

PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



XMIT 2020.03.25.0

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 |
|------------------------------|--------------|------------|-----|-----------|-----------|
| Analyzer - Spectrum Analyzer | Agilent | N9010A | AFL | 27-Feb-20 | 27-Feb-21 |
| Generator - Signal | Keysight | N5171B-506 | TEW | 2-May-18 | 2-May-21 |

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. Because the conducted Output Power was measured using a RMS Average detector, the Peak to Average Power Ratio (PAPR) was measured to show that the maximum peak-max-hold spectrum to the maximum of the average spectrum does not exceed 13 dB.

The PAPR measurement method is described in ANSI C63.26 section 5.2.3.4.

The PAPR was measured using the CCDF function of the spectrum analyzer.

PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



XMI 2020.03.25.0

| | | |
|---|---------------|-----------------------------------|
| EUT: Aircscale Base Transceiver Station Remote Radio Head Model AHLBBA | | Work Order: NOKI0013 |
| Serial Number: K9193514835 | | Date: 23-Mar-20 |
| Customer: Nokia Solutions and Networks | | Temperature: 24.7 °C |
| Attendees: Mitch Hill, John Rattanaovong | | Humidity: 36.3% RH |
| Project: None | | Barometric Pres.: 1024 mbar |
| Tested by: Brandon Hobbs | Power: 54 VDC | Job Site: TX03 |
| TEST SPECIFICATIONS | | |
| FCC 27:2020 | | Test Method |
| RSS-130:2019 | | ANSI C63.26:2015 |
| COMMENTS | | RSS-130:2019 |
| All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. The hottest port per power amplifier (PA) was used for testing. Measured only the affected channels in each extended band. The worst case port was determined in the original client provided test report. The carrier power was set to maximum for all testing. | | |
| DEVIATIONS FROM TEST STANDARD | | |
| None | | |
| Configuration # | 2,6 | Signature |
| | | PAPR Value (dB) Limit (dB) Result |
| Band 12, 729 MHz - 745 MHz, LTE | | |
| Port 1 | | |
| 5 MHz Bandwidth | | |
| QPSK Modulation | | |
| High Channel, 742.5 MHz | | 7.69 13 Pass |
| 16-QAM Modulation | | |
| High Channel, 742.5 MHz | | 7.71 13 Pass |
| 64-QAM Modulation | | |
| High Channel, 742.5 MHz | | 7.71 13 Pass |
| 256-QAM Modulation | | |
| High Channel, 742.5 MHz | | 7.71 13 Pass |
| 10 MHz Bandwidth | | |
| QPSK Modulation | | |
| High Channel, 740 MHz | | 7.70 13 Pass |
| 16-QAM Modulation | | |
| High Channel, 740 MHz | | 7.69 13 Pass |
| 64-QAM Modulation | | |
| High Channel, 740 MHz | | 7.70 13 Pass |
| 256-QAM Modulation | | |
| High Channel, 740 MHz | | 7.69 13 Pass |
| Port 2 | | |
| 5 MHz Bandwidth | | |
| QPSK Modulation | | |
| High Channel, 742.5 MHz | | 6.70 13 Pass |
| 16-QAM Modulation | | |
| High Channel, 742.5 MHz | | 6.71 13 Pass |
| 64-QAM Modulation | | |
| High Channel, 742.5 MHz | | 6.70 13 Pass |
| 256-QAM Modulation | | |
| High Channel, 742.5 MHz | | 6.71 13 Pass |
| 10 MHz Bandwidth | | |
| QPSK Modulation | | |
| High Channel, 740 MHz | | 6.73 13 Pass |
| 16-QAM Modulation | | |
| High Channel, 740 MHz | | 6.73 13 Pass |
| 64-QAM Modulation | | |
| High Channel, 740 MHz | | 6.74 13 Pass |
| 256-QAM Modulation | | |
| High Channel, 740 MHz | | 6.74 13 Pass |
| Band 29, 717 MHz - 728 MHz, LTE | | |
| Port 1 | | |
| 5 MHz Bandwidth | | |
| QPSK Modulation | | |
| Low Channel, 719.5 MHz | | 8.03 13 Pass |
| 16-QAM Modulation | | |
| Low Channel, 719.5 MHz | | 8.03 13 Pass |
| 64-QAM Modulation | | |
| Low Channel, 719.5 MHz | | 8.05 13 Pass |
| 256-QAM Modulation | | |
| Low Channel, 719.5 MHz | | 8.09 13 Pass |
| 10 MHz Bandwidth | | |
| QPSK Modulation | | |
| Low Channel, 722 MHz | | 8.15 13 Pass |
| 16-QAM Modulation | | |
| Low Channel, 722 MHz | | 8.16 13 Pass |
| 64-QAM Modulation | | |
| Low Channel, 722 MHz | | 8.19 13 Pass |
| 256-QAM Modulation | | |
| Low Channel, 722 MHz | | 8.18 13 Pass |

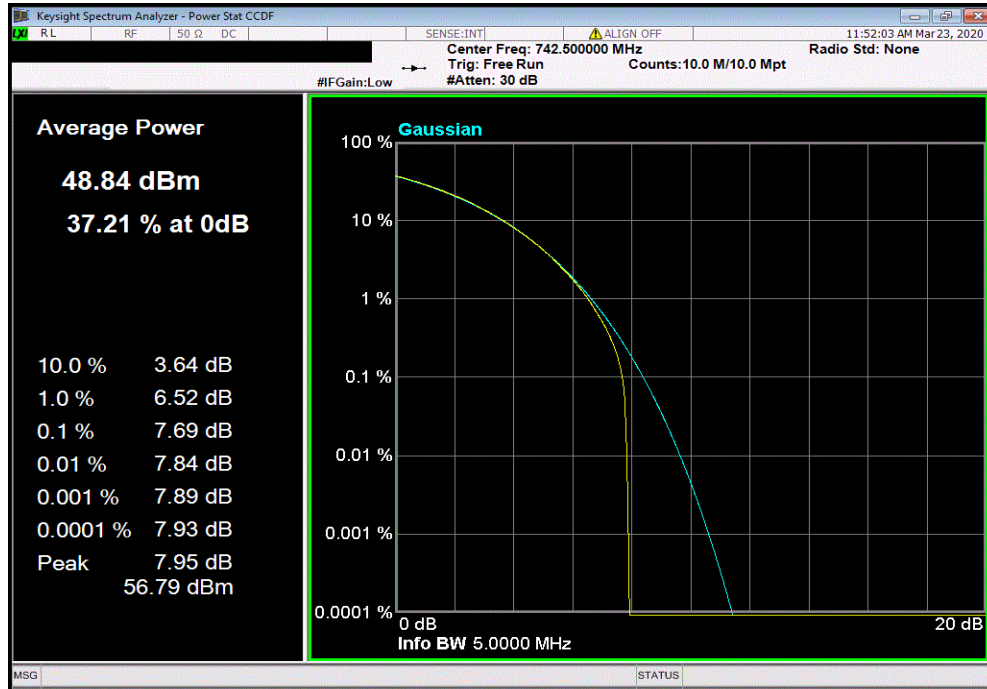
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XMI 2020.03.25.0

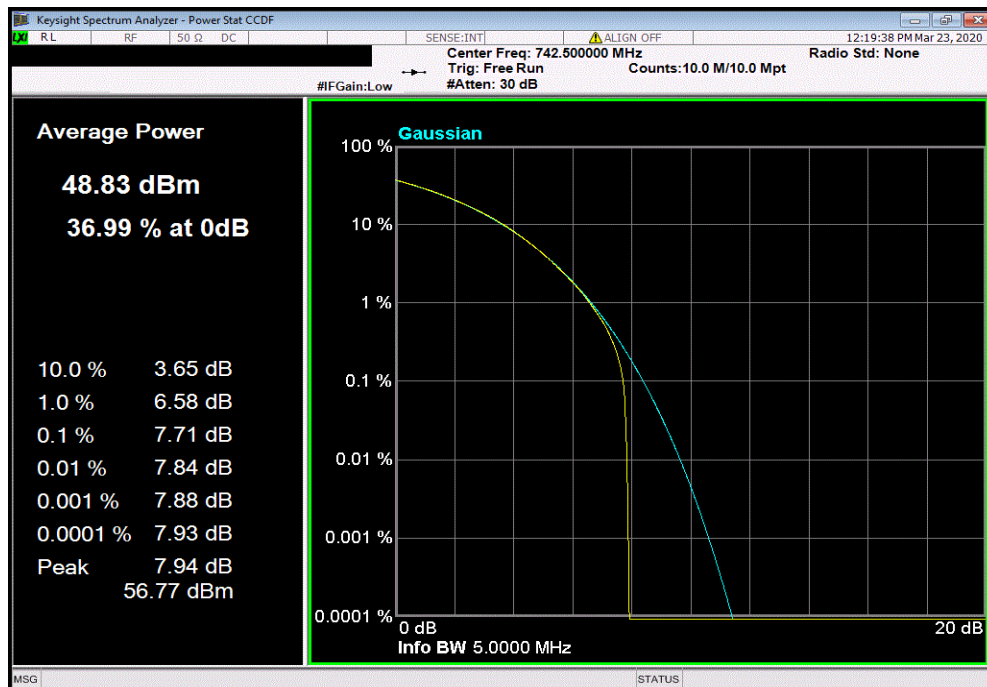
Band 12, 729 MHz - 745 MHz, LTE, Port 1, 5 MHz Bandwidth, QPSK Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.69 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 1, 5 MHz Bandwidth, 16-QAM Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.71 | 13 | Pass |



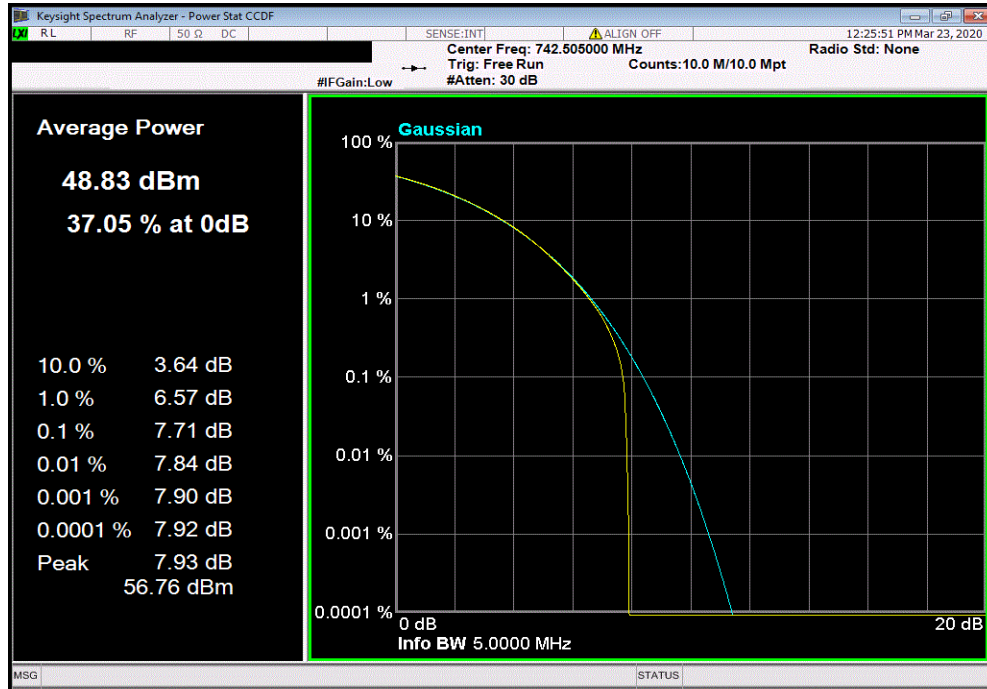
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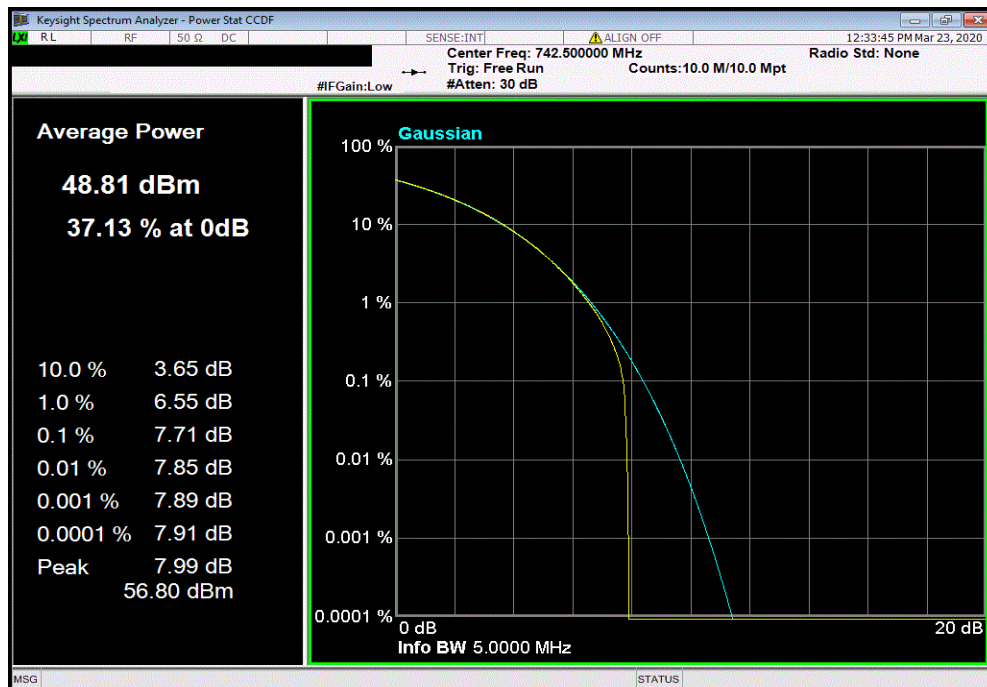
Band 12, 729 MHz - 745 MHz, LTE, Port 1, 5 MHz Bandwidth, 64-QAM Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.71 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.71 | 13 | Pass |



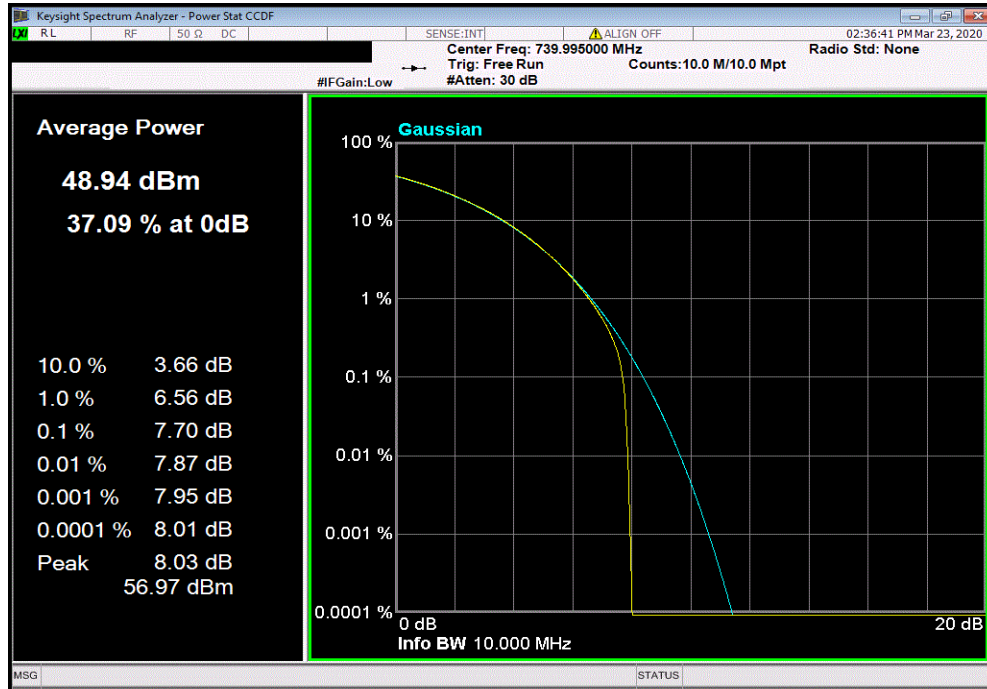
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



XMI 2020.03.25.0

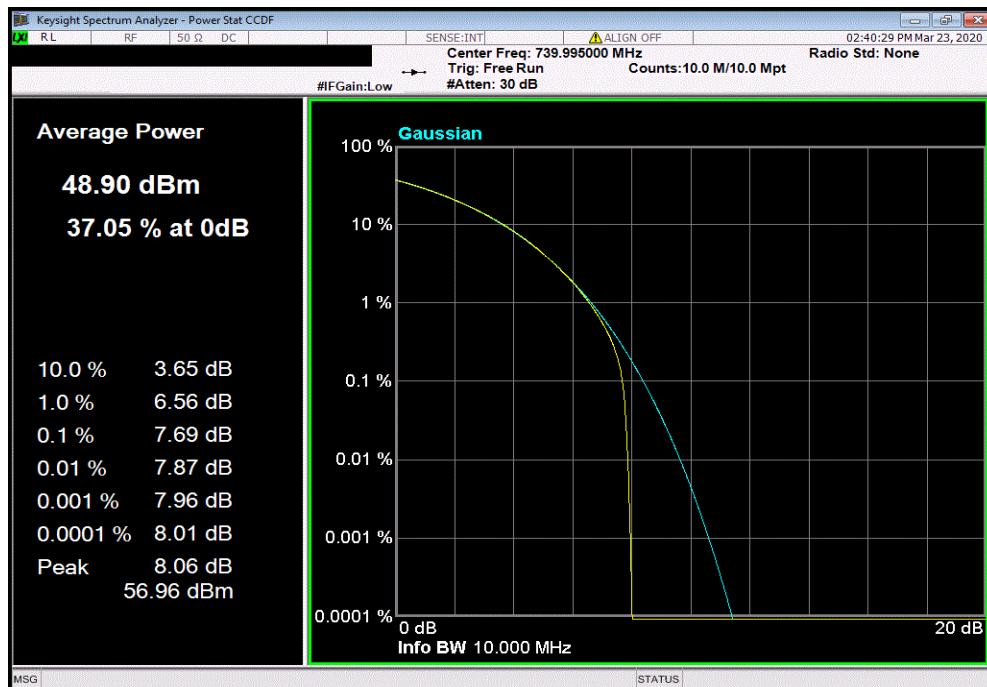
Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.7 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, 16-QAM Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.69 | 13 | Pass |



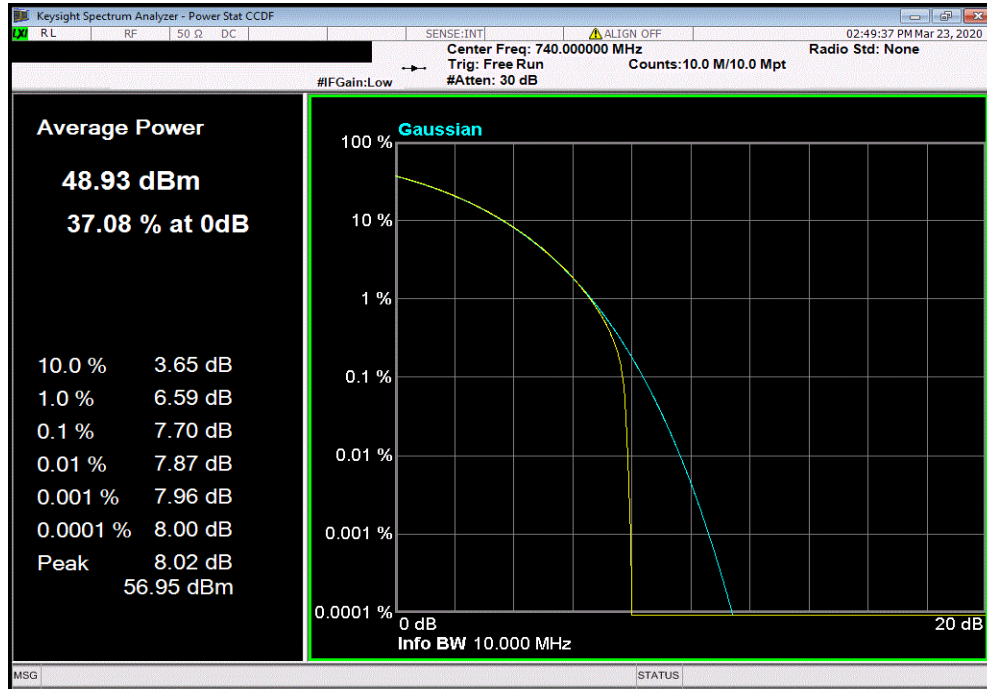
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



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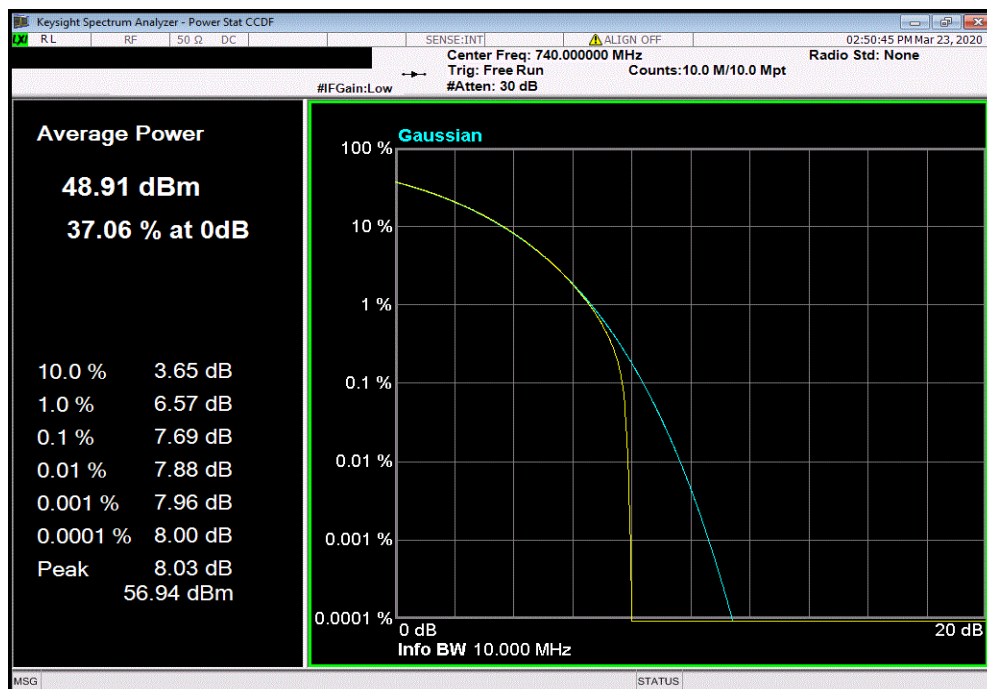
Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, 64-QAM Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.7 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.69 | 13 | Pass |



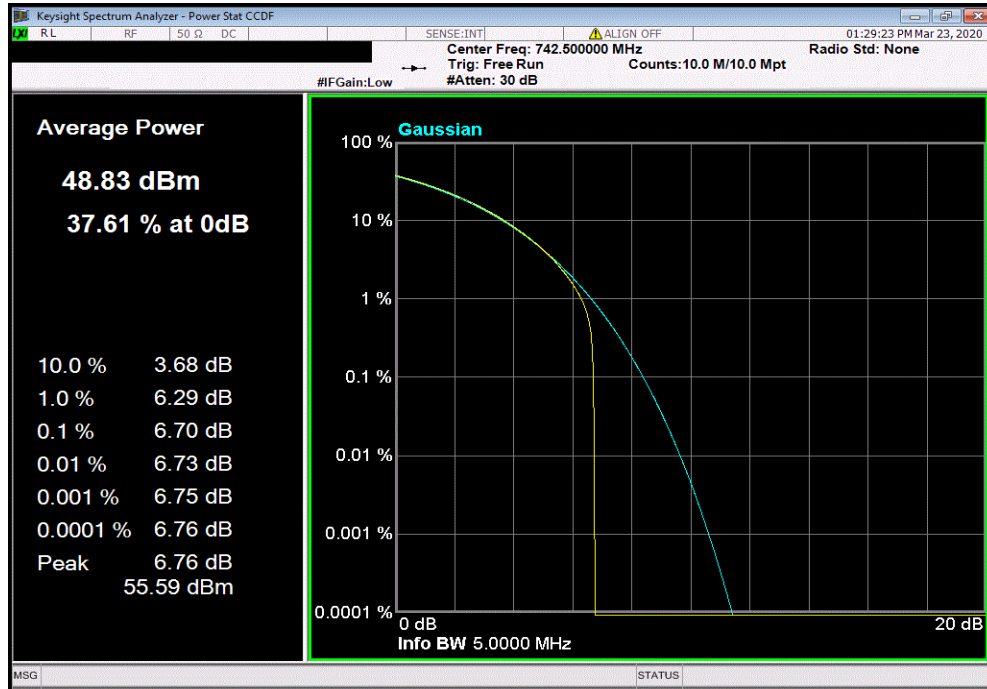
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



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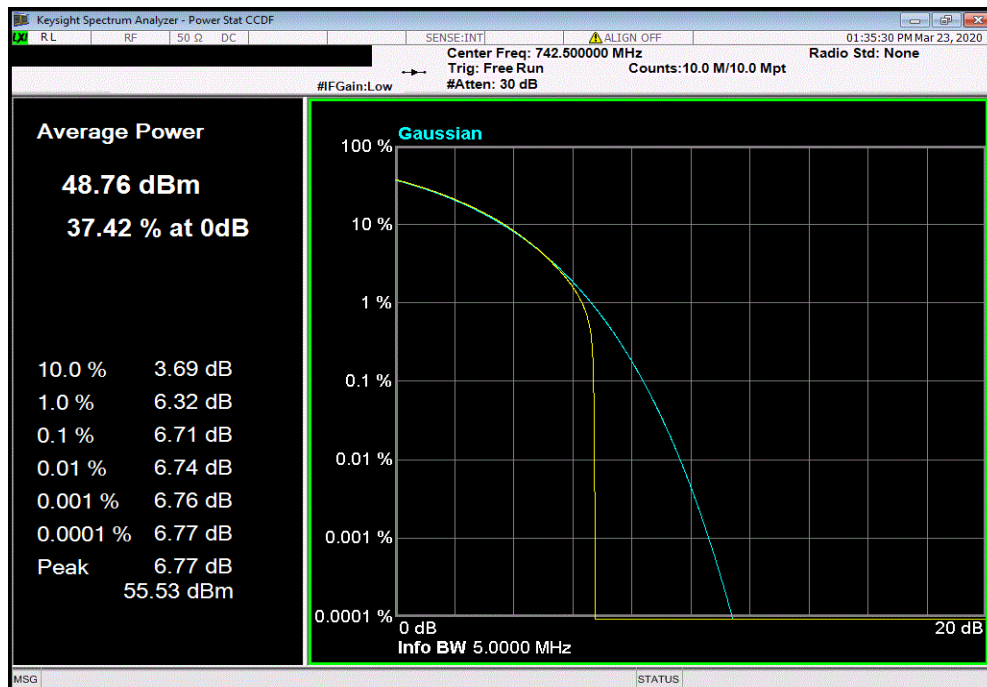
Band 12, 729 MHz - 745 MHz, LTE, Port 2, 5 MHz Bandwidth, QPSK Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.7 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 2, 5 MHz Bandwidth, 16-QAM Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.71 | 13 | Pass |



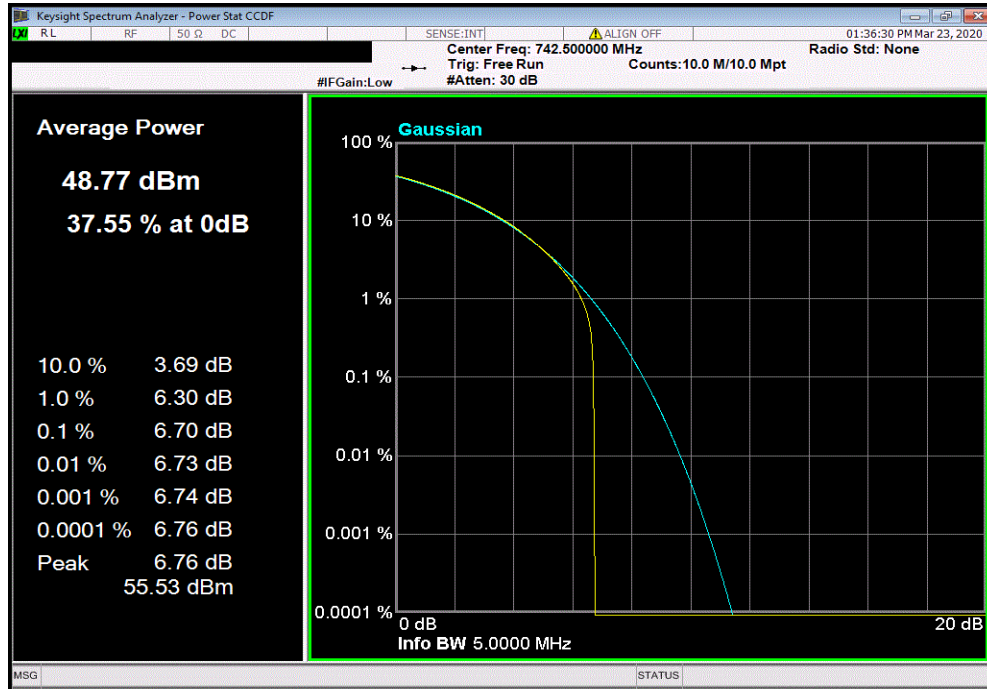
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



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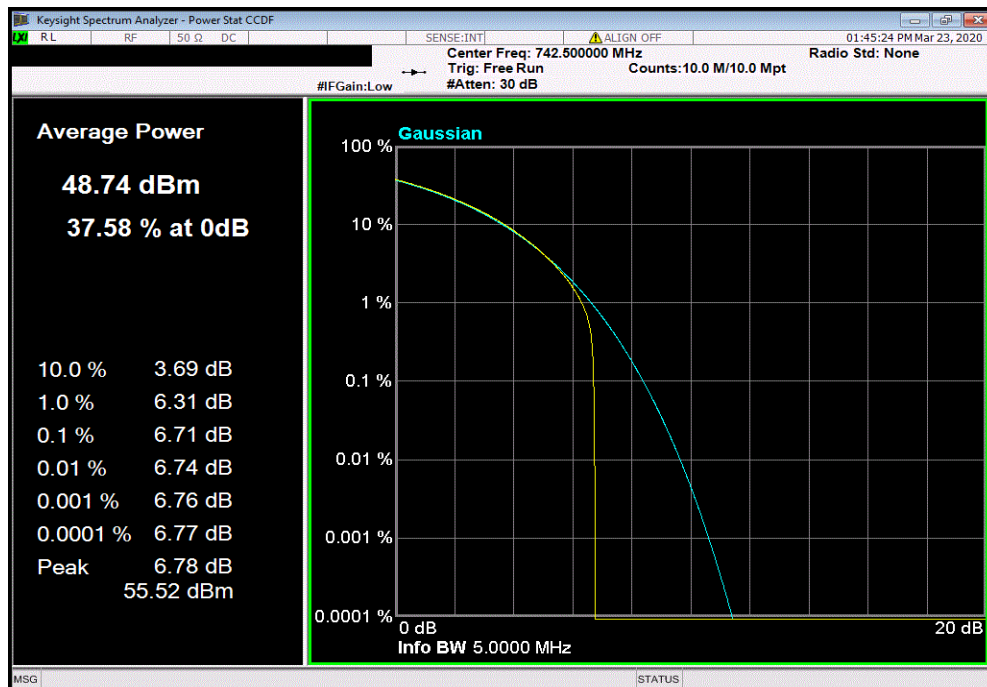
Band 12, 729 MHz - 745 MHz, LTE, Port 2, 5 MHz Bandwidth, 64-QAM Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.7 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 2, 5 MHz Bandwidth, 256-QAM Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.71 | 13 | Pass |



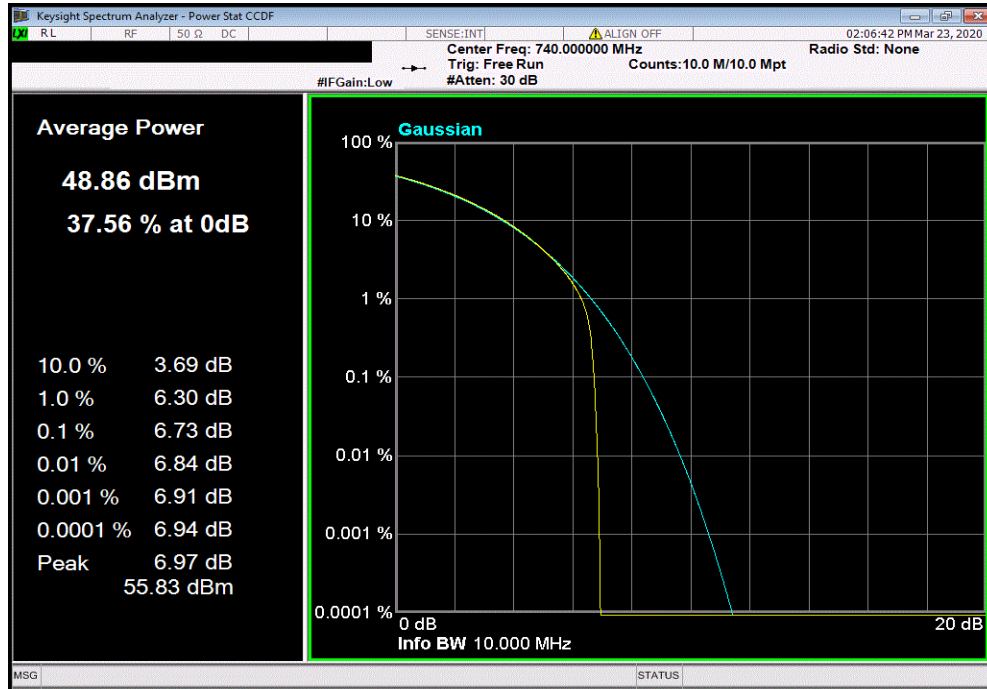
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



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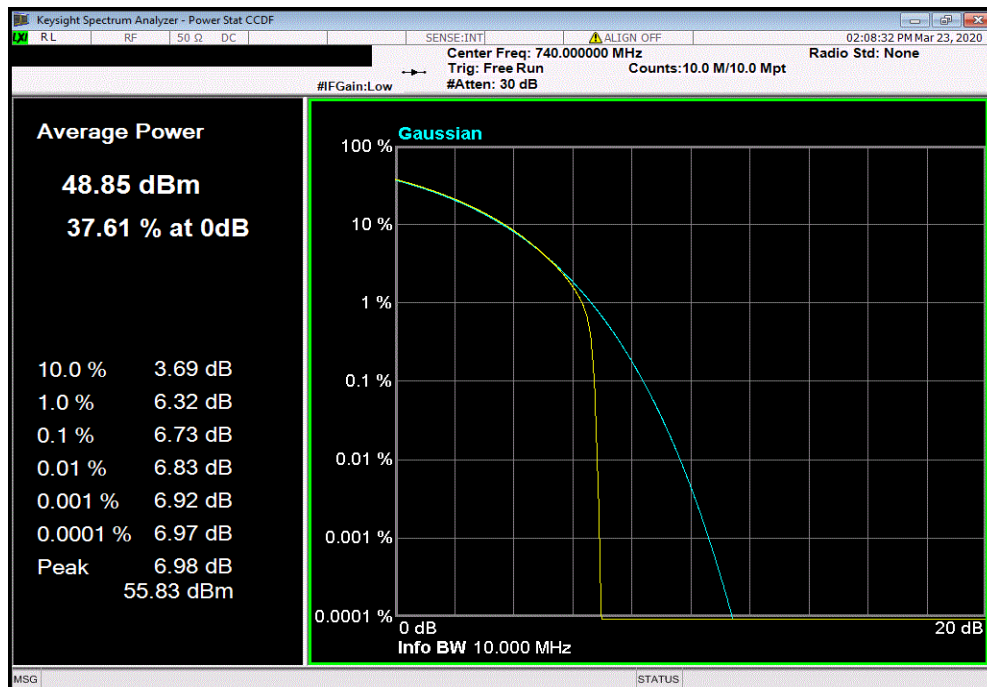
Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, QPSK Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.73 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, 16-QAM Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.73 | 13 | Pass |



PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



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Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, 64-QAM Modulation, High Channel, 740 MHz

PAPR

Value (dB)

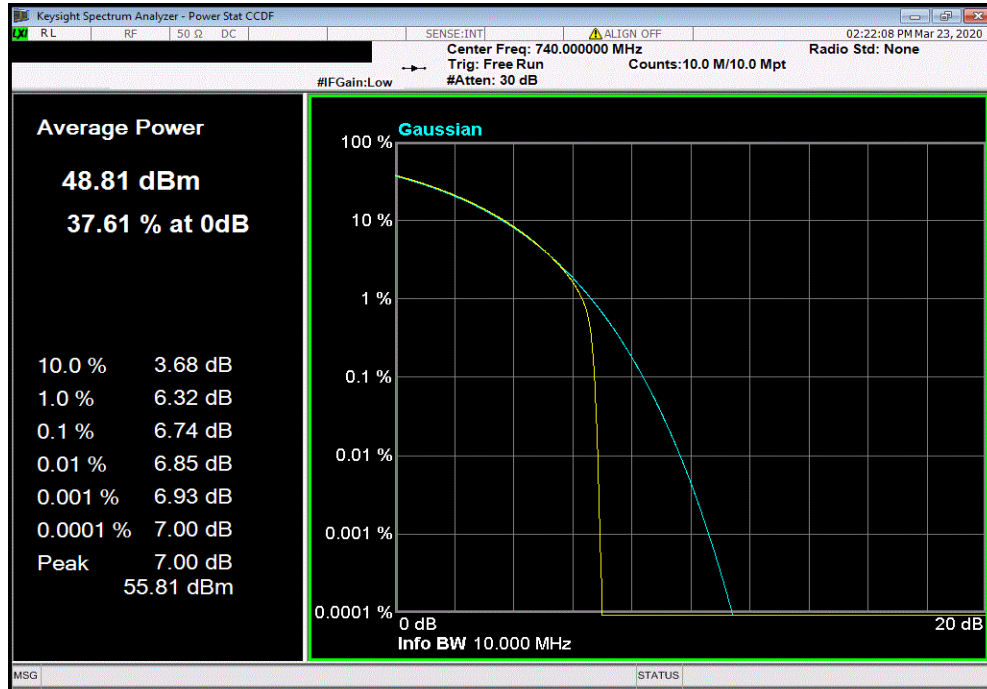
Limit (dB)

Result

6.74

13

Pass



Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, 256-QAM Modulation, High Channel, 740 MHz

PAPR

Value (dB)

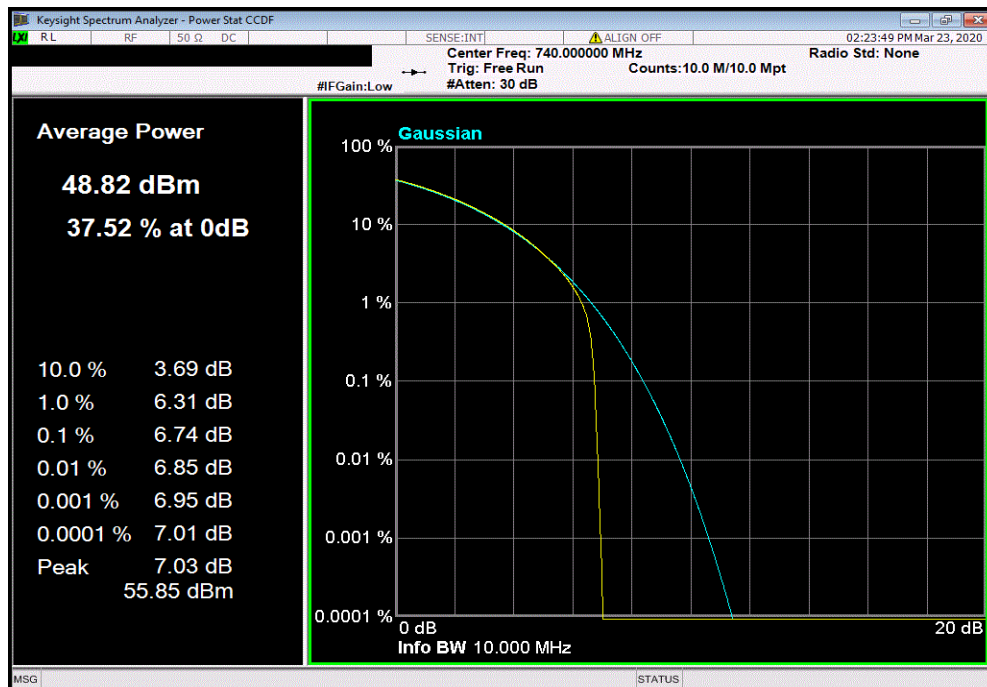
Limit (dB)

Result

6.74

13

Pass



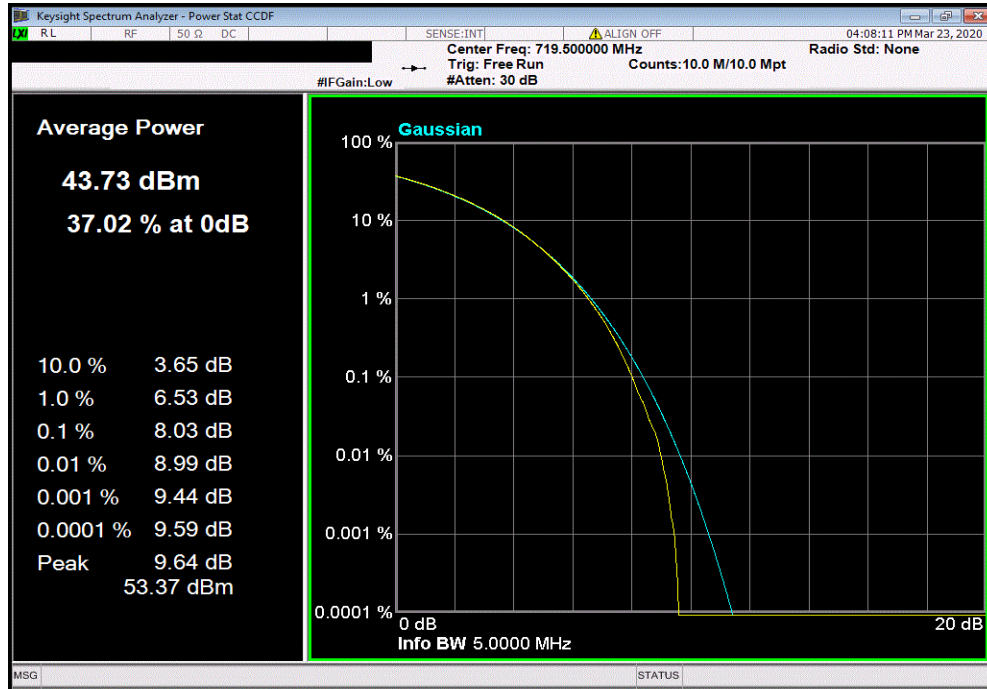
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



XMI 2020.03.25.0

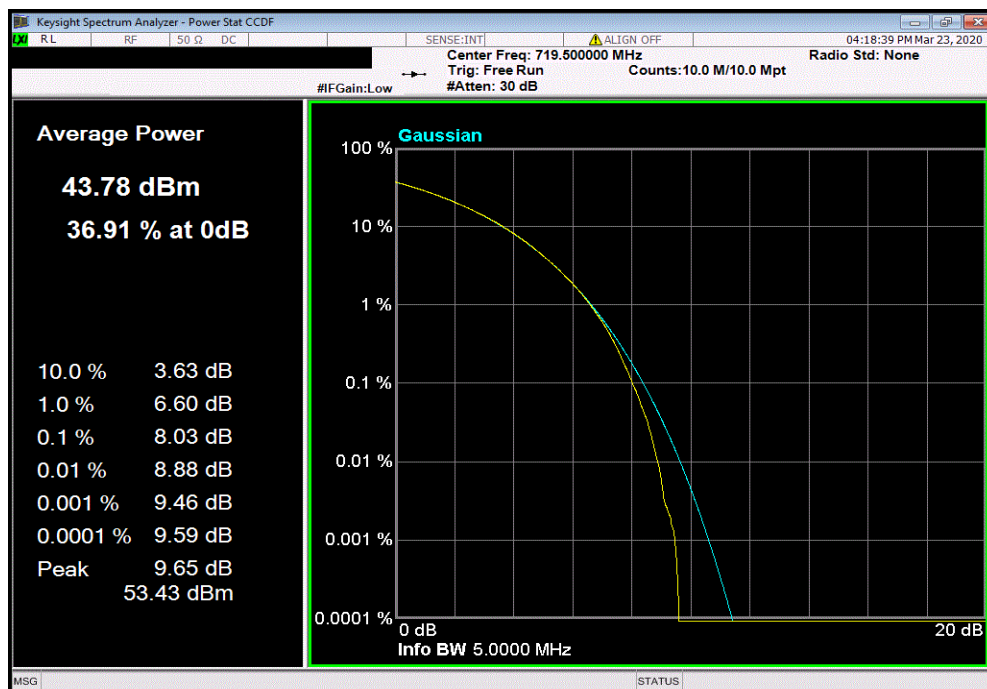
Band 29, 717 MHz - 728 MHz, LTE, Port 1, 5 MHz Bandwidth, QPSK Modulation, Low Channel, 719.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.03 | 13 | Pass |



Band 29, 717 MHz - 728 MHz, LTE, Port 1, 5 MHz Bandwidth, 16-QAM Modulation, Low Channel, 719.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.03 | 13 | Pass |



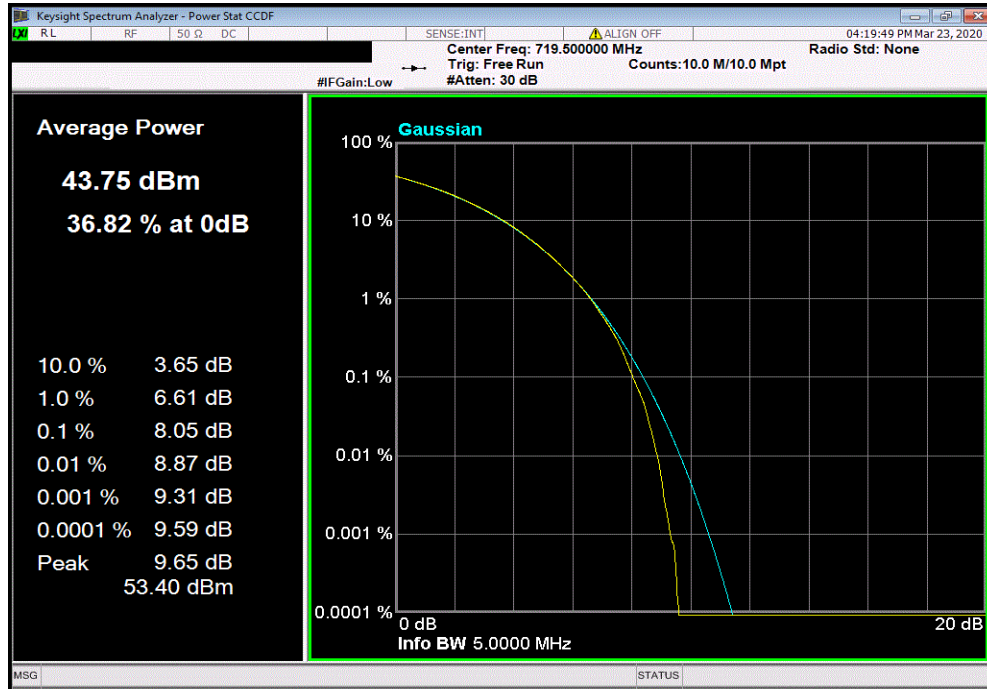
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



XMI 2020.03.25.0

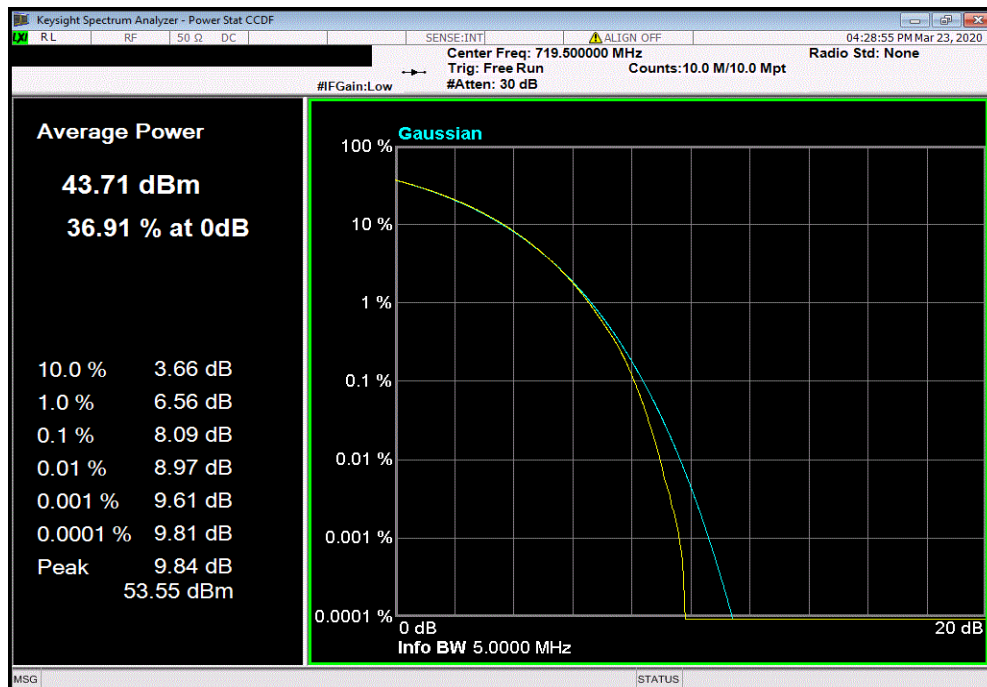
Band 29, 717 MHz - 728 MHz, LTE, Port 1, 5 MHz Bandwidth, 64-QAM Modulation, Low Channel, 719.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.05 | 13 | Pass |



Band 29, 717 MHz - 728 MHz, LTE, Port 1, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel, 719.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.09 | 13 | Pass |



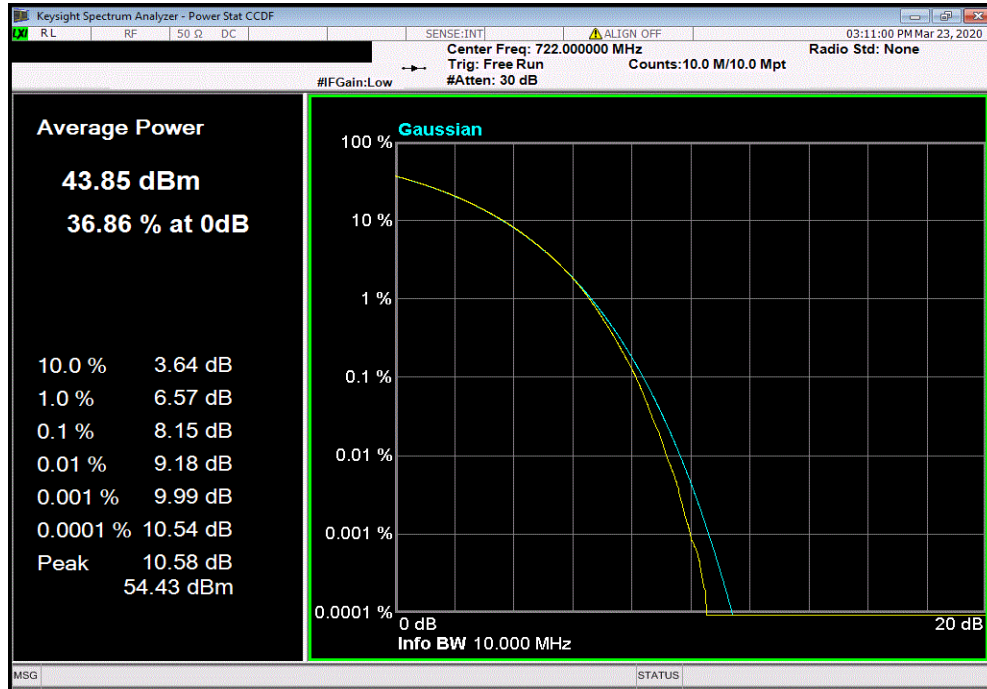
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



XMI 2020.03.25.0

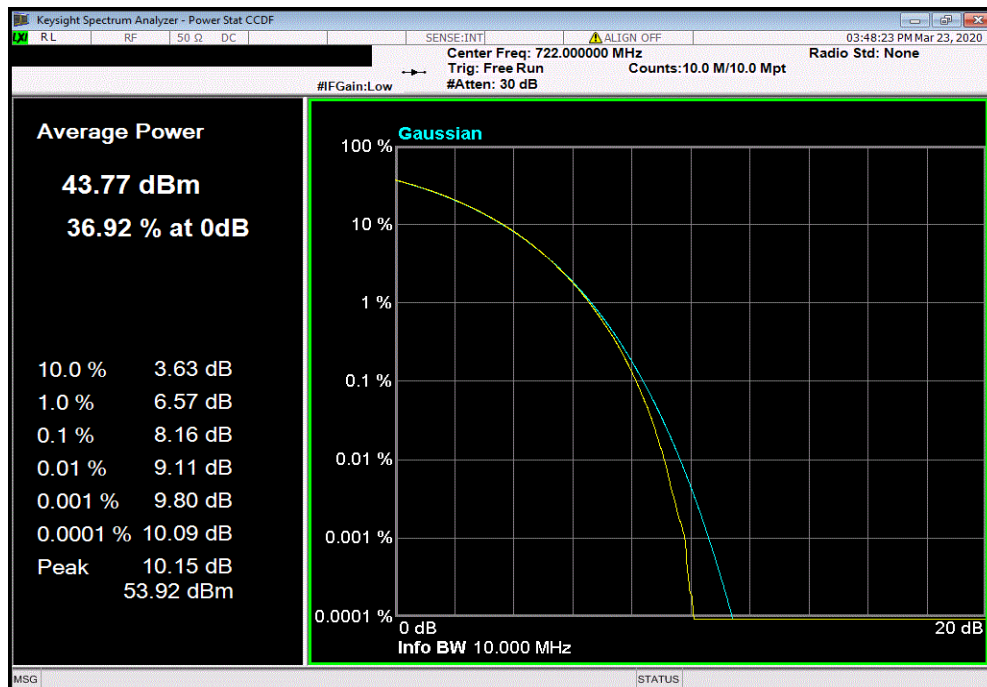
Band 29, 717 MHz - 728 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, Low Channel, 722 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.15 | 13 | Pass |



Band 29, 717 MHz - 728 MHz, LTE, Port 1, 10 MHz Bandwidth, 16-QAM Modulation, Low Channel, 722 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.16 | 13 | Pass |



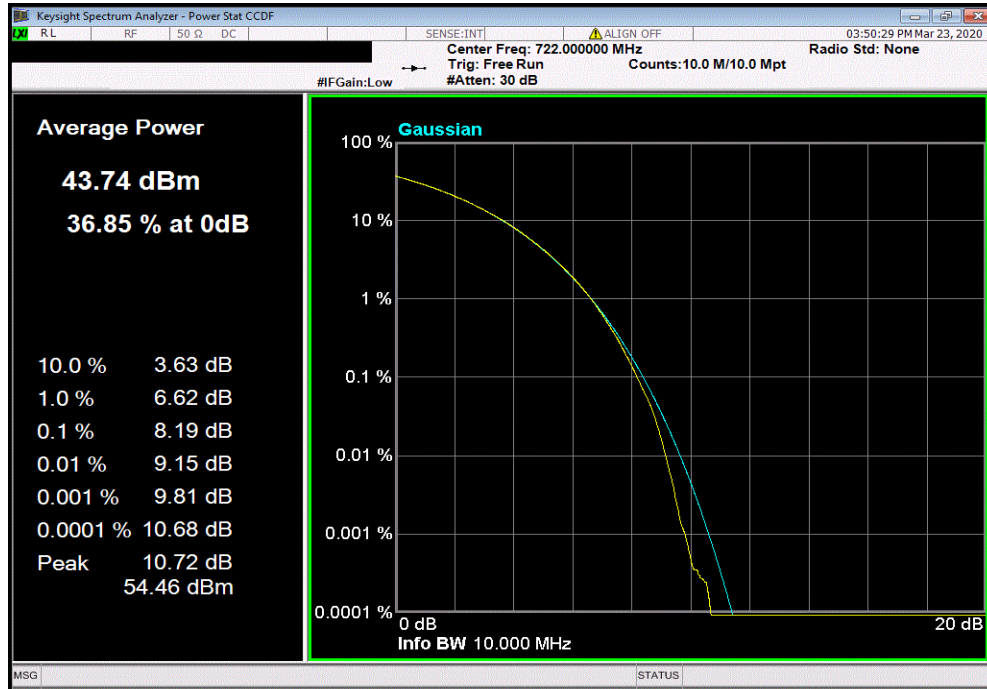
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (EXPANDED)



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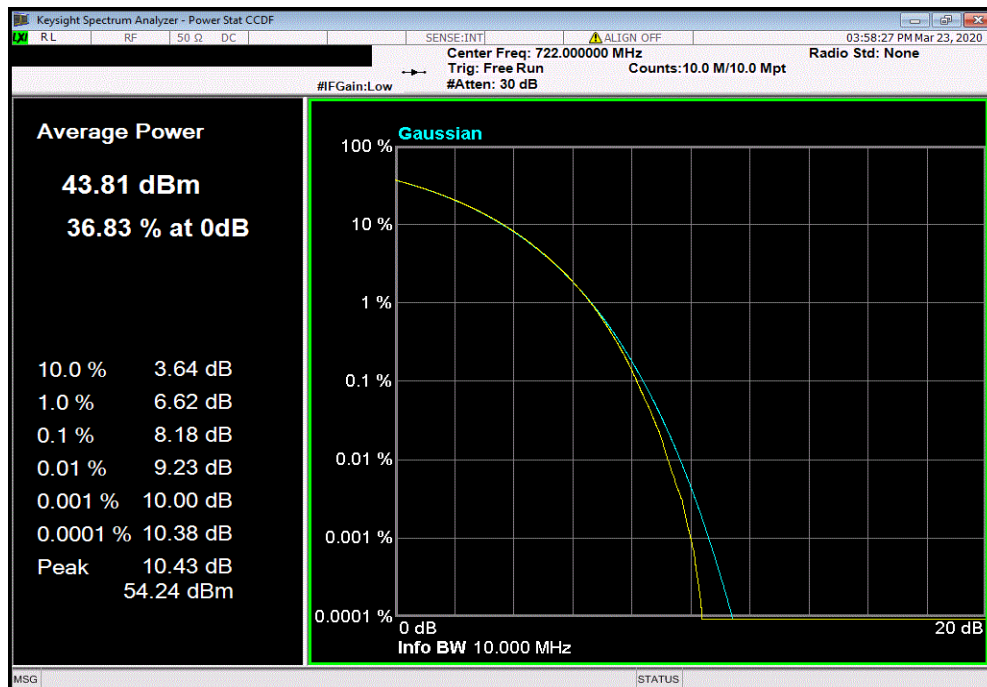
Band 29, 717 MHz - 728 MHz, LTE, Port 1, 10 MHz Bandwidth, 64-QAM Modulation, Low Channel, 722 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.19 | 13 | Pass |



Band 29, 717 MHz - 728 MHz, LTE, Port 1, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel, 722 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.18 | 13 | Pass |



PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 14 (GUARDBAND)



XMIT 2020.03.25.0

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TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Cal. Due |
|------------------------------|--------------|------------|-----|-----------|-----------|
| Analyzer - Spectrum Analyzer | Agilent | N9010A | AFL | 27-Feb-20 | 27-Feb-21 |
| Generator - Signal | Keysight | N5171B-506 | TEW | 2-May-18 | 2-May-21 |

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. Because the conducted Output Power was measured using a RMS Average detector, the Peak to Average Power Ratio (PAPR) was measured to show that the maximum peak-max-hold spectrum to the maximum of the average spectrum does not exceed 13 dB.

The PAPR measurement method is described in ANSI C63.26 section 5.2.3.4.
The PAPR was measured using the CCDF function of the spectrum analyzer.

PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 14 (GUARDBAND)



XMIT 2020.03.25.0

| | | | |
|--|-----|-----------------------------|----------------|
| EUT: Aircscale Base Transceiver Station Remote Radio Head Model AHLBBA | | Work Order: NOKI0013 | |
| Serial Number: K9193514835 | | Date: 24-Mar-20 | |
| Customer: Nokia Solutions and Networks | | Temperature: 24.9 °C | |
| Attendees: Mitch Hill, John Rattanaovong | | Humidity: 36.5% RH | |
| Project: None | | Barometric Pres.: 1023 mbar | |
| Tested by: Brandon Hobbs | | Power: 54 VDC | Job Site: TX03 |
| TEST SPECIFICATIONS | | | |
| FCC 901:2020 | | ANSI C63.26:2015 | |
| RSS-140:2018 | | RSS-140:2018 | |
| COMMENTS | | | |
| All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. The hottest port per power amplifier (PA) was used for testing. The worst case port was determined in the original client provided test report. The carrier power was set to maximum for all testing. | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| None | | | |
| Configuration # | 2,6 | Signature | |
| | | Value | Limit |
| Band 14, 758 MHz - 768 MHz, LTE | | | |
| Port 1 | | | |
| 10 MHz Bandwidth | | | |
| QPSK Modulation | | | |
| Single Channel | | 7.84 | 13 |
| Port 2 | | | |
| 10 MHz Bandwidth | | | |
| QPSK Modulation | | | |
| Single Channel | | 7.36 | 13 |
| | | | Pass |

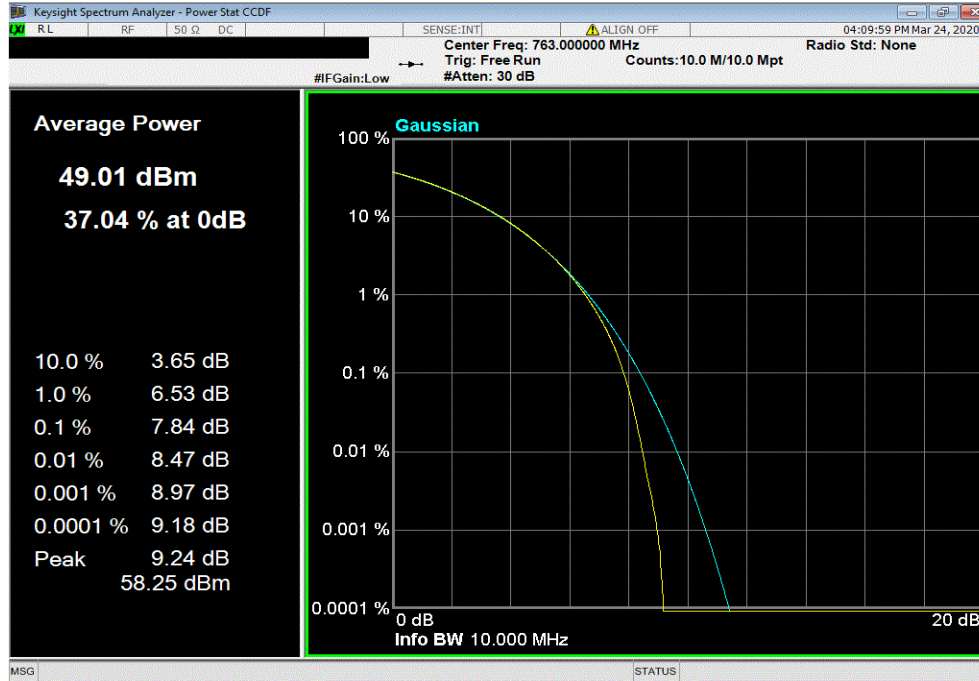
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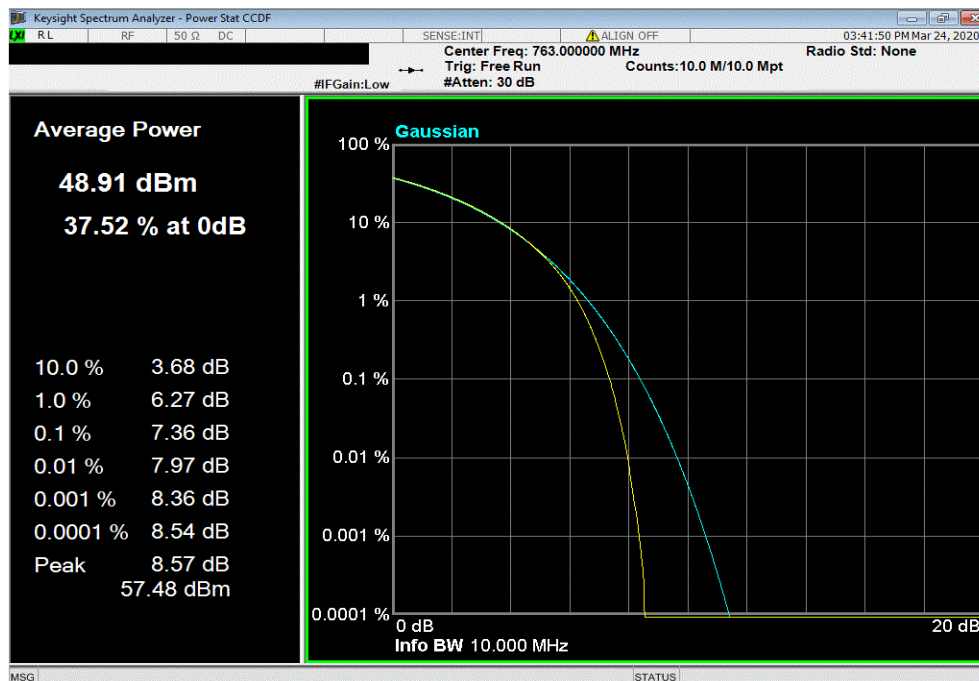
Band 14, 758 MHz - 768 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, Single Channel

| | Value | Limit | Result |
|--|-------|-------|--------|
| | 7.84 | 13 | Pass |



Band 14, 758 MHz - 768 MHz, LTE, Port 2, 10 MHz Bandwidth, QPSK Modulation, Single Channel

| | Value | Limit | Result |
|--|-------|-------|--------|
| | 7.36 | 13 | Pass |



PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (GUARDBAND)



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| Customer: Nokia Solutions and Networks | | Temperature: 24.9 °C | |
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| Tested by: Brandon Hobbs | Power: 54 VDC | Job Site: TX03 | |
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| FCC 27:2020 | | ANSI C63.26:2015 | |
| RSS-130:2019 | | RSS-130:2019 | |
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| Port 1 | | | |
| 10 MHz Bandwidth | | | |
| QPSK Modulation | | | |
| Low Channel, 734 MHz | | 7.69 | 13 Pass |
| Mid Channel, 737 MHz | | 7.70 | 13 Pass |
| High Channel, 740 MHz | | 7.69 | 13 Pass |
| Port 2 | | | |
| 10 MHz Bandwidth | | | |
| QPSK Modulation | | | |
| Low Channel, 734 MHz | | 6.94 | 13 Pass |
| Mid Channel, 737 MHz | | 6.78 | 13 Pass |
| High Channel, 740 MHz | | 6.74 | 13 Pass |
| Band 29, 717 MHz - 728 MHz, LTE | | | |
| Port 1 | | | |
| 10 MHz Bandwidth | | | |
| QPSK Modulation | | | |
| Low Channel, 722 MHz | | 8.22 | 13 Pass |
| Mid Channel, 722.5 MHz | | 8.17 | 13 Pass |
| High Channel, 723 MHz | | 8.12 | 13 Pass |

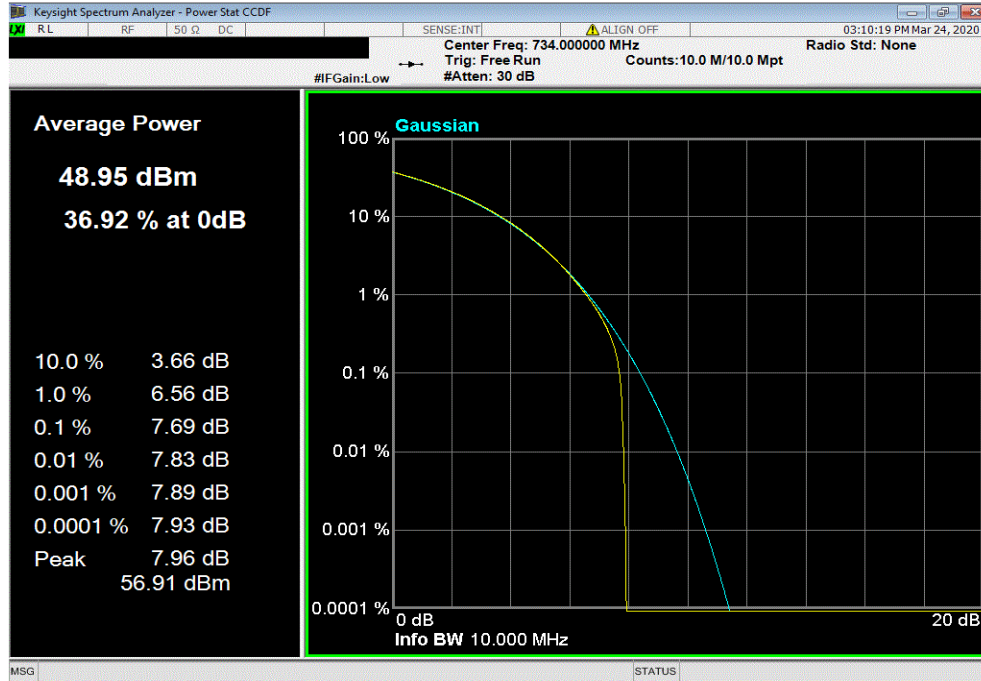
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (GUARDBAND)



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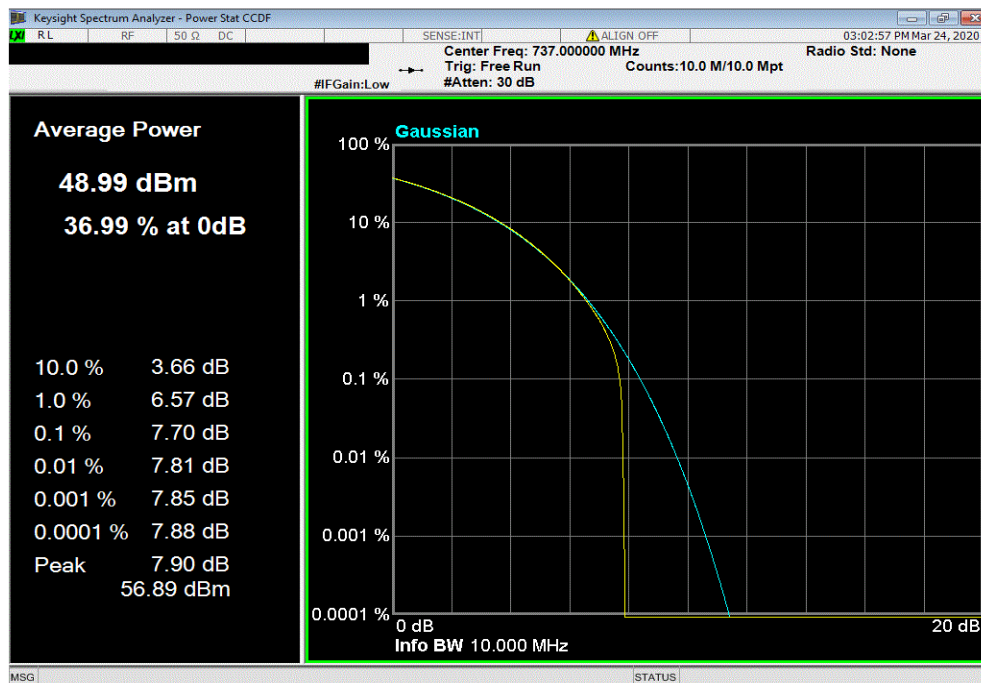
Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, Low Channel, 734 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.69 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, Mid Channel, 737 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.7 | 13 | Pass |



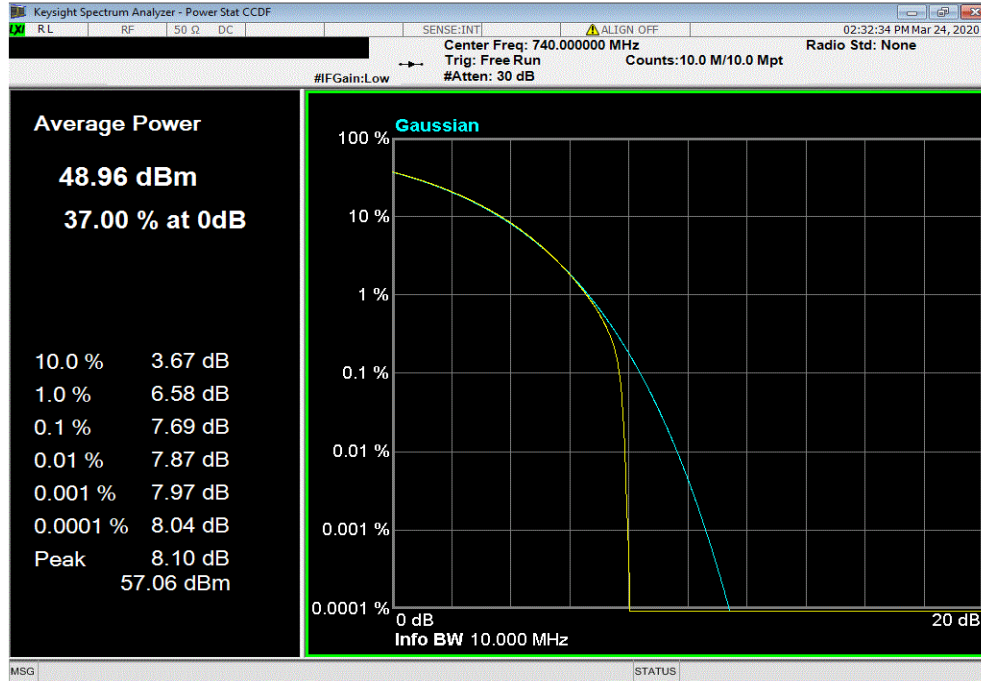
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (GUARDBAND)



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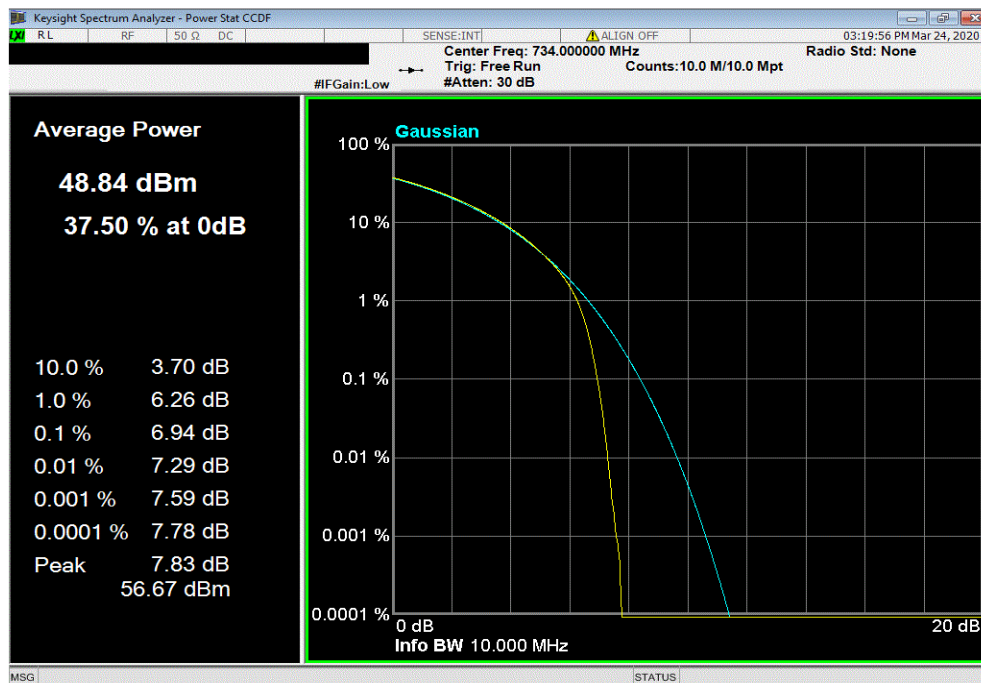
Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.69 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, QPSK Modulation, Low Channel, 734 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.94 | 13 | Pass |



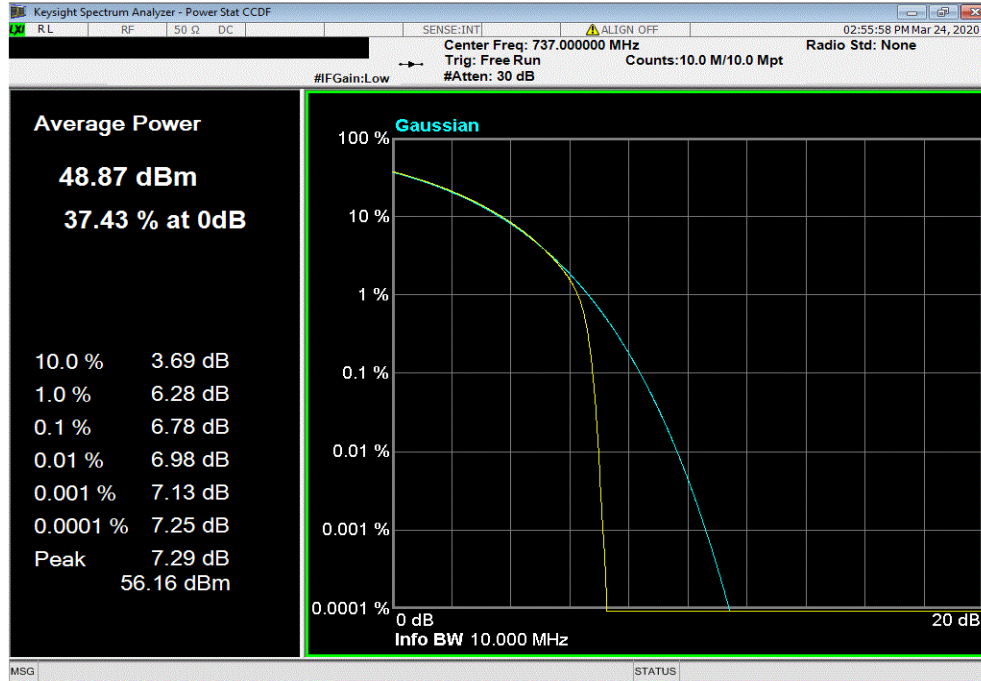
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (GUARDBAND)



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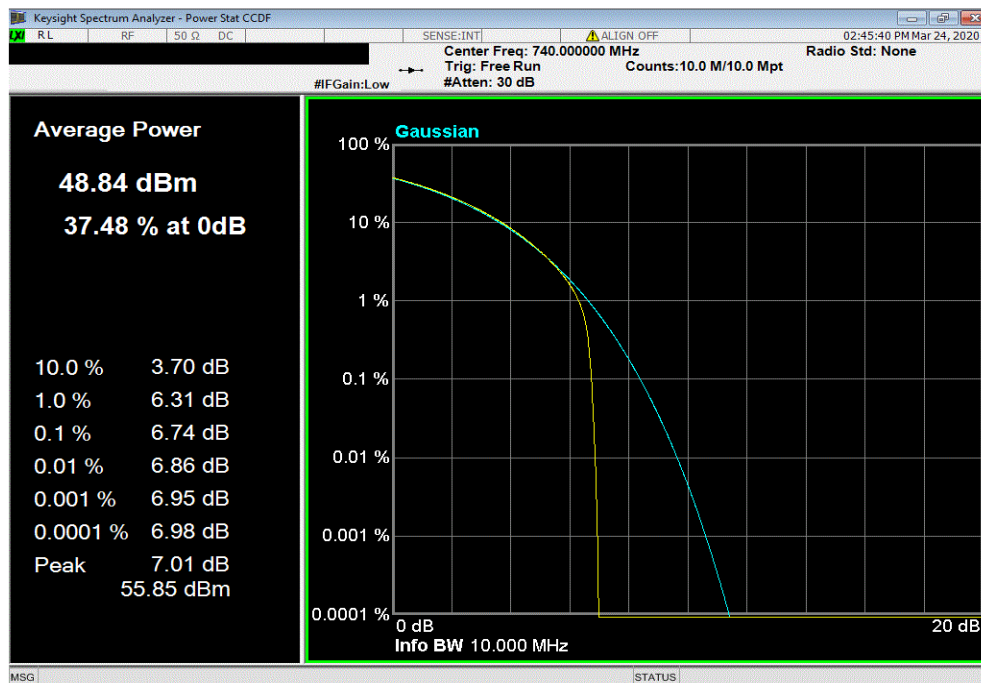
Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, QPSK Modulation, Mid Channel, 737 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.78 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, QPSK Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.74 | 13 | Pass |



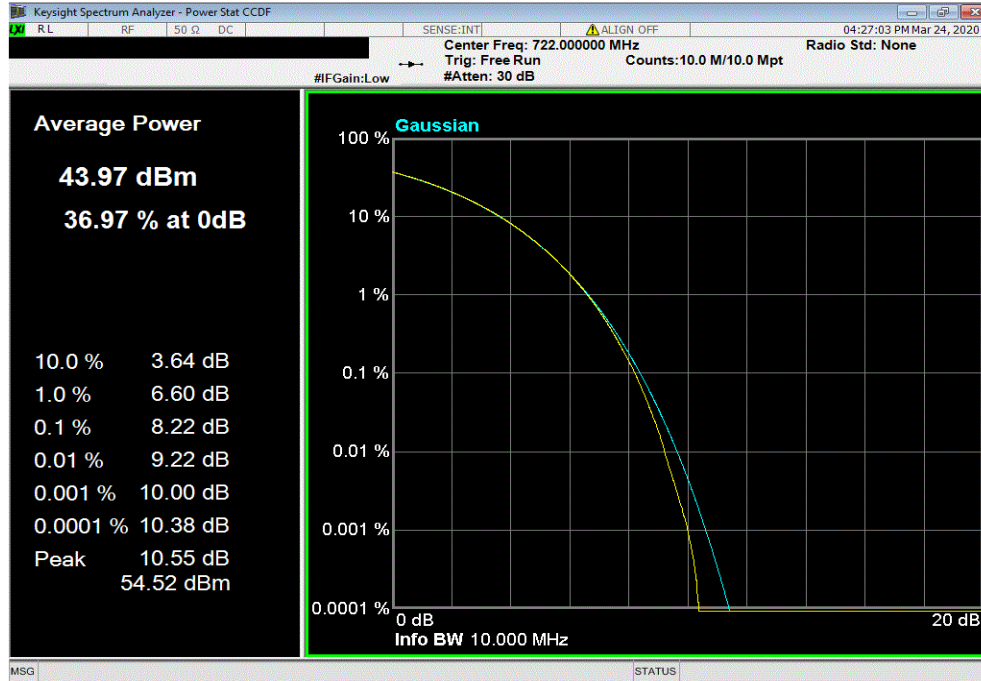
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (GUARDBAND)



XMI 2020.03.25.0

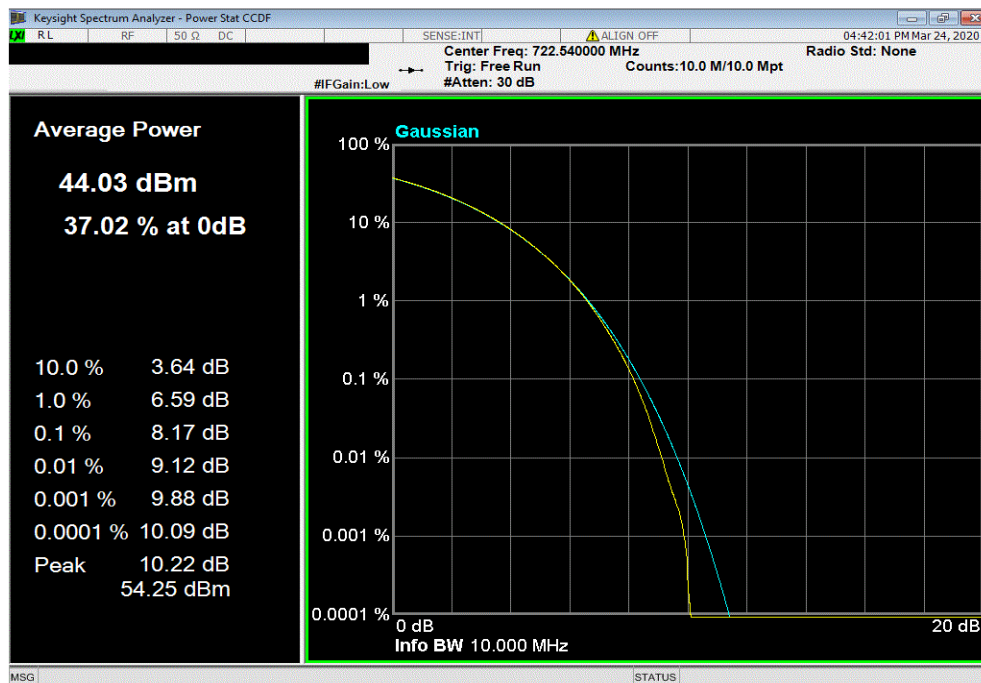
Band 29, 717 MHz - 728 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, Low Channel, 722 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.22 | 13 | Pass |



Band 29, 717 MHz - 728 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, Mid Channel, 722.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.17 | 13 | Pass |



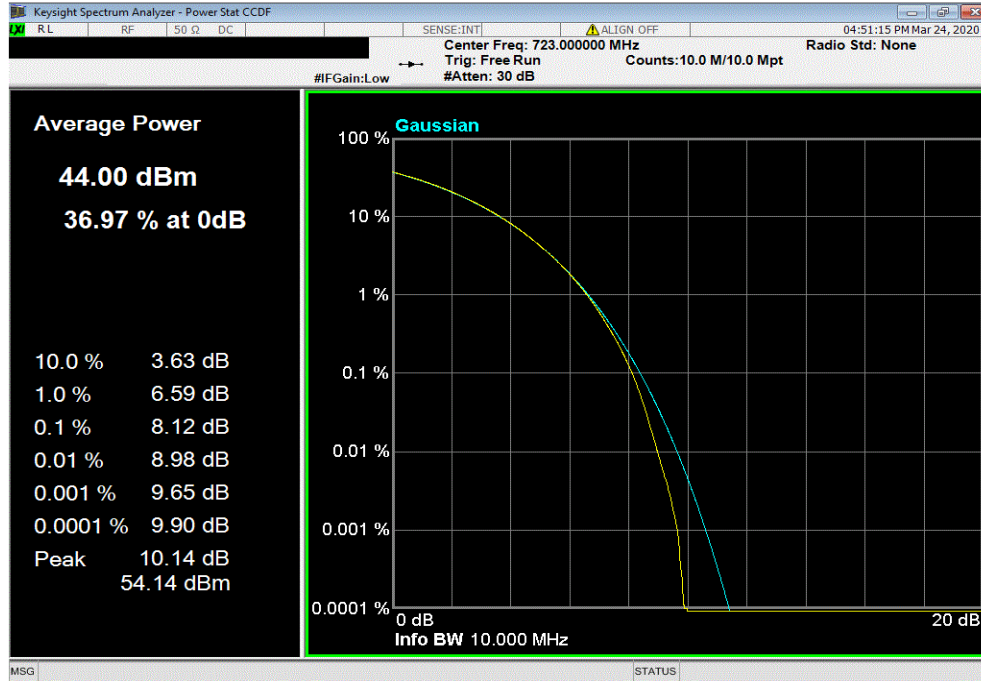
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BANDS 29,12 (GUARDBAND)



XMI 2020.03.25.0

Band 29, 717 MHz - 728 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, High Channel, 723 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 8.12 | 13 | Pass |



PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 12 (INBAND)



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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 |
|------------------------------|--------------|------------|-----|-----------|-----------|
| Analyzer - Spectrum Analyzer | Agilent | N9010A | AFL | 27-Feb-20 | 27-Feb-21 |
| Generator - Signal | Keysight | N5171B-506 | TEW | 2-May-18 | 2-May-21 |

TEST DESCRIPTION


The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. Because the conducted Output Power was measured using a RMS Average detector, the Peak to Average Power Ratio (PAPR) was measured to show that the maximum peak-max-hold spectrum to the maximum of the average spectrum does not exceed 13 dB.

The PAPR measurement method is described in ANSI C63.26 section 5.2.3.4.
The PAPR was measured using the CCDF function of the spectrum analyzer.

PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 12 (INBAND)



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| | | | |
|--|-------------------------|---|-------------------|
| EUT: Aircscale Base Transceiver Station Remote Radio Head Model AHLBBA | | Work Order: NOKI0013 | |
| Serial Number: K9193514835 | | Date: 24-Mar-20 | |
| Customer: Nokia Solutions and Networks | | Temperature: 24.9 °C | |
| Attendees: Mitch Hill, John Rattavong | | Humidity: 36.4% RH | |
| Project: None | | Barometric Pres.: 1023 mbar | |
| Tested by: Brandon Hobbs | Power: 54 VDC | Job Site: TX03 | |
| TEST SPECIFICATIONS | | | |
| FCC 27:2020 | | Test Method | |
| RSS-130:2019 | | ANSI C63.26:2015 | |
| | | RSS-130:2019 | |
| COMMENTS | | | |
| All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. The hottest port per power amplifier (PA) was used for testing. The worst case port was determined in the original client provided test report. The carrier power was set to maximum for all testing. | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| None | | | |
| Configuration # | 2,6 | Signature  | |
| | | PAPR Value (dB) | Limit (dB) Result |
| Band 12, 729 MHz - 745 MHz, LTE | | | |
| Port 1 | | | |
| 5 MHz Bandwidth | | | |
| QPSK Modulation | | | |
| | Low Channel, 731.5 MHz | 7.86 | 13 Pass |
| | Mid Channel, 737 MHz | 7.86 | 13 Pass |
| | High Channel, 742.5 MHz | 7.86 | 13 Pass |
| 10 MHz Bandwidth | | | |
| QPSK Modulation | | | |
| | Low Channel, 734 MHz | 7.78 | 13 Pass |
| | Mid Channel, 737 MHz | 7.78 | 13 Pass |
| | High Channel, 740 MHz | 7.78 | 13 Pass |
| Port 2 | | | |
| 5 MHz Bandwidth | | | |
| QPSK Modulation | | | |
| | Low Channel, 731.5 MHz | 6.93 | 13 Pass |
| | Mid Channel, 737 MHz | 6.88 | 13 Pass |
| | High Channel, 742.5 MHz | 6.88 | 13 Pass |
| 10 MHz Bandwidth | | | |
| QPSK Modulation | | | |
| | Low Channel, 734 MHz | 7.00 | 13 Pass |
| | Mid Channel, 737 MHz | 6.86 | 13 Pass |
| | High Channel, 740 MHz | 6.81 | 13 Pass |

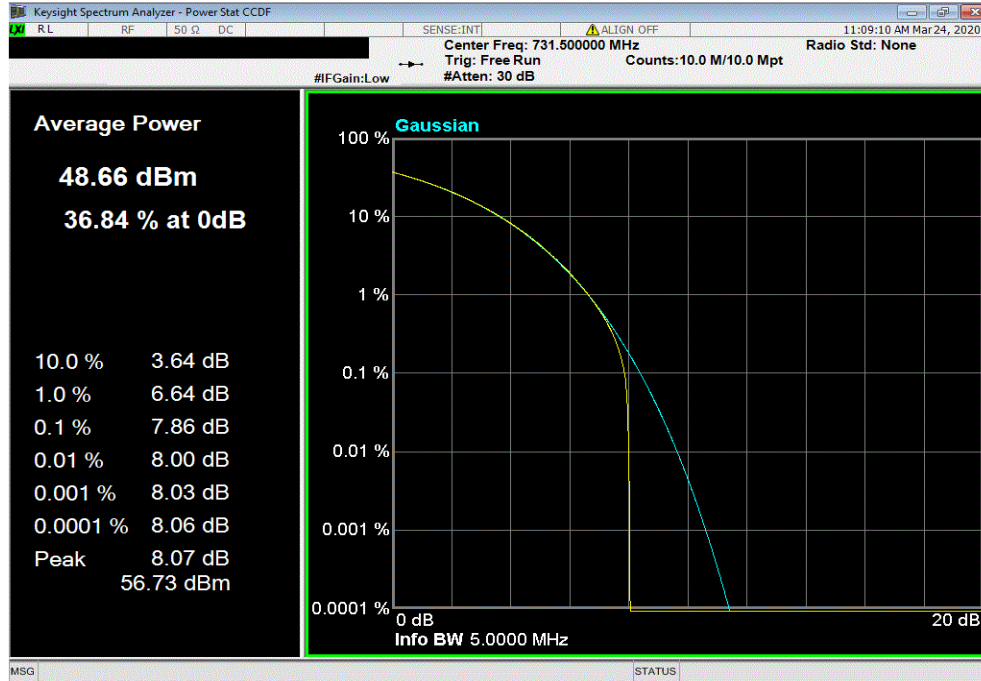
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 12 (INBAND)



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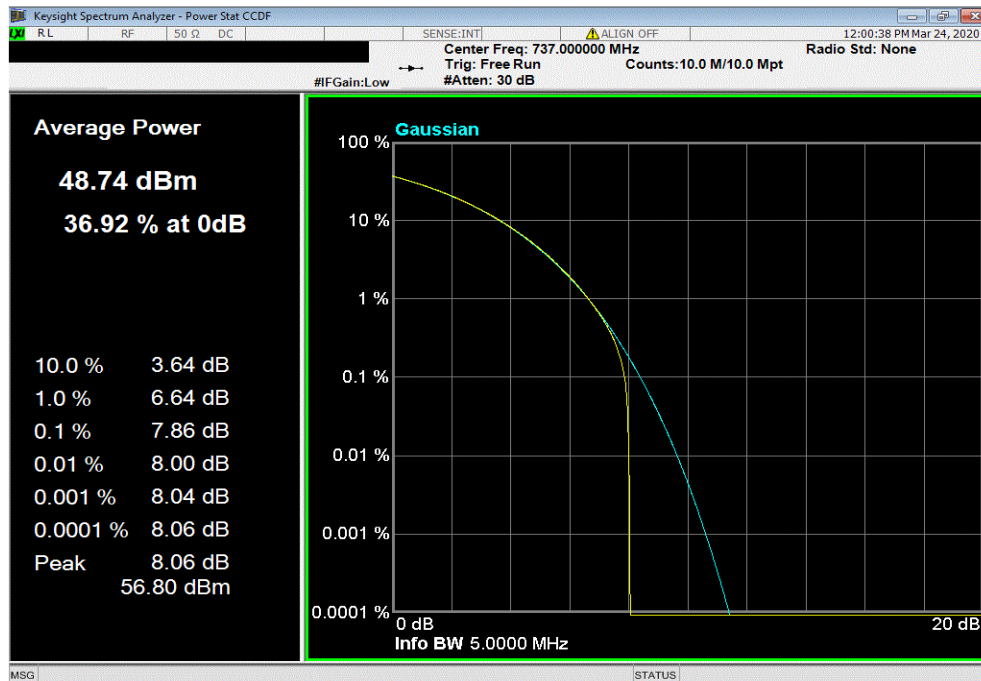
Band 12, 729 MHz - 745 MHz, LTE, Port 1, 5 MHz Bandwidth, QPSK Modulation, Low Channel, 731.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.86 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 1, 5 MHz Bandwidth, QPSK Modulation, Mid Channel, 737 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.86 | 13 | Pass |



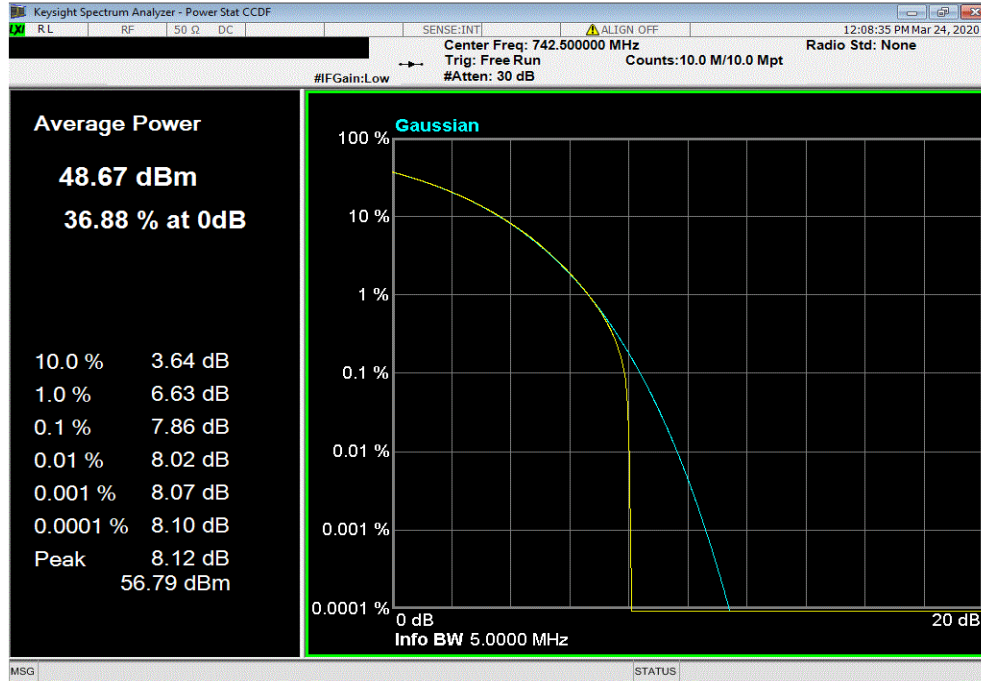
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 12 (INBAND)



XMI 2020.03.25.0

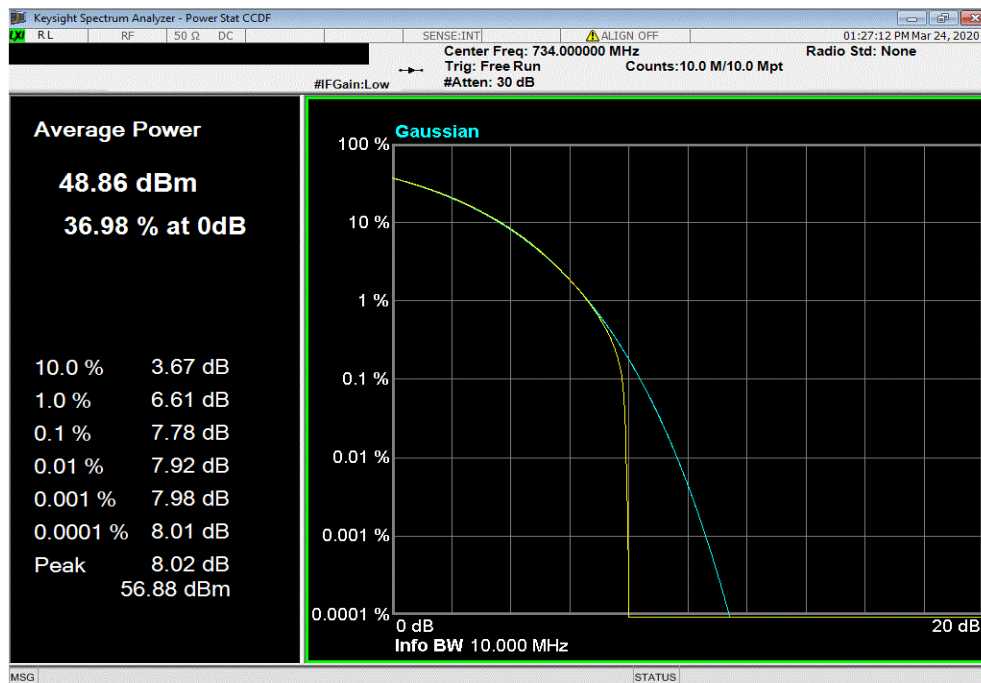
Band 12, 729 MHz - 745 MHz, LTE, Port 1, 5 MHz Bandwidth, QPSK Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.86 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, Low Channel, 734 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.78 | 13 | Pass |



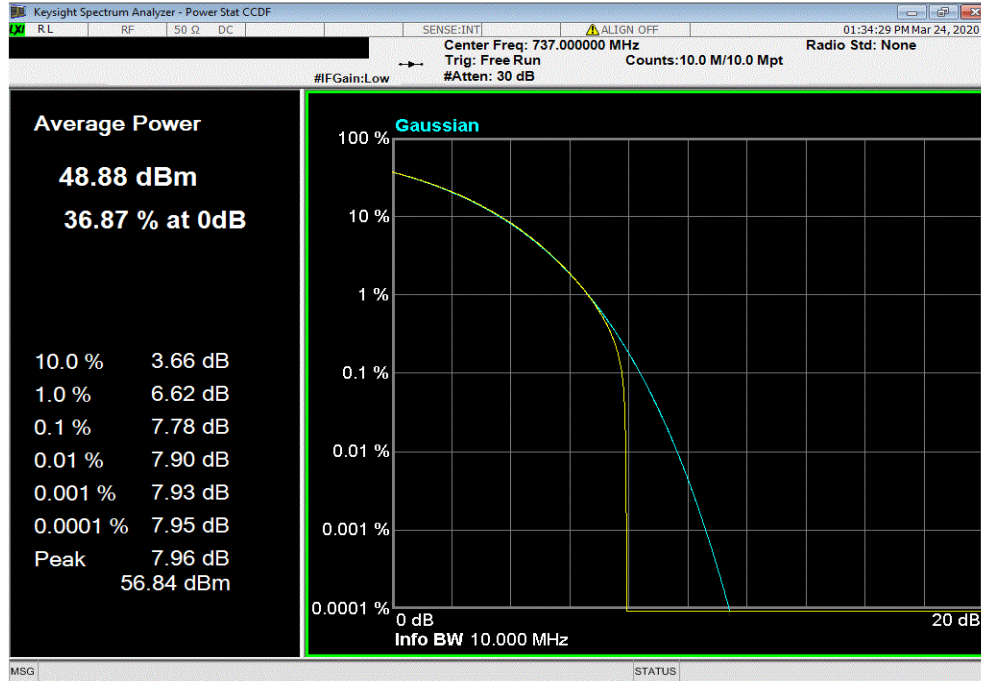
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 12 (INBAND)



XMI 2020.03.25.0

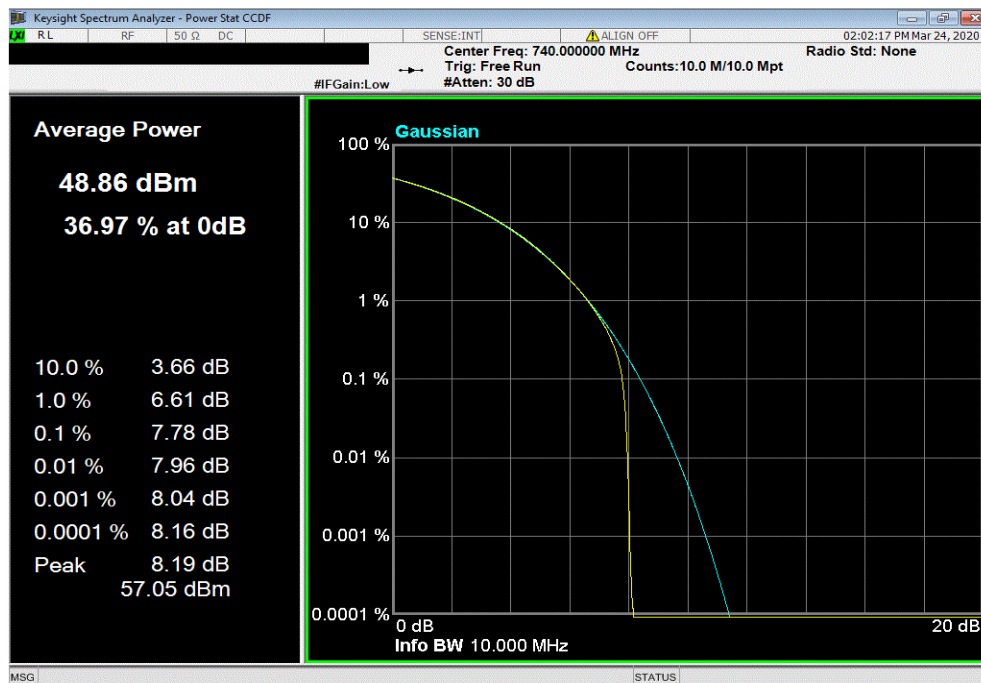
Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, Mid Channel, 737 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.78 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 1, 10 MHz Bandwidth, QPSK Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7.78 | 13 | Pass |



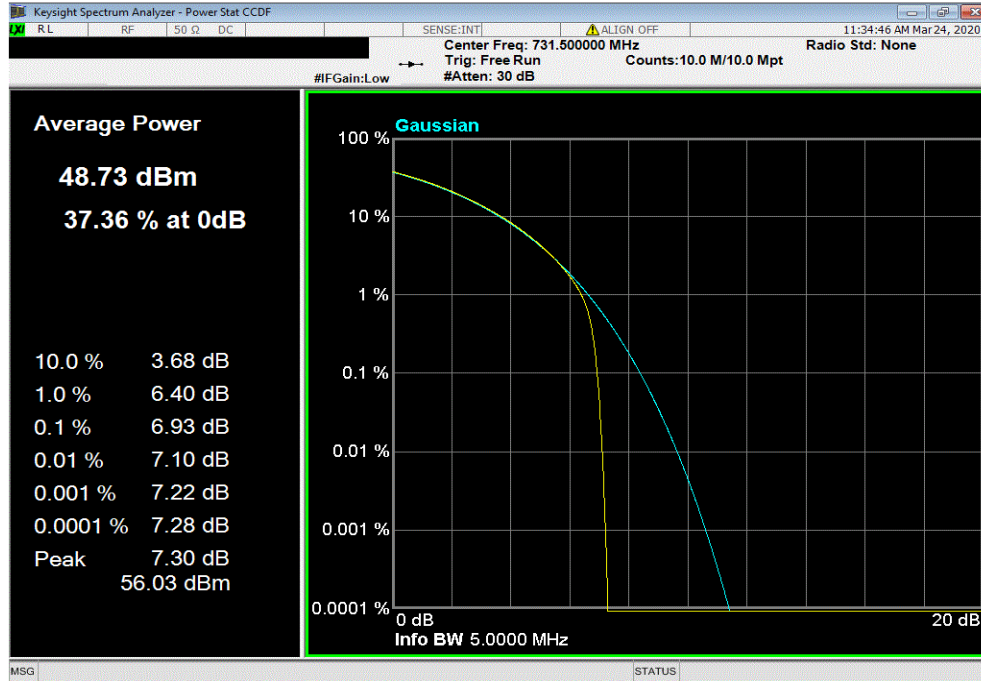
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 12 (INBAND)



XMI 2020.03.25.0

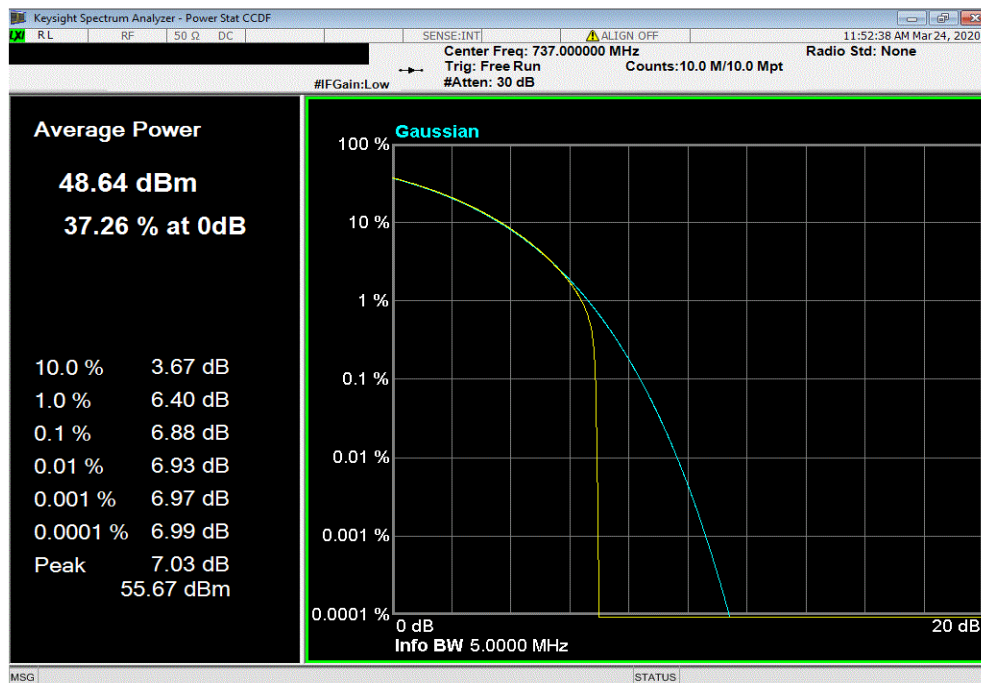
Band 12, 729 MHz - 745 MHz, LTE, Port 2, 5 MHz Bandwidth, QPSK Modulation, Low Channel, 731.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.93 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 2, 5 MHz Bandwidth, QPSK Modulation, Mid Channel, 737 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.88 | 13 | Pass |



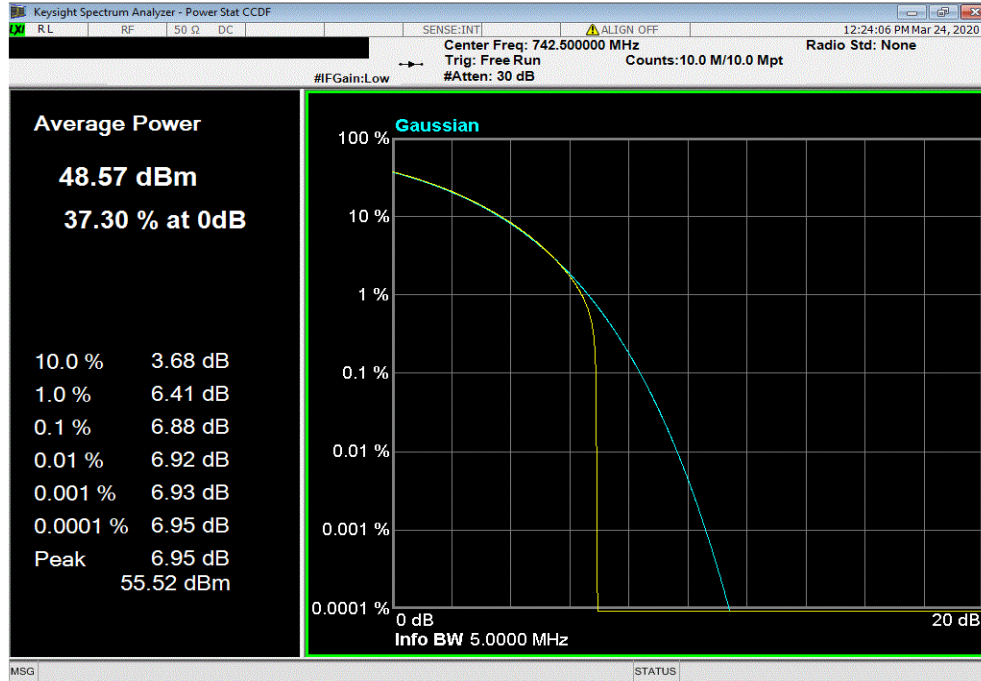
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 12 (INBAND)



XMI 2020.03.25.0

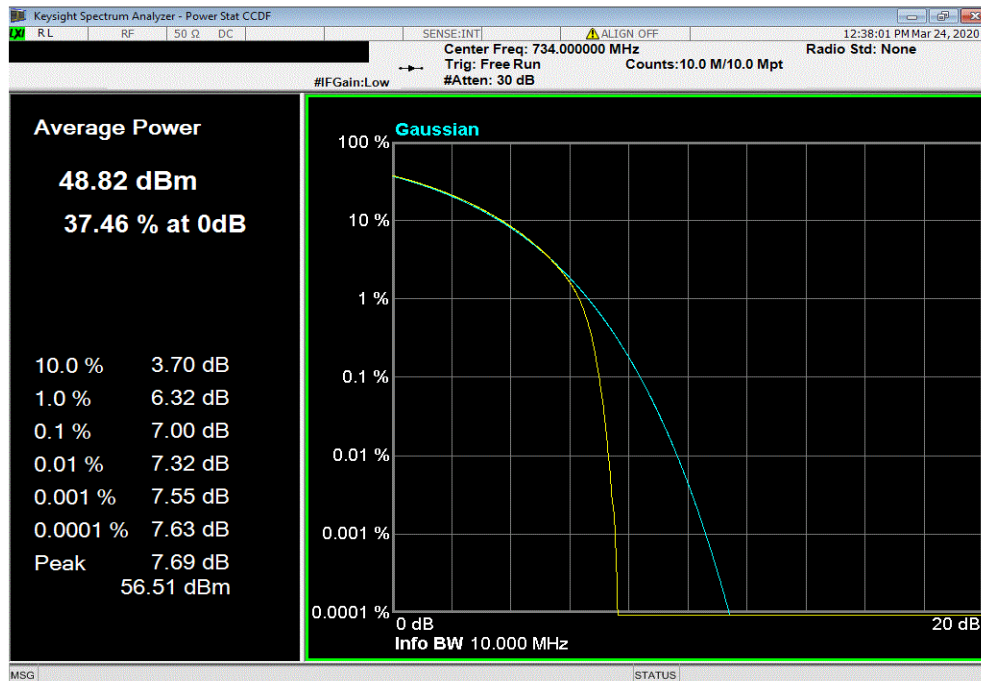
Band 12, 729 MHz - 745 MHz, LTE, Port 2, 5 MHz Bandwidth, QPSK Modulation, High Channel, 742.5 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.88 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, QPSK Modulation, Low Channel, 734 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 7 | 13 | Pass |



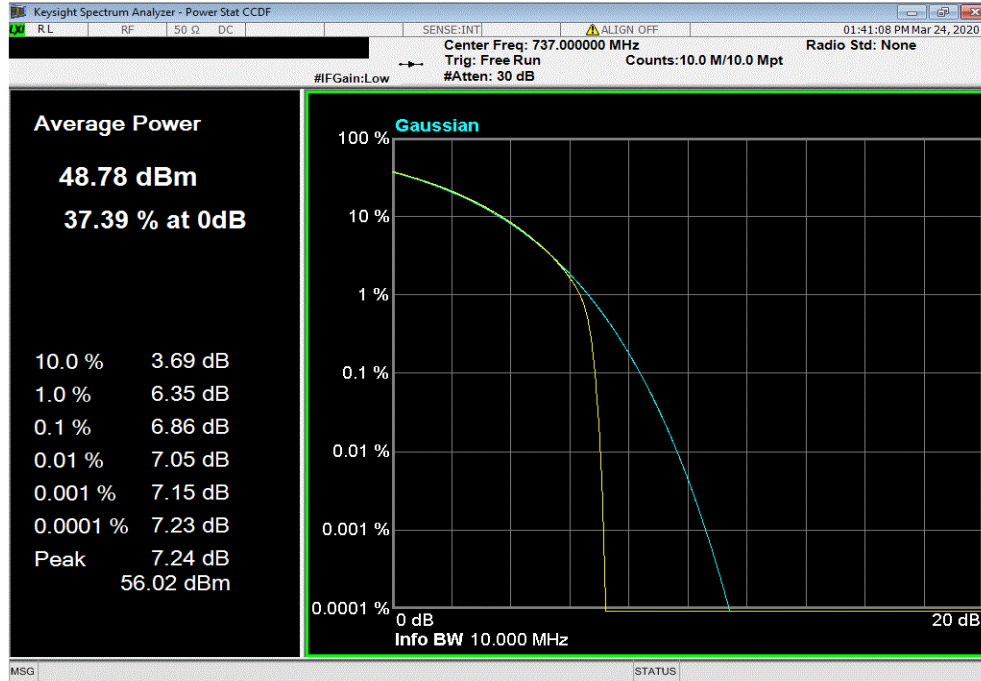
PEAK TO AVERAGE POWER RATIO (PAPR) CCDF LTE BAND 12 (INBAND)



XMI 2020.03.25.0

Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, QPSK Modulation, Mid Channel, 737 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.86 | 13 | Pass |



Band 12, 729 MHz - 745 MHz, LTE, Port 2, 10 MHz Bandwidth, QPSK Modulation, High Channel, 740 MHz

| PAPR | | |
|------------|------------|--------|
| Value (dB) | Limit (dB) | Result |
| 6.81 | 13 | Pass |

