

Table of Content

| | |
|--|-----|
| # Message with SA scan ~ | 4 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 | 5 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 | 9 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 | 13 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 | 17 |
| # Message with SA scan ~ | 21 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 | 22 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 | 26 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 | 30 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1 | 34 |
| # Message with SA scan ~ | 38 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A | 39 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A | 43 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A | 48 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A | 52 |
| # Message with SA scan ~ | 57 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A | 58 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A | 62 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A | 67 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A | 71 |
| # Message with SA scan ~ | 76 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C | 77 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C | 81 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C | 86 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C | 90 |
| # Message with SA scan ~ | 95 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C | 96 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C | 100 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C | 105 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C | 109 |
| # Message with SA scan ~ | 114 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C | 115 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C | 119 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C | 124 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C | 128 |
| # Message with SA scan ~ | 133 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3 | 134 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3 | 139 |
| FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3 | 143 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3 | 145 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3 | 150 |

| | |
|--|-----|
| FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3 | 154 |
| # Message with SA scan ~ | 156 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3 | 157 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3 | 162 |
| FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3 | 166 |
| FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3 | 168 |
| FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3 | 173 |
| FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3 | 177 |
| FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1 | 179 |
| FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A | 182 |
| FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C | 185 |
| FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3 | 189 |

Message with SA scan ~

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 09:46:36 |
| Ambit temp [°C] humidity [rel%] | 25.8 61 |
| System version | 4.6.0.0 |
| Specification | - |
| Method | |
| Description | Message with SA WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

Test Parameter

| | |
|---------------|--|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer |
| Message start | 12.07.2023 09:46:37 |
| Message | set WLAN5Gx to WLAN5Gx ax-HE40 U-NII-1, Frequency [MHz] 5190 , |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 09:46:47 |
| Ambit temp [°C] humidity [rel%] | 25.8 61 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5190 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5230 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5190 MHz

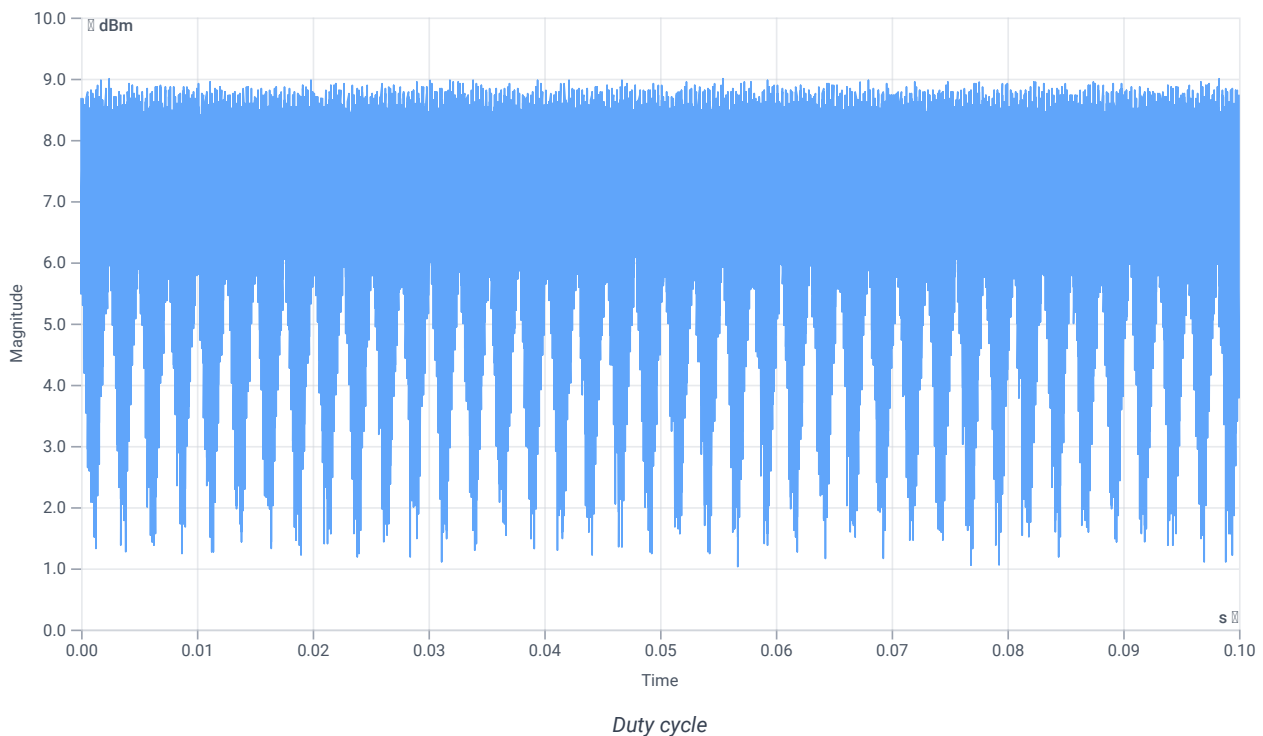
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 9.22 | dBm | INFO |
| Ref. Frequency | -- | -- | 5183.810 | MHz | INFO |

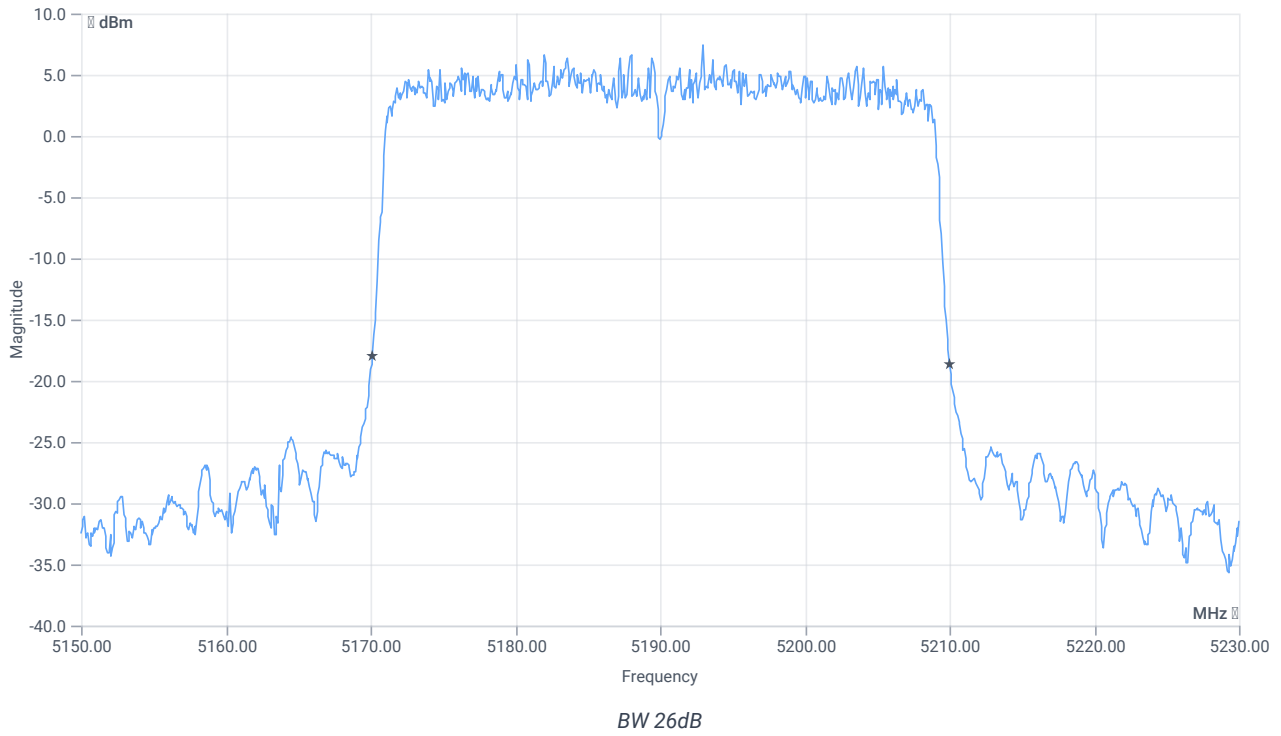
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



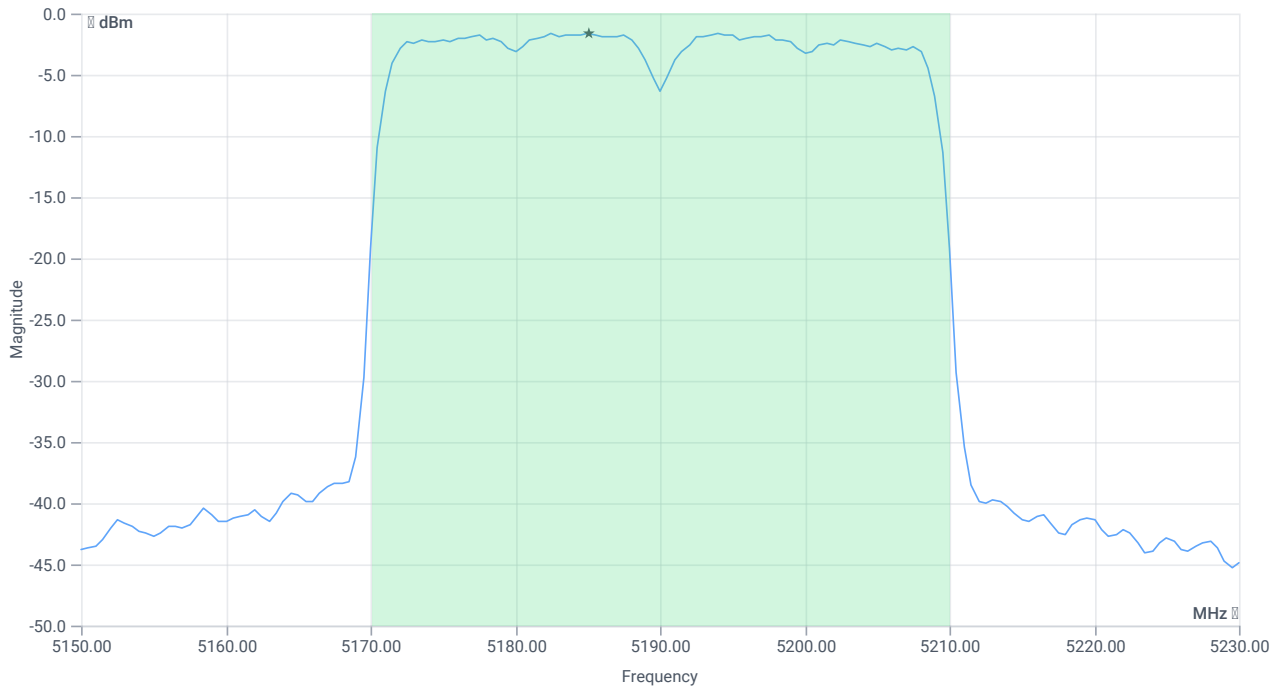
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 39.84 | MHz | INFO |
| T1 26dB | --- | --- | 5170.1600 | MHz | INFO |
| T2 26dB | --- | --- | 5210.0000 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 21.22 16.35 20 |
| Start [MHz] Stop [MHz] | 5150.000 5230.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 13.09 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 13.09 | dBm | PASS |
| Limit: 11 dBm + 10 log 39.84 | | | | | |
| Max Output Power DC corrected | -- | 27 | 13.09 | dBm | na |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | -1.57 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | -1.57 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 09:48:18 |
| Ambit temp [°C] humidity [rel%] | 25.8 60 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5190 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5230 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

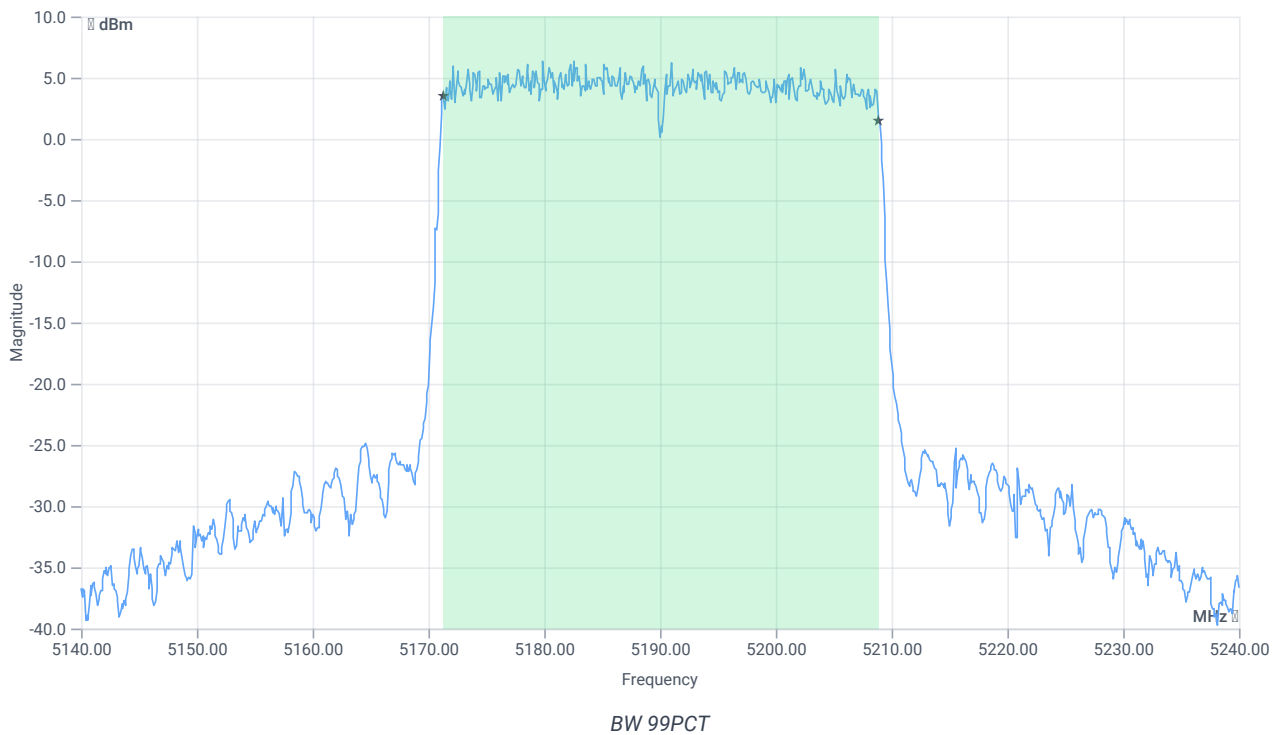
Test at TX 5190 MHz

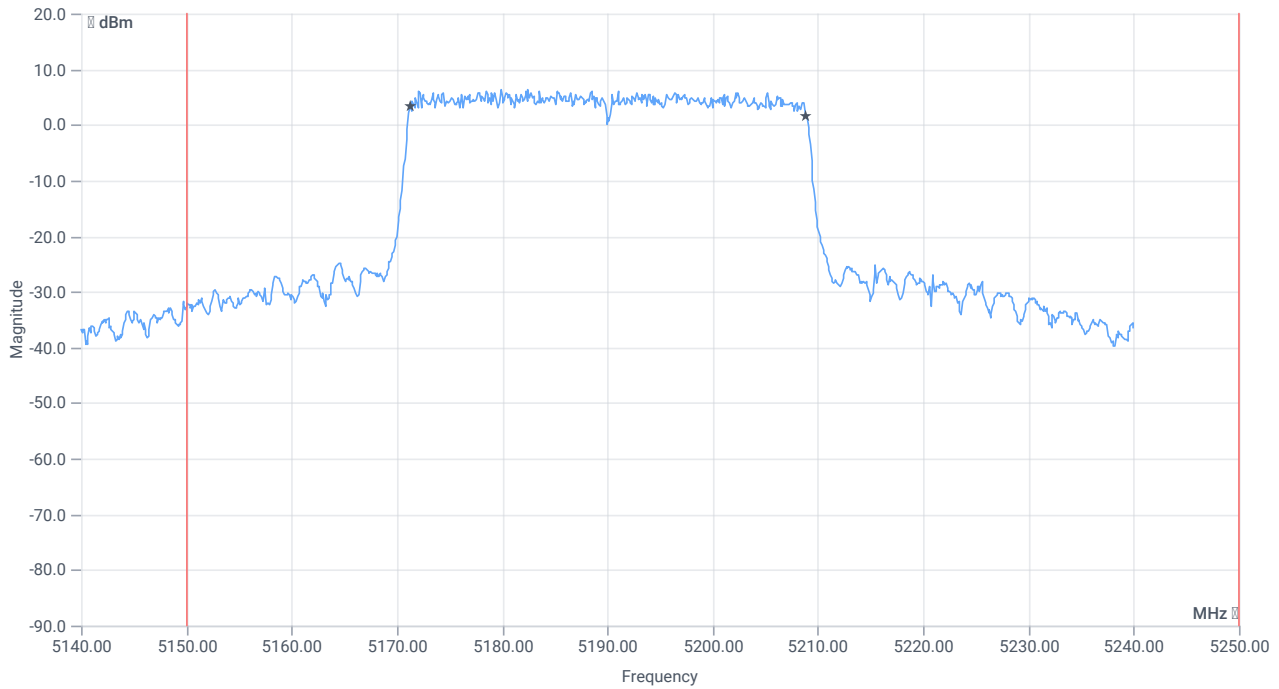
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 9.38 | dBm | INFO |
| Ref. Frequency | -- | -- | 5176.210 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 17.38 16.35 20 |
| Start [MHz] Stop [MHz] | 5140.000 5240.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

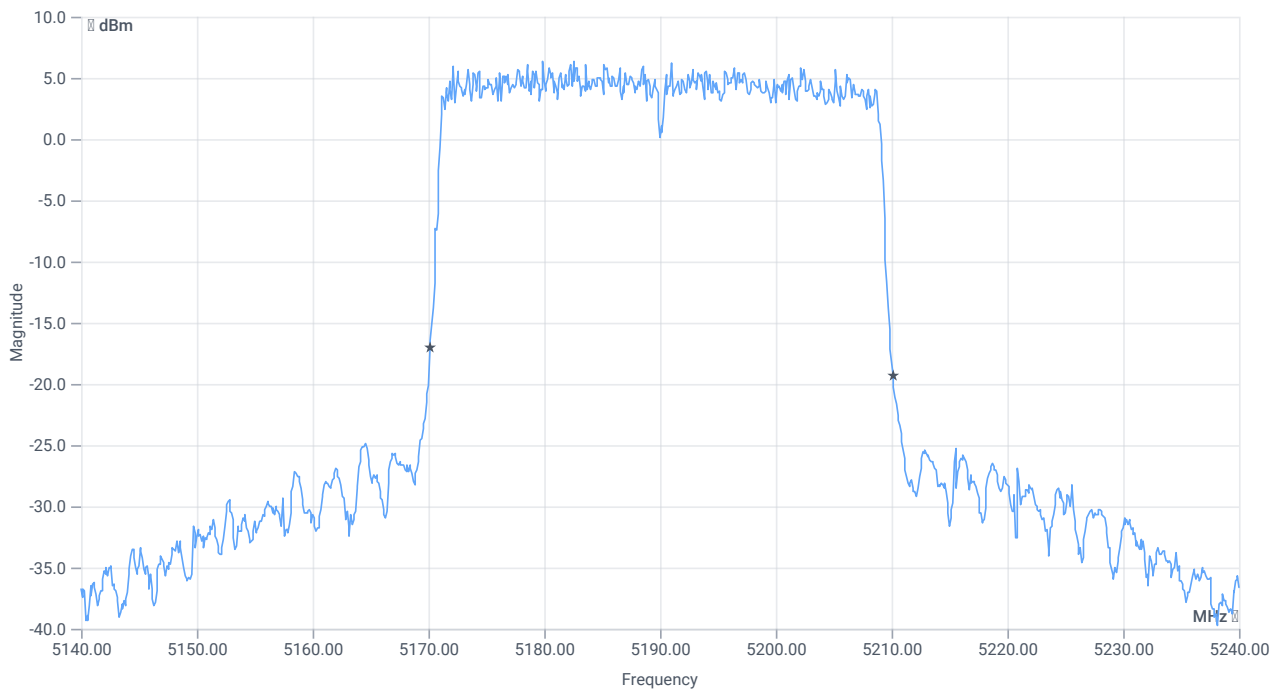




BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | -- | -- | 37.662 | MHz | INFO |
| T1 99% | 5150.000000 | -- | 5171.2188 | MHz | PASS |
| T2 99% | -- | 5250.000000 | 5208.8811 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 40 | MHz | INFO |
| T1 26dB | 5150.000000 | --- | 5170.1000 | MHz | PASS |
| T2 26dB | --- | 5250.000000 | 5210.1000 | MHz | PASS |

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 09:48:55 |
| Ambit temp [°C] humidity [rel%] | 25.8 60 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5190 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5230 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5190 MHz

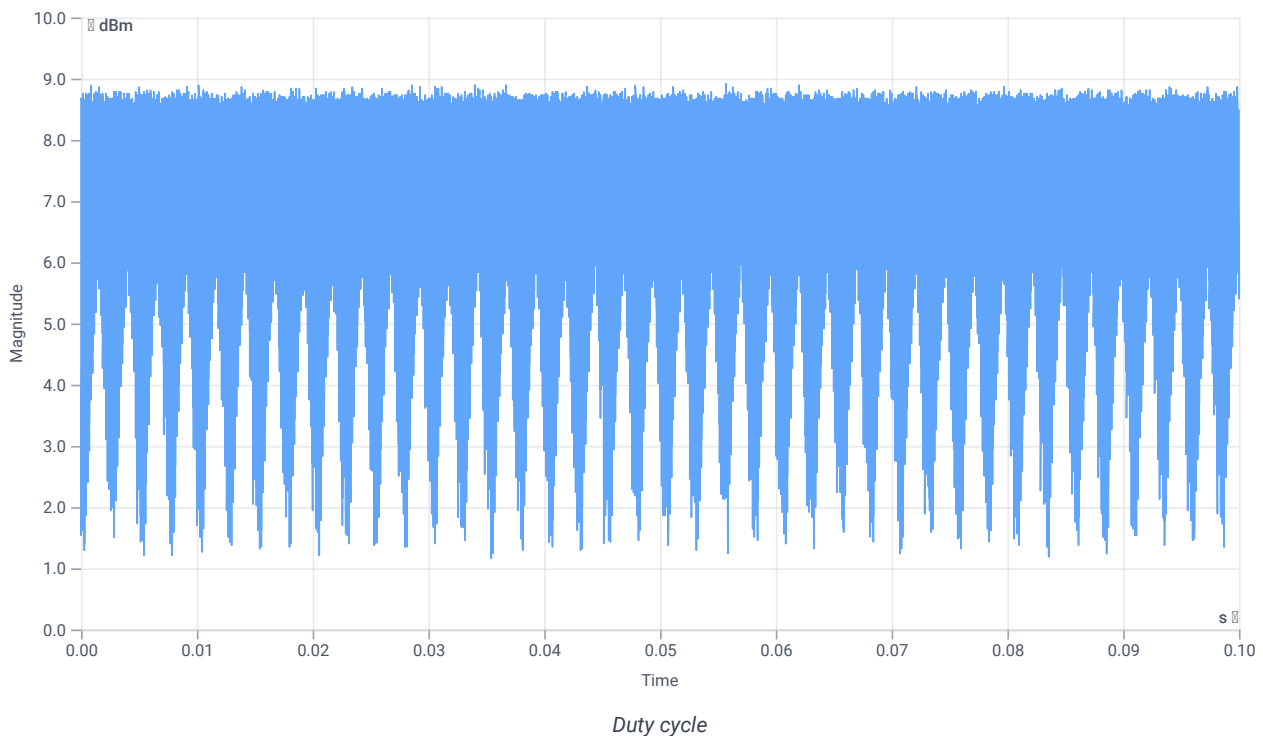
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 7.52 | dBm | INFO |
| Ref. Frequency | -- | -- | 5193.000 | MHz | INFO |

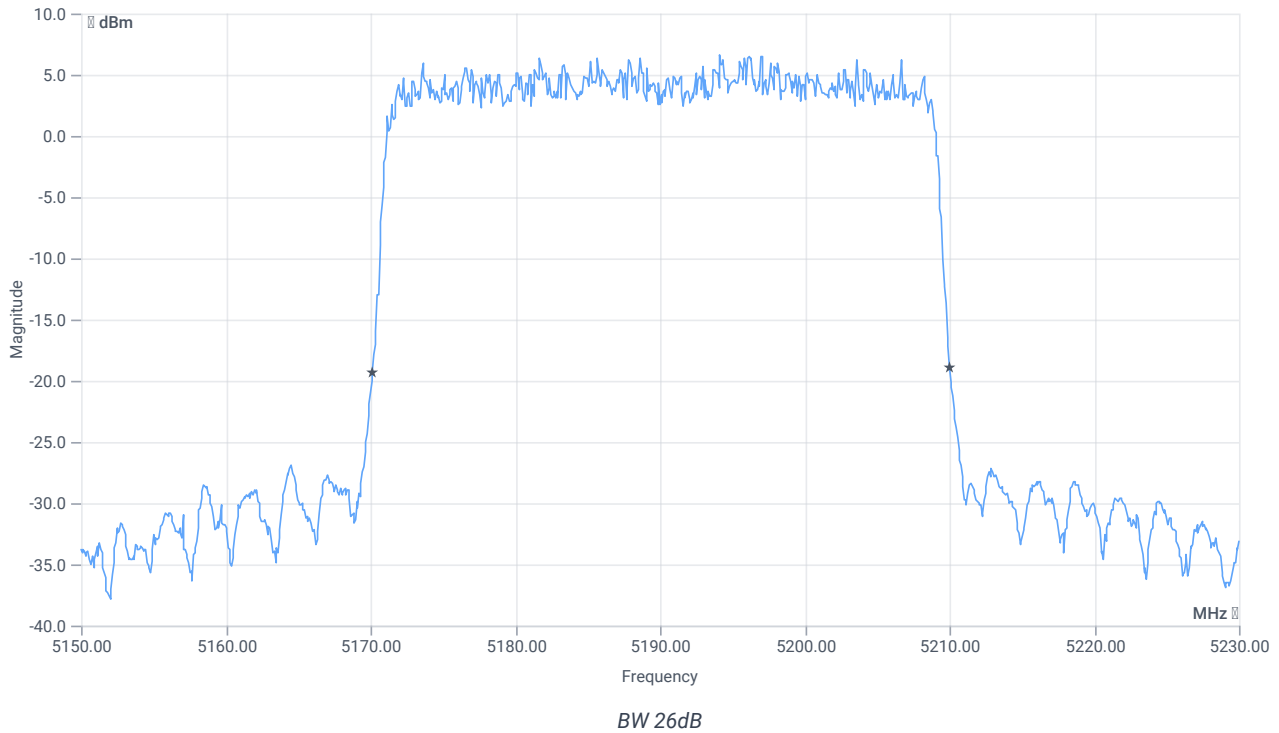
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



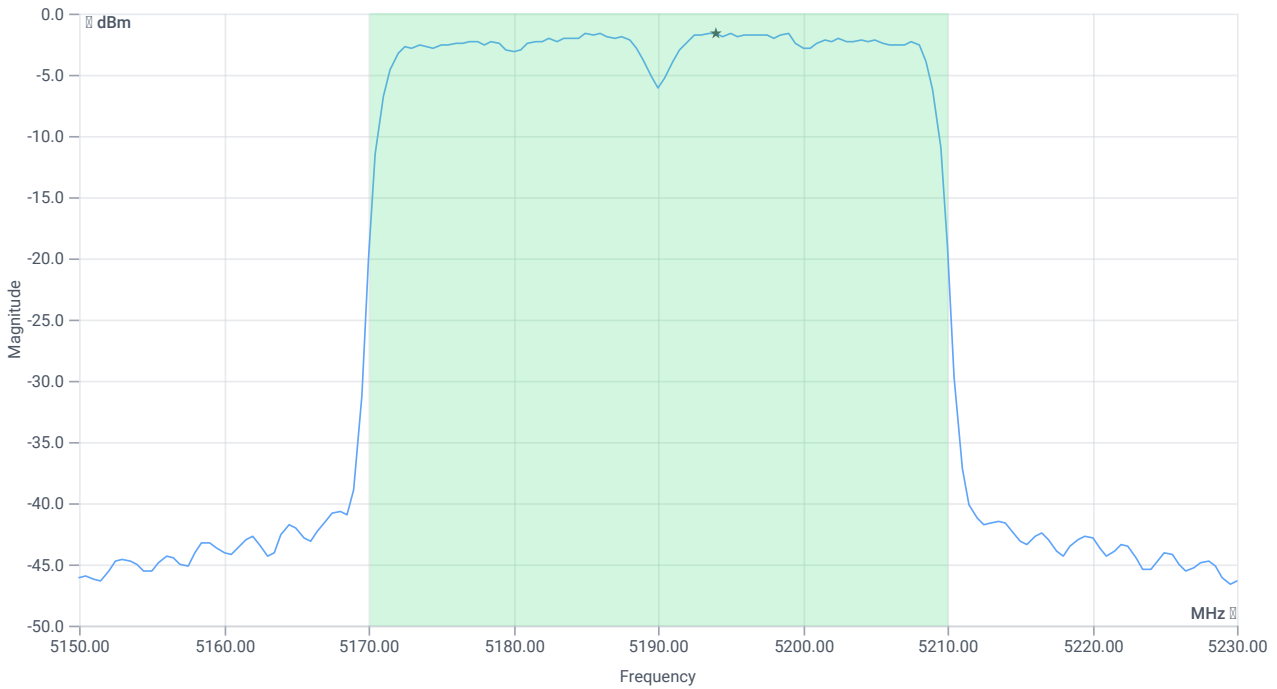
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 39.84 | MHz | INFO |
| T1 26dB | --- | --- | 5170.1600 | MHz | INFO |
| T2 26dB | --- | --- | 5210.0000 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 19.52 16.35 20 |
| Start [MHz] Stop [MHz] | 5150.000 5230.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 13.07 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 13.07 | dBm | PASS |
| Limit: 11 dBm + 10 log 39.84 | | | | | |
| Max Output Power DC corrected | -- | 27 | 13.07 | dBm | na |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | -1.57 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | -1.57 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 09:50:26 |
| Ambit temp [°C] humidity [rel%] | 25.8 61 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5190 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5230 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

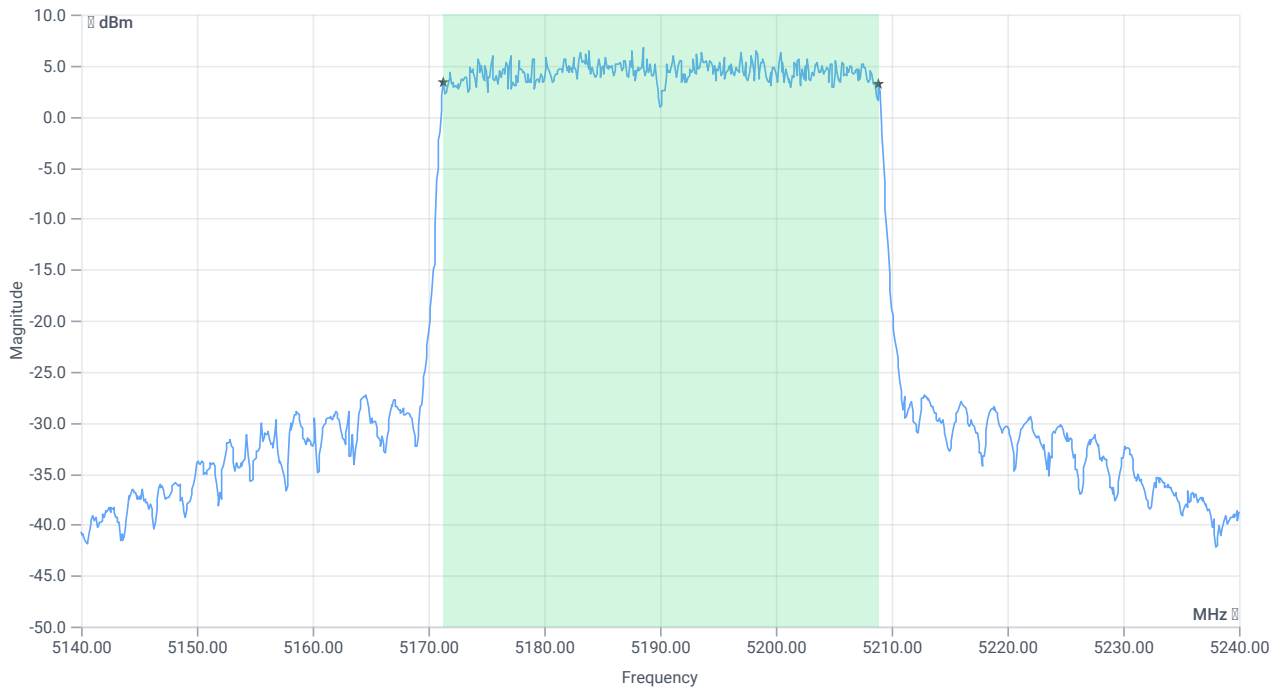
Test at TX 5190 MHz

RESULT: Reference Power cond.

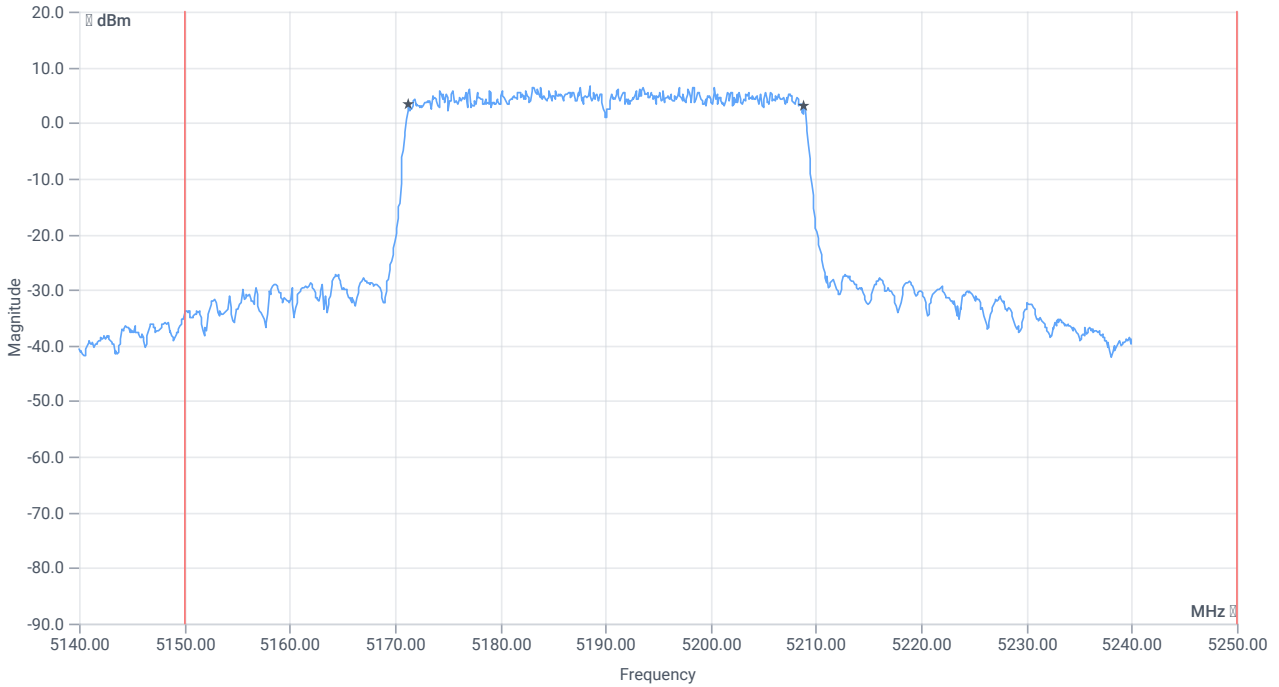
| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 6.87 | dBm | INFO |
| Ref. Frequency | -- | -- | 5195.590 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 14.87 16.35 15 |
| Start [MHz] Stop [MHz] | 5140.000 5240.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |



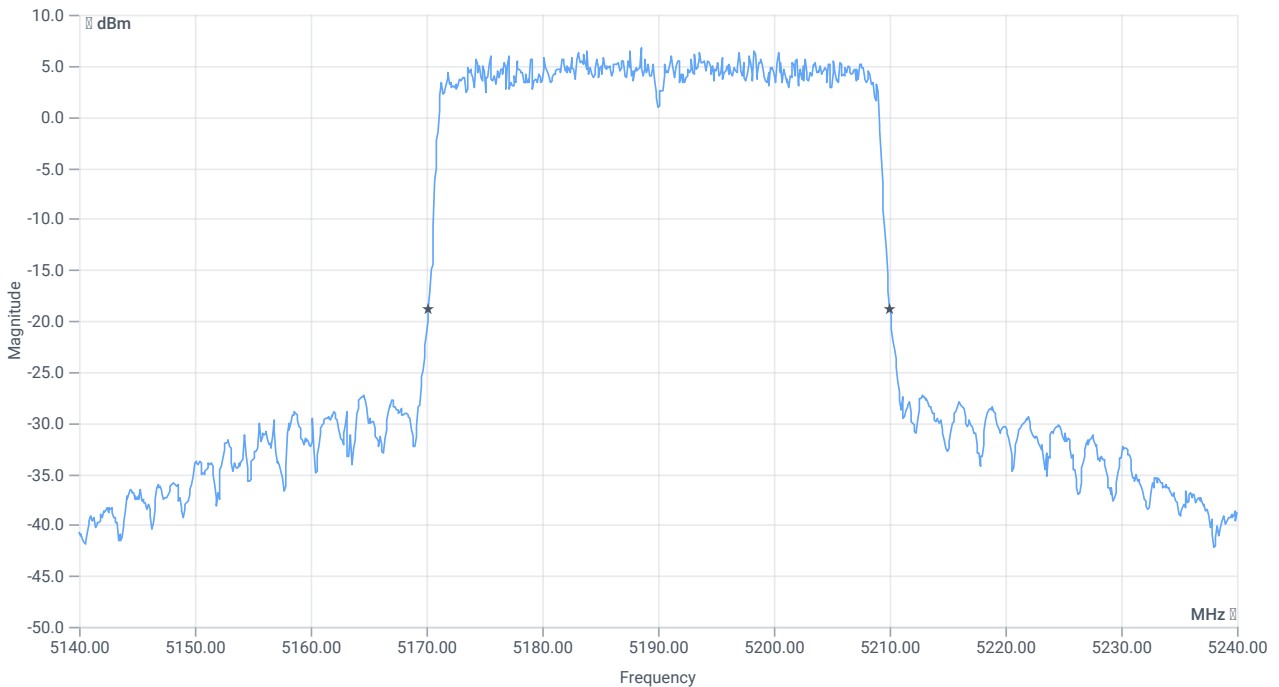
BW 99PCT



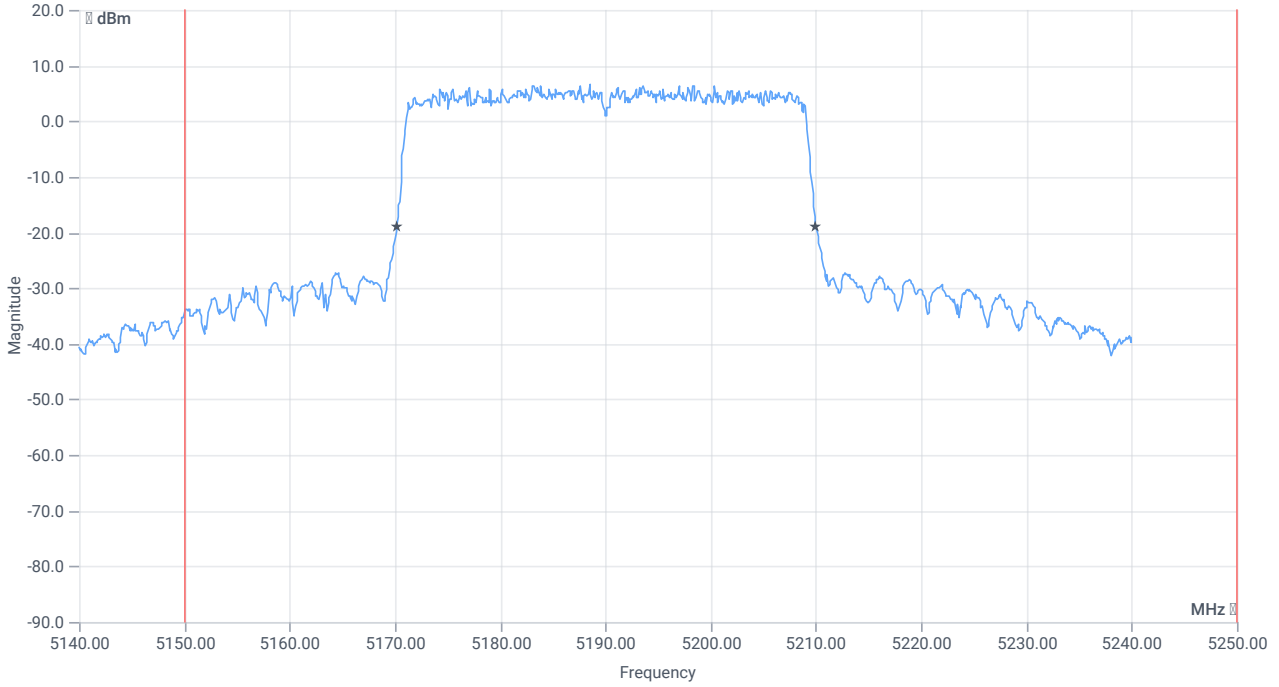
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | -- | -- | 37.562 | MHz | INFO |
| T1 99% | 5150.000000 | -- | 5171.3187 | MHz | PASS |
| T2 99% | -- | 5250.000000 | 5208.8811 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 39.8 | MHz | INFO |
| T1 26dB | 5150.000000 | --- | 5170.2000 | MHz | PASS |
| T2 26dB | --- | 5250.000000 | 5210.0000 | MHz | PASS |

Verdict

PASS

Message with SA scan ~

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 09:51:03 |
| Ambit temp [°C] humidity [rel%] | 25.8 61 |
| System version | 4.6.0.0 |
| Specification | - |
| Method | |
| Description | Message with SA WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

Test Parameter

| | |
|---------------|--|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer |
| Message start | 12.07.2023 09:51:03 |
| Message | set WLAN5Gx to WLAN5Gx ax-HE40 U-NII-1, Frequency [MHz] 5230 |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 09:53:45 |
| Ambit temp [°C] humidity [rel%] | 25.8 60 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5190 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5230 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5230 MHz

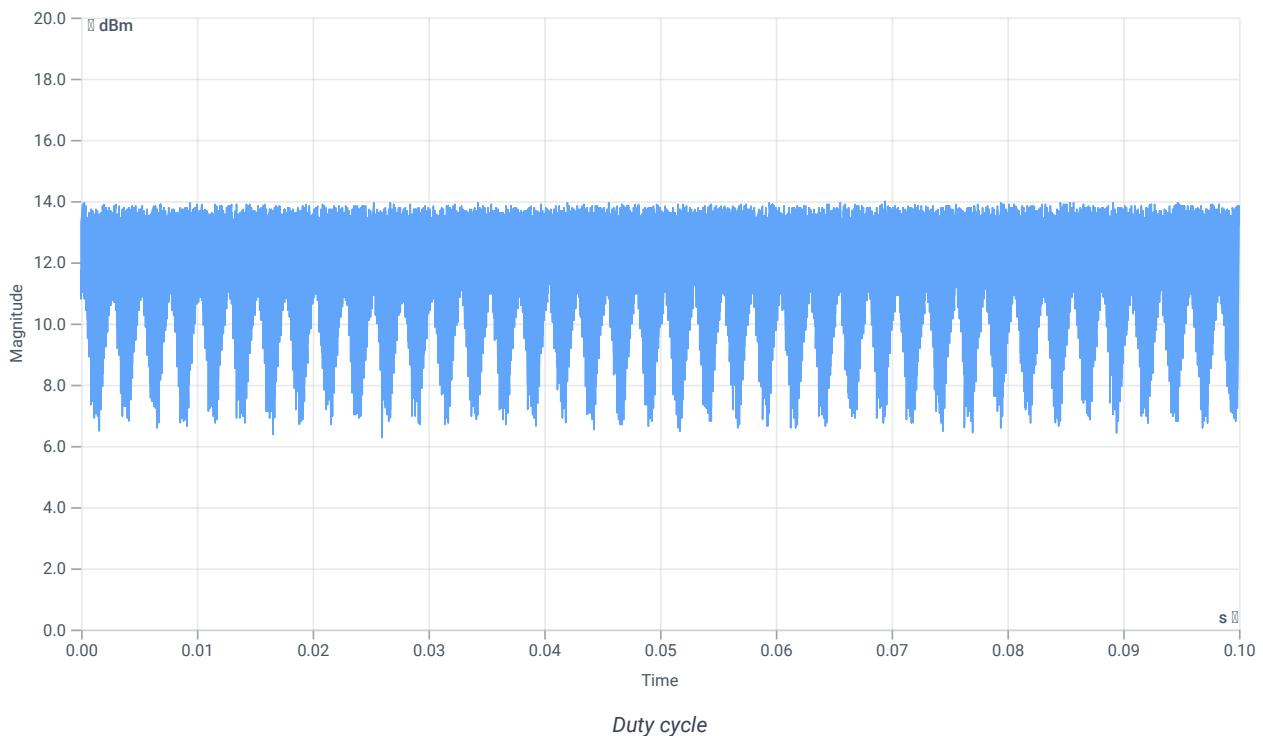
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 12.66 | dBm | INFO |
| Ref. Frequency | -- | -- | 5224.010 | MHz | INFO |

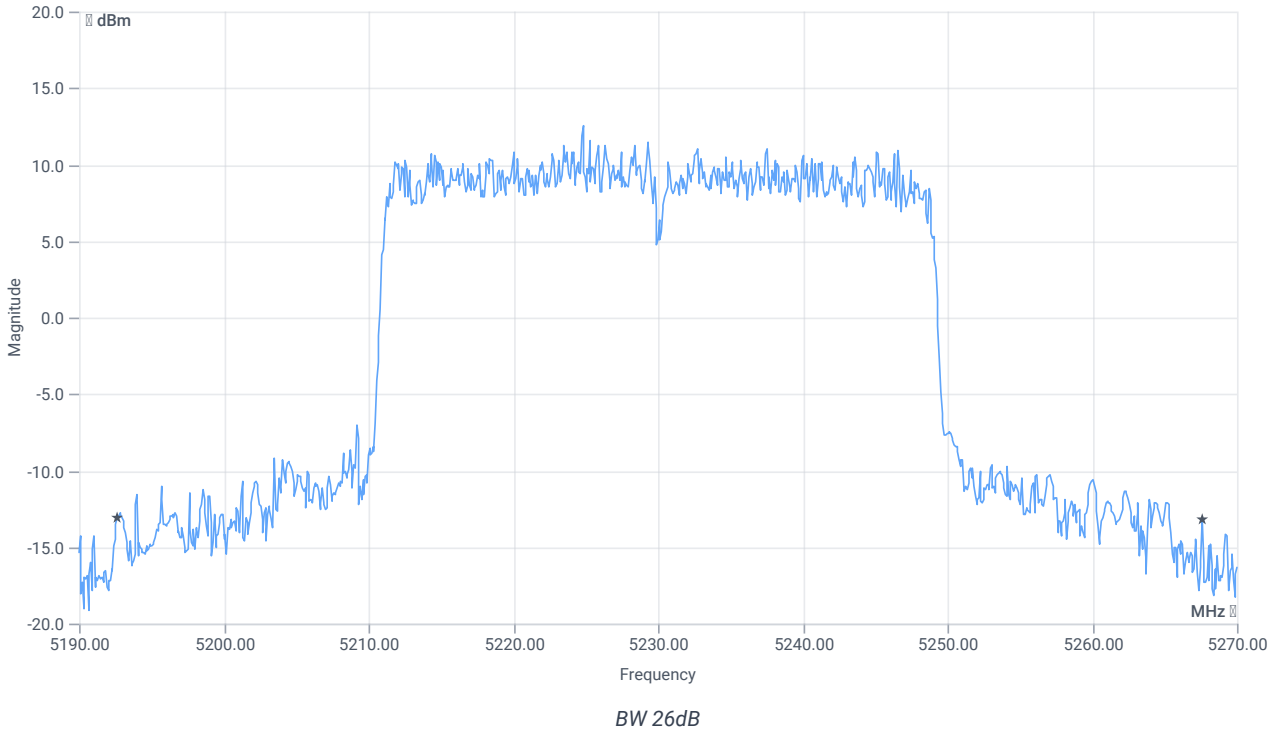
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



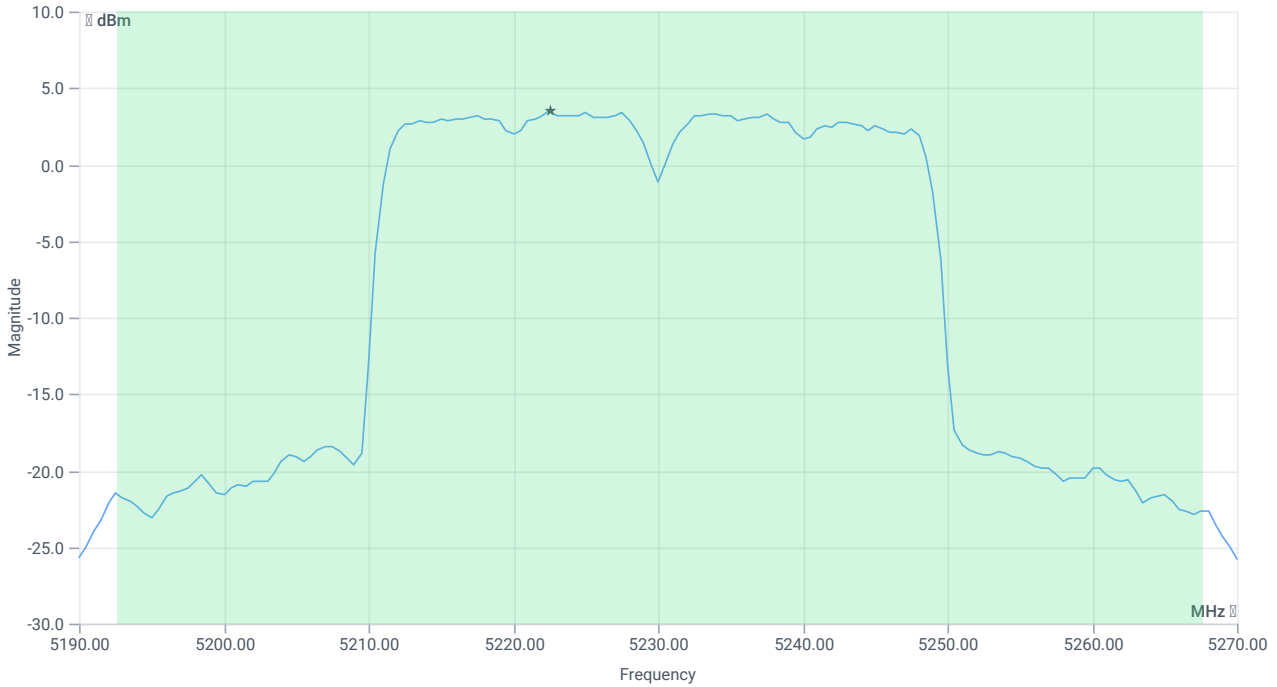
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 74.96 | MHz | INFO |
| T1 26dB | --- | --- | 5192.6400 | MHz | INFO |
| T2 26dB | --- | --- | 5267.6000 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 24.66 16.34 25 |
| Start [MHz] Stop [MHz] | 5190.000 5270.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 18.14 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 18.14 | dBm | PASS |
| Limit: 11 dBm + 10 log 74.96 | | | | | |
| Max Output Power DC corrected | -- | 29.75 | 18.14 | dBm | na |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | 3.48 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | 3.48 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 09:55:16 |
| Ambit temp [°C] humidity [rel%] | 25.8 60 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5190 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5230 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

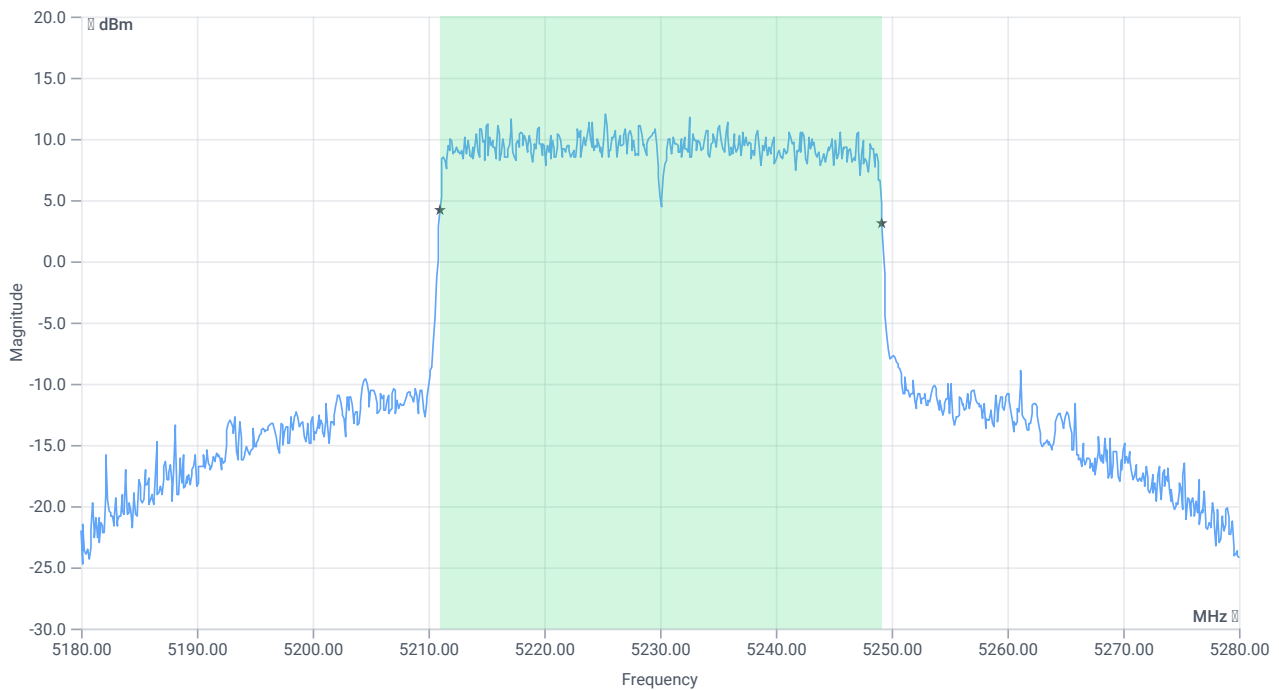
Test at TX 5230 MHz

RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 12.29 | dBm | INFO |
| Ref. Frequency | -- | -- | 5240.190 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 20.29 16.34 20 |
| Start [MHz] Stop [MHz] | 5180.000 5280.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |



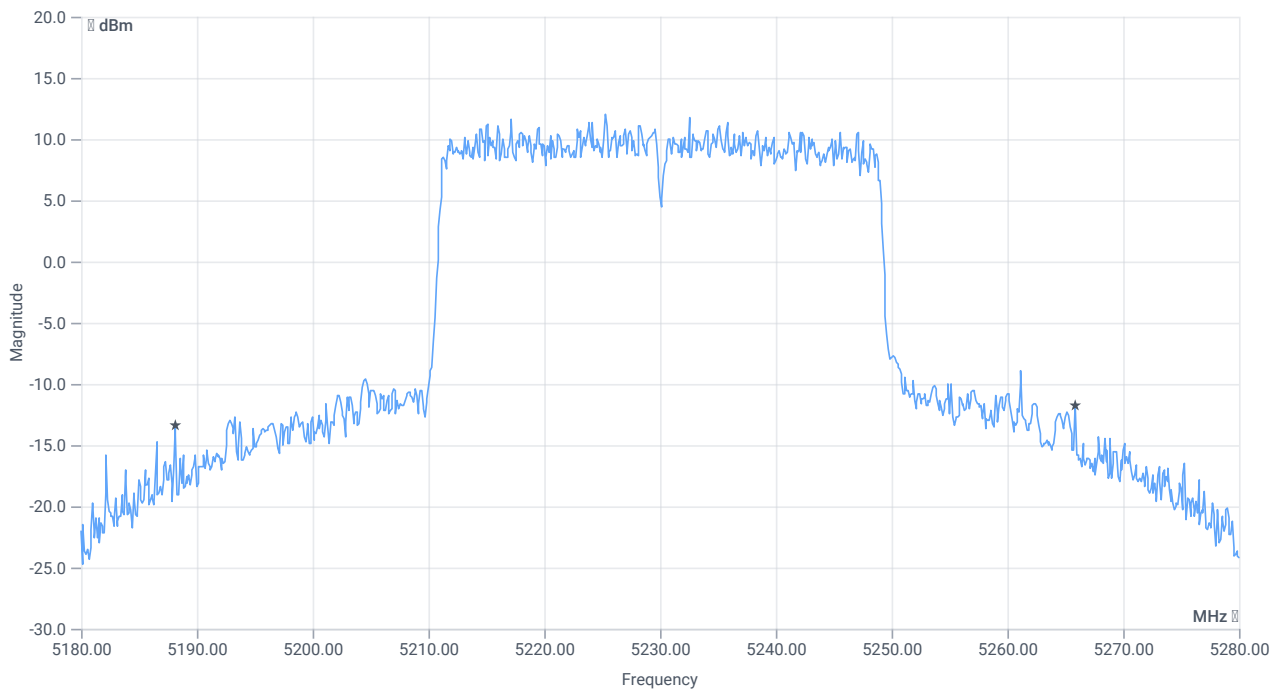
BW 99PCT



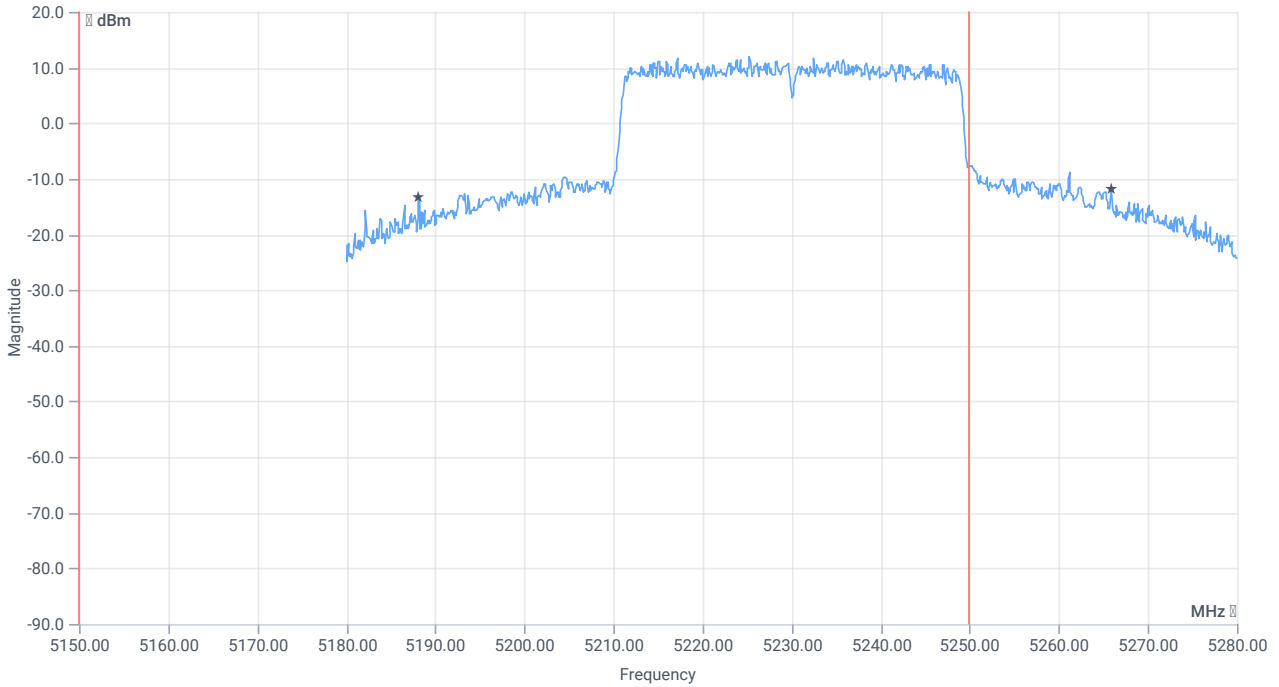
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | -- | -- | 38.162 | MHz | INFO |
| T1 99% | 5150.000000 | -- | 5211.0190 | MHz | PASS |
| T2 99% | -- | 5250.000000 | 5249.1808 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|--------------|
| Bandwidth 26dB | -- | -- | 77.8 | MHz | INFO |
| T1 26dB | 5150.000000 | -- | 5188.1000 | MHz | PASS |
| T2 26dB | -- | 5250.000000 | 5265.9000 | MHz | DFS required |

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 09:55:54 |
| Ambit temp [°C] humidity [rel%] | 25.8 60 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5190 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5230 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5230 MHz

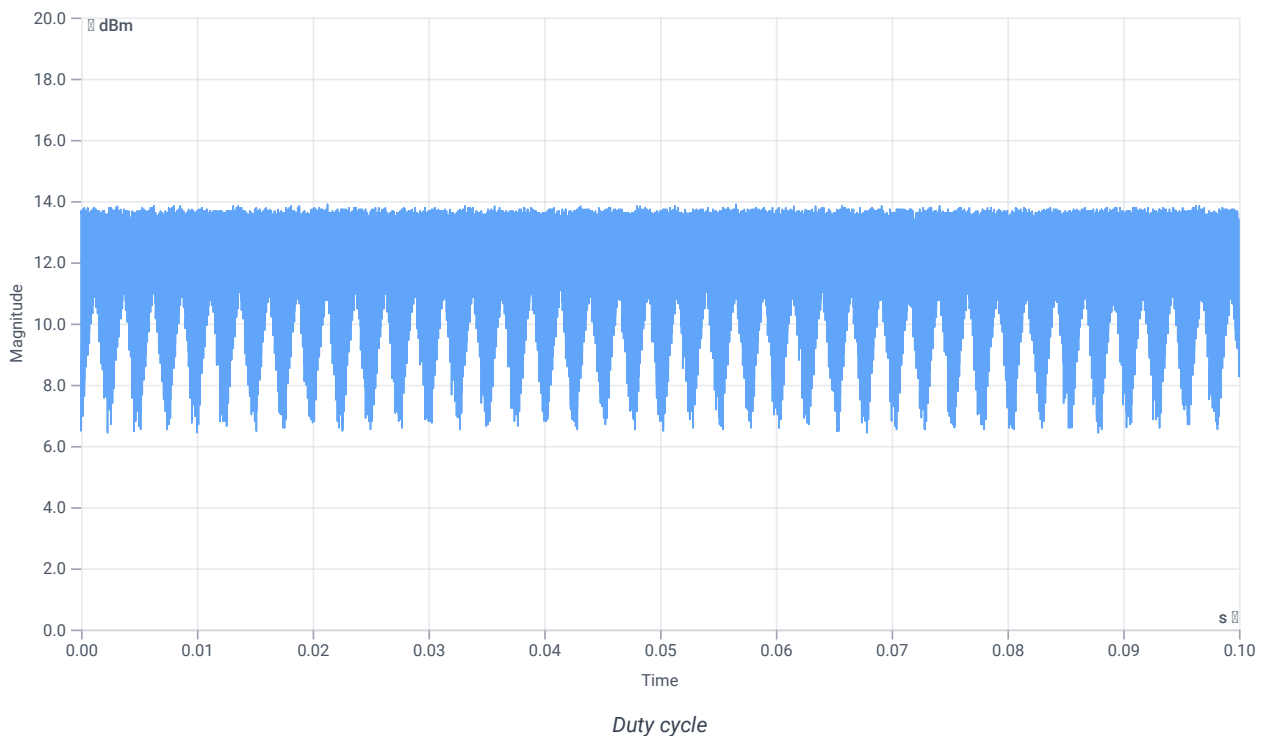
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 12.61 | dBm | INFO |
| Ref. Frequency | -- | -- | 5244.790 | MHz | INFO |

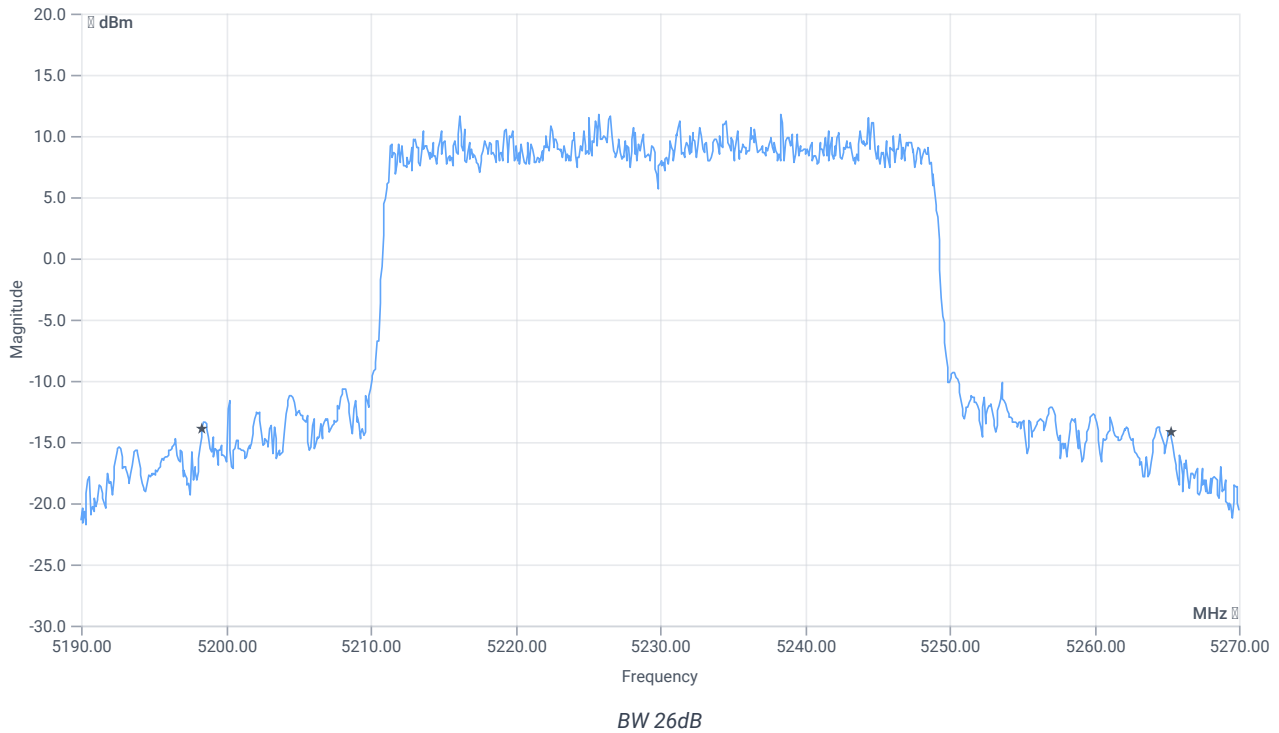
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



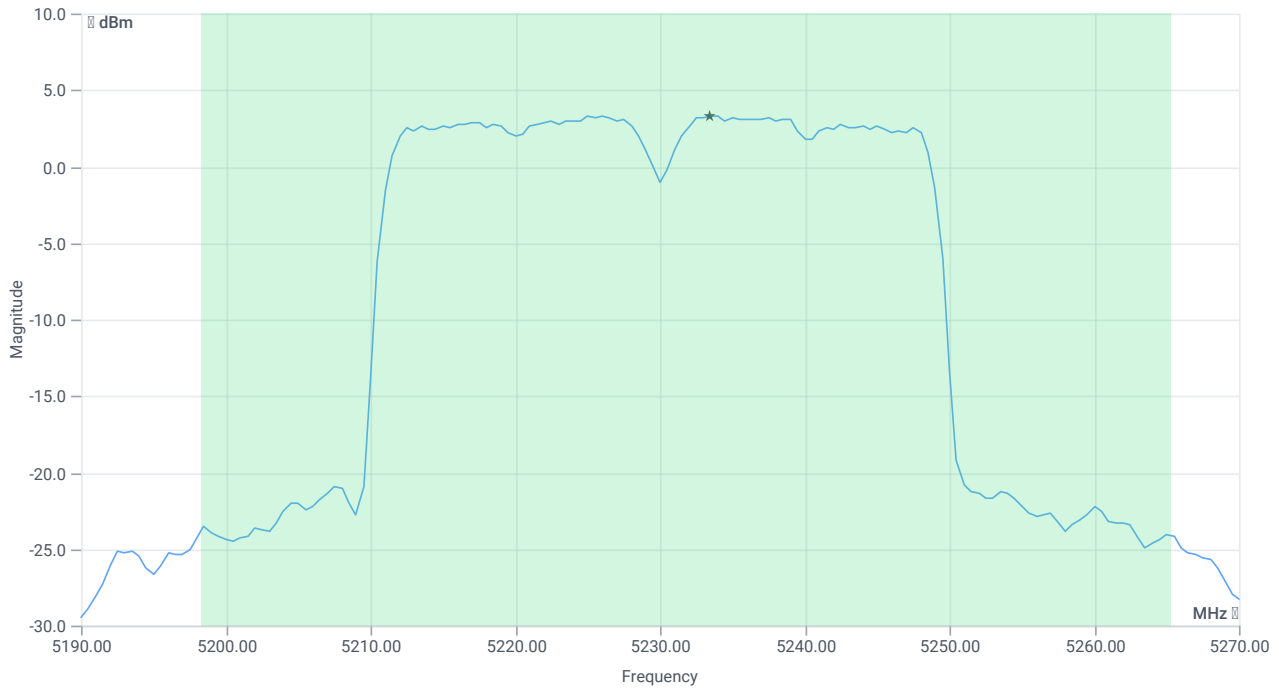
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 66.88 | MHz | INFO |
| T1 26dB | --- | --- | 5198.4000 | MHz | INFO |
| T2 26dB | --- | --- | 5265.2800 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 24.61 16.34 25 |
| Start [MHz] Stop [MHz] | 5190.000 5270.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 18.06 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 18.06 | dBm | PASS |
| Limit: 11 dBm + 10 log 66.88 | | | | | |
| Max Output Power DC corrected | -- | 29.25 | 18.06 | dBm | na |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | 3.3 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | 3.3 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-1

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 09:57:26 |
| Ambit temp [°C] humidity [rel%] | 25.8 60 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5190 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5230 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

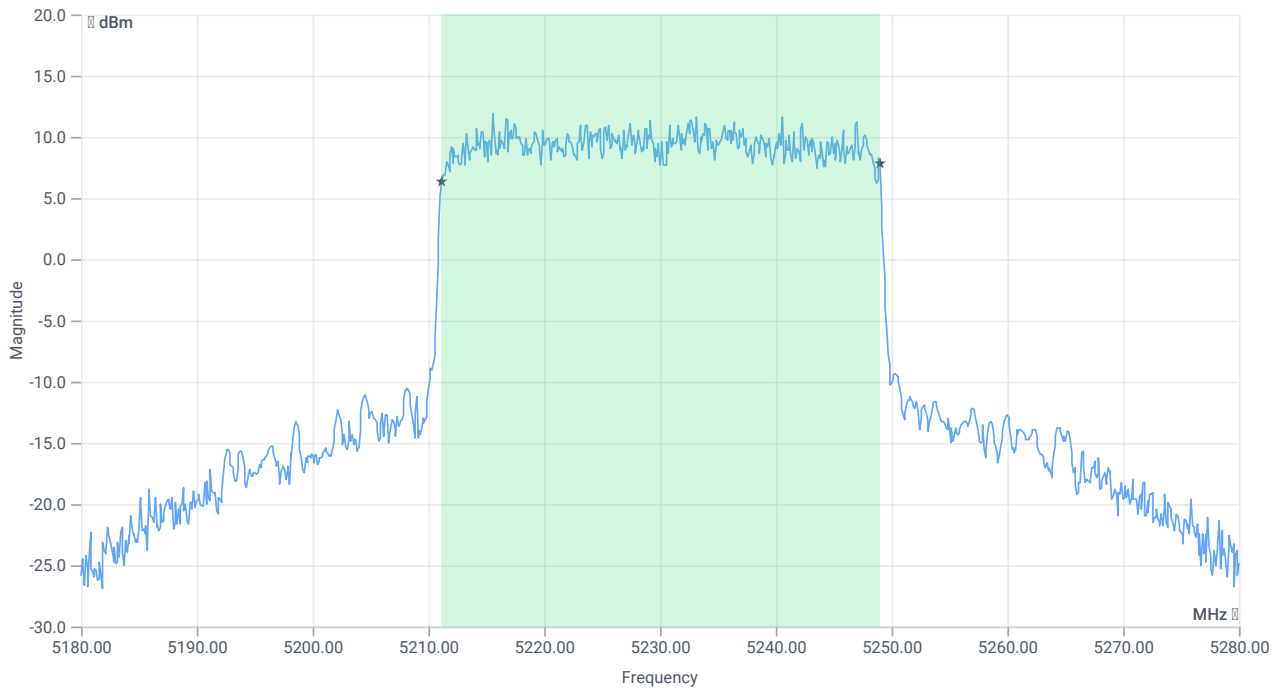
Test at TX 5230 MHz

RESULT: Reference Power cond.

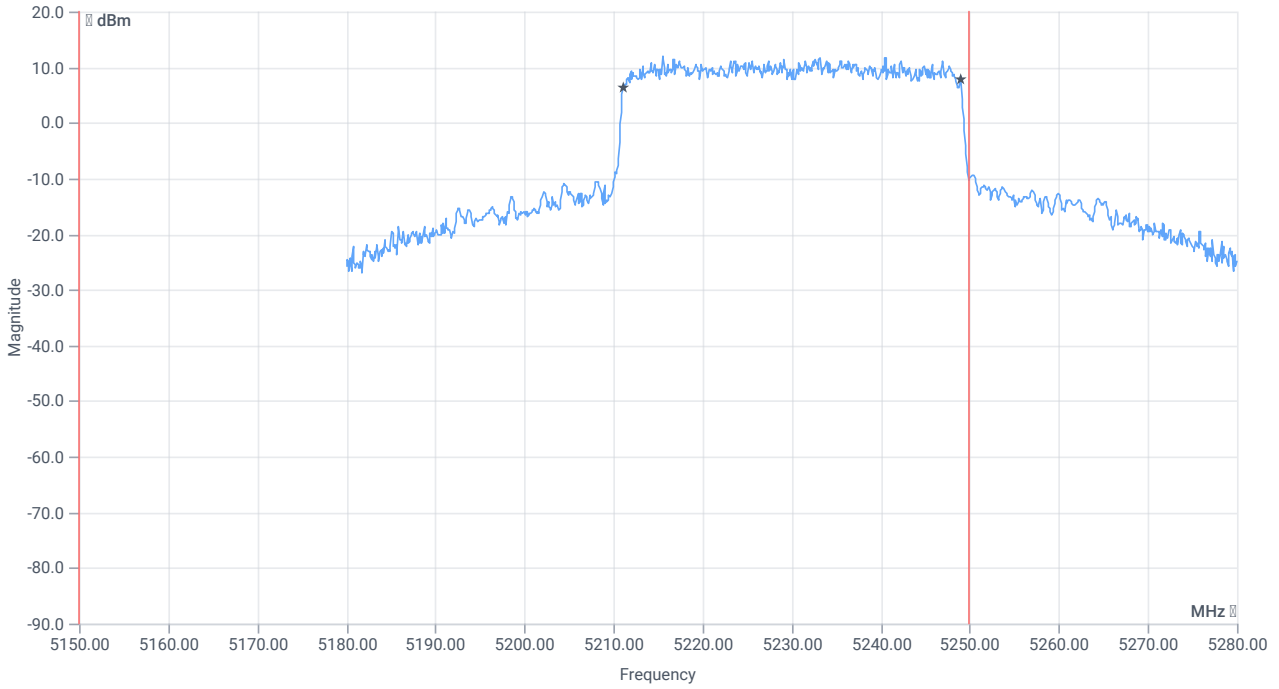
| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 13.46 | dBm | INFO |
| Ref. Frequency | -- | -- | 5236.190 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 21.46 16.34 25 |
| Start [MHz] Stop [MHz] | 5180.000 5280.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |



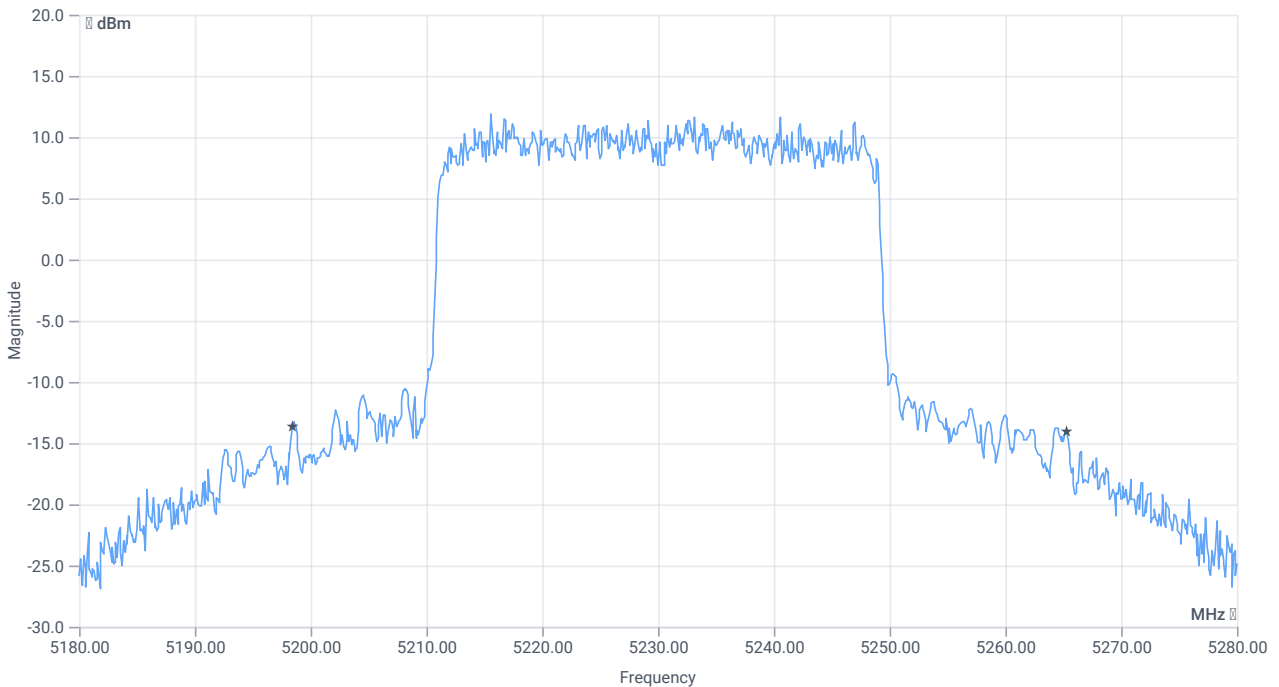
BW 99PCT



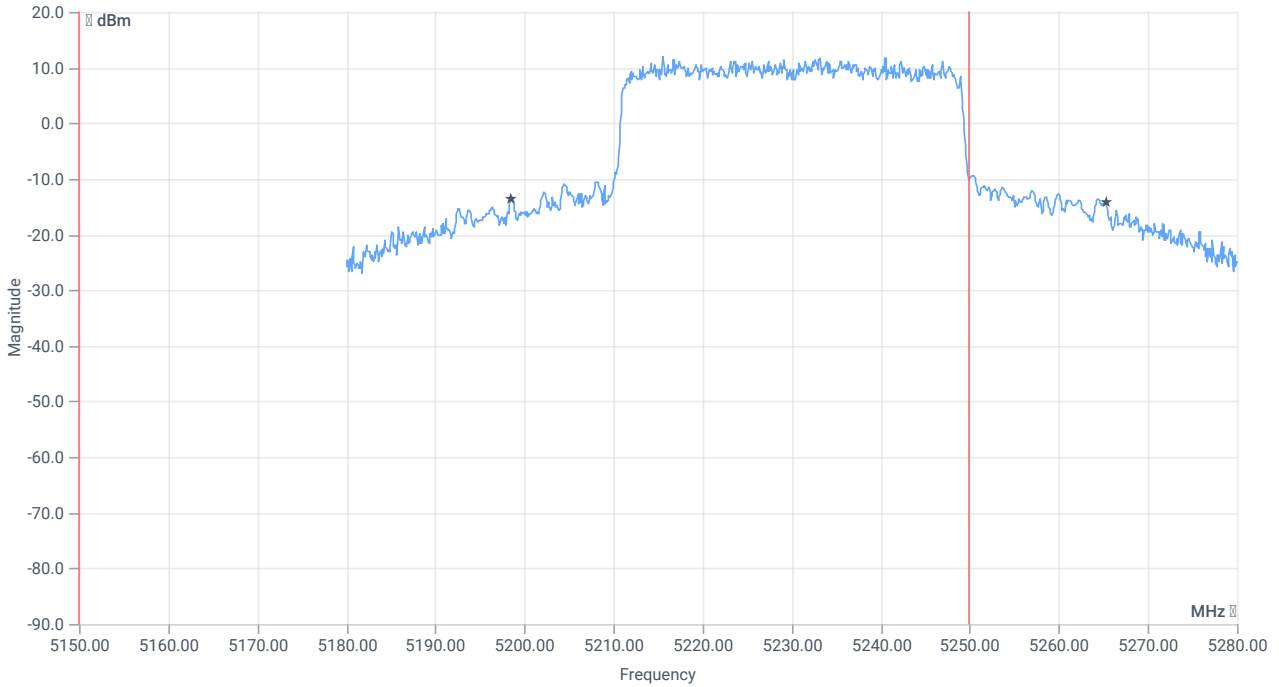
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | -- | -- | 37.862 | MHz | INFO |
| T1 99% | 5150.000000 | -- | 5211.1189 | MHz | PASS |
| T2 99% | -- | 5250.000000 | 5248.9810 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|--------------|
| Bandwidth 26dB | -- | -- | 66.9 | MHz | INFO |
| T1 26dB | 5150.000000 | -- | 5198.4000 | MHz | PASS |
| T2 26dB | -- | 5250.000000 | 5265.3000 | MHz | DFS required |

Verdict

PASS

Message with SA scan ~

References

| | |
|-----------------------------------|---------------------------------------|
| TC start | 12.07.2023 09:58:03 |
| Ambit temp [°C] humidity [rel%] | 25.8 60 |
| System version | 4.6.0.0 |
| Specification | - |
| Method | |
| Description | Message with SA Scan ax-HE40 U-NII-2A |
| Information | |

Test Parameter

| | |
|---------------|---|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer |
| Message start | 12.07.2023 09:58:03 |
| Message | set WLAN5Gx to ax-HE40 U-NII-2A, Frequency [MHz] 5270 , |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:02:24 |
| Ambit temp [°C] humidity [rel%] | 25.8 60 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5270 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5310 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5270 MHz

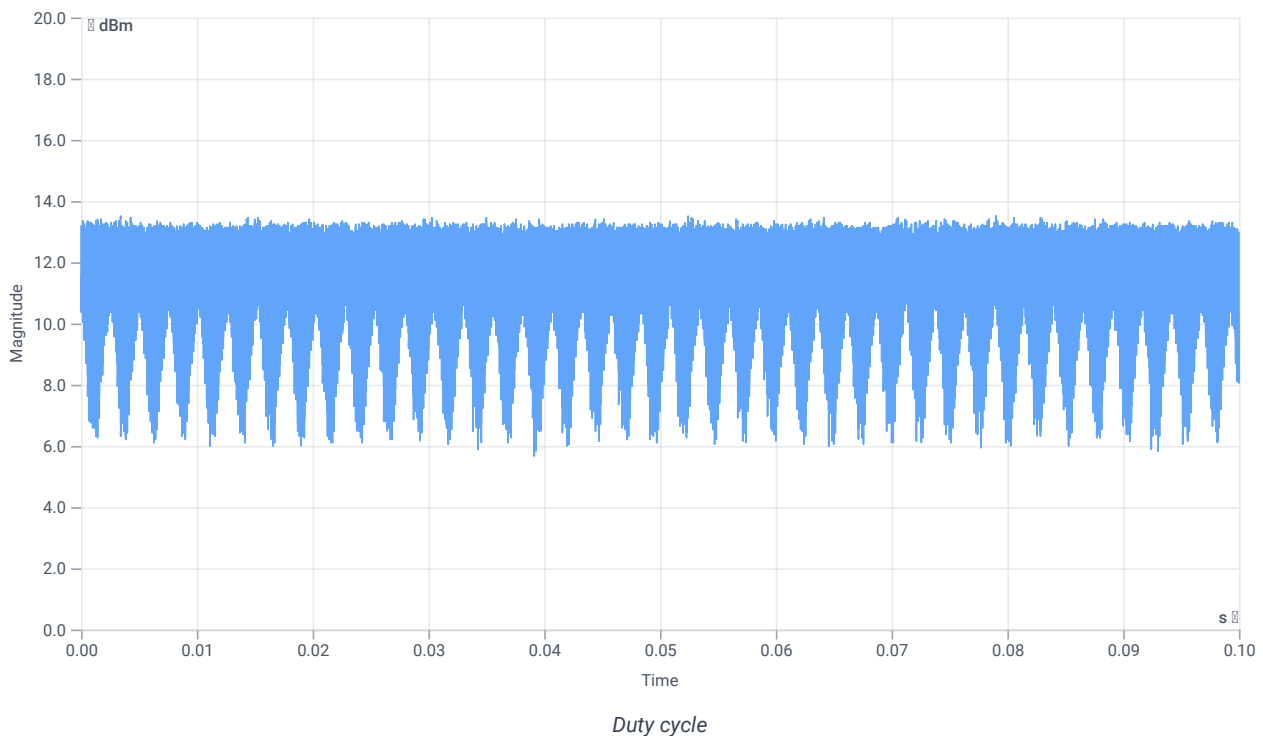
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 11.54 | dBm | INFO |
| Ref. Frequency | -- | -- | 5278.390 | MHz | INFO |

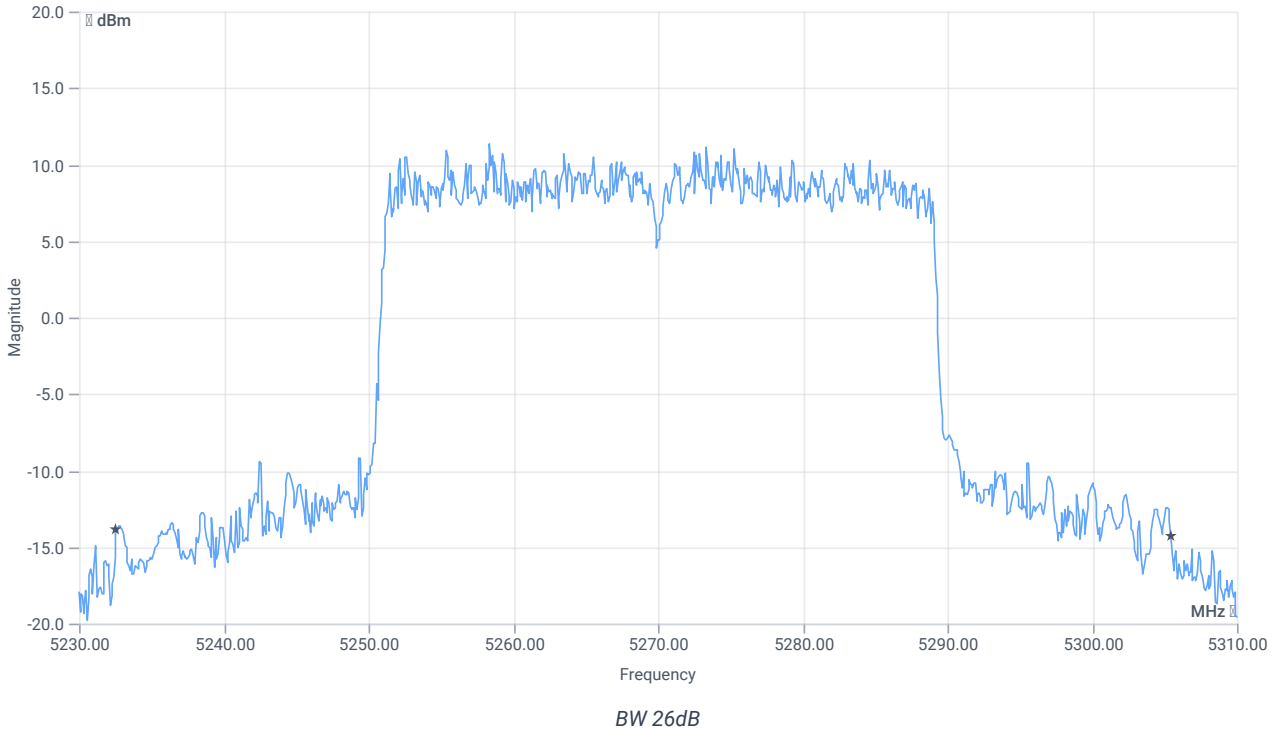
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



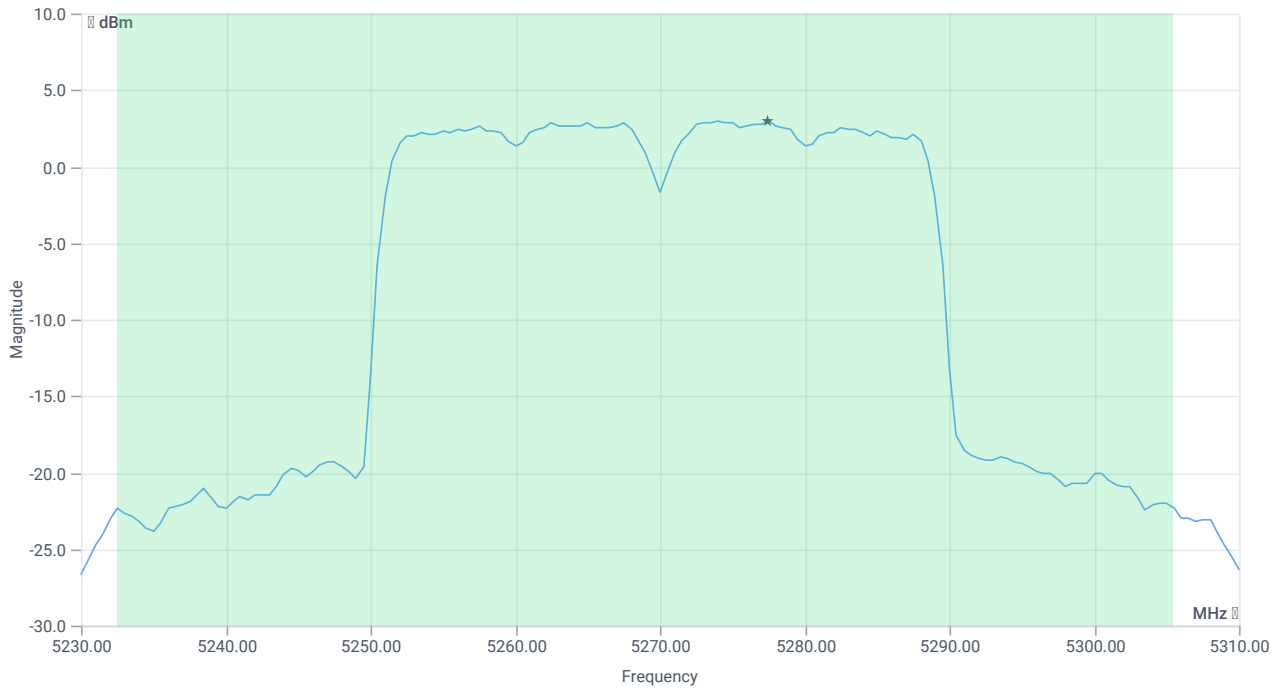
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 72.88 | MHz | INFO |
| T1 26dB | --- | --- | 5232.5600 | MHz | INFO |
| T2 26dB | --- | --- | 5305.4400 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 23.54 16.22 25 |
| Start [MHz] Stop [MHz] | 5230.000 5310.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 17.69 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 17.69 | dBm | PASS |
| Limit: 11 dBm + 10 log 72.88 | | | | | |
| Max Output Power DC corrected | -- | 29.63 | 17.69 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | 2.98 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | 2.98 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:03:54 |
| Ambit temp [°C] humidity [rel%] | 25.9 60 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5270 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5310 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

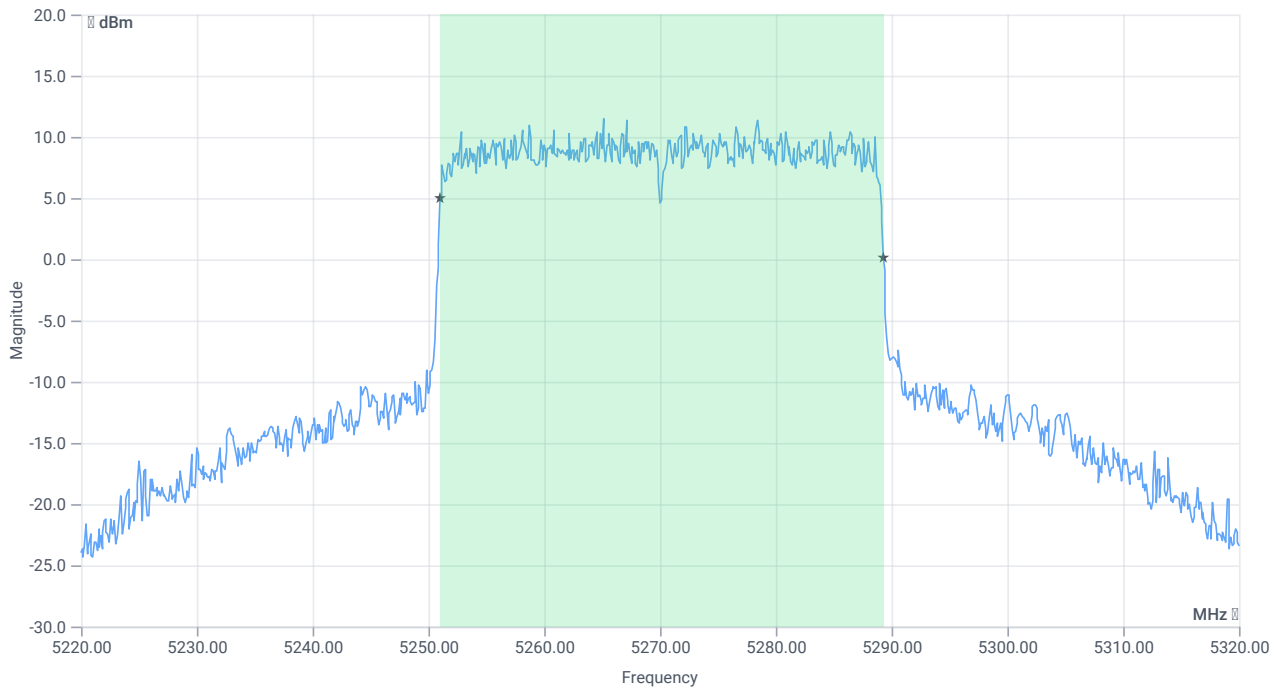
Test at TX 5270 MHz

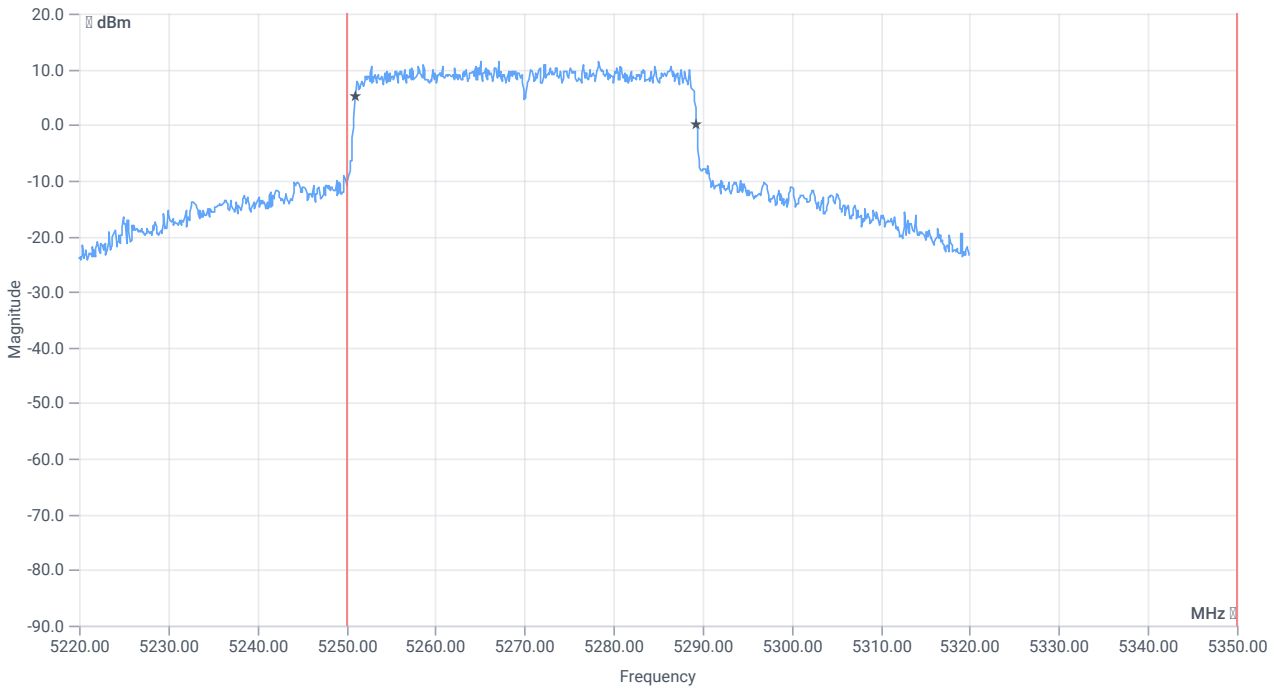
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 13.05 | dBm | INFO |
| Ref. Frequency | -- | -- | 5272.600 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 21.05 16.22 20 |
| Start [MHz] Stop [MHz] | 5220.000 5320.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

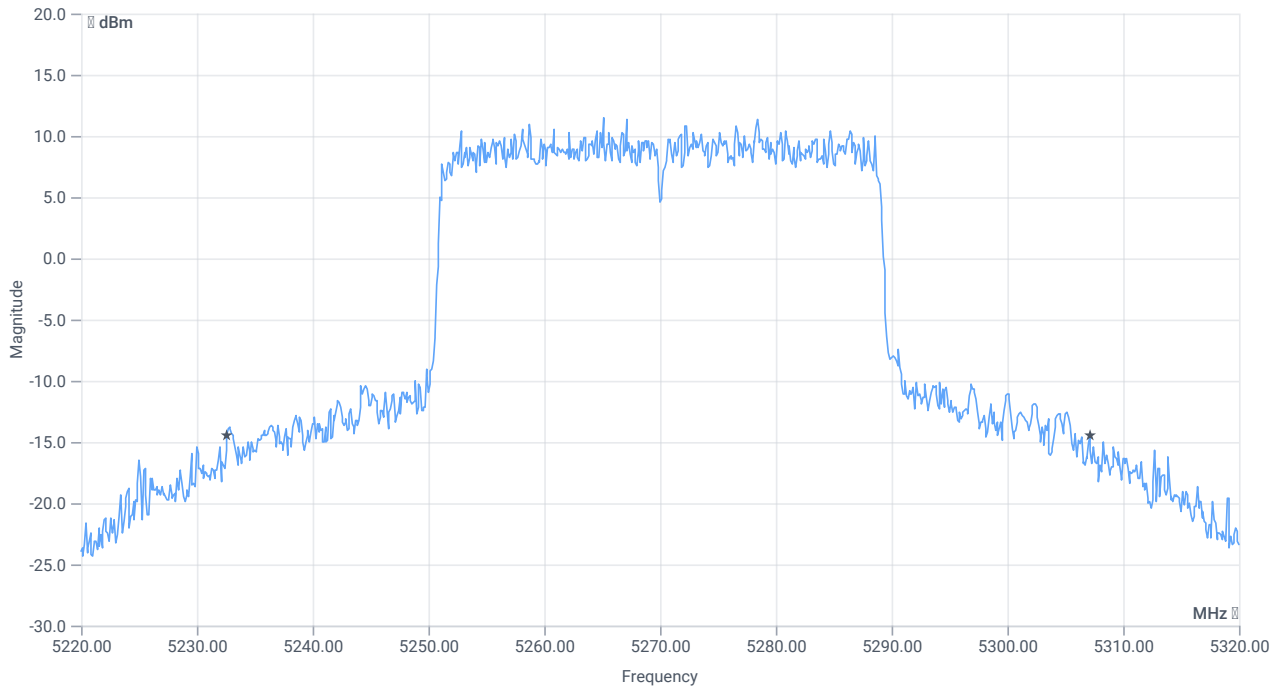




BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 38.262 | MHz | INFO |
| T1 99% | 5250.000000 | -- | 5251.0190 | MHz | PASS since U-NII-1 is supported |
| T2 99% | -- | 5350.000000 | 5289.2807 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 74.5 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5250.000000 | -- | 5232.6000 | MHz | PASS since U-NII-1 is supported |
| T2 26dB | -- | 5350.000000 | 5307.1000 | MHz | PASS |

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:04:31 |
| Ambit temp [°C] humidity [rel%] | 25.9 60 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5270 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5310 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5270 MHz

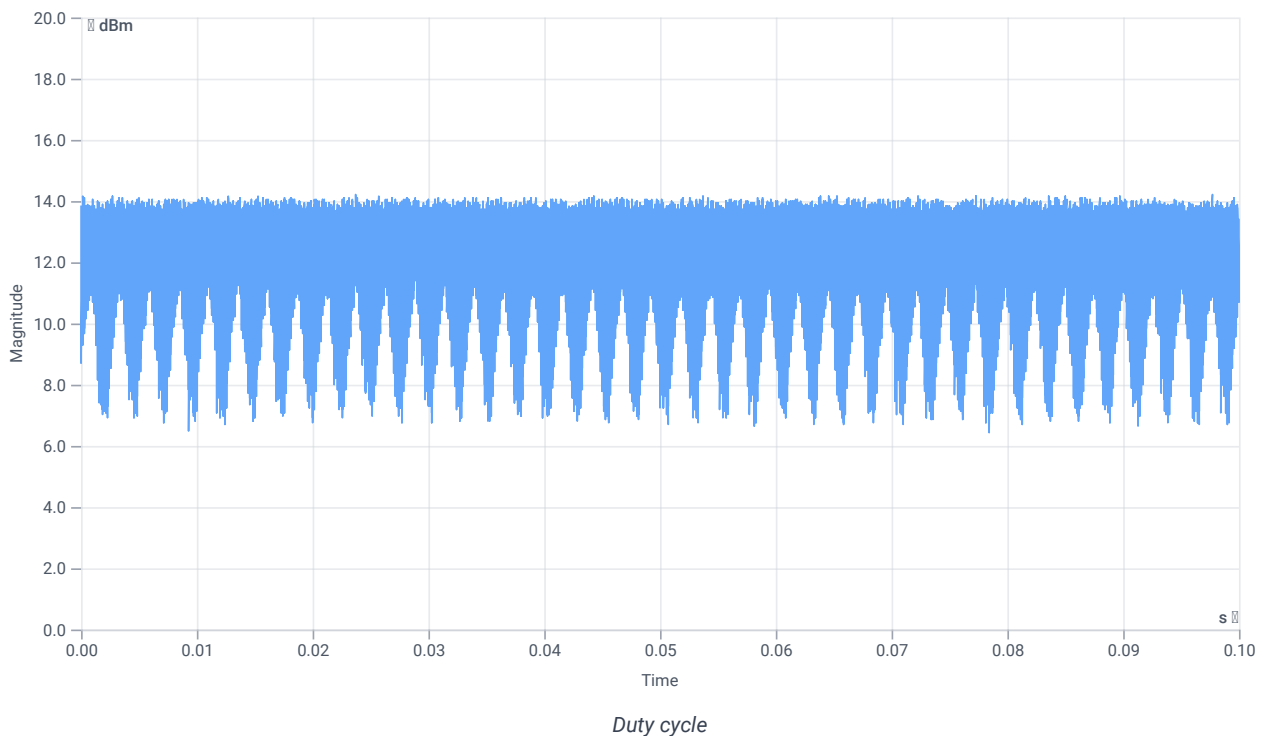
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 13.37 | dBm | INFO |
| Ref. Frequency | -- | -- | 5268.800 | MHz | INFO |

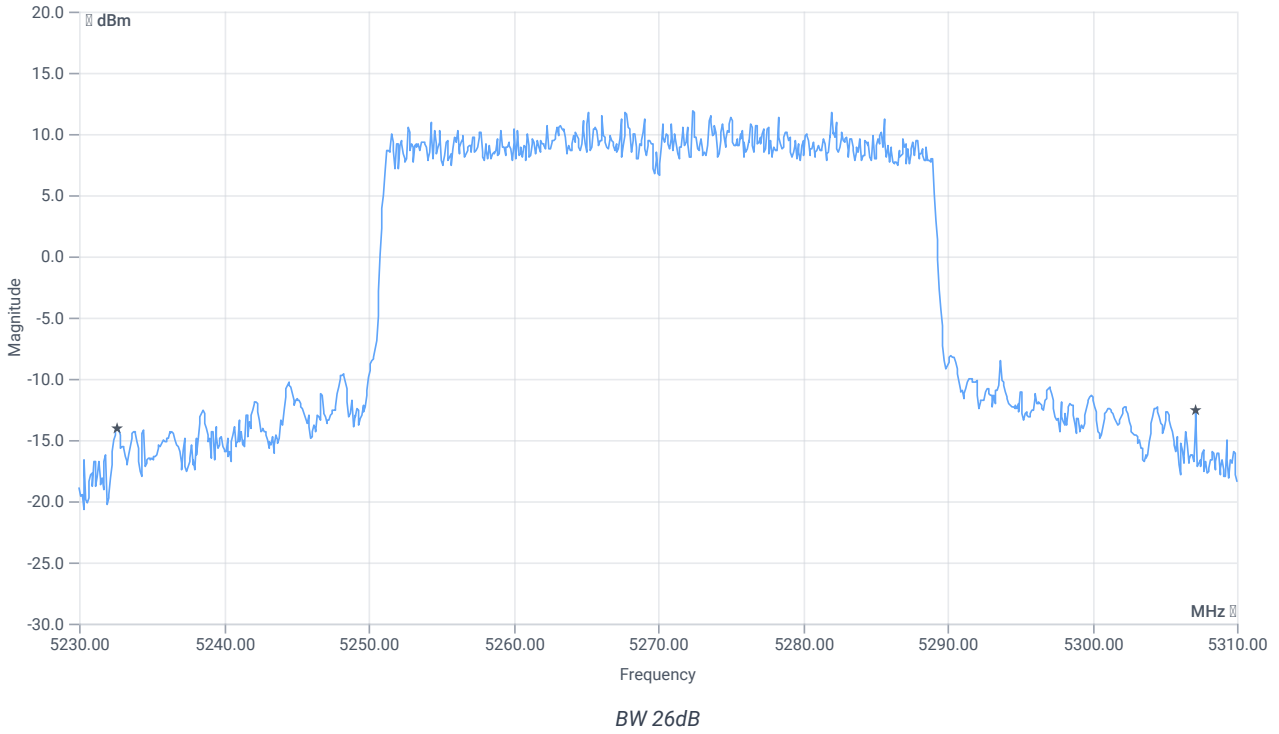
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



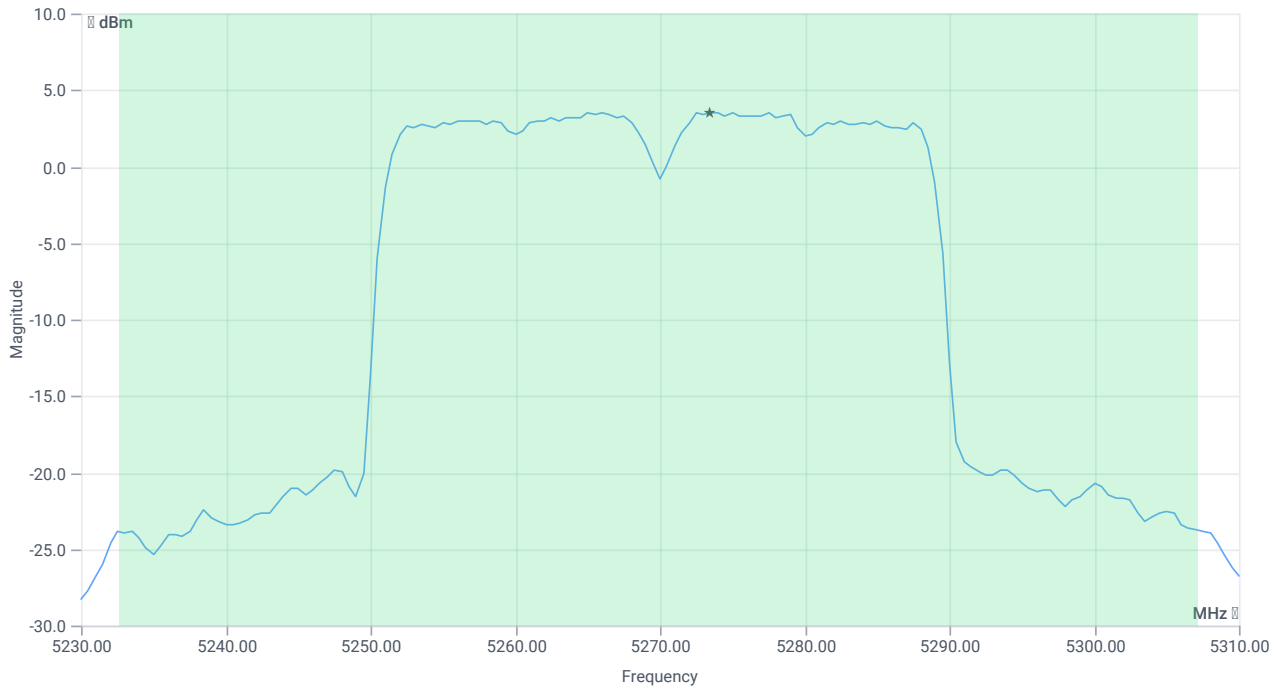
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 74.56 | MHz | INFO |
| T1 26dB | --- | --- | 5232.6400 | MHz | INFO |
| T2 26dB | --- | --- | 5307.2000 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 25.37 16.22 25 |
| Start [MHz] Stop [MHz] | 5230.000 5310.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 18.27 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 18.27 | dBm | PASS |
| Limit: 11 dBm + 10 log 74.56 | | | | | |
| Max Output Power DC corrected | -- | 29.73 | 18.27 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | 3.53 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | 3.53 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:06:03 |
| Ambit temp [°C] humidity [rel%] | 25.9 59 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5270 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5310 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

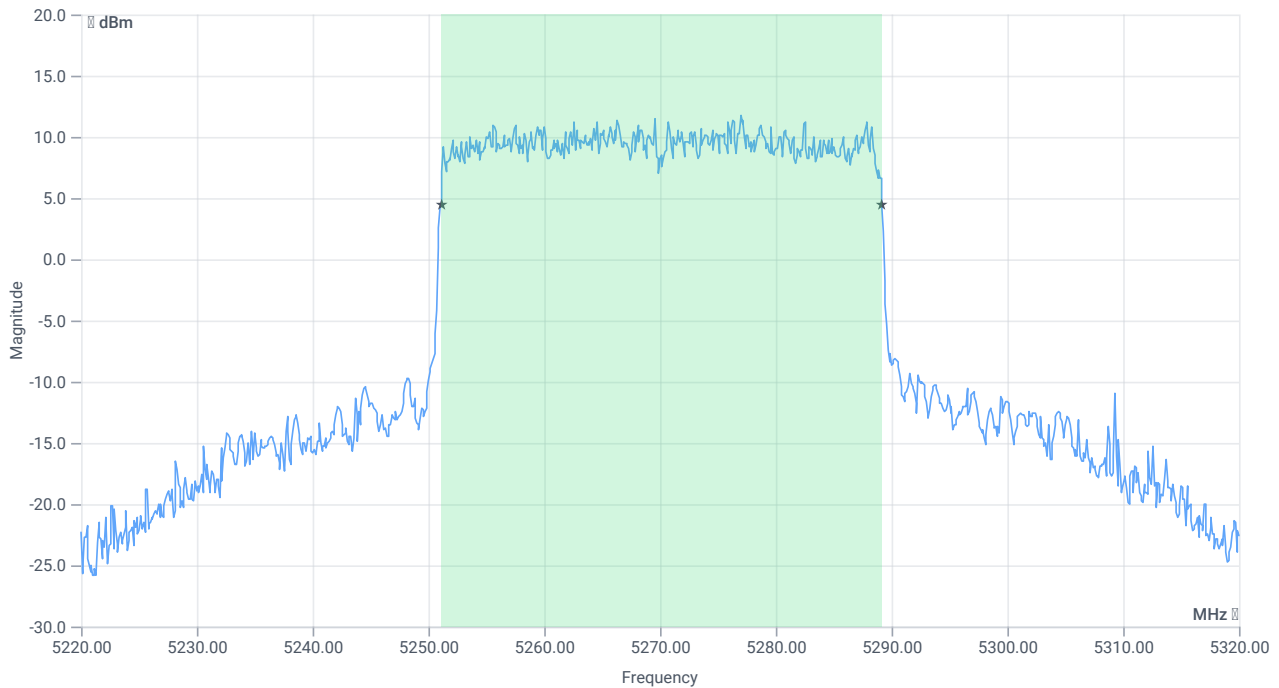
Test at TX 5270 MHz

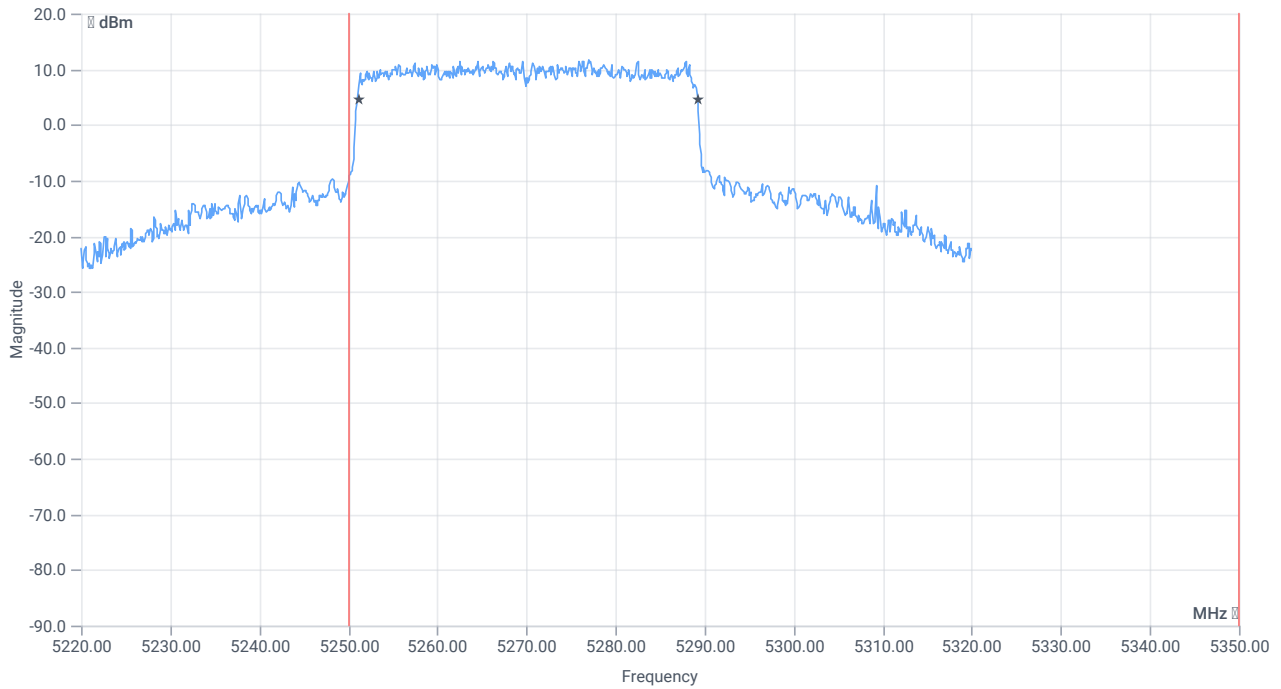
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 12.72 | dBm | INFO |
| Ref. Frequency | -- | -- | 5266.200 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 20.72 16.22 20 |
| Start [MHz] Stop [MHz] | 5220.000 5320.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

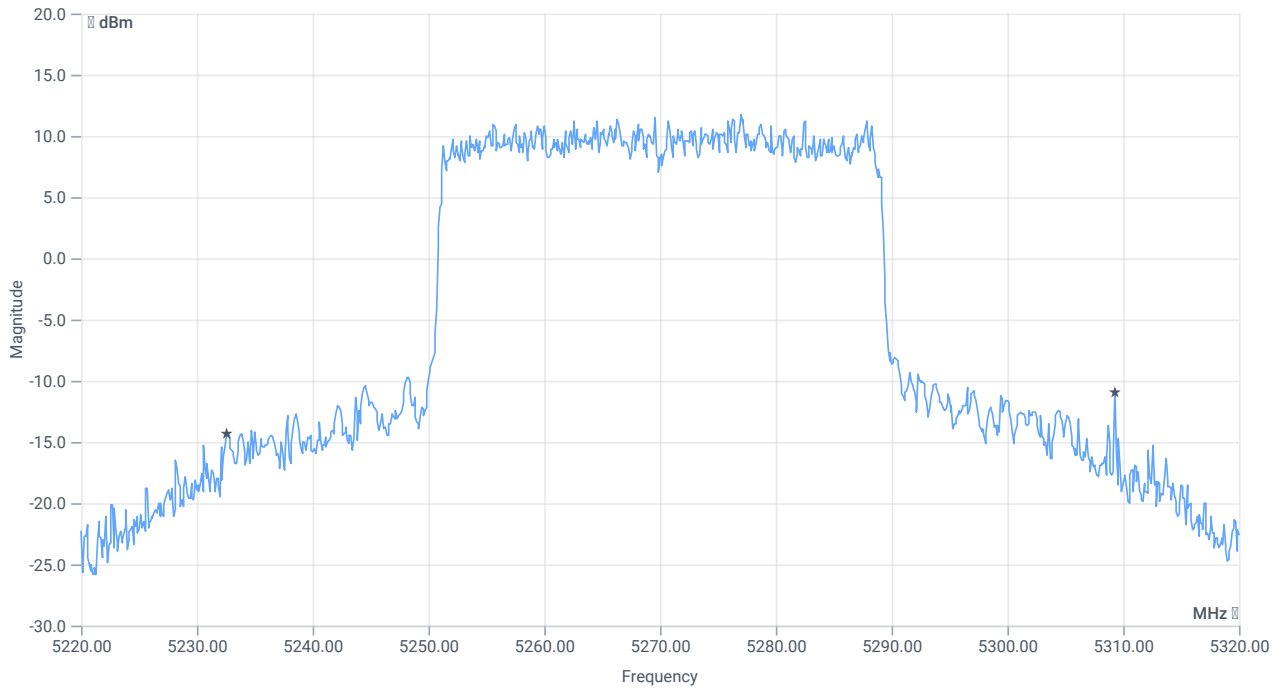




BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 38.062 | MHz | INFO |
| T1 99% | 5250.000000 | -- | 5251.1189 | MHz | PASS since U-NII-1 is supported |
| T2 99% | -- | 5350.000000 | 5289.1808 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 76.8 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5250.000000 | -- | 5232.5000 | MHz | PASS since U-NII-1 is supported |
| T2 26dB | -- | 5350.000000 | 5309.3000 | MHz | PASS |

Verdict

PASS

Message with SA scan ~

References

| | |
|-----------------------------------|---------------------------------------|
| TC start | 12.07.2023 10:06:40 |
| Ambit temp [°C] humidity [rel%] | 25.9 59 |
| System version | 4.6.0.0 |
| Specification | - |
| Method | |
| Description | Message with SA Scan ax-HE40 U-NII-2A |
| Information | |

Test Parameter

| | |
|---------------|---|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer |
| Message start | 12.07.2023 10:06:40 |
| Message | set WLAN5Gx to ax-HE40 U-NII-2A, Frequency [MHz] 5310 |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:14:16 |
| Ambit temp [°C] humidity [rel%] | 25.9 59 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5270 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5310 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5310 MHz

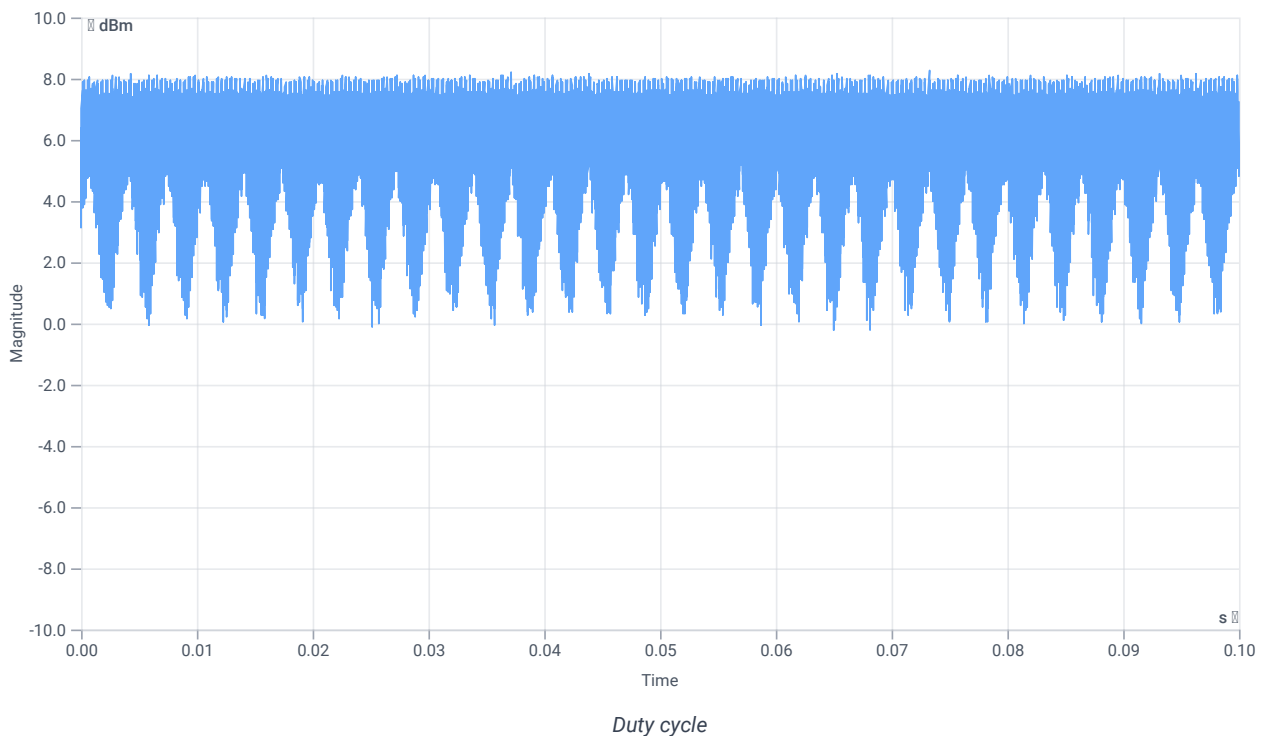
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 7.43 | dBm | INFO |
| Ref. Frequency | -- | -- | 5323.390 | MHz | INFO |

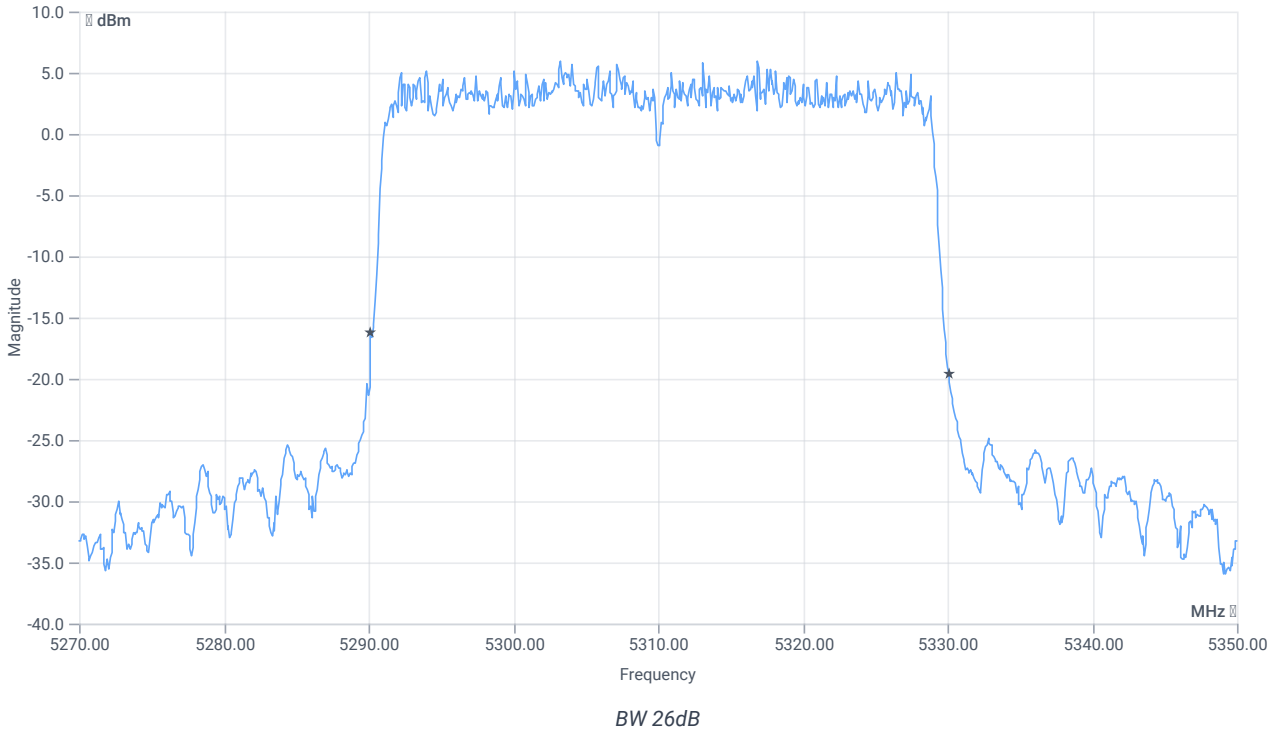
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



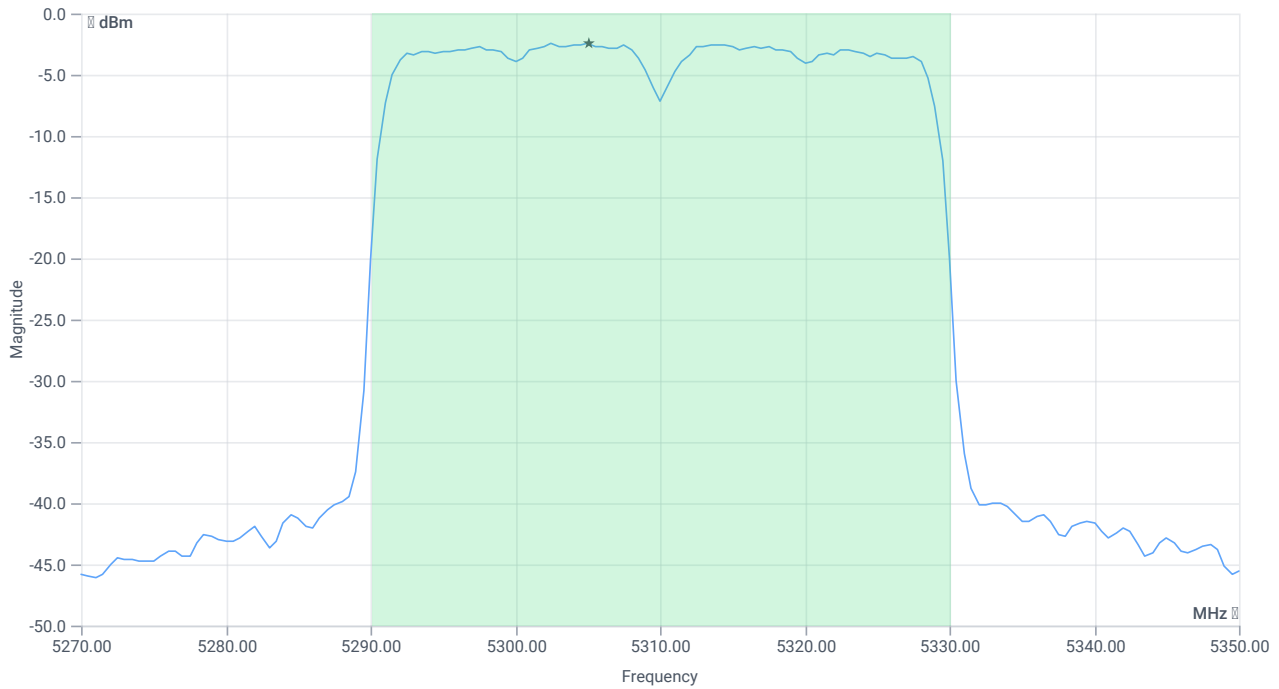
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 39.92 | MHz | INFO |
| T1 26dB | --- | --- | 5290.1600 | MHz | INFO |
| T2 26dB | --- | --- | 5330.0800 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 19.43 16.12 20 |
| Start [MHz] Stop [MHz] | 5270.000 5350.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 12.24 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 12.24 | dBm | PASS |
| Limit: 11 dBm + 10 log 39.92 | | | | | |
| Max Output Power DC corrected | -- | 27.01 | 12.24 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | -2.45 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | -2.45 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:15:47 |
| Ambit temp [°C] humidity [rel%] | 25.9 58 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5270 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5310 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

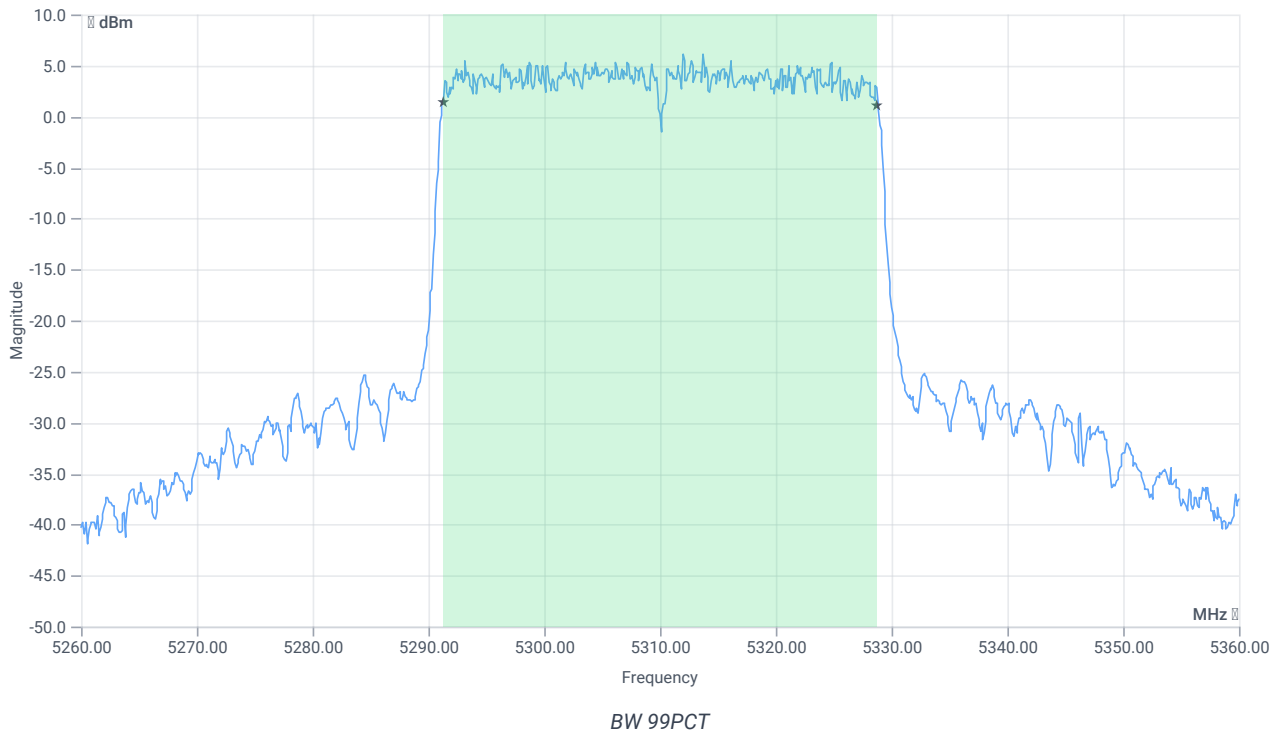
Test at TX 5310 MHz

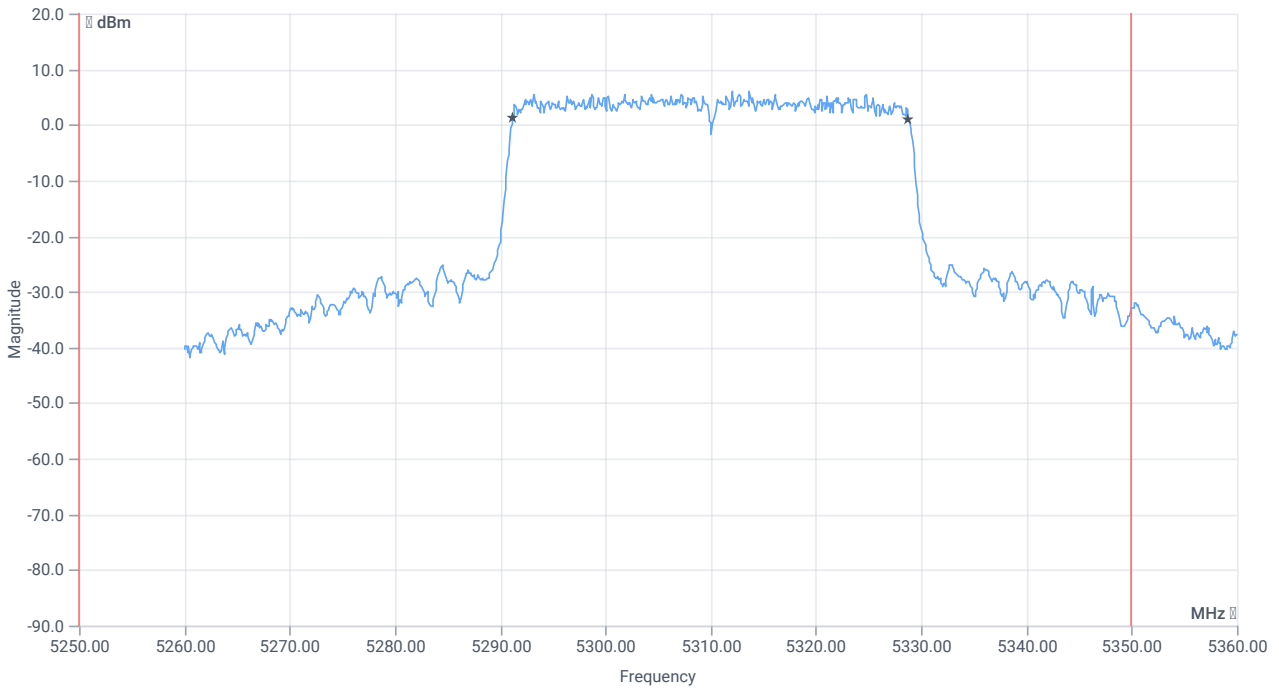
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 7.99 | dBm | INFO |
| Ref. Frequency | -- | -- | 5303.810 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 15.99 16.12 15 |
| Start [MHz] Stop [MHz] | 5260.000 5360.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

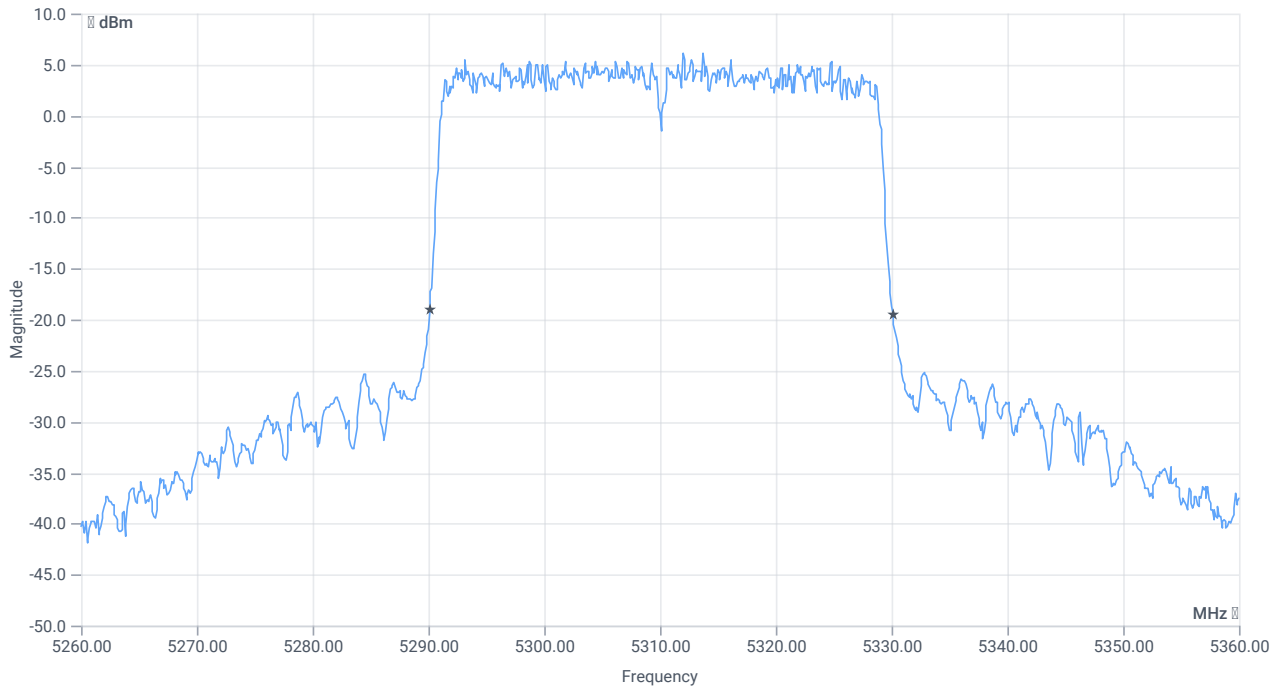




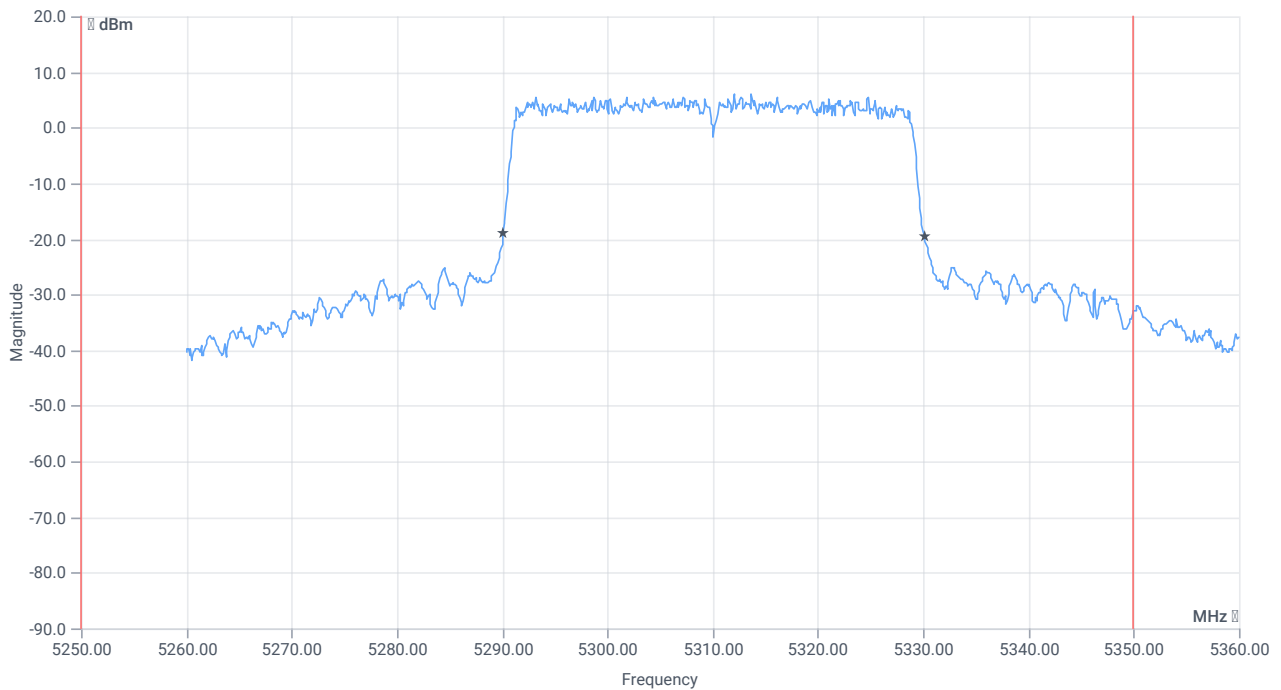
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 37.562 | MHz | INFO |
| T1 99% | 5250.000000 | -- | 5291.2188 | MHz | PASS since U-NII-1 is supported |
| T2 99% | -- | 5350.000000 | 5328.7812 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 40 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5250.000000 | -- | 5290.1000 | MHz | PASS since U-NII-1 is supported |
| T2 26dB | -- | 5350.000000 | 5330.1000 | MHz | PASS |

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2A

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:16:24 |
| Ambit temp [°C] humidity [rel%] | 26.0 58 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2A |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5270 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5310 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5310 MHz

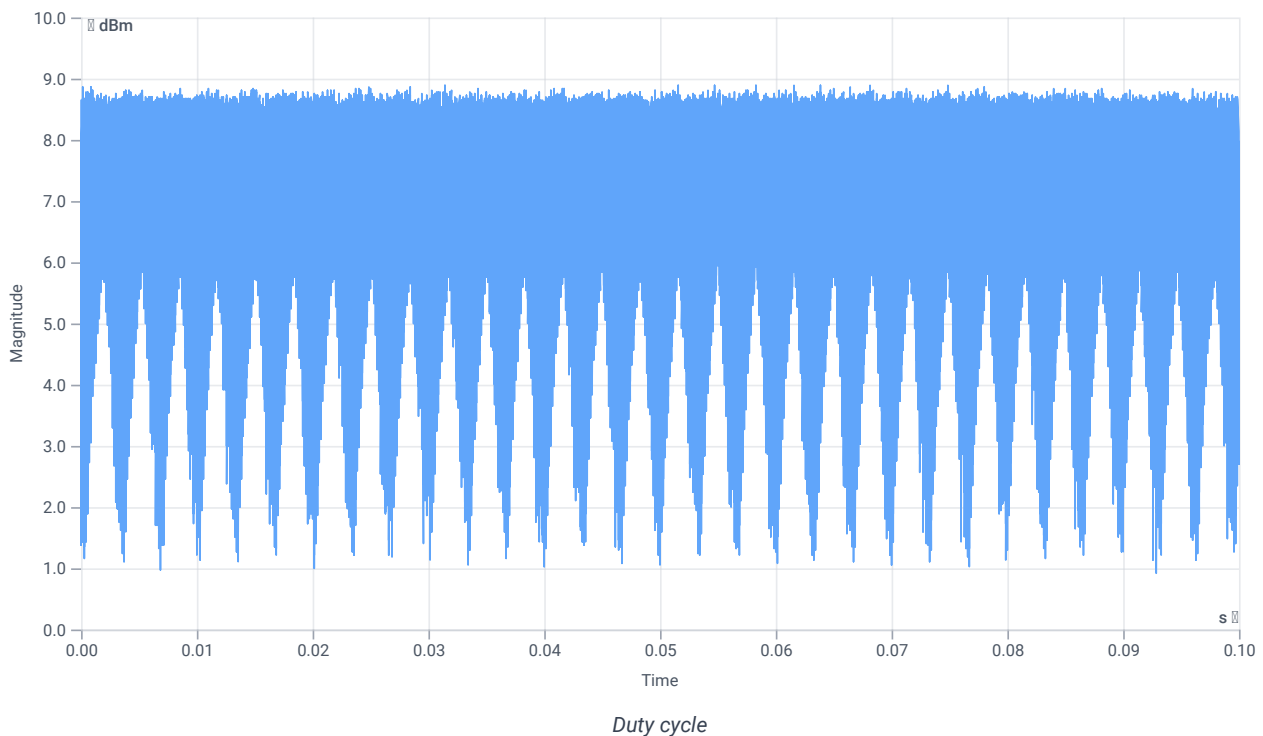
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 8.69 | dBm | INFO |
| Ref. Frequency | -- | -- | 5317.390 | MHz | INFO |

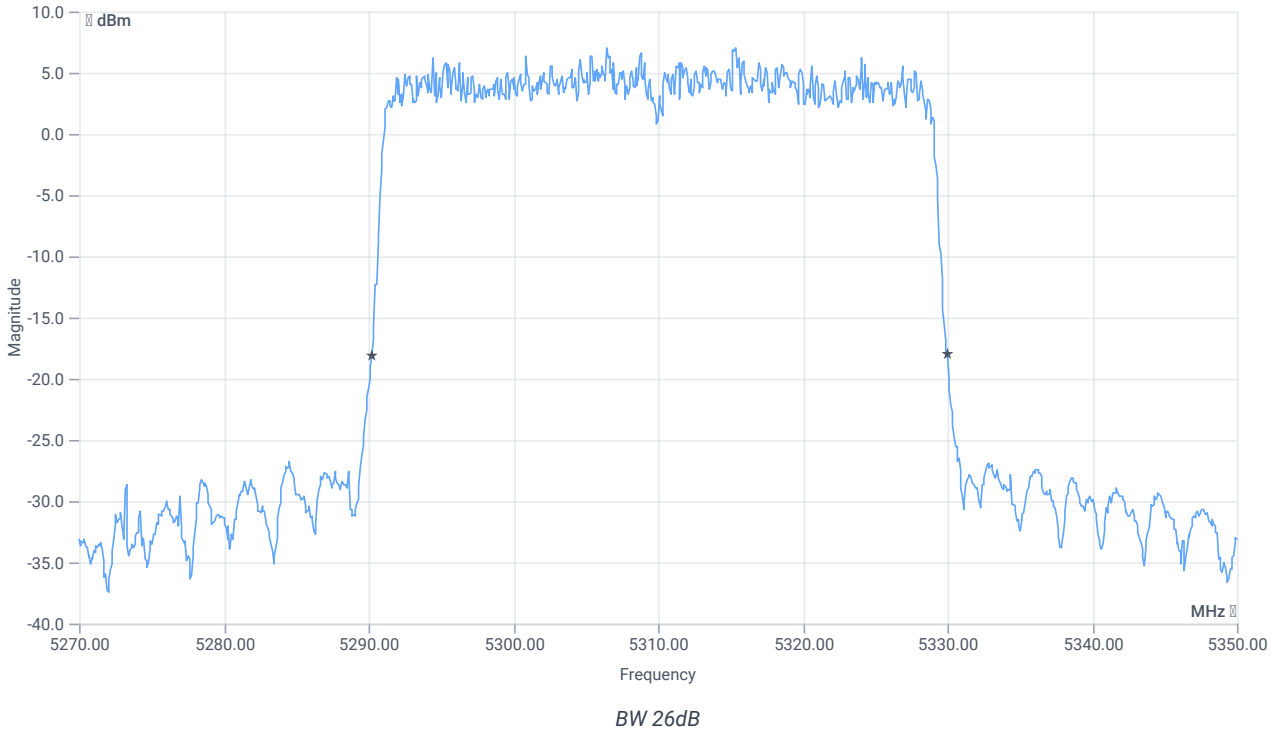
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



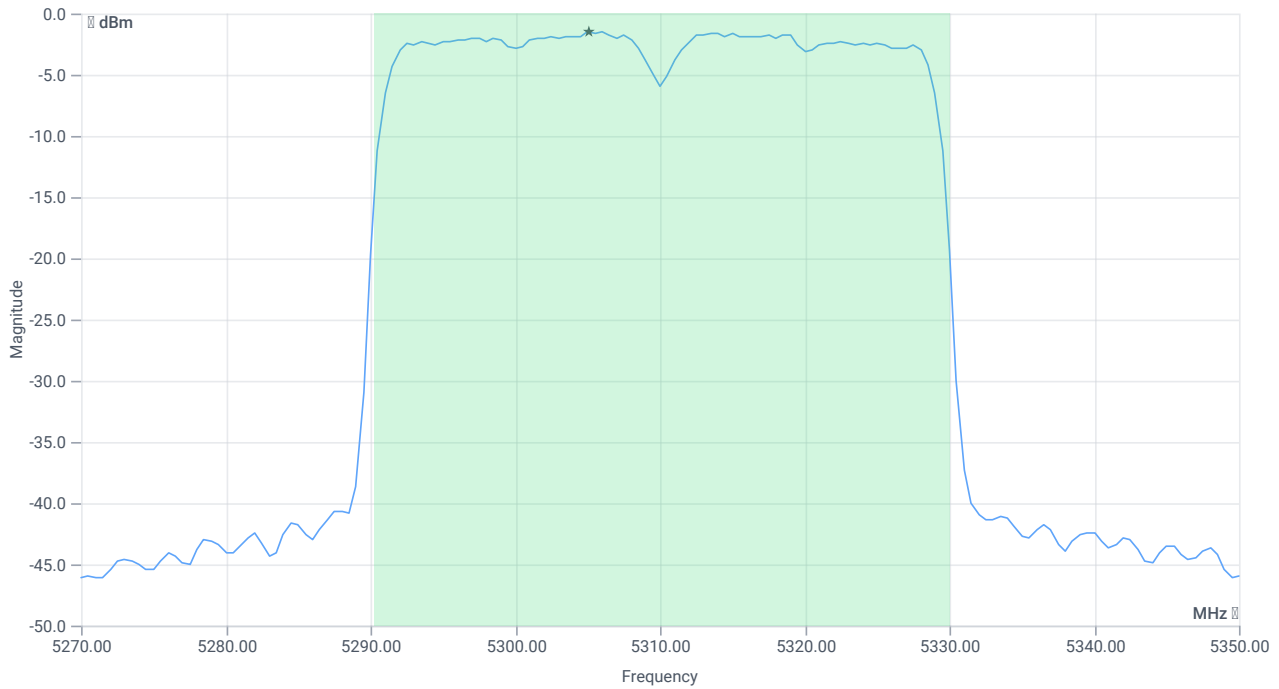
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 39.76 | MHz | INFO |
| T1 26dB | --- | --- | 5290.2400 | MHz | INFO |
| T2 26dB | --- | --- | 5330.0000 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 20.69 16.12 20 |
| Start [MHz] Stop [MHz] | 5270.000 5350.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 13.11 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 13.11 | dBm | PASS |
| Limit: 11 dBm + 10 log 39.76 | | | | | |
| Max Output Power DC corrected | -- | 26.99 | 13.11 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | -1.51 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | -1.51 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2A

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:17:55 |
| Ambit temp [°C] humidity [rel%] | 26.0 58 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2A |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5270 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5310 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

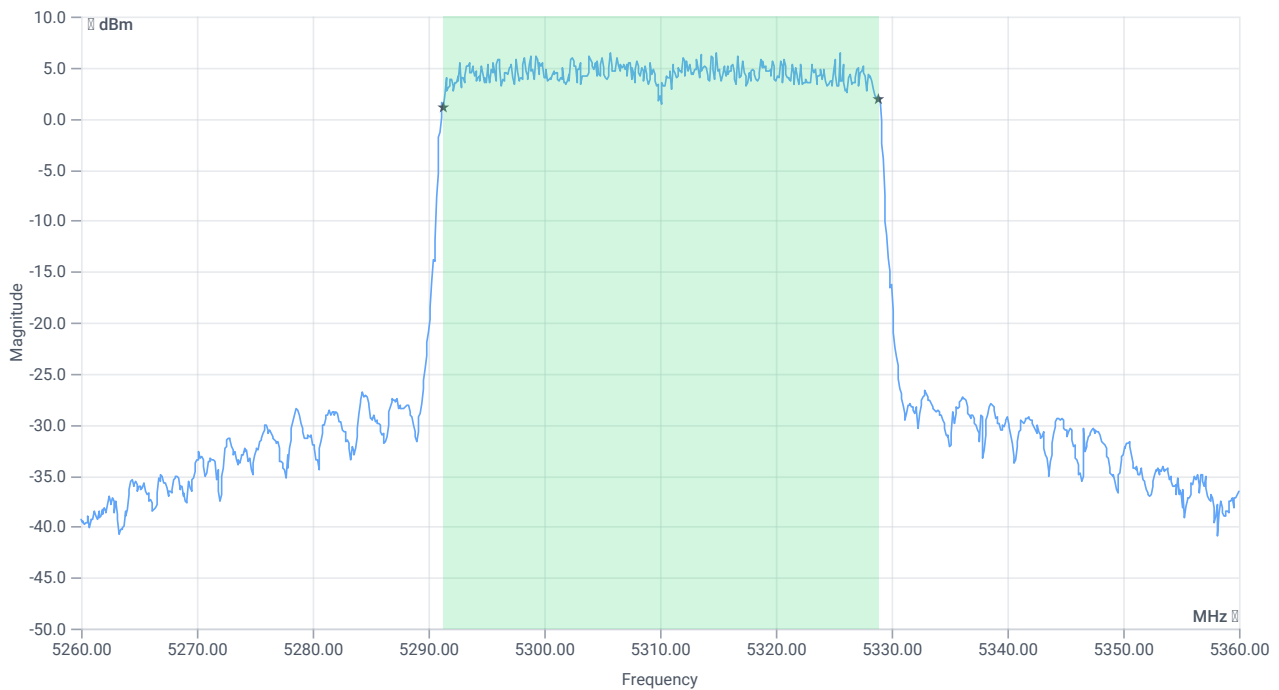
Test at TX 5310 MHz

RESULT: Reference Power cond.

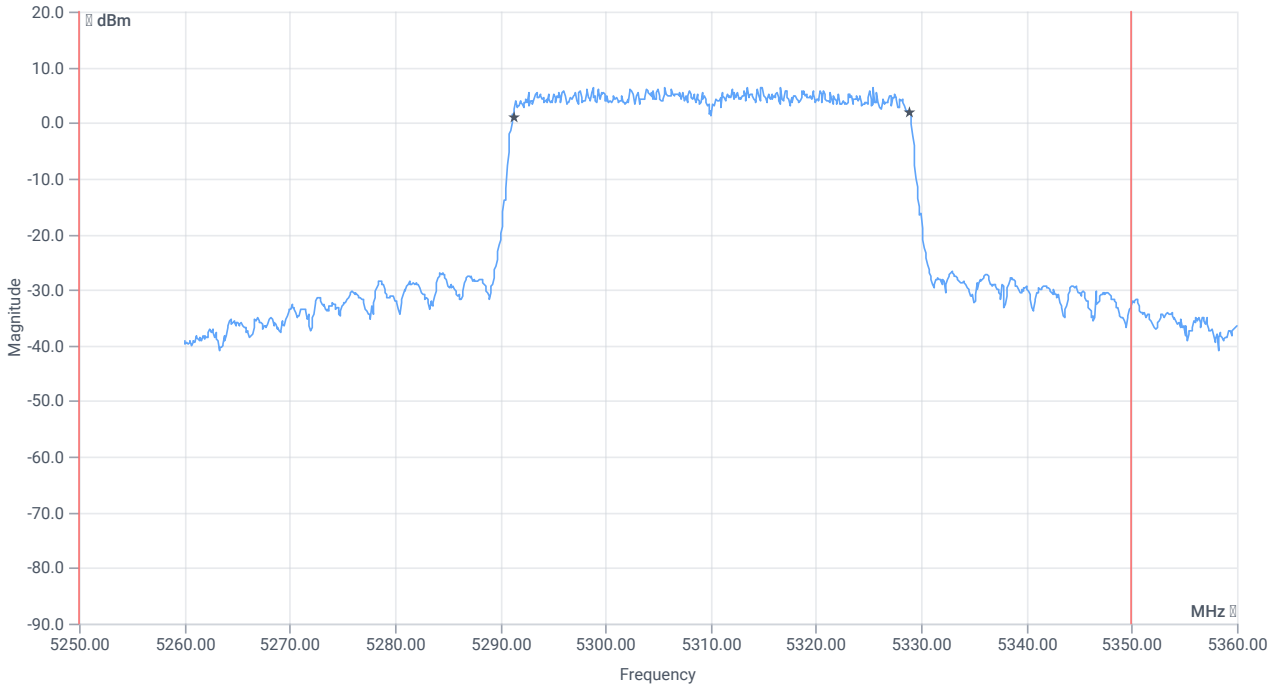
| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 8.15 | dBm | INFO |
| Ref. Frequency | -- | -- | 5317.790 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 16.15 16.12 20 |
| Start [MHz] Stop [MHz] | 5260.000 5360.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |



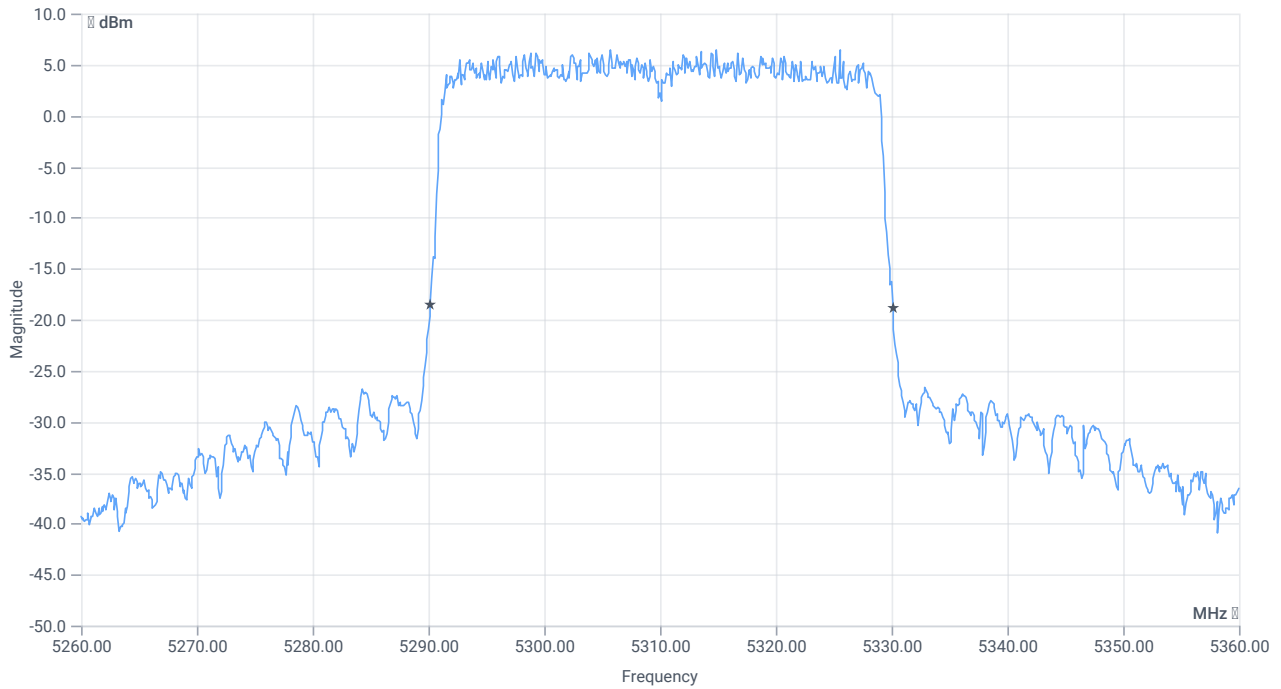
BW 99PCT



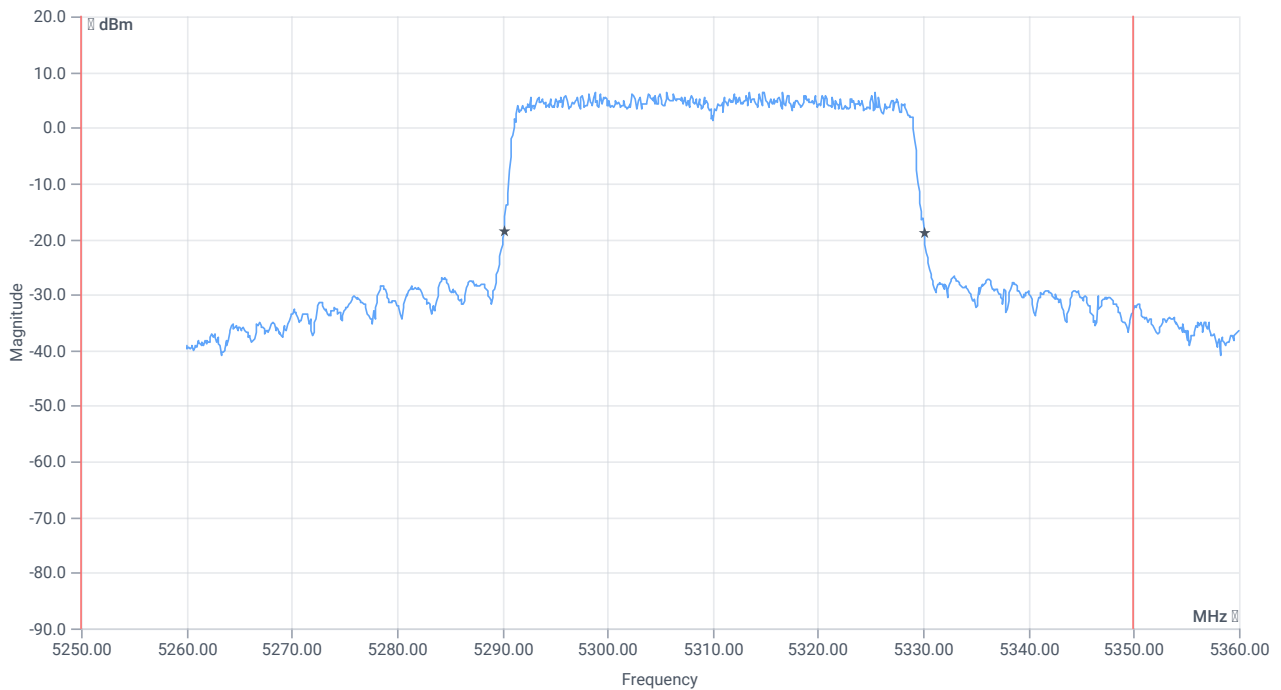
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 37.562 | MHz | INFO |
| T1 99% | 5250.000000 | -- | 5291.3187 | MHz | PASS since U-NII-1 is supported |
| T2 99% | -- | 5350.000000 | 5328.8811 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 39.9 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5250.000000 | -- | 5290.2000 | MHz | PASS since U-NII-1 is supported |
| T2 26dB | -- | 5350.000000 | 5330.1000 | MHz | PASS |

Verdict

PASS

Message with SA scan ~

References

| | |
|-----------------------------------|---------------------------------------|
| TC start | 12.07.2023 10:18:32 |
| Ambit temp [°C] humidity [rel%] | 26.0 58 |
| System version | 4.6.0.0 |
| Specification | - |
| Method | |
| Description | Message with SA Scan ax_HE40_U_NII_2C |
| Information | |

Test Parameter

| | |
|---------------|---|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer |
| Message start | 12.07.2023 10:18:33 |
| Message | set WLAN5Gx to ax_HE40_U_NII_2C, Frequency [MHz] 5510 , |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:19:05 |
| Ambit temp [°C] humidity [rel%] | 26.0 58 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5510 |
| Frequency mid to test | False Freq [MHz] 5590 |
| Frequency high to test | False Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5510 MHz

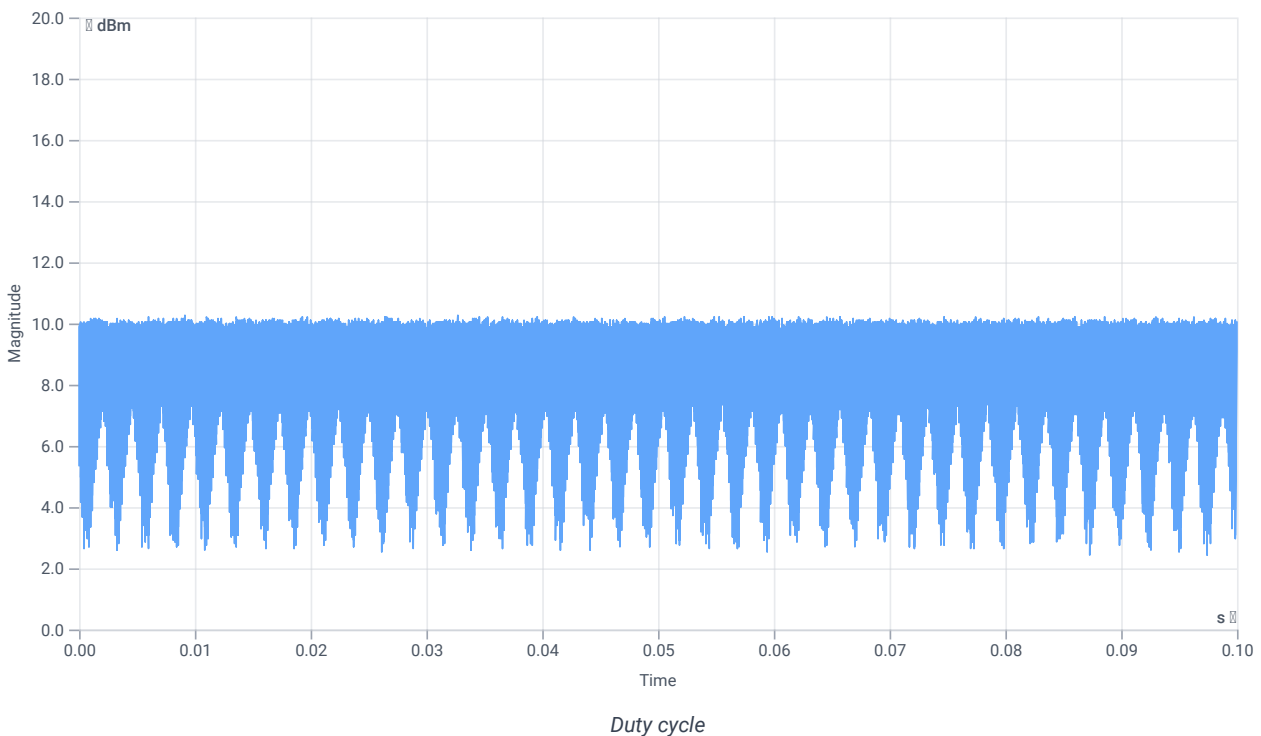
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 9.54 | dBm | INFO |
| Ref. Frequency | -- | -- | 5506.400 | MHz | INFO |

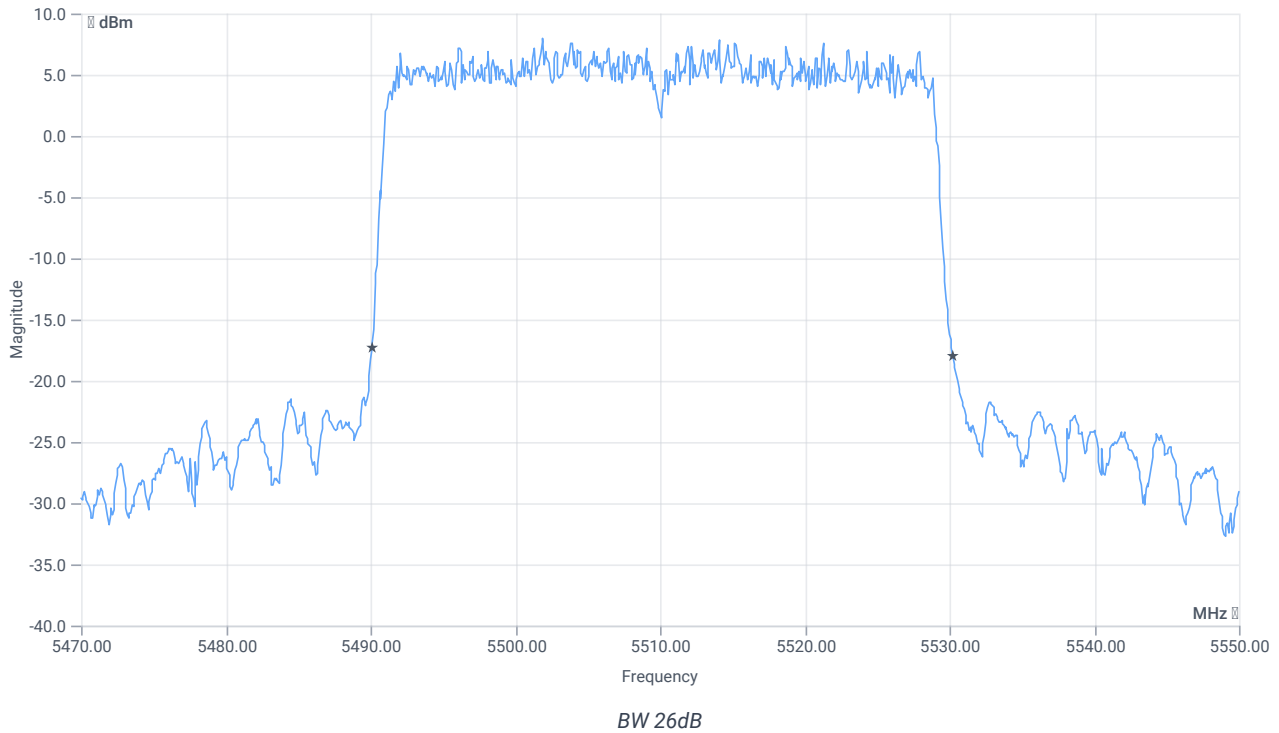
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



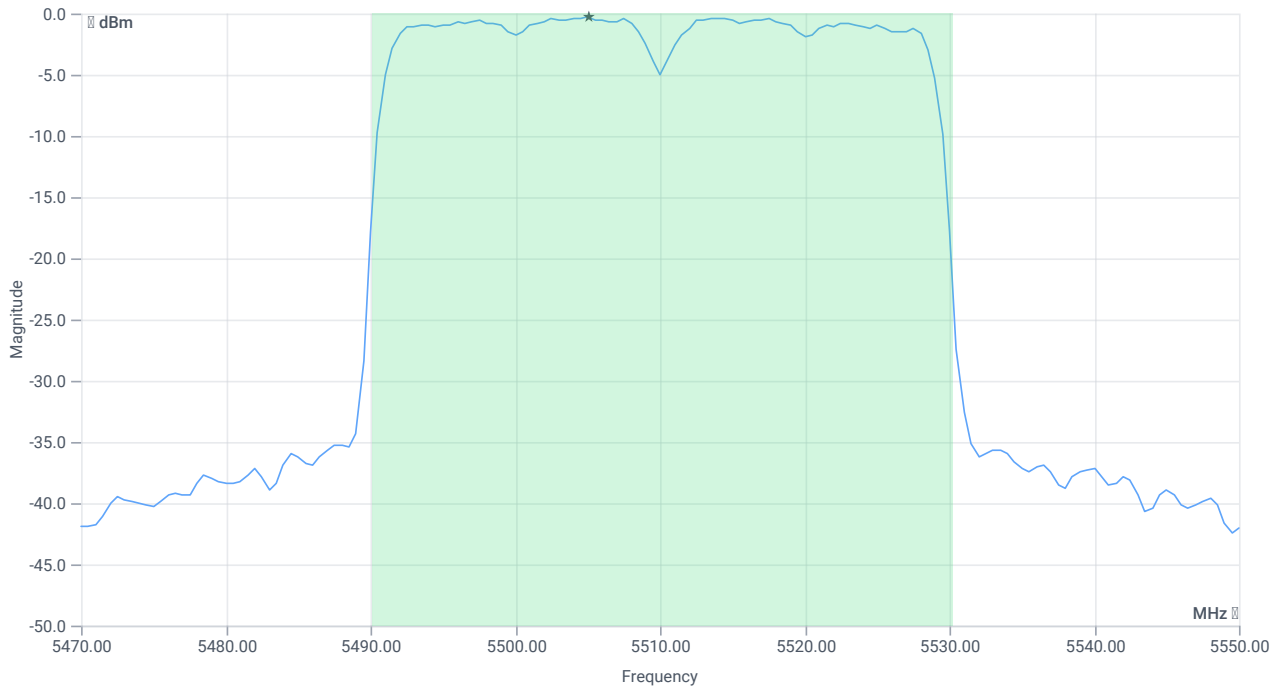
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 40.16 | MHz | INFO |
| T1 26dB | --- | --- | 5490.0800 | MHz | INFO |
| T2 26dB | --- | --- | 5530.2400 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 21.54 16.59 20 |
| Start [MHz] Stop [MHz] | 5470.000 5550.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 14.42 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 14.42 | dBm | PASS |
| Limit: 11 dBm + 10 log 40.16 | | | | | |
| Max Output Power DC corrected | -- | 27.04 | 14.42 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | -0.33 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | -0.33 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:20:31 |
| Ambit temp [°C] humidity [rel%] | 26.0 58 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5510 |
| Frequency mid to test | False Freq [MHz] 5590 |
| Frequency high to test | False Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5510 MHz

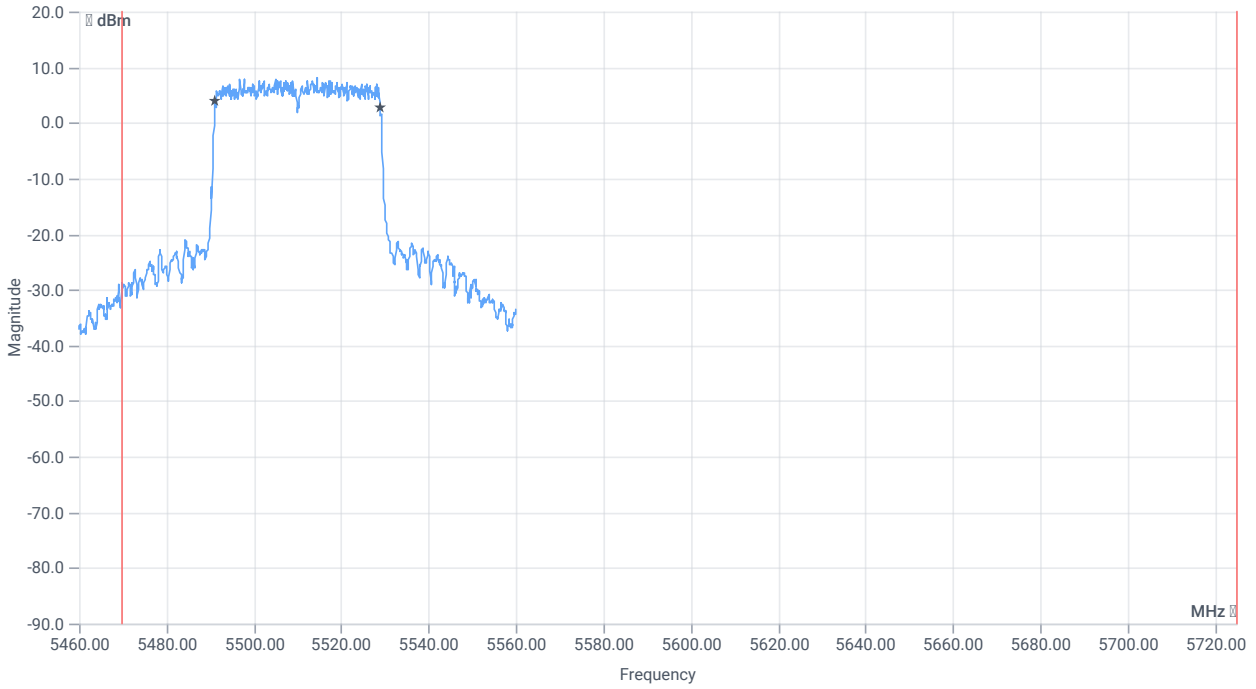
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 9.31 | dBm | INFO |
| Ref. Frequency | -- | -- | 5513.400 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 17.31 16.59 20 |
| Start [MHz] Stop [MHz] | 5460.000 5560.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

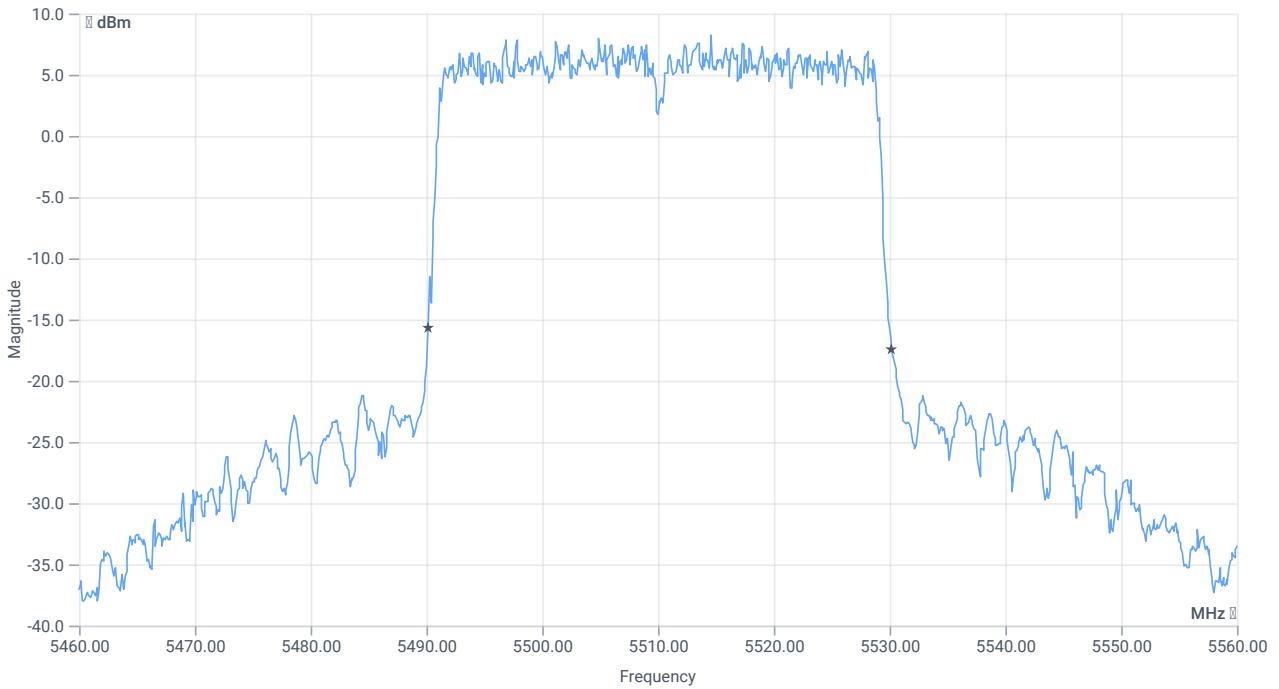




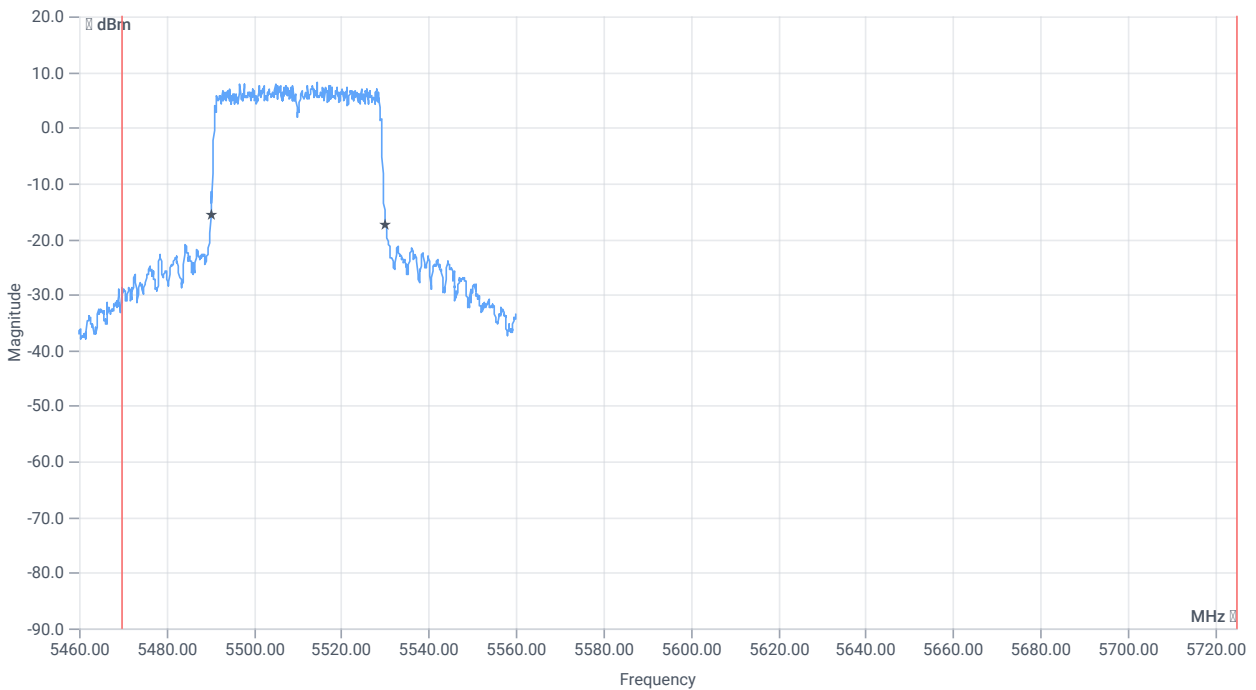
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 37.662 | MHz | INFO |
| T1 99% | 5470.000000 | -- | 5491.2188 | MHz | PASS since U-NII-3 is supported |
| T2 99% | -- | 5725.000000 | 5528.8811 | MHz | |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 40.1 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5470.000000 | -- | 5490.1000 | MHz | PASS since U-NII-3 is supported |
| T2 26dB | -- | 5725.000000 | 5530.2000 | MHz | |

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:21:02 |
| Ambit temp [°C] humidity [rel%] | 26.0 58 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5510 |
| Frequency mid to test | False Freq [MHz] 5590 |
| Frequency high to test | False Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5510 MHz

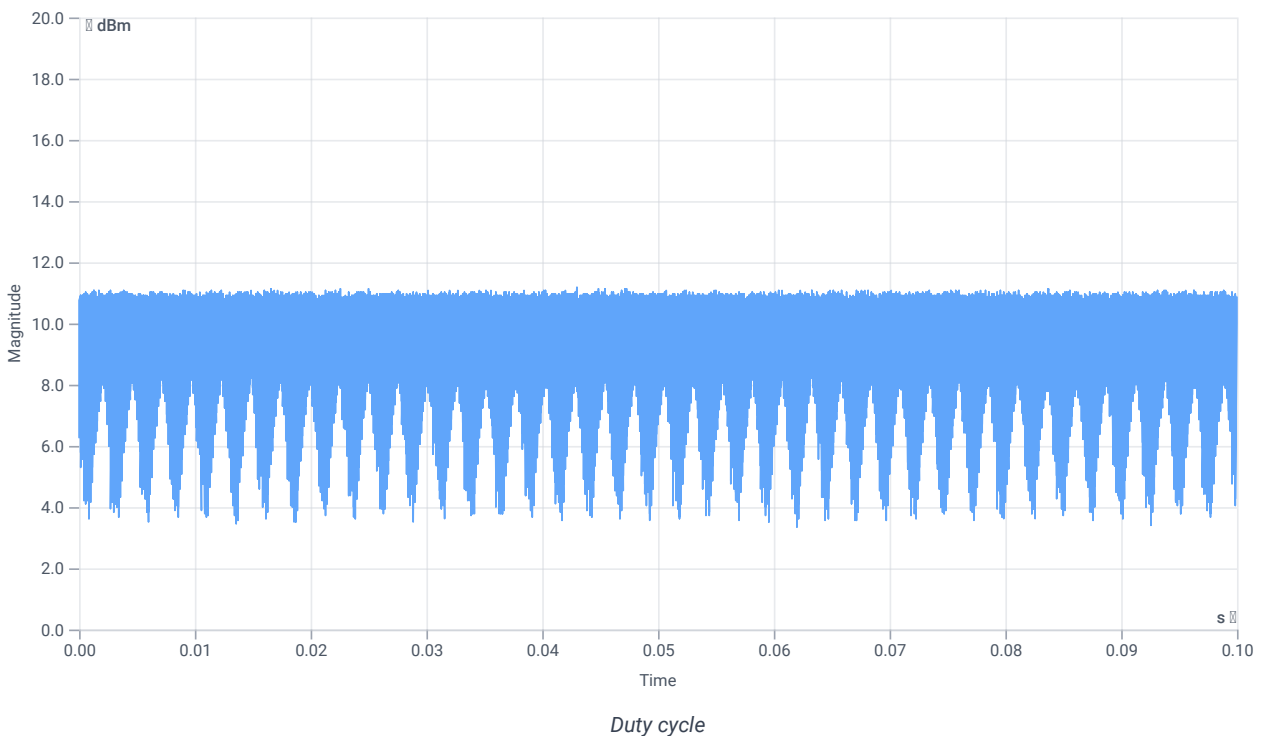
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 9.82 | dBm | INFO |
| Ref. Frequency | -- | -- | 5507.000 | MHz | INFO |

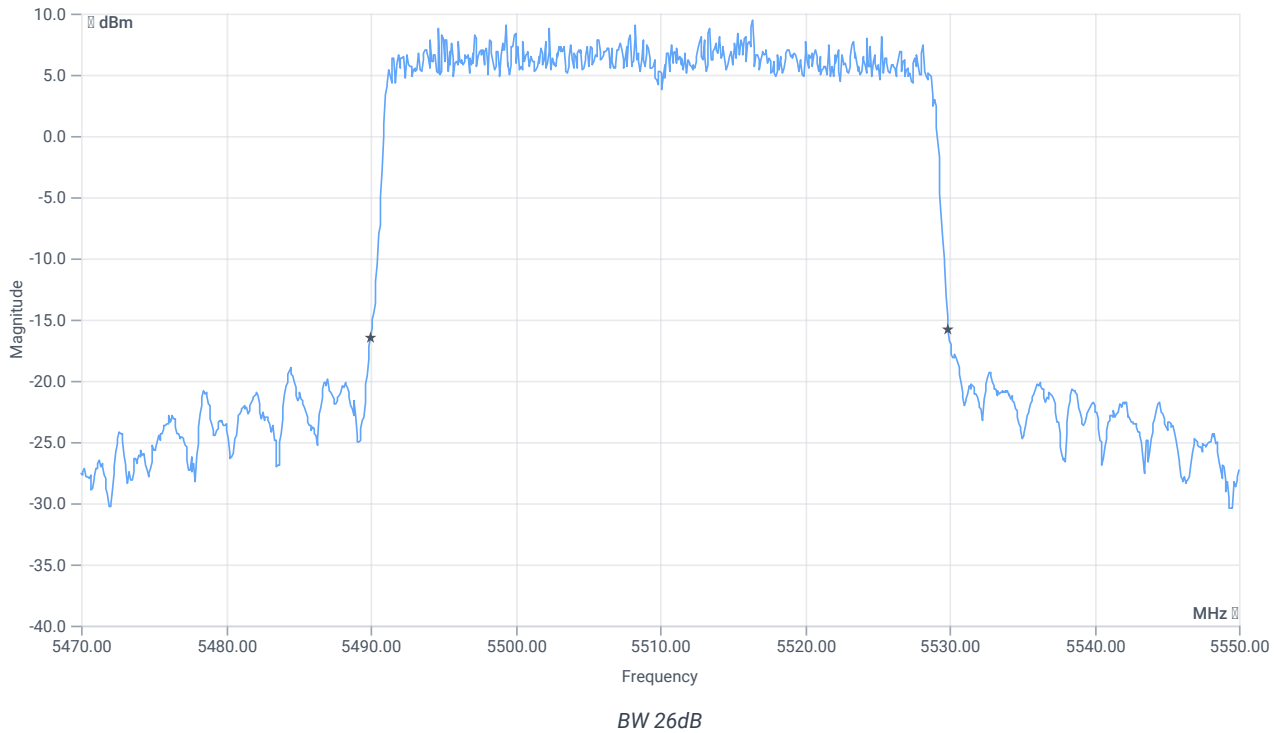
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



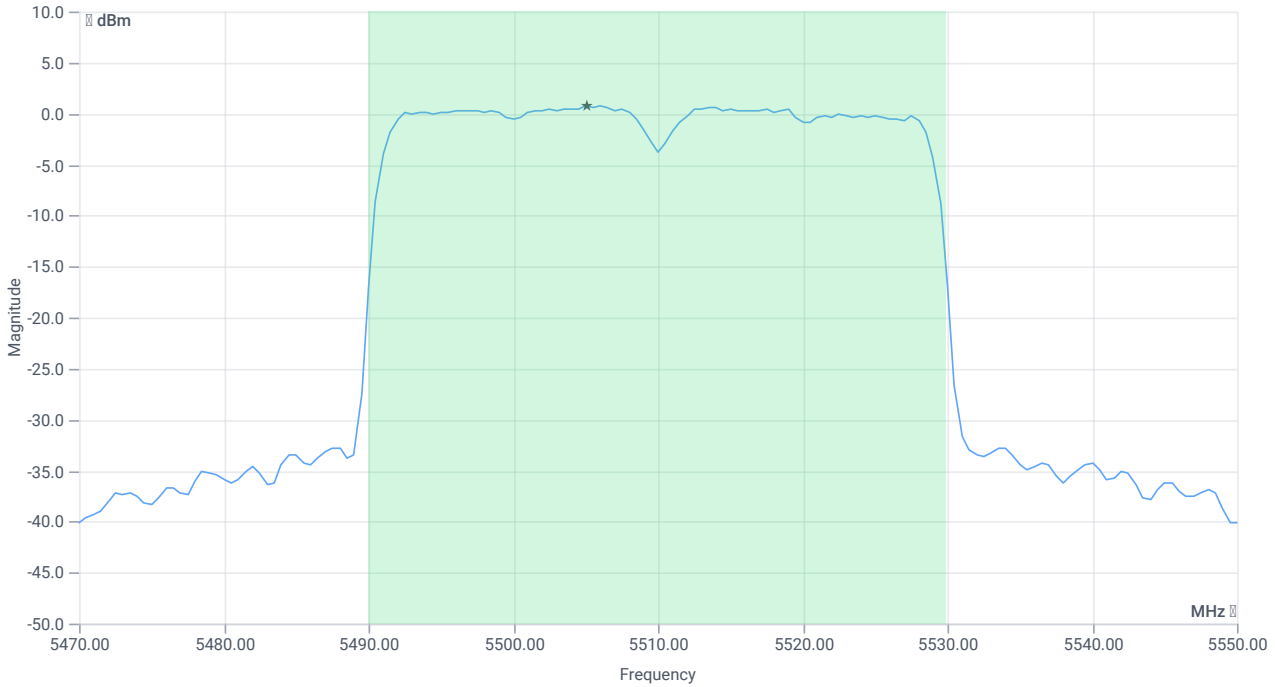
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 39.92 | MHz | INFO |
| T1 26dB | --- | --- | 5490.0000 | MHz | INFO |
| T2 26dB | --- | --- | 5529.9200 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 21.82 16.59 20 |
| Start [MHz] Stop [MHz] | 5470.000 5550.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 15.38 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 15.38 | dBm | PASS |
| Limit: 11 dBm + 10 log 39.92 | | | | | |
| Max Output Power DC corrected | -- | 27.01 | 15.38 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | 0.71 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | 0.71 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:22:29 |
| Ambit temp [°C] humidity [rel%] | 26.0 58 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5510 |
| Frequency mid to test | False Freq [MHz] 5590 |
| Frequency high to test | False Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

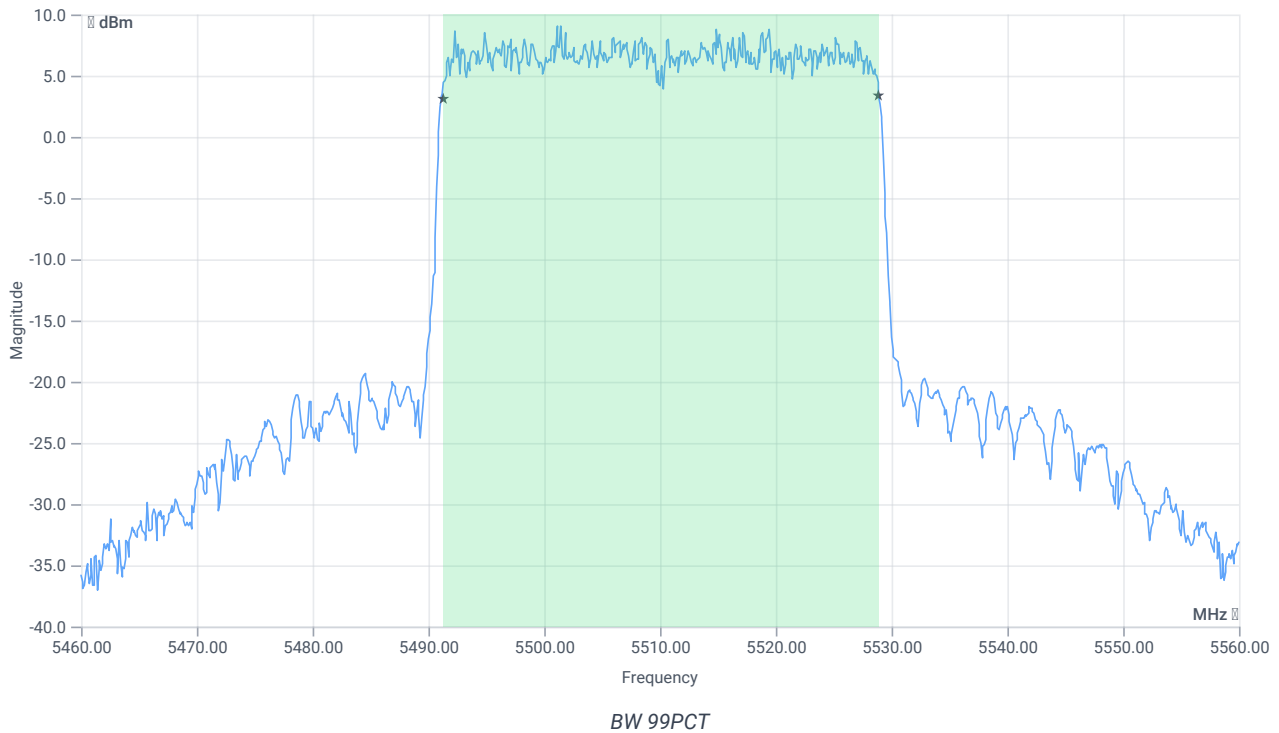
Test at TX 5510 MHz

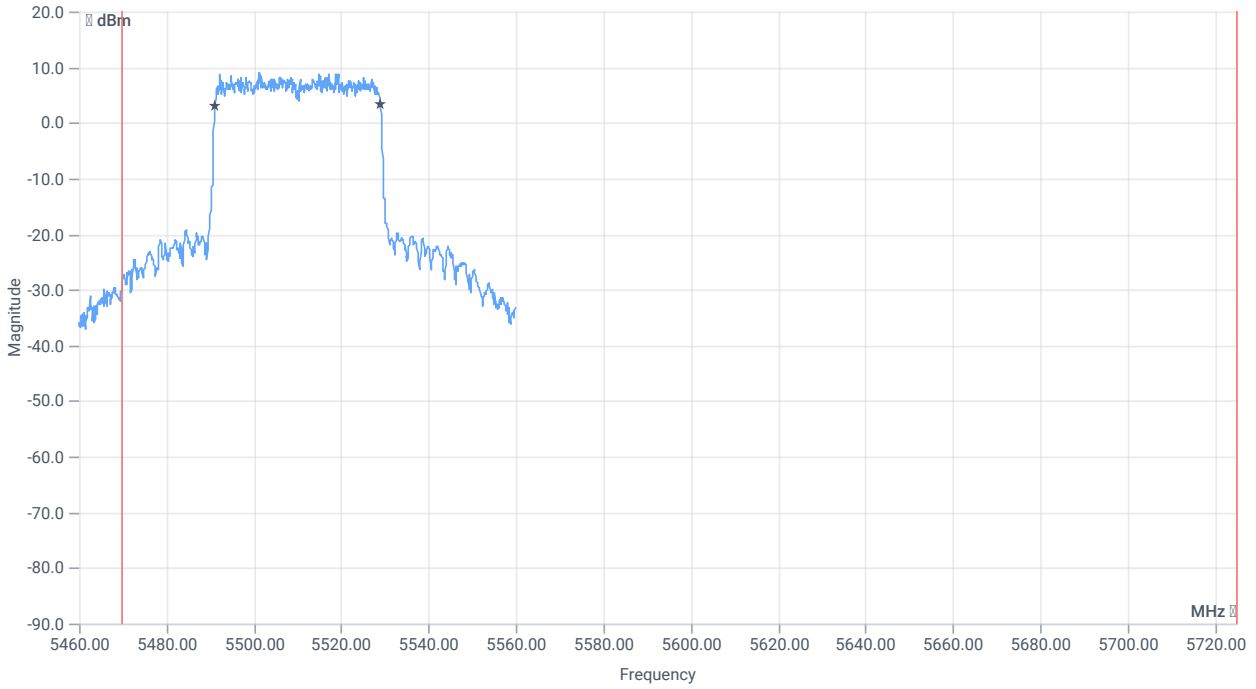
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 9.34 | dBm | INFO |
| Ref. Frequency | -- | -- | 5521.990 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 17.34 16.59 20 |
| Start [MHz] Stop [MHz] | 5460.000 5560.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

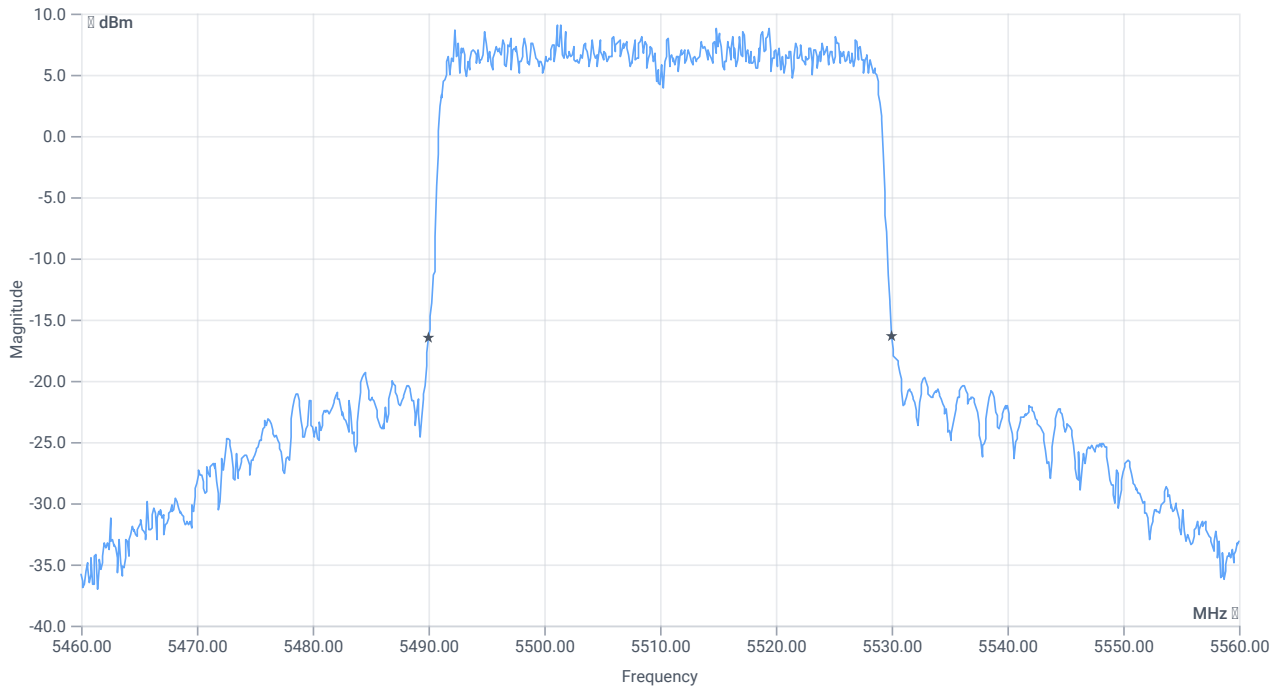




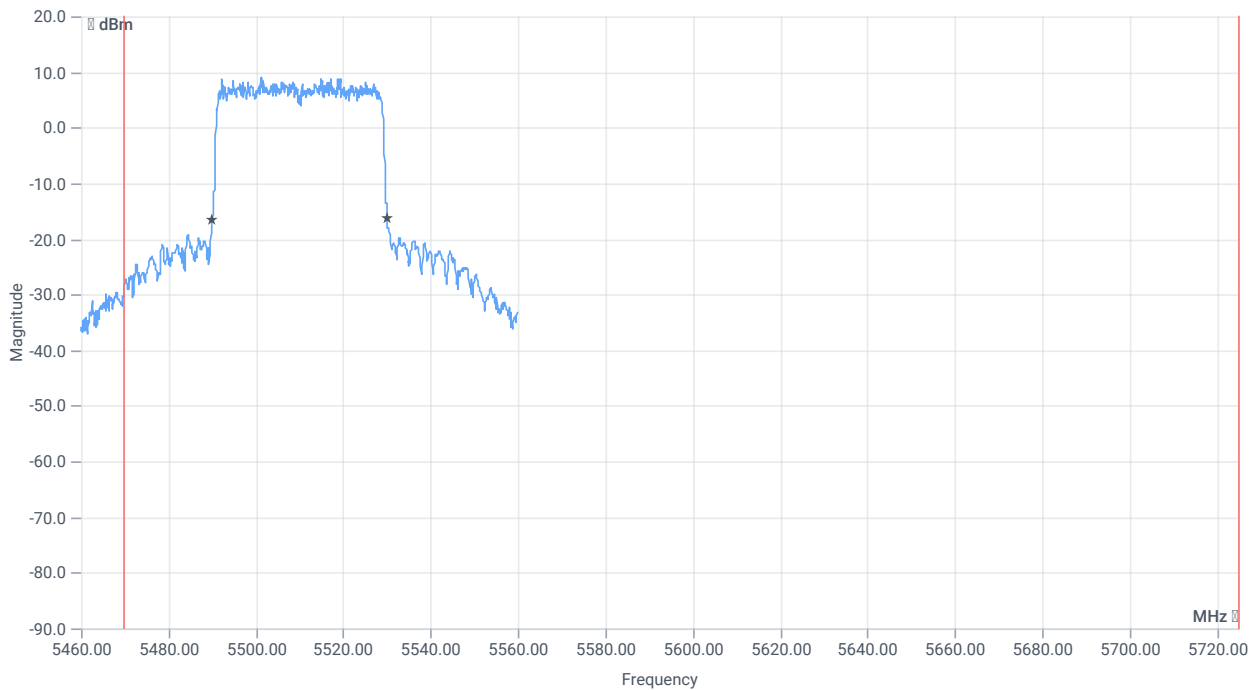
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 37.662 | MHz | INFO |
| T1 99% | 5470.000000 | -- | 5491.2188 | MHz | PASS since U-NII-3 is supported |
| T2 99% | -- | 5725.000000 | 5528.8811 | MHz | |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 40 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5470.000000 | -- | 5490.0000 | MHz | PASS since U-NII-3 is supported |
| T2 26dB | -- | 5725.000000 | 5530.0000 | MHz | |

Verdict

PASS

Message with SA scan ~

References

| | |
|-----------------------------------|---------------------------------------|
| TC start | 12.07.2023 10:23:00 |
| Ambit temp [°C] humidity [rel%] | 26.0 58 |
| System version | 4.6.0.0 |
| Specification | - |
| Method | |
| Description | Message with SA Scan ax_HE40_U_NII_2C |
| Information | |

Test Parameter

| | |
|---------------|---|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer |
| Message start | 12.07.2023 10:23:00 |
| Message | set WLAN5Gx to ax_HE40_U_NII_2C, Frequency [MHz] 5590 , |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:39:33 |
| Ambit temp [°C] humidity [rel%] | 26.0 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5510 |
| Frequency mid to test | True Freq [MHz] 5590 |
| Frequency high to test | False Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5590 MHz

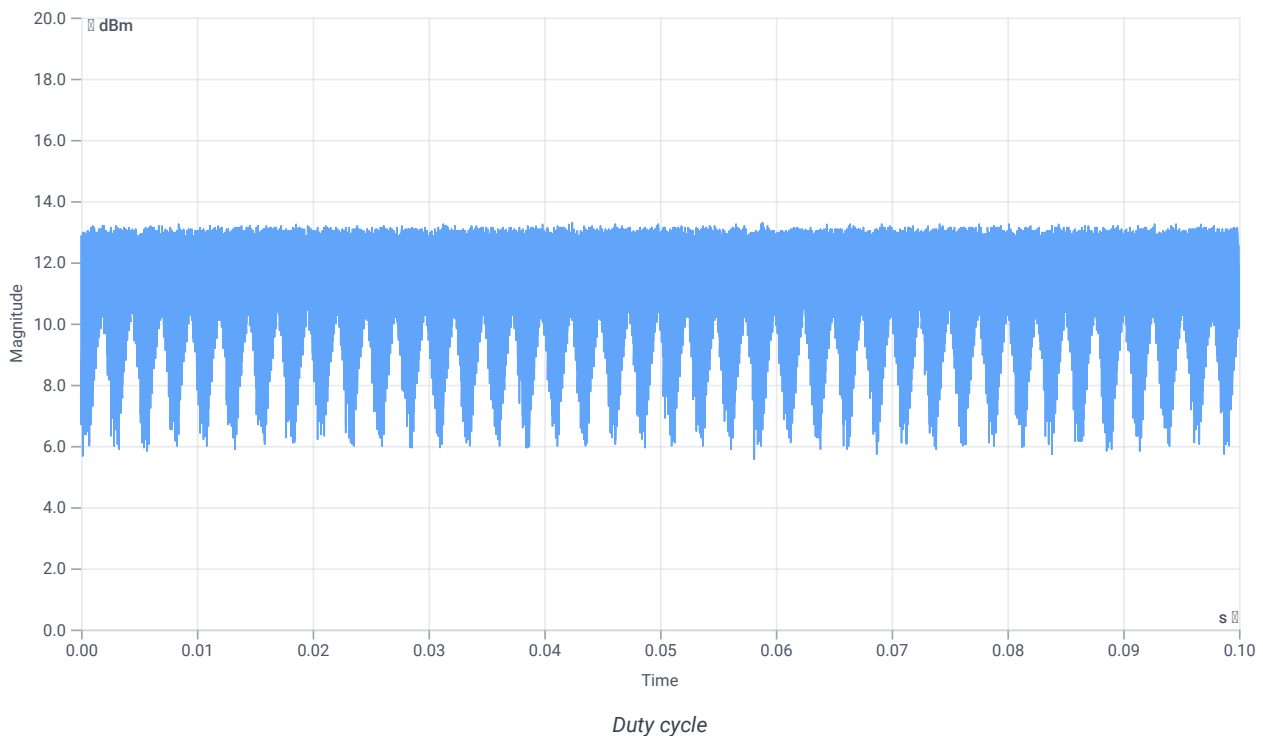
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 12.81 | dBm | INFO |
| Ref. Frequency | -- | -- | 5597.390 | MHz | INFO |

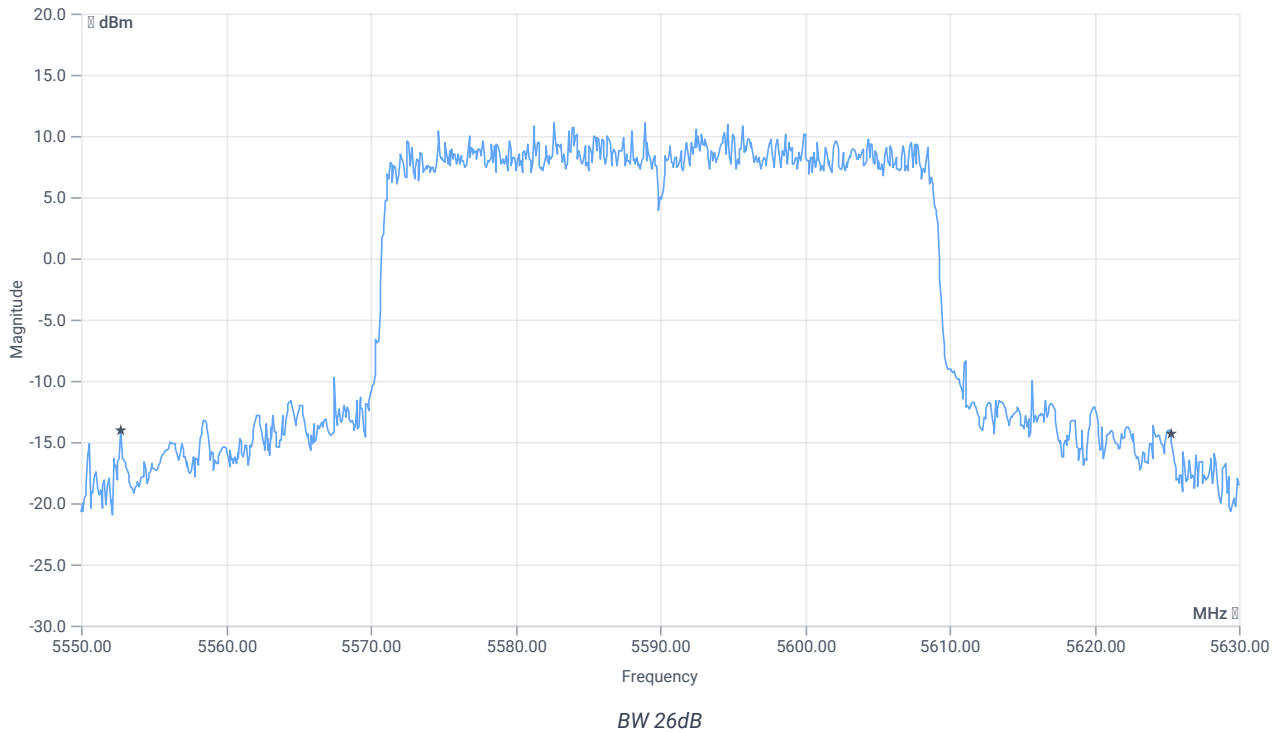
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



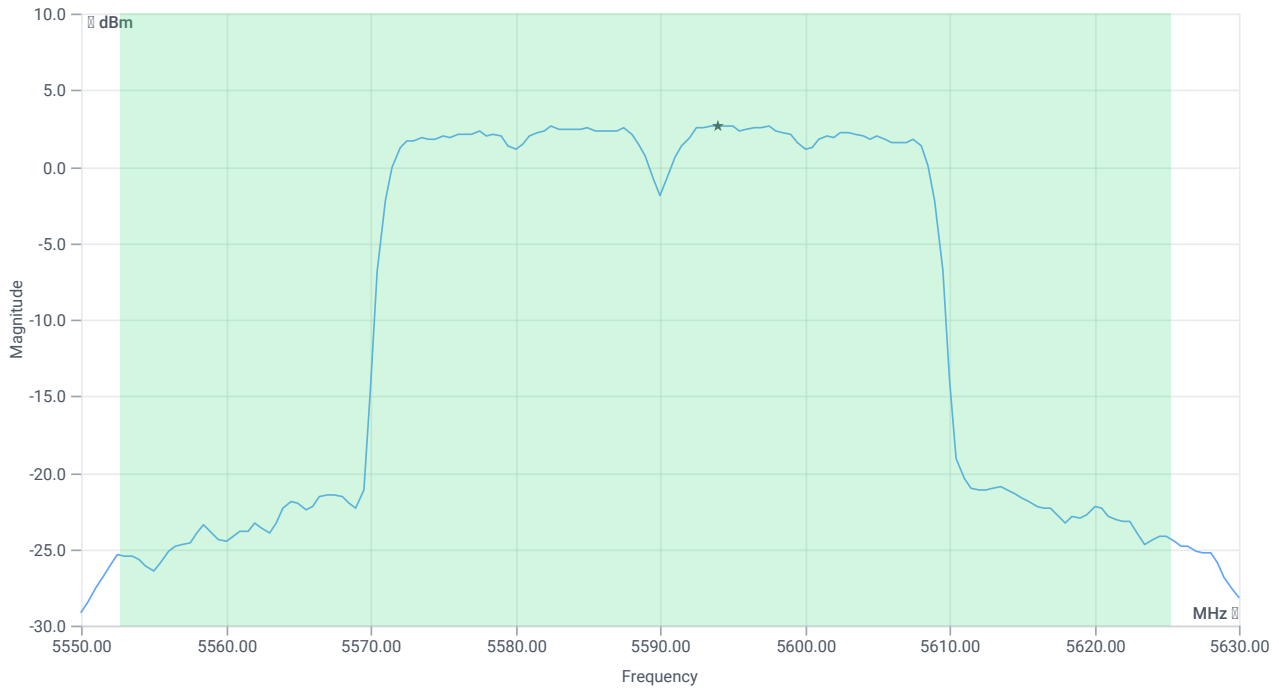
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 72.56 | MHz | INFO |
| T1 26dB | --- | --- | 5552.7200 | MHz | INFO |
| T2 26dB | --- | --- | 5625.2800 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 24.81 16.72 25 |
| Start [MHz] Stop [MHz] | 5550.000 5630.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 17.42 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 17.42 | dBm | PASS |
| Limit: 11 dBm + 10 log 72.56 | | | | | |
| Max Output Power DC corrected | -- | 29.61 | 17.42 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | 2.7 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | 2.7 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:40:59 |
| Ambit temp [°C] humidity [rel%] | 26.0 57 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5510 |
| Frequency mid to test | True Freq [MHz] 5590 |
| Frequency high to test | False Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

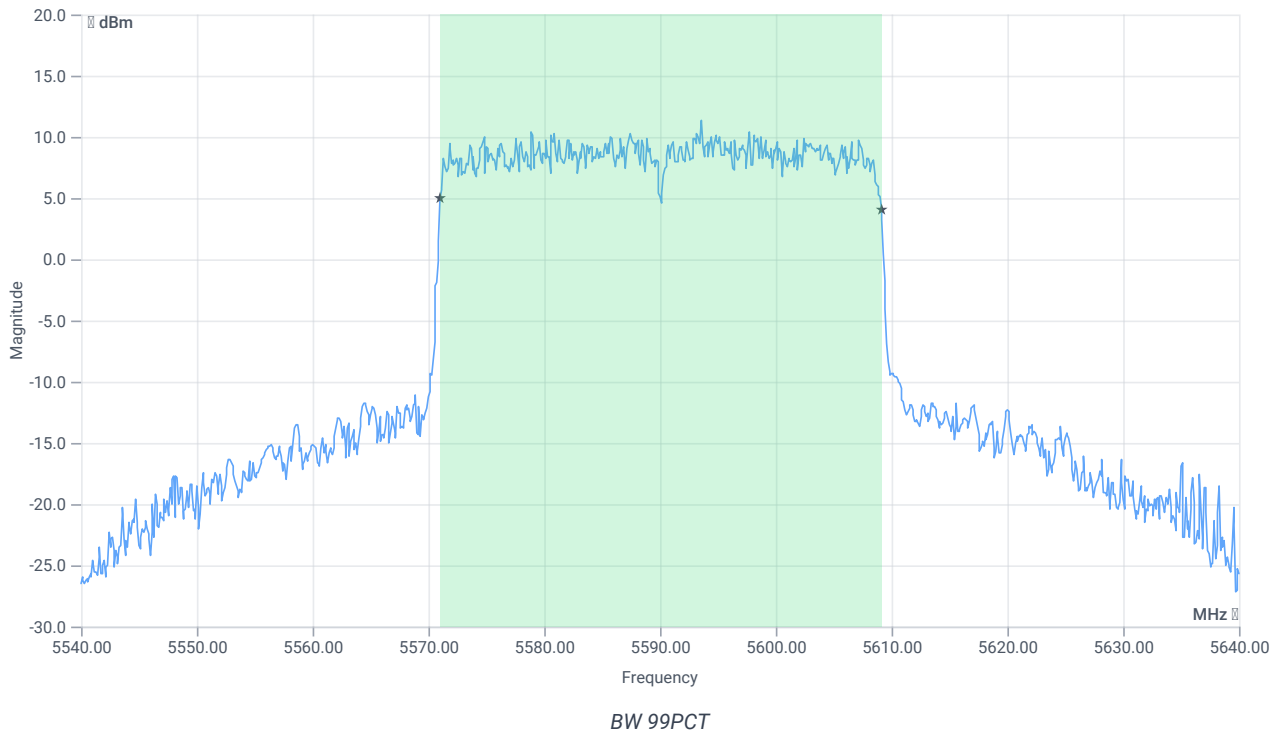
Test at TX 5590 MHz

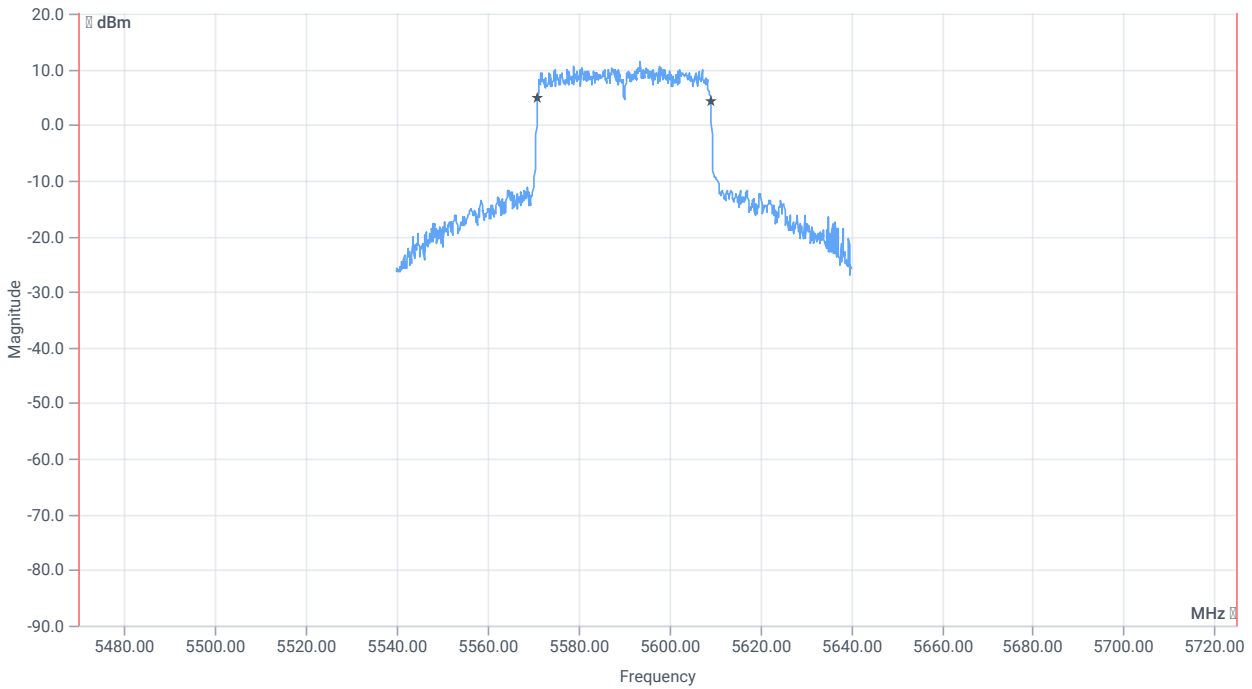
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 12.41 | dBm | INFO |
| Ref. Frequency | -- | -- | 5602.990 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 20.41 16.72 20 |
| Start [MHz] Stop [MHz] | 5540.000 5640.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

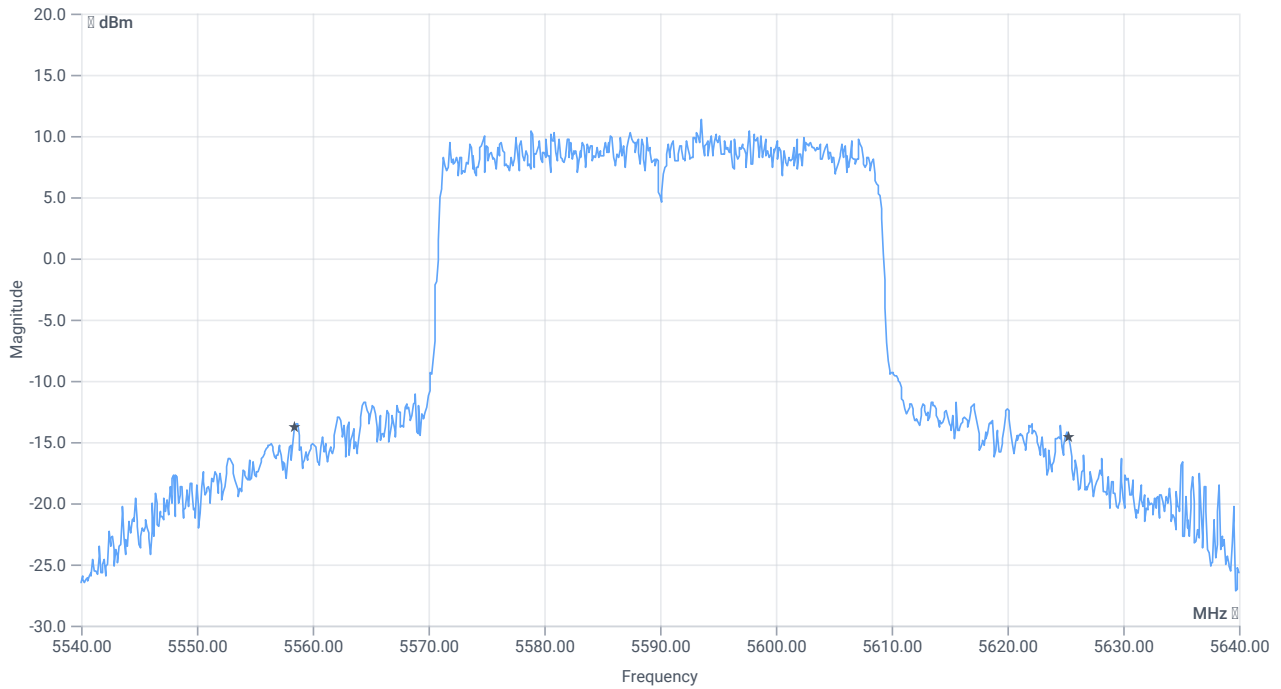




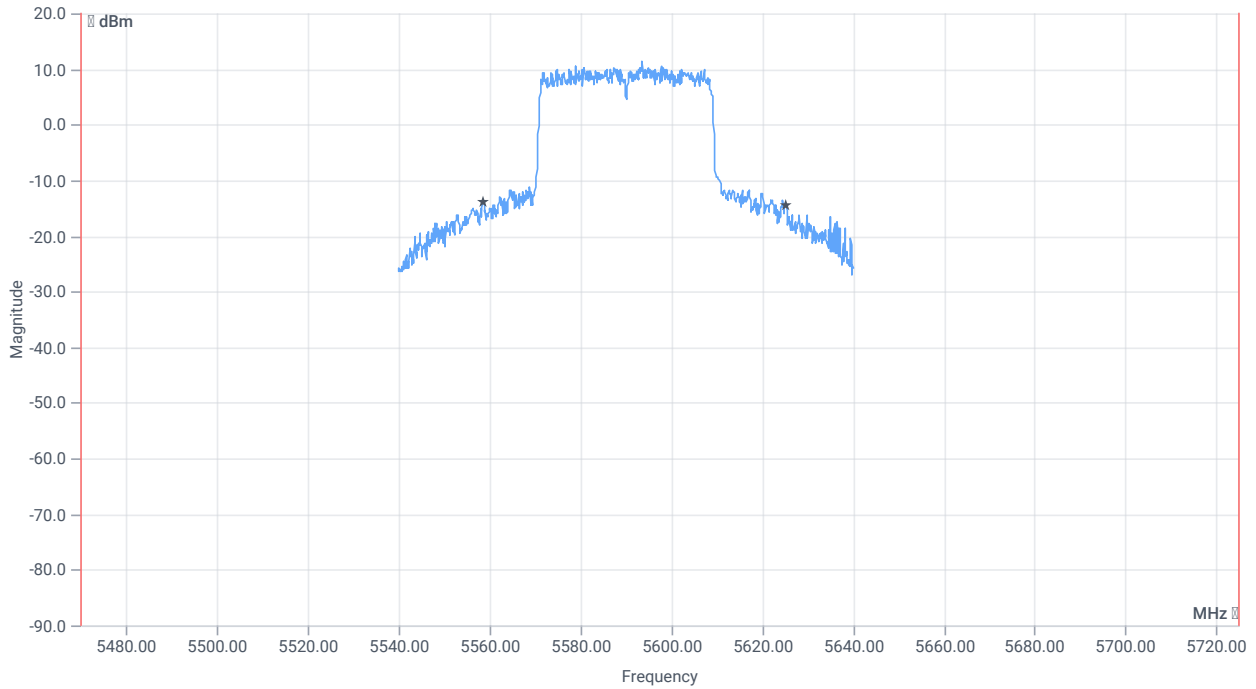
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 38.062 | MHz | INFO |
| T1 99% | 5470.000000 | -- | 5571.0190 | MHz | PASS since U-NII-3 is supported |
| T2 99% | -- | 5725.000000 | 5609.0809 | MHz | |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 66.9 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5470.000000 | -- | 5558.4000 | MHz | PASS since U-NII-3 is supported |
| T2 26dB | -- | 5725.000000 | 5625.3000 | MHz | |

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:41:30 |
| Ambit temp [°C] humidity [rel%] | 26.0 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5510 |
| Frequency mid to test | True Freq [MHz] 5590 |
| Frequency high to test | False Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5590 MHz

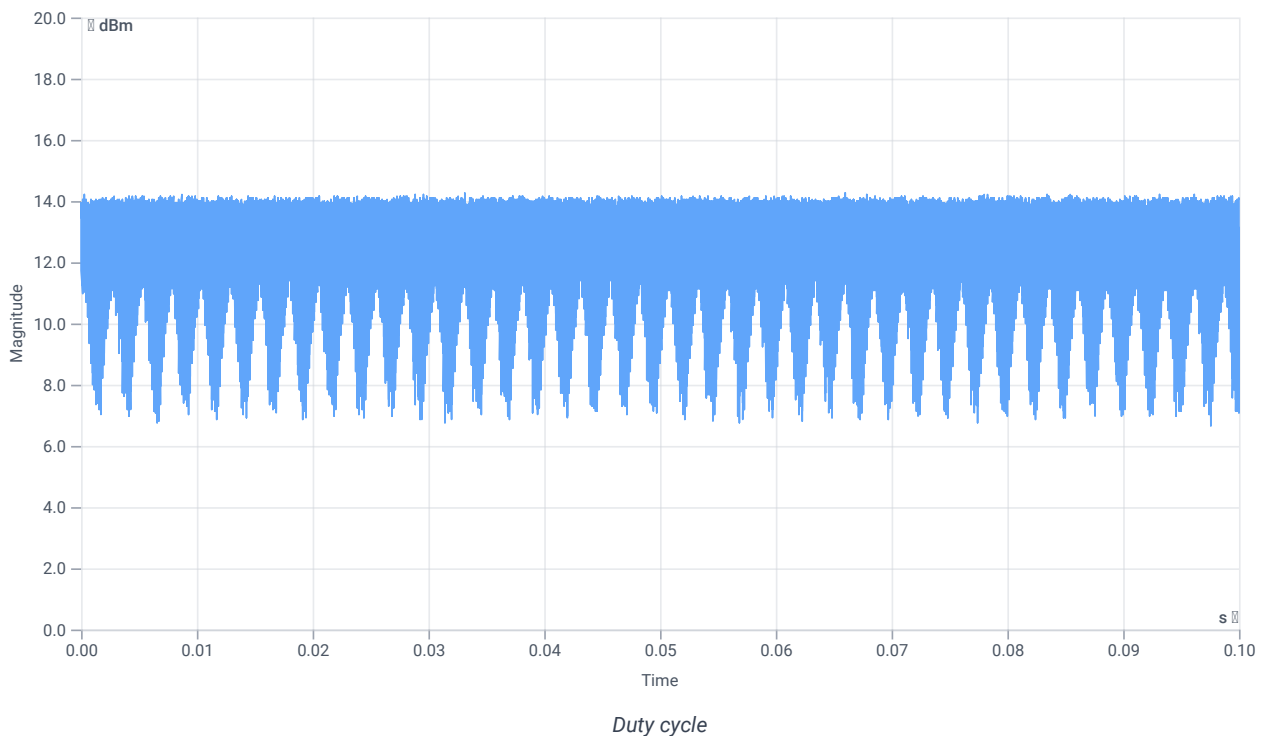
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 13.41 | dBm | INFO |
| Ref. Frequency | -- | -- | 5600.790 | MHz | INFO |

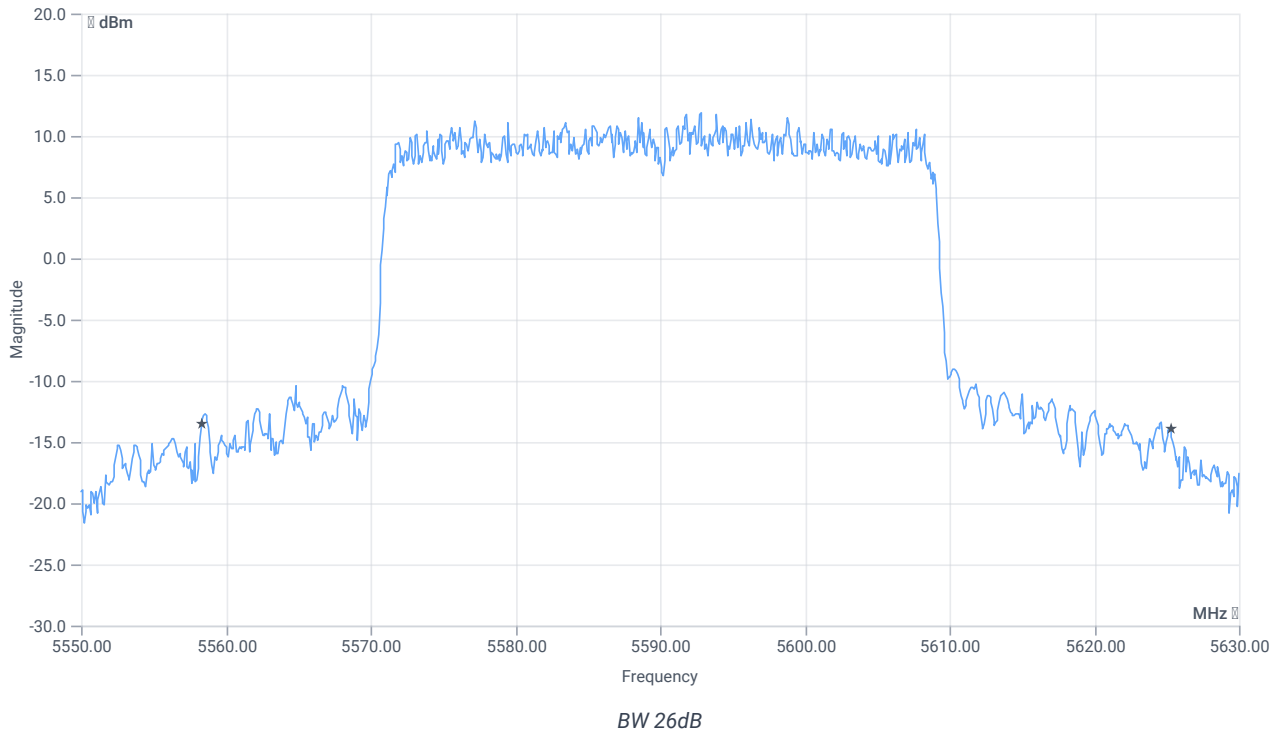
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



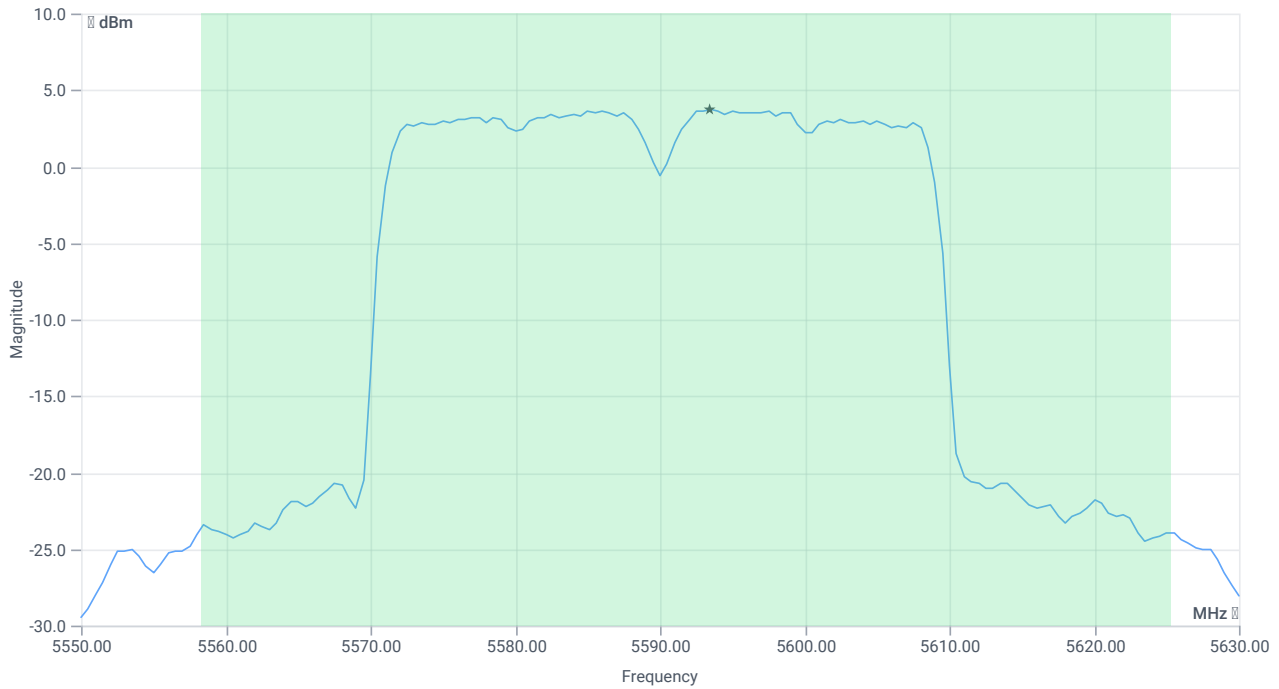
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 66.96 | MHz | INFO |
| T1 26dB | --- | --- | 5558.3200 | MHz | INFO |
| T2 26dB | --- | --- | 5625.2800 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 25.41 16.72 25 |
| Start [MHz] Stop [MHz] | 5550.000 5630.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 18.42 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 18.42 | dBm | PASS |
| Limit: 11 dBm + 10 log 66.96 | | | | | |
| Max Output Power DC corrected | -- | 29.26 | 18.42 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | 3.7 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | 3.7 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:42:57 |
| Ambit temp [°C] humidity [rel%] | 26.0 57 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5510 |
| Frequency mid to test | True Freq [MHz] 5590 |
| Frequency high to test | False Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

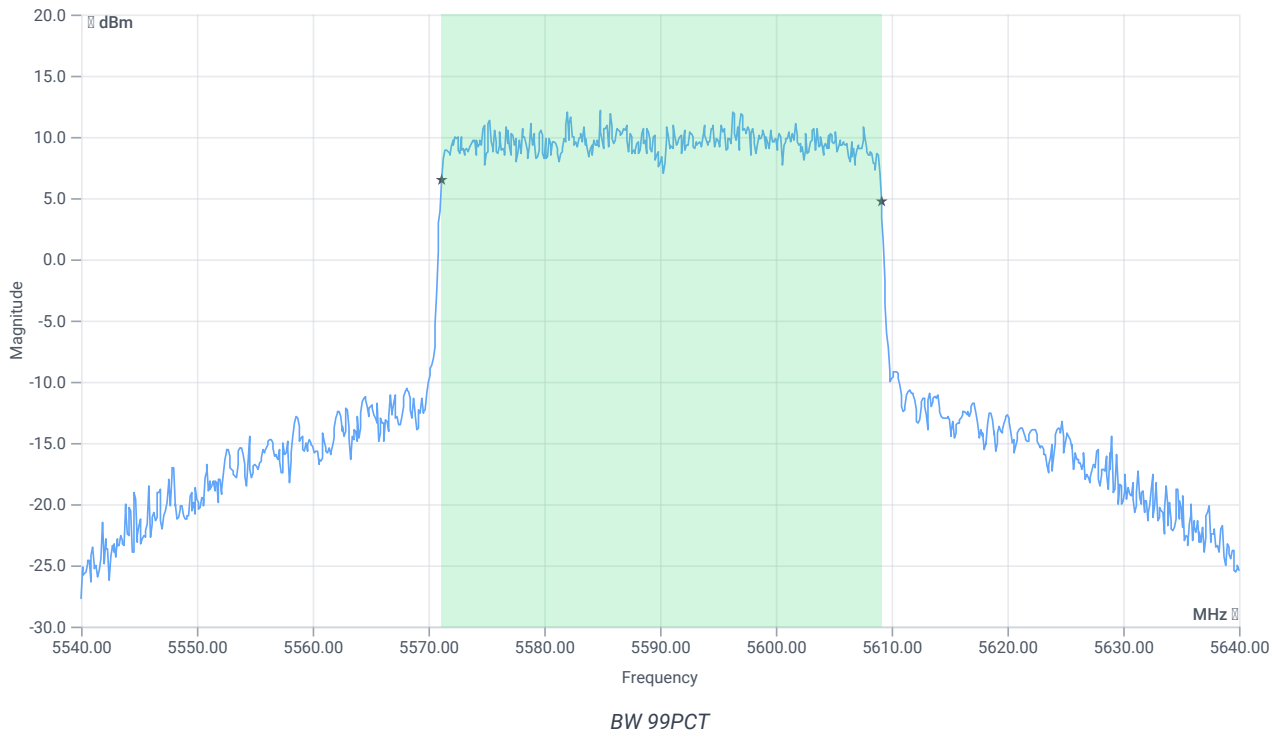
Test at TX 5590 MHz

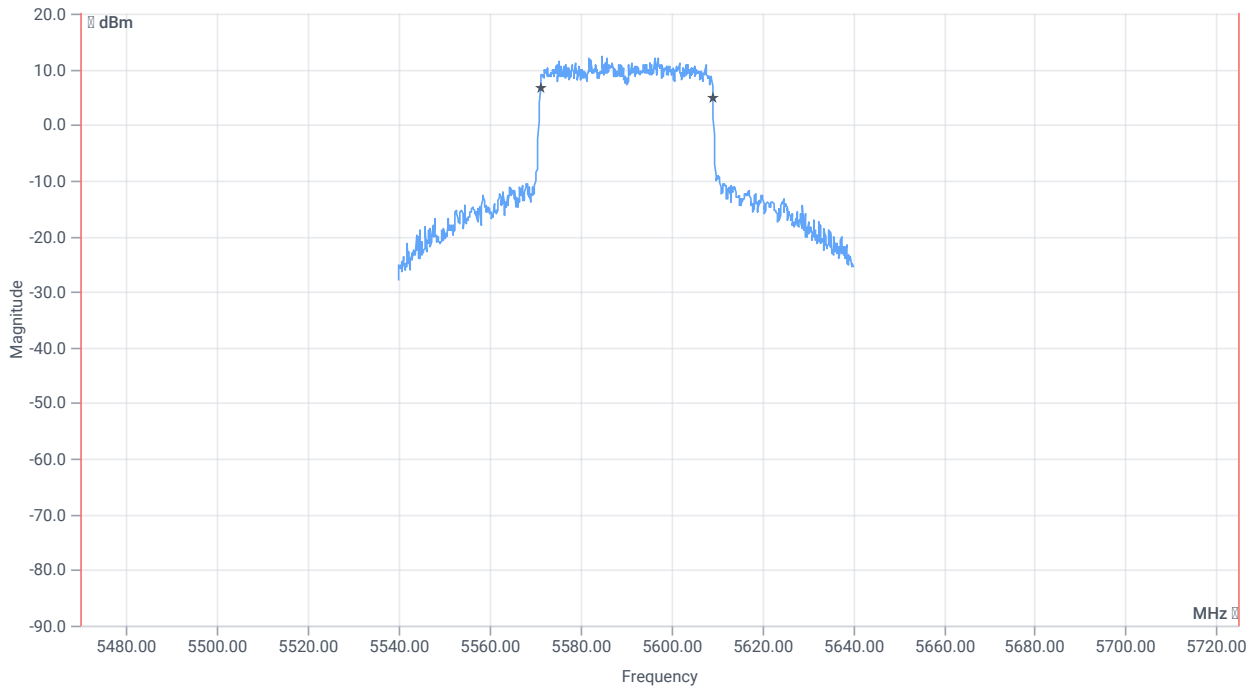
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 13.20 | dBm | INFO |
| Ref. Frequency | -- | -- | 5598.390 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 21.20 16.72 20 |
| Start [MHz] Stop [MHz] | 5540.000 5640.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

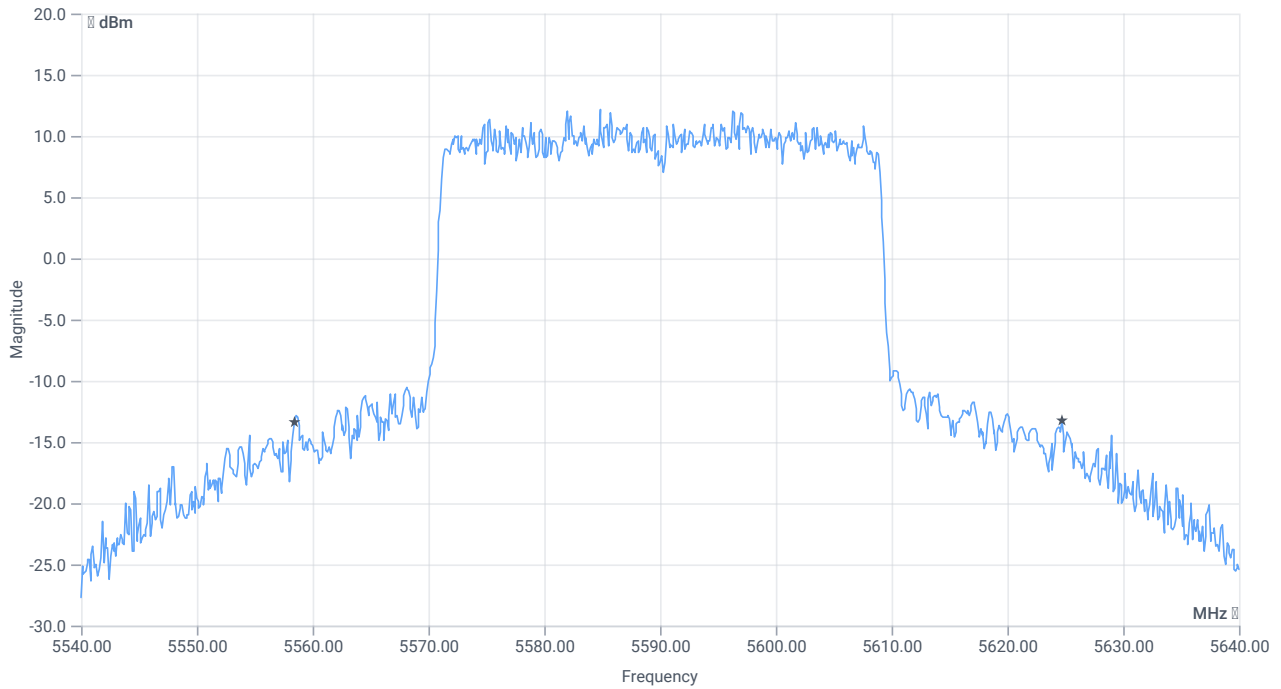




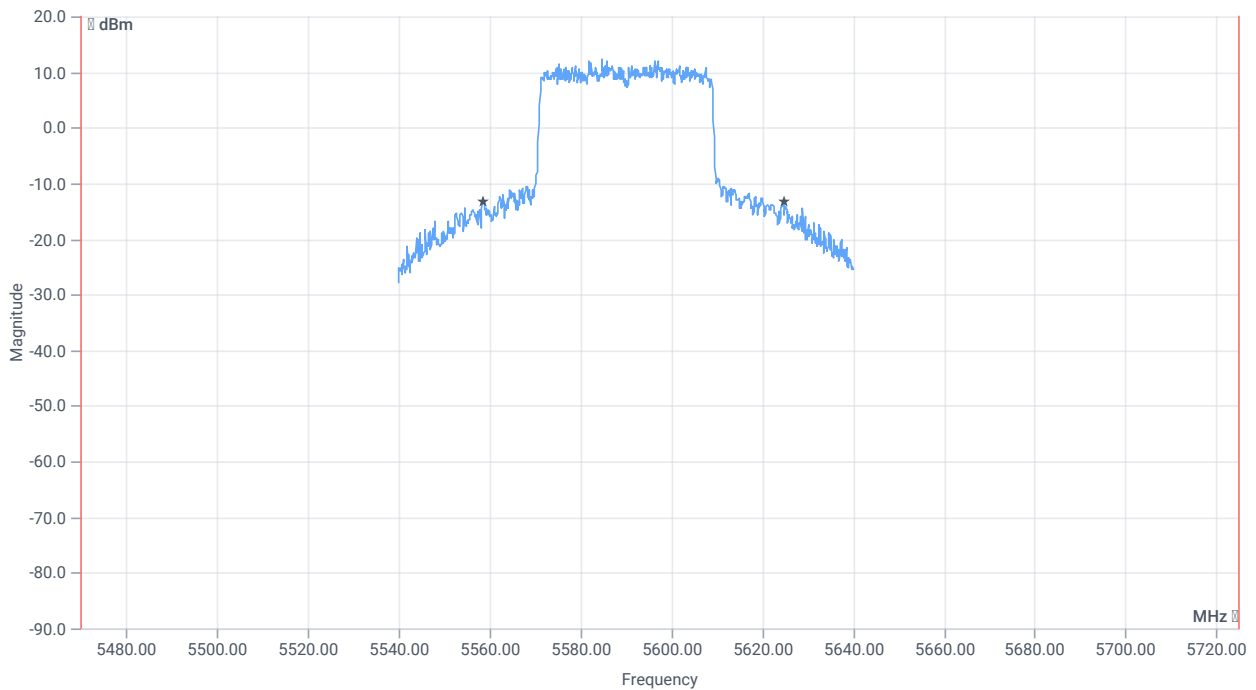
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 37.962 | MHz | INFO |
| T1 99% | 5470.000000 | -- | 5571.1189 | MHz | PASS since U-NII-3 is supported |
| T2 99% | -- | 5725.000000 | 5609.0809 | MHz | |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 66.3 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5470.000000 | -- | 5558.4000 | MHz | PASS since U-NII-3 is supported |
| T2 26dB | -- | 5725.000000 | 5624.7000 | MHz | |

Verdict

PASS

Message with SA scan ~

References

| | |
|-----------------------------------|---------------------------------------|
| TC start | 12.07.2023 10:43:27 |
| Ambit temp [°C] humidity [rel%] | 26.0 57 |
| System version | 4.6.0.0 |
| Specification | - |
| Method | |
| Description | Message with SA Scan ax_HE40_U_NII_2C |
| Information | |

Test Parameter

| | |
|---------------|---|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer |
| Message start | 12.07.2023 10:43:28 |
| Message | set WLAN5Gx to ax_HE40_U_NII_2C, Frequency [MHz] 5670 |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:55:34 |
| Ambit temp [°C] humidity [rel%] | 26.0 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5510 |
| Frequency mid to test | False Freq [MHz] 5590 |
| Frequency high to test | True Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5670 MHz

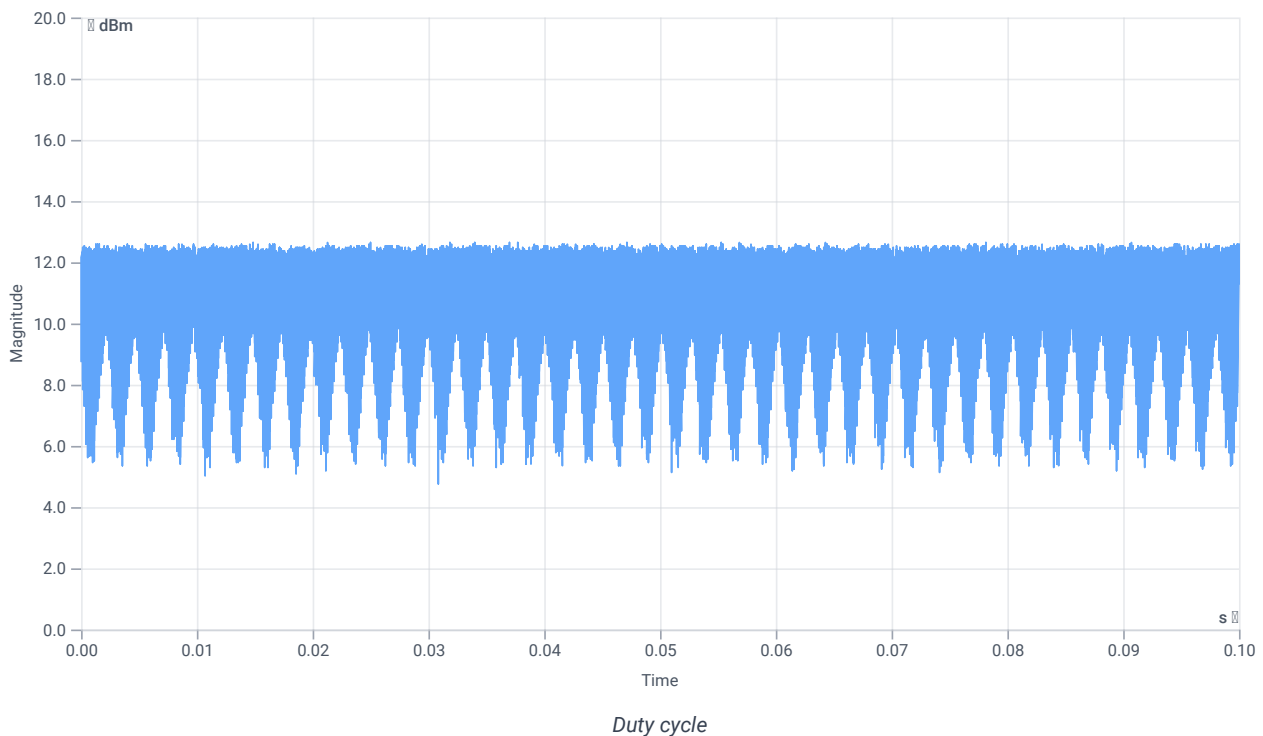
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 12.00 | dBm | INFO |
| Ref. Frequency | -- | -- | 5662.010 | MHz | INFO |

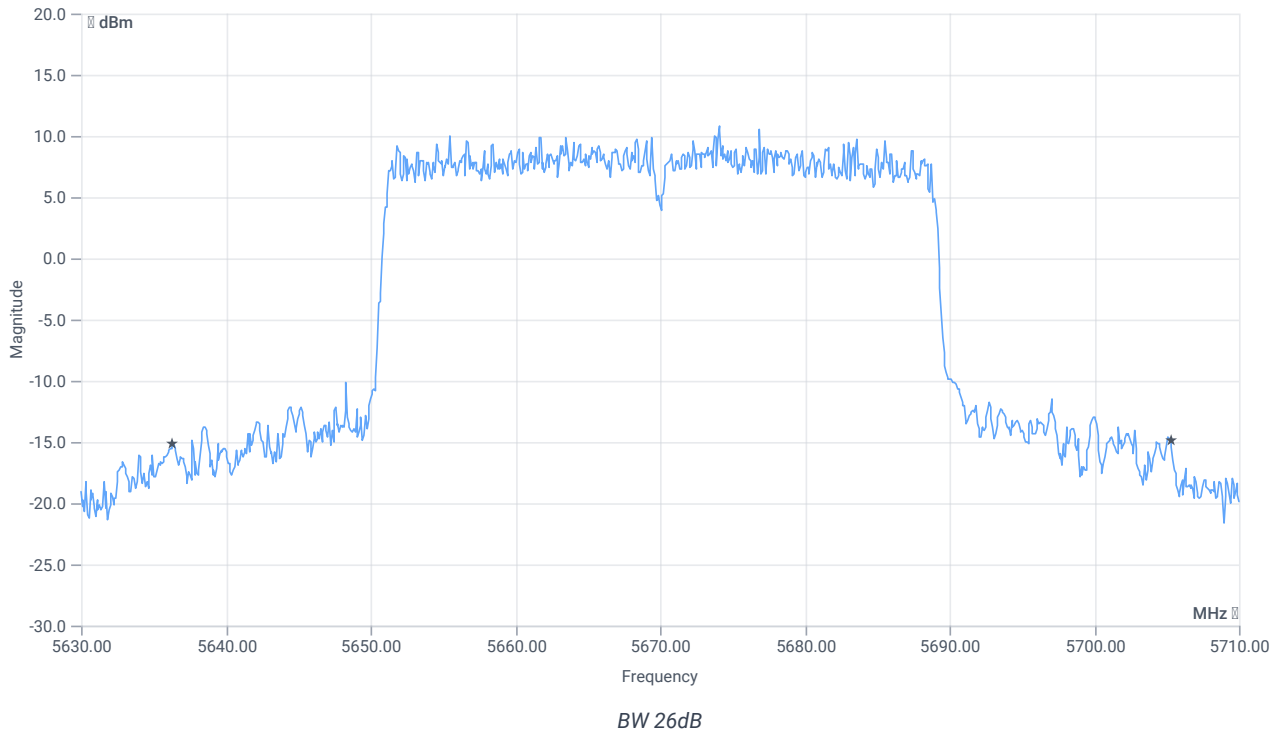
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



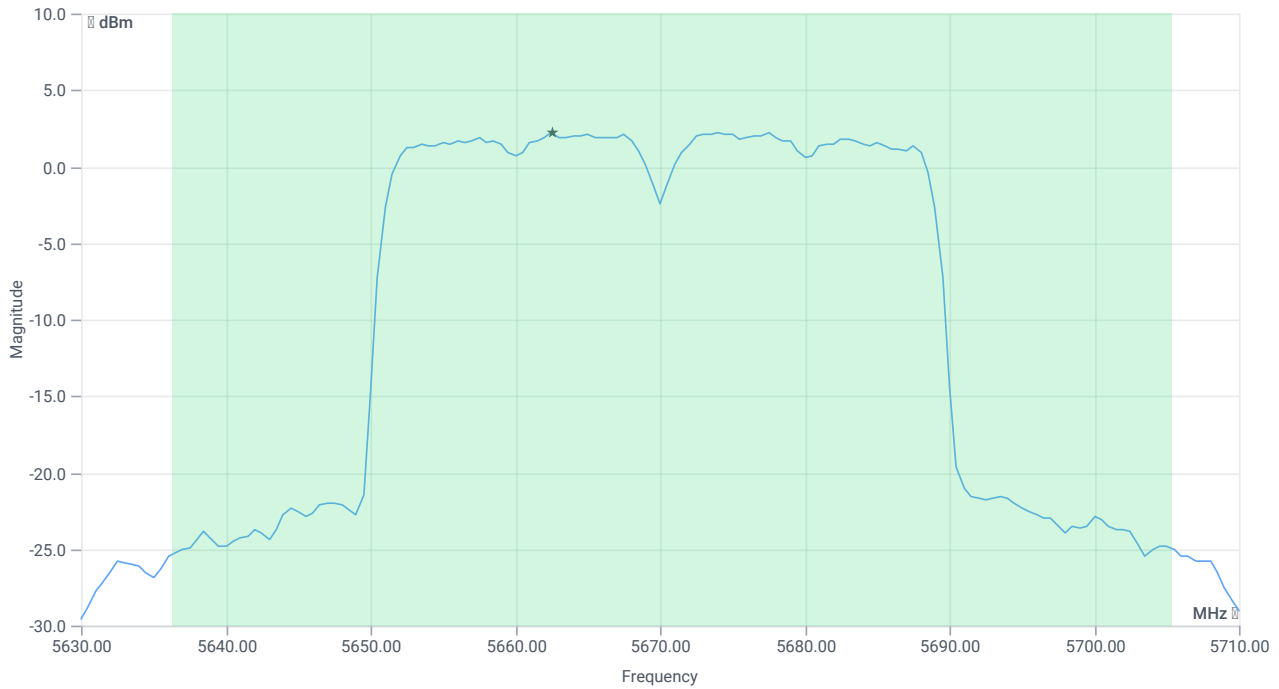
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 68.96 | MHz | INFO |
| T1 26dB | --- | --- | 5636.3200 | MHz | INFO |
| T2 26dB | --- | --- | 5705.2800 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 24.00 16.68 25 |
| Start [MHz] Stop [MHz] | 5630.000 5710.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 16.94 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 16.94 | dBm | PASS |
| Limit: 11 dBm + 10 log 68.96 | | | | | |
| Max Output Power DC corrected | -- | 29.39 | 16.94 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | 2.18 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | 2.18 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:56:59 |
| Ambit temp [°C] humidity [rel%] | 26.0 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5510 |
| Frequency mid to test | False Freq [MHz] 5590 |
| Frequency high to test | True Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

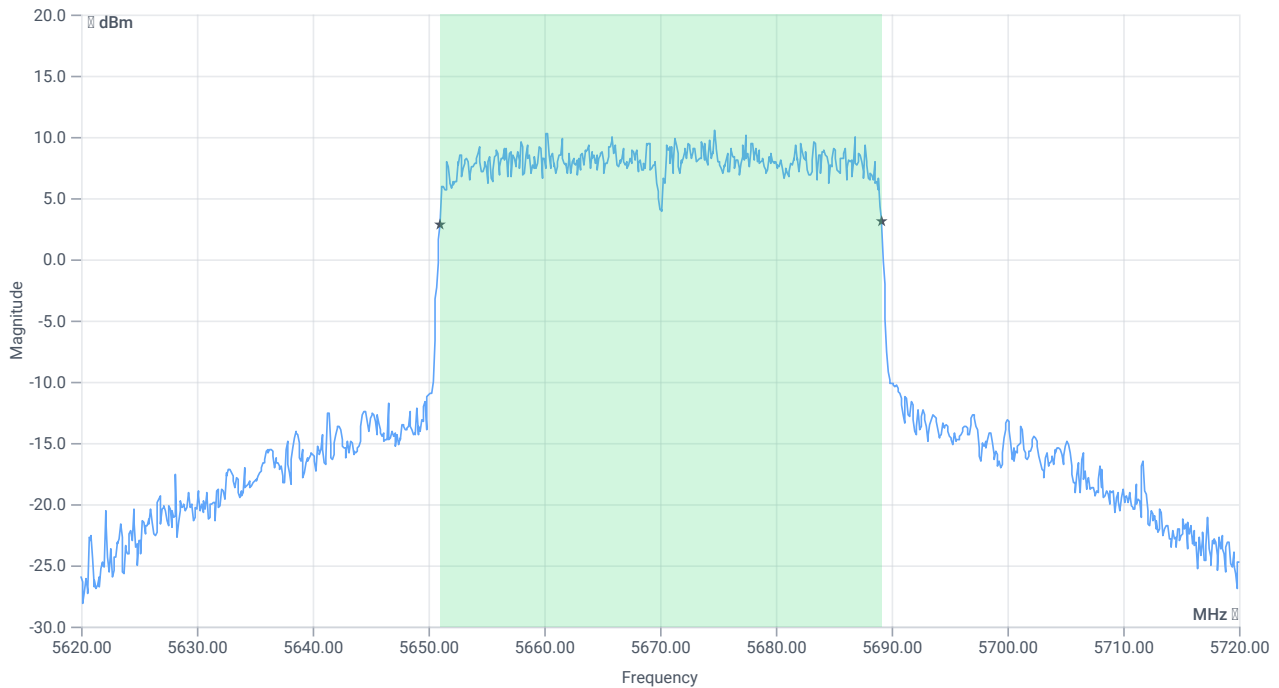
Test at TX 5670 MHz

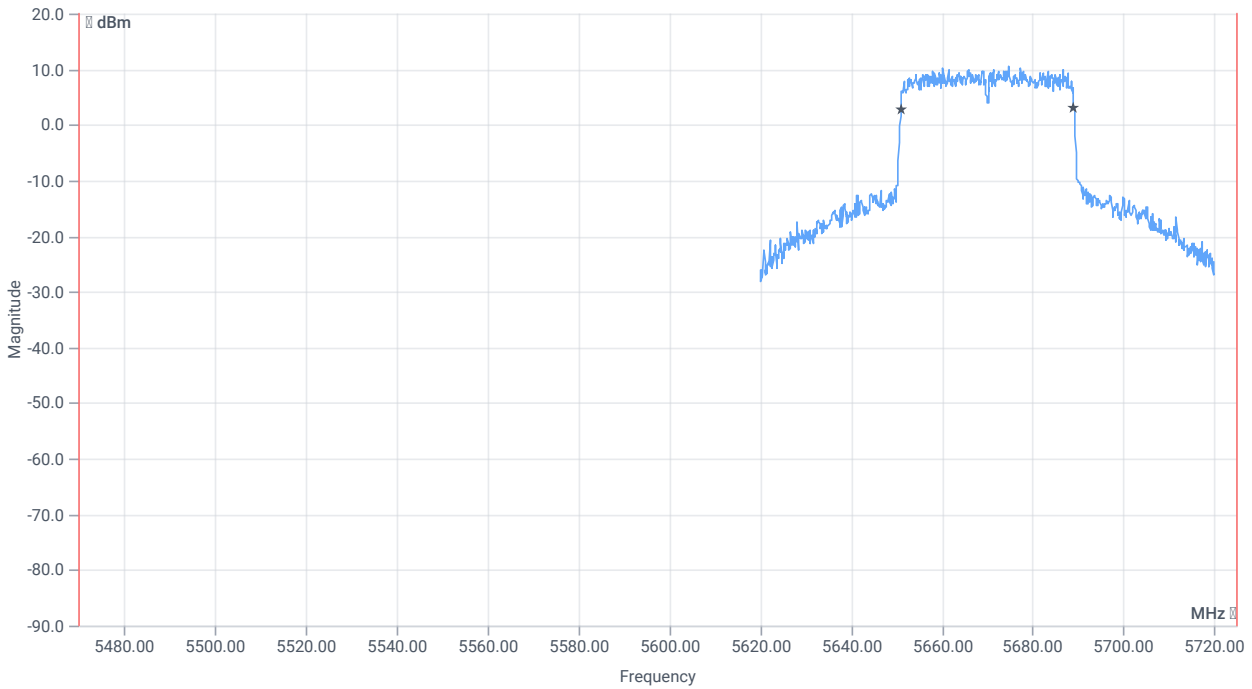
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 10.97 | dBm | INFO |
| Ref. Frequency | -- | -- | 5660.410 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 18.97 16.68 20 |
| Start [MHz] Stop [MHz] | 5620.000 5720.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

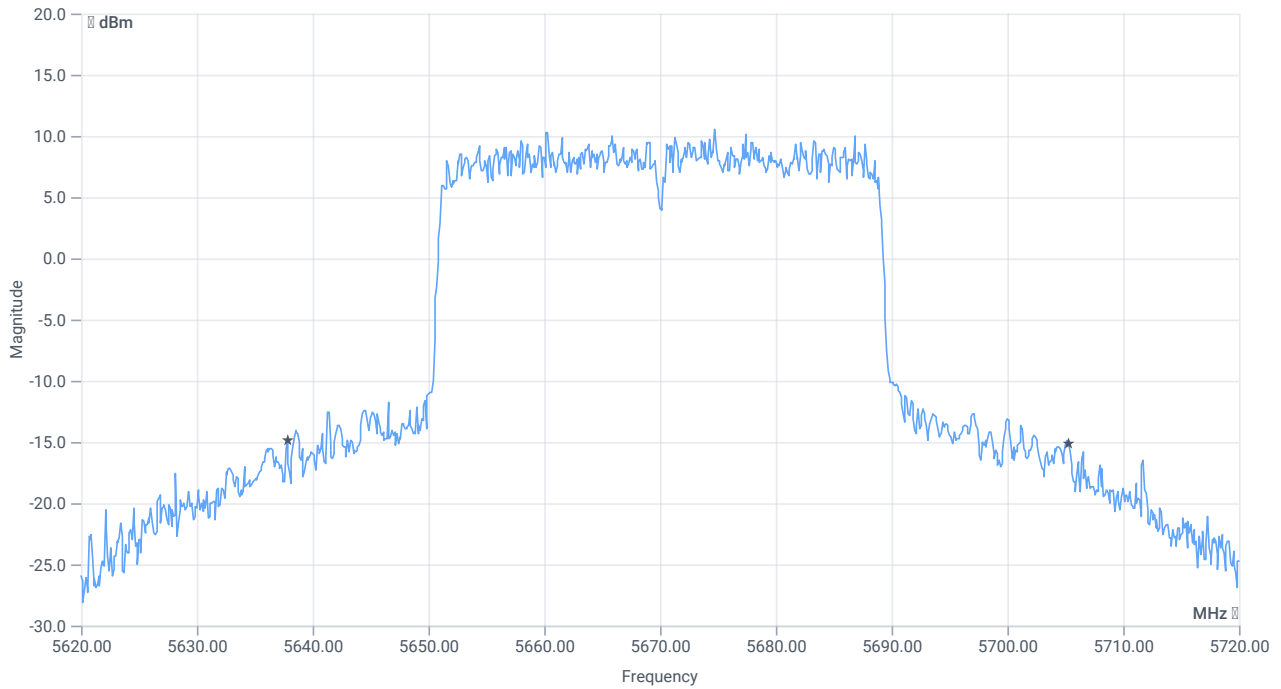




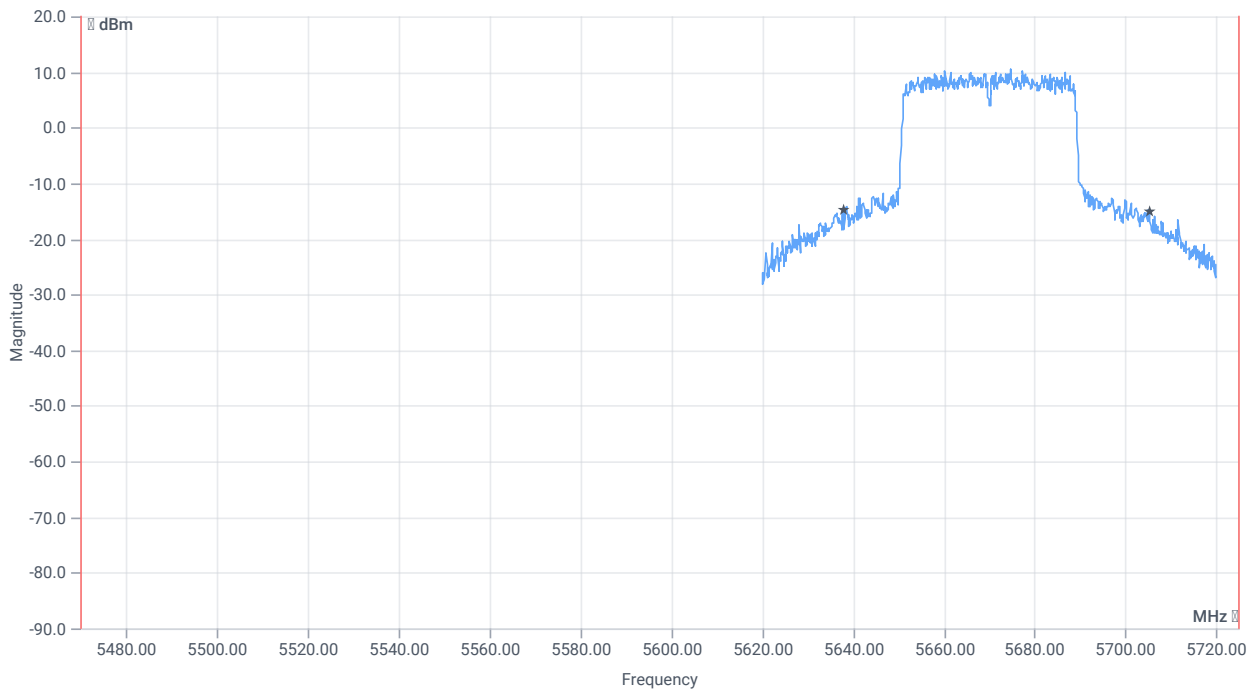
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 38.062 | MHz | INFO |
| T1 99% | 5470.000000 | -- | 5651.0190 | MHz | PASS since U-NII-3 is supported |
| T2 99% | -- | 5725.000000 | 5689.0809 | MHz | |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 67.5 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5470.000000 | -- | 5637.8000 | MHz | PASS since U-NII-3 is supported |
| T2 26dB | -- | 5725.000000 | 5705.3000 | MHz | |

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:57:30 |
| Ambit temp [°C] humidity [rel%] | 26.0 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5510 |
| Frequency mid to test | False Freq [MHz] 5590 |
| Frequency high to test | True Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5670 MHz

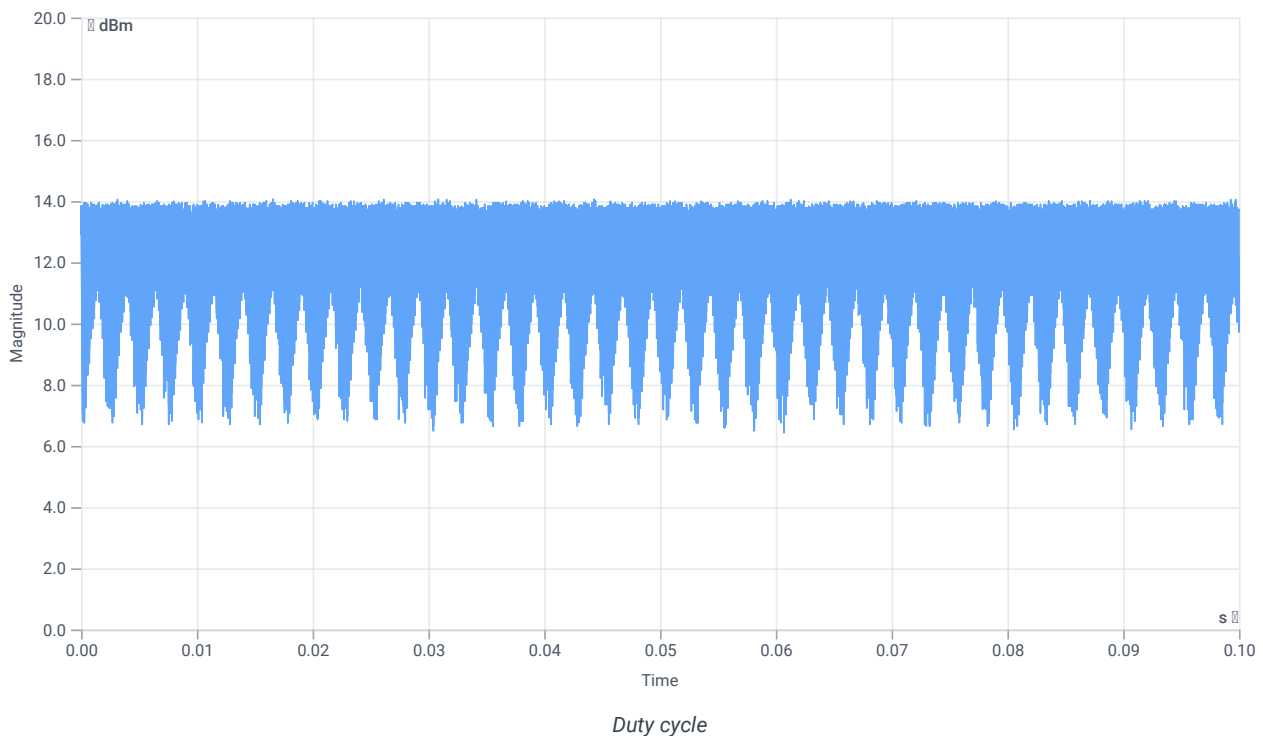
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 12.37 | dBm | INFO |
| Ref. Frequency | -- | -- | 5673.200 | MHz | INFO |

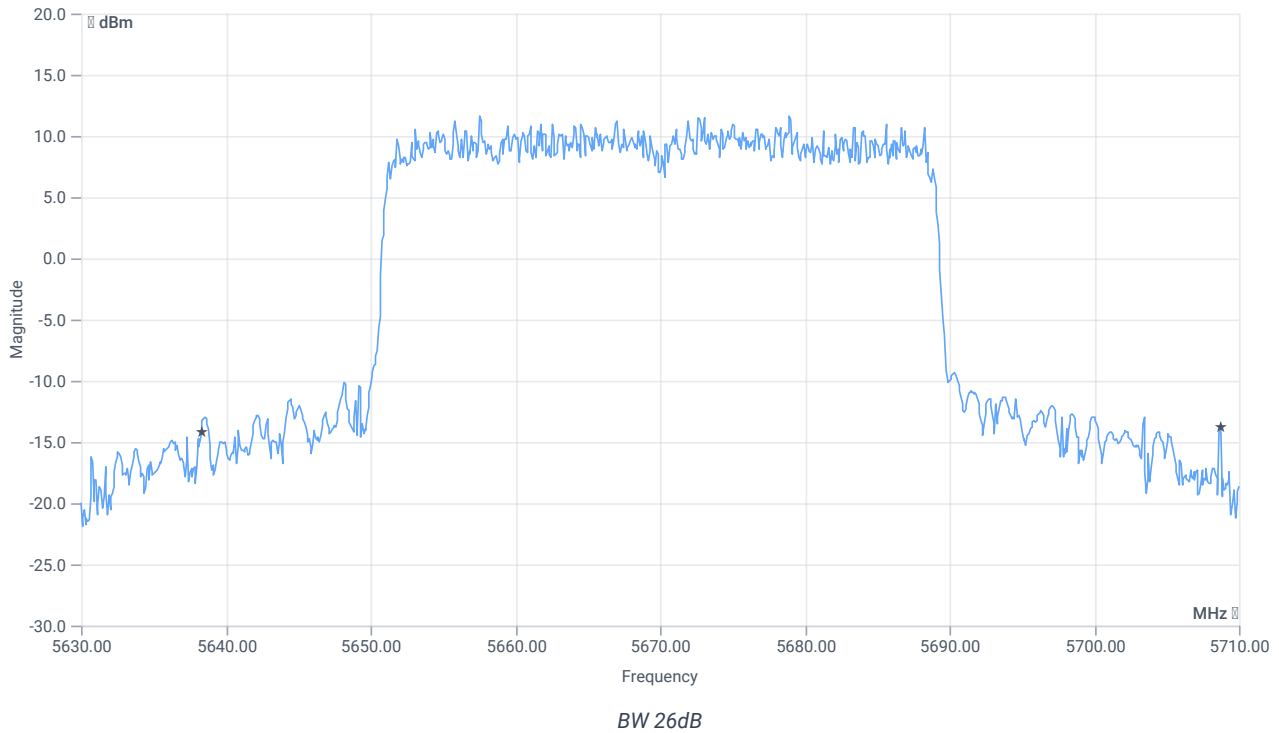
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



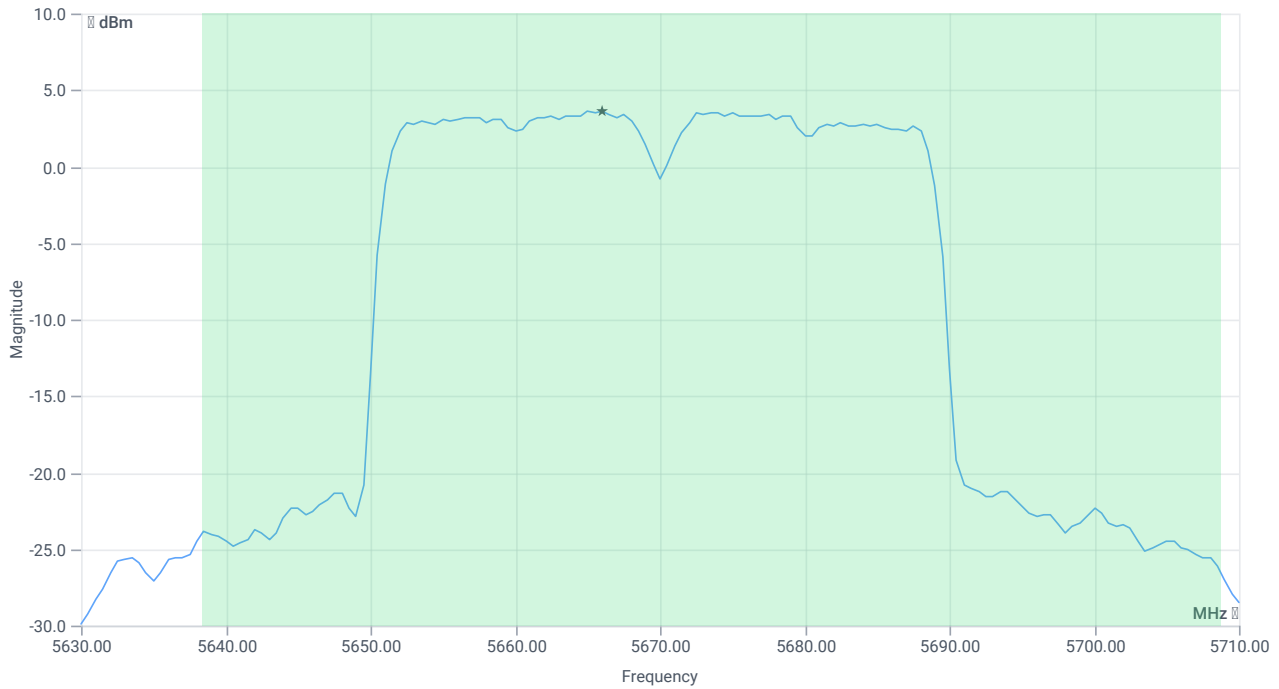
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 70.4 | MHz | INFO |
| T1 26dB | --- | --- | 5638.3200 | MHz | INFO |
| T2 26dB | --- | --- | 5708.7200 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 24.37 16.68 25 |
| Start [MHz] Stop [MHz] | 5630.000 5710.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 18.32 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 24 | 18.32 | dBm | PASS |
| Limit: 11 dBm + 10 log 70.4 | | | | | |
| Max Output Power DC corrected | -- | 29.48 | 18.32 | dBm | PASS |

Power Spectral Density

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density | -- | -- | 3.58 | dBm/1MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 11 | 3.58 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-2C

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 10:58:57 |
| Ambit temp [°C] humidity [rel%] | 26.1 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-2C |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5510 |
| Frequency mid to test | False Freq [MHz] 5590 |
| Frequency high to test | True Freq [MHz] 5670 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

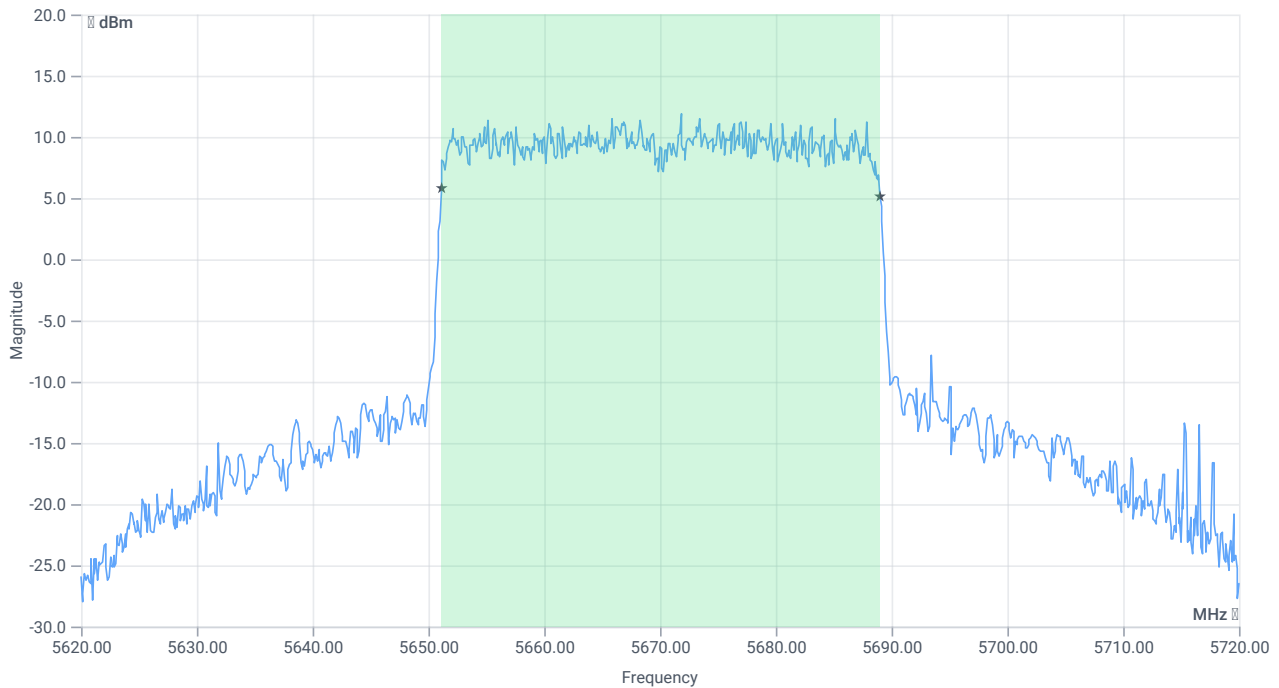
Test at TX 5670 MHz

RESULT: Reference Power cond.

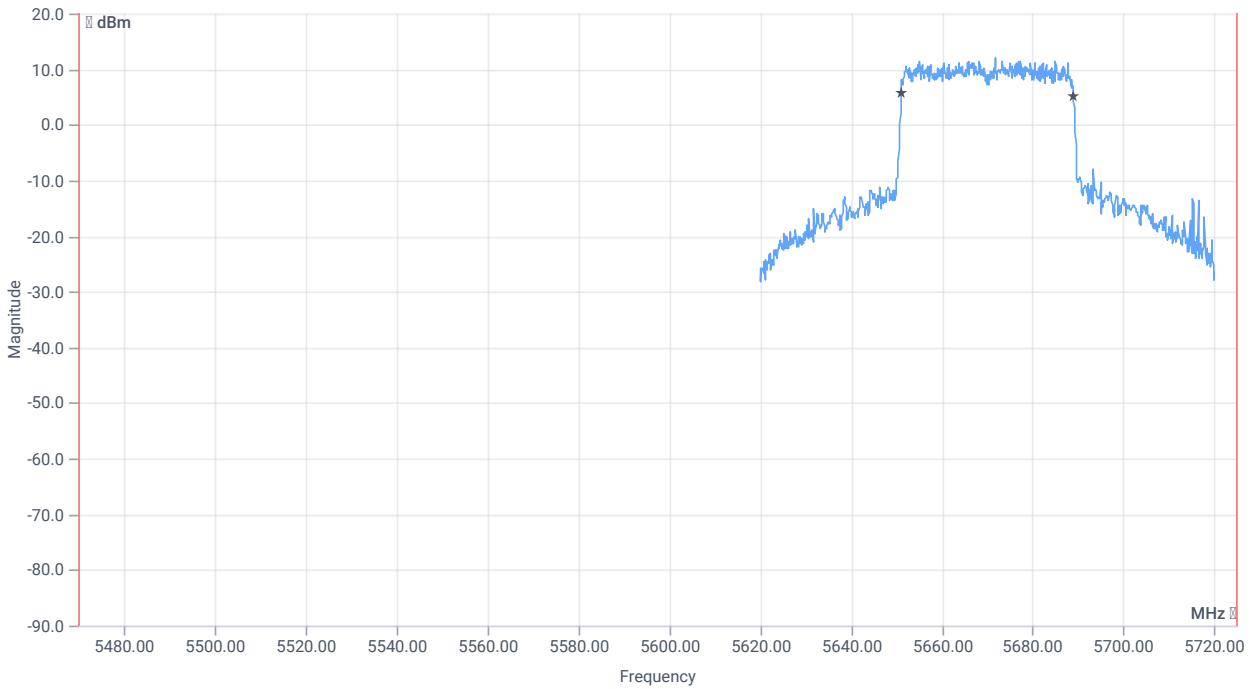
| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 12.02 | dBm | INFO |
| Ref. Frequency | -- | -- | 5666.400 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 20.02 16.68 20 |
| Start [MHz] Stop [MHz] | 5620.000 5720.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |



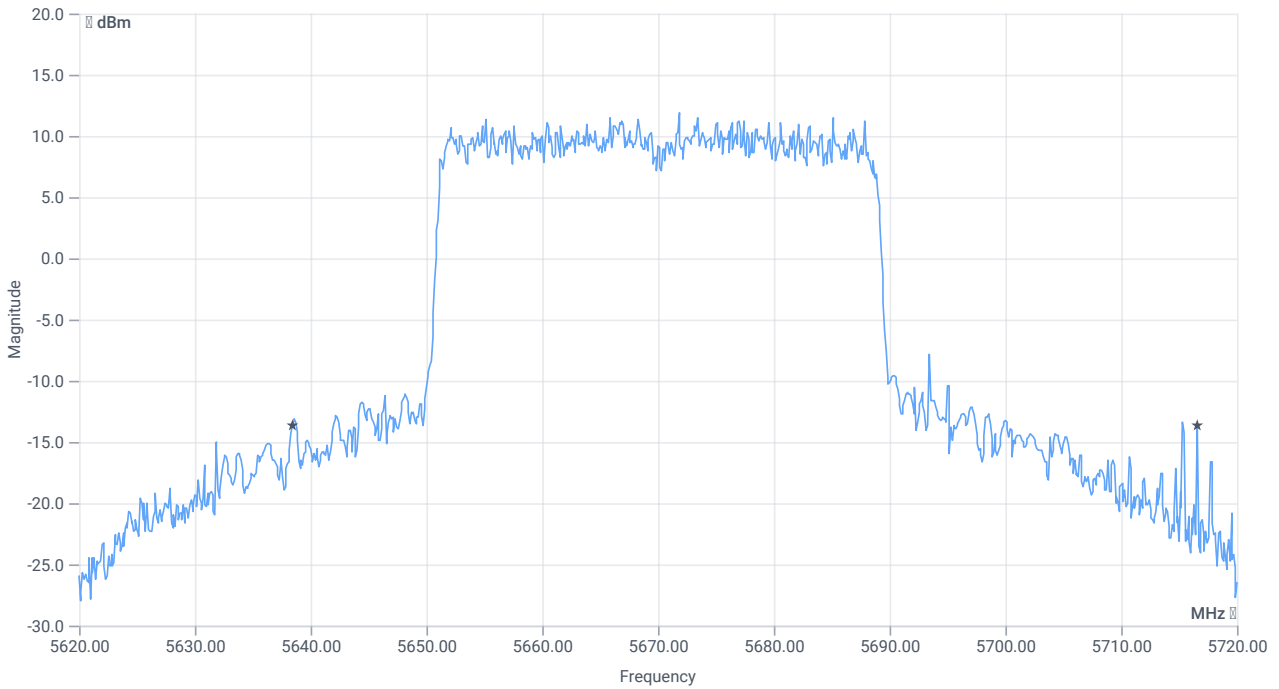
BW 99PCT



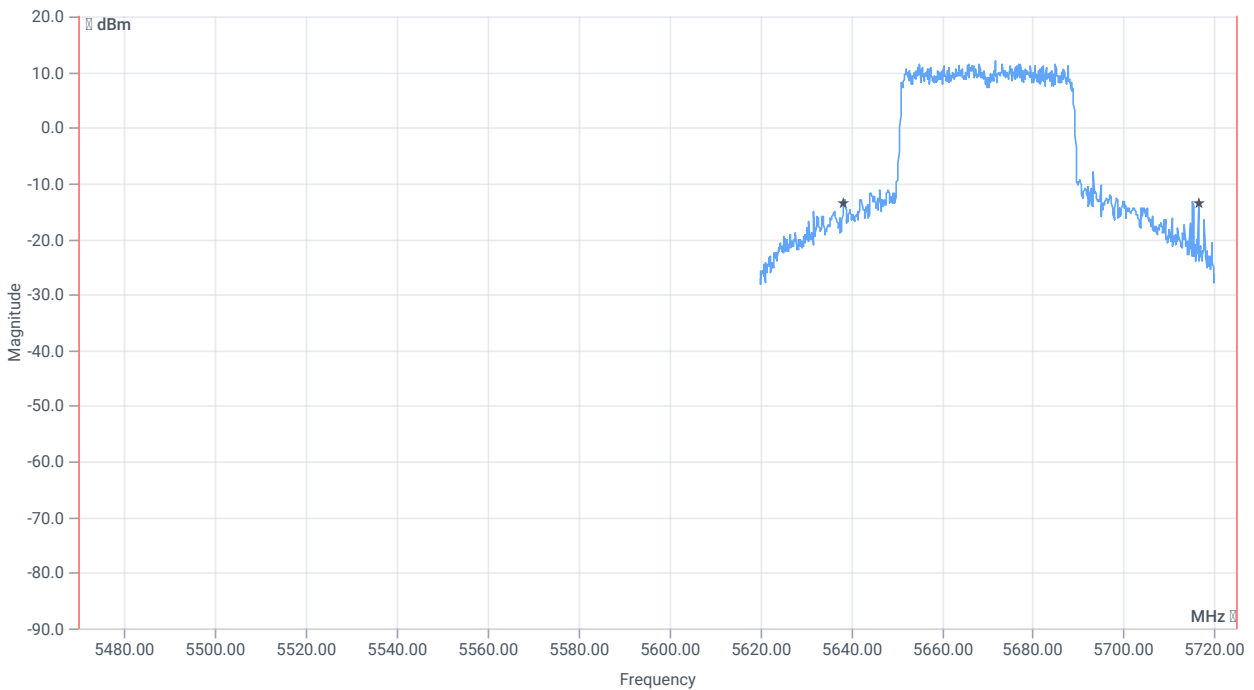
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99% | -- | -- | 37.862 | MHz | INFO |
| T1 99% | 5470.000000 | -- | 5651.1189 | MHz | PASS since U-NII-3 is supported |
| T2 99% | -- | 5725.000000 | 5688.9810 | MHz | |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|----------|------|---------|
| Bandwidth 26dB | --- | --- | 78.2 | MHz | INFO |

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|-----------|------|---------------------------------|
| T1 26dB | 5470.000000 | -- | 5638.4000 | MHz | PASS since U-NII-3 is supported |
| T2 26dB | -- | 5725.000000 | 5716.6000 | MHz | |

Verdict

PASS

Message with SA scan ~

References

| | |
|-----------------------------------|--------------------------------------|
| TC start | 12.07.2023 10:59:27 |
| Ambit temp [°C] humidity [rel%] | 26.0 56 |
| System version | 4.6.0.0 |
| Specification | - |
| Method | |
| Description | Message with SA Scan ax-HE40 U-NII-3 |
| Information | |

Test Parameter

| | |
|---------------|--|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer |
| Message start | 12.07.2023 10:59:27 |
| Message | set WLAN5Gx to ax-HE40 U-NII-3, Frequency [MHz] 5755 , |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 11:09:36 |
| Ambit temp [°C] humidity [rel%] | 26.1 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5755 MHz

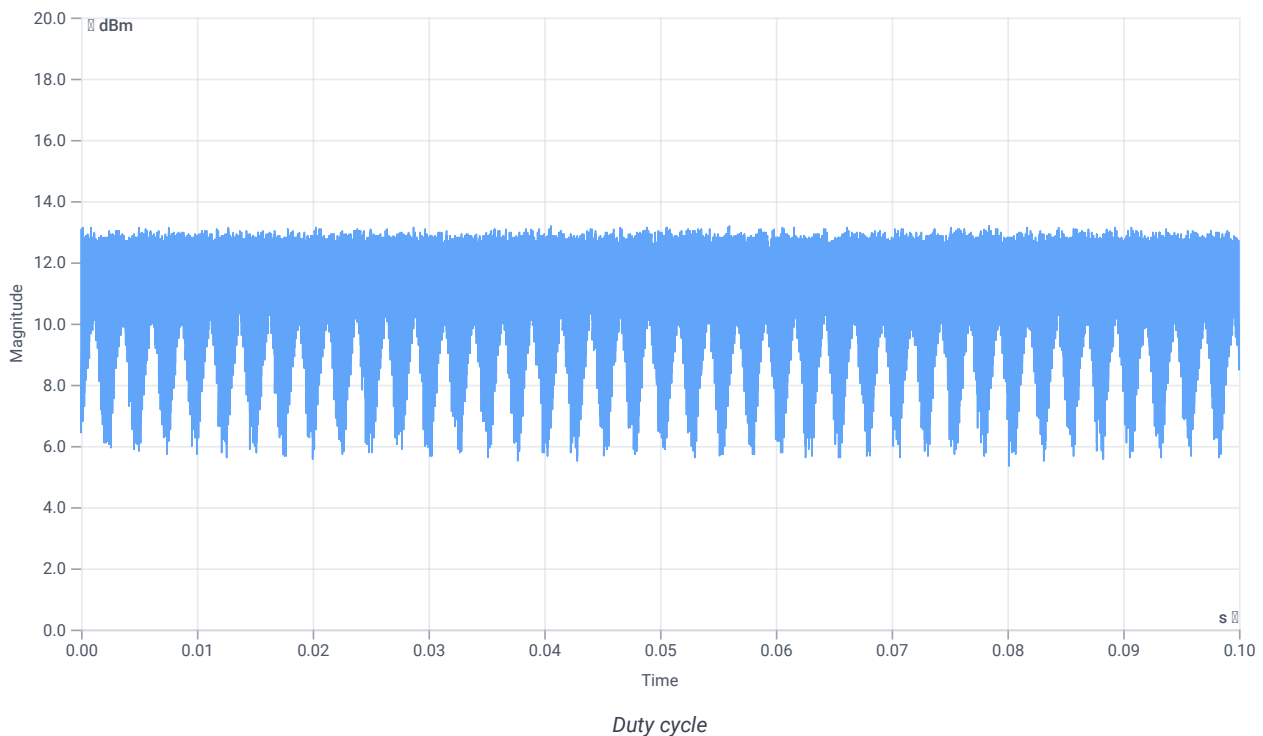
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 11.87 | dBm | INFO |
| Ref. Frequency | -- | -- | 5757.600 | MHz | INFO |

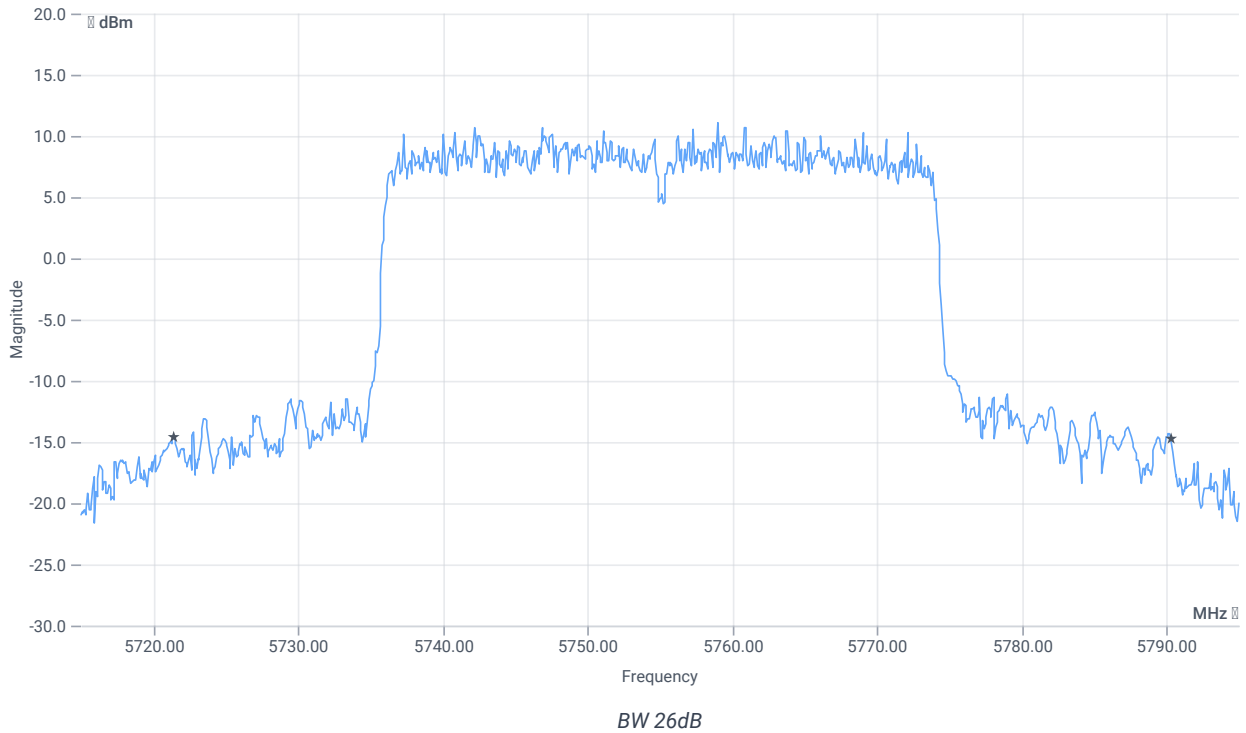
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



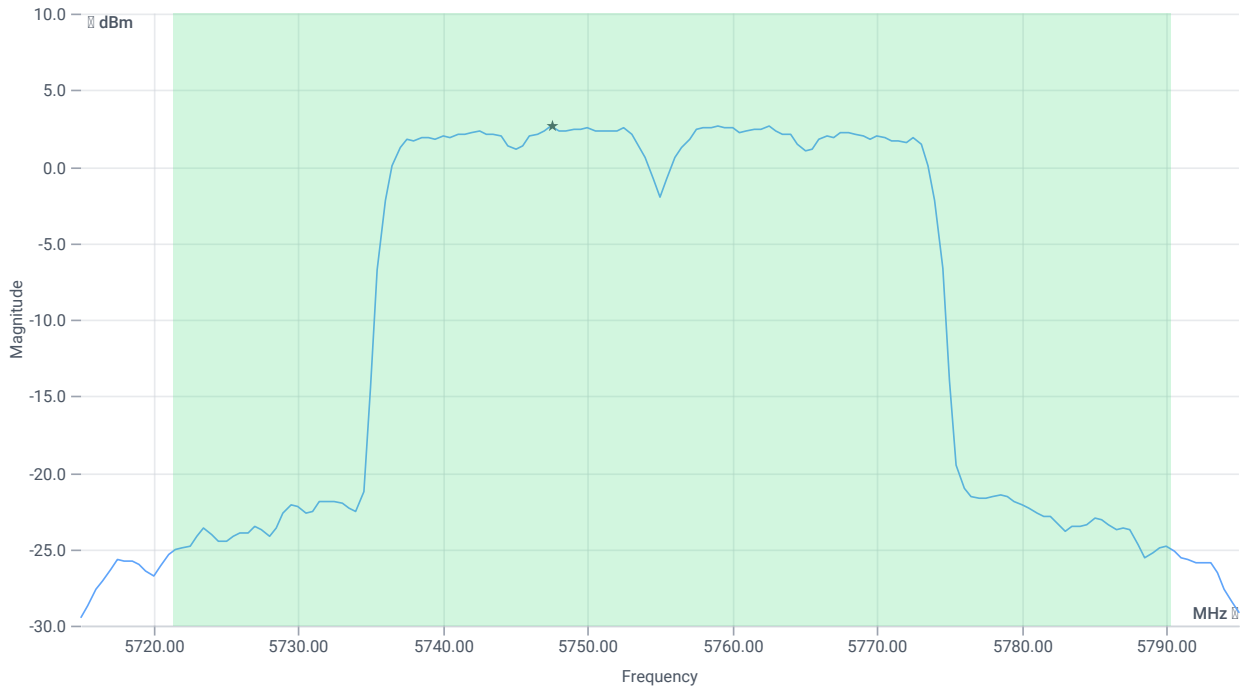
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 68.88 | MHz | INFO |
| T1 26dB | --- | --- | 5721.4000 | MHz | INFO |
| T2 26dB | --- | --- | 5790.2800 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 23.87 16.77 25 |
| Start [MHz] Stop [MHz] | 5715.000 5795.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

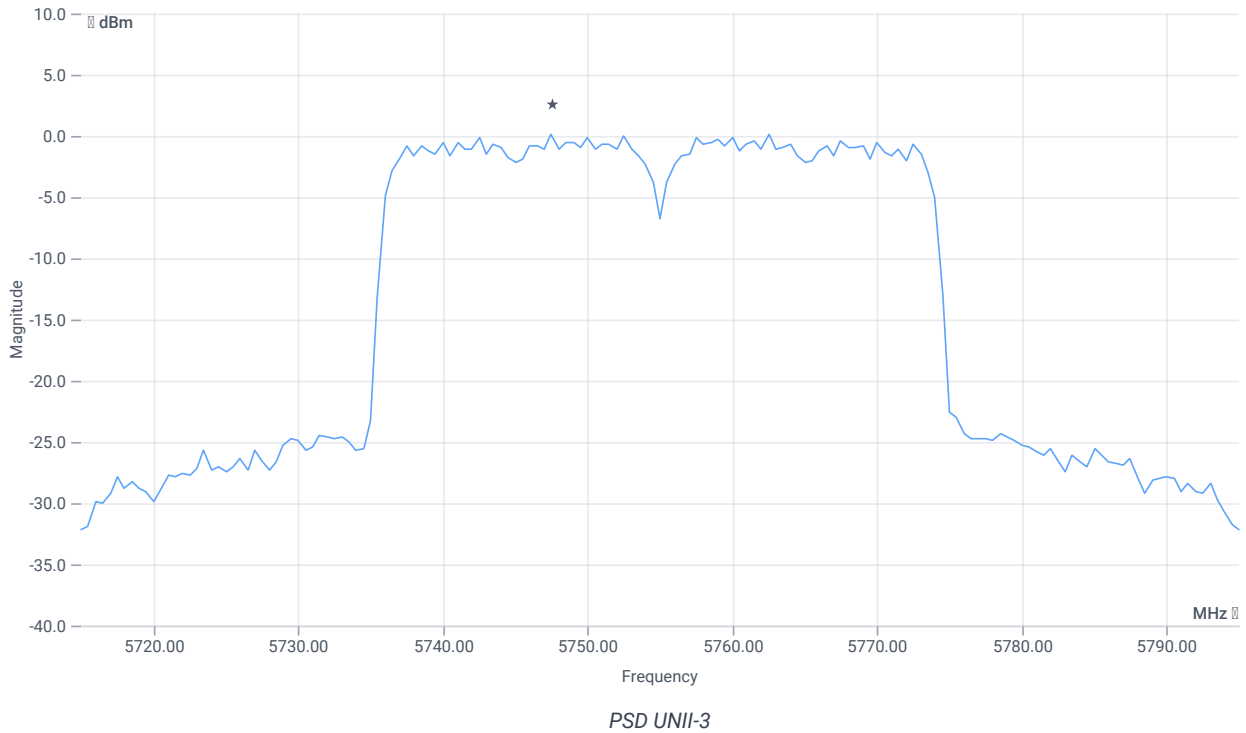
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 17.39 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 30 | 17.39 | dBm | PASS |
| Limit: 11 dBm + 10 log 68.88 | | | | | |
| Max Output Power DC corrected | -- | 29.38 | 17.39 | dBm | na |

Power Spectral Density U-NII-3

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 23.87 16.77 25 |
| Start [MHz] Stop [MHz] | 5715.000 5795.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density | -- | -- | 0.13 | dBm/0.5MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 30 | 0.13 | dBm/0.5MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 11:11:59 |
| Ambit temp [°C] humidity [rel%] | 26.1 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

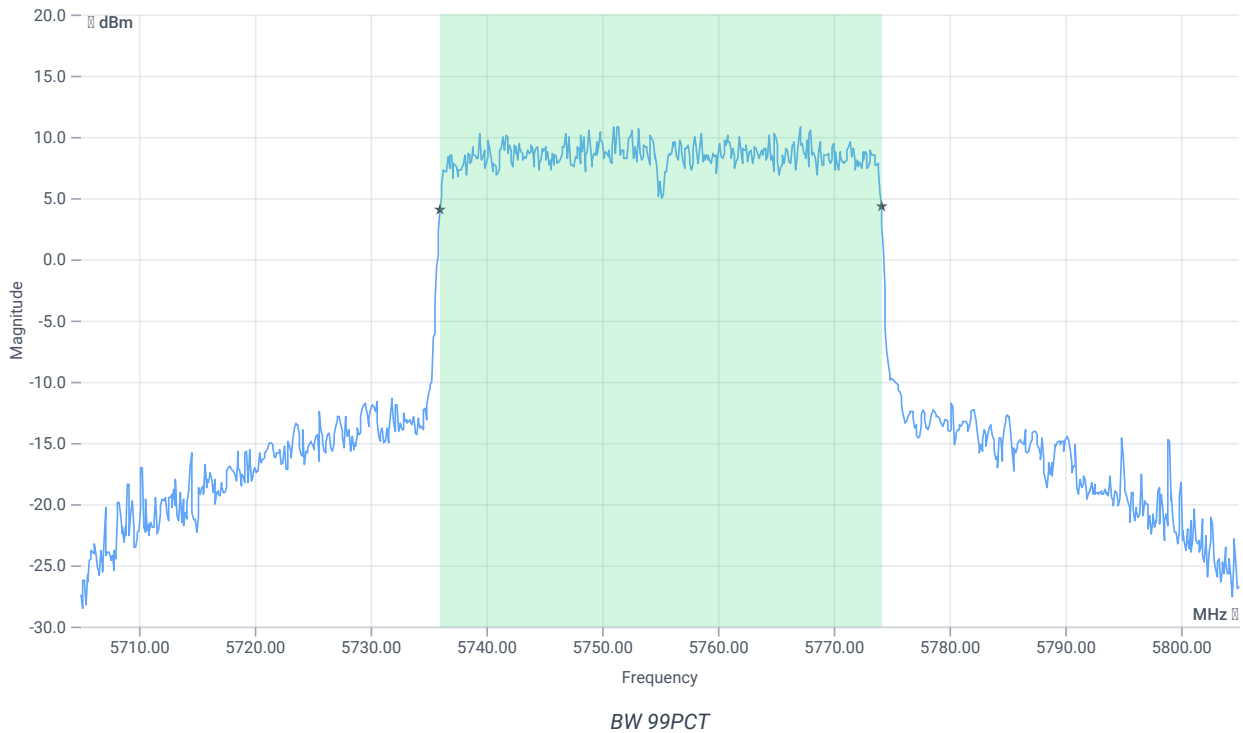
Test at TX 5755 MHz

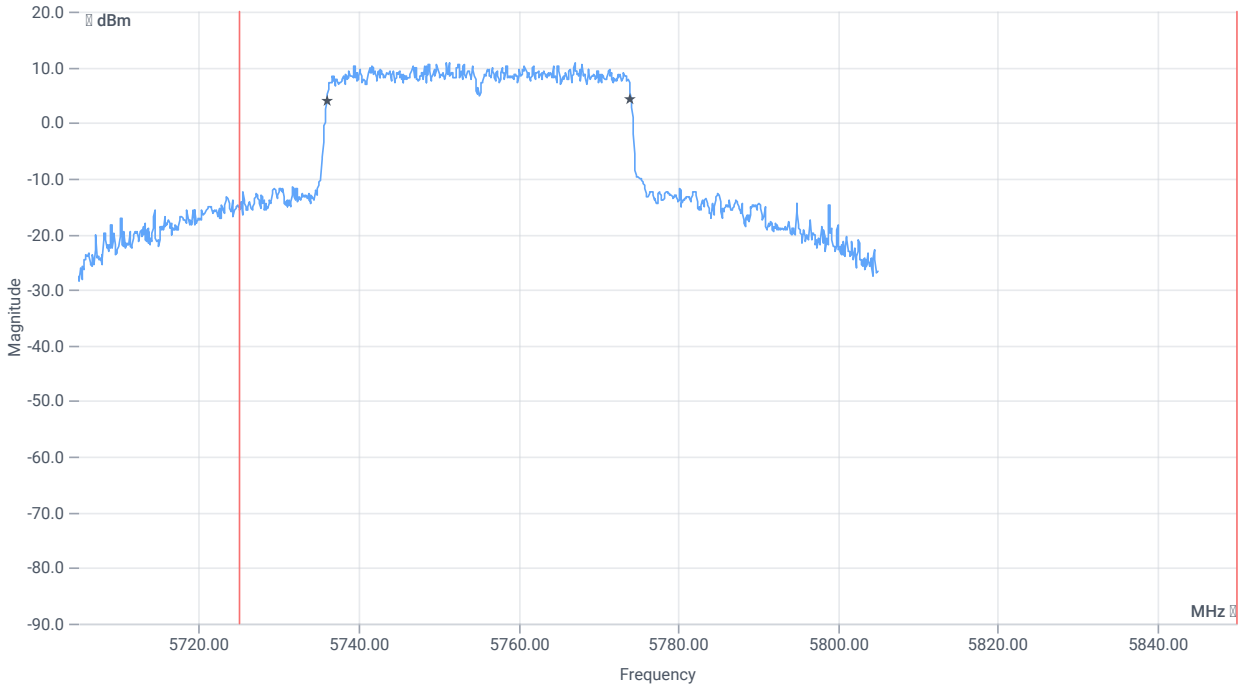
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 11.59 | dBm | INFO |
| Ref. Frequency | -- | -- | 5760.390 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 19.59 16.77 20 |
| Start [MHz] Stop [MHz] | 5705.000 5805.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

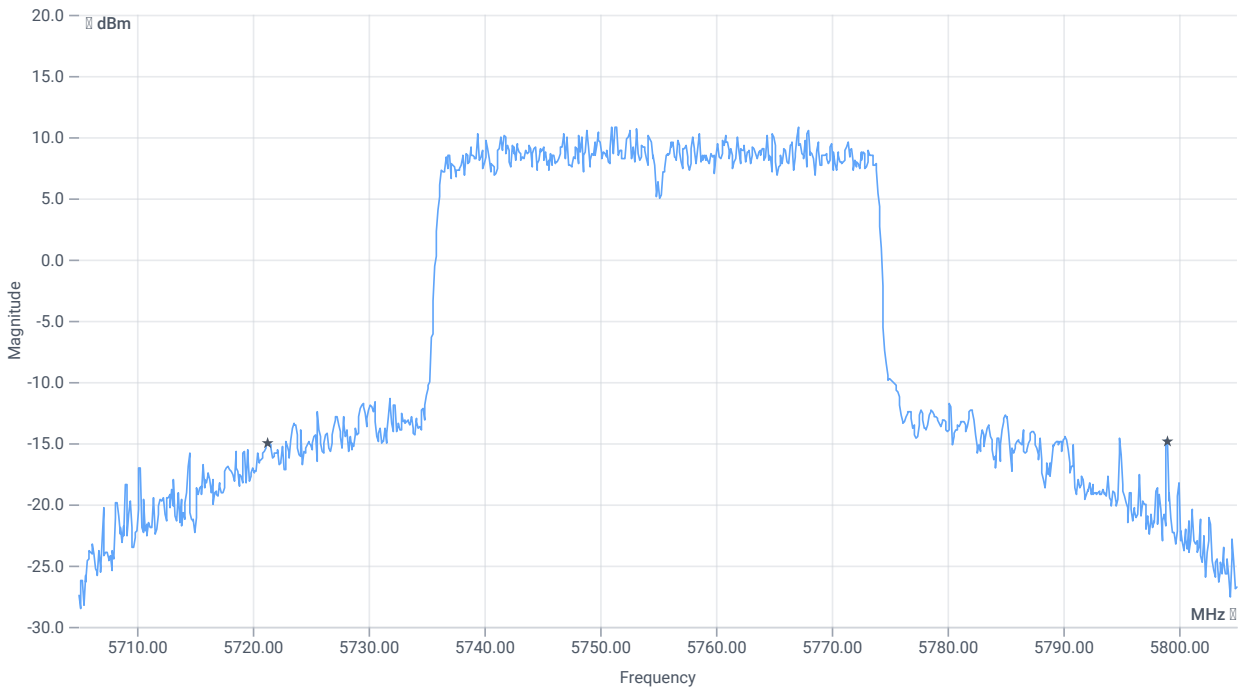




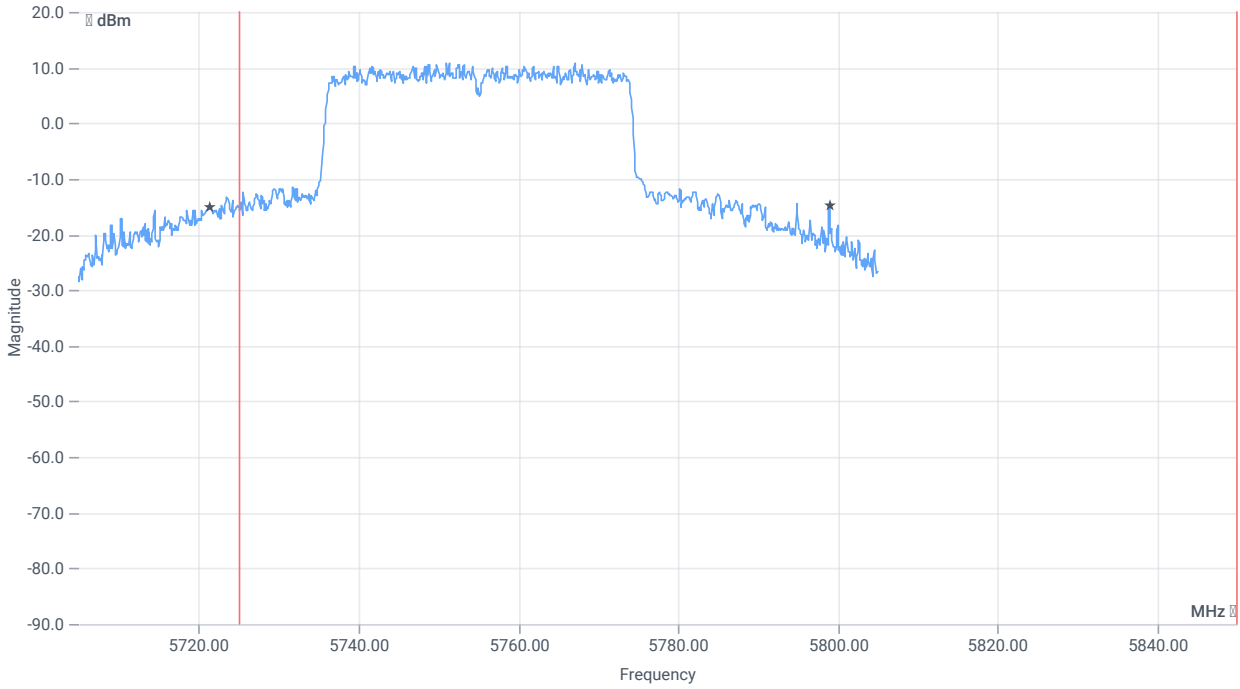
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | -- | -- | 38.062 | MHz | INFO |
| T1 99% | 5725.000000 | -- | 5736.0190 | MHz | PASS |
| T2 99% | -- | 5850.000000 | 5774.0809 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|--------------|
| Bandwidth 26dB | -- | -- | 77.7 | MHz | INFO |
| T1 26dB | 5725.000000 | -- | 5721.3000 | MHz | DFS required |
| T2 26dB | -- | 5850.000000 | 5799.0000 | MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 11:12:30 |
| Ambit temp [°C] humidity [rel%] | 26.1 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | KDB789033 D02, C.2. |
| Description | FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

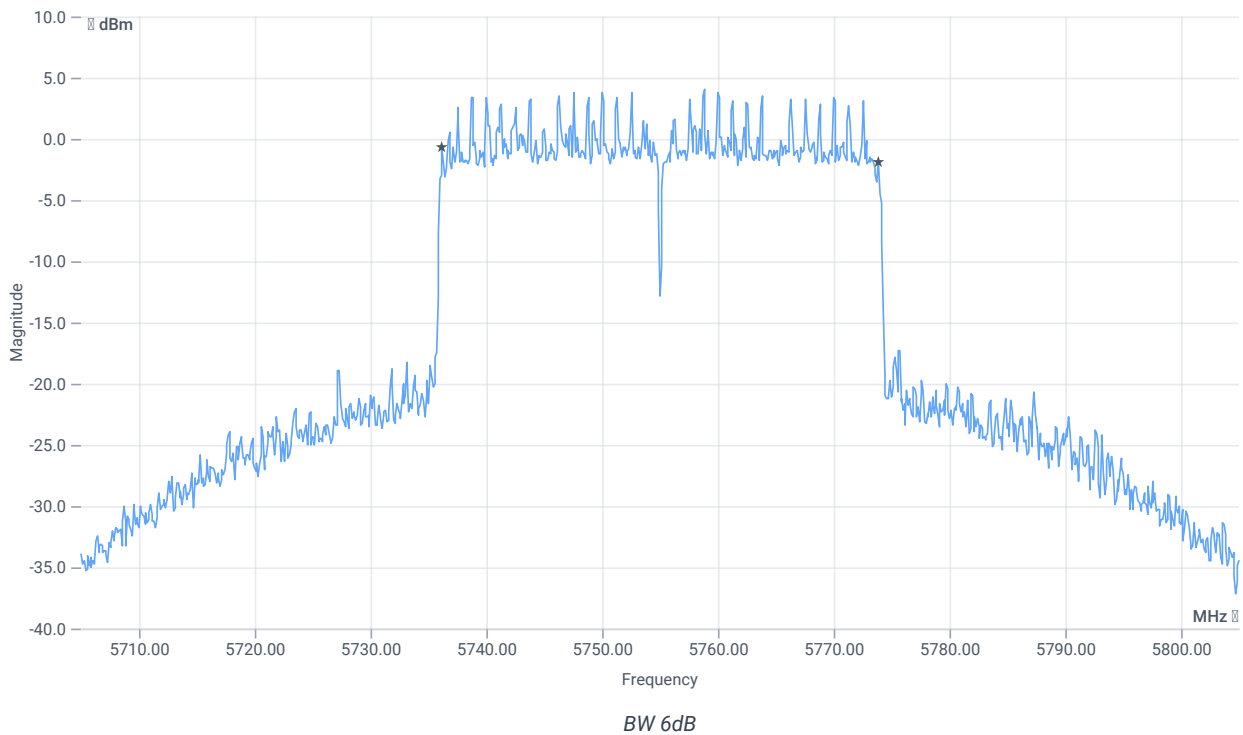
Test at TX 5755 MHz

RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 11.72 | dBm | INFO |
| Ref. Frequency | -- | -- | 5750.000 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 23.72 16.77 25 |
| Start [MHz] Stop [MHz] | 5705.000 5805.000 |
| RBW [MHz] VBW [MHz] | 0.100000 0.300000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 2 1500 1001 SWE |



RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-----------------|-------------|-------------|----------|------|---------|
| Bandwidth (6dB) | 0.500 | -- | 37.7 | MHz | PASS |

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 11:12:55 |
| Ambit temp [°C] humidity [rel%] | 26.1 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5755 MHz

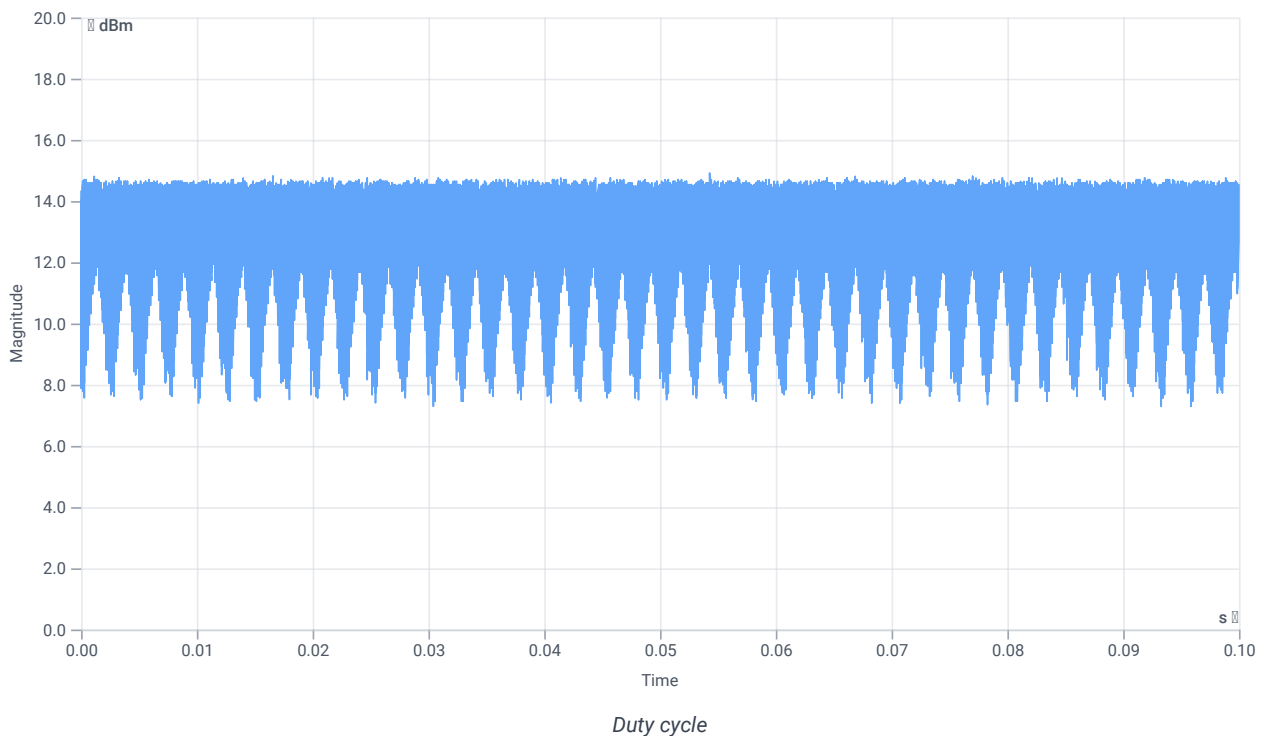
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 14.63 | dBm | INFO |
| Ref. Frequency | -- | -- | 5743.610 | MHz | INFO |

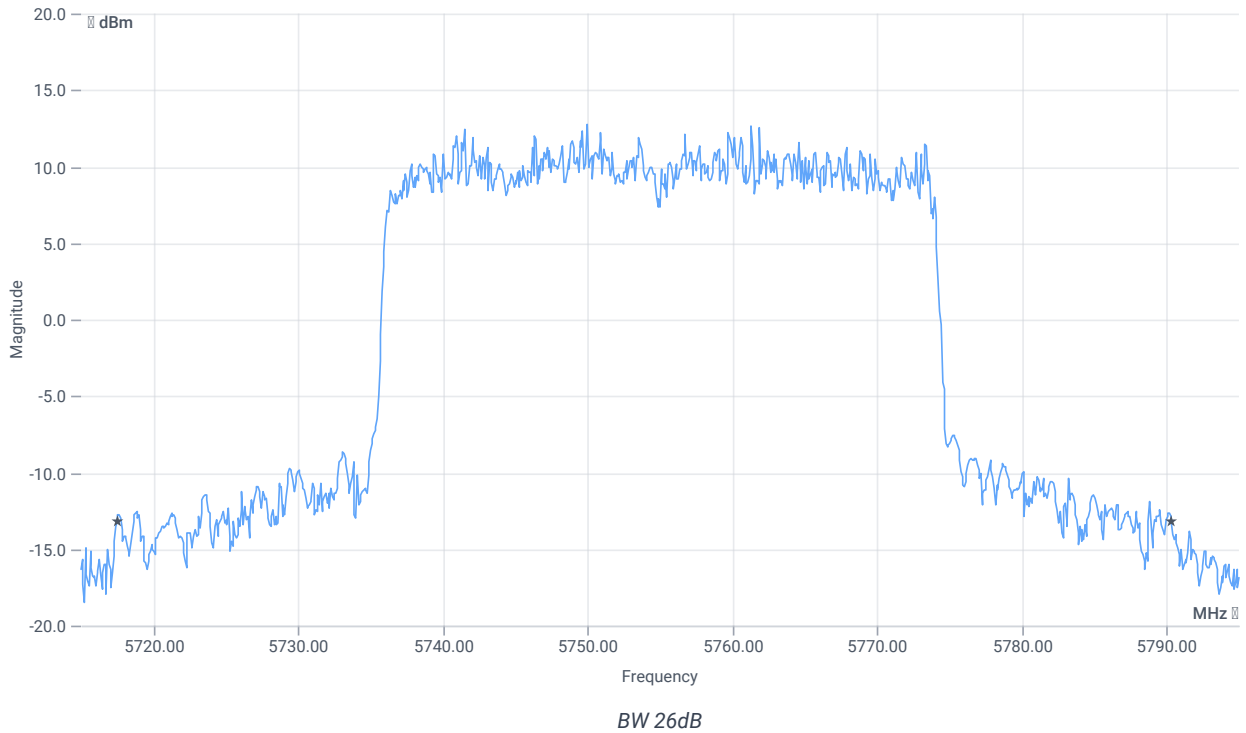
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



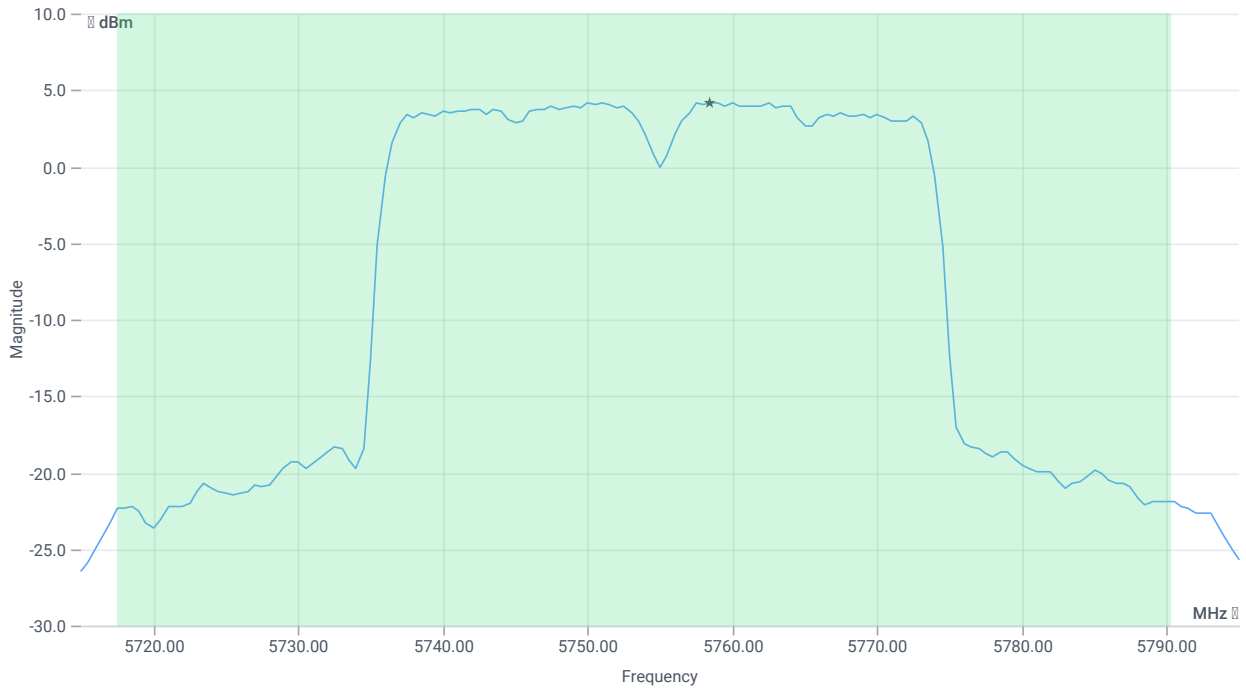
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 72.88 | MHz | INFO |
| T1 26dB | --- | --- | 5717.4800 | MHz | INFO |
| T2 26dB | --- | --- | 5790.3600 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 26.63 16.77 25 |
| Start [MHz] Stop [MHz] | 5715.000 5795.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

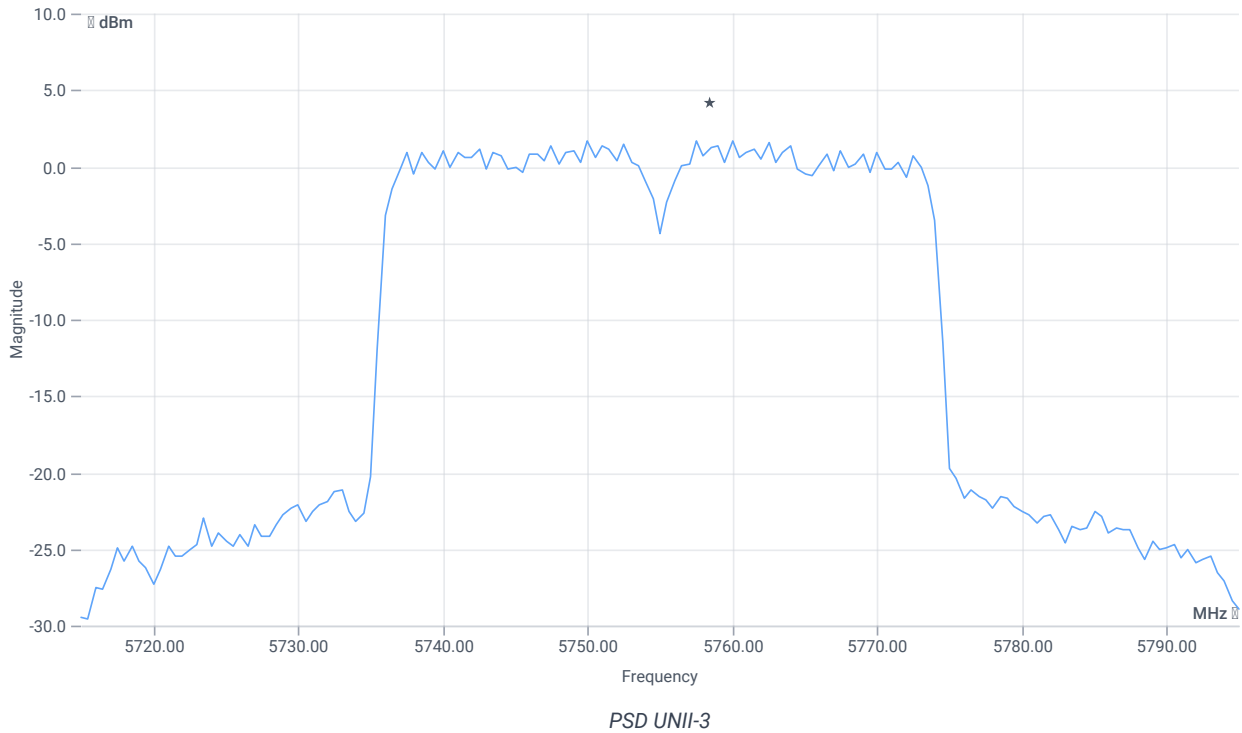
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 18.94 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 30 | 18.94 | dBm | PASS |
| Limit: 11 dBm + 10 log 72.88 | | | | | |
| Max Output Power DC corrected | -- | 29.63 | 18.94 | dBm | na |

Power Spectral Density U-NII-3

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 26.63 16.77 25 |
| Start [MHz] Stop [MHz] | 5715.000 5795.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density | -- | -- | 1.66 | dBm/0.5MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 30 | 1.66 | dBm/0.5MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 11:15:18 |
| Ambit temp [°C] humidity [rel%] | 26.2 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

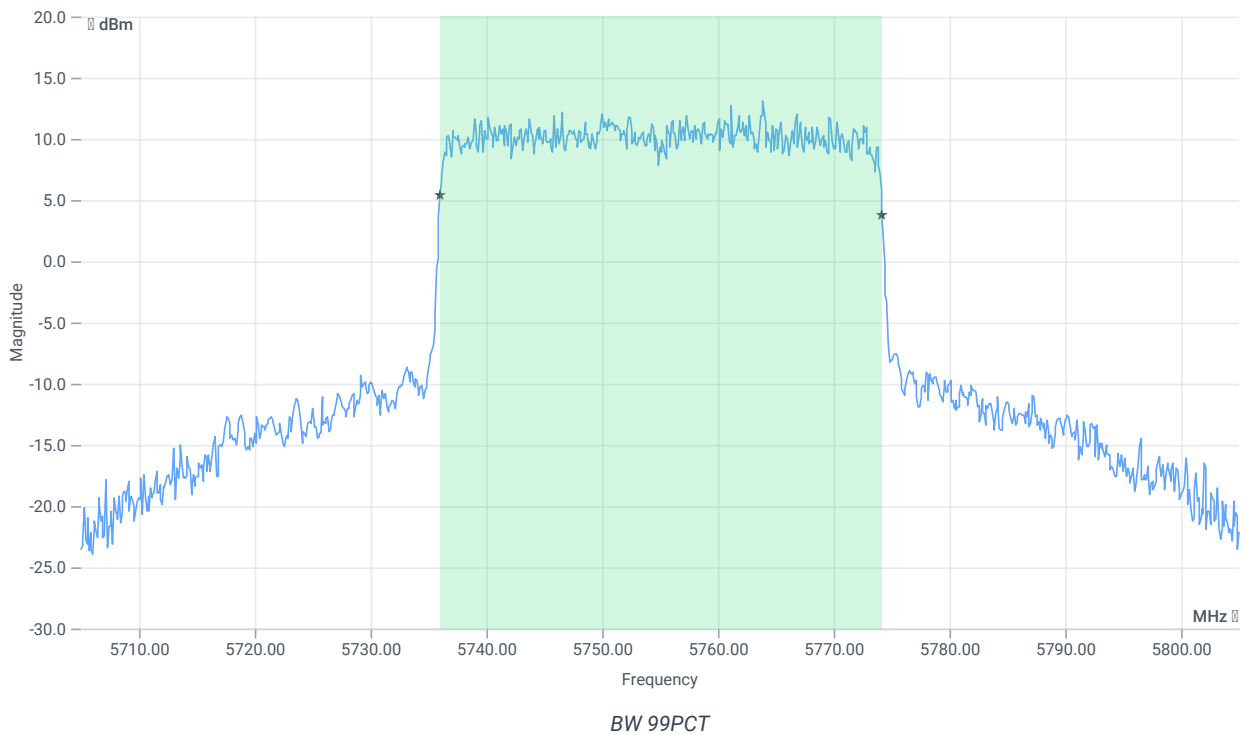
Test at TX 5755 MHz

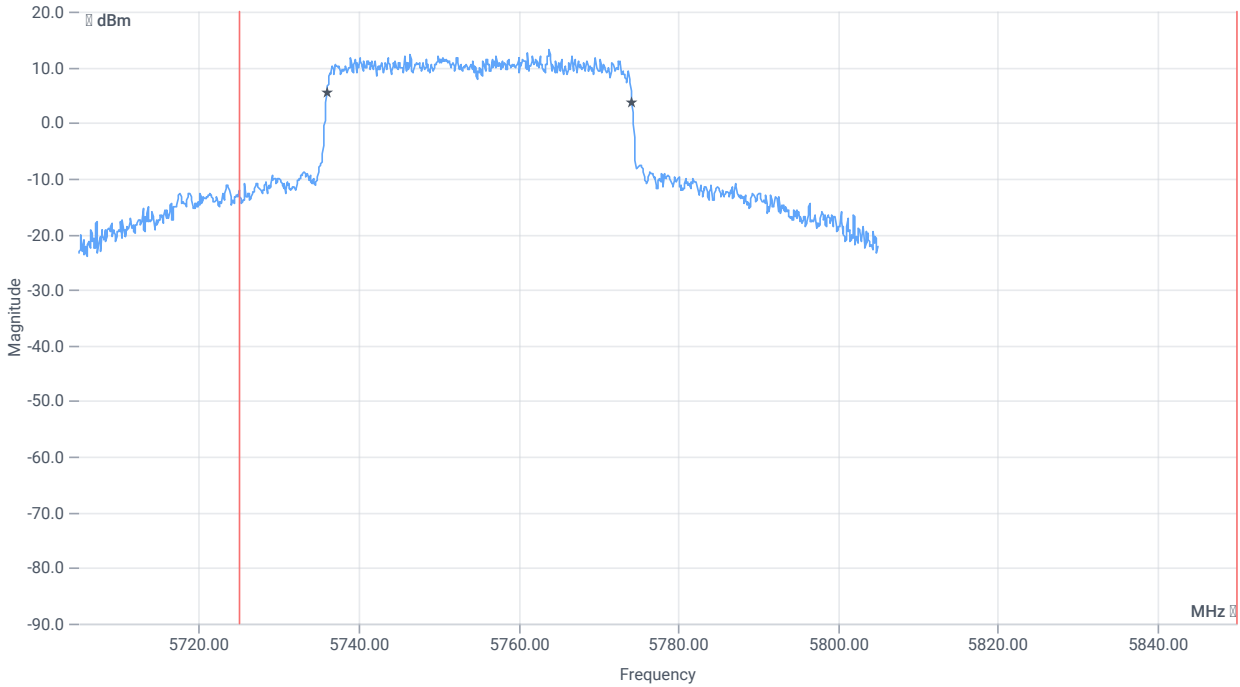
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 14.23 | dBm | INFO |
| Ref. Frequency | -- | -- | 5760.990 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 22.23 16.77 25 |
| Start [MHz] Stop [MHz] | 5705.000 5805.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

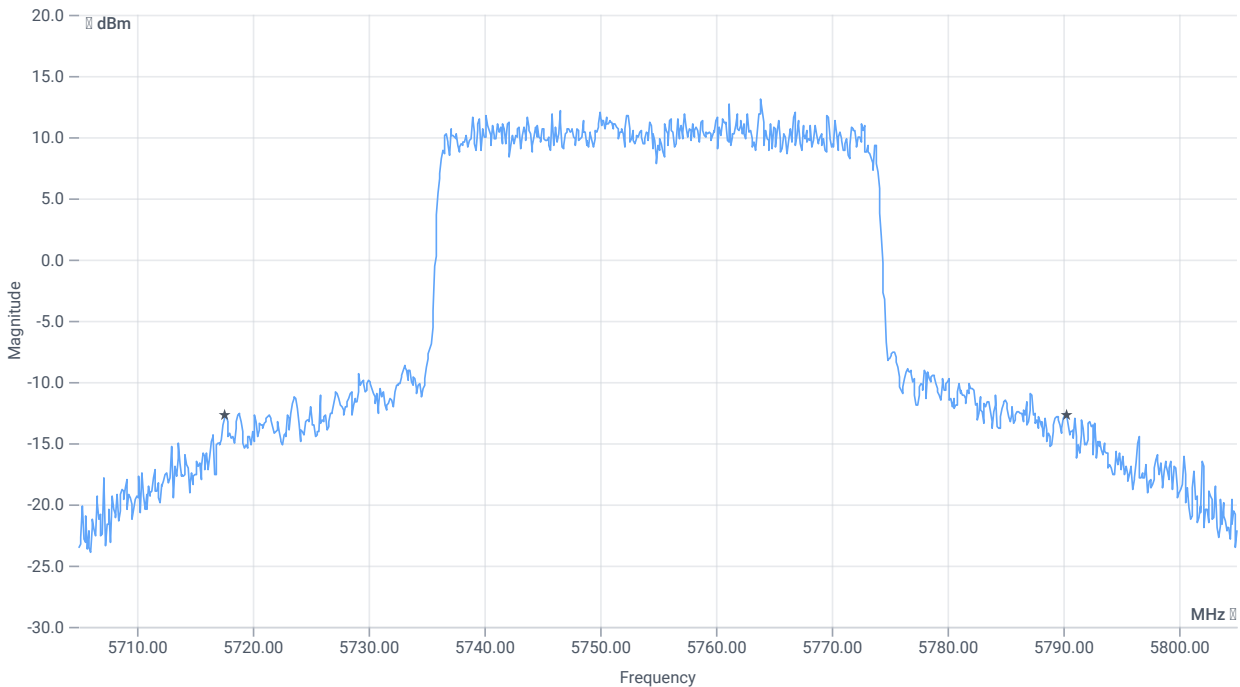




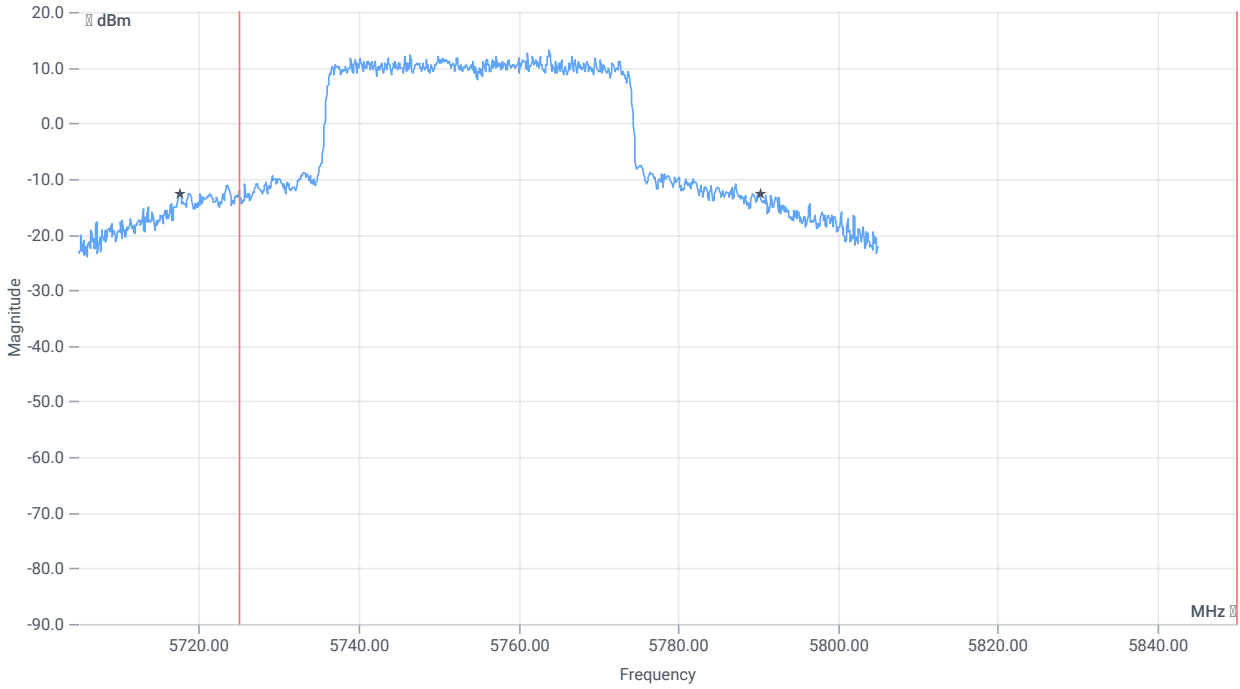
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | -- | -- | 38.162 | MHz | INFO |
| T1 99% | 5725.000000 | -- | 5736.0190 | MHz | PASS |
| T2 99% | -- | 5850.000000 | 5774.1808 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|--------------|
| Bandwidth 26dB | -- | -- | 72.7 | MHz | INFO |
| T1 26dB | 5725.000000 | -- | 5717.6000 | MHz | DFS required |
| T2 26dB | -- | 5850.000000 | 5790.3000 | MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 11:15:49 |
| Ambit temp [°C] humidity [rel%] | 26.2 56 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | KDB789033 D02, C.2. |
| Description | FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | False Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

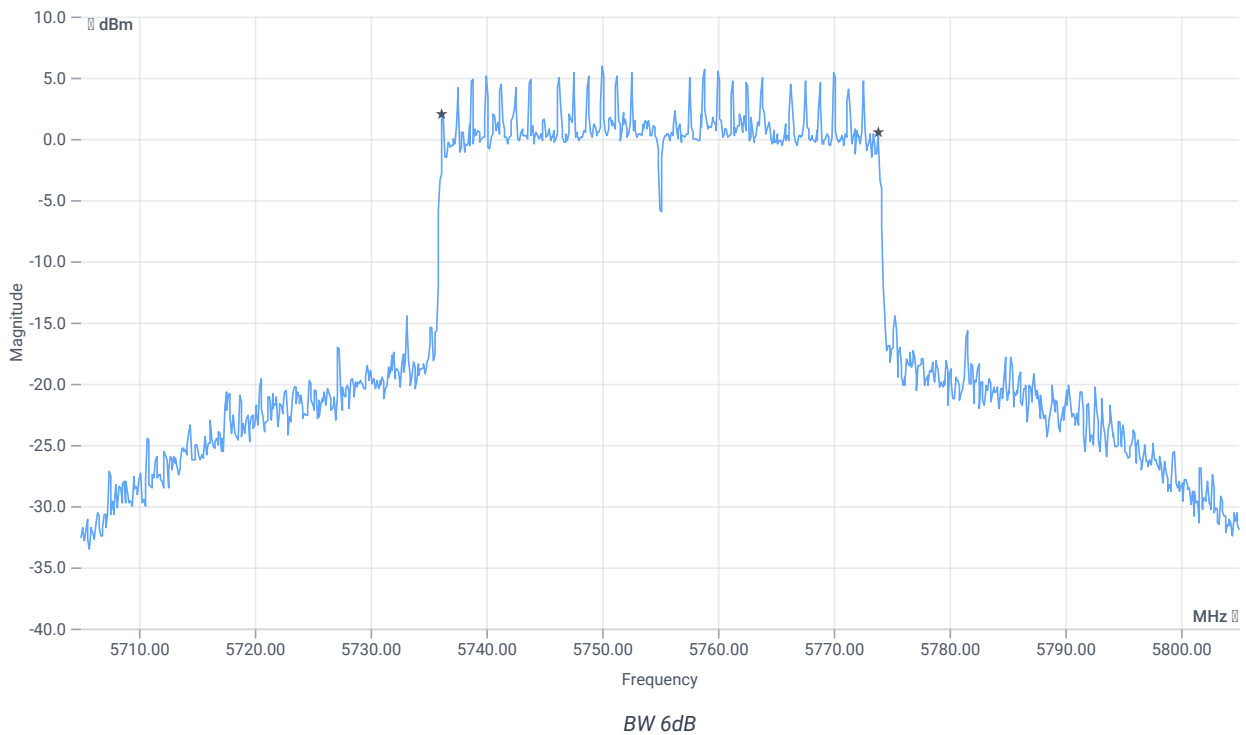
Test at TX 5755 MHz

RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 14.08 | dBm | INFO |
| Ref. Frequency | -- | -- | 5756.200 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 26.08 16.77 25 |
| Start [MHz] Stop [MHz] | 5705.000 5805.000 |
| RBW [MHz] VBW [MHz] | 0.100000 0.300000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 2 1500 1001 SWE |



RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-----------------|-------------|-------------|----------|------|---------|
| Bandwidth (6dB) | 0.500 | -- | 37.6 | MHz | PASS |

Verdict

PASS

Message with SA scan ~

References

| | |
|-----------------------------------|--------------------------------------|
| TC start | 12.07.2023 11:16:13 |
| Ambit temp [°C] humidity [rel%] | 26.2 56 |
| System version | 4.6.0.0 |
| Specification | - |
| Method | |
| Description | Message with SA Scan ax-HE40 U-NII-3 |
| Information | |

Test Parameter

| | |
|---------------|--|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer |
| Message start | 12.07.2023 11:16:13 |
| Message | set WLAN5Gx to ax-HE40 U-NII-3, Frequency [MHz] 5795 |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Verdict

INFO

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 11:22:47 |
| Ambit temp [°C] humidity [rel%] | 26.2 55 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5795 MHz

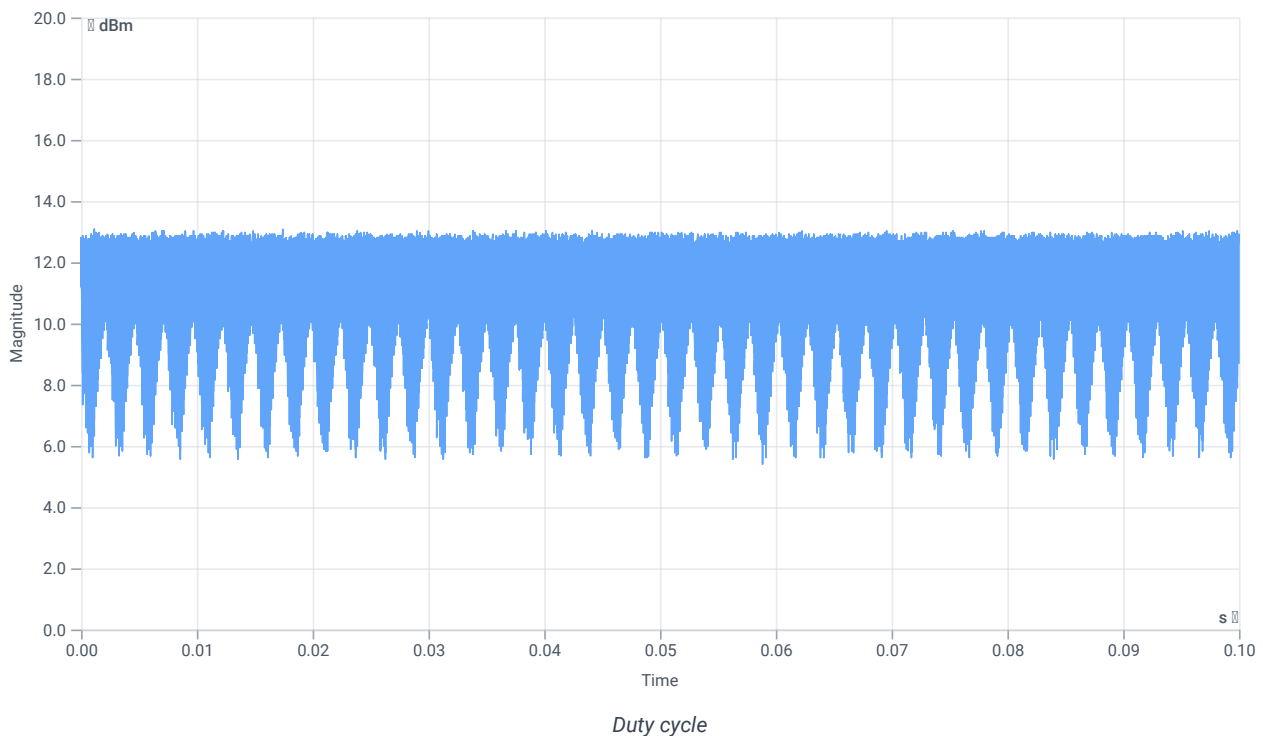
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 11.42 | dBm | INFO |
| Ref. Frequency | -- | -- | 5799.200 | MHz | INFO |

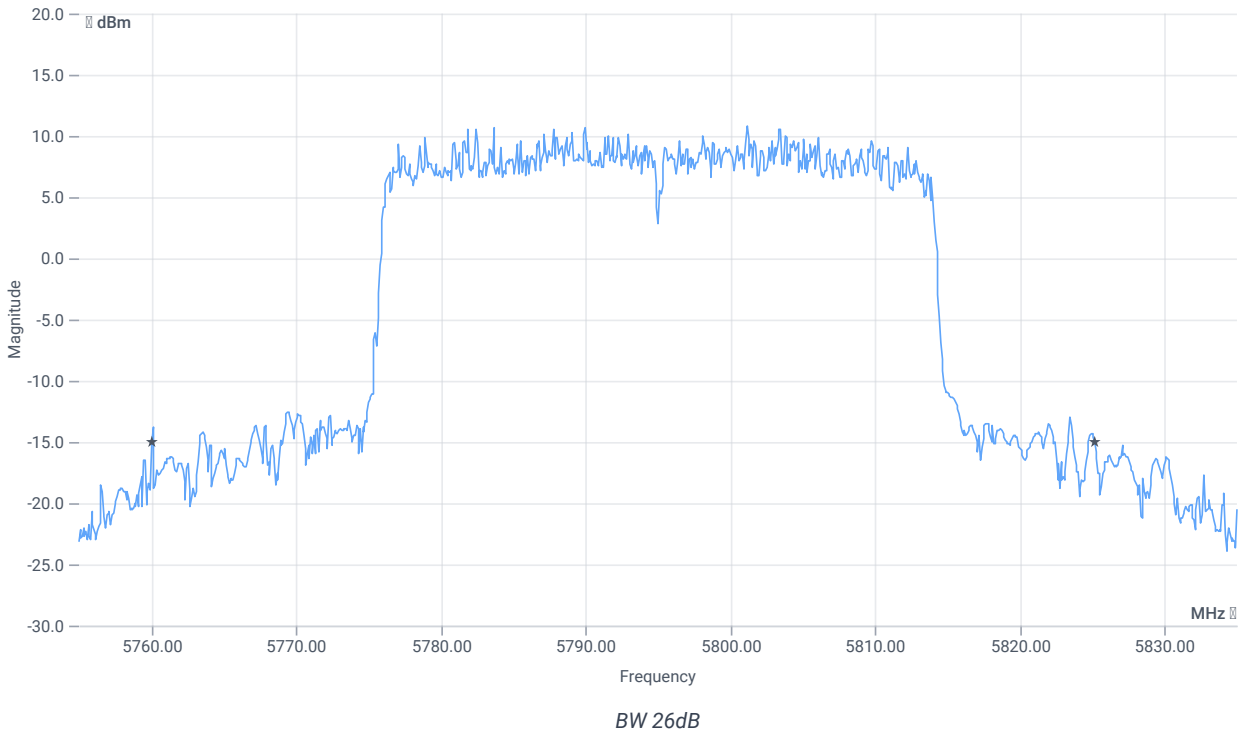
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



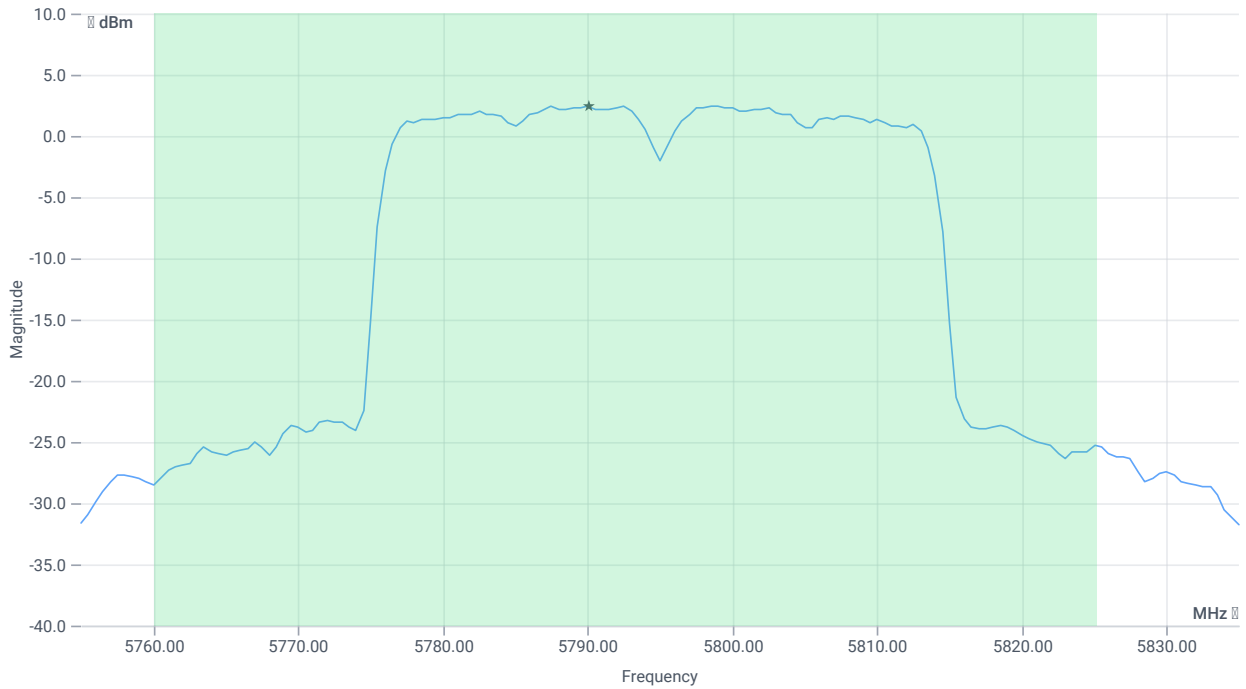
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 65.12 | MHz | INFO |
| T1 26dB | --- | --- | 5760.0400 | MHz | INFO |
| T2 26dB | --- | --- | 5825.1600 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 23.42 16.67 25 |
| Start [MHz] Stop [MHz] | 5755.000 5835.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

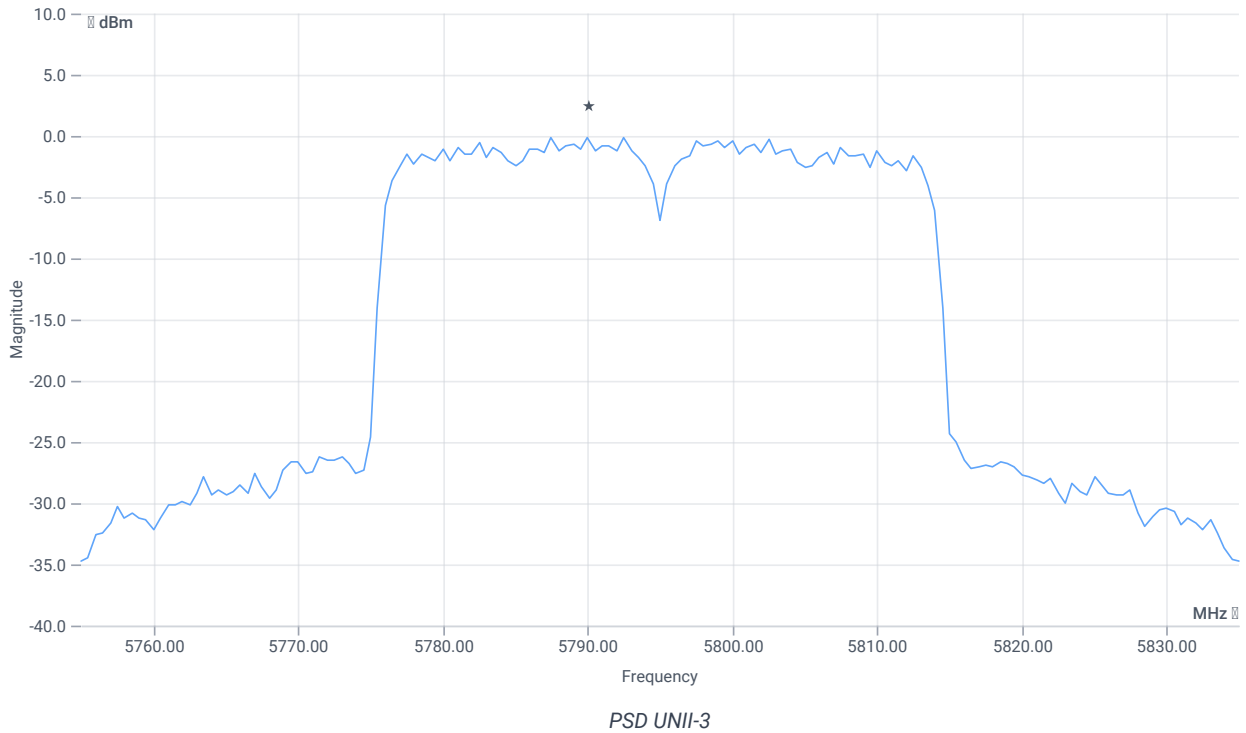
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 17.02 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 30 | 17.02 | dBm | PASS |
| Limit: 11 dBm + 10 log 65.12 | | | | | |
| Max Output Power DC corrected | -- | 29.14 | 17.02 | dBm | na |

Power Spectral Density U-NII-3

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 23.42 16.67 25 |
| Start [MHz] Stop [MHz] | 5755.000 5835.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density | -- | -- | -0.09 | dBm/0.5MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 30 | -0.09 | dBm/0.5MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 11:25:10 |
| Ambit temp [°C] humidity [rel%] | 26.2 55 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

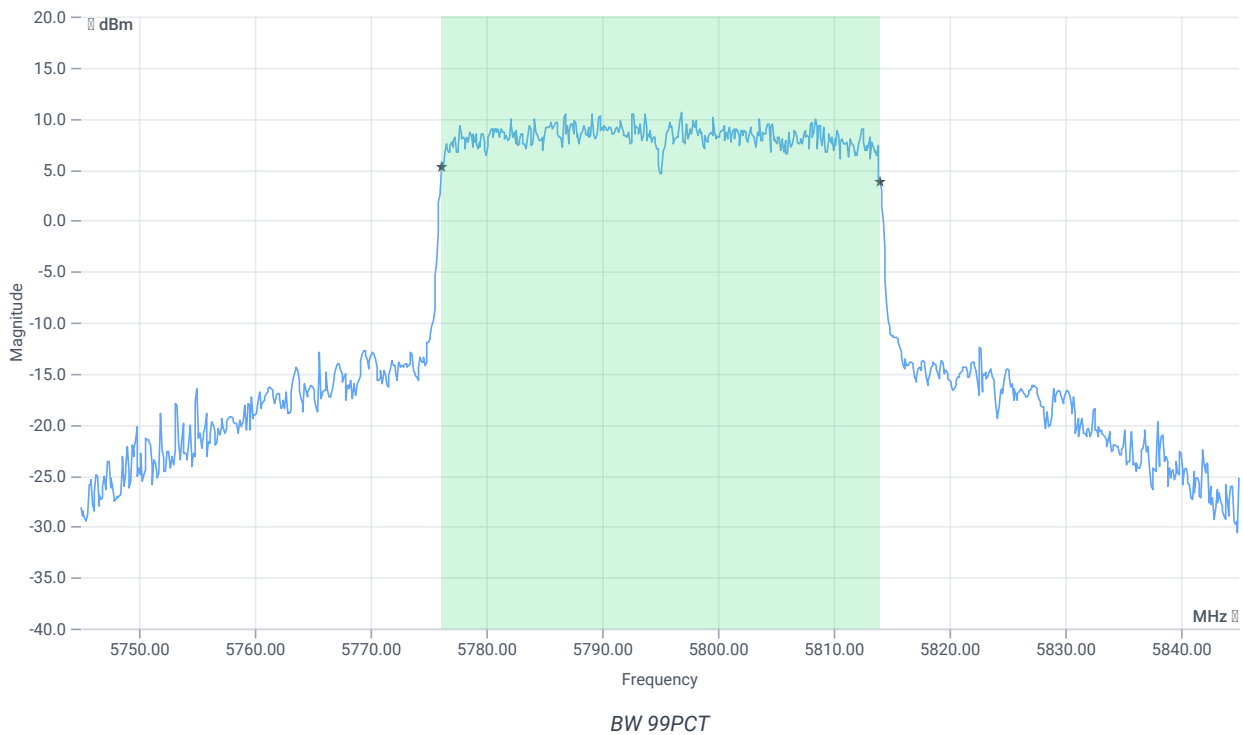
Test at TX 5795 MHz

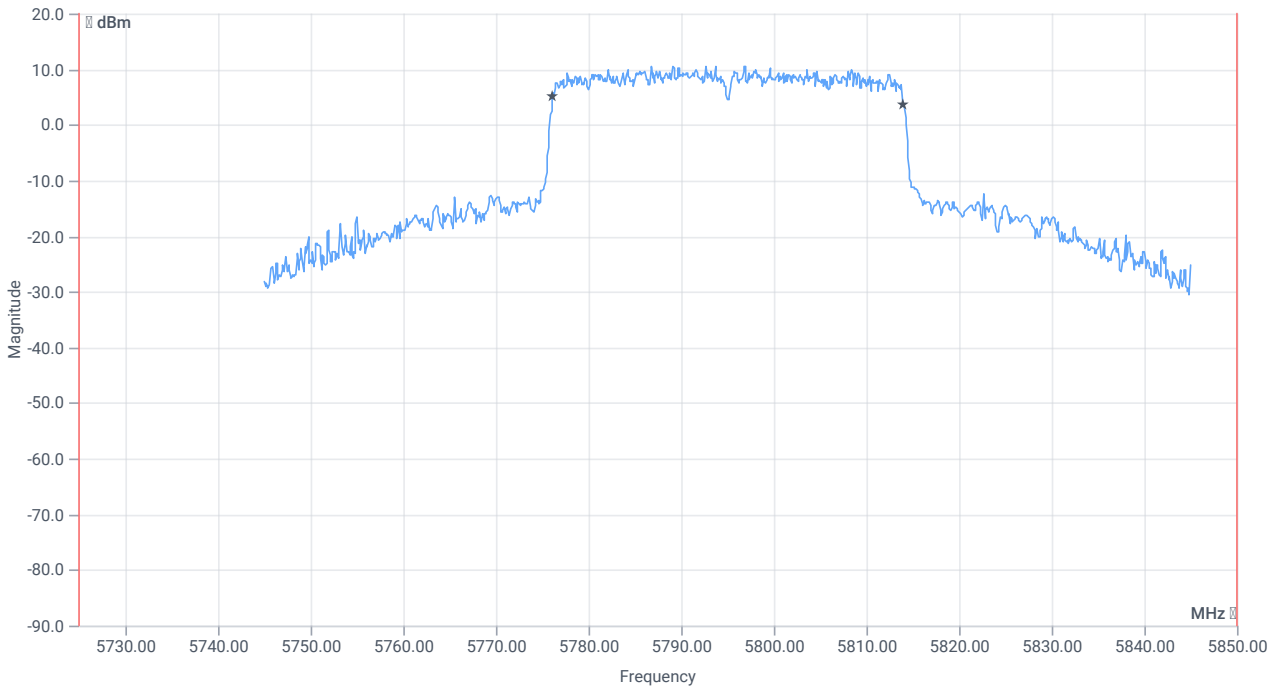
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 11.32 | dBm | INFO |
| Ref. Frequency | -- | -- | 5802.390 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 19.32 16.67 20 |
| Start [MHz] Stop [MHz] | 5745.000 5845.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

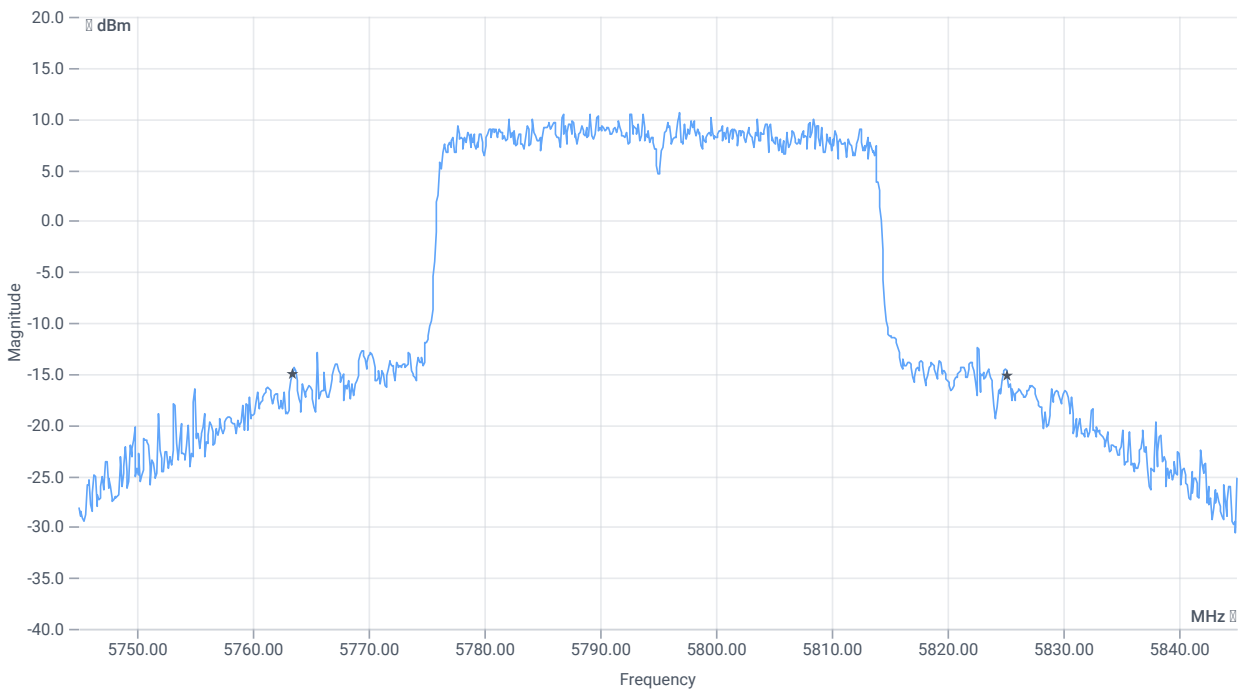




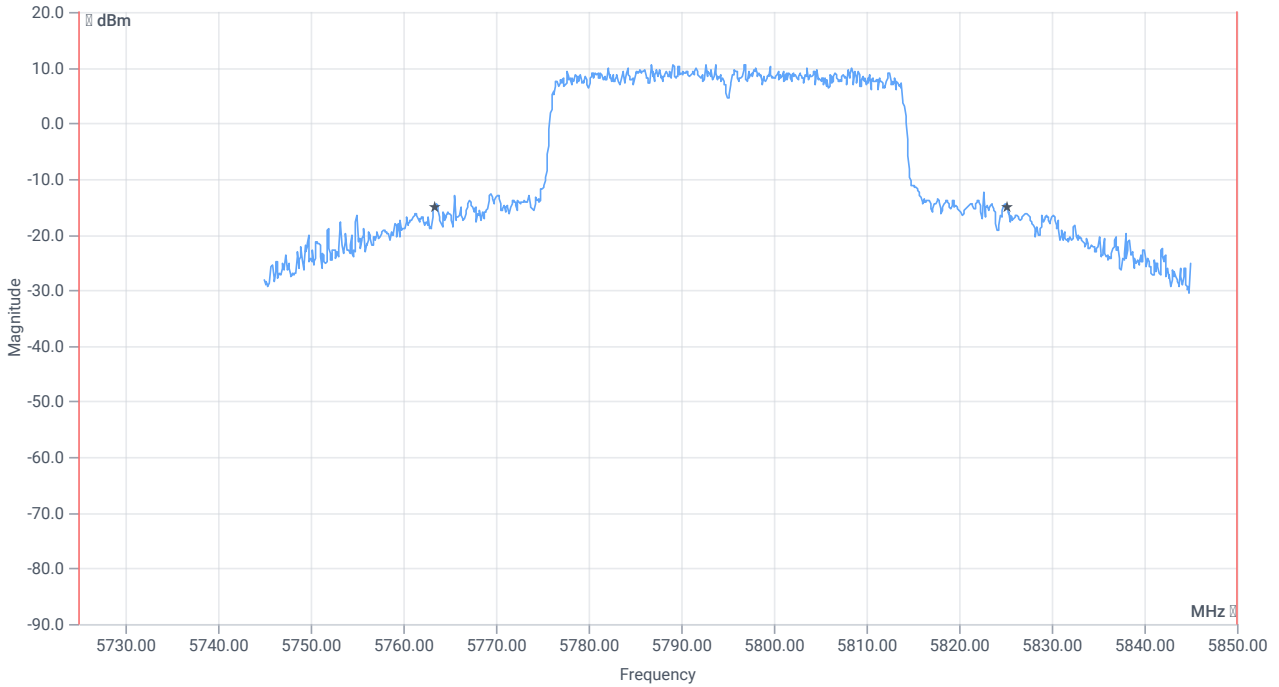
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | -- | -- | 37.862 | MHz | INFO |
| T1 99% | 5725.000000 | -- | 5776.1189 | MHz | PASS |
| T2 99% | -- | 5850.000000 | 5813.9810 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | -- | -- | 61.8 | MHz | INFO |
| T1 26dB | 5725.000000 | -- | 5763.4000 | MHz | PASS |
| T2 26dB | -- | 5850.000000 | 5825.2000 | MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 11:25:41 |
| Ambit temp [°C] humidity [rel%] | 26.2 55 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | KDB789033 D02, C.2. |
| Description | FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 1 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

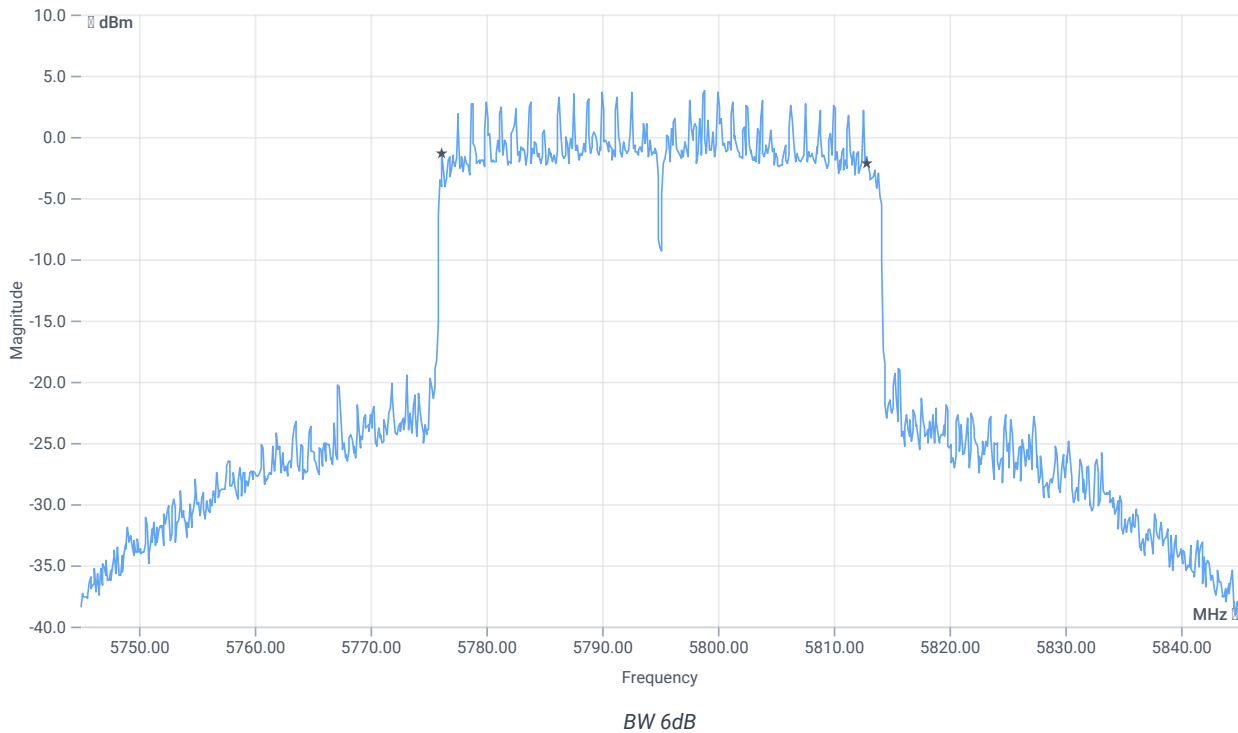
Test at TX 5795 MHz

RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 11.30 | dBm | INFO |
| Ref. Frequency | -- | -- | 5798.800 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 23.30 16.67 25 |
| Start [MHz] Stop [MHz] | 5745.000 5845.000 |
| RBW [MHz] VBW [MHz] | 0.100000 0.300000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 2 1500 1001 SWE |



RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-----------------|-------------|-------------|----------|------|---------|
| Bandwidth (6dB) | 0.500 | -- | 36.7 | MHz | PASS |

Verdict

PASS

FCC 15.407 # Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 11:26:05 |
| Ambit temp [°C] humidity [rel%] | 26.2 55 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | KDB789033 D02, F, E.2.e. |
| Description | FCC 15.407 Max Output Power & PSD - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

Test at TX 5795 MHz

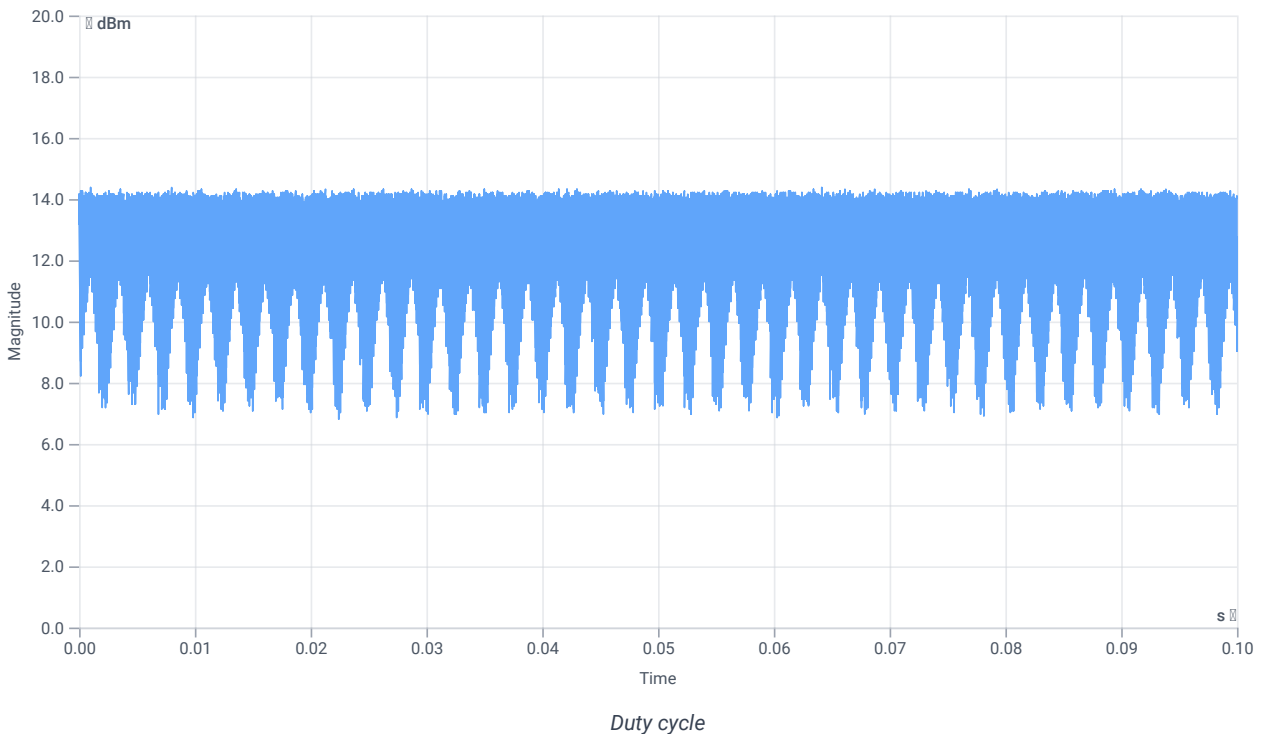
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 13.26 | dBm | INFO |
| Ref. Frequency | -- | -- | 5809.590 | MHz | INFO |

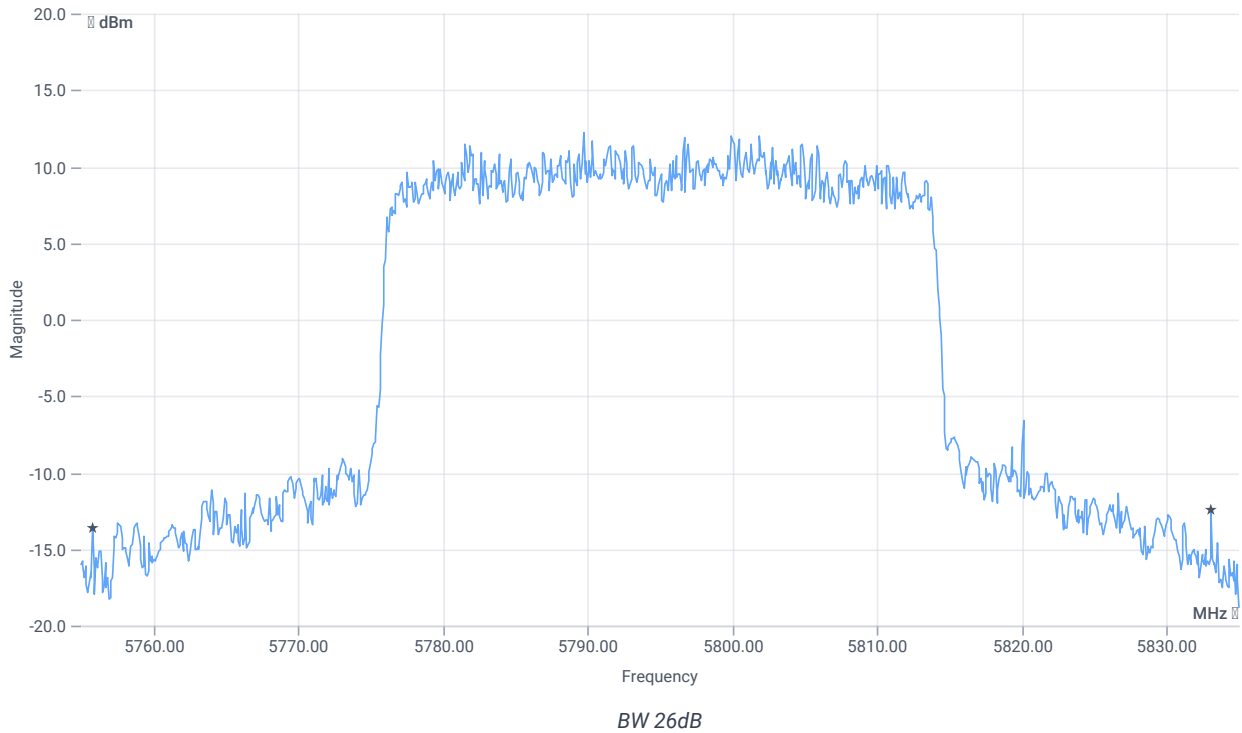
Evaluation max. Duty Cycle

Duty Cycle evaluation

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|--|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 | | | | | |
| Duty Cycle (Burst Ratio) max | -- | -- | 1 | -- | INFO |
| Duty Cycle max | -- | -- | 0 | dB | INFO |
| Duty Cycle (Burst Ratio) min | -- | -- | 1 | -- | INFO |
| Duty Cycle min | -- | -- | 0 | dB | INFO |



Evaluation Bandwidth



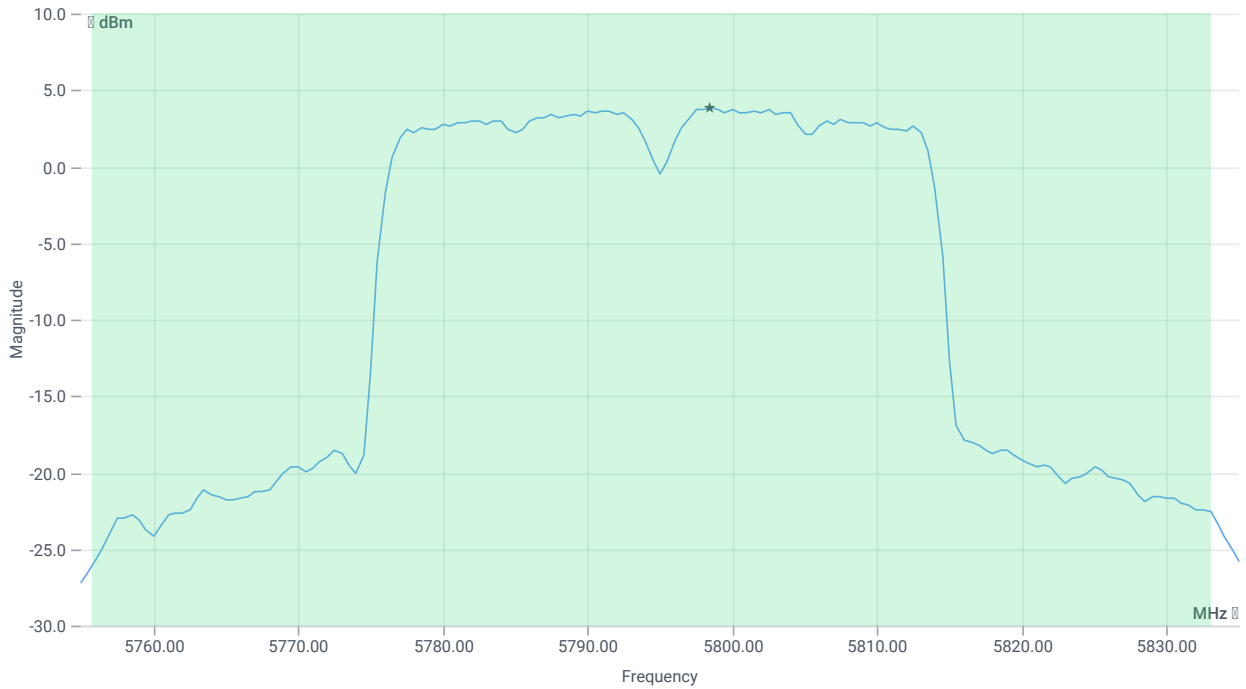
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | --- | --- | 77.28 | MHz | INFO |
| T1 26dB | --- | --- | 5755.8000 | MHz | INFO |
| T2 26dB | --- | --- | 5833.0800 | MHz | INFO |

Maximum Output Power

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 25.26 16.67 25 |
| Start [MHz] Stop [MHz] | 5755.000 5835.000 |
| RBW [MHz] VBW [MHz] | 1.000000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



Max OP and PSD

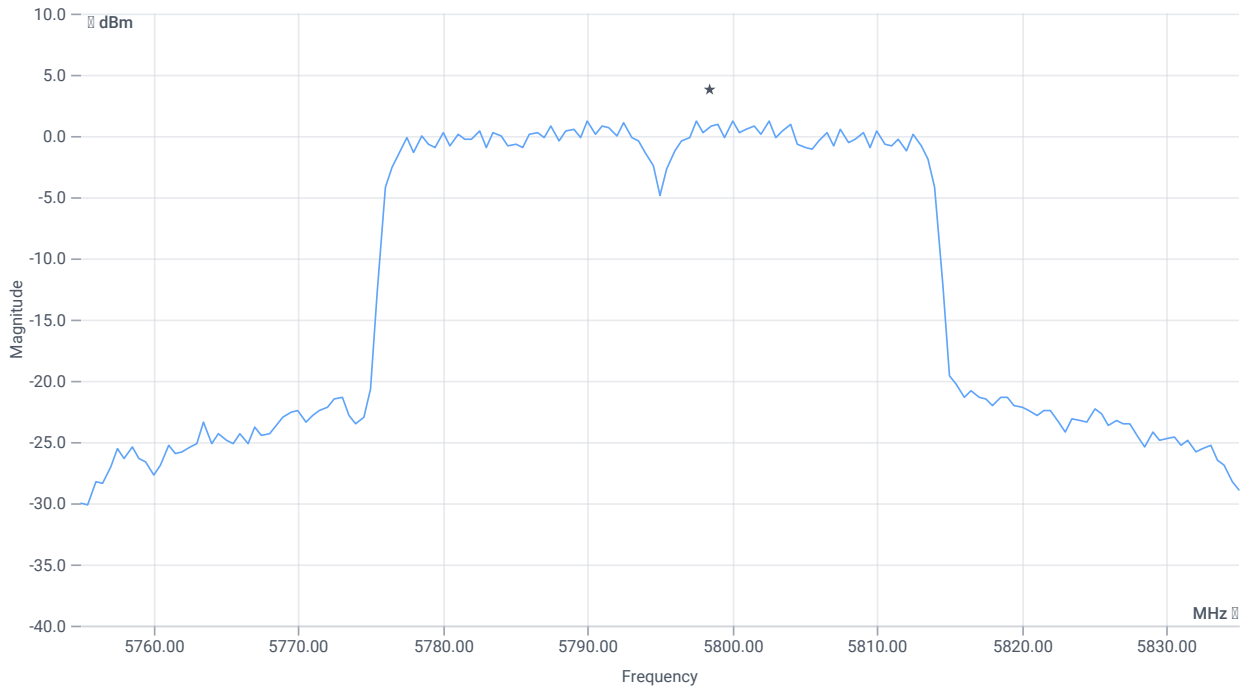
RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power | -- | -- | 18.36 | dBm | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Limit absolute | | | | | |
| Max Output Power DC corrected | -- | 30 | 18.36 | dBm | PASS |
| Limit: 11 dBm + 10 log 77.28 | | | | | |
| Max Output Power DC corrected | -- | 29.88 | 18.36 | dBm | na |

Power Spectral Density U-NII-3

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 25.26 16.67 25 |
| Start [MHz] Stop [MHz] | 5755.000 5835.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | RMS MAXH |
| Sweep: time [ms] count points per Section type | 53700 1 161 SWE |



PSD UNII-3

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density | -- | -- | 1.27 | dBm/0.5MHz | INFO |
| Duty Cycle Correction | -- | -- | 0 | dB | INFO |
| Power Spectral Density DC corrected | -- | 30 | 1.27 | dBm/0.5MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 11:28:28 |
| Ambit temp [°C] humidity [rel%] | 26.3 54 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN |
| Description | FCC 15.407 Bandwidths - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

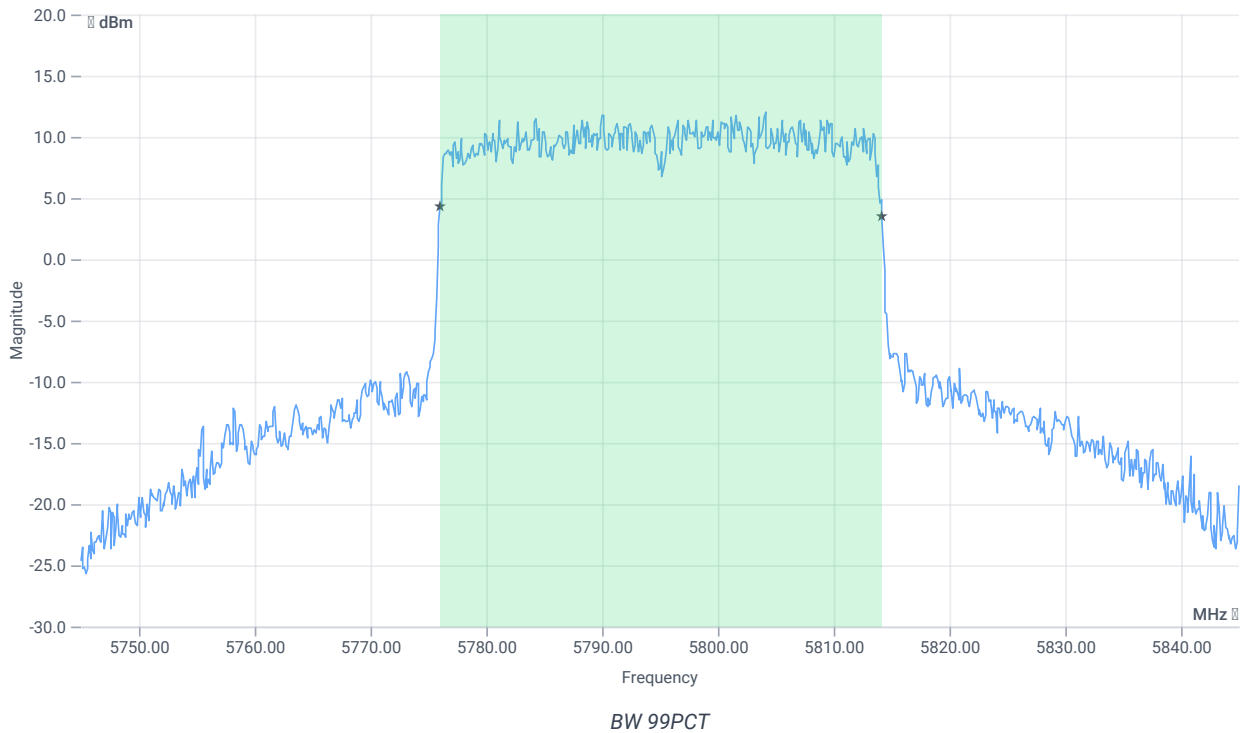
Test at TX 5795 MHz

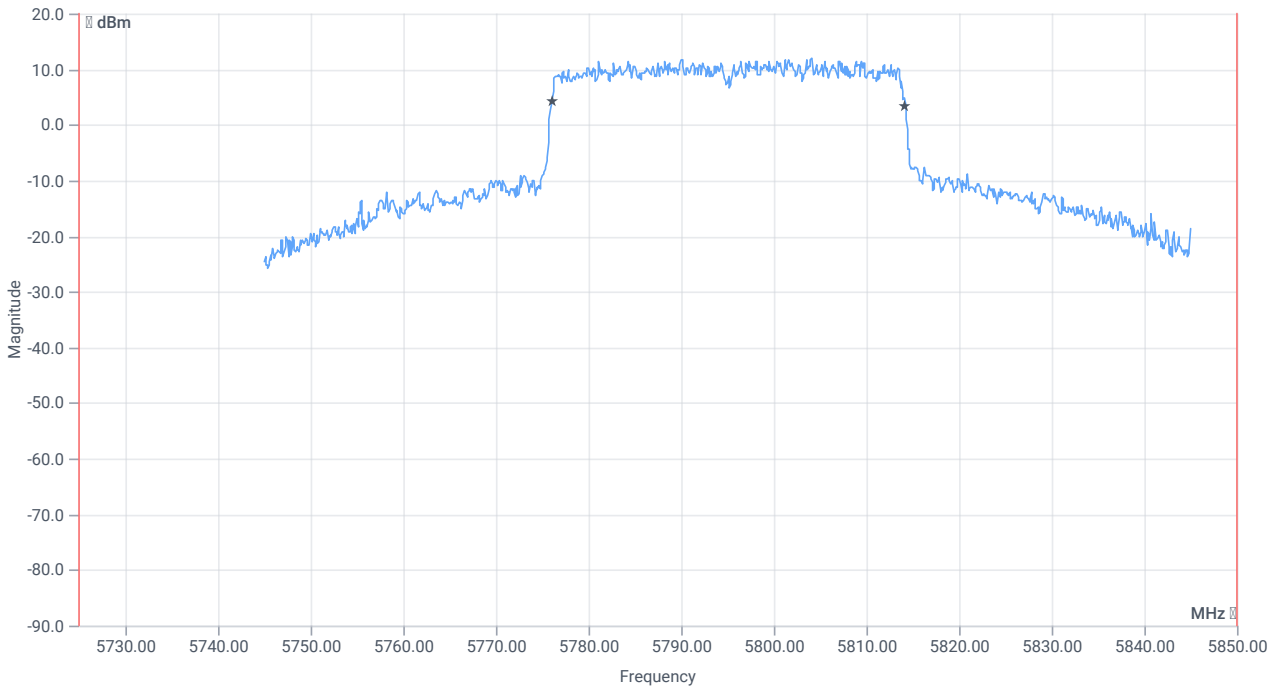
RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 13.62 | dBm | INFO |
| Ref. Frequency | -- | -- | 5798.200 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 21.62 16.67 20 |
| Start [MHz] Stop [MHz] | 5745.000 5845.000 |
| RBW [MHz] VBW [MHz] | 0.500000 3.000000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 1 2500 1001 SWE |

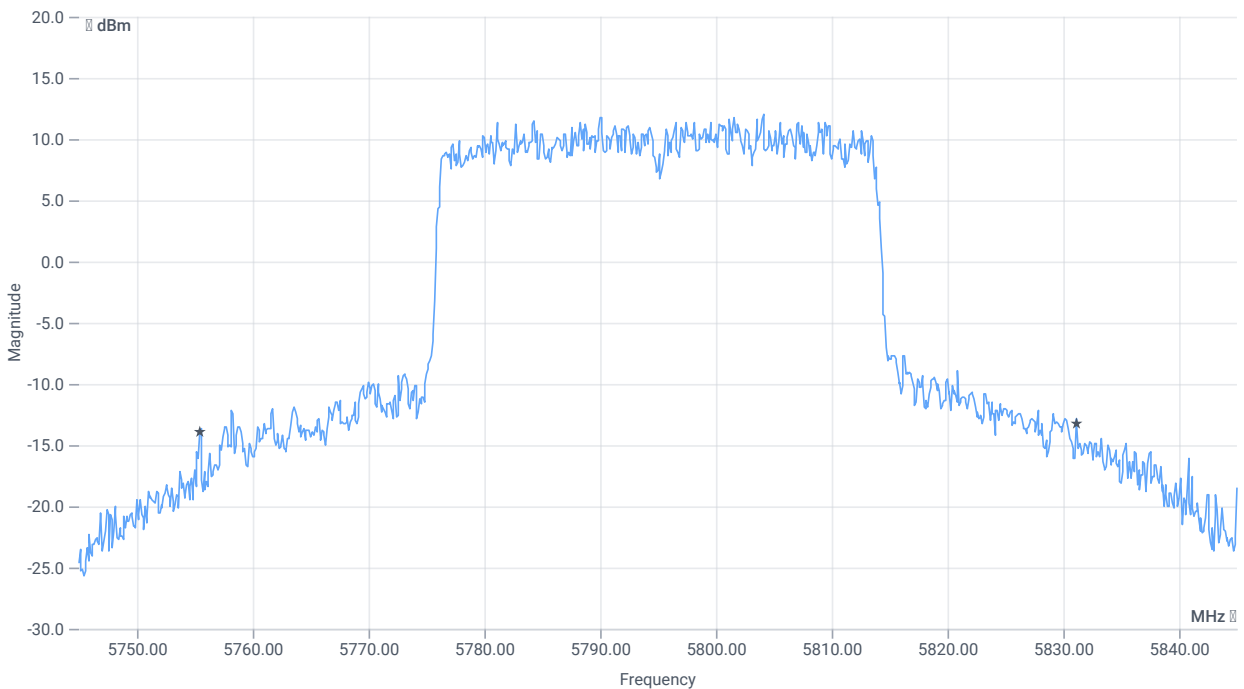




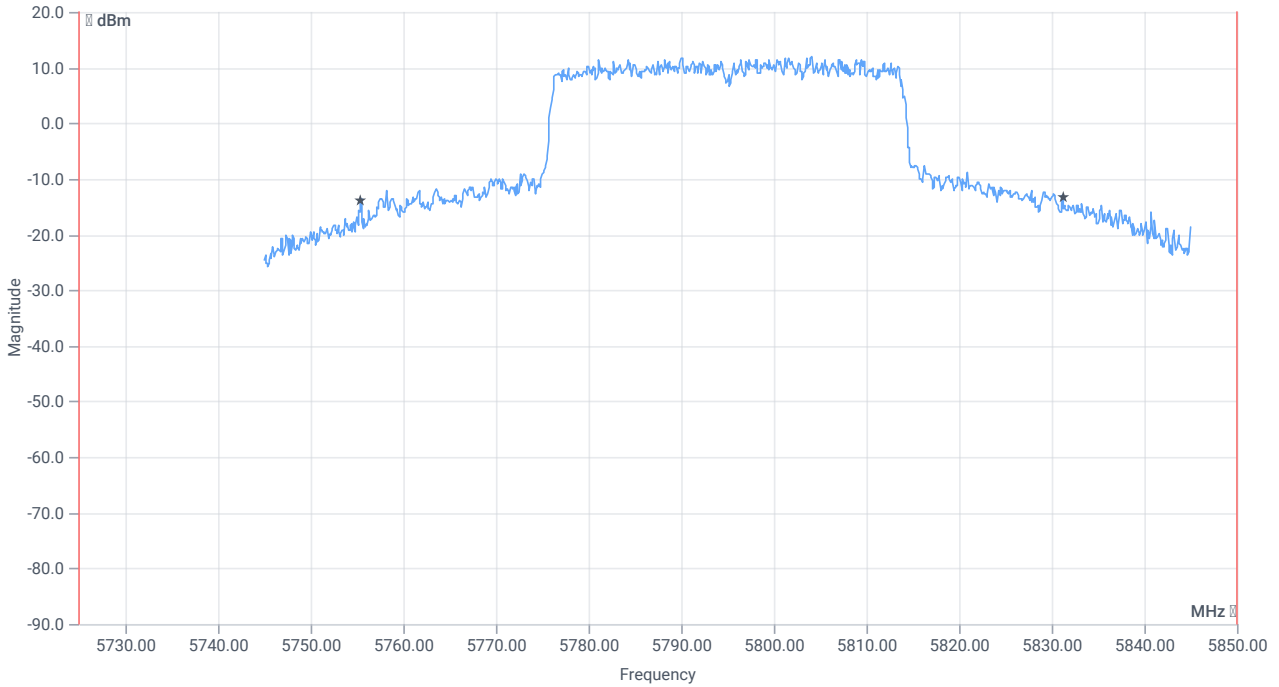
BW within Band 99PCT

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99% | -- | -- | 38.162 | MHz | INFO |
| T1 99% | 5725.000000 | -- | 5776.0190 | MHz | PASS |
| T2 99% | -- | 5850.000000 | 5814.1808 | MHz | PASS |



BW 26dB



BW within Band 26dB

RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|----------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB | -- | -- | 75.8 | MHz | INFO |
| T1 26dB | 5725.000000 | -- | 5755.4000 | MHz | PASS |
| T2 26dB | -- | 5850.000000 | 5831.2000 | MHz | PASS |

Verdict

PASS

FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 11:28:59 |
| Ambit temp [°C] humidity [rel%] | 26.3 54 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407, ISED RSS247 - |
| Method | KDB789033 D02, C.2. |
| Description | FCC 15.407 Min Emission Bandwidth - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|--|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | 2 |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | False Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | EUT - SignalingUnit - SpectrumAnalyzer |

Equipment

| |
|---|
| Signal analyzer,Rohde&Schwarz,FSV-40,1307.9002K40/101042,3.70 |
| Switch matrix,CTCadvanced,SPM-4 NI DAQ,28016133,NI |

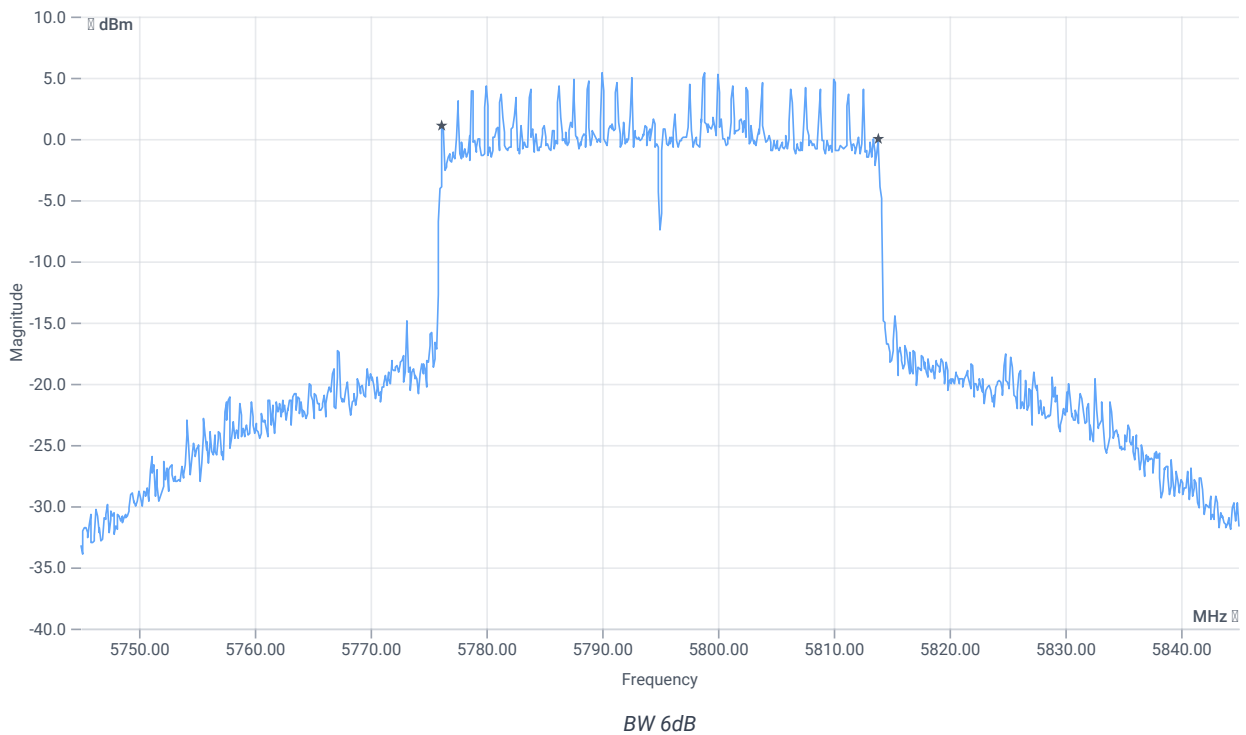
Test at TX 5795 MHz

RESULT: Reference Power cond.

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | -- | -- | 14.17 | dBm | INFO |
| Ref. Frequency | -- | -- | 5798.400 | MHz | INFO |

READ SA SETTINGS:

| | |
|--|-----------------------|
| RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB] | 26.17 16.67 25 |
| Start [MHz] Stop [MHz] | 5745.000 5845.000 |
| RBW [MHz] VBW [MHz] | 0.100000 0.300000 |
| Detector TraceMode | POS MAXH |
| Sweep: time [ms] count points per Section type | 2 1500 1001 SWE |



RESULT

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-----------------|-------------|-------------|----------|------|---------|
| Bandwidth (6dB) | 0.500 | -- | 37.6 | MHz | PASS |

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-1

References

| | |
|-----------------------------------|---|
| TC start | 12.07.2023 11:29:23 |
| Ambit temp [°C] humidity [rel%] | 26.2 54 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | |
| Description | MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-1 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|------------------------|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | several |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5190 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5230 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | None |

Equipment

Test at TX 5190 MHz

RESULT Power

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------------------------|-------------|-------------|----------|------|---------|
| Ant:1 Max Output Power DC corrected | -- | -- | 13.09 | dBm | INFO |
| Ant:1 BW 26dB | -- | -- | 39.840 | MHz | INFO |
| Ant:2 Max Output Power DC corrected | -- | -- | 13.07 | dBm | INFO |
| Ant:2 BW 26dB | -- | -- | 39.840 | MHz | INFO |
| Σ Limit absolute | -- | 24 | 16.09 | dBm | PASS |
| Σ Limit: 11 dBm + 10 log 39.84 | -- | 27 | 16.09 | dBm | na |

RESULT PSD

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Ant:1 PSD | -- | -- | -1.57 | dBm/1MHz | INFO |
| Ant:2 PSD | -- | -- | -1.57 | dBm/1MHz | INFO |
| Σ | -- | 11 | 1.44 | dBm/1MHz | PASS |

Test at TX 5230 MHz

RESULT Power

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Ant:1 Max Output Power DC corrected | -- | -- | 18.14 | dBm | INFO |
| Ant:1 BW 26dB | -- | -- | 74.960 | MHz | INFO |
| Ant:2 Max Output Power DC corrected | -- | -- | 18.06 | dBm | INFO |
| Ant:2 BW 26dB | -- | -- | 66.880 | MHz | INFO |
| Σ Limit absolute | -- | 24 | 21.11 | dBm | PASS |
| Σ Limit: 11 dBm + 10 log 66.88 | -- | 29.25 | 21.11 | dBm | na |

RESULT PSD

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Ant:1 PSD | -- | -- | 3.48 | dBm/1MHz | INFO |
| Ant:2 PSD | -- | -- | 3.3 | dBm/1MHz | INFO |
| Σ | -- | 11 | 6.4 | dBm/1MHz | PASS |

Verdict

PASS

Test at TX 5270 MHz

RESULT Power

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Ant:1 Max Output Power DC corrected | -- | -- | 17.69 | dBm | INFO |
| Ant:1 BW 26dB | -- | -- | 72.880 | MHz | INFO |
| Ant:2 Max Output Power DC corrected | -- | -- | 18.27 | dBm | INFO |
| Ant:2 BW 26dB | -- | -- | 74.560 | MHz | INFO |
| Σ Limit absolute | -- | 24 | 21 | dBm | PASS |
| Σ Limit: 11 dBm + 10 log 72.88 | -- | 29.63 | 21 | dBm | PASS |

RESULT PSD

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Ant:1 PSD | -- | -- | 2.98 | dBm/1MHz | INFO |
| Ant:2 PSD | -- | -- | 3.53 | dBm/1MHz | INFO |
| Σ | -- | 11 | 6.27 | dBm/1MHz | PASS |

Test at TX 5310 MHz

RESULT Power

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Ant:1 Max Output Power DC corrected | -- | -- | 12.24 | dBm | INFO |
| Ant:1 BW 26dB | -- | -- | 39.920 | MHz | INFO |
| Ant:2 Max Output Power DC corrected | -- | -- | 13.11 | dBm | INFO |
| Ant:2 BW 26dB | -- | -- | 39.760 | MHz | INFO |
| Σ Limit absolute | -- | 24 | 15.71 | dBm | PASS |
| Σ Limit: 11 dBm + 10 log 39.76 | -- | 26.99 | 15.71 | dBm | PASS |

RESULT PSD

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Ant:1 PSD | -- | -- | -2.45 | dBm/1MHz | INFO |
| Ant:2 PSD | -- | -- | -1.51 | dBm/1MHz | INFO |
| Σ | -- | 11 | 1.06 | dBm/1MHz | PASS |

Verdict

PASS

Test at TX 5510 MHz

RESULT Power

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------------------------|-------------|-------------|----------|------|---------|
| Ant:1 Max Output Power DC corrected | -- | -- | 14.42 | dBm | INFO |
| Ant:1 BW 26dB | -- | -- | 40.160 | MHz | INFO |
| Ant:2 Max Output Power DC corrected | -- | -- | 15.38 | dBm | INFO |
| Ant:2 BW 26dB | -- | -- | 39.920 | MHz | INFO |
| Σ Limit absolute | -- | 24 | 17.94 | dBm | PASS |
| Σ Limit: 11 dBm + 10 log 39.92 | -- | 27.01 | 17.94 | dBm | PASS |

RESULT PSD

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Ant:1 PSD | -- | -- | -0.33 | dBm/1MHz | INFO |
| Ant:2 PSD | -- | -- | 0.71 | dBm/1MHz | INFO |
| Σ | -- | 11 | 3.23 | dBm/1MHz | PASS |

Test at TX 5590 MHz

RESULT Power

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------------------------|-------------|-------------|----------|------|---------|
| Ant:1 Max Output Power DC corrected | -- | -- | 17.42 | dBm | INFO |
| Ant:1 BW 26dB | -- | -- | 72.560 | MHz | INFO |
| Ant:2 Max Output Power DC corrected | -- | -- | 18.42 | dBm | INFO |
| Ant:2 BW 26dB | -- | -- | 66.960 | MHz | INFO |
| Σ Limit absolute | -- | 24 | 20.96 | dBm | PASS |
| Σ Limit: 11 dBm + 10 log 66.96 | -- | 29.26 | 20.96 | dBm | PASS |

RESULT PSD

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Ant:1 PSD | -- | -- | 2.7 | dBm/1MHz | INFO |
| Ant:2 PSD | -- | -- | 3.7 | dBm/1MHz | INFO |
| Σ | -- | 11 | 6.24 | dBm/1MHz | PASS |

Test at TX 5670 MHz

RESULT Power

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Ant:1 Max Output Power DC corrected | -- | -- | 16.94 | dBm | INFO |
| Ant:1 BW 26dB | -- | -- | 68.960 | MHz | INFO |
| Ant:2 Max Output Power DC corrected | -- | -- | 18.32 | dBm | INFO |
| Ant:2 BW 26dB | -- | -- | 70.400 | MHz | INFO |
| Σ Limit absolute | -- | 24 | 20.69 | dBm | PASS |
| Σ Limit: 11 dBm + 10 log 68.96 | -- | 29.39 | 20.69 | dBm | PASS |

RESULT PSD

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|----------|----------|---------|
| Ant:1 PSD | -- | -- | 2.18 | dBm/1MHz | INFO |
| Ant:2 PSD | -- | -- | 3.58 | dBm/1MHz | INFO |
| Σ | -- | 11 | 5.95 | dBm/1MHz | PASS |

Verdict

PASS

FCC 15.407 # MIMO Σ Max output power and psd ~ WLAN5Gx ax-HE40 U-NII-3

References

| | |
|-----------------------------------|--|
| TC start | 12.07.2023 11:33:06 |
| Ambit temp [°C] humidity [rel%] | 26.3 55 |
| System version | 4.6.0.0 |
| Specification | FCC 15.407 - |
| Method | |
| Description | MIMO Σ FCC Power & psd - WLAN5Gx ax-HE40 U-NII-3 |
| Information | |

EUT Common Settings WLAN5Gx

| | |
|-------------------------|----------|
| Number of Antenna Ports | 1 |
| User Interaction | No |
| Device Class UNII_1 | Client |
| Limit W52 Japan | Standard |

Test Parameter

| | |
|--|------------------------|
| Technology to test | WLAN5Gx ax-HE40 |
| Antenna port used | several |
| Temperature | nom |
| Voltage | nom |
| Frequency low to test | True Freq [MHz] 5755 |
| Frequency mid to test | False Freq [MHz] 0 |
| Frequency high to test | True Freq [MHz] 5795 |
| Auto control enabled power supply Climatic Box | No No |
| Additional path loss [dB] | 1.3 |
| Switched path | None |

Equipment

Test at TX 5755 MHz

RESULT Power

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|---------------------------------------|-------------|-------------|----------|------|---------|
| Ant:1 Max Output Power DC corrected | -- | -- | 17.39 | dBm | INFO |
| Ant:1 BW 26dB | -- | -- | 68.880 | MHz | INFO |
| Ant:2 Max Output Power DC corrected | -- | -- | 18.94 | dBm | INFO |
| Ant:2 BW 26dB | -- | -- | 72.880 | MHz | INFO |
| Σ Limit absolute | -- | 30 | 21.24 | dBm | PASS |
| Σ Limit: 11 dBm + 10 log 68.88 | -- | 29.38 | 21.24 | dBm | na |

RESULT PSD

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|----------|------------|---------|
| Ant:1 PSD | -- | -- | 0.13 | dBm/0.5MHz | INFO |
| Ant:2 PSD | -- | -- | 1.66 | dBm/0.5MHz | INFO |
| Σ | -- | 30 | 3.97 | dBm/0.5MHz | PASS |

Test at TX 5795 MHz

RESULT Power

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------------------------------|-------------|-------------|----------|------|---------|
| Ant:1 Max Output Power DC corrected | -- | -- | 17.02 | dBm | INFO |
| Ant:1 BW 26dB | -- | -- | 65.120 | MHz | INFO |
| Ant:2 Max Output Power DC corrected | -- | -- | 18.36 | dBm | INFO |
| Ant:2 BW 26dB | -- | -- | 77.280 | MHz | INFO |
| Σ Limit absolute | -- | 30 | 20.75 | dBm | PASS |
| Σ Limit: 11 dBm + 10 log 65.12 | -- | 29.14 | 20.75 | dBm | na |

RESULT PSD

| DESCRIPTION | LOWER LIMIT | UPPER LIMIT | MEASURED | UNIT | VERDICT |
|-------------|-------------|-------------|----------|------------|---------|
| Ant:1 PSD | -- | -- | -0.09 | dBm/0.5MHz | INFO |
| Ant:2 PSD | -- | -- | 1.27 | dBm/0.5MHz | INFO |
| Σ | -- | 30 | 3.65 | dBm/0.5MHz | PASS |

Verdict

PASS

- END OF DOCUMENT -