

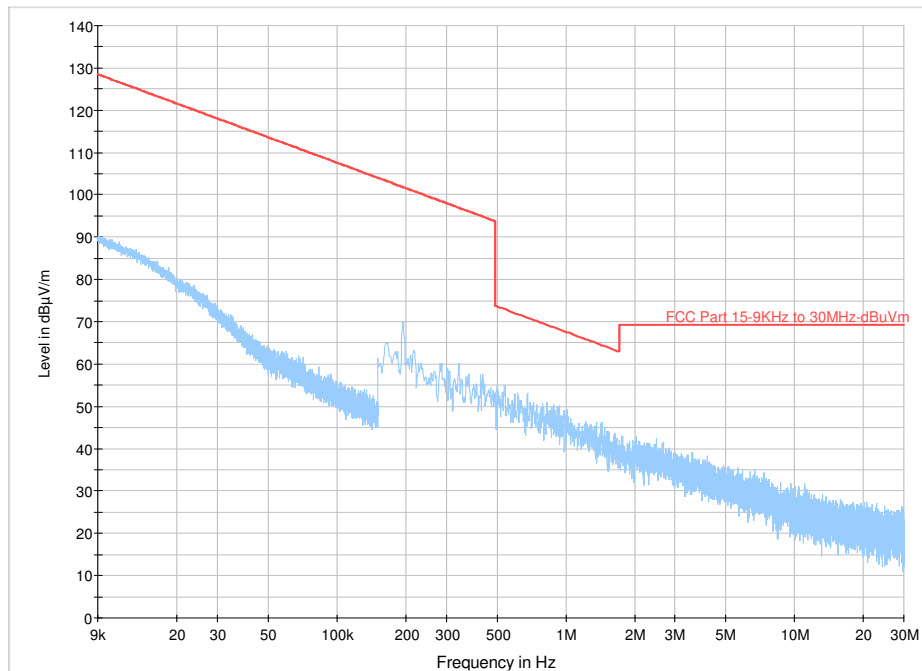
## 3.6 SPURIOUS RADIATED EMISSIONS

|                             |                                       |                      |            |
|-----------------------------|---------------------------------------|----------------------|------------|
| EUT Nomenclature            | Wireless AV Base                      | Test Report No.      | EMC0209-1  |
| Model No.                   | WAV-RL                                | Serial No.           | AV-RF202   |
| Test Start Date             | 03, 15 & 19 - May-2017                | Temperature (°C)     | 23 ± 2     |
| Test End Date               | 03, 15 & 19 - May-2017                | Humidity RH (%)      | 55 ± 3     |
| Tested By                   | Magesh .S                             | Pressure (mbar)      | NR         |
| Input Voltage / Freq        | 3.3Vdc                                |                      |            |
| Operating Mode              | Refer Page 5 Operating Modes Table    |                      |            |
| Test configuration          | Refer Page 5 Test Configuration Table |                      |            |
| Deviation from Std          | NA                                    |                      |            |
| Comment                     | Nil                                   |                      |            |
| TEST FREQUENCY RANGE        |                                       |                      |            |
| Start Frequency             | 9KHz                                  | Stop Frequency       | 10GHz      |
| MAXIMUM OPERATING FREQUENCY |                                       |                      |            |
| 902MHz to 928MHz            |                                       |                      |            |
| TEST PARAMETERS             |                                       |                      |            |
| Antenna Height              | 1m to 4m                              | Turntable Rotation   | 0° to 360° |
| Applicable standard         | FCC Part 15.209                       | Test Method          | KDB 558074 |
| Equipment Class             | NA                                    | Measurement Distance | 3m         |

## TEST EQUIPMENT

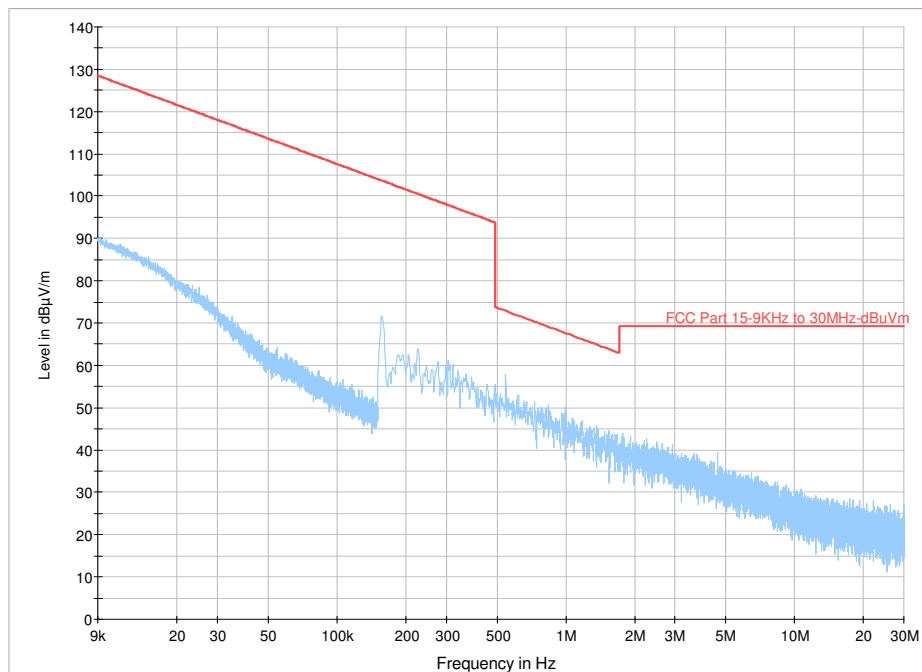
| Y/N                                                                                                                       | Equipment                       | Make           | Model          | Sl. No.      | Cal Due Date |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------|----------------|--------------|--------------|
| Y                                                                                                                         | EMI Test Receiver               | R&S            | ESU26          | 100525       | 06-July-2017 |
| Y                                                                                                                         | 3m Semi Anechoic Chamber        | ETS Lindgren   | DKE 6X7 DBL.DR | 1625         | 26-July-2018 |
| Y                                                                                                                         | Active Loop Antenna             | ETS Lindgren   | 6507           | 000103694    | 02-Jun-2017* |
| Y                                                                                                                         | Bilog Antenna                   | ETS Lindgren   | HLP3003C       | 130525       | 14-Nov-2017  |
| Y                                                                                                                         | Double Ridge Guide Horn Antenna | ETS Lindgren   | 3117           | 00119022     | 08-Jun-2017* |
| Y                                                                                                                         | RF cable (9KHz to 1GHz)         | ENS Microwave  | MNS-MNS        | 11202012     | 22-Feb-2018  |
| Y                                                                                                                         | RF cable (9KHz to 1GHz)         | AH System      | SAC-18G-06     | RE-03        | 22-Feb-2018  |
| Y                                                                                                                         | RF cable (1GHz to 18GHz)        | Huber + Suhner | Sucoflex 104   | MY13472/4    | 24-Feb-2018  |
| Y                                                                                                                         | Signal Conditioning unit        | R&S            | SCU-18         | 10178        | 02-May-2018  |
| Y                                                                                                                         | EMC32 Software                  | R&S            | 8.30.0         | 820-OT101248 | NA           |
| Note: Switch ON /OFF the Internal Preamplifier based on carrier level and or noise floor without overloading the receiver |                                 |                |                |              |              |
| * Tests were completed before the due date.                                                                               |                                 |                |                |              |              |

## TEST GRAPHS – 9KHz to 30MHz



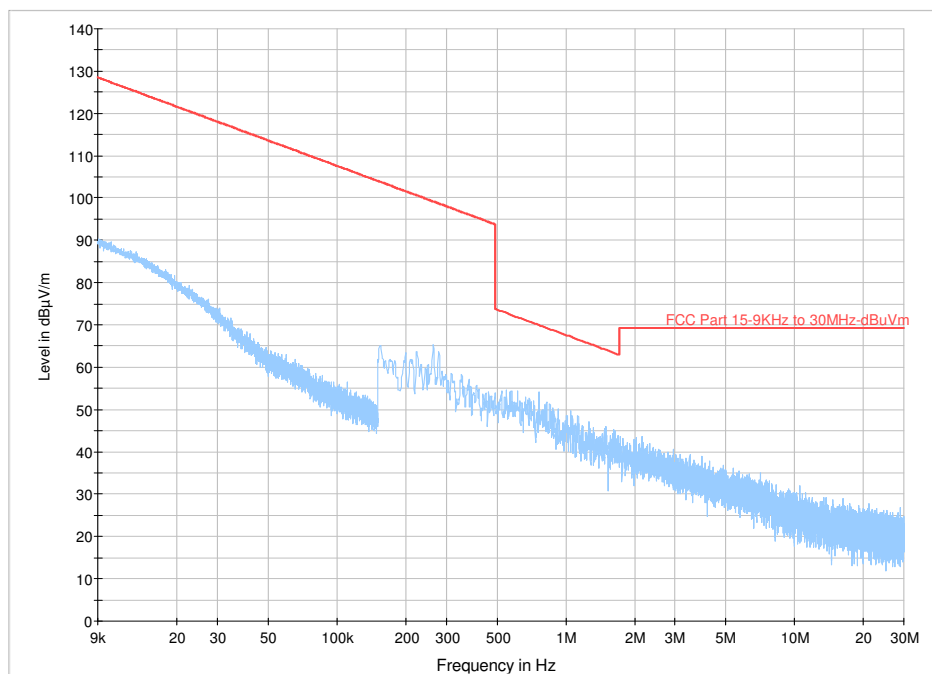
Antenna-1, Channel 1 (902.875 MHz)

Note : Peak Graph - Parallel

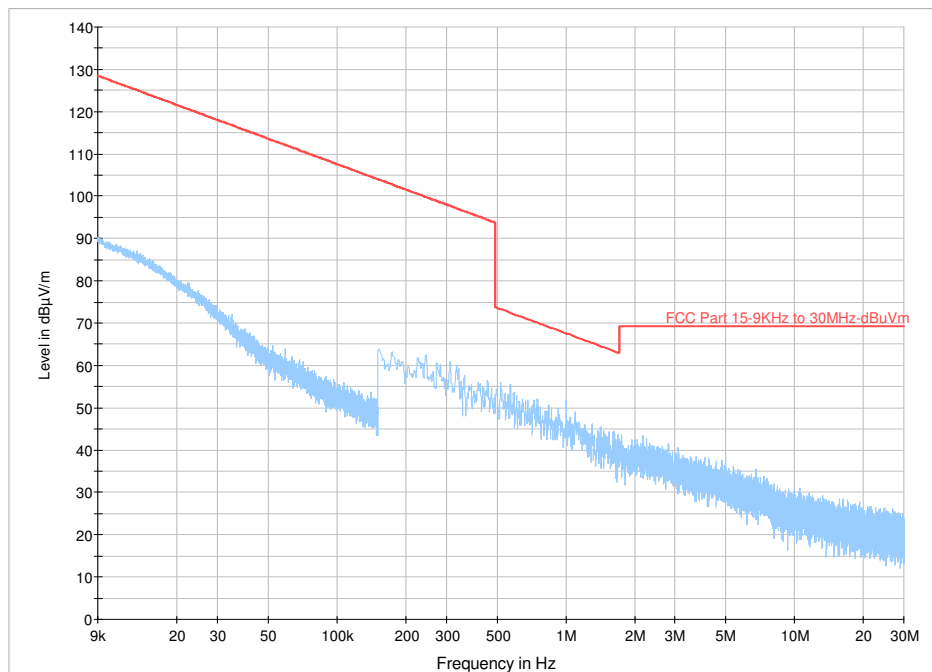


Antenna-1, Channel 1 (902.875 MHz)

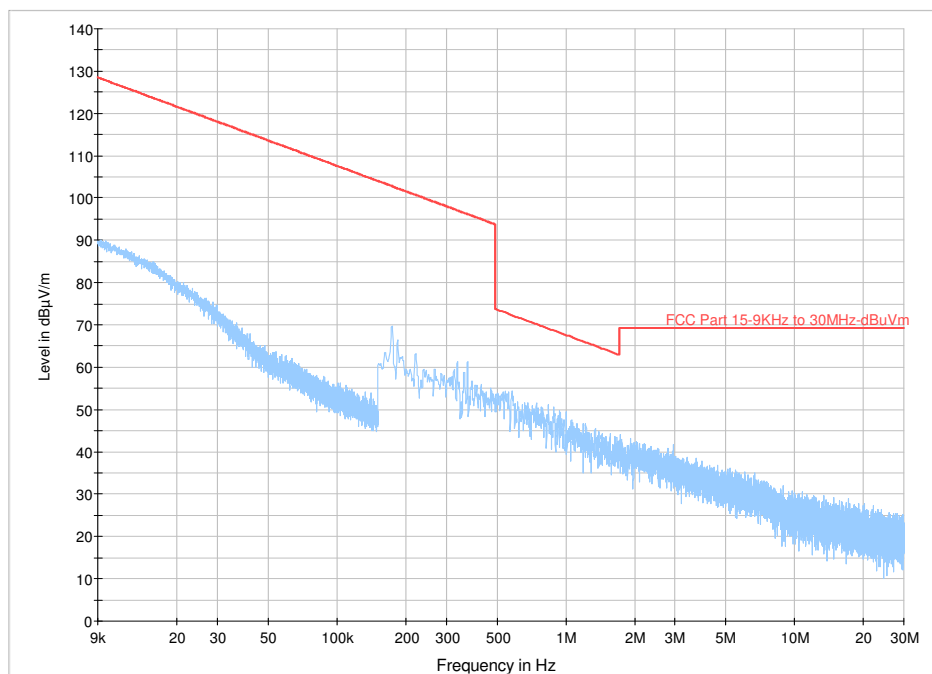
Note : Peak Graph - Perpendicular

**Antenna-1, Channel 2 (908.425 MHz)**

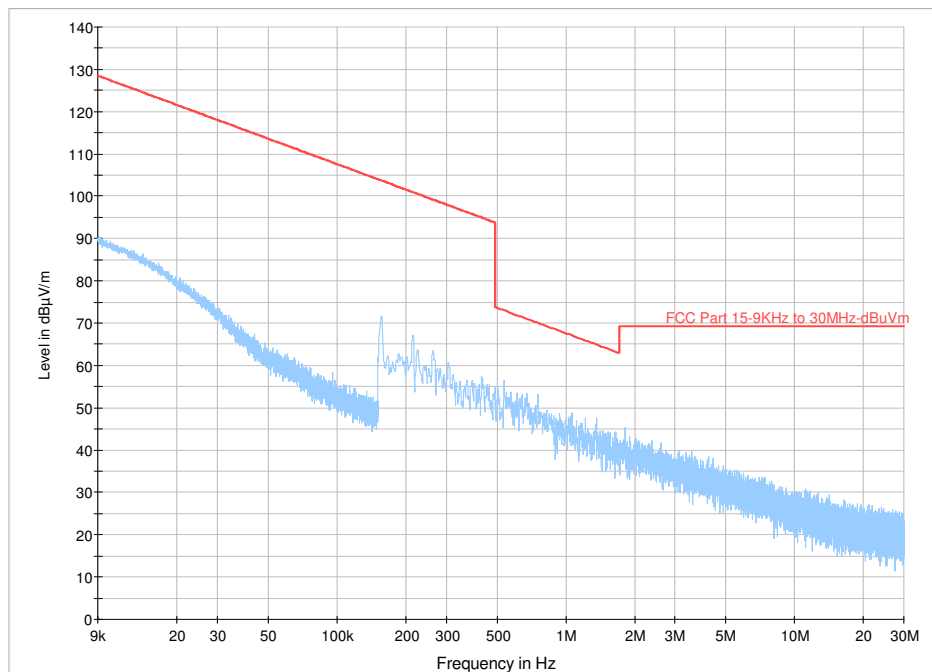
Note : Peak Graph - Parallel

**Antenna-1, Channel 2 (908.425 MHz)**

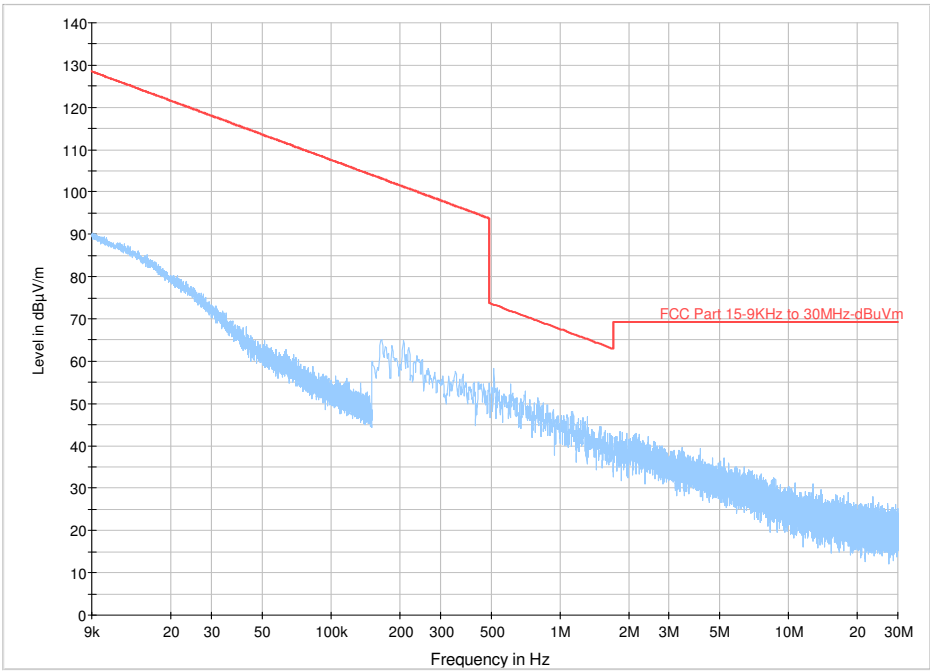
Note : Peak Graph - Perpendicular

**Antenna-1, Channel 3 (914.325 MHz)**

Note : Peak Graph - Parallel

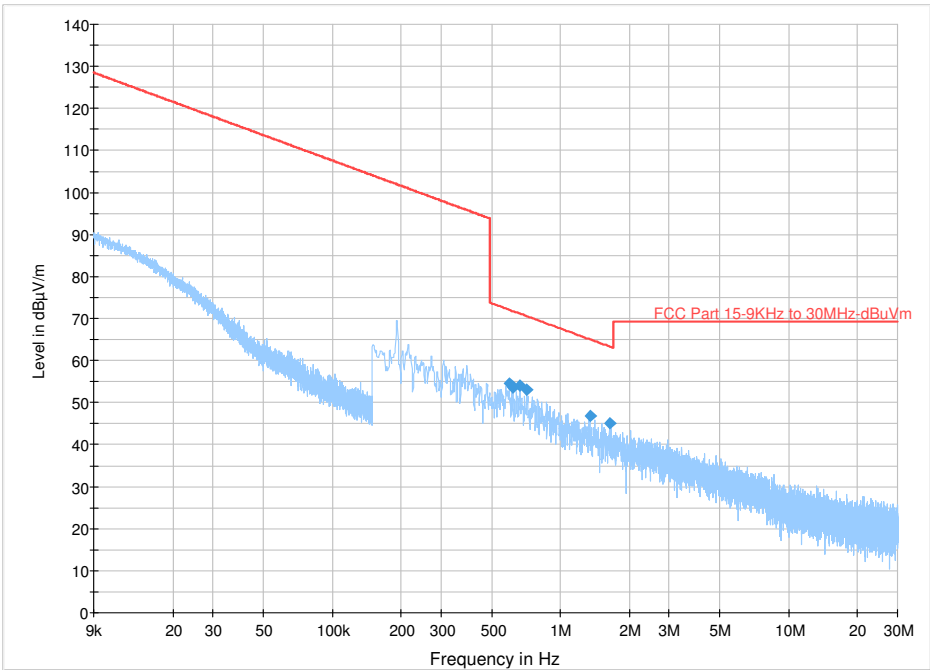
**Antenna-1, Channel 3 (914.325 MHz)**

Note : Peak Graph - Perpendicular



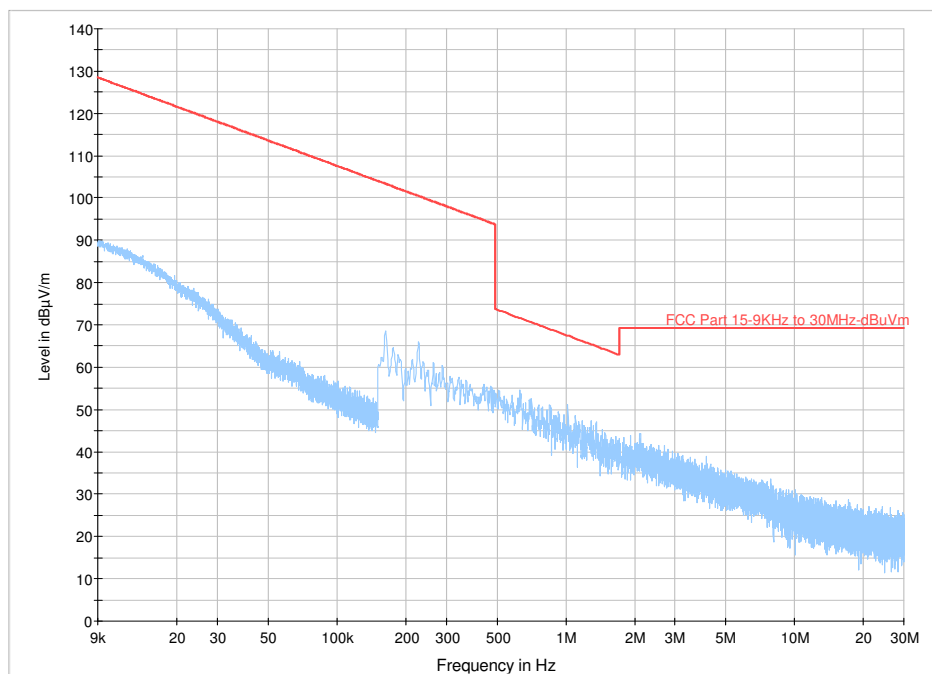
Antenna-1, Channel 4 (915.325 MHz)

Note : Peak Graph - Parallel

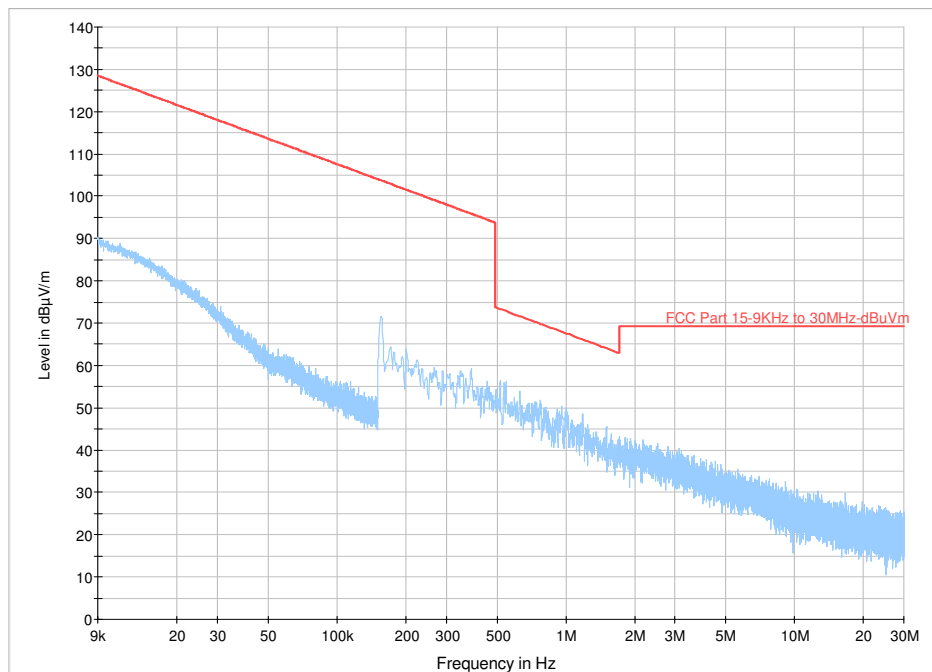


Antenna-1, Channel 4 (915.325 MHz)

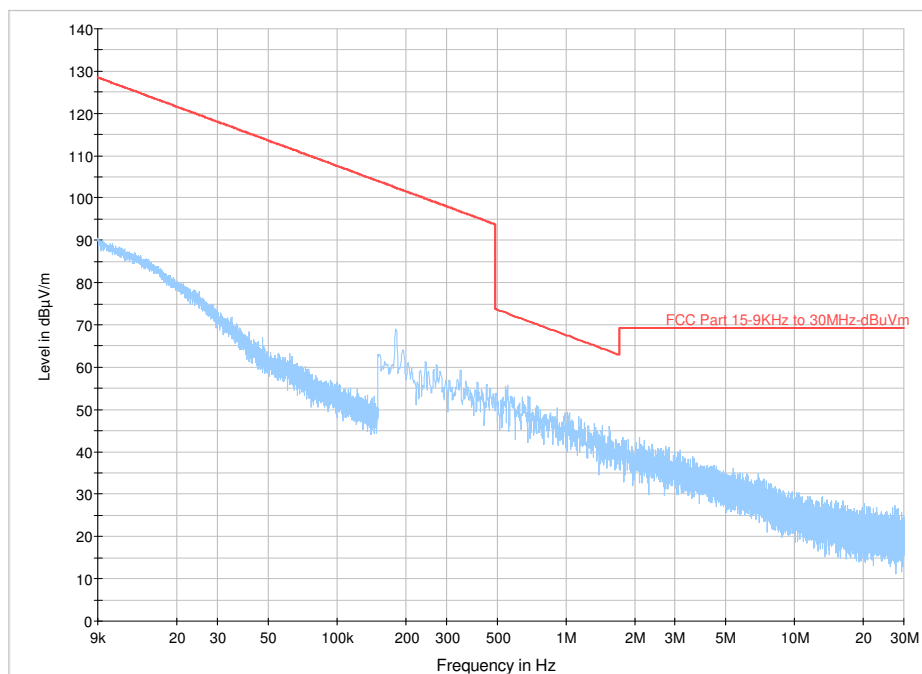
Note : Peak Graph - Perpendicular

**Antenna-1, Channel 5 (921.575 MHz)**

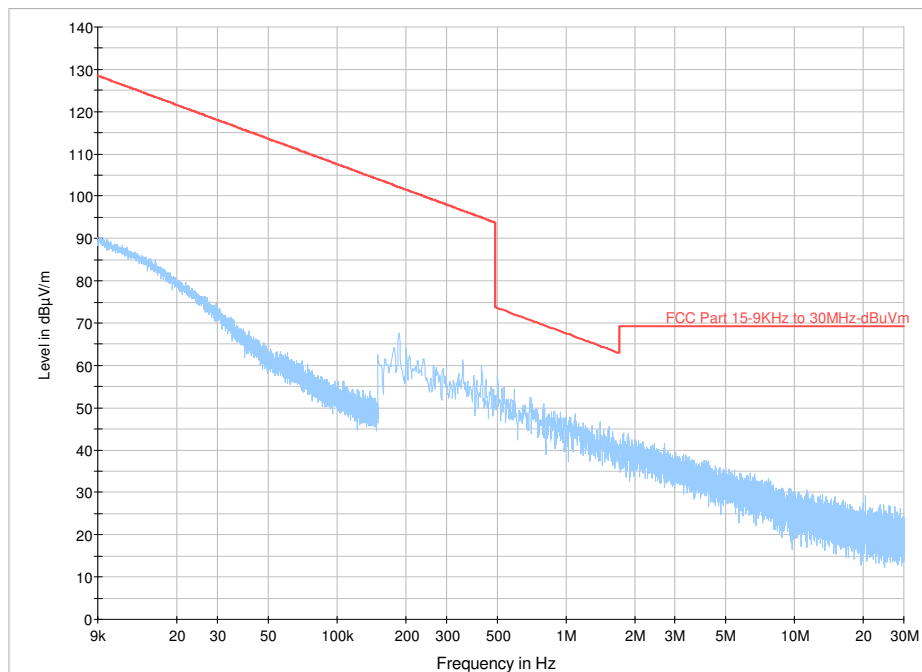
Note : Peak Graph - Parallel

**Antenna-1, Channel 5 (921.575 MHz)**

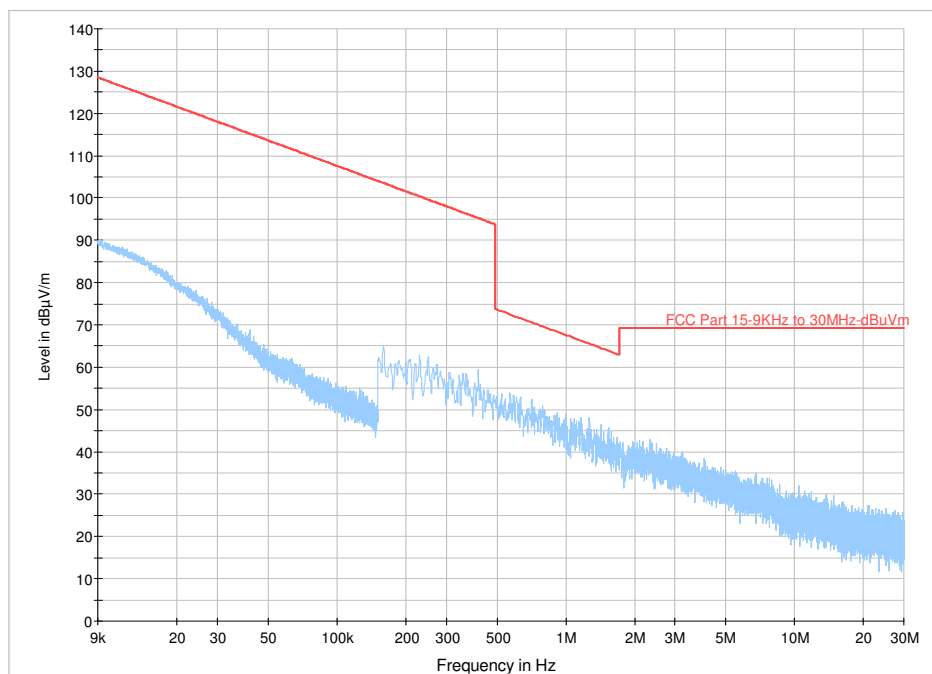
Note : Peak Graph - Perpendicular

**Antenna-1, Channel 6 (927.125MHz)**

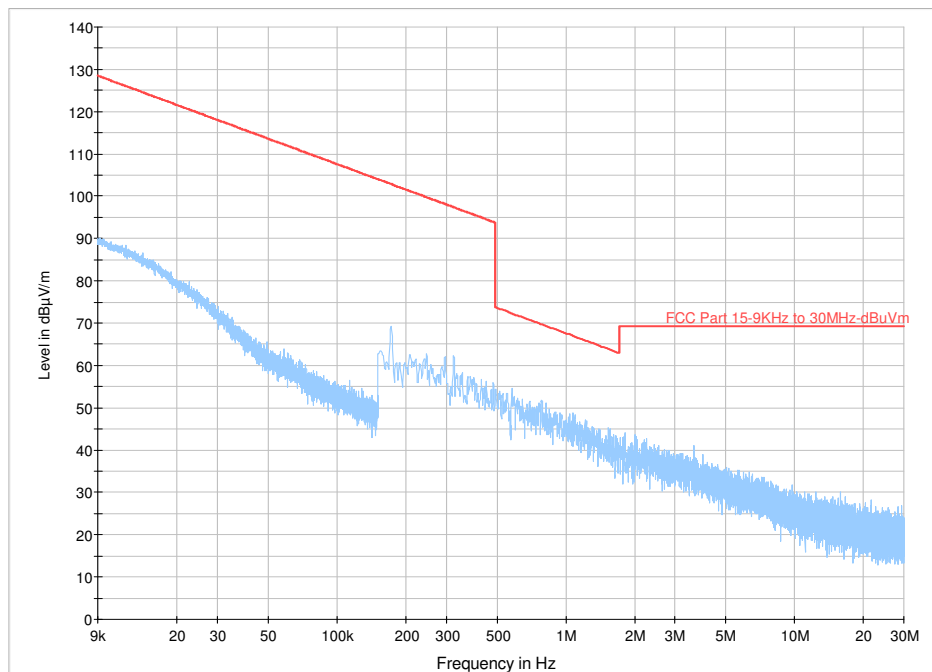
Note : Peak Graph - Parallel

**Antenna-1, Channel 6 (927.125MHz)**

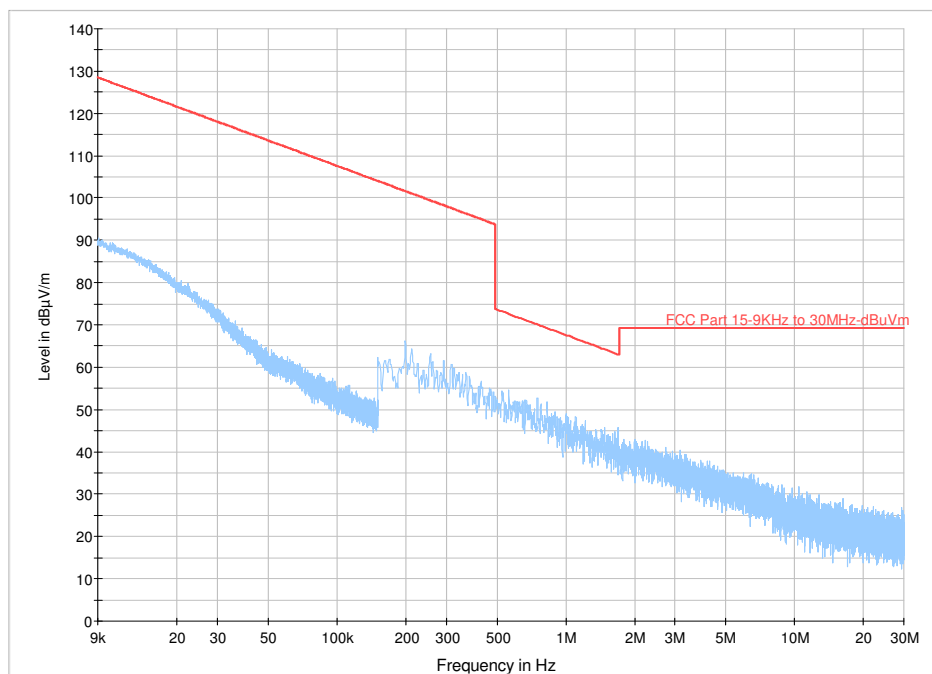
Note : Peak Graph - Perpendicular

**Antenna-2, Channel 1 (902.875 MHz)**

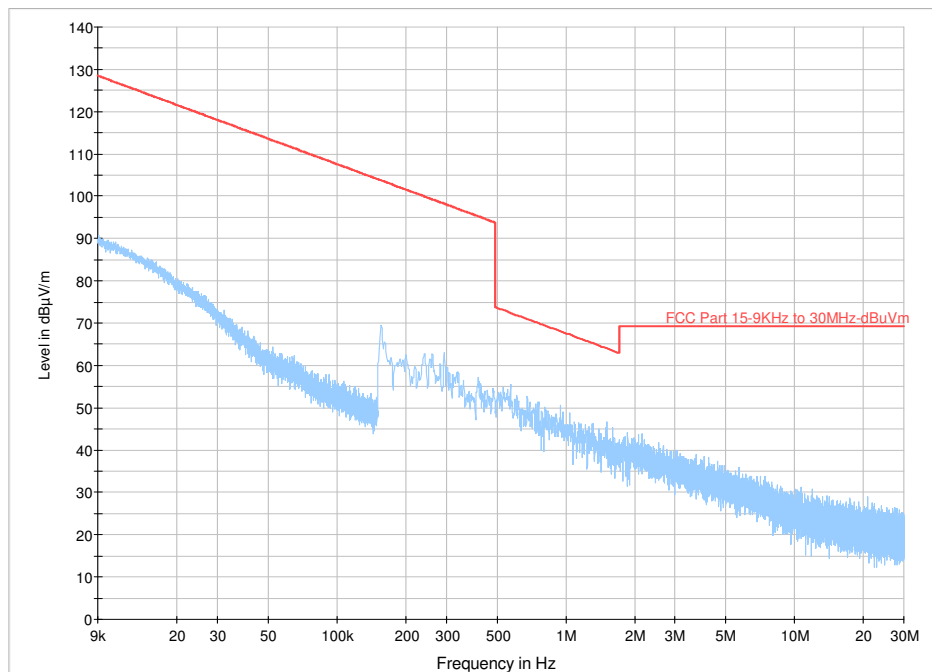
Note : Peak Graph - Parallel

**Antenna-2, Channel 1 (902.875 MHz)**

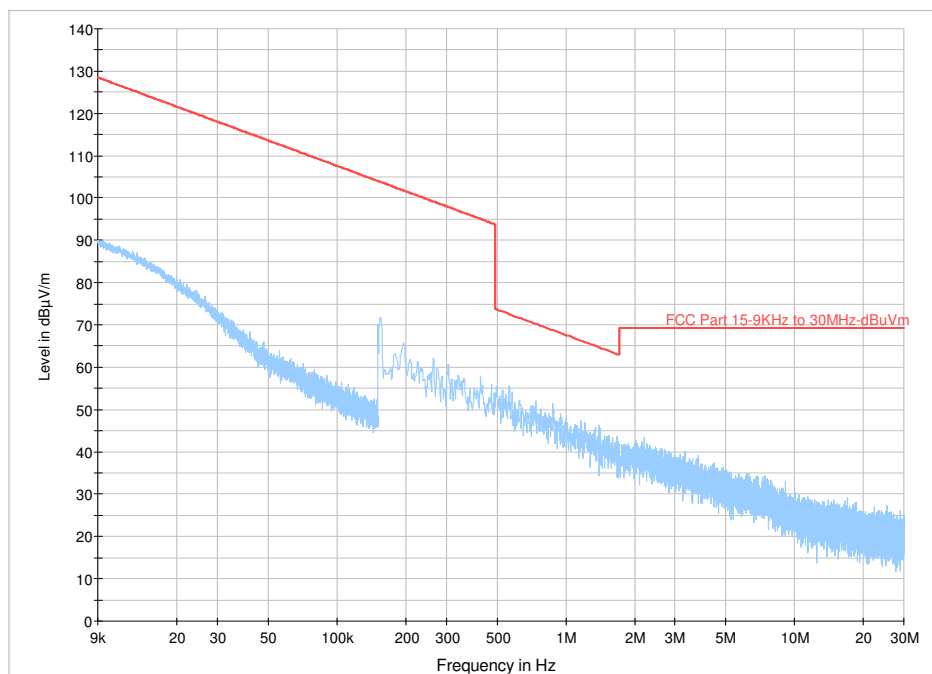
Note : Peak Graph - Perpendicular

**Antenna-2, Channel 2 (908.425 MHz)**

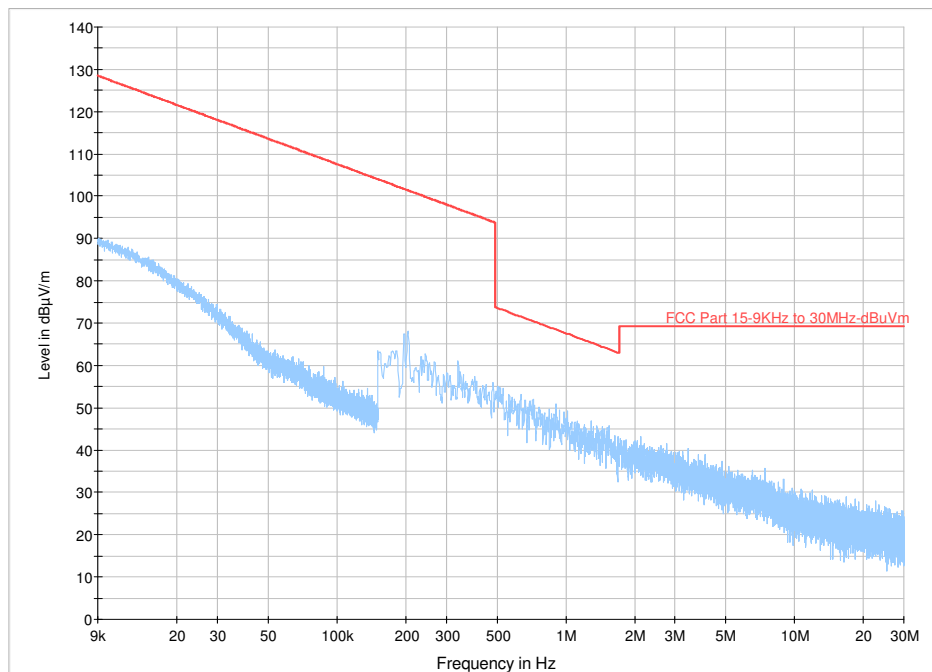
Note : Peak Graph - Parallel

**Antenna-2, Channel 2 (908.425 MHz)**

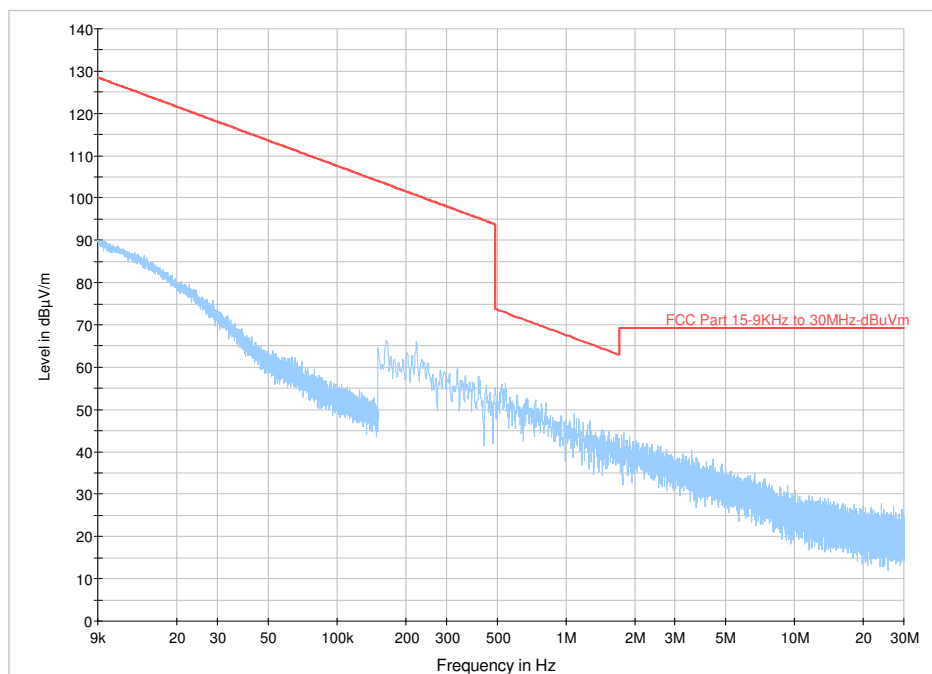
Note : Peak Graph - Perpendicular

**Antenna-2, Channel 3 (914.325 MHz)**

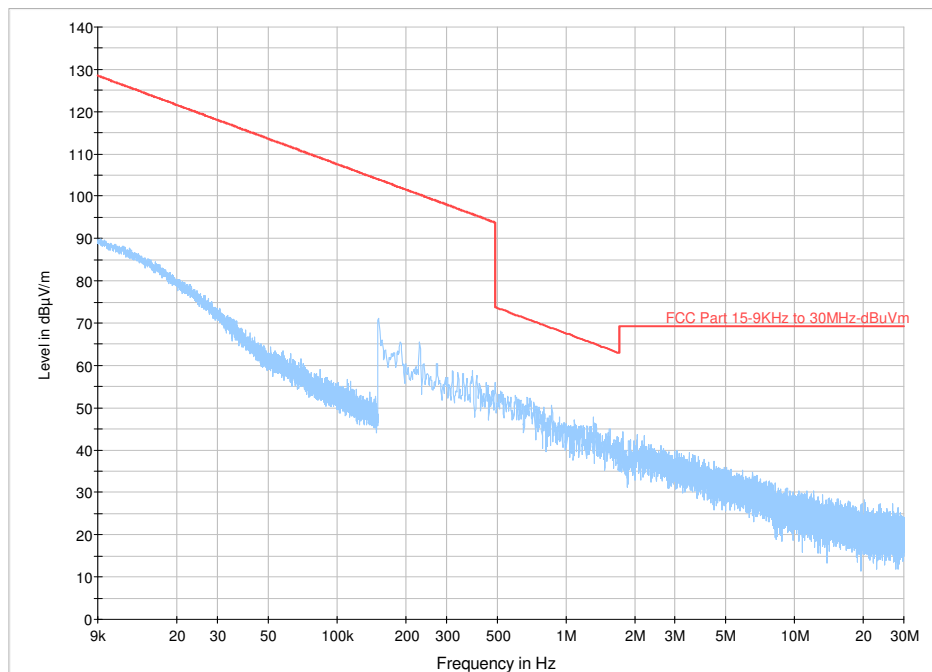
Note : Peak Graph - Parallel

**Antenna-2, Channel 3 (914.325 MHz)**

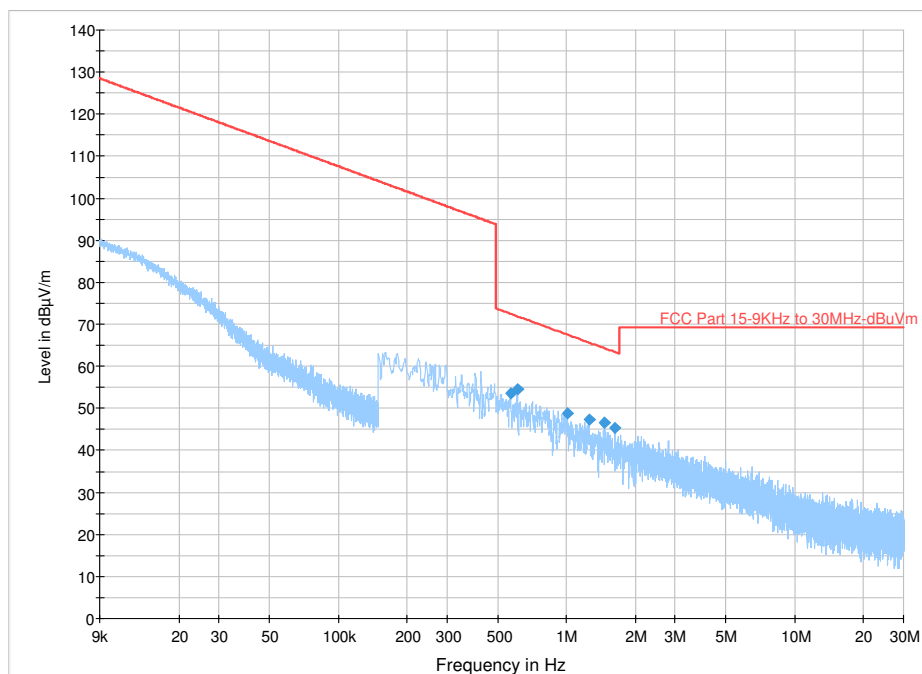
Note : Peak Graph - Perpendicular

**Antenna-2, Channel 4 (915.325 MHz)**

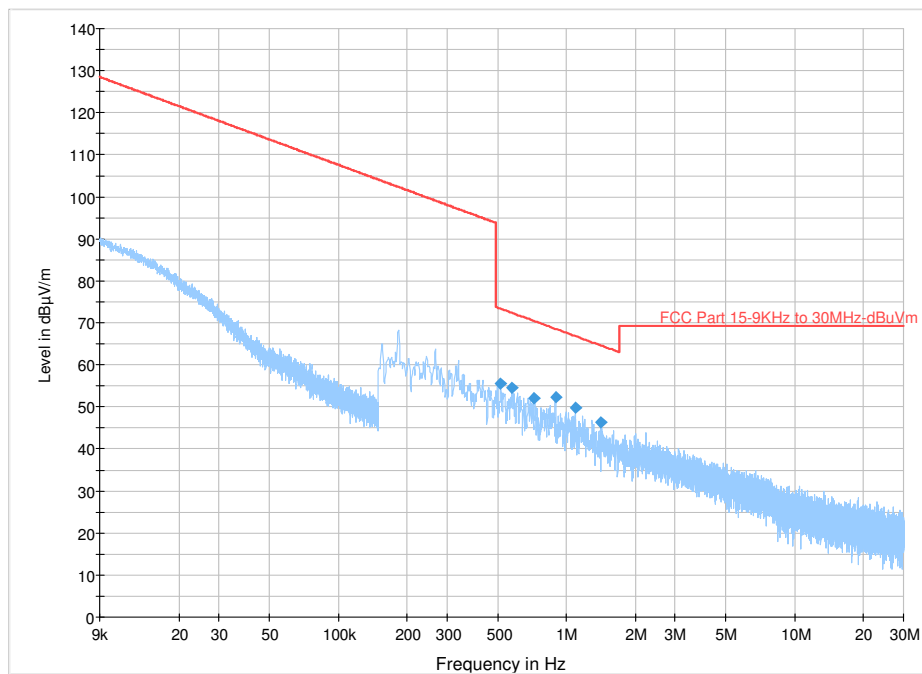
Note : Peak Graph - Parallel

**Antenna-2, Channel 4 (915.325 MHz)**

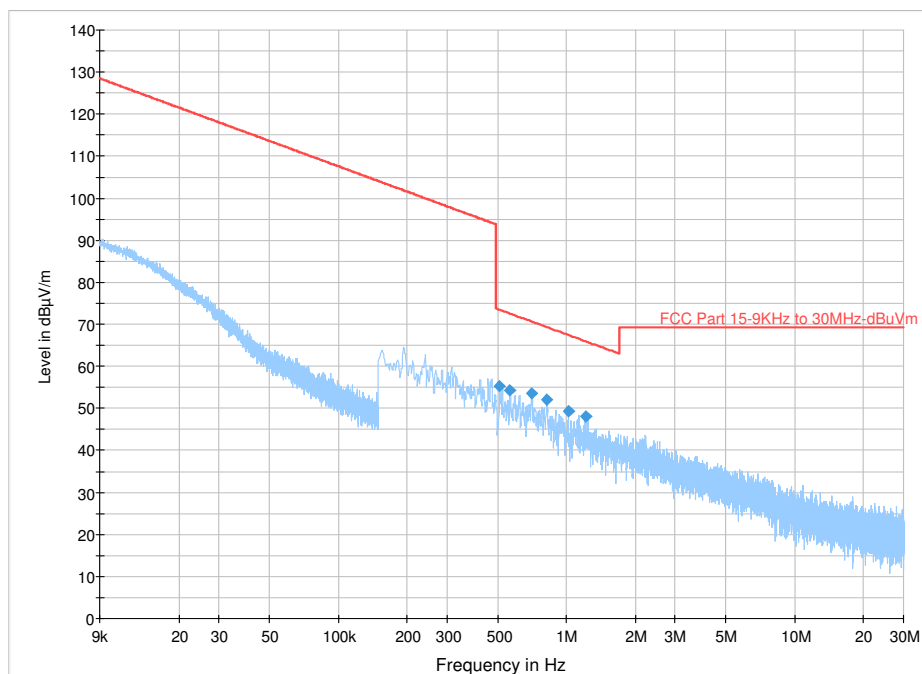
Note : Peak Graph - Perpendicular

**Antenna-2, Channel 5 (921.575 MHz)**

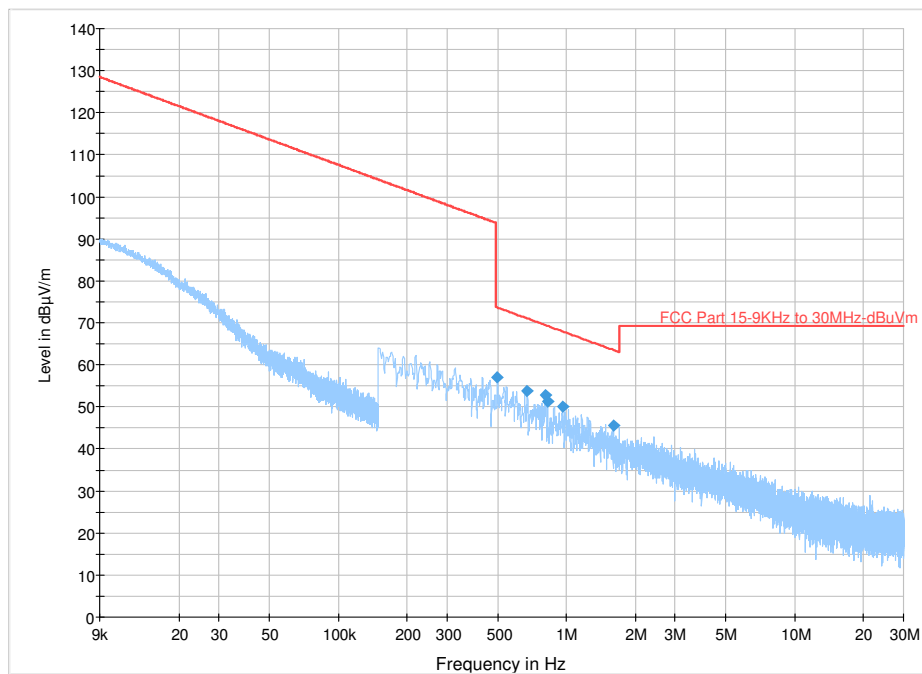
Note : Peak Graph - Parallel

**Antenna-2, Channel 5 (921.575 MHz)**

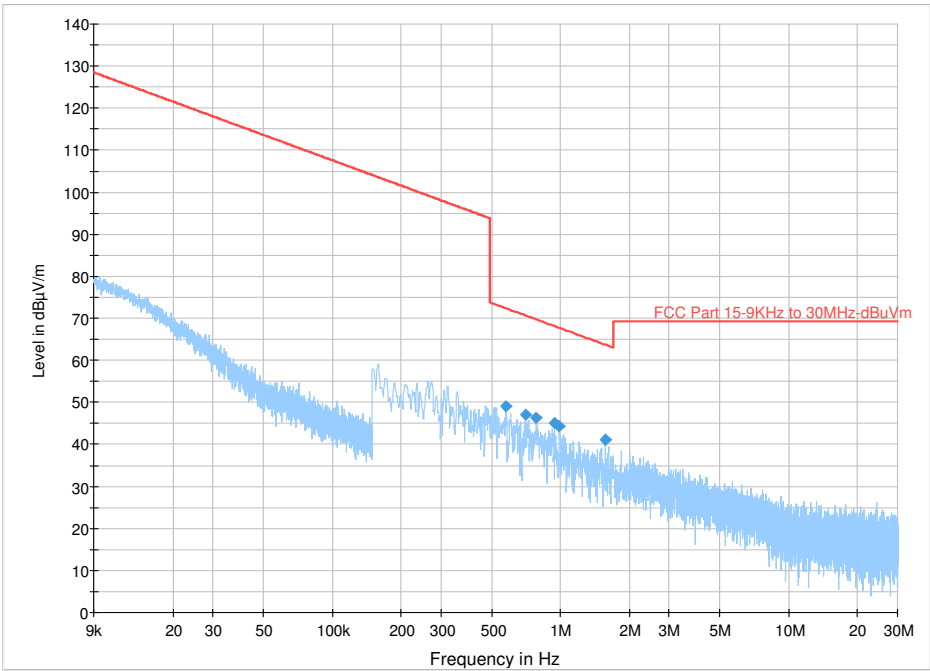
Note : Peak Graph - Perpendicular

**Antenna-2, Channel 6 (927.125MHz)**

Note : Peak Graph - Parallel

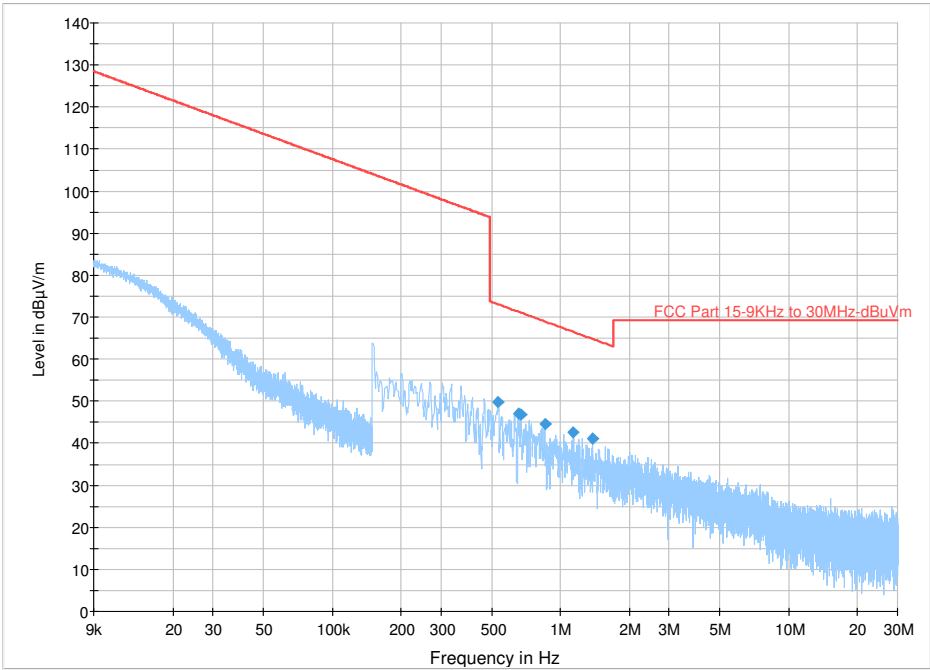
**Antenna-2, Channel 6 (927.125MHz)**

Note : Peak Graph - Perpendicular



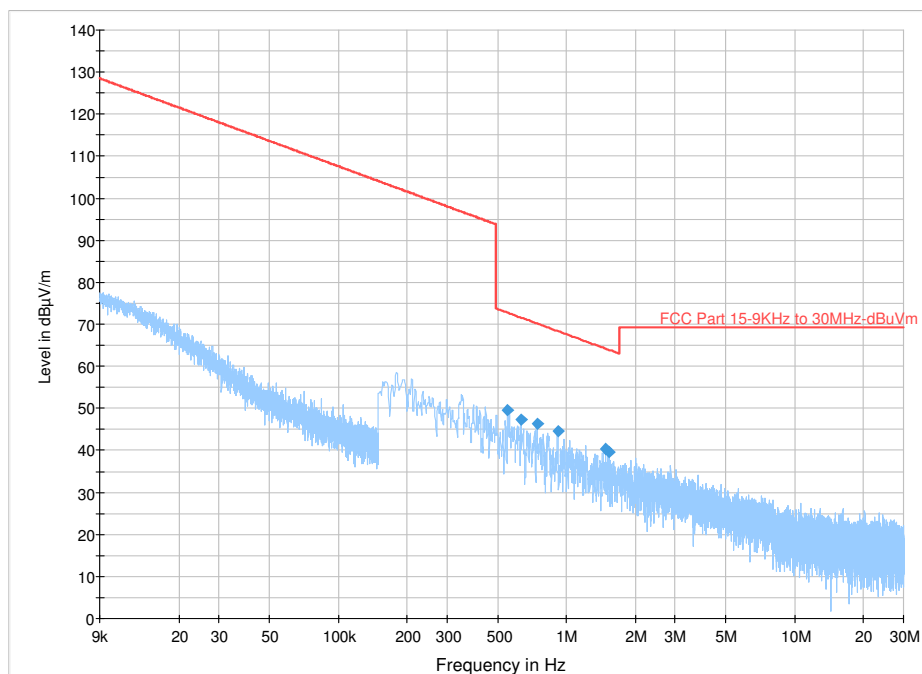
Antenna-3, Channel 1 (902.875 MHz)

Note : Peak Graph - Parallel

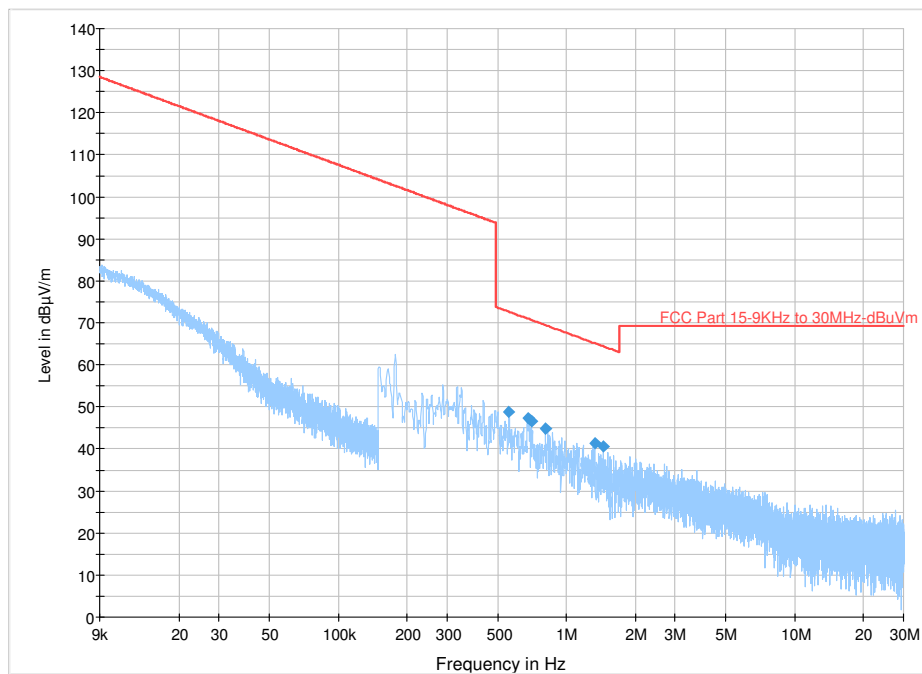


Antenna-3, Channel 1 (902.875 MHz)

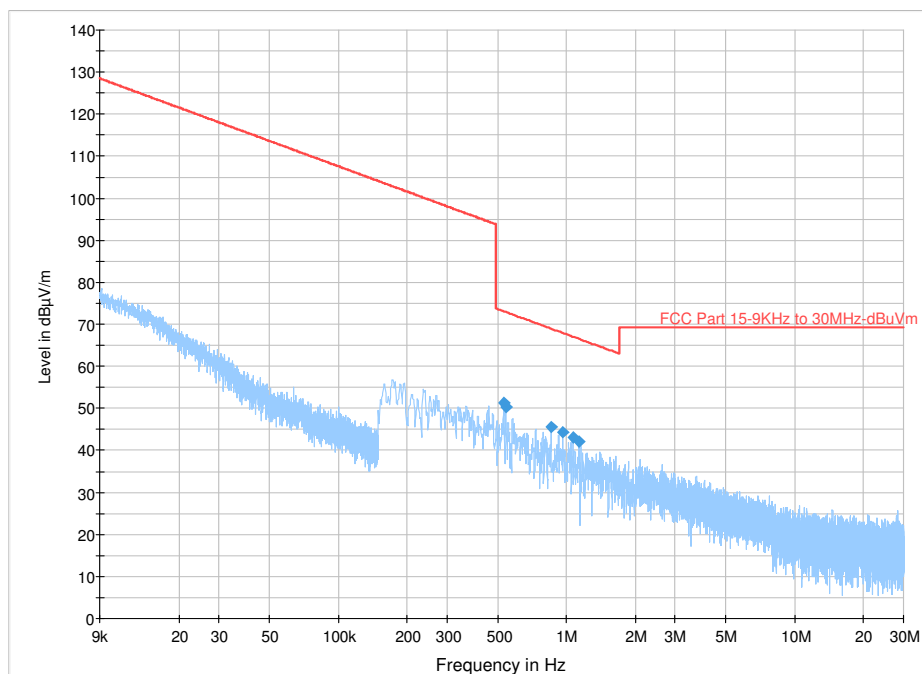
Note : Peak Graph - Perpendicular

**Antenna-3, Channel 2 (908.425 MHz)**

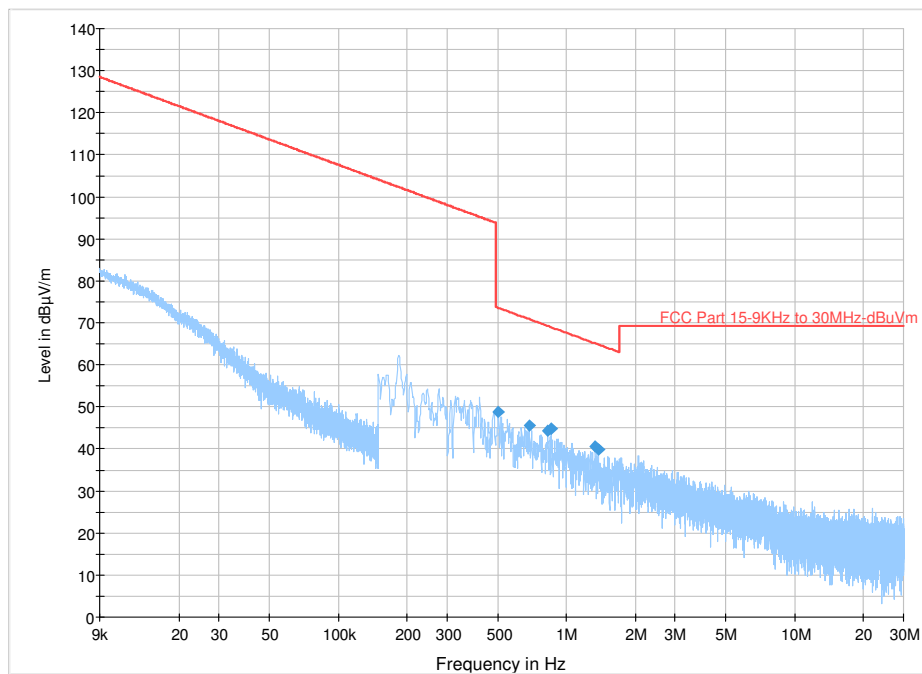
Note : Peak Graph - Parallel

**Antenna-3, Channel 2 (908.425 MHz)**

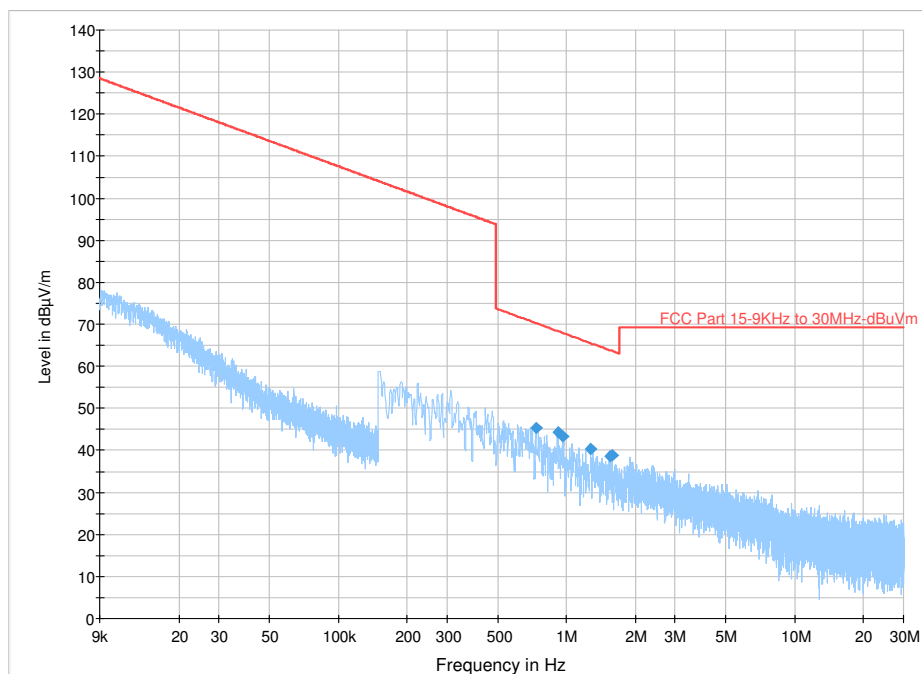
Note : Peak Graph - Perpendicular

**Antenna-3, Channel 3 (914.325 MHz)**

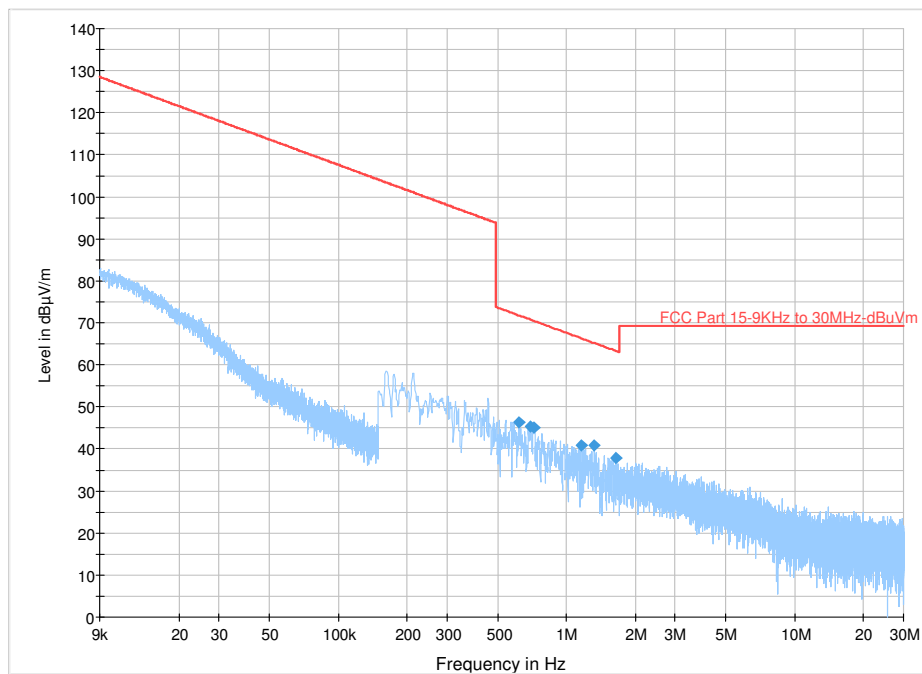
Note : Peak Graph - Parallel

**Antenna-3, Channel 3 (914.325 MHz)**

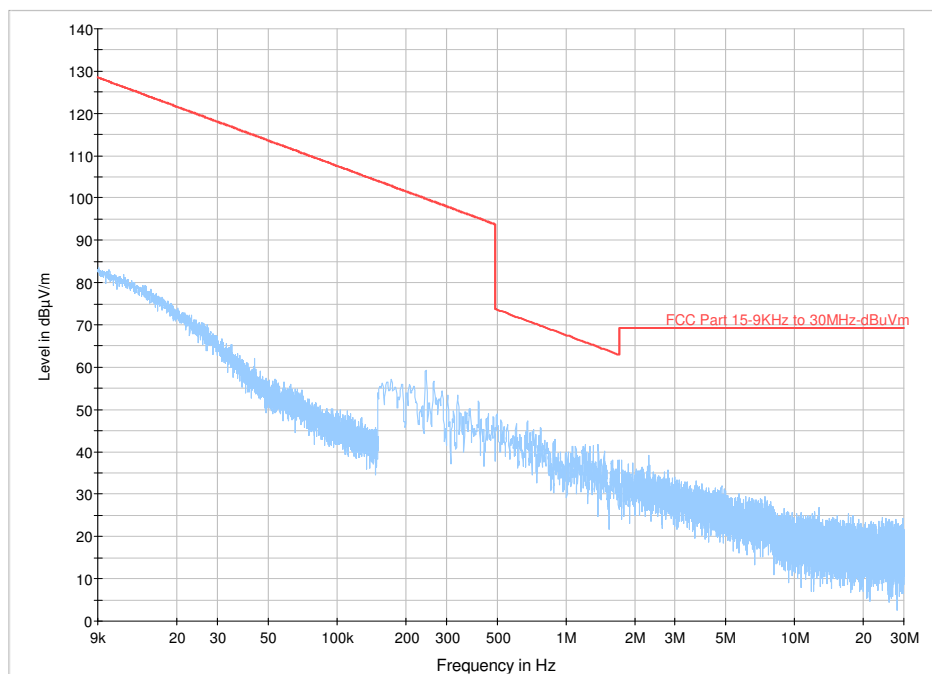
Note : Peak Graph - Perpendicular

**Antenna-3, Channel 4 (915.325 MHz)**

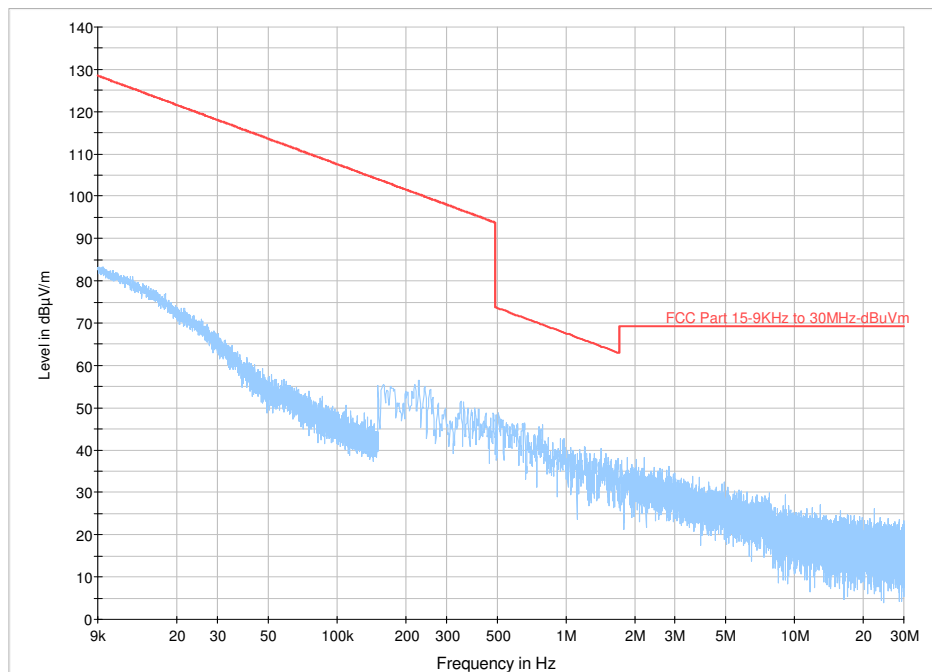
Note : Peak Graph - Parallel

**Antenna-3, Channel 4 (915.325 MHz)**

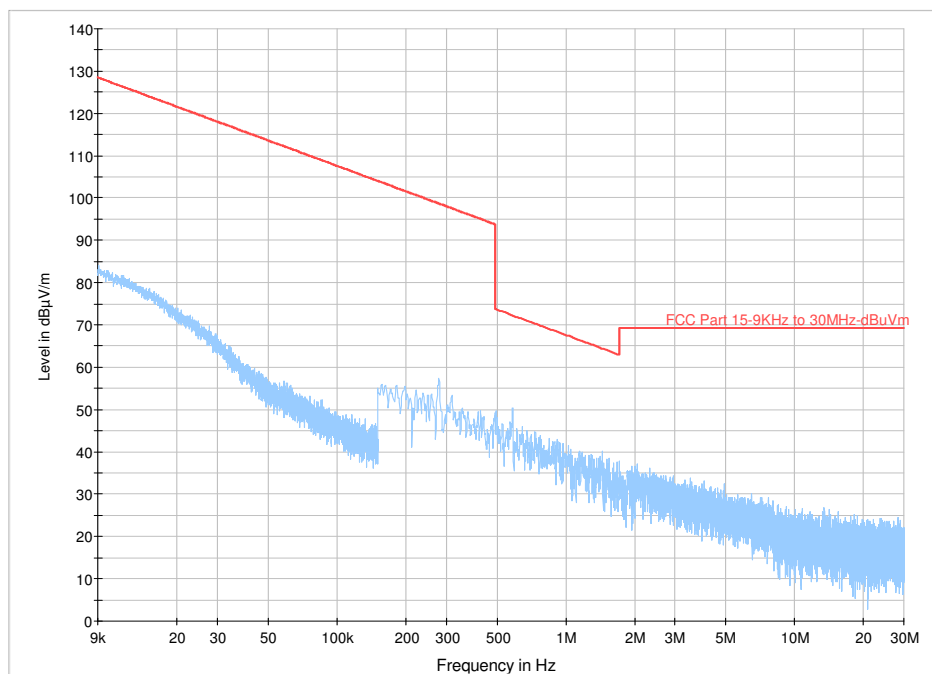
Note : Peak Graph - Perpendicular

**Antenna-3, Channel 5 (921.575 MHz)**

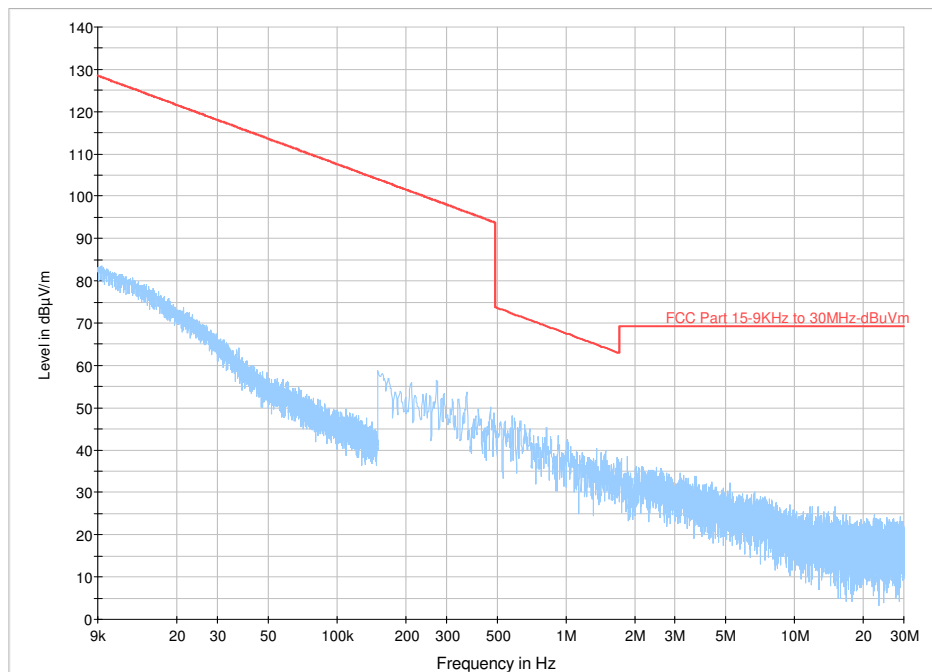
Note : Peak Graph - Parallel

**Antenna-3, Channel 5 (921.575 MHz)**

Note : Peak Graph - Perpendicular

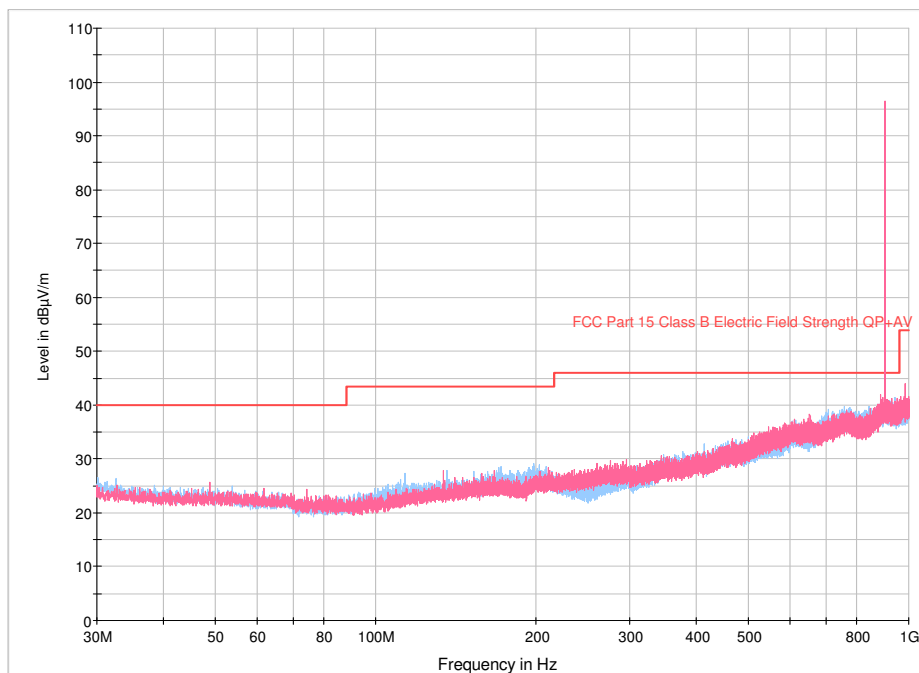
**Antenna-3, Channel 6 (927.125MHz)**

Note : Peak Graph - Parallel

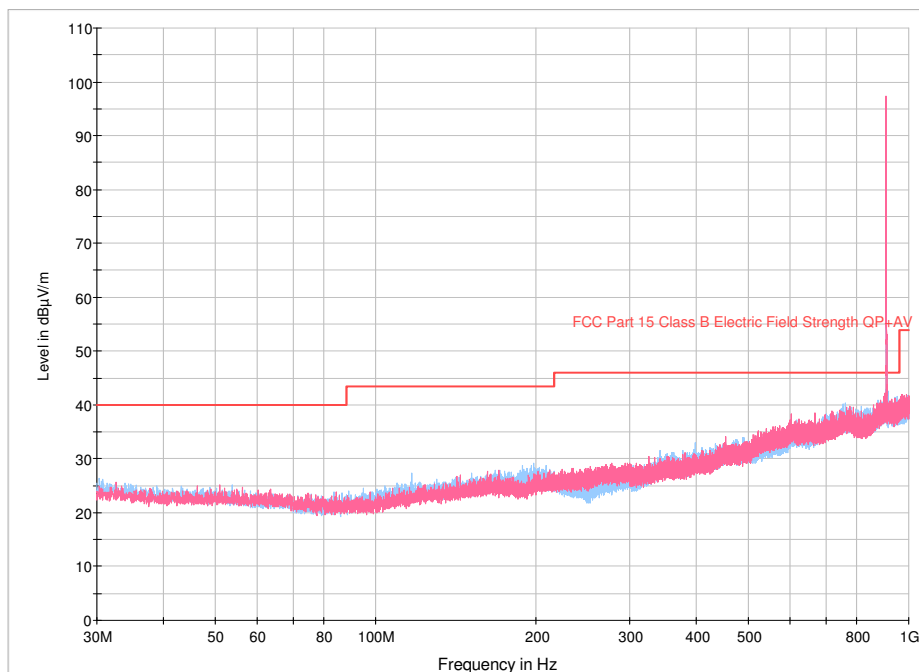
**Antenna-3, Channel 6 (927.125MHz)**

Note : Peak Graph - Perpendicular

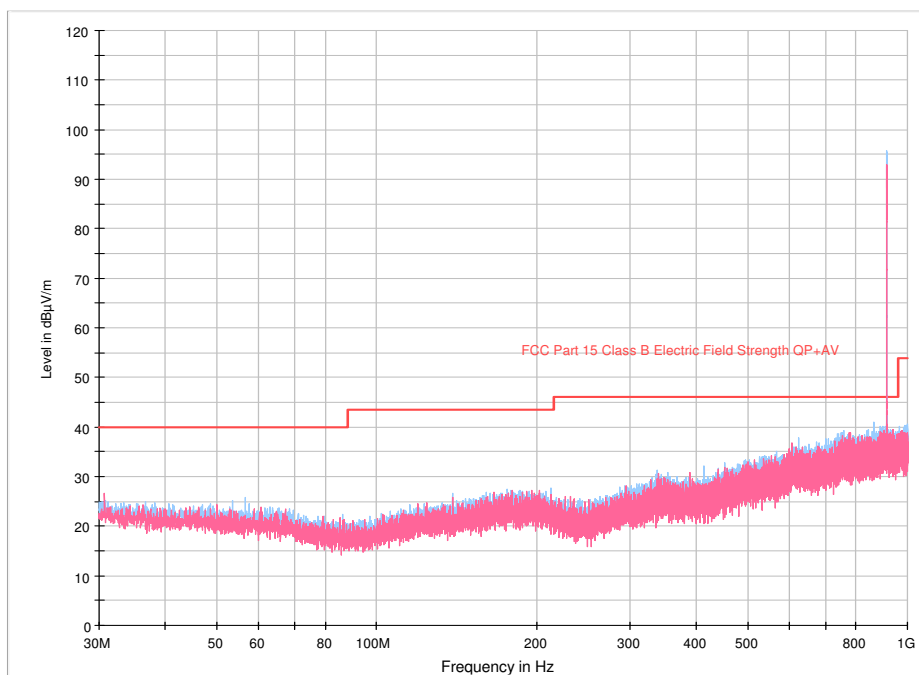
| TEST RESULT – 9 KHz to 30 MHz                                                                                       |                   |                   |            |        |                          |         |        |                     |         |
|---------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|------------|--------|--------------------------|---------|--------|---------------------|---------|
| Channel                                                                                                             | Channel Frequency | Measured Spurious | Quasi Peak | Height | Ant Pol                  | Azimuth | Margin | Limit @ 3m Distance | Results |
| #                                                                                                                   | MHz               | MHz               | dBµV/m     | cm     | Parallel / Perpendicular | deg     | dB     | dBµV/m              |         |
| No Emissions Found                                                                                                  |                   |                   |            |        |                          |         |        |                     |         |
| <b>Note :</b> Measured Field Strength (dBuV/m) = Receiver Readings (dBuV) + Antenna Factor (dB/m) + Cable loss (dB) |                   |                   |            |        |                          |         |        |                     |         |

**TEST GRAPHS – 30 MHz to 1 GHz****Antenna-1, Channel 1 (902.875 MHz)**

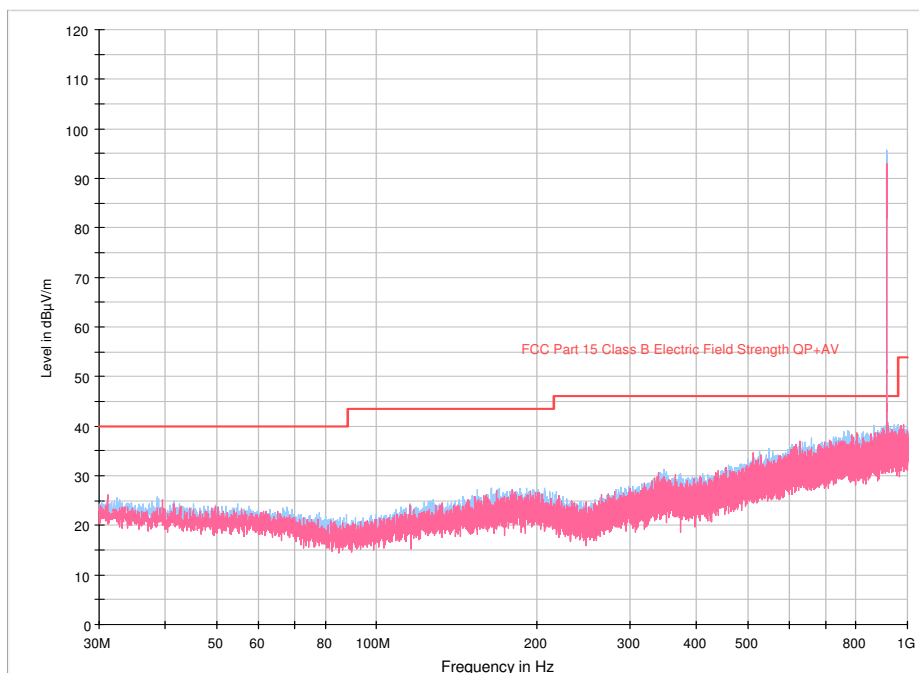
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-1, Channel 2 (908.425 MHz)**

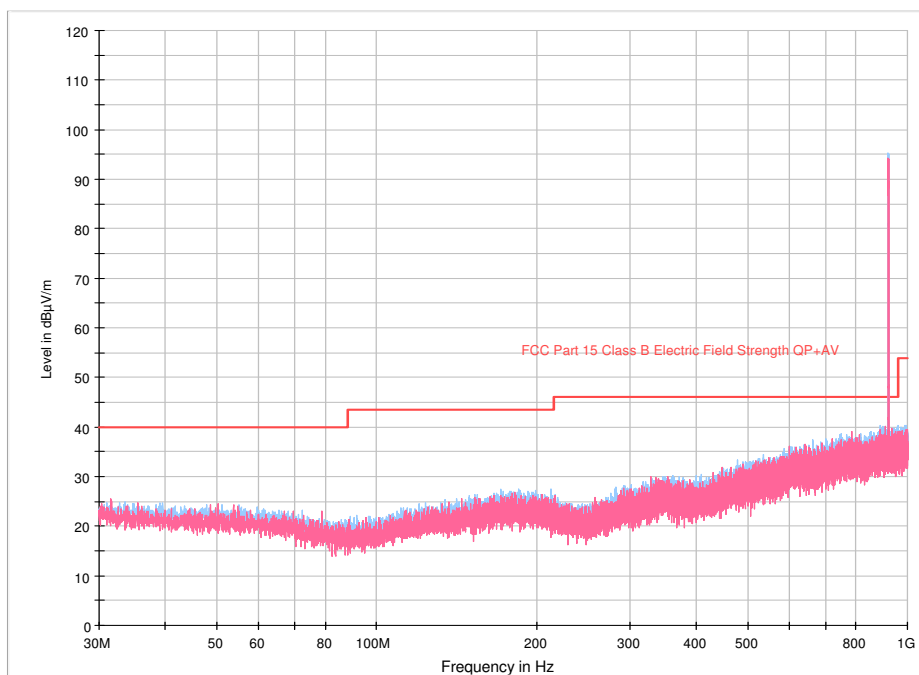
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-1, Channel 3 (914.325 MHz)**

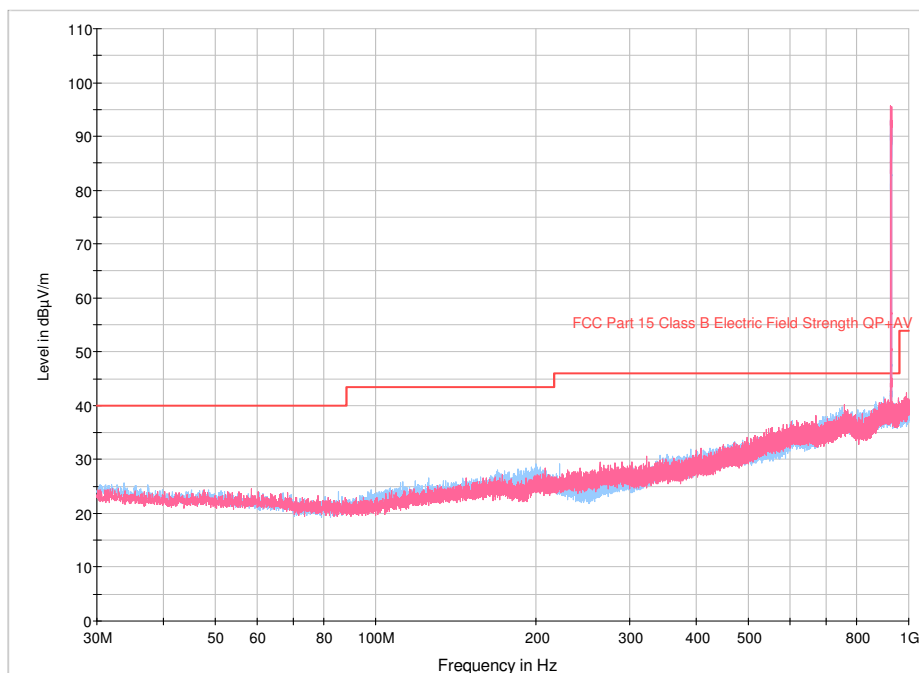
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-1, Channel 4 (915.325 MHz)**

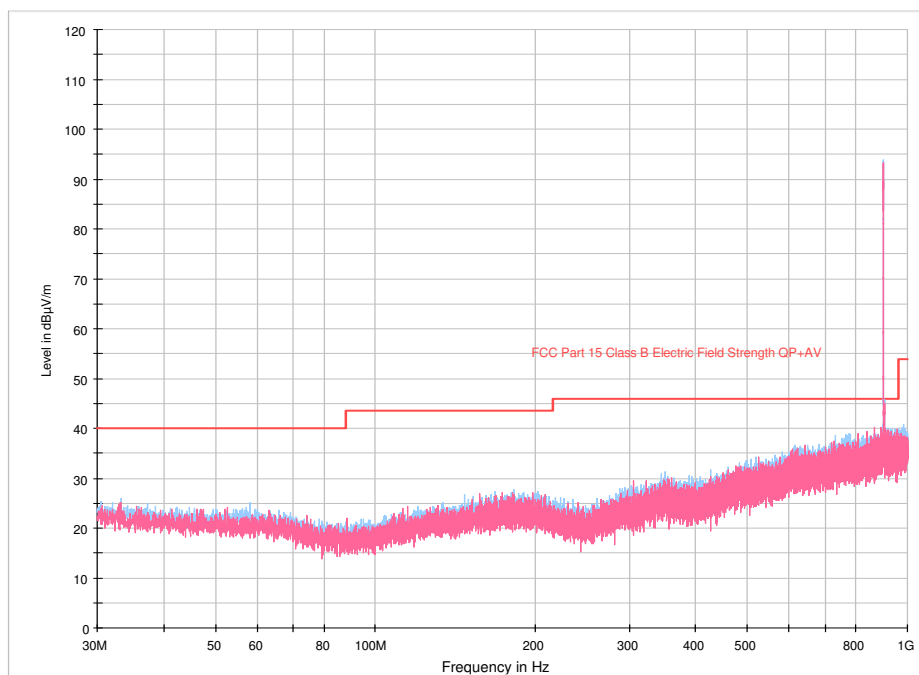
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-1, Channel 5 (921.575 MHz)**

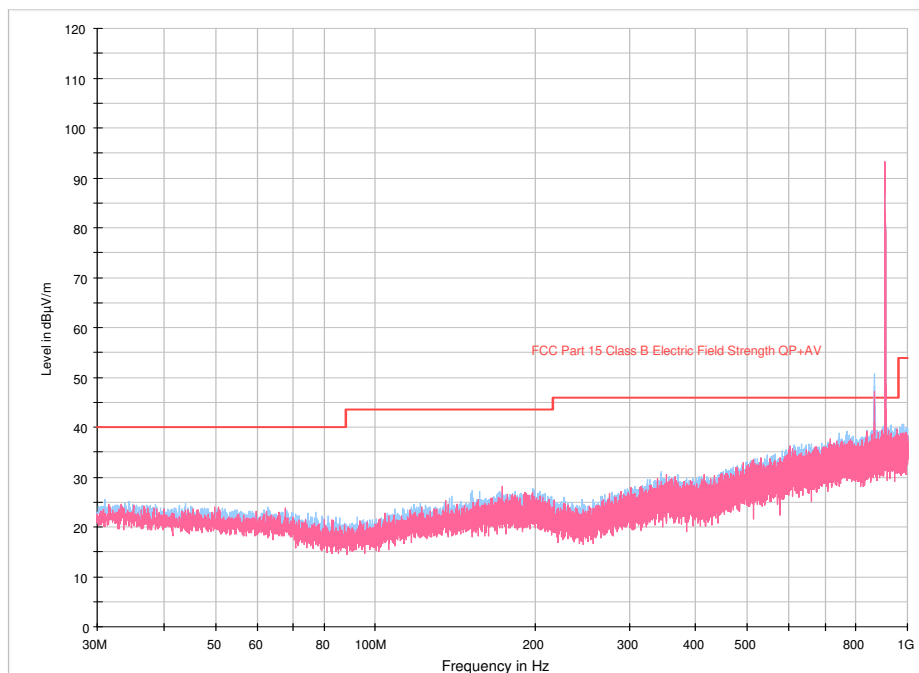
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-1, Channel 6 (927.125MHz)**

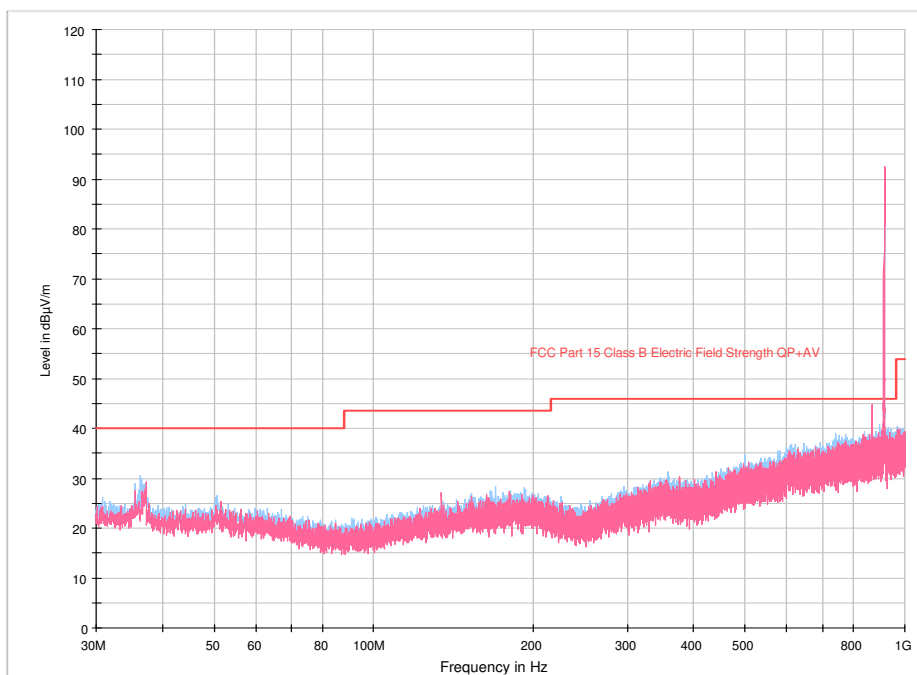
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-2, Channel 1 (902.875 MHz)**

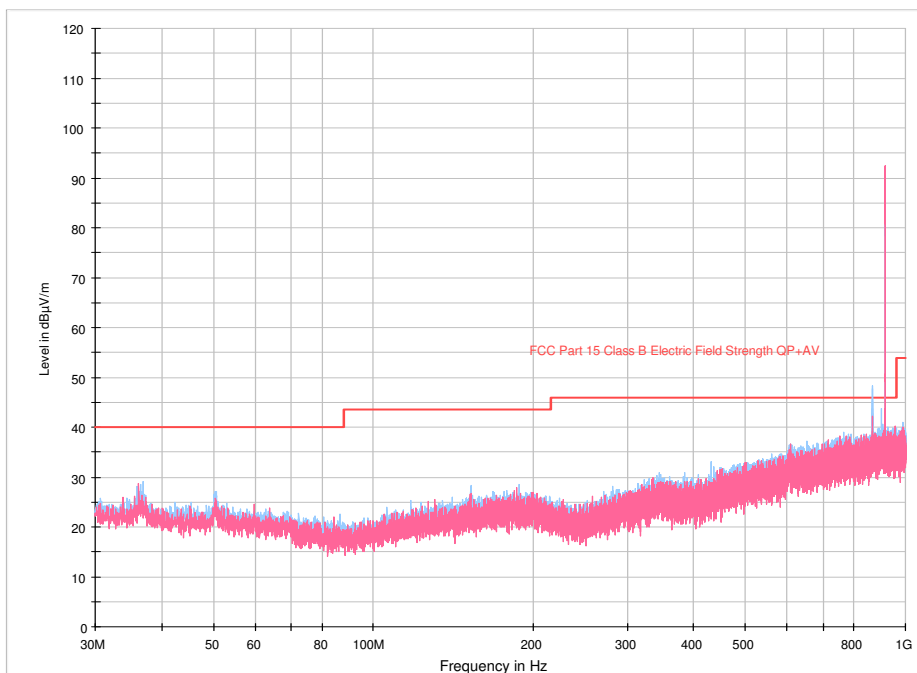
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-2, Channel 2 (908.425 MHz)**

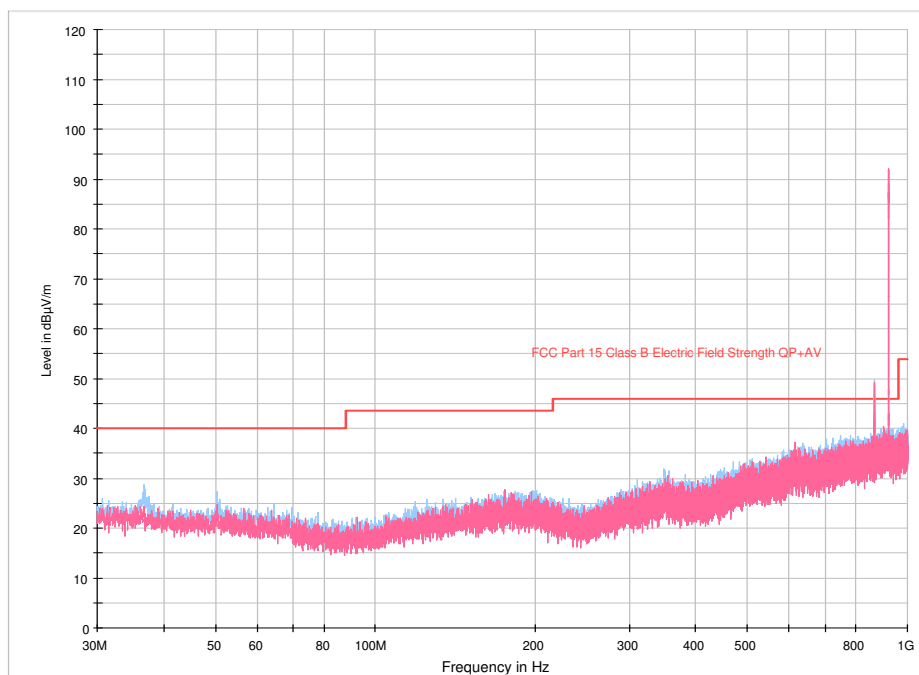
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-2, Channel 3 (914.325 MHz)**

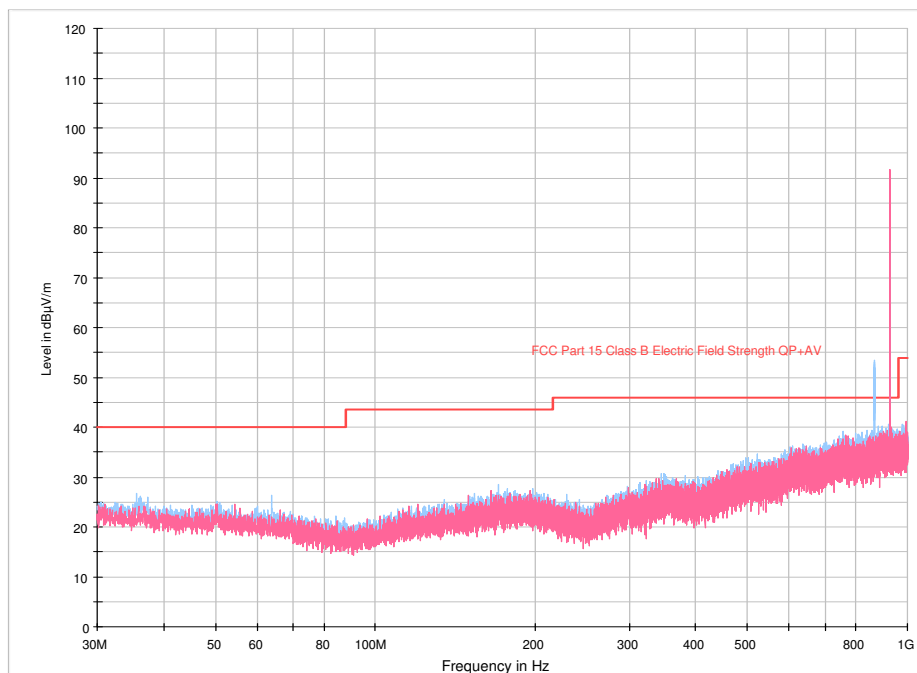
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-2, Channel 4 (915.325 MHz)**

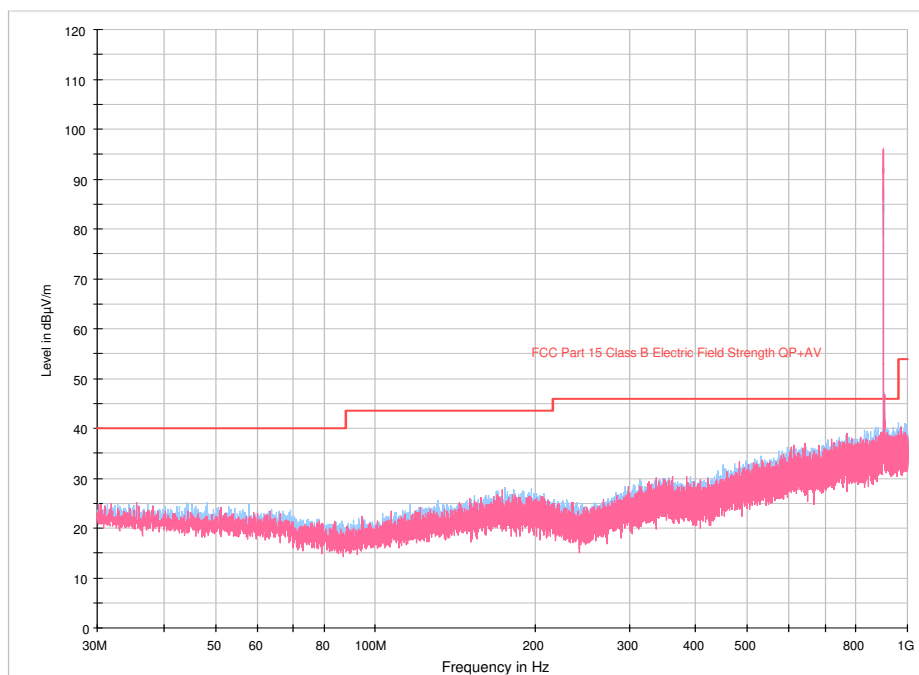
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-2, Channel 5 (921.575 MHz)**

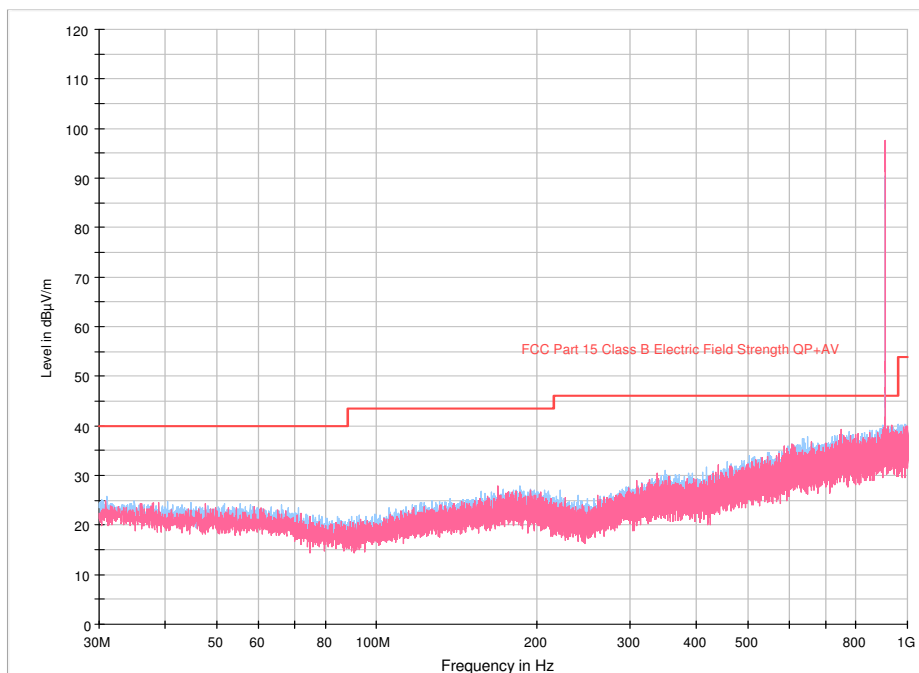
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-2, Channel 6 (927.125MHz)**

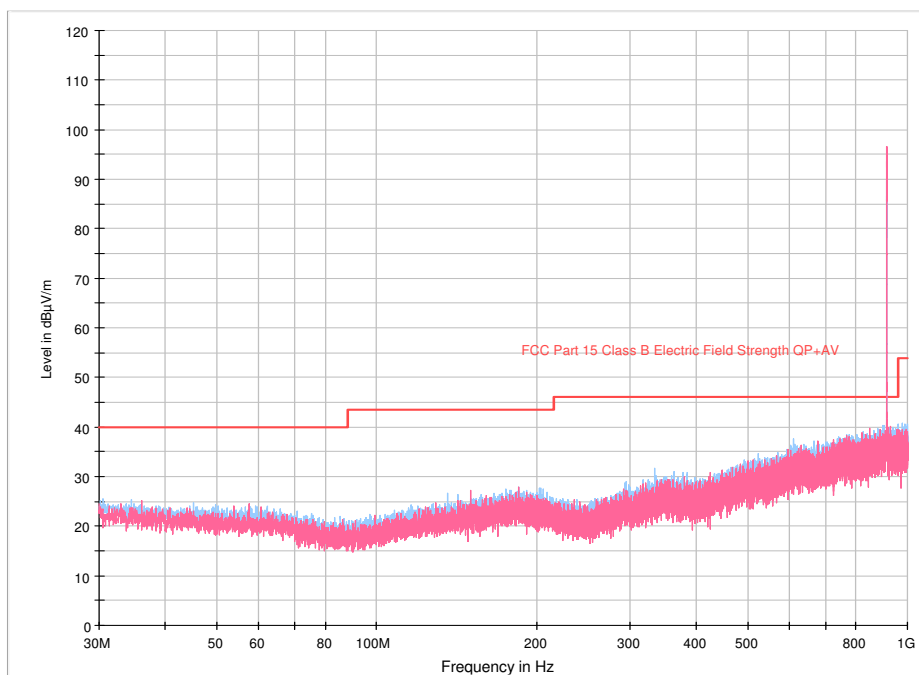
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-3, Channel 1 (902.875 MHz)**

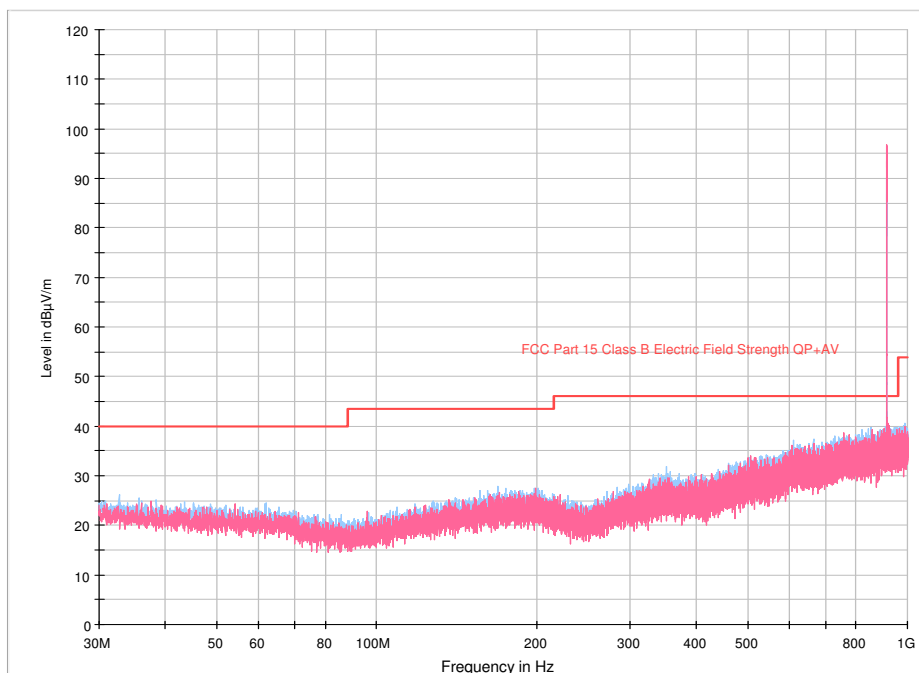
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-3, Channel 2 (908.425 MHz)**

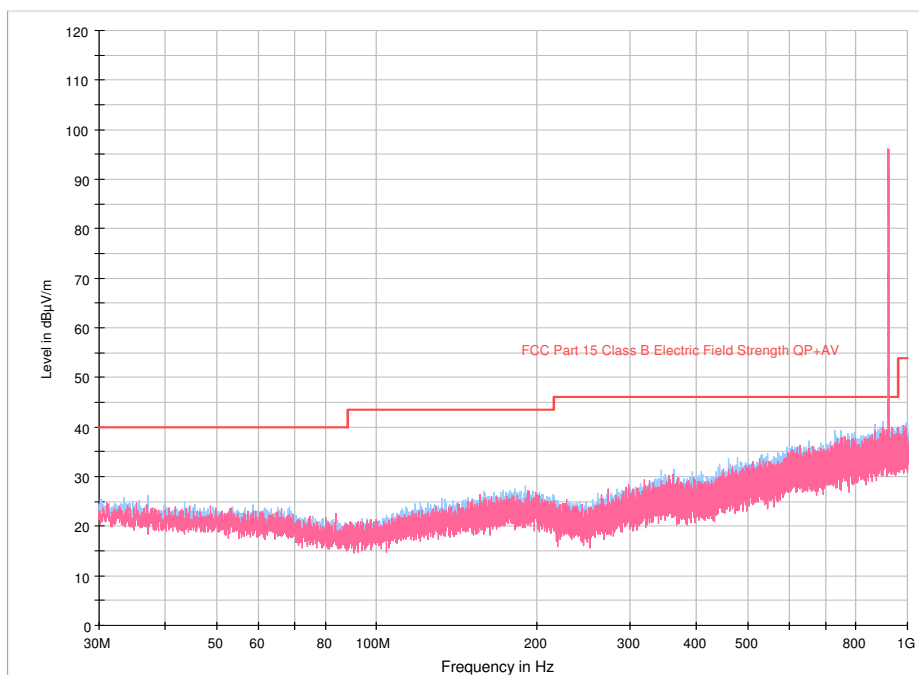
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-3, Channel 3 (914.325 MHz)**

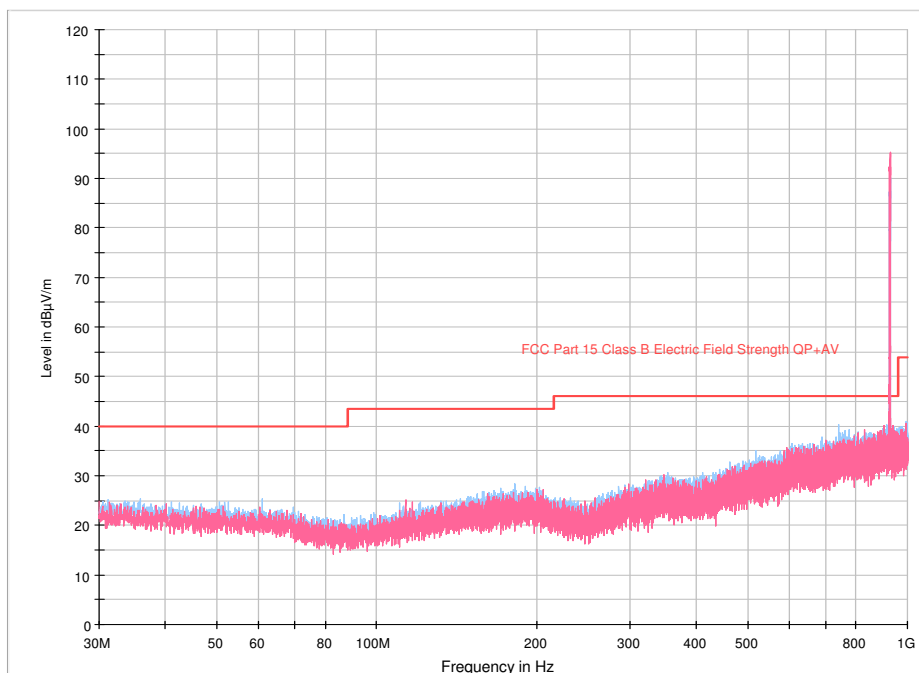
Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-3, Channel 4 (915.325 MHz)**

Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-3, Channel 5 (921.575 MHz)**

Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

**Antenna-3, Channel 6 (927.125MHz)**

Note : Peak Graph - Vertical (Red), Peak Graph Horizontal (Blue), Tested with 6dB Attenuator

## TEST RESULT – 30 MHz to 1 GHz

| Channel   | Measured Spurious Frequency | Quasi Peak | Height | Ant Pol | Azimuth | Margin | Limit @ 3m Distance | Results               |
|-----------|-----------------------------|------------|--------|---------|---------|--------|---------------------|-----------------------|
| #         | MHz                         | dBµV/m     | cm     | H / V   | deg     | dB     | dBµV/m              |                       |
| Antenna-1 |                             |            |        |         |         |        |                     |                       |
| CH-1      | 884.51                      | 40.36      | 300    | V       | 231     | 5.64   | 46.00               | PASS                  |
| CH-1      | 889.42                      | 40.45      | 100    | V       | 192     | 5.55   | 46.00               | PASS                  |
| CH-1      | 902.74                      | 101.96     | 100    | V       | 119     | -      | -                   | Intentional Frequency |
| CH-2      | 877.88                      | 40.02      | 200    | H       | 28      | 5.98   | 46.00               | PASS                  |
| CH-2      | 887.12                      | 40.49      | 100    | V       | 289     | 5.51   | 46.00               | PASS                  |
| CH-2      | 908.59                      | 102.59     | 100    | V       | 109     | -      | -                   | Intentional Frequency |
| CH-3      | 866.30                      | 39.37      | 100    | H       | 1       | 6.63   | 46.00               | PASS                  |
| CH-3      | 914.51                      | 99.64      | 100    | H       | 192     | -      | -                   | Intentional Frequency |
| CH-4      | 915.19                      | 101.27     | 100    | H       | 196     | -      | -                   | Intentional Frequency |
| CH-4      | 946.33                      | 40.18      | 100    | H       | 146     | 5.82   | 46.00               | PASS                  |
| CH-5      | 921.75                      | 99.89      | 100    | H       | 198     | -      | -                   | Intentional Frequency |
| CH-5      | 959.29                      | 40.30      | 100    | H       | 290     | 5.70   | 46.00               | PASS                  |
| CH-6      | 750.23                      | 39.37      | 200    | H       | 186     | 6.63   | 46.00               | PASS                  |
| CH-6      | 758.18                      | 38.71      | 100    | V       | 13      | 7.29   | 46.00               | PASS                  |
| CH-6      | 869.47                      | 39.48      | 200    | H       | 102     | 6.52   | 46.00               | PASS                  |
| CH-6      | 886.90                      | 40.16      | 100    | H       | 82      | 5.84   | 46.00               | PASS                  |
| CH-6      | 927.28                      | 101.48     | 100    | V       | 91      | -      | -                   | Intentional Frequency |
| Antenna-2 |                             |            |        |         |         |        |                     |                       |
| CH-1      | 869.86                      | 39.35      | 300    | V       | 21      | 6.65   | 46.00               | PASS                  |
| CH-1      | 902.74                      | 98.92      | 100    | H       | 21      | -      | -                   | Intentional Frequency |
| CH-2      | 867.30                      | 39.30      | 100    | H       | 267     | 6.70   | 46.00               | PASS                  |
| CH-2      | 908.59                      | 93.68      | 100    | V       | 267     | -      | -                   | Intentional Frequency |
| CH-3      | 867.08                      | 39.34      | 100    | V       | 0       | 6.67   | 46.00               | PASS                  |
| CH-3      | 914.19                      | 98.33      | 100    | V       | 0       | -      | -                   | Intentional Frequency |
| CH-4      | 867.50                      | 39.36      | 100    | H       | 46      | 6.64   | 46.00               | PASS                  |
| CH-4      | 915.19                      | 95.82      | 100    | V       | 46      | -      | -                   | Intentional Frequency |
| CH-5      | 865.91                      | 39.32      | 100    | H       | 145     | 6.68   | 46.00               | PASS                  |
| CH-5      | 921.75                      | 84.49      | 100    | V       | 145     | -      | -                   | Intentional Frequency |
| CH-6      | 866.14                      | 39.33      | 100    | H       | 319     | 6.67   | 46.00               | PASS                  |
| CH-6      | 926.99                      | 97.90      | 100    | V       | 319     | -      | -                   | Intentional Frequency |
| Antenna-3 |                             |            |        |         |         |        |                     |                       |
| CH-1      | 881.05                      | 39.71      | 100    | H       | 276     | 6.29   | 46.00               | PASS                  |
| CH-1      | 903.03                      | 102.37     | 100    | V       | 276     | -      | -                   | Intentional Frequency |
| CH-2      | 908.59                      | 102.25     | 100    | V       | 0       | -      | -                   | Intentional Frequency |
| CH-2      | 935.43                      | 40.18      | 100    | V       | 0       | 5.82   | 46.00               | PASS                  |
| CH-3      | 906.10                      | 40.42      | 300    | H       | 0       | 5.58   | 46.00               | PASS                  |
| CH-3      | 914.19                      | 102.47     | 100    | V       | 0       | -      | -                   | Intentional Frequency |
| CH-4      | 915.19                      | 103.37     | 100    | V       | 222     | -      | -                   | Intentional Frequency |

|                                                                                                                                              |        |        |     |   |     |      |       |                       |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|-----|---|-----|------|-------|-----------------------|
| CH-4                                                                                                                                         | 949.43 | 40.10  | 100 | H | 222 | 5.90 | 46.00 | PASS                  |
| CH-5                                                                                                                                         | 896.40 | 40.34  | 100 | H | 80  | 5.67 | 46.00 | PASS                  |
| CH-5                                                                                                                                         | 921.75 | 95.52  | 100 | V | 80  | -    | -     | Intentional Frequency |
| CH-6                                                                                                                                         | 740.75 | 38.23  | 100 | H | 262 | 7.77 | 46.00 | PASS                  |
| CH-6                                                                                                                                         | 927.28 | 102.26 | 100 | V | 262 | -    | -     | Intentional Frequency |
| NOTE: Measured Field Strength (dBuV/m) (9 KHz to 1GHz) = Receiver Readings (dBuV) + Antenna Factor (dB/m) + Cable loss (dB) + 6dB Attenuator |        |        |     |   |     |      |       |                       |