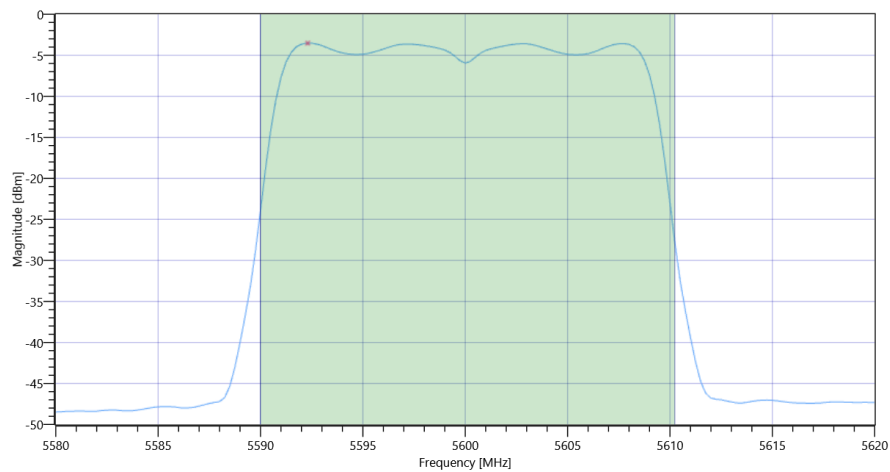




FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C Max OP and PSD

## Power Spectral Density

### RESULT

| Test 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    |

## ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C

### Test References

|                                   |                                                            |
|-----------------------------------|------------------------------------------------------------|
| TC Start                          | 27.10.2022 21:55:58                                        |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                  |
| System Version                    | 3.3.1.6                                                    |
| Test Specification                | ISED RSS247 -                                              |
| Test Method                       |                                                            |
| TC Version                        | 0.0.1                                                      |
| My Description                    | ISED Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-2C |
| Add. Information                  |                                                            |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5500                |
| Frequency mid to test                            | True   Freq [MHz] 5600                 |
| Frequency high to test                           | False   Freq [MHz] 5700                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5600 MHz

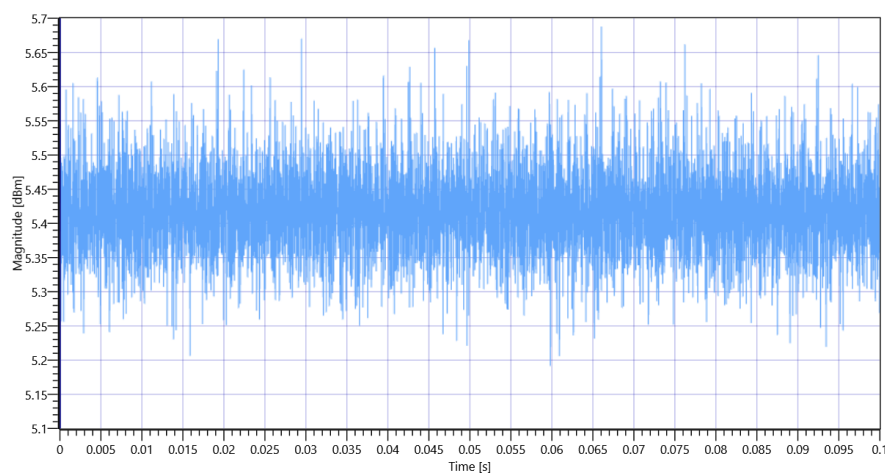
RESULT: Reference Power cond.

| Test Description           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | ---         | ---         | 4.02     | dBm  | INFO    |
| Ref. Frequency             | ---         | ---         | 5596.800 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test 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    |

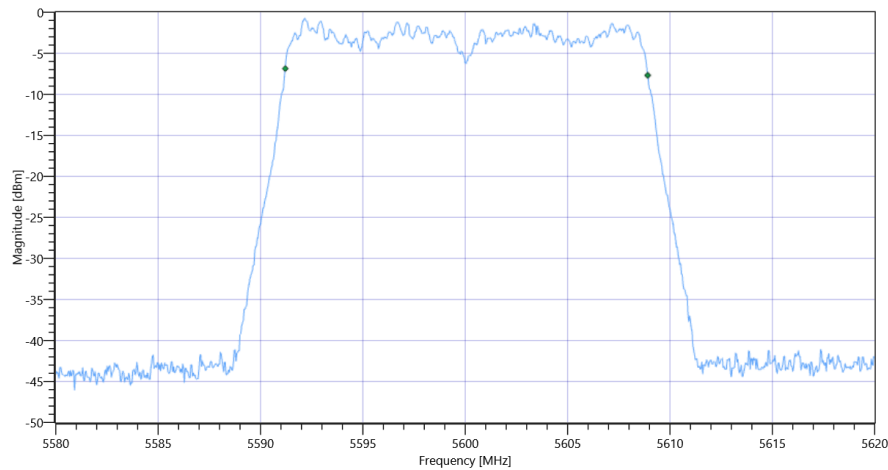


ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C 5600 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 17.702    | MHz  | INFO    |
| T1 99%           | ---         | ---         | 5591.2088 | MHz  | INFO    |
| T2 99%           | ---         | ---         | 5608.9111 | MHz  | INFO    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C\_BW

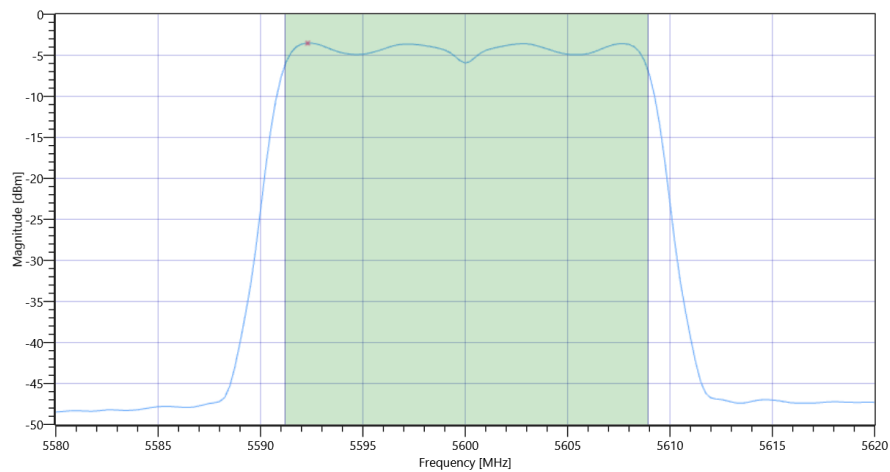
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.02   4.85   30     |
| Start [MHz]   Stop [MHz]                             | 5580.000   5620.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   3.000000   |
| Detector   TraceMode                                 | RMS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 53700   1   161   SWE |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 7.92     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24          | 7.92     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 17.702 |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 23.48       | 7.92     | dBm  | PASS    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C Max OP and PSD

## Power Spectral Density

### RESULT

| Test 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    |

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C

### Test References

|                                   |                                                      |
|-----------------------------------|------------------------------------------------------|
| TC Start                          | 27.10.2022 21:57:43                                  |
| Ambit Temp [°C]   Humidity [rel%] | 27.4   44                                            |
| System Version                    | 3.3.1.6                                              |
| Test Specification                | FCC 15.407, ISED RSS247 -                            |
| Test Method                       | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN     |
| TC Version                        | 0.0.1                                                |
| My Description                    | FCC 15.407 Bandwidths - WLAN5Gx n-HT20 mode U-NII-2C |
| Add. Information                  |                                                      |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5500                |
| Frequency mid to test                            | True   Freq [MHz] 5600                 |
| Frequency high to test                           | False   Freq [MHz] 5700                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5600 MHz

RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 3.84     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5601.400 | MHz  | INFO    |

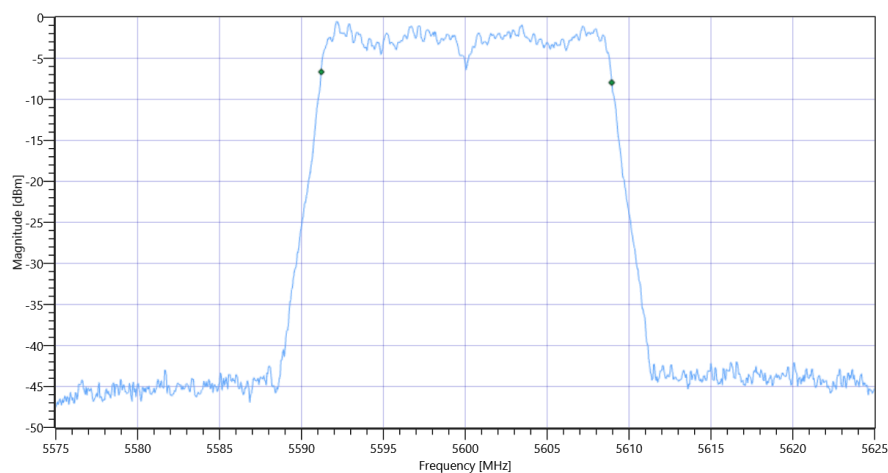
## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 11.84   4.85   25     |
| Start [MHz]   Stop [MHz]                             | 5575.000   5625.000   |
| RBW [MHz]   VBW [MHz]                                | 0.300000   1.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 1   2500   1001   SWE |

## RESULT

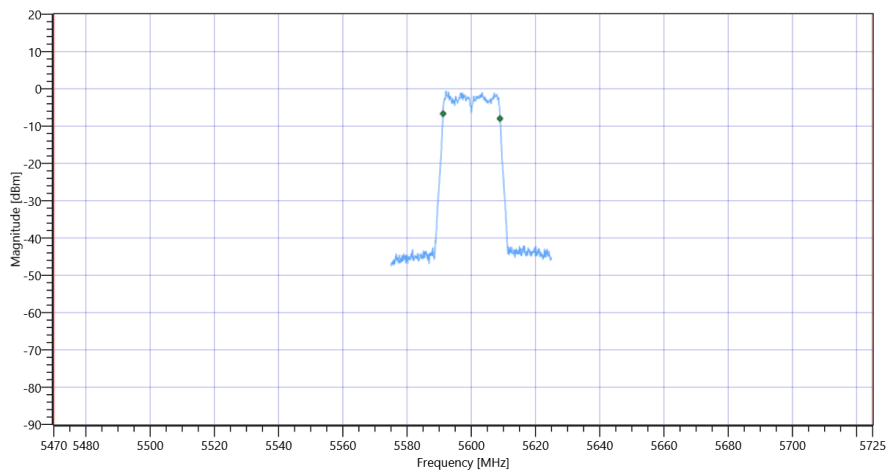
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict                         |
|------------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99%    | ---         | ---         | 17.732    | MHz  | INFO                            |
| T1 99%           | 5470.000000 | ---         | 5591.2088 | MHz  | PASS since U-NII-3 is supported |
| T2 99%           | ---         | 5725.000000 | 5608.9411 | MHz  |                                 |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C 99PCT

## Plot: Bandwidth within Band

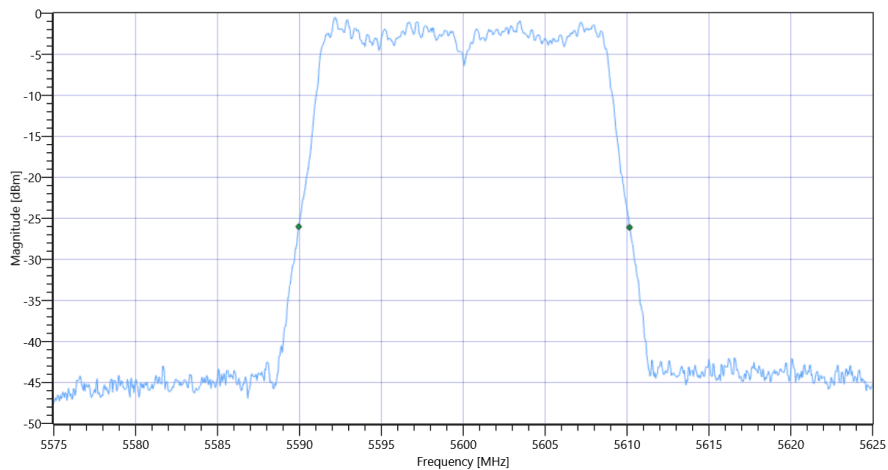


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C

## RESULT

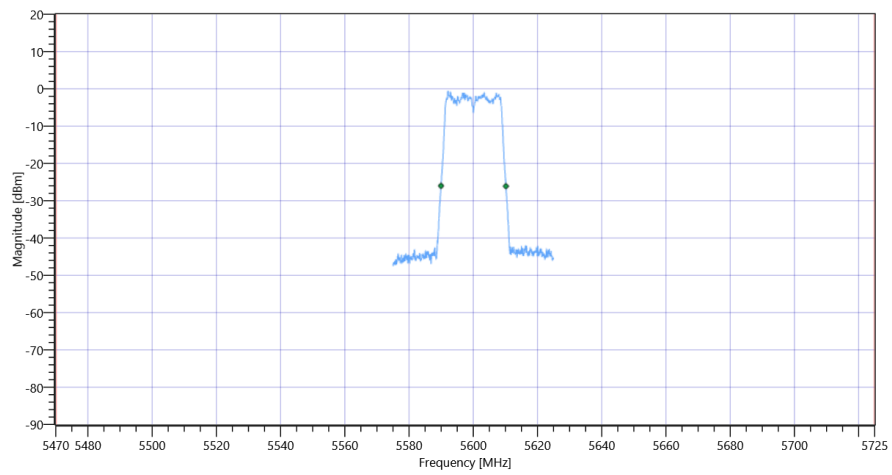
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict                         |
|------------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 26dB   | ---         | ---         | 20.2      | MHz  | INFO                            |
| T1 26dB          | 5470.000000 | ---         | 5589.9500 | MHz  | PASS since U-NII-3 is supported |
| T2 26dB          | ---         | 5725.000000 | 5610.1500 | MHz  |                                 |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C 26dB

## Plot: Bandwidth within Band



*FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C*

## # Message with SA scan ~

### Test References

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| TC Start                          | 27.10.2022 21:58:36                  |
| Ambit Temp [°C]   Humidity [rel%] | 27.4   44                            |
| System Version                    | 3.3.1.6                              |
| Test Specification                | -                                    |
| Test Method                       |                                      |
| TC Version                        | 0.0.1                                |
| My Description                    | Message with SA Scan n_HT20_U_NII_2C |
| Add. Information                  |                                      |

### Test Parameter

|               |                                                      |
|---------------|------------------------------------------------------|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer               |
| Message start | 27.10.2022 21:58:38                                  |
| Message       | set WLAN5Gx to n_HT20_U_NII_2C, Frequency [MHz] 5700 |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Common 5Gx 6Gx # Peak output power 3MHz/3MHz ~ WLAN5Gx n-HT20 mode U-NII-2C

### Test References

|                                   |                                                  |
|-----------------------------------|--------------------------------------------------|
| TC Start                          | 27.10.2022 22:00:07                              |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                        |
| System Version                    | 3.3.1.6                                          |
| Test Specification                | Common 5Gx 6Gx - none                            |
| Test Method                       |                                                  |
| TC Version                        | 0.0.1                                            |
| My Description                    | Peak OP 3MHz/3MHz - WLAN5Gx n-HT20 mode U-NII-2C |
| Add. Information                  |                                                  |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5500                |
| Frequency mid to test                            | False   Freq [MHz] 5600                |
| Frequency high to test                           | True   Freq [MHz] 5700                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5700 MHz

RESULT: Reference Power cond.

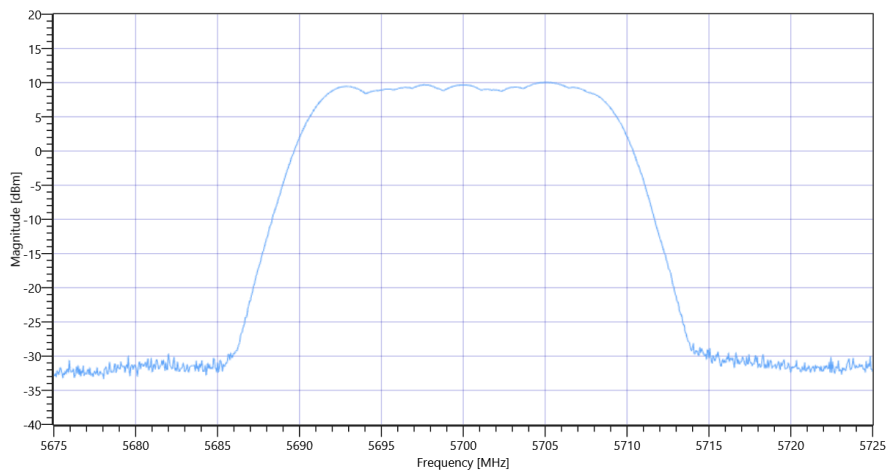
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 3.96     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5703.000 | MHz  | INFO    |

## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 15.96   4.97   30     |
| Start [MHz]   Stop [MHz]                             | 5675.000   5725.000   |
| RBW [MHz]   VBW [MHz]                                | 3.000000   3.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 300   20   1001   SWE |

## RESULT

| Test Description  | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|-------------------|-------------|-------------|-----------|------|---------|
| Peak Power        | ---         | ---         | 10.05     | dBm  | INFO    |
| Peak Power        | ---         | ---         | 10.115795 | mW   | INFO    |
| Frequency at Peak | ---         | ---         | 5705.045  | MHz  | INFO    |



Common 5Gx 6Gx # Peak output power 3MHz-3MHz ~ WLAN5Gx n-HT20 mode U-NII-2C

## FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C

### Test References

|                                   |                                                                  |
|-----------------------------------|------------------------------------------------------------------|
| TC Start                          | 27.10.2022 22:00:38                                              |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                        |
| System Version                    | 3.3.1.6                                                          |
| Test Specification                | FCC 15.247 -                                                     |
| Test Method                       | KDB789033 D02, F., E.2.e.                                        |
| TC Version                        | 0.0.1                                                            |
| My Description                    | FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-2C |
| Add. Information                  |                                                                  |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5500                |
| Frequency mid to test                            | False   Freq [MHz] 5600                |
| Frequency high to test                           | True   Freq [MHz] 5700                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5700 MHz

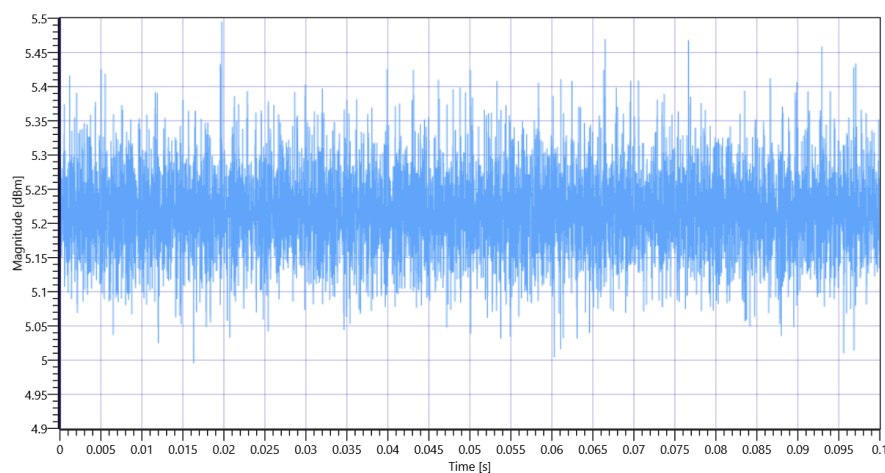
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.15     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5702.200 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

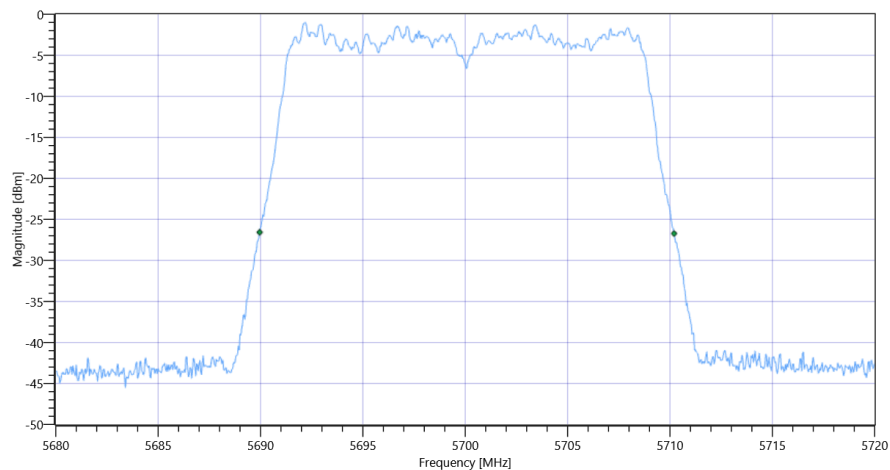


FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C 5700 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 20.24     | MHz  | INFO    |
| T1 26dB          | ---         | ---         | 5689.9600 | MHz  | INFO    |
| T2 26dB          | ---         | ---         | 5710.2000 | MHz  | INFO    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C\_BW

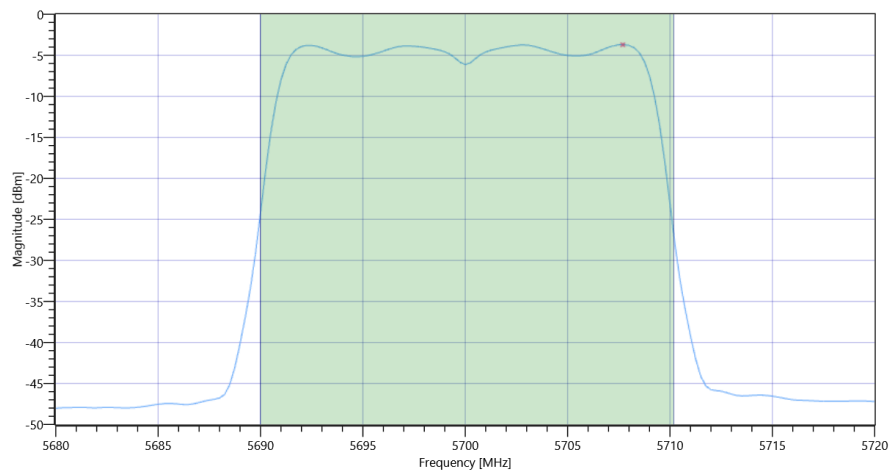
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.15   4.97   30     |
| Start [MHz]   Stop [MHz]                             | 5680.000   5720.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   3.000000   |
| Detector   TraceMode                                 | RMS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 53700   1   161   SWE |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 7.83     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24          | 7.83     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 20.24  |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24.06       | 7.83     | dBm  | PASS    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C Max OP and PSD

## Power Spectral Density

### RESULT

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density              | ---         | ---         | -3.71    | dBm/1MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB       | INFO    |
| Power Spectral Density DC corrected | ---         | 11          | -3.71    | dBm/1MHz | PASS    |

## ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C

### Test References

|                                   |                                                            |
|-----------------------------------|------------------------------------------------------------|
| TC Start                          | 27.10.2022 22:02:23                                        |
| Ambit Temp [°C]   Humidity [rel%] | 27.4   44                                                  |
| System Version                    | 3.3.1.6                                                    |
| Test Specification                | ISED RSS247 -                                              |
| Test Method                       |                                                            |
| TC Version                        | 0.0.1                                                      |
| My Description                    | ISED Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-2C |
| Add. Information                  |                                                            |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5500                |
| Frequency mid to test                            | False   Freq [MHz] 5600                |
| Frequency high to test                           | True   Freq [MHz] 5700                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5700 MHz

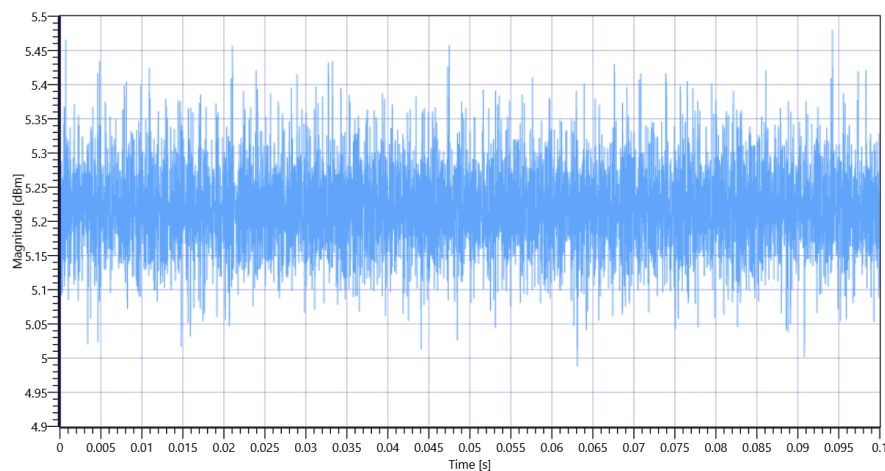
RESULT: Reference Power cond.

| Test Description           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|----------------------------|-------------|-------------|----------|------|---------|
| Ref. Power 1MHz/1MHz cond. | ---         | ---         | 4.08     | dBm  | INFO    |
| Ref. Frequency             | ---         | ---         | 5702.800 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test 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    |

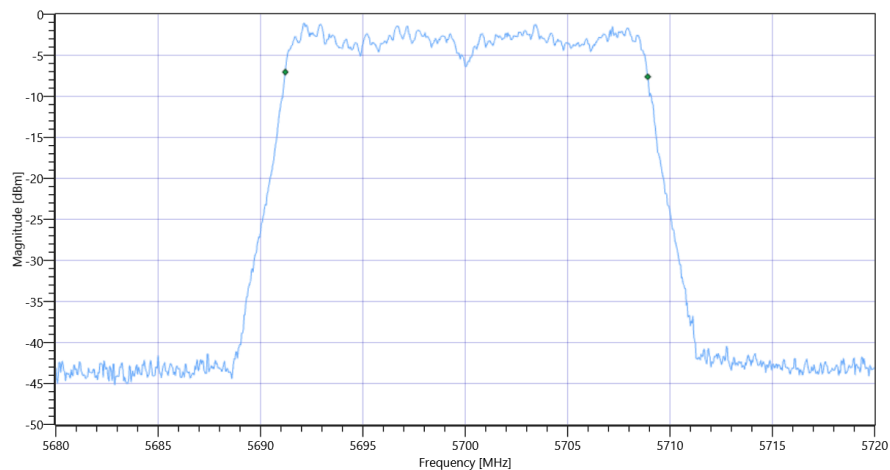


ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C 5700 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 17.702    | MHz  | INFO    |
| T1 99%           | ---         | ---         | 5691.2088 | MHz  | INFO    |
| T2 99%           | ---         | ---         | 5708.9111 | MHz  | INFO    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C\_BW

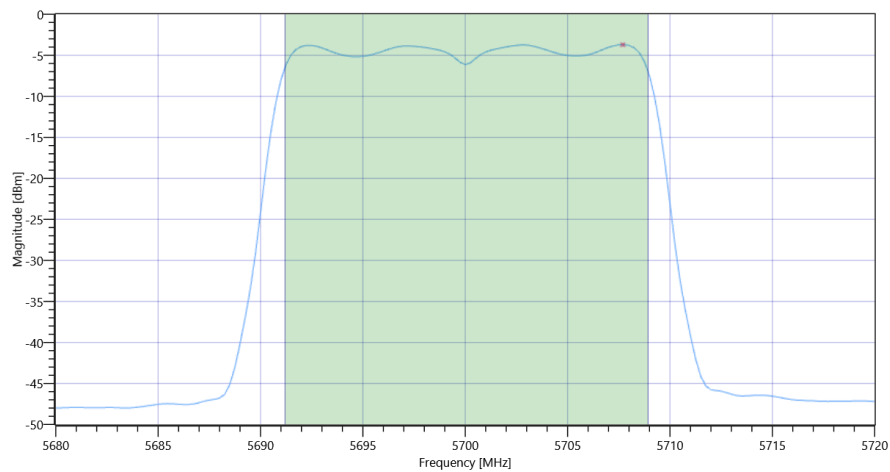
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.08   4.97   30     |
| Start [MHz]   Stop [MHz]                             | 5680.000   5720.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   3.000000   |
| Detector   TraceMode                                 | RMS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 53700   1   161   SWE |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 7.72     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24          | 7.72     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 17.702 |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 23.48       | 7.72     | dBm  | PASS    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-2C Max OP and PSD

## Power Spectral Density

### RESULT

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density              | ---         | ---         | -3.71    | dBm/1MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB       | INFO    |
| Power Spectral Density DC corrected | ---         | 11          | -3.71    | dBm/1MHz | PASS    |

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C

### Test References

|                                   |                                                      |
|-----------------------------------|------------------------------------------------------|
| TC Start                          | 27.10.2022 22:04:09                                  |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                            |
| System Version                    | 3.3.1.6                                              |
| Test Specification                | FCC 15.407, ISED RSS247 -                            |
| Test Method                       | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN     |
| TC Version                        | 0.0.1                                                |
| My Description                    | FCC 15.407 Bandwidths - WLAN5Gx n-HT20 mode U-NII-2C |
| Add. Information                  |                                                      |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5500                |
| Frequency mid to test                            | False   Freq [MHz] 5600                |
| Frequency high to test                           | True   Freq [MHz] 5700                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5700 MHz

RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.09     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5707.790 | MHz  | INFO    |

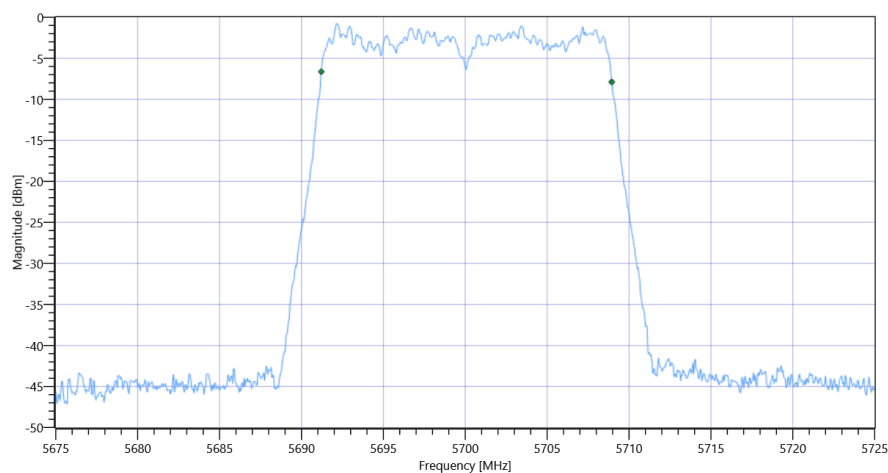
## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 12.09   4.97   25     |
| Start [MHz]   Stop [MHz]                             | 5675.000   5725.000   |
| RBW [MHz]   VBW [MHz]                                | 0.300000   1.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 1   2500   1001   SWE |

## RESULT

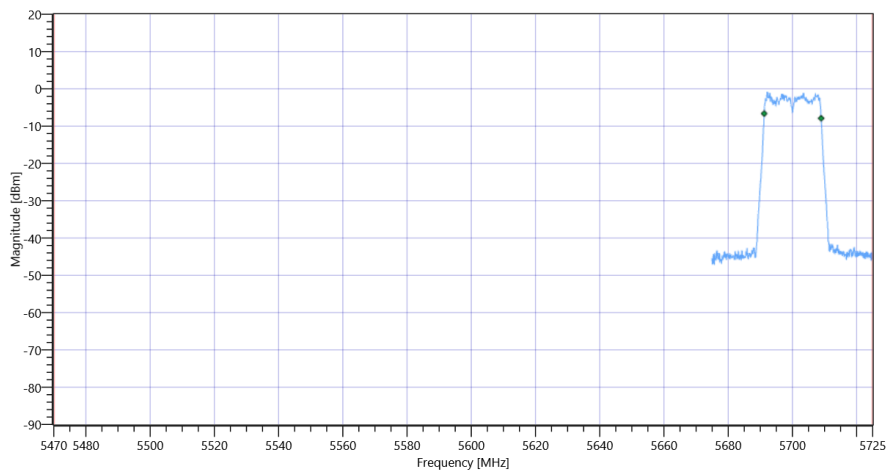
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict                         |
|------------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 99%    | ---         | ---         | 17.732    | MHz  | INFO                            |
| T1 99%           | 5470.000000 | ---         | 5691.2088 | MHz  | PASS since U-NII-3 is supported |
| T2 99%           | ---         | 5725.000000 | 5708.9411 | MHz  |                                 |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C 99PCT

## Plot: Bandwidth within Band

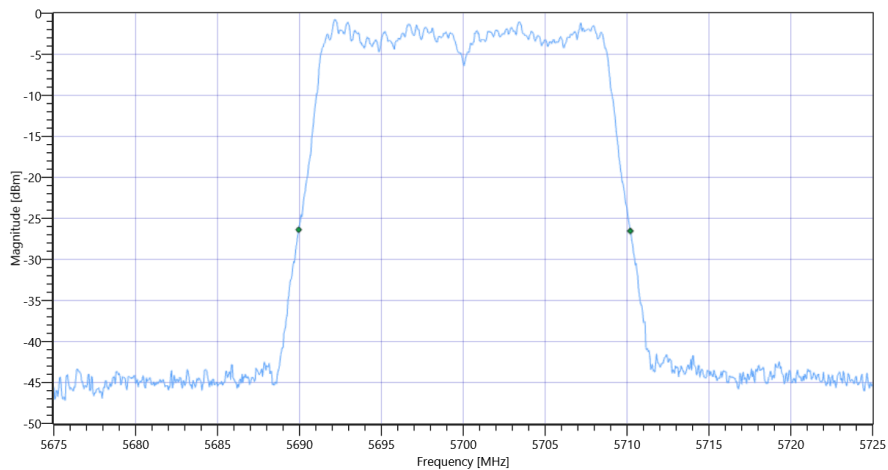


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C

## RESULT

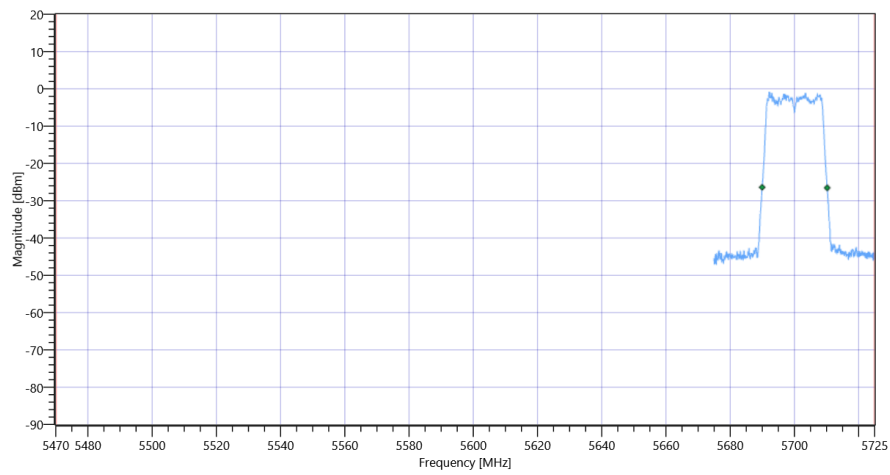
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict                         |
|------------------|-------------|-------------|-----------|------|---------------------------------|
| Bandwidth 26dB   | ---         | ---         | 20.25     | MHz  | INFO                            |
| T1 26dB          | 5470.000000 | ---         | 5689.9500 | MHz  | PASS since U-NII-3 is supported |
| T2 26dB          | ---         | 5725.000000 | 5710.2000 | MHz  |                                 |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C 26dB

## Plot: Bandwidth within Band



*FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-2C*

## # Message with SA scan ~

### Test References

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| TC Start                          | 27.10.2022 22:05:02                 |
| Ambit Temp [°C]   Humidity [rel%] | 27.4   44                           |
| System Version                    | 3.3.1.6                             |
| Test Specification                | -                                   |
| Test Method                       |                                     |
| TC Version                        | 0.0.1                               |
| My Description                    | Message with SA Scan n_HT20_U_NII_3 |
| Add. Information                  |                                     |

### Test Parameter

|               |                                                       |
|---------------|-------------------------------------------------------|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer                |
| Message start | 27.10.2022 22:05:04                                   |
| Message       | set WLAN5Gx to n_HT20_U_NII_3, Frequency [MHz] 5745 , |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Common 5Gx 6Gx # Peak output power 3MHz/3MHz ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| TC Start                          | 27.10.2022 22:07:55                             |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                       |
| System Version                    | 3.3.1.6                                         |
| Test Specification                | Common 5Gx 6Gx - none                           |
| Test Method                       |                                                 |
| TC Version                        | 0.0.1                                           |
| My Description                    | Peak OP 3MHz/3MHz - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 5745                 |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5745 MHz

RESULT: Reference Power cond.

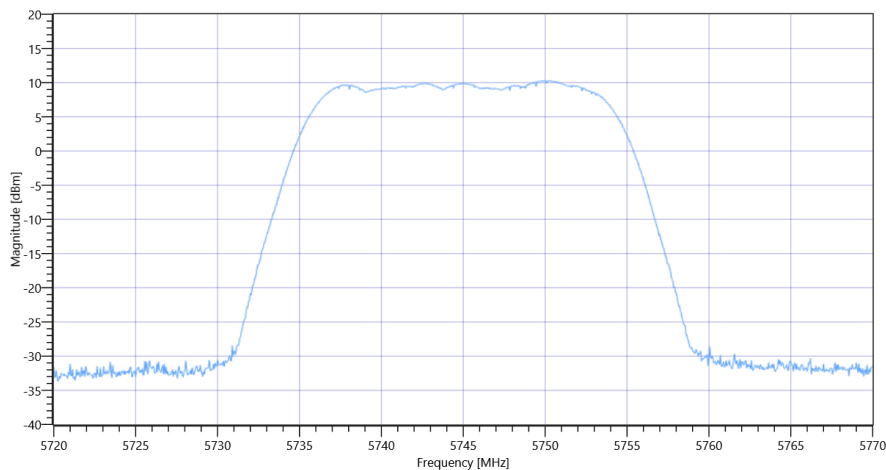
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.28     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5737.410 | MHz  | INFO    |

## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.28   5.1   30      |
| Start [MHz]   Stop [MHz]                             | 5720.000   5770.000   |
| RBW [MHz]   VBW [MHz]                                | 3.000000   3.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 300   20   1001   SWE |

## RESULT

| Test Description  | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|-------------------|-------------|-------------|-----------|------|---------|
| Peak Power        | ---         | ---         | 10.26     | dBm  | INFO    |
| Peak Power        | ---         | ---         | 10.616956 | mW   | INFO    |
| Frequency at Peak | ---         | ---         | 5749.995  | MHz  | INFO    |



Common 5Gx 6Gx # Peak output power 3MHz-3MHz ~ WLAN5Gx n-HT20 mode U-NII-3

## FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 27.10.2022 22:08:26                                             |
| Ambit Temp [°C]   Humidity [rel%] | 27.4   44                                                       |
| System Version                    | 3.3.1.6                                                         |
| Test Specification                | FCC 15.247 -                                                    |
| Test Method                       | KDB789033 D02, F., E.2.e.                                       |
| TC Version                        | 0.0.1                                                           |
| My Description                    | FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 5745                 |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5745 MHz

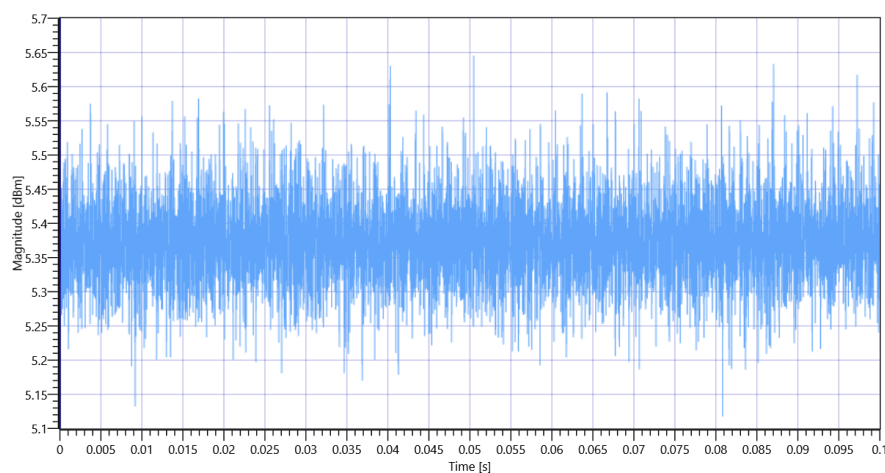
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.12     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5743.000 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

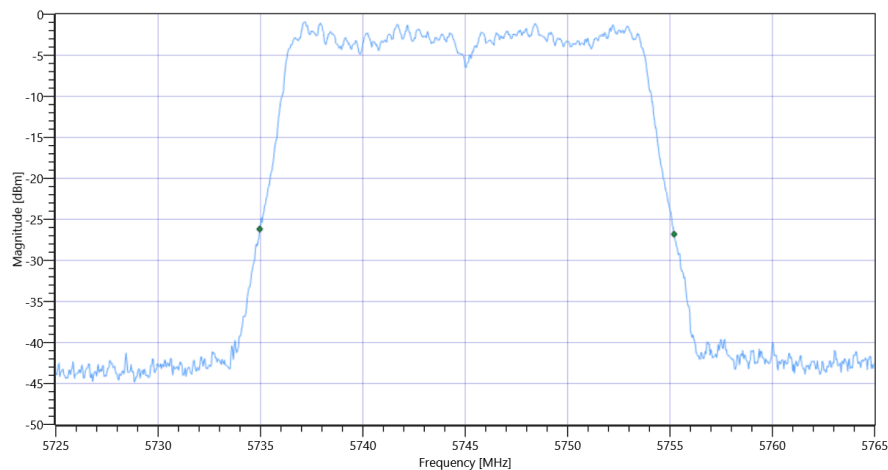


FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 5745 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 20.24     | MHz  | INFO    |
| T1 26dB          | ---         | ---         | 5734.9600 | MHz  | INFO    |
| T2 26dB          | ---         | ---         | 5755.2000 | MHz  | INFO    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3\_BW

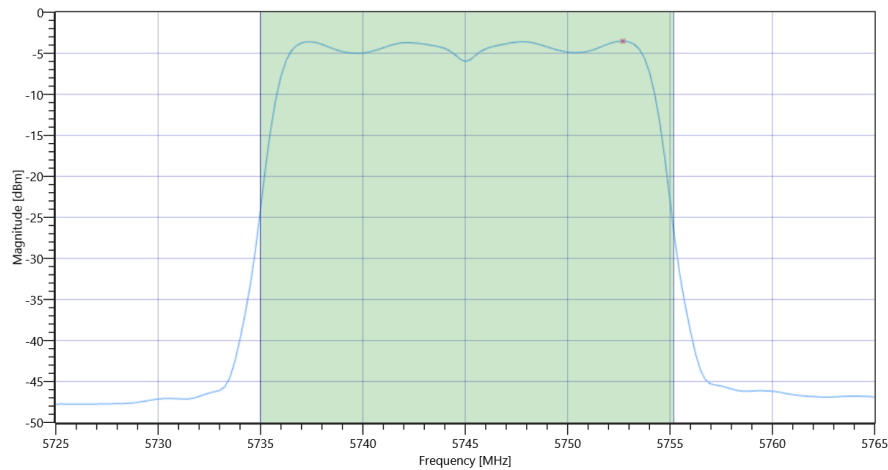
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.12   5.1   30      |
| Start [MHz]   Stop [MHz]                             | 5725.000   5765.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   3.000000   |
| Detector   TraceMode                                 | RMS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 53700   1   161   SWE |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 7.99     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 30          | 7.99     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 20.24  |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24.06       | 7.99     | dBm  | na      |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 Max OP and PSD

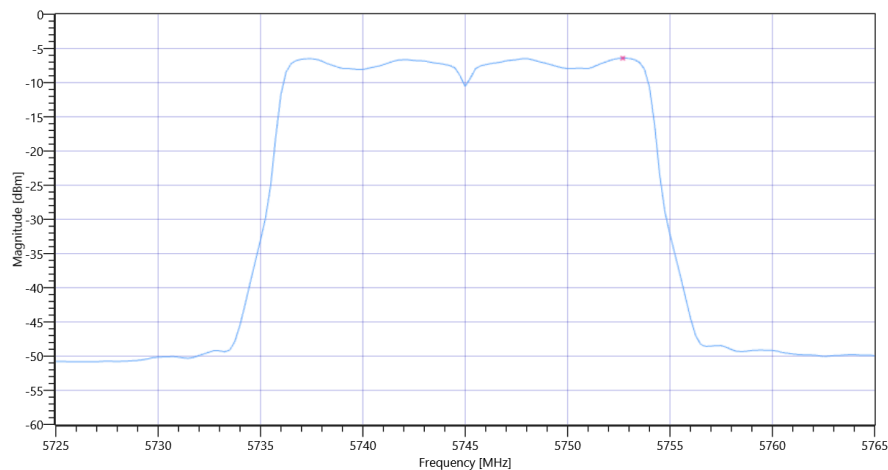
## Power Spectral Density U-NII-3

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.12   5.1   30      |
| Start [MHz]   Stop [MHz]                             | 5725.000   5765.000   |
| 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

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit       | Verdict |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density              | ---         | ---         | -6.42    | dBm/0.5MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB         | INFO    |
| Power Spectral Density DC corrected | ---         | 30          | -6.42    | dBm/0.5MHz | PASS    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 PSD UNII-3

## ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                           |
|-----------------------------------|-----------------------------------------------------------|
| TC Start                          | 27.10.2022 22:11:14                                       |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                 |
| System Version                    | 3.3.1.6                                                   |
| Test Specification                | ISED RSS247 -                                             |
| Test Method                       |                                                           |
| TC Version                        | 0.0.1                                                     |
| My Description                    | ISED Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                           |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 5745                 |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5745 MHz

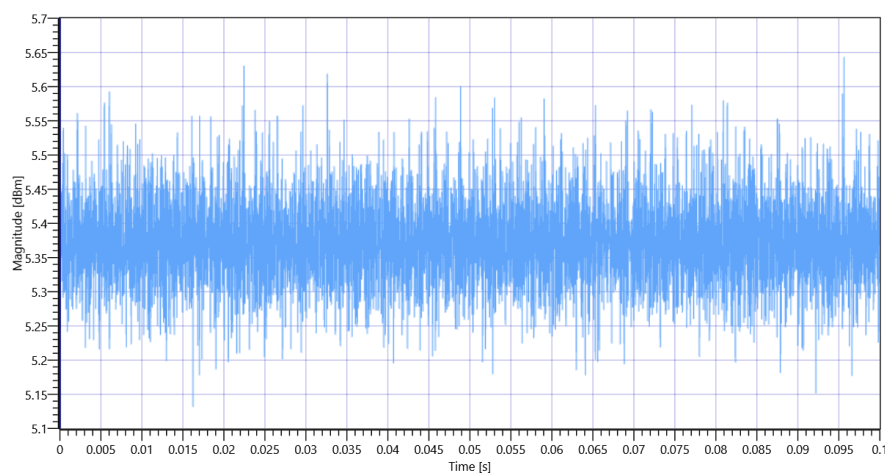
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.32     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5752.590 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

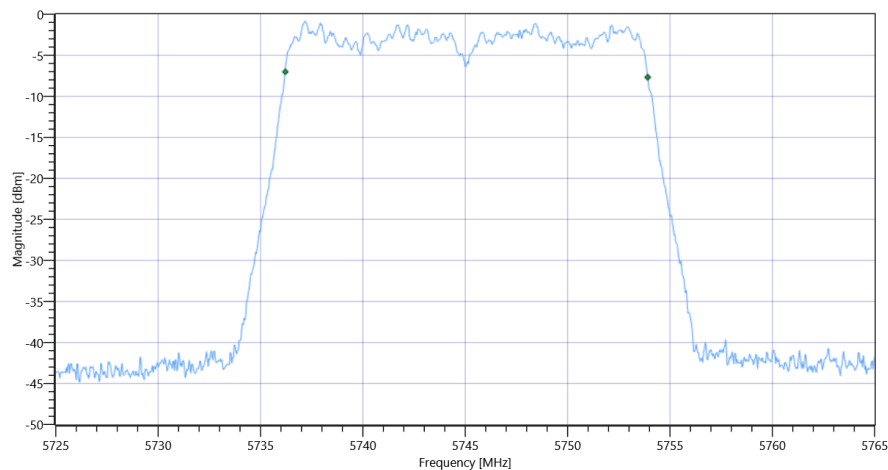


ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 5745 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 17.702    | MHz  | INFO    |
| T1 99%           | ---         | ---         | 5736.2088 | MHz  | INFO    |
| T2 99%           | ---         | ---         | 5753.9111 | MHz  | INFO    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3\_BW

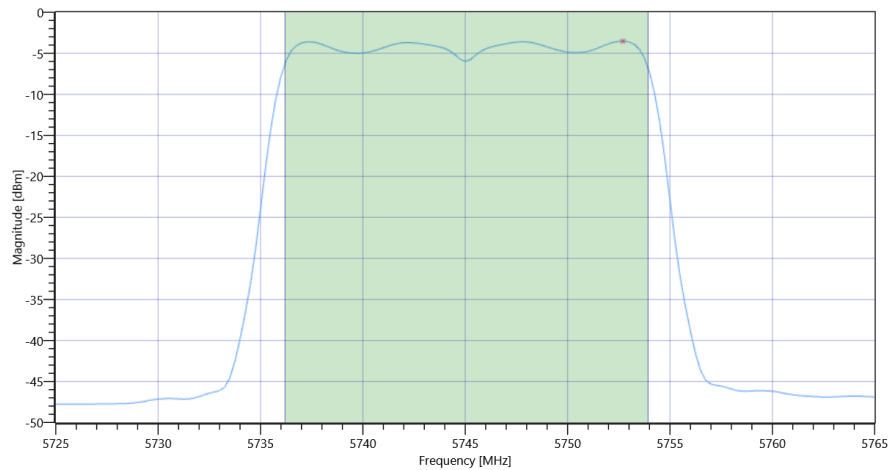
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.32   5.1   30      |
| Start [MHz]   Stop [MHz]                             | 5725.000   5765.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   3.000000   |
| Detector   TraceMode                                 | RMS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 53700   1   161   SWE |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 7.89     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 30          | 7.89     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 17.702 |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 23.48       | 7.89     | dBm  | na      |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 Max OP and PSD

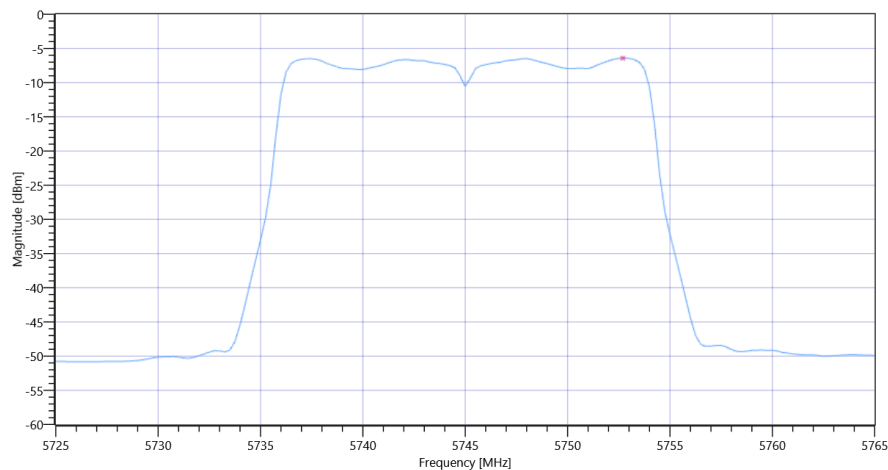
## Power Spectral Density U-NII-3

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.32   5.1   30      |
| Start [MHz]   Stop [MHz]                             | 5725.000   5765.000   |
| 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

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit       | Verdict |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density              | ---         | ---         | -6.41    | dBm/0.5MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB         | INFO    |
| Power Spectral Density DC corrected | ---         | 30          | -6.41    | dBm/0.5MHz | PASS    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 PSD UNII-3

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 27.10.2022 22:14:03                                 |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                           |
| System Version                    | 3.3.1.6                                             |
| Test Specification                | FCC 15.407, ISED RSS247 -                           |
| Test Method                       | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN    |
| TC Version                        | 0.0.1                                               |
| My Description                    | FCC 15.407 Bandwidths - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                     |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 5745                 |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5745 MHz

RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.33     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5752.790 | MHz  | INFO    |

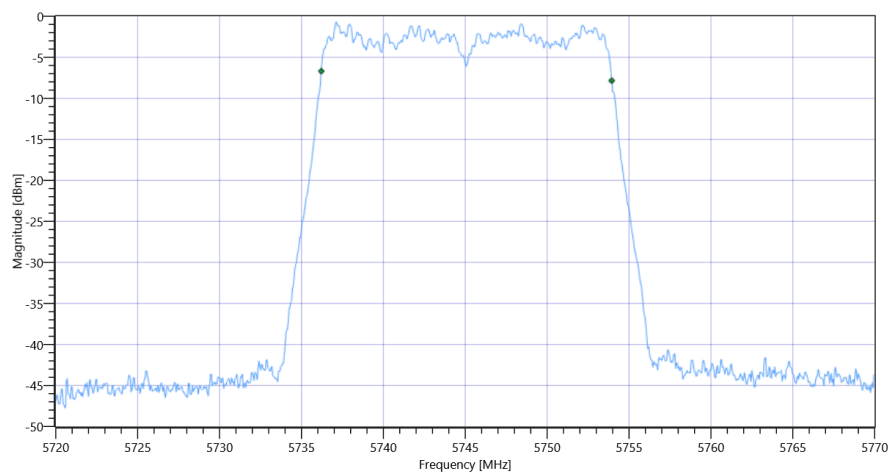
## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 12.33   5.1   25      |
| Start [MHz]   Stop [MHz]                             | 5720.000   5770.000   |
| RBW [MHz]   VBW [MHz]                                | 0.300000   1.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 1   2500   1001   SWE |

## RESULT

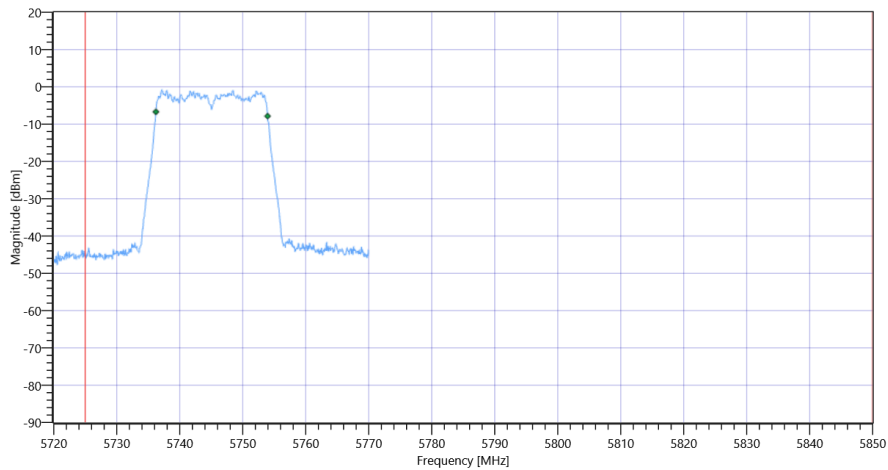
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 17.732    | MHz  | INFO    |
| T1 99%           | 5725.000000 | ---         | 5736.2088 | MHz  | PASS    |
| T2 99%           | ---         | 5850.000000 | 5753.9411 | MHz  | PASS    |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3 99PCT

## Plot: Bandwidth within Band

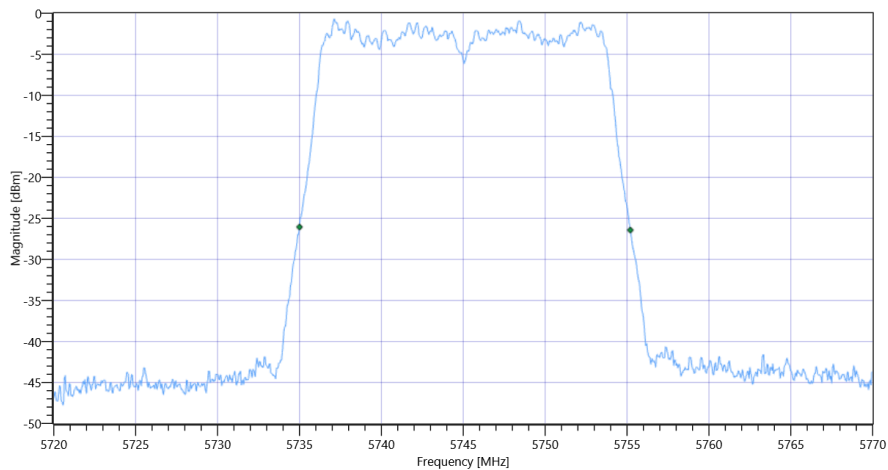


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3

## RESULT

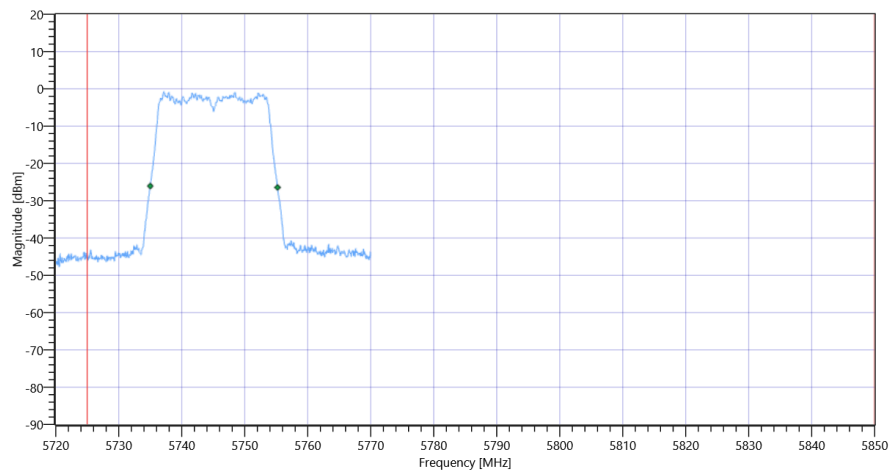
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 20.2      | MHz  | INFO    |
| T1 26dB          | 5725.000000 | ---         | 5735.0000 | MHz  | PASS    |
| T2 26dB          | ---         | 5850.000000 | 5755.2000 | MHz  | PASS    |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3

## FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 27.10.2022 22:14:56                                             |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                       |
| System Version                    | 3.3.1.6                                                         |
| Test Specification                | FCC 15.407, ISED RSS247 -                                       |
| Test Method                       | KDB789033 D02, C.2.                                             |
| TC Version                        | 0.0.1                                                           |
| My Description                    | FCC 15.407 Min Emission Bandwidth - WLAN5Gx n-HT20 mode U-NII-3 |

Add. Information

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | True   Freq [MHz] 5745                 |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5745 MHz

RESULT: Reference Power cond.

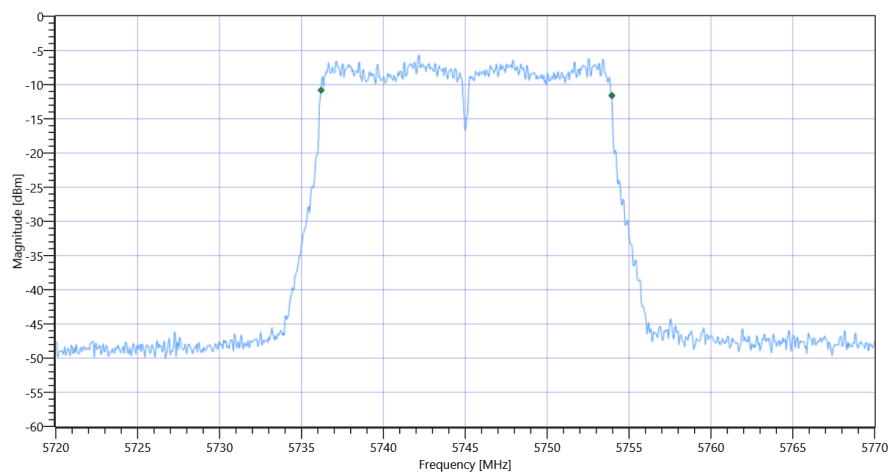
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.32     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5743.000 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.32   5.1   30      |
| Start [MHz]   Stop [MHz]                             | 5720.000   5770.000   |
| 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

| Test Description | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------|-------------|-------------|----------|------|---------|
| Bandwidth (6dB)  | 0.500       | ---         | 17.75    | MHz  | PASS    |



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT20 mode U-NII-3

## # Message with SA scan ~

### Test References

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| TC Start                          | 27.10.2022 22:15:45                 |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                           |
| System Version                    | 3.3.1.6                             |
| Test Specification                | -                                   |
| Test Method                       |                                     |
| TC Version                        | 0.0.1                               |
| My Description                    | Message with SA Scan n_HT20_U_NII_3 |
| Add. Information                  |                                     |

### Test Parameter

|               |                                                       |
|---------------|-------------------------------------------------------|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer                |
| Message start | 27.10.2022 22:15:47                                   |
| Message       | set WLAN5Gx to n_HT20_U_NII_3, Frequency [MHz] 5785 , |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Common 5Gx 6Gx # Peak output power 3MHz/3MHz ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| TC Start                          | 27.10.2022 22:16:52                             |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                       |
| System Version                    | 3.3.1.6                                         |
| Test Specification                | Common 5Gx 6Gx - none                           |
| Test Method                       |                                                 |
| TC Version                        | 0.0.1                                           |
| My Description                    | Peak OP 3MHz/3MHz - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | True   Freq [MHz] 5785                 |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5785 MHz

RESULT: Reference Power cond.

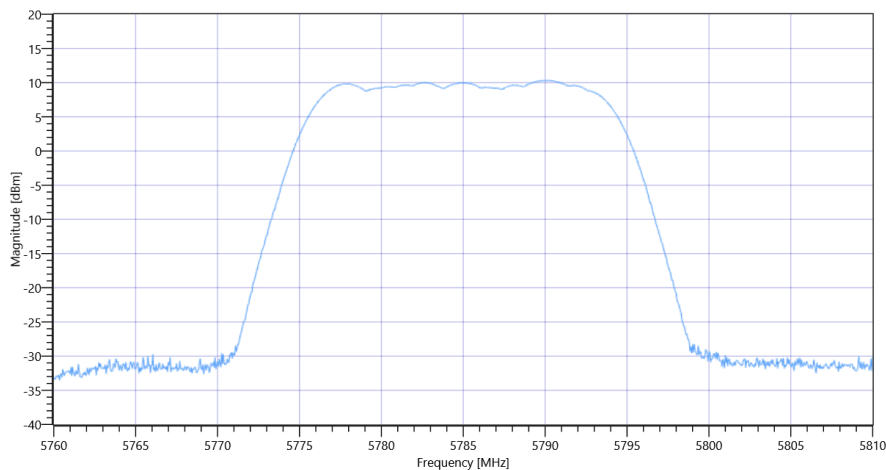
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.55     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5781.800 | MHz  | INFO    |

## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.55   5.12   30     |
| Start [MHz]   Stop [MHz]                             | 5760.000   5810.000   |
| RBW [MHz]   VBW [MHz]                                | 3.000000   3.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 300   20   1001   SWE |

## RESULT

| Test Description  | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|-------------------|-------------|-------------|-----------|------|---------|
| Peak Power        | ---         | ---         | 10.31     | dBm  | INFO    |
| Peak Power        | ---         | ---         | 10.739894 | mW   | INFO    |
| Frequency at Peak | ---         | ---         | 5790.145  | MHz  | INFO    |



Common 5Gx 6Gx # Peak output power 3MHz-3MHz ~ WLAN5Gx n-HT20 mode U-NII-3

## FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 27.10.2022 22:17:23                                             |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                       |
| System Version                    | 3.3.1.6                                                         |
| Test Specification                | FCC 15.247 -                                                    |
| Test Method                       | KDB789033 D02, F., E.2.e.                                       |
| TC Version                        | 0.0.1                                                           |
| My Description                    | FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | True   Freq [MHz] 5785                 |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5785 MHz

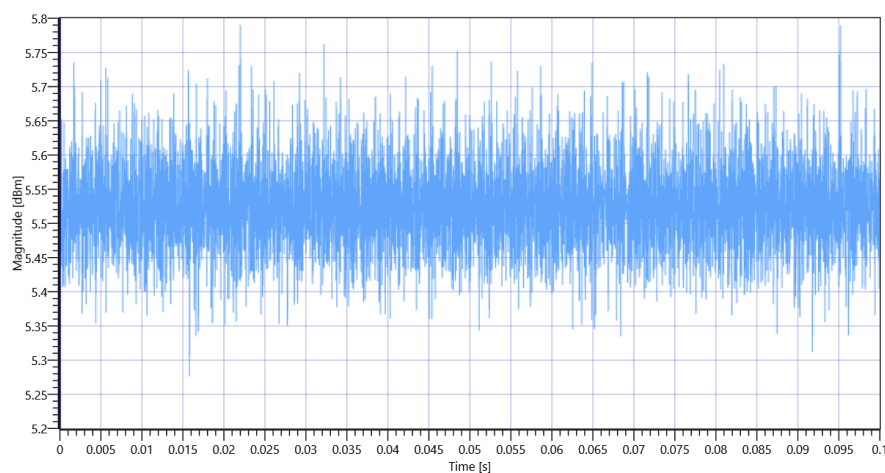
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.48     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5792.590 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

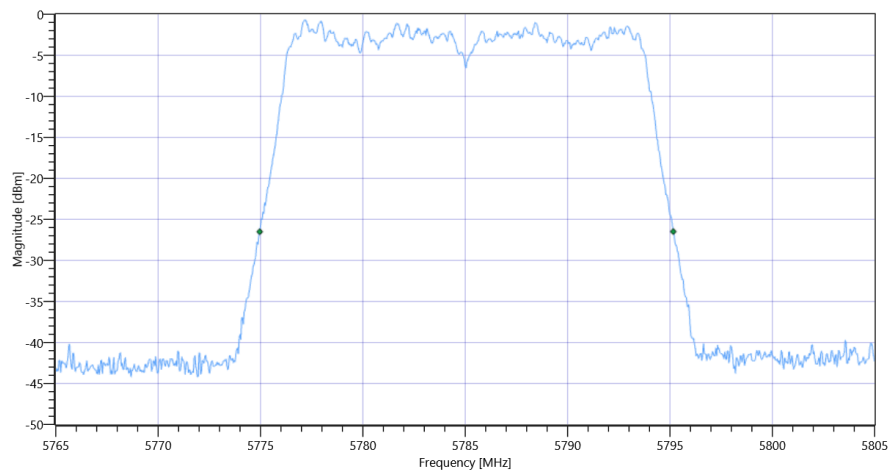


FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 5785 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 20.2      | MHz  | INFO    |
| T1 26dB          | ---         | ---         | 5774.9600 | MHz  | INFO    |
| T2 26dB          | ---         | ---         | 5795.1600 | MHz  | INFO    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3\_BW

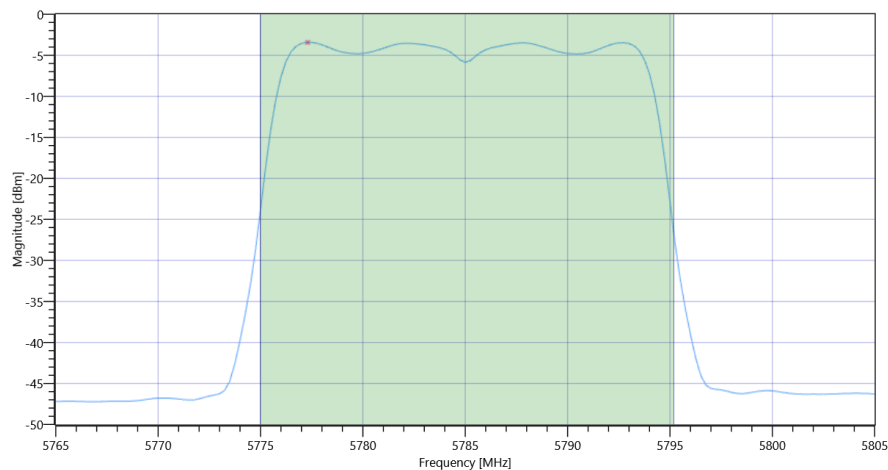
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.48   5.12   30     |
| Start [MHz]   Stop [MHz]                             | 5765.000   5805.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   3.000000   |
| Detector   TraceMode                                 | RMS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 53700   1   161   SWE |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 8.12     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 30          | 8.12     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 20.2   |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24.05       | 8.12     | dBm  | na      |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 Max OP and PSD

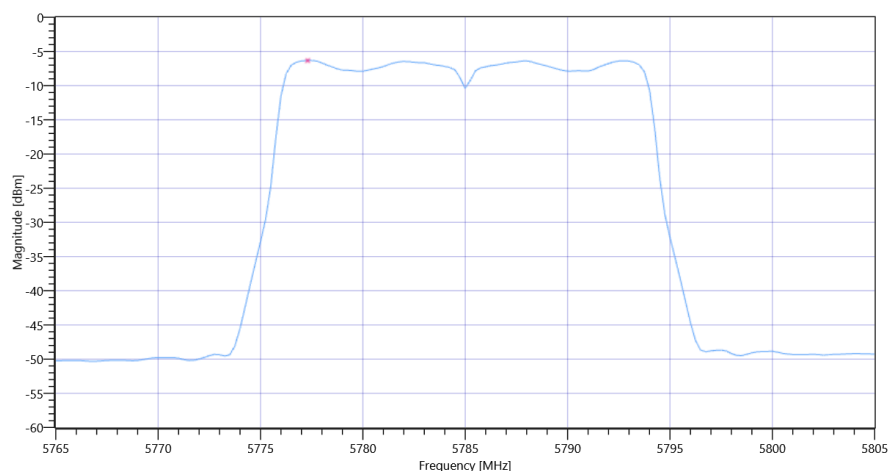
## Power Spectral Density U-NII-3

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.48   5.12   30     |
| Start [MHz]   Stop [MHz]                             | 5765.000   5805.000   |
| 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

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit       | Verdict |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density              | ---         | ---         | -6.33    | dBm/0.5MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB         | INFO    |
| Power Spectral Density DC corrected | ---         | 30          | -6.33    | dBm/0.5MHz | PASS    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 PSD UNII-3

## ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                           |
|-----------------------------------|-----------------------------------------------------------|
| TC Start                          | 27.10.2022 22:20:12                                       |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                 |
| System Version                    | 3.3.1.6                                                   |
| Test Specification                | ISED RSS247 -                                             |
| Test Method                       |                                                           |
| TC Version                        | 0.0.1                                                     |
| My Description                    | ISED Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                           |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | True   Freq [MHz] 5785                 |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5785 MHz

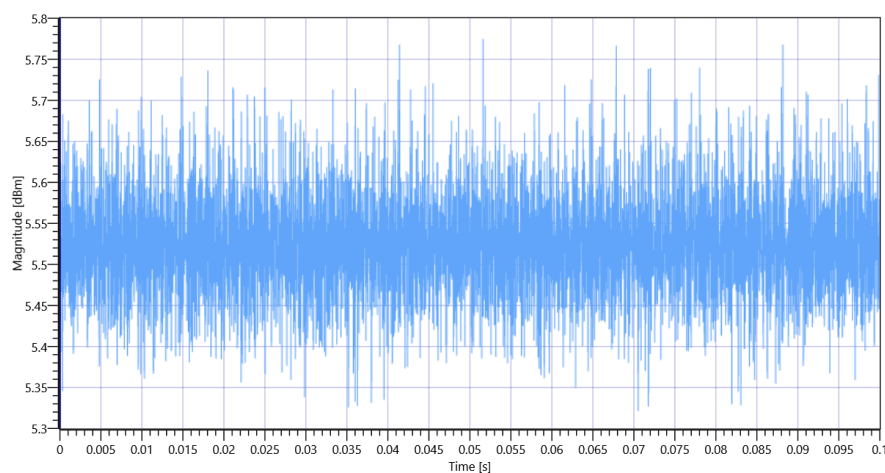
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.39     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5787.800 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

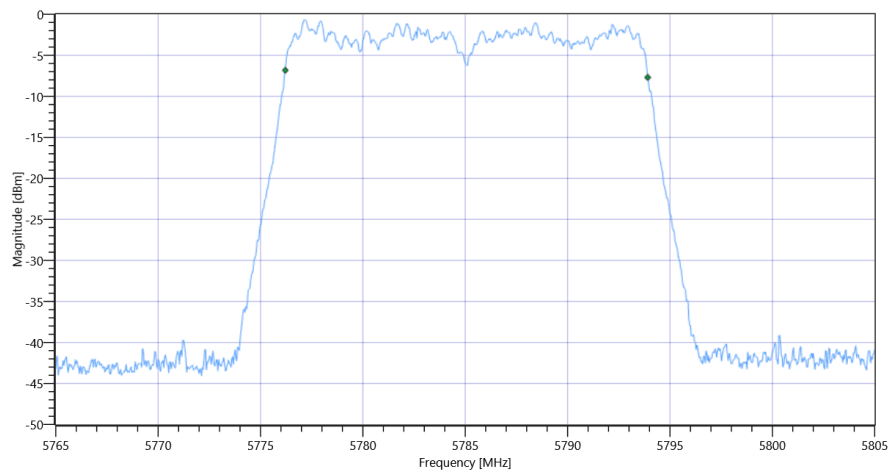


ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 5785 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 17.702    | MHz  | INFO    |
| T1 99%           | ---         | ---         | 5776.2088 | MHz  | INFO    |
| T2 99%           | ---         | ---         | 5793.9111 | MHz  | INFO    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3\_BW

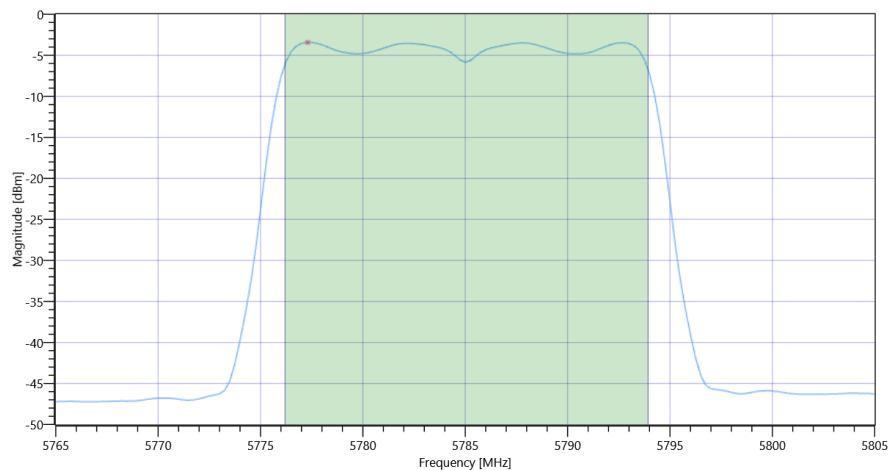
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.39   5.12   30     |
| Start [MHz]   Stop [MHz]                             | 5765.000   5805.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   3.000000   |
| Detector   TraceMode                                 | RMS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 53700   1   161   SWE |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 8.02     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 30          | 8.02     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 17.702 |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 23.48       | 8.02     | dBm  | na      |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 Max OP and PSD

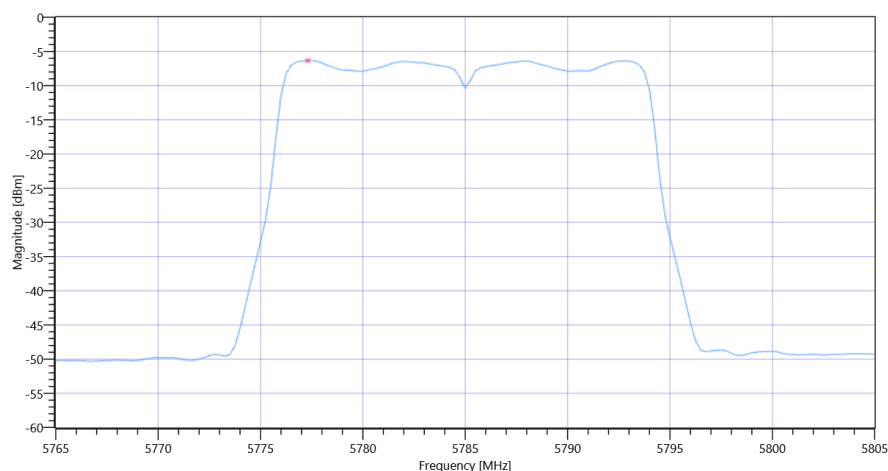
## Power Spectral Density U-NII-3

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.39   5.12   30     |
| Start [MHz]   Stop [MHz]                             | 5765.000   5805.000   |
| 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

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit       | Verdict |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density              | ---         | ---         | -6.33    | dBm/0.5MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB         | INFO    |
| Power Spectral Density DC corrected | ---         | 30          | -6.33    | dBm/0.5MHz | PASS    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 PSD UNII-3

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 27.10.2022 22:23:01                                 |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                           |
| System Version                    | 3.3.1.6                                             |
| Test Specification                | FCC 15.407, ISED RSS247 -                           |
| Test Method                       | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN    |
| TC Version                        | 0.0.1                                               |
| My Description                    | FCC 15.407 Bandwidths - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                     |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | True   Freq [MHz] 5785                 |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5785 MHz

RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.34     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5792.790 | MHz  | INFO    |

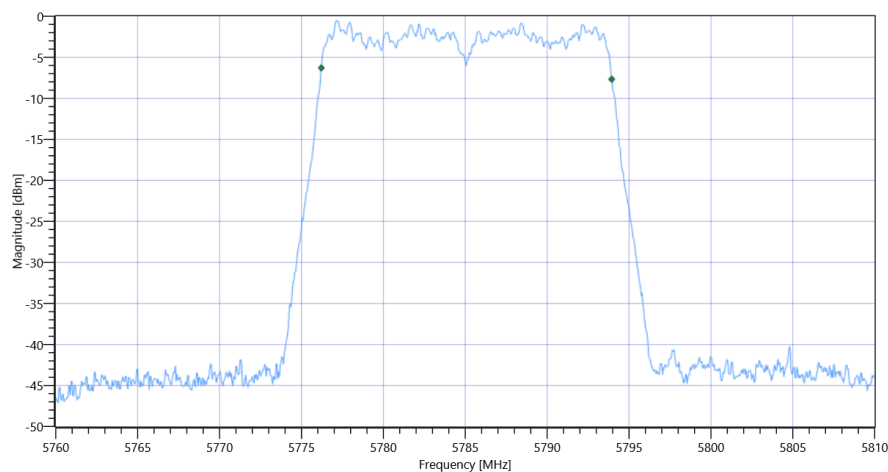
## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 12.34   5.12   25     |
| Start [MHz]   Stop [MHz]                             | 5760.000   5810.000   |
| RBW [MHz]   VBW [MHz]                                | 0.300000   1.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 1   2500   1001   SWE |

## RESULT

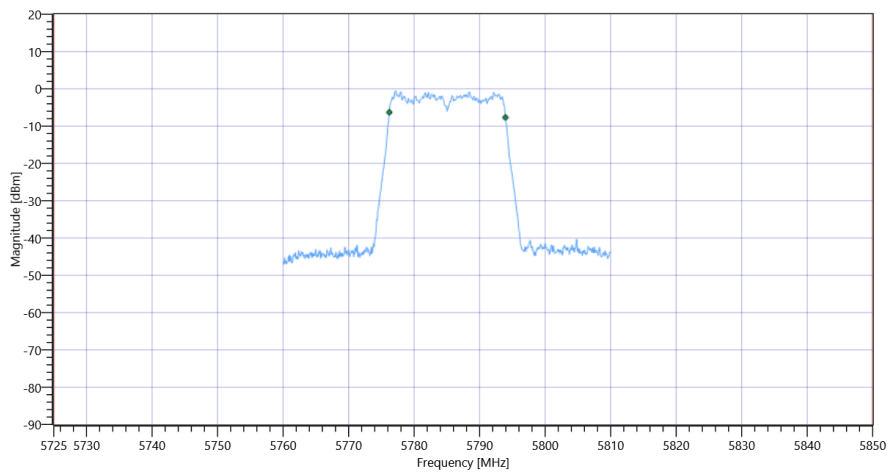
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 17.732    | MHz  | INFO    |
| T1 99%           | 5725.000000 | ---         | 5776.2088 | MHz  | PASS    |
| T2 99%           | ---         | 5850.000000 | 5793.9411 | MHz  | PASS    |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3 99PCT

## Plot: Bandwidth within Band

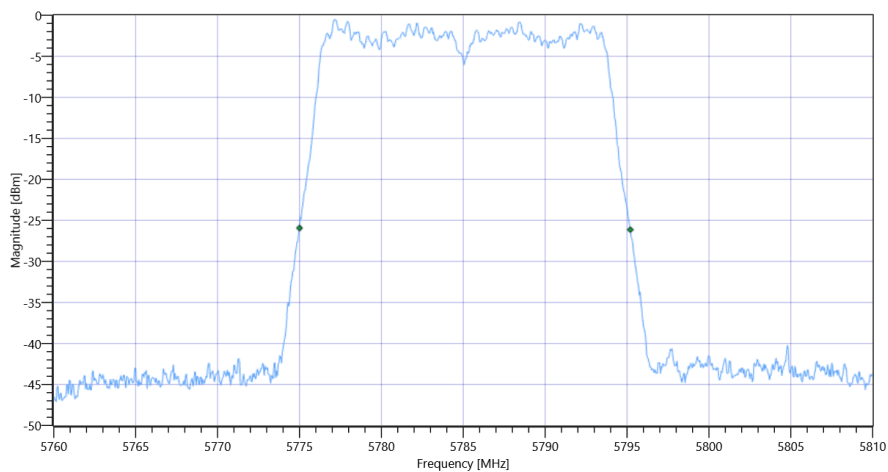


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3

## RESULT

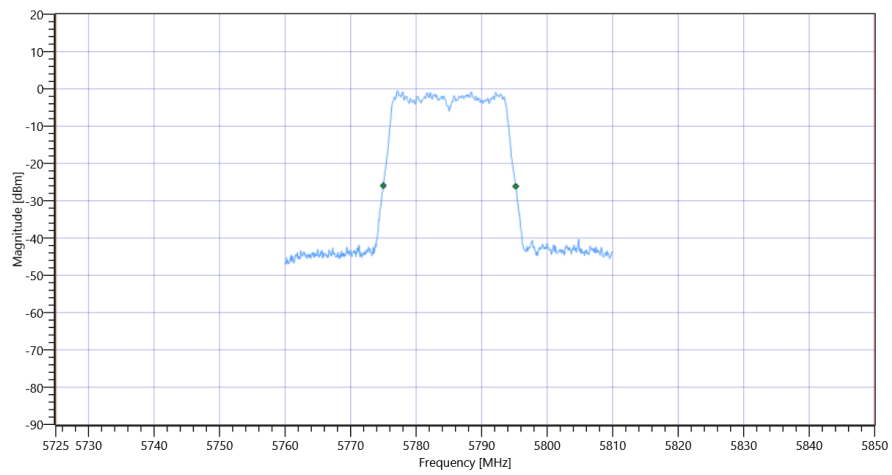
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 20.2      | MHz  | INFO    |
| T1 26dB          | 5725.000000 | ---         | 5775.0000 | MHz  | PASS    |
| T2 26dB          | ---         | 5850.000000 | 5795.2000 | MHz  | PASS    |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3 26dB

## Plot: Bandwidth within Band



*FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3*

## FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 27.10.2022 22:23:56                                             |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                       |
| System Version                    | 3.3.1.6                                                         |
| Test Specification                | FCC 15.407, ISED RSS247 -                                       |
| Test Method                       | KDB789033 D02, C.2.                                             |
| TC Version                        | 0.0.1                                                           |
| My Description                    | FCC 15.407 Min Emission Bandwidth - WLAN5Gx n-HT20 mode U-NII-3 |

Add. Information

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | True   Freq [MHz] 5785                 |
| Frequency high to test                           | False   Freq [MHz] 5825                |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5785 MHz

RESULT: Reference Power cond.

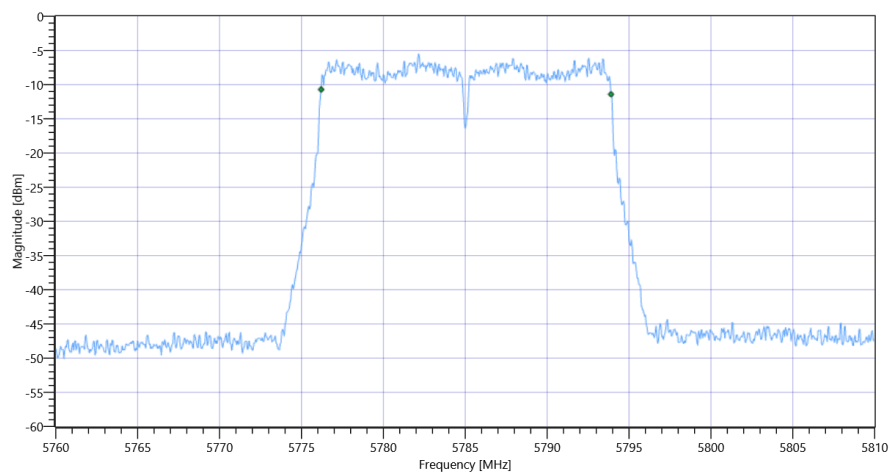
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.52     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5777.610 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.52   5.12   30     |
| Start [MHz]   Stop [MHz]                             | 5760.000   5810.000   |
| 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

| Test Description | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------|-------------|-------------|----------|------|---------|
| Bandwidth (6dB)  | 0.500       | ---         | 17.7     | MHz  | PASS    |



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT20 mode U-NII-3

## # Message with SA scan ~

### Test References

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| TC Start                          | 27.10.2022 22:24:50                 |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                           |
| System Version                    | 3.3.1.6                             |
| Test Specification                | -                                   |
| Test Method                       |                                     |
| TC Version                        | 0.0.1                               |
| My Description                    | Message with SA Scan n_HT20_U_NII_3 |
| Add. Information                  |                                     |

### Test Parameter

|               |                                                     |
|---------------|-----------------------------------------------------|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer              |
| Message start | 27.10.2022 22:24:51                                 |
| Message       | set WLAN5Gx to n_HT20_U_NII_3, Frequency [MHz] 5825 |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Common 5Gx 6Gx # Peak output power 3MHz/3MHz ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| TC Start                          | 27.10.2022 22:27:26                             |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                       |
| System Version                    | 3.3.1.6                                         |
| Test Specification                | Common 5Gx 6Gx - none                           |
| Test Method                       |                                                 |
| TC Version                        | 0.0.1                                           |
| My Description                    | Peak OP 3MHz/3MHz - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | True   Freq [MHz] 5825                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5825 MHz

RESULT: Reference Power cond.

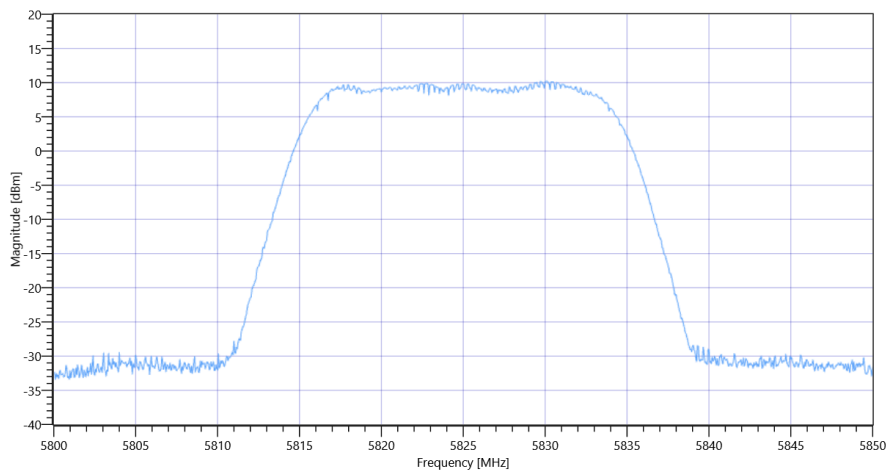
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.17     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5832.590 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.17   5   30        |
| Start [MHz]   Stop [MHz]                             | 5800.000   5850.000   |
| RBW [MHz]   VBW [MHz]                                | 3.000000   3.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 300   20   1001   SWE |

### RESULT

| Test Description  | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|-------------------|-------------|-------------|-----------|------|---------|
| Peak Power        | ---         | ---         | 10.18     | dBm  | INFO    |
| Peak Power        | ---         | ---         | 10.423174 | mW   | INFO    |
| Frequency at Peak | ---         | ---         | 5830.095  | MHz  | INFO    |



Common 5Gx 6Gx # Peak output power 3MHz-3MHz ~ WLAN5Gx n-HT20 mode U-NII-3

## FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 27.10.2022 22:27:58                                             |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                       |
| System Version                    | 3.3.1.6                                                         |
| Test Specification                | FCC 15.247 -                                                    |
| Test Method                       | KDB789033 D02, F., E.2.e.                                       |
| TC Version                        | 0.0.1                                                           |
| My Description                    | FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | True   Freq [MHz] 5825                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5825 MHz

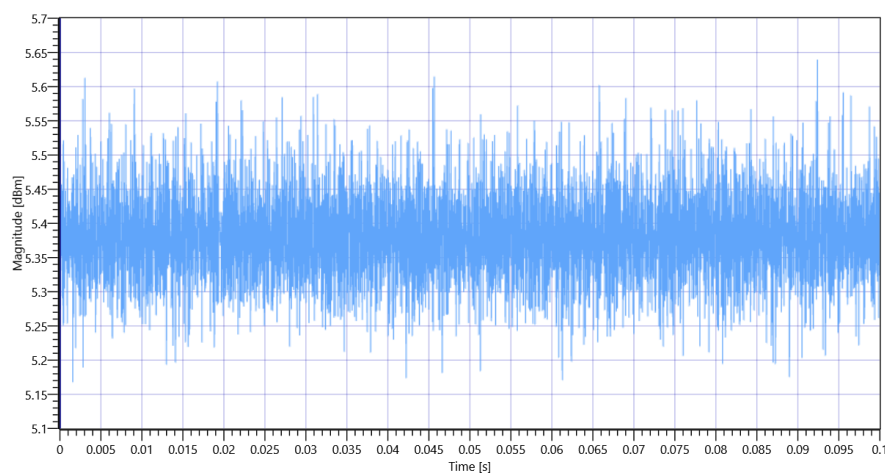
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.32     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5817.410 | MHz  | INFO    |

Evaluation max. Duty Cycle

Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

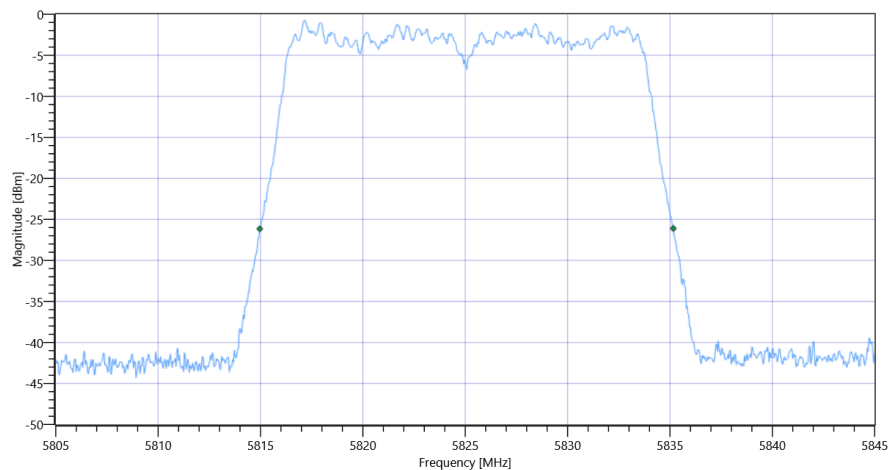


FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 5825 MHz - DutyCycle

Evaluation Bandwidth

RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 20.2      | MHz  | INFO    |
| T1 26dB          | ---         | ---         | 5814.9600 | MHz  | INFO    |
| T2 26dB          | ---         | ---         | 5835.1600 | MHz  | INFO    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3\_BW

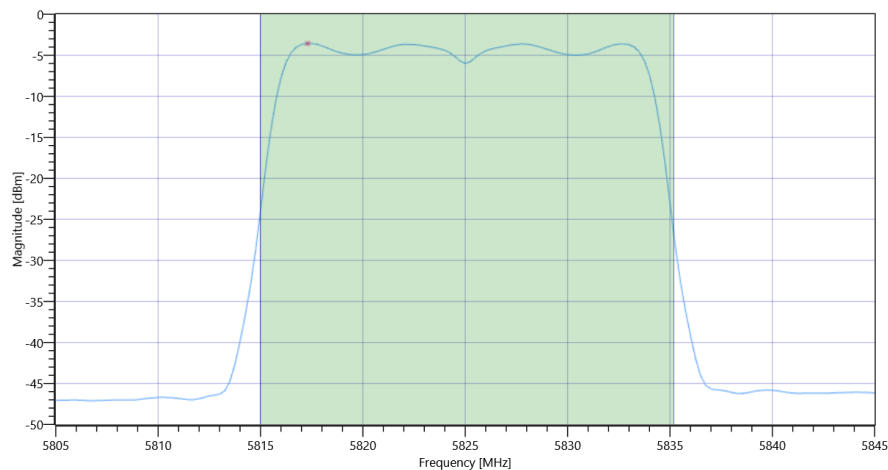
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.32   5   30        |
| Start [MHz]   Stop [MHz]                             | 5805.000   5845.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   3.000000   |
| Detector   TraceMode                                 | RMS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 53700   1   161   SWE |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 7.99     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 30          | 7.99     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 20.2   |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24.05       | 7.99     | dBm  | na      |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 Max OP and PSD

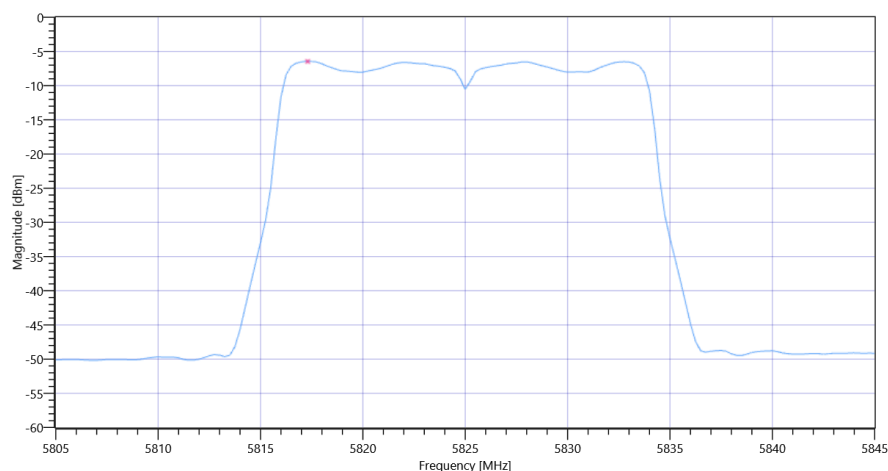
## Power Spectral Density U-NII-3

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.32   5   30        |
| Start [MHz]   Stop [MHz]                             | 5805.000   5845.000   |
| 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

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit       | Verdict |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density              | ---         | ---         | -6.46    | dBm/0.5MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB         | INFO    |
| Power Spectral Density DC corrected | ---         | 30          | -6.46    | dBm/0.5MHz | PASS    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 PSD UNII-3

## ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                           |
|-----------------------------------|-----------------------------------------------------------|
| TC Start                          | 27.10.2022 22:30:46                                       |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                 |
| System Version                    | 3.3.1.6                                                   |
| Test Specification                | ISED RSS247 -                                             |
| Test Method                       |                                                           |
| TC Version                        | 0.0.1                                                     |
| My Description                    | ISED Max Output Power & PSD - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                           |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | True   Freq [MHz] 5825                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5825 MHz

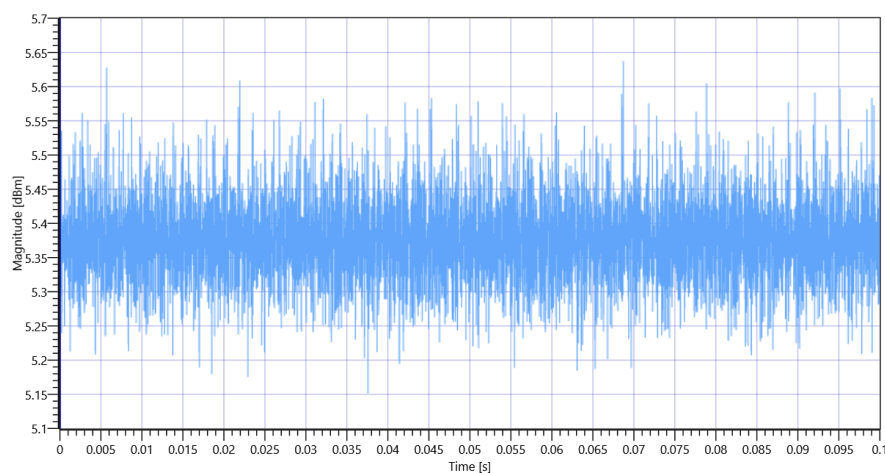
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.25     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5817.410 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

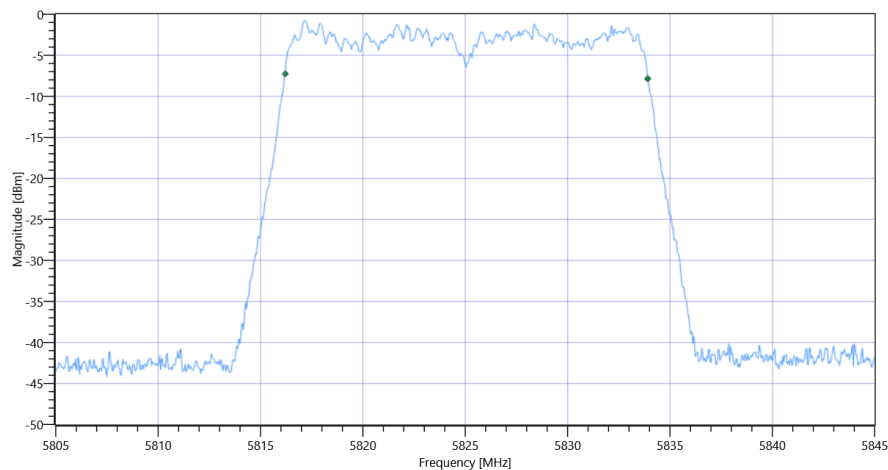


ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 5825 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 17.702    | MHz  | INFO    |
| T1 99%           | ---         | ---         | 5816.2088 | MHz  | INFO    |
| T2 99%           | ---         | ---         | 5833.9111 | MHz  | INFO    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3\_BW

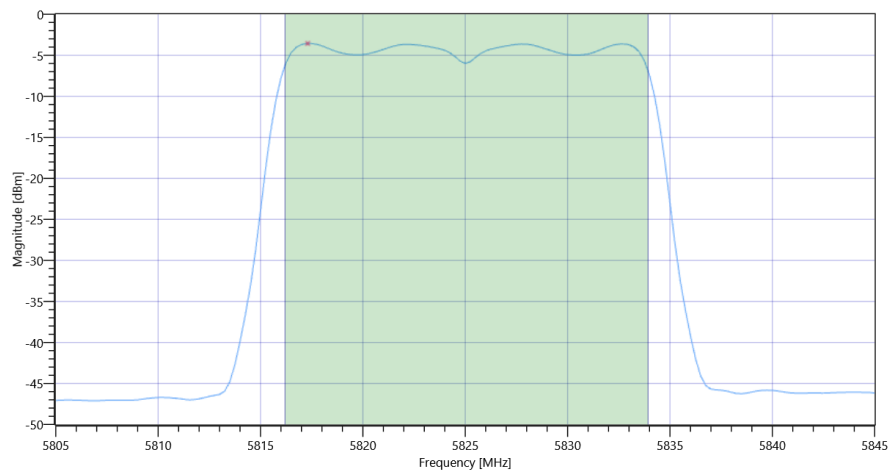
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.25   5   30        |
| Start [MHz]   Stop [MHz]                             | 5805.000   5845.000   |
| RBW [MHz]   VBW [MHz]                                | 1.000000   3.000000   |
| Detector   TraceMode                                 | RMS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 53700   1   161   SWE |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 7.88     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 30          | 7.88     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 17.702 |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 23.48       | 7.88     | dBm  | na      |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 Max OP and PSD

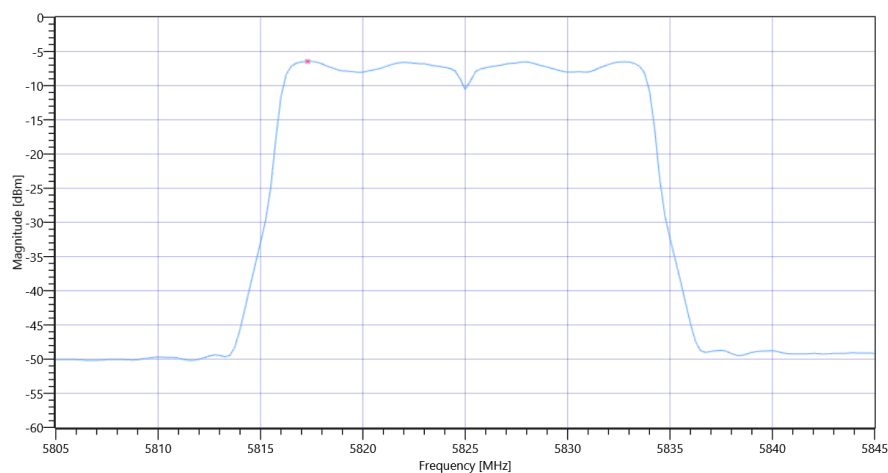
## Power Spectral Density U-NII-3

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.25   5   30        |
| Start [MHz]   Stop [MHz]                             | 5805.000   5845.000   |
| 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

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit       | Verdict |
|-------------------------------------|-------------|-------------|----------|------------|---------|
| Power Spectral Density              | ---         | ---         | -6.46    | dBm/0.5MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB         | INFO    |
| Power Spectral Density DC corrected | ---         | 30          | -6.46    | dBm/0.5MHz | PASS    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT20 mode U-NII-3 PSD UNII-3

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 27.10.2022 22:33:36                                 |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                           |
| System Version                    | 3.3.1.6                                             |
| Test Specification                | FCC 15.407, ISED RSS247 -                           |
| Test Method                       | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN    |
| TC Version                        | 0.0.1                                               |
| My Description                    | FCC 15.407 Bandwidths - WLAN5Gx n-HT20 mode U-NII-3 |
| Add. Information                  |                                                     |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | True   Freq [MHz] 5825                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5825 MHz

RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.35     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5828.000 | MHz  | INFO    |

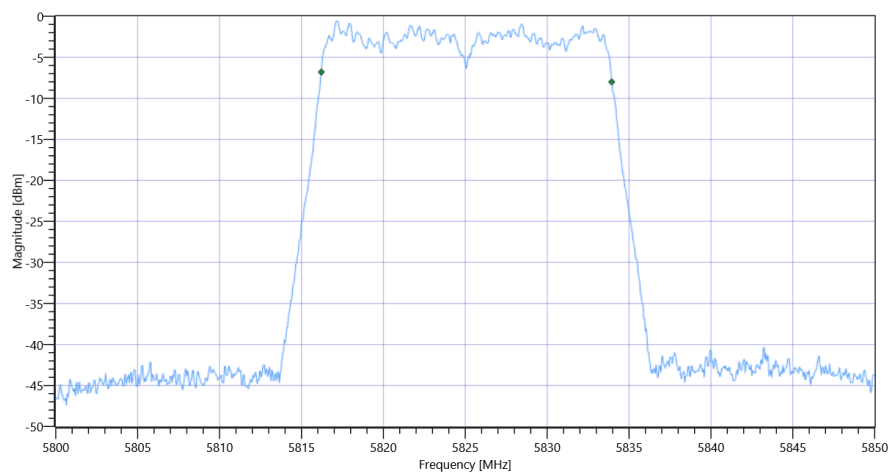
## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 12.35   5   25        |
| Start [MHz]   Stop [MHz]                             | 5800.000   5850.000   |
| RBW [MHz]   VBW [MHz]                                | 0.300000   1.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 1   2500   1001   SWE |

## RESULT

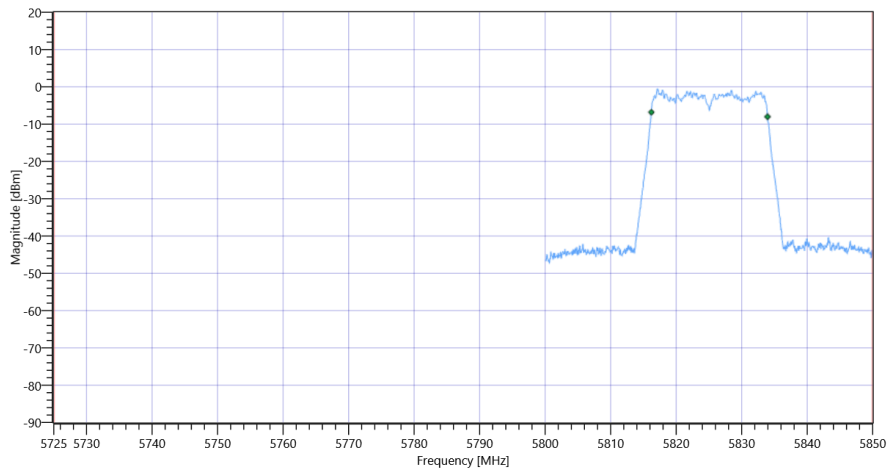
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 17.732    | MHz  | INFO    |
| T1 99%           | 5725.000000 | ---         | 5816.2088 | MHz  | PASS    |
| T2 99%           | ---         | 5850.000000 | 5833.9411 | MHz  | PASS    |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3 99PCT

## Plot: Bandwidth within Band

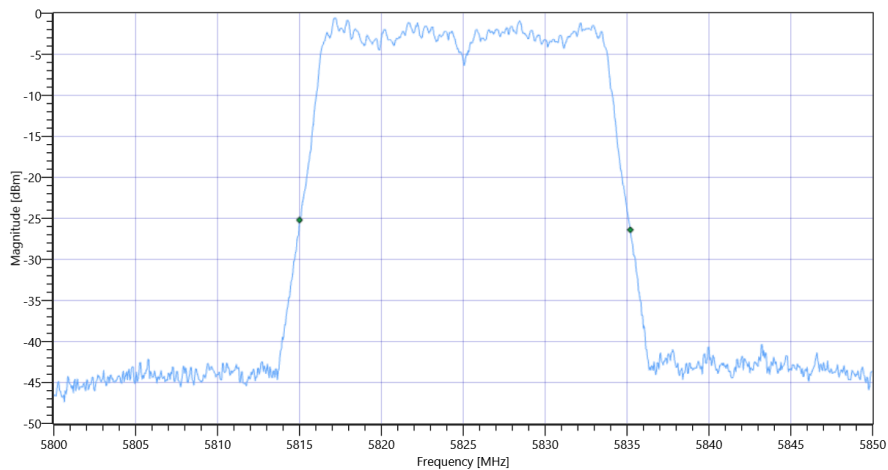


FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3

## RESULT

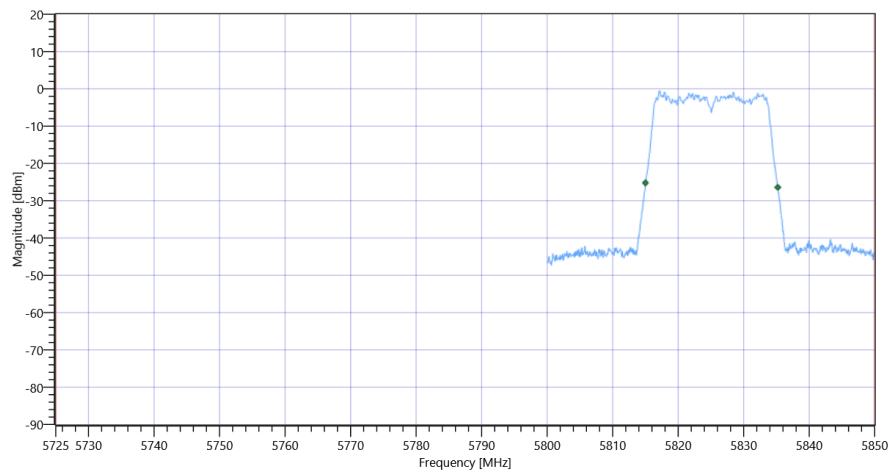
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 20.2      | MHz  | INFO    |
| T1 26dB          | 5725.000000 | ---         | 5815.0000 | MHz  | PASS    |
| T2 26dB          | ---         | 5850.000000 | 5835.2000 | MHz  | PASS    |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3 26dB

## Plot: Bandwidth within Band



*FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT20 mode U-NII-3*

## FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT20 mode U-NII-3

### Test References

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 27.10.2022 22:34:37                                             |
| Ambit Temp [°C]   Humidity [rel%] | 27.3   44                                                       |
| System Version                    | 3.3.1.6                                                         |
| Test Specification                | FCC 15.407, ISED RSS247 -                                       |
| Test Method                       | KDB789033 D02, C.2.                                             |
| TC Version                        | 0.0.1                                                           |
| My Description                    | FCC 15.407 Min Emission Bandwidth - WLAN5Gx n-HT20 mode U-NII-3 |

Add. Information

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT20 mode                    |
| Antenna Port used                                | 1                                      |
| Temperature                                      | nom                                    |
| Voltage                                          | nom                                    |
| Frequency low to test                            | False   Freq [MHz] 5745                |
| Frequency mid to test                            | False   Freq [MHz] 5785                |
| Frequency high to test                           | True   Freq [MHz] 5825                 |
| Auto Control enabled Power Supply   Climatic Box | No   No                                |
| Additional Path Loss [dB]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5825 MHz

RESULT: Reference Power cond.

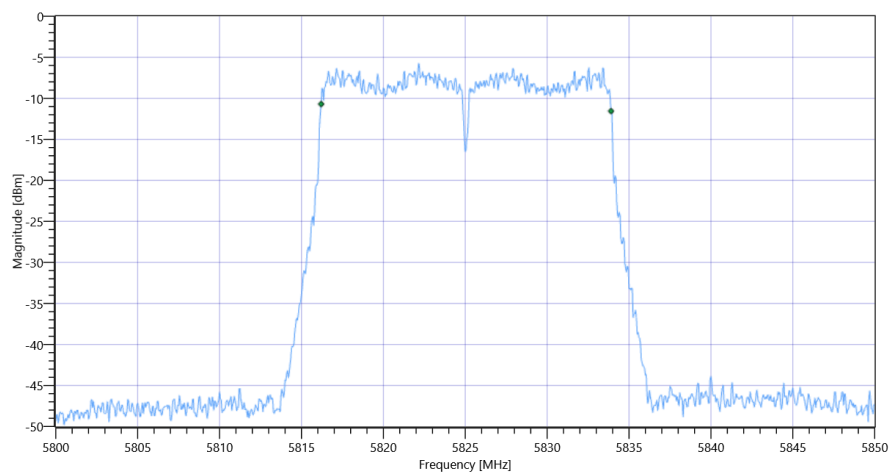
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 4.32     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5817.410 | MHz  | INFO    |

## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 16.32   5   30        |
| Start [MHz]   Stop [MHz]                             | 5800.000   5850.000   |
| 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

| Test Description | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------|-------------|-------------|----------|------|---------|
| Bandwidth (6dB)  | 0.500       | ---         | 17.7     | MHz  | PASS    |



FCC 15.407, ISED RSS247 # Minimum emission bandwidth ~ WLAN5Gx n-HT20 mode U-NII-3

## # Message with SA scan ~

### Test References

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| TC Start                          | 28.10.2022 09:18:58                 |
| Ambit Temp [°C]   Humidity [rel%] | 25.6   43                           |
| System Version                    | 3.3.1.7                             |
| Test Specification                | -                                   |
| Test Method                       |                                     |
| TC Version                        | 0.0.1                               |
| My Description                    | Message with SA Scan n_HT40_U_NII_1 |
| Add. Information                  |                                     |

### Test Parameter

|               |                                                       |
|---------------|-------------------------------------------------------|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer                |
| Message start | 28.10.2022 09:18:59                                   |
| Message       | set WLAN5Gx to n_HT40_U_NII_1, Frequency [MHz] 5190 , |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Common 5Gx 6Gx # Peak output power 3MHz/3MHz ~ WLAN5Gx n-HT40 mode U-NII-1

### Test References

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| TC Start                          | 28.10.2022 09:19:10                             |
| Ambit Temp [°C]   Humidity [rel%] | 25.6   43                                       |
| System Version                    | 3.3.1.7                                         |
| Test Specification                | Common 5Gx 6Gx - none                           |
| Test Method                       |                                                 |
| TC Version                        | 0.0.1                                           |
| My Description                    | Peak OP 3MHz/3MHz - WLAN5Gx n-HT40 mode U-NII-1 |
| Add. Information                  |                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT40 mode                    |
| 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]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5190 MHz

RESULT: Reference Power cond.

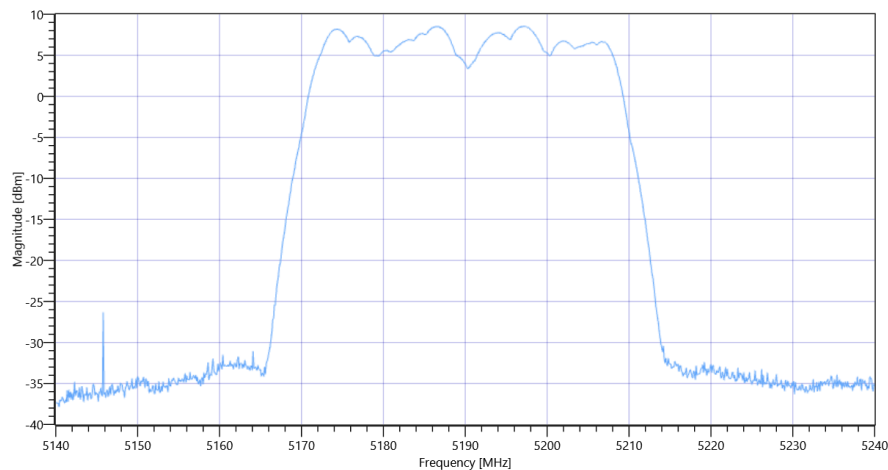
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 1.59     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5182.810 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 13.59   4.79   25     |
| Start [MHz]   Stop [MHz]                             | 5140.000   5240.000   |
| RBW [MHz]   VBW [MHz]                                | 3.000000   3.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 300   20   1001   SWE |

### RESULT

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | ---         | 8.53     | dBm  | INFO    |
| Peak Power        | ---         | ---         | 7.12853  | mW   | INFO    |
| Frequency at Peak | ---         | ---         | 5197.29  | MHz  | INFO    |



Common 5Gx 6Gx # Peak output power 3MHz-3MHz ~ WLAN5Gx n-HT40 mode U-NII-1

## FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1

### Test References

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 28.10.2022 09:19:40                                             |
| Ambit Temp [°C]   Humidity [rel%] | 25.7   43                                                       |
| System Version                    | 3.3.1.7                                                         |
| Test Specification                | FCC 15.247 -                                                    |
| Test Method                       | KDB789033 D02, F., E.2.e.                                       |
| TC Version                        | 0.0.1                                                           |
| My Description                    | FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT40 mode U-NII-1 |
| Add. Information                  |                                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT40 mode                    |
| 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]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5190 MHz

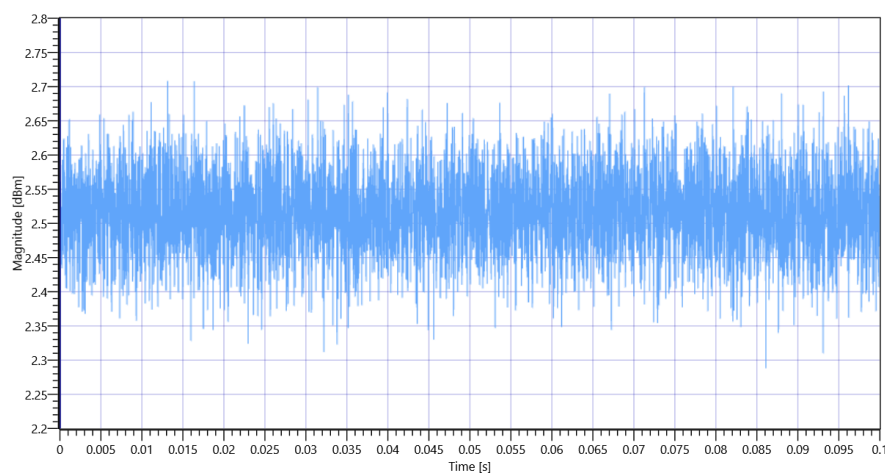
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 1.77     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5204.990 | MHz  | INFO    |

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

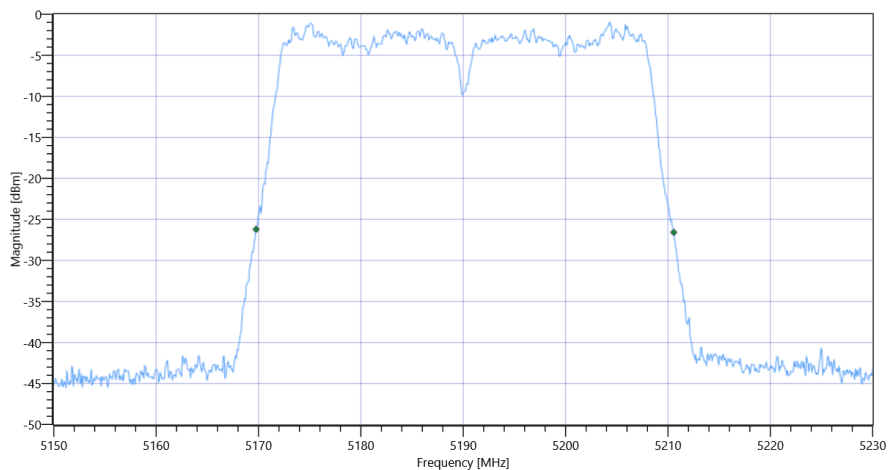


FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1 5190 MHz - DutyCycle

## Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 40.8      | MHz  | INFO    |
| T1 26dB          | ---         | ---         | 5169.7600 | MHz  | INFO    |
| T2 26dB          | ---         | ---         | 5210.5600 | MHz  | INFO    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1\_BW

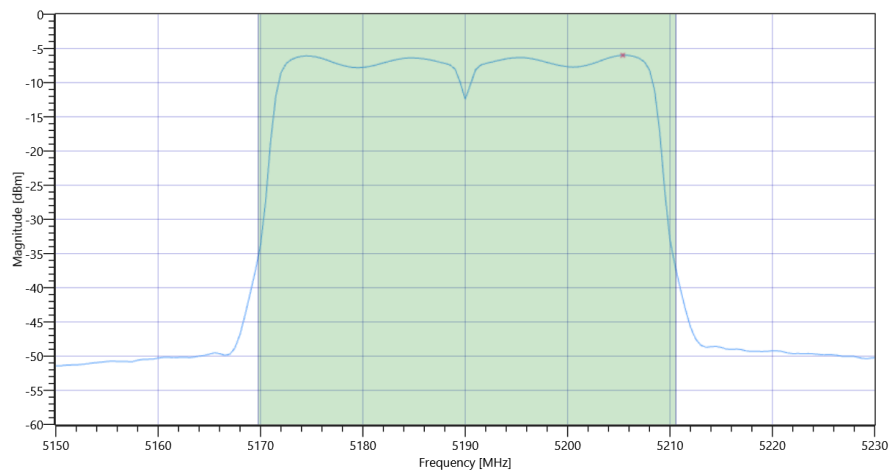
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 13.77   4.79   25     |
| 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 |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 8.36     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24          | 8.36     | dBm  | PASS    |
| Limit: 11 dBm + 10 log 40.8   |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 27.11       | 8.36     | dBm  | na      |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1 Max OP and PSD

## Power Spectral Density

### RESULT

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density              | ---         | ---         | -5.99    | dBm/1MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB       | INFO    |
| Power Spectral Density DC corrected | ---         | 11          | -5.99    | dBm/1MHz | PASS    |

# ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1

## Test References

|                                   |                                                           |
|-----------------------------------|-----------------------------------------------------------|
| TC Start                          | 28.10.2022 09:21:26                                       |
| Ambit Temp [°C]   Humidity [rel%] | 25.7   43                                                 |
| System Version                    | 3.3.1.7                                                   |
| Test Specification                | ISED RSS247 -                                             |
| Test Method                       |                                                           |
| TC Version                        | 0.0.1                                                     |
| My Description                    | ISED Max Output Power & PSD - WLAN5Gx n-HT40 mode U-NII-1 |
| Add. Information                  |                                                           |

## EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

## Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT40 mode                    |
| 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]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

## Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5190 MHz

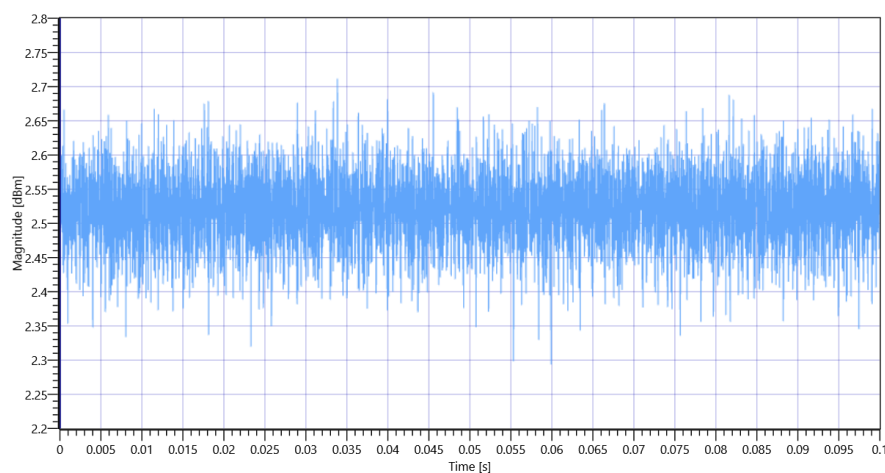
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 1.52     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5174.420 | MHz  | INFO    |

## Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

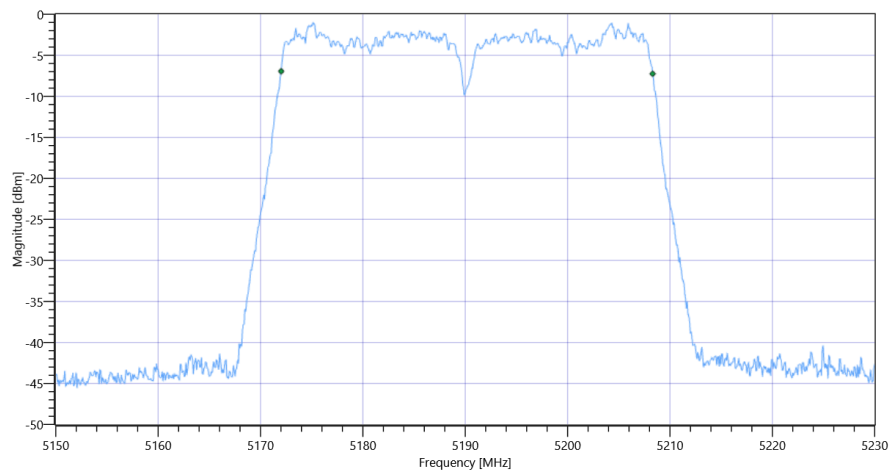


ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1 5190 MHz - DutyCycle

## Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 36.284    | MHz  | INFO    |
| T1 99%           | ---         | ---         | 5172.0180 | MHz  | INFO    |
| T2 99%           | ---         | ---         | 5208.3017 | MHz  | INFO    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1\_BW

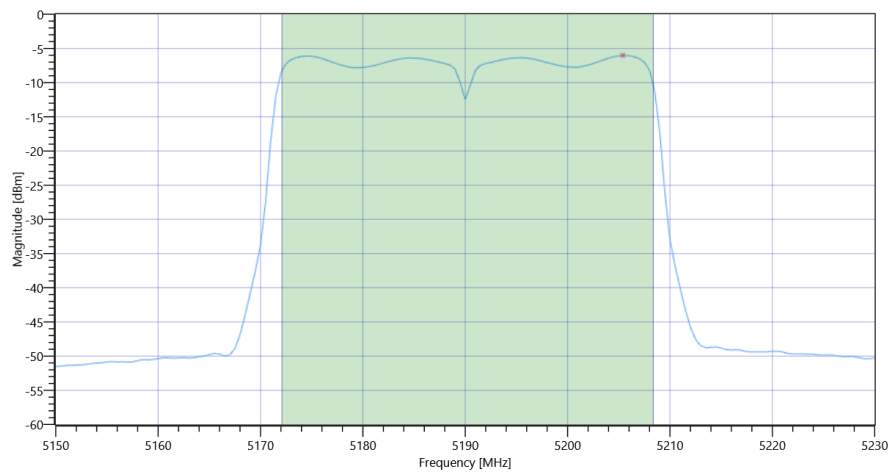
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 13.52   4.79   25     |
| 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 |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 8.29     | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24          | 8.29     | dBm  | na      |
| Limit: 11 dBm + 10 log 36.284 |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 26.6        | 8.29     | dBm  | na      |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1 Max OP and PSD

## Power Spectral Density

### RESULT

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density              | ---         | ---         | -6.02    | dBm/1MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB       | INFO    |
| Power Spectral Density DC corrected | ---         | 11          | -6.02    | dBm/1MHz | PASS    |

## FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-1

### Test References

|                                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| TC Start                          | 28.10.2022 09:23:09                                 |
| Ambit Temp [°C]   Humidity [rel%] | 25.8   43                                           |
| System Version                    | 3.3.1.7                                             |
| Test Specification                | FCC 15.407, ISED RSS247 -                           |
| Test Method                       | 26dB Bandwidth KDB789033 D02, C.1 / ISED RSS-GEN    |
| TC Version                        | 0.0.1                                               |
| My Description                    | FCC 15.407 Bandwidths - WLAN5Gx n-HT40 mode U-NII-1 |
| Add. Information                  |                                                     |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT40 mode                    |
| 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]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5190 MHz

RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 1.47     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5204.190 | MHz  | INFO    |

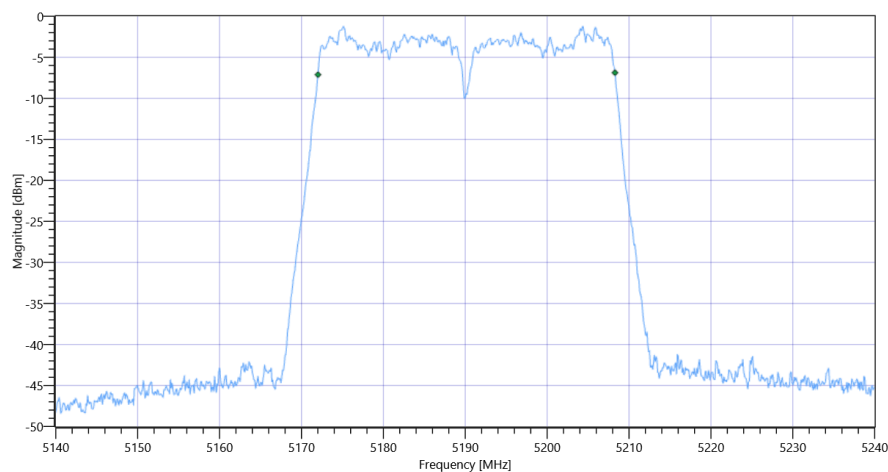
## READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 9.47   4.79   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 |

## RESULT

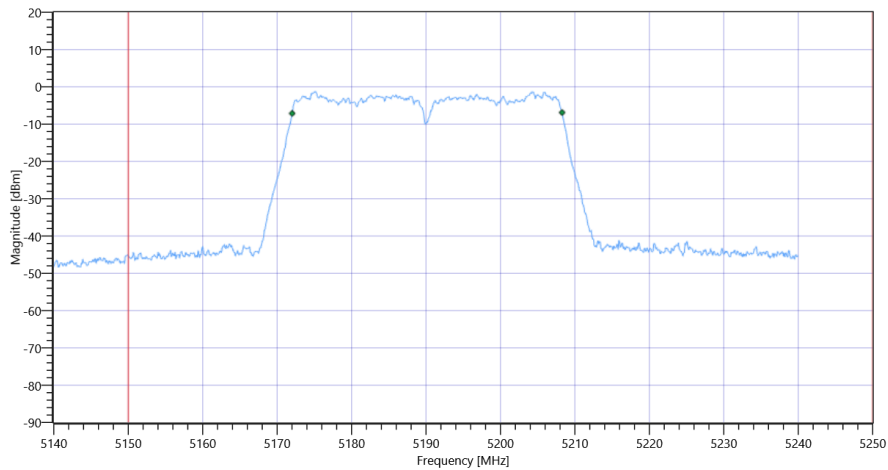
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 36.264    | MHz  | INFO    |
| T1 99%           | 5150.000000 | ---         | 5172.0180 | MHz  | PASS    |
| T2 99%           | ---         | 5250.000000 | 5208.2817 | MHz  | PASS    |

## Plot: Bandwidth only



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-1 99PCT

## Plot: Bandwidth within Band

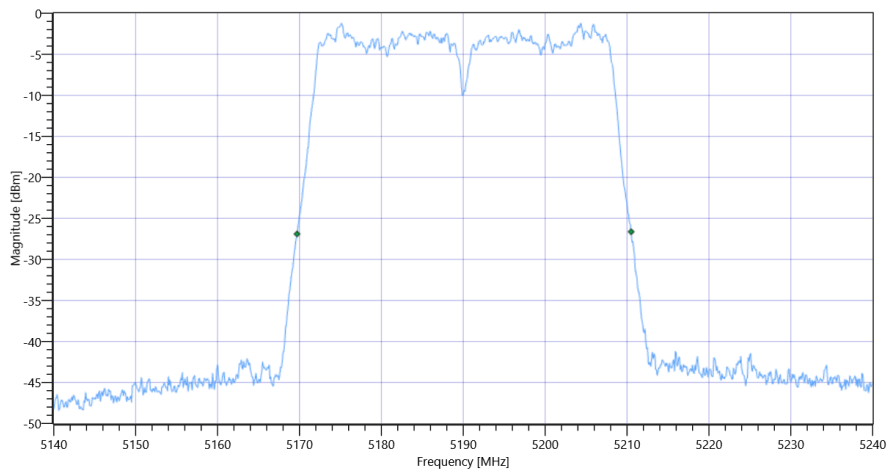


FCC 15.407, ISSED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-1

## RESULT

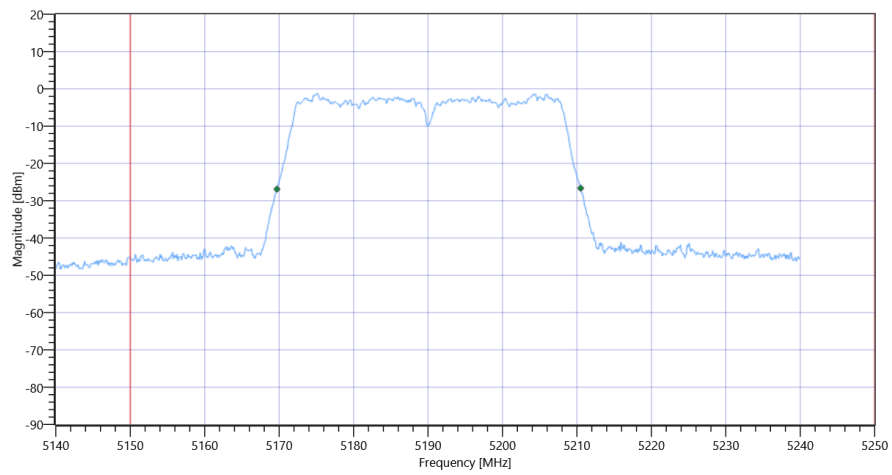
| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 40.8      | MHz  | INFO    |
| T1 26dB          | 5150.000000 | ---         | 5169.7000 | MHz  | PASS    |
| T2 26dB          | ---         | 5250.000000 | 5210.5000 | MHz  | PASS    |

## Plot: Bandwidth only



FCC 15.407, ISSED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-1 26dB

## Plot: Bandwidth within Band



FCC 15.407, ISED RSS247 # Bandwidths 99PCT and 26dB ~ WLAN5Gx n-HT40 mode U-NII-1

## # Message with SA scan ~

### Test References

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| TC Start                          | 28.10.2022 09:24:00                 |
| Ambit Temp [°C]   Humidity [rel%] | 25.8   43                           |
| System Version                    | 3.3.1.7                             |
| Test Specification                | -                                   |
| Test Method                       |                                     |
| TC Version                        | 0.0.1                               |
| My Description                    | Message with SA Scan n_HT40_U_NII_1 |
| Add. Information                  |                                     |

### Test Parameter

|               |                                                     |
|---------------|-----------------------------------------------------|
| Switched Path | EUT - SignalingUnit - SpectrumAnalyzer              |
| Message start | 28.10.2022 09:24:01                                 |
| Message       | set WLAN5Gx to n_HT40_U_NII_1, Frequency [MHz] 5230 |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Common 5Gx 6Gx # Peak output power 3MHz/3MHz ~ WLAN5Gx n-HT40 mode U-NII-1

### Test References

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| TC Start                          | 28.10.2022 09:24:34                             |
| Ambit Temp [°C]   Humidity [rel%] | 25.9   43                                       |
| System Version                    | 3.3.1.7                                         |
| Test Specification                | Common 5Gx 6Gx - none                           |
| Test Method                       |                                                 |
| TC Version                        | 0.0.1                                           |
| My Description                    | Peak OP 3MHz/3MHz - WLAN5Gx n-HT40 mode U-NII-1 |
| Add. Information                  |                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT40 mode                    |
| 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]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5230 MHz

RESULT: Reference Power cond.

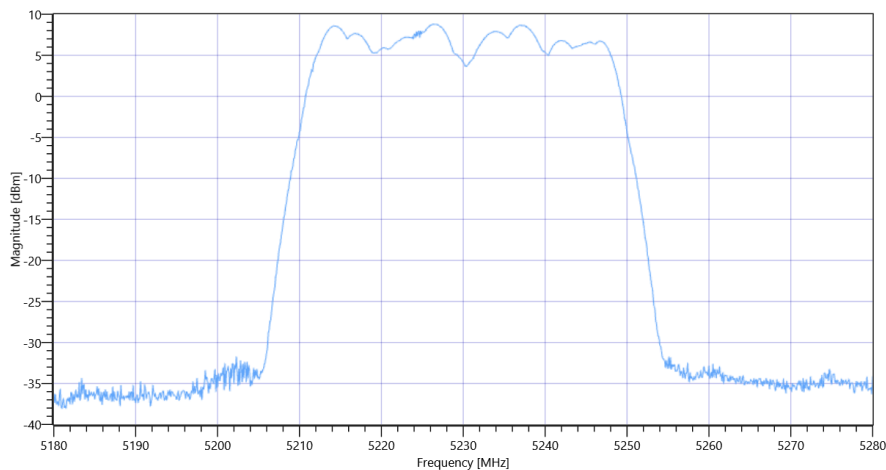
| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 1.68     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5244.990 | MHz  | INFO    |

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 13.68   4.81   25     |
| Start [MHz]   Stop [MHz]                             | 5180.000   5280.000   |
| RBW [MHz]   VBW [MHz]                                | 3.000000   3.000000   |
| Detector   TraceMode                                 | POS   MAXH            |
| Sweep: Time [ms]   Count   Points per Section   Type | 300   20   1001   SWE |

### RESULT

| Test Description  | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------|-------------|-------------|----------|------|---------|
| Peak Power        | ---         | ---         | 8.78     | dBm  | INFO    |
| Peak Power        | ---         | ---         | 7.550922 | mW   | INFO    |
| Frequency at Peak | ---         | ---         | 5226.7   | MHz  | INFO    |



Common 5Gx 6Gx # Peak output power 3MHz-3MHz ~ WLAN5Gx n-HT40 mode U-NII-1

## FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1

### Test References

|                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| TC Start                          | 28.10.2022 09:25:04                                             |
| Ambit Temp [°C]   Humidity [rel%] | 25.9   43                                                       |
| System Version                    | 3.3.1.7                                                         |
| Test Specification                | FCC 15.247 -                                                    |
| Test Method                       | KDB789033 D02, F., E.2.e.                                       |
| TC Version                        | 0.0.1                                                           |
| My Description                    | FCC 15.407 Max Output Power & PSD - WLAN5Gx n-HT40 mode U-NII-1 |
| Add. Information                  |                                                                 |

### EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

### Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT40 mode                    |
| 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]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

### Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5230 MHz

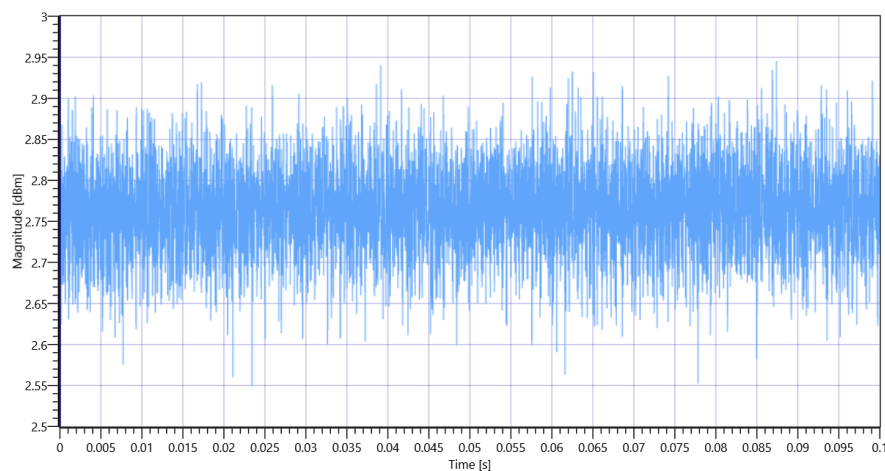
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 1.75     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5245.580 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |

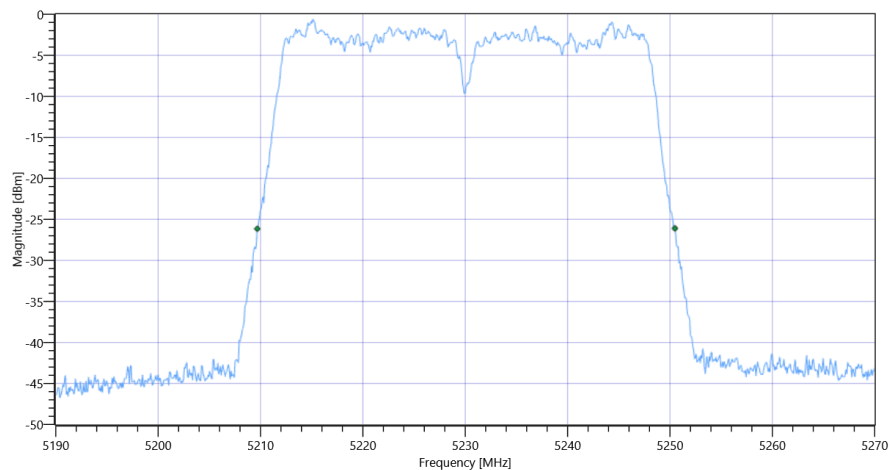


FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1 5230 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 26dB   | ---         | ---         | 40.8      | MHz  | INFO    |
| T1 26dB          | ---         | ---         | 5209.6800 | MHz  | INFO    |
| T2 26dB          | ---         | ---         | 5250.4800 | MHz  | INFO    |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1\_BW

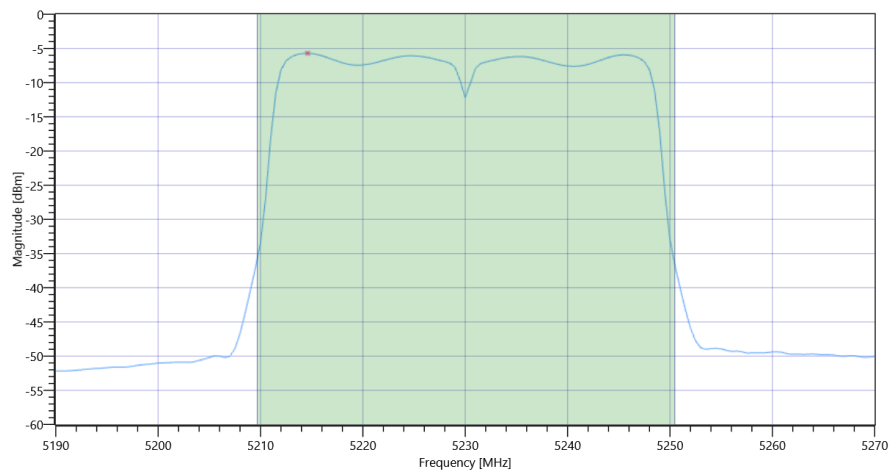
## Maximum Output Power

### READ SA SETTINGS:

|                                                      |                       |
|------------------------------------------------------|-----------------------|
| RefLevel [dBm]   RefLevelOffset [dB]   InpAtt [dB]   | 13.75   4.81   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 |

### RESULT

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Max Output Power              | ---         | ---         | 8.6      | dBm  | INFO    |
| Duty Cycle Correction         | ---         | ---         | 0        | dB   | INFO    |
| Limit absolute                |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 24          | 8.6      | dBm  | PASS    |
| Limit: 11 dBm + 10 log 40.8   |             |             |          |      |         |
| Max Output Power DC corrected | ---         | 27.11       | 8.6      | dBm  | na      |



FCC 15.247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1 Max OP and PSD

## Power Spectral Density

### RESULT

| Test Description                    | Lower Limit | Upper Limit | Measured | Unit     | Verdict |
|-------------------------------------|-------------|-------------|----------|----------|---------|
| Power Spectral Density              | ---         | ---         | -5.7     | dBm/1MHz | INFO    |
| Duty Cycle Correction               | ---         | ---         | 0        | dB       | INFO    |
| Power Spectral Density DC corrected | ---         | 11          | -5.7     | dBm/1MHz | PASS    |

# ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1

## Test References

|                                   |                                                           |
|-----------------------------------|-----------------------------------------------------------|
| TC Start                          | 28.10.2022 09:26:46                                       |
| Ambit Temp [°C]   Humidity [rel%] | 25.9   43                                                 |
| System Version                    | 3.3.1.7                                                   |
| Test Specification                | ISED RSS247 -                                             |
| Test Method                       |                                                           |
| TC Version                        | 0.0.1                                                     |
| My Description                    | ISED Max Output Power & PSD - WLAN5Gx n-HT40 mode U-NII-1 |
| Add. Information                  |                                                           |

## EUT Common Settings WLAN5Gx

|                         |        |
|-------------------------|--------|
| Number of Antenna Ports | 1      |
| User Interaction        | No     |
| Device Class UNII_1     | Client |

## Test Parameter

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| Technology to test                               | WLAN5Gx n-HT40 mode                    |
| 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]                        | 1.4                                    |
| Switched Path                                    | EUT - SignalingUnit - SpectrumAnalyzer |

## Test Equipment

|                                                                            |
|----------------------------------------------------------------------------|
| Signal analyzer,Rohde&Schwarz,FSV-40,1321.3008K40/101353,3.70              |
| Switch matrix,Rohde&Schwarz,OSP-B157W8PLUS,1527.1144.05 / 100837,2.10.0.23 |

## Test at TX 5230 MHz

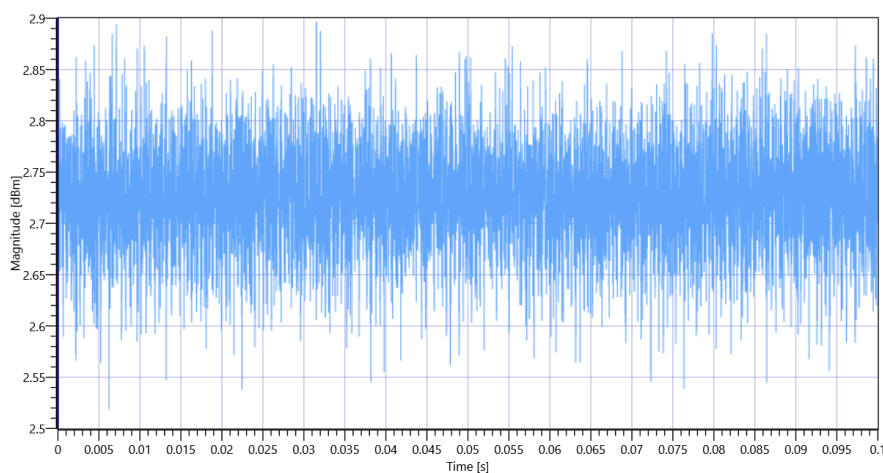
RESULT: Reference Power cond.

| Test Description              | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|-------------------------------|-------------|-------------|----------|------|---------|
| Ref. Power<br>1MHz/1MHz cond. | ---         | ---         | 1.86     | dBm  | INFO    |
| Ref. Frequency                | ---         | ---         | 5222.810 | MHz  | INFO    |

Evaluation max. Duty Cycle

### Duty Cycle evaluation

| Test Description                                           | Lower Limit | Upper Limit | Measured | Unit | Verdict |
|------------------------------------------------------------|-------------|-------------|----------|------|---------|
| No enough Bursts detected, Duty Cycle Burst Ratio set to 1 |             |             |          |      |         |
| Duty Cycle (Burst<br>Ratio) max                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle max                                             | ---         | ---         | 0        | dB   | INFO    |
| Duty Cycle (Burst<br>Ratio) min                            | ---         | ---         | 1        | ---  | INFO    |
| Duty Cycle min                                             | ---         | ---         | 0        | dB   | INFO    |



ISED RSS247 # Max output power and psd ~ WLAN5Gx n-HT40 mode U-NII-1 5230 MHz - DutyCycle

Evaluation Bandwidth

### RESULT

| Test Description | Lower Limit | Upper Limit | Measured  | Unit | Verdict |
|------------------|-------------|-------------|-----------|------|---------|
| Bandwidth 99%    | ---         | ---         | 36.284    | MHz  | INFO    |
| T1 99%           | ---         | ---         | 5211.9381 | MHz  | INFO    |
| T2 99%           | ---         | ---         | 5248.2218 | MHz  | INFO    |