

## Measurement Results

1-0573/20-01-09\_Annex\_MR\_A\_1

[Test logging](#)

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## EUT Summary

| IUT DEFINITION & Common settings                 |                                               |
|--------------------------------------------------|-----------------------------------------------|
| Manufacturer                                     | beyerdynamic GmbH & Co. KG                    |
| Type                                             | Blue Byrd 2nd Generation                      |
| Serial No.   Setup No.                           | BD Address 0022BB76003A   1.0                 |
| SW Version   HW Version                          | NI   NI                                       |
| Comment 1   2                                    |                                               |
| Tlow   Tmid   Thigh [°C]                         | -10   22   55                                 |
| Vlow   Vmid   Vhigh [V] @Imax [A]                | 3   3.8   4.35 @1                             |
| Auto Control enabled Power Supply   Climatic Box | No   No                                       |
| Additional Path Loss [dB]                        | 0.7                                           |
| IUT Common Settings BT Low Energy                |                                               |
| Intermodulation Value N                          | 3                                             |
| Image Freq. Low   Mid   High [MHz]               | 0   0   0                                     |
| Power Class                                      | 1.5                                           |
| 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                                            |
| Switch Matrix & Pathcompensation enabled         | Yes                                           |

## 1. Common2G4 Peak OP 3MHz/3MHz ~ BT LE 1 Msps

| Test References                   |                                                                          |
|-----------------------------------|--------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:08:58                                                      |
| Ambit Temp [°C]   Humidity [rel%] | 22.0   30                                                                |
| System Version                    | 1.0.1.2                                                                  |
| Test Specification                | None                                                                     |
| Test Method                       |                                                                          |
| Class / TC Version                | TC_VM_Common2G4_Peak_Output_Power_Conducted_3MHz_3MHz_V01 Version: 0.0.1 |
| My Description                    | Peak Output Power conducted 3MHz/3MHz - BT LE 1 Msps                     |
| Add. Information                  |                                                                          |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                      |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                     |
| Frequency high to test | False   Freq [MHz] 2480                                                                                     |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

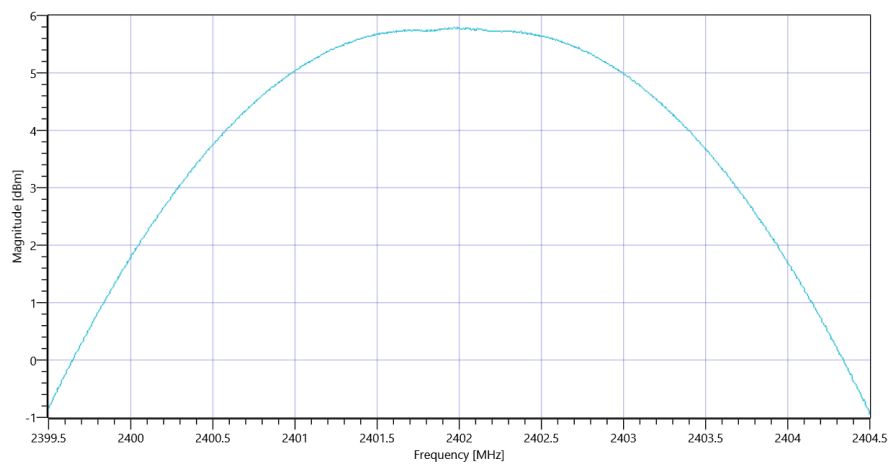
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.97   10.79   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

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | ---         | 5.79     | dBm  | Info    |
| Peak Power        | ---         | ---         | 3.79315  | mW   | Info    |
| Frequency at Peak | ---         | ---         | 2401.99  | MHz  | Info    |



Plot\_Common2G4 Peak OP 3MHz-3MHz ~ BT LE 1 Msps\_14122020\_100925.png

### TEST FINISHED

General Verdict 14.12.2020 10:09:26 / RT: 27 s

PASS

## 2. Common2G4 Peak OP 3MHz/3MHz ~ BT LE 1 Msps

| Test References                   |                                                                          |
|-----------------------------------|--------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:17:43                                                      |
| Ambit Temp [°C]   Humidity [rel%] | 22.1   29                                                                |
| System Version                    | 1.0.1.2                                                                  |
| Test Specification                | None                                                                     |
| Test Method                       |                                                                          |
| Class / TC Version                | TC_VM_Common2G4_Peak_Output_Power_Conducted_3MHz_3MHz_V01 Version: 0.0.1 |
| My Description                    | Peak Output Power conducted 3MHz/3MHz - BT LE 1 Msps                     |
| Add. Information                  |                                                                          |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                     |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                      |
| Frequency high to test | False   Freq [MHz] 2480                                                                                     |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

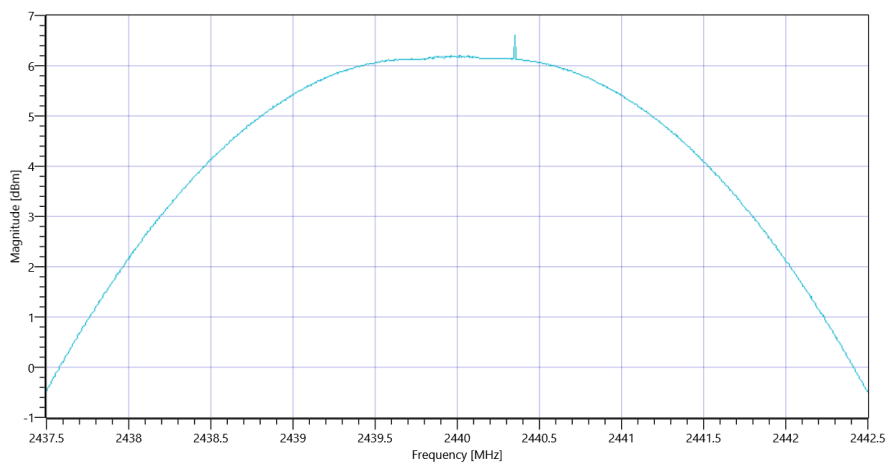
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.33   10.8   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

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | ---         | 6.61     | dBm  | Info    |
| Peak Power        | ---         | ---         | 4.581419 | mW   | Info    |
| Frequency at Peak | ---         | ---         | 2440.35  | MHz  | Info    |



Plot\_Common2G4 Peak OP 3MHz-3MHz ~ BT LE 1 Msps\_14122020\_101809.png

### TEST FINISHED

General Verdict 14.12.2020 10:18:09 / RT: 25 s

PASS

### 3. Common2G4 Peak OP 3MHz/3MHz ~ BT LE 1 Msps

| Test References                   |                                                                          |
|-----------------------------------|--------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:26:28                                                      |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   29                                                                |
| System Version                    | 1.0.1.2                                                                  |
| Test Specification                | None                                                                     |
| Test Method                       |                                                                          |
| Class / TC Version                | TC_VM_Common2G4_Peak_Output_Power_Conducted_3MHz_3MHz_V01 Version: 0.0.1 |
| My Description                    | Peak Output Power conducted 3MHz/3MHz - BT LE 1 Msps                     |
| Add. Information                  |                                                                          |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                     |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                     |
| Frequency high to test | True   Freq [MHz] 2480                                                                                      |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

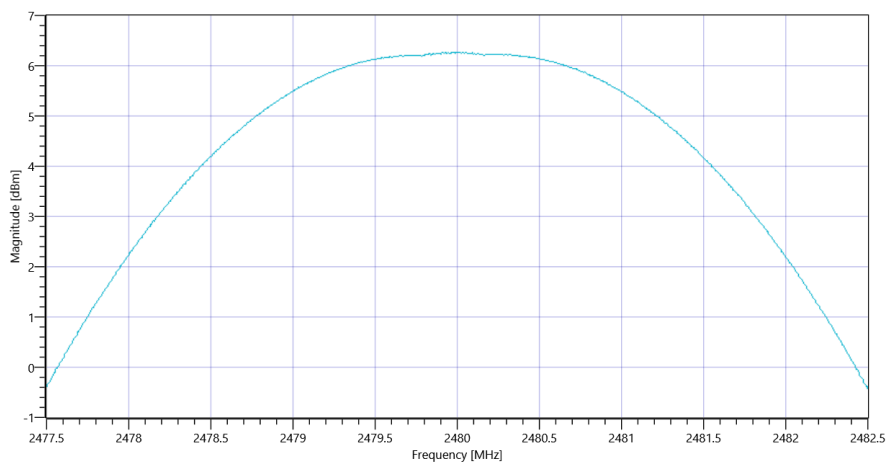
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.24   10.85   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

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | ---         | 6.27     | dBm  | Info    |
| Peak Power        | ---         | ---         | 4.23643  | mW   | Info    |
| Frequency at Peak | ---         | ---         | 2480.035 | MHz  | Info    |



Plot\_Common2G4 Peak OP 3MHz-3MHz ~ BT LE 1 Msps\_14122020\_102654.png

### TEST FINISHED

General Verdict 14.12.2020 10:26:54 / RT: 26 s

PASS

## 4. Common2G4 Peak OP 3MHz/3MHz ~ BT LE 2 Msps

| Test References                   |                                                                          |
|-----------------------------------|--------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:36:36                                                      |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   28                                                                |
| System Version                    | 1.0.1.2                                                                  |
| Test Specification                | None                                                                     |
| Test Method                       |                                                                          |
| Class / TC Version                | TC_VM_Common2G4_Peak_Output_Power_Conducted_3MHz_3MHz_V01 Version: 0.0.1 |
| My Description                    | Peak Output Power conducted 3MHz/3MHz - BT LE 2 Msps                     |
| Add. Information                  |                                                                          |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                      |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                     |
| Frequency high to test | False   Freq [MHz] 2480                                                                                     |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

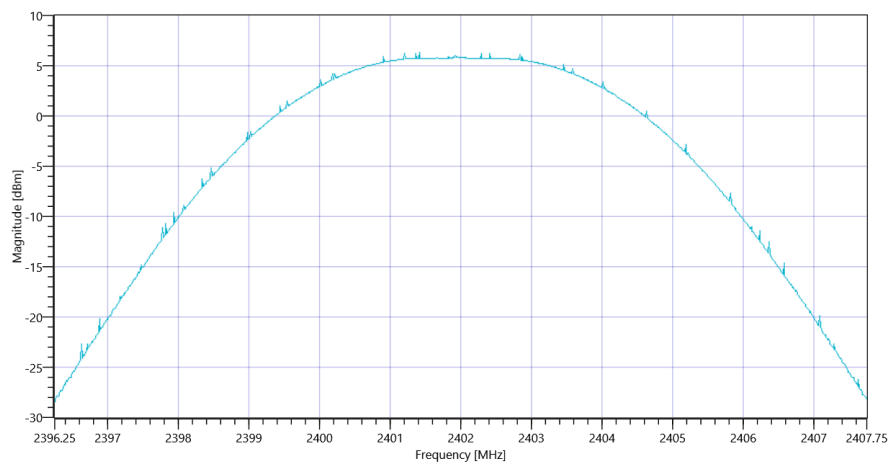
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.99   10.79   25     |
| Start [MHz]   Stop [MHz]                             | 2396.250   2407.750    |
| 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

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | ---         | 6.28     | dBm  | Info    |
| Peak Power        | ---         | ---         | 4.246196 | mW   | Info    |
| Frequency at Peak | ---         | ---         | 2401.414 | MHz  | Info    |



Plot\_Common2G4 Peak OP 3MHz-3MHz ~ BT LE 2 Msps\_14122020\_103701.png

### TEST FINISHED

General Verdict 14.12.2020 10:37:02 / RT: 25 s

PASS

## 5. Common2G4 Peak OP 3MHz/3MHz ~ BT LE 2 Msps

| Test References                   |                                                                          |
|-----------------------------------|--------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:45:38                                                      |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   28                                                                |
| System Version                    | 1.0.1.2                                                                  |
| Test Specification                | None                                                                     |
| Test Method                       |                                                                          |
| Class / TC Version                | TC_VM_Common2G4_Peak_Output_Power_Conducted_3MHz_3MHz_V01 Version: 0.0.1 |
| My Description                    | Peak Output Power conducted 3MHz/3MHz - BT LE 2 Msps                     |
| Add. Information                  |                                                                          |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                   |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

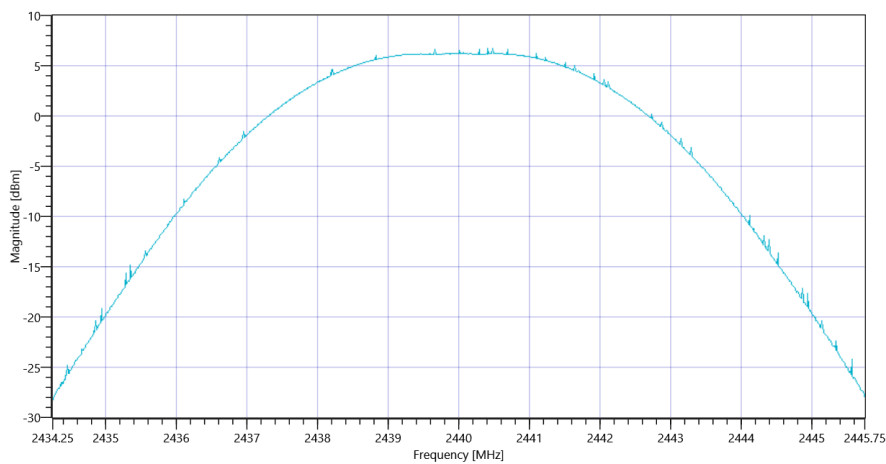
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.38   10.8   25      |
| Start [MHz]   Stop [MHz]                             | 2434.250   2445.750    |
| 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

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | ---         | 6.69     | dBm  | Info    |
| Peak Power        | ---         | ---         | 4.666594 | mW   | Info    |
| Frequency at Peak | ---         | ---         | 2440.414 | MHz  | Info    |



Plot\_Common2G4 Peak OP 3MHz-3MHz ~ BT LE 2 Msps\_14122020\_104603.png

### TEST FINISHED

General Verdict 14.12.2020 10:46:04 / RT: 25 s

PASS

## 6. Common2G4 Peak OP 3MHz/3MHz ~ BT LE 2 Msps

| Test References                   |                                                                          |
|-----------------------------------|--------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:54:28                                                      |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   27                                                                |
| System Version                    | 1.0.1.2                                                                  |
| Test Specification                | None                                                                     |
| Test Method                       |                                                                          |
| Class / TC Version                | TC_VM_Common2G4_Peak_Output_Power_Conducted_3MHz_3MHz_V01 Version: 0.0.1 |
| My Description                    | Peak Output Power conducted 3MHz/3MHz - BT LE 2 Msps                     |
| Add. Information                  |                                                                          |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                     |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                     |
| Frequency high to test | True   Freq [MHz] 2480                                                                                      |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

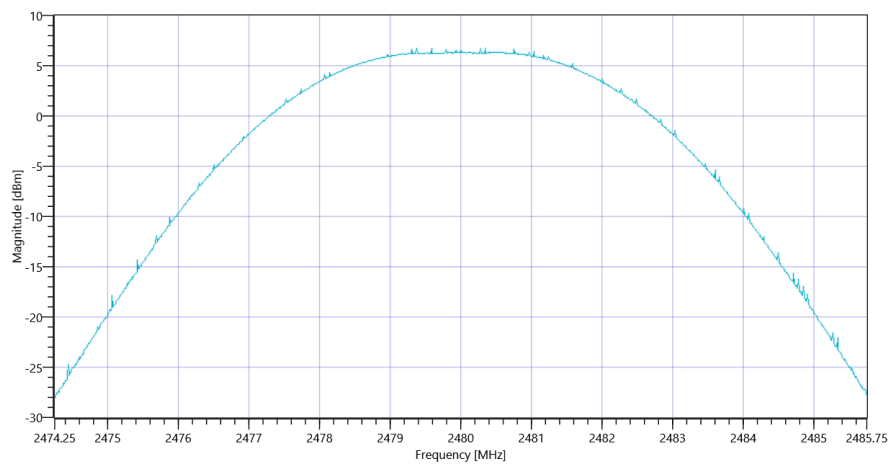
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.32   10.85   25     |
| Start [MHz]   Stop [MHz]                             | 2474.250   2485.750    |
| 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

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | ---         | 6.76     | dBm  | Info    |
| Peak Power        | ---         | ---         | 4.74242  | mW   | Info    |
| Frequency at Peak | ---         | ---         | 2480.345 | MHz  | Info    |



Plot\_Common2G4 Peak OP 3MHz-3MHz ~ BT LE 2 Msps\_14122020\_105454.png

### TEST FINISHED

General Verdict 14.12.2020 10:54:54 / RT: 26 s

PASS

## 7. FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps

| Test References                   |                                                                           |
|-----------------------------------|---------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:09:30                                                       |
| Ambit Temp [°C]   Humidity [rel%] | 22.0   30                                                                 |
| System Version                    | 1.0.1.2                                                                   |
| Test Specification                | FCC Part 15.247                                                           |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth             |
| Class / TC Version                | TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE 1 Msps         |
| Add. Information                  |                                                                           |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                   |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

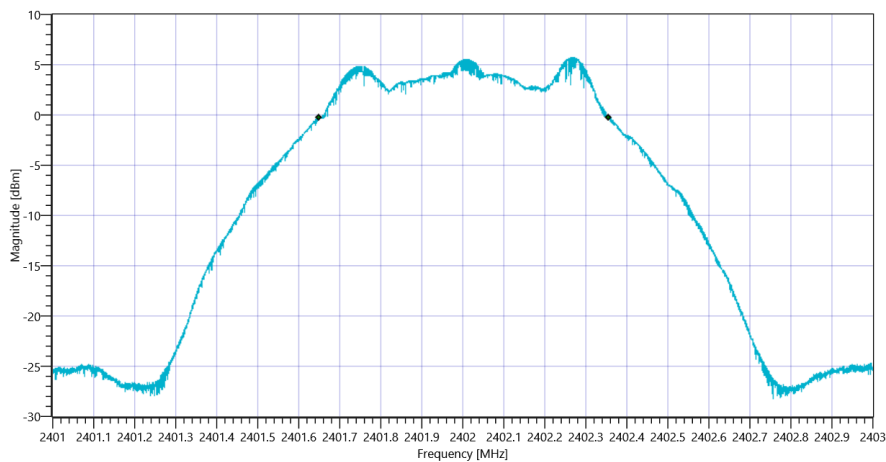
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.97   10.79   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | ---         | ---         | 707      | kHz  | INFO    |



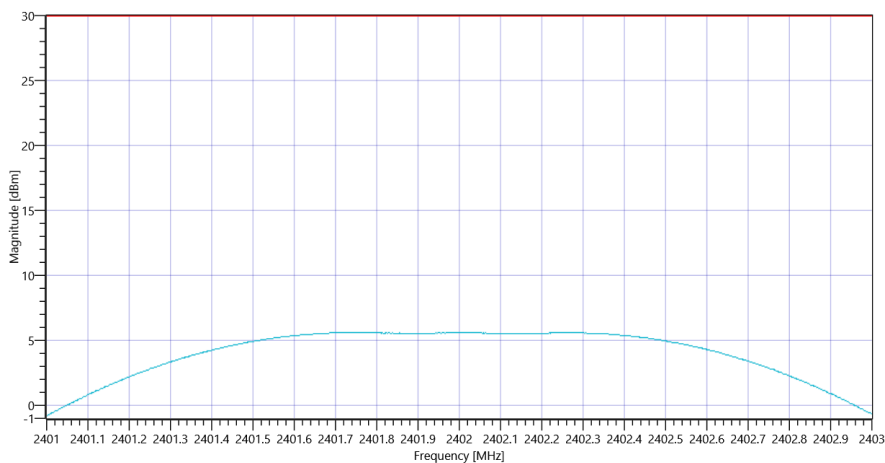
Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps DTS BW\_14122020\_100955.png

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.97   10.79   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 |

### RESULT

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | 30.00       | 5.61     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 3.63915  | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2402.022 | MHz  | INFO    |



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps\_14122020\_101011.png

|                 |                                |      |
|-----------------|--------------------------------|------|
| TEST FINISHED   |                                |      |
| General Verdict | 14.12.2020 10:10:11 / RT: 41 s | PASS |

## 8. FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps

| Test References                   |                                                                           |
|-----------------------------------|---------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:18:13                                                       |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   29                                                                 |
| System Version                    | 1.0.1.2                                                                   |
| Test Specification                | FCC Part 15.247                                                           |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth             |
| Class / TC Version                | TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE 1 Msps         |
| Add. Information                  |                                                                           |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                   |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

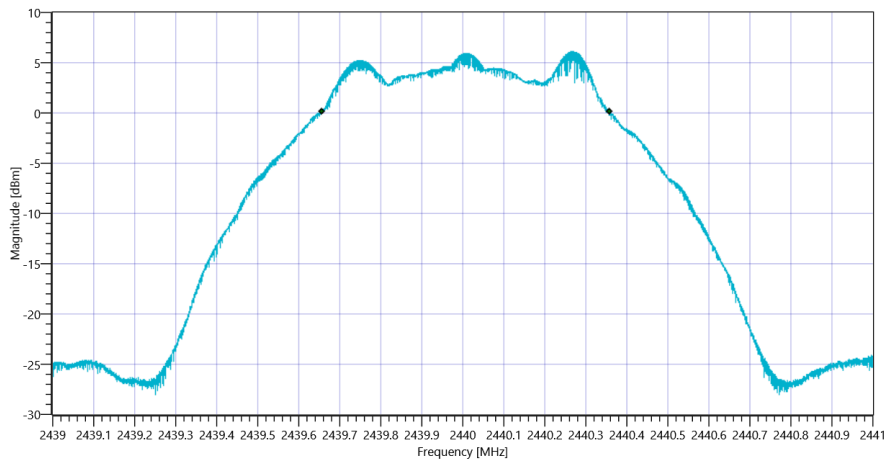
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.33   10.8   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | ---         | ---         | 700      | kHz  | INFO    |



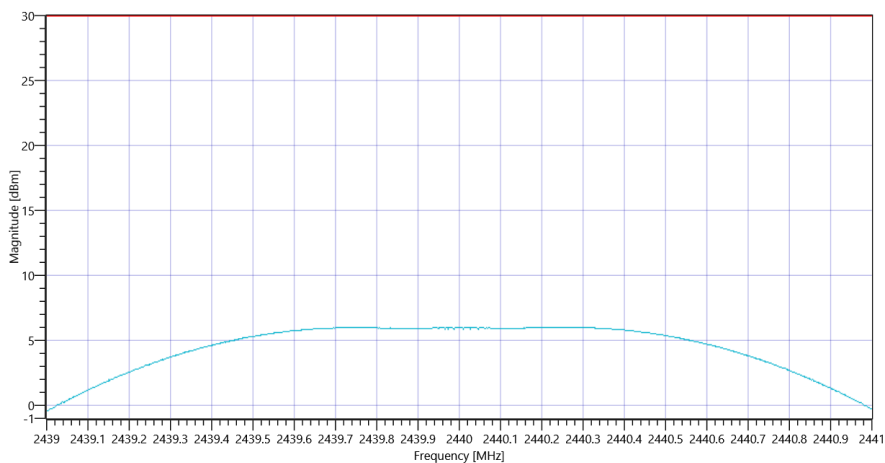
Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps DTS BW\_14122020\_101840.png

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.33   10.8   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 |

### RESULT

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | 30.00       | 6.02     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 3.999447 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2439.982 | MHz  | INFO    |



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps\_14122020\_101855.png

|                 |                                |      |
|-----------------|--------------------------------|------|
| TEST FINISHED   |                                |      |
| General Verdict | 14.12.2020 10:18:56 / RT: 42 s | PASS |

## 9. FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps

| Test References                   |                                                                           |
|-----------------------------------|---------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:26:59                                                       |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   28                                                                 |
| System Version                    | 1.0.1.2                                                                   |
| Test Specification                | FCC Part 15.247                                                           |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth             |
| Class / TC Version                | TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE 1 Msps         |
| Add. Information                  |                                                                           |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | True   Freq [MHz] 2480                                                                                   |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

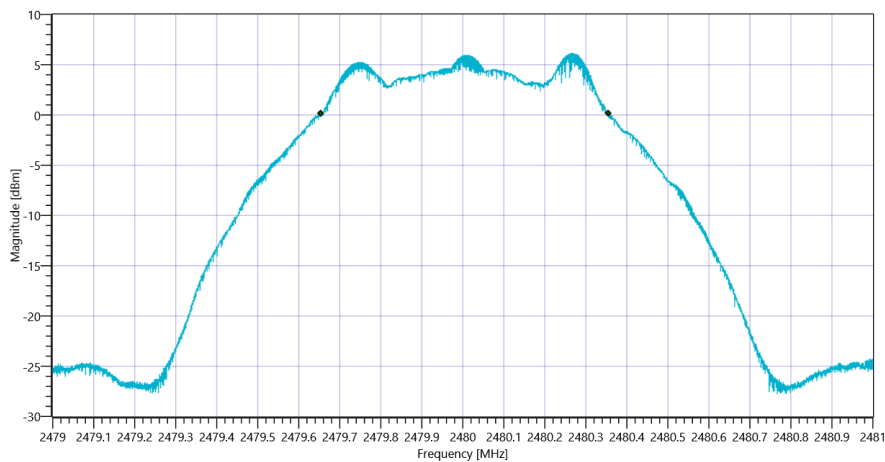
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.25   10.85   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | ---         | ---         | 701      | kHz  | INFO    |



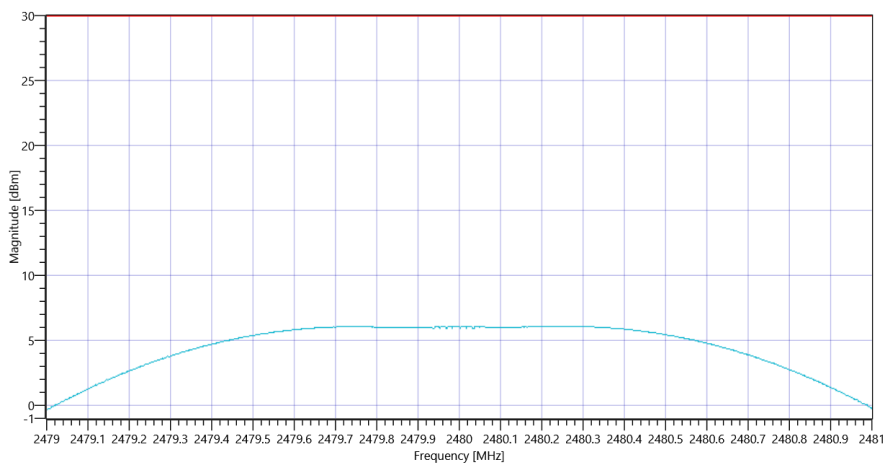
Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps DTS BW\_14122020\_102725.png

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.25   10.85   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 |

### RESULT

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | 30.00       | 6.09     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 4.064433 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2480.006 | MHz  | INFO    |



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 1 Msps\_14122020\_102740.png

|                 |                                |      |
|-----------------|--------------------------------|------|
| TEST FINISHED   |                                |      |
| General Verdict | 14.12.2020 10:27:41 / RT: 42 s | PASS |

## 10. FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps

| Test References                   |                                                                           |
|-----------------------------------|---------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:37:06                                                       |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   28                                                                 |
| System Version                    | 1.0.1.2                                                                   |
| Test Specification                | FCC Part 15.247                                                           |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth             |
| Class / TC Version                | TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE 2 Msps         |
| Add. Information                  |                                                                           |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                   |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

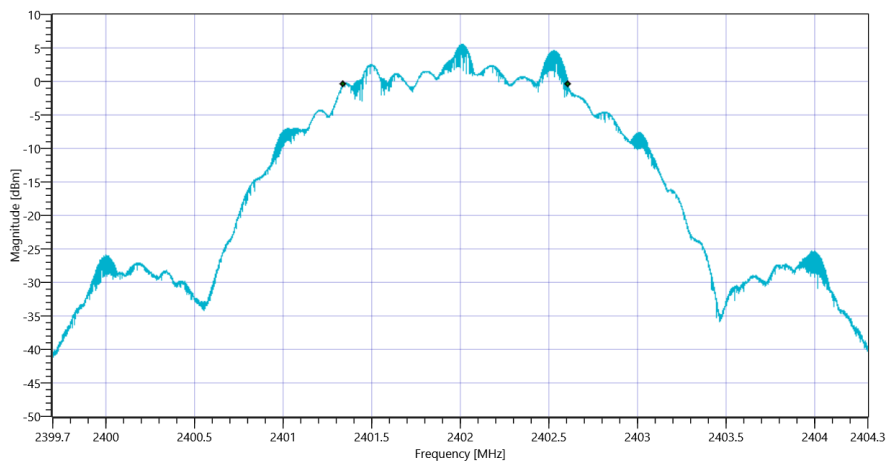
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.99   10.79   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | ---         | ---         | 1270     | kHz  | INFO    |



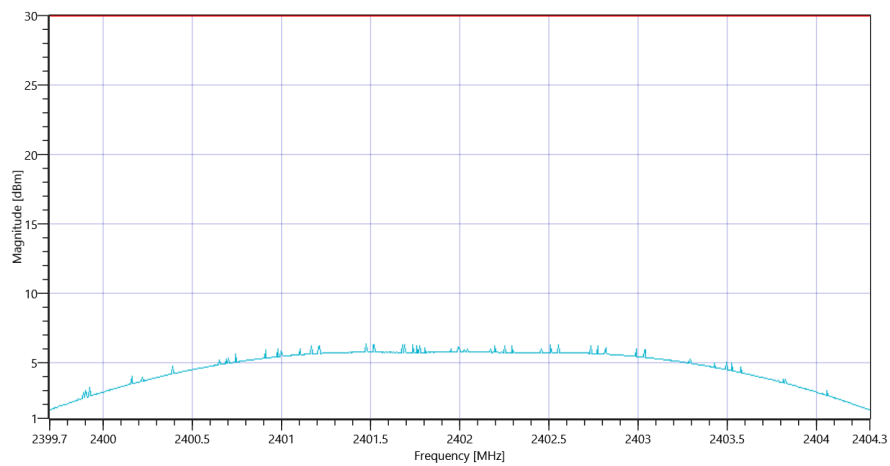
Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps DTS BW\_14122020\_103731.png

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.99   10.79   25    |
| Start [MHz]   Stop [MHz]                             | 2399.700   2404.300   |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000  |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 50   200   1001   SWE |

### RESULT

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | 30.00       | 6.34     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 4.305266 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2401.476 | MHz  | INFO    |



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps\_14122020\_103747.png

TEST FINISHED

General Verdict

14.12.2020 10:37:47 / RT: 41 s

PASS

## 11. FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps

| Test References                   |                                                                           |
|-----------------------------------|---------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:46:08                                                       |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   28                                                                 |
| System Version                    | 1.0.1.2                                                                   |
| Test Specification                | FCC Part 15.247                                                           |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth             |
| Class / TC Version                | TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE 2 Msps         |
| Add. Information                  |                                                                           |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                   |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

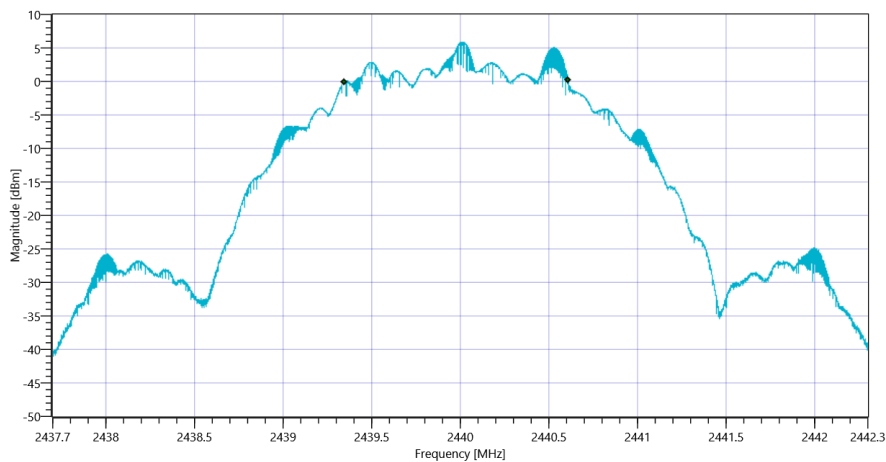
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.40   10.8   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | ---         | ---         | 1267     | kHz  | INFO    |



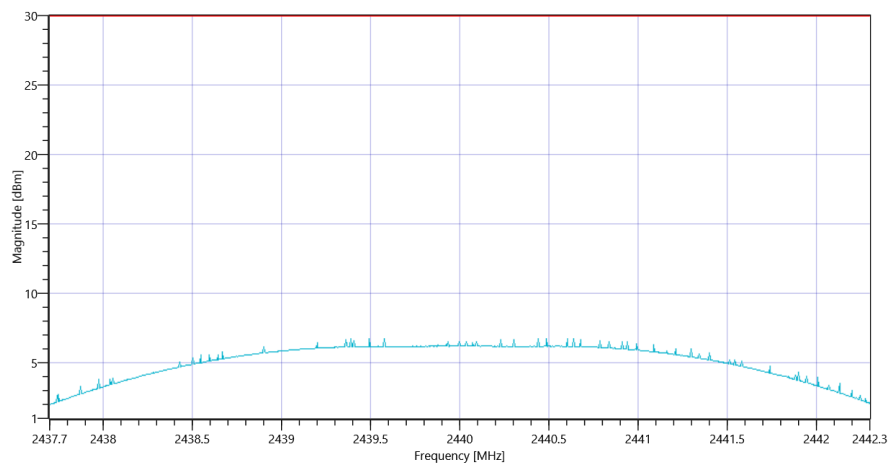
Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps DTS BW\_14122020\_104634.png

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.40   10.8   25     |
| Start [MHz]   Stop [MHz]                             | 2437.700   2442.300   |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000  |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 50   200   1001   SWE |

### RESULT

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | 30.00       | 6.74     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 4.72063  | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2440.487 | MHz  | INFO    |



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps\_14122020\_104650.png

**TEST FINISHED**

General Verdict

14.12.2020 10:46:50 / RT: 42 s

**PASS**

## 12. FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps

| Test References                   |                                                                           |
|-----------------------------------|---------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:54:58                                                       |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   28                                                                 |
| System Version                    | 1.0.1.2                                                                   |
| Test Specification                | FCC Part 15.247                                                           |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth             |
| Class / TC Version                | TC_VM_FCC15247_Maximum_Peak_Conducted_Output_Power_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Maximum Peak Output Power Conducted DTS - BT LE 2 Msps         |
| Add. Information                  |                                                                           |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | True   Freq [MHz] 2480                                                                                   |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

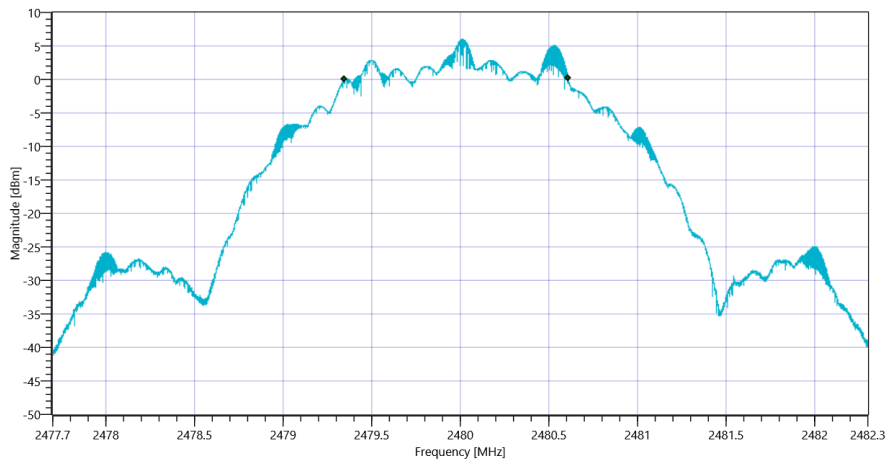
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.34   10.85   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | ---         | ---         | 1263     | kHz  | INFO    |



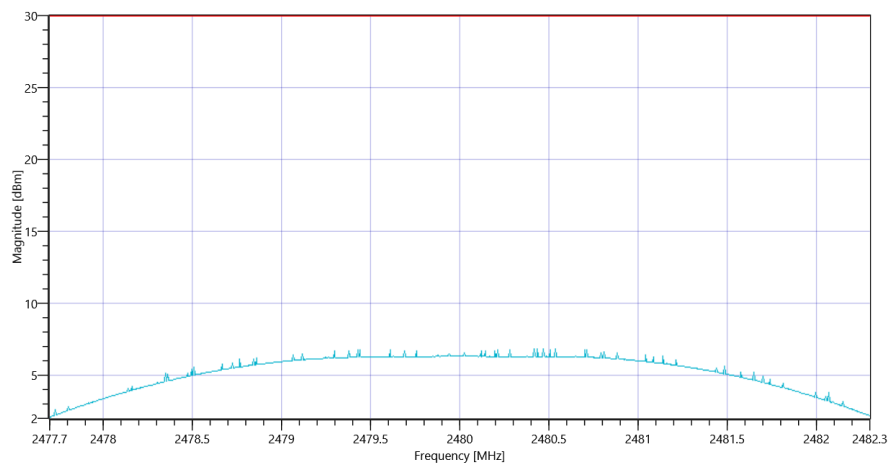
Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps DTS BW\_14122020\_105524.png

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.34   10.85   25    |
| Start [MHz]   Stop [MHz]                             | 2477.700   2482.300   |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000  |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 50   200   1001   SWE |

### RESULT

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | 30.00       | 6.82     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 4.808393 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2480.437 | MHz  | INFO    |



Plot\_FCC Part 15.247 Maximum Peak Conducted Output Power DTS ~ BT LE 2 Msps\_14122020\_105540.png

TEST FINISHED

General Verdict

14.12.2020 10:55:40 / RT: 42 s

PASS

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

| Test References                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 14.12.2020 10:10:15                                 |
| Ambit Temp [°C]   Humidity [rel%] | 22.0   30                                           |
| System Version                    | 1.0.1.2                                             |
| Test Specification                | FCC Part 15.247                                     |
| Test Method                       | 99                                                  |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_6dB_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps         |
| Add. Information                  |                                                     |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                   |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

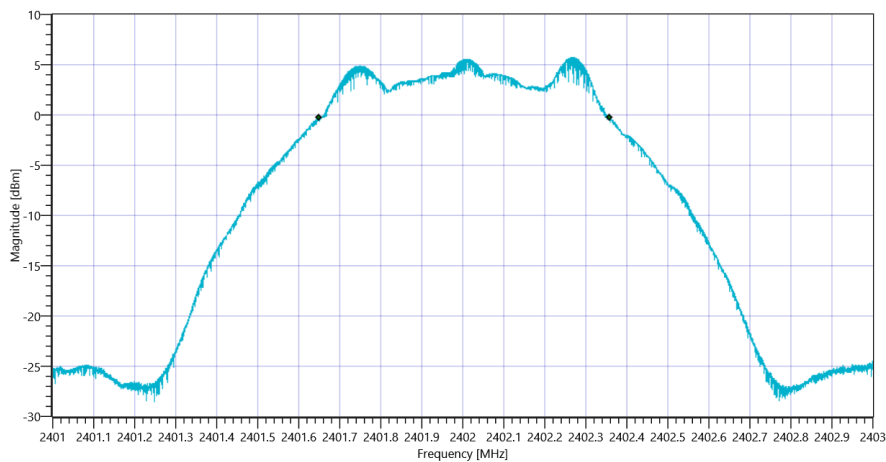
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.94   10.79   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | 500         | ---         | 708      | kHz  | PASS    |



Plot\_FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE 1 Msps\_14122020\_101041.png

### TEST FINISHED

|                 |                                |      |
|-----------------|--------------------------------|------|
| General Verdict | 14.12.2020 10:10:42 / RT: 26 s | PASS |
|-----------------|--------------------------------|------|

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

| Test References                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 14.12.2020 10:19:00                                 |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   29                                           |
| System Version                    | 1.0.1.2                                             |
| Test Specification                | FCC Part 15.247                                     |
| Test Method                       | 99                                                  |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_6dB_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps         |
| Add. Information                  |                                                     |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                   |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

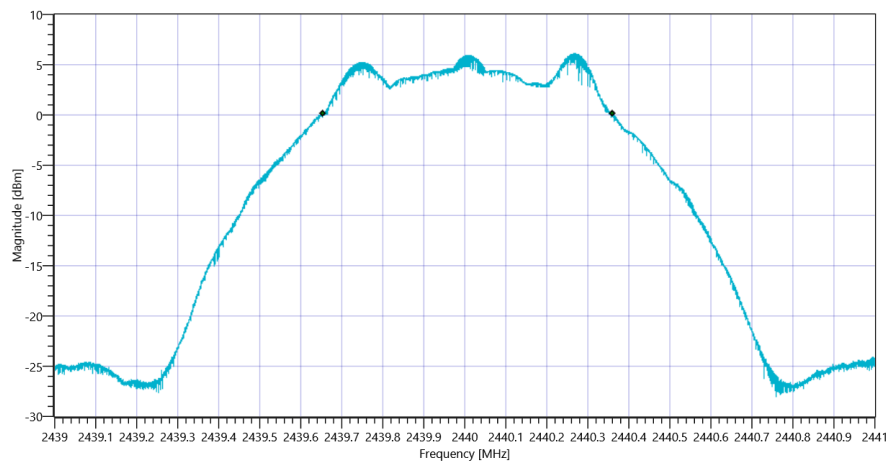
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.33   10.8   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | 500         | ---         | 707      | kHz  | PASS    |



Plot\_FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE 1 Msps\_14122020\_101926.png

### TEST FINISHED

|                 |                                |      |
|-----------------|--------------------------------|------|
| General Verdict | 14.12.2020 10:19:26 / RT: 26 s | PASS |
|-----------------|--------------------------------|------|

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

| Test References                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 14.12.2020 10:27:45                                 |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   28                                           |
| System Version                    | 1.0.1.2                                             |
| Test Specification                | FCC Part 15.247                                     |
| Test Method                       | 99                                                  |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_6dB_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps         |
| Add. Information                  |                                                     |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                     |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                     |
| Frequency high to test | True   Freq [MHz] 2480                                                                                      |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

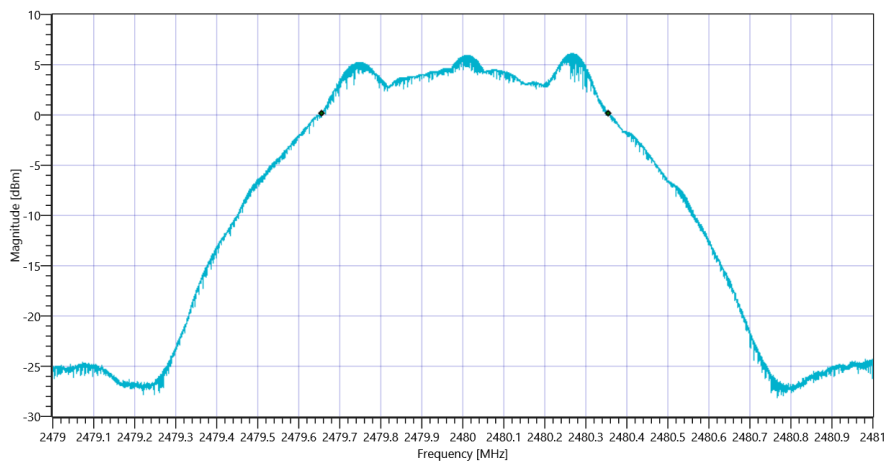
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.25   10.85   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | 500         | ---         | 700      | kHz  | PASS    |



### TEST FINISHED

|                 |                                |      |
|-----------------|--------------------------------|------|
| General Verdict | 14.12.2020 10:28:12 / RT: 26 s | PASS |
|-----------------|--------------------------------|------|

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

| Test References                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 14.12.2020 10:37:52                                 |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   28                                           |
| System Version                    | 1.0.1.2                                             |
| Test Specification                | FCC Part 15.247                                     |
| Test Method                       | 99                                                  |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_6dB_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps         |
| Add. Information                  |                                                     |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                      |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                     |
| Frequency high to test | False   Freq [MHz] 2480                                                                                     |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

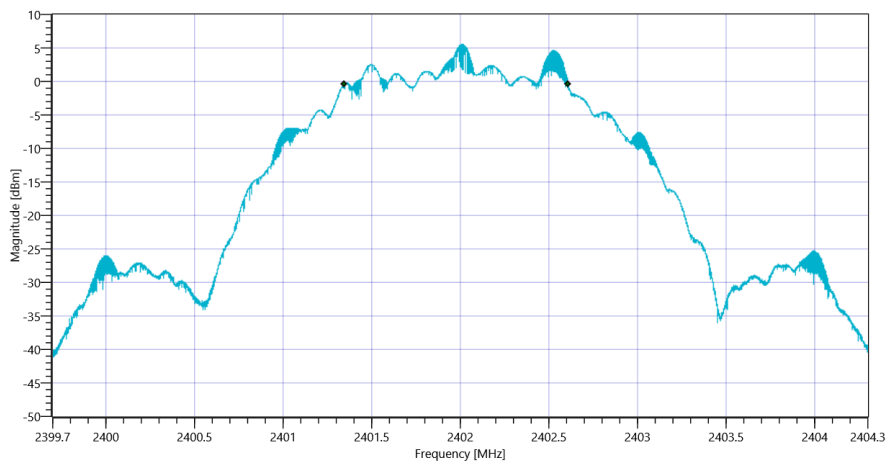
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.00   10.79   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | 500         | ---         | 1267     | kHz  | PASS    |



Plot\_FCC Part 15.247 Bandwidth 6dB DTS ~ BT LE 2 Msps\_14122020\_103818.png

### TEST FINISHED

|                 |                                |      |
|-----------------|--------------------------------|------|
| General Verdict | 14.12.2020 10:38:18 / RT: 26 s | PASS |
|-----------------|--------------------------------|------|

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

| Test References                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 14.12.2020 10:46:54                                 |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   28                                           |
| System Version                    | 1.0.1.2                                             |
| Test Specification                | FCC Part 15.247                                     |
| Test Method                       | 99                                                  |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_6dB_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps         |
| Add. Information                  |                                                     |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                   |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

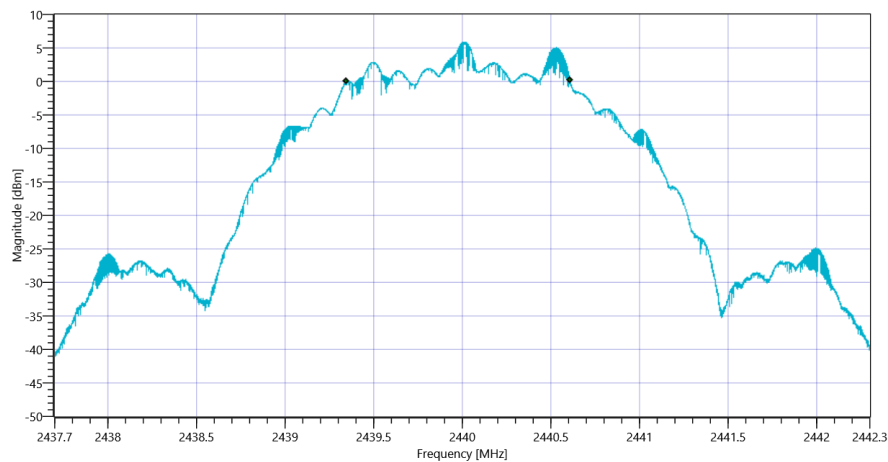
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.37   10.8   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | 500         | ---         | 1264     | kHz  | PASS    |



### TEST FINISHED

|                 |                                |      |
|-----------------|--------------------------------|------|
| General Verdict | 14.12.2020 10:47:21 / RT: 26 s | PASS |
|-----------------|--------------------------------|------|

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

| Test References                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 14.12.2020 10:55:45                                 |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   27                                           |
| System Version                    | 1.0.1.2                                             |
| Test Specification                | FCC Part 15.247                                     |
| Test Method                       | 99                                                  |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_6dB_DTS_V01 Version: 0.0.1 |
| My Description                    | FCC 15.247 Bandwidth 6dB DTS - BT LE 2 Msps         |
| Add. Information                  |                                                     |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                     |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                     |
| Frequency high to test | True   Freq [MHz] 2480                                                                                      |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

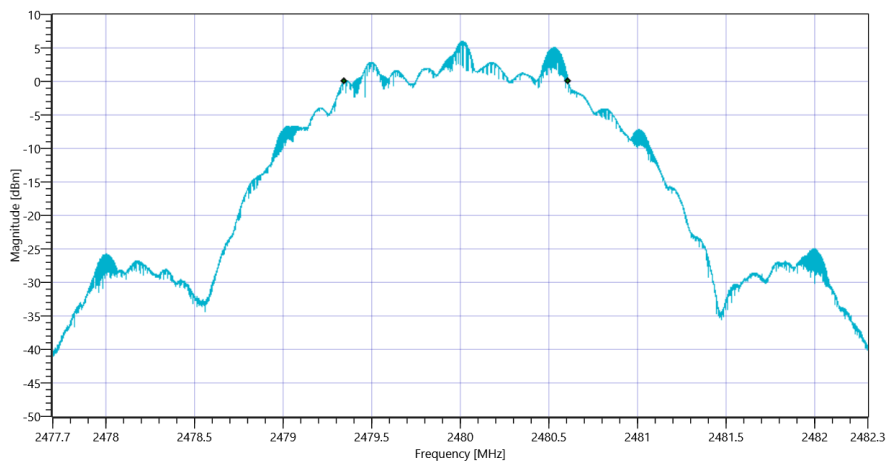
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.30   10.85   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

| Test Description    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------|-------------|-------------|----------|------|---------|
| DTS Bandwidth (6dB) | 500         | ---         | 1265     | kHz  | PASS    |



### TEST FINISHED

|                 |                                |      |
|-----------------|--------------------------------|------|
| General Verdict | 14.12.2020 10:56:11 / RT: 26 s | PASS |
|-----------------|--------------------------------|------|

## 19. FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msps

| Test References                   |                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:10:46                                                                                        |
| Ambit Temp [°C]   Humidity [rel%] | 22.0   30                                                                                                  |
| System Version                    | 1.0.1.2                                                                                                    |
| Test Specification                | FCC Part 15.247                                                                                            |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Class / TC Version                | TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01 Version: 0.0.1                                          |
| My Description                    | FCC 15.247 Peak Power Spectral Density DTS - BT LE 1 Msps                                                  |
| Add. Information                  |                                                                                                            |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                   |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

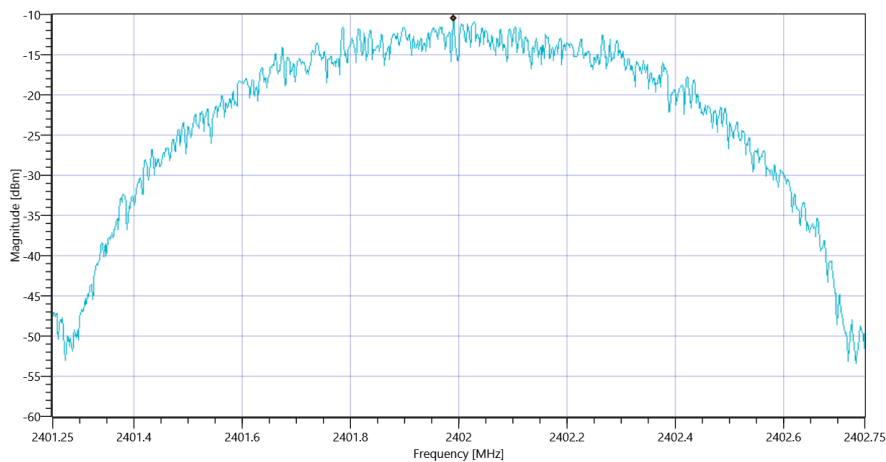
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.97   10.79   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

| Test Description       | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|------------------------|-------------|-------------|----------|----------|---------|
| Max Peak power Density | ---         | 8           | -10.33   | dBm/3KHz | PASS    |



Plot\_FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msps\_14122020\_101121.png

### TEST FINISHED

|                 |                                |      |
|-----------------|--------------------------------|------|
| General Verdict | 14.12.2020 10:11:22 / RT: 35 s | PASS |
|-----------------|--------------------------------|------|

## 20. FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msps

| Test References                   |                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:19:31                                                                                        |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   29                                                                                                  |
| System Version                    | 1.0.1.2                                                                                                    |
| Test Specification                | FCC Part 15.247                                                                                            |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Class / TC Version                | TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01 Version: 0.0.1                                          |
| My Description                    | FCC 15.247 Peak Power Spectral Density DTS - BT LE 1 Msps                                                  |
| Add. Information                  |                                                                                                            |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                   |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

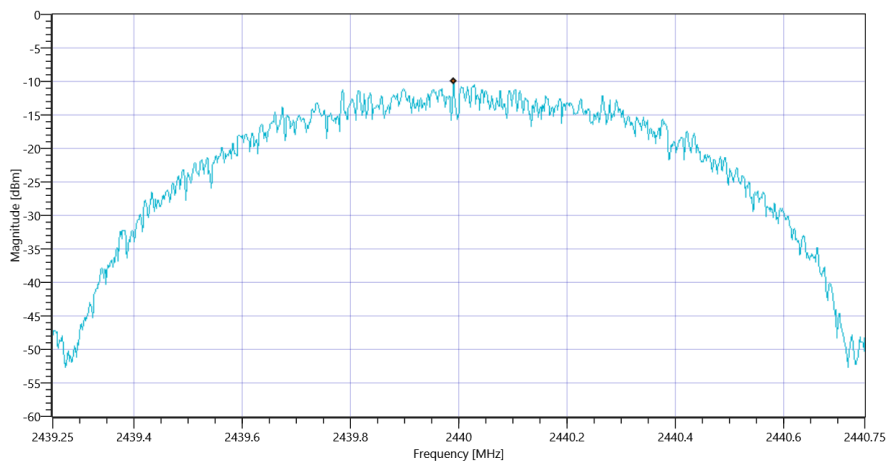
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.33   10.8   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

| Test Description       | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|------------------------|-------------|-------------|----------|----------|---------|
| Max Peak power Density | ---         | 8           | -9.95    | dBm/3KHz | PASS    |



### TEST FINISHED

General Verdict 14.12.2020 10:20:07 / RT: 36 s

PASS

## 21. FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msps

| Test References                   |                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:28:16                                                                                        |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   28                                                                                                  |
| System Version                    | 1.0.1.2                                                                                                    |
| Test Specification                | FCC Part 15.247                                                                                            |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Class / TC Version                | TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01 Version: 0.0.1                                          |
| My Description                    | FCC 15.247 Peak Power Spectral Density DTS - BT LE 1 Msps                                                  |
| Add. Information                  |                                                                                                            |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | True   Freq [MHz] 2480                                                                                   |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

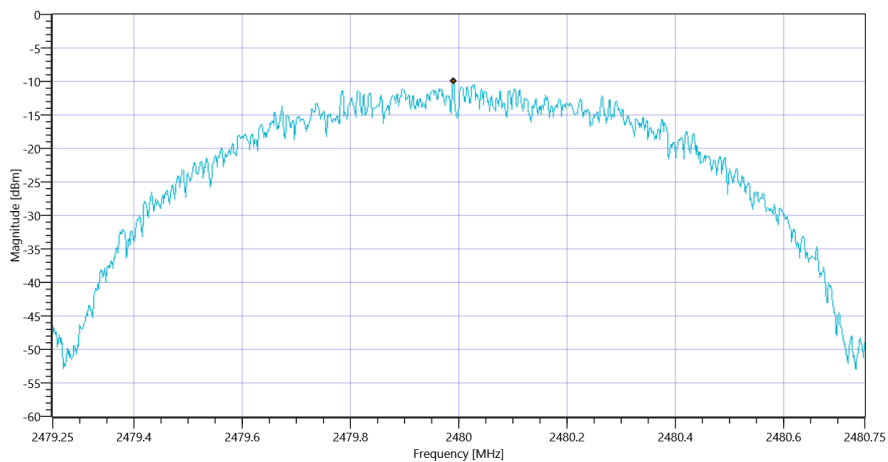
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.29   10.85   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

| Test Description       | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|------------------------|-------------|-------------|----------|----------|---------|
| Max Peak power Density | ---         | 8           | -10      | dBm/3KHz | PASS    |



Plot\_FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 1 Msps\_14122020\_102851.png

### TEST FINISHED

|                 |                                |      |
|-----------------|--------------------------------|------|
| General Verdict | 14.12.2020 10:28:52 / RT: 36 s | PASS |
|-----------------|--------------------------------|------|

## 22. FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msps

| Test References                   |                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:38:22                                                                                        |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   28                                                                                                  |
| System Version                    | 1.0.1.2                                                                                                    |
| Test Specification                | FCC Part 15.247                                                                                            |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Class / TC Version                | TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01 Version: 0.0.1                                          |
| My Description                    | FCC 15.247 Peak Power Spectral Density DTS - BT LE 2 Msps                                                  |
| Add. Information                  |                                                                                                            |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                   |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

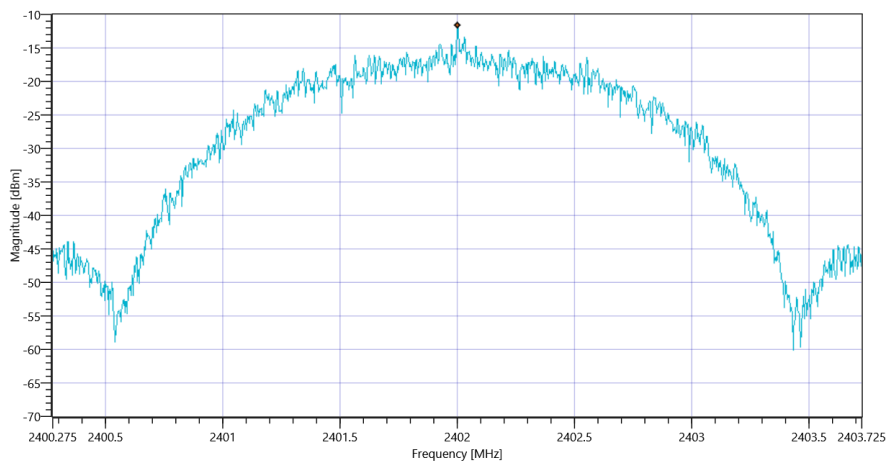
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.01   10.79   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

| Test Description       | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|------------------------|-------------|-------------|----------|----------|---------|
| Max Peak power Density | ---         | 8           | -11.66   | dBm/3KHz | PASS    |



### TEST FINISHED

|                 |                                |      |
|-----------------|--------------------------------|------|
| General Verdict | 14.12.2020 10:38:58 / RT: 36 s | PASS |
|-----------------|--------------------------------|------|

## 23. FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msps

| Test References                   |                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:47:25                                                                                        |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   28                                                                                                  |
| System Version                    | 1.0.1.2                                                                                                    |
| Test Specification                | FCC Part 15.247                                                                                            |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Class / TC Version                | TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01 Version: 0.0.1                                          |
| My Description                    | FCC 15.247 Peak Power Spectral Density DTS - BT LE 2 Msps                                                  |
| Add. Information                  |                                                                                                            |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                   |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

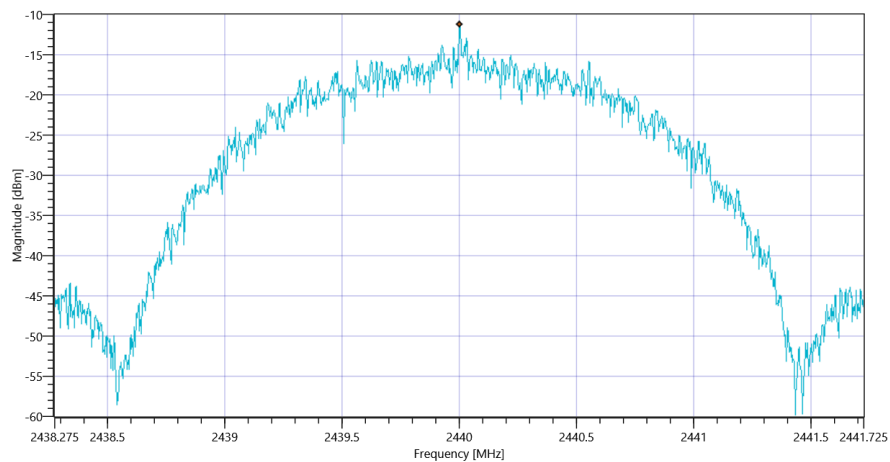
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.41   10.8   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

| Test Description       | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|------------------------|-------------|-------------|----------|----------|---------|
| Max Peak power Density | ---         | 8           | -11.23   | dBm/3KHz | PASS    |



Plot\_FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msps\_14122020\_104801.png

### TEST FINISHED

General Verdict 14.12.2020 10:48:01 / RT: 36 s

PASS

## 24. FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msps

| Test References                   |                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:56:15                                                                                        |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   27                                                                                                  |
| System Version                    | 1.0.1.2                                                                                                    |
| Test Specification                | FCC Part 15.247                                                                                            |
| Test Method                       | DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission |
| Class / TC Version                | TC_VM_FCC15247_Peak_Power_Spectral_Density_DTS_V01 Version: 0.0.1                                          |
| My Description                    | FCC 15.247 Peak Power Spectral Density DTS - BT LE 2 Msps                                                  |
| Add. Information                  |                                                                                                            |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | True   Freq [MHz] 2480                                                                                   |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

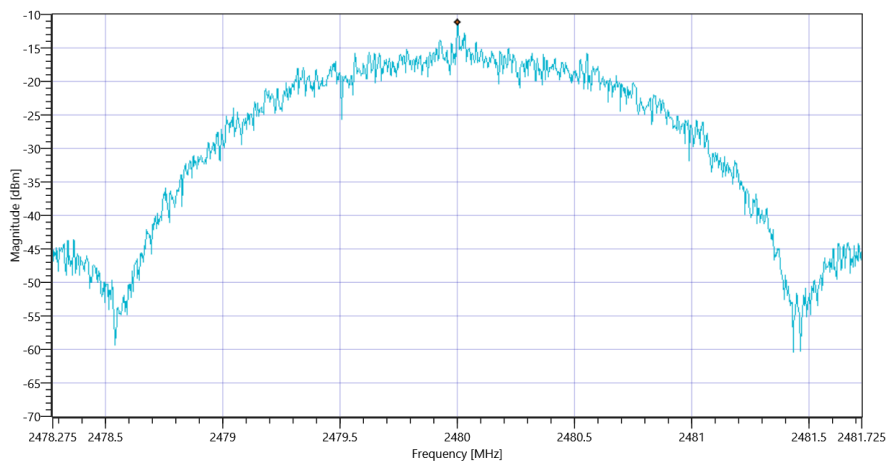
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.30   10.85   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

| Test Description       | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|------------------------|-------------|-------------|----------|----------|---------|
| Max Peak power Density | ---         | 8           | -11.19   | dBm/3KHz | PASS    |



Plot\_FCC Part 15.247 Peak Power Spectral Density DTS ~ BT LE 2 Msps\_14122020\_105651.png

### TEST FINISHED

General Verdict 14.12.2020 10:56:52 / RT: 36 s

PASS

## 25. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps

| Test References                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:11:26                                             |
| Ambit Temp [°C]   Humidity [rel%] | 22.0   30                                                       |
| System Version                    | 1.0.1.2                                                         |
| Test Specification                | FCC Part 15.247                                                 |
| Test Method                       |                                                                 |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2 |
| My Description                    | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps              |
| Add. Information                  |                                                                 |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                   |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

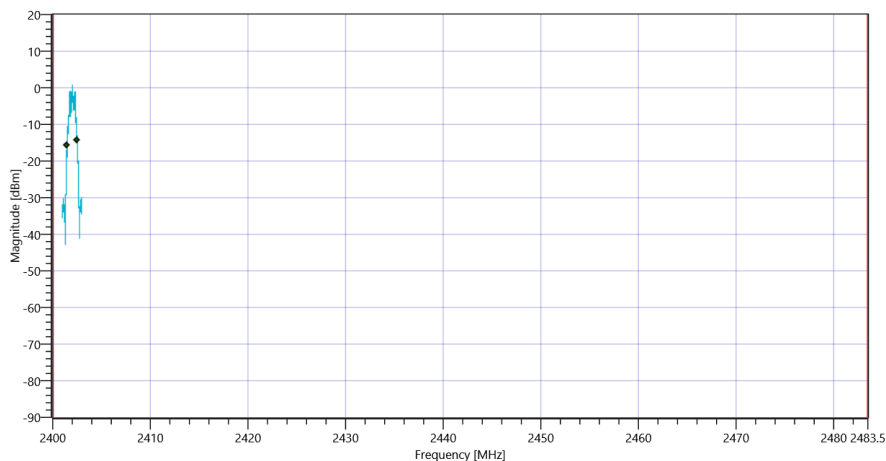
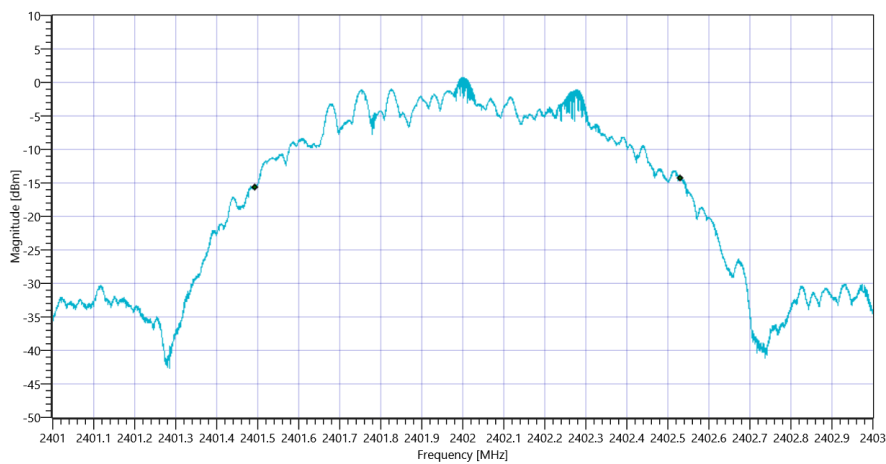
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.99   10.79   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 |

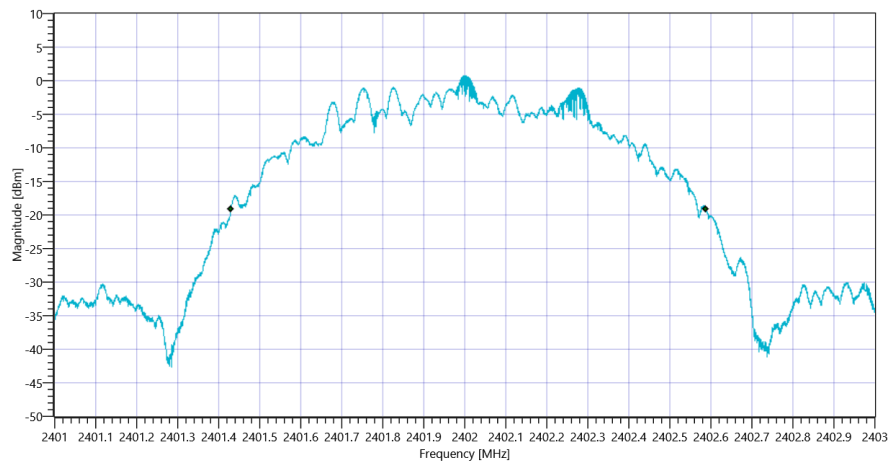
### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 1037      | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2401.4937 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2402.5307 | MHz  | PASS    |

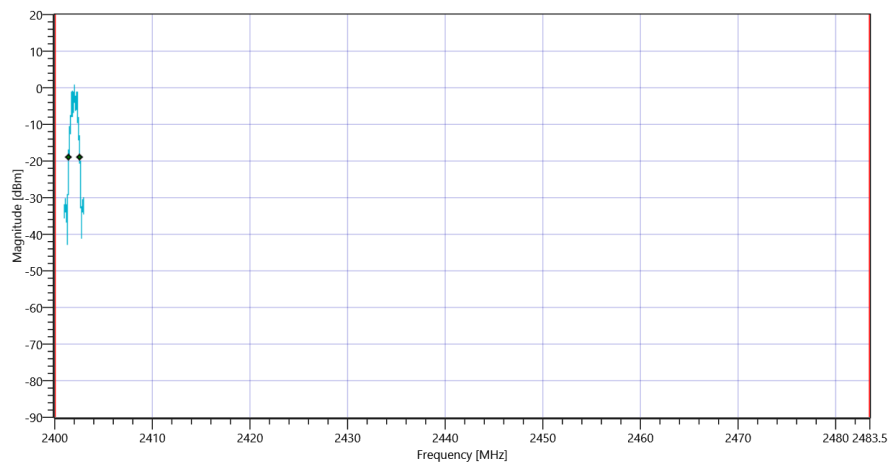


### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB   | ---         | ---         | 1159      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2401.4296 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2402.5884 | MHz  | PASS    |



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps 20dB\_14122020\_101200.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps\_14122020\_101204.png

TEST FINISHED

General Verdict

14.12.2020 10:12:04 / RT: 38 s

PASS

## 26. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps

| Test References                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:20:11                                             |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   29                                                       |
| System Version                    | 1.0.1.2                                                         |
| Test Specification                | FCC Part 15.247                                                 |
| Test Method                       |                                                                 |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2 |
| My Description                    | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps              |
| Add. Information                  |                                                                 |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                     |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                      |
| Frequency high to test | False   Freq [MHz] 2480                                                                                     |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

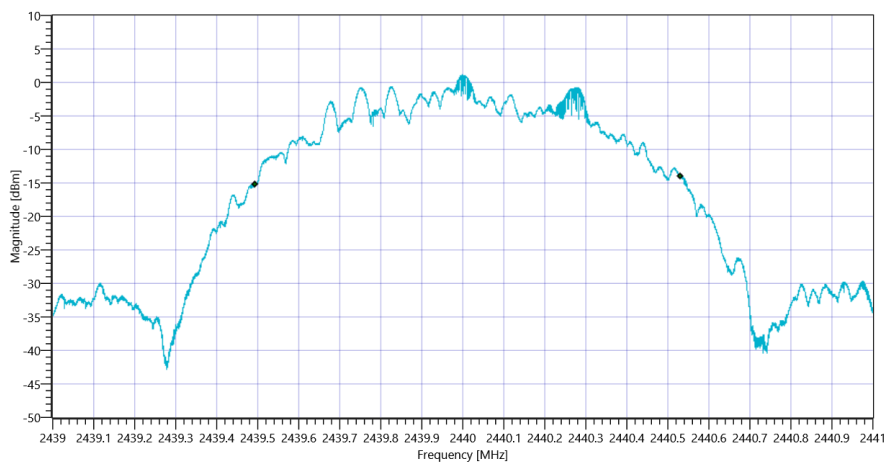
## Test at TX 2440 MHz

### READ SA SETTINGS:

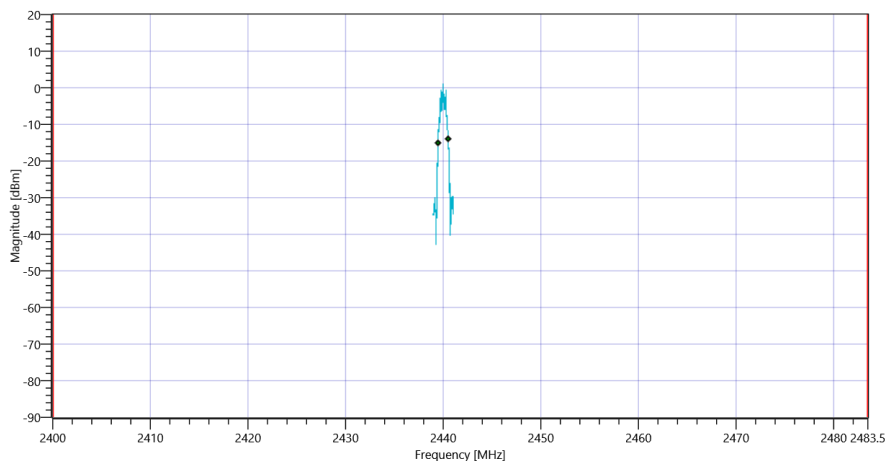
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.32   10.8   20      |
| Start [MHz]   Stop [MHz]                             | 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 |

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 1036      | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2439.4943 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2440.5307 | MHz  | PASS    |



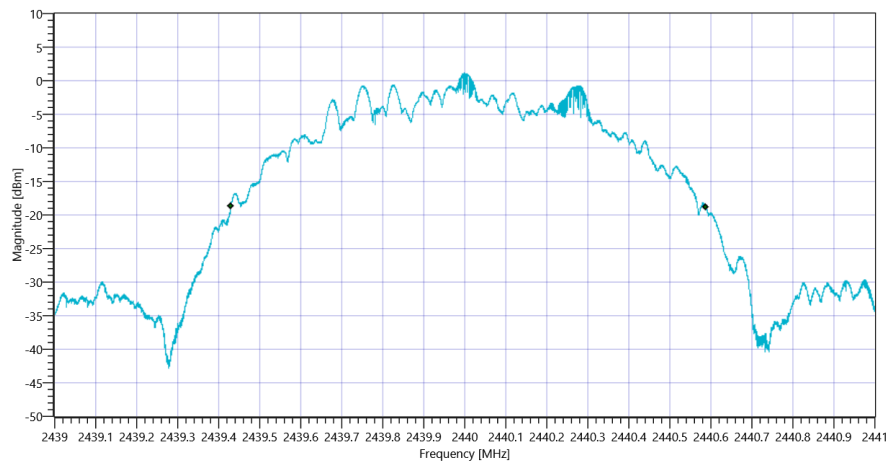
Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps 99PCT\_14122020\_102038.png



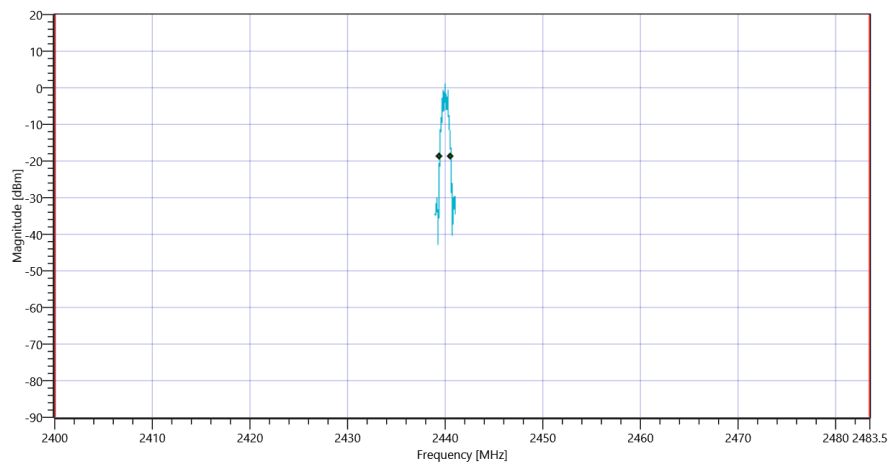
Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps\_14122020\_102041.png

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB   | ---         | ---         | 1159      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2439.4294 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2440.5886 | MHz  | PASS    |



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps 20dB\_14122020\_102046.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps\_14122020\_102049.png

TEST FINISHED

General Verdict

14.12.2020 10:20:49 / RT: 38 s

PASS

## 27. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps

| Test References                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:28:56                                             |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   28                                                       |
| System Version                    | 1.0.1.2                                                         |
| Test Specification                | FCC Part 15.247                                                 |
| Test Method                       |                                                                 |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2 |
| My Description                    | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps              |
| Add. Information                  |                                                                 |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                     |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                     |
| Frequency high to test | True   Freq [MHz] 2480                                                                                      |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

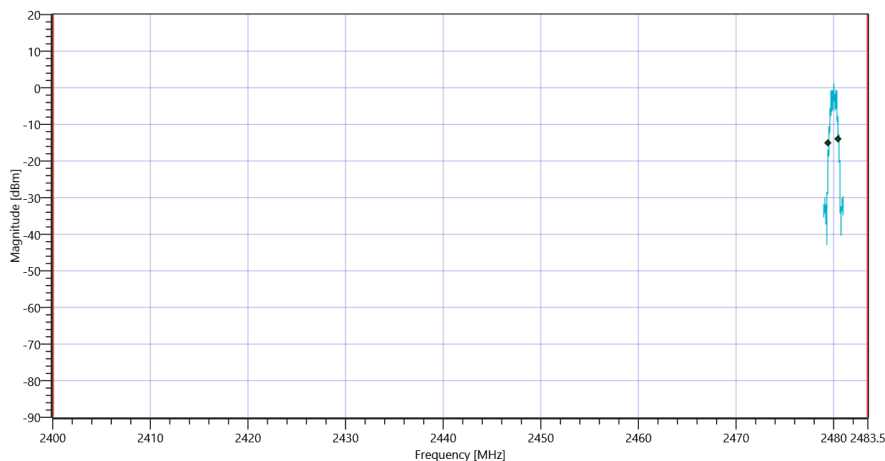
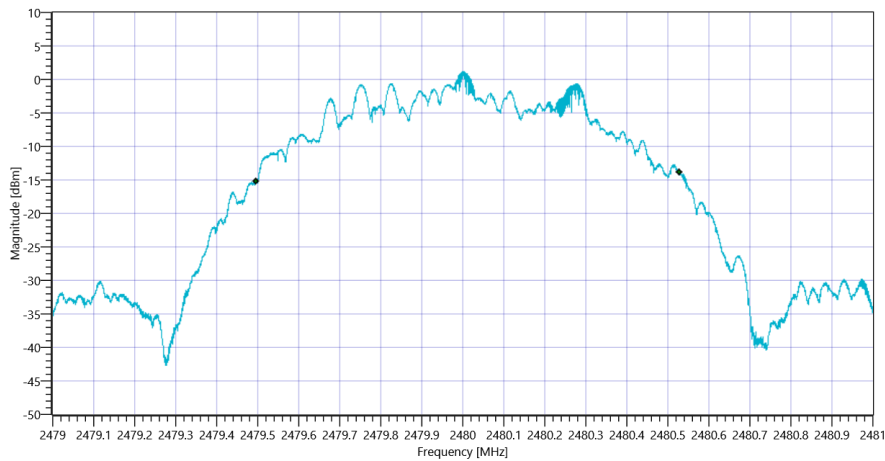
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.24   10.85   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 |

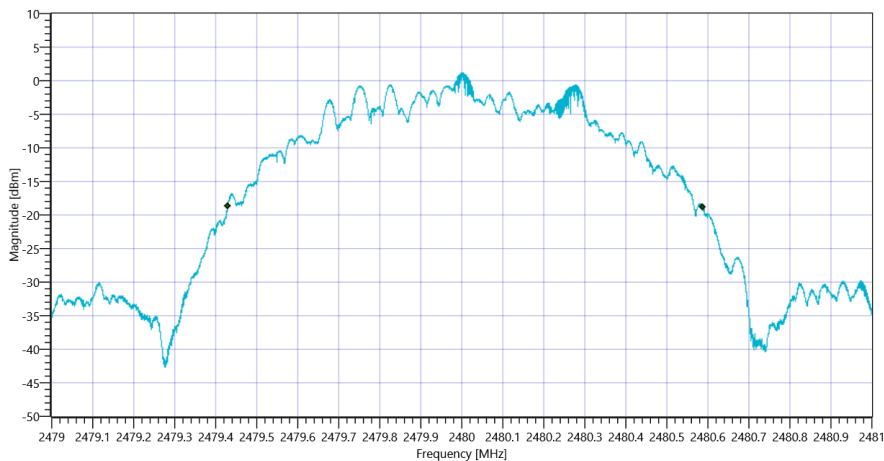
### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 1033      | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2479.4955 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2480.5287 | MHz  | PASS    |

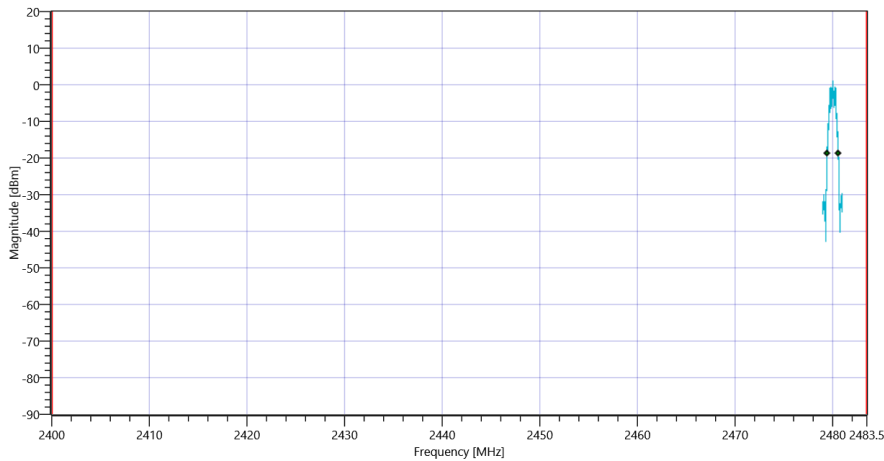


### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB   | ---         | ---         | 1159      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2479.4292 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2480.5880 | MHz  | PASS    |



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps 20dB\_14122020\_102931.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 1 Msps\_14122020\_102934.png

|                 |                                |      |
|-----------------|--------------------------------|------|
| TEST FINISHED   |                                |      |
| General Verdict | 14.12.2020 10:29:35 / RT: 38 s | PASS |

## 28. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps

| Test References                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:39:02                                             |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   29                                                       |
| System Version                    | 1.0.1.2                                                         |
| Test Specification                | FCC Part 15.247                                                 |
| Test Method                       |                                                                 |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2 |
| My Description                    | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps              |
| Add. Information                  |                                                                 |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                   |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

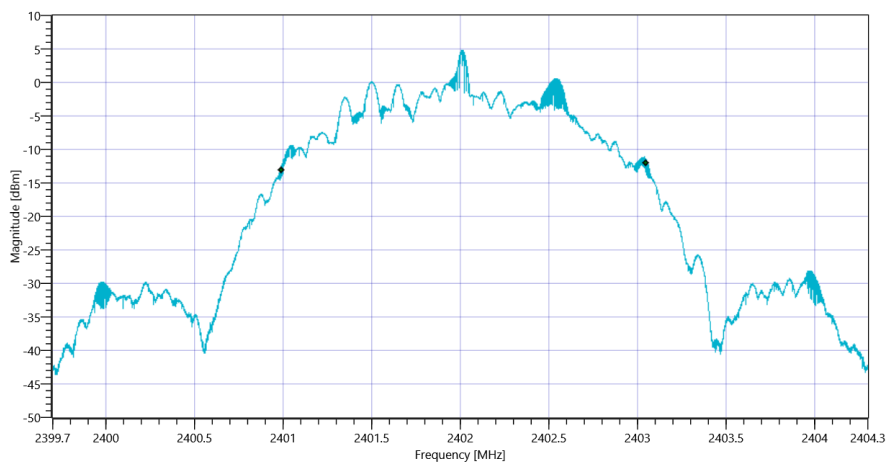
## Test at TX 2402 MHz

### READ SA SETTINGS:

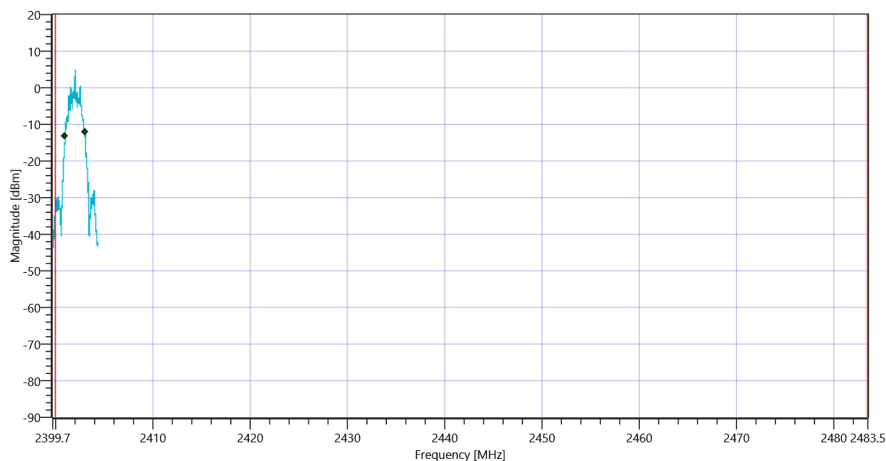
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.00   10.79   20     |
| Start [MHz]   Stop [MHz]                             | 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 |

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 2062      | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2400.9890 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2403.0505 | MHz  | PASS    |



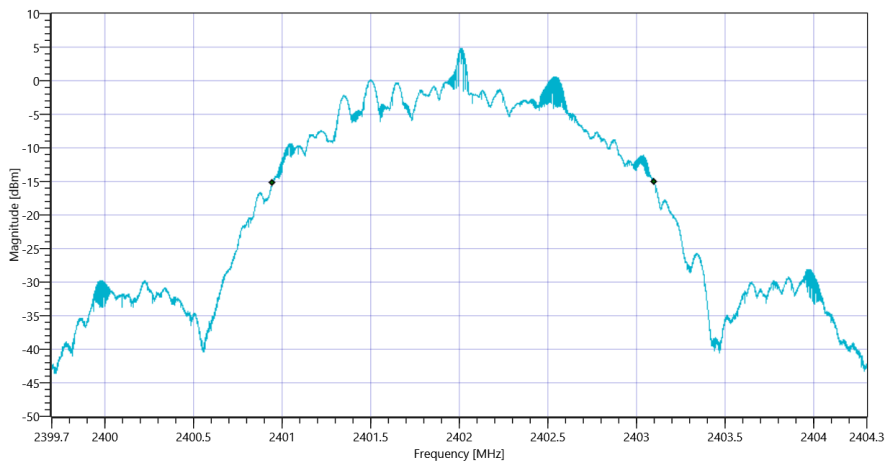
Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps 99PCT\_14122020\_103929.png



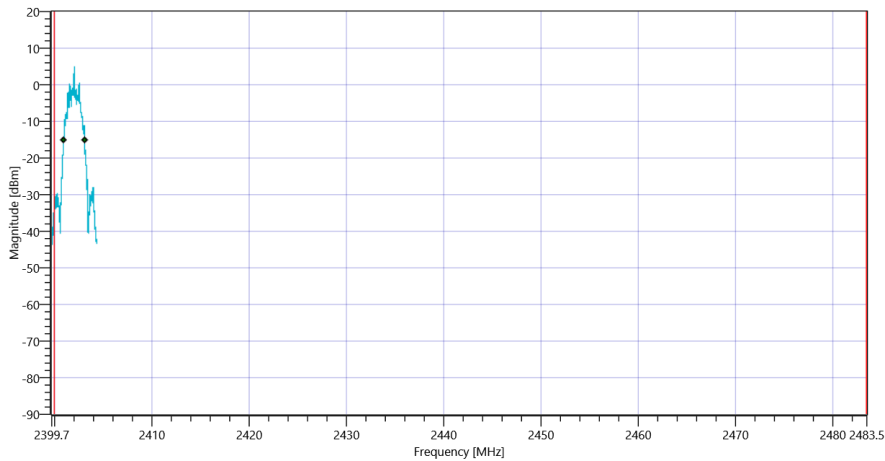
Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps\_14122020\_103932.png

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB   | ---         | ---         | 2153      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2400.9457 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2403.0989 | MHz  | PASS    |



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps 20dB\_14122020\_103937.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps\_14122020\_103940.png

|                 |                                |      |
|-----------------|--------------------------------|------|
| TEST FINISHED   |                                |      |
| General Verdict | 14.12.2020 10:39:40 / RT: 38 s | PASS |

## 29. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps

| Test References                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:48:05                                             |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   28                                                       |
| System Version                    | 1.0.1.2                                                         |
| Test Specification                | FCC Part 15.247                                                 |
| Test Method                       |                                                                 |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2 |
| My Description                    | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps              |
| Add. Information                  |                                                                 |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                     |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                      |
| Frequency high to test | False   Freq [MHz] 2480                                                                                     |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

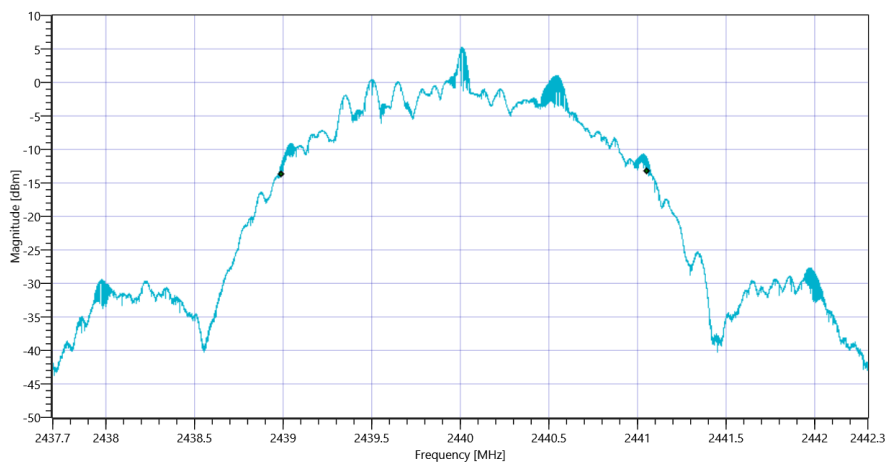
## Test at TX 2440 MHz

### READ SA SETTINGS:

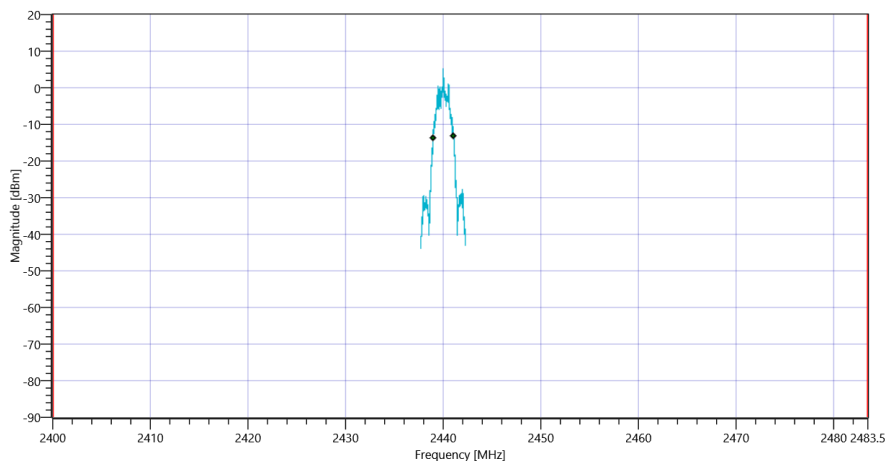
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.40   10.8   20      |
| Start [MHz]   Stop [MHz]                             | 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 |

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 2061      | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2438.9922 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2441.0528 | MHz  | PASS    |



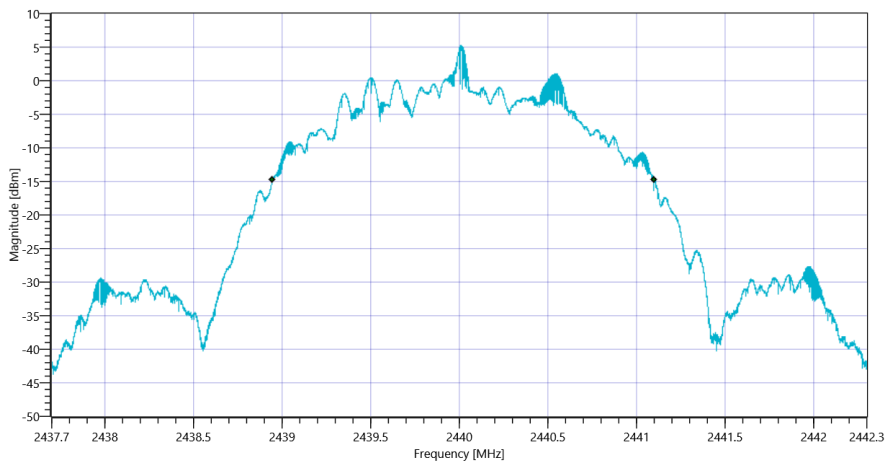
Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps 99PCT\_14122020\_104832.png



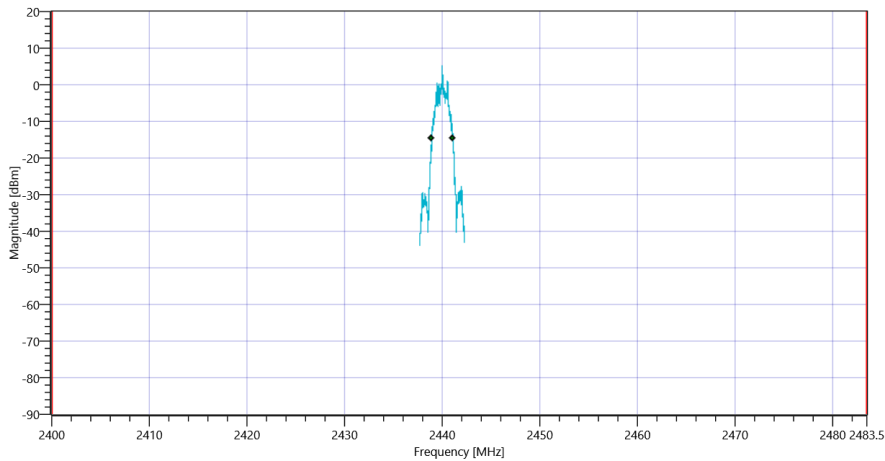
Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps\_14122020\_104835.png

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB   | ---         | ---         | 2154      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2438.9480 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2441.1022 | MHz  | PASS    |



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps 20dB\_14122020\_104840.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps\_14122020\_104843.png

|                 |                                |      |
|-----------------|--------------------------------|------|
| TEST FINISHED   |                                |      |
| General Verdict | 14.12.2020 10:48:44 / RT: 38 s | PASS |

## 30. FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps

| Test References                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:56:56                                             |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   27                                                       |
| System Version                    | 1.0.1.2                                                         |
| Test Specification                | FCC Part 15.247                                                 |
| Test Method                       |                                                                 |
| Class / TC Version                | TC_VM_FCC15247_Bandwidth_99PCT_20dB_DTS_FHSS_V01 Version: 0.0.2 |
| My Description                    | FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 2 Msps              |
| Add. Information                  |                                                                 |

| Test Parameter         |                                                                                                             |
|------------------------|-------------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                                |
| Antenna Port used      | 1                                                                                                           |
| Temperature            | mid                                                                                                         |
| Voltage                | mid                                                                                                         |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                     |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                     |
| Frequency high to test | True   Freq [MHz] 2480                                                                                      |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                      |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA:<br>Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

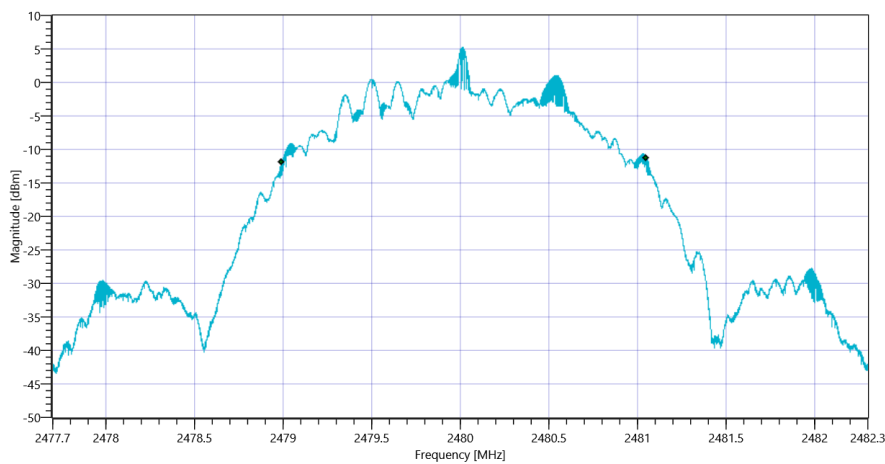
## Test at TX 2480 MHz

### READ SA SETTINGS:

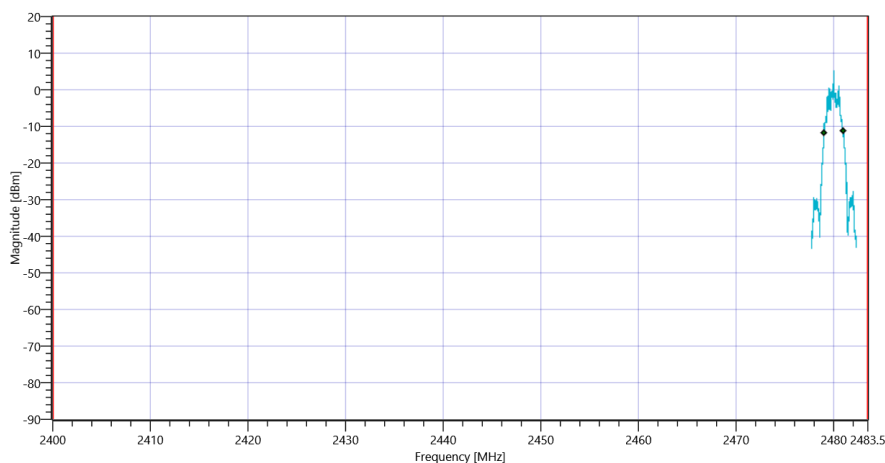
|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.32   10.85   20     |
| Start [MHz]   Stop [MHz]                             | 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 |

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 2058      | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2478.9932 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2481.0510 | MHz  | PASS    |



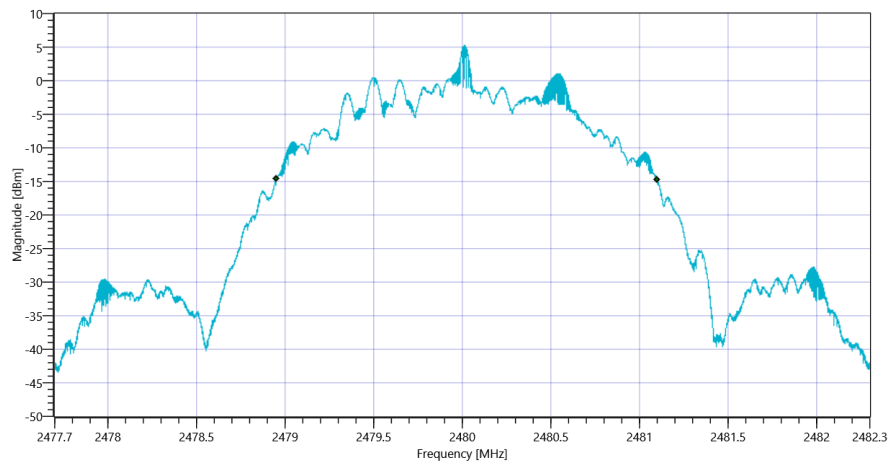
Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps 99PCT\_14122020\_105723.png



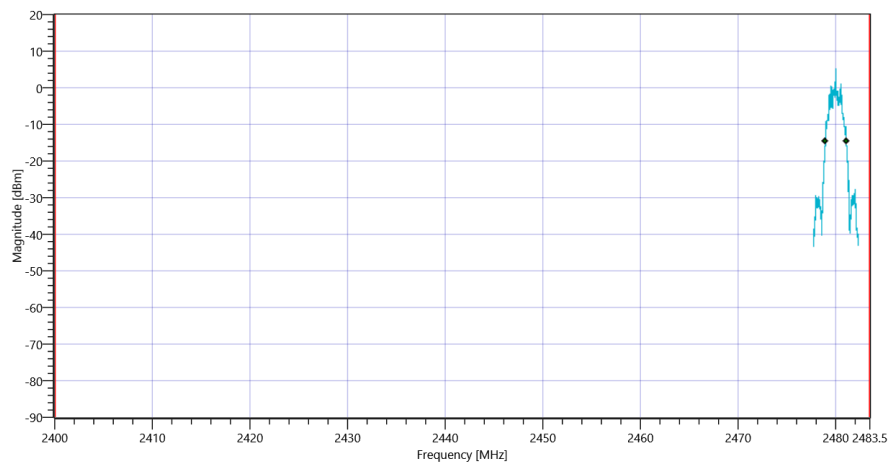
Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps\_14122020\_105726.png

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 20dB   | ---         | ---         | 2149      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2478.9494 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2481.0985 | MHz  | PASS    |



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps 20dB\_14122020\_105731.png



Plot\_FCC Part 15.247 Bandwidth 99PCT-20dB ~ BT LE 2 Msps\_14122020\_105734.png

TEST FINISHED

General Verdict

14.12.2020 10:57:35 / RT: 38 s

PASS

## 31. FCC Part 15.247 TX Spurious Conducted ~ BT LE 1 Msp

| Test References                   |                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:12:08                                                                                            |
| Ambit Temp [°C]   Humidity [rel%] | 22.0   30                                                                                                      |
| System Version                    | 1.0.1.2                                                                                                        |
| Test Specification                | FCC Part 15.247                                                                                                |
| Test Method                       | IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable. |
| Class / TC Version                | TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1                                                       |
| My Description                    | FCC 15.247 TX Emissions Conducted DTS - BT LE 1 Msp                                                            |
| Add. Information                  |                                                                                                                |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msp                                                                                              |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                   |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

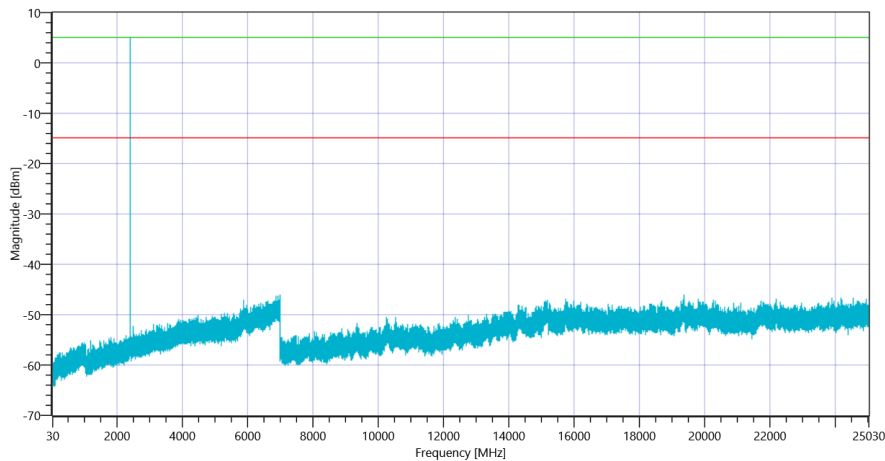
## Test at TX 2402 MHz

### READ SA SETTINGS:

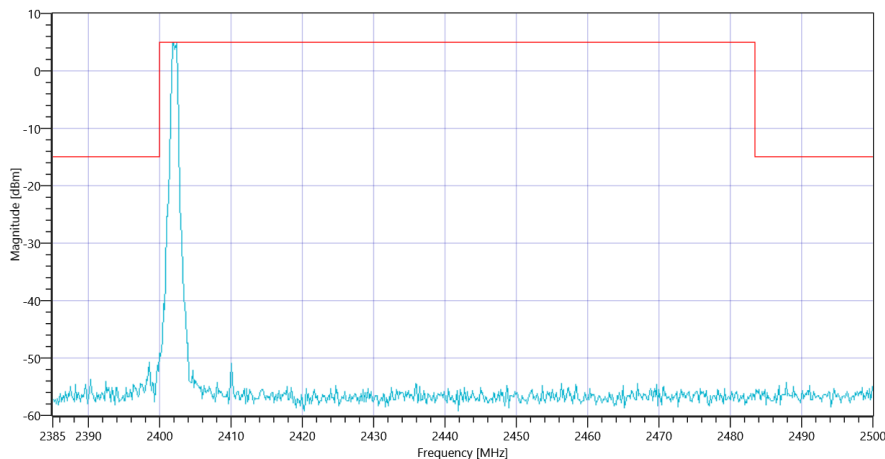
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 5.97   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 500   8   3001   SWE  |

### RESULT

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2402.00 MHz             | ---         | ---         | 5.06     | dBm  | INFO    |
| No peaks detected                   | ---         | ---         |          |      | PASS    |
| Lowest margin to limit 6997.167 MHz | 0           | ---         | 31.22    | dB   | INFO    |



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT LE 1 Msps 2402\_14122020\_101654.png



Plot\_FCC Part 15.247 TX Spurious Conducted ~ BT LE 1 Msps 2402\_14122020\_101657.png

### TEST FINISHED

General Verdict 14.12.2020 10:16:58 / RT: 289 s

PASS

## 32. FCC Part 15.247 TX Spurious Conducted ~ BT LE 1 Msp

| Test References                   |                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:20:54                                                                                            |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   29                                                                                                      |
| System Version                    | 1.0.1.2                                                                                                        |
| Test Specification                | FCC Part 15.247                                                                                                |
| Test Method                       | IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable. |
| Class / TC Version                | TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1                                                       |
| My Description                    | FCC 15.247 TX Emissions Conducted DTS - BT LE 1 Msp                                                            |
| Add. Information                  |                                                                                                                |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msp                                                                                              |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                   |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

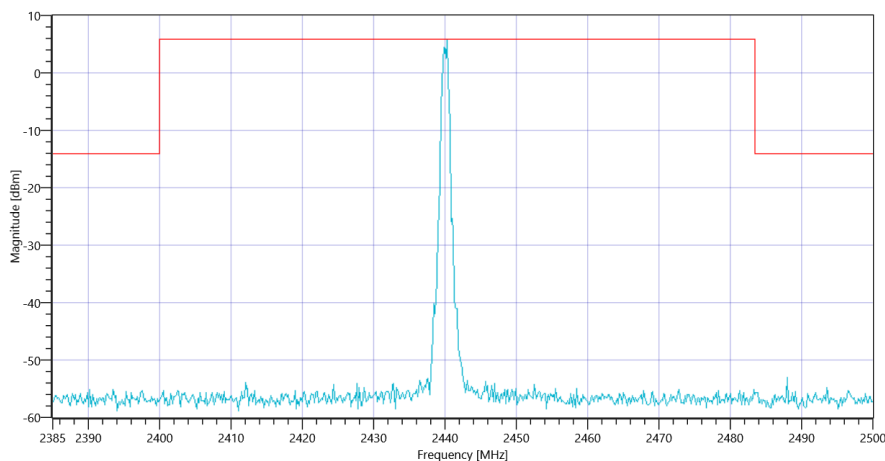
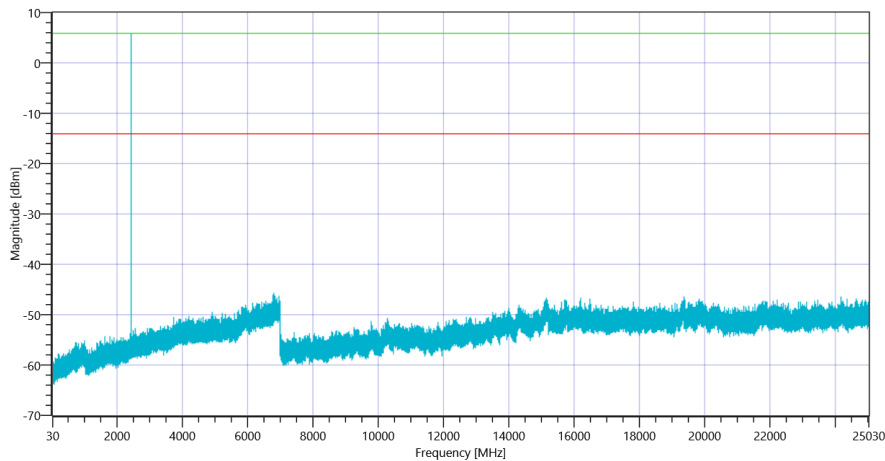
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 6.32   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 500   8   3001   SWE  |

### RESULT

| Test Description                       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2440.33 MHz                | ---         | ---         | 5.87     | dBm  | INFO    |
| No peaks detected                      | ---         | ---         |          |      | PASS    |
| Lowest margin to limit<br>6817.667 MHz | 0           | ---         | 31.56    | dB   | INFO    |



### TEST FINISHED

General Verdict 14.12.2020 10:25:44 / RT: 289 s

PASS

### 33. FCC Part 15.247 TX Spurious Conducted ~ BT LE 1 Msp

| Test References                   |                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 10:29:39                                                                                            |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   28                                                                                                      |
| System Version                    | 1.0.1.2                                                                                                        |
| Test Specification                | FCC Part 15.247                                                                                                |
| Test Method                       | IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable. |
| Class / TC Version                | TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1                                                       |
| My Description                    | FCC 15.247 TX Emissions Conducted DTS - BT LE 1 Msp                                                            |
| Add. Information                  |                                                                                                                |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 1 Msp                                                                                              |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | True   Freq [MHz] 2480                                                                                   |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

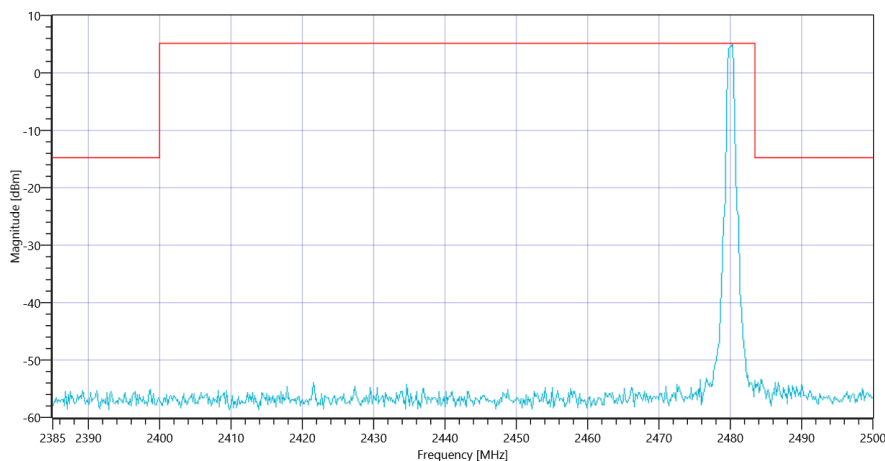
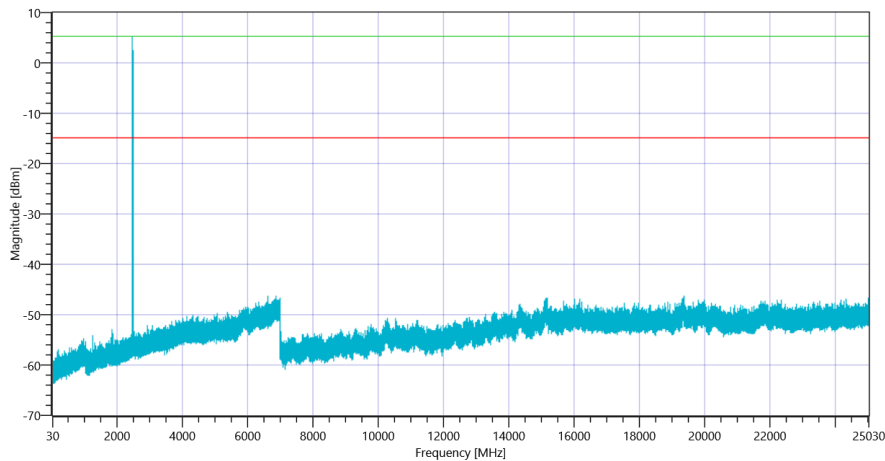
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 6.24   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 500   8   3001   SWE  |

### RESULT

| Test Description                | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|---------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2480.33 MHz         | ---         | ---         | 5.20     | dBm  | INFO    |
| No peaks detected               | ---         | ---         |          |      | PASS    |
| Lowest margin to limit 6616 MHz | 0           | ---         | 31.43    | dB   | INFO    |



### TEST FINISHED

General Verdict 14.12.2020 10:34:29 / RT: 289 s

PASS

## 34. FCC Part 15.247 TX Spurious Conducted ~ BT LE 2 Msps

| Test References                   |                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 12:15:02                                                                                            |
| Ambit Temp [°C]   Humidity [rel%] | 22.2   29                                                                                                      |
| System Version                    | 1.0.1.2                                                                                                        |
| Test Specification                | FCC Part 15.247                                                                                                |
| Test Method                       | IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable. |
| Class / TC Version                | TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1                                                       |
| My Description                    | FCC 15.247 TX Emissions Conducted DTS - BT LE 2 Msps                                                           |
| Add. Information                  |                                                                                                                |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | True   Freq [MHz] 2402                                                                                   |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

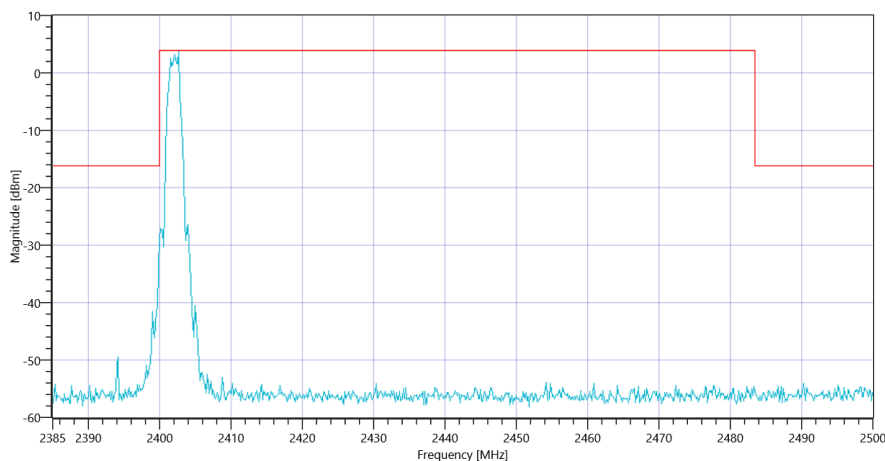
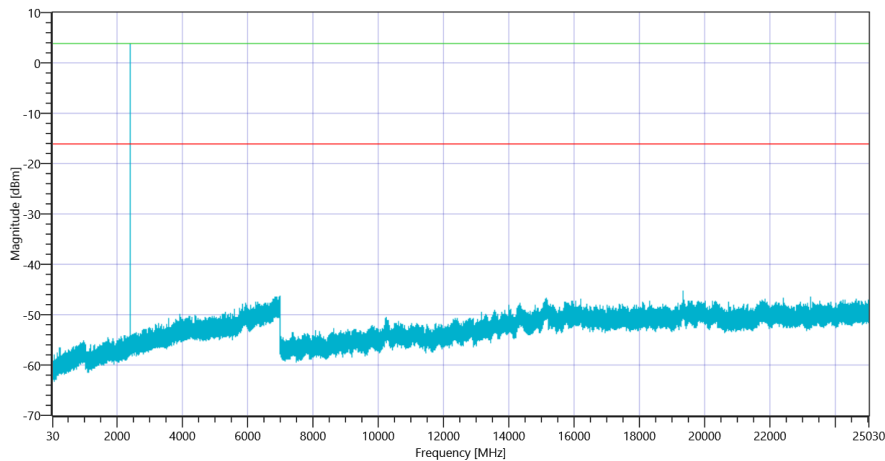
## Test at TX 2402 MHz

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 6.12   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 1000   8   3001   SWE |

### RESULT

| Test Description                       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2402.67 MHz                | ---         | ---         | 3.87     | dBm  | INFO    |
| No peaks detected                      | ---         | ---         |          |      | PASS    |
| Lowest margin to limit<br>2399.833 MHz | 0           | ---         | 17.67    | dB   | INFO    |



### TEST FINISHED

General Verdict 14.12.2020 12:23:23 / RT: 500 s

PASS

## 35. FCC Part 15.247 TX Spurious Conducted ~ BT LE 2 Msps

| Test References                   |                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 12:23:27                                                                                            |
| Ambit Temp [°C]   Humidity [rel%] | 22.3   29                                                                                                      |
| System Version                    | 1.0.1.2                                                                                                        |
| Test Specification                | FCC Part 15.247                                                                                                |
| Test Method                       | IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable. |
| Class / TC Version                | TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1                                                       |
| My Description                    | FCC 15.247 TX Emissions Conducted DTS - BT LE 2 Msps                                                           |
| Add. Information                  |                                                                                                                |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | True   Freq [MHz] 2440                                                                                   |
| Frequency high to test | False   Freq [MHz] 2480                                                                                  |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

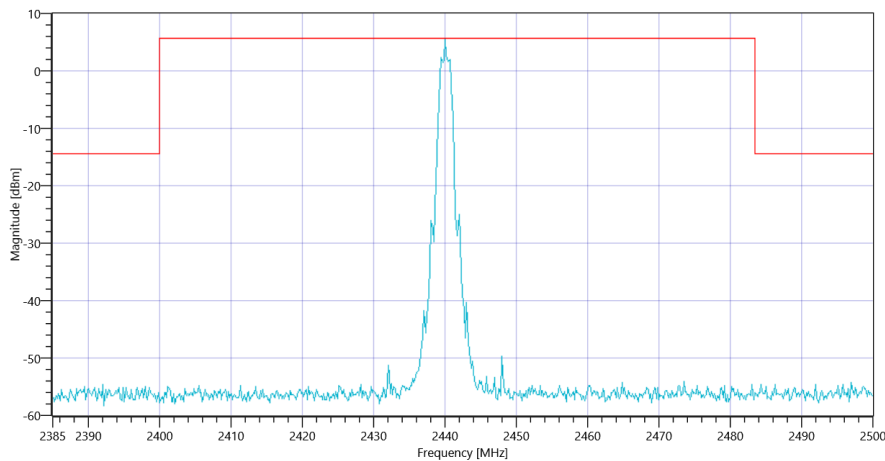
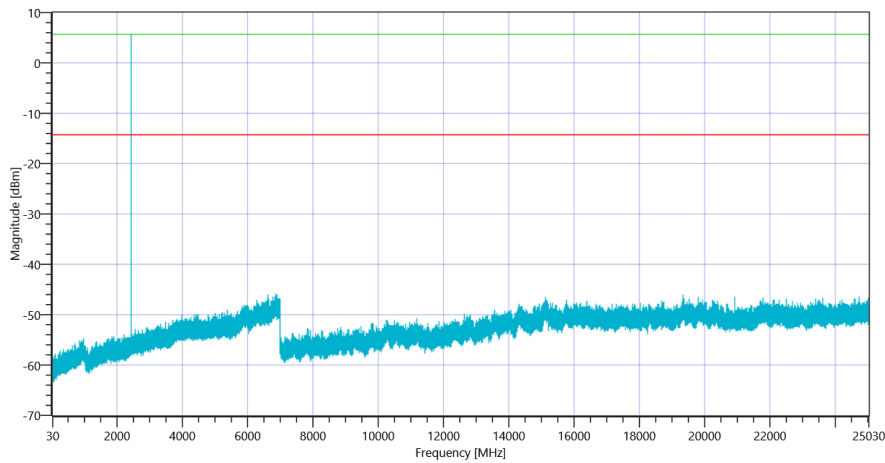
## Test at TX 2440 MHz

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 6.38   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 1000   8   3001   SWE |

### RESULT

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2440.00 MHz             | ---         | ---         | 5.66     | dBm  | INFO    |
| No peaks detected                   | ---         | ---         |          |      | PASS    |
| Lowest margin to limit 6870.167 MHz | 0           | ---         | 31.54    | dB   | INFO    |



### TEST FINISHED

General Verdict 14.12.2020 12:39:53 / RT: 986 s

PASS

## 36. FCC Part 15.247 TX Spurious Conducted ~ BT LE 2 Msps

| Test References                   |                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------|
| TC Start                          | 14.12.2020 12:39:57                                                                                            |
| Ambit Temp [°C]   Humidity [rel%] | 22.4   29                                                                                                      |
| System Version                    | 1.0.1.2                                                                                                        |
| Test Specification                | FCC Part 15.247                                                                                                |
| Test Method                       | IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable. |
| Class / TC Version                | TC_VM_FCC15247_TX_Emissions_Conducted_V01 Version: 0.0.1                                                       |
| My Description                    | FCC 15.247 TX Emissions Conducted DTS - BT LE 2 Msps                                                           |
| Add. Information                  |                                                                                                                |

| Test Parameter         |                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------|
| Technology to test     | BT LE 2 Msps                                                                                             |
| Antenna Port used      | 1                                                                                                        |
| Temperature            | mid                                                                                                      |
| Voltage                | mid                                                                                                      |
| Frequency low to test  | False   Freq [MHz] 2402                                                                                  |
| Frequency mid to test  | False   Freq [MHz] 2440                                                                                  |
| Frequency high to test | True   Freq [MHz] 2480                                                                                   |
| Switched Path          | IUT - SignalingUnit - SpectrumAnalyzer                                                                   |
| Devices in use         | SigBT: Rohde&Schwarz,CMW,1201.0002k75/100683,3.7.170   SA: Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |

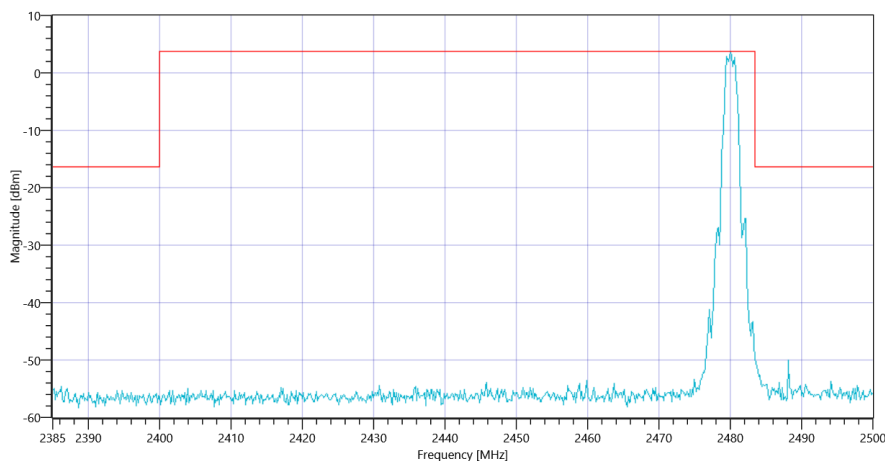
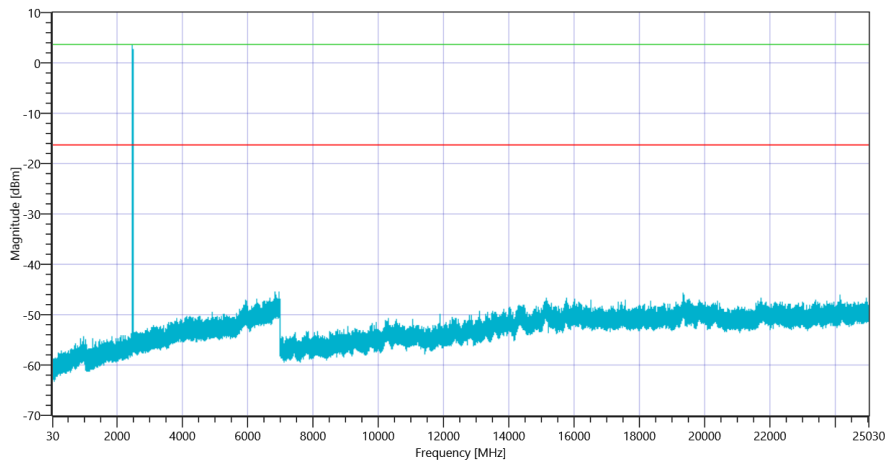
## Test at TX 2480 MHz

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 6.42   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 1000   8   3001   SWE |

### RESULT

| Test Description                       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------------|-------------|-------------|----------|------|---------|
| Reference @ 2480.00 MHz                | ---         | ---         | 3.67     | dBm  | INFO    |
| No peaks detected                      | ---         | ---         |          |      | PASS    |
| Lowest margin to limit<br>6845.667 MHz | 0           | ---         | 29.2     | dB   | INFO    |



### TEST FINISHED

General Verdict 14.12.2020 12:48:23 / RT: 506 s

PASS

- END OF DOCUMENT -