

# Measurement Results

No.1-3547/21-01-12\_Annex\_MR

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## Test logging

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## EUT Information

| EUT DEFINITION       |                                |
|----------------------|--------------------------------|
| Manufacturer         | Digi International Spain S.A.U |
| Type                 | ConnectCard i.MX28N            |
| Serial Number        | Sample #1 conducted            |
| Setup Number         | 1.0                            |
| Version SW           | NI                             |
| Version FW           | NI                             |
| Version HW           | NI                             |
| Comment 1            |                                |
| Comment 2            |                                |
| Temperature [°C] Min | -40                            |
| Temperature [°C] Nom | 20                             |
| Temperature [°C] Max | 85                             |
| Voltage [V] Min      | 4.5                            |
| Voltage [V] Nom      | 5                              |
| Voltage [V] Max      | 5.5                            |

## FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate

| Test References                   |                                                                |
|-----------------------------------|----------------------------------------------------------------|
| TC Start                          | 24.06.2022 13:02:50                                            |
| Ambit Temp [°C]   Humidity [rel%] | 28.3   44                                                      |
| System Version                    | 3.2.0.2                                                        |
| Test Specification                | FCC 15.247, ISED RSS247 -                                      |
| Test Method                       |                                                                |
| TC Version                        | 0.0.2                                                          |
| My Description                    | FCC 15.247 Bandwidth 99PCT - 20dB FHSS - BT Classic Basic Rate |
| Add. Information                  |                                                                |

| EUT Common Settings BT Classic           |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFD                                          |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

| Test Parameter                                   |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic Basic rate                  |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 2402                 |
| Frequency mid to test                            | True   Freq [MHz] 2441                 |
| Frequency high to test                           | True   Freq [MHz] 2480                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

| Test Equipment                                                |  |
|---------------------------------------------------------------|--|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |  |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |  |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |  |

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 7.79     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |

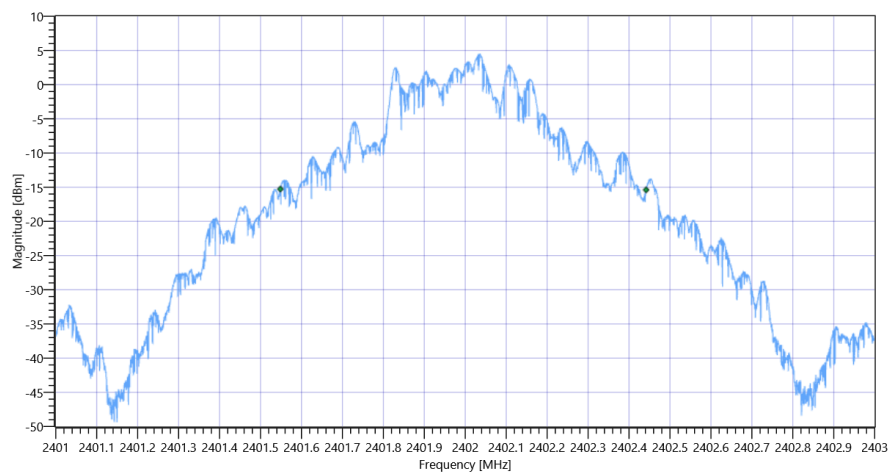
### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 12.79   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

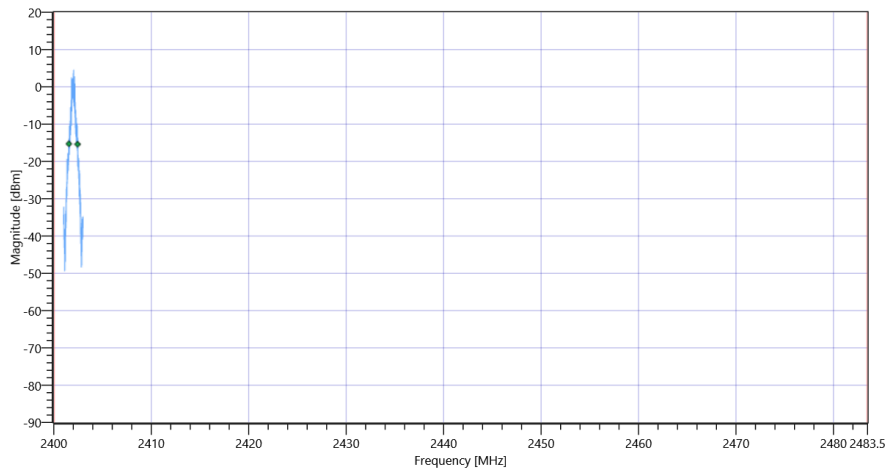
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 893.111   | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2401.5484 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2402.4416 | MHz  | PASS    |

### Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate 99PCT

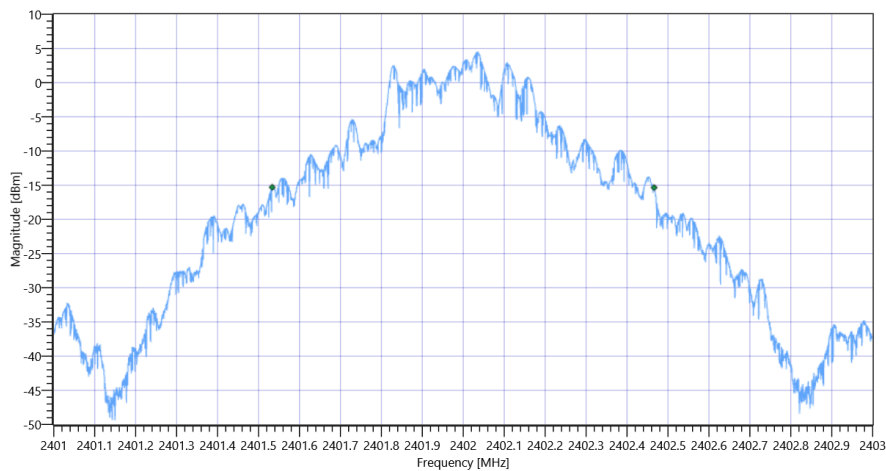
### Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate

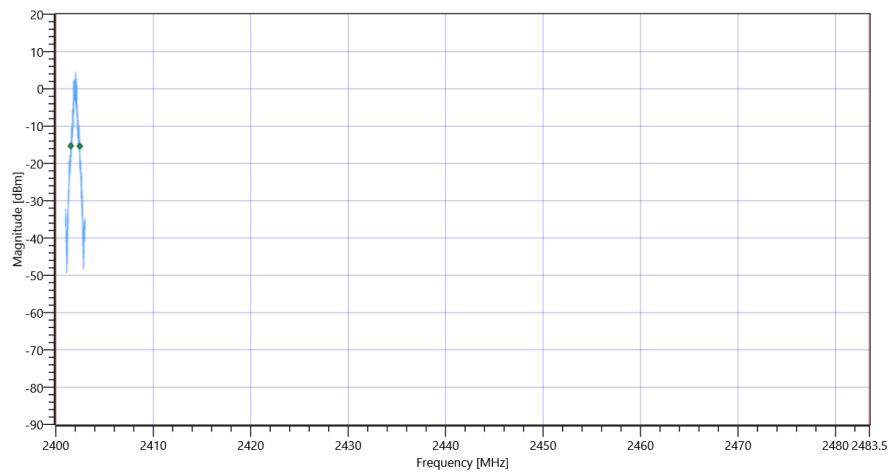
| RESULT           |             |             |           |      |         |
|------------------|-------------|-------------|-----------|------|---------|
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
| Bandwidth 20dB   | ---         | ---         | 933       | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2401.5334 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2402.4662 | MHz  | PASS    |

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate 20dB

Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate

## Test at TX 2441 MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 8.18     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2441.100 | MHz  | INFO    |

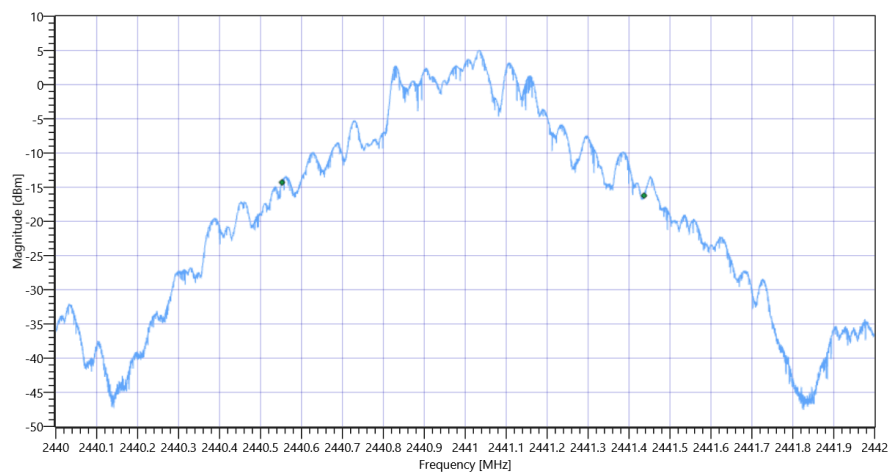
### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 13.18   10.8   20      |
| Start [MHz]   Stop [MHz]                             | 2440.000   2442.000    |
| 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

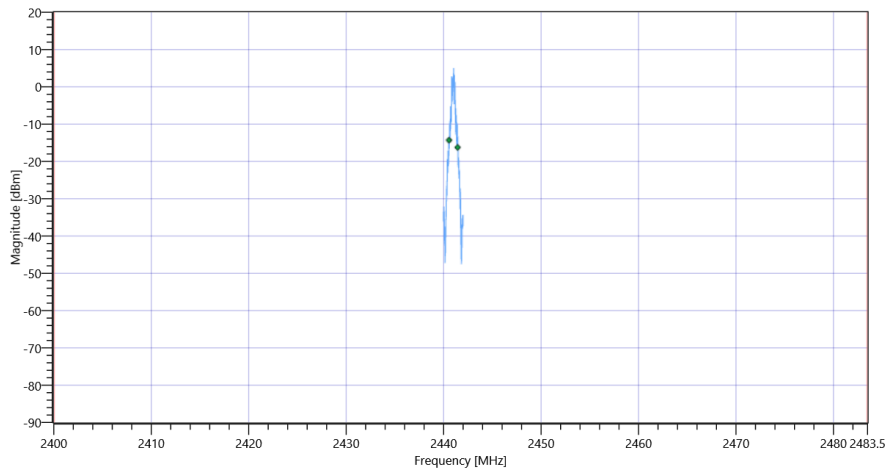
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 884.112   | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2440.5524 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2441.4366 | MHz  | PASS    |

### Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate 99PCT

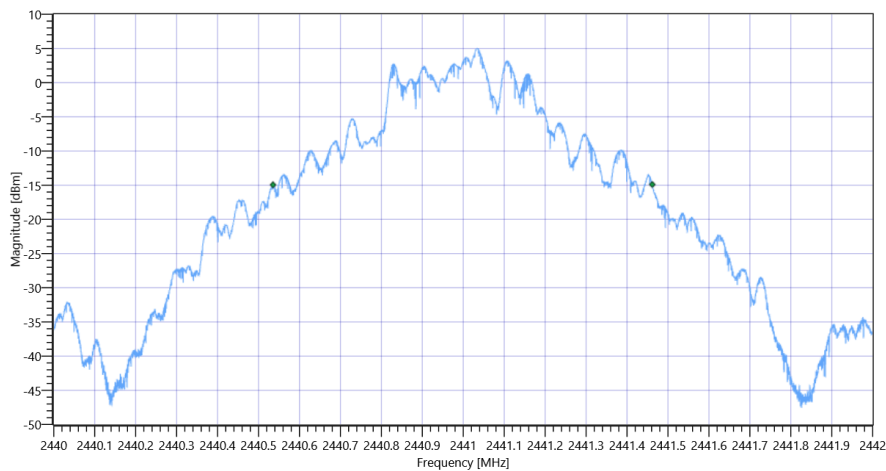
### Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate

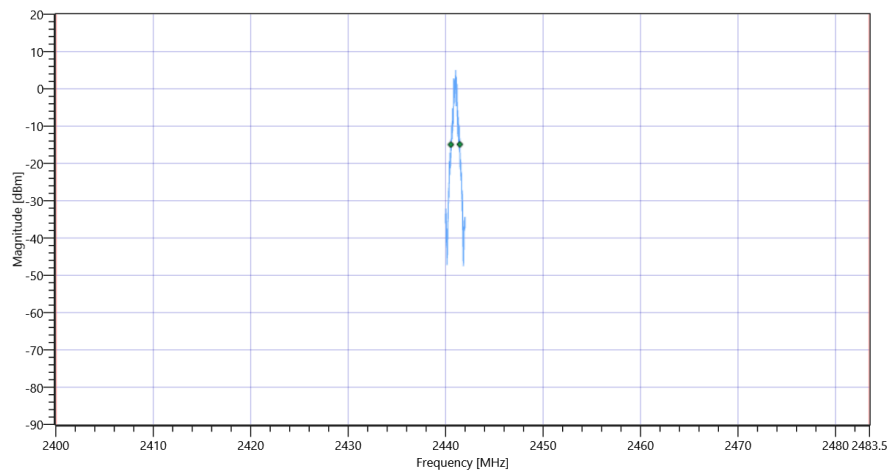
| RESULT           |             |             |           |      |         |
|------------------|-------------|-------------|-----------|------|---------|
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
| Bandwidth 20dB   | ---         | ---         | 926       | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2440.5354 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2441.4616 | MHz  | PASS    |

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate 20dB

Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 7.45     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2480.000 | MHz  | INFO    |

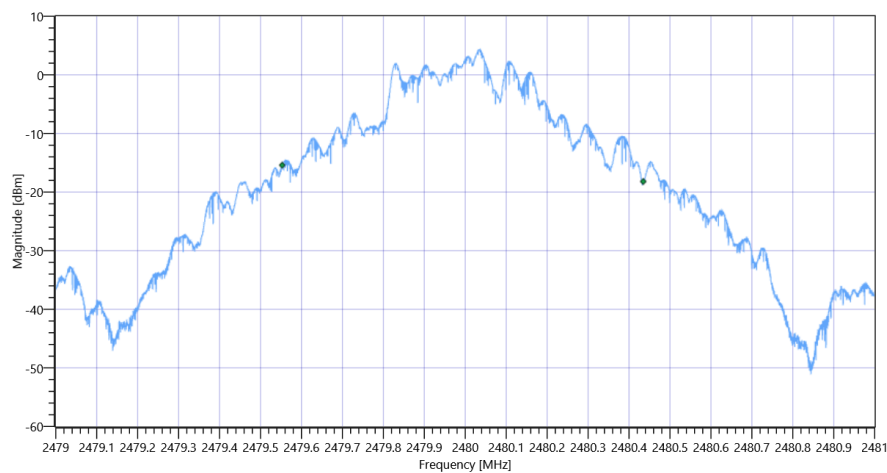
### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 12.45   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

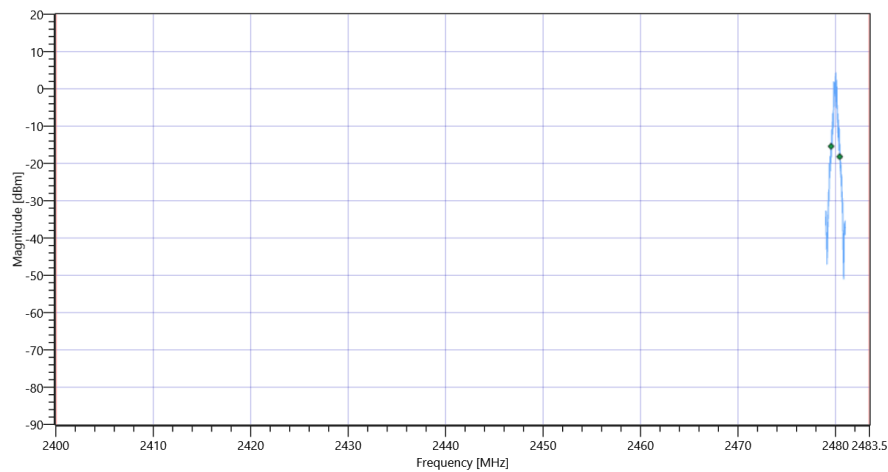
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 881.912   | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2479.5528 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2480.4348 | MHz  | PASS    |

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate 99PCT

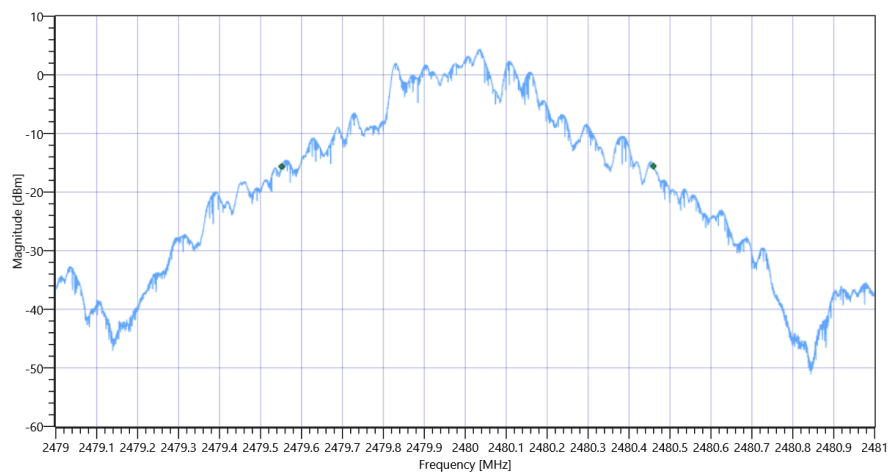
### Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate

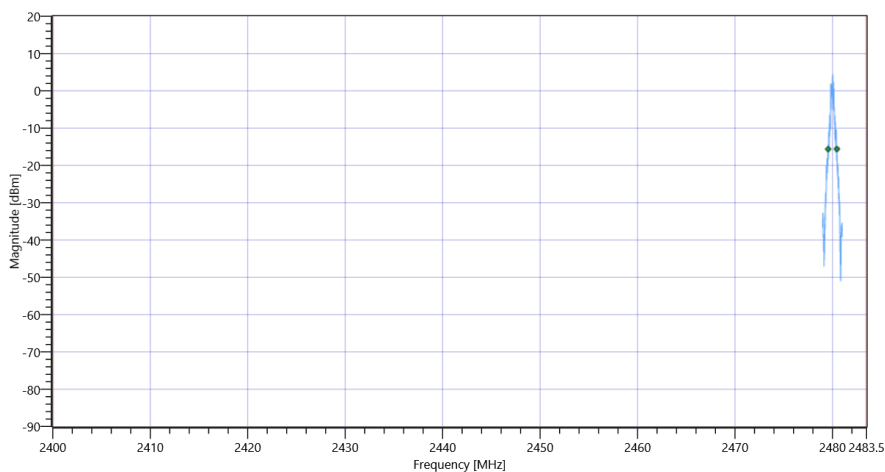
| RESULT           |             |             |           |      |         |
|------------------|-------------|-------------|-----------|------|---------|
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
| Bandwidth 20dB   | ---         | ---         | 908       | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2479.5516 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2480.4594 | MHz  | PASS    |

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate 20dB

Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic Basic rate

General verdict

PASS

## FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi/4DQPSK

### Test References

|                                   |                                                                   |
|-----------------------------------|-------------------------------------------------------------------|
| TC Start                          | 24.06.2022 13:30:56                                               |
| Ambit Temp [°C]   Humidity [rel%] | 28.2   43                                                         |
| System Version                    | 3.2.0.2                                                           |
| Test Specification                | FCC 15.247, ISED RSS247 -                                         |
| Test Method                       |                                                                   |
| TC Version                        | 0.0.2                                                             |
| My Description                    | FCC 15.247 Bandwidth 99PCT - 20dB FHSS - BT Classic EDR Pi/4DQPSK |
| Add. Information                  |                                                                   |

### EUT Common Settings BT Classic

|                                          |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFD                                          |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic EDR Pi/4DQPSK               |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 2402                 |
| Frequency mid to test                            | True   Freq [MHz] 2441                 |
| Frequency high to test                           | True   Freq [MHz] 2480                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.17     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2401.800 | MHz  | INFO    |

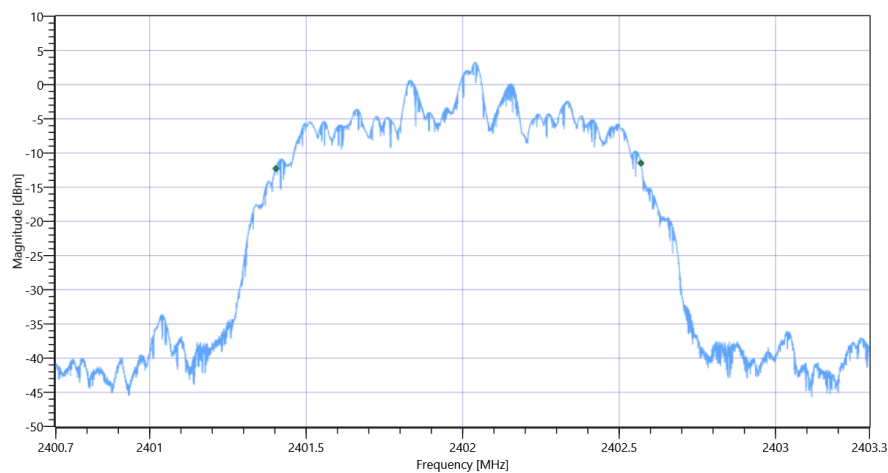
### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.17   10.79   15     |
| Start [MHz]   Stop [MHz]                             | 2400.700   2403.300    |
| RBW [MHz]   VBW [MHz]                                | 0.030000   0.100000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: Time [ms]   Count   Points per Section   Type | 50   200   10001   SWE |

### RESULT

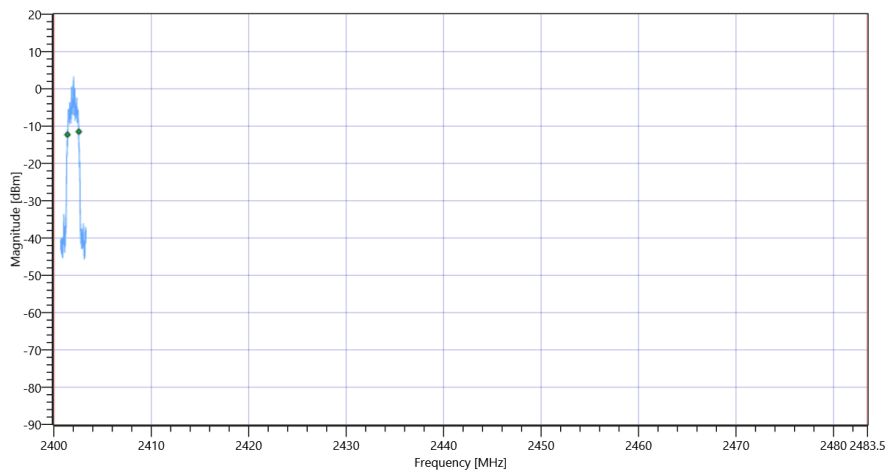
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 1166.243  | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2401.4031 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2402.5693 | MHz  | PASS    |

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK 99PCT

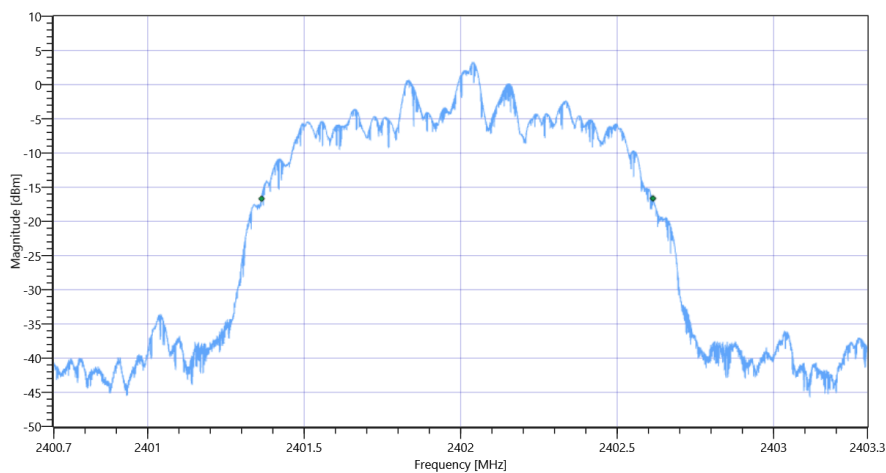
### Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK

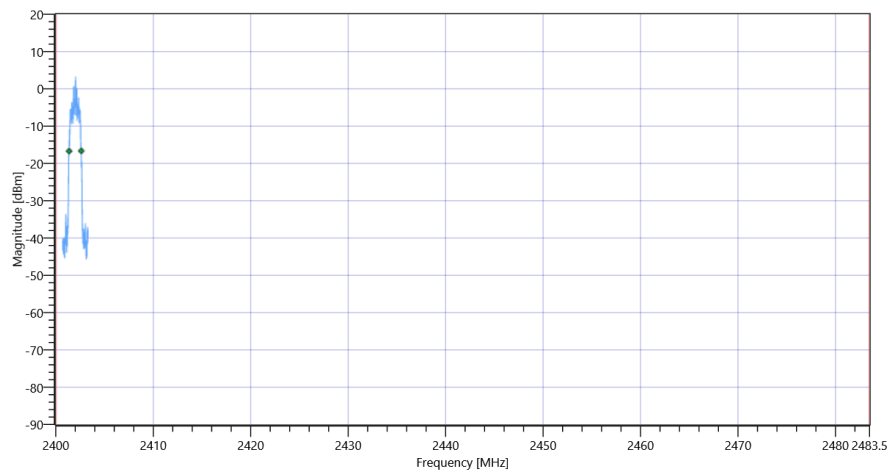
| RESULT           |             |             |           |      |         |
|------------------|-------------|-------------|-----------|------|---------|
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
| Bandwidth 20dB   | ---         | ---         | 1251      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2401.3638 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2402.6144 | MHz  | PASS    |

Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK 20dB

Plot: Bandwidth within Band



## Test at TX 2441 MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.98     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2441.000 | MHz  | INFO    |

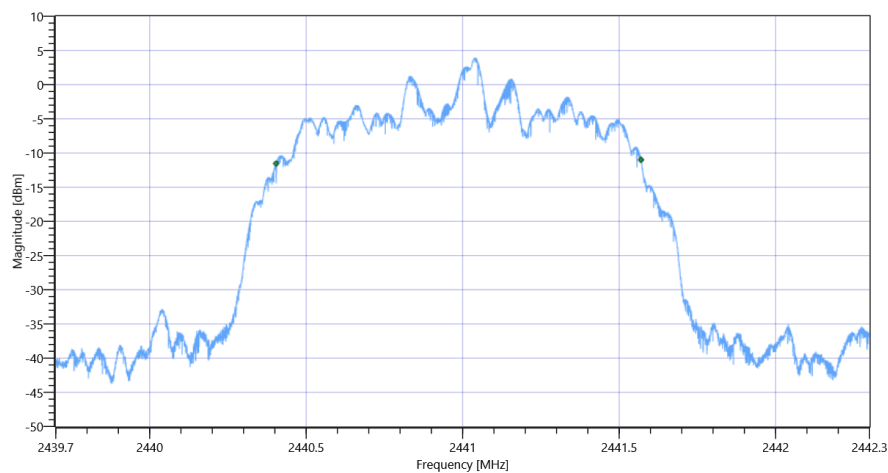
### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.98   10.8   20      |
| Start [MHz]   Stop [MHz]                             | 2439.700   2442.300    |
| RBW [MHz]   VBW [MHz]                                | 0.030000   0.100000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: Time [ms]   Count   Points per Section   Type | 50   200   10001   SWE |

### RESULT

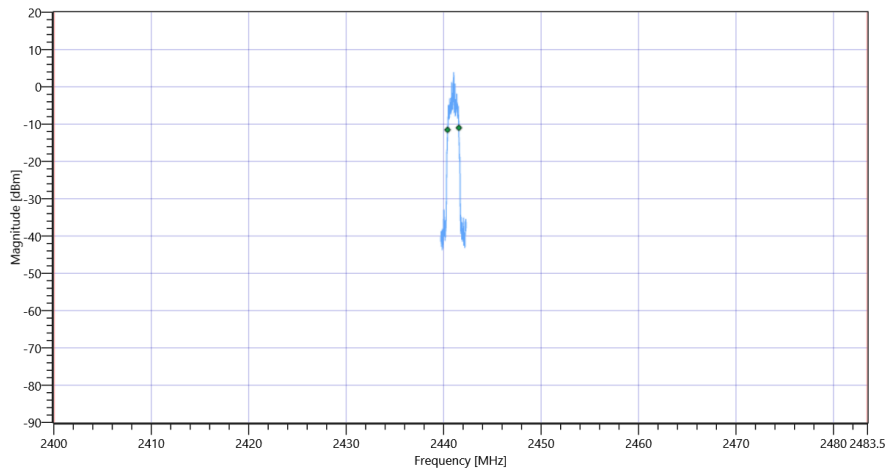
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 1165.723  | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2440.4039 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2441.5696 | MHz  | PASS    |

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK 99PCT

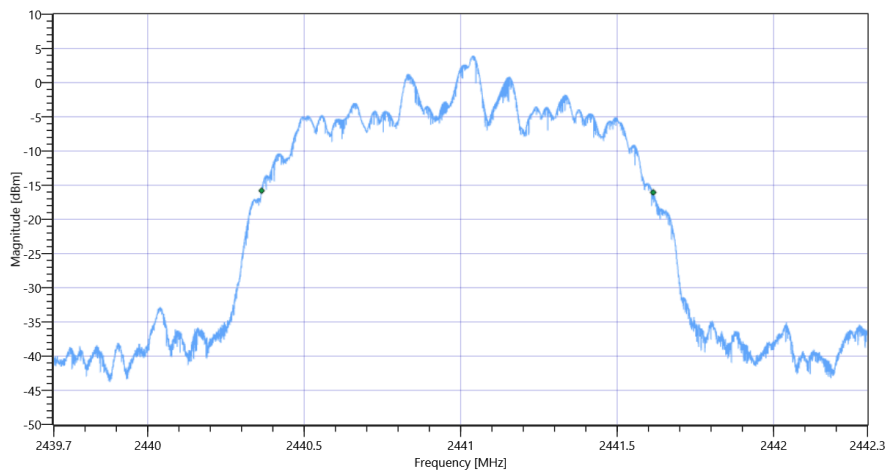
### Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK

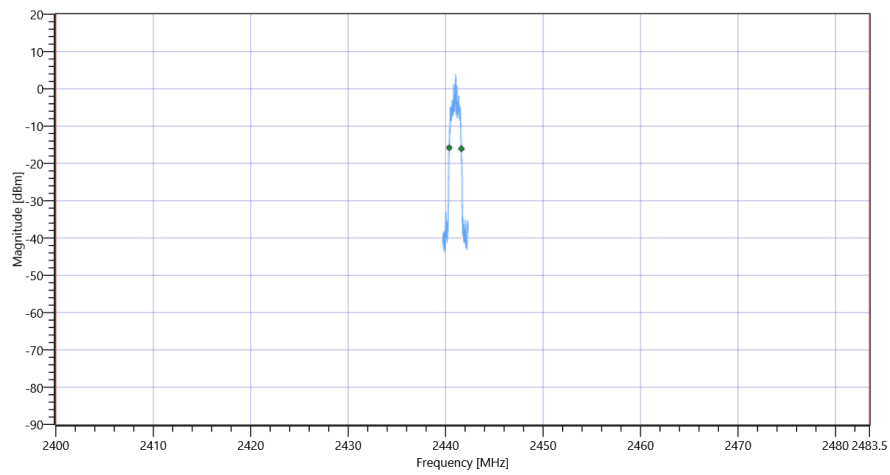
| RESULT           |             |             |           |      |         |
|------------------|-------------|-------------|-----------|------|---------|
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
| Bandwidth 20dB   | ---         | ---         | 1251      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2440.3640 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2441.6152 | MHz  | PASS    |

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4QPSK

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.47     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2480.000 | MHz  | INFO    |

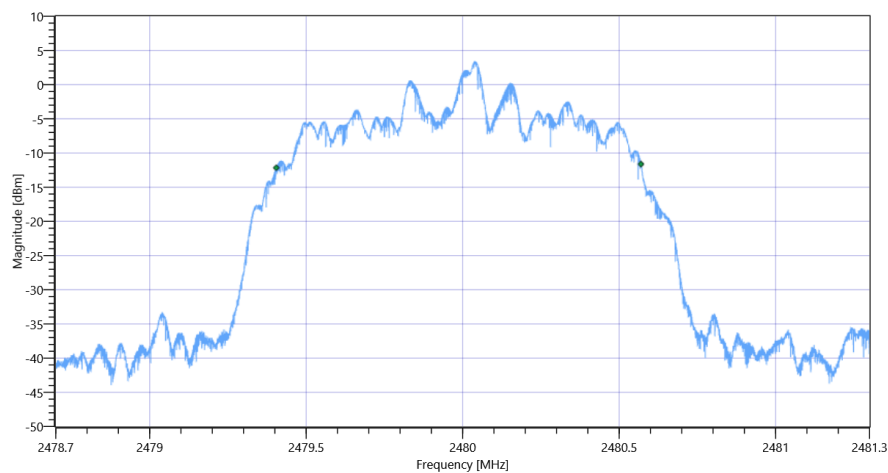
### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.47   10.85   15     |
| Start [MHz]   Stop [MHz]                             | 2478.700   2481.300    |
| RBW [MHz]   VBW [MHz]                                | 0.030000   0.100000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: Time [ms]   Count   Points per Section   Type | 50   200   10001   SWE |

### RESULT

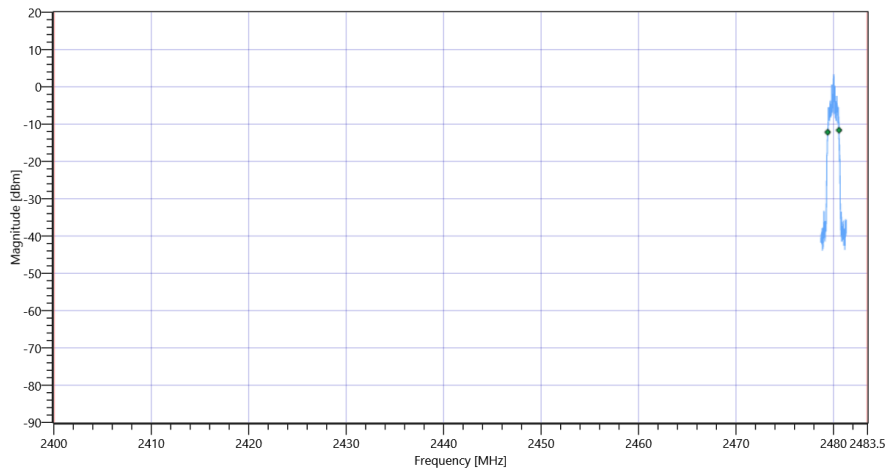
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 1165.203  | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2479.4044 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2480.5696 | MHz  | PASS    |

### Plot: Bandwidth only



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK 99PCT

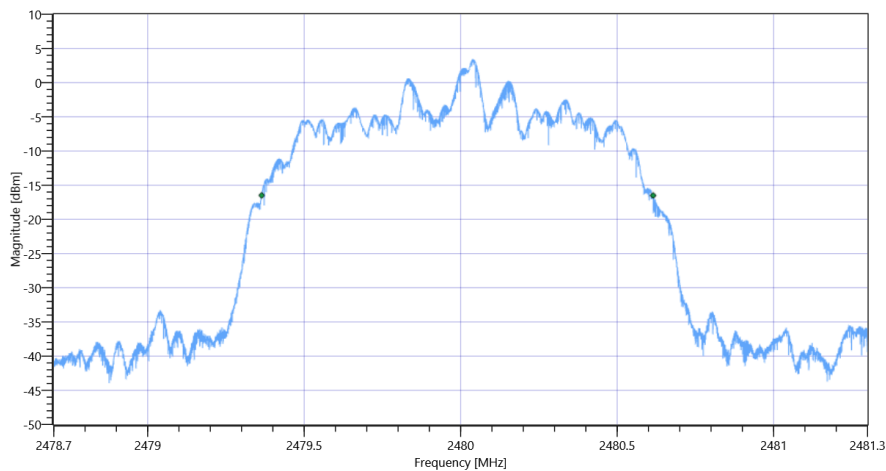
### Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK

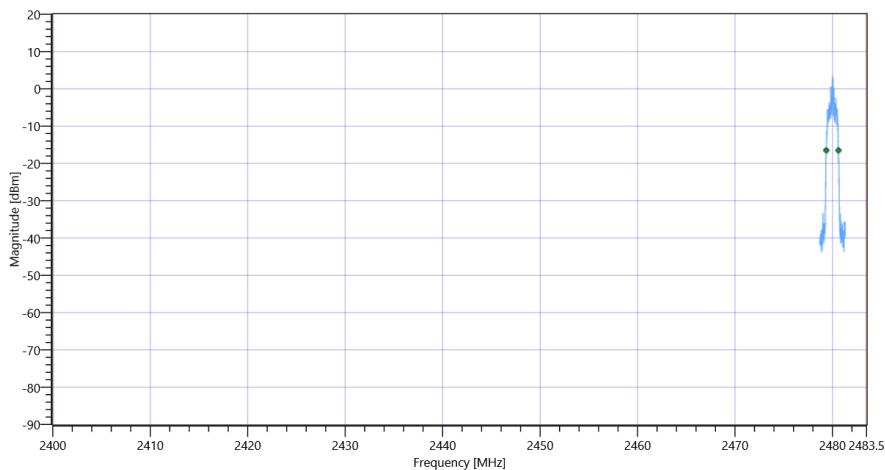
| RESULT           |             |             |           |      |         |
|------------------|-------------|-------------|-----------|------|---------|
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
| Bandwidth 20dB   | ---         | ---         | 1251      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2479.3640 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2480.6149 | MHz  | PASS    |

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK 20dB

Plot: Bandwidth within Band



FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR Pi-4DQPSK

|                 |      |
|-----------------|------|
| General verdict | PASS |
|-----------------|------|

## FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK

### Test References

|                                   |                                                               |
|-----------------------------------|---------------------------------------------------------------|
| TC Start                          | 24.06.2022 13:59:09                                           |
| Ambit Temp [°C]   Humidity [rel%] | 28.3   44                                                     |
| System Version                    | 3.2.0.2                                                       |
| Test Specification                | FCC 15.247, ISED RSS247 -                                     |
| Test Method                       |                                                               |
| TC Version                        | 0.0.2                                                         |
| My Description                    | FCC 15.247 Bandwidth 99PCT - 20dB FHSS - BT Classic EDR 8DPSK |
| Add. Information                  |                                                               |

### EUT Common Settings BT Classic

|                                          |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFD                                          |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic EDR 8DPSK                   |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 2402                 |
| Frequency mid to test                            | True   Freq [MHz] 2441                 |
| Frequency high to test                           | True   Freq [MHz] 2480                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.51     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |

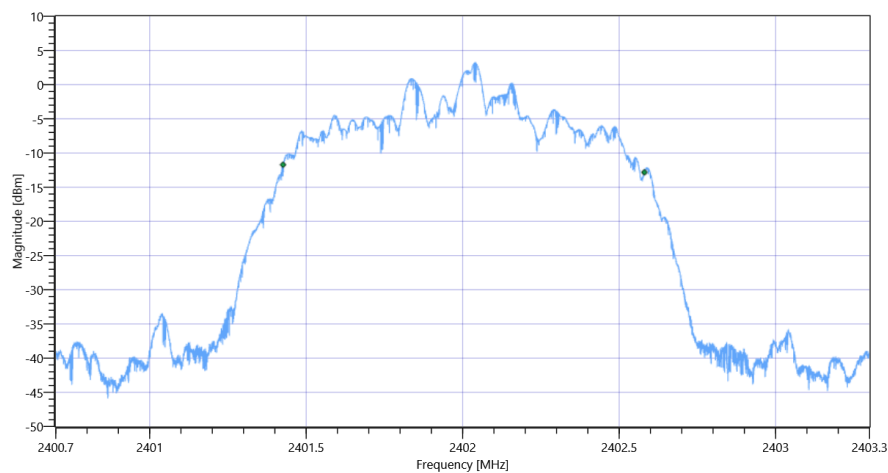
### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.51   10.79   15     |
| Start [MHz]   Stop [MHz]                             | 2400.700   2403.300    |
| RBW [MHz]   VBW [MHz]                                | 0.030000   0.100000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: Time [ms]   Count   Points per Section   Type | 50   200   10001   SWE |

### RESULT

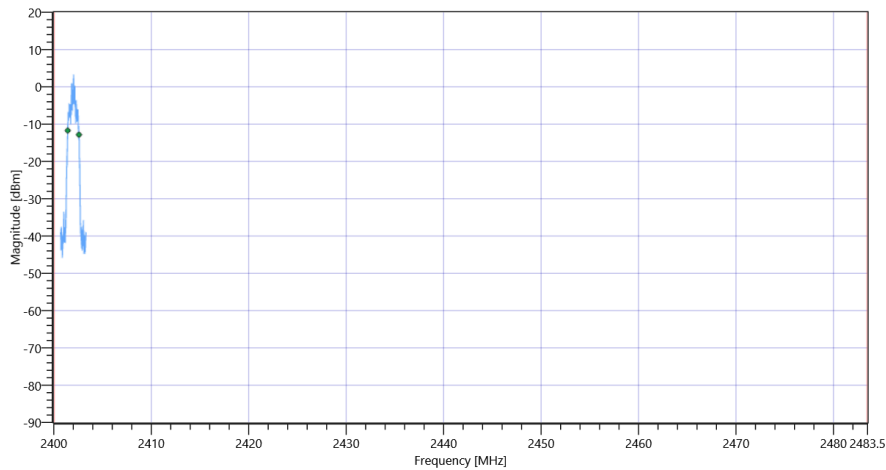
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 1154.805  | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2401.4260 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2402.5808 | MHz  | PASS    |

### Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK 99PCT

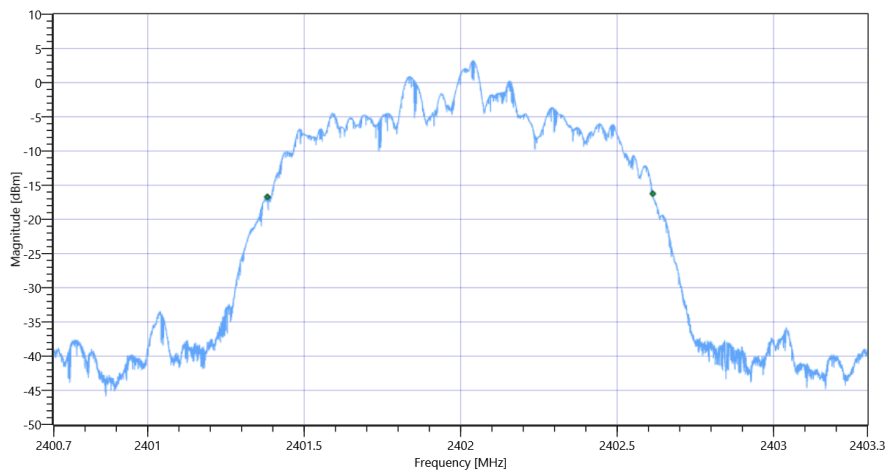
### Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK

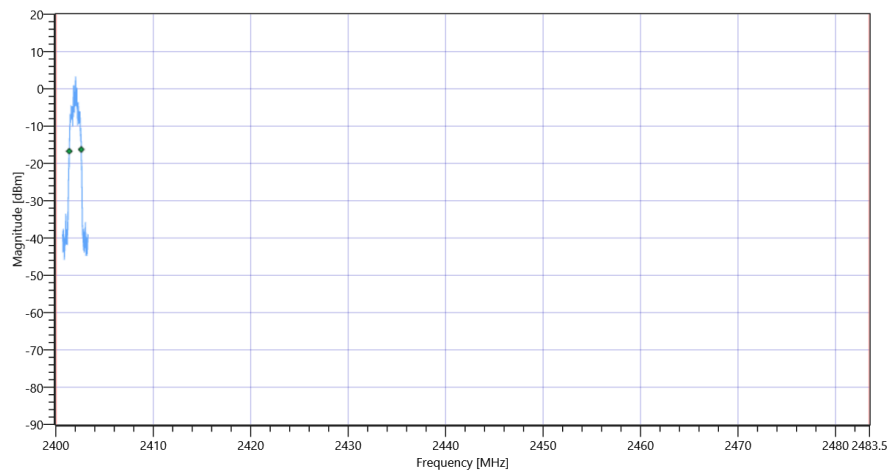
| RESULT           |             |             |           |      |         |
|------------------|-------------|-------------|-----------|------|---------|
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
| Bandwidth 20dB   | ---         | ---         | 1232      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2401.3822 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2402.6139 | MHz  | PASS    |

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK 20dB

Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK

## Test at TX 2441 MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.67     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2441.300 | MHz  | INFO    |

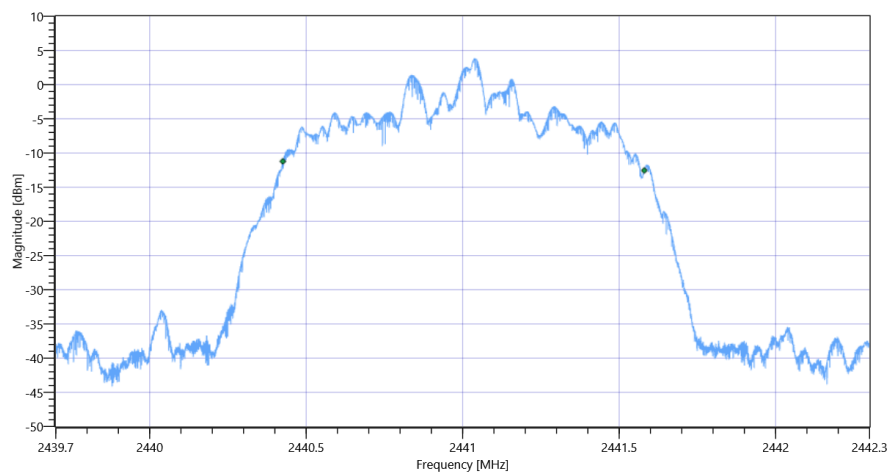
### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.67   10.8   15      |
| Start [MHz]   Stop [MHz]                             | 2439.700   2442.300    |
| RBW [MHz]   VBW [MHz]                                | 0.030000   0.100000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: Time [ms]   Count   Points per Section   Type | 50   200   10001   SWE |

### RESULT

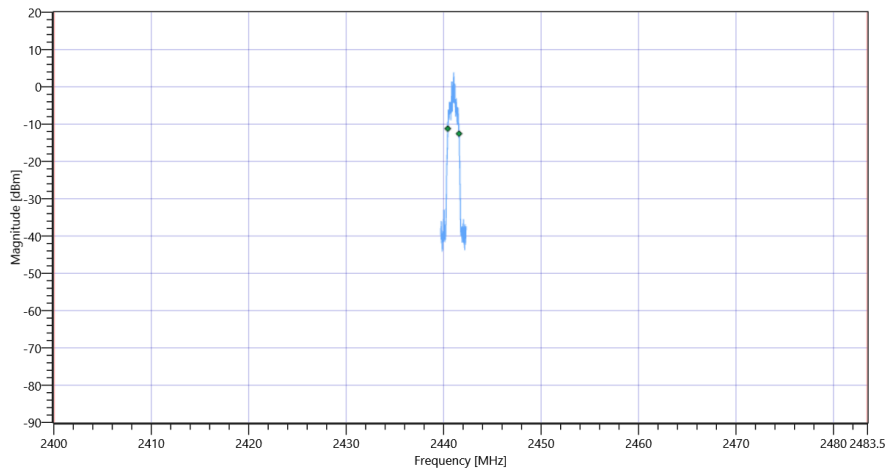
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 1154.805  | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2440.4255 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2441.5803 | MHz  | PASS    |

### Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK 99PCT

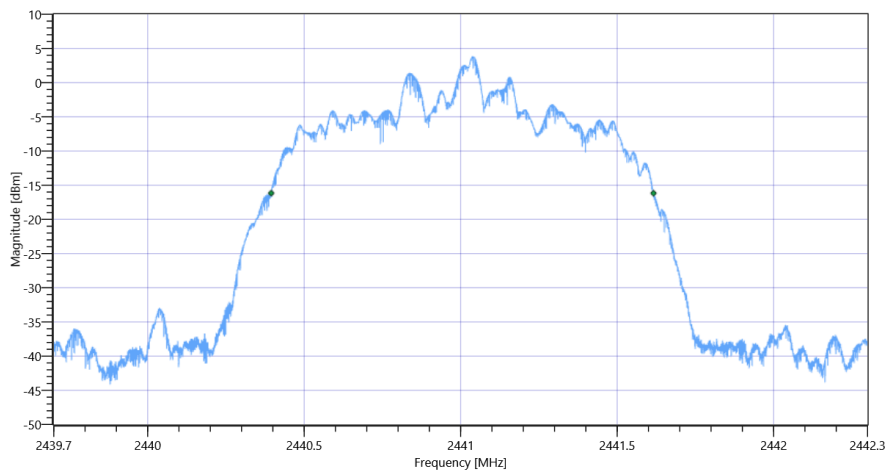
### Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK

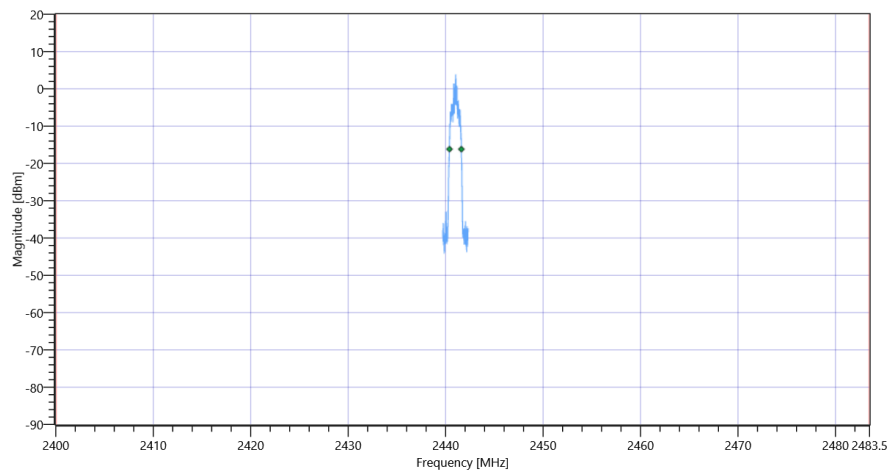
| RESULT           |             |             |           |      |         |
|------------------|-------------|-------------|-----------|------|---------|
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
| Bandwidth 20dB   | ---         | ---         | 1221      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2440.3947 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2441.6159 | MHz  | PASS    |

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK 20dB

Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.28     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2479.900 | MHz  | INFO    |

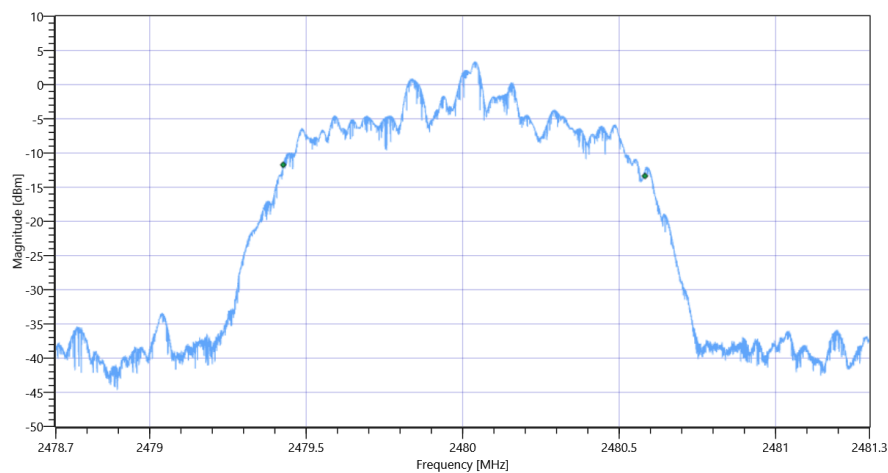
### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 10.28   10.85   15     |
| Start [MHz]   Stop [MHz]                             | 2478.700   2481.300    |
| RBW [MHz]   VBW [MHz]                                | 0.030000   0.100000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: Time [ms]   Count   Points per Section   Type | 50   200   10001   SWE |

### RESULT

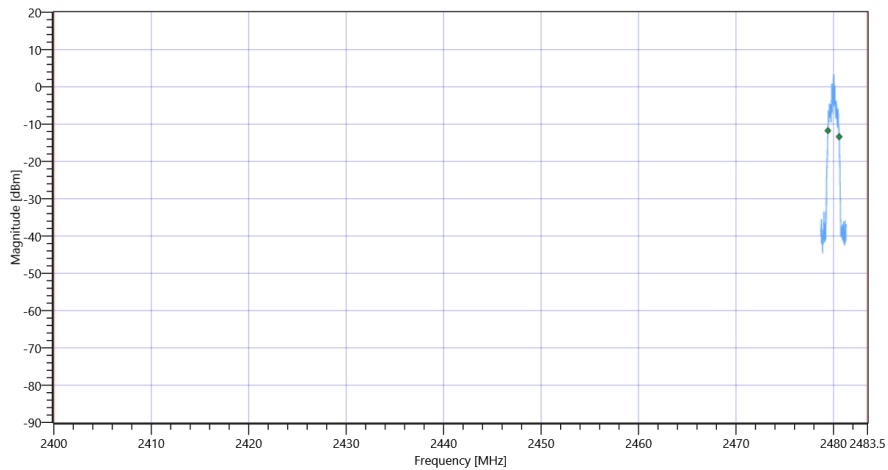
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 1155.844  | kHz  | INFO    |
| T1 99%           | 2400.000000 | ---         | 2479.4265 | MHz  | PASS    |
| T2 99%           | ---         | 2483.500000 | 2480.5823 | MHz  | PASS    |

### Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK 99PCT

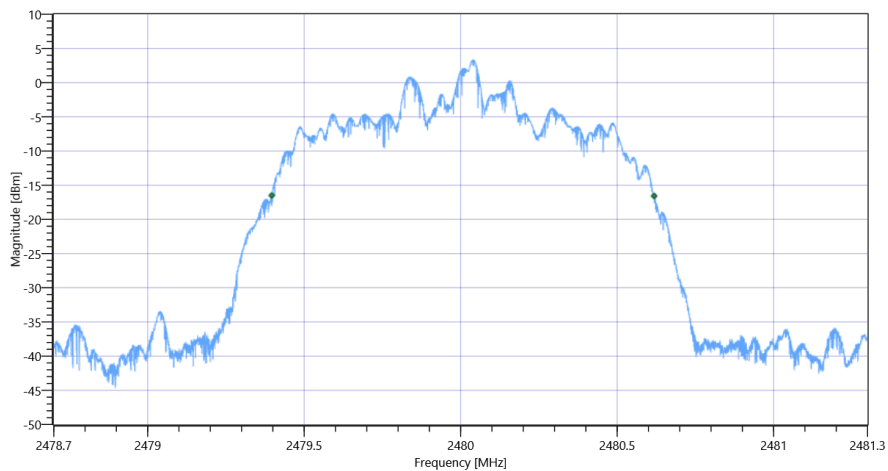
### Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK

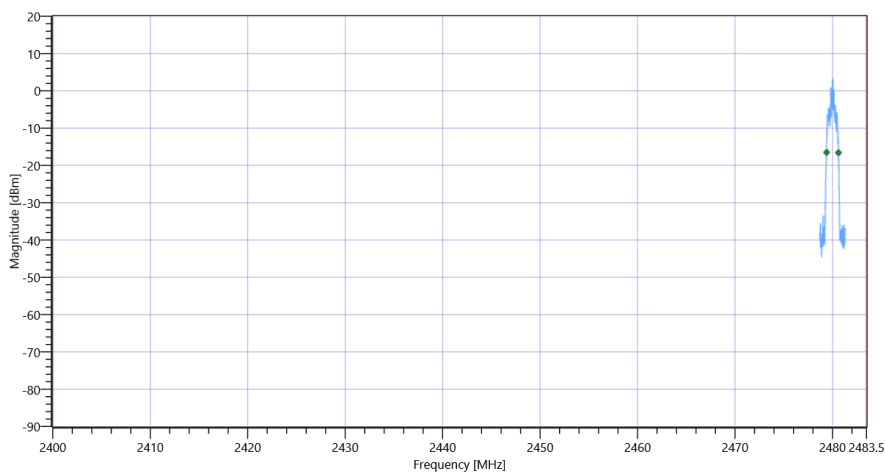
| RESULT           |             |             |           |      |         |
|------------------|-------------|-------------|-----------|------|---------|
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
| Bandwidth 20dB   | ---         | ---         | 1222      | kHz  | INFO    |
| T1 20dB          | 2400.000000 | ---         | 2479.3963 | MHz  | PASS    |
| T2 20dB          | ---         | 2483.500000 | 2480.6180 | MHz  | PASS    |

Plot: Bandwidth only



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK 20dB

Plot: Bandwidth within Band



FCC 15.247, ISSED RSS247 # Bandwidth 99PCT and 20dB ~ BT Classic EDR 8DPSK

General verdict

PASS

## FCC 15.247 # Carrier frequency separation FHSS ~ BT Classic Basic rate

| Test References                   |                                                                      |
|-----------------------------------|----------------------------------------------------------------------|
| TC Start                          | 24.06.2022 13:00:46                                                  |
| Ambit Temp [°C]   Humidity [rel%] | 28.4   44                                                            |
| System Version                    | 3.2.0.2                                                              |
| Test Specification                | FCC 15.247 -                                                         |
| Test Method                       |                                                                      |
| TC Version                        | 0.0.1                                                                |
| My Description                    | FCC 15.247 Carrier Frequency Separation FHSS - BT Classic Basic Rate |
| Add. Information                  |                                                                      |

| EUT Common Settings BT Classic           |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFFD                                         |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

| Test Parameter                                   |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic Basic rate                  |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 2402                |
| Frequency mid to test                            | False   Freq [MHz] 2441                |
| Frequency high to test                           | False   Freq [MHz] 2480                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

| Test Equipment                                                |  |
|---------------------------------------------------------------|--|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |  |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |  |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |  |

## Test at TX hopping MHz

### RESULT: Reference Power cond.

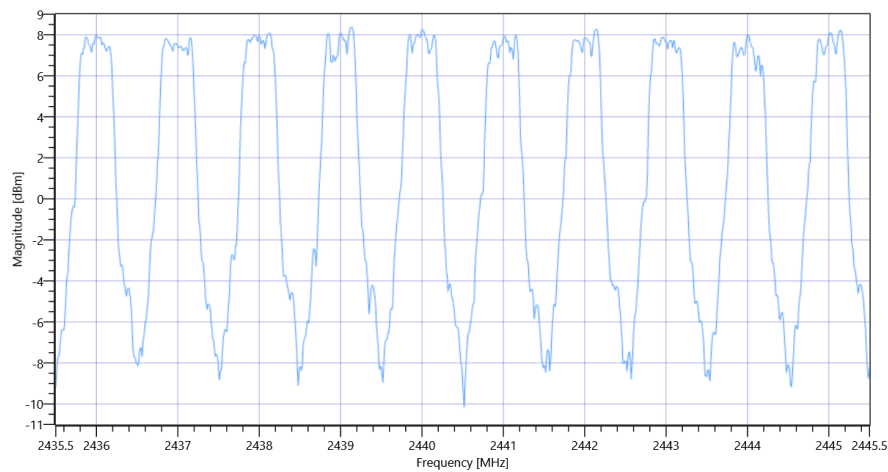
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 8.28     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2429.810 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 13.28   10.8   20      |
| Start [MHz]   Stop [MHz]                             | 2435.500   2445.500    |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: Time [ms]   Count   Points per Section   Type | 1   20000   1001   SWE |

### RESULT

| Test Description     | Lower Limit        | Upper Limit | Measured | Unit | Verdict |
|----------------------|--------------------|-------------|----------|------|---------|
| 1 CFS n to n+1 (rnd) | 0.025              | ---         | 1        | MHz  | PASS    |
| 1 CFS n to n+1 (rnd) | 0.667 (2/3 Nom.BW) | ---         | 1        | MHz  | PASS    |
| 2 CFS n to n+1 (rnd) | 0.025              | ---         | 1        | MHz  | PASS    |
| 2 CFS n to n+1 (rnd) | 0.667 (2/3 Nom.BW) | ---         | 1        | MHz  | PASS    |
| 3 CFS n to n+1 (rnd) | 0.025              | ---         | 1        | MHz  | PASS    |
| 3 CFS n to n+1 (rnd) | 0.667 (2/3 Nom.BW) | ---         | 1        | MHz  | PASS    |
| 4 CFS n to n+1 (rnd) | 0.025              | ---         | 1        | MHz  | PASS    |
| 4 CFS n to n+1 (rnd) | 0.667 (2/3 Nom.BW) | ---         | 1        | MHz  | PASS    |
| 5 CFS n to n+1 (rnd) | 0.025              | ---         | 1        | MHz  | PASS    |
| 5 CFS n to n+1 (rnd) | 0.667 (2/3 Nom.BW) | ---         | 1        | MHz  | PASS    |
| 6 CFS n to n+1 (rnd) | 0.025              | ---         | 1        | MHz  | PASS    |
| 6 CFS n to n+1 (rnd) | 0.667 (2/3 Nom.BW) | ---         | 1        | MHz  | PASS    |
| 7 CFS n to n+1 (rnd) | 0.025              | ---         | 1        | MHz  | PASS    |
| 7 CFS n to n+1 (rnd) | 0.667 (2/3 Nom.BW) | ---         | 1        | MHz  | PASS    |
| 8 CFS n to n+1 (rnd) | 0.025              | ---         | 1        | MHz  | PASS    |
| 8 CFS n to n+1 (rnd) | 0.667 (2/3 Nom.BW) | ---         | 1        | MHz  | PASS    |
| 9 CFS n to n+1 (rnd) | 0.025              | ---         | 1        | MHz  | PASS    |
| 9 CFS n to n+1 (rnd) | 0.667 (2/3 Nom.BW) | ---         | 1        | MHz  | PASS    |
| Carrier Freq. (rnd)  | ---                | ---         | 2436     | MHz  | INFO    |
| Carrier Freq. (rnd)  | ---                | ---         | 2437     | MHz  | INFO    |
| Carrier Freq. (rnd)  | ---                | ---         | 2438     | MHz  | INFO    |
| Carrier Freq. (rnd)  | ---                | ---         | 2439     | MHz  | INFO    |
| Carrier Freq. (rnd)  | ---                | ---         | 2440     | MHz  | INFO    |
| Carrier Freq. (rnd)  | ---                | ---         | 2441     | MHz  | INFO    |
| Carrier Freq. (rnd)  | ---                | ---         | 2442     | MHz  | INFO    |
| Carrier Freq. (rnd)  | ---                | ---         | 2443     | MHz  | INFO    |
| Carrier Freq. (rnd)  | ---                | ---         | 2444     | MHz  | INFO    |
| Carrier Freq. (rnd)  | ---                | ---         | 2445     | MHz  | INFO    |



FCC 15.247 # Carrier frequency separation FHSS ~ BT Classic Basic rate

General verdict

PASS

## FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic Basic rate

| Test References                   |                                                                             |
|-----------------------------------|-----------------------------------------------------------------------------|
| TC Start                          | 24.06.2022 12:58:21                                                         |
| Ambit Temp [°C]   Humidity [rel%] | 28.4   44                                                                   |
| System Version                    | 3.2.0.2                                                                     |
| Test Specification                | FCC 15.247 -                                                                |
| Test Method                       |                                                                             |
| TC Version                        | 0.0.1                                                                       |
| My Description                    | FCC 15.247 Maximum Peak Output Power Conducted FHSS - BT Classic Basic Rate |
| Add. Information                  |                                                                             |

| EUT Common Settings BT Classic           |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFFD                                         |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

| Test Parameter                                   |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic Basic rate                  |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 2402                 |
| Frequency mid to test                            | True   Freq [MHz] 2441                 |
| Frequency high to test                           | True   Freq [MHz] 2480                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

| Test Equipment                                                |  |
|---------------------------------------------------------------|--|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |  |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |  |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |  |

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

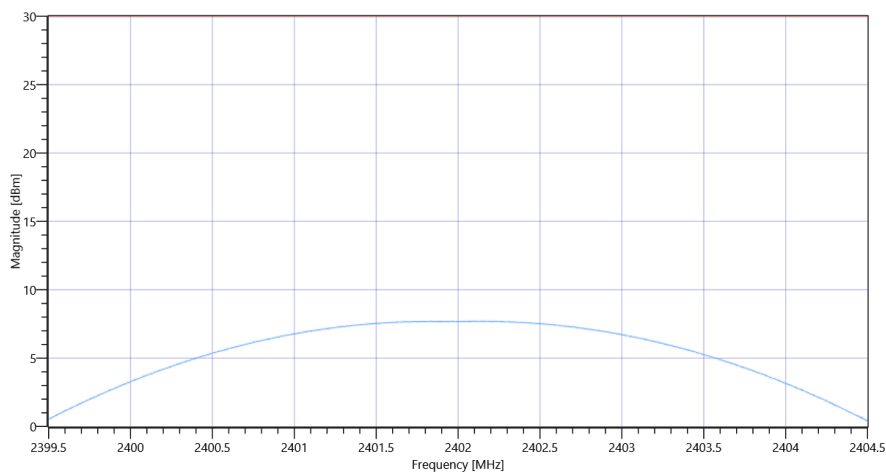
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 7.81     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2402.100 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 17.81   10.79   25     |
| Start [MHz]   Stop [MHz]                             | 2399.500   2404.500    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000   |
| 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        | ---         | 30.00       | 7.7      | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 5.888437 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2402.16  | MHz  | INFO    |



FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic Basic rate

## Test at TX 2441 MHz

### RESULT: Reference Power cond.

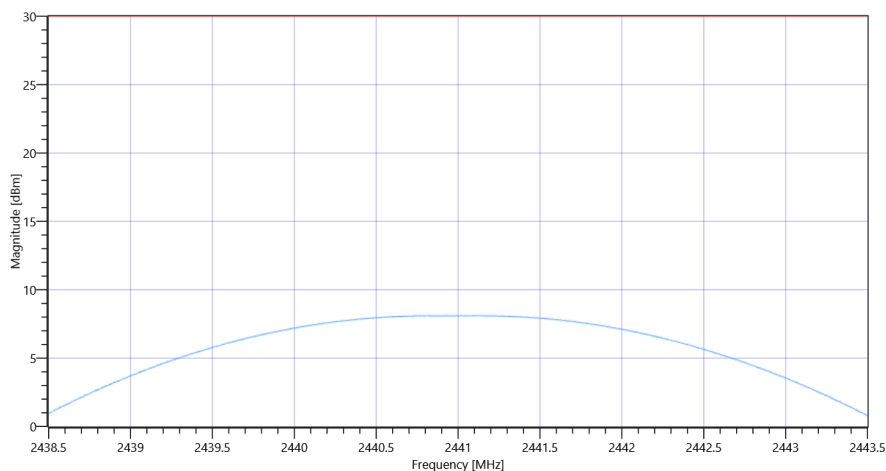
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 8.16     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2441.100 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 18.16   10.8   25      |
| Start [MHz]   Stop [MHz]                             | 2438.500   2443.500    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000   |
| 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        | ---         | 30.00       | 8.1      | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 6.456542 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2441.12  | MHz  | INFO    |



FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic Basic rate

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

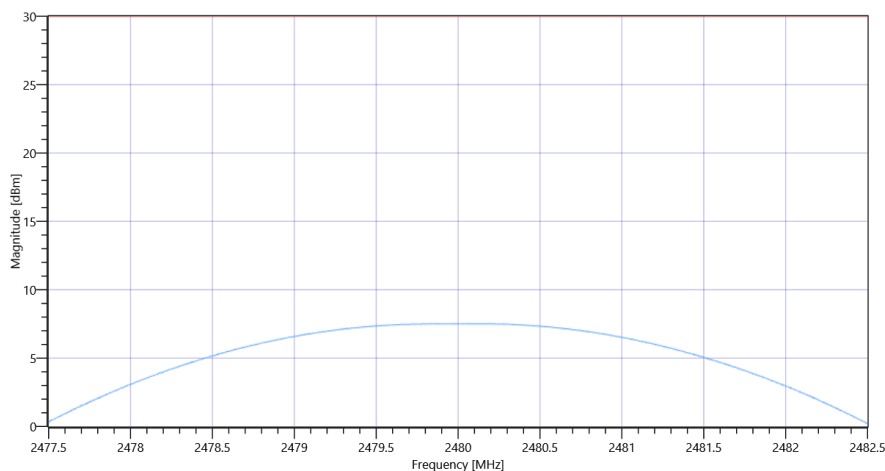
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 7.44     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2479.900 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 17.44   10.85   25     |
| Start [MHz]   Stop [MHz]                             | 2477.500   2482.500    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000   |
| 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        | ---         | 30.00       | 7.51     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 5.636377 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2480.05  | MHz  | INFO    |



FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic Basic rate

General verdict

PASS

## FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR Pi/4DQPSK

| Test References                   |                                                                                |
|-----------------------------------|--------------------------------------------------------------------------------|
| TC Start                          | 24.06.2022 13:29:22                                                            |
| Ambit Temp [°C]   Humidity [rel%] | 28.2   43                                                                      |
| System Version                    | 3.2.0.2                                                                        |
| Test Specification                | FCC 15.247 -                                                                   |
| Test Method                       |                                                                                |
| TC Version                        | 0.0.1                                                                          |
| My Description                    | FCC 15.247 Maximum Peak Output Power Conducted FHSS - BT Classic EDR Pi/4DQPSK |
| Add. Information                  |                                                                                |

| EUT Common Settings BT Classic           |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFFD                                         |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

| Test Parameter                                   |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic EDR Pi/4DQPSK               |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 2402                 |
| Frequency mid to test                            | True   Freq [MHz] 2441                 |
| Frequency high to test                           | True   Freq [MHz] 2480                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

| Test Equipment                                                |  |
|---------------------------------------------------------------|--|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |  |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |  |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |  |

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

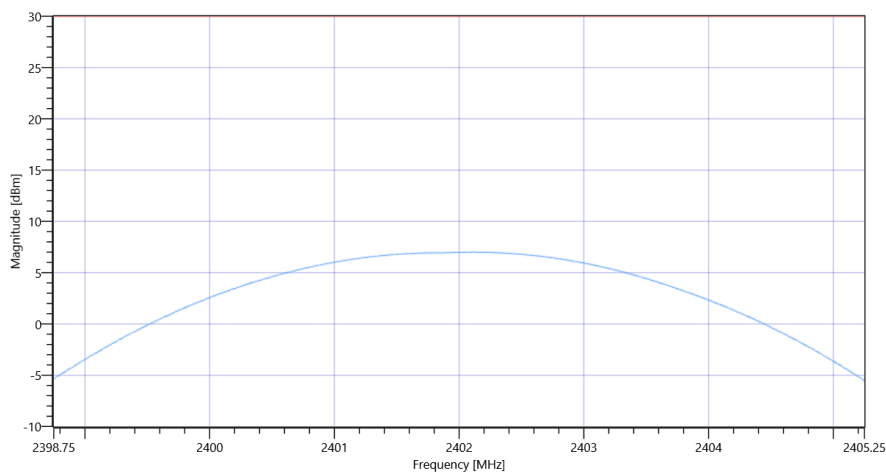
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.46     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2402.100 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.46   10.79   20     |
| Start [MHz]   Stop [MHz]                             | 2398.750   2405.250    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000   |
| 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        | ---         | 30.00       | 7        | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 5.011872 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2402.188 | MHz  | INFO    |



FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR Pi-4DQPSK

## Test at TX 2441 MHz

### RESULT: Reference Power cond.

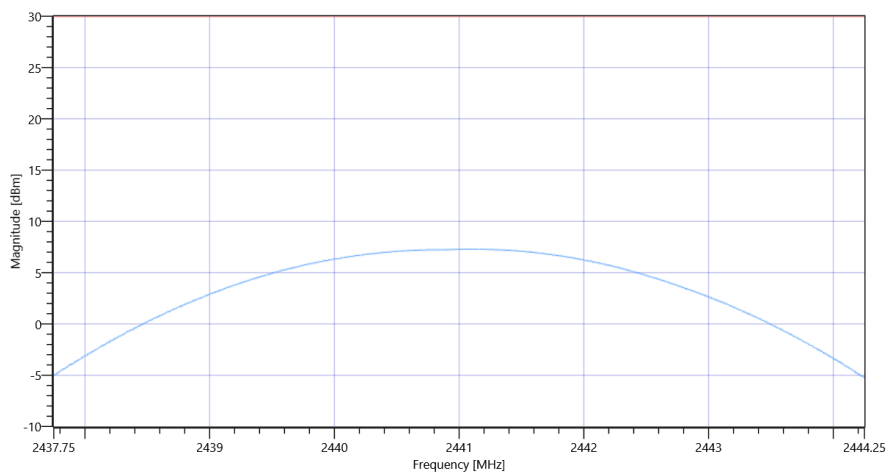
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 6.04     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2441.000 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.04   10.8   25      |
| Start [MHz]   Stop [MHz]                             | 2437.750   2444.250    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000   |
| 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        | ---         | 30.00       | 7.3      | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 5.370318 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2441.065 | MHz  | INFO    |



FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR Pi-4QPSK

## Test at TX 2480 MHz

RESULT: Reference Power cond.

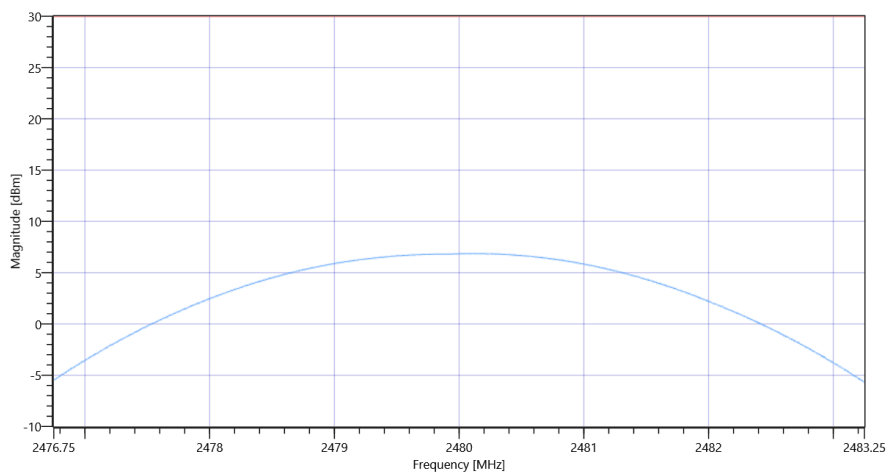
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.23     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2479.800 | MHz  | INFO    |

READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.23   10.85   20     |
| Start [MHz]   Stop [MHz]                             | 2476.750   2483.250    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000   |
| 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        | ---         | 30.00       | 6.86     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 4.852885 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2480.104 | MHz  | INFO    |



FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR Pi-4DQPSK

General verdict

PASS

## FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR 8DPSK

### Test References

|                                   |                                                                            |
|-----------------------------------|----------------------------------------------------------------------------|
| TC Start                          | 24.06.2022 13:57:33                                                        |
| Ambit Temp [°C]   Humidity [rel%] | 28.3   44                                                                  |
| System Version                    | 3.2.0.2                                                                    |
| Test Specification                | FCC 15.247 -                                                               |
| Test Method                       |                                                                            |
| TC Version                        | 0.0.1                                                                      |
| My Description                    | FCC 15.247 Maximum Peak Output Power Conducted FHSS - BT Classic EDR 8DPSK |
| Add. Information                  |                                                                            |

### EUT Common Settings BT Classic

|                                          |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFFD                                         |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic EDR 8DPSK                   |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 2402                 |
| Frequency mid to test                            | True   Freq [MHz] 2441                 |
| Frequency high to test                           | True   Freq [MHz] 2480                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                               |
|---------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

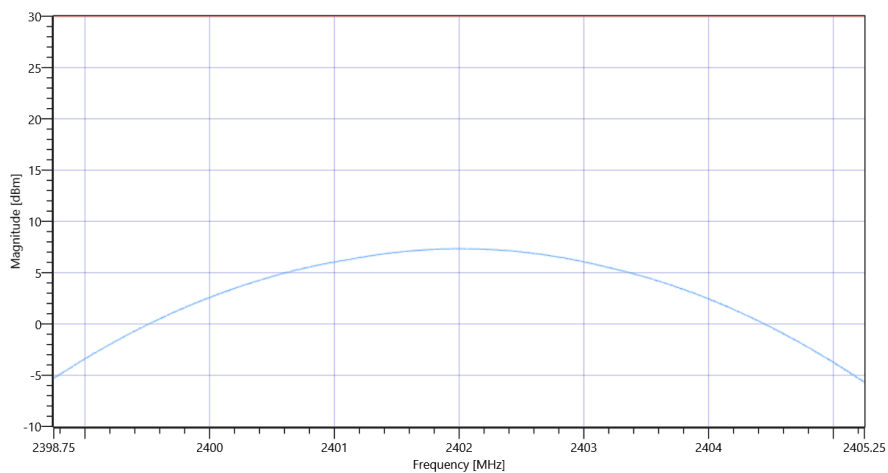
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.73     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.73   10.79   20     |
| Start [MHz]   Stop [MHz]                             | 2398.750   2405.250    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000   |
| 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        | ---         | 30.00       | 7.34     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 5.420009 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2401.987 | MHz  | INFO    |



FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR 8DPSK

## Test at TX 2441 MHz

### RESULT: Reference Power cond.

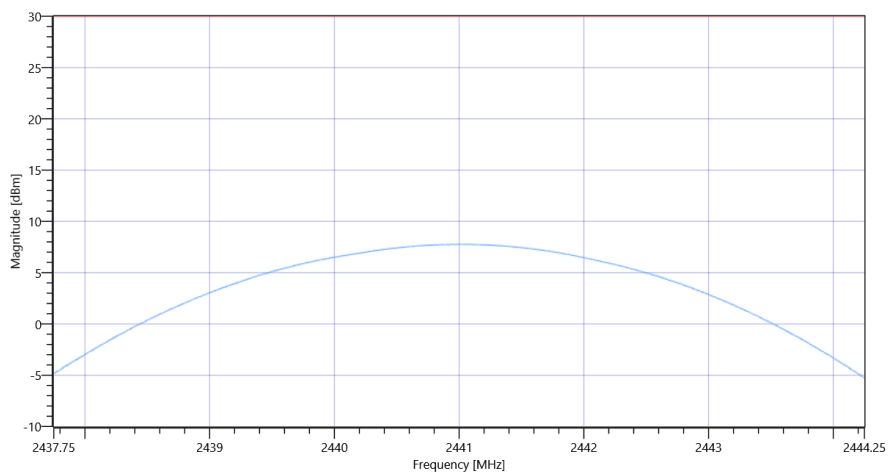
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.76     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2441.000 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.76   10.8   20      |
| Start [MHz]   Stop [MHz]                             | 2437.750   2444.250    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000   |
| 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        | ---         | 30.00       | 7.76     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 5.970353 | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2441.026 | MHz  | INFO    |



FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR 8DPSK

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

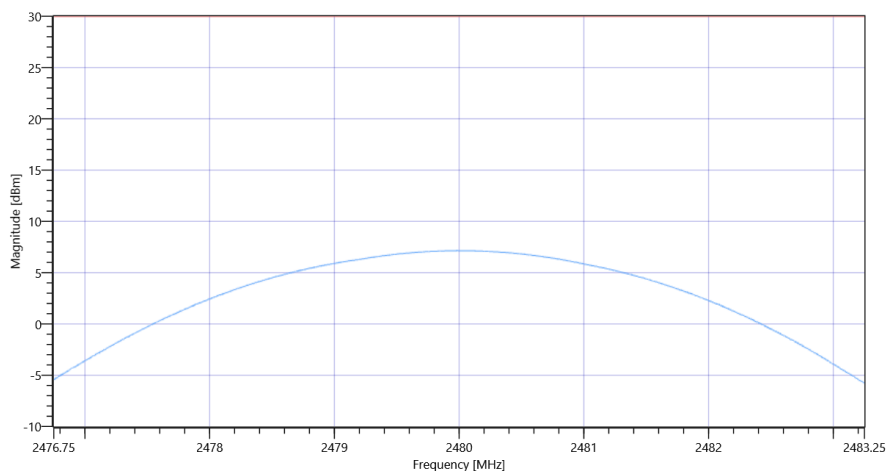
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.32     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2480.100 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.32   10.85   20     |
| Start [MHz]   Stop [MHz]                             | 2476.750   2483.250    |
| RBW [MHz]   VBW [MHz]                                | 3.000000   10.000000   |
| 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        | ---         | 30.00       | 7.16     | dBm  | PASS    |
| Peak Power        | ---         | 1000        | 5.19996  | mW   | PASS    |
| Frequency at Peak | ---         | ---         | 2479.987 | MHz  | INFO    |



FCC 15.247 # Maximum peak conducted output power FHSS ~ BT Classic EDR 8DPSK

General verdict

PASS

## FCC 15.247 # Number of hopping channels FHSS ~ BT Classic Basic rate

| Test References                   |                                                                    |
|-----------------------------------|--------------------------------------------------------------------|
| TC Start                          | 24.06.2022 12:59:54                                                |
| Ambit Temp [°C]   Humidity [rel%] | 28.4   44                                                          |
| System Version                    | 3.2.0.2                                                            |
| Test Specification                | FCC 15.247 -                                                       |
| Test Method                       |                                                                    |
| TC Version                        | 0.0.1                                                              |
| My Description                    | FCC 15.247 Number Of Hopping Channels FHSS - BT Classic Basic Rate |
| Add. Information                  |                                                                    |

| EUT Common Settings BT Classic           |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFD                                          |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

| Test Parameter                                   |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic Basic rate                  |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 2402                |
| Frequency mid to test                            | False   Freq [MHz] 2441                |
| Frequency high to test                           | False   Freq [MHz] 2480                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

| Test Equipment                                                |  |
|---------------------------------------------------------------|--|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |  |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |  |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |  |

## Test at TX hopping MHz

### RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 8.26     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2430.110 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                        |
|------------------------------------------------------|------------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 13.26   10.8   20      |
| Start [MHz]   Stop [MHz]                             | 2399.000   2483.000    |
| RBW [MHz]   VBW [MHz]                                | 0.200000   0.500000    |
| Detector   TraceMode                                 | POS   MAXH             |
| Sweep: Time [ms]   Count   Points per Section   Type | 1   10000   1001   SWE |

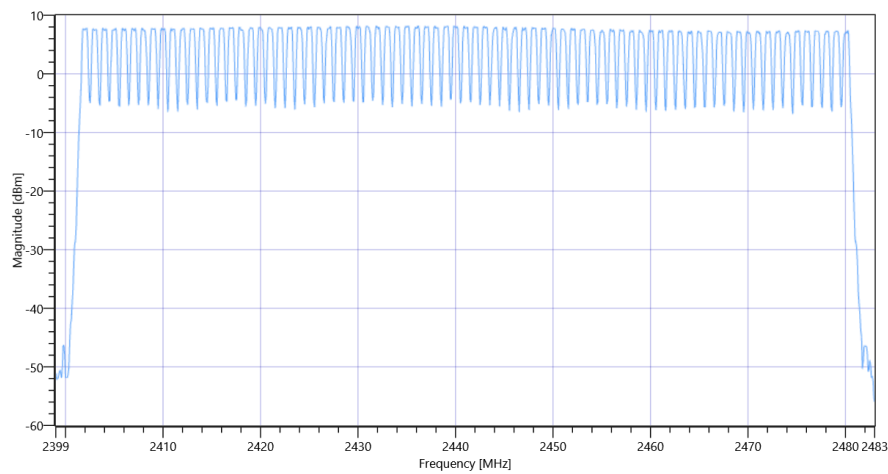
### RESULT

| Test Description       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------|-------------|-------------|----------|------|---------|
| Hopp channel (rounded) | ---         | ---         | 2402     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2403     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2404     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2405     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2406     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2407     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2408     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2409     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2410     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2411     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2412     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2413     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2414     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2415     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2416     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2417     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2418     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2419     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2420     | MHz  | INFO    |

| RESULT                 |             |             |          |      |         |
|------------------------|-------------|-------------|----------|------|---------|
| Test Description       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
| Hopp channel (rounded) | ---         | ---         | 2421     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2422     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2423     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2424     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2425     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2426     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2427     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2428     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2429     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2430     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2431     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2432     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2433     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2434     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2435     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2436     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2437     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2438     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2439     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2440     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2441     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2442     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2443     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2444     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2445     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2446     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2447     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2448     | MHz  | INFO    |

| RESULT                 |             |             |          |      |         |
|------------------------|-------------|-------------|----------|------|---------|
| Test Description       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
| Hopp channel (rounded) | ---         | ---         | 2449     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2450     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2451     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2452     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2453     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2454     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2455     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2456     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2457     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2458     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2459     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2460     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2461     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2462     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2463     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2464     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2465     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2466     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2467     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2468     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2469     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2470     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2471     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2472     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2473     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2474     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2475     | MHz  | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2476     | MHz  | INFO    |

| RESULT                 |             |             |          |        |         |
|------------------------|-------------|-------------|----------|--------|---------|
| Test Description       | Lower Limit | Upper Limit | Measured | Unit   | Verdict |
| Hopp channel (rounded) | ---         | ---         | 2477     | MHz    | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2478     | MHz    | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2479     | MHz    | INFO    |
| Hopp channel (rounded) | ---         | ---         | 2480     | MHz    | INFO    |
| Σ Hopping channels     | 15          | ---         | 79       | Number | PASS    |



FCC 15.247 # Number of hopping channels FHSS ~ BT Classic Basic rate

General verdict

PASS

## FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic Basic rate

| Test References                   |                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------|
| TC Start                          | 24.06.2022 13:05:32                                                                                              |
| Ambit Temp [°C]   Humidity [rel%] | 28.2   44                                                                                                        |
| System Version                    | 3.2.0.2                                                                                                          |
| Test Specification                | FCC 15.247 -                                                                                                     |
| Test Method                       | IF DTS then 8.5 DTS emissions in non-restricted frequency bands:<br>Subclause 11.11 of ANSI C63.10 is applicable |
| TC Version                        | 0.0.1                                                                                                            |
| My Description                    | FCC 15.247 TX Emissions Conducted FHSS - BT Classic Basic Rate                                                   |
| Add. Information                  |                                                                                                                  |

| EUT Common Settings BT Classic           |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFD                                          |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

| Test Parameter                                   |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic Basic rate                  |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 2402                 |
| Frequency mid to test                            | True   Freq [MHz] 2441                 |
| Frequency high to test                           | True   Freq [MHz] 2480                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

| Test Equipment                                                |  |
|---------------------------------------------------------------|--|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |  |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |  |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |  |

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

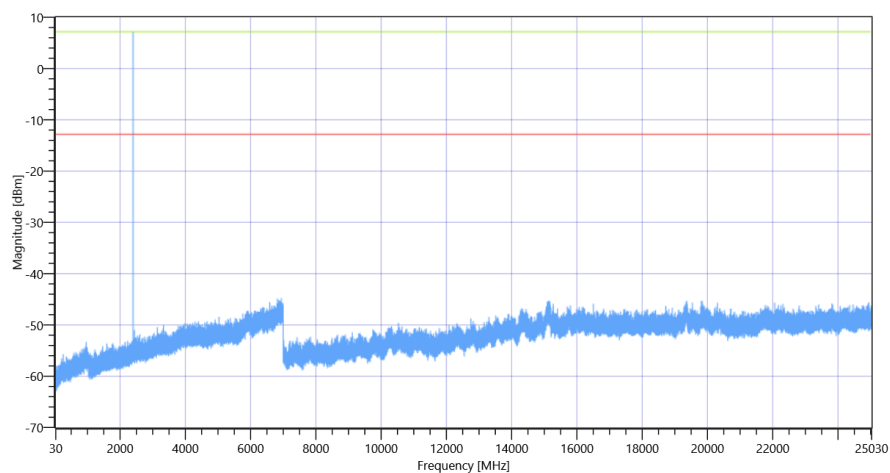
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 7.77     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2402.100 | MHz  | INFO    |

### READ SA SETTINGS:

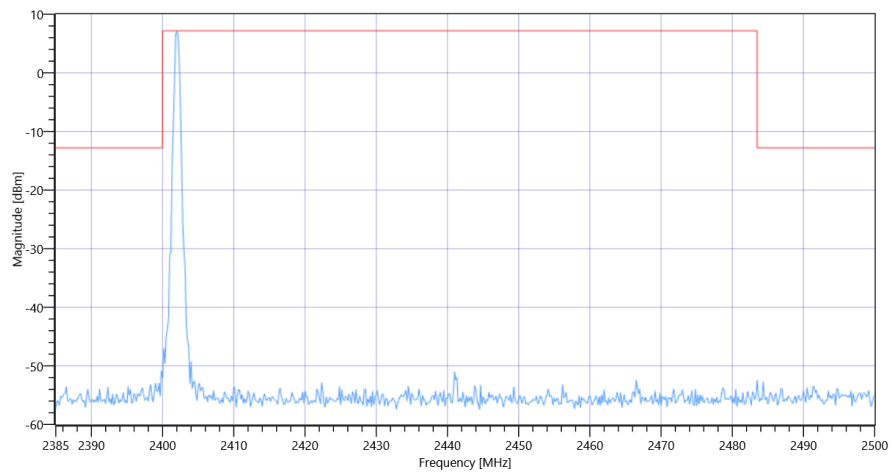
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 7.77   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 200   25   3001   SWE |

### RESULT

| Test Description                 | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------|-------------|-------------|----------|------|---------|
| Reference @<br>2402.00 MHz       | ---         | ---         | 7.19     | dBm  | INFO    |
| No peaks detected                | ---         | ---         |          |      | PASS    |
| Lowest margin to<br>limit 30 MHz | 0           | ---         | -140.71  | dB   | INFO    |



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic Basic rate 2402



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic Basic rate 2402

## Test at TX 2441 MHz

### RESULT: Reference Power cond.

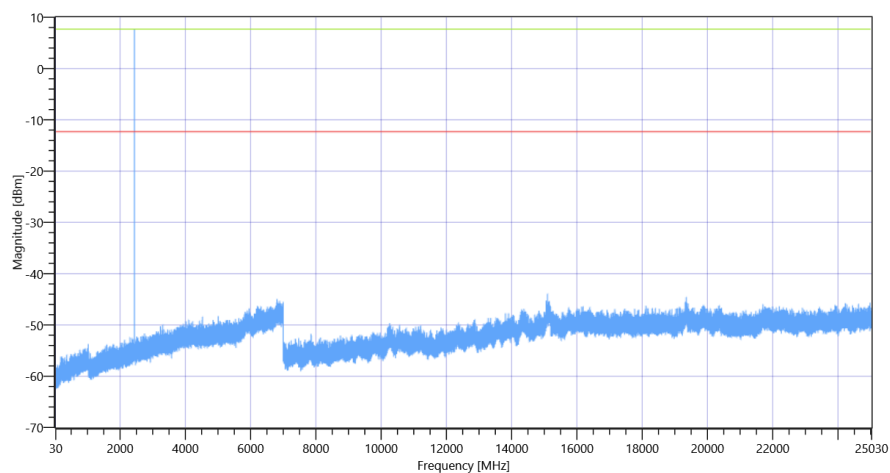
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 8.13     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2441.200 | MHz  | INFO    |

### READ SA SETTINGS:

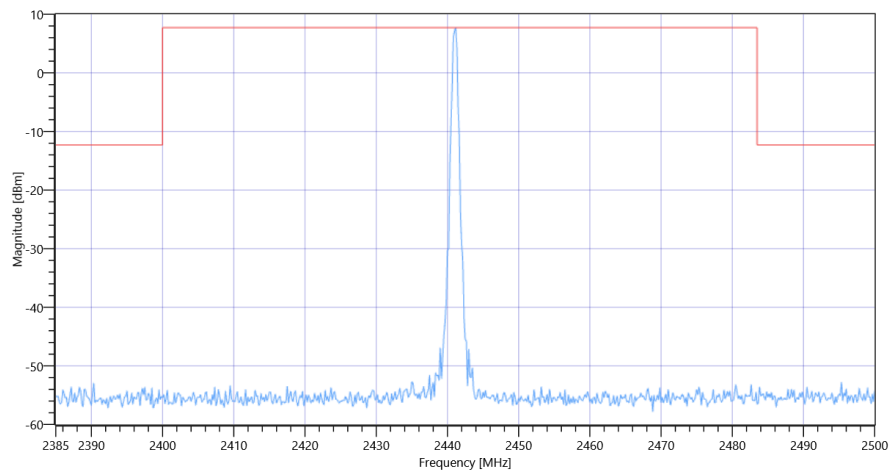
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 8.13   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 200   25   3001   SWE |

### RESULT

| Test Description                 | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------|-------------|-------------|----------|------|---------|
| Reference @<br>2441.17 MHz       | ---         | ---         | 7.70     | dBm  | INFO    |
| No peaks detected                | ---         | ---         |          |      | PASS    |
| Lowest margin to<br>limit 30 MHz | 0           | ---         | -141.65  | dB   | INFO    |



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic Basic rate 2441



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic Basic rate 2441

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

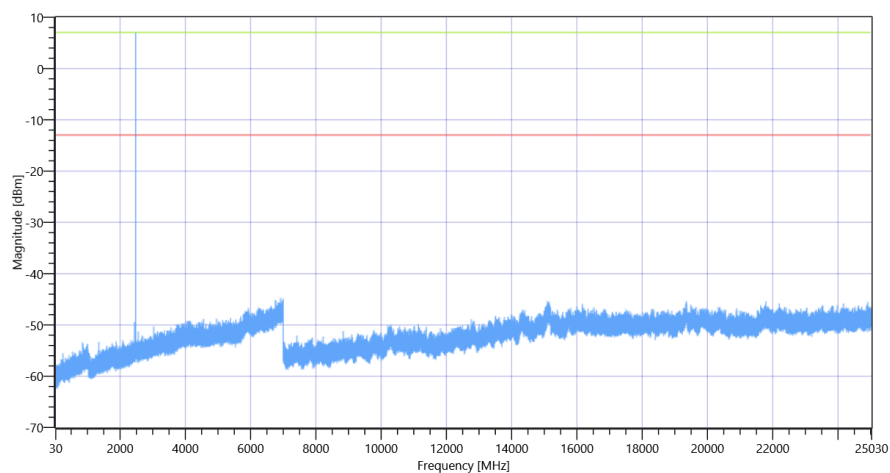
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 7.51     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2480.100 | MHz  | INFO    |

### READ SA SETTINGS:

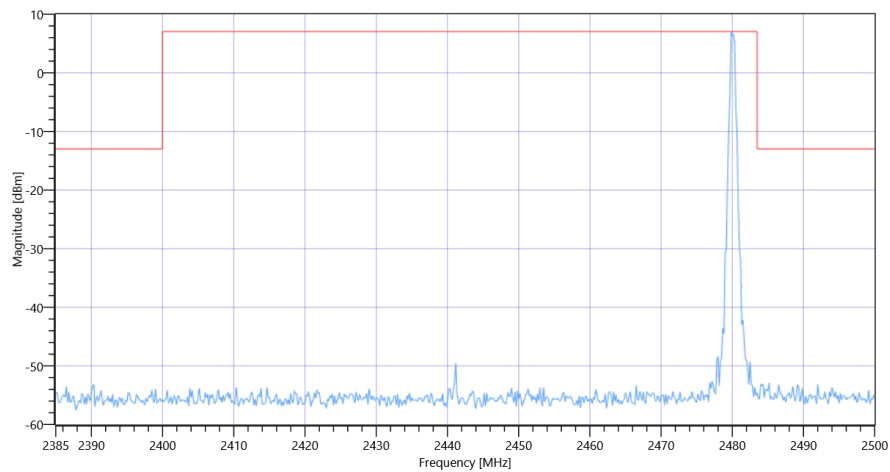
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 7.51   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 200   25   3001   SWE |

### RESULT

| Test Description                       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------------|-------------|-------------|----------|------|---------|
| Reference @<br>2479.83 MHz             | ---         | ---         | 7.03     | dBm  | INFO    |
| No peaks detected                      | ---         | ---         |          |      | PASS    |
| Lowest margin to<br>limit 6919.333 MHz | 0           | ---         | 31.75    | dB   | INFO    |



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic Basic rate 2480



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic Basic rate 2480

General verdict

PASS

## FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR Pi/4DQPSK

| Test References                   |                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------|
| TC Start                          | 24.06.2022 13:33:40                                                                                              |
| Ambit Temp [°C]   Humidity [rel%] | 28.2   43                                                                                                        |
| System Version                    | 3.2.0.2                                                                                                          |
| Test Specification                | FCC 15.247 -                                                                                                     |
| Test Method                       | IF DTS then 8.5 DTS emissions in non-restricted frequency bands:<br>Subclause 11.11 of ANSI C63.10 is applicable |
| TC Version                        | 0.0.1                                                                                                            |
| My Description                    | FCC 15.247 TX Emissions Conducted FHSS - BT Classic EDR<br>Pi/4DQPSK                                             |
| Add. Information                  |                                                                                                                  |

| EUT Common Settings BT Classic           |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFD                                          |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

| Test Parameter                                   |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic EDR Pi/4DQPSK               |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 2402                 |
| Frequency mid to test                            | True   Freq [MHz] 2441                 |
| Frequency high to test                           | True   Freq [MHz] 2480                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

| Test Equipment                                                |  |
|---------------------------------------------------------------|--|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |  |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |  |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |  |

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

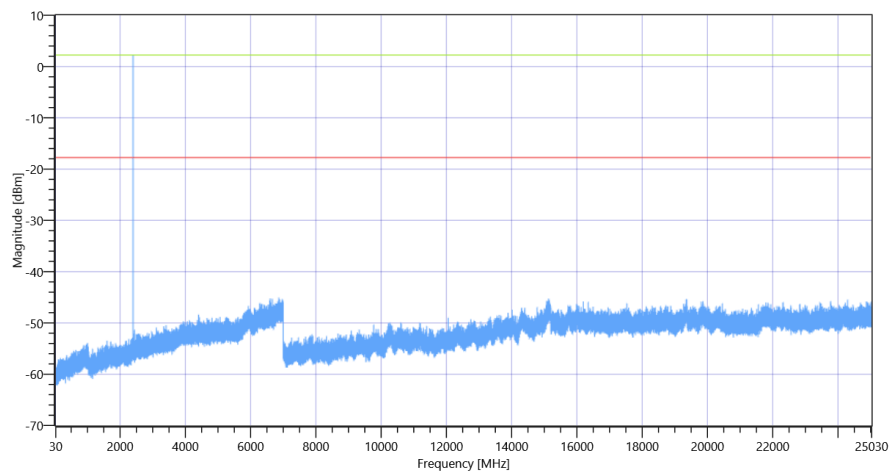
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.37     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |

### READ SA SETTINGS:

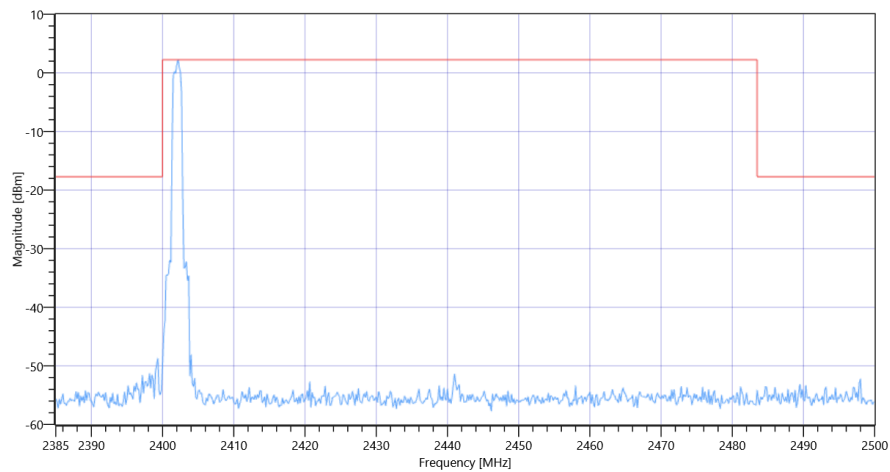
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 5.37   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 200   25   3001   SWE |

### RESULT

| Test Description                 | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------|-------------|-------------|----------|------|---------|
| Reference @<br>2402.17 MHz       | ---         | ---         | 2.26     | dBm  | INFO    |
| No peaks detected                | ---         | ---         |          |      | PASS    |
| Lowest margin to<br>limit 30 MHz | 0           | ---         | -139.18  | dB   | INFO    |



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR Pi-4DQPSK 2402



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR Pi-4QPSK 2402

## Test at TX 2441 MHz

### RESULT: Reference Power cond.

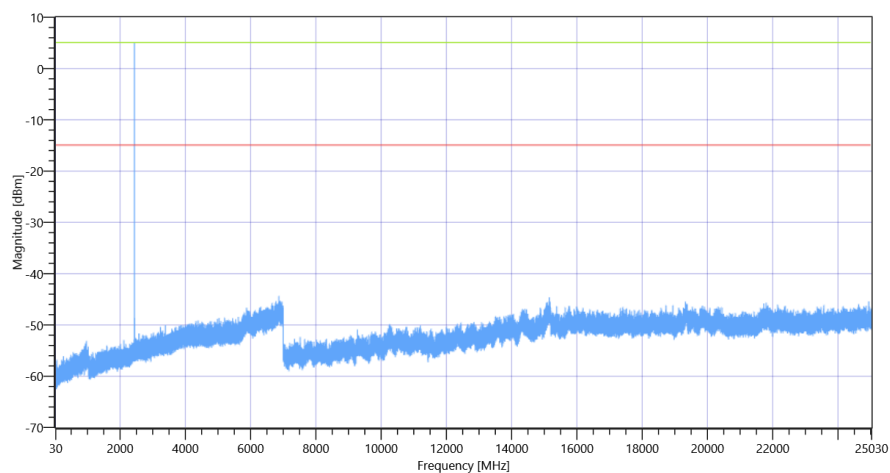
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 6.05     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2441.000 | MHz  | INFO    |

### READ SA SETTINGS:

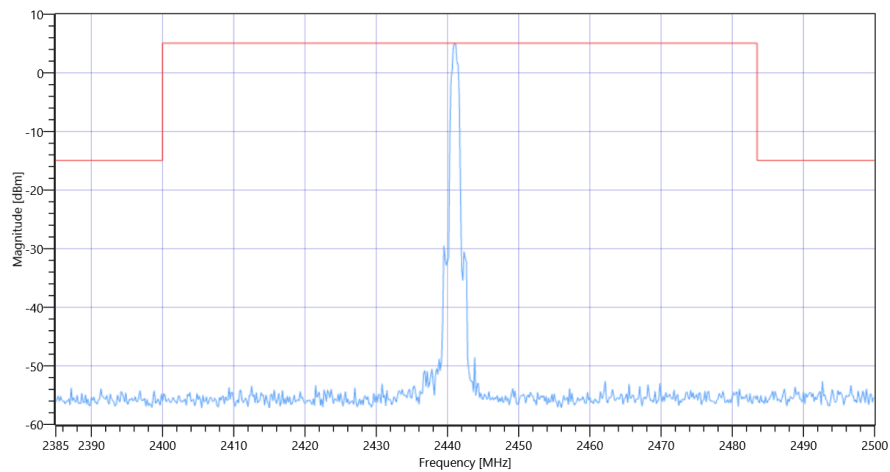
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 6.05   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 200   25   3001   SWE |

### RESULT

| Test Description                       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------------|-------------|-------------|----------|------|---------|
| Reference @<br>2441.00 MHz             | ---         | ---         | 5.06     | dBm  | INFO    |
| No peaks detected                      | ---         | ---         |          |      | PASS    |
| Lowest margin to<br>limit 6867.667 MHz | 0           | ---         | 29.41    | dB   | INFO    |



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR Pi-4QPSK 2441



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR Pi-4QPSK 2441

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

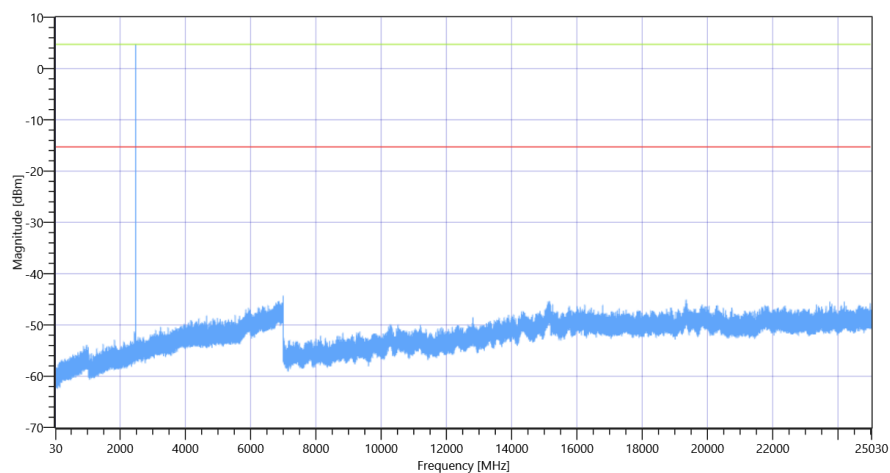
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.32     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2480.000 | MHz  | INFO    |

### READ SA SETTINGS:

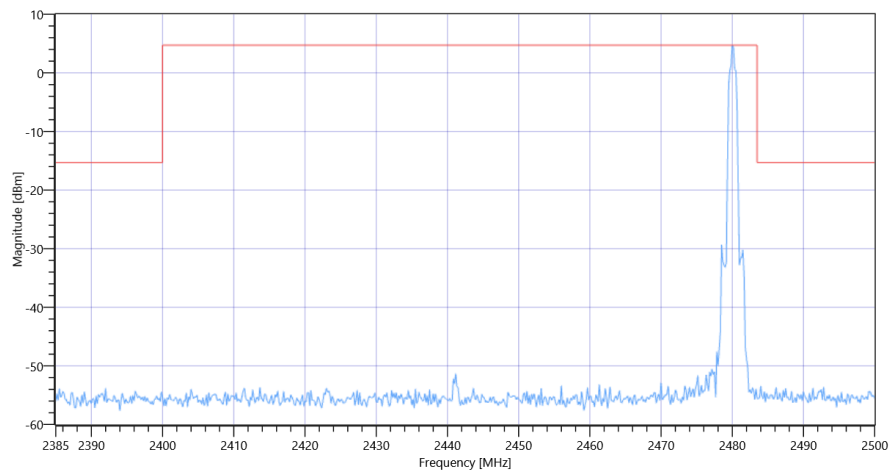
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 5.32   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 200   25   3001   SWE |

### RESULT

| Test Description                       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------------|-------------|-------------|----------|------|---------|
| Reference @<br>2480.00 MHz             | ---         | ---         | 4.71     | dBm  | INFO    |
| No peaks detected                      | ---         | ---         |          |      | PASS    |
| Lowest margin to<br>limit 6995.167 MHz | 0           | ---         | 29       | dB   | INFO    |



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR Pi-4DQPSK 2480



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR Pi-4DQPSK 2480

General verdict

PASS

## FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR 8DPSK

| Test References                   |                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------|
| TC Start                          | 24.06.2022 14:01:53                                                                                              |
| Ambit Temp [°C]   Humidity [rel%] | 28.3   44                                                                                                        |
| System Version                    | 3.2.0.2                                                                                                          |
| Test Specification                | FCC 15.247 -                                                                                                     |
| Test Method                       | IF DTS then 8.5 DTS emissions in non-restricted frequency bands:<br>Subclause 11.11 of ANSI C63.10 is applicable |
| TC Version                        | 0.0.1                                                                                                            |
| My Description                    | FCC 15.247 TX Emissions Conducted FHSS - BT Classic EDR 8DPSK                                                    |
| Add. Information                  |                                                                                                                  |

| EUT Common Settings BT Classic           |                                                       |
|------------------------------------------|-------------------------------------------------------|
| Intermodulation Value N                  | 3                                                     |
| Image Freq. Low   Mid   High [MHz]       | 0   0   0                                             |
| Power Class                              | 1                                                     |
| Power Control                            | No                                                    |
| Longest Supported Packet Type            | DH1                                                   |
| RF Supported                             | Basic Rate True   EDR Pi/4DQPSK True   EDR 8DPSK True |
| Testmode                                 | LOOPback                                              |
| Perform Inquiry                          | No                                                    |
| EUT BT Address (if Inquiry No)           | 0004F3FFFFFD                                          |
| Signaling BT Address                     | BABEBEDADBAD                                          |
| Switch Matrix & Pathcompensation enabled | Yes                                                   |

| Test Parameter                                   |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | BT Classic EDR 8DPSK                   |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 2402                 |
| Frequency mid to test                            | True   Freq [MHz] 2441                 |
| Frequency high to test                           | True   Freq [MHz] 2480                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 0.7                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

| Test Equipment                                                |  |
|---------------------------------------------------------------|--|
| Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103809,3.70 |  |
| Signaling unit,Rohde&Schwarz,CMW,1201.0002k75/102550,4.0.62   |  |
| Switch matrix,CTCadvanced,RSM-1 NI DAQ,29655273,NI            |  |

## Test at TX 2402 MHz

### RESULT: Reference Power cond.

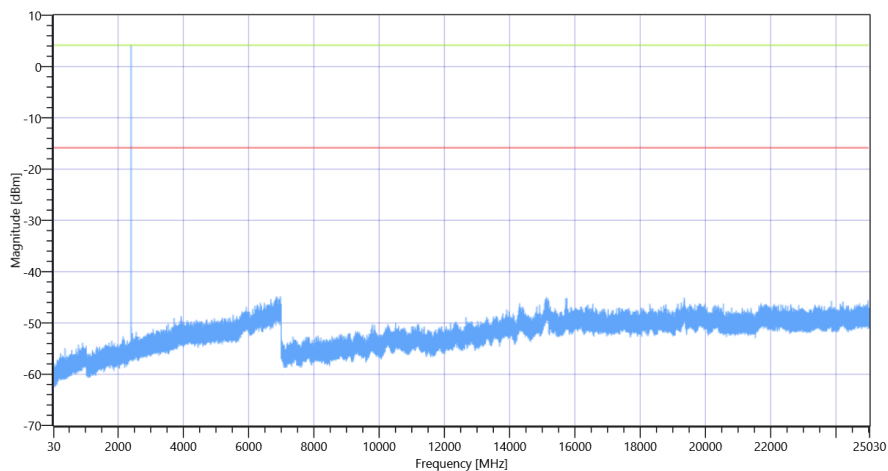
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.85     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2402.200 | MHz  | INFO    |

### READ SA SETTINGS:

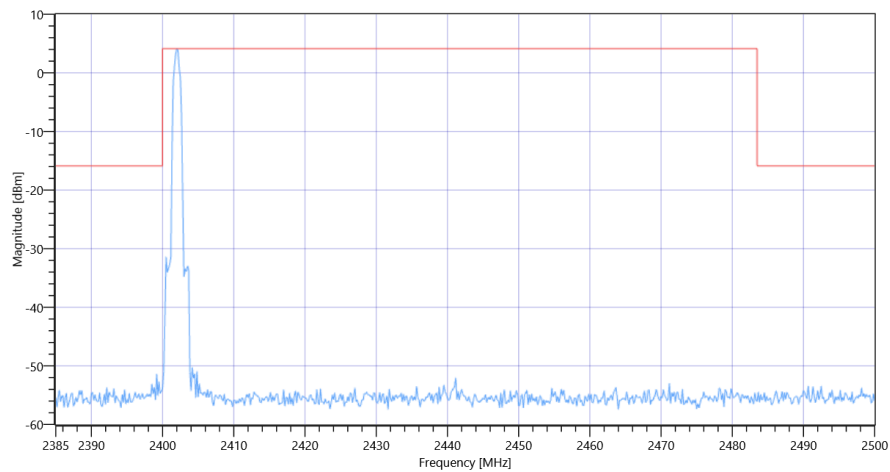
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 5.85   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 200   25   3001   SWE |

### RESULT

| Test Description                       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------------|-------------|-------------|----------|------|---------|
| Reference @<br>2402.00 MHz             | ---         | ---         | 4.13     | dBm  | INFO    |
| No peaks detected                      | ---         | ---         |          |      | PASS    |
| Lowest margin to<br>limit 6973.167 MHz | 0           | ---         | 28.94    | dB   | INFO    |



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR 8DPSK 2402



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR 8DPSK 2402

## Test at TX 2441 MHz

### RESULT: Reference Power cond.

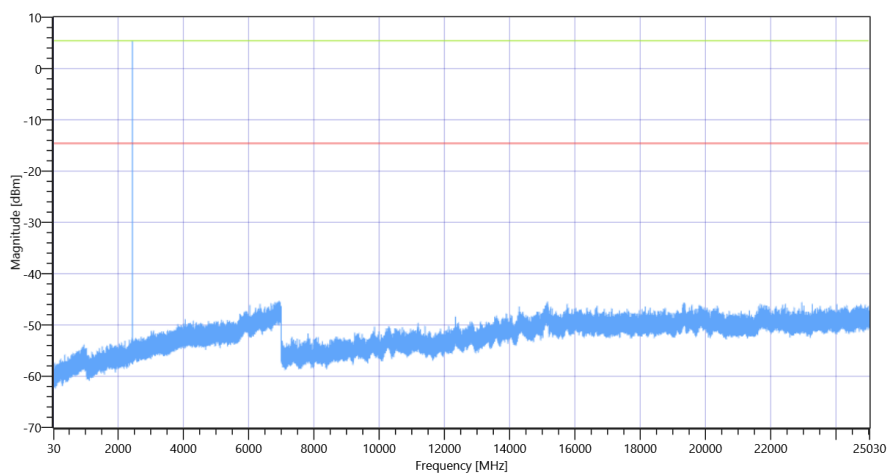
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 6.09     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2441.100 | MHz  | INFO    |

### READ SA SETTINGS:

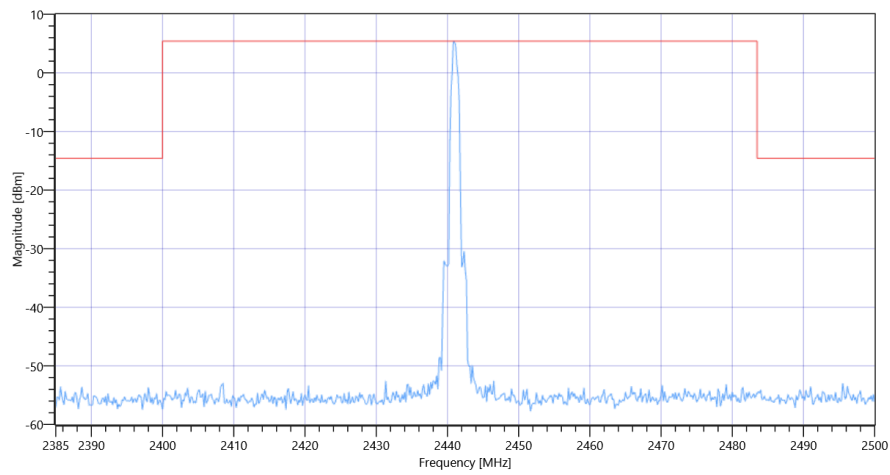
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 6.09   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 200   25   3001   SWE |

### RESULT

| Test Description                       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------------|-------------|-------------|----------|------|---------|
| Reference @<br>2440.83 MHz             | ---         | ---         | 5.41     | dBm  | INFO    |
| No peaks detected                      | ---         | ---         |          |      | PASS    |
| Lowest margin to<br>limit 6938.167 MHz | 0           | ---         | 30.73    | dB   | INFO    |



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR 8DPSK 2441



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR 8DPSK 2441

## Test at TX 2480 MHz

### RESULT: Reference Power cond.

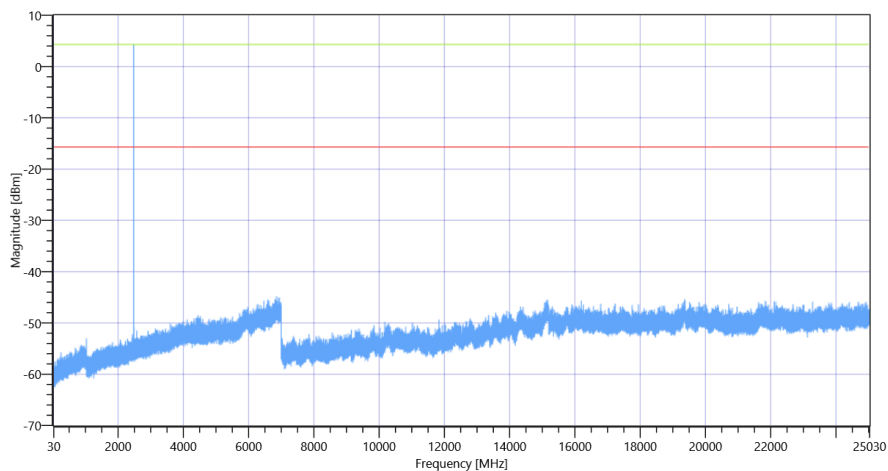
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 5.46     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 2480.000 | MHz  | INFO    |

### READ SA SETTINGS:

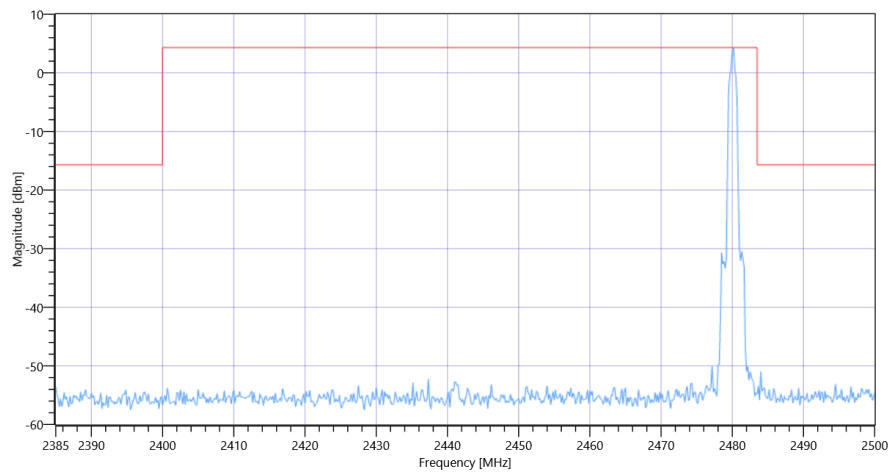
|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 5.46   0   25         |
| Start [MHz]   Stop [MHz]                             | 24530.000   25030.000 |
| RBW [MHz]   VBW [MHz]                                | 0.100000   0.300000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 200   25   3001   SWE |

### RESULT

| Test Description                       | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------------------|-------------|-------------|----------|------|---------|
| Reference @<br>2480.17 MHz             | ---         | ---         | 4.32     | dBm  | INFO    |
| No peaks detected                      | ---         | ---         |          |      | PASS    |
| Lowest margin to<br>limit 6854.333 MHz | 0           | ---         | 29.14    | dB   | INFO    |



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR 8DPSK 2480



FCC 15.247 # TX spurious conducted 20dBc ~ BT Classic EDR 8DPSK 2480

General verdict

PASS

- END OF DOCUMENT -