

# Conducted test results

No.1-7590-24-02-03\_TR1-A201-R2

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March 21, 2025

|                  |                               |
|------------------|-------------------------------|
| Test Standard(s) | NA - NI                       |
|                  | FCC 15.247 - NI               |
|                  | FCC 15.247, ISSED RSS247 - NI |

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Authorized

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Lab Manager  
Radio Labs

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## NA # Peak output power 3MHz/3MHz ~ BT LE 1 Msps

### References

|                                               |                                  |
|-----------------------------------------------|----------------------------------|
| TC start                                      | 18.03.2025 10:55:33              |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled        |
| System version                                | 5.1.6.4                          |
| Standard   Version                            | NA   NI                          |
| Method                                        |                                  |
| Description                                   | Peak OP 3MHz/3MHz - BT LE 1 Msps |
| Information                                   |                                  |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| Technology to test                               | BT LE 1 Msps                              |
| EUT port                                         | EUT1                                      |
| Temperature                                      | nom                                       |
| Voltage                                          | nom                                       |
| Frequency low to test                            | True   Freq [MHz] 2402                    |
| Frequency mid to test                            | False   Freq [MHz] 2440                   |
| Frequency high to test                           | False   Freq [MHz] 2480                   |
| Auto control enabled power supply   Climatic Box | No   No                                   |
| Additional path loss [dB]                        | 0.7                                       |
| Full path type                                   | EUT_SA_GEN_SIG                            |
| Full path name                                   | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |

## Test Parameter

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|             |                                     |
|-------------|-------------------------------------|
| Switch bits | 00010001:00010001:00000000:00000001 |
|-------------|-------------------------------------|

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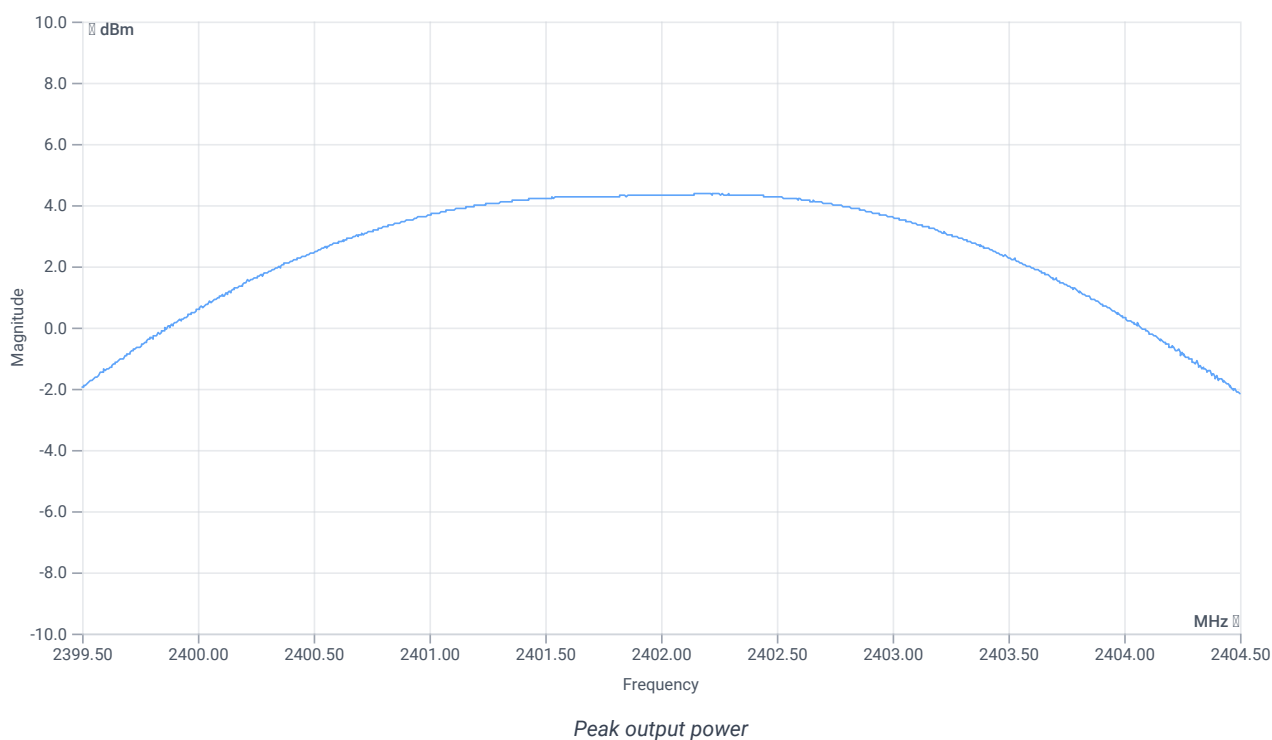
## Test at TX 2402 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.38     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 14.38   8.85   25      |
| Start [MHz]   Stop [MHz]                             | 2399.500   2404.500    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   3.000000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 1000   10   1001   SWE |



### RESULT

| DESCRIPTION       | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------|-------------|-------------|----------|------|---------|
| Peak power        | ---         | ---         | 4.36     | dBm  | INFO    |
| Peak power        | ---         | ---         | 2.728978 | mW   | INFO    |
| Frequency at peak | ---         | ---         | 2402.245 | MHz  | INFO    |

Verdict

PASS

## NA # Peak output power 3MHz/3MHz ~ BT LE 1 Msps

### References

|                                               |                                  |
|-----------------------------------------------|----------------------------------|
| TC start                                      | 18.03.2025 11:22:01              |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled        |
| System version                                | 5.1.6.4                          |
| Standard   Version                            | NA   NI                          |
| Method                                        |                                  |
| Description                                   | Peak OP 3MHz/3MHz - BT LE 1 Msps |
| Information                                   |                                  |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| Technology to test                               | BT LE 1 Msps                              |
| EUT port                                         | EUT1                                      |
| Temperature                                      | nom                                       |
| Voltage                                          | nom                                       |
| Frequency low to test                            | False   Freq [MHz] 2402                   |
| Frequency mid to test                            | True   Freq [MHz] 2440                    |
| Frequency high to test                           | False   Freq [MHz] 2480                   |
| Auto control enabled power supply   Climatic Box | No   No                                   |
| Additional path loss [dB]                        | 0.7                                       |
| Full path type                                   | EUT_SA_GEN_SIG                            |
| Full path name                                   | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |

## Test Parameter

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|             |                                     |
|-------------|-------------------------------------|
| Switch bits | 00010001:00010001:00000000:00000001 |
|-------------|-------------------------------------|

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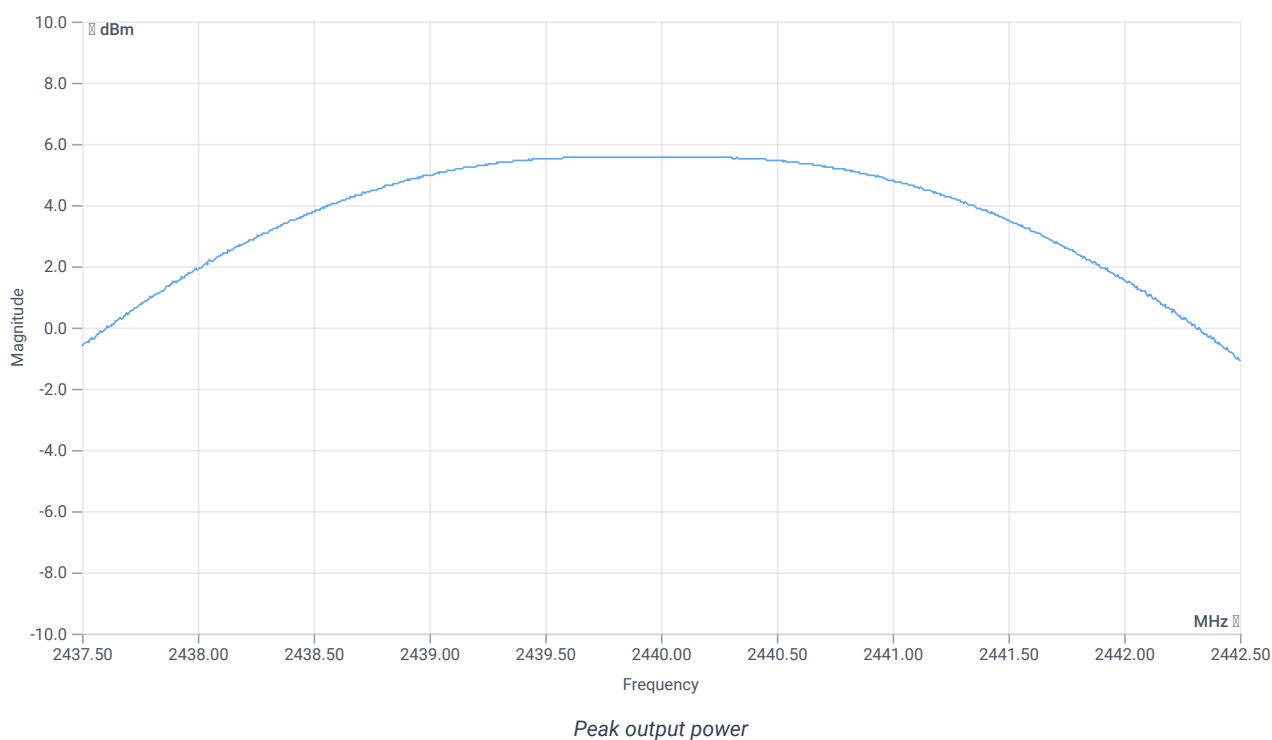
## Test at TX 2440 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.57     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.300 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.57   8.94   25      |
| Start [MHz]   Stop [MHz]                             | 2437.500   2442.500    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   3.000000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 1000   10   1001   SWE |



### RESULT

| DESCRIPTION       | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------|-------------|-------------|----------|------|---------|
| Peak power        | ---         | ---         | 5.56     | dBm  | INFO    |
| Peak power        | ---         | ---         | 3.597493 | mW   | INFO    |
| Frequency at peak | ---         | ---         | 2439.755 | MHz  | INFO    |

Verdict

PASS

## NA # Peak output power 3MHz/3MHz ~ BT LE 1 Msps

### References

|                                               |                                  |
|-----------------------------------------------|----------------------------------|
| TC start                                      | 18.03.2025 12:54:34              |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled        |
| System version                                | 5.1.6.4                          |
| Standard   Version                            | NA   NI                          |
| Method                                        |                                  |
| Description                                   | Peak OP 3MHz/3MHz - BT LE 1 Msps |
| Information                                   |                                  |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| Technology to test                               | BT LE 1 Msps                              |
| EUT port                                         | EUT1                                      |
| Temperature                                      | nom                                       |
| Voltage                                          | nom                                       |
| Frequency low to test                            | False   Freq [MHz] 2402                   |
| Frequency mid to test                            | False   Freq [MHz] 2440                   |
| Frequency high to test                           | True   Freq [MHz] 2480                    |
| Auto control enabled power supply   Climatic Box | No   No                                   |
| Additional path loss [dB]                        | 0.7                                       |
| Full path type                                   | EUT_SA_GEN_SIG                            |
| Full path name                                   | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |

## Test Parameter

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Switch bits

00010001:00010001:00000000:00000001

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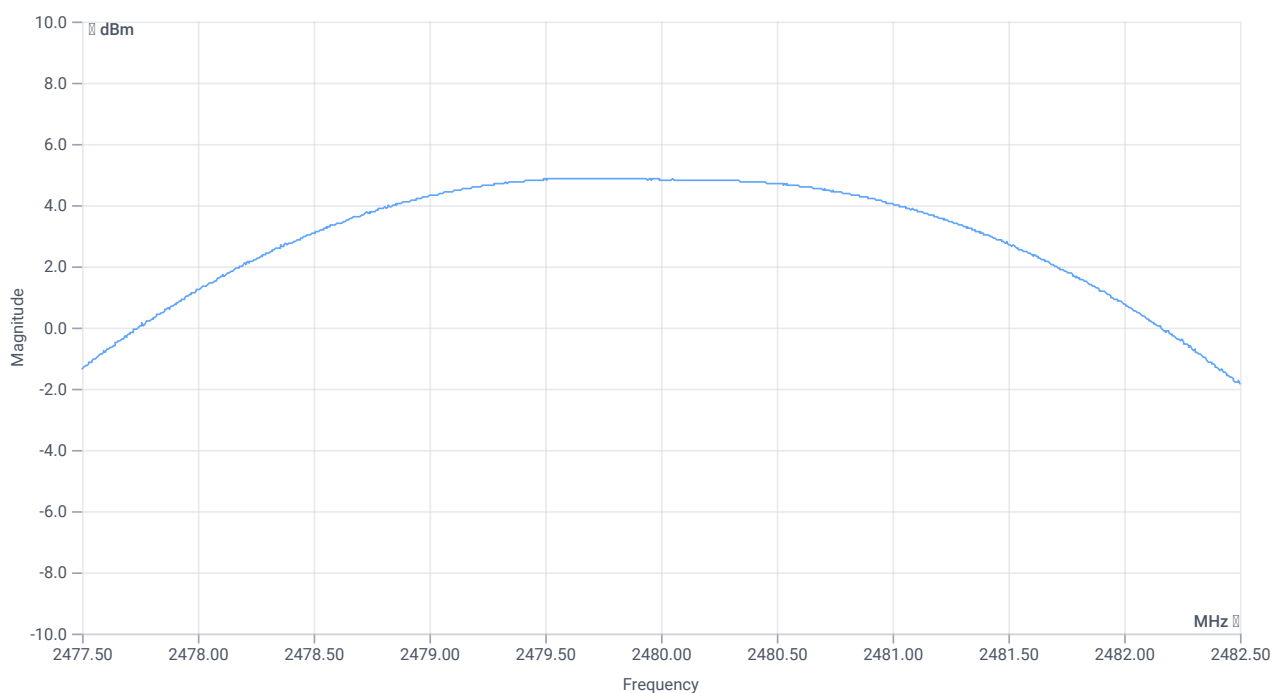
## Test at TX 2480 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.79     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2479.700 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 14.79   9.03   25      |
| Start [MHz]   Stop [MHz]                             | 2477.500   2482.500    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   3.000000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 1000   10   1001   SWE |



### RESULT

| DESCRIPTION       | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------|-------------|-------------|----------|------|---------|
| Peak power        | ---         | ---         | 4.88     | dBm  | INFO    |
| Peak power        | ---         | ---         | 3.076097 | mW   | INFO    |
| Frequency at peak | ---         | ---         | 2479.715 | MHz  | INFO    |

Verdict

PASS

## FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps

### References

|                                               |                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------|
| TC start                                      | 18.03.2025 10:56:05                                               |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                         |
| System version                                | 5.1.6.4                                                           |
| Standard   Version                            | FCC 15.247   NI                                                   |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth     |
| Description                                   | FCC 15.247 Maximum peak output power conducted DTS - BT LE 1 Msps |
| Information                                   |                                                                   |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | True   Freq [MHz] 2402  |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path type | EUT_SA_GEN_SIG                            |
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2402 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.34     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |

### READ SA SETTINGS:

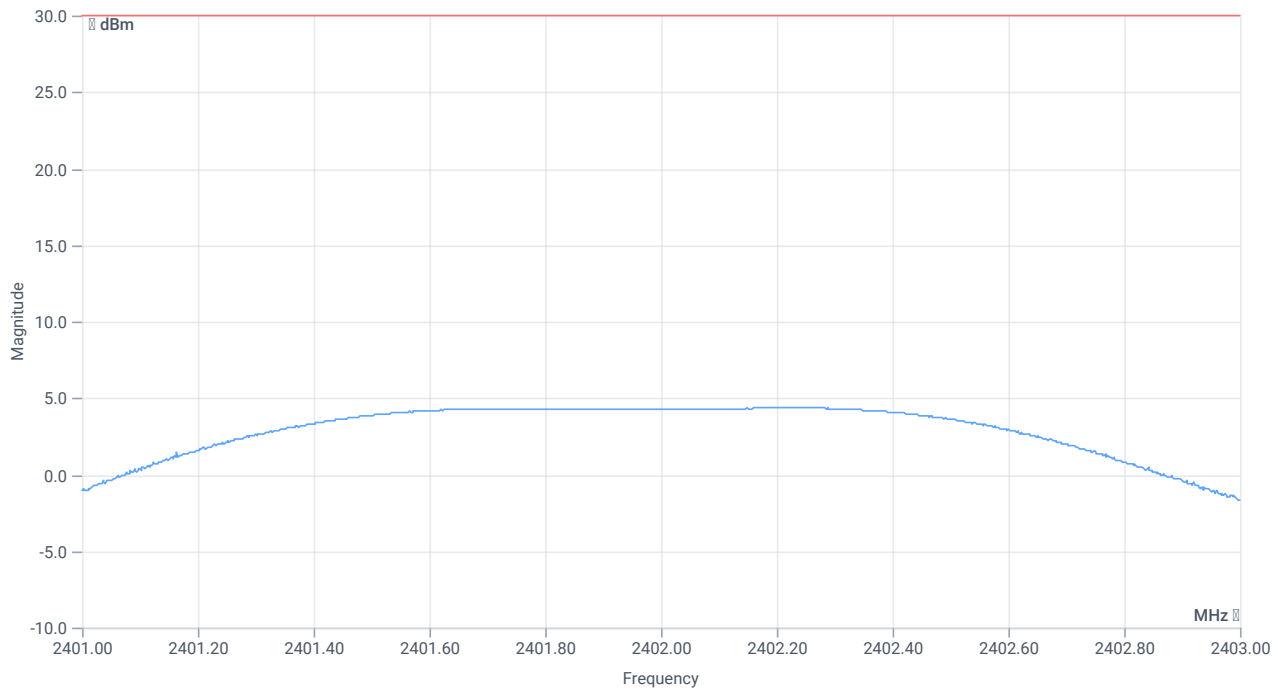
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.34   8.85   20       |
| Start [MHz]   Stop [MHz]                             | 2401.000   2403.000    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

### DTS bandwidth

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | ---         | ---         | 710      | kHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 14.34   8.85   25     |
| Start [MHz]   Stop [MHz]                             | 2401.000   2403.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   5.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 50   200   1001   SWE |



Peak output power

## RESULT

| DESCRIPTION       | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------|-------------|-------------|----------|------|---------|
| Peak power        | ---         | 30.00       | 4.36     | dBm  | PASS    |
| Peak power        | ---         | 1000        | 2.728978 | mW   | PASS    |
| Frequency at peak | ---         | ---         | 2402.218 | MHz  | INFO    |

## Verdict

PASS

# FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps

## References

|                                               |                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------|
| TC start                                      | 18.03.2025 11:22:33                                               |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                         |
| System version                                | 5.1.6.4                                                           |
| Standard   Version                            | FCC 15.247   NI                                                   |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth     |
| Description                                   | FCC 15.247 Maximum peak output power conducted DTS - BT LE 1 Msps |
| Information                                   |                                                                   |

## EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

## Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

## Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | True   Freq [MHz] 2440  |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path type | EUT_SA_GEN_SIG                            |
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2440 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.55     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.200 | MHz  | INFO    |

### READ SA SETTINGS:

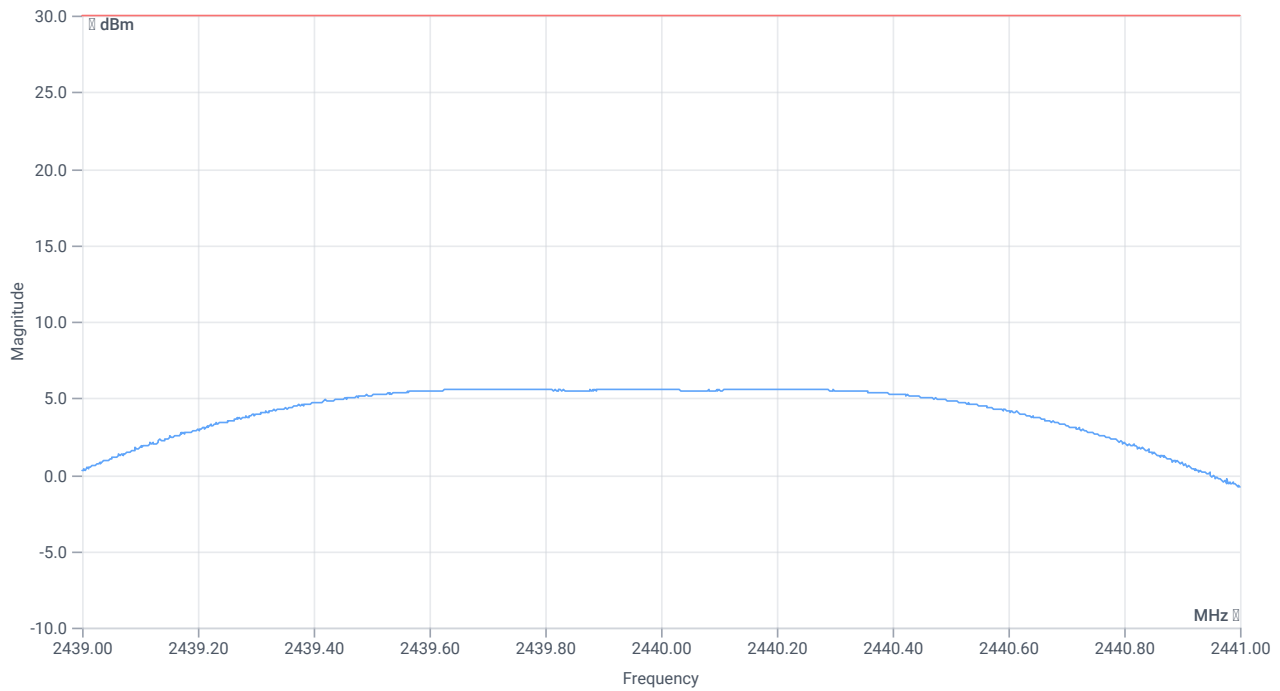
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.55   8.94   20      |
| Start [MHz]   Stop [MHz]                             | 2439.000   2441.000    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

### DTS bandwidth

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | ---         | ---         | 716      | kHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.55   8.94   25     |
| Start [MHz]   Stop [MHz]                             | 2439.000   2441.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   5.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 50   200   1001   SWE |



Peak output power

## RESULT

| DESCRIPTION       | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------|-------------|-------------|----------|------|---------|
| Peak power        | ---         | 30.00       | 5.55     | dBm  | PASS    |
| Peak power        | ---         | 1000        | 3.589219 | mW   | PASS    |
| Frequency at peak | ---         | ---         | 2439.71  | MHz  | INFO    |

Verdict

PASS

# FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps

## References

|                                               |                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------|
| TC start                                      | 18.03.2025 12:55:06                                               |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                         |
| System version                                | 5.1.6.4                                                           |
| Standard   Version                            | FCC 15.247   NI                                                   |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth     |
| Description                                   | FCC 15.247 Maximum peak output power conducted DTS - BT LE 1 Msps |
| Information                                   |                                                                   |

## EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

## Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

## Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | True   Freq [MHz] 2480  |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path type | EUT_SA_GEN_SIG                            |
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2480 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.77     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2479.700 | MHz  | INFO    |

### READ SA SETTINGS:

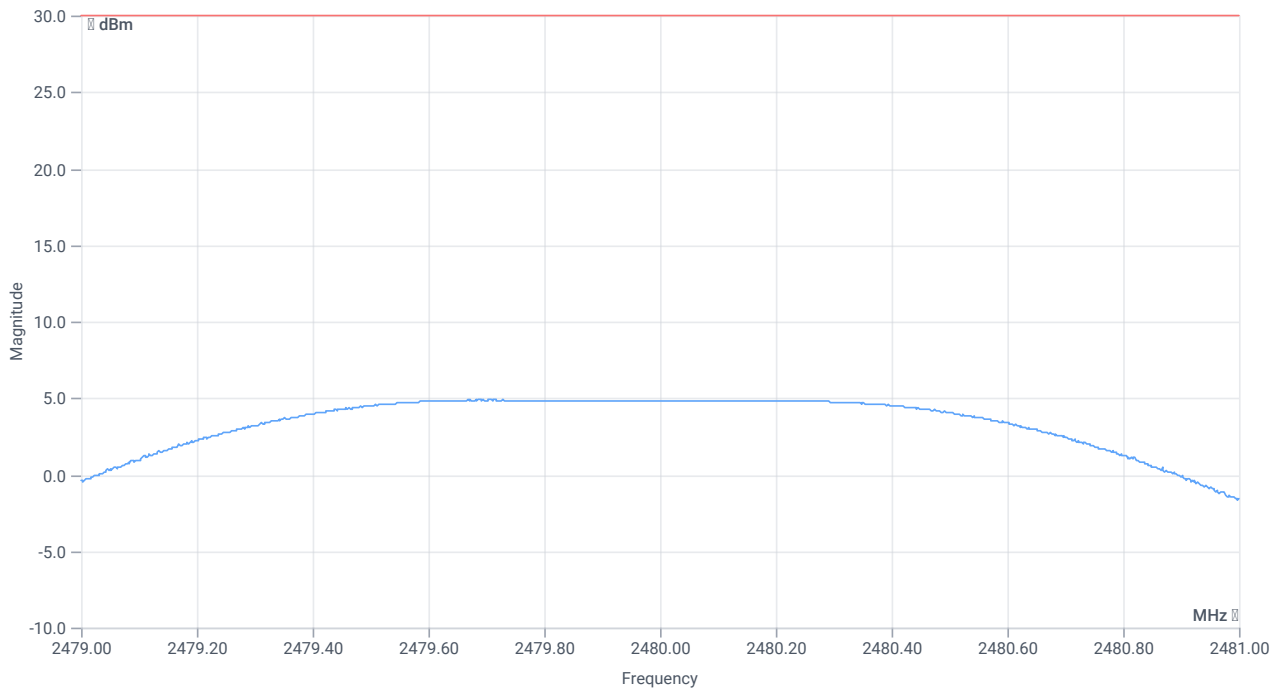
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.77   9.03   20       |
| Start [MHz]   Stop [MHz]                             | 2479.000   2481.000    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

### DTS bandwidth

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | ---         | ---         | 694      | kHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 14.77   9.03   25     |
| Start [MHz]   Stop [MHz]                             | 2479.000   2481.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   5.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 50   200   1001   SWE |



Peak output power

## RESULT

| DESCRIPTION       | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------|-------------|-------------|----------|------|---------|
| Peak power        | ---         | 30.00       | 4.87     | dBm  | PASS    |
| Peak power        | ---         | 1000        | 3.069022 | mW   | PASS    |
| Frequency at peak | ---         | ---         | 2479.704 | MHz  | INFO    |

## Verdict

PASS

## FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps

### References

|                                               |                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------|
| TC start                                      | 18.03.2025 13:12:44                                               |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                         |
| System version                                | 5.1.6.4                                                           |
| Standard   Version                            | FCC 15.247   NI                                                   |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth     |
| Description                                   | FCC 15.247 Maximum peak output power conducted DTS - BT LE 2 Msps |
| Information                                   |                                                                   |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | True   Freq [MHz] 2402  |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path type | EUT_SA_GEN_SIG                            |
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2402 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.34     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.600 | MHz  | INFO    |

### READ SA SETTINGS:

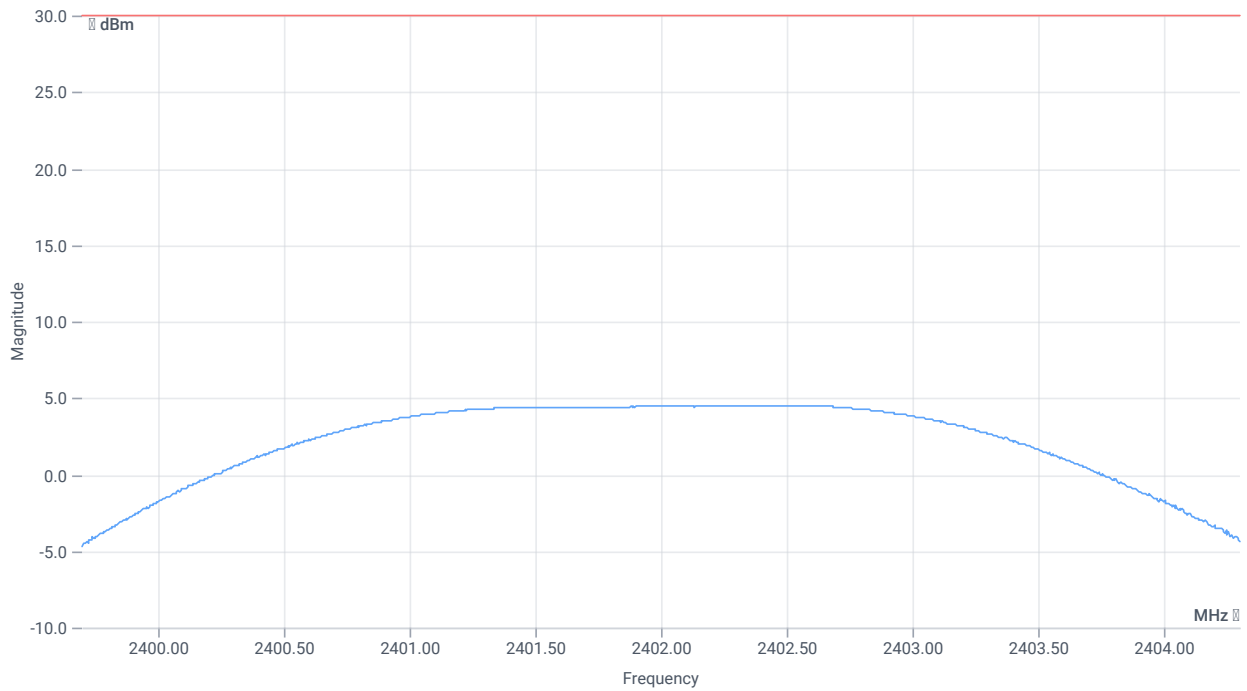
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.34   8.85   20       |
| Start [MHz]   Stop [MHz]                             | 2399.700   2404.300    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

### DTS bandwidth

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | ---         | ---         | 1161     | kHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 14.34   8.85   25     |
| Start [MHz]   Stop [MHz]                             | 2399.700   2404.300   |
| RBW [MHz]   VBW [MHz]                                | 2.000000   5.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 50   200   1001   SWE |



Peak output power

## RESULT

| DESCRIPTION       | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------|-------------|-------------|----------|------|---------|
| Peak power        | ---         | 30.00       | 4.54     | dBm  | PASS    |
| Peak power        | ---         | 1000        | 2.844461 | mW   | PASS    |
| Frequency at peak | ---         | ---         | 2402.492 | MHz  | INFO    |

## Verdict

PASS

## FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps

### References

|                                               |                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------|
| TC start                                      | 18.03.2025 13:38:03                                               |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                         |
| System version                                | 5.1.6.4                                                           |
| Standard   Version                            | FCC 15.247   NI                                                   |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth     |
| Description                                   | FCC 15.247 Maximum peak output power conducted DTS - BT LE 2 Msps |
| Information                                   |                                                                   |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | True   Freq [MHz] 2440  |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path type | EUT_SA_GEN_SIG                            |
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2440 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.50     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.500 | MHz  | INFO    |

### READ SA SETTINGS:

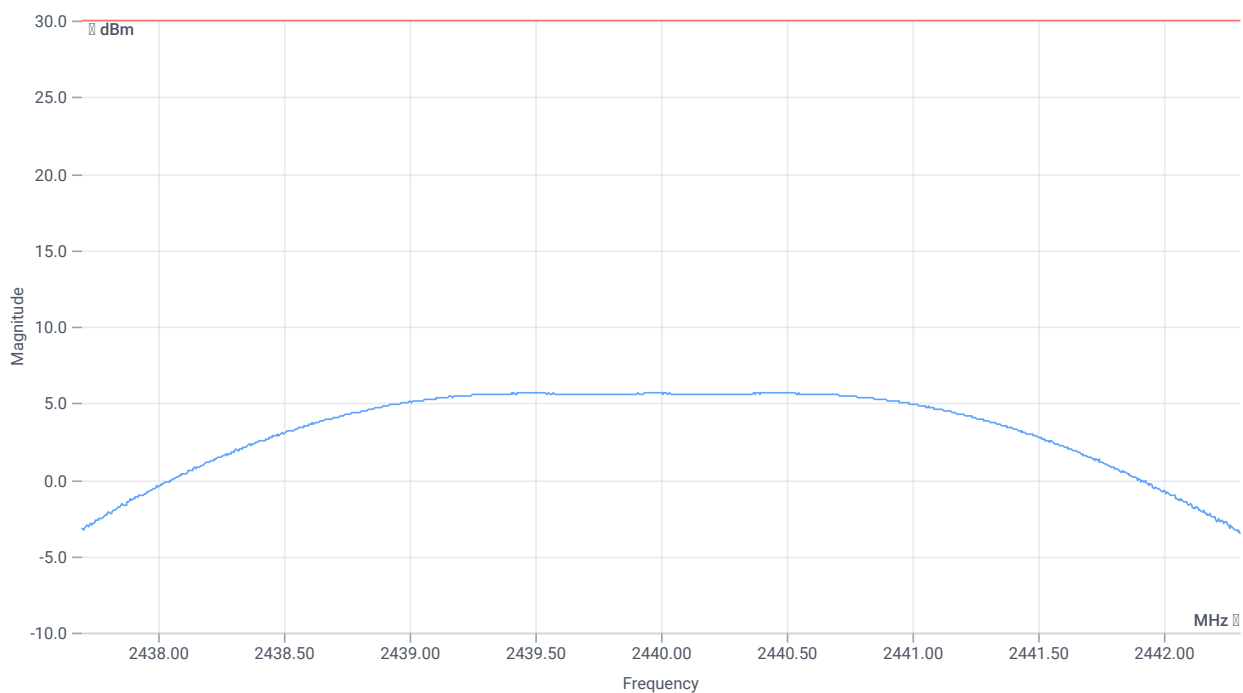
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.50   8.94   20      |
| Start [MHz]   Stop [MHz]                             | 2437.700   2442.300    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

### DTS bandwidth

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | ---         | ---         | 1167     | kHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.50   8.94   25     |
| Start [MHz]   Stop [MHz]                             | 2437.700   2442.300   |
| RBW [MHz]   VBW [MHz]                                | 2.000000   5.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 50   200   1001   SWE |



Peak output power

## RESULT

| DESCRIPTION       | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------|-------------|-------------|----------|------|---------|
| Peak power        | ---         | 30.00       | 5.64     | dBm  | PASS    |
| Peak power        | ---         | 1000        | 3.664376 | mW   | PASS    |
| Frequency at peak | ---         | ---         | 2440.441 | MHz  | INFO    |

## Verdict

PASS

## FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 2 Msps

### References

|                                               |                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------|
| TC start                                      | 18.03.2025 13:54:43                                               |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                         |
| System version                                | 5.1.6.4                                                           |
| Standard   Version                            | FCC 15.247   NI                                                   |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth     |
| Description                                   | FCC 15.247 Maximum peak output power conducted DTS - BT LE 2 Msps |
| Information                                   |                                                                   |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | True   Freq [MHz] 2480  |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path type | EUT_SA_GEN_SIG                            |
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2480 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.64     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2479.400 | MHz  | INFO    |

### READ SA SETTINGS:

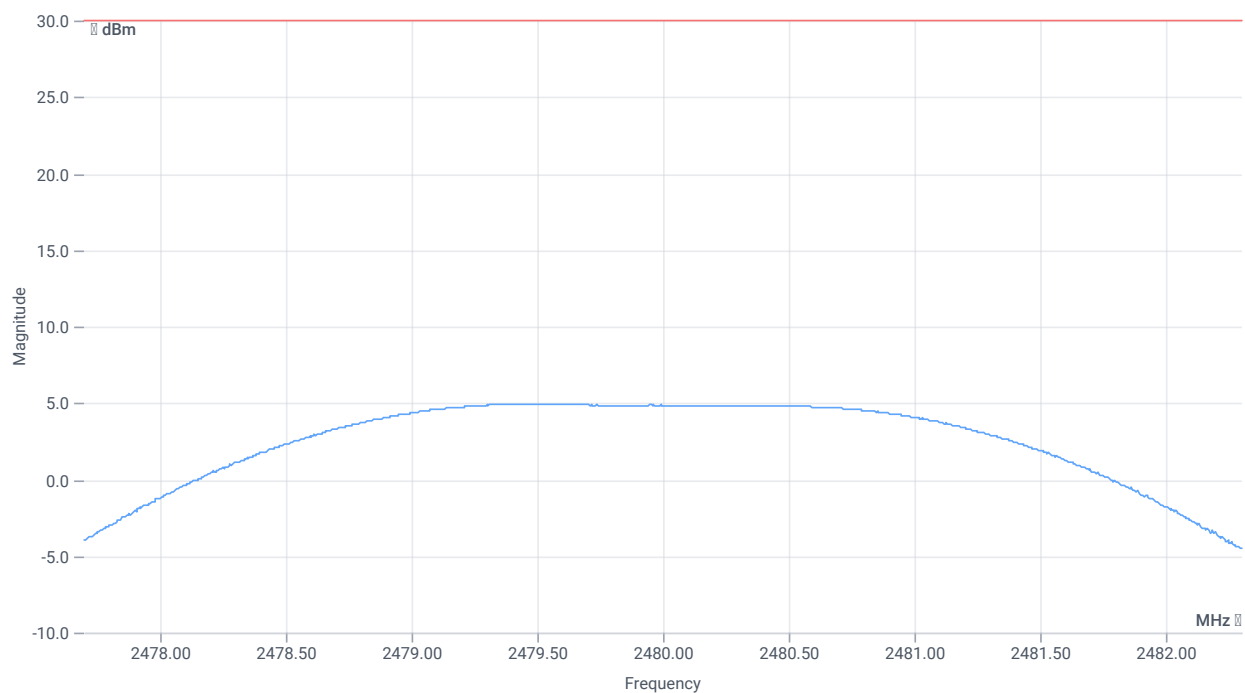
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.64   9.03   20       |
| Start [MHz]   Stop [MHz]                             | 2477.700   2482.300    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

### DTS bandwidth

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | ---         | ---         | 1161     | kHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 14.64   9.03   25     |
| Start [MHz]   Stop [MHz]                             | 2477.700   2482.300   |
| RBW [MHz]   VBW [MHz]                                | 2.000000   5.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 50   200   1001   SWE |



Peak output power

## RESULT

| DESCRIPTION       | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------|-------------|-------------|----------|------|---------|
| Peak power        | ---         | 30.00       | 4.93     | dBm  | PASS    |
| Peak power        | ---         | 1000        | 3.111716 | mW   | PASS    |
| Frequency at peak | ---         | ---         | 2479.449 | MHz  | INFO    |

Verdict

PASS

## FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

### References

|                                               |                                                                                                            |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 10:57:22                                                                                        |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                  |
| System version                                | 5.1.6.4                                                                                                    |
| Standard   Version                            | FCC 15.247   NI                                                                                            |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Description                                   | FCC 15.247 Peak psd DTS - BT LE 1 Msps                                                                     |
| Information                                   |                                                                                                            |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | True   Freq [MHz] 2402  |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

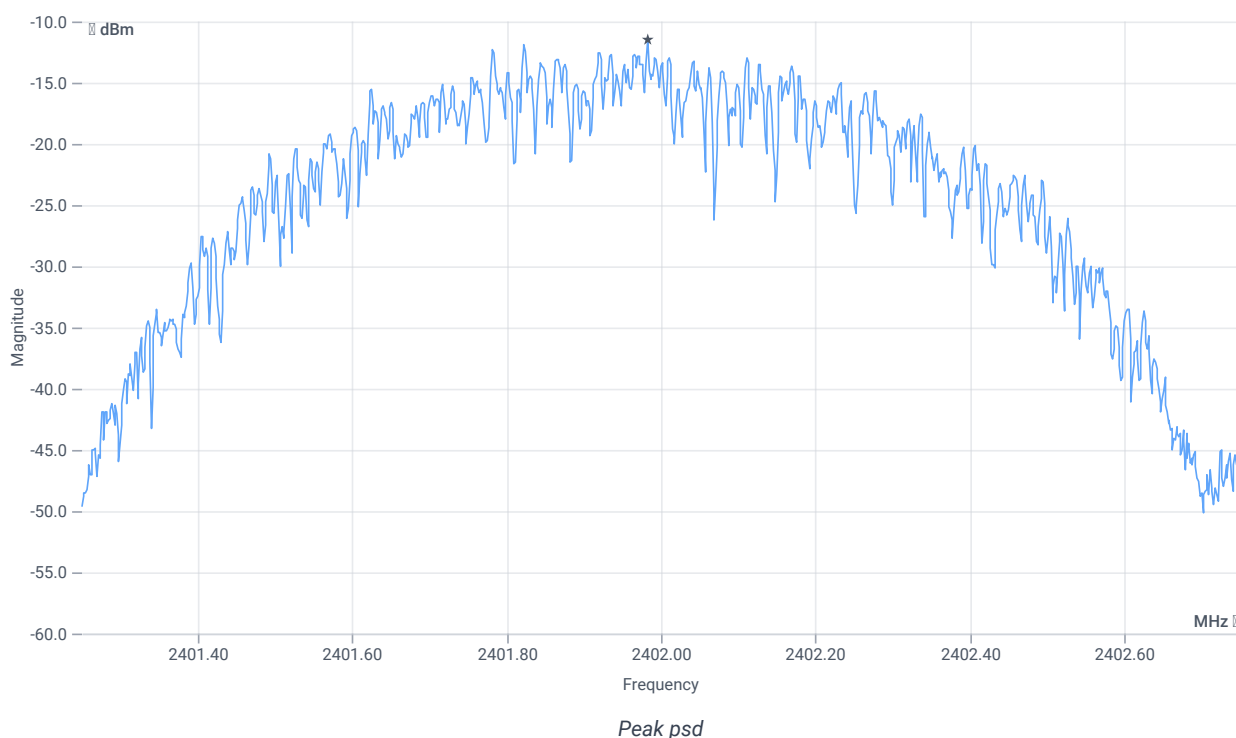
## Test at TX 2402 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.39     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.300 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.39   8.85   20       |
| Start [MHz]   Stop [MHz]                             | 2401.250   2402.750    |
| RBW [MHz]   VBW [MHz]                                | 0.003000   0.010000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 1000   20   1001   SWE |



### RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT     | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Peak psd    | ---         | 8           | -11.48   | dBm/3KHz | PASS    |

#### Verdict

PASS

## FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

### References

|                                               |                                                                                                            |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 11:23:51                                                                                        |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                  |
| System version                                | 5.1.6.4                                                                                                    |
| Standard   Version                            | FCC 15.247   NI                                                                                            |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Description                                   | FCC 15.247 Peak psd DTS - BT LE 1 Msps                                                                     |
| Information                                   |                                                                                                            |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | True   Freq [MHz] 2440  |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

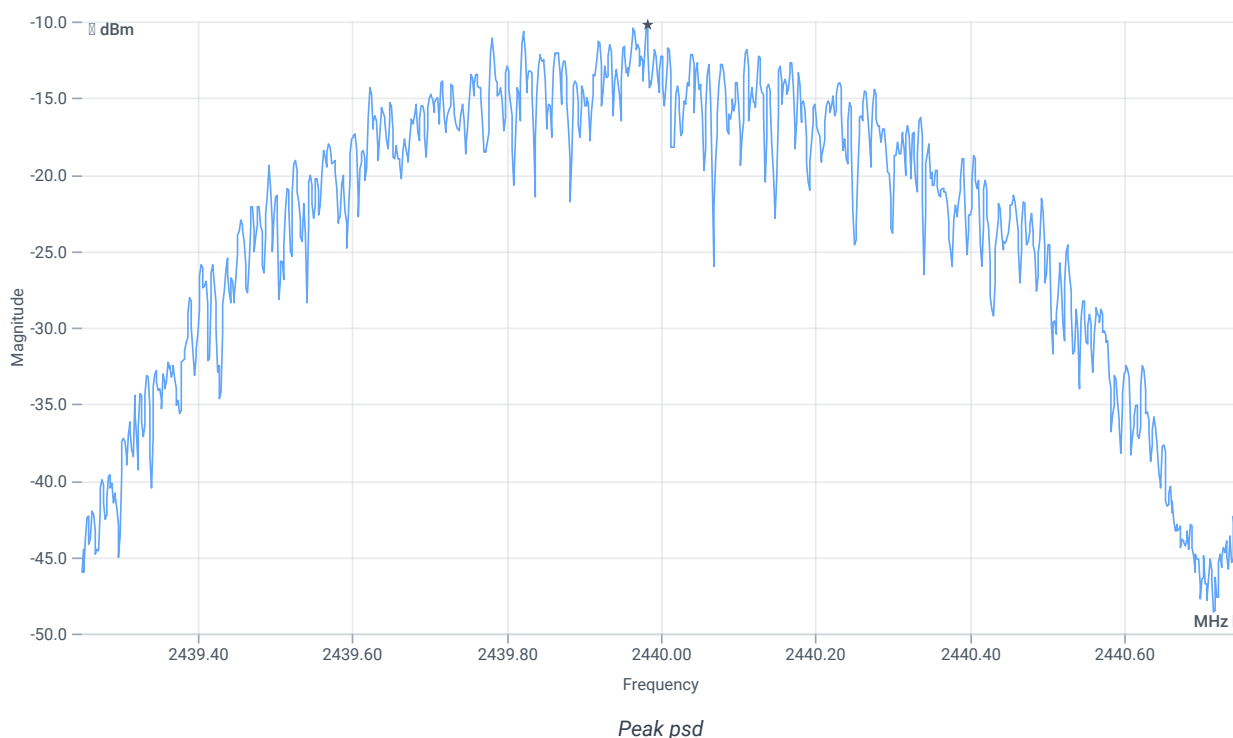
## Test at TX 2440 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.55     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.200 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.55   8.94   20      |
| Start [MHz]   Stop [MHz]                             | 2439.250   2440.750    |
| RBW [MHz]   VBW [MHz]                                | 0.003000   0.010000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 1000   20   1001   SWE |



### RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT     | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Peak psd    | ---         | 8           | -10.22   | dBm/3KHz | PASS    |

#### Verdict

PASS

## FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

### References

|                                               |                                                                                                            |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 12:56:24                                                                                        |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                  |
| System version                                | 5.1.6.4                                                                                                    |
| Standard   Version                            | FCC 15.247   NI                                                                                            |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Description                                   | FCC 15.247 Peak psd DTS - BT LE 1 Msps                                                                     |
| Information                                   |                                                                                                            |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | True   Freq [MHz] 2480  |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

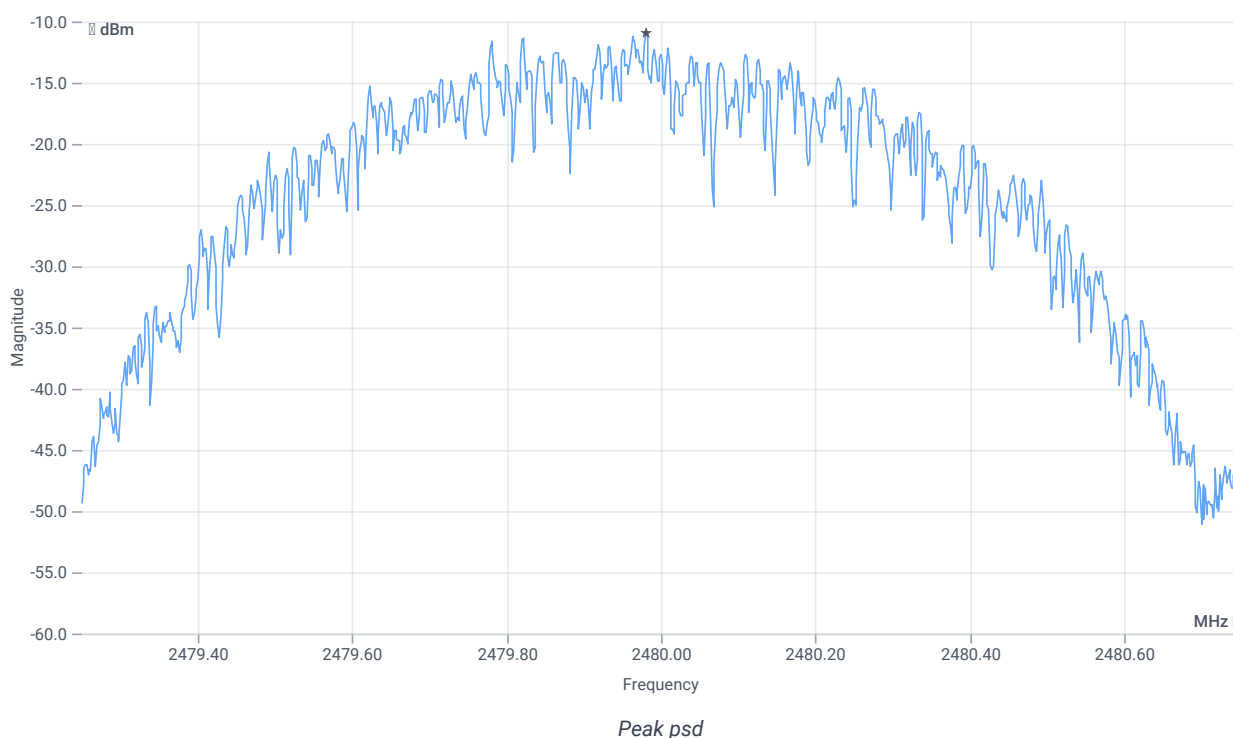
## Test at TX 2480 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.80     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2479.700 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.80   9.03   20       |
| Start [MHz]   Stop [MHz]                             | 2479.250   2480.750    |
| RBW [MHz]   VBW [MHz]                                | 0.003000   0.010000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 1000   20   1001   SWE |



### RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT     | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Peak psd    | ---         | 8           | -10.94   | dBm/3KHz | PASS    |

#### Verdict

PASS

## FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps

### References

|                                               |                                                                                                            |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 13:14:02                                                                                        |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                  |
| System version                                | 5.1.6.4                                                                                                    |
| Standard   Version                            | FCC 15.247   NI                                                                                            |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Description                                   | FCC 15.247 Peak psd DTS - BT LE 2 Msps                                                                     |
| Information                                   |                                                                                                            |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | True   Freq [MHz] 2402  |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

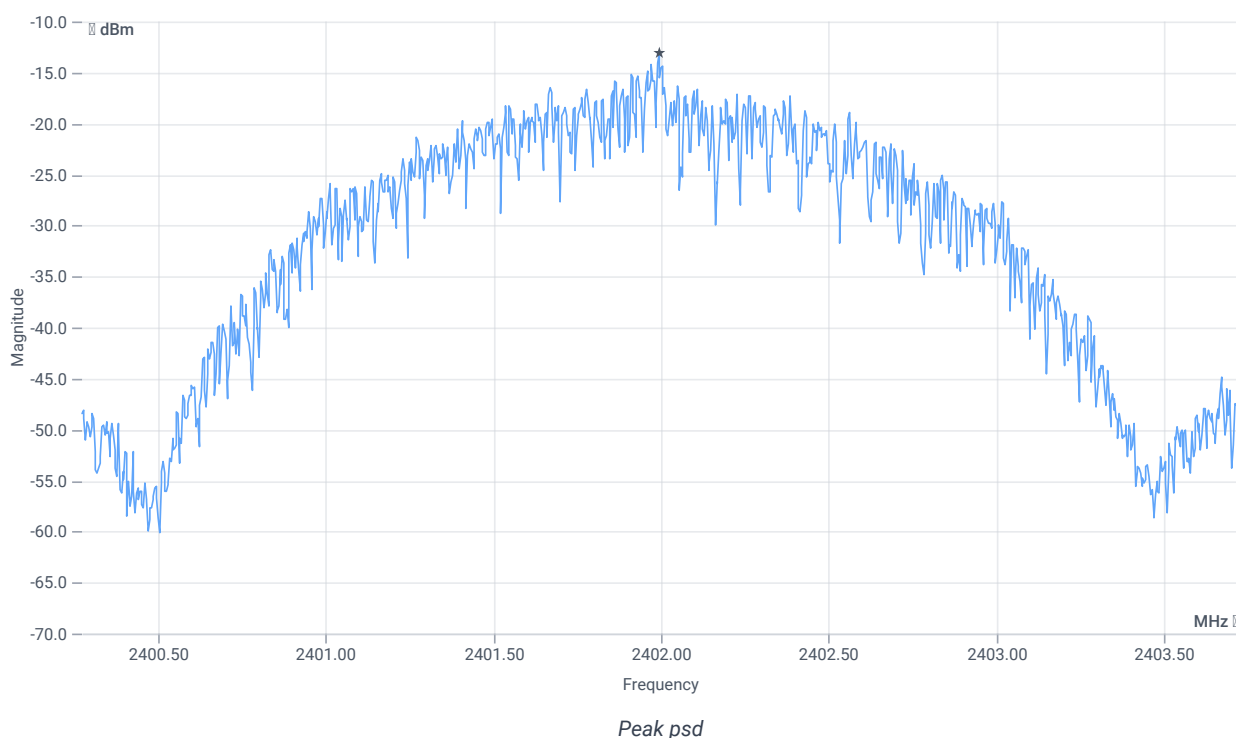
## Test at TX 2402 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.36     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.500 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.36   8.85   20       |
| Start [MHz]   Stop [MHz]                             | 2400.275   2403.725    |
| RBW [MHz]   VBW [MHz]                                | 0.003000   0.010000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 1000   20   1001   SWE |



### RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT     | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Peak psd    | ---         | 8           | -13.02   | dBm/3KHz | PASS    |

#### Verdict

PASS

## FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps

### References

|                                               |                                                                                                            |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 13:39:21                                                                                        |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                  |
| System version                                | 5.1.6.4                                                                                                    |
| Standard   Version                            | FCC 15.247   NI                                                                                            |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Description                                   | FCC 15.247 Peak psd DTS - BT LE 2 Msps                                                                     |
| Information                                   |                                                                                                            |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | True   Freq [MHz] 2440  |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

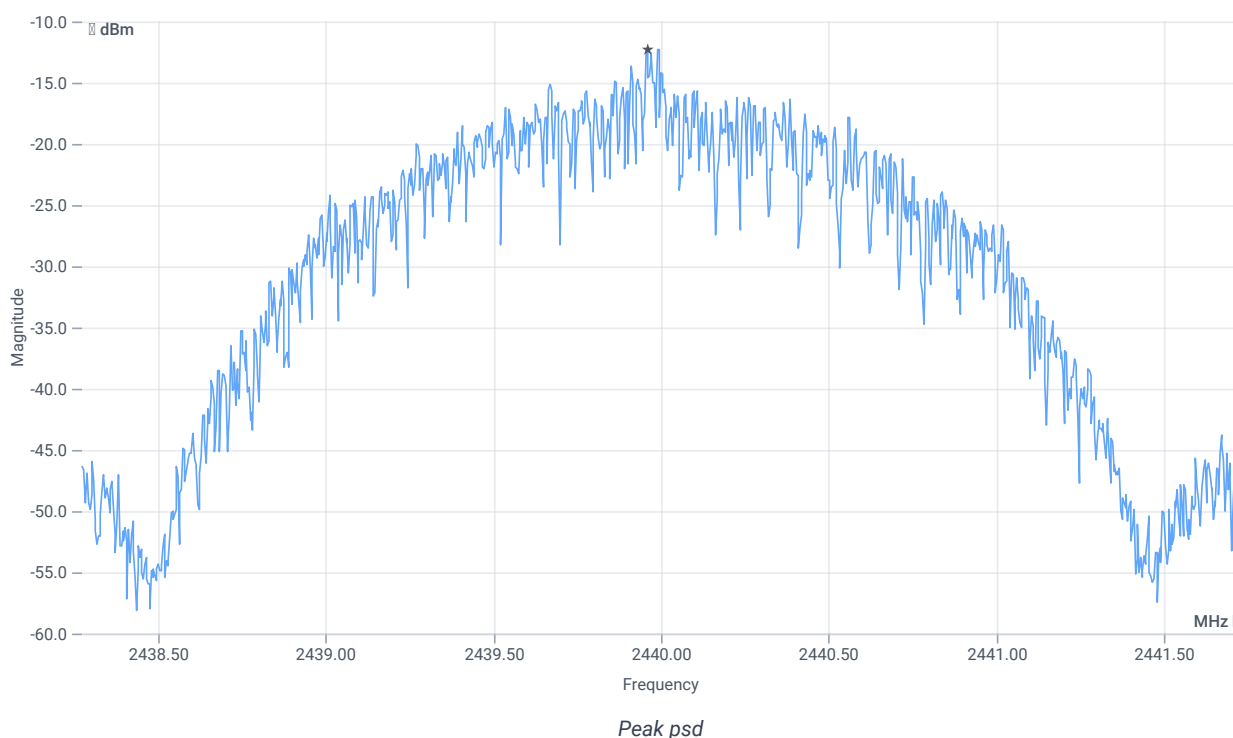
## Test at TX 2440 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.59     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.500 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.59   8.94   20      |
| Start [MHz]   Stop [MHz]                             | 2438.275   2441.725    |
| RBW [MHz]   VBW [MHz]                                | 0.003000   0.010000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 1000   20   1001   SWE |



### RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT     | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Peak psd    | ---         | 8           | -12.34   | dBm/3KHz | PASS    |

#### Verdict

PASS

## FCC 15.247 # Peak psd DTS ~ BT LE 2 Msps

### References

|                                               |                                                                                                            |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 13:57:41                                                                                        |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                  |
| System version                                | 5.1.6.4                                                                                                    |
| Standard   Version                            | FCC 15.247   NI                                                                                            |
| Method                                        | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Description                                   | FCC 15.247 Peak psd DTS - BT LE 2 Msps                                                                     |
| Information                                   |                                                                                                            |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | True   Freq [MHz] 2480  |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

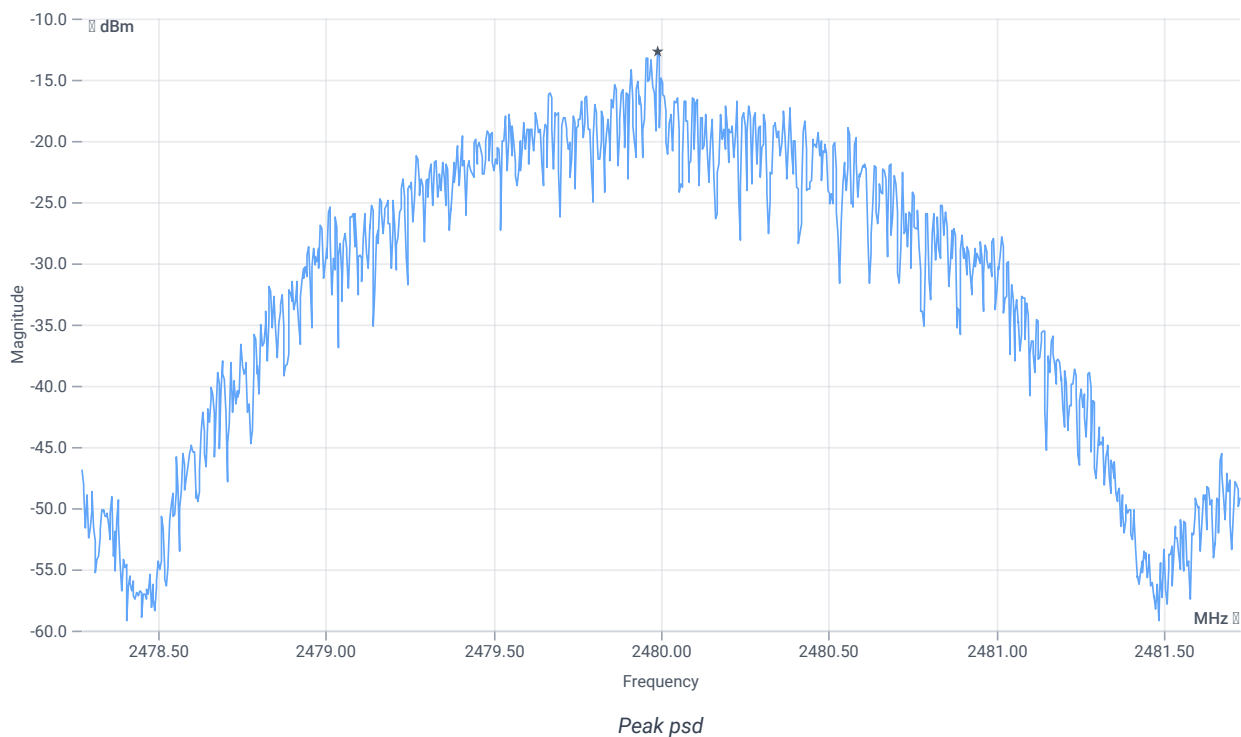
## Test at TX 2480 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.67     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2479.400 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.67   9.03   20       |
| Start [MHz]   Stop [MHz]                             | 2478.275   2481.725    |
| RBW [MHz]   VBW [MHz]                                | 0.003000   0.010000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 1000   20   1001   SWE |



### RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT     | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Peak psd    | ---         | 8           | -12.72   | dBm/3KHz | PASS    |

#### Verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps

### References

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| TC start                                      | 18.03.2025 10:56:49                         |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                   |
| System version                                | 5.1.6.4                                     |
| Standard   Version                            | FCC 15.247   NI                             |
| Method                                        |                                             |
| Description                                   | FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps |
| Information                                   |                                             |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| Technology to test                               | BT LE 1 Msps                              |
| EUT port                                         | EUT1                                      |
| Temperature                                      | nom                                       |
| Voltage                                          | nom                                       |
| Frequency low to test                            | True   Freq [MHz] 2402                    |
| Frequency mid to test                            | False   Freq [MHz] 2440                   |
| Frequency high to test                           | False   Freq [MHz] 2480                   |
| Auto control enabled power supply   Climatic Box | No   No                                   |
| Additional path loss [dB]                        | 0.7                                       |
| Full path type                                   | EUT_SA_GEN_SIG                            |
| Full path name                                   | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |

## Test Parameter

---

|             |                                     |
|-------------|-------------------------------------|
| Switch bits | 00010001:00010001:00000000:00000001 |
|-------------|-------------------------------------|

---

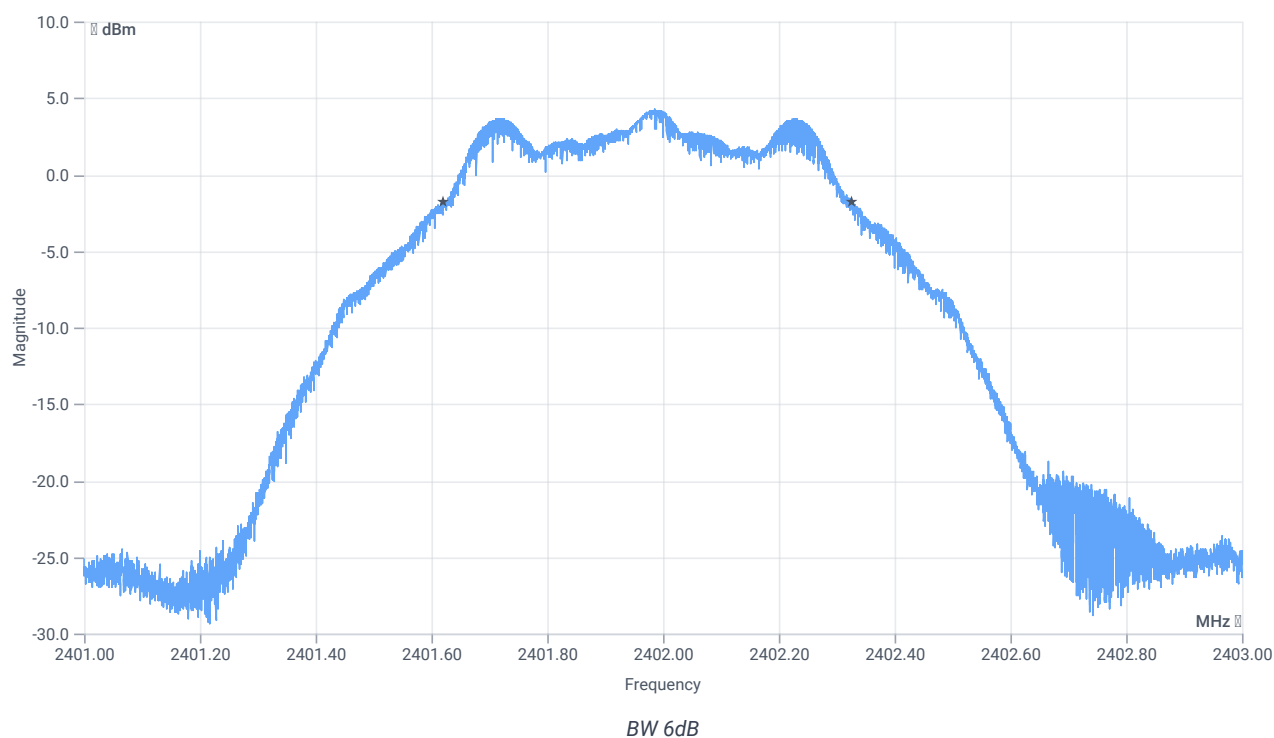
## Test at TX 2402 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.38     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.38   8.85   20       |
| Start [MHz]   Stop [MHz]                             | 2401.000   2403.000    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |



### RESULT

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | 500         | ---         | 705      | kHz  | PASS    |

#### Verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps

### References

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| TC start                                      | 18.03.2025 11:23:18                         |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                   |
| System version                                | 5.1.6.4                                     |
| Standard   Version                            | FCC 15.247   NI                             |
| Method                                        |                                             |
| Description                                   | FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps |
| Information                                   |                                             |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| Technology to test                               | BT LE 1 Msps                              |
| EUT port                                         | EUT1                                      |
| Temperature                                      | nom                                       |
| Voltage                                          | nom                                       |
| Frequency low to test                            | False   Freq [MHz] 2402                   |
| Frequency mid to test                            | True   Freq [MHz] 2440                    |
| Frequency high to test                           | False   Freq [MHz] 2480                   |
| Auto control enabled power supply   Climatic Box | No   No                                   |
| Additional path loss [dB]                        | 0.7                                       |
| Full path type                                   | EUT_SA_GEN_SIG                            |
| Full path name                                   | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |

## Test Parameter

---

Switch bits

00010001:00010001:00000000:00000001

---

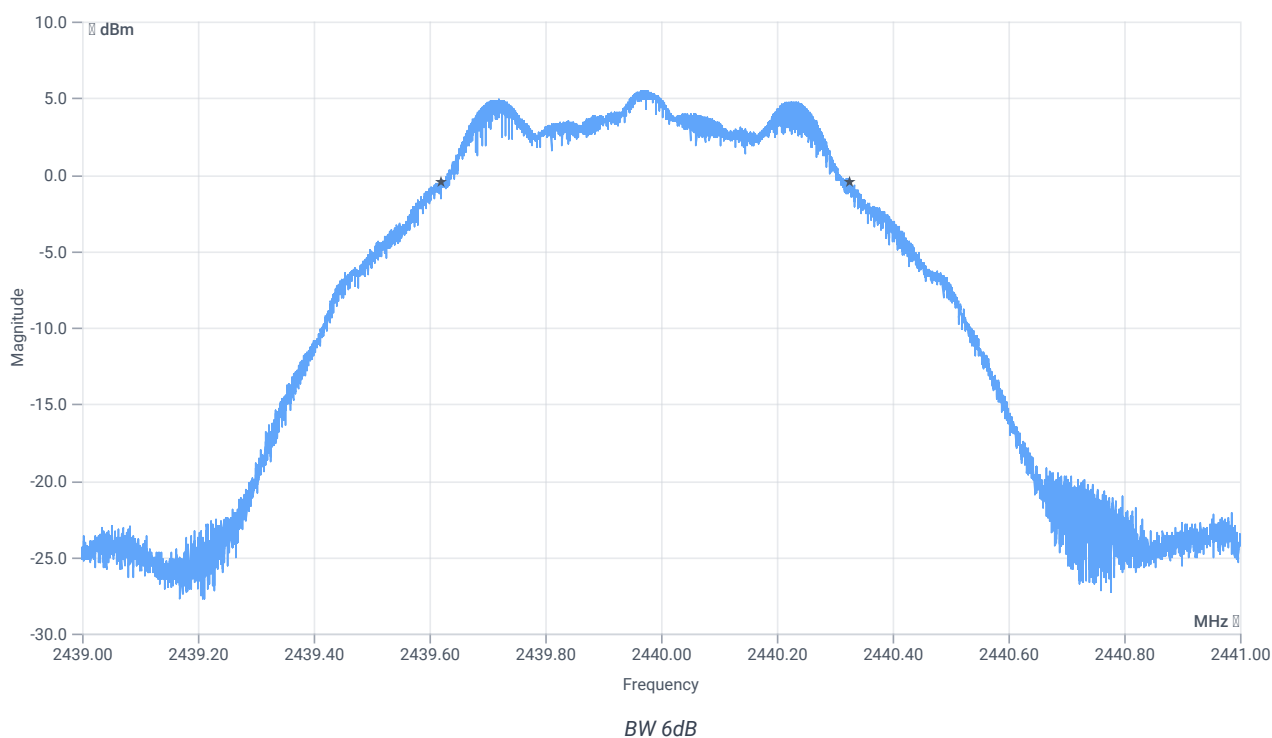
## Test at TX 2440 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.55     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.200 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.55   8.94   20      |
| Start [MHz]   Stop [MHz]                             | 2439.000   2441.000    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |



### RESULT

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | 500         | ---         | 708      | kHz  | PASS    |

Verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps

### References

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| TC start                                      | 18.03.2025 12:55:51                         |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                   |
| System version                                | 5.1.6.4                                     |
| Standard   Version                            | FCC 15.247   NI                             |
| Method                                        |                                             |
| Description                                   | FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps |
| Information                                   |                                             |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| Technology to test                               | BT LE 1 Msps                              |
| EUT port                                         | EUT1                                      |
| Temperature                                      | nom                                       |
| Voltage                                          | nom                                       |
| Frequency low to test                            | False   Freq [MHz] 2402                   |
| Frequency mid to test                            | False   Freq [MHz] 2440                   |
| Frequency high to test                           | True   Freq [MHz] 2480                    |
| Auto control enabled power supply   Climatic Box | No   No                                   |
| Additional path loss [dB]                        | 0.7                                       |
| Full path type                                   | EUT_SA_GEN_SIG                            |
| Full path name                                   | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |

## Test Parameter

---

|             |                                     |
|-------------|-------------------------------------|
| Switch bits | 00010001:00010001:00000000:00000001 |
|-------------|-------------------------------------|

---

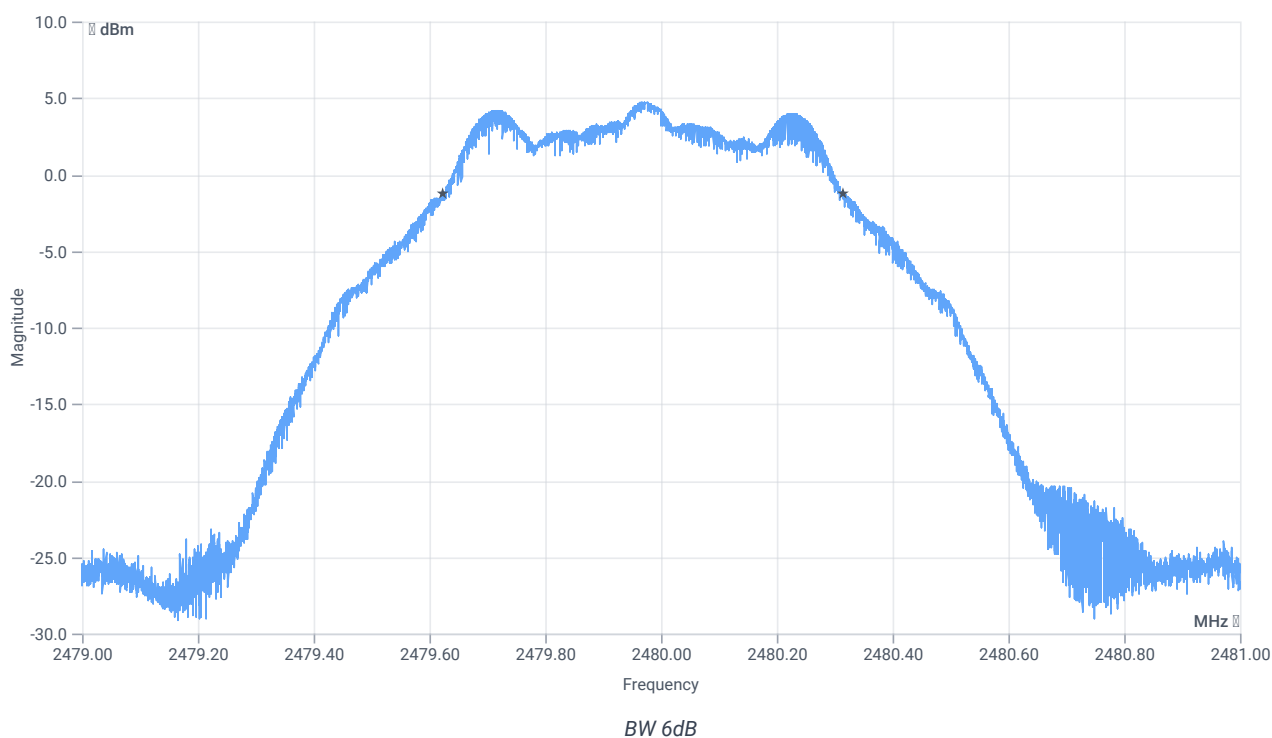
## Test at TX 2480 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.79     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2480.200 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.79   9.03   20       |
| Start [MHz]   Stop [MHz]                             | 2479.000   2481.000    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |



### RESULT

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | 500         | ---         | 693      | kHz  | PASS    |

#### Verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps

### References

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| TC start                                      | 18.03.2025 13:13:29                         |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                   |
| System version                                | 5.1.6.4                                     |
| Standard   Version                            | FCC 15.247   NI                             |
| Method                                        |                                             |
| Description                                   | FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps |
| Information                                   |                                             |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| Technology to test                               | BT LE 2 Msps                              |
| EUT port                                         | EUT1                                      |
| Temperature                                      | nom                                       |
| Voltage                                          | nom                                       |
| Frequency low to test                            | True   Freq [MHz] 2402                    |
| Frequency mid to test                            | False   Freq [MHz] 2440                   |
| Frequency high to test                           | False   Freq [MHz] 2480                   |
| Auto control enabled power supply   Climatic Box | No   No                                   |
| Additional path loss [dB]                        | 0.7                                       |
| Full path type                                   | EUT_SA_GEN_SIG                            |
| Full path name                                   | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |

## Test Parameter

---

Switch bits

00010001:00010001:00000000:00000001

---

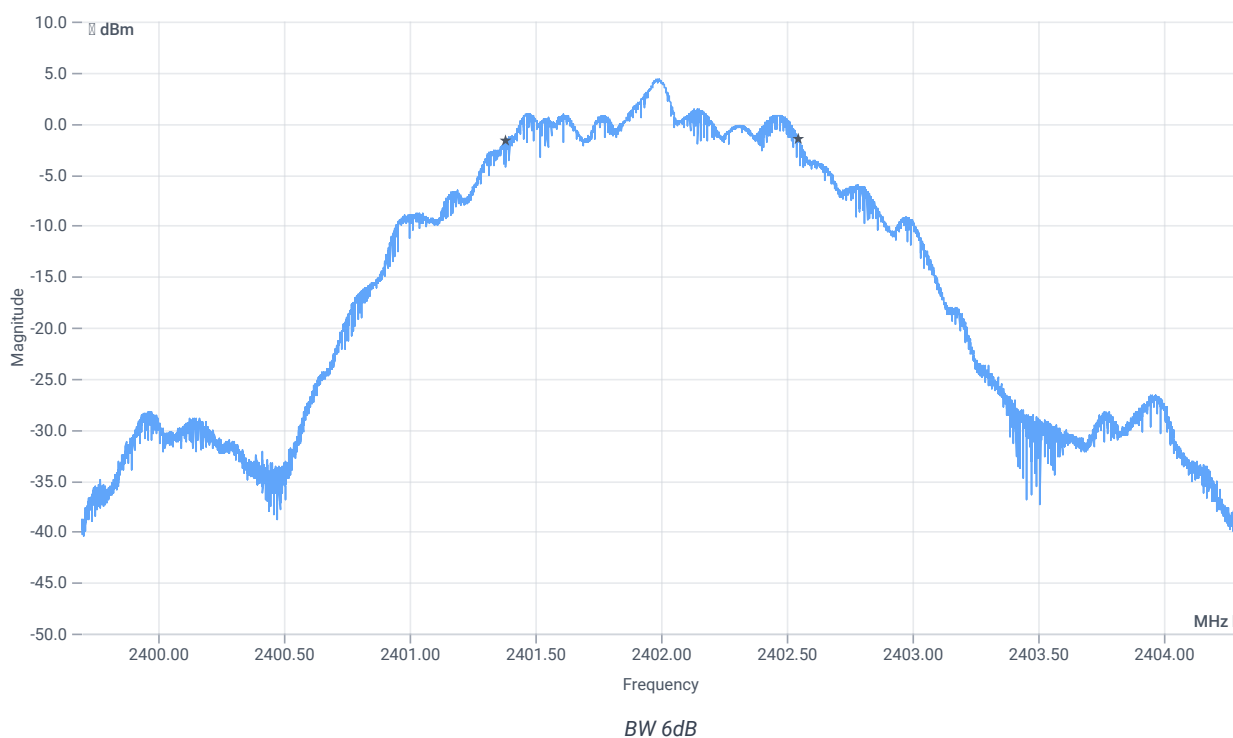
## Test at TX 2402 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.36     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.400 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.36   8.85   20       |
| Start [MHz]   Stop [MHz]                             | 2399.700   2404.300    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |



### RESULT

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | 500         | ---         | 1163     | kHz  | PASS    |

#### Verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps

### References

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| TC start                                      | 18.03.2025 13:38:48                         |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                   |
| System version                                | 5.1.6.4                                     |
| Standard   Version                            | FCC 15.247   NI                             |
| Method                                        |                                             |
| Description                                   | FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps |
| Information                                   |                                             |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| Technology to test                               | BT LE 2 Msps                              |
| EUT port                                         | EUT1                                      |
| Temperature                                      | nom                                       |
| Voltage                                          | nom                                       |
| Frequency low to test                            | False   Freq [MHz] 2402                   |
| Frequency mid to test                            | True   Freq [MHz] 2440                    |
| Frequency high to test                           | False   Freq [MHz] 2480                   |
| Auto control enabled power supply   Climatic Box | No   No                                   |
| Additional path loss [dB]                        | 0.7                                       |
| Full path type                                   | EUT_SA_GEN_SIG                            |
| Full path name                                   | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |

## Test Parameter

---

|             |                                     |
|-------------|-------------------------------------|
| Switch bits | 00010001:00010001:00000000:00000001 |
|-------------|-------------------------------------|

---

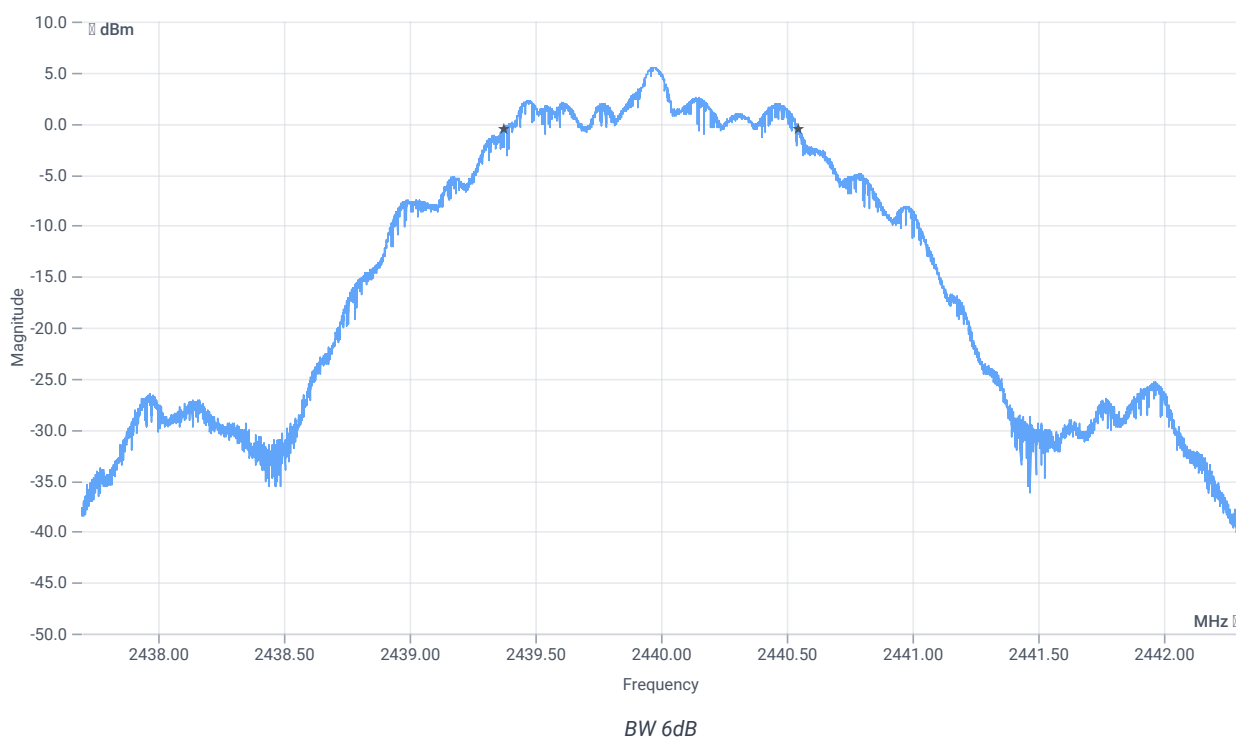
## Test at TX 2440 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.64     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.500 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.64   8.94   20      |
| Start [MHz]   Stop [MHz]                             | 2437.700   2442.300    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |



### RESULT

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | 500         | ---         | 1170     | kHz  | PASS    |

#### Verdict

PASS

## FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 2 Msps

### References

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| TC start                                      | 18.03.2025 13:55:28                         |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                   |
| System version                                | 5.1.6.4                                     |
| Standard   Version                            | FCC 15.247   NI                             |
| Method                                        |                                             |
| Description                                   | FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps |
| Information                                   |                                             |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| Technology to test                               | BT LE 2 Msps                              |
| EUT port                                         | EUT1                                      |
| Temperature                                      | nom                                       |
| Voltage                                          | nom                                       |
| Frequency low to test                            | False   Freq [MHz] 2402                   |
| Frequency mid to test                            | False   Freq [MHz] 2440                   |
| Frequency high to test                           | True   Freq [MHz] 2480                    |
| Auto control enabled power supply   Climatic Box | No   No                                   |
| Additional path loss [dB]                        | 0.7                                       |
| Full path type                                   | EUT_SA_GEN_SIG                            |
| Full path name                                   | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |

## Test Parameter

---

Switch bits

00010001:00010001:00000000:00000001

---

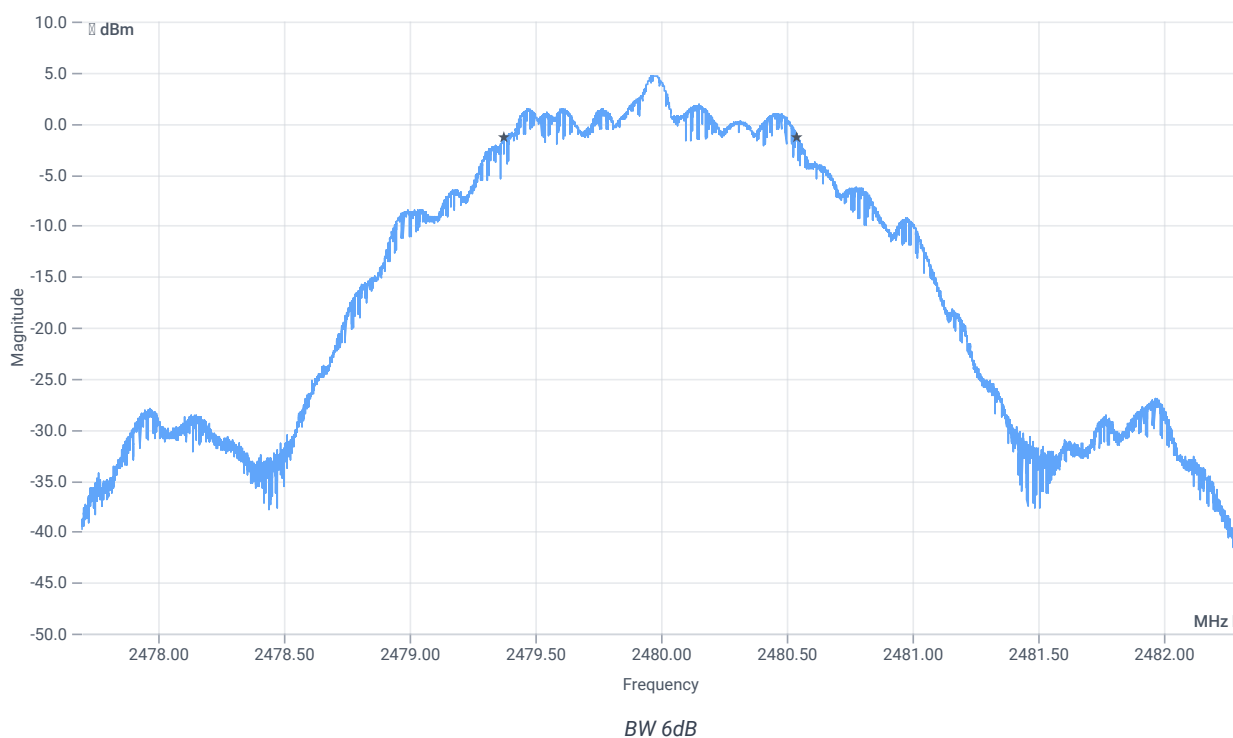
## Test at TX 2480 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.65     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2479.600 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.65   9.03   20       |
| Start [MHz]   Stop [MHz]                             | 2477.700   2482.300    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |



### RESULT

| DESCRIPTION         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------|-------------|-------------|----------|------|---------|
| DTS bandwidth (6dB) | 500         | ---         | 1163     | kHz  | PASS    |

#### Verdict

PASS

# FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps

## References

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| TC start                                      | 18.03.2025 10:58:03                                |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                          |
| System version                                | 5.1.6.4                                            |
| Standard   Version                            | FCC 15.247, ISED RSS247   NI                       |
| Method                                        |                                                    |
| Description                                   | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps |
| Information                                   |                                                    |

## EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

## Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

## Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | True   Freq [MHz] 2402  |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

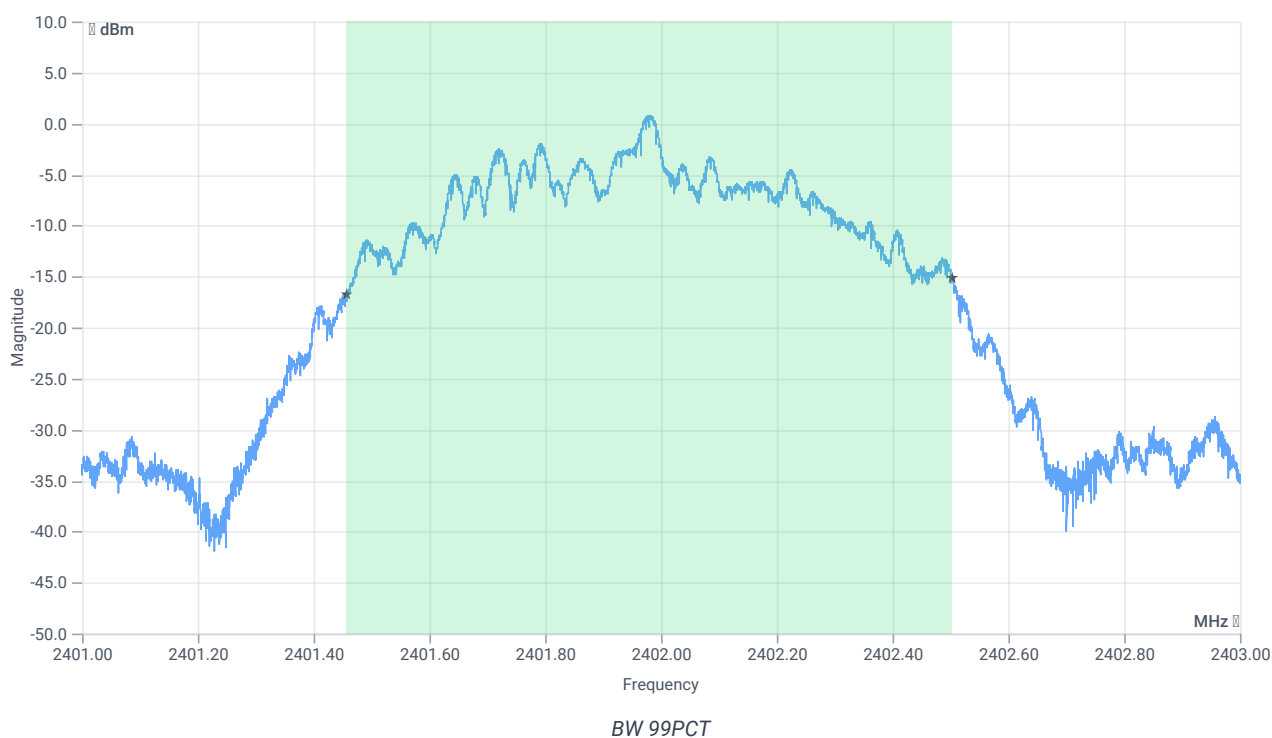
## Test at TX 2402 MHz

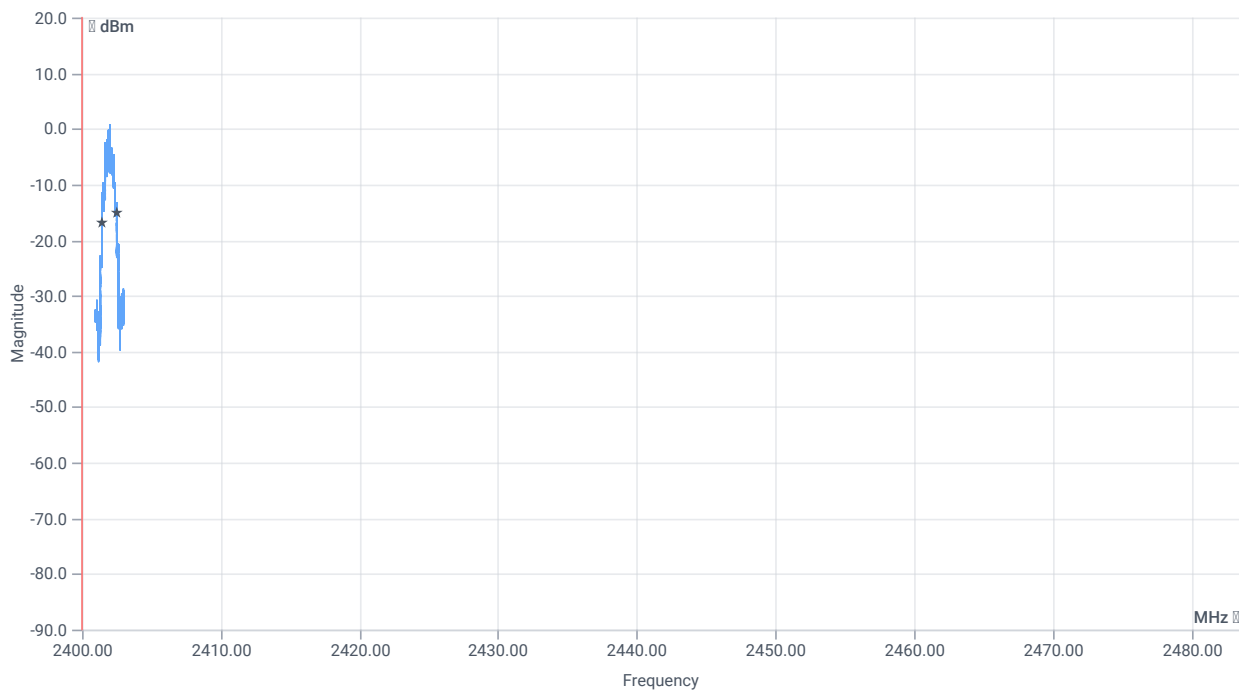
RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.39     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.39   8.85   20       |
| Start [MHz]   Stop [MHz]                             | 2401.000   2403.000    |
| RBW [MHz]   VBW [MHz]                                | 0.020000   0.100000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |





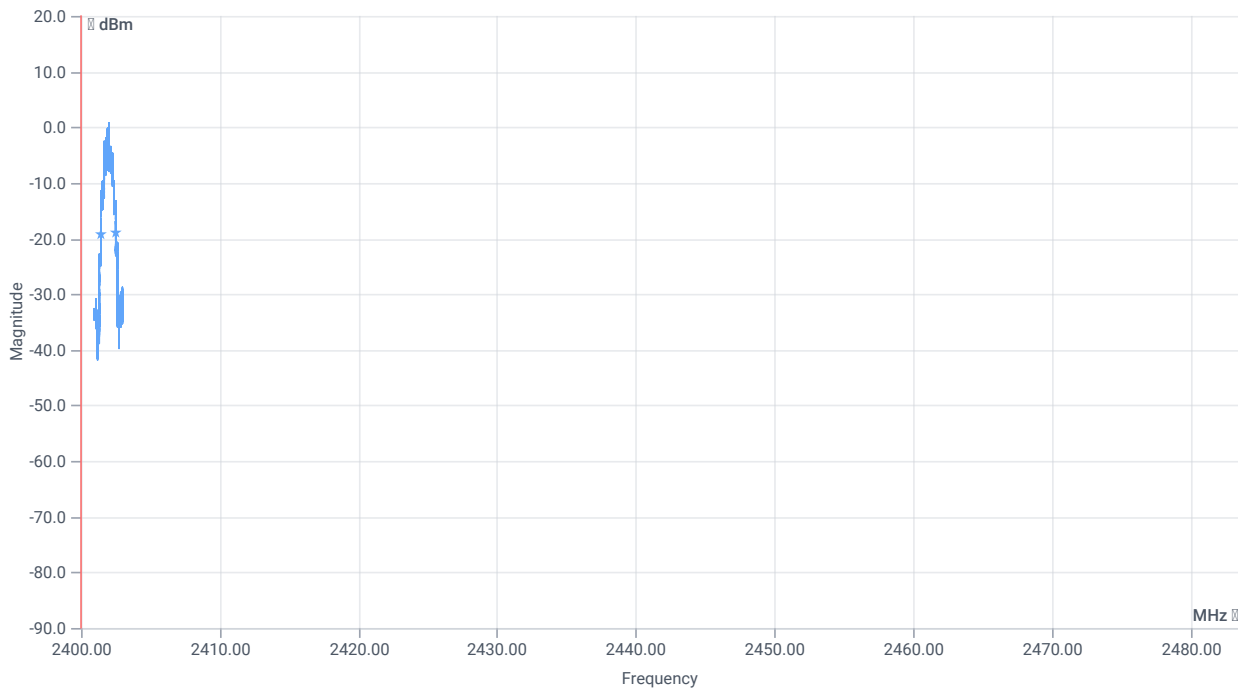
*BW within Band 99PCT*

## RESULT

| DESCRIPTION   | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | ---         | ---         | 1044.000  | kHz  | INFO    |
| T1 99%        | 2400.000000 | ---         | 2401.4585 | MHz  | PASS    |
| T2 99%        | ---         | 2483.500000 | 2402.5029 | MHz  | PASS    |



BW 20dB



BW within band 20dB

## RESULT

| DESCRIPTION    | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB | ---         | ---         | 1130      | kHz  | INFO    |
| T1 20dB        | 2400.000000 | ---         | 2401.4016 | MHz  | PASS    |
| T2 20dB        | ---         | 2483.500000 | 2402.5318 | MHz  | PASS    |

Verdict

PASS

# FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps

## References

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| TC start                                      | 18.03.2025 11:24:32                                |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                          |
| System version                                | 5.1.6.4                                            |
| Standard   Version                            | FCC 15.247, ISED RSS247   NI                       |
| Method                                        |                                                    |
| Description                                   | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps |
| Information                                   |                                                    |

## EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

## Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

## Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | True   Freq [MHz] 2440  |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

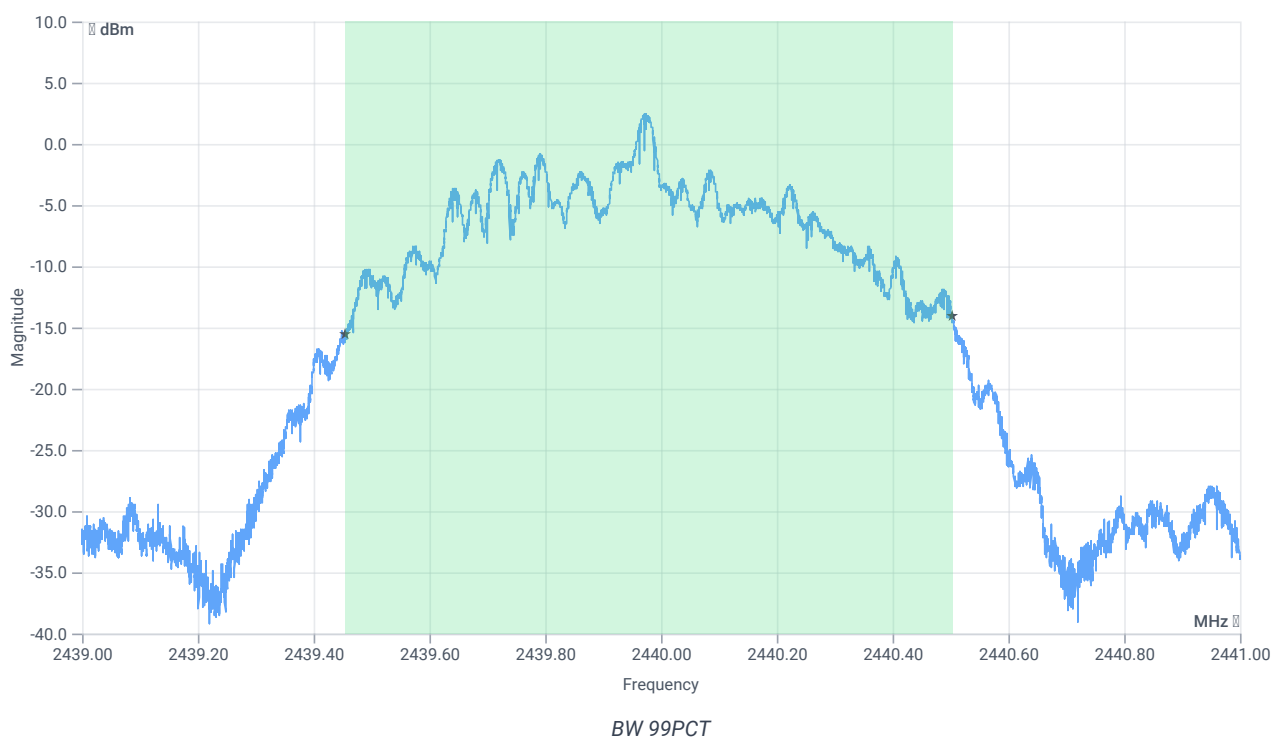
## Test at TX 2440 MHz

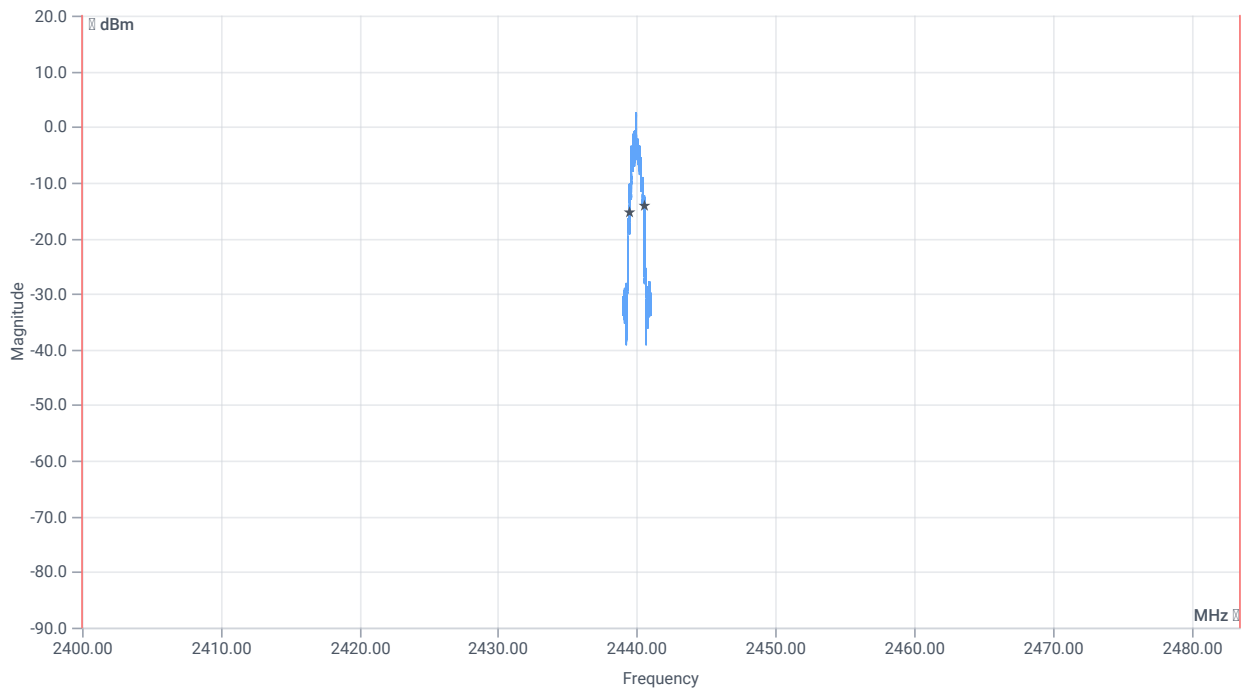
RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.53     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.200 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.53   8.94   20      |
| Start [MHz]   Stop [MHz]                             | 2439.000   2441.000    |
| RBW [MHz]   VBW [MHz]                                | 0.020000   0.100000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

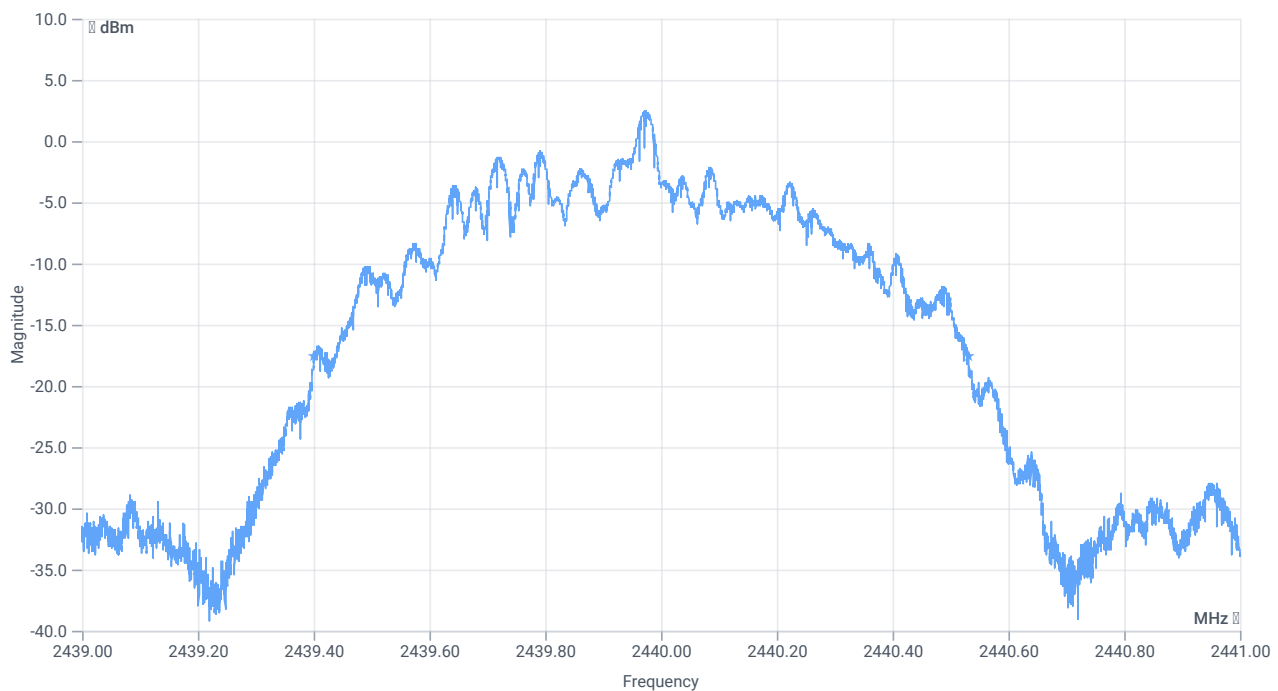




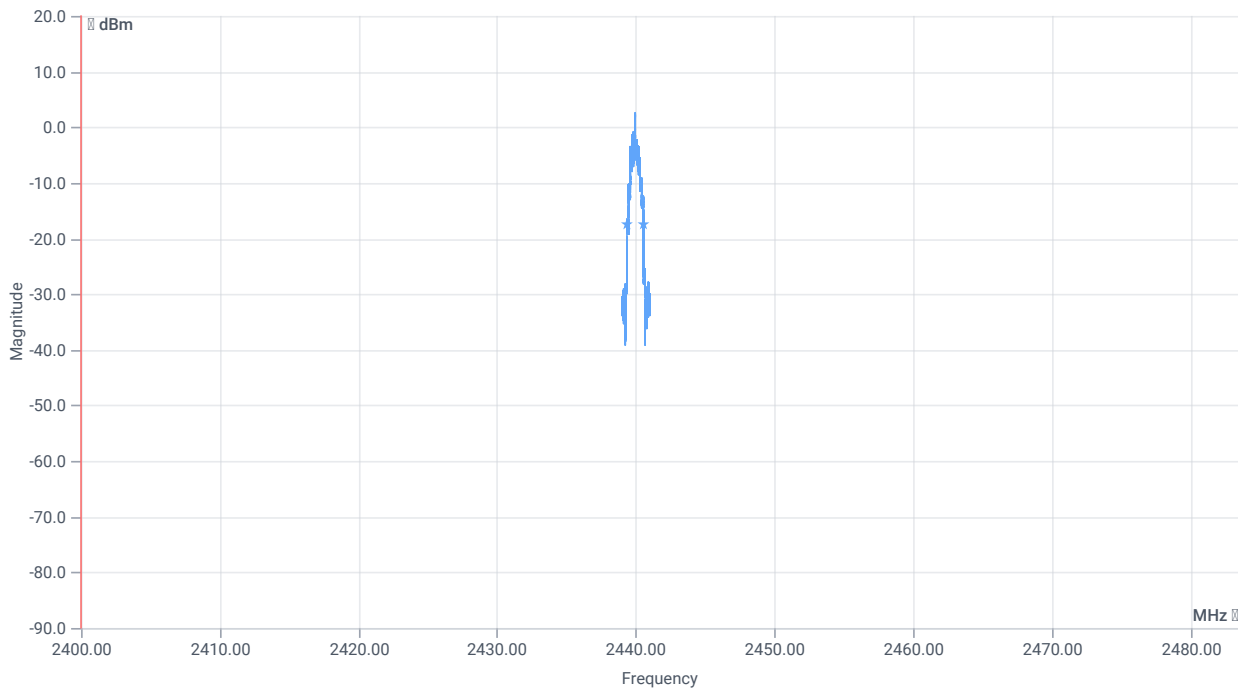
*BW within Band 99PCT*

## RESULT

| DESCRIPTION   | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | ---         | ---         | 1048.000  | kHz  | INFO    |
| T1 99%        | 2400.000000 | ---         | 2439.4547 | MHz  | PASS    |
| T2 99%        | ---         | 2483.500000 | 2440.5023 | MHz  | PASS    |



BW 20dB



BW within band 20dB

## RESULT

| DESCRIPTION    | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB | ---         | ---         | 1130      | kHz  | INFO    |
| T1 20dB        | 2400.000000 | ---         | 2439.4002 | MHz  | PASS    |
| T2 20dB        | ---         | 2483.500000 | 2440.5306 | MHz  | PASS    |

Verdict

PASS

# FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps

## References

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| TC start                                      | 18.03.2025 12:57:05                                |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                          |
| System version                                | 5.1.6.4                                            |
| Standard   Version                            | FCC 15.247, ISED RSS247   NI                       |
| Method                                        |                                                    |
| Description                                   | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps |
| Information                                   |                                                    |

## EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

## Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

## Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | True   Freq [MHz] 2480  |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

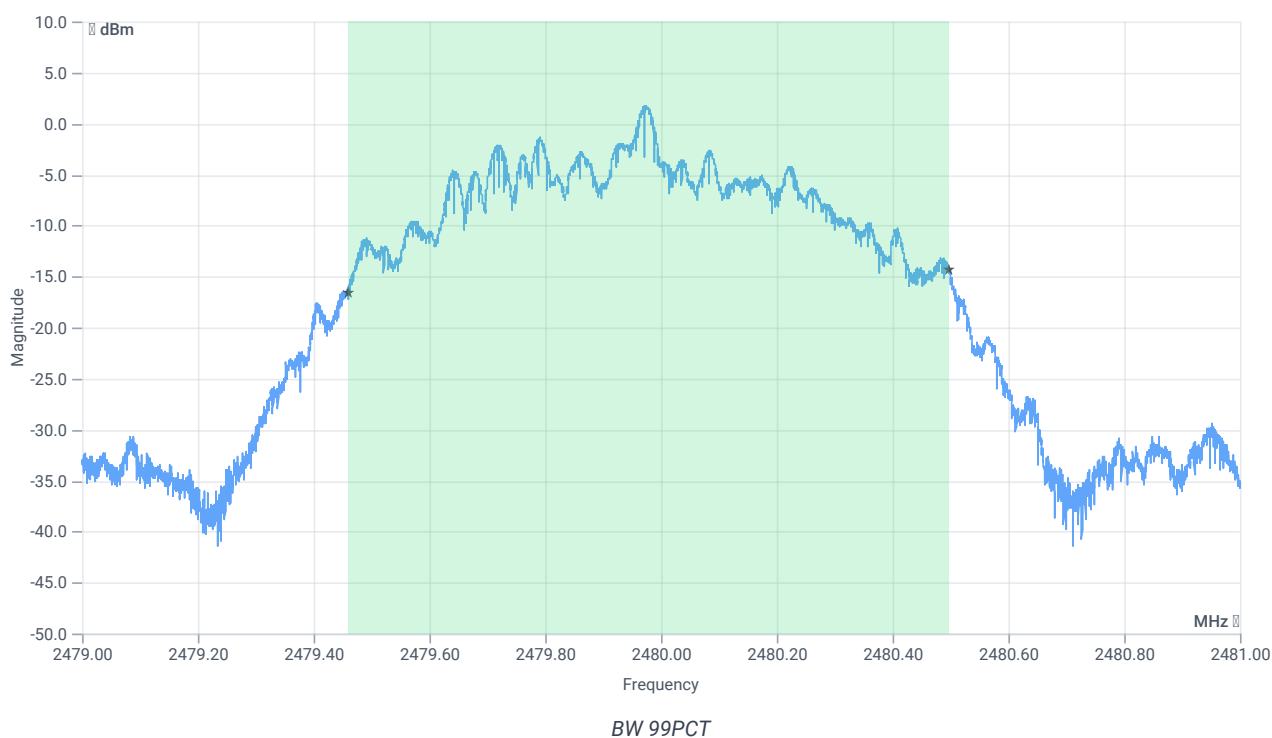
## Test at TX 2480 MHz

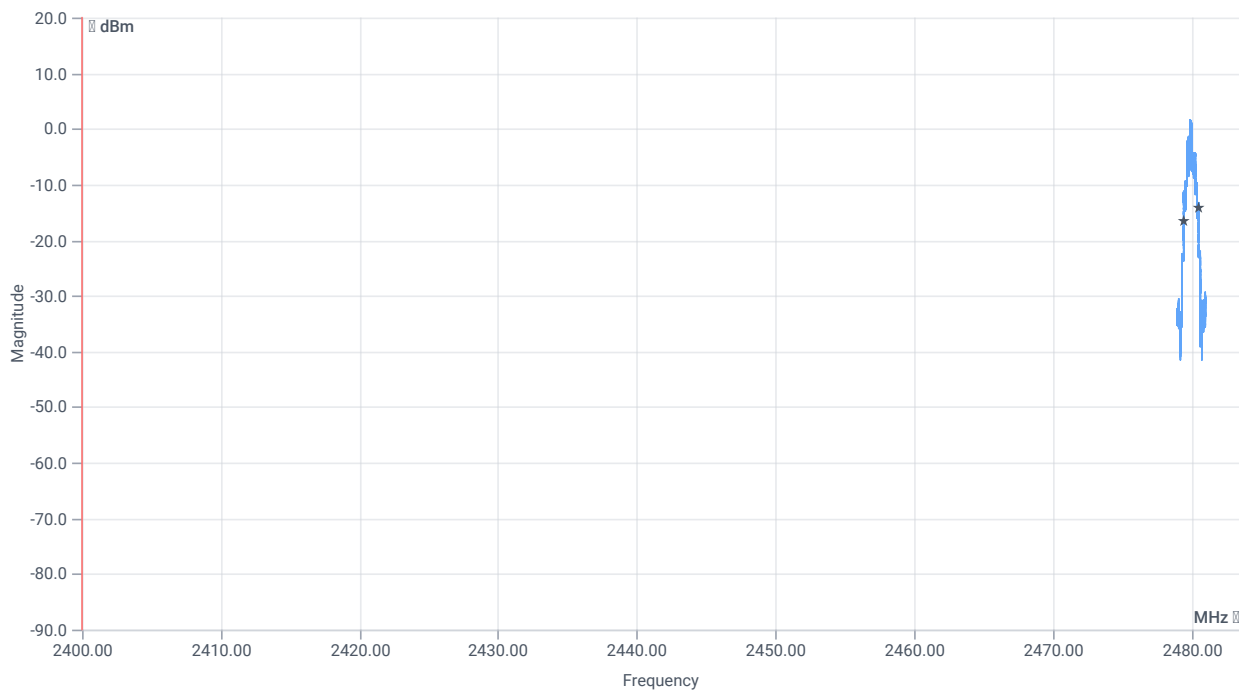
RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.78     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2480.200 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.78   9.03   20       |
| Start [MHz]   Stop [MHz]                             | 2479.000   2481.000    |
| RBW [MHz]   VBW [MHz]                                | 0.020000   0.100000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

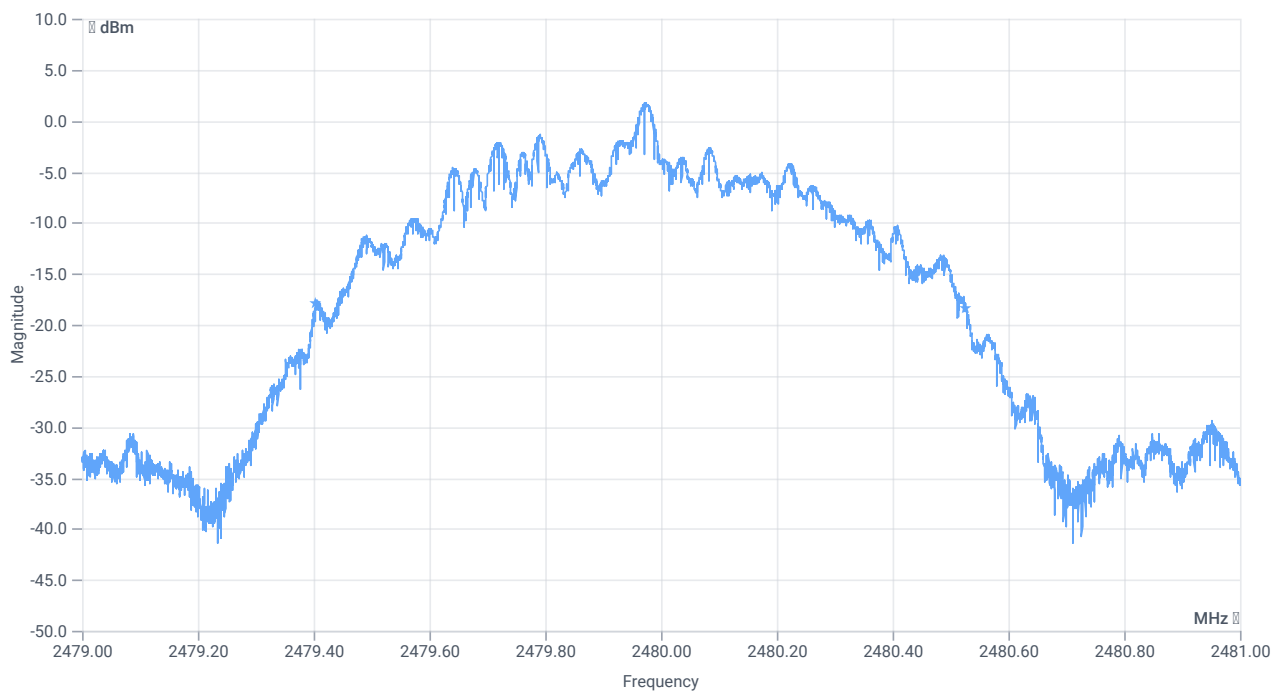




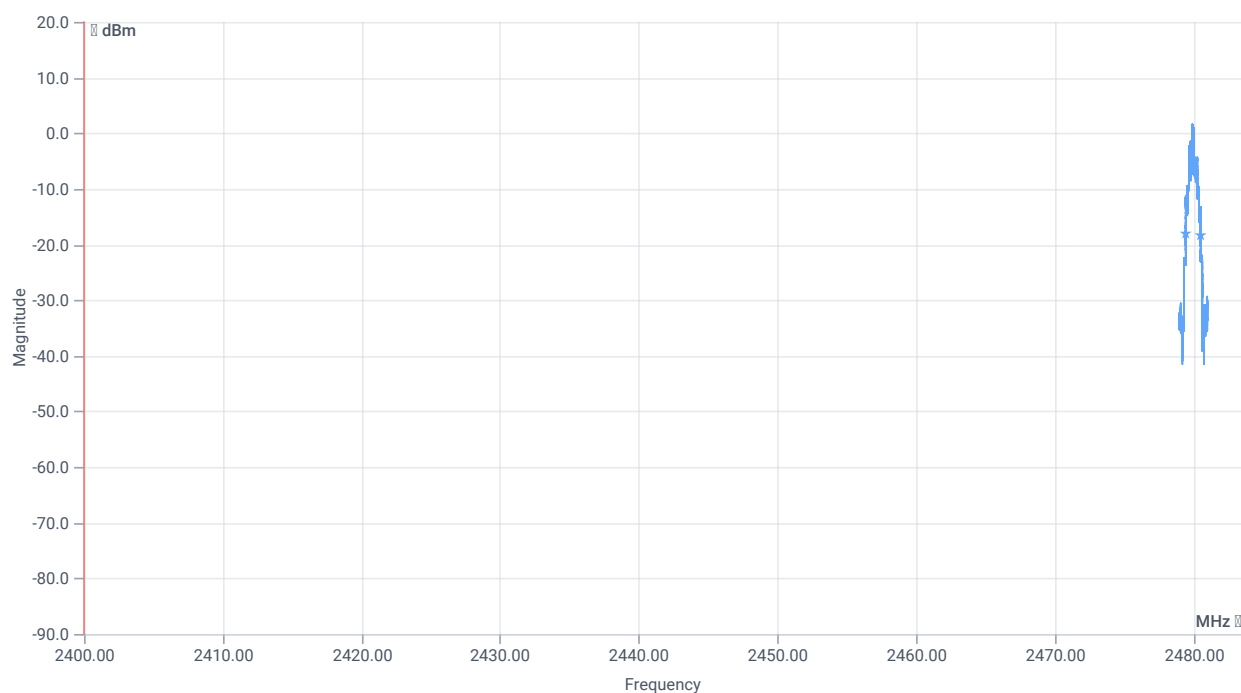
*BW within Band 99PCT*

## RESULT

| DESCRIPTION   | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | ---         | ---         | 1035.000  | kHz  | INFO    |
| T1 99%        | 2400.000000 | ---         | 2479.4609 | MHz  | PASS    |
| T2 99%        | ---         | 2483.500000 | 2480.4958 | MHz  | PASS    |



BW 20dB



BW within band 20dB

## RESULT

| DESCRIPTION    | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB | ---         | ---         | 1123      | kHz  | INFO    |
| T1 20dB        | 2400.000000 | ---         | 2479.4040 | MHz  | PASS    |
| T2 20dB        | ---         | 2483.500000 | 2480.5268 | MHz  | PASS    |

Verdict

PASS

# FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 2 Msps

## References

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| TC start                                      | 18.03.2025 13:14:43                                |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                          |
| System version                                | 5.1.6.4                                            |
| Standard   Version                            | FCC 15.247, ISED RSS247   NI                       |
| Method                                        |                                                    |
| Description                                   | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps |
| Information                                   |                                                    |

## EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

## Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

## Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | True   Freq [MHz] 2402  |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

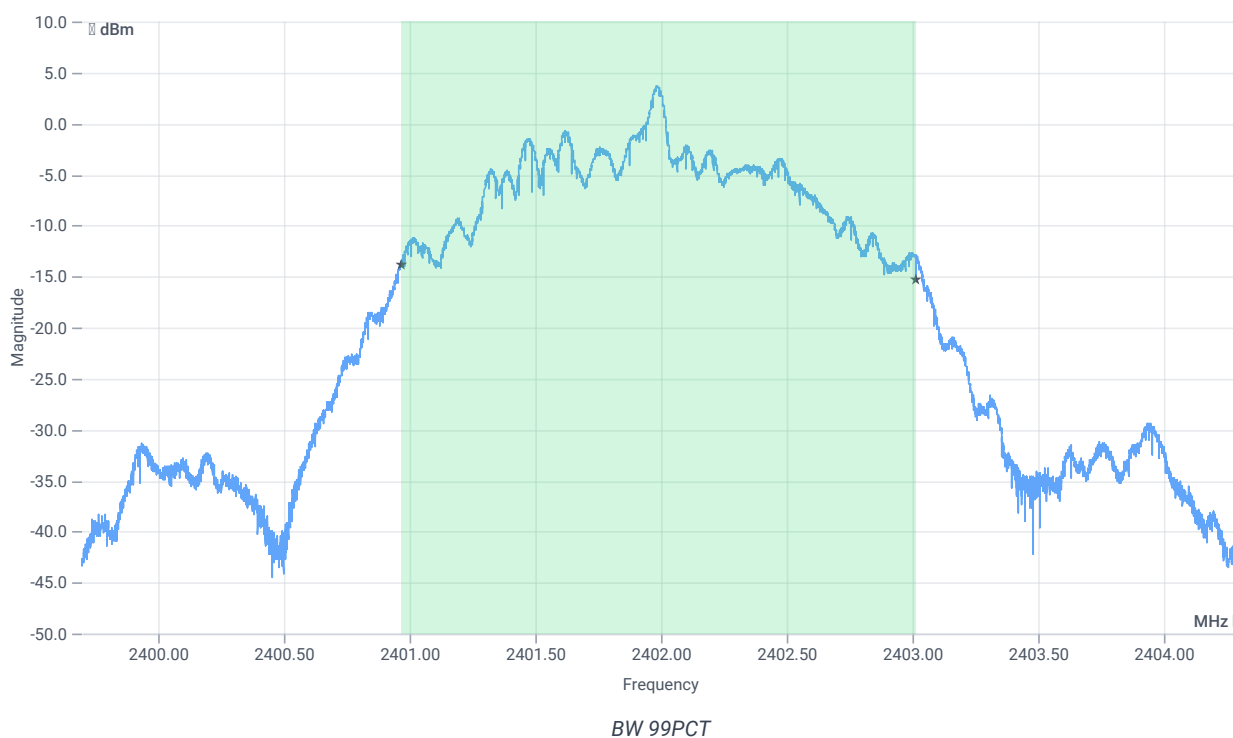
## Test at TX 2402 MHz

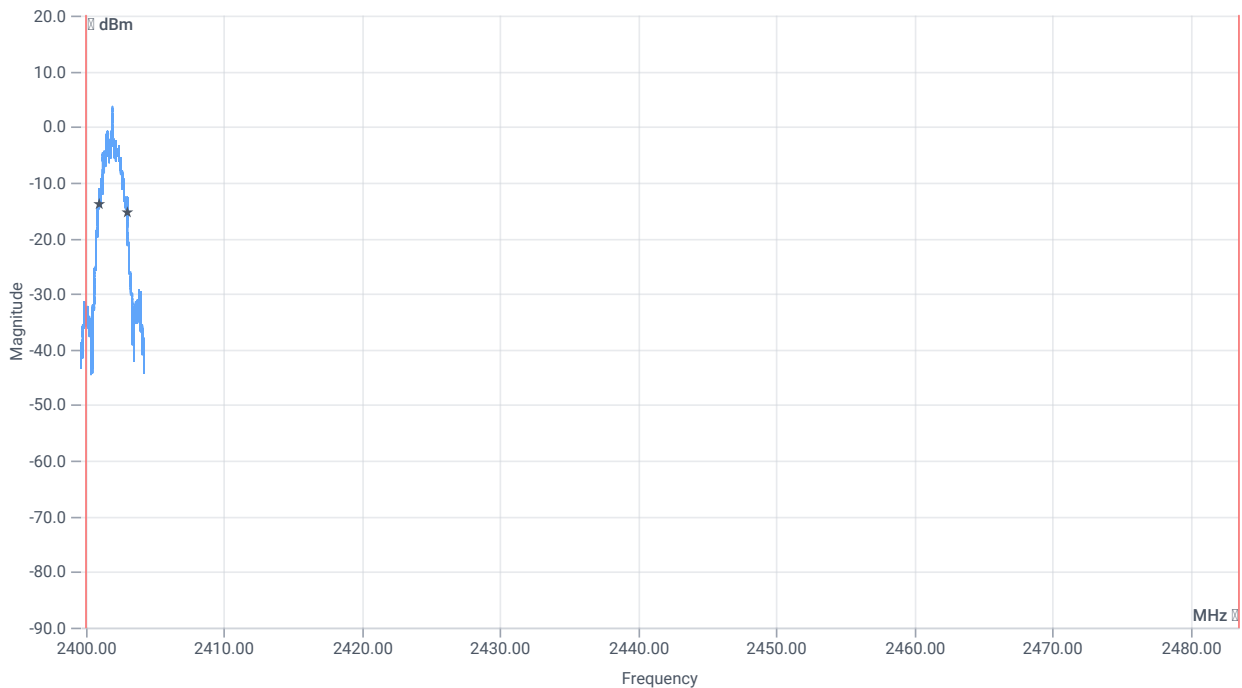
RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.35     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.600 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.35   8.85   20       |
| Start [MHz]   Stop [MHz]                             | 2399.700   2404.300    |
| RBW [MHz]   VBW [MHz]                                | 0.050000   0.200000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

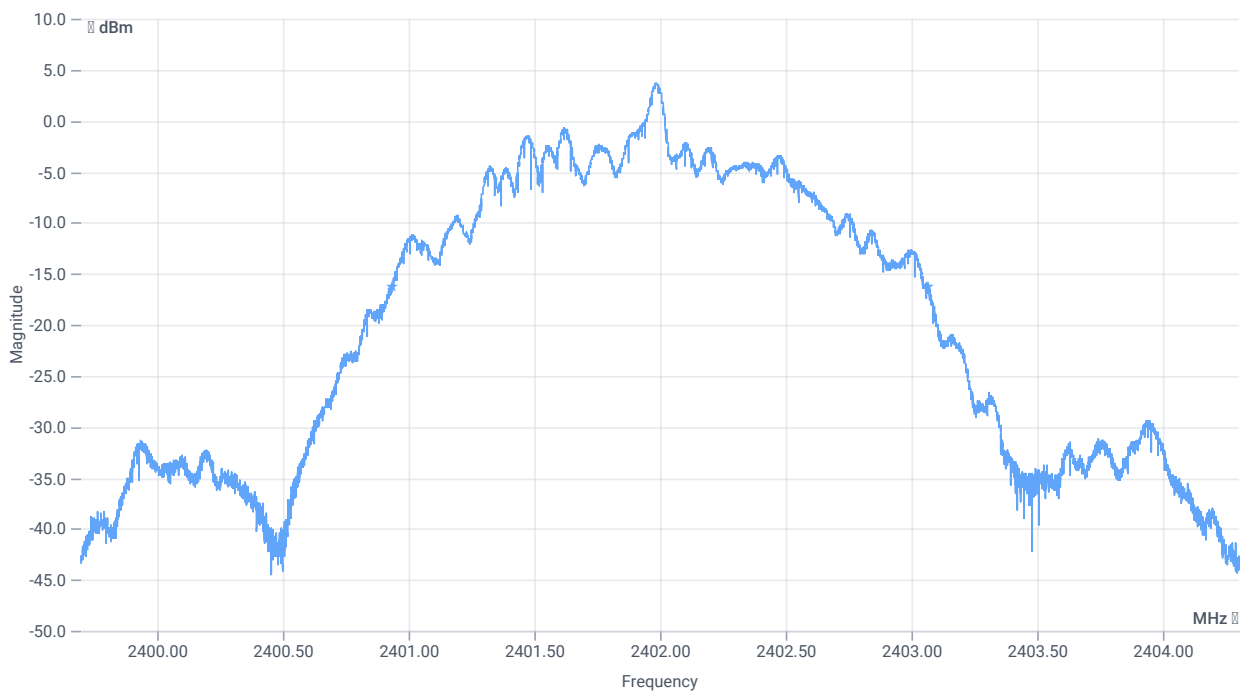




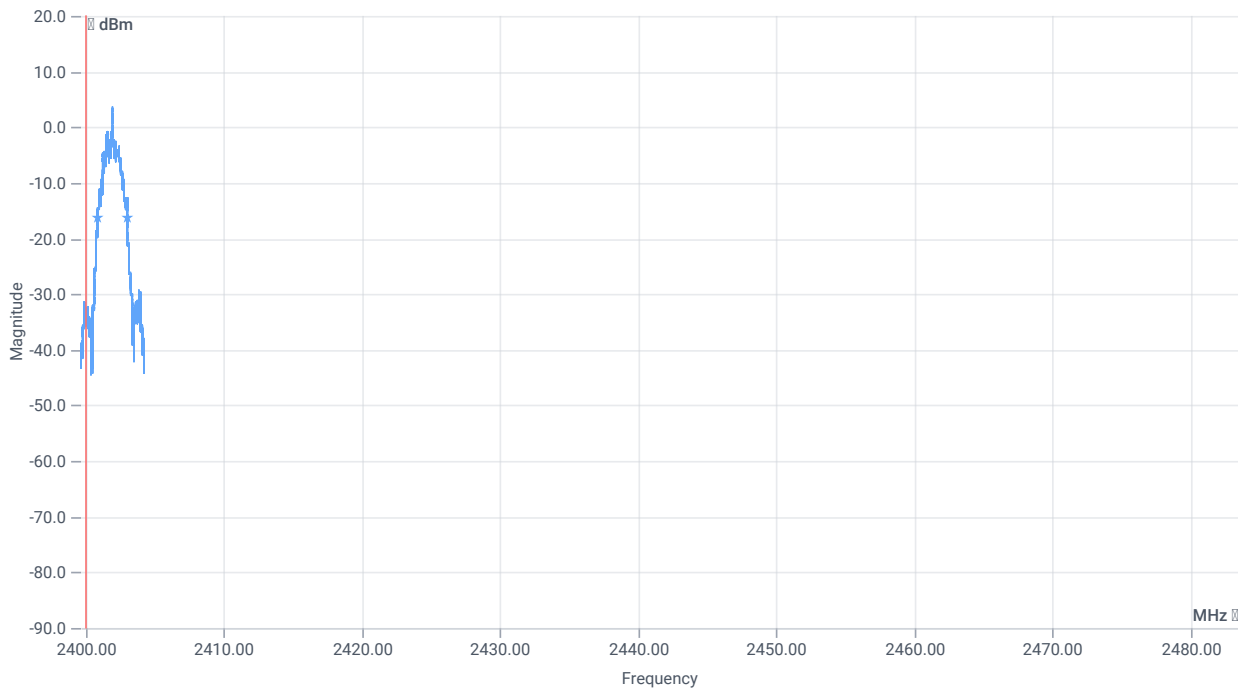
*BW within Band 99PCT*

## RESULT

| DESCRIPTION   | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | ---         | ---         | 2048.000  | kHz  | INFO    |
| T1 99%        | 2400.000000 | ---         | 2400.9665 | MHz  | PASS    |
| T2 99%        | ---         | 2483.500000 | 2403.0142 | MHz  | PASS    |



BW 20dB



BW within band 20dB

## RESULT

| DESCRIPTION    | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB | ---         | ---         | 2128      | kHz  | INFO    |
| T1 20dB        | 2400.000000 | ---         | 2400.9346 | MHz  | PASS    |
| T2 20dB        | ---         | 2483.500000 | 2403.0621 | MHz  | PASS    |

Verdict

PASS

# FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 2 Msps

## References

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| TC start                                      | 18.03.2025 13:40:03                                |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                          |
| System version                                | 5.1.6.4                                            |
| Standard   Version                            | FCC 15.247, ISED RSS247   NI                       |
| Method                                        |                                                    |
| Description                                   | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps |
| Information                                   |                                                    |

## EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

## Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

## Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | True   Freq [MHz] 2440  |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

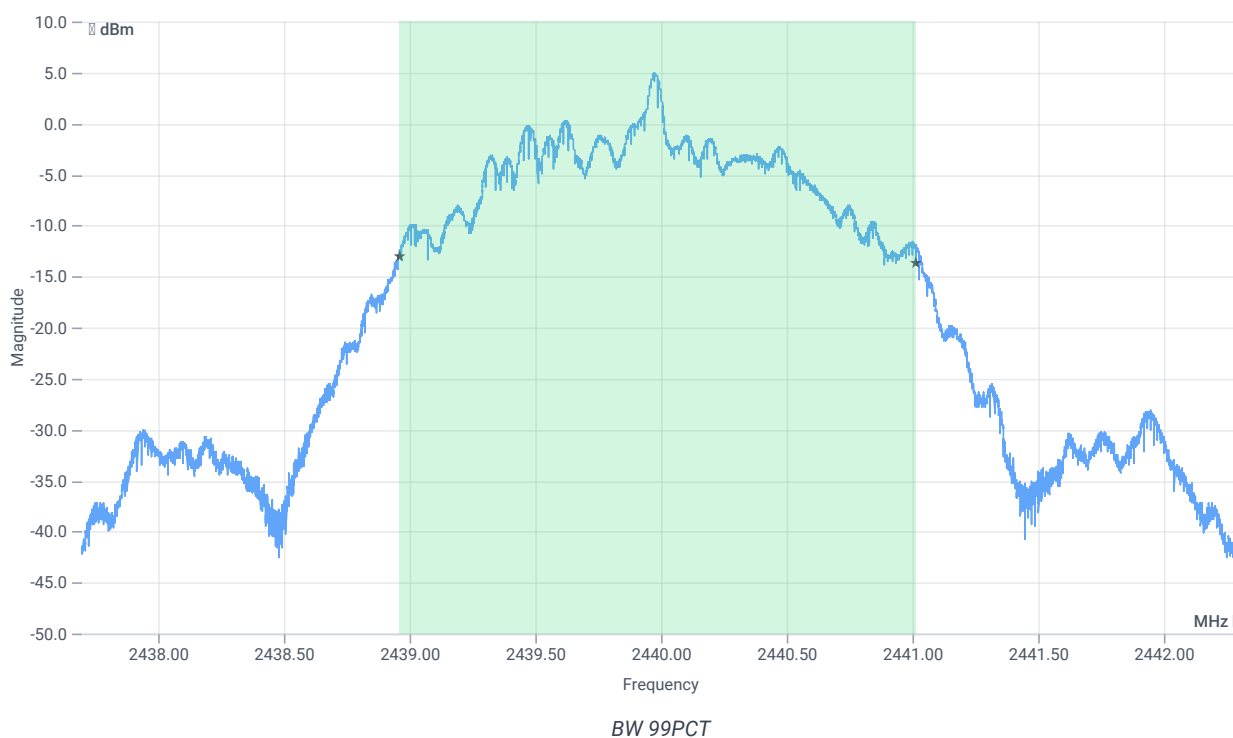
## Test at TX 2440 MHz

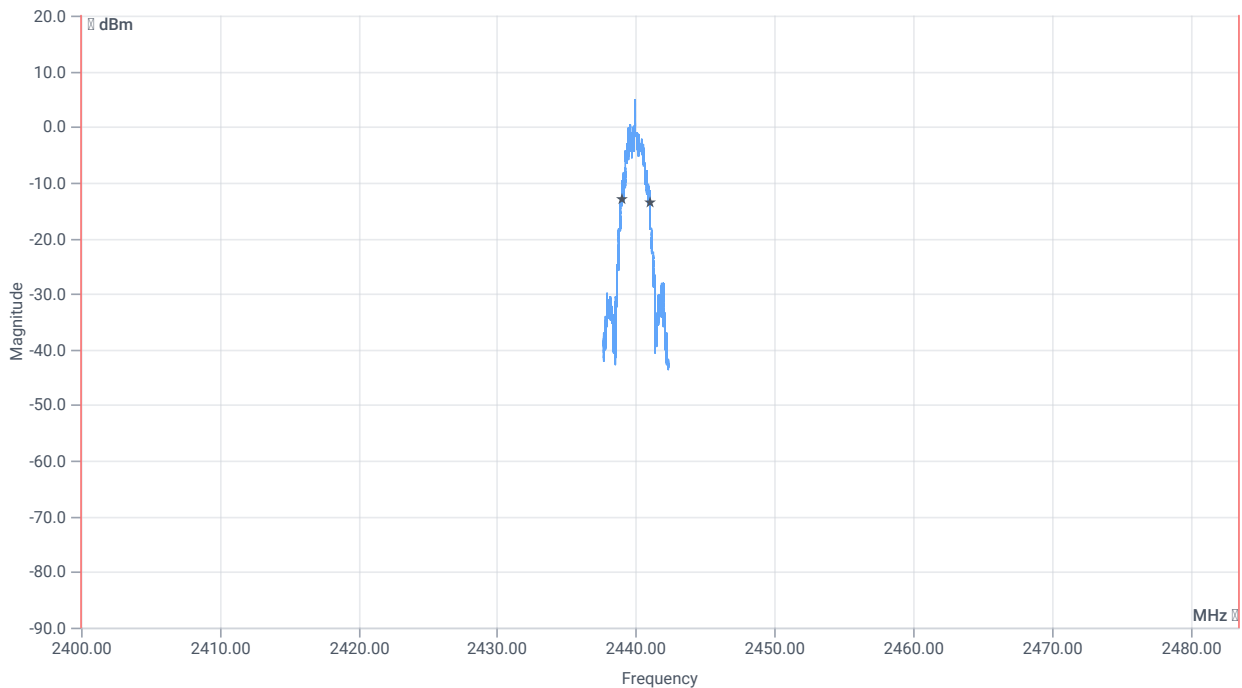
RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.57     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.400 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.57   8.94   20      |
| Start [MHz]   Stop [MHz]                             | 2437.700   2442.300    |
| RBW [MHz]   VBW [MHz]                                | 0.050000   0.200000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

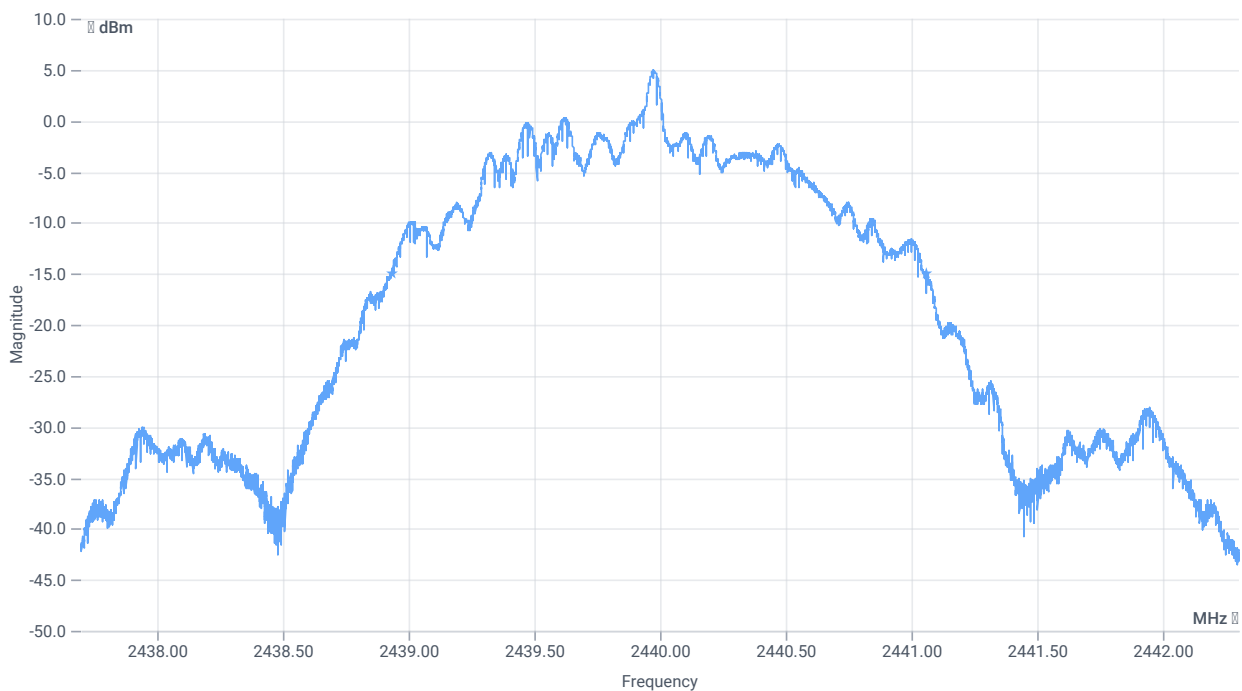




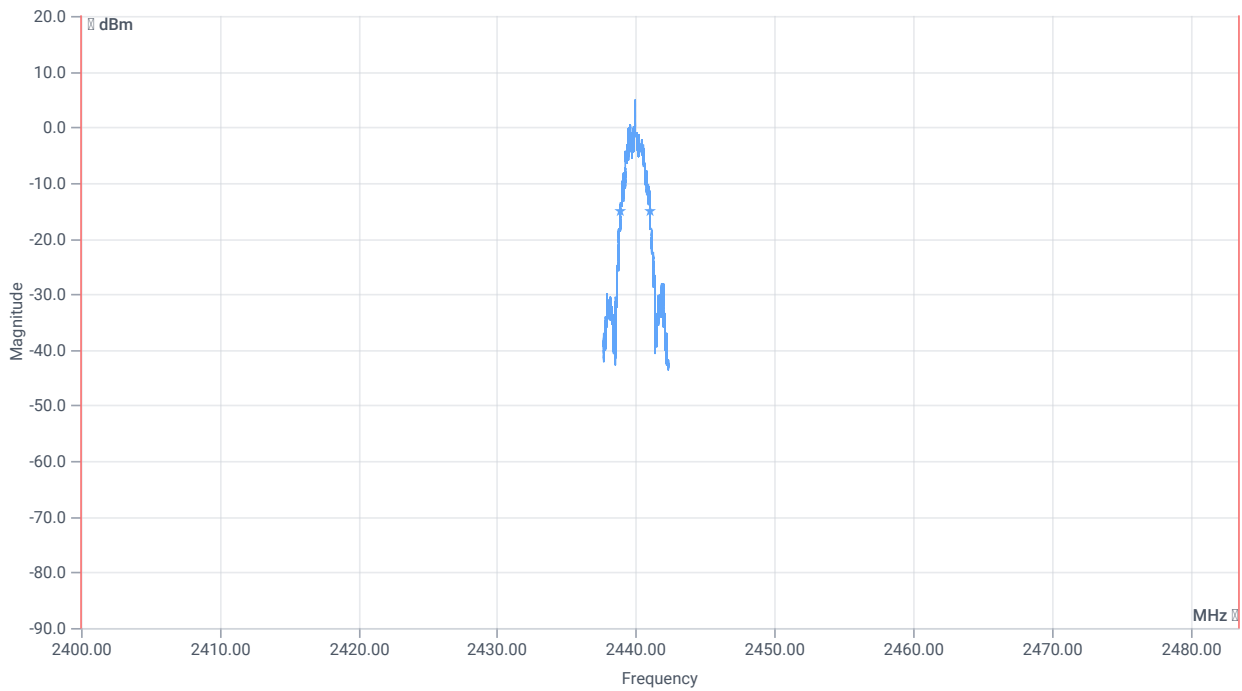
*BW within Band 99PCT*

## RESULT

| DESCRIPTION   | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | ---         | ---         | 2054.000  | kHz  | INFO    |
| T1 99%        | 2400.000000 | ---         | 2438.9591 | MHz  | PASS    |
| T2 99%        | ---         | 2483.500000 | 2441.0128 | MHz  | PASS    |



BW 20dB



BW within band 20dB

## RESULT

| DESCRIPTION    | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB | ---         | ---         | 2128      | kHz  | INFO    |
| T1 20dB        | 2400.000000 | ---         | 2438.9323 | MHz  | PASS    |
| T2 20dB        | ---         | 2483.500000 | 2441.0608 | MHz  | PASS    |

Verdict

PASS

# FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 2 Msps

## References

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| TC start                                      | 18.03.2025 13:58:23                                |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                          |
| System version                                | 5.1.6.4                                            |
| Standard   Version                            | FCC 15.247, ISED RSS247   NI                       |
| Method                                        |                                                    |
| Description                                   | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps |
| Information                                   |                                                    |

## EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

## Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

## Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | True   Freq [MHz] 2480  |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

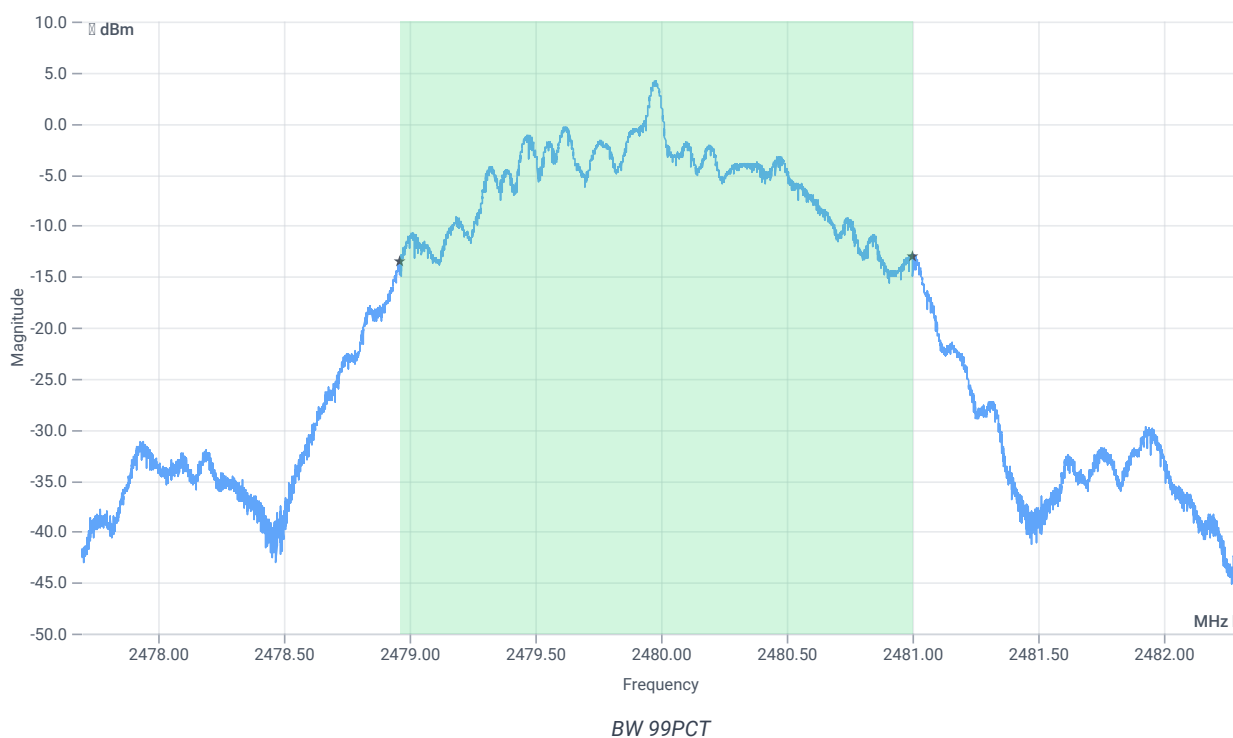
## Test at TX 2480 MHz

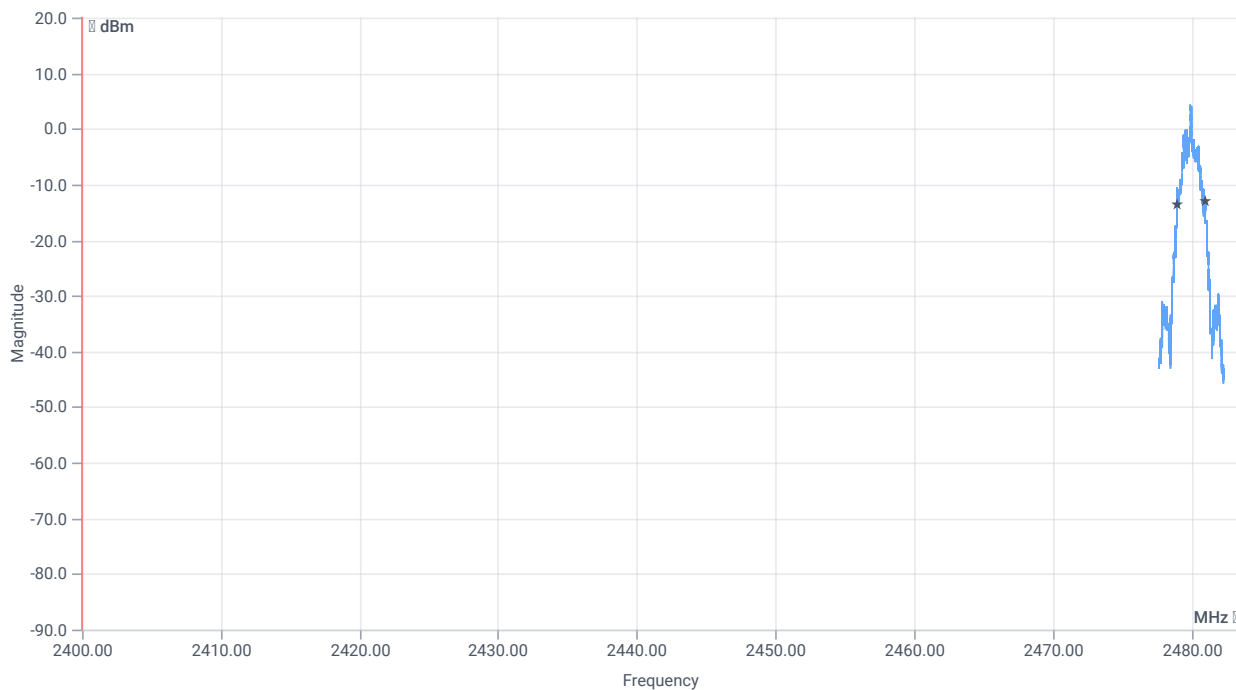
RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.76     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2479.500 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.76   9.03   20       |
| Start [MHz]   Stop [MHz]                             | 2477.700   2482.300    |
| RBW [MHz]   VBW [MHz]                                | 0.050000   0.200000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: time [ms]   count   points per Section   type | 50   200   10001   SWE |

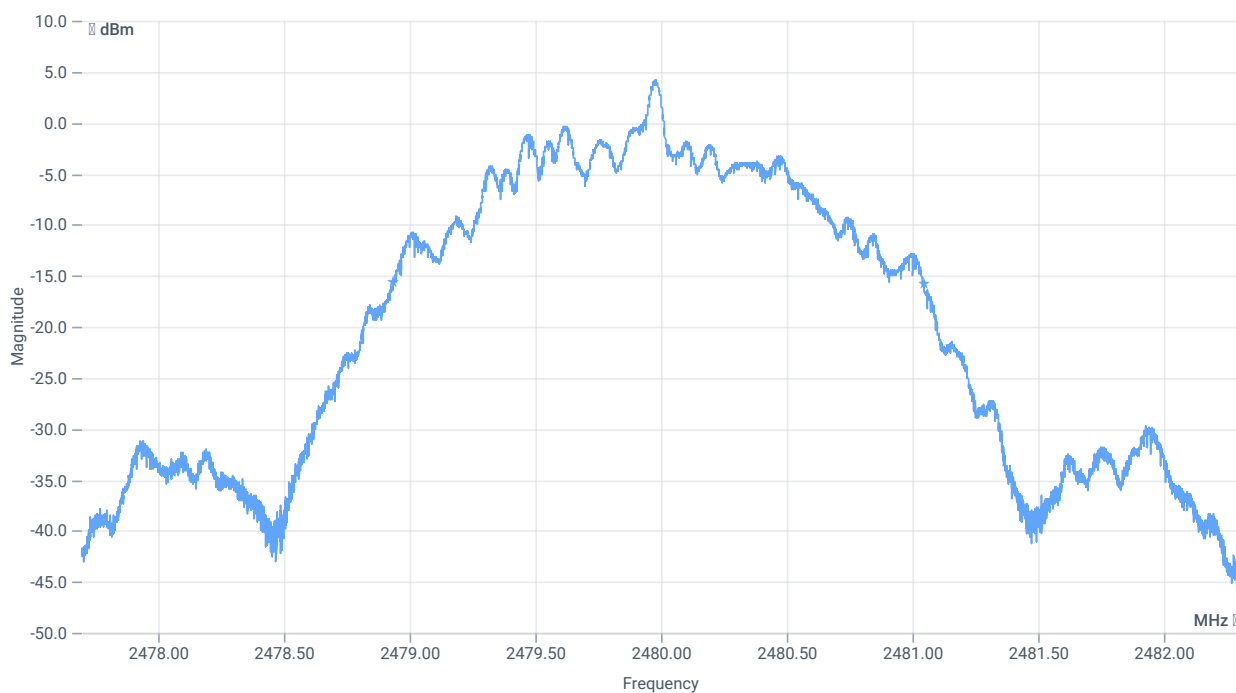




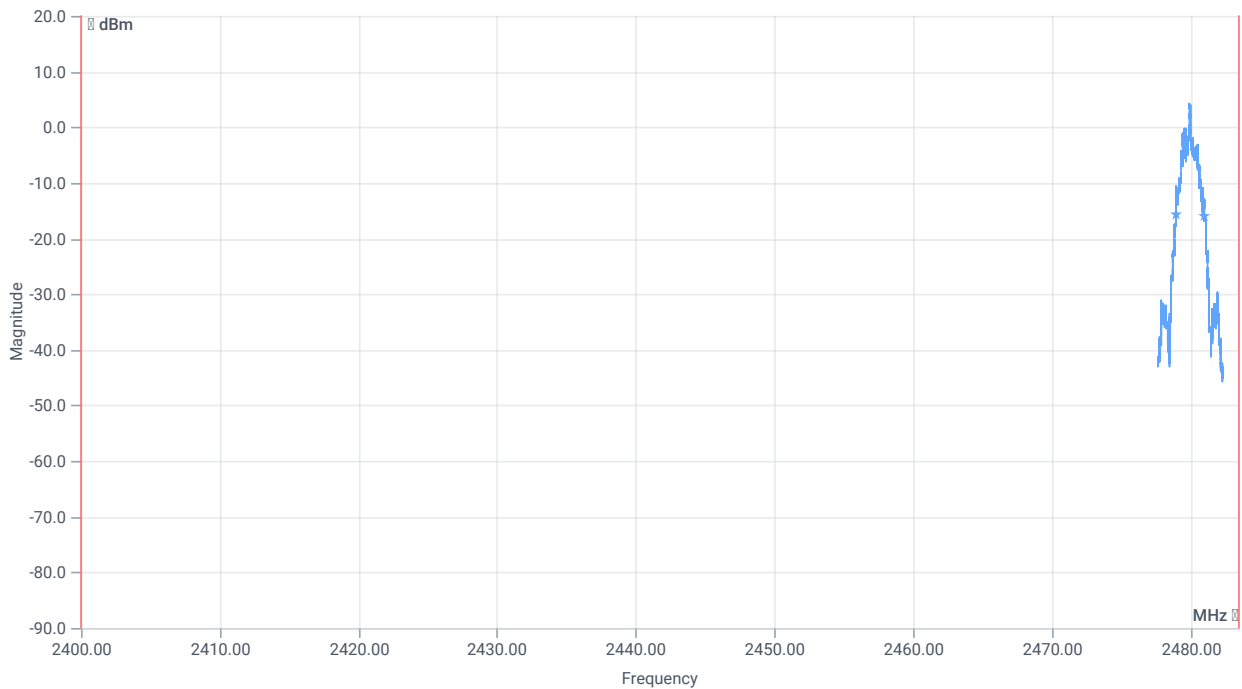
*BW within Band 99PCT*

## RESULT

| DESCRIPTION   | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | ---         | ---         | 2037.000  | kHz  | INFO    |
| T1 99%        | 2400.000000 | ---         | 2478.9642 | MHz  | PASS    |
| T2 99%        | ---         | 2483.500000 | 2481.0013 | MHz  | PASS    |



BW 20dB



BW within band 20dB

## RESULT

| DESCRIPTION    | LOWER LIMIT | UPPER LIMIT | MEASURED  | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB | ---         | ---         | 2108      | kHz  | INFO    |
| T1 20dB        | 2400.000000 | ---         | 2478.9346 | MHz  | PASS    |
| T2 20dB        | ---         | 2483.500000 | 2481.0428 | MHz  | PASS    |

Verdict

PASS

## FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps

### References

|                                               |                                                                                                                  |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 10:58:43                                                                                              |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                        |
| System version                                | 5.1.6.4                                                                                                          |
| Standard   Version                            | FCC 15.247   NI                                                                                                  |
| Method                                        | IF DTS then 8.5 DTS emissions in non-restricted frequency bands:<br>Subclause 11.11 of ANSI C63.10 is applicable |
| Description                                   | FCC 15.247 TX emissions conducted DTS - BT LE 1 Msps                                                             |
| Information                                   |                                                                                                                  |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | True   Freq [MHz] 2402  |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

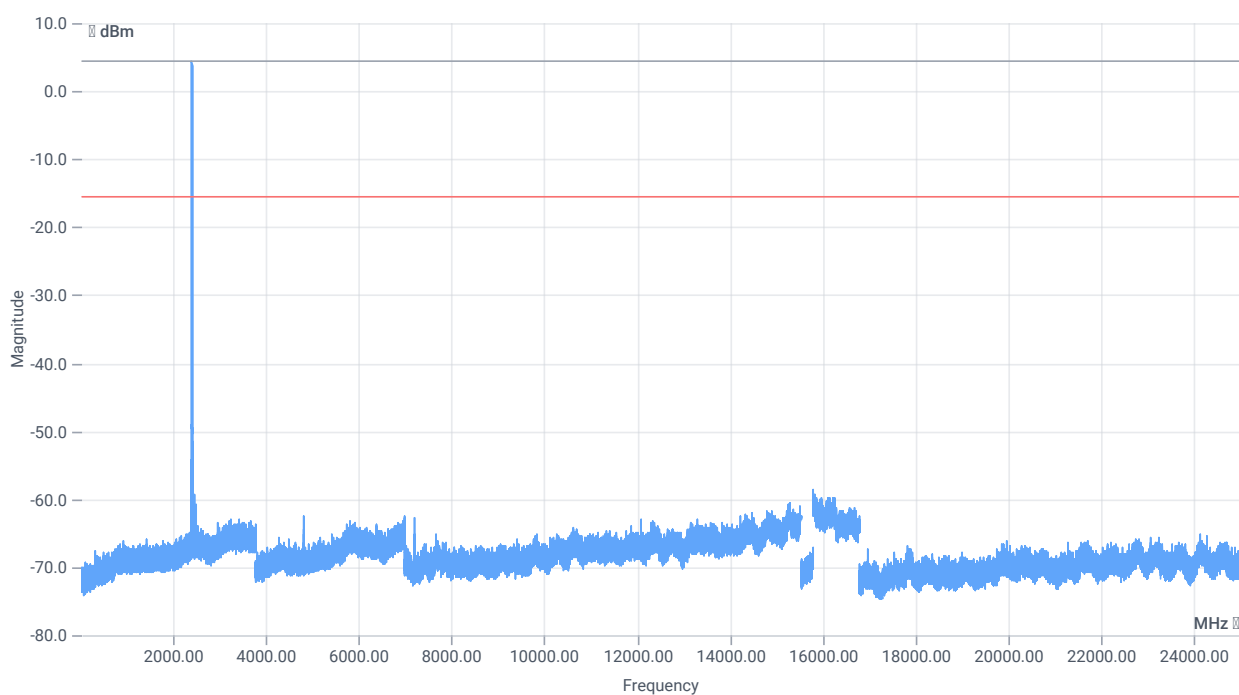
## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2402 MHz

RESULT: Reference power cond.

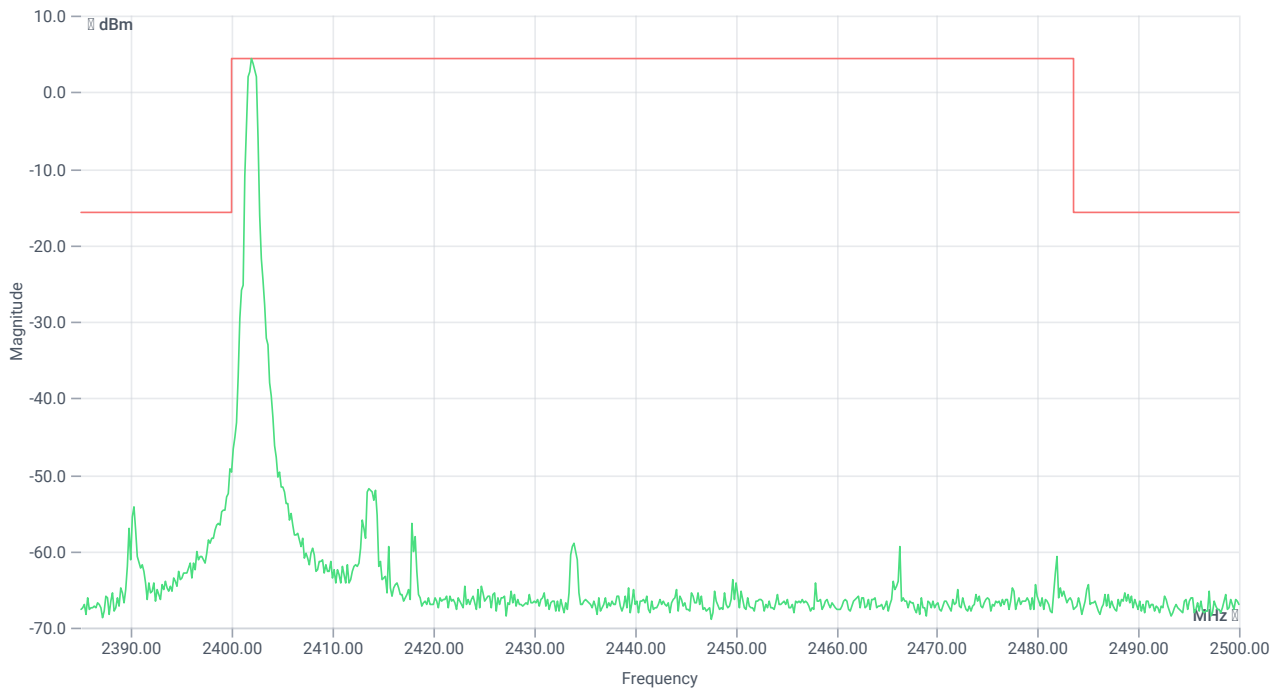
| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.38     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |



TX emissions

## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 4.38   17.03   5      |
| Start [MHz]   Stop [MHz]                             | 24780.000   25000.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 200   25   1501   SWE |



## RESULT

| DESCRIPTION                         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2402.00 MHz             | ---         | ---         | 4.34     | dBm  | INFO    |
| No peaks detected                   | ---         | ---         |          |      | PASS    |
| Lowest margin to limit 2399.833 MHz | 0           | ---         | 33.49    | dB   | INFO    |

Verdict

PASS

## FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps

### References

|                                               |                                                                                                                  |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 11:25:12                                                                                              |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                        |
| System version                                | 5.1.6.4                                                                                                          |
| Standard   Version                            | FCC 15.247   NI                                                                                                  |
| Method                                        | IF DTS then 8.5 DTS emissions in non-restricted frequency bands:<br>Subclause 11.11 of ANSI C63.10 is applicable |
| Description                                   | FCC 15.247 TX emissions conducted DTS - BT LE 1 Msps                                                             |
| Information                                   |                                                                                                                  |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | True   Freq [MHz] 2440  |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

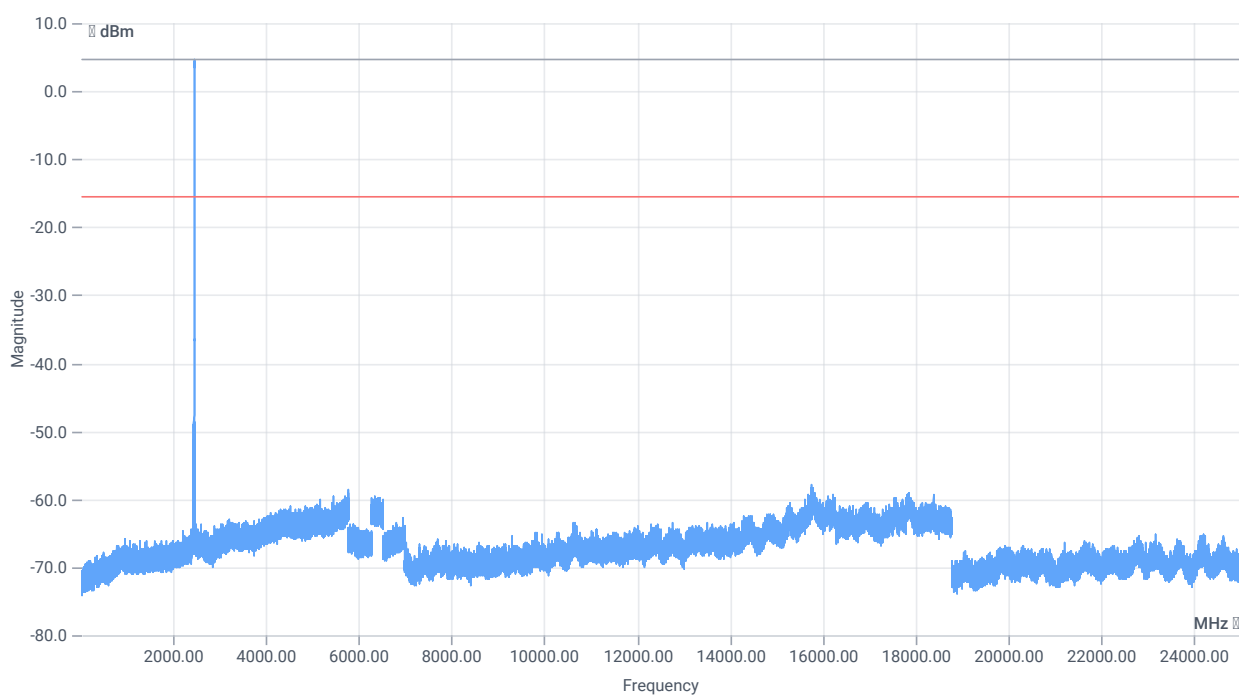
## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2440 MHz

RESULT: Reference power cond.

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.56     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.200 | MHz  | INFO    |



TX emissions

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 5.56   17.03   5      |
| Start [MHz]   Stop [MHz]                             | 24780.000   25000.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 200   25   1501   SWE |



## RESULT

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2440.33 MHz       | ---         | ---         | 4.56     | dBm  | INFO    |
| No peaks detected             | ---         | ---         |          |      | PASS    |
| Lowest margin to limit 30 MHz | 0           | ---         | -129.13  | dB   | INFO    |

Verdict

PASS

## FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps

### References

|                                               |                                                                                                                  |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 12:57:45                                                                                              |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                        |
| System version                                | 5.1.6.4                                                                                                          |
| Standard   Version                            | FCC 15.247   NI                                                                                                  |
| Method                                        | IF DTS then 8.5 DTS emissions in non-restricted frequency bands:<br>Subclause 11.11 of ANSI C63.10 is applicable |
| Description                                   | FCC 15.247 TX emissions conducted DTS - BT LE 1 Msps                                                             |
| Information                                   |                                                                                                                  |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 1 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | True   Freq [MHz] 2480  |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

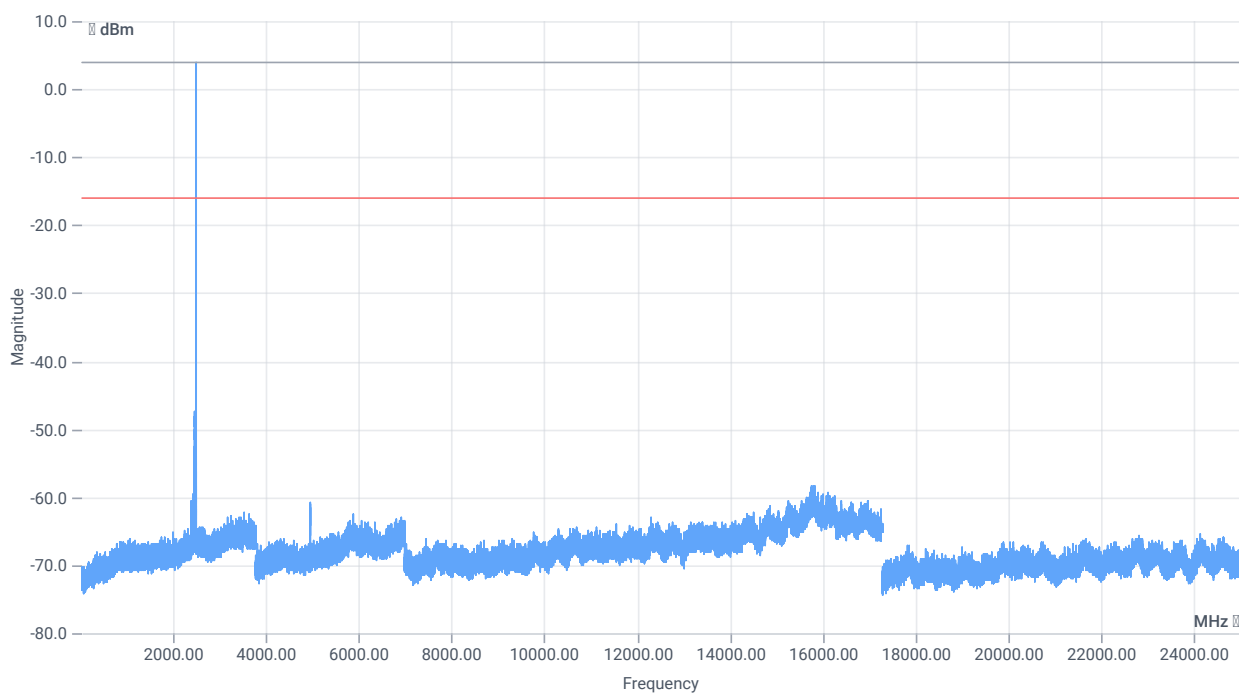
## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2480 MHz

RESULT: Reference power cond.

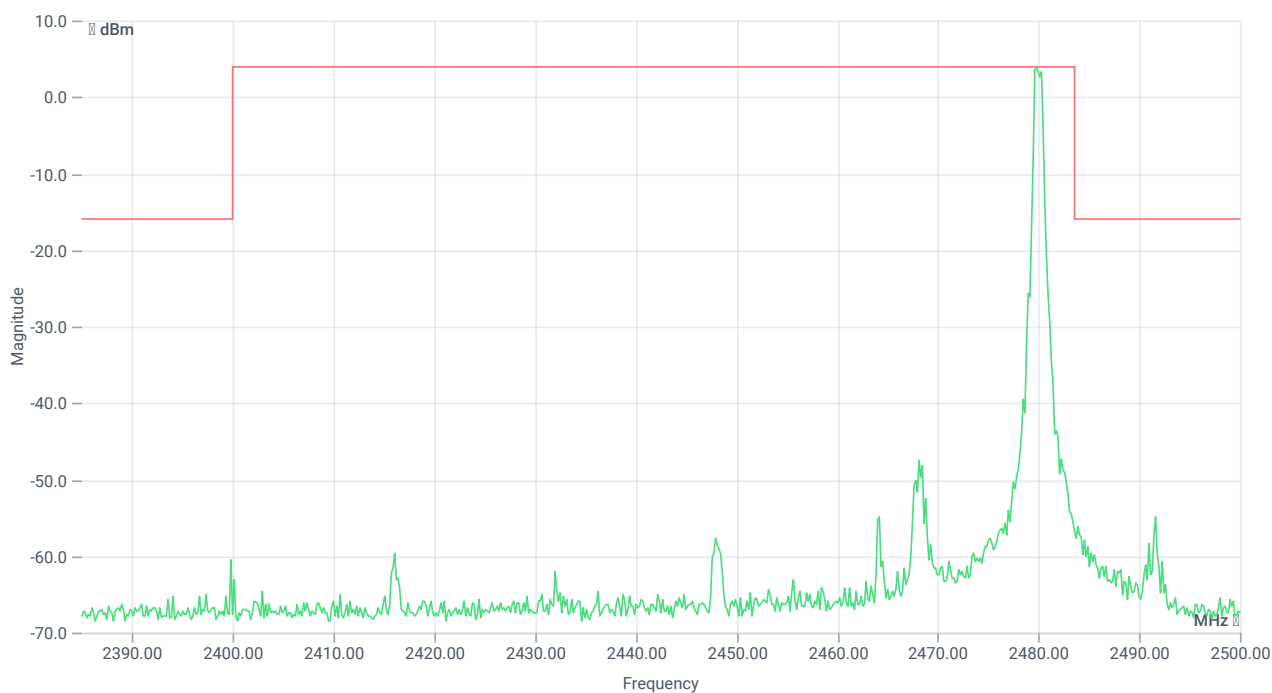
| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.79     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2479.700 | MHz  | INFO    |



TX emissions

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 4.79   17.03   5      |
| Start [MHz]   Stop [MHz]                             | 24780.000   25000.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 200   25   1501   SWE |



## RESULT

| DESCRIPTION                         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2479.83 MHz             | ---         | ---         | 4.02     | dBm  | INFO    |
| No peaks detected                   | ---         | ---         |          |      | PASS    |
| Lowest margin to limit 2491.667 MHz | 0           | ---         | 38.91    | dB   | INFO    |

Verdict

PASS

## FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 2 Msps

### References

|                                               |                                                                                                                  |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 13:15:24                                                                                              |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                        |
| System version                                | 5.1.6.4                                                                                                          |
| Standard   Version                            | FCC 15.247   NI                                                                                                  |
| Method                                        | IF DTS then 8.5 DTS emissions in non-restricted frequency bands:<br>Subclause 11.11 of ANSI C63.10 is applicable |
| Description                                   | FCC 15.247 TX emissions conducted DTS - BT LE 2 Msps                                                             |
| Information                                   |                                                                                                                  |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | True   Freq [MHz] 2402  |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

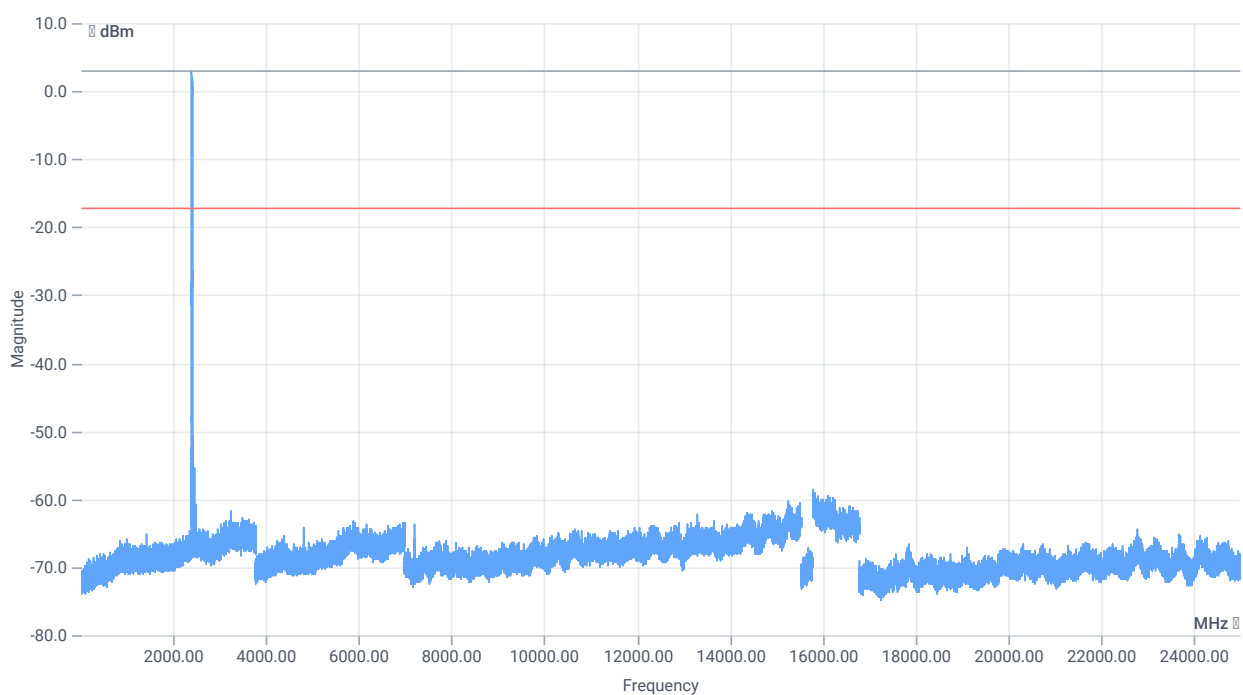
## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2402 MHz

RESULT: Reference power cond.

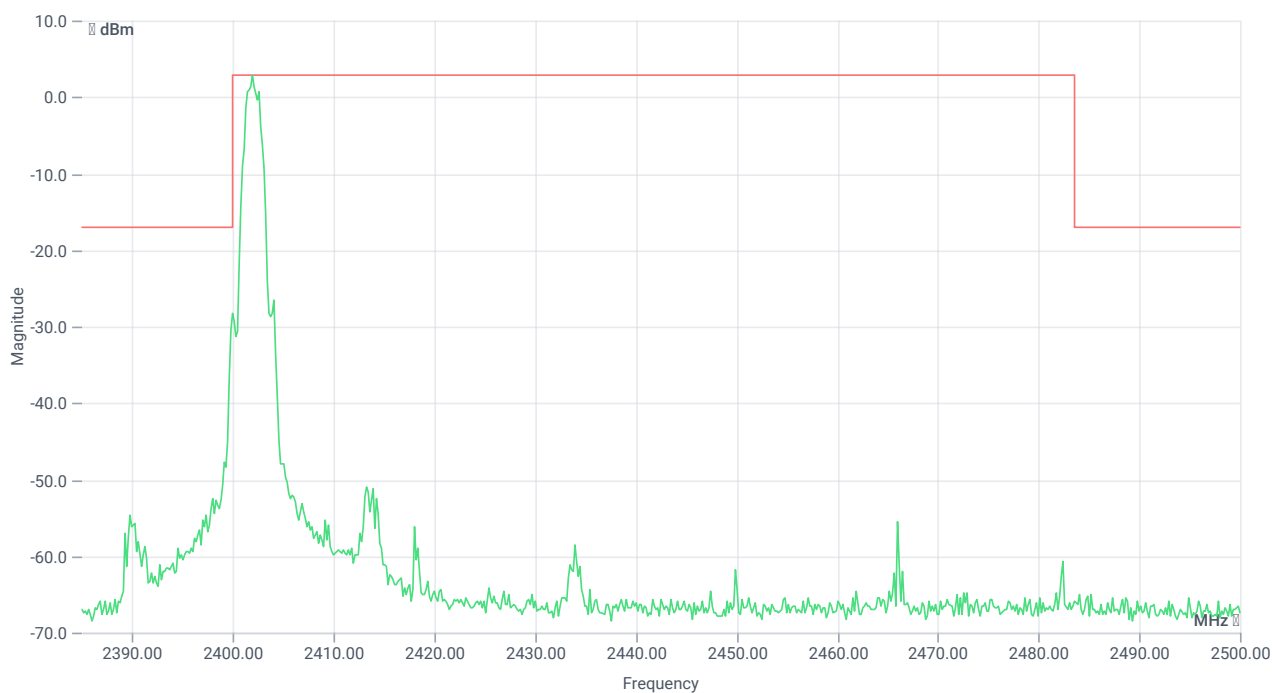
| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.34     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2402.400 | MHz  | INFO    |



TX emissions

## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 4.34   17.03   5      |
| Start [MHz]   Stop [MHz]                             | 24780.000   25000.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 200   25   1501   SWE |



## RESULT

| DESCRIPTION                         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2402.00 MHz             | ---         | ---         | 2.88     | dBm  | INFO    |
| No peaks detected                   | ---         | ---         |          |      | PASS    |
| Lowest margin to limit 2399.833 MHz | 0           | ---         | 13.41    | dB   | INFO    |

Verdict

PASS

## FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 2 Msps

### References

|                                               |                                                                                                                  |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 13:40:43                                                                                              |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                        |
| System version                                | 5.1.6.4                                                                                                          |
| Standard   Version                            | FCC 15.247   NI                                                                                                  |
| Method                                        | IF DTS then 8.5 DTS emissions in non-restricted frequency bands:<br>Subclause 11.11 of ANSI C63.10 is applicable |
| Description                                   | FCC 15.247 TX emissions conducted DTS - BT LE 2 Msps                                                             |
| Information                                   |                                                                                                                  |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | True   Freq [MHz] 2440  |
| Frequency high to test                           | False   Freq [MHz] 2480 |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

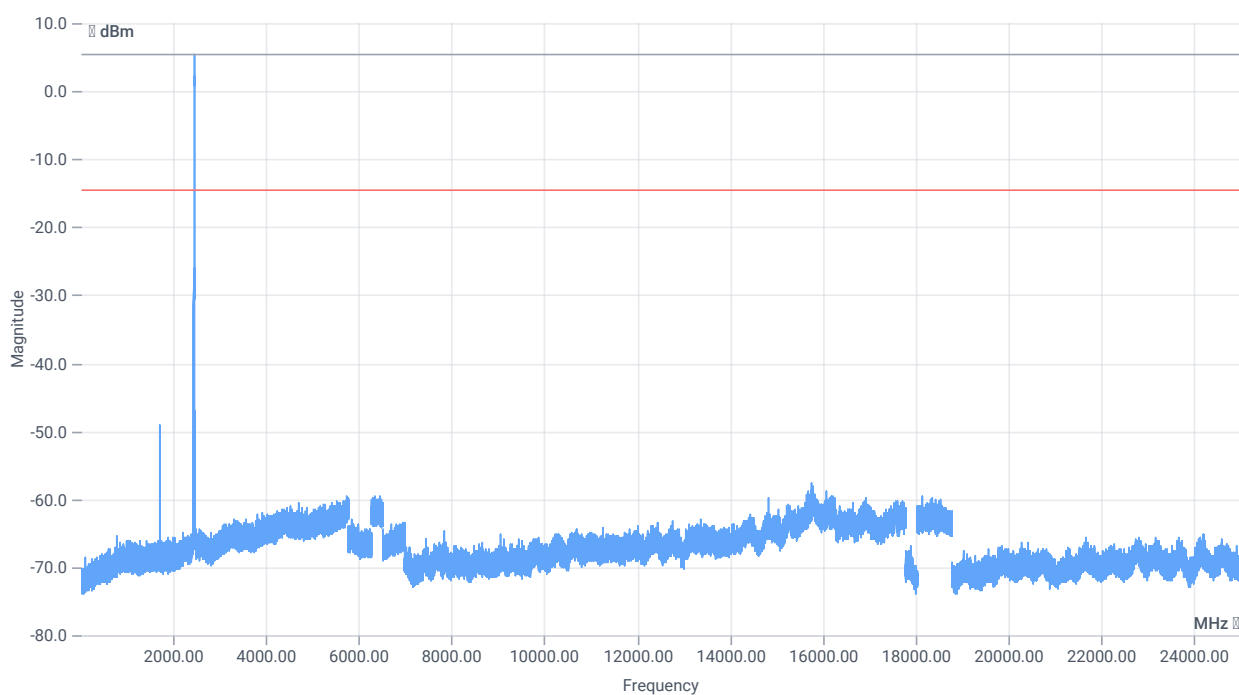
## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2440 MHz

RESULT: Reference power cond.

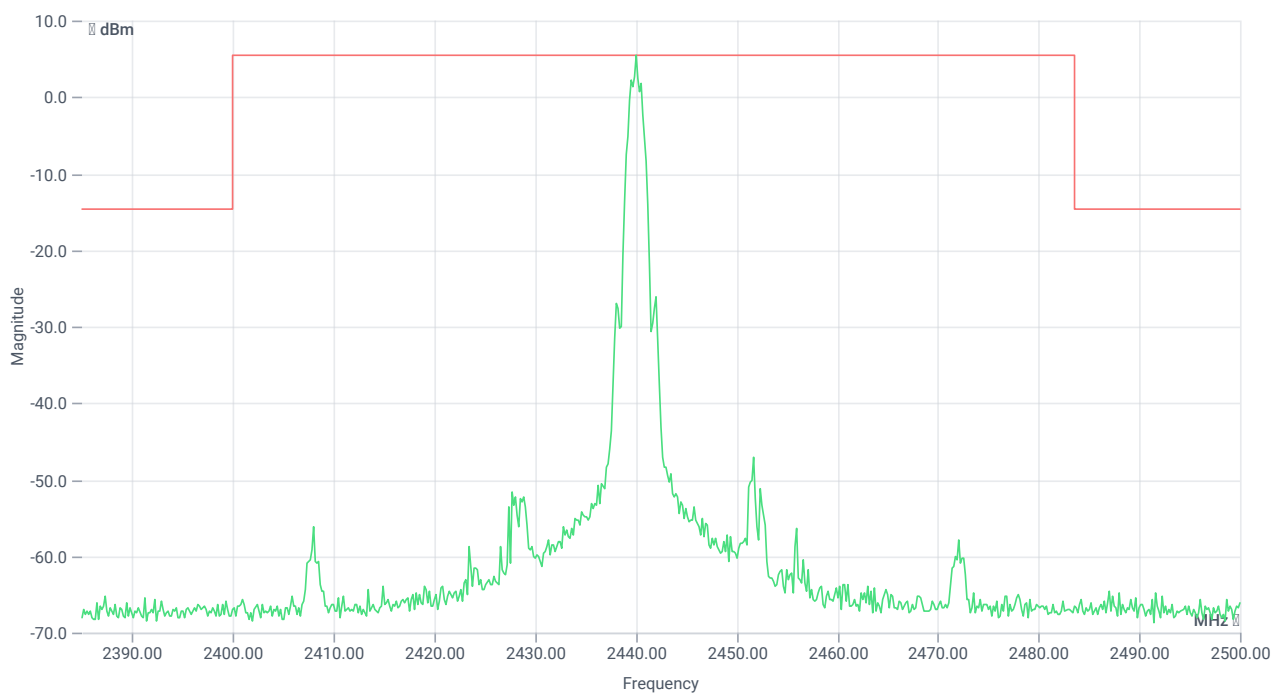
| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 5.45     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2440.400 | MHz  | INFO    |



TX emissions

## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 5.45   17.03   5      |
| Start [MHz]   Stop [MHz]                             | 24780.000   25000.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 200   25   1501   SWE |



## RESULT

| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2440.00 MHz       | ---         | ---         | 5.39     | dBm  | INFO    |
| No peaks detected             | ---         | ---         |          |      | PASS    |
| Lowest margin to limit 30 MHz | 0           | ---         | -129.37  | dB   | INFO    |

Verdict

PASS

## FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 2 Msps

### References

|                                               |                                                                                                                  |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| TC start                                      | 18.03.2025 13:59:03                                                                                              |
| Ambit temp (test rack) [°C]   humidity [rel%] | not enabled   not enabled                                                                                        |
| System version                                | 5.1.6.4                                                                                                          |
| Standard   Version                            | FCC 15.247   NI                                                                                                  |
| Method                                        | IF DTS then 8.5 DTS emissions in non-restricted frequency bands:<br>Subclause 11.11 of ANSI C63.10 is applicable |
| Description                                   | FCC 15.247 TX emissions conducted DTS - BT LE 2 Msps                                                             |
| Information                                   |                                                                                                                  |

### EUT Common Settings BT Low Energy

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| Intermodulation value N            | 3                                             |
| Image freq. Low   Mid   High [MHz] | 0   0   0                                     |
| Power class                        | 2                                             |
| 1 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| 2 Mbps supported                   | True   TXpayload 255   RXpayload 255          |
| Longrange S8 supported             | False   TXpayload 255   RXpayload 255         |
| Longrange S2 supported             | False   TXpayload 255   RXpayload 255         |
| Signaling settings                 | None   HCI   1   2400   None   S1   None   On |
| Signaling RF settings              | RF1com   0   0   On                           |
| User interaction                   | No                                            |

### Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70 |
| Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0            |

### Test Parameter

|                                                  |                         |
|--------------------------------------------------|-------------------------|
| Technology to test                               | BT LE 2 Msps            |
| EUT port                                         | EUT1                    |
| Temperature                                      | nom                     |
| Voltage                                          | nom                     |
| Frequency low to test                            | False   Freq [MHz] 2402 |
| Frequency mid to test                            | False   Freq [MHz] 2440 |
| Frequency high to test                           | True   Freq [MHz] 2480  |
| Auto control enabled power supply   Climatic Box | No   No                 |
| Additional path loss [dB]                        | 0.7                     |
| Full path type                                   | EUT_SA_GEN_SIG          |

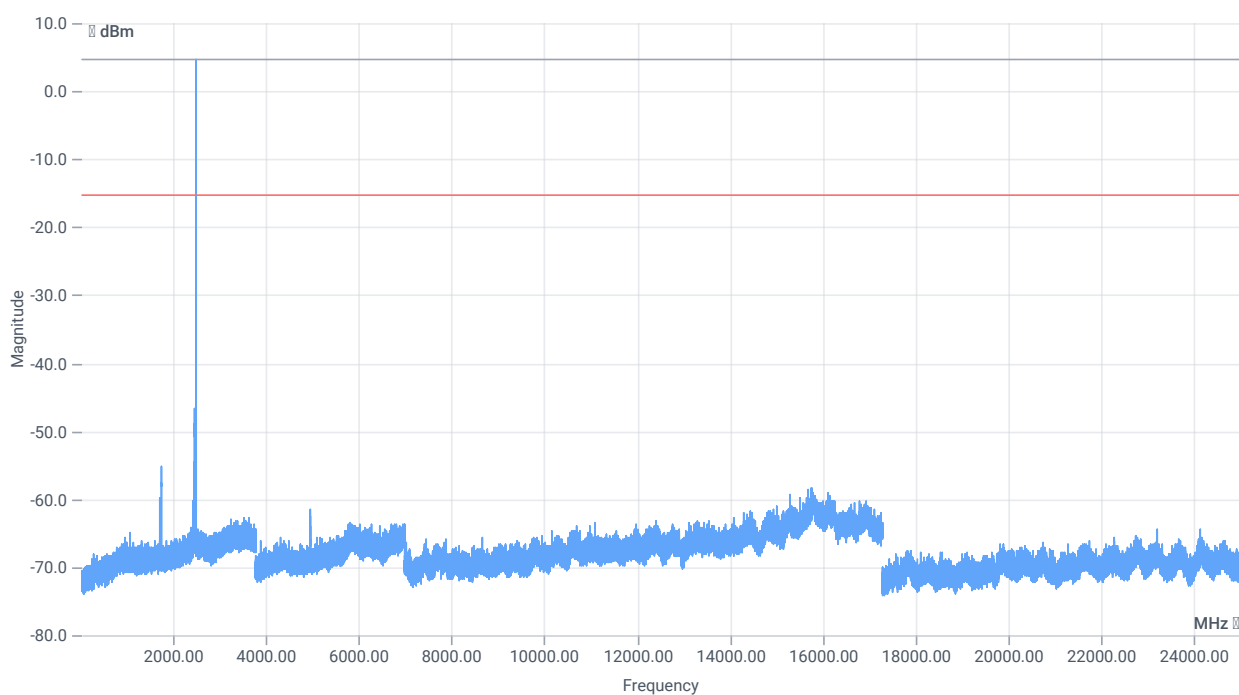
## Test Parameter

|                |                                           |
|----------------|-------------------------------------------|
| Full path name | EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/ |
| Switch bits    | 00010001:00010001:00000000:00000001       |

## Test at TX 2480 MHz

RESULT: Reference power cond.

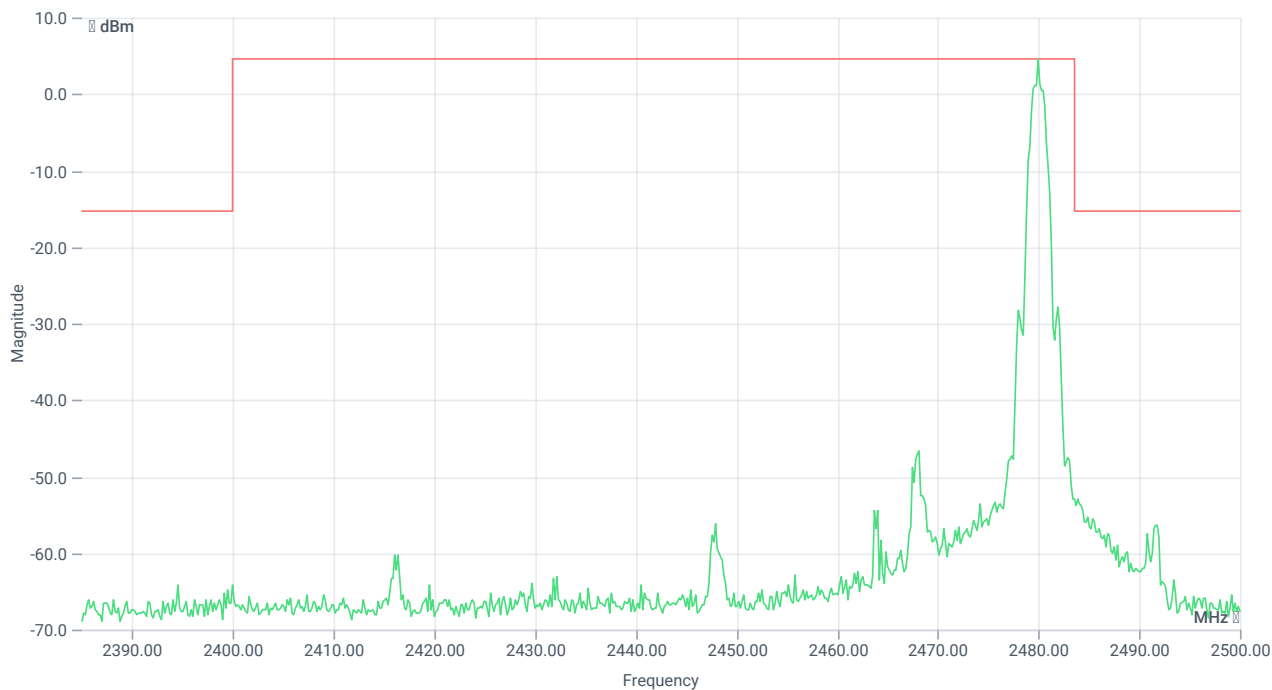
| DESCRIPTION                   | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. power<br>1MHz/1MHz cond. | ---         | ---         | 4.74     | dBm  | INFO    |
| Ref. frequency                | ---         | ---         | 2479.500 | MHz  | INFO    |



TX emissions

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 4.74   17.03   5      |
| Start [MHz]   Stop [MHz]                             | 24780.000   25000.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: time [ms]   count   points per Section   type | 200   25   1501   SWE |



## RESULT

| DESCRIPTION                         | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2480.00 MHz             | ---         | ---         | 4.65     | dBm  | INFO    |
| No peaks detected                   | ---         | ---         |          |      | PASS    |
| Lowest margin to limit 2483.833 MHz | 0           | ---         | 37.62    | dB   | INFO    |

Verdict

PASS

- END OF DOCUMENT -