

BAND EDGE COMPLIANCE



XMit 2019.09.05

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Cal. Due |
|------------------------------|--------------|------------|-----|-----------|-----------|
| Generator - Signal | Keysight | N5171B-506 | TEW | 2-May-18 | 2-May-21 |
| Analyzer - Spectrum Analyzer | Keysight | N9010A | AFM | 19-Mar-19 | 19-Mar-20 |

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in the available band. The channels closest to the band edges were selected. The EUT was transmitting at the data rate(s) listed in the datasheet. For Multiband operation, measurements were taken at the lower band edge of the lower band and the upper band edge of the upper band.

The spectrum was scanned below the lower band edge and above the higher band edge.

All limits were adjusted by a factor of $[-10 \cdot \log((N))]$ to account for the device operation as a N port MIMO transmitter, as per FCC KDB 622911.

For Bands 12 and 14, the adjustment factor is $-10 \cdot \log(4) = -6$ dB. The Bands 12 and 14 adjusted limit is -19 dBm.

For Band 29, the adjustment factor is $-10 \cdot \log(2) = -3$ dB. The Band 29 adjusted limit is -16 dBm.

Per FCC section 27.53(g), the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm. The limit is adjusted to -19 dBm $[-13 \text{ dBm} - 10 \log(4)]$ per FCC KDB 662911D01 v02r01 because the RRH may operate as a 4 port MIMO transmitter for Band 12.

FCC 27.53(g) requires a >100 kHz measurement bandwidth for emissions 100 kHz outside of the RRH operating frequency range. FCC 27.53(g) requires a >30 kHz measurement bandwidth for emissions between 100 kHz outside of the RRH operating frequency range and band edge of the operating frequency range.

BAND EDGE COMPLIANCE



XM11 2019.09.05

| | | | |
|--|---|----------------------------------|--------------------|
| EUT: AHLBBA RRH | | Work Order: NOKI0004 | |
| Serial Number: K9193514835 | | Date: 18-Nov-19 | |
| Customer: Nokia Solutions and Networks | | Temperature: 22.7 °C | |
| Attendees: John Rattanavong | | Humidity: 29.9% RH | |
| Project: None | | Barometric Pres.: 1019 mbar | |
| Tested by: Jonathan Kiefer | | Power: 54VDC | |
| Job Site: TX09 | | | |
| TEST SPECIFICATIONS | | Test Method | |
| FCC 27:2019 | | ANSI C63.26:2015 | |
| COMMENTS | | | |
| Band 12 band edge measurements. Tested on highest power antenna port (Port 1). EUT is operated at 100% duty cycle. | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| None | | | |
| Configuration # | 2 | Signature <i>Jonathan Kiefer</i> | |
| | | Value (dBm) | Limit (dBm) Result |
| Band 12 | | | |
| QPSK Modulation | | | |
| LTE5 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -28.691 | -19 Pass |
| Measurement 2 | | -25.806 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -26.853 | -19 Pass |
| Measurement 2 | | -24.809 | -19 Pass |
| LTE10 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -31.322 | -19 Pass |
| Measurement 2 | | -27.472 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -30.92 | -19 Pass |
| Measurement 2 | | -27.547 | -19 Pass |
| 16QAM Modulation | | | |
| LTE5 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -28.719 | -19 Pass |
| Measurement 2 | | -26.217 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -27.263 | -19 Pass |
| Measurement 2 | | -24.603 | -19 Pass |
| LTE10 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -31.502 | -19 Pass |
| Measurement 2 | | -27.707 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -30.955 | -19 Pass |
| Measurement 2 | | -27.32 | -19 Pass |
| 64QAM Modulation | | | |
| LTE5 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -28.262 | -19 Pass |
| Measurement 2 | | -26.222 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -27.031 | -19 Pass |
| Measurement 2 | | -24.62 | -19 Pass |
| LTE10 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -31.414 | -19 Pass |
| Measurement 2 | | -27.829 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -30.897 | -19 Pass |
| Measurement 2 | | -27.732 | -19 Pass |
| 256QAM Modulation | | | |
| LTE5 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -28.371 | -19 Pass |
| Measurement 2 | | -25.52 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -26.827 | -19 Pass |
| Measurement 2 | | -24.676 | -19 Pass |
| LTE10 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -31.493 | -19 Pass |
| Measurement 2 | | -28.24 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -30.478 | -19 Pass |
| Measurement 2 | | -27.635 | -19 Pass |

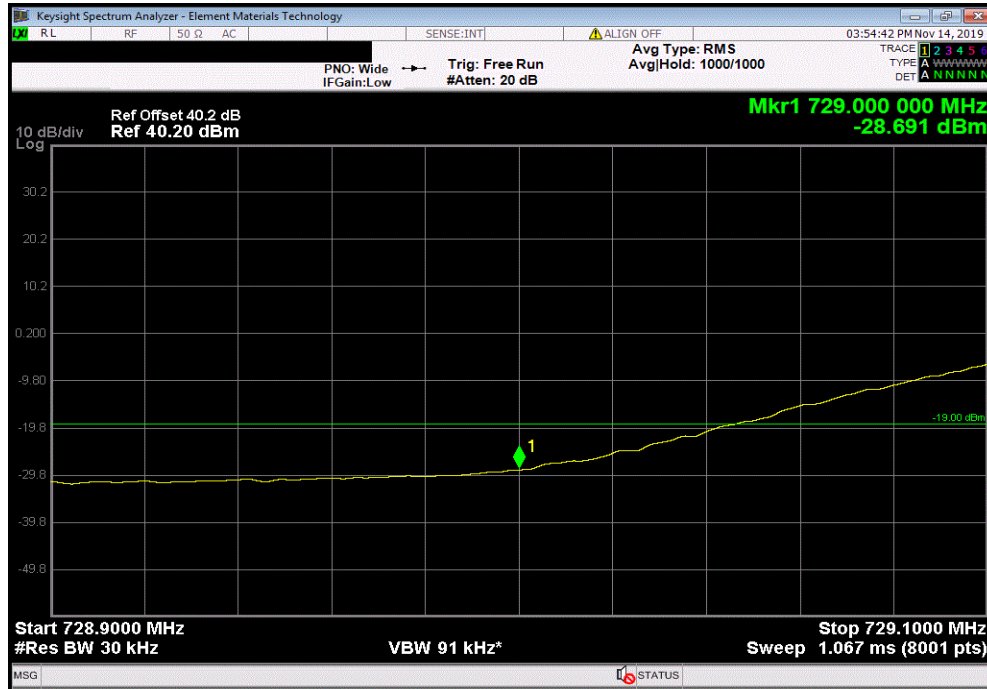
BAND EDGE COMPLIANCE



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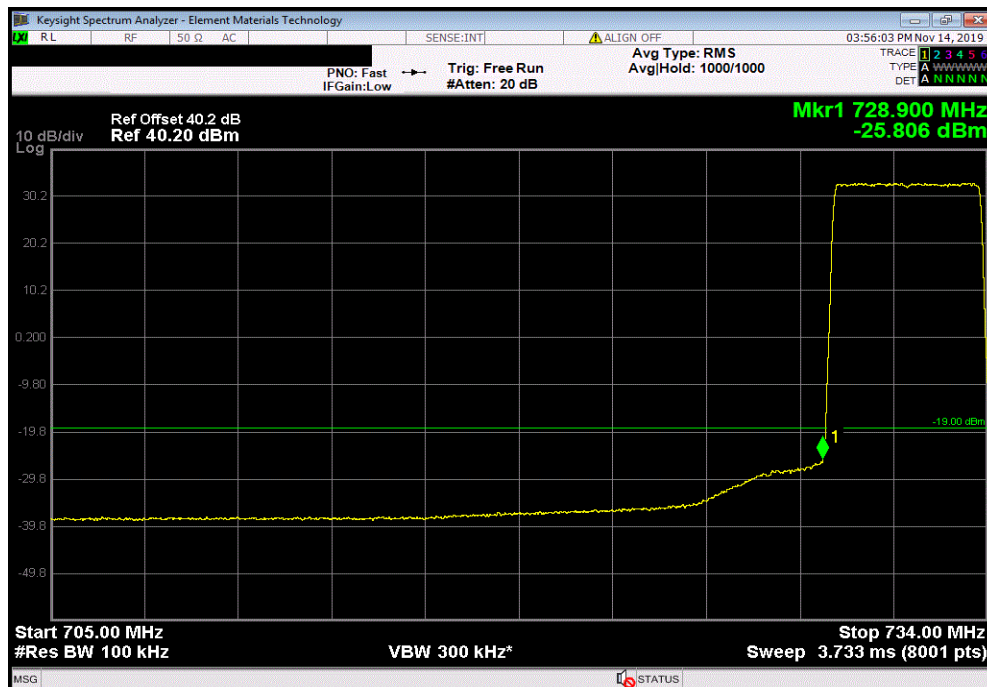
Band 12, QPSK Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1

| | | | | Value (dBm) | Limit (dBm) | Result |
|--|--|--|--|----------------|----------------|--------|
| | | | | -28.691 | -19 | Pass |



Band 12, QPSK Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2

| | | | | Value (dBm) | Limit (dBm) | Result |
|--|--|--|--|----------------|----------------|--------|
| | | | | -25.806 | -19 | Pass |



BAND EDGE COMPLIANCE



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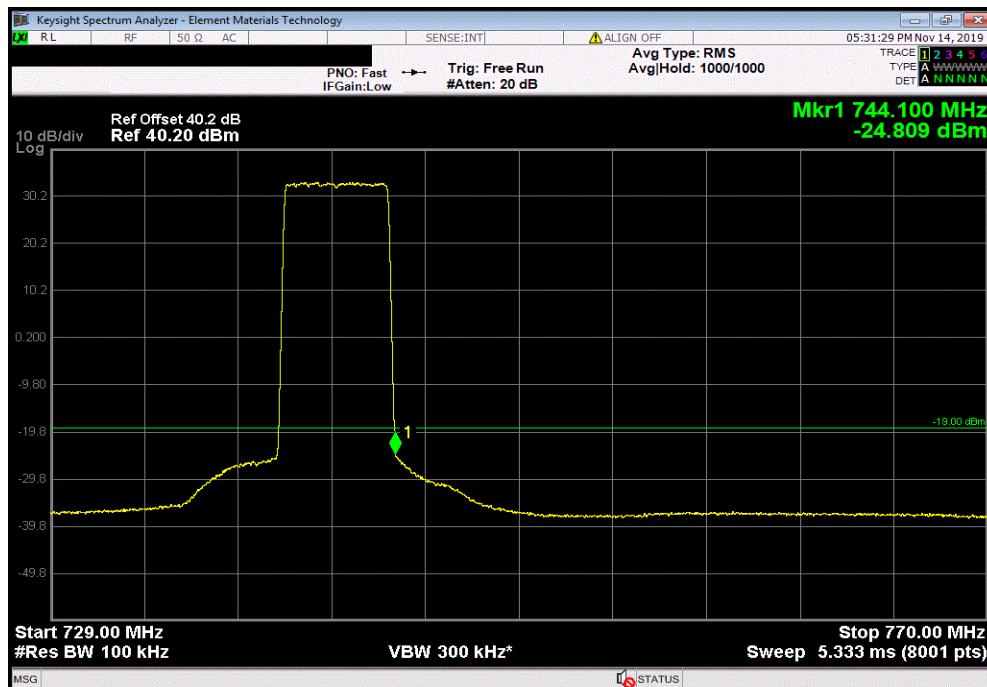
Band 12, QPSK Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1

| | | | | Value (dBm) | Limit (dBm) | Result |
|--|--|--|--|----------------|----------------|--------|
| | | | | -26.853 | -19 | Pass |



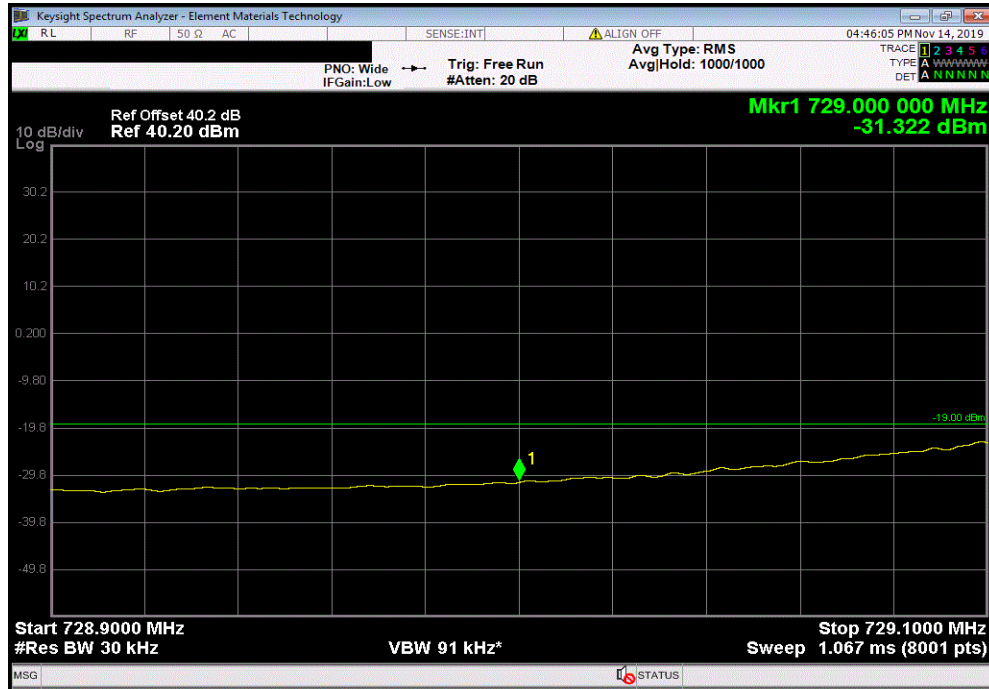
Band 12, QPSK Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2

| | | | | Value (dBm) | Limit (dBm) | Result |
|--|--|--|--|----------------|----------------|--------|
| | | | | -24.809 | -19 | Pass |

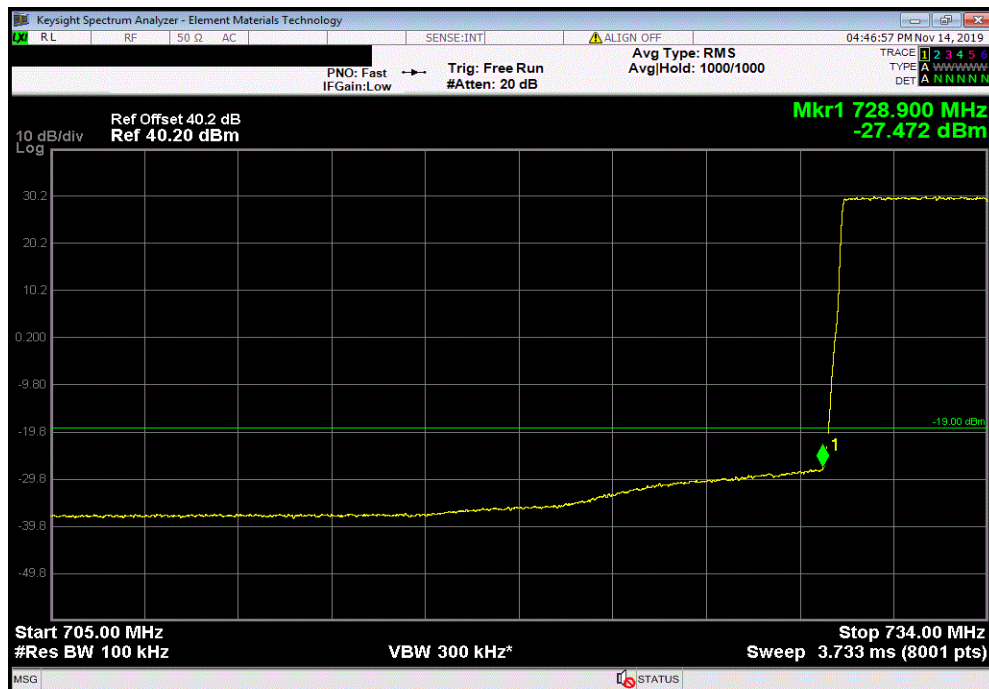


BAND EDGE COMPLIANCE

| Band 12, QPSK Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -31.322 | -19 | Pass | | | |

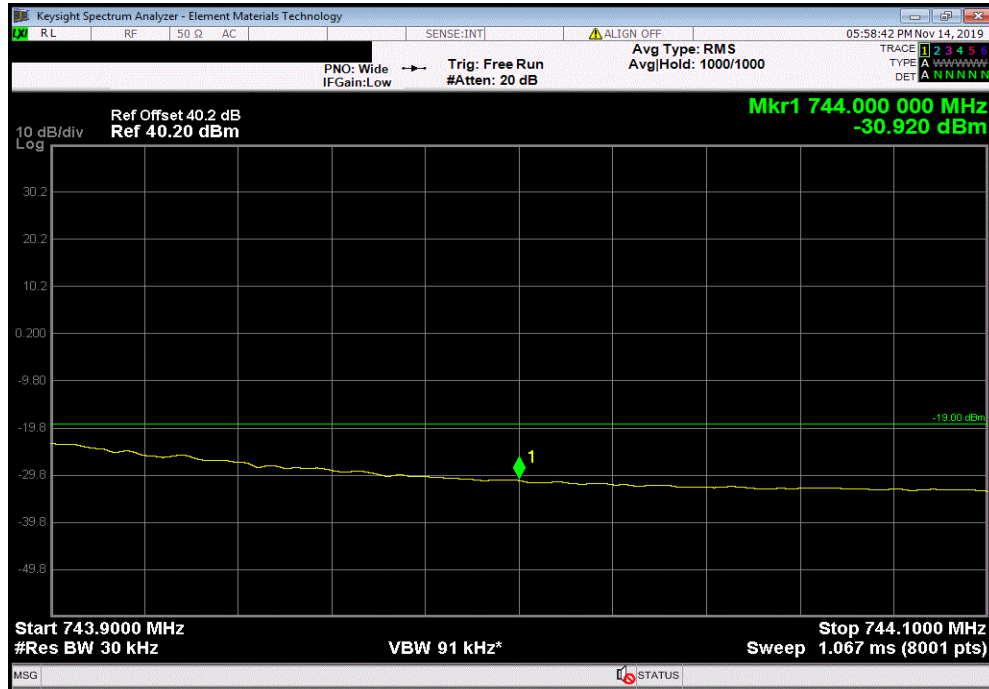


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|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -27.472 | -19 | Pass | | | |

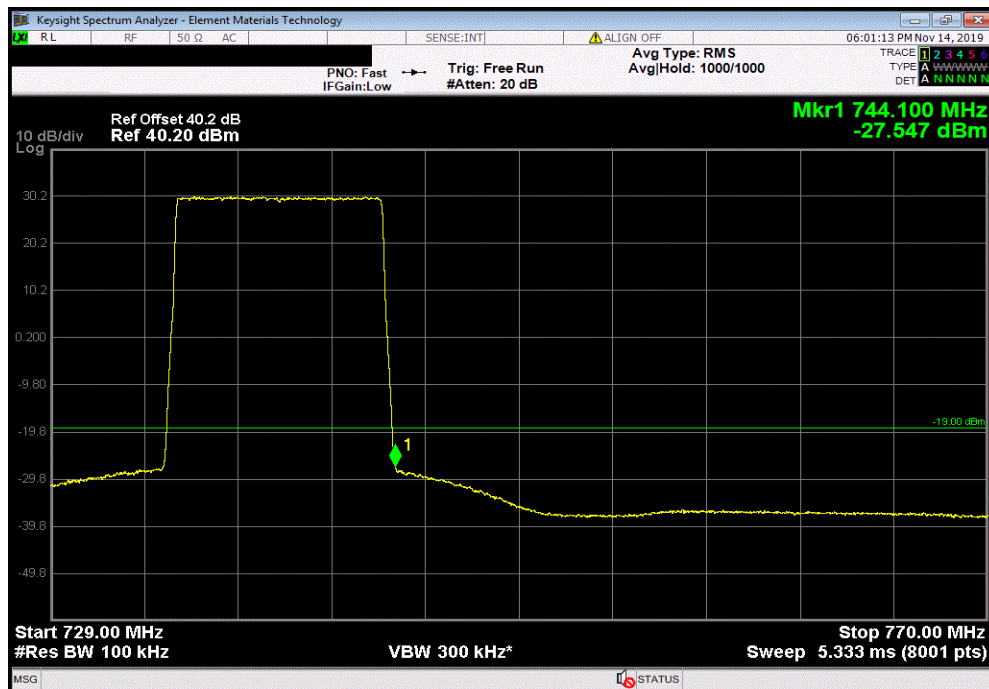


BAND EDGE COMPLIANCE

| Band 12, QPSK Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|---|--------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -30.92 | -19 | Pass | | | |



| Band 12, QPSK Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -27.547 | -19 | Pass | | | |

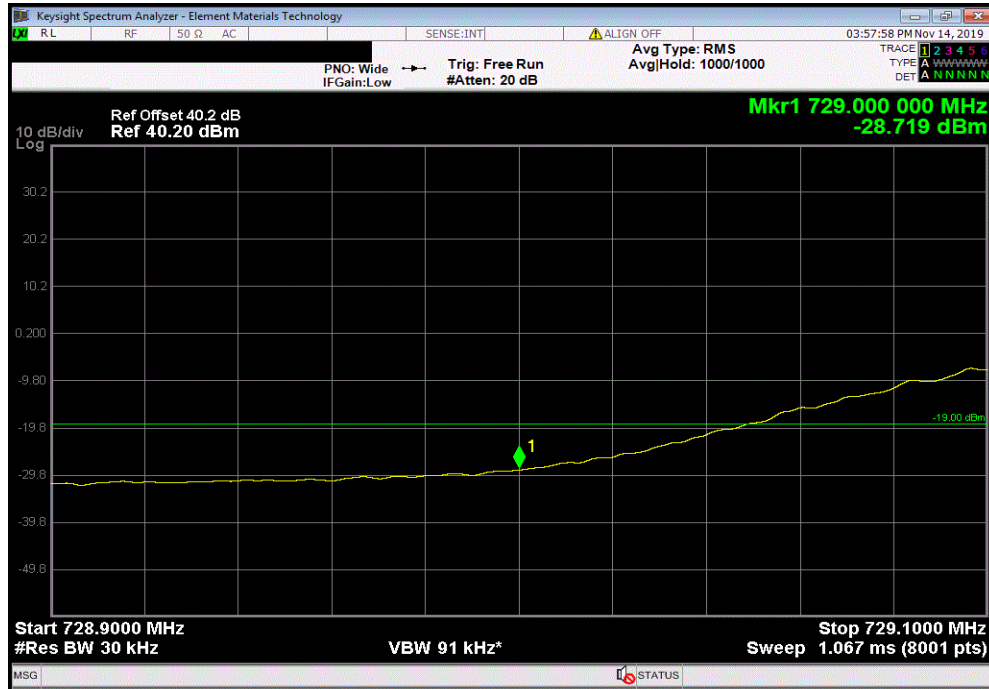


BAND EDGE COMPLIANCE

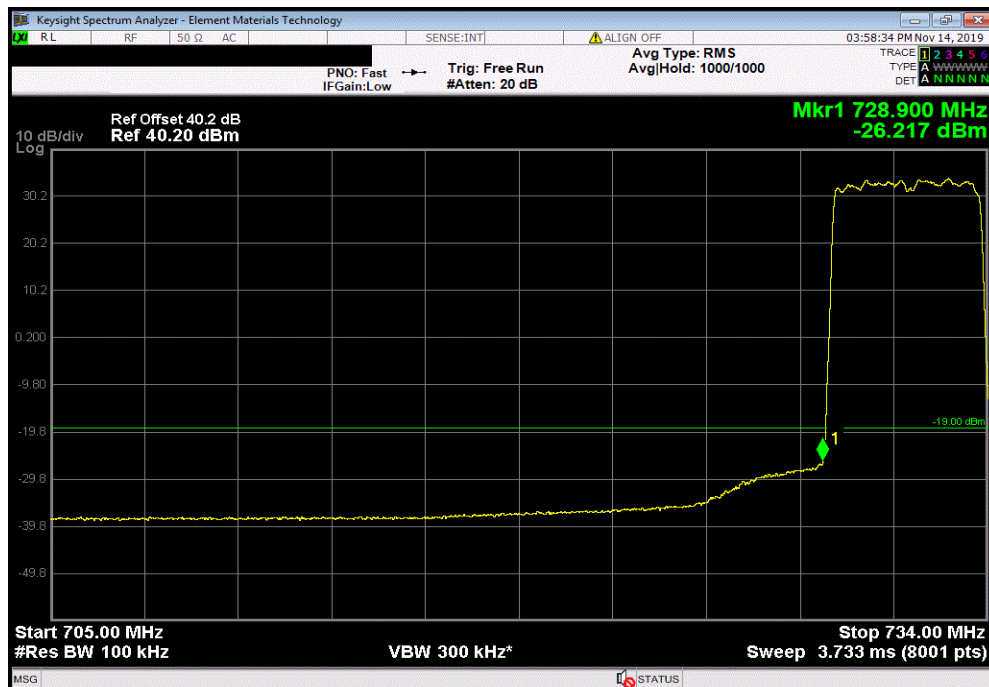


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| Band 12, 16QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -28.719 | -19 | Pass | | | |



| Band 12, 16QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -26.217 | -19 | Pass | | | |

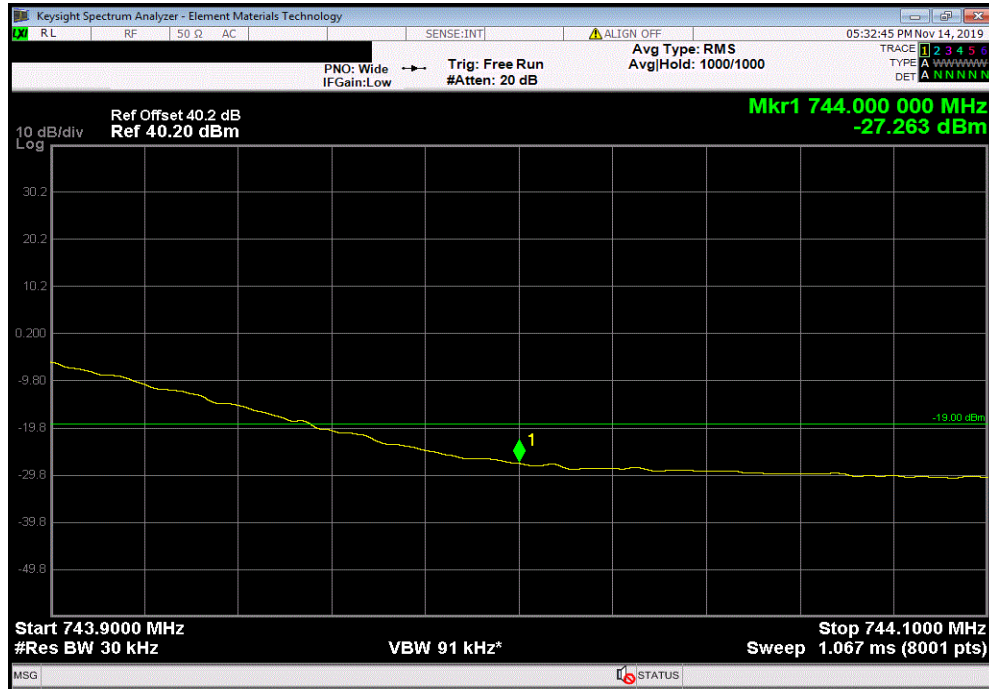


BAND EDGE COMPLIANCE

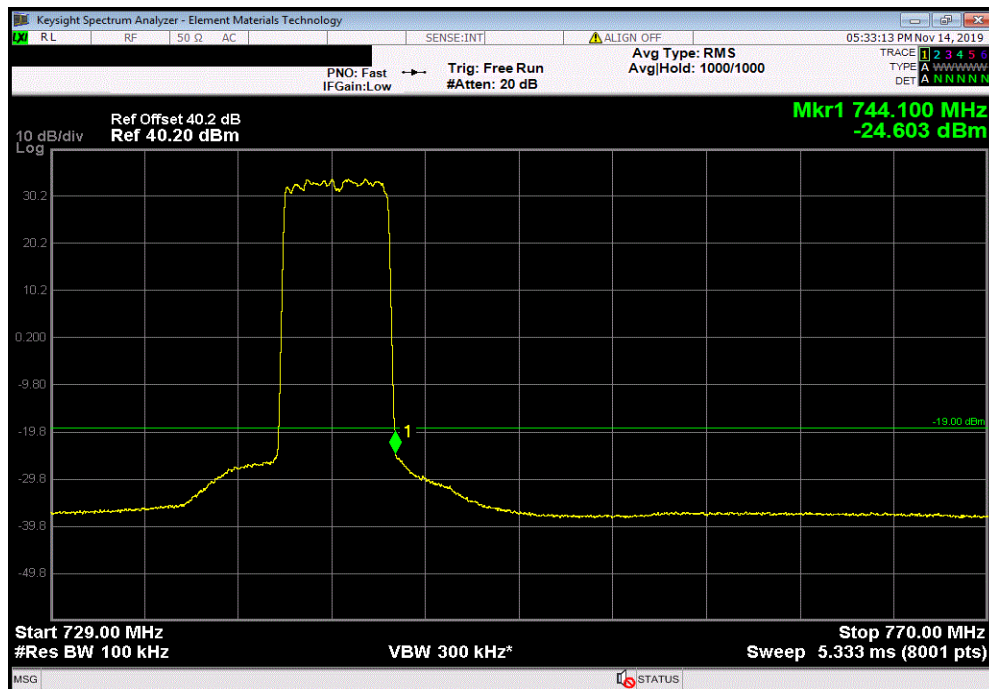


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| Band 12, 16QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -27.263 | -19 | Pass | | | |



| Band 12, 16QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.603 | -19 | Pass | | | |

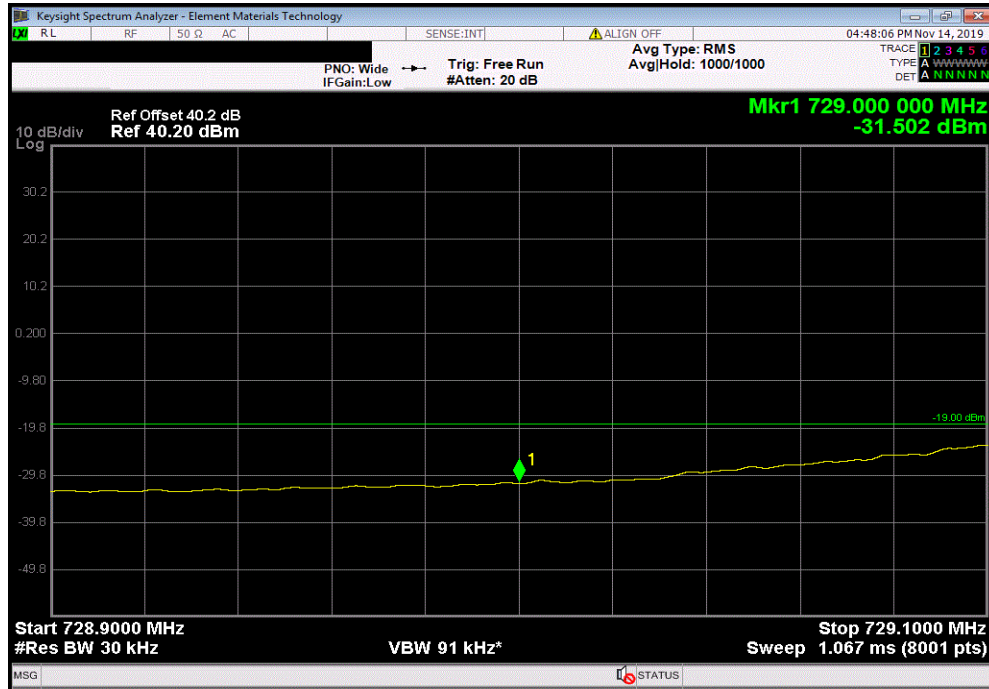


BAND EDGE COMPLIANCE

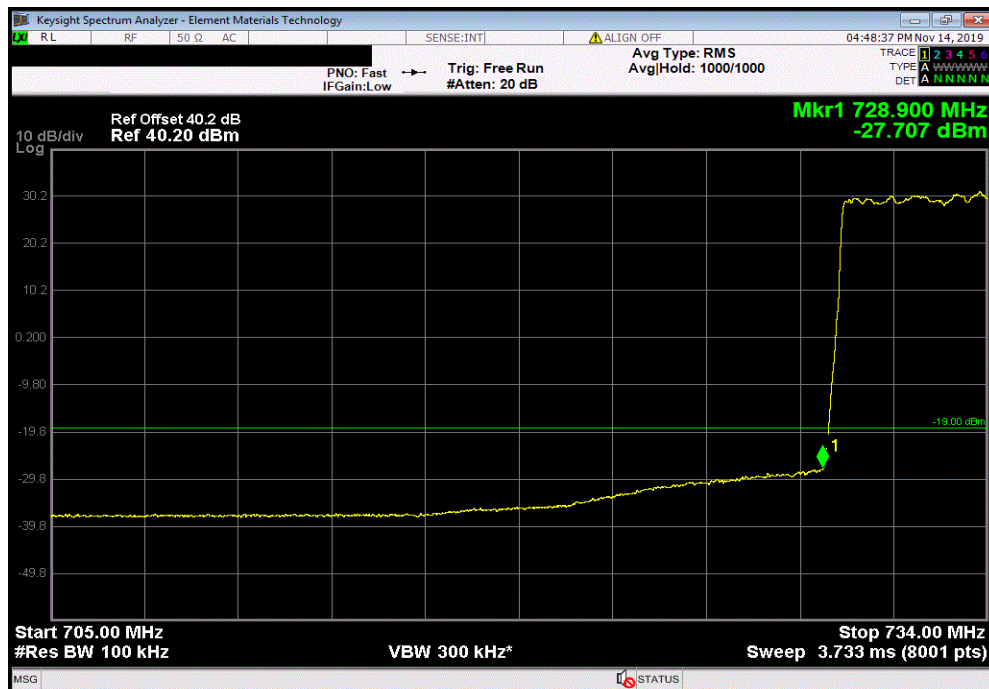


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| Band 12, 16QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -31.502 | -19 | Pass | | | |



| Band 12, 16QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -27.707 | -19 | Pass | | | |

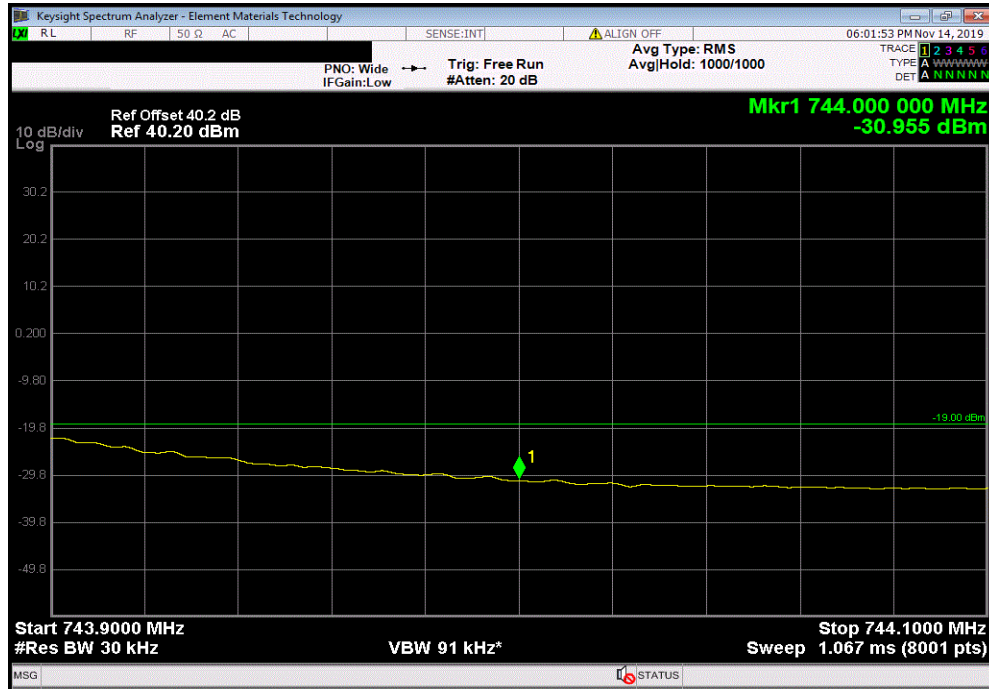


BAND EDGE COMPLIANCE

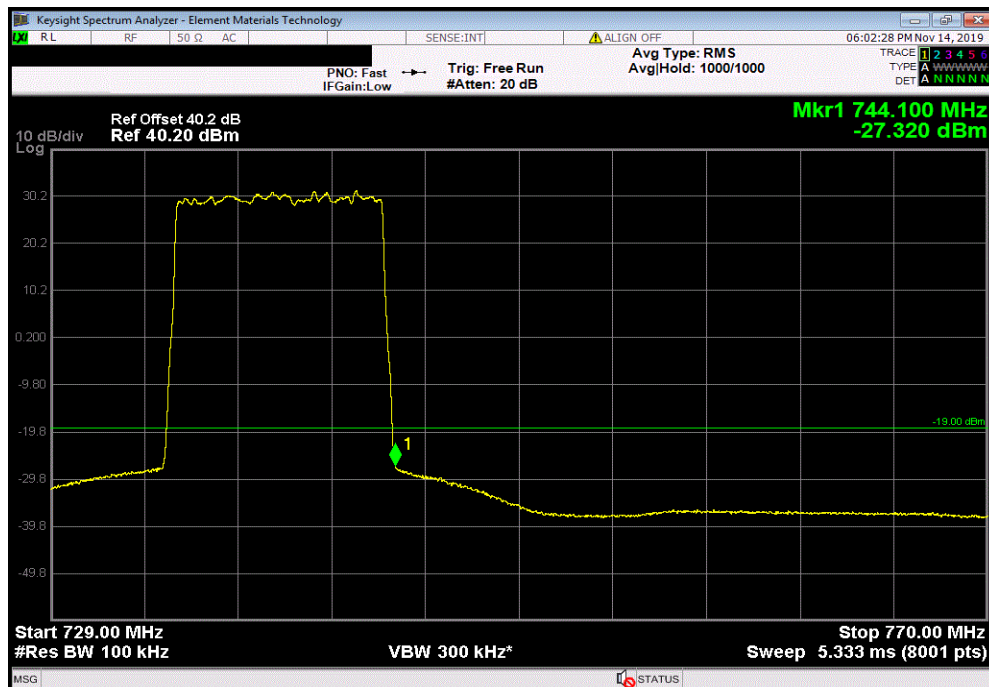


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| Band 12, 16QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -30.955 | -19 | Pass | | | |



| Band 12, 16QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|--|--------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -27.32 | -19 | Pass | | | |

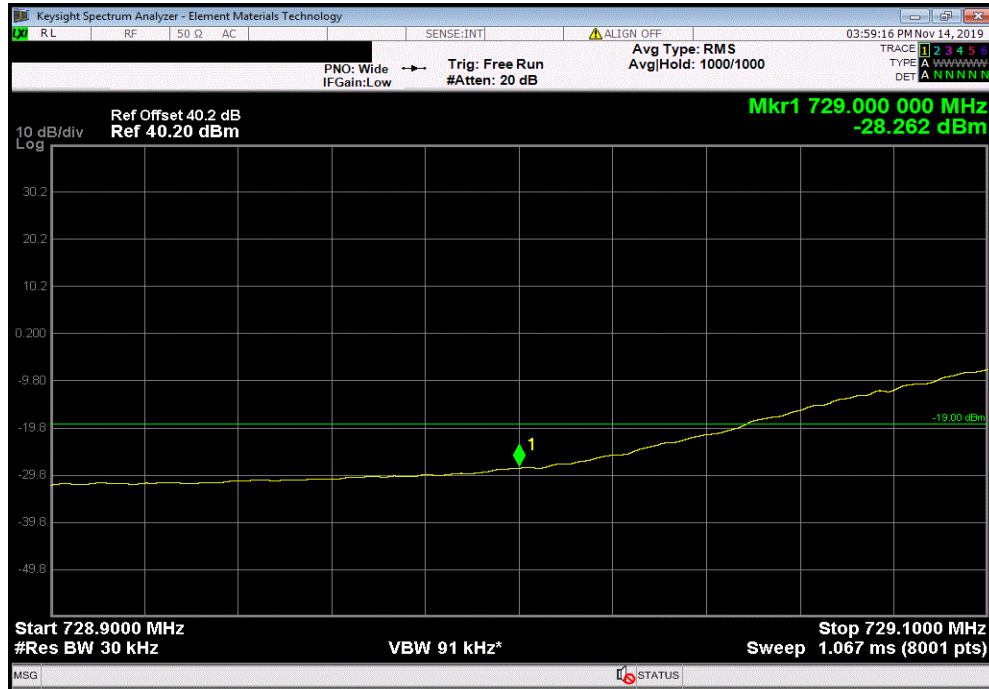


BAND EDGE COMPLIANCE

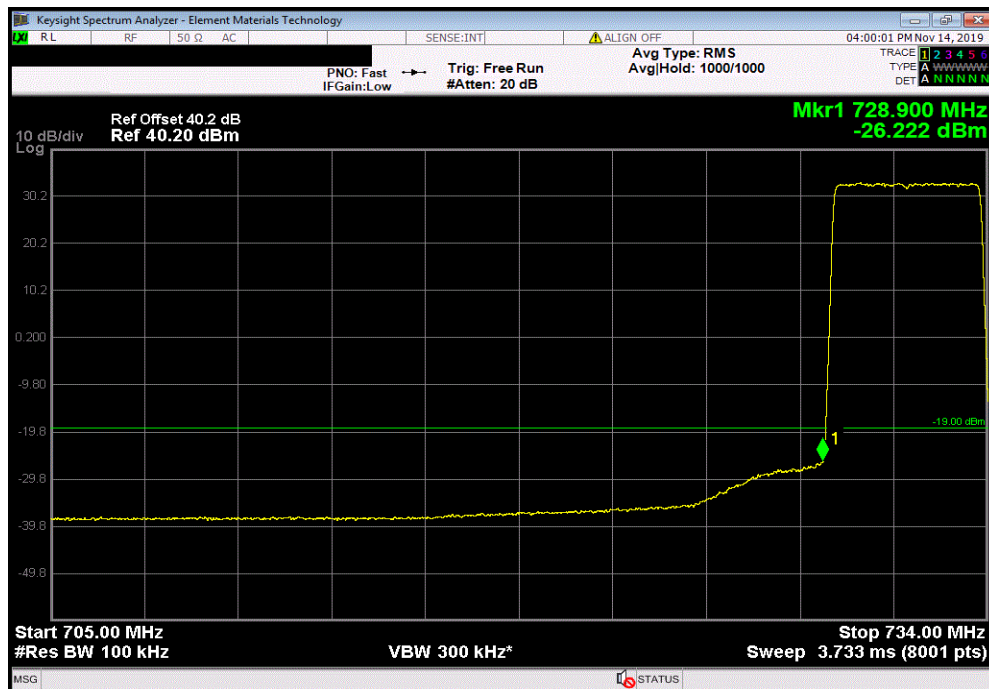


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| Band 12, 64QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -28.262 | -19 | Pass | | | |



| Band 12, 64QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -26.222 | -19 | Pass | | | |



BAND EDGE COMPLIANCE

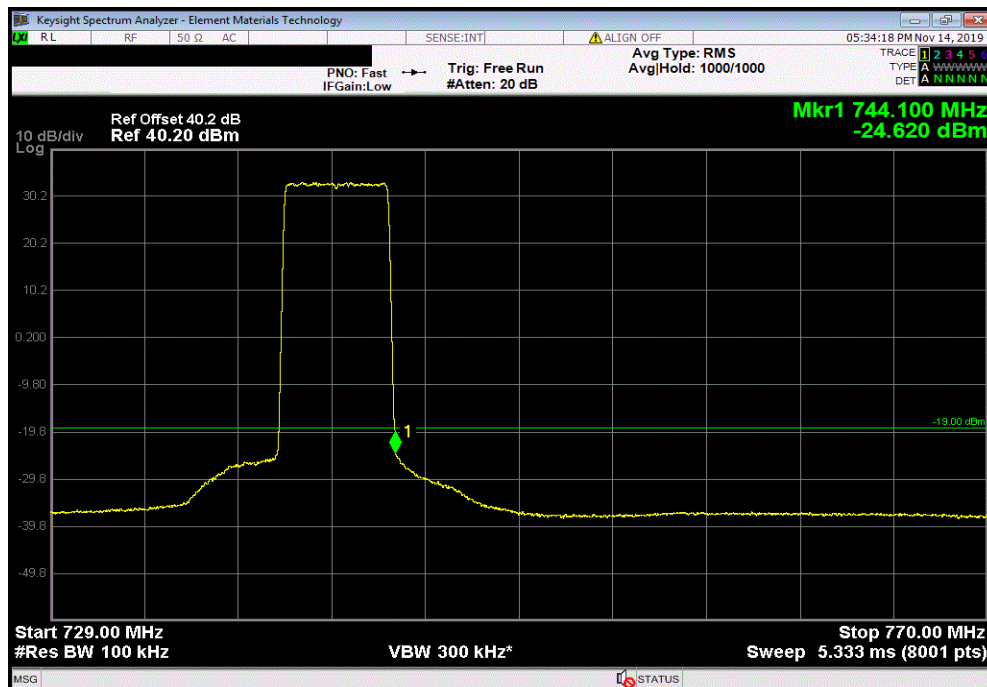


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| Band 12, 64QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -27.031 | -19 | Pass | | | |



| Band 12, 64QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|---|--------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.62 | -19 | Pass | | | |

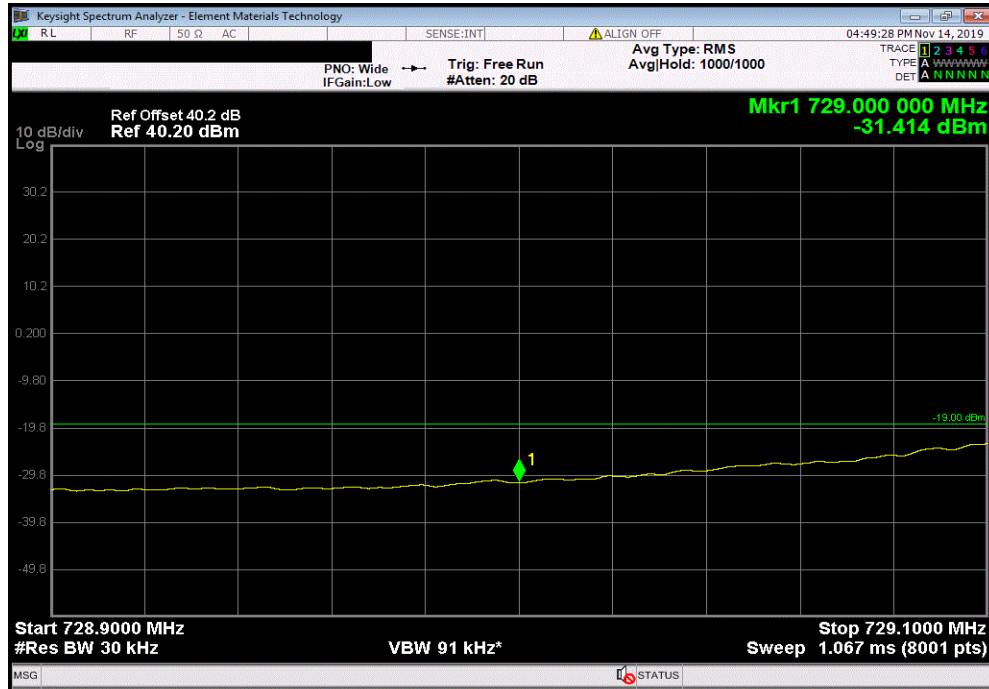


BAND EDGE COMPLIANCE

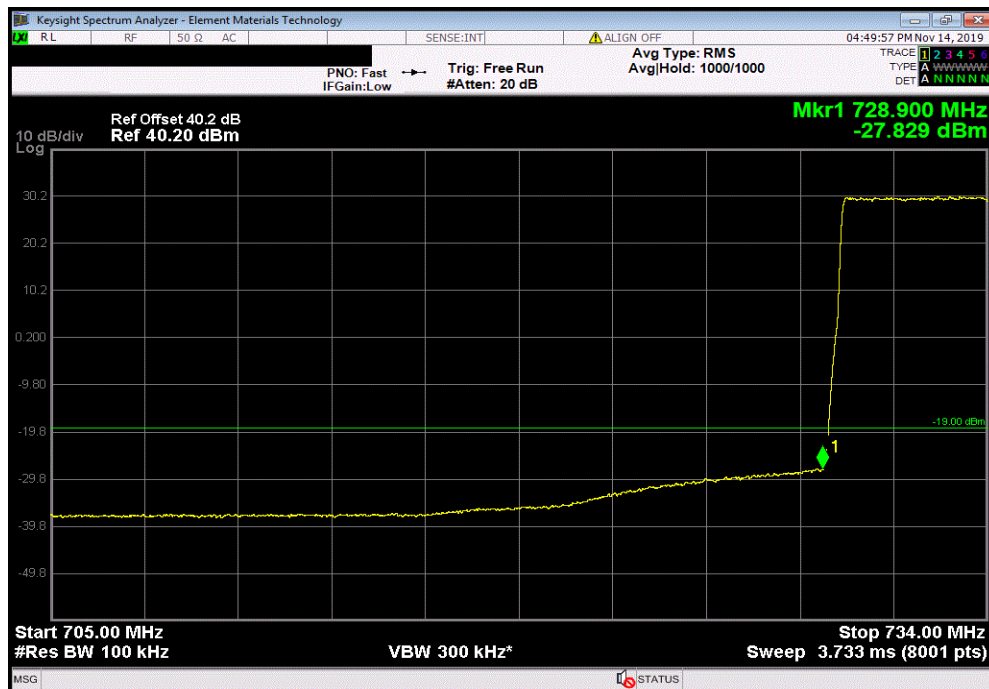


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| Band 12, 64QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -31.414 | -19 | Pass | | | |

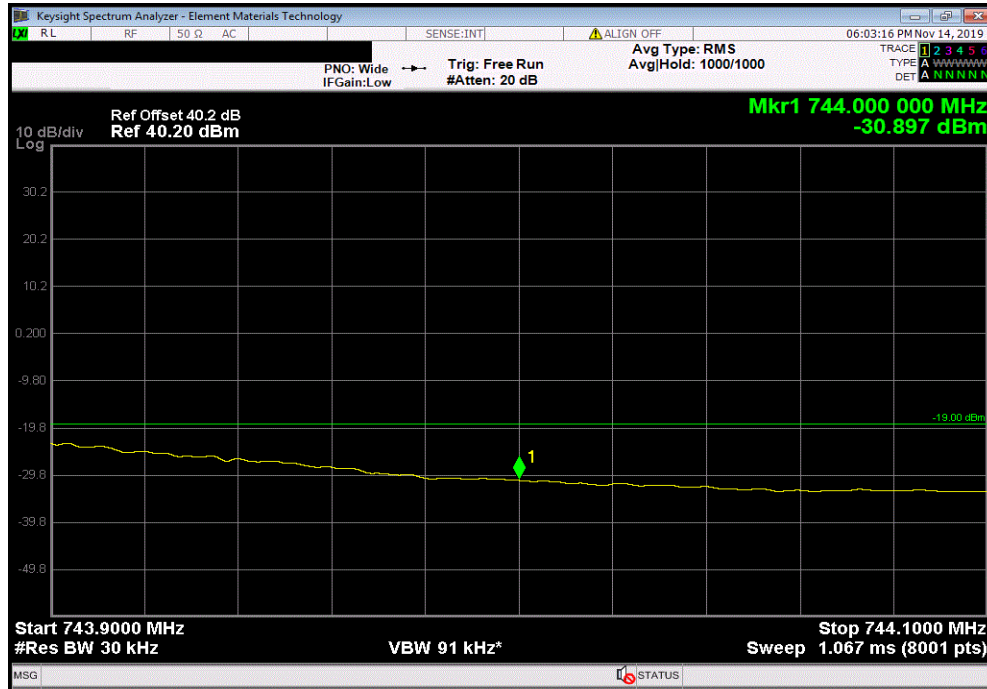


| Band 12, 64QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -27.829 | -19 | Pass | | | |

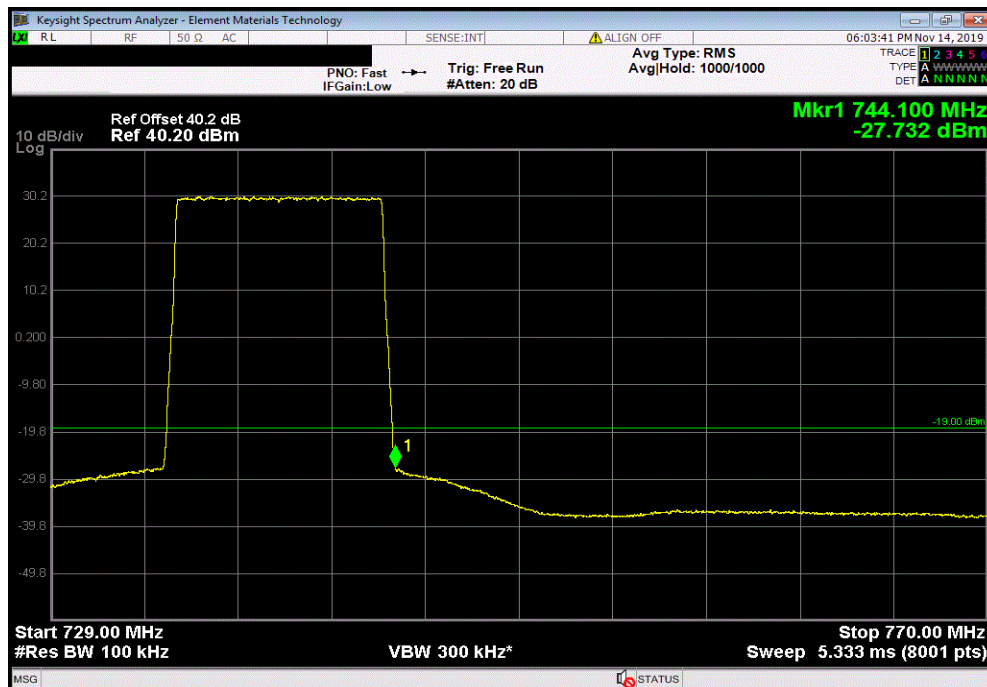


BAND EDGE COMPLIANCE

| Band 12, 64QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|--|-------------|-------------|--------|--|--|--|
| | Value (dBm) | Limit (dBm) | Result | | | |
| | -30.897 | -19 | Pass | | | |



| Band 12, 64QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|--|-------------|-------------|--------|--|--|--|
| | Value (dBm) | Limit (dBm) | Result | | | |
| | -27.732 | -19 | Pass | | | |

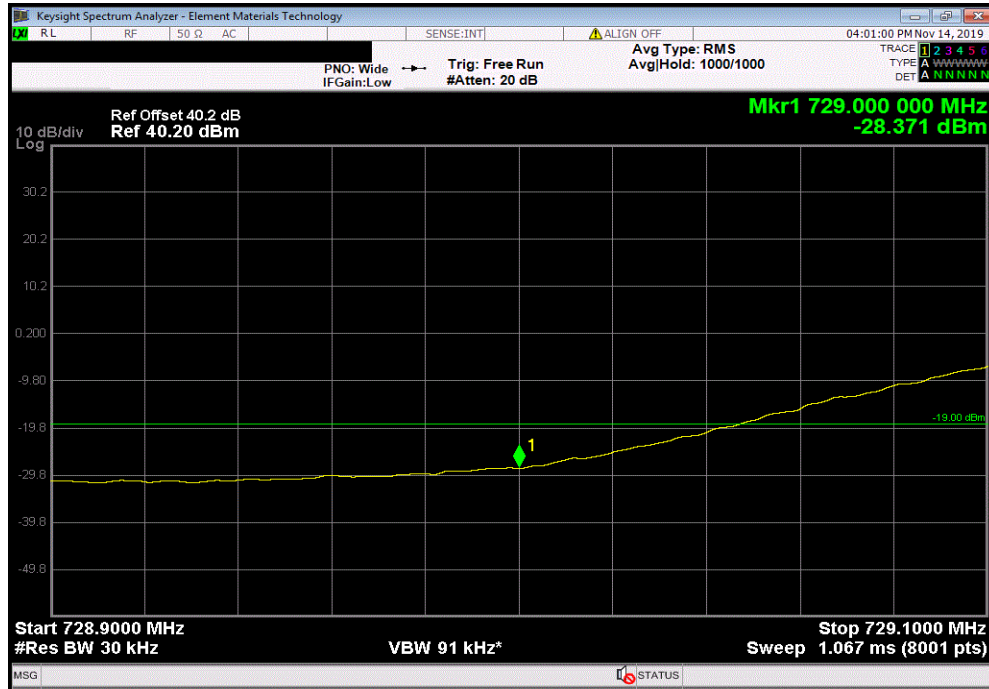


BAND EDGE COMPLIANCE

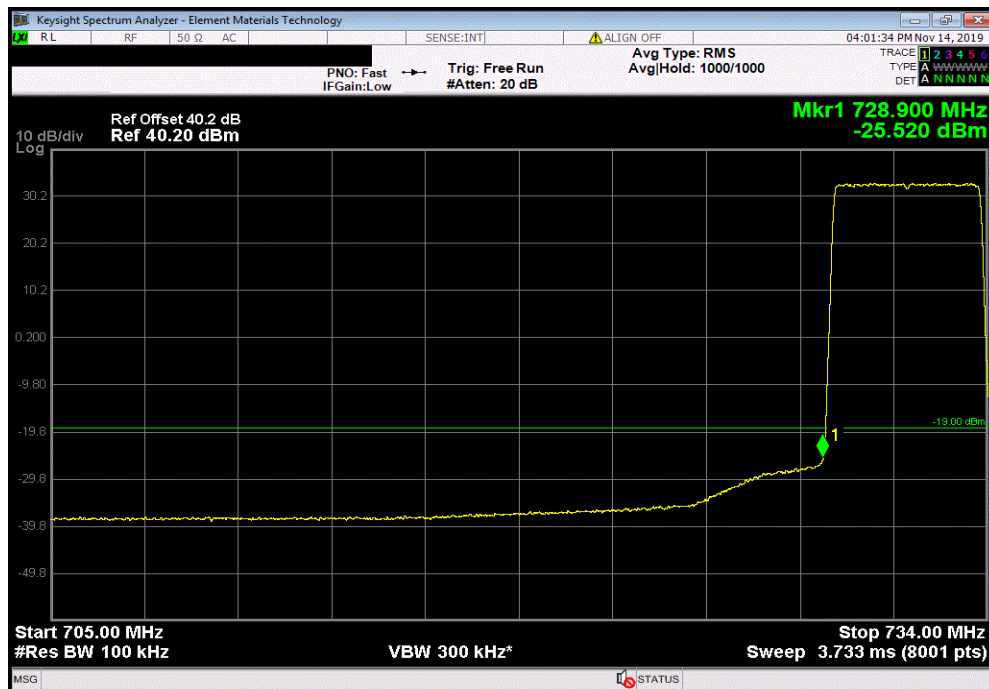


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| Band 12, 256QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -28.371 | -19 | Pass | | | |



| Band 12, 256QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|--|--------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -25.52 | -19 | Pass | | | |

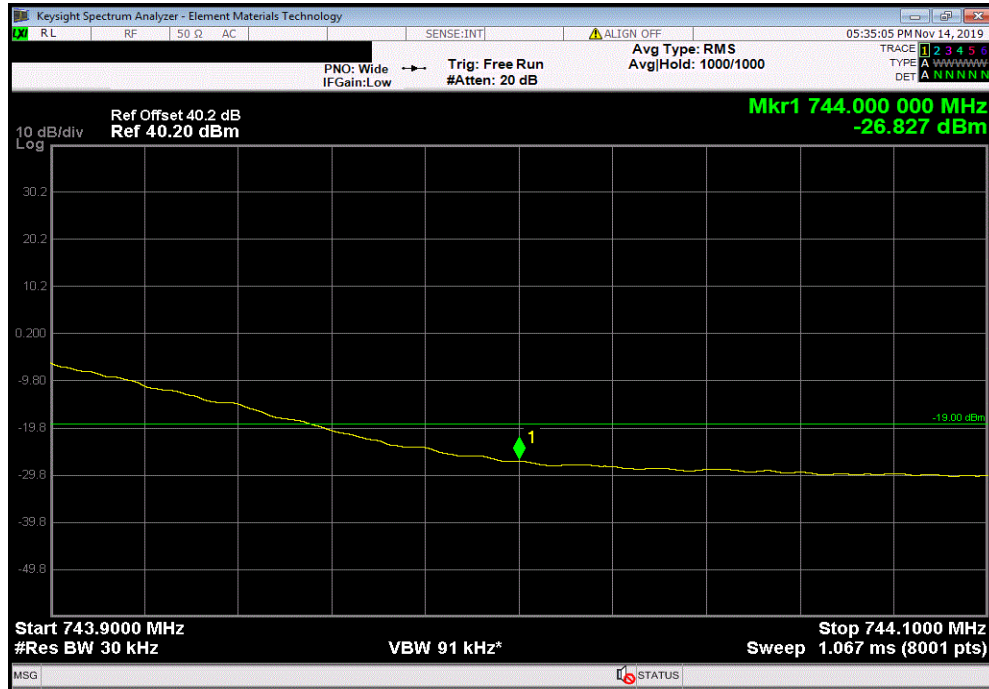


BAND EDGE COMPLIANCE

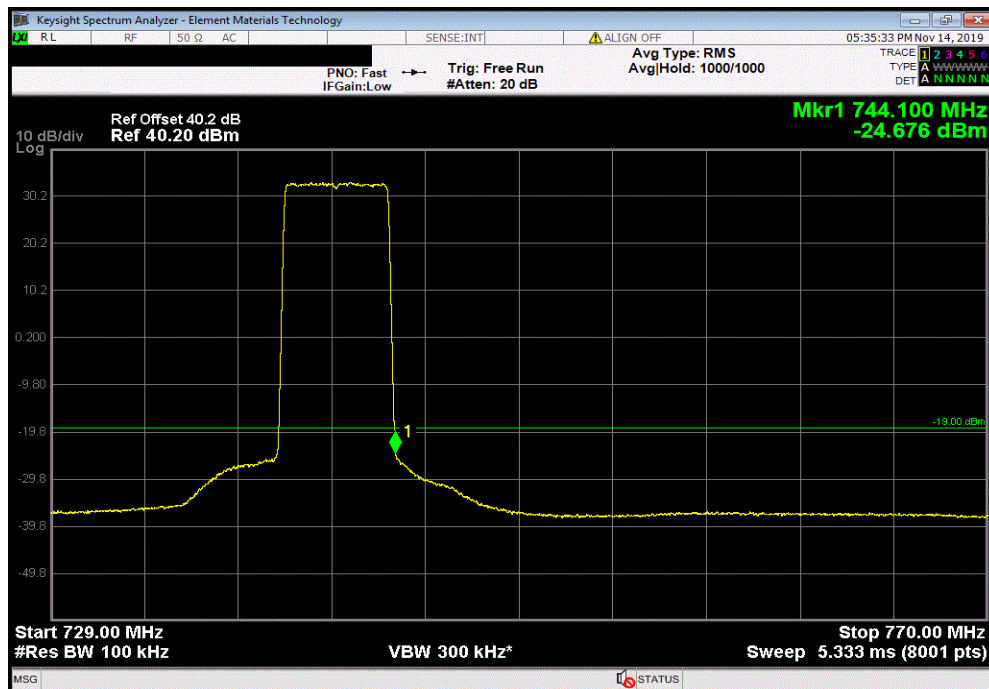


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| Band 12, 256QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|--|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -26.827 | -19 | Pass |



| Band 12, 256QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|--|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -24.676 | -19 | Pass |



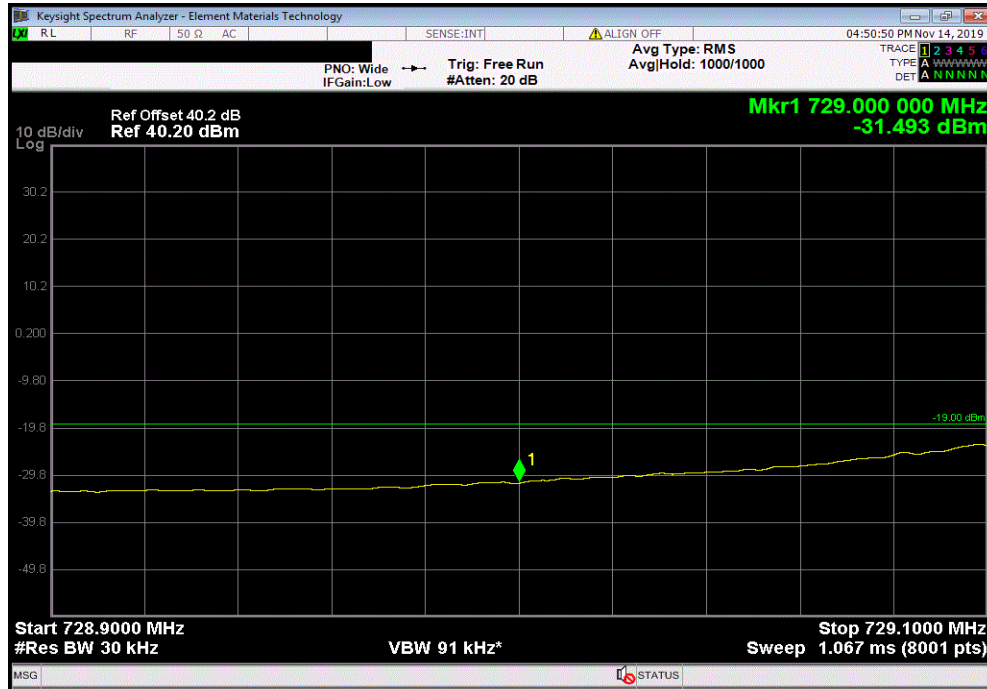
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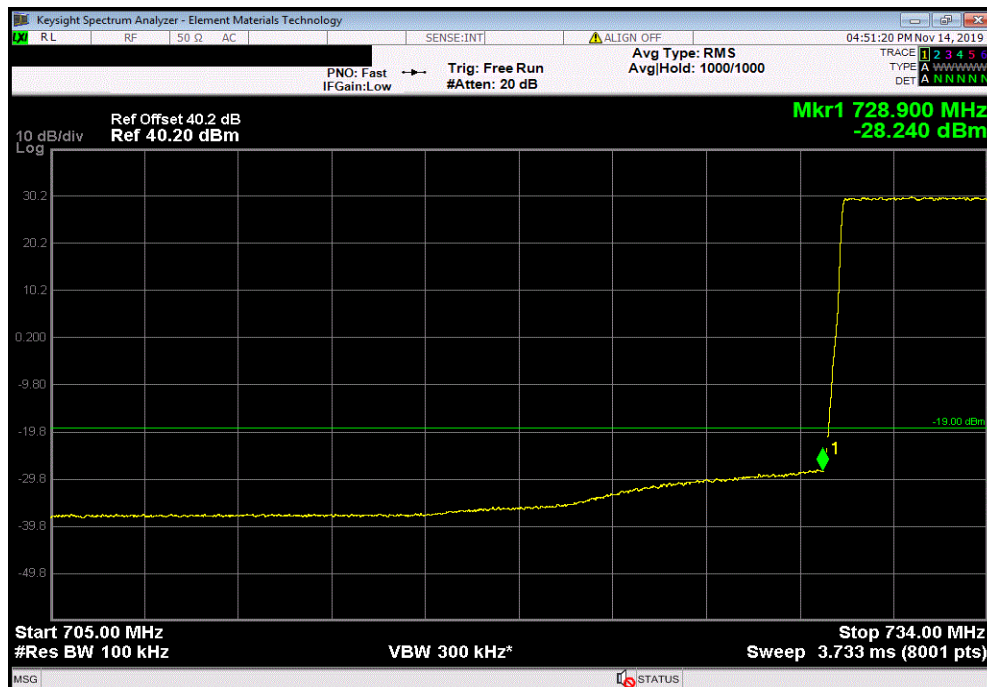
Band 12, 256QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1

| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -31.493 | -19 | Pass |



Band 12, 256QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2

| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -28.24 | -19 | Pass |



BAND EDGE COMPLIANCE



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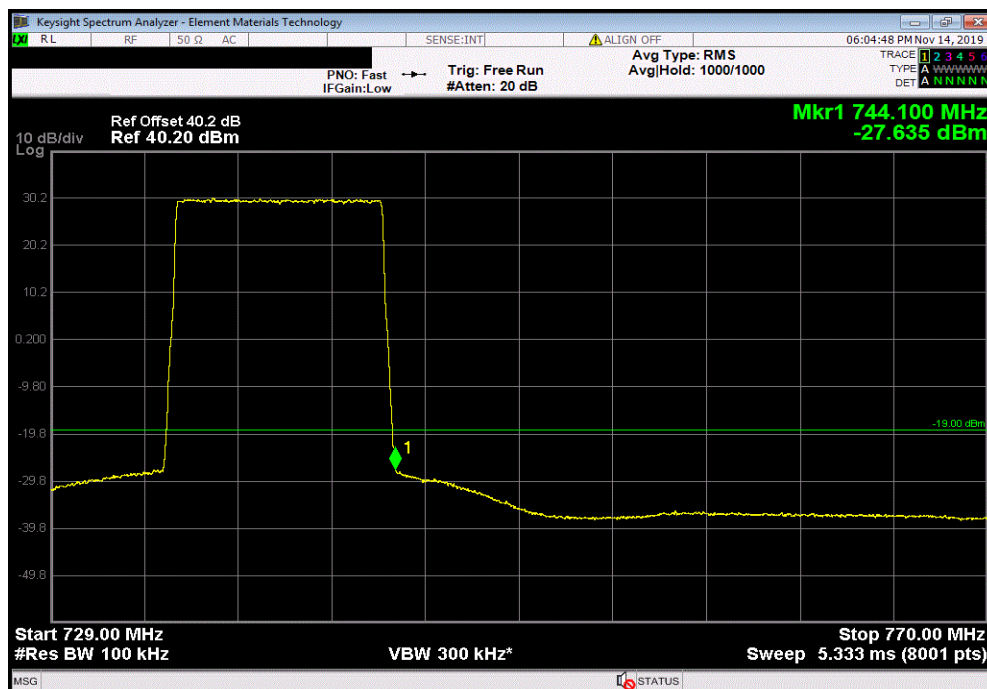
Band 12, 256QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1

| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -30.478 | -19 | Pass |



Band 12, 256QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2

| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -27.635 | -19 | Pass |



BAND EDGE COMPLIANCE



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Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Cal. Due |
|------------------------------|--------------|------------|-----|-----------|-----------|
| Generator - Signal | Keysight | N5171B-506 | TEW | 2-May-18 | 2-May-21 |
| Analyzer - Spectrum Analyzer | Keysight | N9010A | AFM | 19-Mar-19 | 19-Mar-20 |

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in the available band. The channels closest to the band edges were selected. The EUT was transmitting at the data rate(s) listed in the datasheet. For Multiband operation, measurements were taken at the lower band edge of the lower band and the upper band edge of the upper band.

The spectrum was scanned below the lower band edge and above the higher band edge.

All limits were adjusted by a factor of $[-10 \cdot \log((N))]$ to account for the device operation as a N port MIMO transmitter, as per FCC KDB 622911.

For Bands 12 and 14, the adjustment factor is $-10 \cdot \log(4) = -6$ dB. The Bands 12 and 14 adjusted limit is -19 dBm.

For Band 29, the adjustment factor is $-10 \cdot \log(2) = -3$ dB. The Band 29 adjusted limit is -16 dBm.

Per FCC section 27.53(g), the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm. The limit is adjusted to -19 dBm $[-13 \text{ dBm} - 10 \log(4)]$ per FCC KDB 662911D01 v02r01 because the RRH may operate as a 4 port MIMO transmitter for Band 12.

FCC 27.53(g) requires a >100 kHz measurement bandwidth for emissions 100 kHz outside of the RRH operating frequency range. FCC 27.53(g) requires a >30 kHz measurement bandwidth for emissions between 100 kHz outside of the RRH operating frequency range and band edge of the operating frequency range.

BAND EDGE COMPLIANCE



XMM 2019.09.05

| | | | |
|--|---|---------------------------------|--------------------|
| EUT: AHLBBA RRH | | Work Order: NOKI0004 | |
| Serial Number: K9193514835 | | Date: 18-Nov-19 | |
| Customer: Nokia Solutions and Networks | | Temperature: 22.7 °C | |
| Attendees: John Rattanavong | | Humidity: 29.9% RH | |
| Project: None | | Barometric Pres.: 1019 mbar | |
| Tested by: Jonathan Kiefer | | Power: 54VDC | |
| Job Site: TX09 | | | |
| TEST SPECIFICATIONS | | | |
| FCC 27:2019 | | Test Method | |
| | | ANSI C63.26:2015 | |
| COMMENTS | | | |
| Band 12 band edge measurements. Tested on highest power antenna port (Port 2). EUT is operated at 100% duty cycle. | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| None | | | |
| Configuration # | 2 | Signature <i>Jonathan Kiefa</i> | |
| | | Value (dBm) | Limit (dBm) Result |
| Band 12 | | | |
| QPSK Modulation | | | |
| LTE5 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -24.359 | -19 |
| Measurement 2 | | -23.858 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -23.398 | -19 |
| Measurement 2 | | -25.178 | -19 Pass |
| LTE10 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -27.013 | -19 |
| Measurement 2 | | -25.04 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -26.755 | -19 |
| Measurement 2 | | -24.841 | -19 Pass |
| 16QAM Modulation | | | |
| LTE5 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -24.013 | -19 |
| Measurement 2 | | -24.228 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -24.643 | -19 |
| Measurement 2 | | -26.013 | -19 Pass |
| LTE10 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -27.316 | -19 |
| Measurement 2 | | -25.323 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -26.965 | -19 |
| Measurement 2 | | -24.948 | -19 Pass |
| 64QAM Modulation | | | |
| LTE5 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -24.365 | -19 |
| Measurement 2 | | -24.496 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -24.291 | -19 |
| Measurement 2 | | -25.567 | -19 Pass |
| LTE10 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -26.804 | -19 |
| Measurement 2 | | -24.967 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -26.589 | -19 |
| Measurement 2 | | -24.723 | -19 Pass |
| 256QAM Modulation | | | |
| LTE5 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -23.831 | -19 |
| Measurement 2 | | -24.15 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -23.167 | -19 |
| Measurement 2 | | -25.269 | -19 Pass |
| LTE10 Bandwidth | | | |
| Lower Band Edge | | | |
| Measurement 1 | | -26.776 | -19 |
| Measurement 2 | | -25.409 | -19 Pass |
| Upper Band Edge | | | |
| Measurement 1 | | -26.702 | -19 |
| Measurement 2 | | -25.15 | -19 Pass |

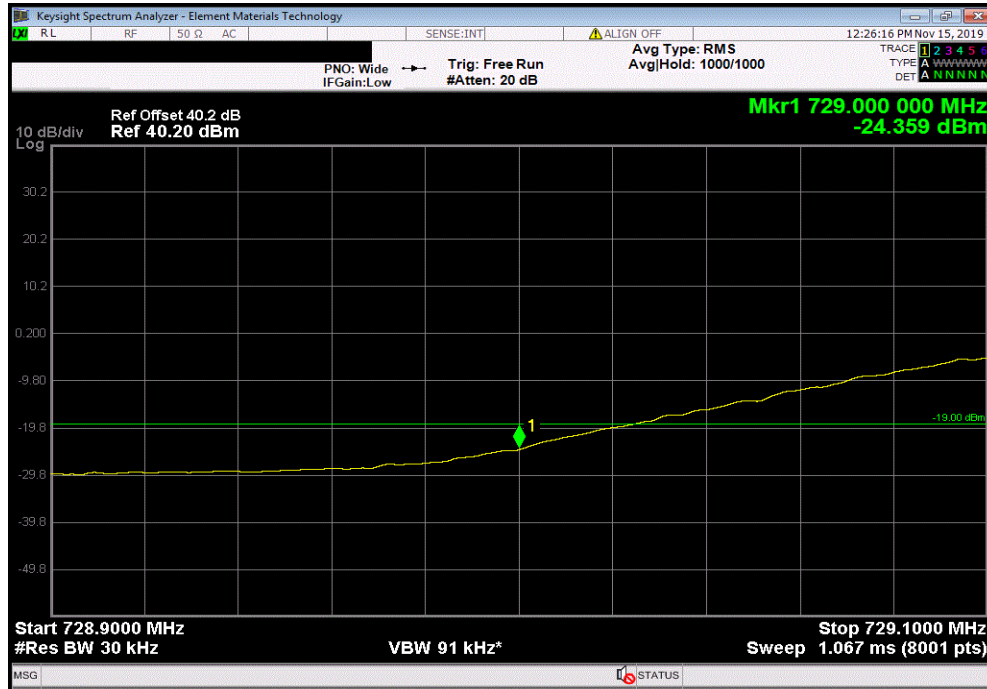
BAND EDGE COMPLIANCE



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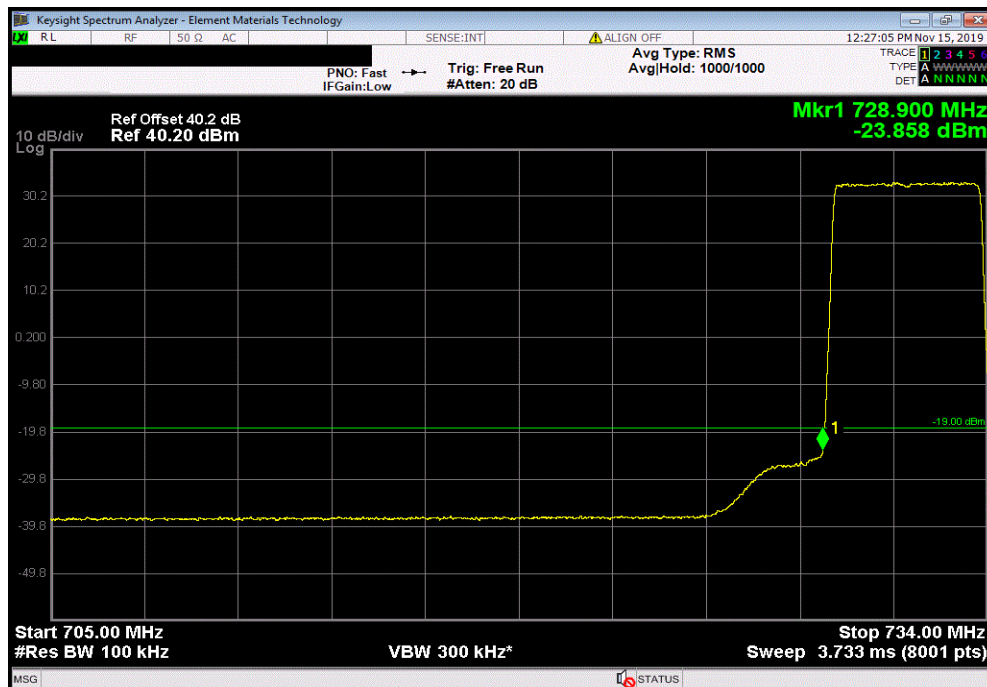
Band 12, QPSK Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1

| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -24.359 | -19 | Pass |



Band 12, QPSK Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2

| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -23.858 | -19 | Pass |



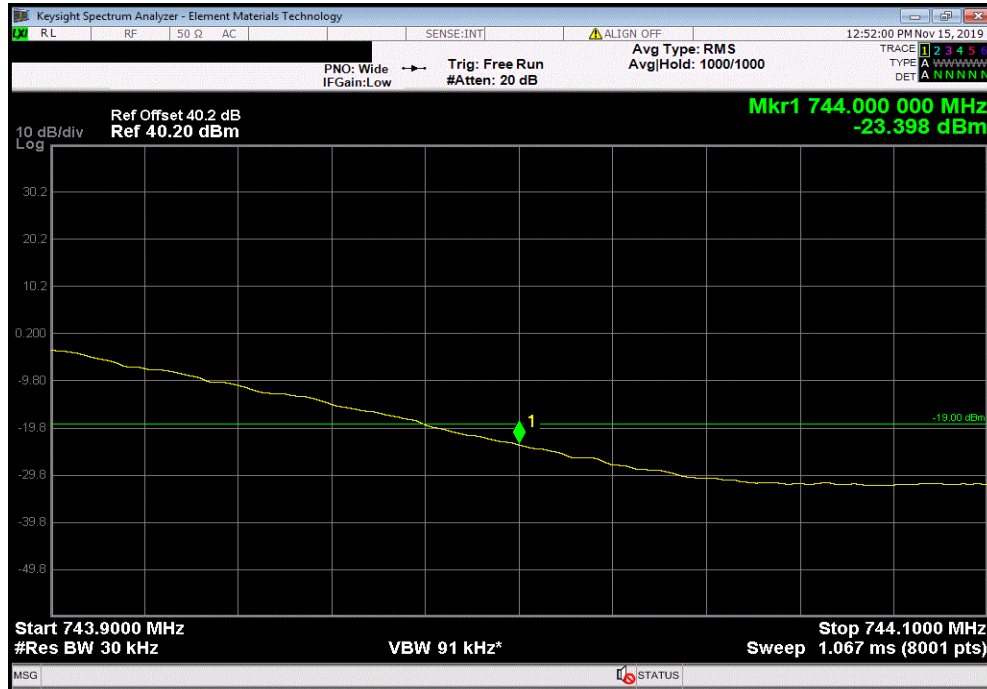
BAND EDGE COMPLIANCE



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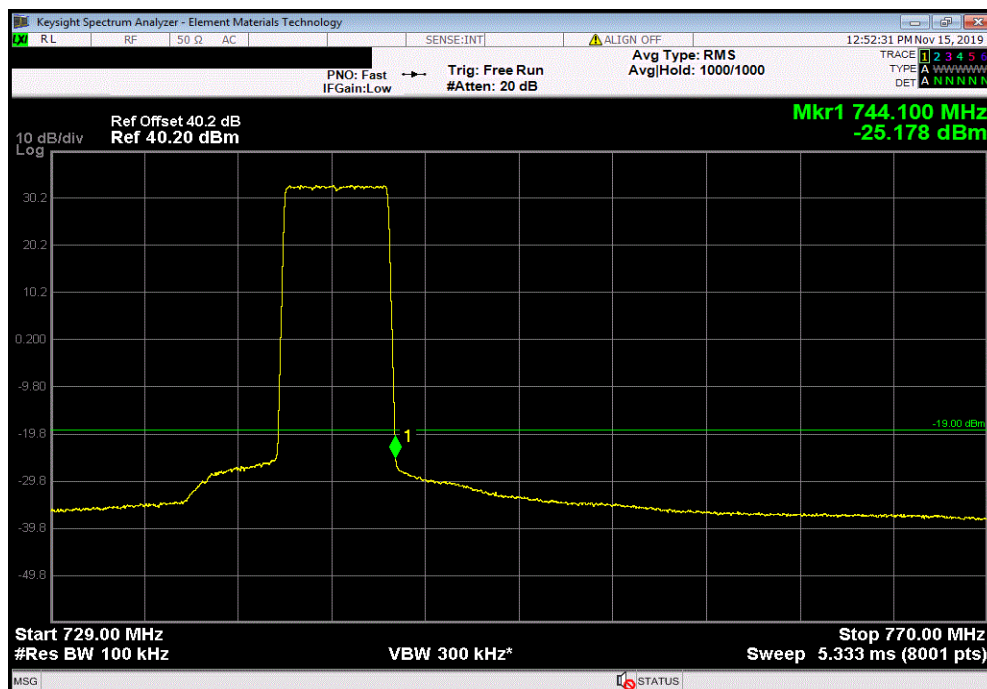
Band 12, QPSK Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1

| | | | | Value (dBm) | Limit (dBm) | Result |
|--|--|--|--|----------------|----------------|--------|
| | | | | -23.398 | -19 | Pass |



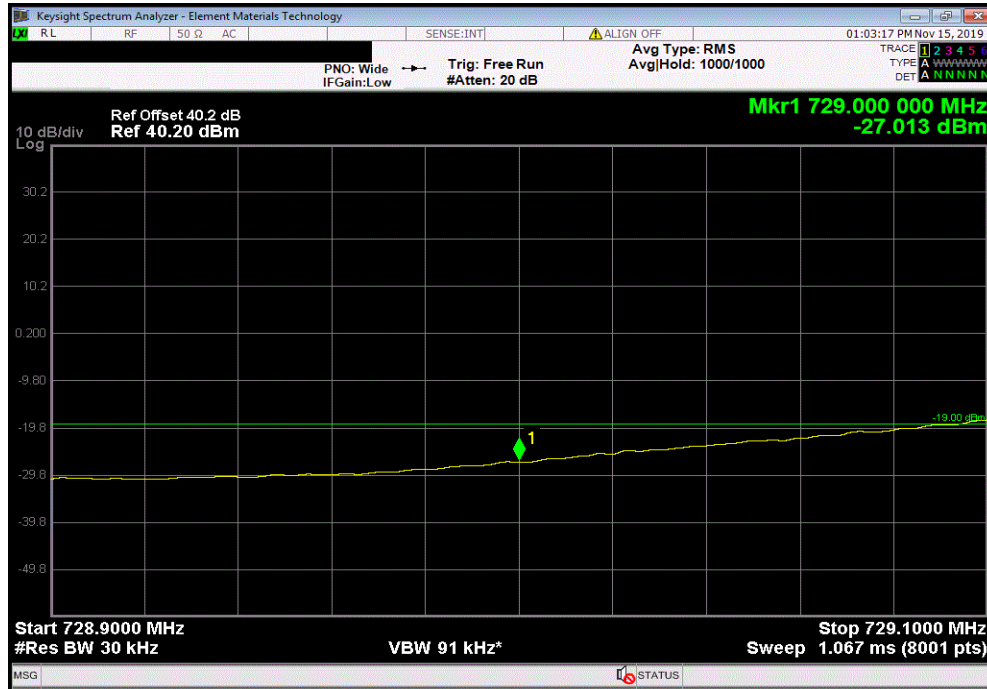
Band 12, QPSK Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2

| | | | | Value (dBm) | Limit (dBm) | Result |
|--|--|--|--|----------------|----------------|--------|
| | | | | -25.178 | -19 | Pass |

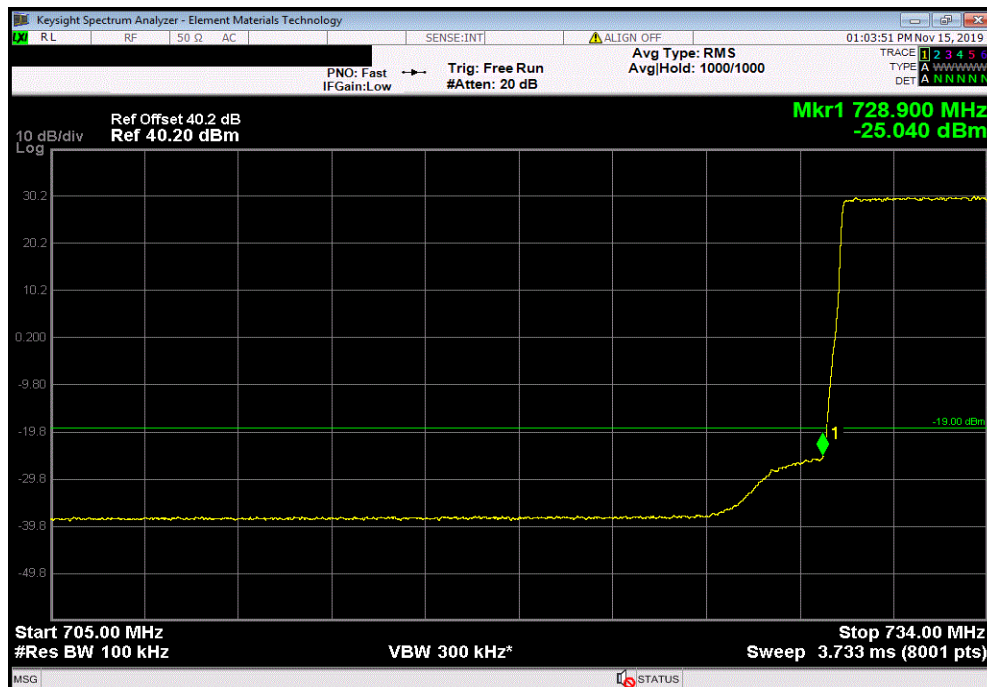


BAND EDGE COMPLIANCE

| Band 12, QPSK Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|---|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -27.013 | -19 | Pass |

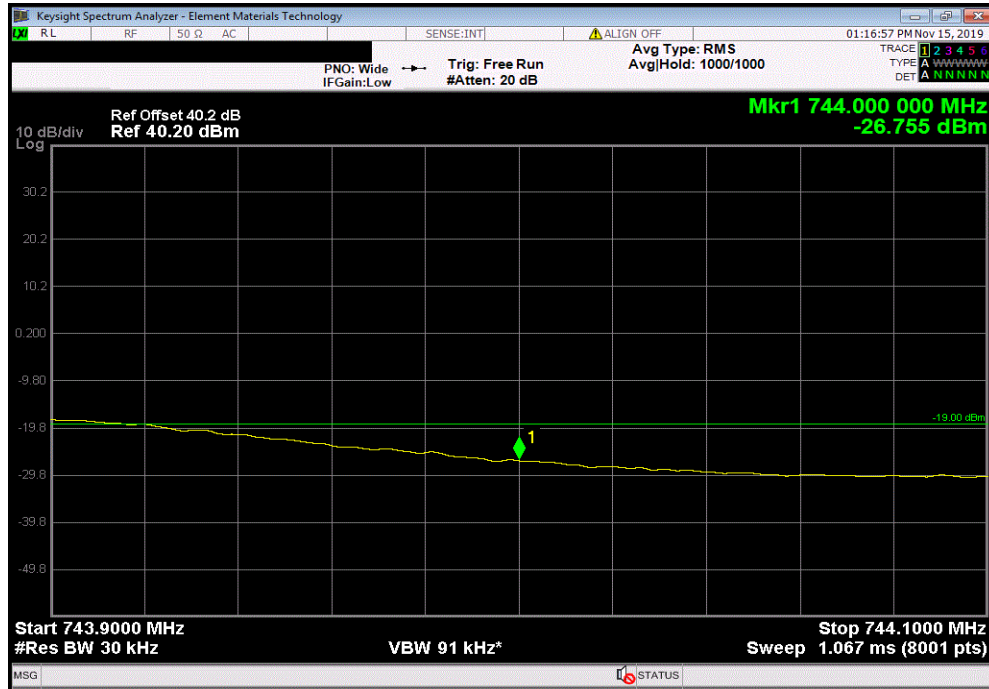


| Band 12, QPSK Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|---|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -25.04 | -19 | Pass |

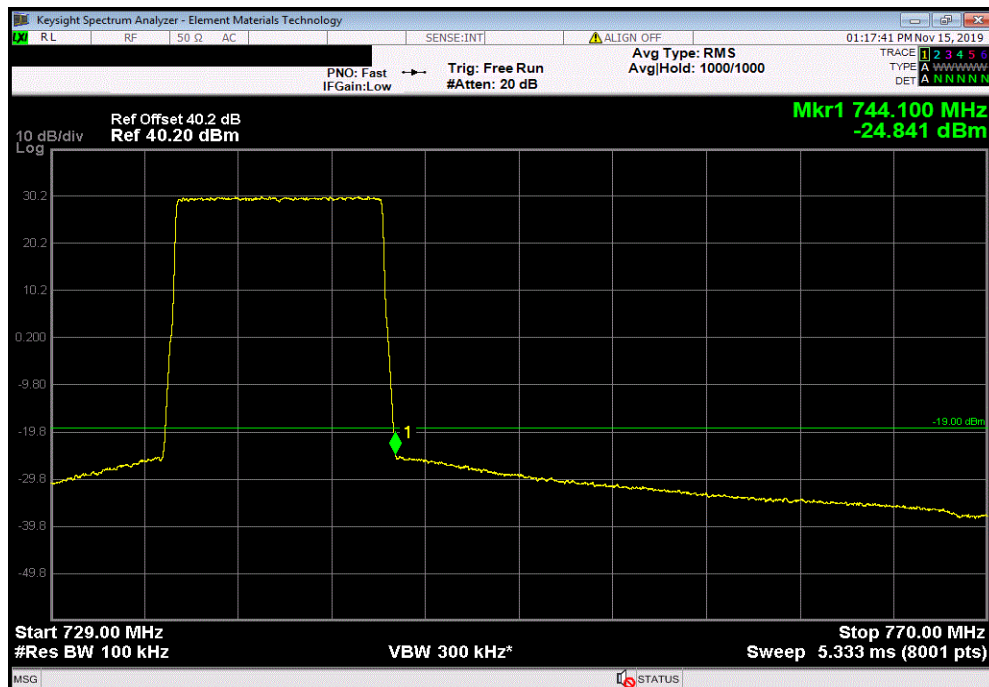


BAND EDGE COMPLIANCE

| Band 12, QPSK Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|---|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -26.755 | -19 | Pass |



| Band 12, QPSK Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|---|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -24.841 | -19 | Pass |

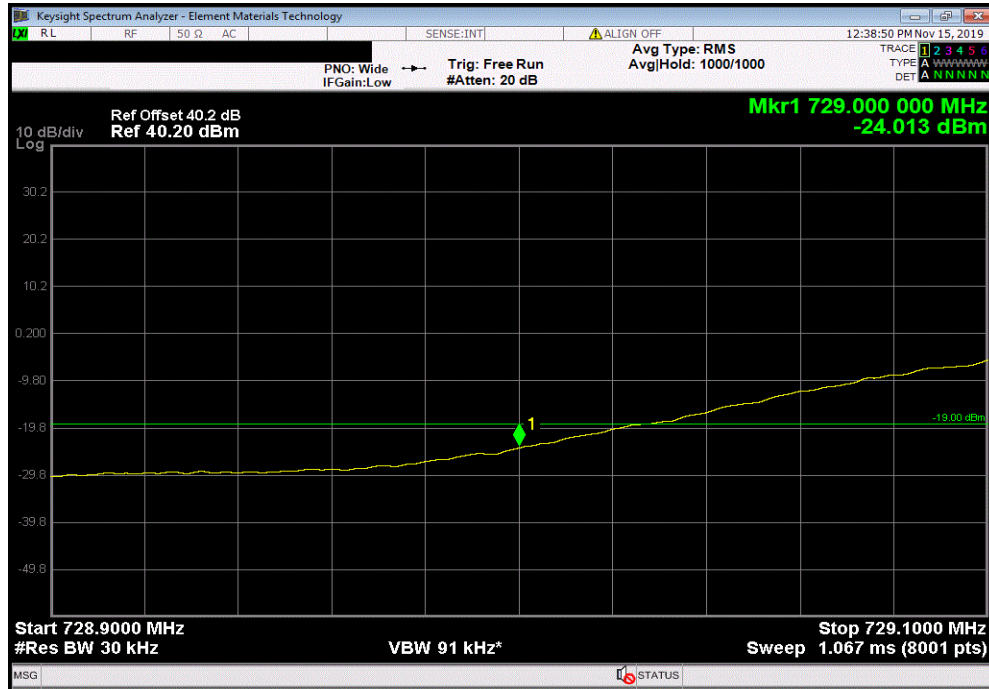


BAND EDGE COMPLIANCE

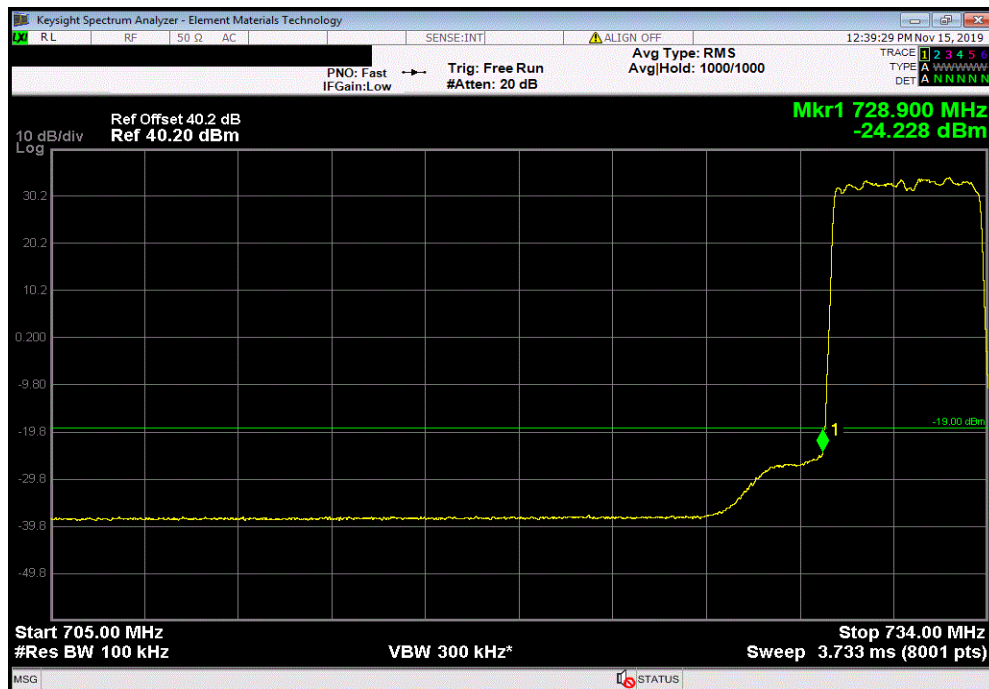


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| Band 12, 16QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.013 | -19 | Pass | | | |



| Band 12, 16QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.228 | -19 | Pass | | | |

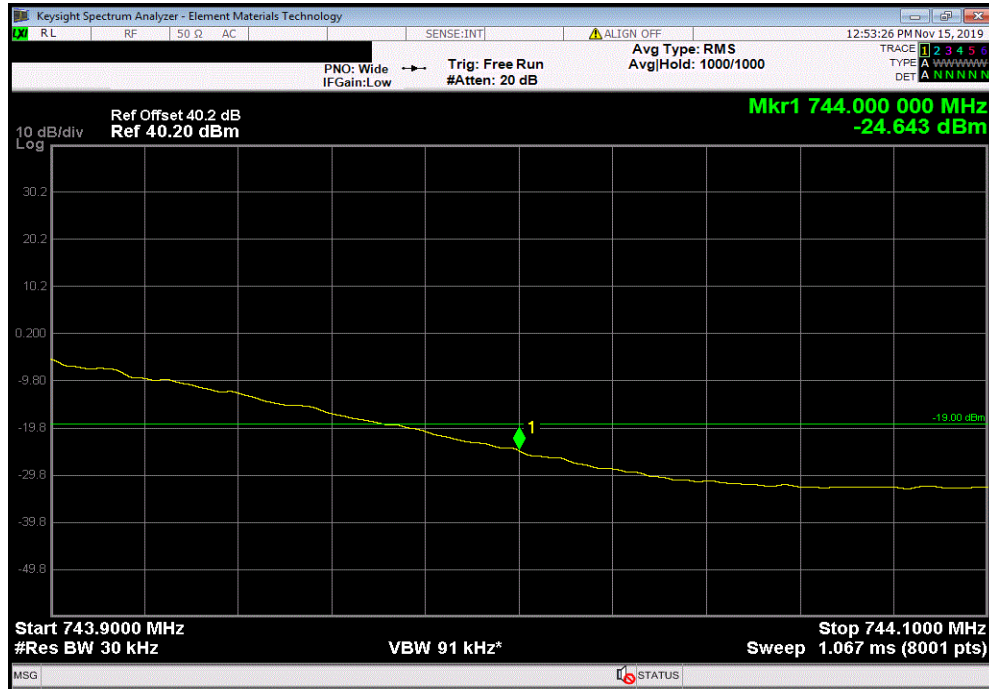


BAND EDGE COMPLIANCE

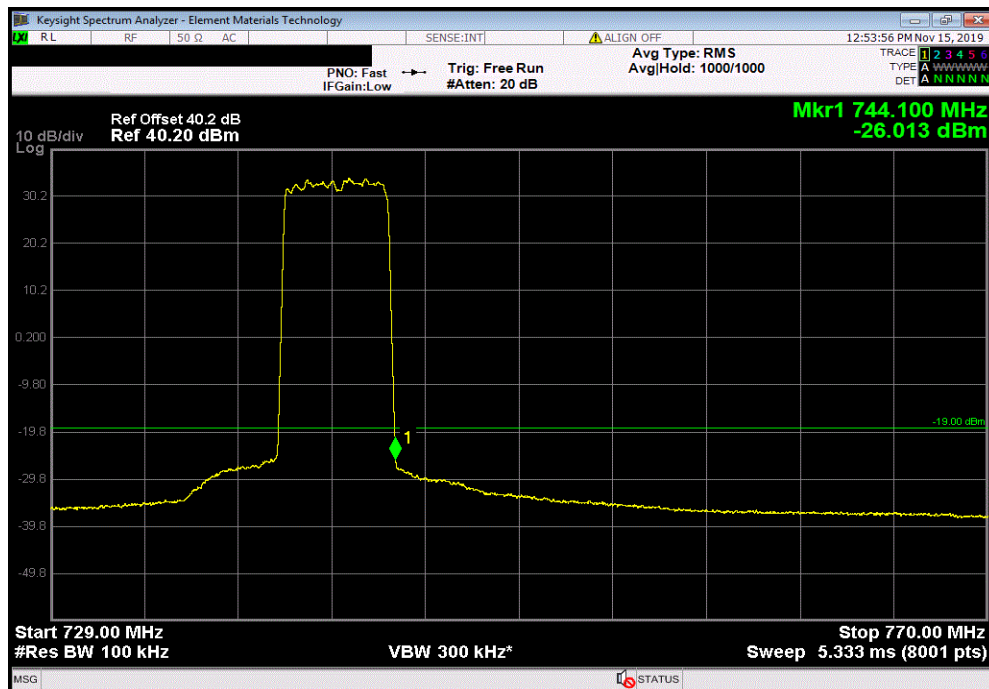


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| Band 12, 16QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.643 | -19 | Pass | | | |



| Band 12, 16QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -26.013 | -19 | Pass | | | |

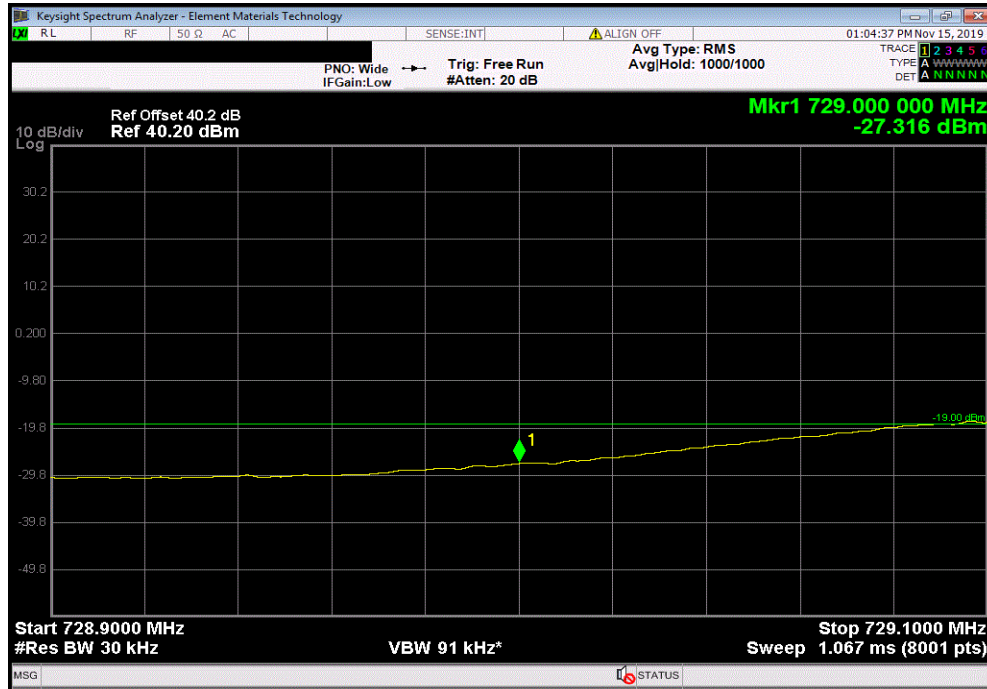


BAND EDGE COMPLIANCE

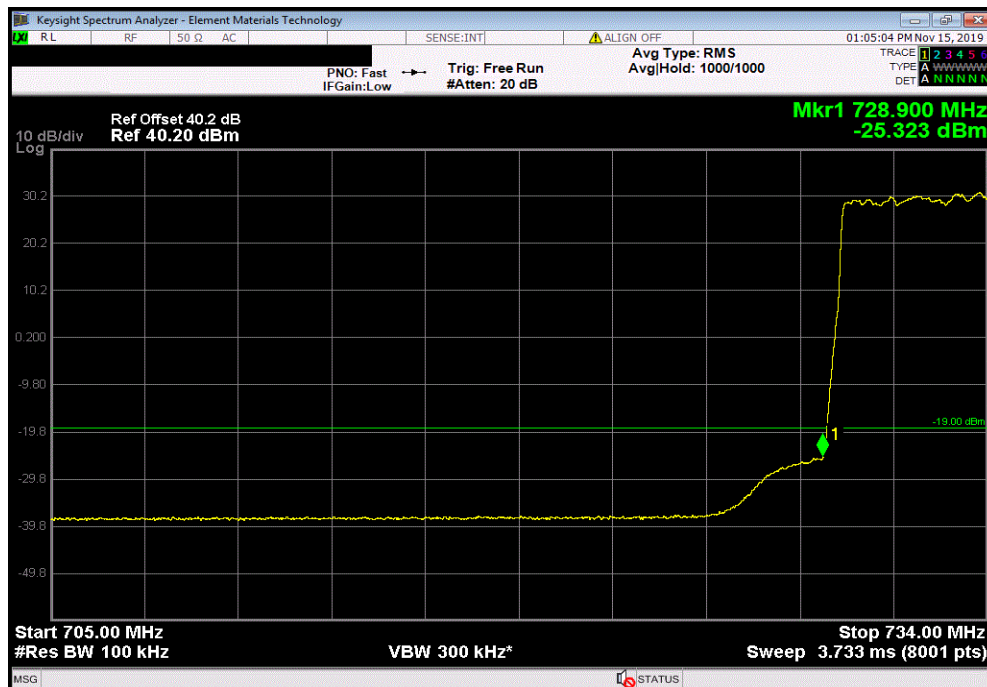


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| Band 12, 16QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -27.316 | -19 | Pass | | | |



| Band 12, 16QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -25.323 | -19 | Pass | | | |

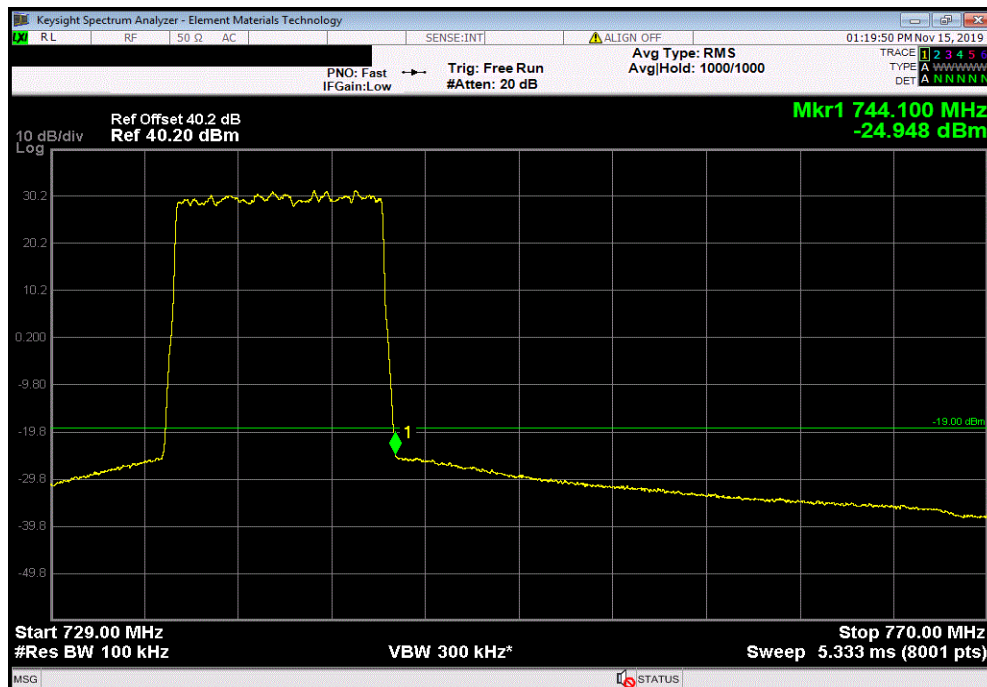


BAND EDGE COMPLIANCE

| Band 12, 16QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|--|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -26.965 | -19 | Pass |

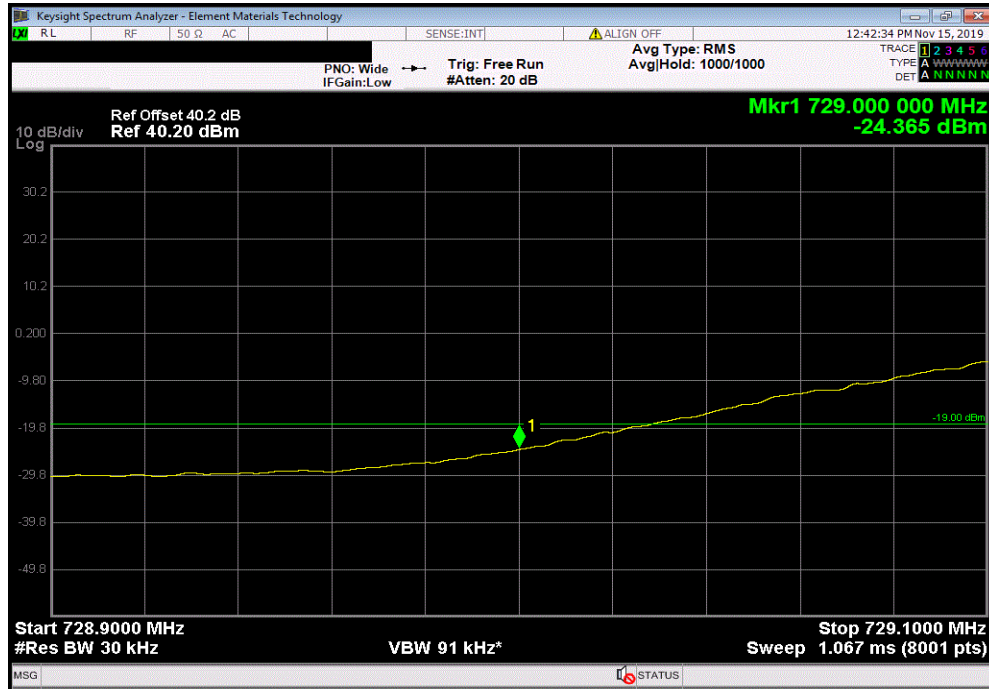


| Band 12, 16QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|--|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -24.948 | -19 | Pass |

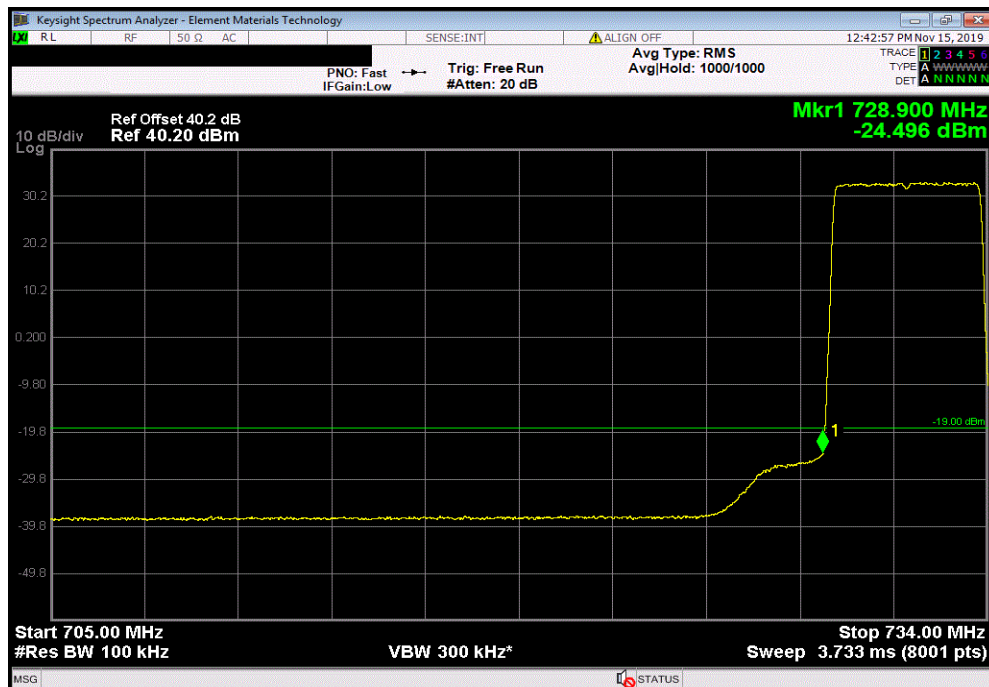


BAND EDGE COMPLIANCE

| Band 12, 64QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.365 | -19 | Pass | | | |



| Band 12, 64QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.496 | -19 | Pass | | | |

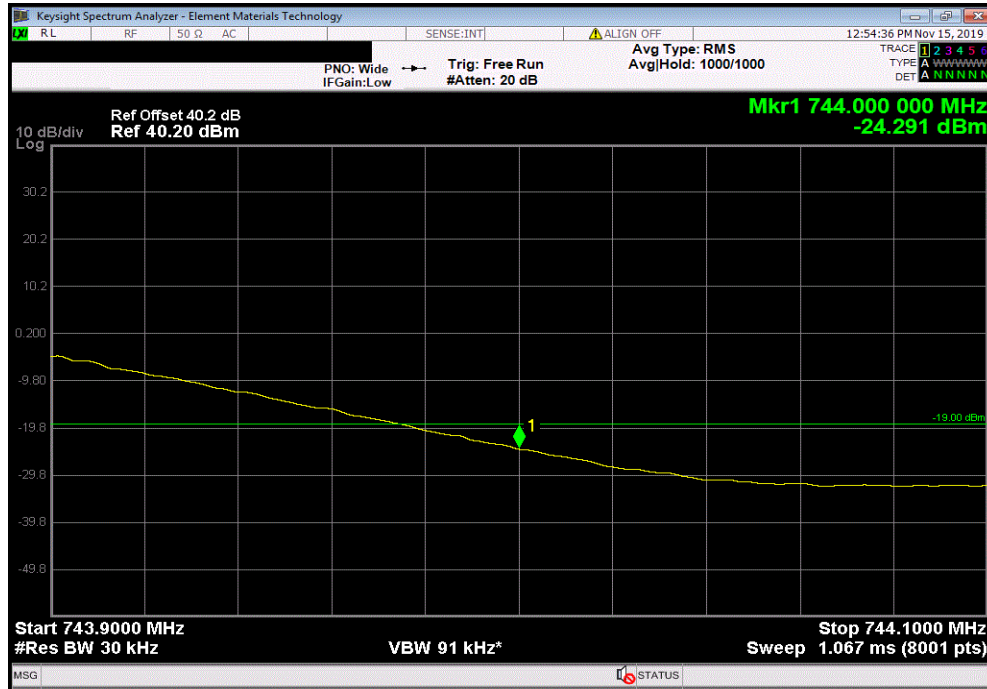


BAND EDGE COMPLIANCE

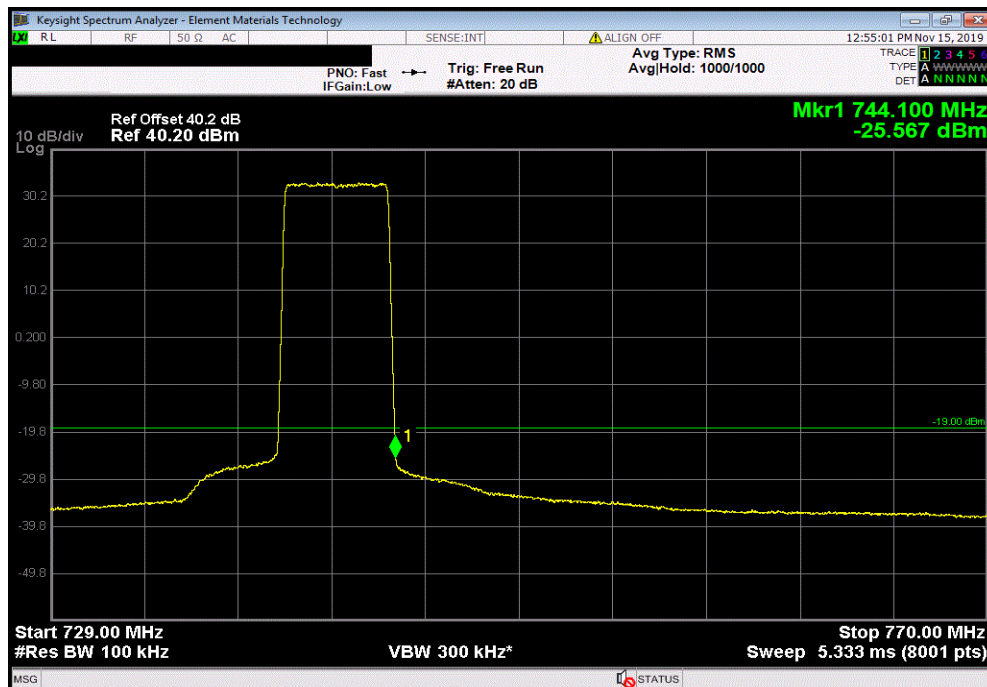


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| Band 12, 64QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.291 | -19 | Pass | | | |



| Band 12, 64QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|---|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -25.567 | -19 | Pass | | | |

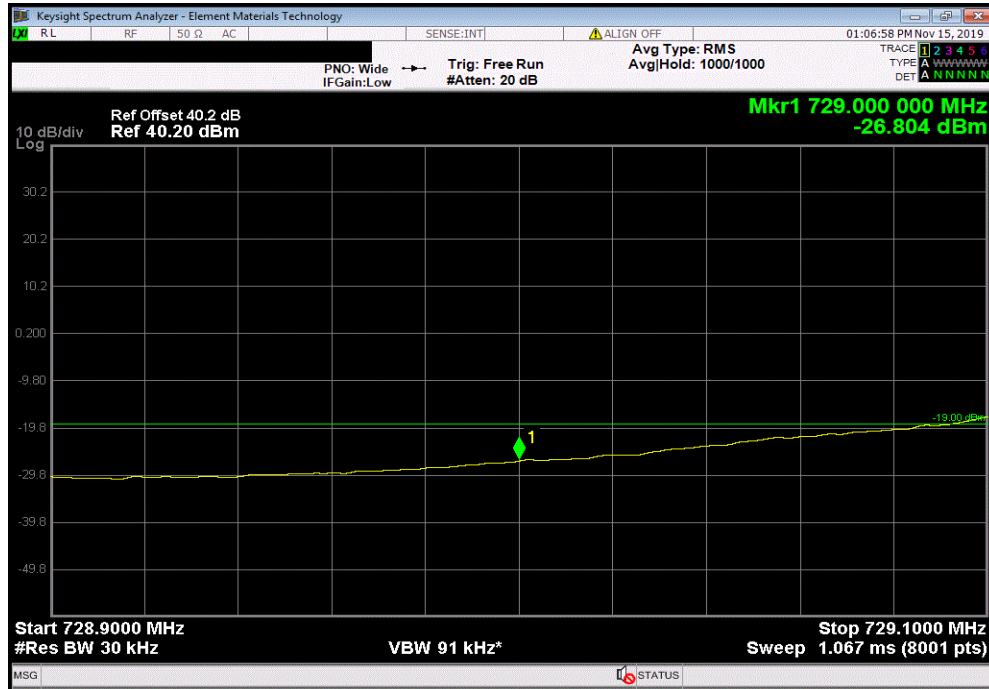


BAND EDGE COMPLIANCE

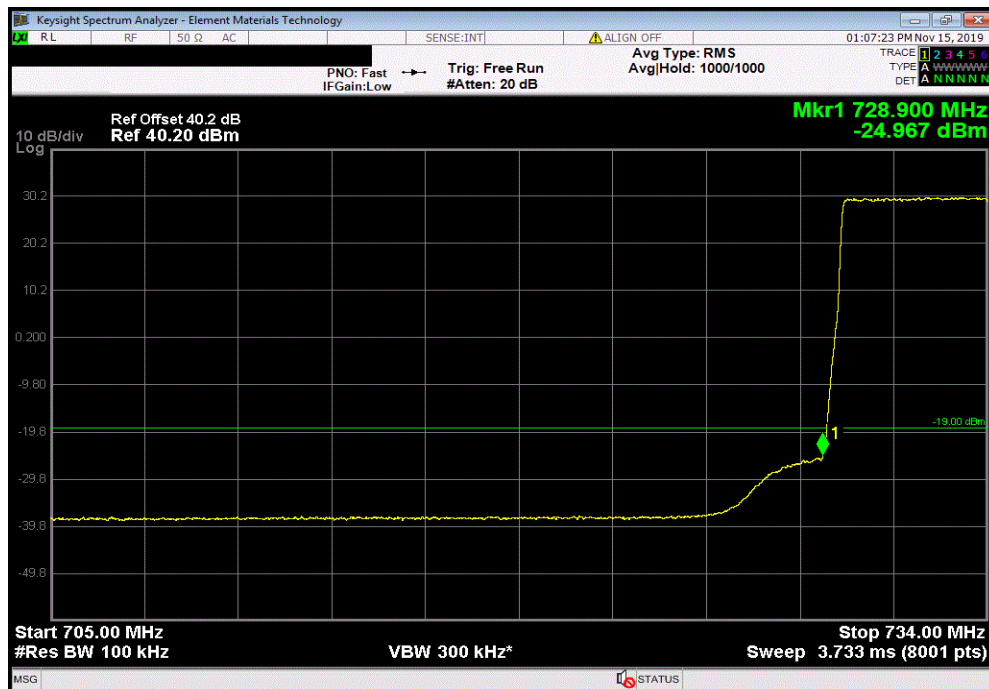


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| Band 12, 64QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -26.804 | -19 | Pass | | | |

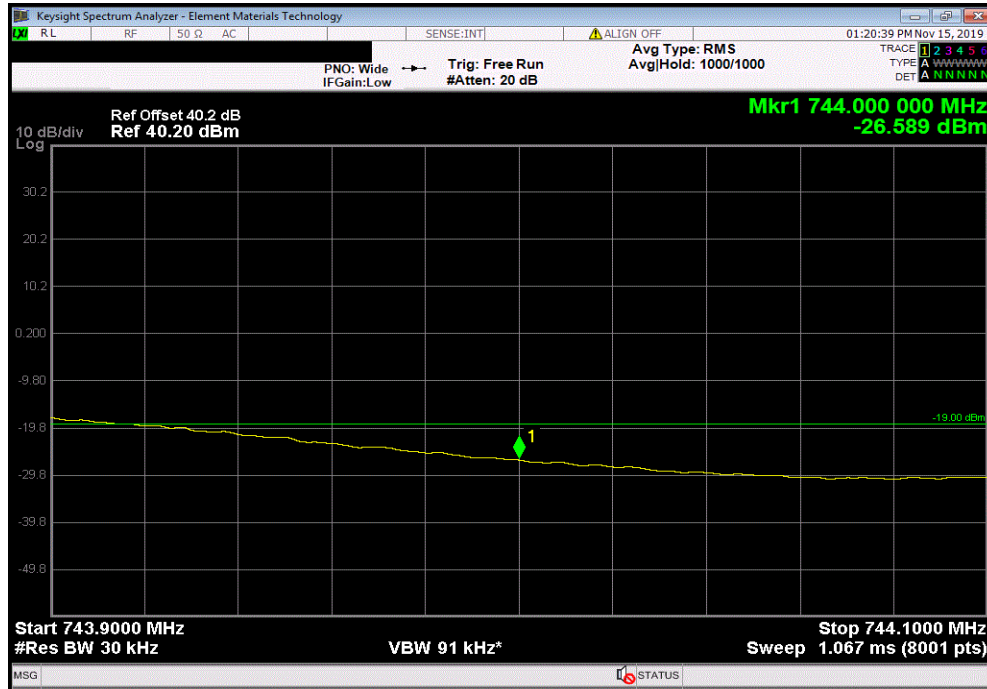


| Band 12, 64QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.967 | -19 | Pass | | | |



BAND EDGE COMPLIANCE

| Band 12, 64QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|--|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -26.589 | -19 | Pass |



| Band 12, 64QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|--|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -24.723 | -19 | Pass |

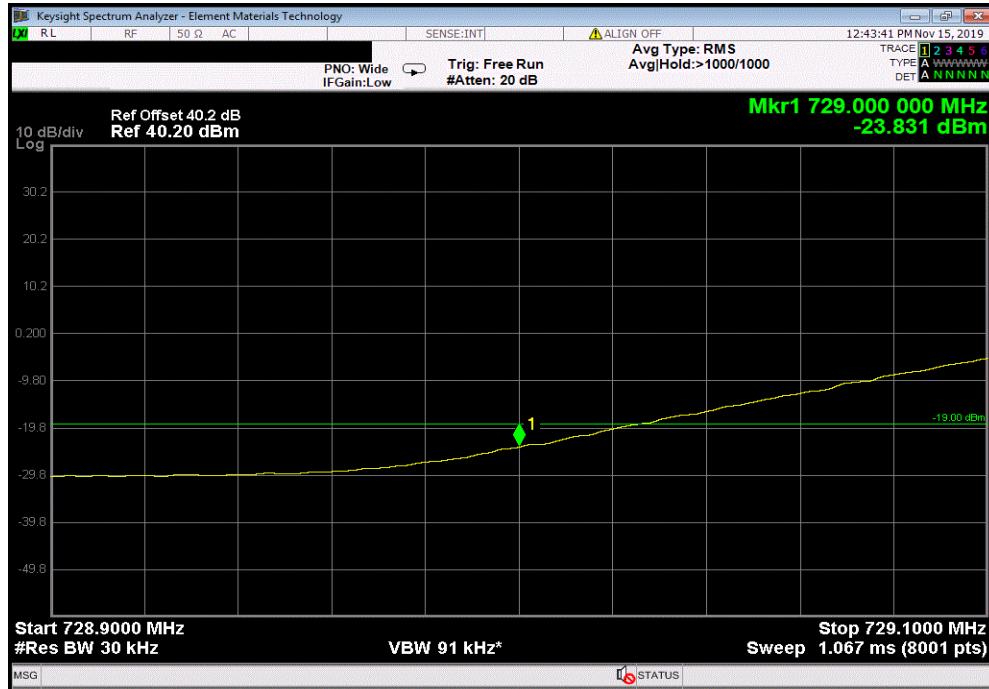


BAND EDGE COMPLIANCE

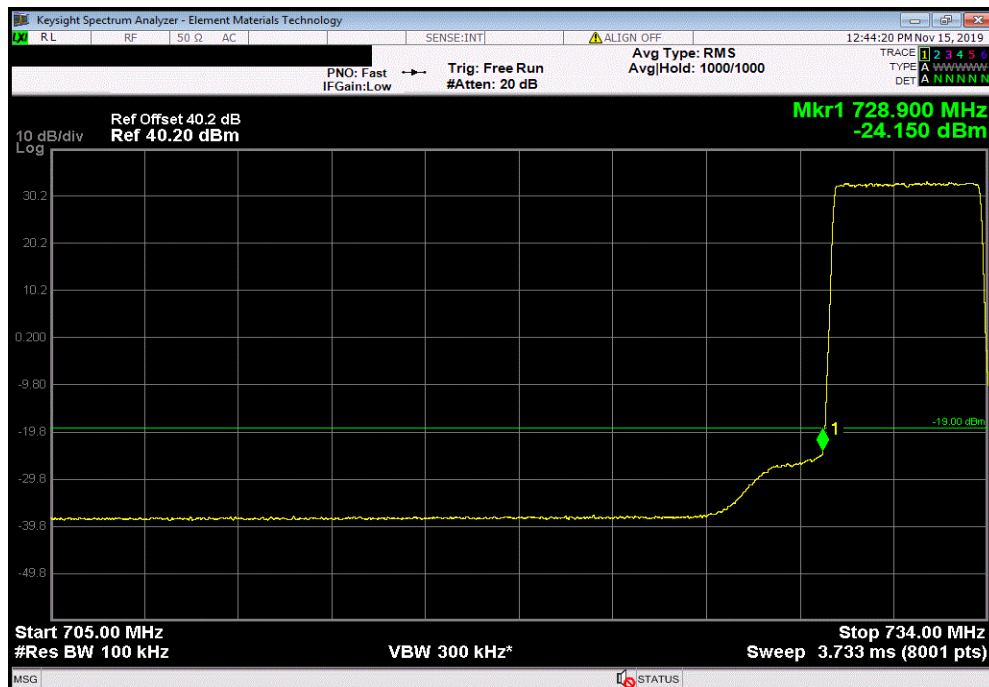


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| Band 12, 256QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1 | | | | | | |
|--|---------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -23.831 | -19 | Pass | | | |

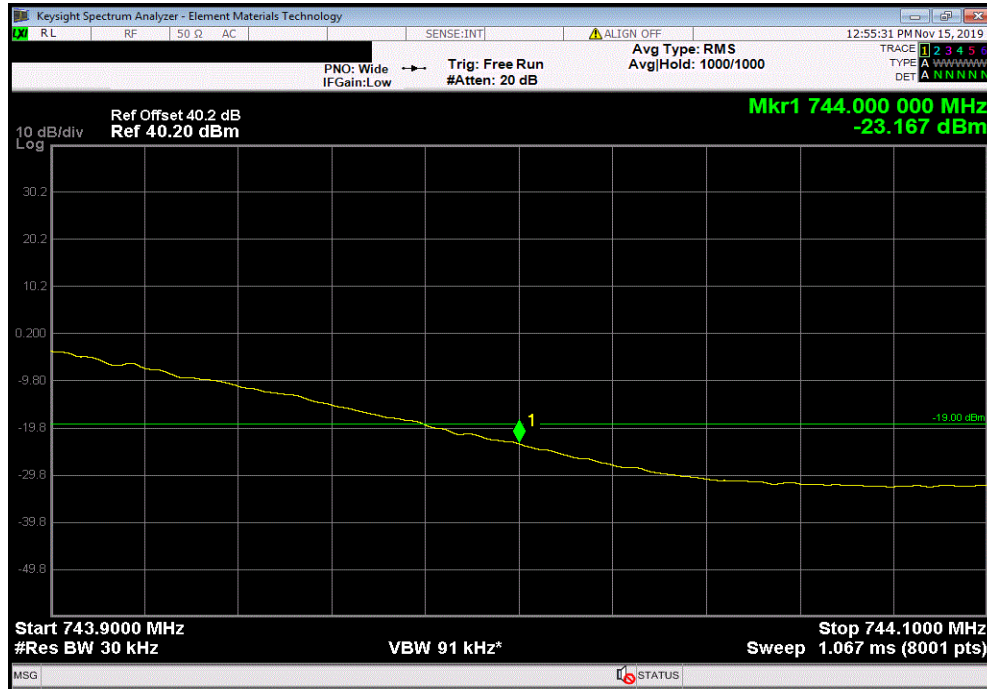


| Band 12, 256QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2 | | | | | | |
|--|--------|-------|--------|--|--|--|
| | Value | Limit | Result | | | |
| | (dBm) | (dBm) | | | | |
| | -24.15 | -19 | Pass | | | |

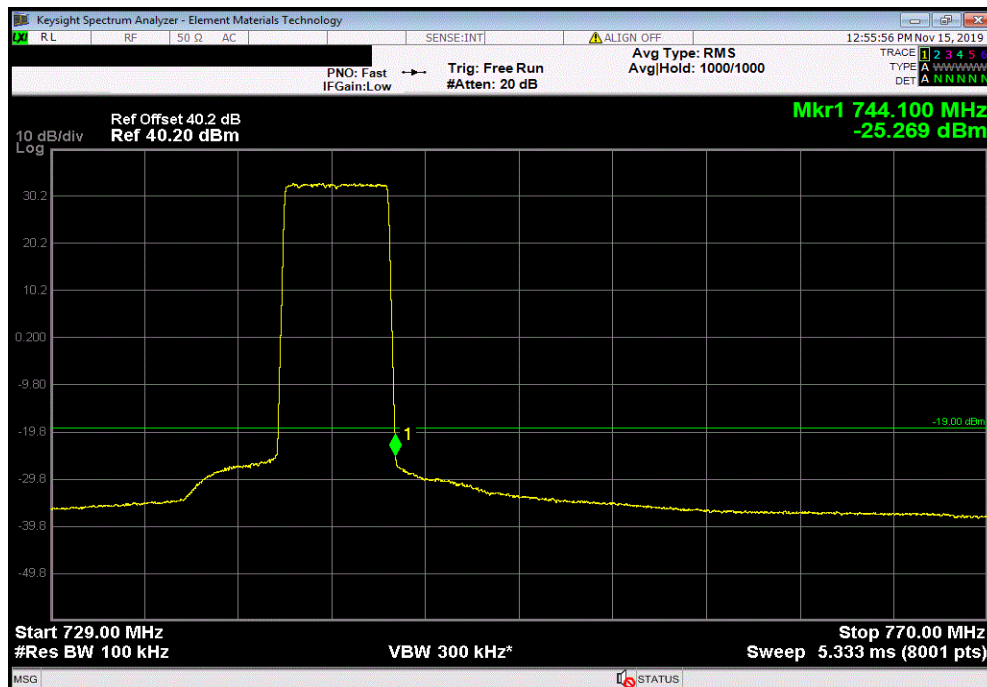


BAND EDGE COMPLIANCE

| Band 12, 256QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1 | | | | | | |
|--|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -23.167 | -19 | Pass |



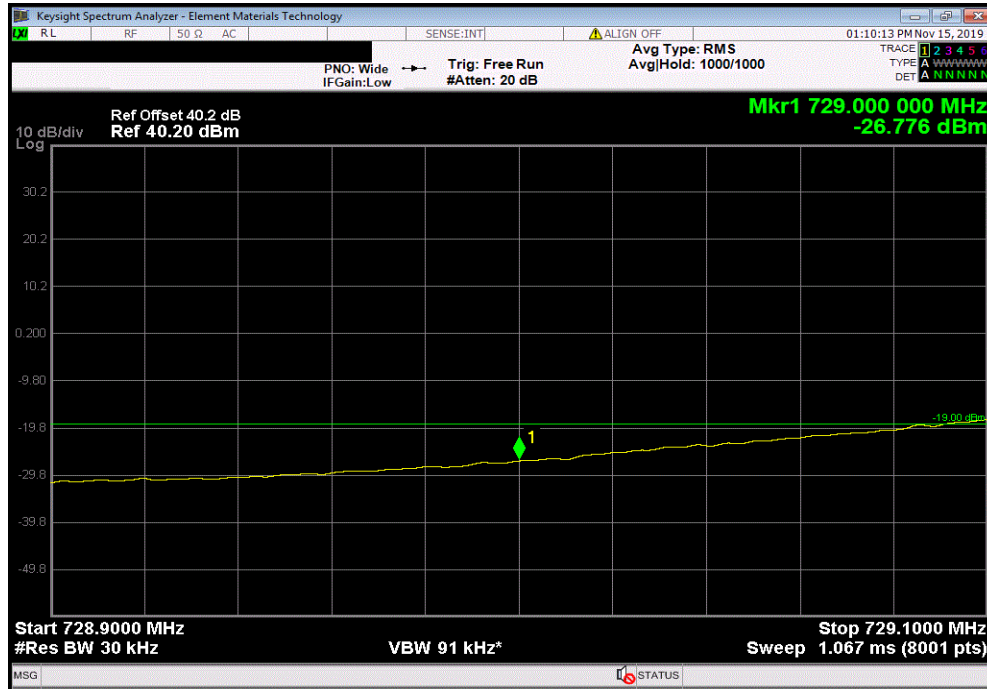
| Band 12, 256QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2 | | | | | | |
|--|--|--|--|----------------|----------------|--------|
| | | | | Value (dBm) | Limit (dBm) | Result |
| | | | | -25.269 | -19 | Pass |



BAND EDGE COMPLIANCE

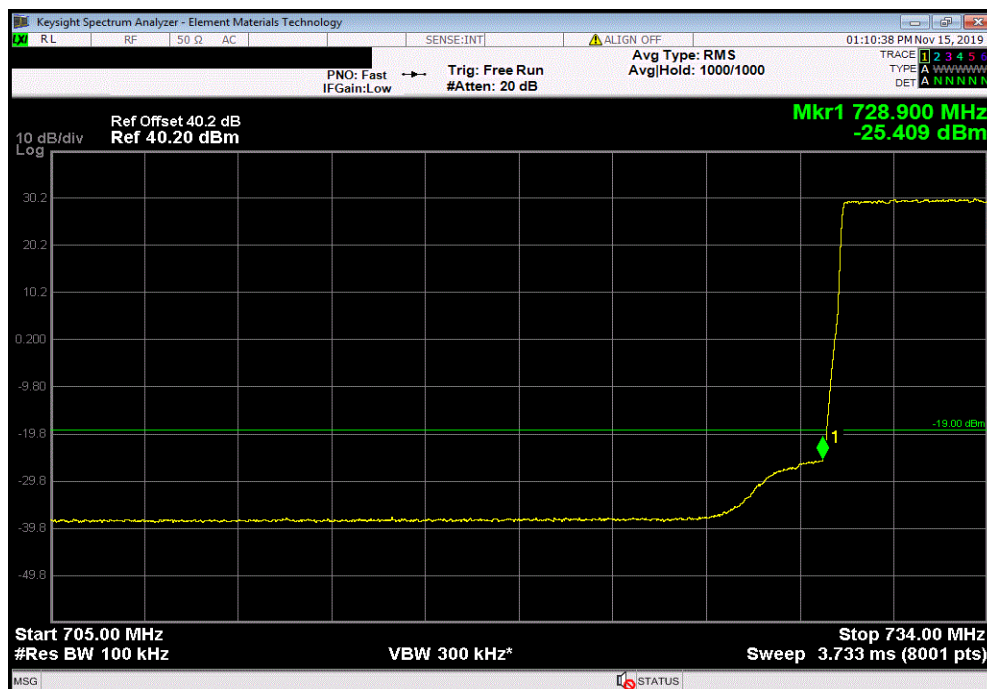
Band 12, 256QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1

| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -26.776 | -19 | Pass |



Band 12, 256QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2

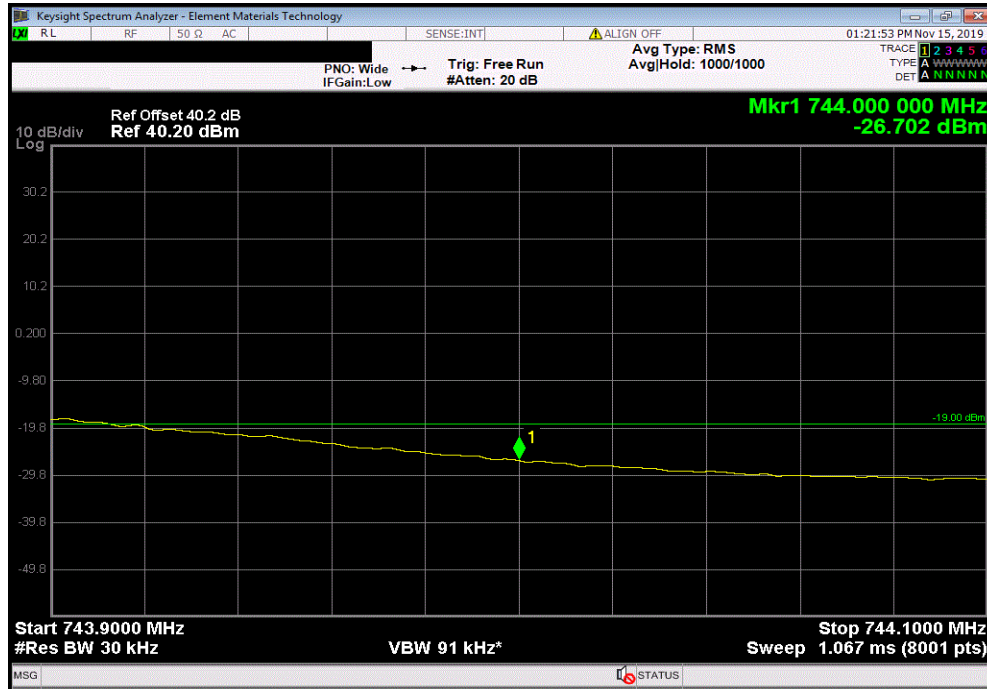
| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -25.409 | -19 | Pass |



BAND EDGE COMPLIANCE

Band 12, 256QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1

| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -26.702 | -19 | Pass |



Band 12, 256QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2

| | Value (dBm) | Limit (dBm) | Result |
|--|----------------|----------------|--------|
| | -25.15 | -19 | Pass |

