

## Annex 1: Measurement diagrams to Test Report 20-1-0080401T02a-A1



|                                                        |                                                                                                                                                                                                             |                 |                |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|
| Number of pages:                                       | 7                                                                                                                                                                                                           | Date of Report: | 2020-Sep-09    |
| Testing company:                                       | CETECOM GmbH<br>Im Teelbruch 116<br>45219 Essen Germany<br>Tel. + 49 (0) 20 54 / 95 19-0<br>Fax: + 49 (0) 20 54 / 95 19-150                                                                                 | Applicant:      | STRAFFR GMBH   |
| Test Object /<br>Tested Device(s):                     | Smart resistance band<br>STRAFFR Band ST01X                                                                                                                                                                 |                 |                |
| Listing FCC ID:                                        | 2AWRM-ST01X                                                                                                                                                                                                 | Contains IC ID: | 23763-RSL10SIP |
| Testing has been<br>carried out in<br>accordance with: | <b>FCC Regulations:</b><br>Title 47 CFR, Chapter I<br>FCC Regulations, Subchapter A<br>Subpart B: §15.107, §15.109 (Class B limits)<br><br><b>ISED Regulations:</b><br>ICES-003, Issue 6 (2016+Update 2019) |                 |                |

# 1 Measurement diagrams

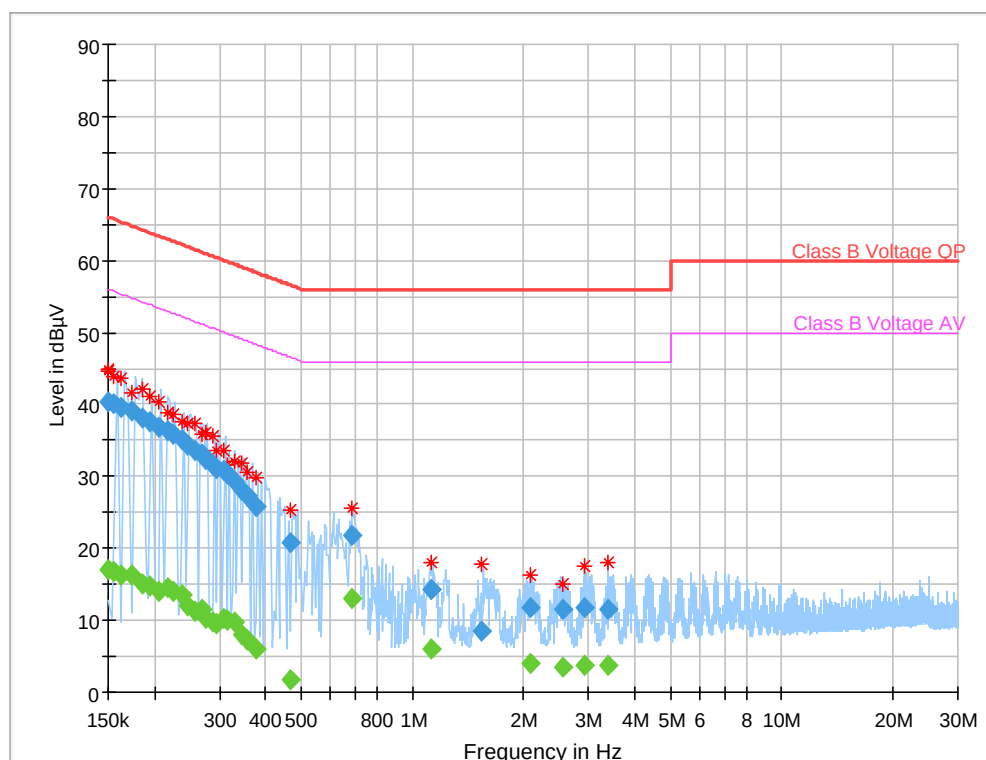
## Common Information

|                           |                                                                  |
|---------------------------|------------------------------------------------------------------|
| Test Description:         | Conducted Voltage Measurement Class B                            |
| Test Site Location:       | Conducted Emission, CETECOM GmbH Essen                           |
| Test Software:            | R&S EMC32 v9.15                                                  |
| Test Standard:            | FCC 15.107, FCC 15.207                                           |
| Operating Mode:           | Normal mode, BT off                                              |
| Measured on line:         | N/L1                                                             |
| Diagram details:          | Shows the peak values as a sum of measured ports in maxhold mode |
| Environmental Conditions: | Humidity: 40% rH; Temperature: 21 °C                             |
| Operator:                 | HLa                                                              |
| EUT Setup:                | 1                                                                |
| Verdict:                  | Passed                                                           |

## EUT Information

|                       |                       |
|-----------------------|-----------------------|
| PMT number:           | 20-1-00804S02_C01     |
| Manufacturer:         | STRAFFR GmbH          |
| Product:              | smart resistance band |
| Model:                | STRAFFR Band ST01X    |
| <hr/>                 |                       |
| HW version:           | 8.3                   |
| SW version:           | 9.0                   |
| Serial number:        | N/A                   |
| Connected Interfaces: | USB C cable + Charger |
| Power Supply:         | 120 V AC, 60 Hz       |

Full Spectrum



## Final\_Result

| Frequency (MHz) | QuasiPeak (dBμV) | CAverage (dBμV) | Limit (dBμV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | PE  | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|-----------------|-----------------|------|-----|------------|
| 0.150000        | 40.28            | ---             | 66.00        | 25.72       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.150000        | ---              | 16.99           | 56.00        | 39.01       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.154844        | 40.01            | ---             | 65.74        | 25.73       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.154844        | ---              | 16.85           | 55.74        | 38.89       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.162656        | 39.63            | ---             | 65.33        | 25.70       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.162656        | ---              | 16.35           | 55.33        | 38.98       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.174375        | ---              | 16.28           | 54.75        | 38.47       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.174375        | 39.17            | ---             | 64.75        | 25.58       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.186094        | 38.08            | ---             | 64.21        | 26.13       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.186094        | ---              | 15.13           | 54.21        | 39.08       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.193906        | ---              | 14.71           | 53.87        | 39.16       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.193906        | 37.57            | ---             | 63.87        | 26.30       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.205625        | 36.77            | ---             | 63.38        | 26.61       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.205625        | ---              | 14.13           | 53.38        | 39.25       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.217344        | 36.32            | ---             | 62.92        | 26.60       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.217344        | ---              | 14.50           | 52.92        | 38.42       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.225156        | ---              | 14.14           | 52.63        | 38.49       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.225156        | 35.77            | ---             | 62.63        | 26.86       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.236875        | ---              | 13.51           | 52.21        | 38.70       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.236875        | 34.98            | ---             | 62.21        | 27.23       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.244688        | ---              | 12.03           | 51.94        | 39.91       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.244688        | 34.29            | ---             | 61.94        | 27.65       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.256406        | 33.48            | ---             | 61.55        | 28.07       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.256406        | ---              | 11.36           | 51.55        | 40.19       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.268125        | ---              | 11.61           | 51.18        | 39.57       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 0.268125        | 33.10            | ---             | 61.18        | 28.08       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 0.275938        | 32.38            | ---             | 60.94        | 28.56       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.275938        | ---              | 10.35           | 50.94        | 40.59       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.287656        | ---              | 9.79            | 50.59        | 40.80       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.287656        | 31.62            | ---             | 60.59        | 28.97       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.295469        | 31.19            | ---             | 60.37        | 29.18       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.295469        | ---              | 9.52            | 50.37        | 40.85       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.307188        | 30.76            | ---             | 60.05        | 29.29       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.307188        | ---              | 10.29           | 50.05        | 39.76       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.315000        | ---              | 10.13           | 49.84        | 39.71       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.315000        | 30.32            | ---             | 59.84        | 29.52       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.330625        | ---              | 9.85            | 49.44        | 39.59       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.330625        | 29.27            | ---             | 59.44        | 30.17       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.346250        | ---              | 7.94            | 49.05        | 41.11       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.346250        | 28.13            | ---             | 59.05        | 30.92       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.357969        | ---              | 7.34            | 48.78        | 41.44       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.357969        | 27.25            | ---             | 58.78        | 31.53       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.377500        | ---              | 6.01            | 48.33        | 42.32       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.377500        | 25.76            | ---             | 58.33        | 32.57       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.467344        | ---              | 1.85            | 46.56        | 44.71       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.467344        | 20.92            | ---             | 56.56        | 35.64       | 1000.0          | 9.000           | N    | GND | 0.1        |
| 0.687656        | ---              | 13.00           | 46.00        | 33.00       | 1000.0          | 9.000           | L1   | GND | 0.3        |
| 0.687656        | 21.93            | ---             | 56.00        | 34.07       | 1000.0          | 9.000           | L1   | GND | 0.3        |
| 1.125781        | ---              | 6.00            | 46.00        | 40.00       | 1000.0          | 9.000           | L1   | GND | 0.3        |
| 1.125781        | 14.23            | ---             | 56.00        | 41.77       | 1000.0          | 9.000           | L1   | GND | 0.3        |
| 1.539844        | 8.52             | ---             | 56.00        | 47.48       | 1000.0          | 9.000           | N    | GND | 0.3        |
| 1.539844        | ---              | -0.62           | 46.00        | 46.62       | 1000.0          | 9.000           | N    | GND | 0.3        |
| 2.088438        | ---              | 3.98            | 46.00        | 42.02       | 1000.0          | 9.000           | L1   | GND | 0.3        |
| 2.088438        | 11.89            | ---             | 56.00        | 44.11       | 1000.0          | 9.000           | L1   | GND | 0.3        |
| 2.558281        | 11.46            | ---             | 56.00        | 44.54       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 2.558281        | ---              | 3.62            | 46.00        | 42.38       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 2.930313        | ---              | 3.74            | 46.00        | 42.26       | 1000.0          | 9.000           | L1   | GND | 0.3        |
| 2.930313        | 11.73            | ---             | 56.00        | 44.27       | 1000.0          | 9.000           | L1   | GND | 0.3        |
| 3.380156        | ---              | 3.67            | 46.00        | 42.33       | 1000.0          | 9.000           | L1   | GND | 0.4        |
| 3.380156        | 11.57            | ---             | 56.00        | 44.43       | 1000.0          | 9.000           | L1   | GND | 0.4        |

## 3.01

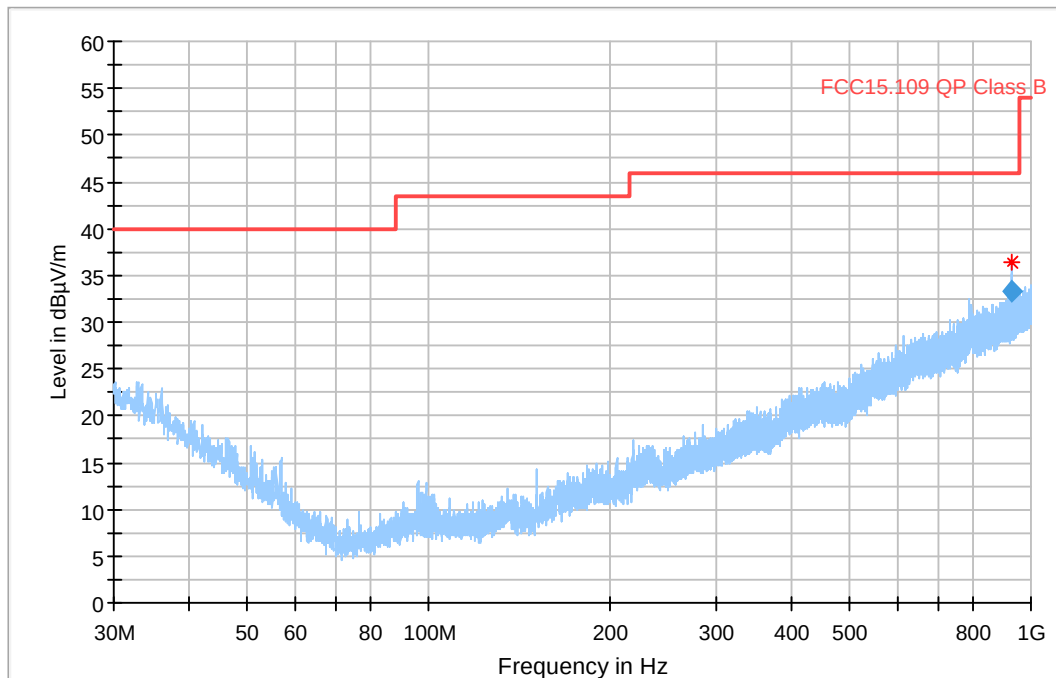
### Common Information

|                           |                                            |
|---------------------------|--------------------------------------------|
| Test Description:         | Electric Field Strength Measurement        |
| Test Spec.:               | FCC15.109/ ICES-003, Issue 6               |
| Antenna:                  | receiving antenna is directed to all sides |
| Operating Mode:           | OP. mode 1, EUT standing                   |
| Environmental Conditions: | Humidity : 40% rH; Temperature: 20 °C      |
| Operator:                 | HLA                                        |
| Verdict:                  | Passed                                     |

### EUT Information

|                       |                       |
|-----------------------|-----------------------|
| PMT number:           | 20-1-00804S02_C01     |
| Manufacturer:         | STRAFFR GmbH          |
| Product:              | smart resistance band |
| Model:                | STRAFFR Band ST01X    |
| -----                 |                       |
| HW version:           | 8.3                   |
| SW version:           | 9.0                   |
| Serial number:        | N/A                   |
| Connected Interfaces: | USB C cable + Charger |
| Power Supply:         | 120 V AC, 60 Hz       |

Full Spectrum



### Final Result

| Frequency (MHz) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|--------------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 928.452000      | 33.28              | 46.00          | 12.72       | 1000.0          | 120.000         | 273.0       | H   | 92.0          | 27.0         |

## 3.02

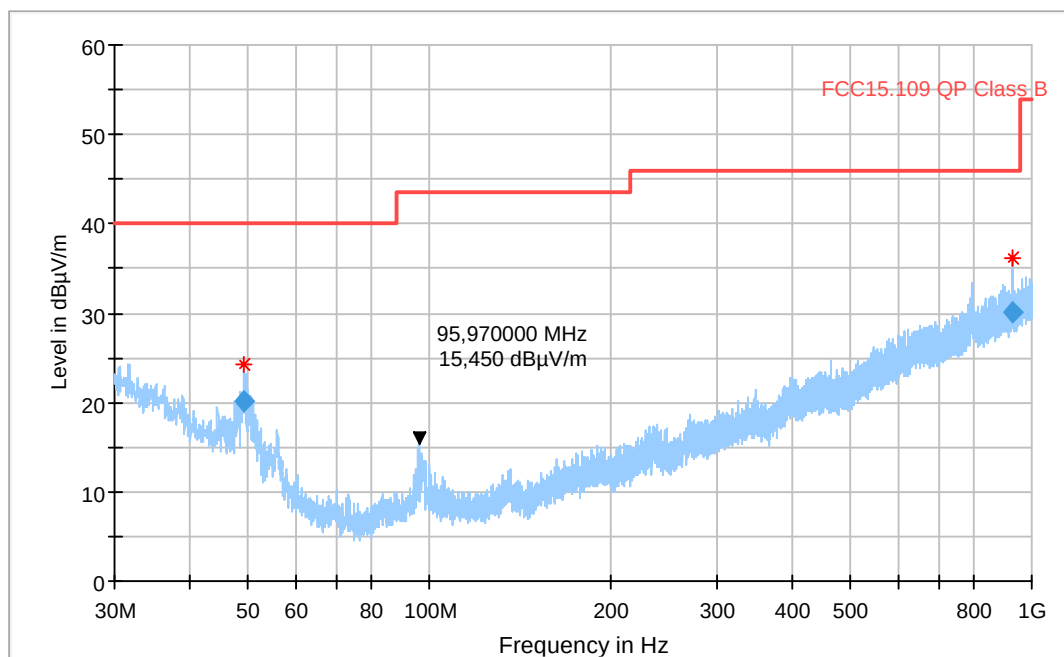
### Common Information

|                           |                                            |
|---------------------------|--------------------------------------------|
| Test Description:         | Electric Field Strength Measurement        |
| Test Spec.:               | FCC15.109/ ICES-003, Issue 6               |
| Antenna:                  | receiving antenna is directed to all sides |
| Operating Mode:           | OP. mode 1, EUT laying                     |
| Environmental Conditions: | Humidity : 40% rH; Temperature: 20 °C      |
| Operator:                 | HLA                                        |
| Verdict:                  | Passed                                     |

### EUT Information

|                       |                       |
|-----------------------|-----------------------|
| PMT number:           | 20-1-00804S02_C01     |
| Manufacturer:         | STRAFFR GmbH          |
| Product:              | smart resistance band |
| Model:                | STRAFFR Band ST01X    |
| <hr/>                 |                       |
| HW version:           | 8.3                   |
| SW version:           | 9.0                   |
| Serial number:        | N/A                   |
| Connected Interfaces: | USB C cable + Charger |
| Power Supply:         | 120 V AC, 60 Hz       |

Full Spectrum



### Final Result

| Frequency (MHz) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|--------------------|----------------|--------|-----------------|-----------------|-------------|-----|---------------|--------------|
| 49.164000       | 20.14              | 40.00          | 19.86  | 1000.0          | 120.000         | 111.0       | V   | 144.0         | 13.2         |
| 927.166000      | 30.04              | 46.00          | 15.96  | 1000.0          | 120.000         | 310.0       | H   | 159.0         | 27.0         |

## 4.01

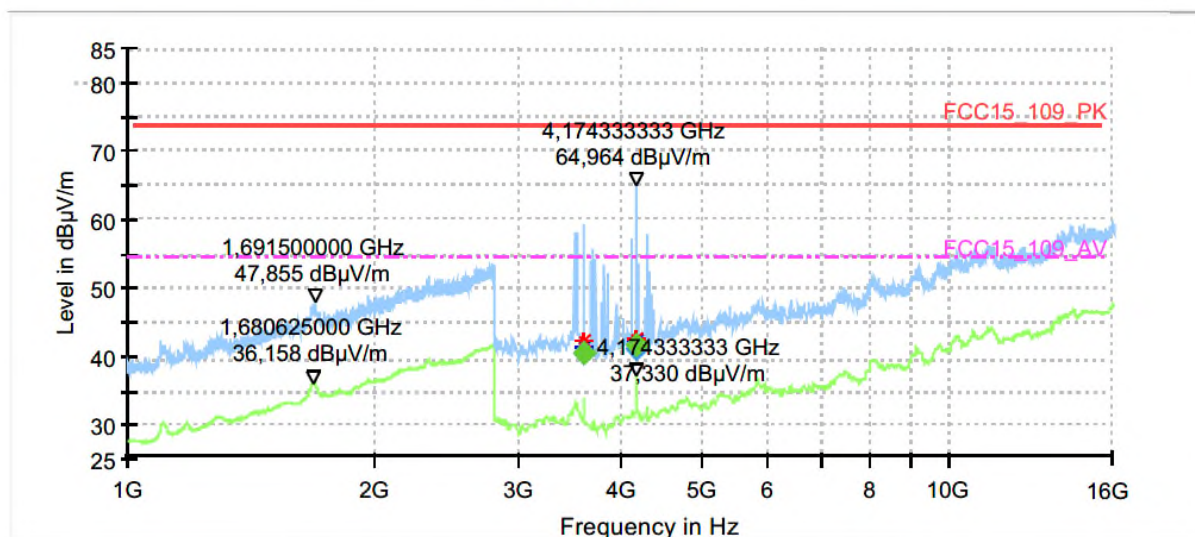
### Common Information

|                           |                                                |
|---------------------------|------------------------------------------------|
| Test Description:         | Radiated Field Strength Emission               |
| Test Site Location:       | CETECOM GmbH Essen                             |
| Test Site:                | Fully Anechoic Chamber (FAC1) - EMC32 V10.50.0 |
| Test Standard:            | FCC Part 15.109, class B / ICES-003, Issue 6   |
| Operating Mode:           | op mode 1                                      |
| Equipment Class:          | Class B                                        |
| Environmental Conditions: | Humidity : 40% rH; Temperature: 20 °C          |
| Operator:                 | HLa                                            |
| EUT Setup:                | 1                                              |
| Verdict:                  | Passed                                         |

### EUT Information

|                       |                       |
|-----------------------|-----------------------|
| PMT number:           | 20-1-00804S02_C01     |
| Manufacturer:         | STRAFFR GmbH          |
| Product:              | smart resistance band |
| Model:                | STRAFFR Band ST01X    |
| <hr/>                 |                       |
| HW version:           | 8.3                   |
| SW version:           | 9.0                   |
| Serial number:        | N/A                   |
| Connected Interfaces: | USB C cable + Charger |
| Power Supply:         | 120 V AC, 60 Hz       |

Full Spectrum



### Final\_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|---------|-----------------|-----------------|-------------|-----|---------------|-----------------|
| 3589.848000     | ---              | 40.62        | 54.00          | 13.38   | 100.0           | 1000.000        | 155.0       | H   | 41.0          | 90.0            |
| 3593.831334     | 40.48            | ---          | 74.00          | 33.52   | 100.0           | 1000.000        | 155.0       | H   | 44.0          | 90.0            |
| 4175.632666     | ---              | 41.86        | 54.00          | 12.14   | 100.0           | 1000.000        | 155.0       | H   | 47.0          | 90.0            |
| 4177.865333     | 41.07            | ---          | 74.00          | 32.93   | 100.0           | 1000.000        | 155.0       | H   | 69.0          | 90.0            |

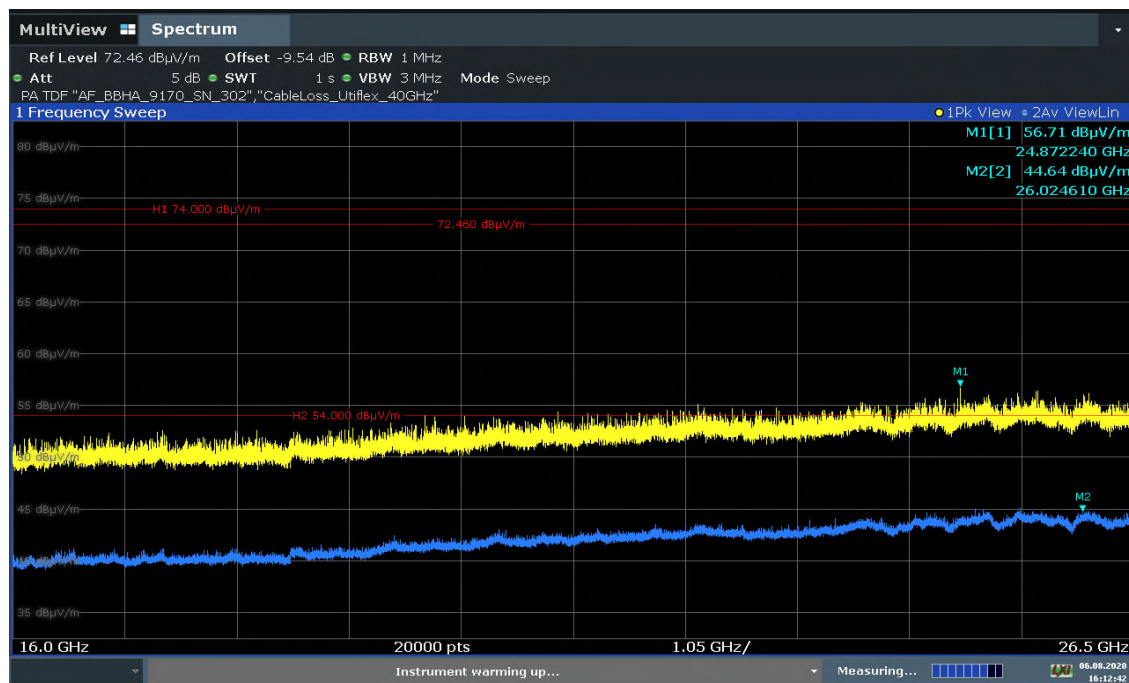
## 4.02

### Common Information

|                           |                                                |
|---------------------------|------------------------------------------------|
| Test Description:         | Radiated Field Strength Emission               |
| Test Site Location:       | CETECOM GmbH Essen                             |
| Test Site:                | Fully Anechoic Chamber (FAC1) - EMC32 V10.50.0 |
| Test Standard:            | FCC Part 15.109, class B / ICES-003, Issue 6   |
| Operating Mode:           | op mode 1                                      |
| Equipment Class:          | Class B                                        |
| Environmental Conditions: | Humidity : 40% rH; Temperature: 20 °C          |
| Operator:                 | HLA                                            |
| EUT Setup:                | 1                                              |
| Verdict:                  | Passed                                         |

### EUT Information

|                       |                       |
|-----------------------|-----------------------|
| PMT number:           | 20-1-00804S02_C01     |
| Manufacturer:         | STRAFFR GmbH          |
| Product:              | smart resistance band |
| Model:                | STRAFFR Band ST01X    |
| <hr/>                 |                       |
| HW version:           | 8.3                   |
| SW version:           | 9.0                   |
| Serial number:        | N/A                   |
| Connected Interfaces: | USB C cable + Charger |
| Power Supply:         | 120 V AC, 60 Hz       |



# End Of Annex 1