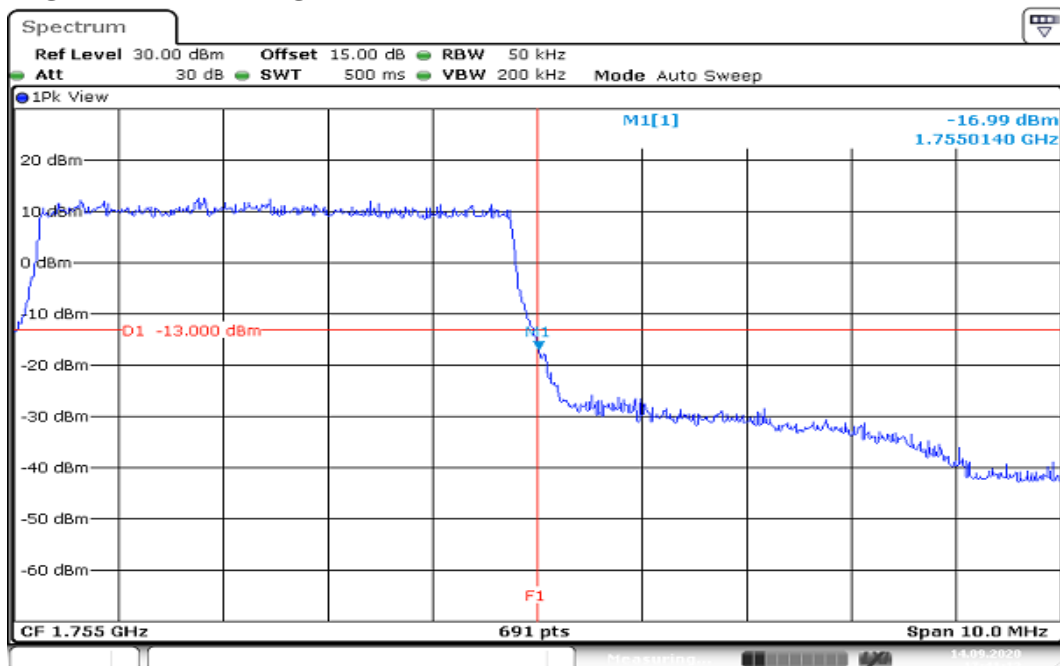
Date: 14.SEP.2020 17:54:50

CHANNEL BANDWIDTH: 5MHz / QPSK / FULL RB ALLOCATION LOWER BAND EDGE



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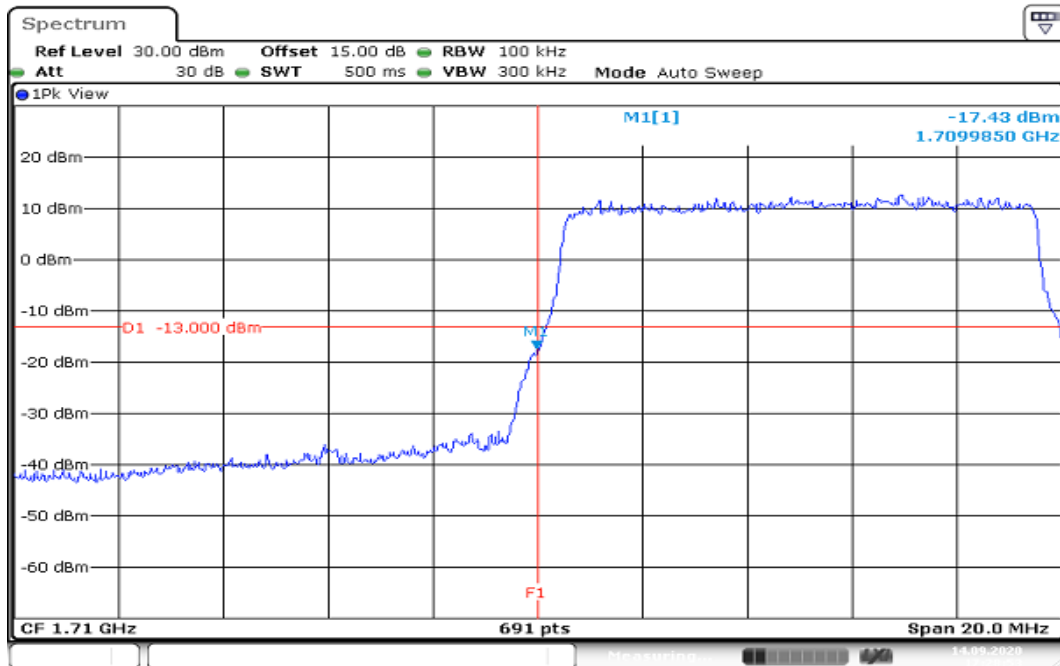
HIGHER BAND EDGE



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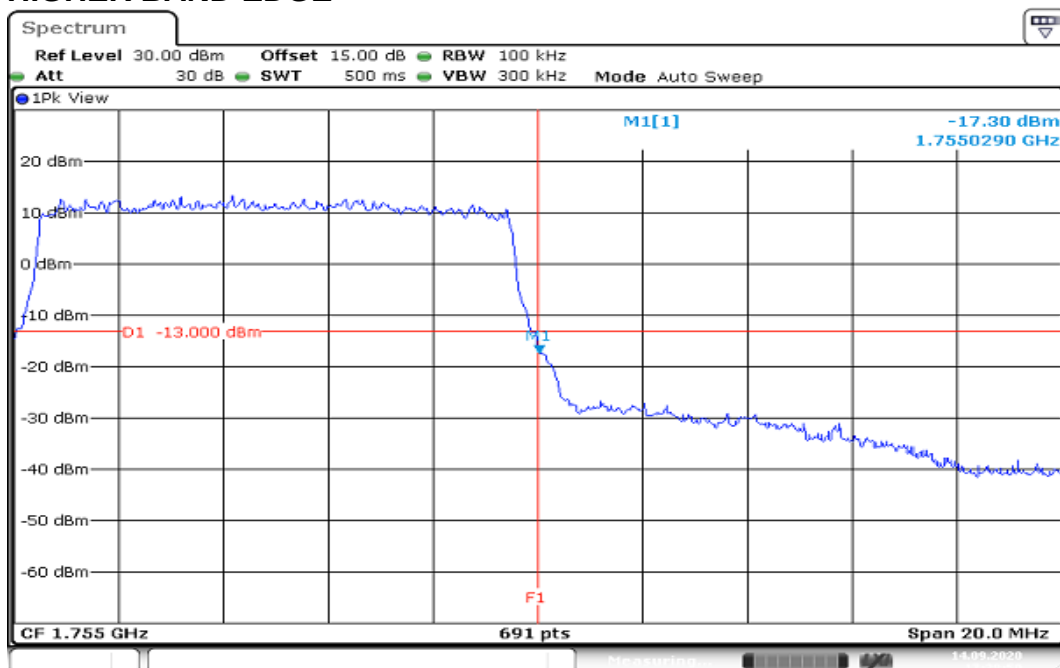
Report No.: T200821W04-RP1

CHANNEL BANDWIDTH: 10MHz / QPSK / FULL RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 17:28:54

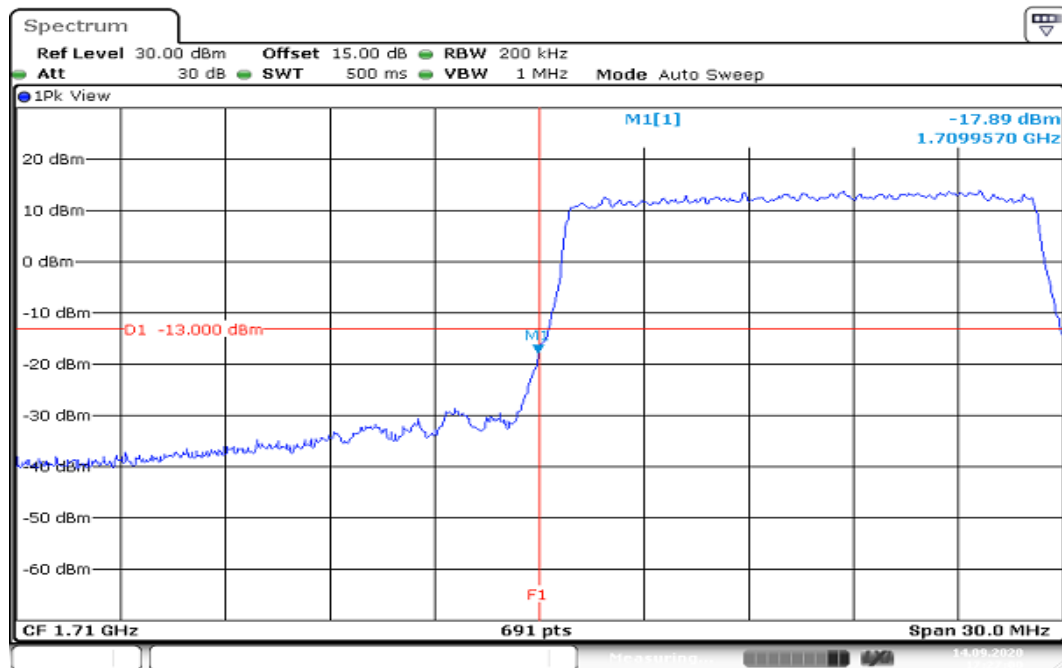
HIGHER BAND EDGE



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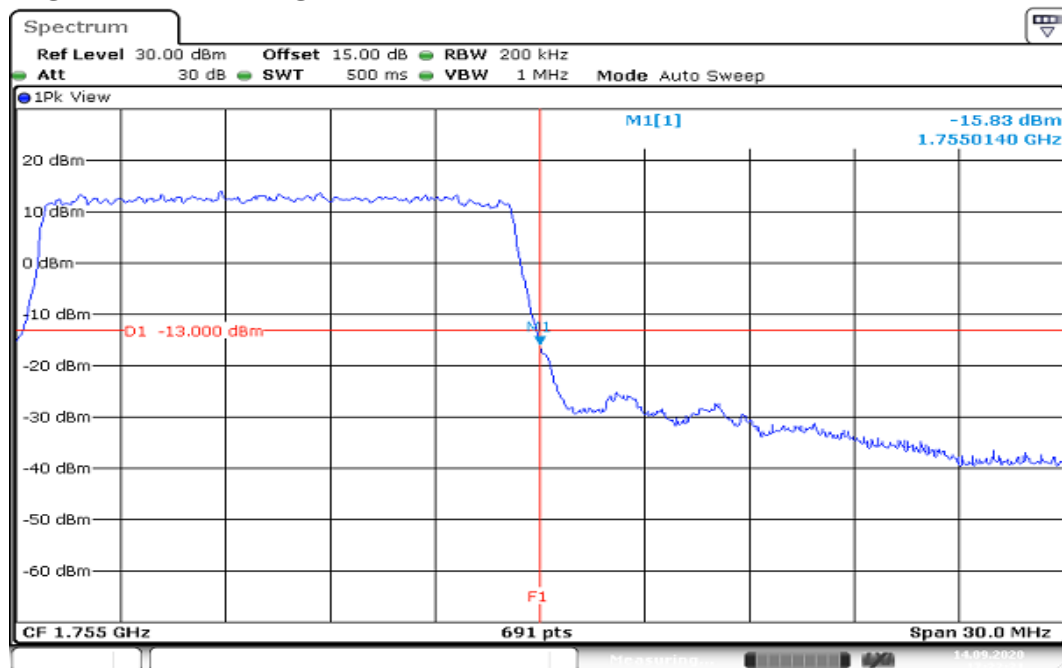
Report No.: T200821W04-RP1

CHANNEL BANDWIDTH: 15MHz / QPSK / FULL RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 17:27:00

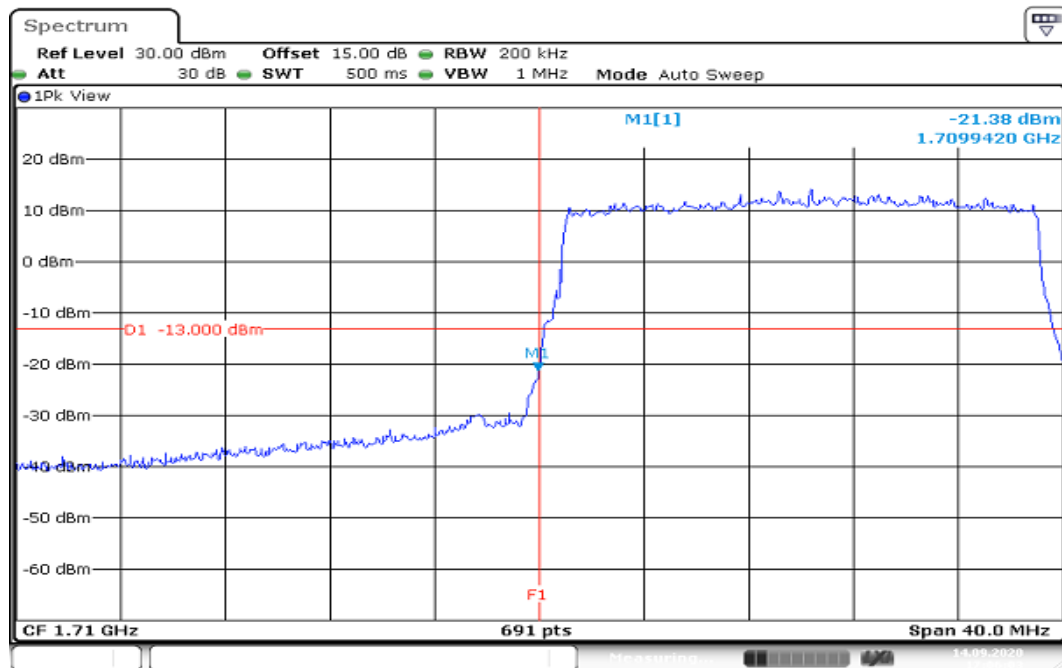
HIGHER BAND EDGE



Date: 14.SEP.2020 17:22:31

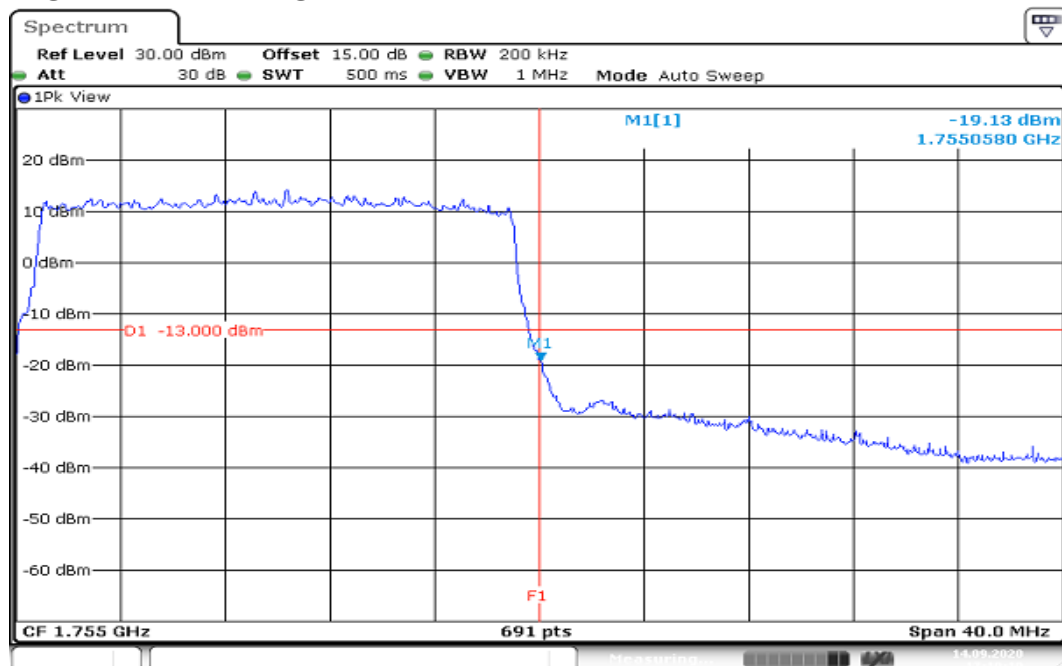
Report No.: T200821W04-RP1

CHANNEL BANDWIDTH: 20MHz / QPSK / FULL RB ALLOCATION LOWER BAND EDGE



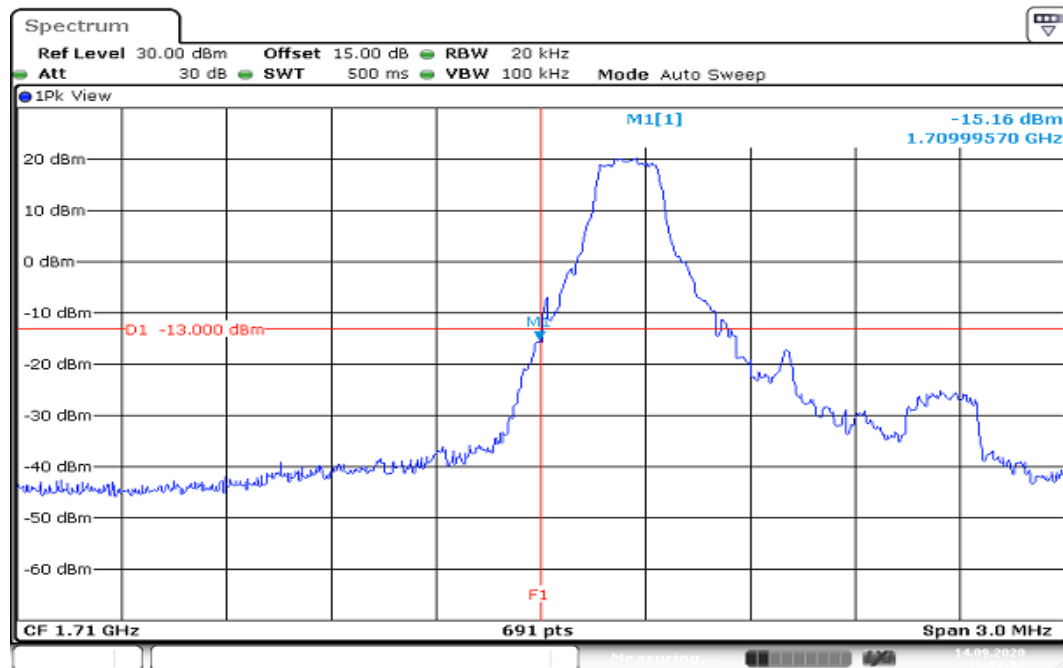
Date: 14.SEP.2020 17:06:03

HIGHER BAND EDGE



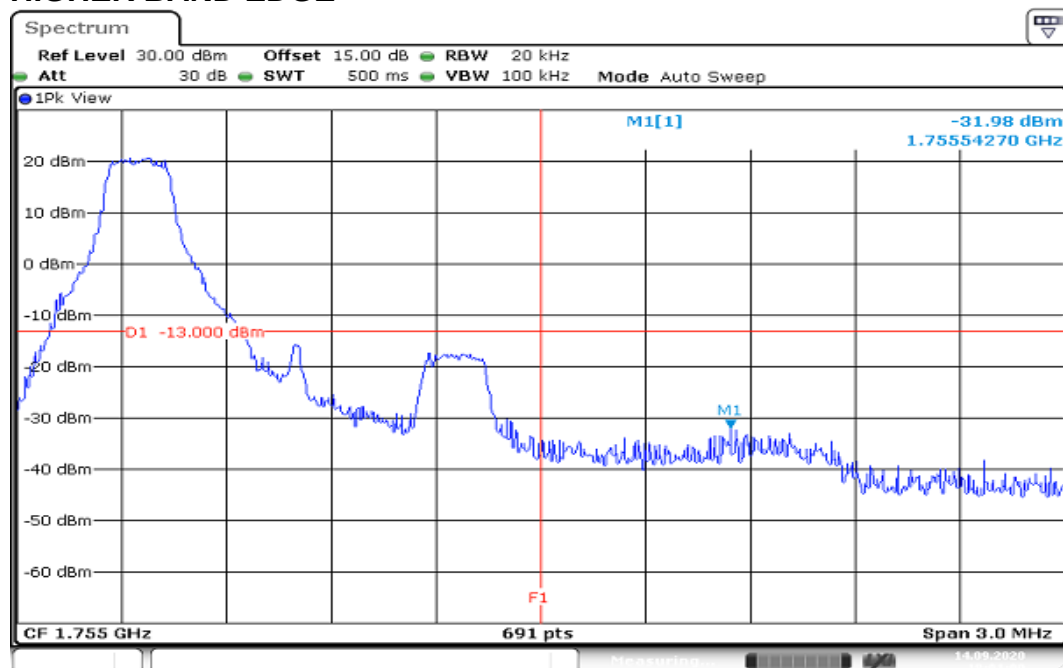
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CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 1RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 18:02:02

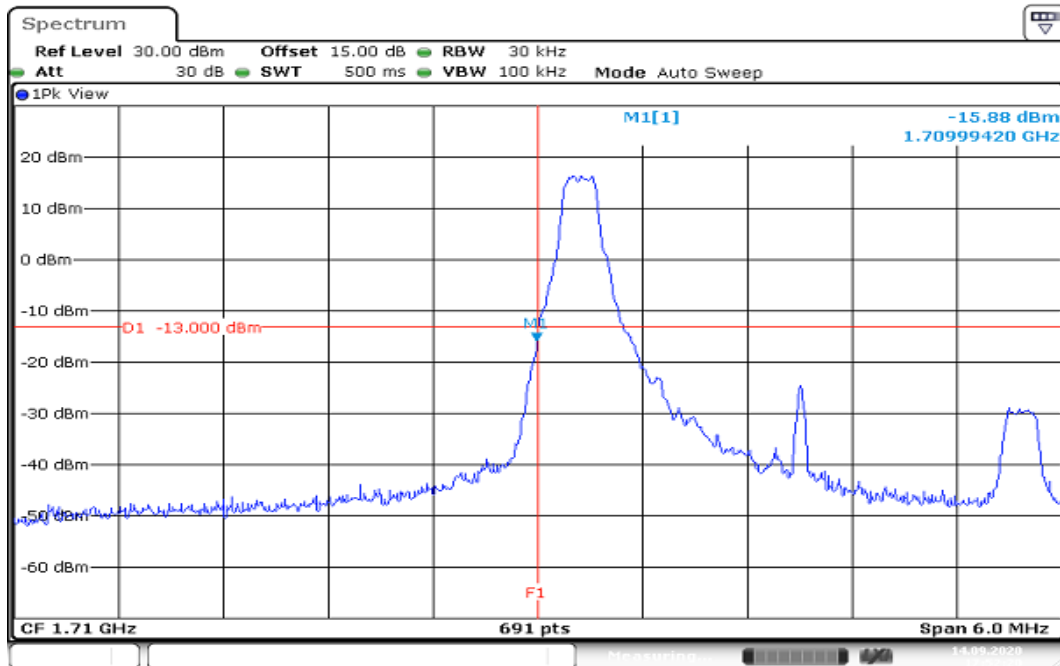
HIGHER BAND EDGE



Date: 14.SEP.2020 18:01:00

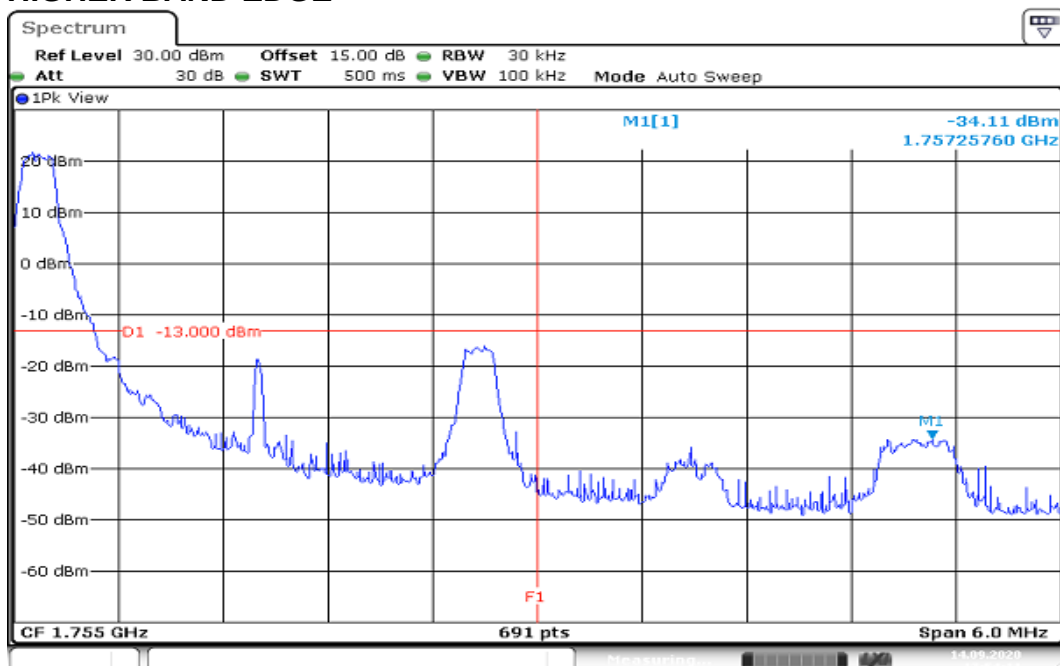
Report No.: T200821W04-RP1

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



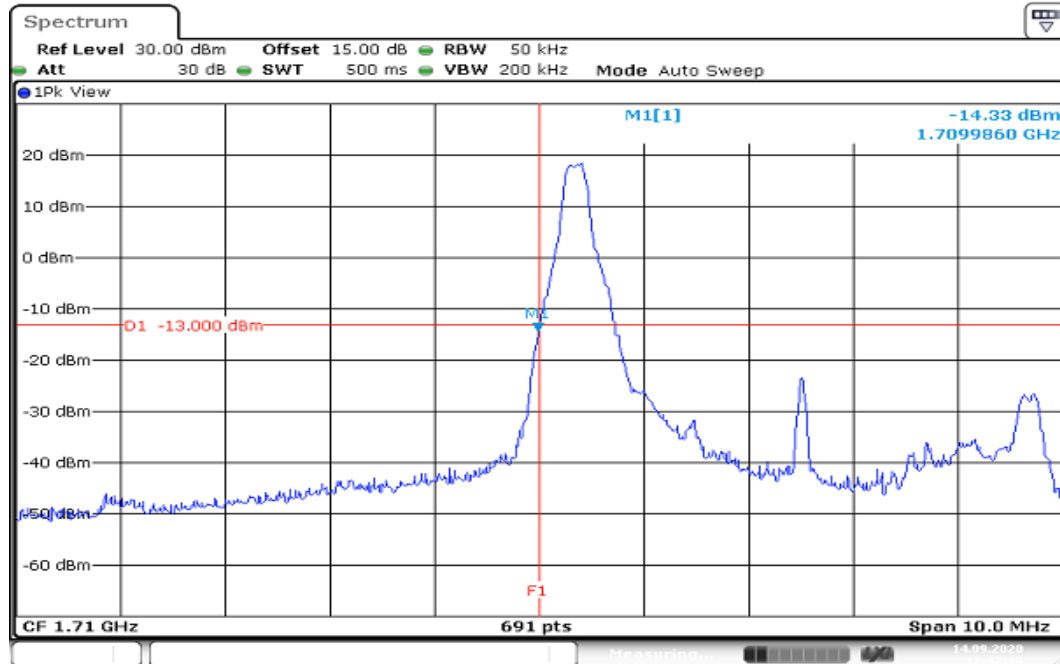
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HIGHER BAND EDGE

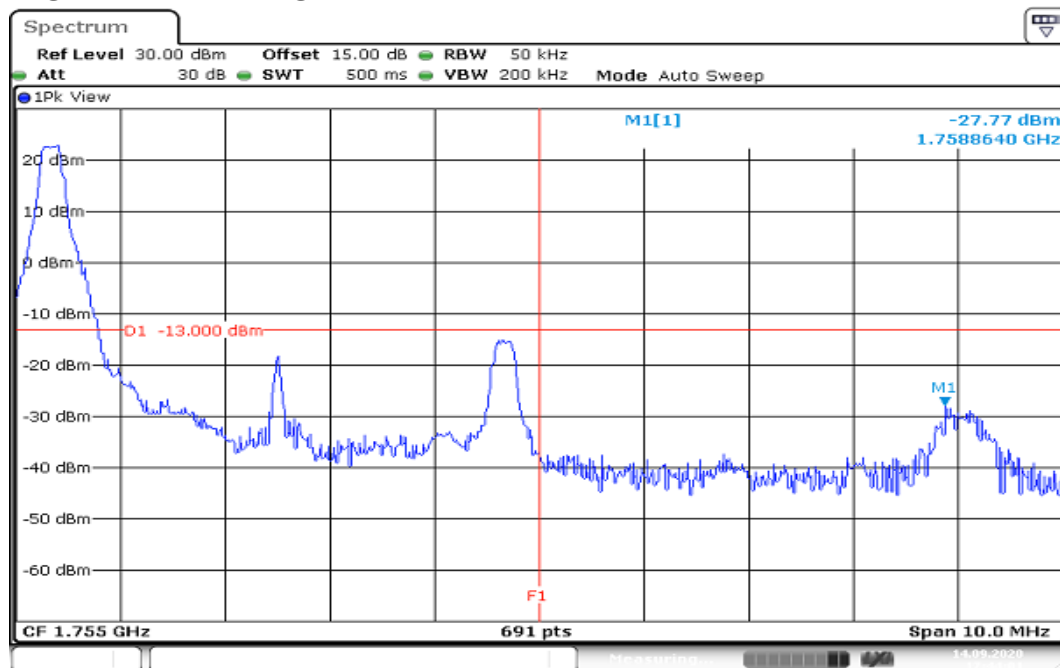


Date: 14.SEP.2020 17:54:11

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

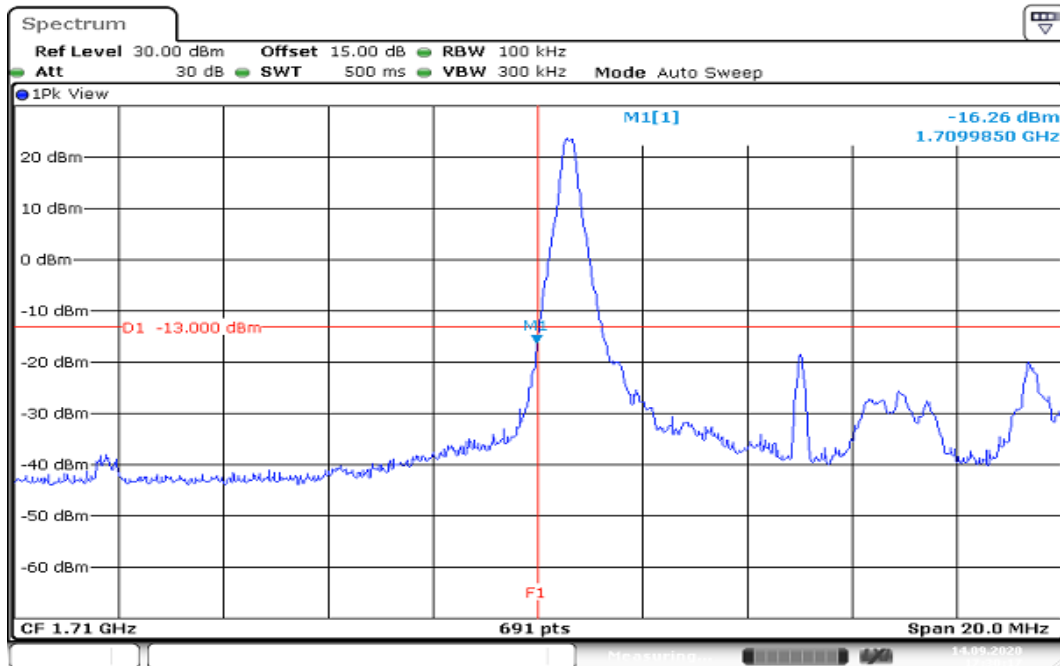


HIGHER BAND EDGE



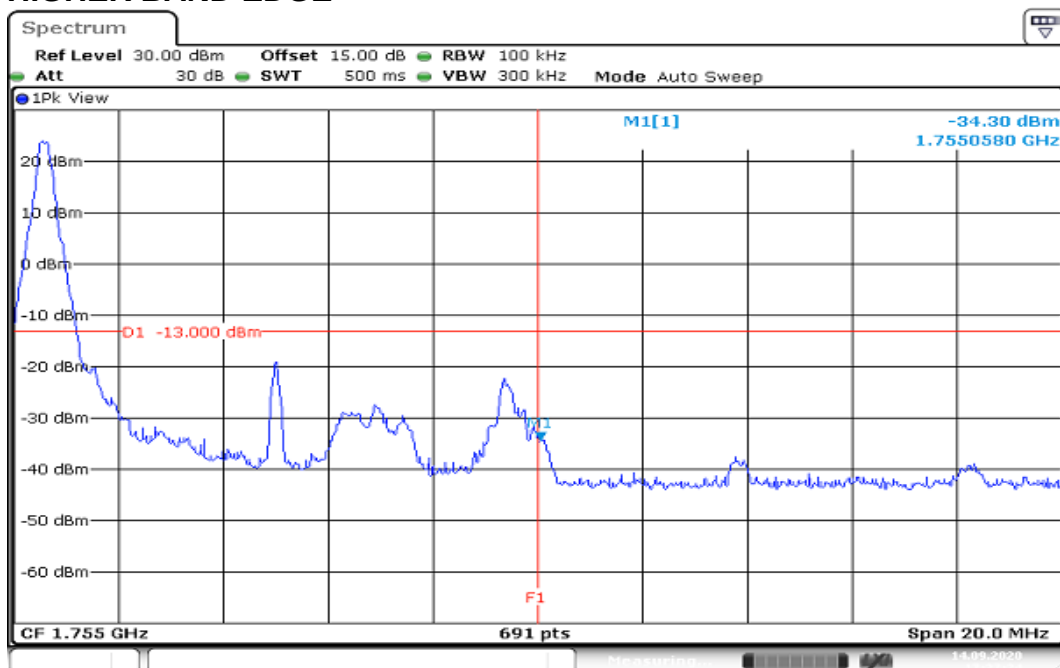
Report No.: T200821W04-RP1

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



Date: 14.SEP.2020 17:30:17

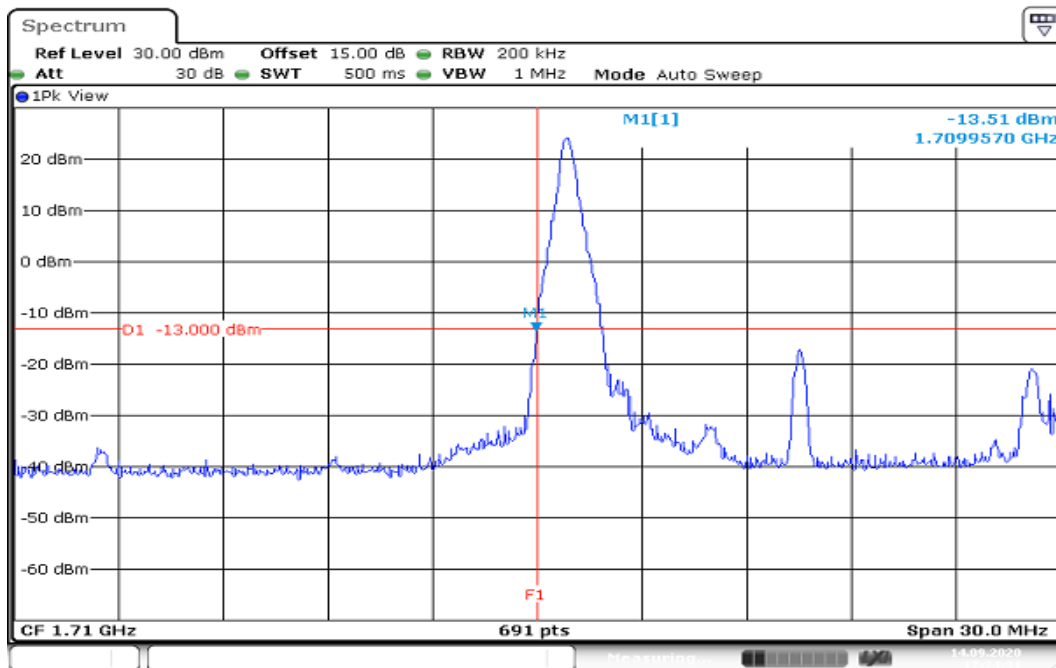
HIGHER BAND EDGE



Date: 14.SEP.2020 17:37:24

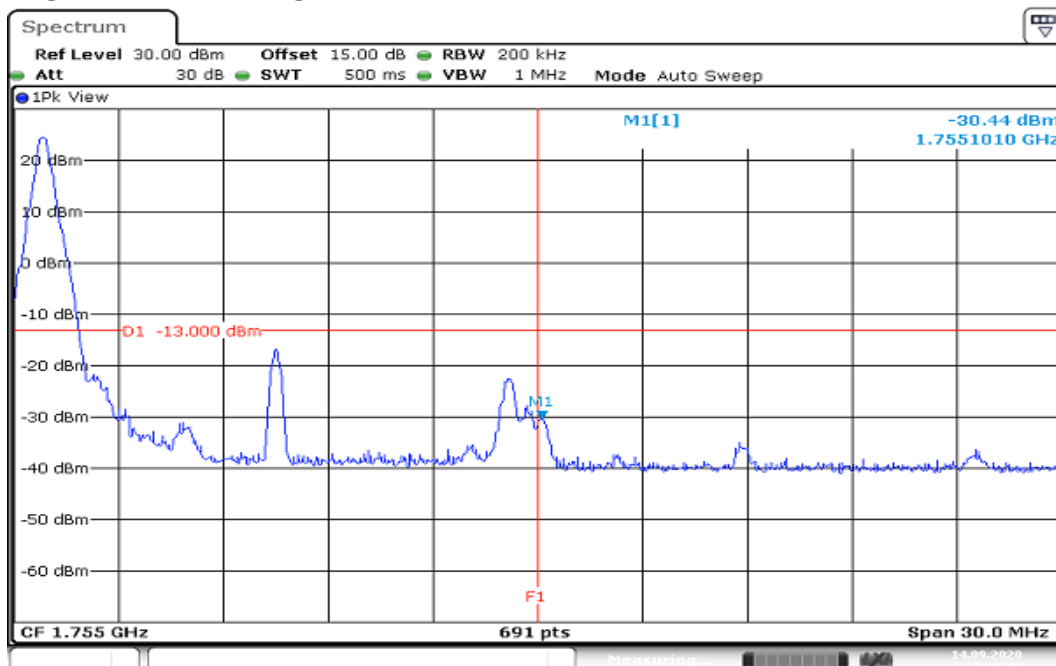
Report No.: T200821W04-RP1

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



Date: 14.SEP.2020 17:24:31

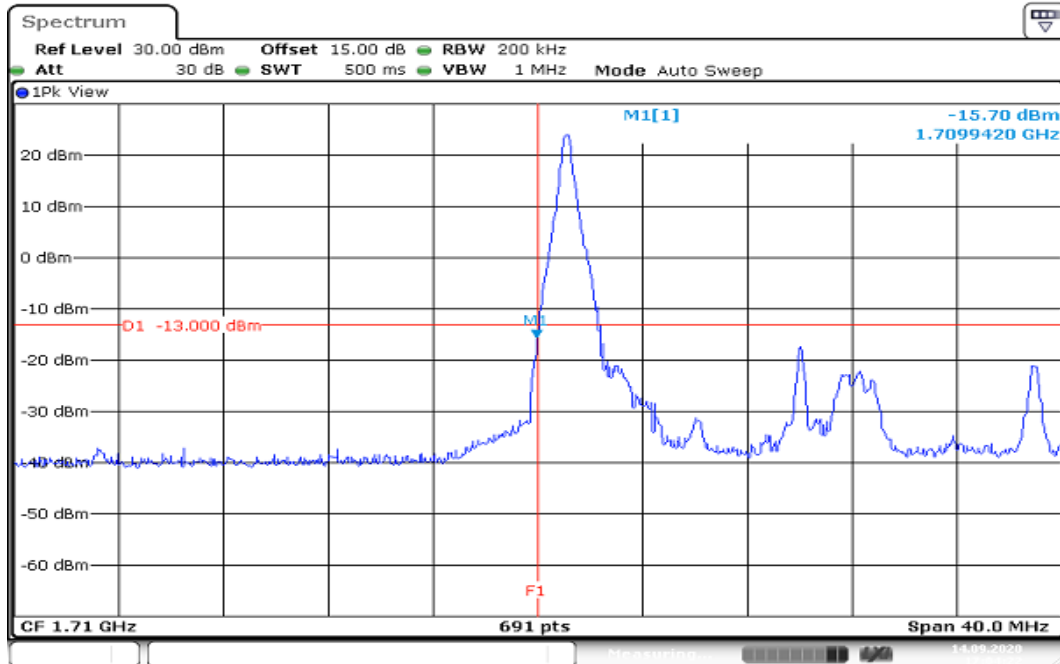
HIGHER BAND EDGE



Date: 14.SEP.2020 17:18:05

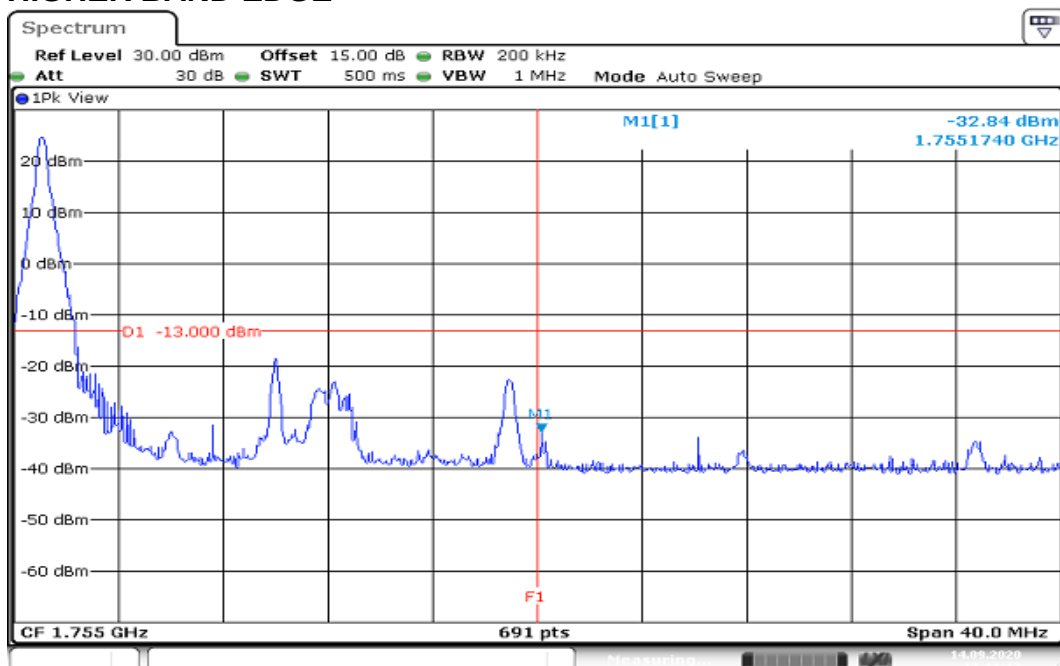
Report No.: T200821W04-RP1

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



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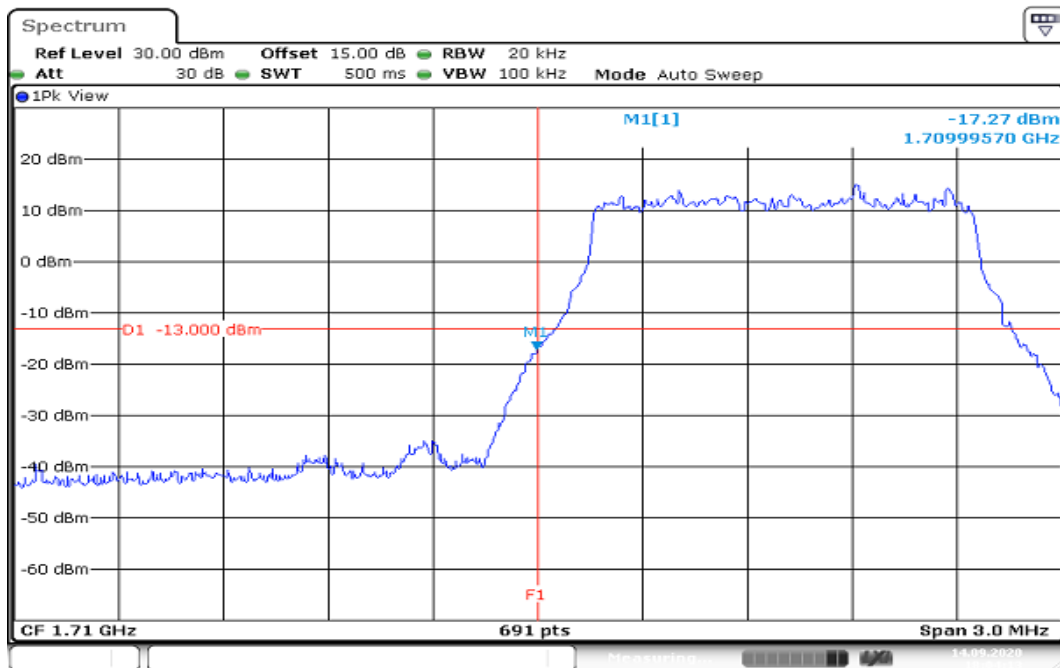
HIGHER BAND EDGE



Date: 14.SEP.2020 17:11:17

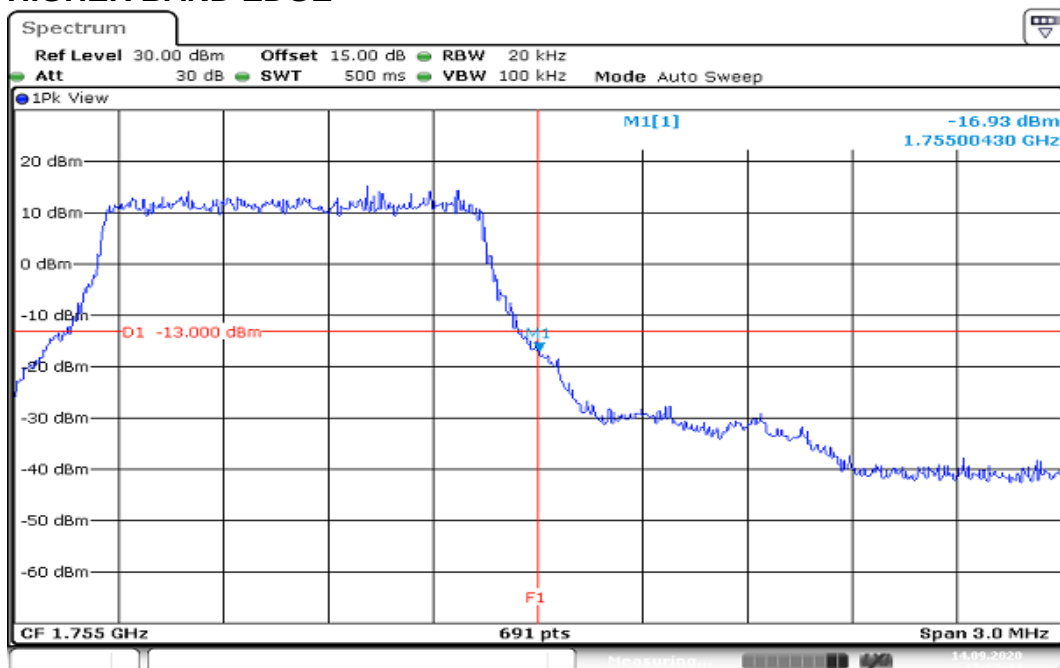
Report No.: T200821W04-RP1

CHANNEL BANDWIDTH: 1.4MHz / 16QAM / FULL RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 18:04:14

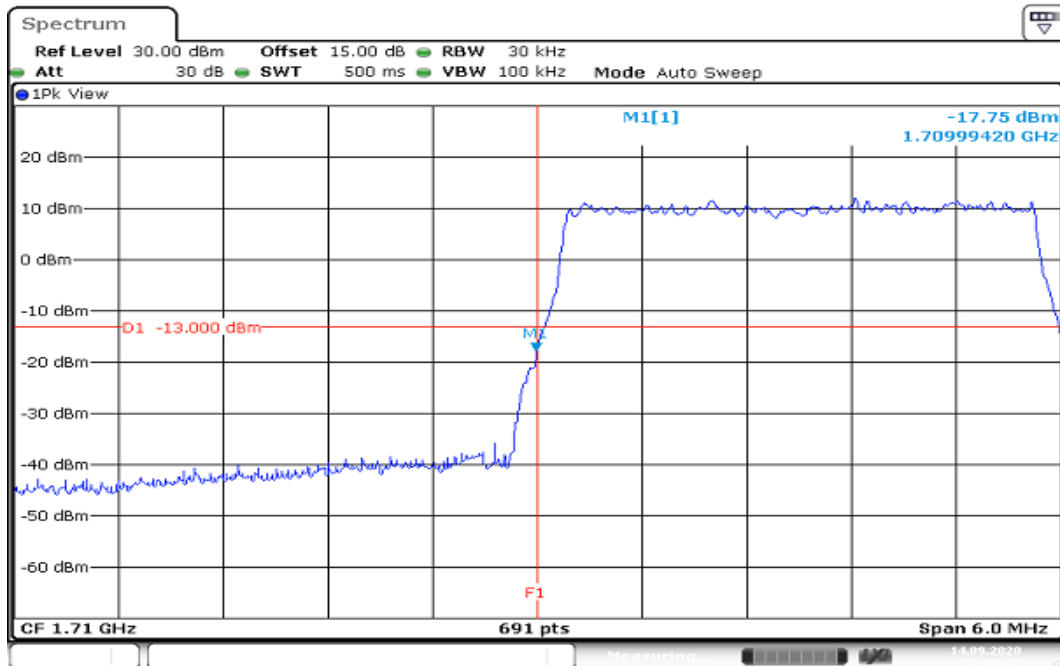
HIGHER BAND EDGE



Date: 14.SEP.2020 17:57:44

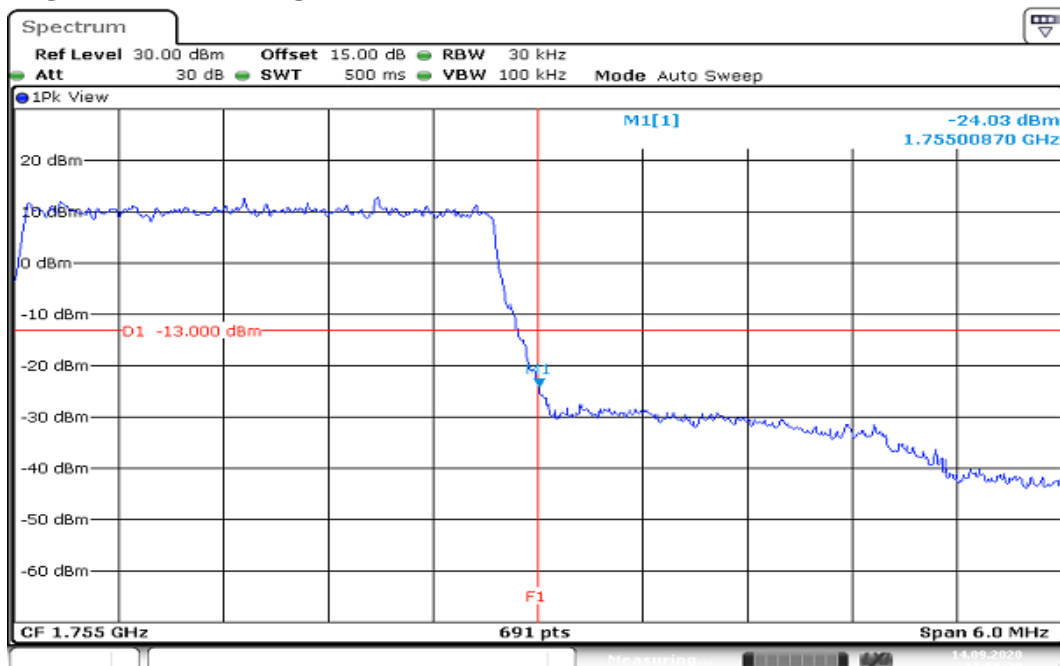
Report No.: T200821W04-RP1

CHANNEL BANDWIDTH: 3MHz / 16QAM / FULL RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 17:50:23

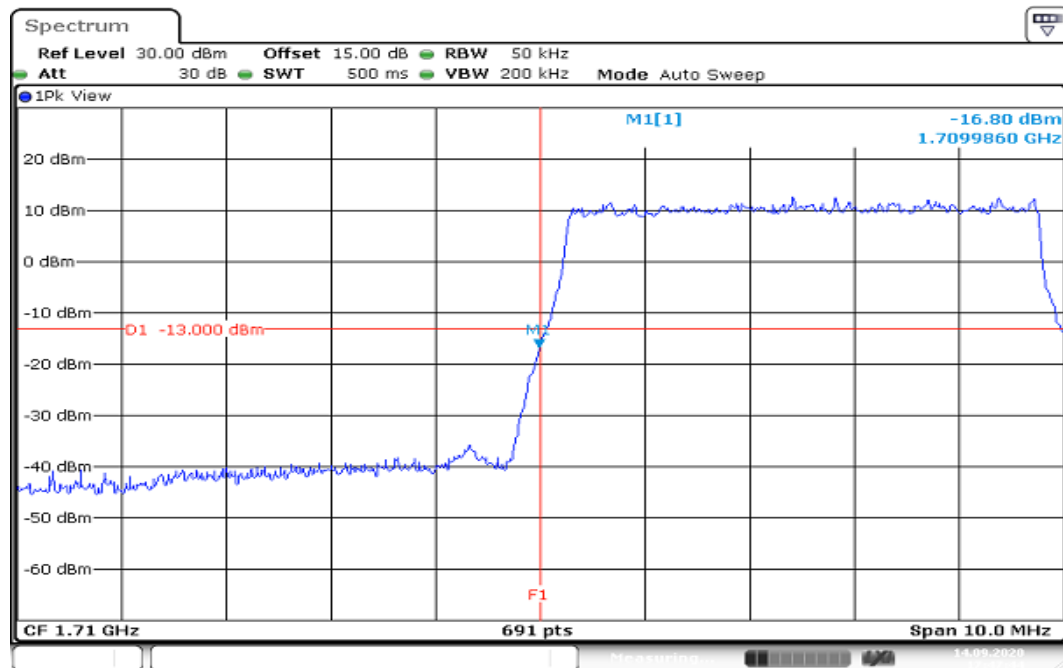
HIGHER BAND EDGE



Date: 14.SEP.2020 17:55:20

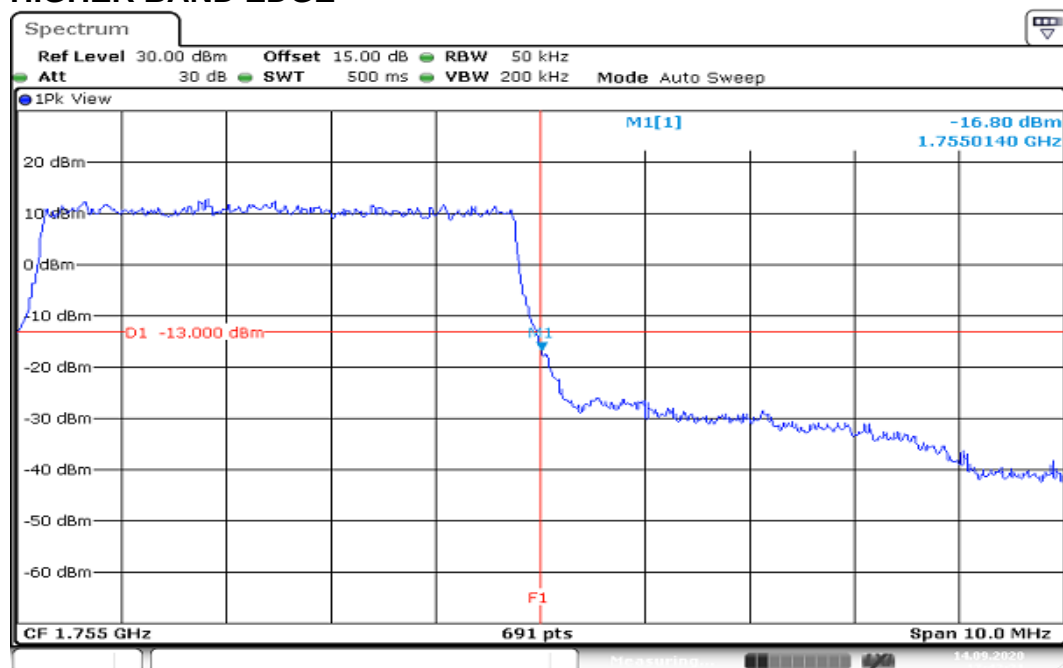
Report No.: T200821W04-RP1

CHANNEL BANDWIDTH: 5MHz / 16QAM / FULL RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 17:47:44

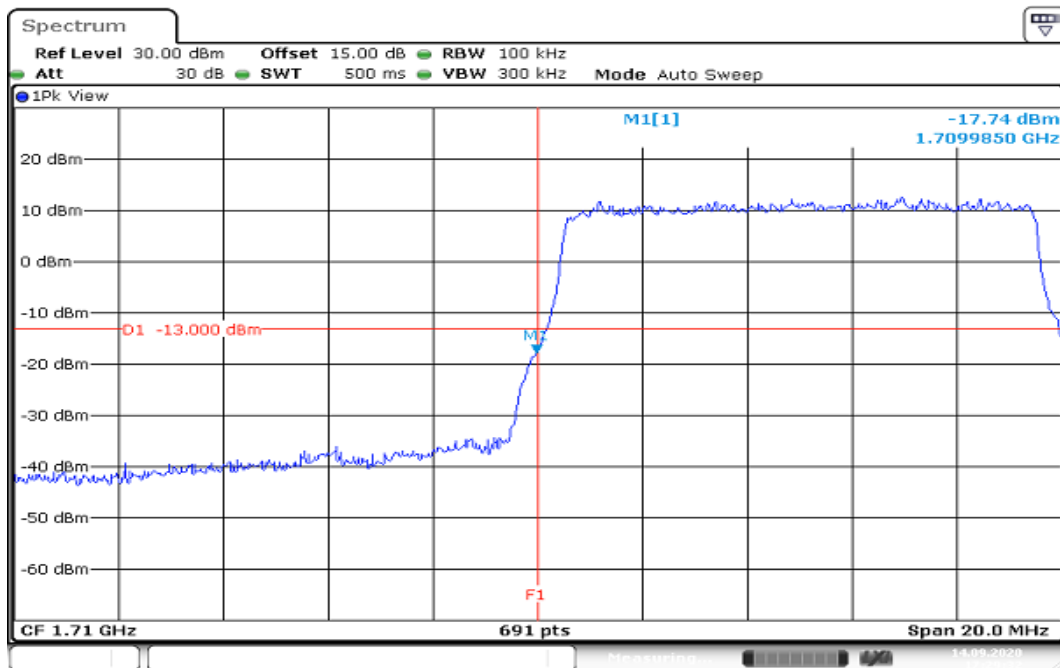
HIGHER BAND EDGE



Date: 14.SEP.2020 17:42:21

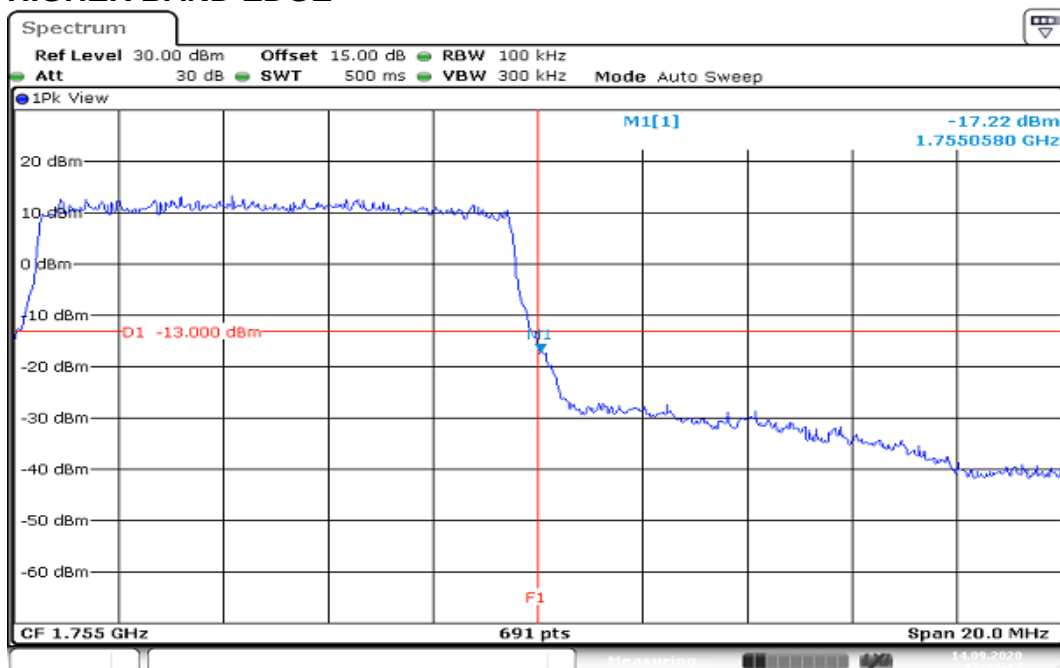
Report No.: T200821W04-RP1

CHANNEL BANDWIDTH: 10MHz / 16QAM / FULL RB ALLOCATION LOWER BAND EDGE



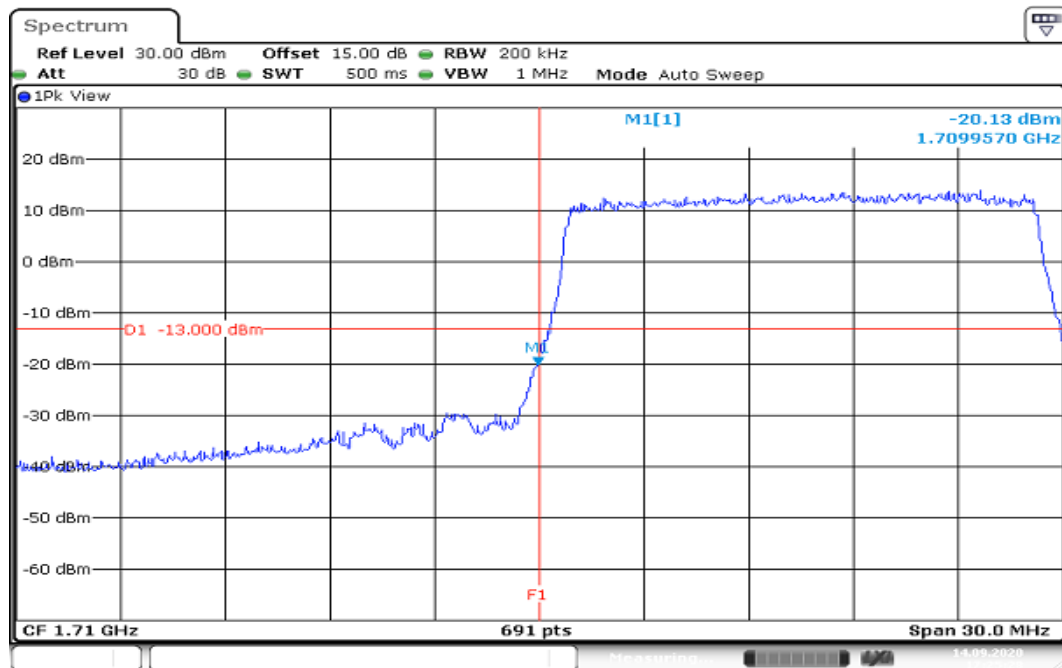
Date: 14.SEP.2020 17:29:32

HIGHER BAND EDGE



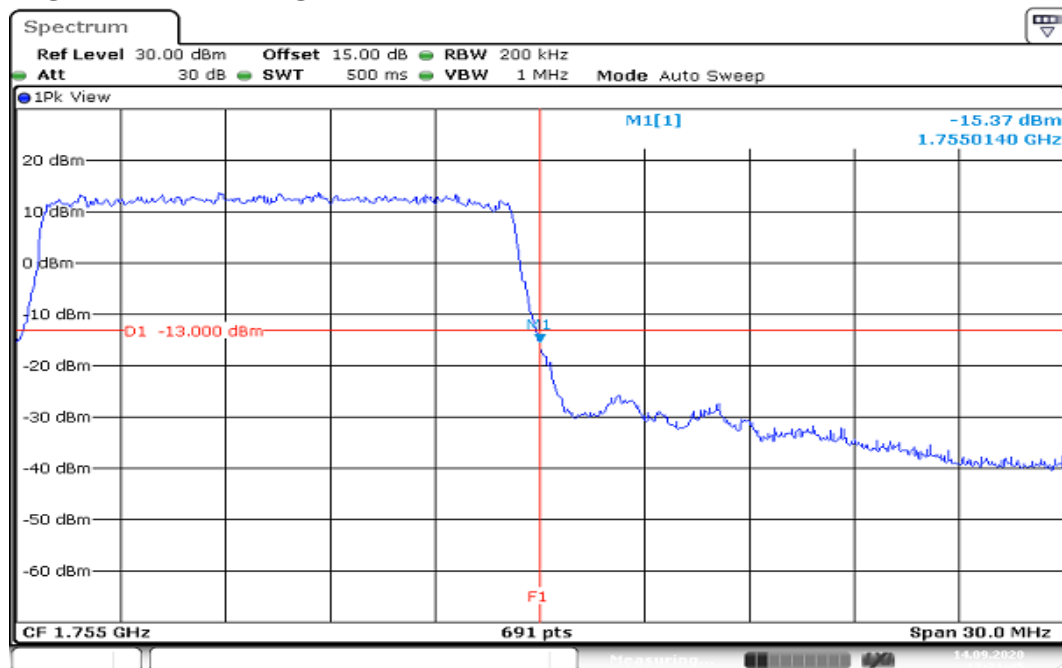
Date: 14.SEP.2020 17:38:14

CHANNEL BANDWIDTH: 15MHz / 16QAM / FULL RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 17:25:28

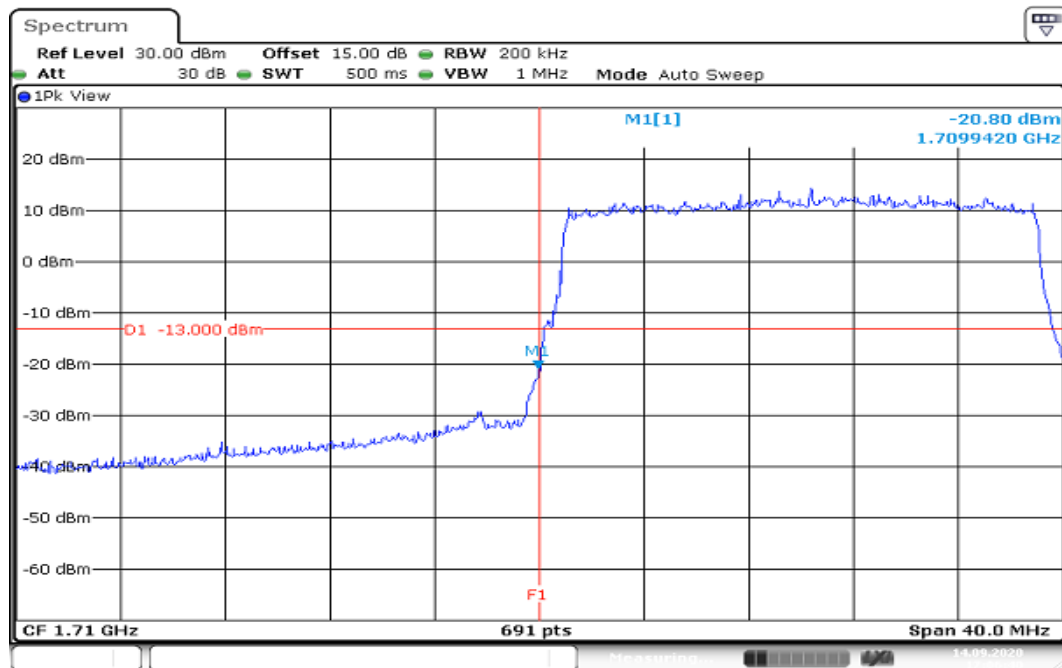
HIGHER BAND EDGE



Date: 14.SEP.2020 17:21:45

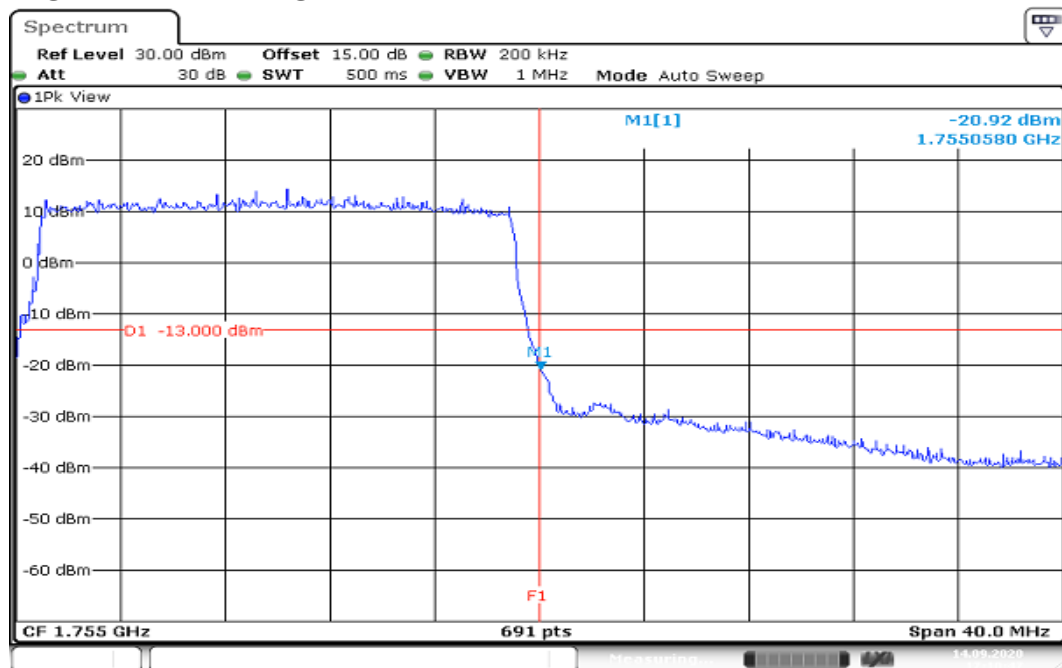
Report No.: T200821W04-RP1

CHANNEL BANDWIDTH: 20MHz / 16QAM / FULL RB ALLOCATION LOWER BAND EDGE



Date: 14.SEP.2020 17:06:40

HIGHER BAND EDGE



Date: 14.SEP.2020 17:10:47

8.6 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. According to KDB 971168D01, photograph 6.0
2. The EUT was connect to spectrum analyzer and call box.
3. The RF output of EUT was connected to the spectrum analyzer.
4. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
5. Record the maximum spurious emission.
6. The fundamental frequency should be excluded against the limit in operating band.



Report No.: T200821W04-RP1

Page: 102 / 142
Rev.: 01

TEST RESULTS

Temperature: 24°C

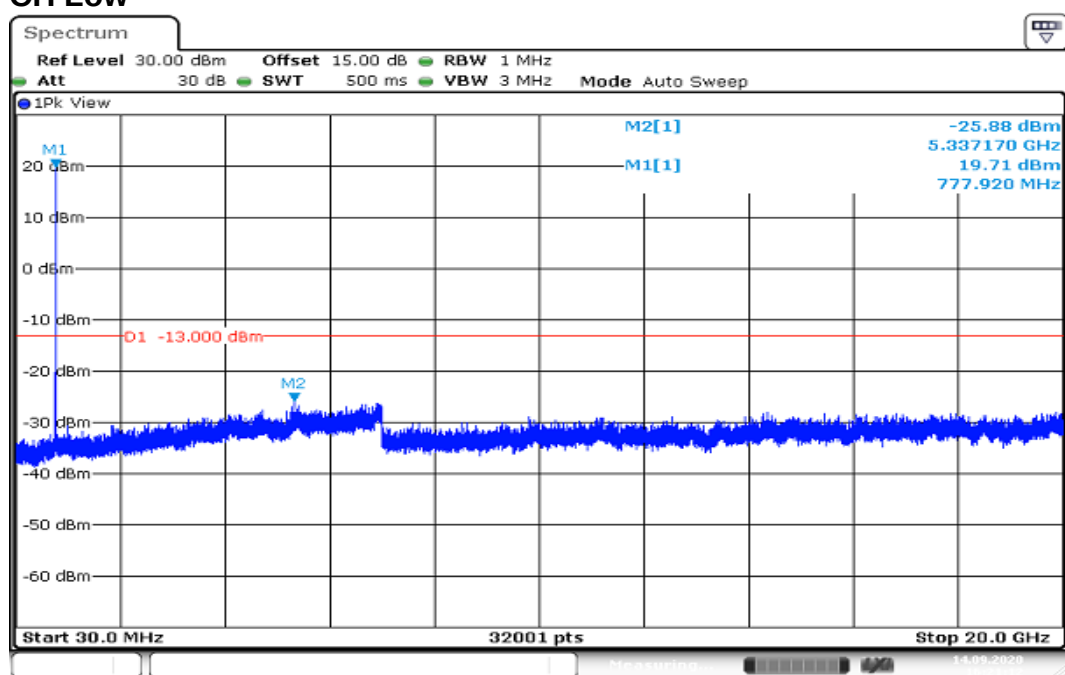
Humidity: 50% RH

Tested by: Jane Wang

LTE Band 13

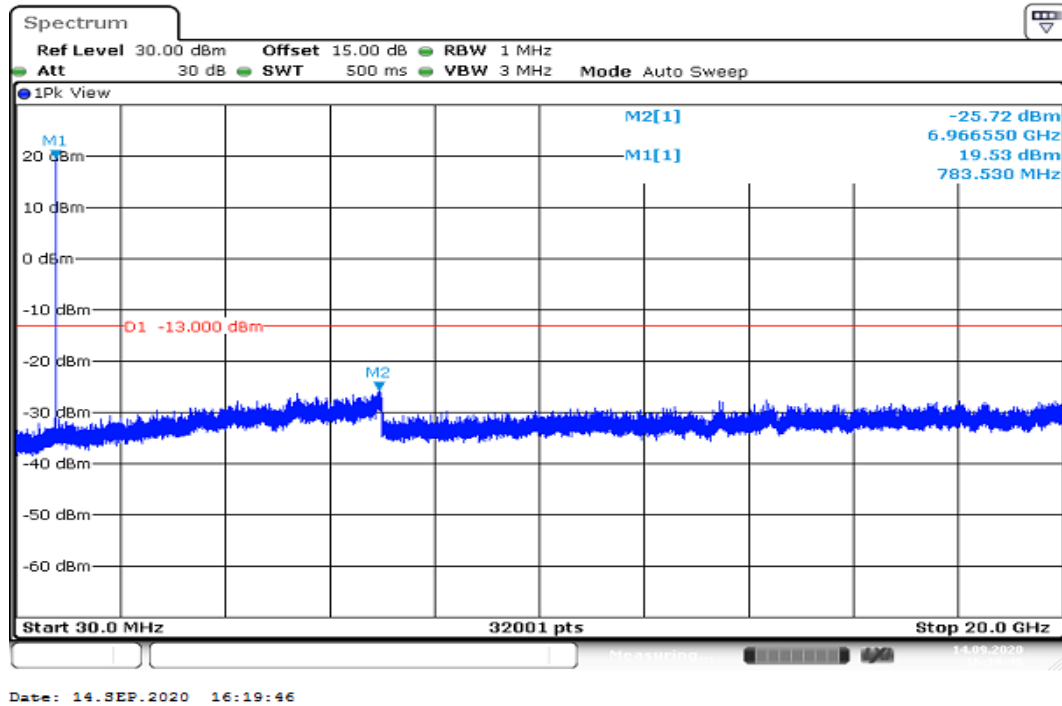
CHANNEL BANDWIDTH: 5MHz / QPSK / 1RB

CH Low

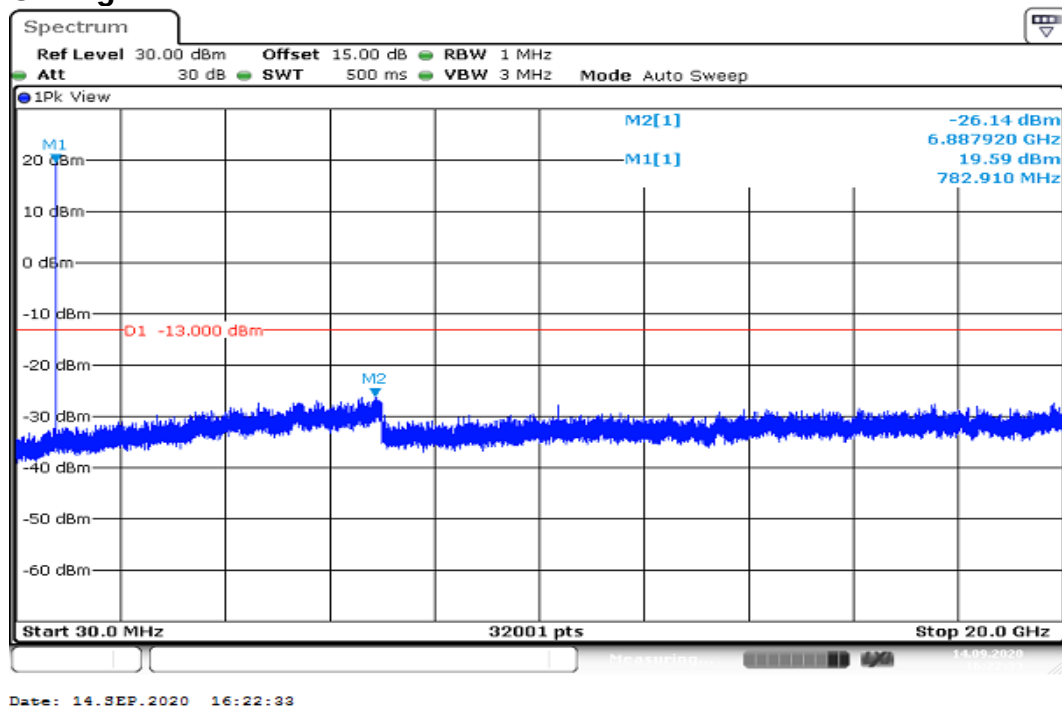


Date: 14.SEP.2020 16:21:12

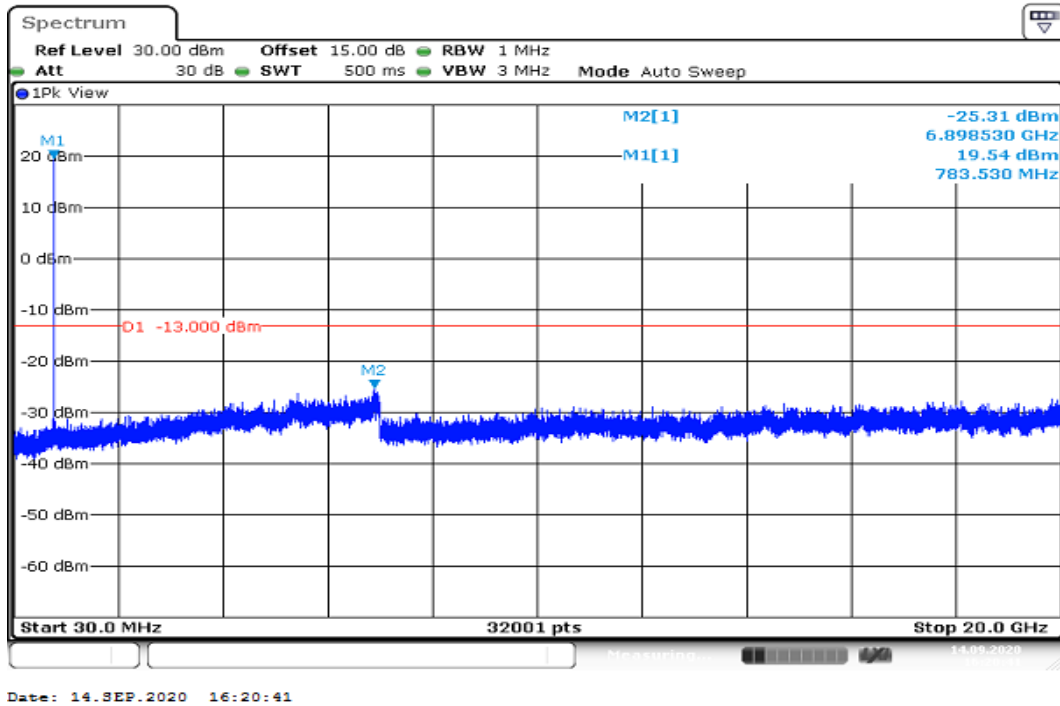
CH Mid



CH High

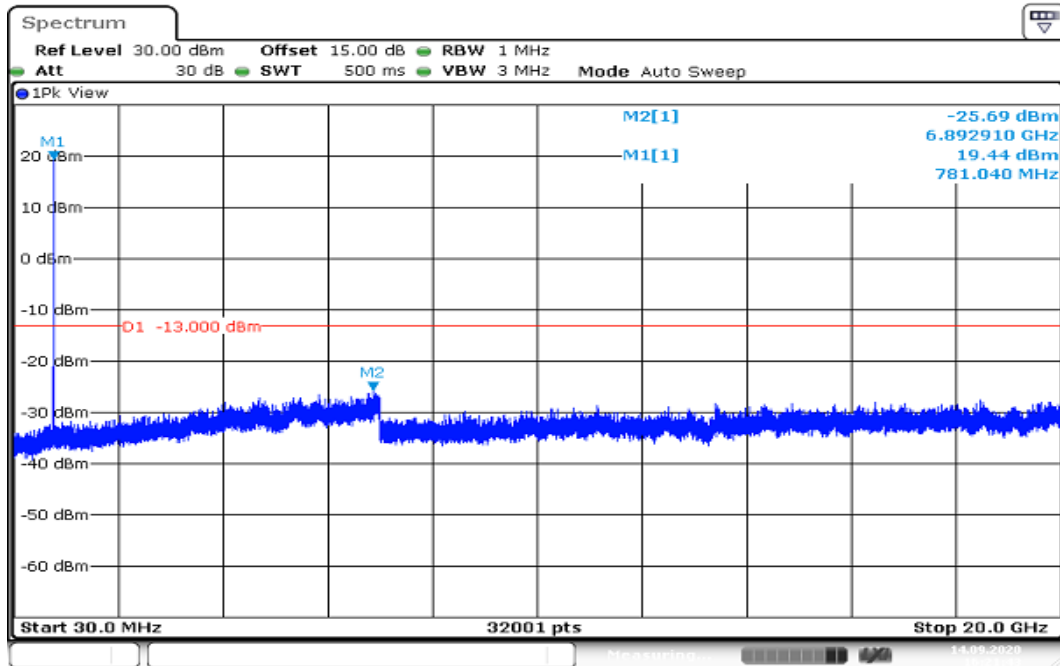


CHANNEL BANDWIDTH: 10MHz / QPSK / 1RB
CH Mid

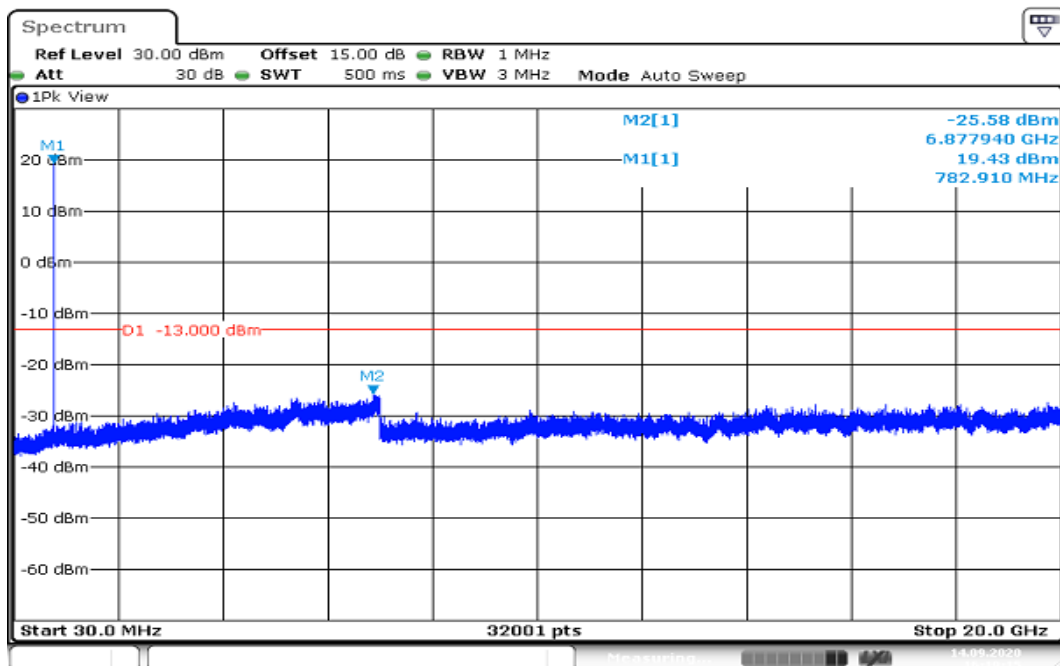


CHANNEL BANDWIDTH: 5MHz / 16QAM / 1RB

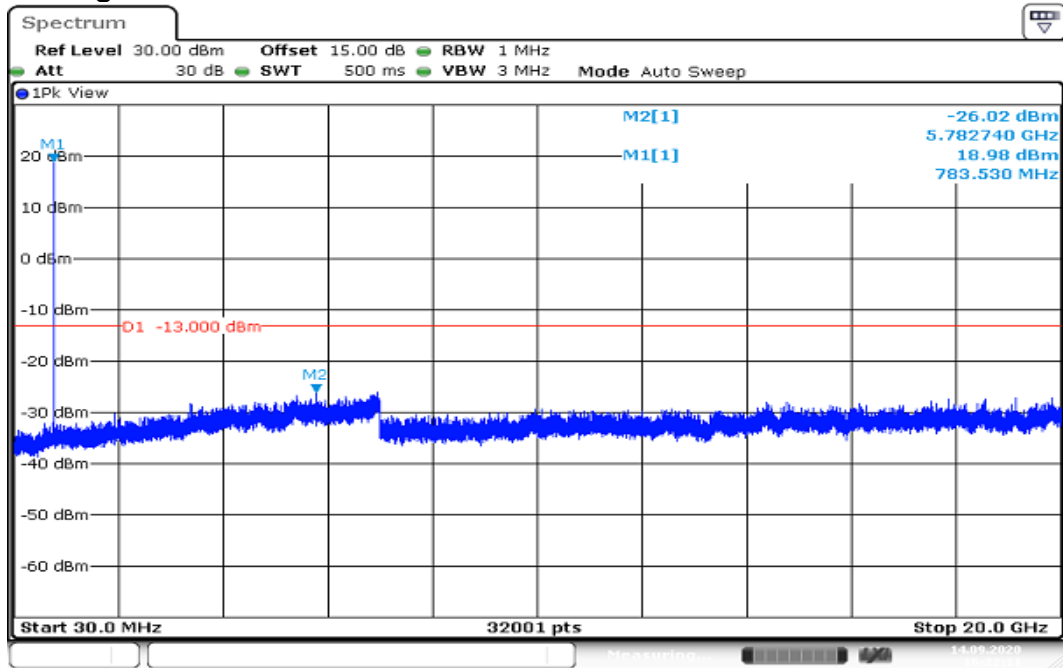
CH Low



CH Mid

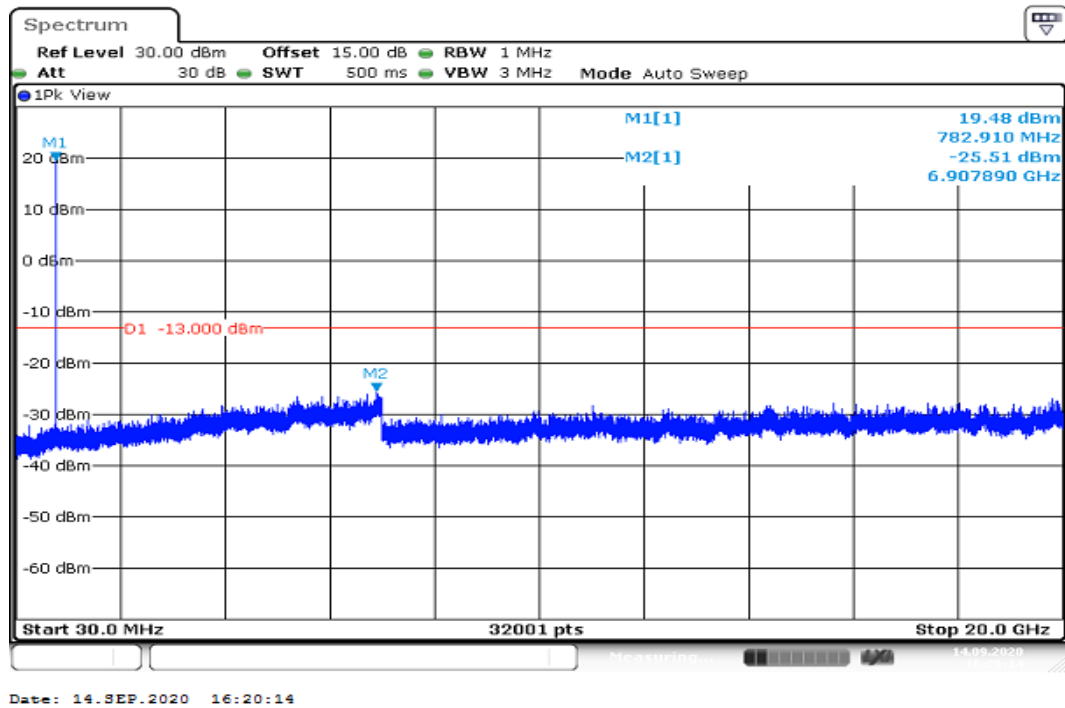


CH High



Date: 14.SEP.2020 16:22:11

CHANNEL BANDWIDTH: 10MHz / 16QAM / 1RB CH Mid

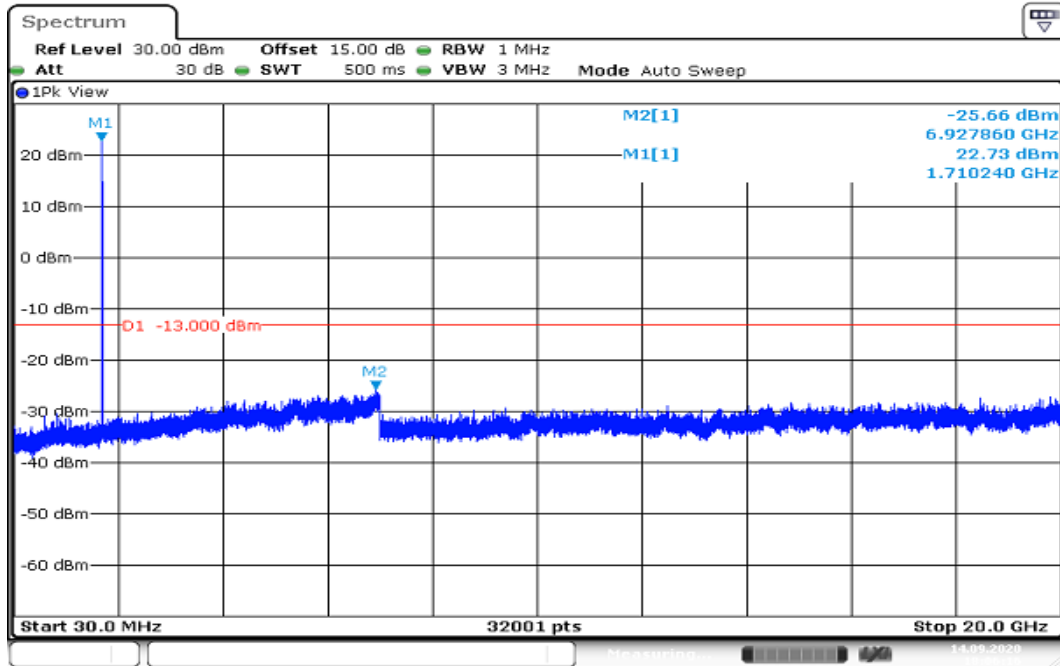


Report No.: T200821W04-RP1

LTE Band 4

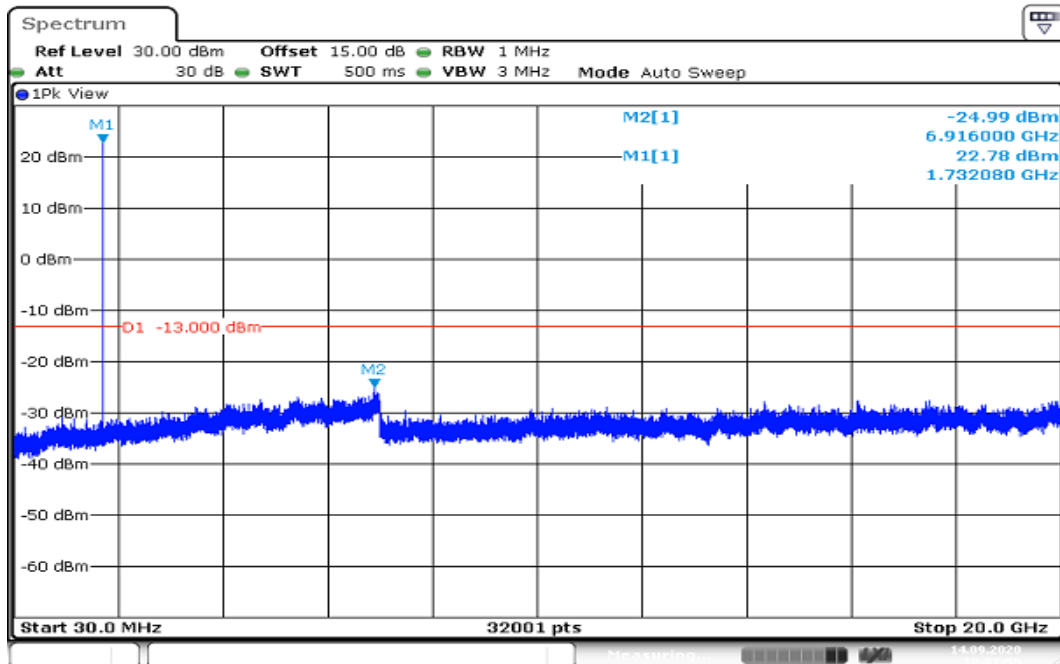
CHANNEL BANDWIDTH: 1.4MHz / QPSK / 1RB

CH Low



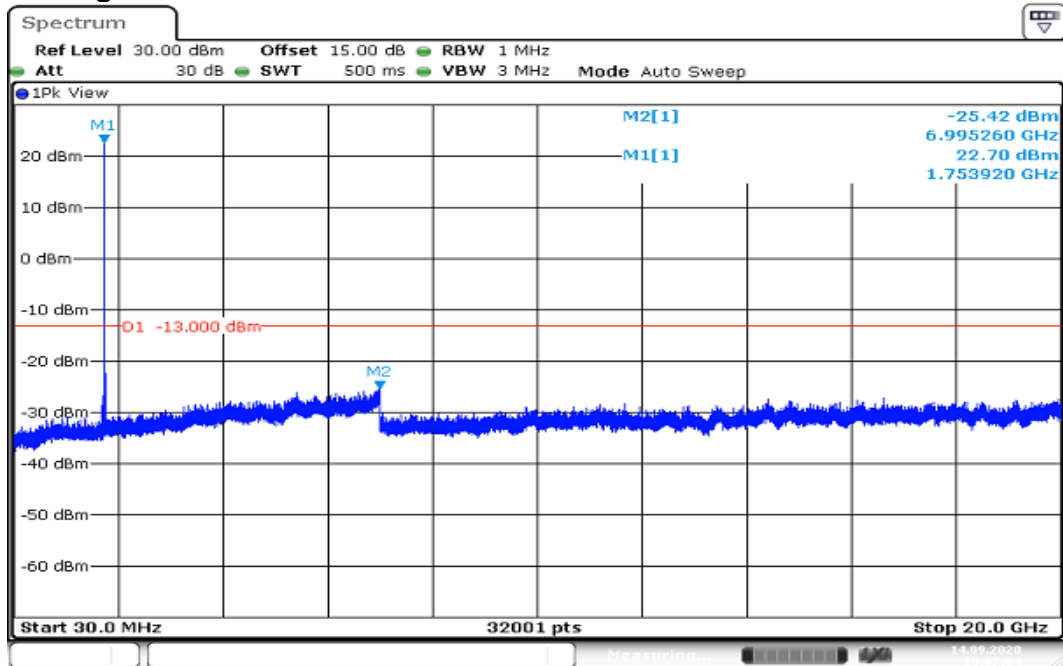
Date: 14.SEP.2020 18:06:16

CH Mid



Date: 14.SEP.2020 18:07:59

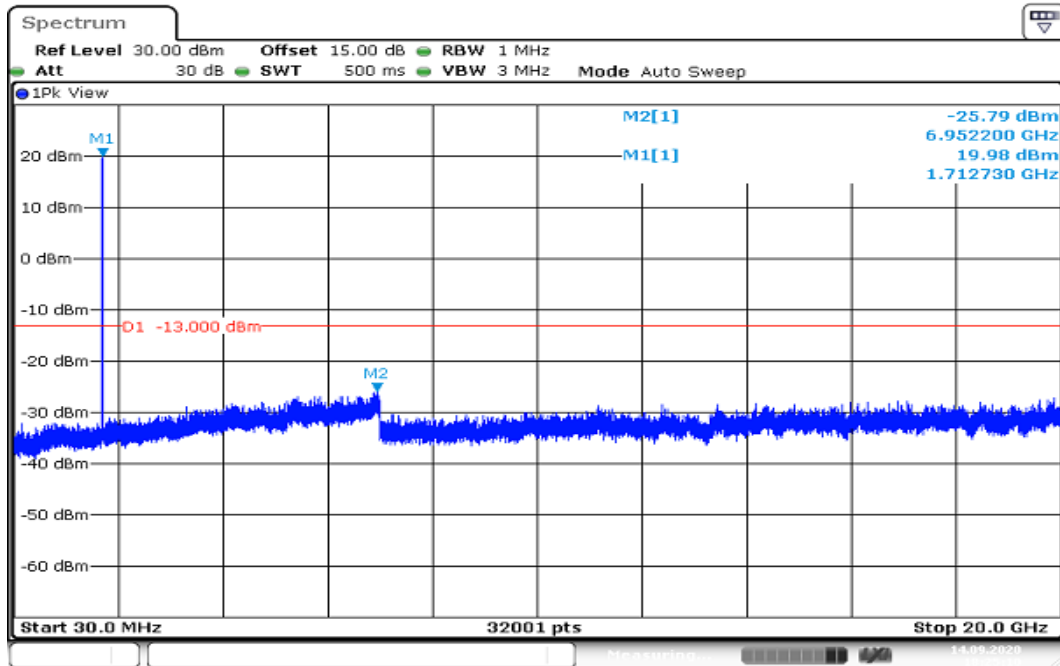
CH High



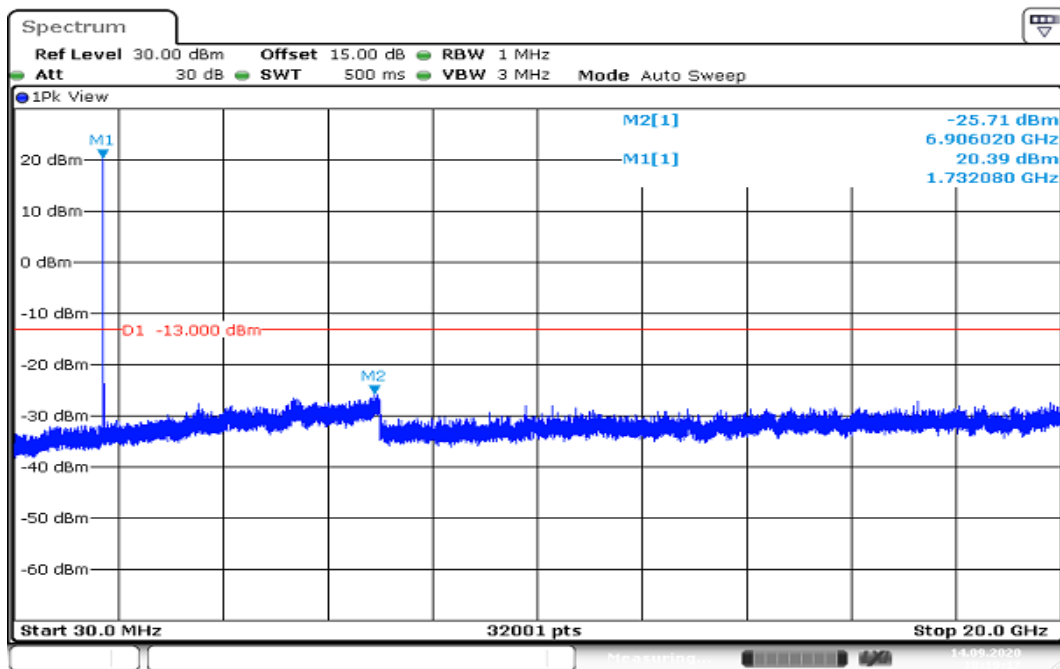
Date: 14.SEP.2020 18:07:05

CHANNEL BANDWIDTH: 3MHz / QPSK / 1RB

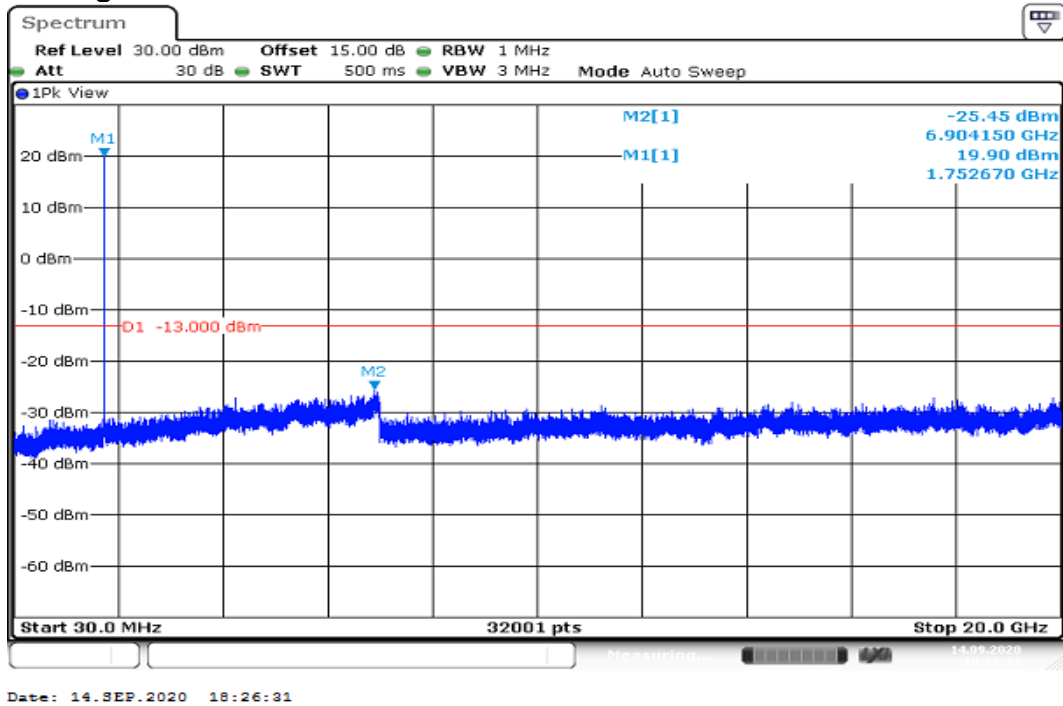
CH Low



CH Mid

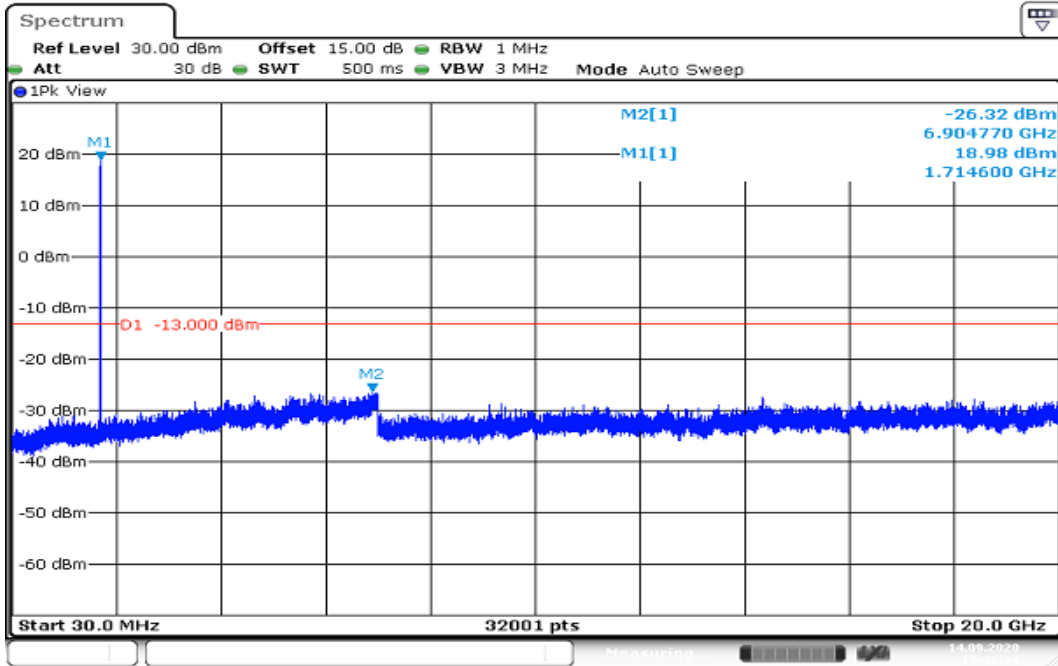


CH High

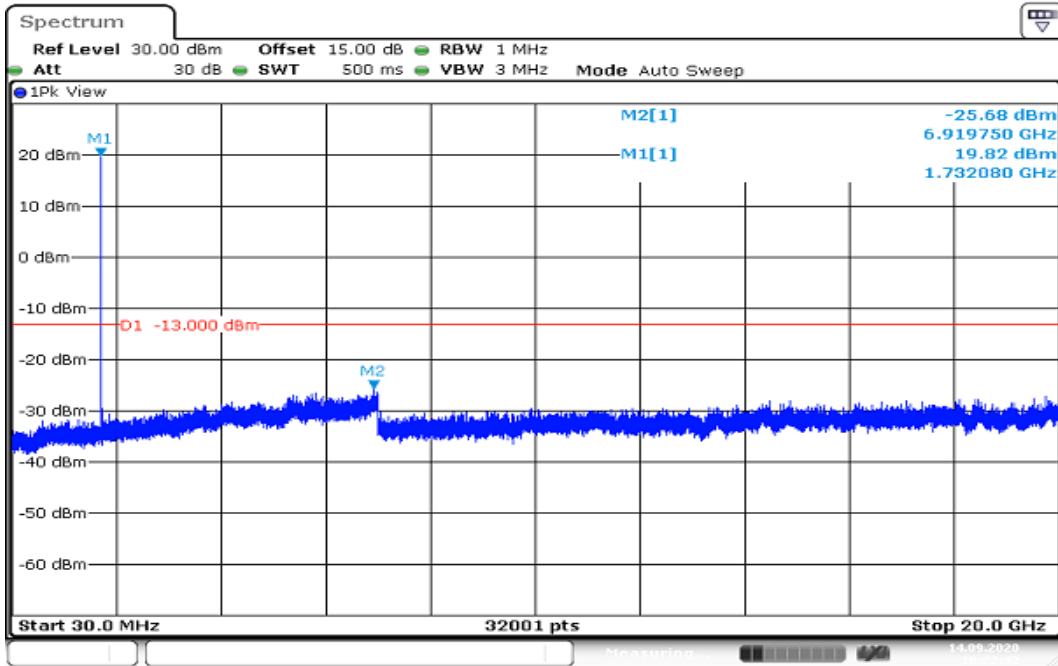


CHANNEL BANDWIDTH: 5MHz / QPSK / 1RB

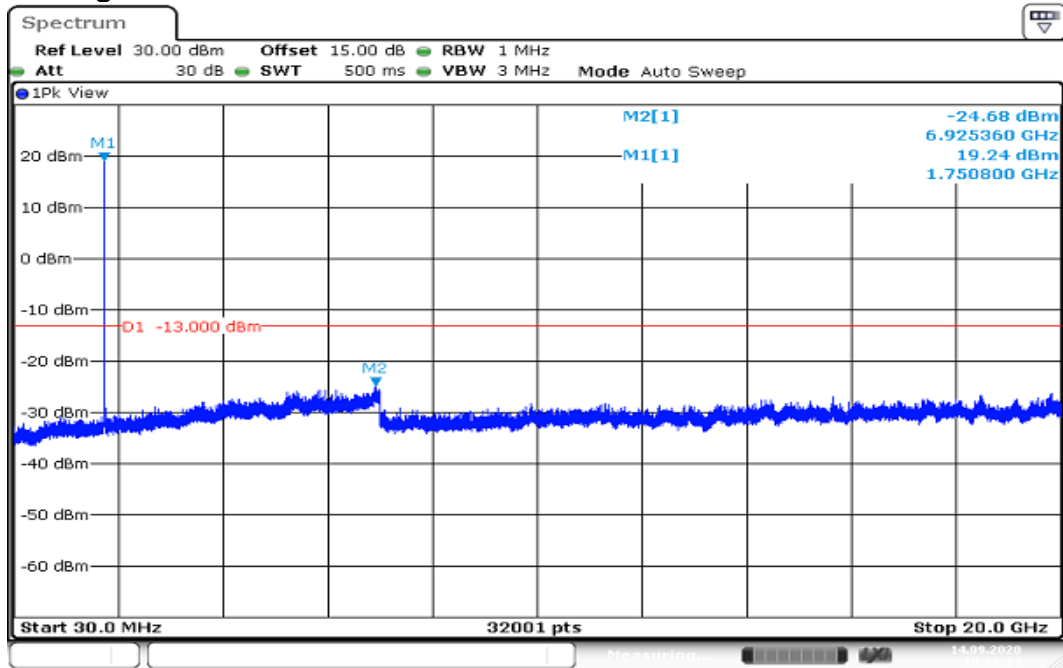
CH Low



CH Mid



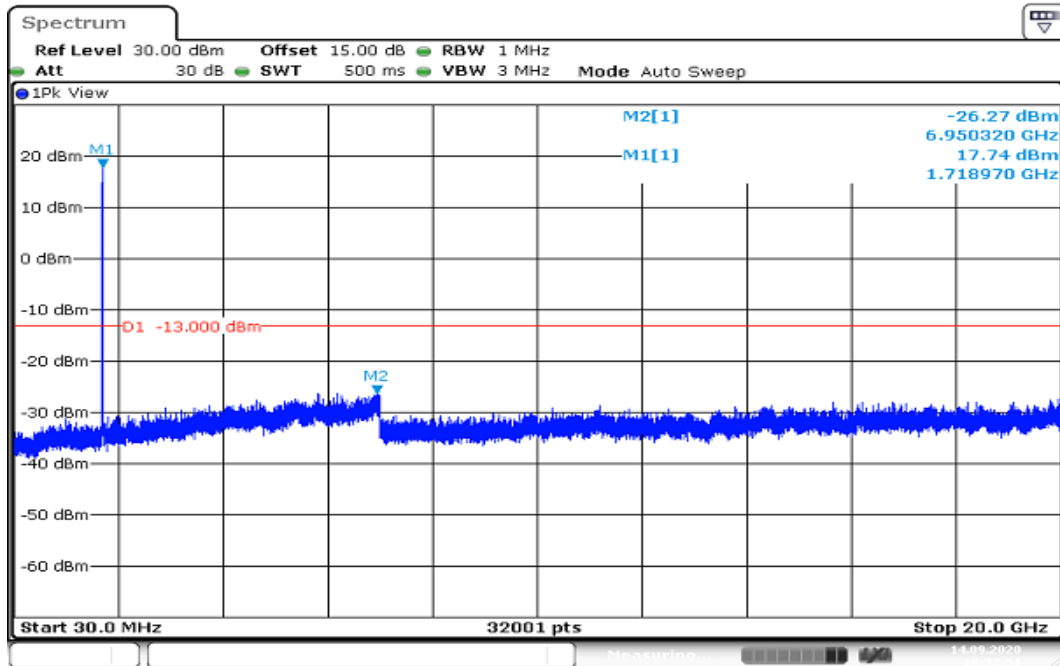
CH High



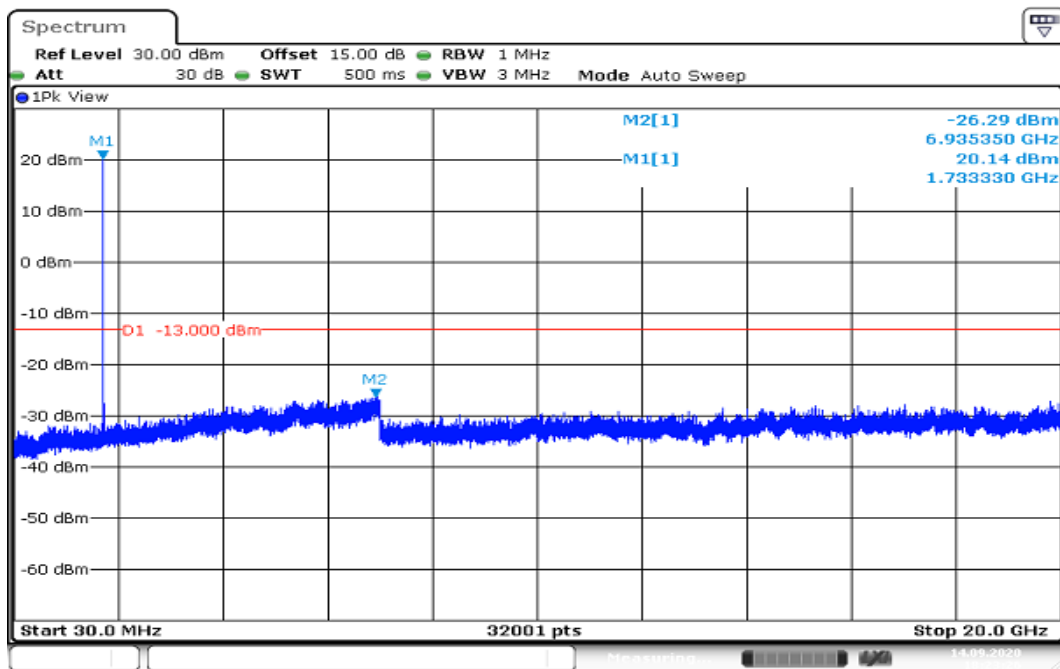
Date: 14.SEP.2020 18:28:24

CHANNEL BANDWIDTH: 10MHz / QPSK / 1RB

CH Low



CH Mid



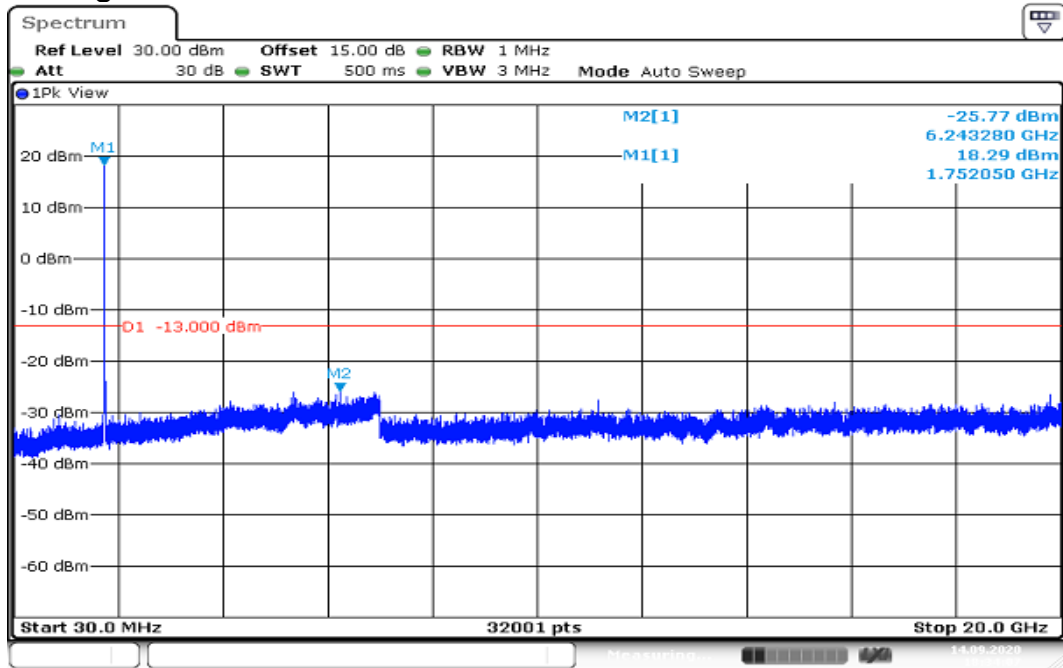


Report No.: T200821W04-RP1

Page: 115 / 142

Rev.: 01

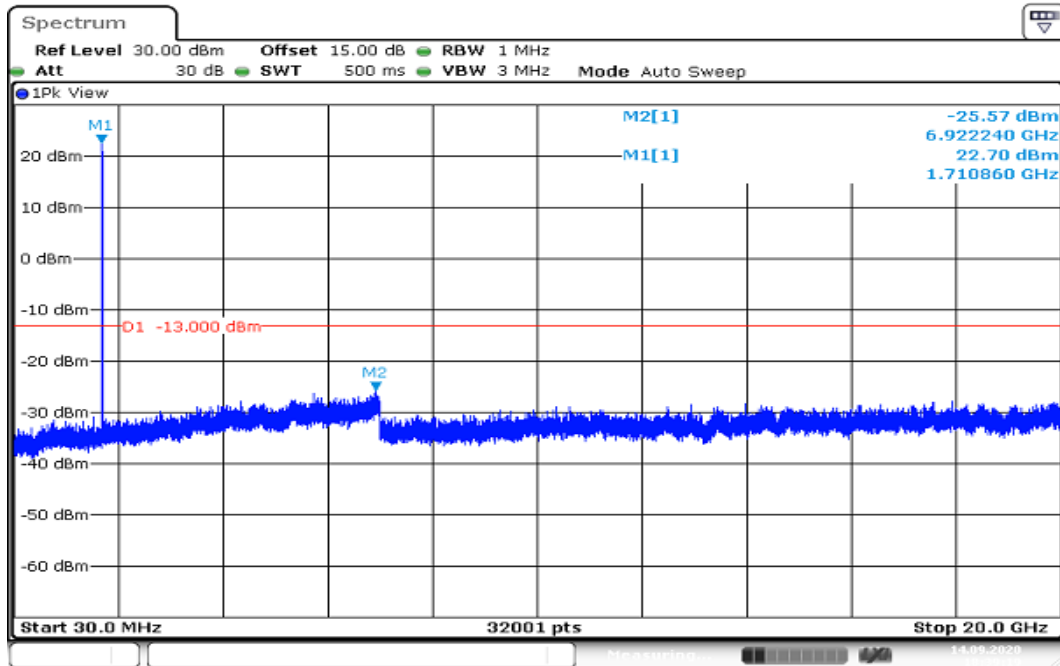
CH High



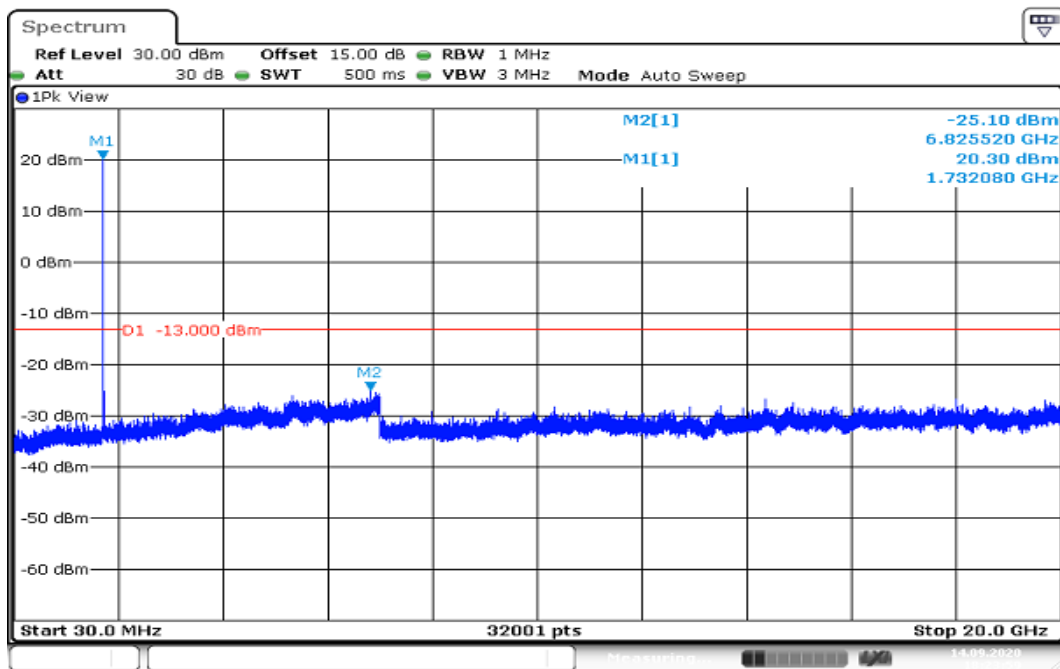
Date: 14.SEP.2020 18:34:07

CHANNEL BANDWIDTH: 15MHz / QPSK / 1RB

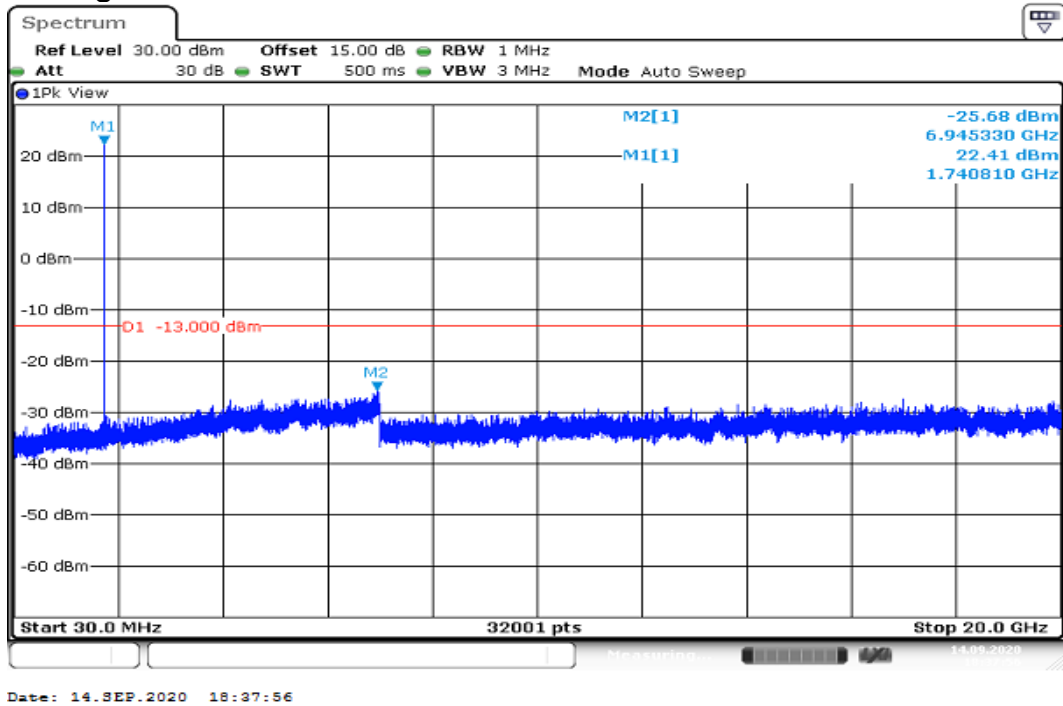
CH Low



CH Mid

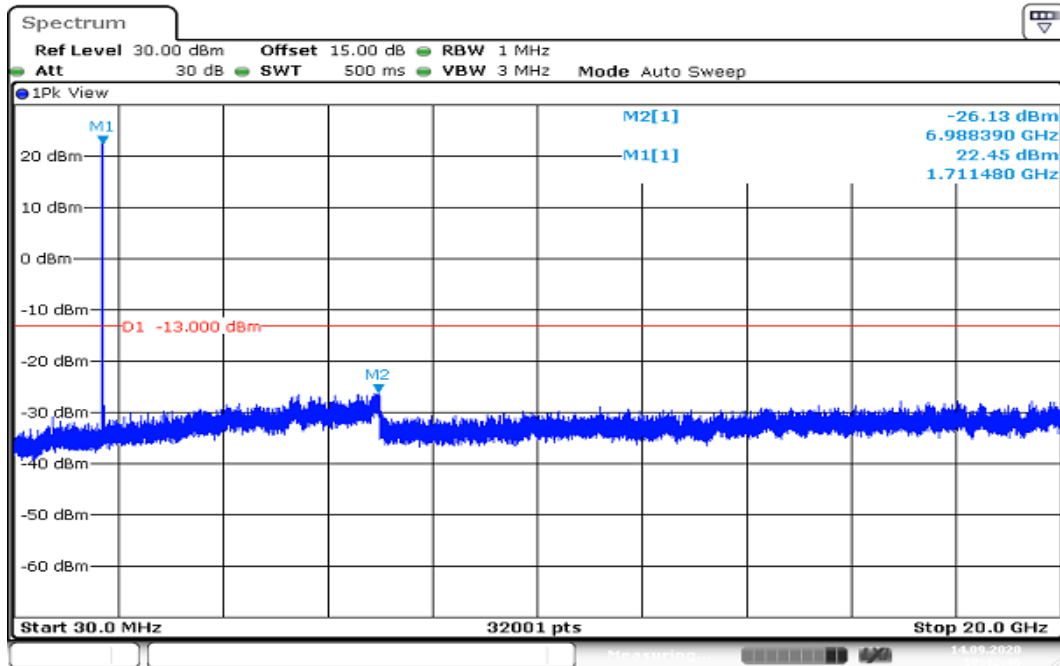


CH High

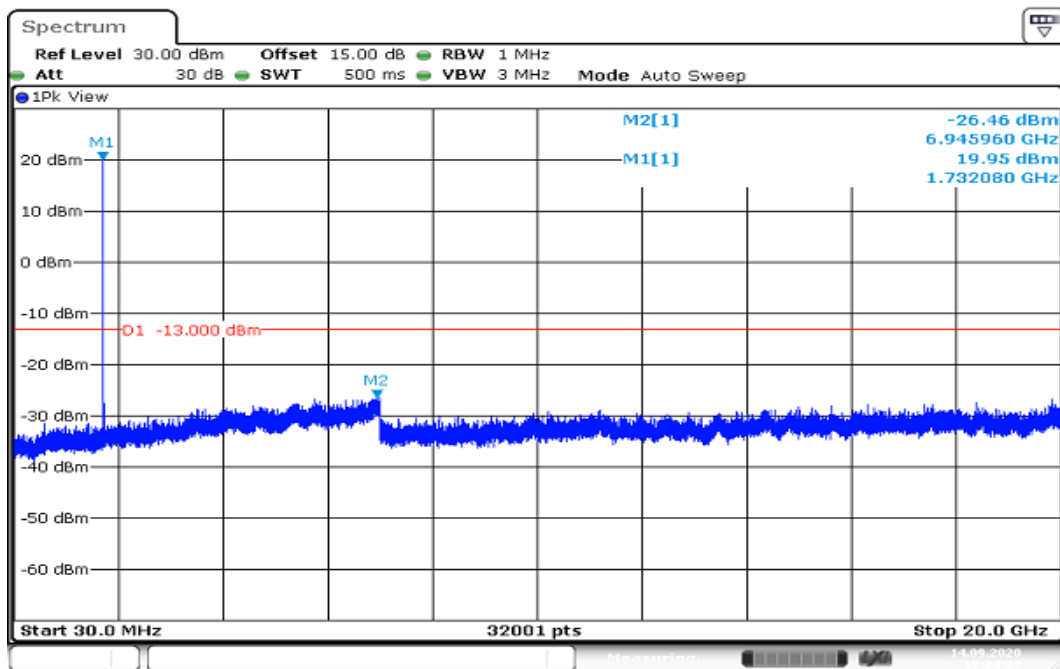


CHANNEL BANDWIDTH: 20MHz / QPSK / 1RB

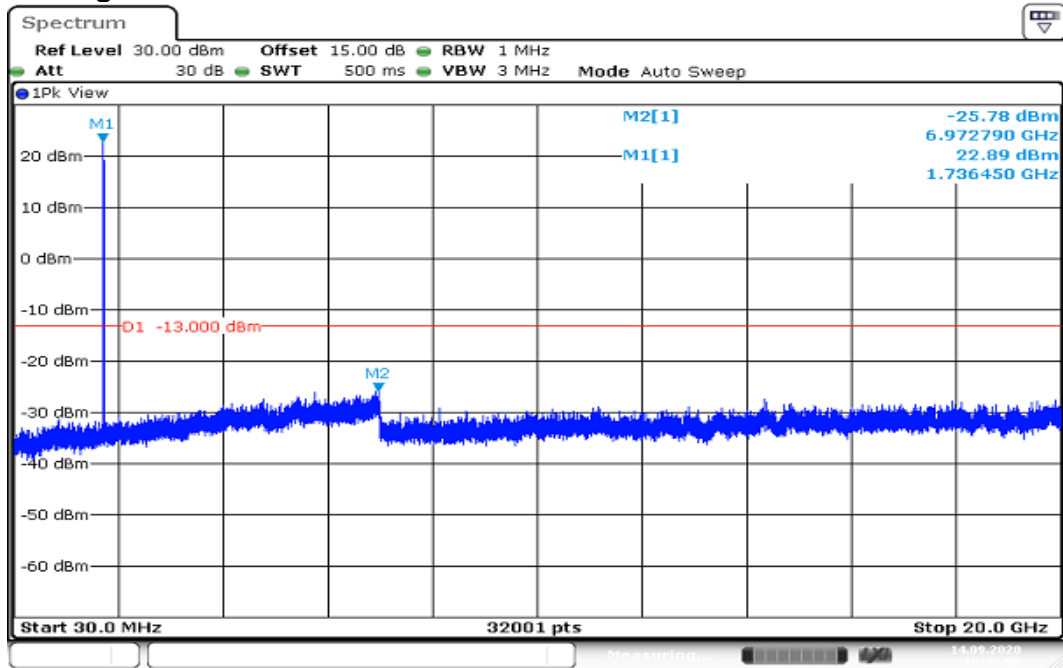
CH Low



CH Mid



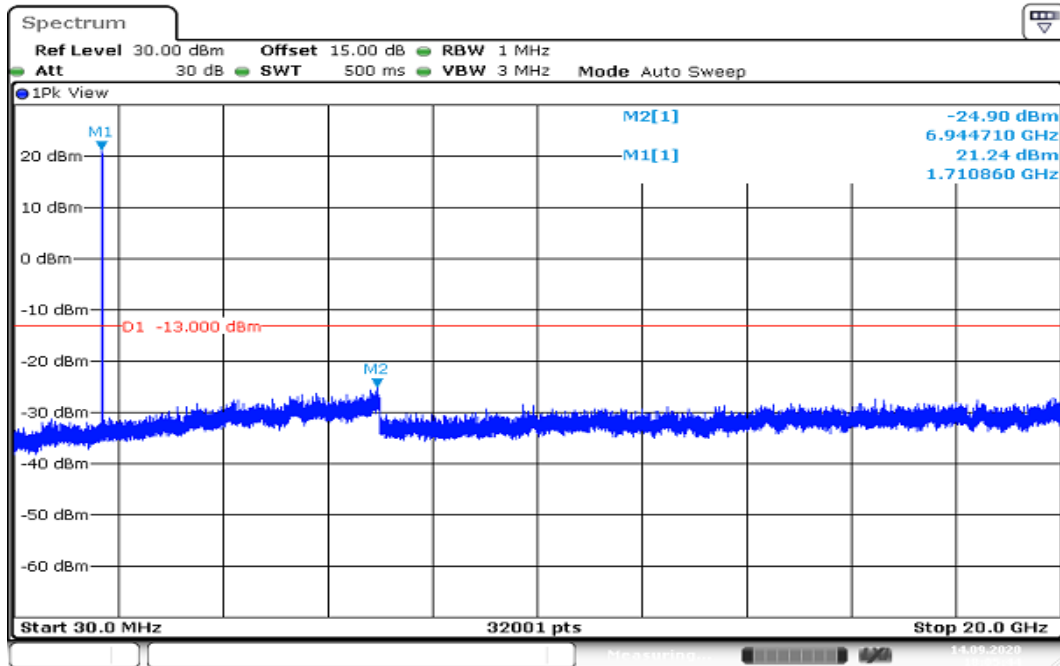
CH High



Date: 14.SEP.2020 18:43:56

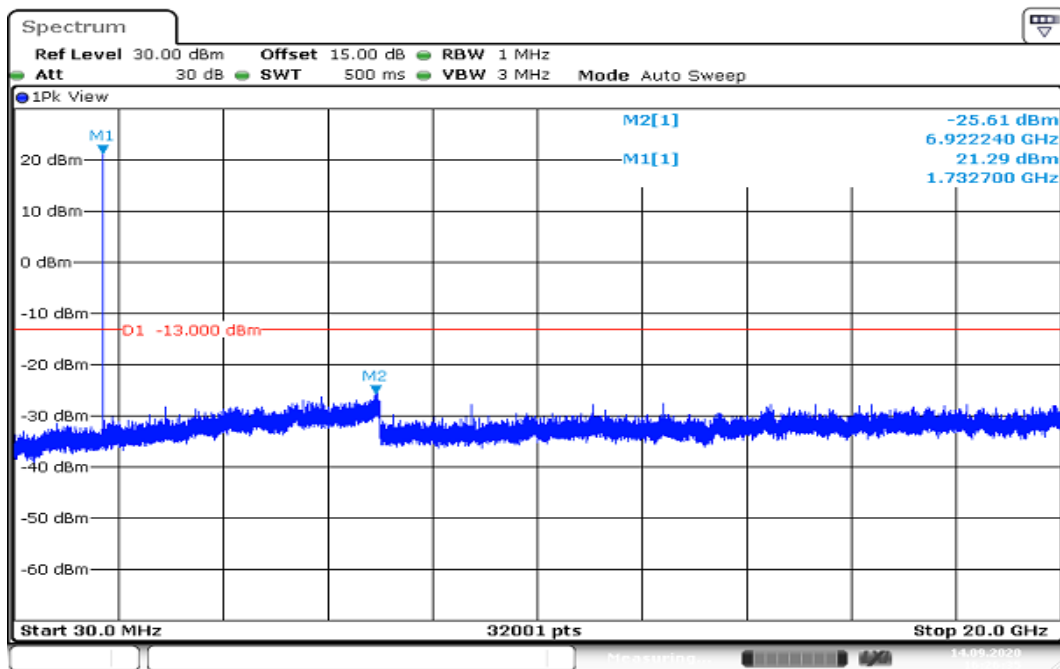
CHANNEL BANDWIDTH: 1.4MHz / 16QAM / 1RB

CH Low



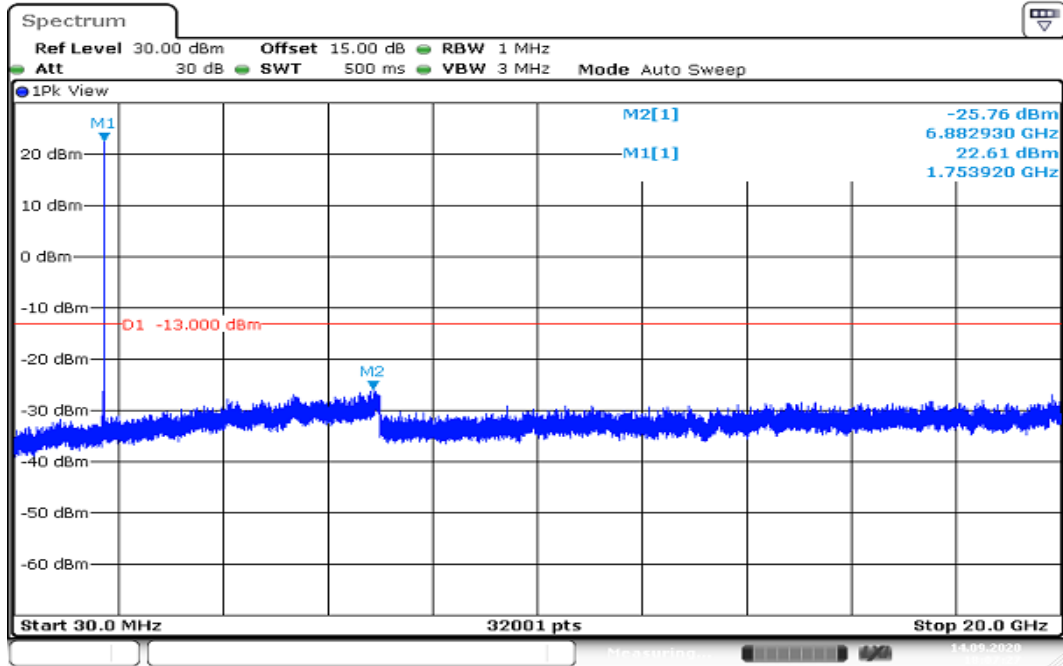
Date: 14.SEP.2020 18:05:44

CH Mid



Date: 14.SEP.2020 16:26:35

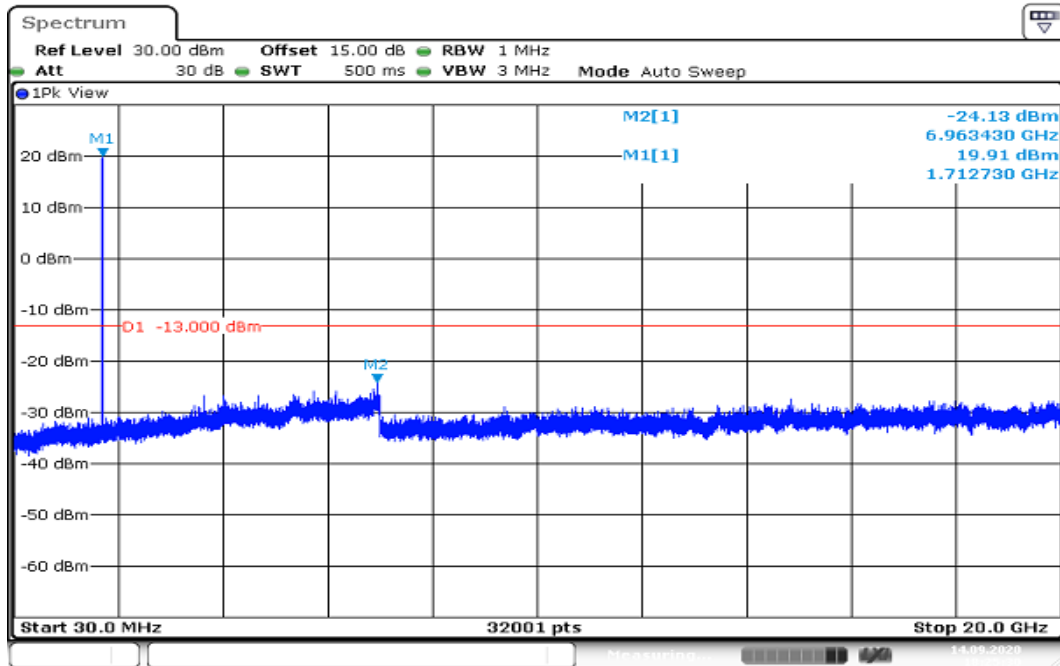
CH High



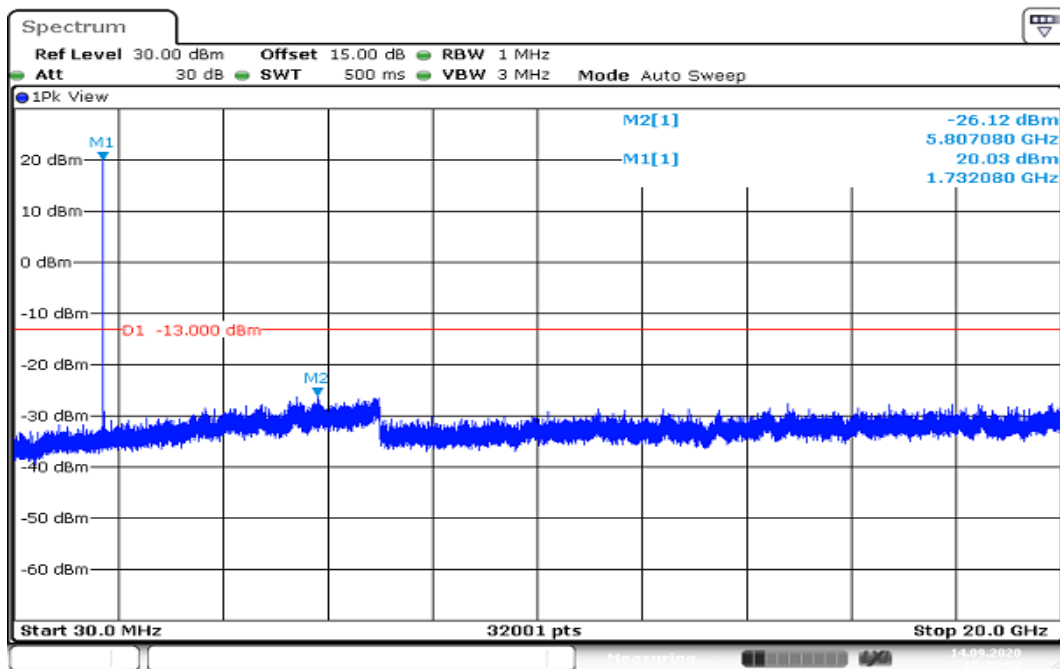
Date: 14.SEP.2020 18:07:27

CHANNEL BANDWIDTH: 3MHz / 16QAM / 1RB

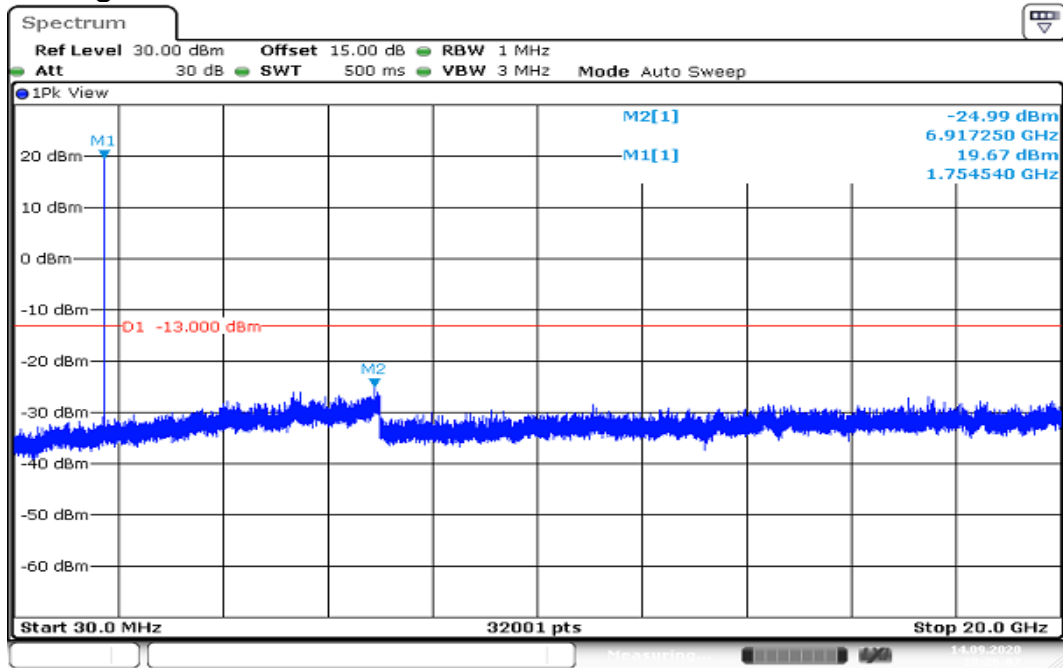
CH Low



CH Mid



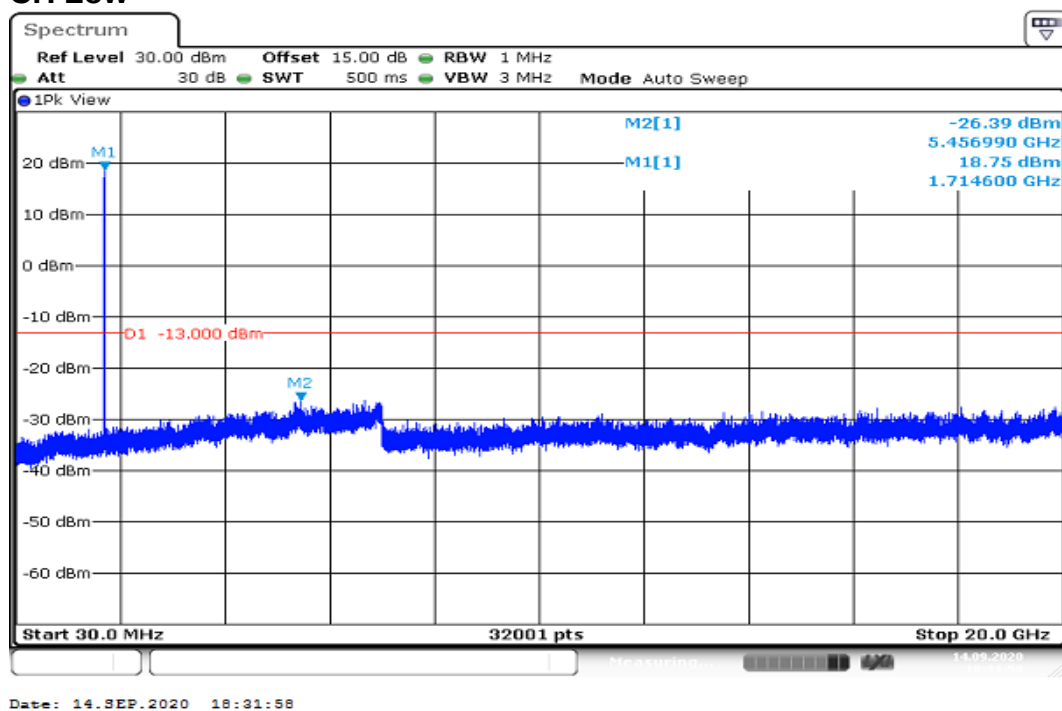
CH High



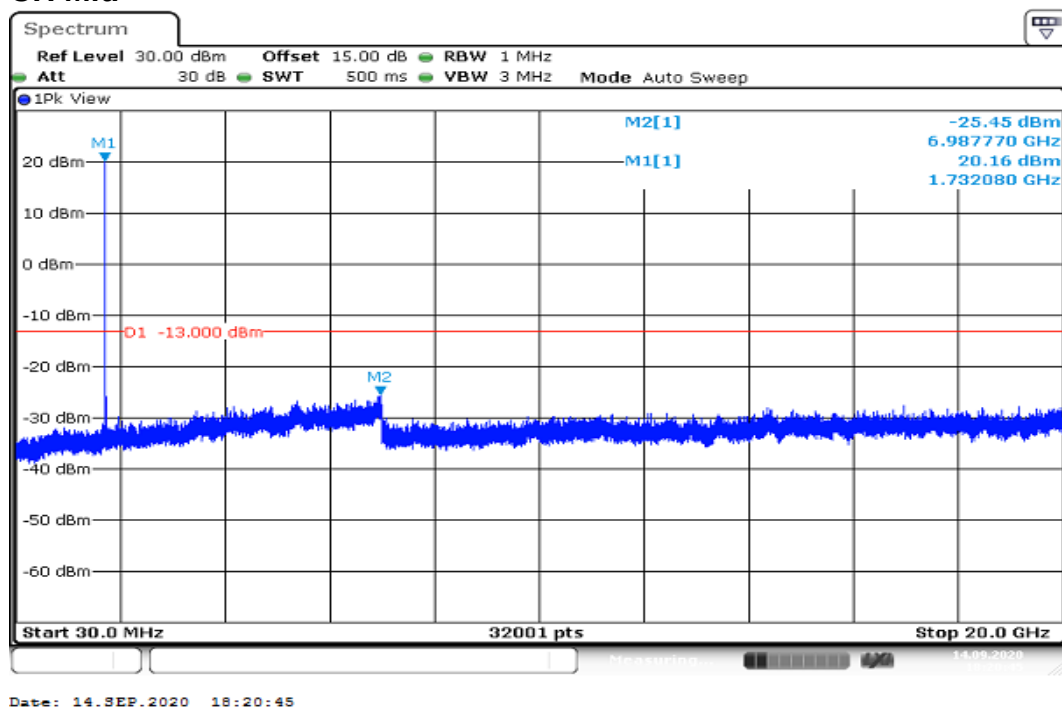
Date: 14.SEP.2020 18:26:07

Report No.: T200821W04-RP1

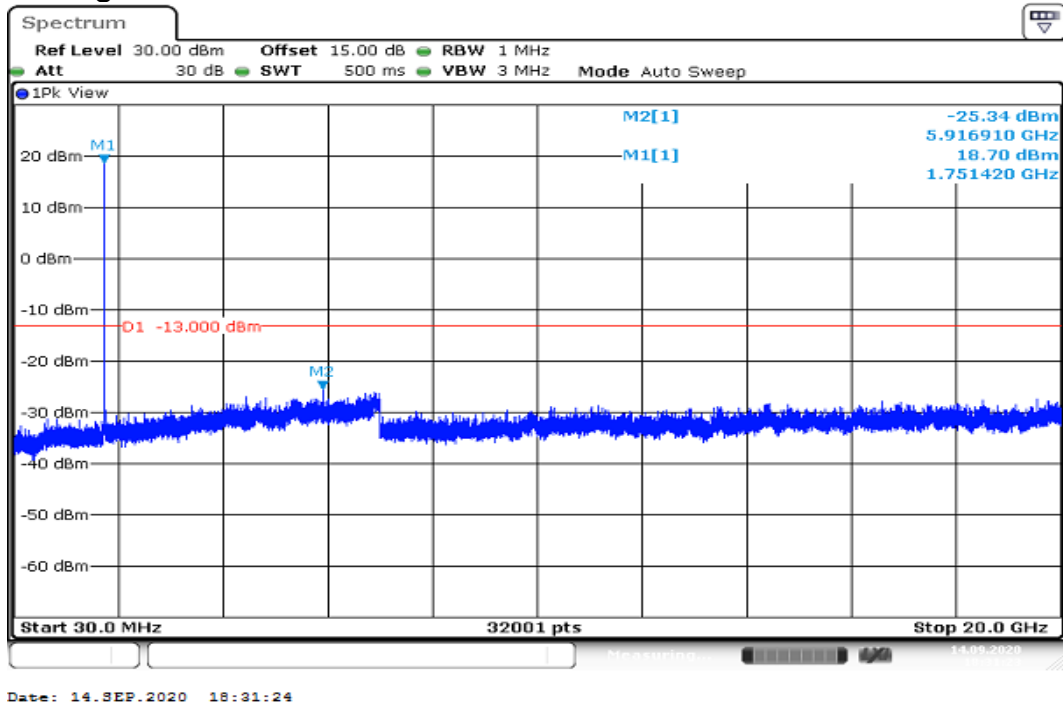
CHANNEL BANDWIDTH:5MHz / 16QAM / 1RB
CH Low



CH Mid

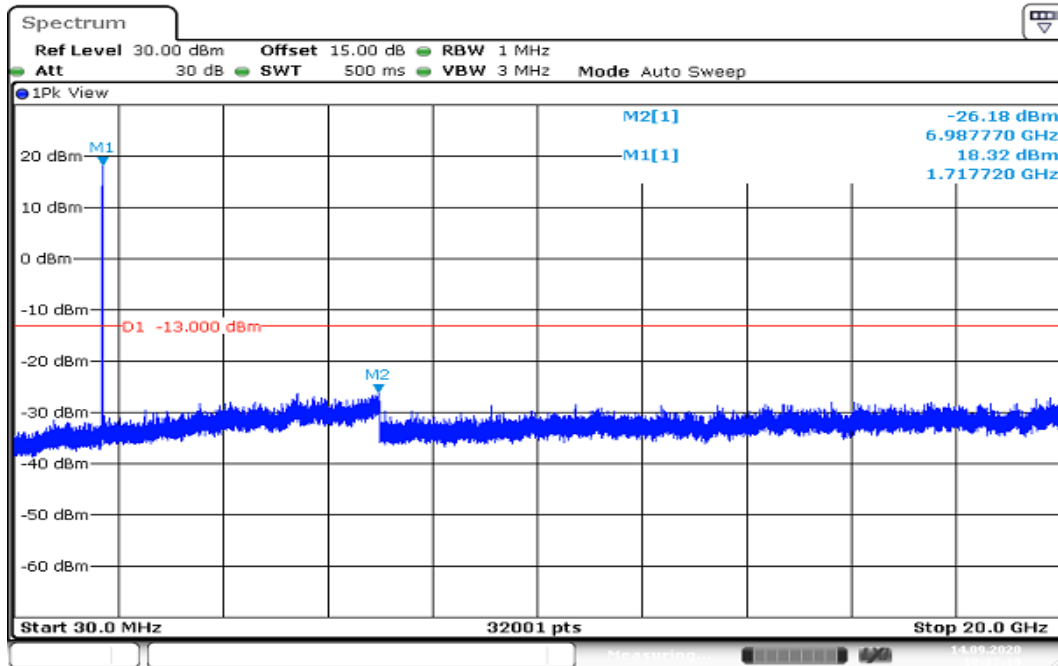


CH High

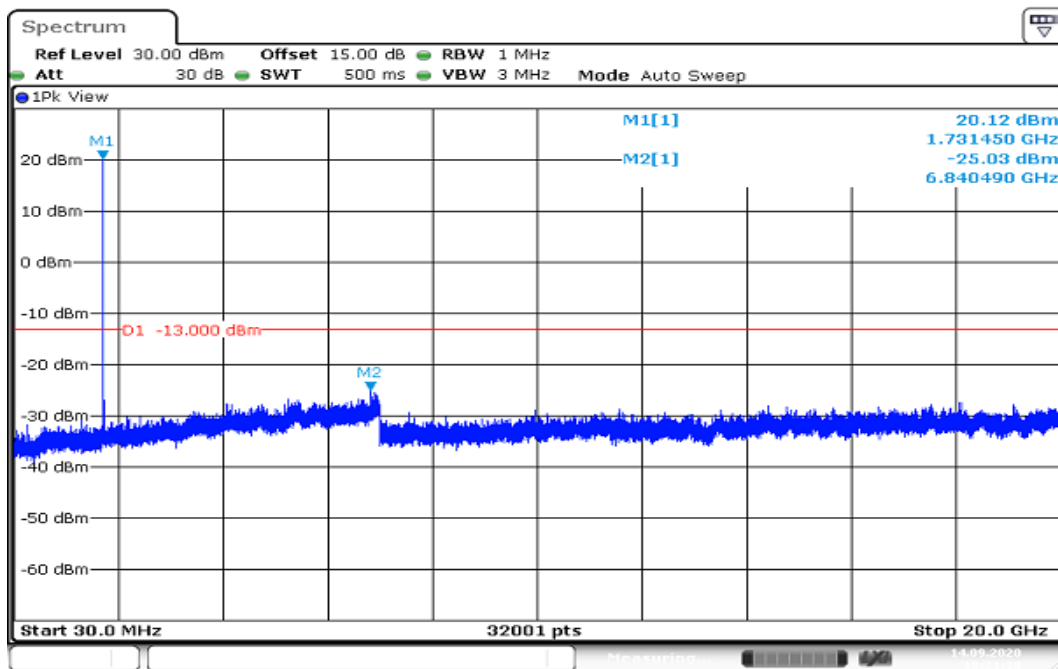


CHANNEL BANDWIDTH:10MHz / 16QAM / 1RB

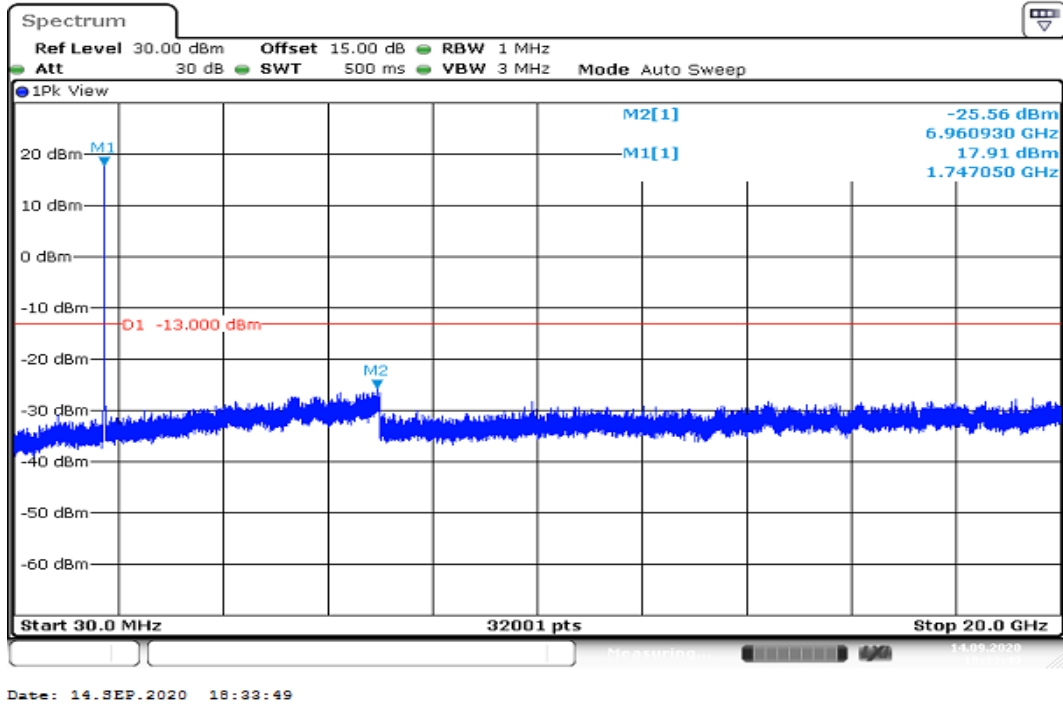
CH Low



CH Mid

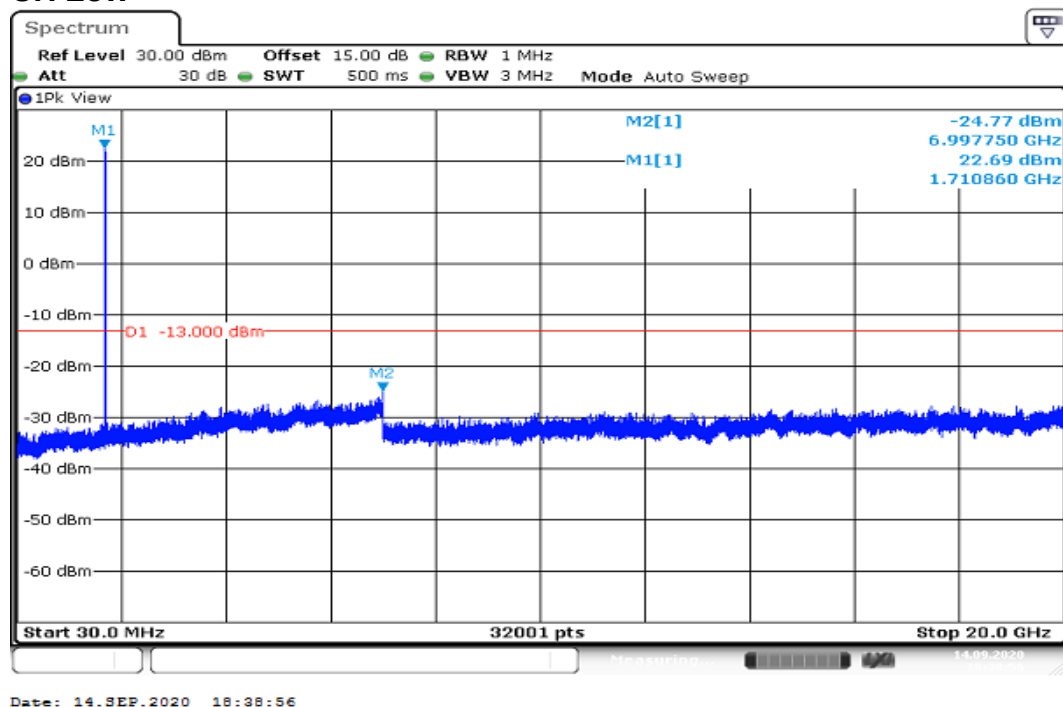


CH High

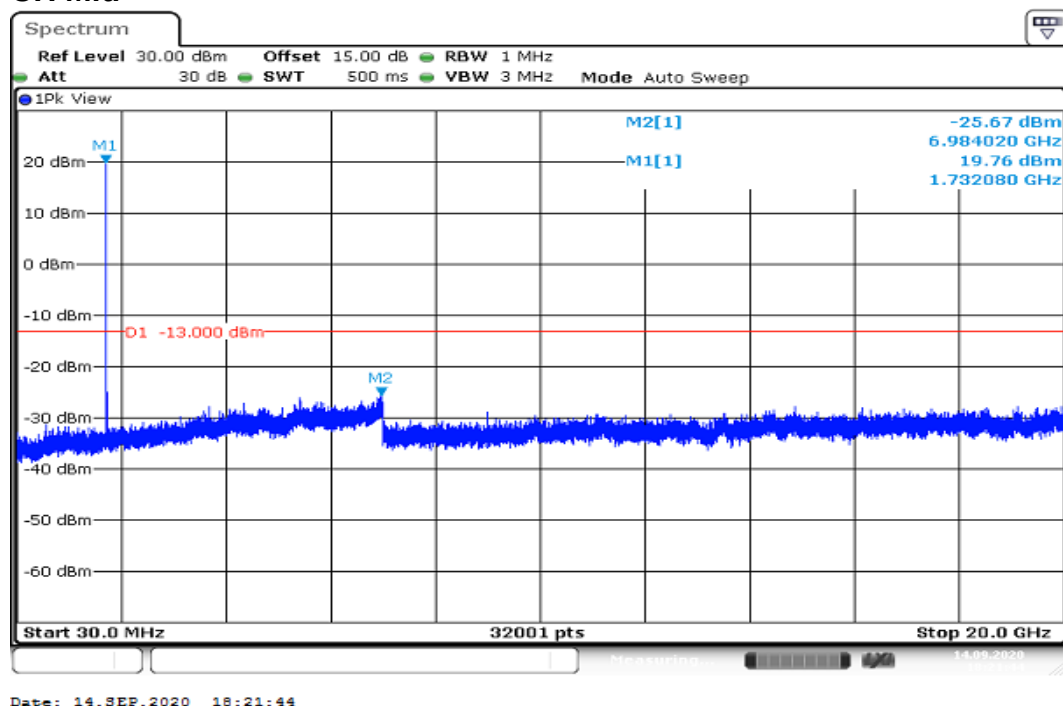


Report No.: T200821W04-RP1

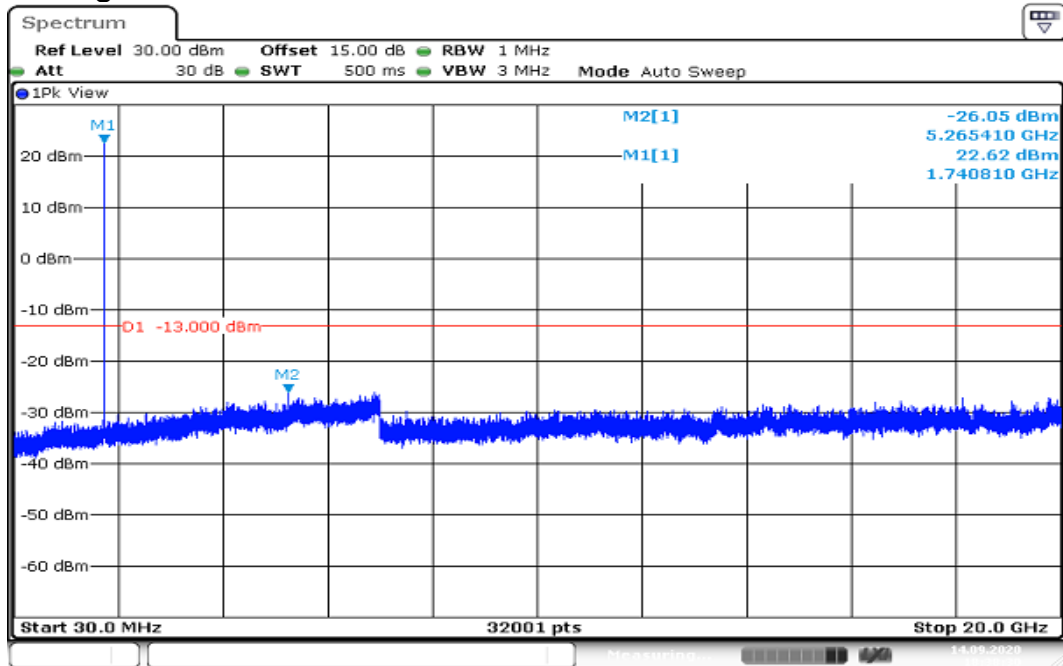
CHANNEL BANDWIDTH:15MHz / 16QAM / 1RB CH Low



CH Mid



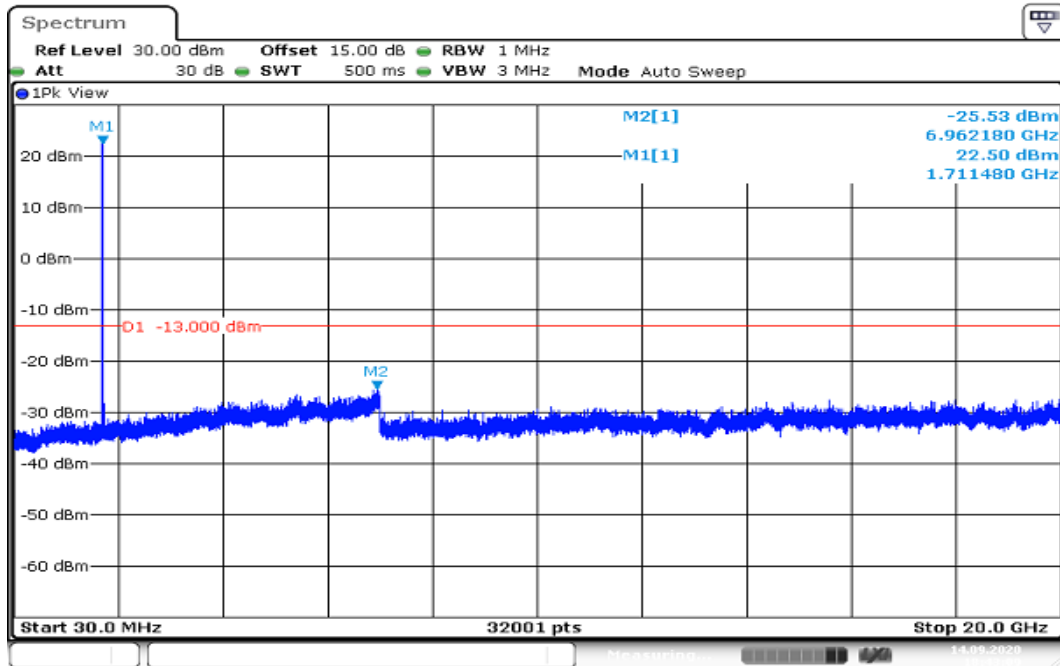
CH High



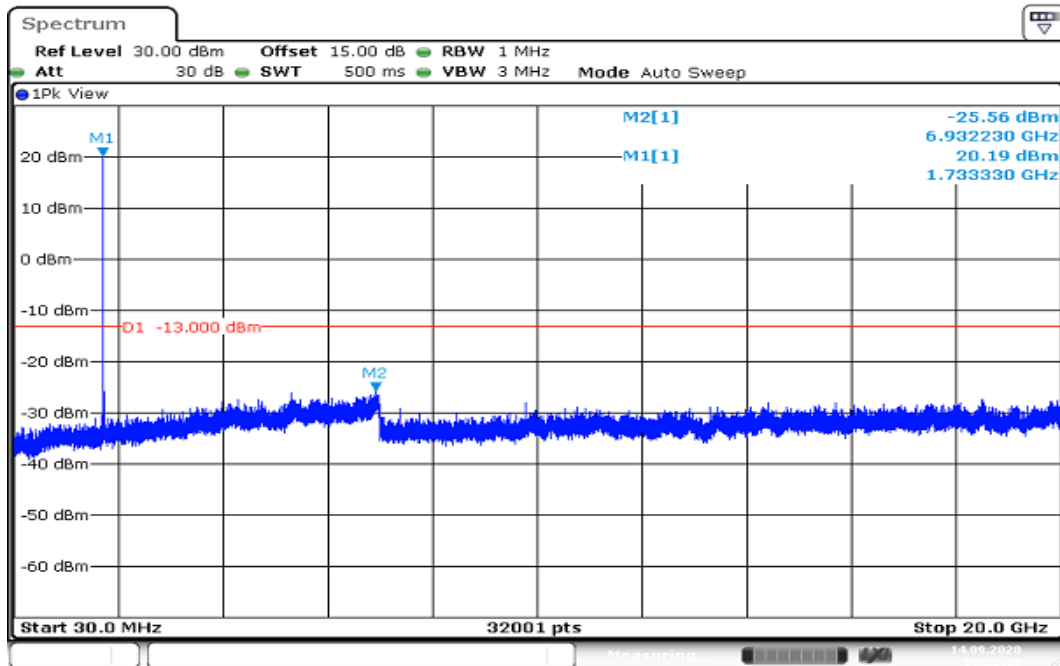
Date: 14.SEP.2020 18:38:30

CHANNEL BANDWIDTH:20MHz / 16QAM / 1RB

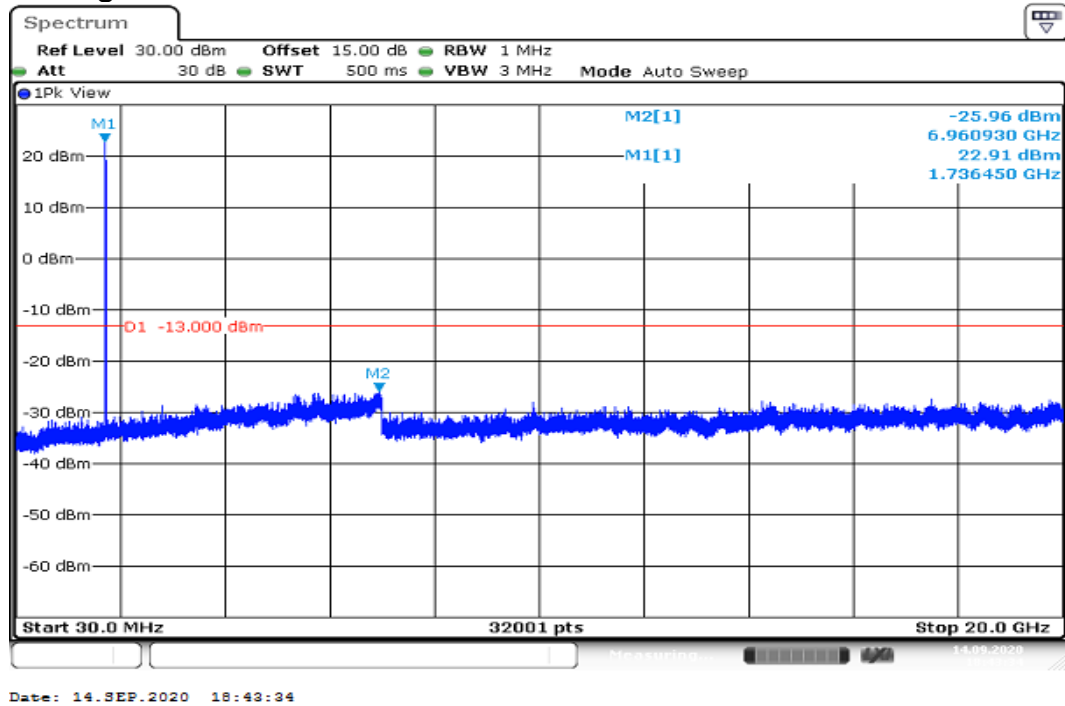
CH Low



CH Mid



CH High



8.7 RADIATED EMISSION MEASUREMENT

LIMITS

FCC §27.53(h), Band 4

General protection levels. Except as otherwise specified below, for operations in the 1710-1755MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.

27.53(c)(2), Band 13

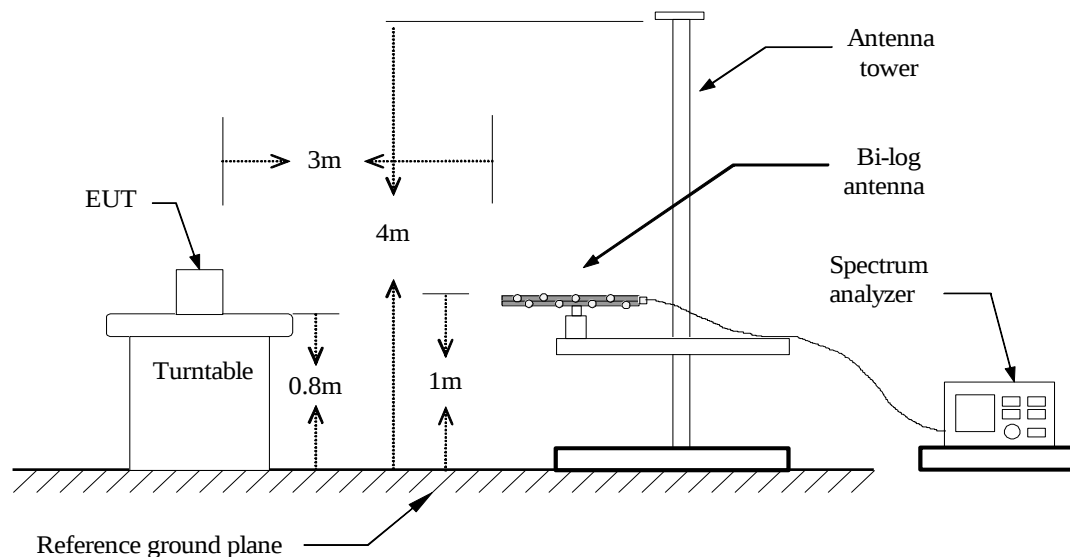
For operations in the 600 MHz band and the 698-746MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Limit Line: -13dBm

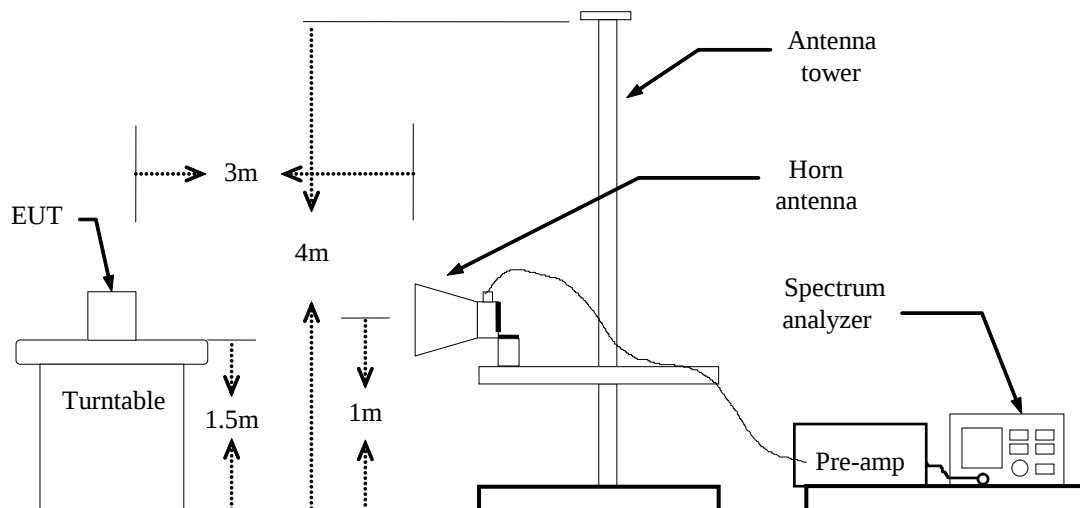
p is the transmitter power measured in watts and **X** is 6 MHz or the equipment occupied bandwidth, whichever is greater.

Test Configuration

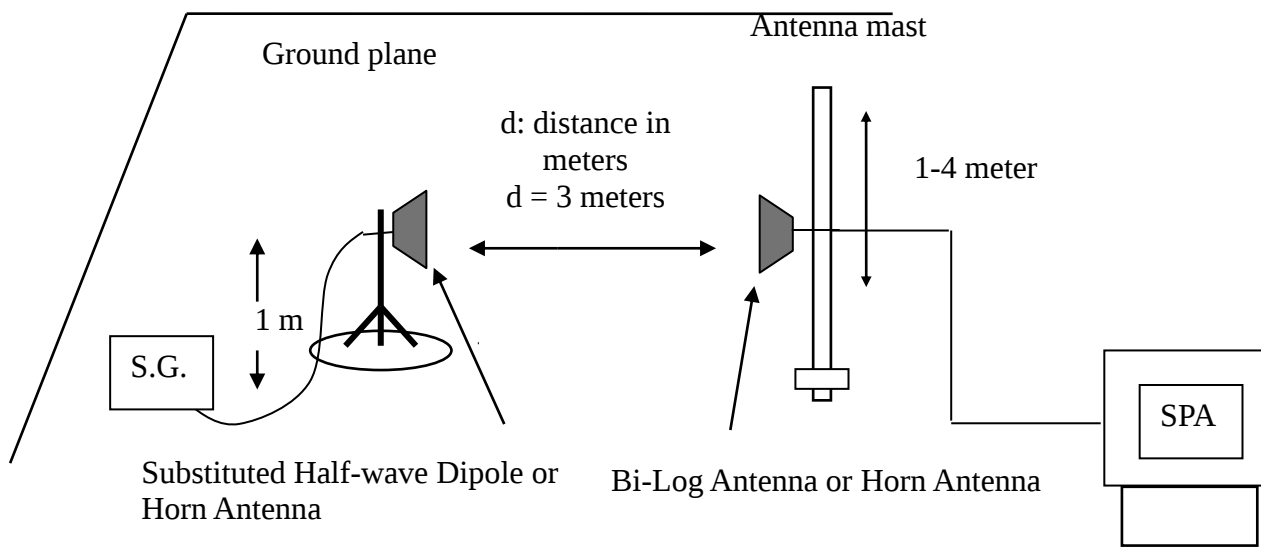
Below 1 GHz



Above 1 GHz



Substituted Method Test Set-up



TEST PROCEDURES

1. According to KDB 971168 D01 and TIA-603-E.
2. 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.
3. Set the spectrum analyzer , RBW=1MHz, VBW=3MHz.
4. A horn antenna was driven by a signal generator.
5. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.

Remark: Performed the worst bandwidth for the testing; the max. BW was the worst case.



Report No.: T200821W04-RP1

Page: 135 / 142
Rev.: 01

Test Results

LTE Band 13 / BW: 10MHz / QPSK / RB =1, RB Offset = 0

Operation Mode: Tx / Low CH

Test Date:

September 14, 2020

Temperature: 25.0°C

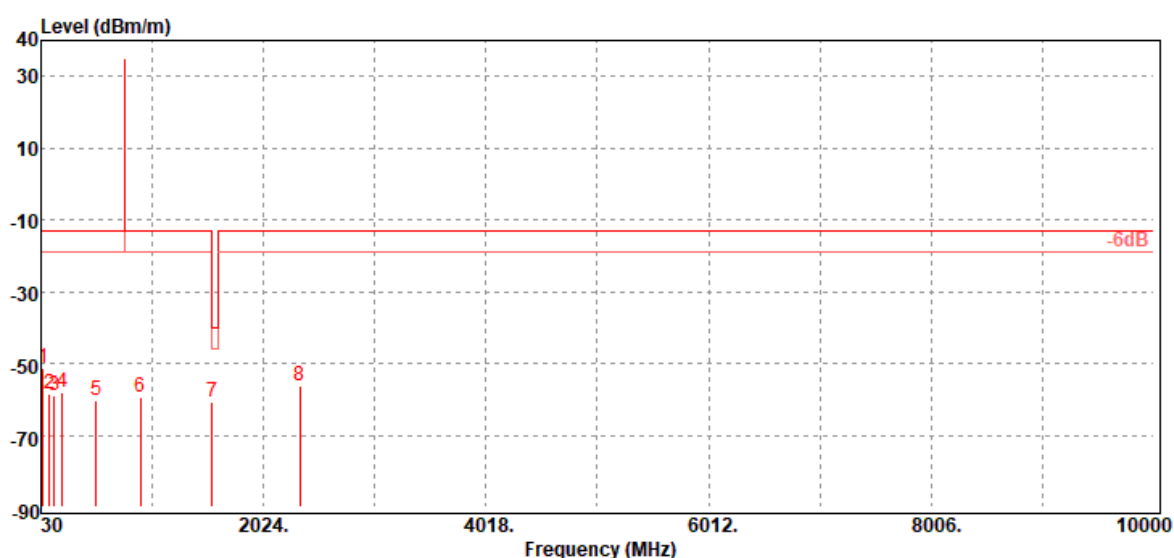
Tested by:

Jerry Chang

Humidity: 42% RH

Polarity:

Ver.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
47.46	-51.29	-37.20	-13.53	-0.56	-13.00	-38.29	V
106.63	-58.65	-48.34	-9.46	-0.85	-13.00	-45.65	V
149.31	-58.79	-50.62	-7.17	-1.00	-13.00	-45.79	V
219.15	-57.95	-54.71	-2.02	-1.22	-13.00	-44.95	V
527.61	-60.16	-56.94	-1.30	-1.92	-13.00	-47.16	V
924.34	-59.41	-55.53	-1.30	-2.58	-13.00	-46.41	V
1564.00	-60.57	-66.51	9.38	-3.44	-40.00	-20.57	V
2346.00	-56.10	-61.58	9.87	-4.39	-13.00	-43.10	V

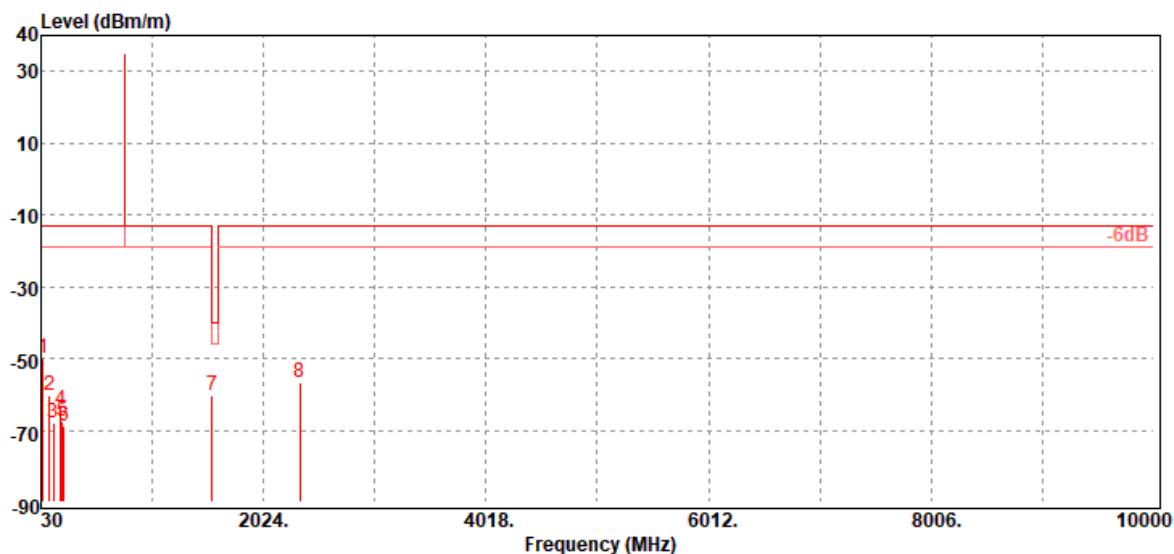


Report No.: T200821W04-RP1

Page: 136 / 142
Rev.: 01

Operation Mode: Tx / Low CH
Temperature: 25.0°C
Humidity: 42% RH

Test Date: September 14, 2020
Tested by: Jerry Chang
Polarity: Hor.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
47.46	-50.12	-36.03	-13.53	-0.56	-13.00	-37.12	H
106.63	-60.42	-50.11	-9.46	-0.85	-13.00	-47.42	H
144.46	-67.95	-59.15	-7.81	-0.99	-13.00	-54.95	H
204.60	-64.26	-60.12	-2.96	-1.18	-13.00	-51.26	H
224.00	-67.44	-64.29	-1.92	-1.23	-13.00	-54.44	H
238.55	-69.00	-65.63	-2.10	-1.27	-13.00	-56.00	H
1564.00	-60.46	-66.40	9.38	-3.44	-40.00	-20.46	H
2346.00	-56.62	-62.10	9.87	-4.39	-13.00	-43.62	H

LTE Band 4 / BW: 20MHz / QPSK / RB =1, RB Offset = 0
Operation Mode: Tx / Low CH

Test Date:

September 14, 2020

Temperature: 25.0°C

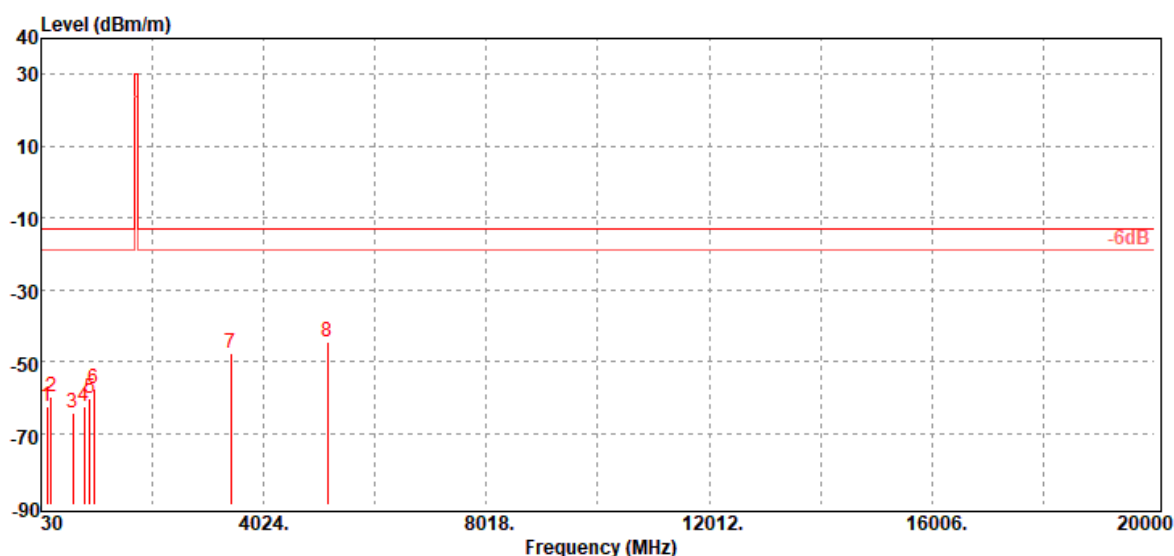
Tested by:

Jerry Chang

Humidity: 42% RH

Polarity:

Ver.



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB	Antenna Polarization (V/H)
143.49	-62.36	-53.38	-8.00	-0.98	-13.00	-49.36	V
203.63	-60.03	-55.51	-3.35	-1.17	-13.00	-47.03	V
595.51	-64.29	-61.42	-0.81	-2.06	-13.00	-51.29	V
800.18	-62.70	-59.03	-1.30	-2.37	-13.00	-49.70	V
910.76	-60.10	-56.16	-1.38	-2.56	-13.00	-47.10	V
979.63	-57.51	-53.55	-1.31	-2.65	-13.00	-44.51	V
3440.00	-47.50	-54.71	12.72	-5.51	-13.00	-34.50	V
5160.00	-44.63	-50.68	12.76	-6.71	-13.00	-31.63	V

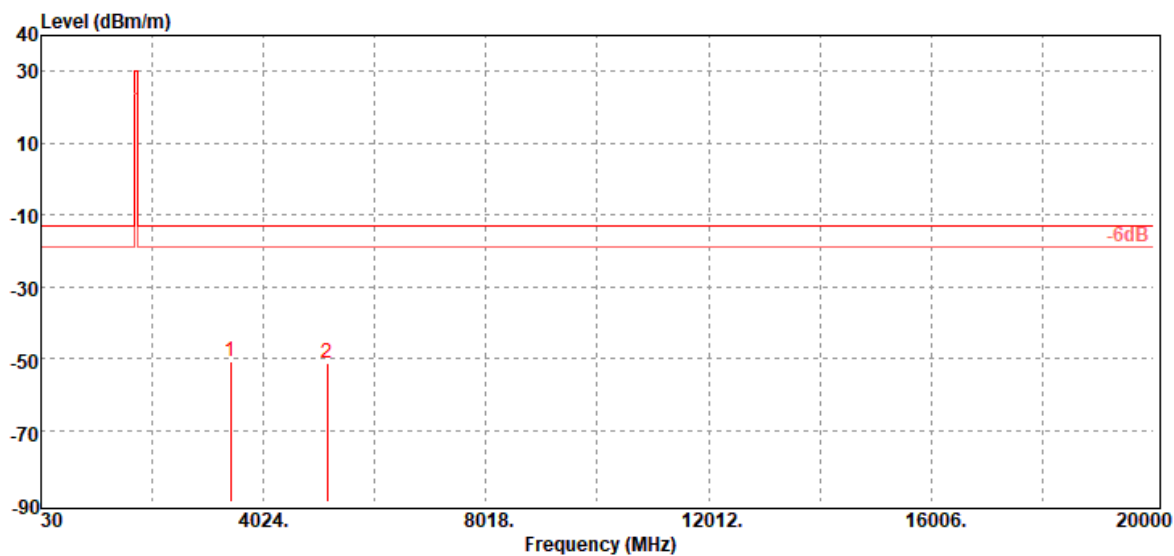


Report No.: T200821W04-RP1

Page: 138 / 142
Rev.: 01

Operation Mode: Tx / Low CH
Temperature: 25.0°C
Humidity: 42% RH

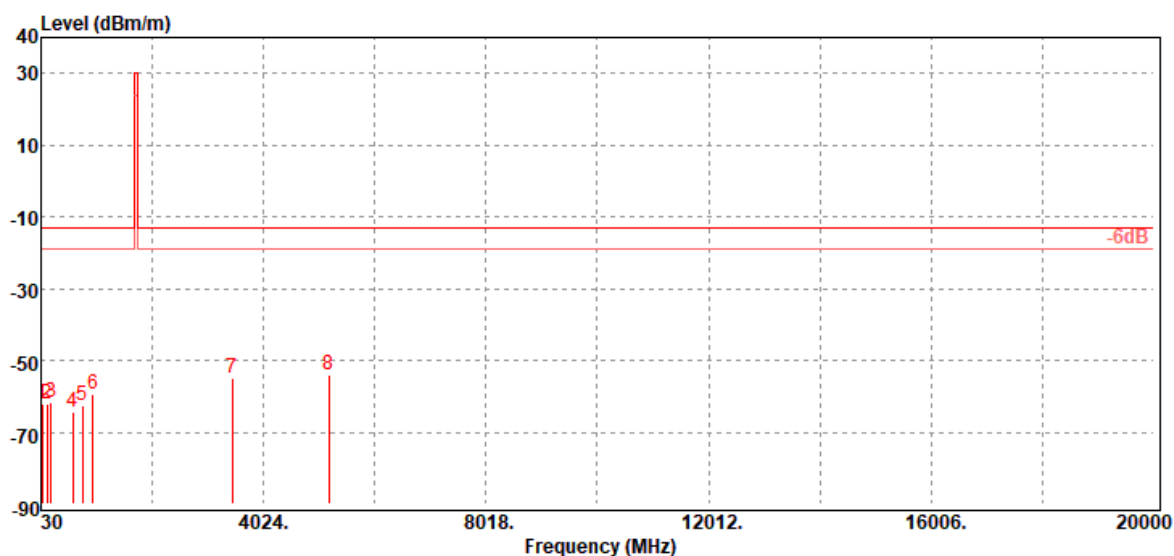
Test Date: September 14, 2020
Tested by: Jerry Chang
Polarity: Hor.



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB	Antenna Polarization (V/H)
3440.00	-50.70	-57.91	12.72	-5.51	-13.00	-37.70	H
5160.00	-51.35	-57.40	12.76	-6.71	-13.00	-38.35	H
N/A							

Operation Mode: Tx / Mid CH
Temperature: 25.0°C
Humidity: 42% RH

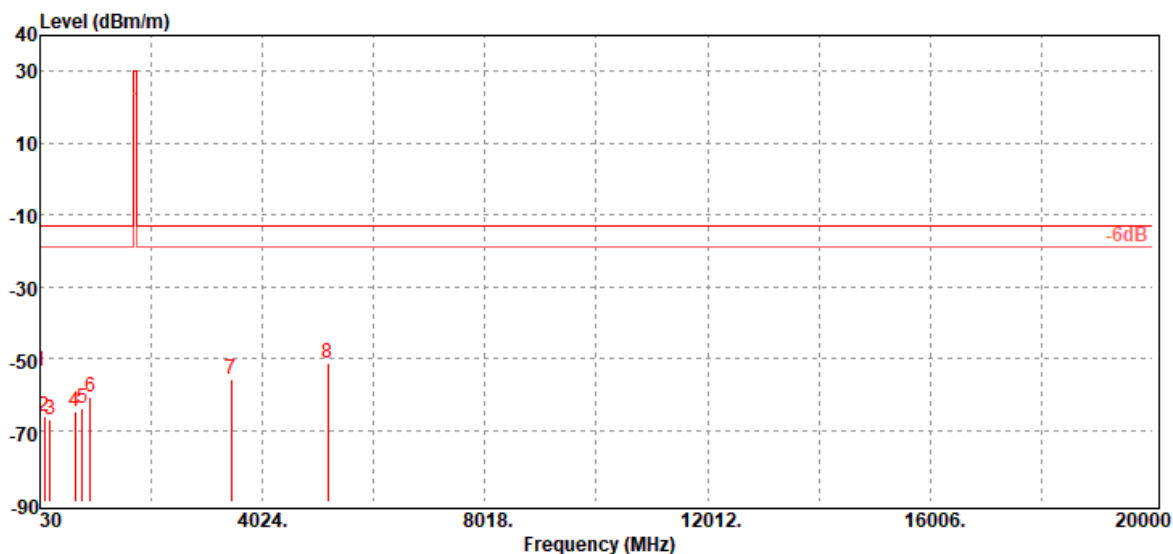
Test Date: September 14, 2020
Tested by: Jerry Chang
Polarity: Ver.



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB	Antenna Polarization (V/H)
46.49	-62.05	-47.14	-14.36	-0.55	-13.00	-49.05	V
145.43	-62.16	-53.56	-7.61	-0.99	-13.00	-49.16	V
203.63	-61.73	-57.21	-3.35	-1.17	-13.00	-48.73	V
600.36	-64.51	-61.53	-0.91	-2.07	-13.00	-51.51	V
773.99	-62.46	-58.72	-1.40	-2.34	-13.00	-49.46	V
955.38	-59.50	-55.67	-1.21	-2.62	-13.00	-46.50	V
3465.00	-55.03	-62.14	12.64	-5.53	-13.00	-42.03	V
5197.50	-54.21	-60.44	12.98	-6.75	-13.00	-41.21	V

Operation Mode: Tx / Mid CH
Temperature: 25.0°C
Humidity: 42% RH

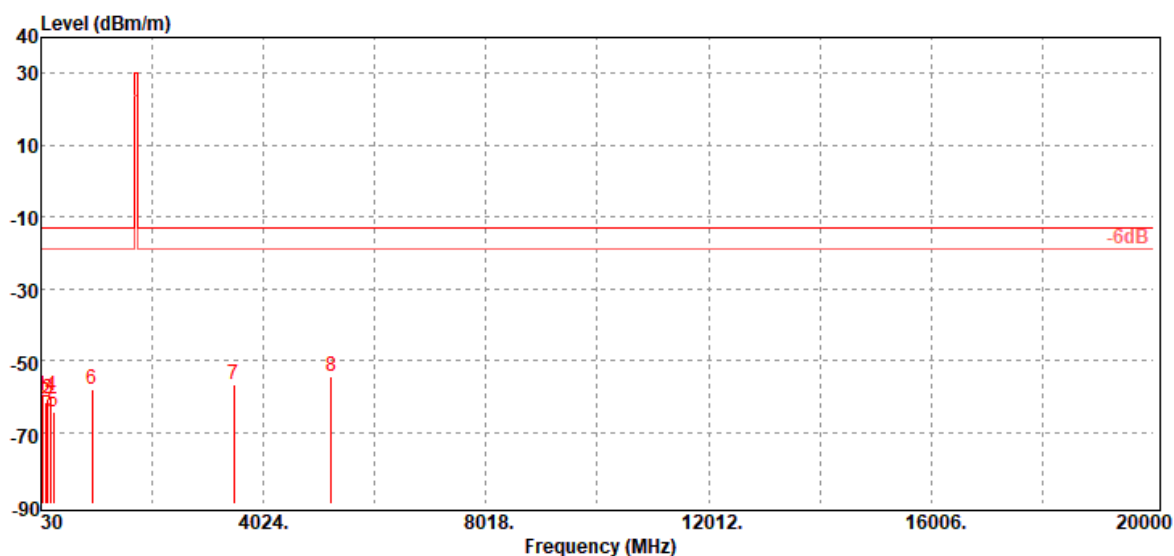
Test Date: September 14, 2020
Tested by: Jerry Chang
Polarity: Hor.



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB	Antenna Polarization (V/H)
30.97	-53.68	-24.09	-29.13	-0.46	-13.00	-40.68	H
106.63	-66.20	-55.89	-9.46	-0.85	-13.00	-53.20	H
204.60	-66.89	-62.75	-2.96	-1.18	-13.00	-53.89	H
661.47	-64.78	-61.18	-1.43	-2.17	-13.00	-51.78	H
790.48	-63.81	-60.17	-1.29	-2.35	-13.00	-50.81	H
934.04	-60.92	-57.03	-1.30	-2.59	-13.00	-47.92	H
3465.00	-55.98	-63.09	12.64	-5.53	-13.00	-42.98	H
5197.50	-51.33	-57.56	12.98	-6.75	-13.00	-38.33	H

Operation Mode: Tx / High CH
Temperature: 25.0°C
Humidity: 42% RH

Test Date: September 14, 2020
Tested by: Jerry Chang
Polarity: Ver.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
48.43	-59.92	-46.52	-12.84	-0.56	-13.00	-46.92	V
106.63	-61.70	-51.39	-9.46	-0.85	-13.00	-48.70	V
150.28	-60.84	-52.73	-7.10	-1.01	-13.00	-47.84	V
203.63	-59.92	-55.40	-3.35	-1.17	-13.00	-46.92	V
250.19	-64.23	-61.14	-1.79	-1.30	-13.00	-51.23	V
951.50	-57.84	-54.02	-1.20	-2.62	-13.00	-44.84	V
3490.00	-56.90	-63.89	12.54	-5.55	-13.00	-43.90	V
5235.00	-54.61	-60.96	13.14	-6.79	-13.00	-41.61	V

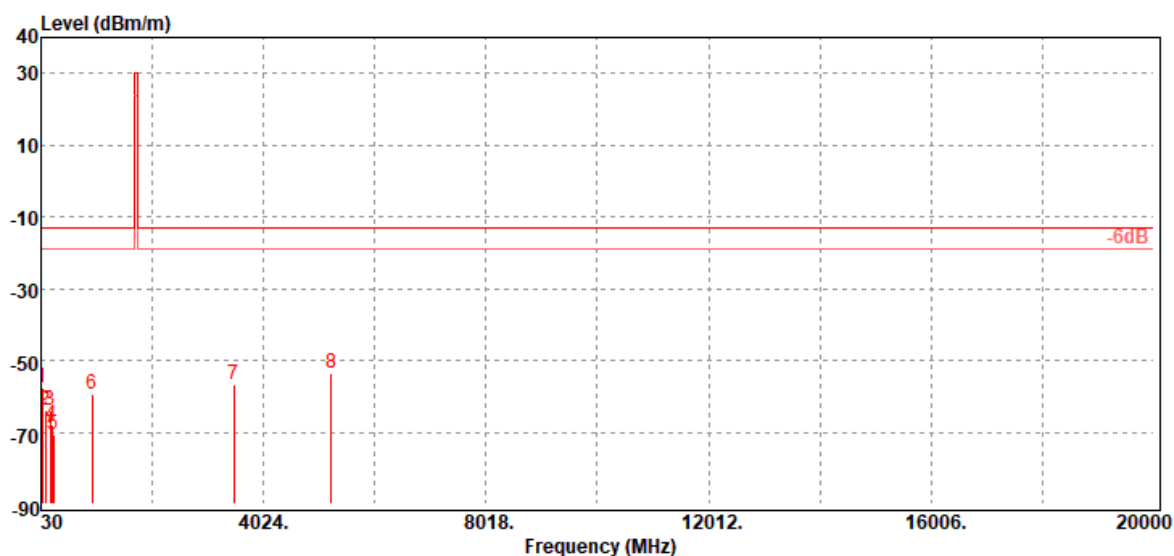


Report No.: T200821W04-RP1

Page: 142 / 142
Rev.: 01

Operation Mode: Tx / High CH
Temperature: 25.0°C
Humidity: 42% RH

Test Date: September 14, 2020
Tested by: Jerry Chang
Polarity: Hor.



Freq. MHz	ERP/EIRP dBm	SG Output Level dBm	Antenna Gain dBd/dBi	Cable Loss dB	Limit dBm	Margin dB	Antenna Polarization (V/H)
46.49	-57.48	-42.57	-14.36	-0.55	-13.00	-44.48	H
105.66	-63.90	-53.69	-9.37	-0.84	-13.00	-50.90	H
202.66	-63.96	-59.05	-3.74	-1.17	-13.00	-50.96	H
223.03	-67.79	-64.62	-1.94	-1.23	-13.00	-54.79	H
252.13	-70.47	-67.45	-1.71	-1.31	-13.00	-57.47	H
951.50	-59.25	-55.43	-1.20	-2.62	-13.00	-46.25	H
3490.00	-56.76	-63.75	12.54	-5.55	-13.00	-43.76	H
5235.00	-53.74	-60.09	13.14	-6.79	-13.00	-40.74	H

- End of Test Report -