





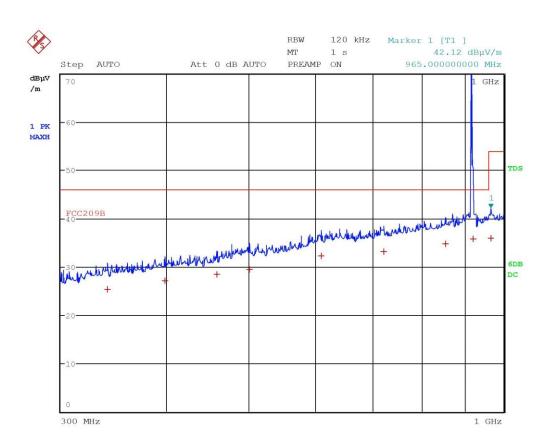


| rac | cel: | FCC209B | . Measurement Result | |
|-----|------------|------------|----------------------|----------------|
| rac | ce2: | | | |
| rac | ce3: | | | |
| | TRACE | FREQUENCY | LEVEL dBµV/m | DELTA LIMIT de |
| 1 | Quasi Peak | 30.2 MHz | 22.55 | -17.44 |
| 1 | Quasi Peak | 41.2 MHz | 19.65 | -20.34 |
| 1 | Quasi Peak | 64 MHz | 18.22 | -21.78 |
| 1 | Quasi Peak | 84.6 MHz | 17.91 | -22.09 |
| 1 | Quasi Peak | 120.16 MHz | 19.83 | -23.68 |
| 1 | Quasi Peak | 155.44 MHz | 22.20 | -21.31 |
| 1 | Quasi Peak | 215.84 MHz | 25.37 | -18.14 |
| 1 | Quasi Peak | 291.52 MHz | 29.13 | -16.89 |
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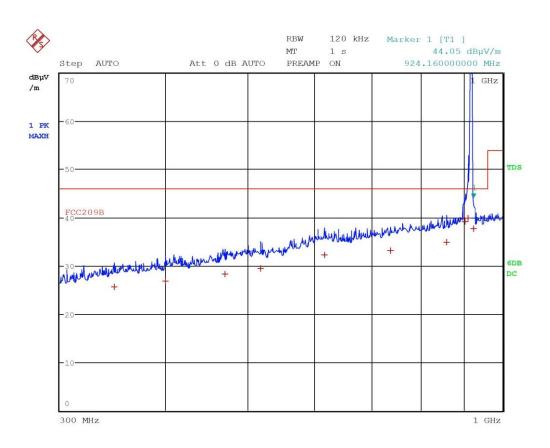


| Tra | cel: | | FCC209B | | | | | |
|---------|-------|------|------------|--------------|----------------|--|--|--|
| Trace2: | | | | | | | | |
| Tra | ce3: | | - | | | | | |
| | TRAC | E | FREQUENCY | LEVEL dBµV/m | DELTA LIMIT dB | | | |
| 1 | Quasi | Peak | 340.92 MHz | 25.42 | -20.59 | | | |
| 1 | Quasi | Peak | 398.2 MHz | 27.09 | -18.92 | | | |
| 1 | Quasi | Peak | 458.64 MHz | 28.51 | -17.50 | | | |
| 1 | Quasi | Peak | 501 MHz | 29.53 | -16.48 | | | |
| 1 | Quasi | Peak | 609.08 MHz | 32.27 | -13.74 | | | |
| 1 | Quasi | Peak | 721.52 MHz | 33.20 | -12.81 | | | |
| 1 | Quasi | Peak | 854.32 MHz | 34.84 | -11.17 | | | |
| 1 | Quasi | Peak | 920 MHz | 35.77 | -10.24 | | | |
| 1 | Quasi | Peak | 965 MHz | 35.96 | -18.01 | | | |
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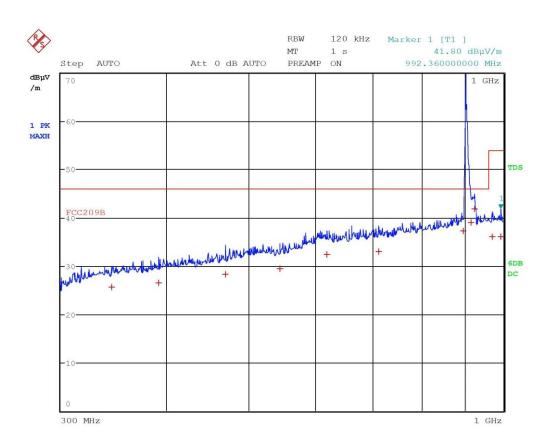


| Tra | cel: | FCC209B | | | | |
|---------|------------|------------|--------------|----------------|--|--|
| Гrа | ce2: | | | | | |
| Trace3: | | | | | | |
| | TRACE | FREQUENCY | LEVEL dBµV/m | DELTA LIMIT de | | |
| 1 | Quasi Peak | 347.88 MHz | 25.62 | -20.39 | | |
| 1 | Quasi Peak | 399.6 MHz | 26.82 | -19.20 | | |
| 1 | Quasi Peak | 470.04 MHz | 28.34 | -17.67 | | |
| 1 | Quasi Peak | 517.6 MHz | 29.50 | -16.51 | | |
| 1 | Quasi Peak | 616.68 MHz | 32.34 | -13.67 | | |
| 1 | Quasi Peak | 737.72 MHz | 33.21 | -12.80 | | |
| 1 | Quasi Peak | 859.36 MHz | 34.88 | -11.13 | | |
| 1 | Quasi Peak | 903.04 MHz | 39.17 | -6.84 | | |
| 1 | Quasi Peak | 910 MHz | 39.99 | -6.02 | | |
| 1 | Quasi Peak | 924.16 MHz | 37.79 | -8.22 | | |
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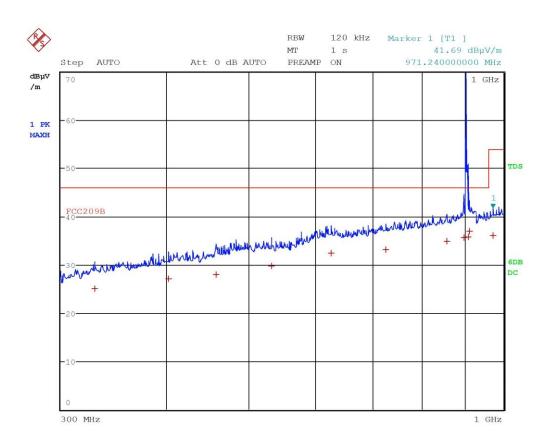


| 'ra | cel: | FCC209B | . Measurement Result | |
|-----|------------|------------|----------------------|----------------|
| 'ra | ce2: | | | |
| | ce3: | | | |
| | TRACE | FREQUENCY | LEVEL dBµV/m | DELTA LIMIT de |
| 1 | Quasi Peak | 344.44 MHz | 25.59 | -20.43 |
| 1 | Quasi Peak | 391.52 MHz | 26.50 | -19.52 |
| 1 | Quasi Peak | 469.12 MHz | 28.35 | -17.66 |
| 1 | Quasi Peak | 544.44 MHz | 29.53 | -16.48 |
| 1 | Quasi Peak | 618.24 MHz | 32.37 | -13.64 |
| 1 | Quasi Peak | 711.76 MHz | 33.03 | -12.98 |
| 1 | Quasi Peak | 897 MHz | 37.28 | -8.73 |
| 1 | Quasi Peak | 915 MHz | 39.02 | -6.99 |
| 1 | Quasi Peak | 924 MHz | 41.80 | -4.21 |
| 1 | Quasi Peak | 970.48 MHz | 36.06 | -17.92 |
| 1 | Quasi Peak | 992.36 MHz | 36.17 | -17.81 |
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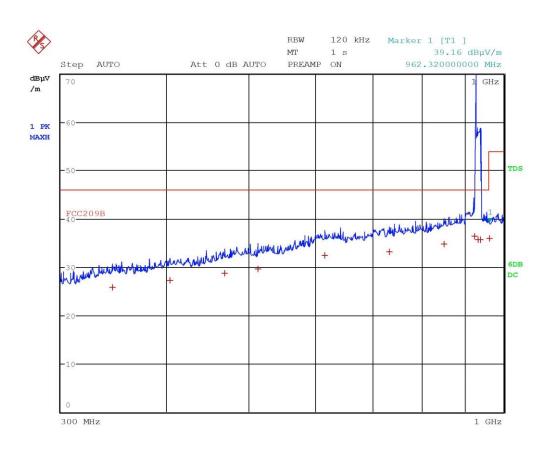


| racel: | FCC209B | . Measurement Result | <u> </u> |
|--------------|------------|----------------------|----------------|
| race1: | FCC209B | | |
| race3: | | | |
| | EDEOUENGY | T PT PT | DELTA LIMIT di |
| TRACE | FREQUENCY | LEVEL dBµV/m | |
| 1 Quasi Peak | 329.32 MHz | 25.04 | -20.97 |
| 1 Quasi Peak | 402.24 MHz | 27.09 | -18.92 |
| 1 Quasi Peak | 457.48 MHz | 28.07 | -17.94 |
| 1 Quasi Peak | 532.52 MHz | 29.76 | -16.25 |
| 1 Quasi Peak | 625.56 MHz | 32.39 | -13.62 |
| 1 Quasi Peak | 725.96 MHz | 33.15 | -12.87 |
| 1 Quasi Peak | 856.92 MHz | 34.94 | -11.07 |
| 1 Quasi Peak | 898.96 MHz | 35.67 | -10.34 |
| 1 Quasi Peak | 908.4 MHz | 35.77 | -10.24 |
| 1 Quasi Peak | 912.04 MHz | 37.00 | -9.01 |
| 1 Quasi Peak | 971.24 MHz | 36.10 | -17.87 |
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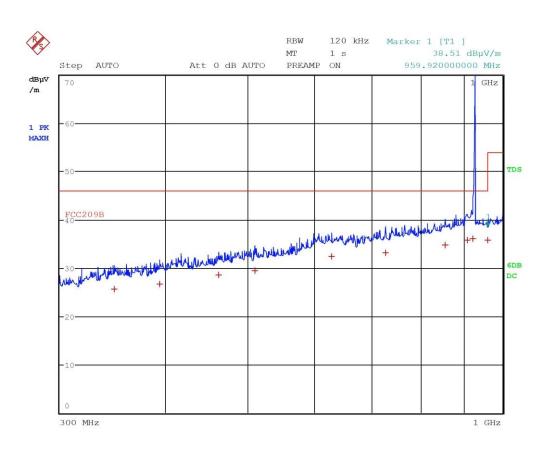


| racel: | FCC209B | | |
|--------------|------------|--------------|----------------|
| Crace2: | | | |
| Prace3: | | | |
| TRACE | FREQUENCY | LEVEL dBµV/m | DELTA LIMIT de |
| 1 Quasi Peak | 345.44 MHz | 25.78 | -20.23 |
| 1 Quasi Peak | 404.08 MHz | 27.25 | -18.76 |
| 1 Quasi Peak | 468.84 MHz | 28.78 | -17.23 |
| 1 Quasi Peak | 512.64 MHz | 29.57 | -16.44 |
| 1 Quasi Peak | 614.96 MHz | 32.35 | -13.66 |
| 1 Quasi Peak | 733.24 MHz | 33.17 | -12.84 |
| 1 Quasi Peak | 850.52 MHz | 34.75 | -11.26 |
| 1 Quasi Peak | 924.16 MHz | 36.38 | -9.63 |
| 1 Quasi Peak | 933.68 MHz | 35.69 | -10.32 |
| 1 Quasi Peak | 938.36 MHz | 35.64 | -10.37 |
| 1 Quasi Peak | 962.32 MHz | 35.91 | -18.06 |
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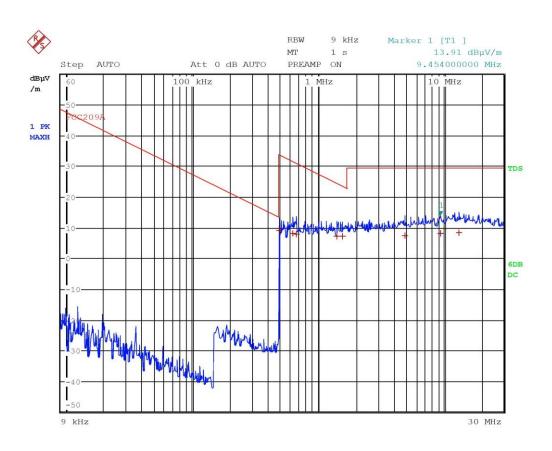


| racel: | FCC209B | | |
|--------------|------------|--------------|----------------|
| Crace2: | | | |
| Trace3: | | | |
| TRACE | FREQUENCY | LEVEL dBµV/m | DELTA LIMIT de |
| 1 Quasi Peak | 347.72 MHz | 25.71 | -20.30 |
| 1 Quasi Peak | 393.76 MHz | 26.74 | -19.27 |
| 1 Quasi Peak | 462.04 MHz | 28.59 | -17.42 |
| 1 Quasi Peak | 509.6 MHz | 29.55 | -16.46 |
| 1 Quasi Peak | 627.84 MHz | 32.40 | -13.61 |
| 1 Quasi Peak | 727.4 MHz | 33.14 | -12.87 |
| 1 Quasi Peak | 854.52 MHz | 34.84 | -11.17 |
| 1 Quasi Peak | 908.48 MHz | 35.80 | -10.21 |
| 1 Quasi Peak | 922.68 MHz | 36.10 | -9.91 |
| 1 Quasi Peak | 959.92 MHz | 35.83 | -10.18 |
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| racel: | FCC209A | | | | | |
|-------------|--------------|--------------|----------------|--|--|--|
| race2: | | | | | | |
| race3: | | | | | | |
| TRACE | FREQUENCY | LEVEL dBµV/m | DELTA LIMIT de | | | |
| 1 Quasi Pea | k 491 kHz | 8.93 | -24.84 | | | |
| 1 Quasi Pea | k 630 kHz | 8.20 | -23.40 | | | |
| 1 Quasi Pea | k 674 kHz | 7.89 | -23.13 | | | |
| 1 Quasi Pea | k 1.414 MHz | 7.29 | -17.30 | | | |
| 1 Quasi Pea | k 1.558 MHz | 7.27 | -16.47 | | | |
| 1 Quasi Pea | k 4.894 MHz | 7.34 | -22.19 | | | |
| 1 Quasi Pea | k 9.454 MHz | 8.07 | -21.46 | | | |
| 1 Quasi Pea | k 13.138 MHz | 8.40 | -21.13 | | | |
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Bertezzolo 190365164

Result: The requirements are met





11.4 20 dB bandwidth

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- ANSI C63.10 cl. 7.8.7
- Internal procedure PM001
- See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test configuration and test method

Test site: Laboratory

Auxiliary equipment: See clause 4 of this test report

Test equipment used

CMC \$295 Measurement uncertainty: See clause 7 of this test report

Test specification

See FCC Part 15.247

Environmental conditions

| Elivii Gilii Ciliai Collailiolis | 211VII OIII TICIII COITAII OII | | | | | | |
|----------------------------------|--------------------------------|-------------------|--|--|--|--|--|
| Temperature | Atmospheric pressure | Relative humidity | | | | | |
| (°C) | (kPa) | (%) | | | | | |
| 22 | 100 | 45 | | | | | |

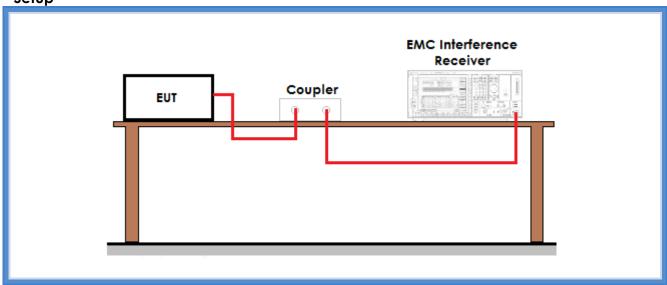
Acceptance limits: The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz







Setup



Result

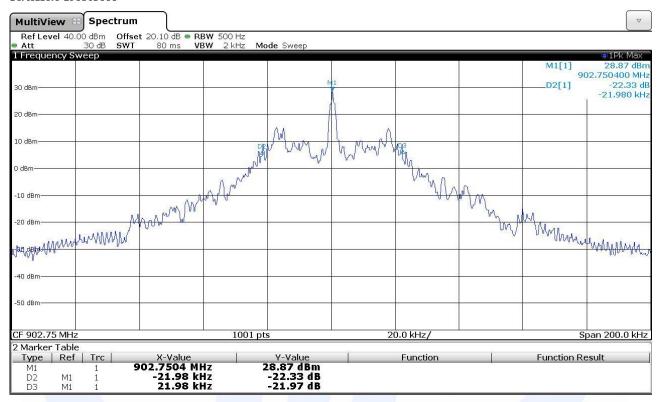
| Kezuli | | | | |
|--------------------|------------|--------------------------|---|----------|
| Frequency (MHz) | Graphs | 20 dB bandwidth (kHz) | Maximum 20 dB bandwidth allowed (kHz) | Results |
| 902,75 | G190365008 | 43,96 | 500 | Complies |
| 914,75 | G190365010 | 42,60 | 500 | Complies |
| 927,25 | G190365012 | 42,84 | 500 | Complies |

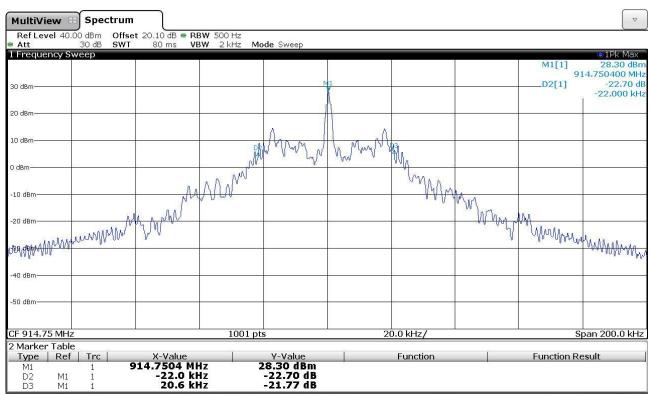




Graphs

Bertezzolo 190365008

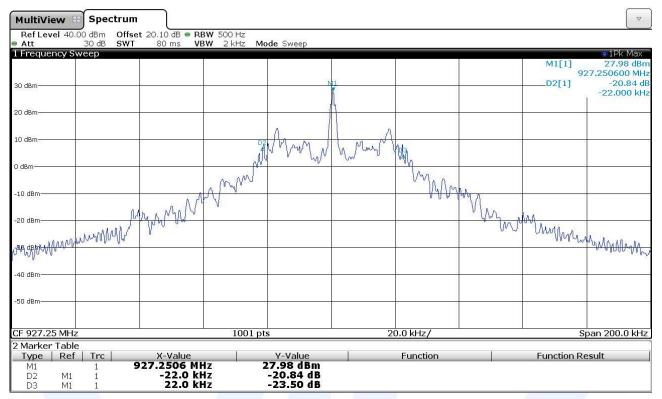








Bertezzolo 190365012



Result: The requirements are met





11.5 Channel separation

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- KDB 558074 D01 15.247 Meas Guidance v05 cl. 9 b)
- ANSI C63.10 cl. 7.8.2
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

Test site: Laboratory

Auxiliary equipment: See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S295

Measurement uncertainty: See clause 7 of this test report

Test specification

See FCC Part 15.247

Environmental conditions

| Temperature | Atmospheric pressure | Relative humidity |
|-------------|----------------------|-------------------|
| (°C) | (kPa) | (%) |
| 20 | 100 | 42 |

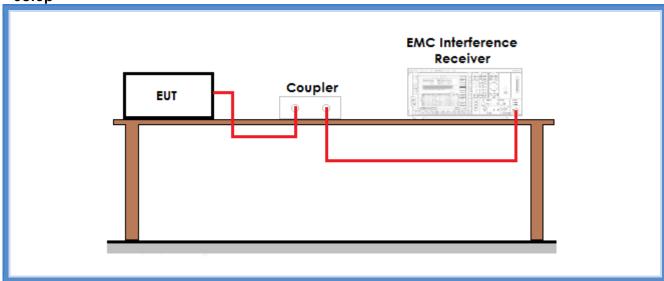
Acceptance limits: frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400–2483,5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW







Setup



Result

| 1100011 | | | | |
|-------------------------|------------|-----------------------------|----------------------------|----------|
| Frequency band (MHz) | Graphs | Channel separation (kHz) | Minimum channel separation | Results |
| | | | required (kHz) | |
| 902 – 928 | G190365014 | 500 | 43,96 | Complies |





Graphs

Bertezzolo 190365014



Result: The requirements are met





11.6 Number of hopping channels

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- KDB 558074 D01 15.247 Meas Guidance v05 cl. 9 b)
- ANSI C63.10 cl. 7.8.3
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

Test site: Laboratory

Auxiliary equipment: See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S295

Measurement uncertainty: See clause 7 of this test report

Test specification

See FCC Part 15.247

Environmental conditions

| Temperature | Atmospheric pressure | Relative humidity |
|-------------|----------------------|-------------------|
| (°C) | (kPa) | (%) |
| 20 | 100 | 42 |

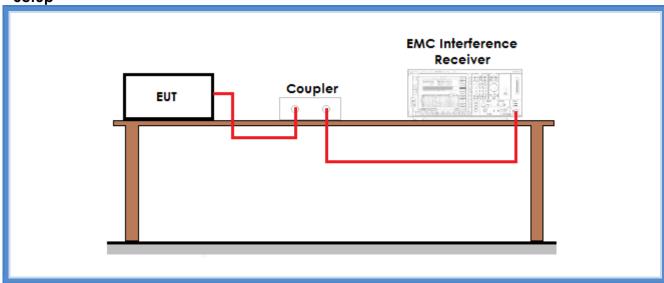
Acceptance limits: for frequency hopping systems operating in the 902–928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies. If the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies. Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels.







Setup



Result

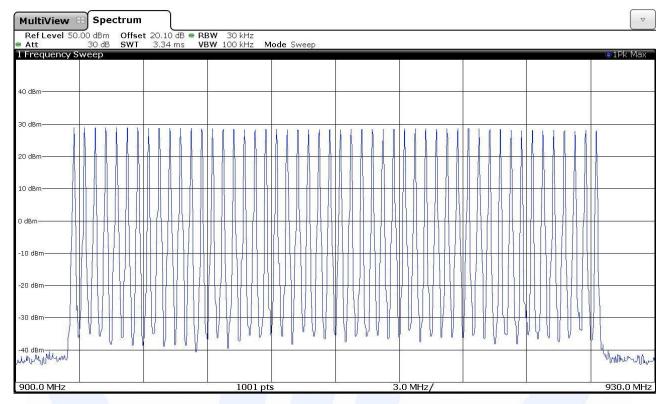
| 1100011 | | | | |
|-------------------------|------------|----------------------------------|------------------------------------|----------|
| Frequency band (MHz) | Graphs | Number of hopping channels | Minimum number of hopping channels | Results |
| | | | required | |
| 902 – 928 | G190365015 | 50 | 50 | Complies |





Graphs

Bertezzolo 190365015



Result: The requirements are met





11.7 Time of occupancy

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- KDB 558074 D01 15.247 Meas Guidance v05 cl. 9 b)
- ANSI C63.10 cl. 7.8.4
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

Test site: Laboratory

Auxiliary equipment: See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S295

Measurement uncertainty: See clause 7 of this test report

Test specification

See FCC Part 15.247

Environmental conditions

| Temperature | Atmospheric pressure | Relative humidity |
|-------------|----------------------|-------------------|
| (°C) | (kPa) | (%) |
| 22 | 100 | 42 |

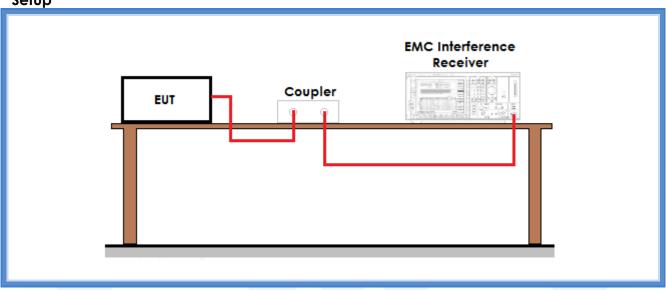
Acceptance limits:

For frequency hopping systems operating in the 902–928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0,4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0,4 seconds within a 10 second period





Setup



Result

| Frequency | Graphs | Dwell time |
|-----------|------------|------------|
| (MHz) | | (ms) |
| 914,75 | G190365016 | 20,7 |

| Frequency (MHz) | Graphs | Number of transmissions | Period |
|--------------------|------------|-------------------------|--------|
| 914,75 | G190365017 | 10 | 20 s |

Remarks: 5 transmissions were detected in a period of 10 s, as shown on graph G190365017. This means that in a period of 20 s 10 transmissions are detected. Only the highest peaks have been considered. The lowest peaks are due to the transmission on the channels near the measurement channel

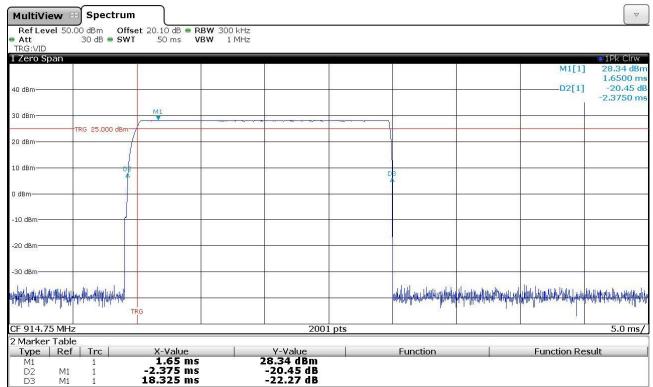
| Time of occupancy (Dwell time x Nr. transmissions) | Maximum allowed time of occupancy | Results |
|--|-----------------------------------|----------|
| 207 ms | 400 ms | Complies |

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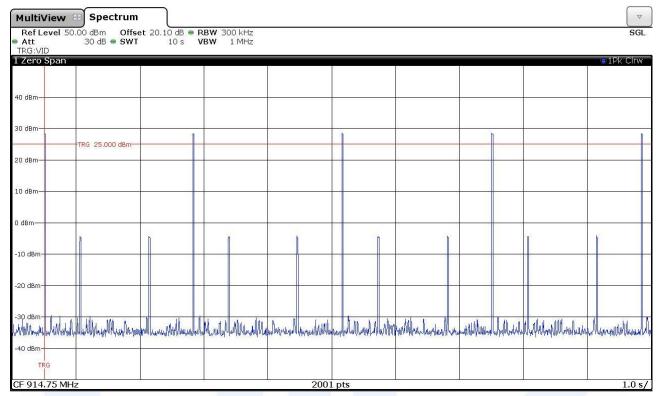
Graphs







Bertezzolo 190365017



Result: The requirements are met





11.8 Band edge

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- ANSI C63.10 cl. 7.8.6
- Internal procedure PM001
- See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test configuration and test method

Test site: Laboratory

Auxiliary equipment: See clause 4 of this test report

Test equipment used

CMC \$295 Measurement uncertainty: See clause 7 of this test report

Test specification

See FCC Part 15.247

Environmental conditions

| ziivii oiii ioii ai ooii aiiioiio | | | |
|-----------------------------------|----------------------|-------------------|--|
| Temperature | Atmospheric pressure | Relative humidity | |
| (°C) | (kPa) | (%) | |
| 22 | 100 | 45 | |

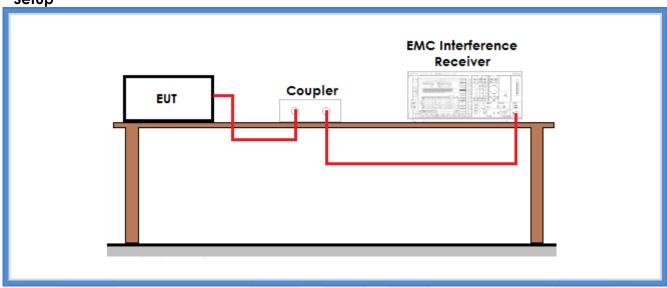
Acceptance limits: operation within the band 902 – 928 MHz

Test report R19036501 Rev. 1.0 Order M190365 page 123 of 138





Setup



Result

| Frequency (MHz) | Graph(s) – Hopping | Resu | ılts |
|-----------------|--------------------|-------------------------------|----------|
| 902,75 | G190365003 | F _L : 902,6103 MHz | Complies |
| 927,25 | G190365005 | F _H : 927,3856 MHz | Complies |

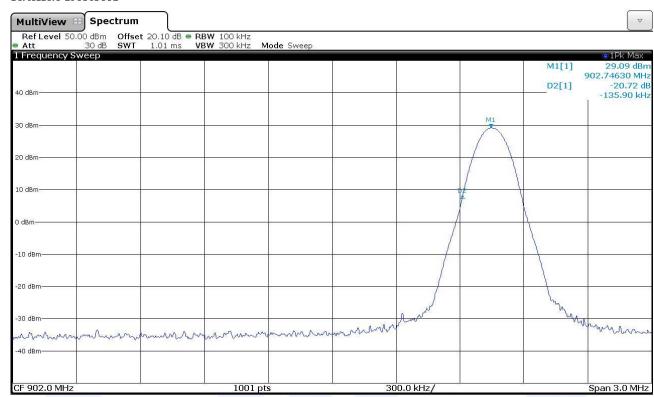
| Frequency (MHz) | Graph(s) - No hopping | Res | ults |
|-----------------|-----------------------|-------------------------------|----------|
| 902,75 | G190365002 | F _L : 902,6104 MHz | Complies |
| 927.25 | G190365004 | F _H : 927.3856 MHz | Complies |







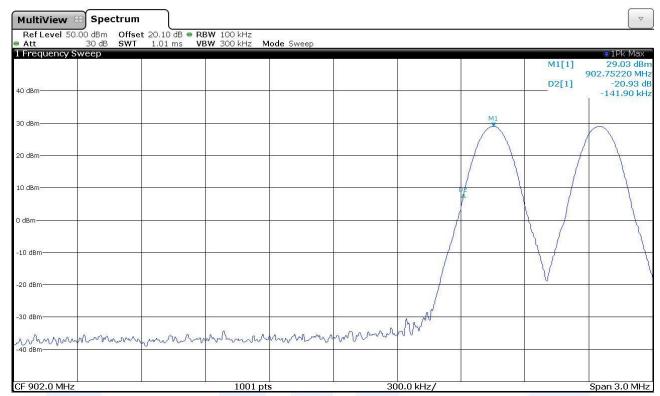
Graphs







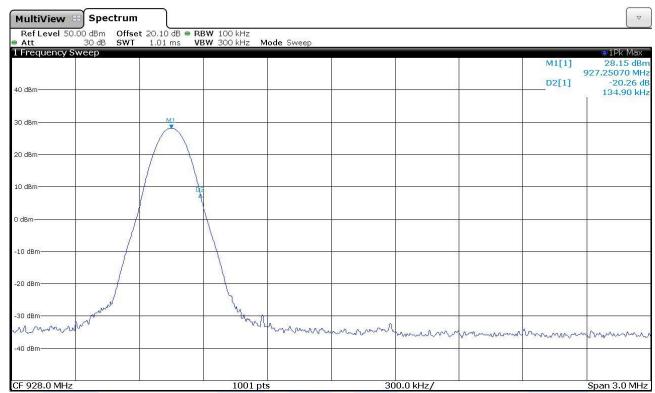








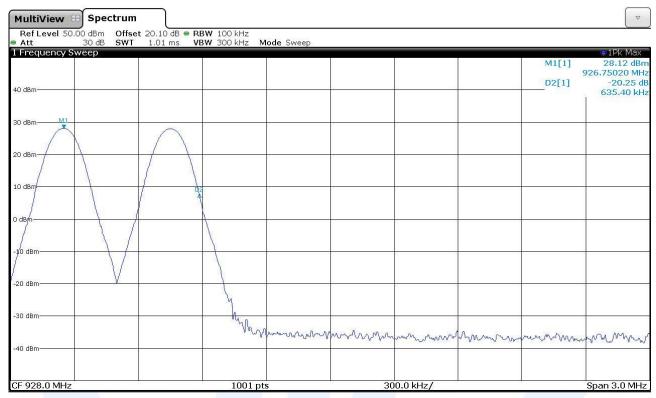








Bertezzolo 190365005



Result: The requirements are met





11.9 Peak Output Power

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- KDB 558074 D01 15.247 Meas Guidance v05 cl. 2.2
- ANSI C63.10 cl. 7.8.5
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

Test site: Laboratory

Auxiliary equipment: See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S295

Measurement uncertainty: See clause 7 of this test report

Test specification

Port: antenna connector

Environmental conditions

| Temperature | Atmospheric pressure | Relative humidity |
|-------------|----------------------|-------------------|
| (°C) | (kPa) | (%) |
| 20 | 100 | 45 |

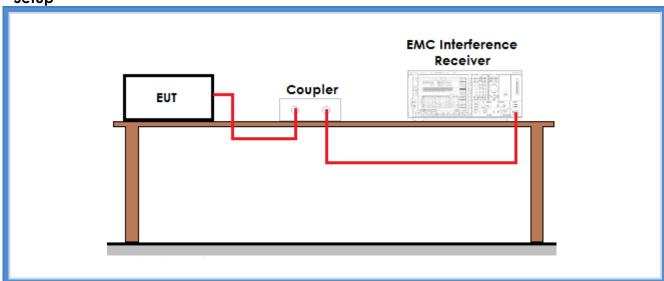
For frequency hopping systems operating in the 2400–2483,5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725–5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400–2483,5 MHz band: 0,125 watts. For frequency hopping systems operating in the 902–928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0,25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels.







Setup



Result

| IXC 5 G II | | | | |
|------------|------------|-------------|-------------|----------|
| Frequency | Graphs | Peak Output | Peak Output | Results |
| (MHz) | | Power (dBm) | Power (mW) | |
| 902,75 | G190365001 | 29,91 | 979,49 | Complies |
| 914,75 | G190365007 | 29,26 | 843,33 | Complies |
| 927,25 | G190365006 | 29,31 | 853,10 | Complies |

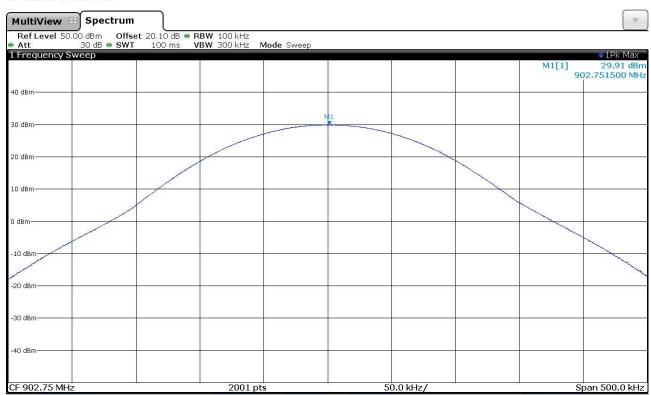


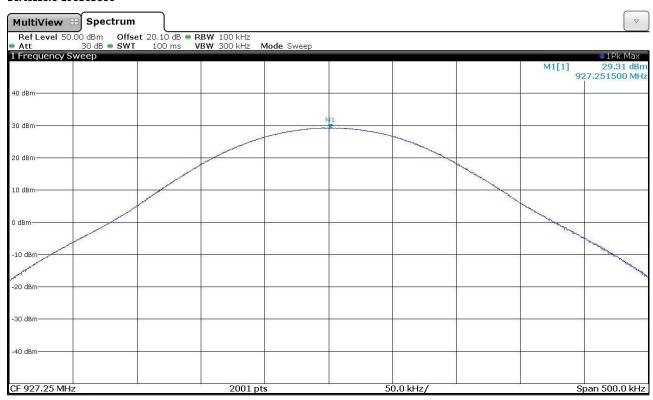




Graphs

Bertezzolo 190365001



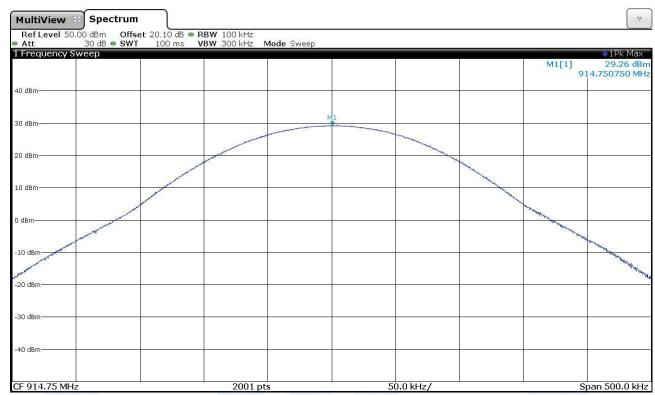








Bertezzolo 190365007



Result: The requirements are met





11.10 Spurious Emission

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.209
- Internal procedure PM001
- See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test specification

Port: Enclosure

Frequency range: 0,009 MHz - 10000 MHz

Antenna polarization: Horizontal (H) – Vertical (V)

10 m for frequencies ≤ 30 MHz 3 m for frequencies > 30 MHz

Test configuration and test method

Test site:

Semi-anechoic chamber

Auxiliary equipment:

See clause 4 of this test report

Test equipment used

CMC \$108, CMC \$136, CMC \$164 Measurement uncertainty: See clause 7 of this test report

Environmental conditions

| Temperature | Atmospheric pressure | Relative humidity |
|-------------|----------------------|-------------------|
| (°C) | (kPa) | (%) |
| 22 | 100 | 45 |

Acceptance limits

| 7 to o o pranto o minio | | | | | | | |
|---|------------|------------|--|--|--|--|--|
| Acceptance limits for emissions in restricted frequency bands | | | | | | | |
| Frequency AV limits Peak limits | | | | | | | |
| (MHz) | [dB(µV/m)] | [dB(µV/m)] | | | | | |
| > 1000 | 54 | 74 | | | | | |

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The restricted frequency bands are listed in the following table

| MHz | MHz | MHz | GHz |
|---------------------|-----------------------|-----------------|---------------|
| 0,090 – 0,110 | 16,42 – 16,423 | 399,9 – 410 | 4,5 – 5,15 |
| 0,495 – 0,505 | 16,69475 – 16,69525 | 608 - 614 | 5,35 – 5,46 |
| 2,1735 – 2,1905 | 16,80425 – 16,80475 | 960 – 1240 | 7,25 – 7,75 |
| 4,125 – 4,128 | 25,5 – 25,67 | 1300 – 1427 | 8,025 – 8,5 |
| 4,17725 – 4,17775 | 37,5 – 38,25 | 1435 – 1626,5 | 9,0 – 9,2 |
| 4,20725 – 4,20775 | 73 – 74,6 | 1645,5 – 1646,5 | 9,3 – 9,5 |
| 6,215 – 6,218 | 74,8 – 75,2 | 1660 – 1710 | 10,6 – 12,7 |
| 6,26775 – 6,26825 | 108 – 121,94 | 1718,8 – 1722,2 | 13,25 – 13,4 |
| 6,31175 – 6,31225 | 123 – 138 | 2200 – 2300 | 14,47 – 14,5 |
| 8,291 – 8,294 | 149,9 – 150,05 | 2310 – 2390 | 15,35 – 16,2 |
| 8,362 – 8,366 | 156,52475 – 156,52525 | 2483,5 – 2500 | 17,7 – 21,4 |
| 8,37625 – 8,38675 | 156,7 – 156,9 | 2690 – 2900 | 22,01 – 23,12 |
| 8,41425 – 8,41475 | 162,0125 – 167,17 | 3260 - 3267 | 23,6 - 24,0 |
| 12,29 – 12,293 | 167,72 – 173,2 | 3332 – 3339 | 31,2 – 31,8 |
| 12,51975 – 12,52025 | 240 – 285 | 3345,8 - 3358 | 36,43 – 36,5 |
| 12,57675 – 12,57725 | 322 – 335,4 | 3600 – 4400 | Above 38,6 |
| 13,36 – 13,41 | | | |

Acceptance limits for emissions in non-restricted frequency bands

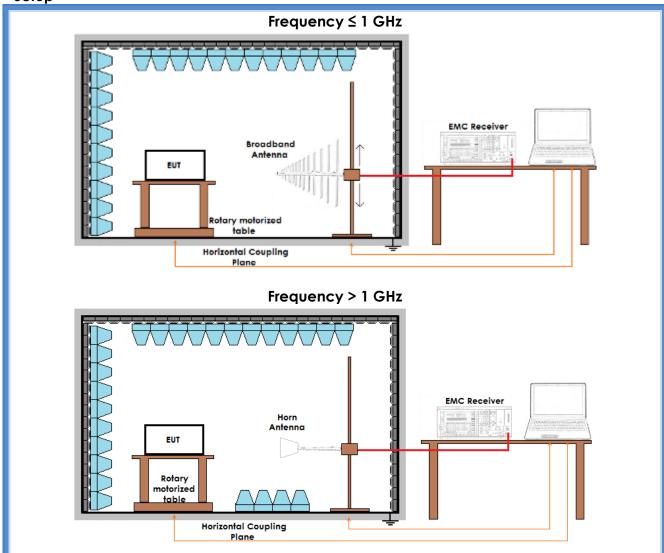
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.







Setup







Result - AV detector

WANTENNAX020 external antenna

| Harmonic / | Lowest channel | | Medium channel | | Highest channel | | Results |
|------------|-----------------------------------|----------|----------------|----------|-----------------------------------|----------|----------|
| Frequency | Level | Limits | Level | Limits | Level | Limits | |
| | (dBµV/m) | (dBµV/m) | (dBµV/m) | (dBµV/m) | (dBµV/m) | (dBµV/m) | |
| 1101 MHz | More than 20 dB below limit | 54,00 | 26,63 | 54,00 | More than 20 dB below limit | 54,00 | Complies |
| II | 61,02* | 110,64* | 63,48* | 109,99* | 65,85* | 110,04* | Complies |
| III | 33,83 | 54,00 | 35,20 | 54,00 | 39,74 | 54,00 | Complies |
| IV | 37,42 | 54,00 | 39,34 | 54,00 | 45,76 | 54,00 | Complies |
| V | 41,59 | 54,00 | 41,23 | 54,00 | 34,47 | 54,00 | Complies |
| VI | 52,35 | 54,00 | 37,19 | 54,00 | 39,29 | 54,00 | Complies |
| VII | 48,67 | 54,00 | 47,59 | 54,00 | 53,16 | 54,00 | Complies |
| VIII | 46,35 | 54,00 | 40,66 | 54,00 | More than 20 dB below limit | 54,00 | Complies |
| IX | 41,68 | 54,00 | 41,47 | 54,00 | 42,35 | 54,00 | Complies |
| Χ | 53,24 | 54,00 | 52,57 | 54,00 | 44,23 | 54,00 | Complies |

Remarks: EUT was tested in 3 orthogonal planes. The results in this table show the highest values. The results have been extrapolated to the specified distance using an extrapolation factor.

Harmonics marked with an * are inside a non-restricted frequency bands, for these frequency bands the limit is 20 dB below the highest ERP power level at 3 m.

ERP power level has been calculated with the following formula:

 $ERP = \sqrt{(P*30*G)/d}$

where

P = conducted power level in mW (see the power values on cl. 11.9 of this Test Report)

G = numeric antenna gain, 3,548 (5,5 dBi, see the antennas specification on cl. 11.1 of this Test Report)

d = distance (3 m)





WANT021XMMCX external antenna

| Harmonic / | Lowest channel | | Medium channel | | Highest channel | | Results |
|------------|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|----------|----------|
| Frequency | Level | Limits | Level | Limits | Level | Limits | |
| | (dBµV/m) | (dBµV/m) | (dBµV/m) | (dBµV/m) | (dBµV/m) | (dBµV/m) | |
| 1101 MHz | More than 20 dB below limit | 54,00 | More than 20 dB below limit | 54,00 | More than 20 dB below limit | 54,00 | Complies |
| II | 45,05* | 105,84* | 46,89* | 105,19* | 44,70* | 105,24* | Complies |
| III | 33,84 | 54,00 | More than 20 dB below limit | 54,00 | 27,54 | 54,00 | Complies |
| IV | 33,84 | 54,00 | 35,36 | 54,00 | More than 20 dB below limit | 54,00 | Complies |
| V | 38,88 | 54,00 | 41,15 | 54,00 | 39,13 | 54,00 | Complies |
| VI | 41,98 | 54,00 | 39,23 | 54,00 | 40,84 | 54,00 | Complies |
| VII | 47,60 | 54,00 | 48,80 | 54,00 | 48,53 | 54,00 | Complies |
| VIII | 41,10 | 54,00 | 42,49 | 54,00 | More than 20 dB below limit | 54,00 | Complies |
| IX | More than 20 dB below limit | 54,00 | 42,19 | 54,00 | 42,22 | 54,00 | Complies |
| Χ | 51,92 | 54,00 | 51,18 | 54,00 | 44,74 | 54,00 | Complies |

Remarks: EUT was tested in 3 orthogonal planes. The results in this table show the highest values. The results have been extrapolated to the specified distance using an extrapolation factor. Harmonics marked with an * are inside a non-restricted frequency bands, for these frequency bands the limit is 20 dB below the highest ERP power level at 3 m.

ERP power level has been calculated with the following formula:

 $ERP = \sqrt{(P*30*G)/d}$

where

P = conducted power level in mW (see the power values on cl. 11.9 of this Test Report)

G = numeric antenna gain, 1,175 (0,7 dBi, see the antennas specification on cl. 11.1 of this Test Report)

d = distance (3 m)





Result – Peak detector

WANTENNAX020 external antenna

| MANIENNAA | WAINTEINNAX020 EXTERNIA UNITEINIA | | | | | | |
|------------|-----------------------------------|----------|----------------|----------|-----------------------------------|----------|----------|
| Harmonic / | Lowest channel | | Medium channel | | Highest channel | | Results |
| Frequency | Level | Limits | Level | Limits | Level | Limits | |
| | (dBµV/m) | (dBµV/m) | (dBµV/m) | (dBµV/m) | (dBµV/m) | (dBµV/m) | |
| 1101 MHz | More than 20 dB below | 74,00 | 67,26 | 74,00 | More than 20 dB below | 74,00 | Complies |
| | limit | | | | limit | | |
| II | 67,03 | 74,00 | 69,35 | 74,00 | 70,43 | 74,00 | Complies |
| III | 44,67 | 74,00 | 43,39 | 74,00 | 48,00 | 74,00 | Complies |
| IV | 48,17 | 74,00 | 49,91 | 74,00 | 56,39 | 74,00 | Complies |
| V | 47,21 | 74,00 | 47,55 | 74,00 | 47,14 | 74,00 | Complies |
| VI | 57,02 | 74,00 | 48,63 | 74,00 | 48,73 | 74,00 | Complies |
| VII | 51,89 | 74,00 | 51,25 | 74,00 | 55,78 | 74,00 | Complies |
| VIII | 51,52 | 74,00 | 49,80 | 74,00 | More than 20 dB below limit | 74,00 | Complies |
| IX | 51,32 | 74,00 | 52,48 | 74,00 | 54,18 | 74,00 | Complies |
| Χ | 57,30 | 74,00 | 57,35 | 74,00 | 55,63 | 74,00 | Complies |

Remarks: EUT was tested in 3 orthogonal planes. The results in this table show the highest values. The results have been extrapolated to the specified distance using an extrapolation factor. For all harmonics it was considered the limit of 74 dB μ V/m as a worse case

WANT021XMMCX external antenna

| WANIUZIXMMCX external antenna | | | | | | | |
|-------------------------------|-----------------------------------|--------------------|-----------------------------------|--------------------|-----------------------------------|--------------------|----------|
| Harmonic / | Lowest | channel | Medium channel | | Highest channel | | Results |
| Frequency | Level (dBµV/m) | Limits (dBµV/m) | Level (dBµV/m) | Limits (dBµV/m) | Level (dBµV/m) | Limits (dBµV/m) | |
| 1101 MHz | More than 20 dB below limit | 74,00 | More than 20 dB below limit | 74,00 | 51,74 | 74,00 | Complies |
| | 53,82 | 74,00 | 53,89 | 74,00 | 39,61 | 74,00 | Complies |
| III | 44,80 | 74,00 | More than 20 dB below limit | 74,00 | More than 20 dB below limit | 74,00 | Complies |
| IV | 44,67 | 74,00 | 46,89 | 74,00 | 46,51 | 74,00 | Complies |
| V | 45,98 | 74,00 | 46,40 | 74,00 | 48,93 | 74,00 | Complies |
| VI | 47,75 | 74,00 | 47,54 | 74,00 | 52,42 | 74,00 | Complies |
| VII | 51,04 | 74,00 | 52,52 | 74,00 | More than 20 dB below limit | 74,00 | Complies |
| VIII | 49,95 | 74,00 | 50,32 | 74,00 | 54,42 | 74,00 | Complies |
| IX | More than 20 dB below limit | 74,00 | 54,23 | 74,00 | 54,42 | 74,00 | Complies |
| X | 57,95 | 74,00 | 56,99 | 74,00 | 56,01 | 74,00 | Complies |

Remarks: EUT was tested in 3 orthogonal planes. The results in this table show the highest values. The results have been extrapolated to the specified distance using an extrapolation factor. For all harmonics it was considered the limit of 74 dBµV/m as a worse case

Result: The requirements are met

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