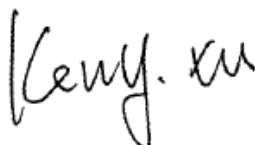


TEST REPORT

Application No.: SZEM2103002456CR
Applicant: UBTECH ROBOTICS CORP LTD
Address of Applicant: 16th and 22ND Floor, block C1 Nanshan I Park, NO.1001 Xueyuan Road, Nanshan District, Shenzhen City, 518055, P.R.CHINA
Manufacturer: UBTECH ROBOTICS CORP LTD
Address of Manufacturer: 16th and 22ND Floor, block C1 Nanshan I Park, NO.1001 Xueyuan Road, Nanshan District, Shenzhen City, 518055, P.R.CHINA
Factory: UBTECH ROBOTICS CORP LTD BAOAN BRANCH
Address of Factory: 1-2Floor, Block B, Huilongda Industry Park, Shilongzai, Shiyan Street, Baoan District, Shenzhen City, P.R.CHINA
Equipment Under Test (EUT):
EUT Name: ADIBOT-S
Model No.: ADAS101
Trade Mark: UBTECH
FCC ID: 2AHJX-ADAS101S
Standard(s) : 47 CFR Part 15, Subpart E 15.407
Date of Receipt: 2021-03-05
Date of Test: 2021-03-09 to 2021-03-23
Date of Issue: 2021-03-23

| | |
|---------------------|--------------|
| Test Result: | Pass* |
|---------------------|--------------|

* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu
EMC Laboratory Manager



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| Revision Record | | | | |
|-----------------|---------|------------|----------|----------|
| Version | Chapter | Date | Modifier | Remark |
| 01 | | 2021-03-23 | | Original |
| | | | | |
| | | | | |

| | | | | |
|--------------------------|--|-------------------------|--|--|
| Authorized for issue by: | | | | |
| | | Leo Li | | |
| | | Leo Li/Project Engineer | | |
| | | Eric Fu | | |
| | | Eric Fu/Reviewer | | |

2 Test Summary

| Radio Spectrum Technical Requirement | | | | |
|--------------------------------------|----------------------------------|--------|--------------------------------------|--------|
| Item | Standard | Method | Requirement | Result |
| Antenna Requirement | 47 CFR Part 15, Subpart E 15.407 | N/A | 47 CFR Part 15, Subpart C 15.203 | Pass |
| Transmission in the Absence of Data | | N/A | 47 CFR Part 15, Subpart C 15.407 (c) | Pass |

| Radio Spectrum Matter Part | | | | |
|---|----------------------------------|--------------------------------|--|--------|
| Item | Standard | Method | Requirement | Result |
| Conducted Emissions at AC Power Line (150kHz-30MHz) | 47 CFR Part 15, Subpart E 15.407 | ANSI C63.10 (2013) Section 6.2 | 47 CFR Part 15, Subpart C 15.207 & 15.407 b(6) | Pass |
| Duty Cycle | | KDB 789033 II B 1 | KDB 789033 D02 II B 1 | Pass |
| 99% Bandwidth | | KDB 789033 II D | N/A | Pass |
| 26dB Emission bandwidth | | KDB 789033 D02 II C 1 | 47 CFR Part 15, Subpart C 15.407 (a) | Pass |
| Minimum 6 dB bandwidth (5.725-5.85 GHz band) | | KDB 789033 D02 II C 2 | 47 CFR Part 15, Subpart C 15.407 (e) | Pass |
| Maximum Conducted output power | | KDB 789033 D02 II E | 47 CFR Part 15, Subpart C 15.407 (a) | Pass |
| Peak Power spectrum density | | KDB 789033 D02 II F | 47 CFR Part 15, Subpart C 15.407 (a) | Pass |
| Radiated Emissions (Below 1GHz) | | KDB 789033 D02 II G | 47 CFR Part 15, Subpart C 15.209 & 15.407(b) | Pass |
| Radiated Emissions (Above 1GHz) | | KDB 789033 D02 II G | 47 CFR Part 15, Subpart C 15.209 & 15.407(b) | Pass |
| Radiated Emissions which fall in the restricted bands | | KDB 789033 D02 II G | 47 CFR Part 15, Subpart C 15.209 & 15.407(b) | Pass |
| Frequency Stability | | ANSI C63.10 (2013) Section 6.8 | 47 CFR Part 15, Subpart C 15.407 (g) | Pass |



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4 General Information

4.1 Details of E.U.T.

| Power supply: | AC 120V/60Hz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|--|----------------------|--------------------|------|------|----------------------|--------------------|-------------|--------------|-----------|---|-----------------------|-----------|---|-----------------------|-----------|---|---------------------|------|---|---------------|--------------|-----------|---|-----------------------|-----------|---|-----------------------|-----------|---|---------------------|------|---|
| AC cable: | 800cm unshielded | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation Frequency (20MHz): | U-NII-1: 5180-5240MHz; U-NII-3: 5745-5825MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation Frequency (40MHz): | U-NII-1: 5190-5230MHz; U-NII-3: 5755-5795MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation Frequency (80MHz): | U-NII-1: 5210MHz; U-NII-3: 5775MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Channel Spacing: | 802.11a/n(HT20)/ac(HT20): 20MHz; 802.11n(HT40)/ac(HT40): 40MHz; 802.11ac(HT80): 80MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antenna Type: | FPC Antenna | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Antenna Gain: | ANT1: 5.1dBi; ANT2: 5.1dBi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operation Frequency: | <table border="1"> <thead> <tr> <th>Band</th><th>Mode</th><th>Frequency Range(MHz)</th><th>Number of channels</th></tr> </thead> <tbody> <tr> <td rowspan="4">UNII Band I</td><td>IEEE 802.11a</td><td>5180-5240</td><td>4</td></tr> <tr> <td>IEEE 802.11n/ac 20MHz</td><td>5180-5240</td><td>4</td></tr> <tr> <td>IEEE 802.11n/ac 40MHz</td><td>5190-5230</td><td>2</td></tr> <tr> <td>IEEE 802.11ac 80MHz</td><td>5210</td><td>1</td></tr> <tr> <td rowspan="4">UNII Band III</td><td>IEEE 802.11a</td><td>5745-5825</td><td>5</td></tr> <tr> <td>IEEE 802.11n/ac 20MHz</td><td>5745-5825</td><td>5</td></tr> <tr> <td>IEEE 802.11n/ac 40MHz</td><td>5755-5795</td><td>2</td></tr> <tr> <td>IEEE 802.11ac 80MHz</td><td>5775</td><td>1</td></tr> </tbody> </table> | | | Band | Mode | Frequency Range(MHz) | Number of channels | UNII Band I | IEEE 802.11a | 5180-5240 | 4 | IEEE 802.11n/ac 20MHz | 5180-5240 | 4 | IEEE 802.11n/ac 40MHz | 5190-5230 | 2 | IEEE 802.11ac 80MHz | 5210 | 1 | UNII Band III | IEEE 802.11a | 5745-5825 | 5 | IEEE 802.11n/ac 20MHz | 5745-5825 | 5 | IEEE 802.11n/ac 40MHz | 5755-5795 | 2 | IEEE 802.11ac 80MHz | 5775 | 1 |
| Band | Mode | Frequency Range(MHz) | Number of channels | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UNII Band I | IEEE 802.11a | 5180-5240 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | IEEE 802.11n/ac 20MHz | 5180-5240 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | IEEE 802.11n/ac 40MHz | 5190-5230 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | IEEE 802.11ac 80MHz | 5210 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UNII Band III | IEEE 802.11a | 5745-5825 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | IEEE 802.11n/ac 20MHz | 5745-5825 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | IEEE 802.11n/ac 40MHz | 5755-5795 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | IEEE 802.11ac 80MHz | 5775 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type of Modulation: | IEEE 802.11a: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11n: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remark: | Two Antennas can simultaneous transmit WIFI signal at 802.11n(HT20), 802.11n(HT40), 802.11ac(HT20), 802.11ac(HT40), 802.11ac(HT80) modes. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

4.2 Description of Support Units

| Description | Manufacturer | Model No. | Serial No. |
|---|--------------|-----------|------------|
| -- | -- | -- | -- |
| The EUT has been tested as an independent unit. | | | |

4.3 Measurement Uncertainty

| Test Item | Measurement Uncertainty |
|---|---|
| Conducted Emissions at AC Power Line (150kHz-30MHz) | $\pm 3.0\text{dB}$ (150kHz to 30MHz) |
| Duty Cycle | $\pm 0.37\%$ |
| 99% Bandwidth | $\pm 3\%$ |
| 26dB Emission bandwidth | $\pm 3\%$ |
| Minimum 6 dB bandwidth (5.725-5.85 GHz band) | $\pm 3\%$ |
| Maximum Conducted output power | $\pm 0.75\text{dB}$ |
| Peak Power spectrum density | $\pm 2.84\text{dB}$ |
| Radiated Emissions (Above 1GHz) | $\pm 4.8\text{dB}$ |
| Radiated Emissions which fall in the restricted bands | $\pm 4.5\text{dB}$ (below 1GHz); $\pm 4.8\text{dB}$ (above 1GHz); |
| Frequency Stability | $\pm 7.25 \times 10^{-8}$ |
| Radiated Emissions (Below 1GHz) | $\pm 4.5\text{dB}$ |

Remark:

The U_{lab} (lab Uncertainty) is less than U_{CISPR} (CISPR Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China.
518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

| Conducted Emissions at AC Power Line (150kHz-30MHz) | | | | | |
|---|-----------------------|-----------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Shielding Room | ZhongYu Electron | GB-88 | SEM001-06 | 2019-06-13 | 2022-06-12 |
| EMI Test Receiver | Rohde&Schwarz | ESCI | SEM004-02 | 2020-03-24 | 2021-03-23 |
| Switch | WEINSCHEL ENGINEERING | 1506A | SEN009-01 | N/A | N/A |
| Matching Pad | anzac | PT-75 | SEN009-02 | N/A | N/A |
| Measurement Software | AUDIX | e3 V8.2014-6-27 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM024-01 | 2020-07-10 | 2021-07-09 |
| LISN | Rohde&Schwarz | ENV216 | SEM007-01 | 2020-09-23 | 2021-09-22 |
| LISN | ETS-LINDGREN | 3816/2 | SEM007-02 | 2020-04-01 | 2021-03-31 |

| Duty Cycle | | | | | |
|---|------------------------------|-----------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Shielding Room | SAEMC | MSR733 | SEM001-09 | 2019-06-13 | 2022-06-12 |
| DC Power Supply | Rohde & Schwarz | NGSM 32/10 | SEM011-04 | 2020-03-24 | 2021-03-23 |
| Spectrum Analyzer | Rohde & Schwarz | FSU43 | SEM004-08 | 2020-04-01 | 2021-03-31 |
| Signal Generator | KEYSIGHT | N5173B | SEM006-05 | 2020-09-23 | 2021-09-22 |
| Measurement Software | TST | TST PASS V1.0.5 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM031-02 | 2020-07-10 | 2021-07-09 |
| Attenuator | Huber+Suhner | 6620_SMA-50-1 | SEM021-09 | 2020-05-21 | 2021-05-20 |
| Programmable Temperature & Humidity Chamber | Votsch Industrietechnik GmbH | VT 4002 | SEM002-15 | 2020-03-25 | 2021-03-24 |

| 99% Bandwidth | | | | | |
|---|------------------------------------|--------------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Shielding Room | SAEMC | MSR733 | SEM001-09 | 2019-06-13 | 2022-06-12 |
| DC Power Supply | Rohde & Schwarz | NGSM 32/10 | SEM011-04 | 2020-03-24 | 2021-03-23 |
| Spectrum Analyzer | Rohde & Schwarz | FSU43 | SEM004-08 | 2020-04-01 | 2021-03-31 |
| Signal Generator | KEYSIGHT | N5173B | SEM006-05 | 2020-09-23 | 2021-09-22 |
| Measurement Software | TST | TST PASS V1.0.5 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM031-02 | 2020-07-10 | 2021-07-09 |
| Attenuator | Huber+Suhner | 6620_SMA-50- 1 | SEM021-09 | 2020-05-21 | 2021-05-20 |
| Programmable Temperature & Humidity Chamber | Votsch Industrietechnik GmbH | VT 4002 | SEM002-15 | 2020-03-25 | 2021-03-24 |

| 26dB Emission bandwidth | | | | | |
|---|------------------------------------|--------------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Shielding Room | SAEMC | MSR733 | SEM001-09 | 2019-06-13 | 2022-06-12 |
| DC Power Supply | Rohde & Schwarz | NGSM 32/10 | SEM011-04 | 2020-03-24 | 2021-03-23 |
| Spectrum Analyzer | Rohde & Schwarz | FSU43 | SEM004-08 | 2020-04-01 | 2021-03-31 |
| Signal Generator | KEYSIGHT | N5173B | SEM006-05 | 2020-09-23 | 2021-09-22 |
| Measurement Software | TST | TST PASS V1.0.5 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM031-02 | 2020-07-10 | 2021-07-09 |
| Attenuator | Huber+Suhner | 6620_SMA-50- 1 | SEM021-09 | 2020-05-21 | 2021-05-20 |
| Programmable Temperature & Humidity Chamber | Votsch Industrietechnik GmbH | VT 4002 | SEM002-15 | 2020-03-25 | 2021-03-24 |



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| Minimum 6 dB bandwidth (5.725-5.85 GHz band) | | | | | |
|---|------------------------------------|--------------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Shielding Room | SAEMC | MSR733 | SEM001-09 | 2019-06-13 | 2022-06-12 |
| DC Power Supply | Rohde & Schwarz | NGSM 32/10 | SEM011-04 | 2020-03-24 | 2021-03-23 |
| Spectrum Analyzer | Rohde & Schwarz | FSU43 | SEM004-08 | 2020-04-01 | 2021-03-31 |
| Signal Generator | KEYSIGHT | N5173B | SEM006-05 | 2020-09-23 | 2021-09-22 |
| Measurement Software | TST | TST PASS V1.0.5 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM031-02 | 2020-07-10 | 2021-07-09 |
| Attenuator | Huber+Suhner | 6620_SMA-50- 1 | SEM021-09 | 2020-05-21 | 2021-05-20 |
| Programmable Temperature & Humidity Chamber | Votsch Industrietechnik GmbH | VT 4002 | SEM002-15 | 2020-03-25 | 2021-03-24 |

| Maximum Conducted output power | | | | | |
|---|------------------------------------|--------------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Shielding Room | SAEMC | MSR733 | SEM001-09 | 2019-06-13 | 2022-06-12 |
| DC Power Supply | Rohde & Schwarz | NGSM 32/10 | SEM011-04 | 2020-03-24 | 2021-03-23 |
| Spectrum Analyzer | Rohde & Schwarz | FSU43 | SEM004-08 | 2020-04-01 | 2021-03-31 |
| Signal Generator | KEYSIGHT | N5173B | SEM006-05 | 2020-09-23 | 2021-09-22 |
| Measurement Software | TST | TST PASS V1.0.5 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM031-02 | 2020-07-10 | 2021-07-09 |
| Attenuator | Huber+Suhner | 6620_SMA-50- 1 | SEM021-09 | 2020-05-21 | 2021-05-20 |
| Programmable Temperature & Humidity Chamber | Votsch Industrietechnik GmbH | VT 4002 | SEM002-15 | 2020-03-25 | 2021-03-24 |



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| Peak Power spectrum density | | | | | |
|---|------------------------------|-----------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Shielding Room | SAEMC | MSR733 | SEM001-09 | 2019-06-13 | 2022-06-12 |
| DC Power Supply | Rohde & Schwarz | NGSM 32/10 | SEM011-04 | 2020-03-24 | 2021-03-23 |
| Spectrum Analyzer | Rohde & Schwarz | FSU43 | SEM004-08 | 2020-04-01 | 2021-03-31 |
| Signal Generator | KEYSIGHT | N5173B | SEM006-05 | 2020-09-23 | 2021-09-22 |
| Measurement Software | TST | TST PASS V1.0.5 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM031-02 | 2020-07-10 | 2021-07-09 |
| Attenuator | Huber+Suhner | 6620_SMA-50-1 | SEM021-09 | 2020-05-21 | 2021-05-20 |
| Programmable Temperature & Humidity Chamber | Votsch Industrietechnik GmbH | VT 4002 | SEM002-15 | 2020-03-25 | 2021-03-24 |

| Radiated Emissions (Above 1GHz) | | | | | |
|---------------------------------|------------------------------------|-----------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| 3m Semi-Anechoic Chamber | AUDIX | N/A | SEM001-02 | 2018-03-27 | 2021-03-26 |
| | | | | 2021-03-26 | 2024-03-25 |
| EXA Signal Analyzer | Agilent Technologies Inc | N9010A | SEM004-12 | 2020-04-09 | 2021-04-08 |
| Horn Antenna | Rohde&Schwarz | HF907 | SEM003-07 | 2018-04-13 | 2021-04-12 |
| Pre-Amplifier | Compliance Directions Systems Inc. | PAP-0126 | SEM004-11 | 2020-09-23 | 2021-09-22 |
| Measurement Software | AUDIX | e3 V8.2014-6-27 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM026-01 | 2020-07-10 | 2021-07-09 |

| Radiated Emissions which fall in the restricted bands | | | | | |
|---|------------------------------------|-----------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| 3m Semi-Anechoic Chamber | AUDIX | N/A | SEM001-02 | 2018-03-27 | 2021-03-26 |
| | | | | 2021-03-26 | 2024-03-25 |
| EXA Signal Analyzer | Agilent Technologies Inc | N9010A | SEM004-12 | 2020-04-09 | 2021-04-08 |
| Horn Antenna | Rohde&Schwarz | HF907 | SEM003-07 | 2018-04-13 | 2021-04-12 |
| Pre-Amplifier | Compliance Directions Systems Inc. | PAP-0126 | SEM004-11 | 2020-09-23 | 2021-09-22 |
| Measurement Software | AUDIX | e3 V8.2014-6-27 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM026-01 | 2020-07-10 | 2021-07-09 |



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| Frequency Stability | | | | | |
|---|------------------------------|-----------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Shielding Room | SAEMC | MSR733 | SEM001-09 | 2019-06-13 | 2022-06-12 |
| DC Power Supply | Rohde & Schwarz | NGSM 32/10 | SEM011-04 | 2020-03-24 | 2021-03-23 |
| Spectrum Analyzer | Rohde & Schwarz | FSU43 | SEM004-08 | 2020-04-01 | 2021-03-31 |
| Signal Generator | KEYSIGHT | N5173B | SEM006-05 | 2020-09-23 | 2021-09-22 |
| Measurement Software | TST | TST PASS V1.0.5 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM031-02 | 2020-07-10 | 2021-07-09 |
| Attenuator | Huber+Suhner | 6620_SMA-50-1 | SEM021-09 | 2020-05-21 | 2021-05-20 |
| Programmable Temperature & Humidity Chamber | Votsch Industrietechnik GmbH | VT 4002 | SEM002-15 | 2020-03-25 | 2021-03-24 |

| Radiated Emissions (30MHz-1GHz) | | | | | |
|---------------------------------|----------------------|-----------------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| 3m Semi-Anechoic Chamber | ETS-LINDGREN | N/A | SEM001-01 | 2020-07-19 | 2023-07-18 |
| MXE EMI Receiver | Agilent Technologies | N9038A | SEM004-15 | 2020-11-02 | 2021-11-01 |
| BiConiLog Antenna | ETS-LINDGREN | 3142C | SEM003-02 | 2019-05-24 | 2022-05-23 |
| Pre-Amplifier | Agilent Technologies | 8447D | SEM005-01 | 2020-04-01 | 2021-03-31 |
| Measurement Software | AUDIX | e3 V8.2014-6-27 | N/A | N/A | N/A |
| Coaxial Cable | SGS | N/A | SEM025-01 | 2020-07-10 | 2021-07-09 |

| General used equipment | | | | | |
|---------------------------------|---|----------|--------------|------------|--------------|
| Equipment | Manufacturer | Model No | Inventory No | Cal Date | Cal Due Date |
| Humidity/ Temperature Indicator | Shanghai Meteorological Industry Factory | ZJ1-2B | SEM002-04 | 2020-09-15 | 2021-09-14 |
| Humidity/ Temperature Indicator | Mingle | N/A | SEM002-08 | 2020-09-15 | 2021-09-14 |
| Barometer | Changchun Meteorological Industry Factory | DYM3 | SEM002-01 | 2020-04-07 | 2021-04-06 |

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

The use of a permanently attached antenna or of an antenna that use an unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

This requirement does not apply to carrier current devices or to devices operated under the provisions of §§ 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site.

However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 5.1dBi for both ANT 1 and ANT 2.

Antenna location: Refer to internal photo.



6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart C 15.407 (c)

6.2.2 Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

WIFI chip support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.



7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207 & 15.407 b(6)
Test Method: ANSI C63.10 (2013) Section 6.2
Limit:

| Frequency of emission(MHz) | Conducted limit(dB μ V) | |
|----------------------------|-----------------------------|-----------|
| | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56* | 56 to 46* |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

*Decreases with the logarithm of the frequency.

7.1.1 E.U.T. Operation

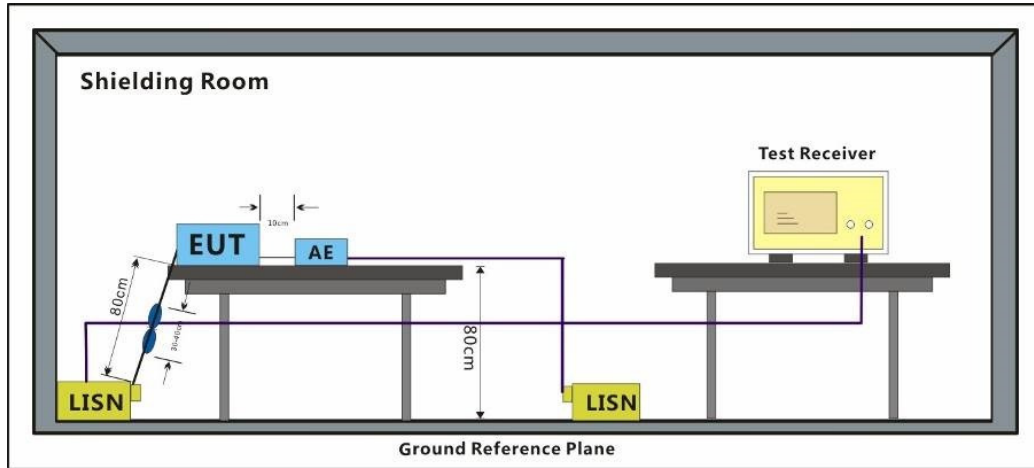
Operating Environment:
Temperature: 21.0 °C Humidity: 52.3 % RH Atmospheric Pressure: 1010 mbar

7.1.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|-----------------------|-----------|--|
| Final test | 03 | TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Pre-scan | 04 | TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |



7.1.3 Test Setup Diagram



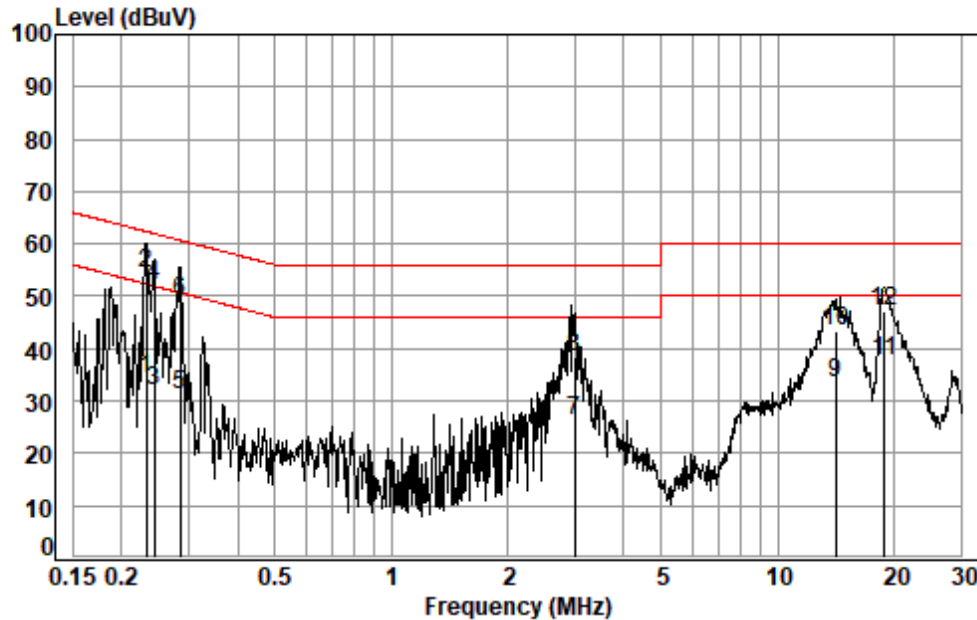
7.1.4 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 50hm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: LISN=Read Level+ Cable Loss+ LISN Factor



Test Mode: 03; Line: Live line

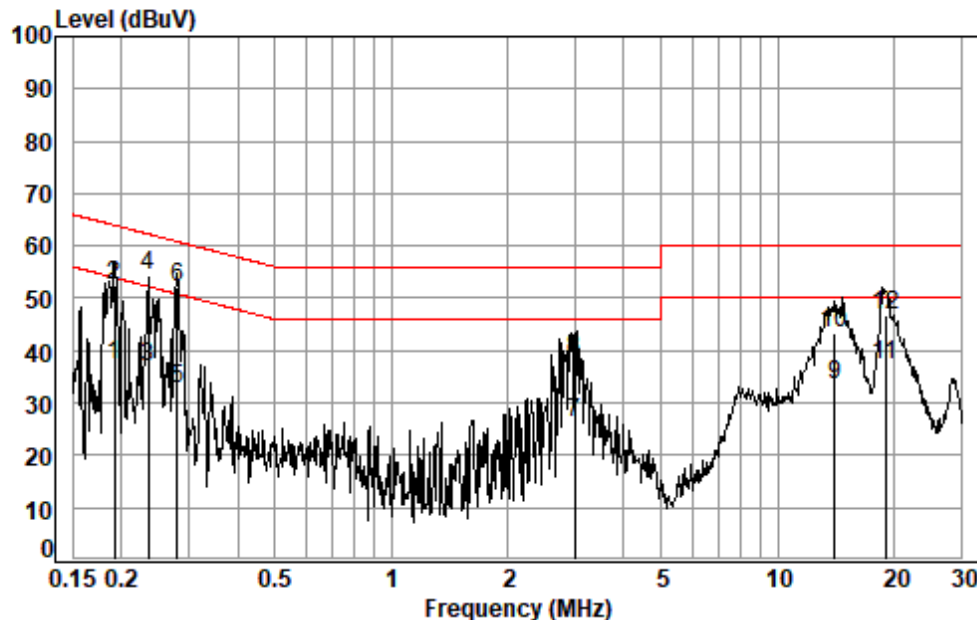


Site : Shielding Room
Condition: Line
Job No. : 02456CR
Test mode: 03

| | Freq | Cable Loss | LISN Factor | Read Level | Limit Line | Over Limit | Remark |
|----|---------|------------|-------------|------------|------------|------------|----------------|
| | MHz | dB | dB | dBuV | dBuV | dB | |
| 1 | 0.2316 | 0.04 | 9.65 | 24.53 | 34.22 | 52.39 | -18.17 Average |
| 2 | 0.2316 | 0.04 | 9.65 | 44.82 | 54.51 | 62.39 | -7.88 QP |
| 3 | 0.2429 | 0.04 | 9.65 | 22.22 | 31.91 | 52.00 | -20.09 Average |
| 4 | 0.2429 | 0.04 | 9.65 | 42.30 | 51.99 | 62.00 | -10.01 QP |
| 5 | 0.2848 | 0.05 | 9.66 | 21.45 | 31.16 | 50.68 | -19.52 Average |
| 6 | 0.2848 | 0.05 | 9.66 | 39.38 | 49.09 | 60.68 | -11.59 QP |
| 7 | 2.9796 | 0.14 | 9.71 | 16.53 | 26.38 | 46.00 | -19.62 Average |
| 8 | 2.9796 | 0.14 | 9.71 | 28.43 | 38.28 | 56.00 | -17.72 QP |
| 9 | 14.1376 | 0.16 | 9.96 | 23.49 | 33.61 | 50.00 | -16.39 Average |
| 10 | 14.1376 | 0.16 | 9.96 | 33.20 | 43.32 | 60.00 | -16.68 QP |
| 11 | 18.9205 | 0.17 | 9.93 | 27.44 | 37.54 | 50.00 | -12.46 Average |
| 12 | 18.9205 | 0.17 | 9.93 | 36.94 | 47.04 | 60.00 | -12.96 QP |



Test Mode: 03; Line: Neutral Line



Site : Shielding Room
Condition: Neutral
Job No. : 02456CR
Test mode: 03

| | Freq | Cable Loss | LISN Factor | Read Level | Level | Limit Line | Over Limit | Remark |
|----|---------|------------|-------------|------------|-------|------------|------------|---------|
| | MHz | dB | dB | dBuV | dBuV | dBuV | dB | |
| 1 | 0.1924 | 0.04 | 9.63 | 27.58 | 37.25 | 53.93 | -16.68 | Average |
| 2 | 0.1924 | 0.04 | 9.63 | 42.76 | 52.43 | 63.93 | -11.50 | QP |
| 3 | 0.2353 | 0.04 | 9.64 | 27.38 | 37.06 | 52.26 | -15.20 | Average |
| 4 | 0.2353 | 0.04 | 9.64 | 44.63 | 54.31 | 62.26 | -7.95 | QP |
| 5 | 0.2788 | 0.05 | 9.65 | 23.06 | 32.76 | 50.85 | -18.09 | Average |
| 6 | 0.2788 | 0.05 | 9.65 | 42.47 | 52.17 | 60.85 | -8.68 | QP |
| 7 | 2.9780 | 0.14 | 9.70 | 16.48 | 26.32 | 46.00 | -19.68 | Average |
| 8 | 2.9780 | 0.14 | 9.70 | 28.52 | 38.36 | 56.00 | -17.64 | QP |
| 9 | 14.0629 | 0.16 | 9.99 | 23.31 | 33.46 | 50.00 | -16.54 | Average |
| 10 | 14.0629 | 0.16 | 9.99 | 33.01 | 43.16 | 60.00 | -16.84 | QP |
| 11 | 19.0210 | 0.17 | 9.97 | 27.03 | 37.17 | 50.00 | -12.83 | Average |
| 12 | 19.0210 | 0.17 | 9.97 | 36.63 | 46.77 | 60.00 | -13.23 | QP |



7.2 Duty Cycle

Test Requirement KDB 789033 D02 II B 1
Test Method: KDB 789033 II B 1

7.2.1 E.U.T. Operation

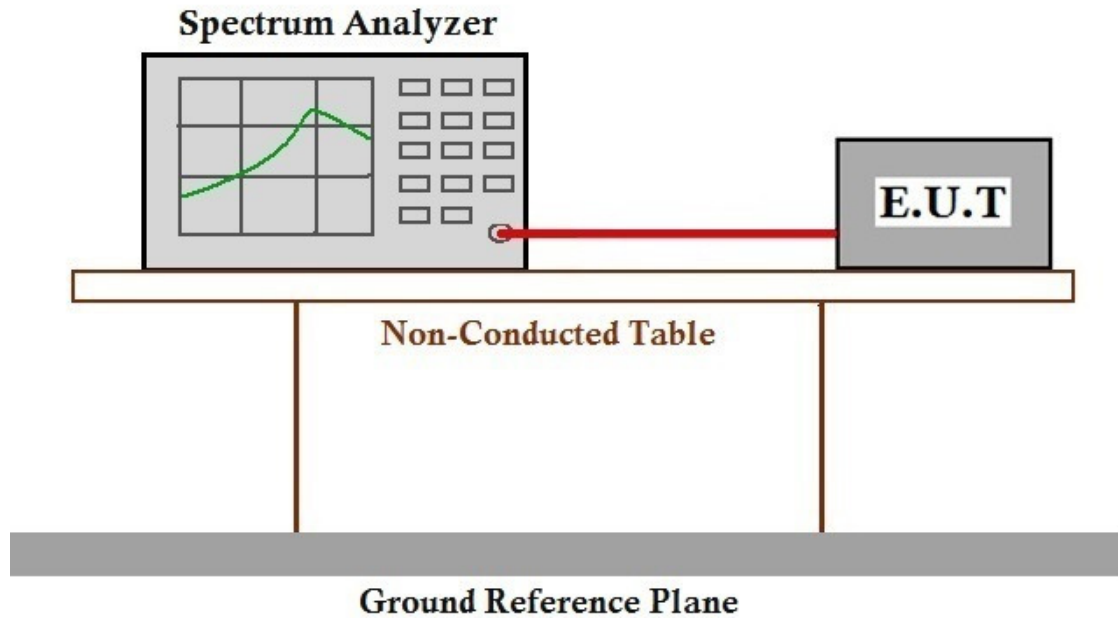
Operating Environment:
Temperature: 21.1 °C Humidity: 39.8 % RH Atmospheric Pressure: 1010 mbar

7.2.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|--------------------------|--------------|--|
| Final test | 03 | TX mode (U-NII-1) Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Final test | 04 | TX mode (U-NII-3) Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |



7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

Please Refer To Appendix For Details



7.3 99% Bandwidth

Test Requirement N/A
Test Method: KDB 789033 II D

7.3.1 E.U.T. Operation

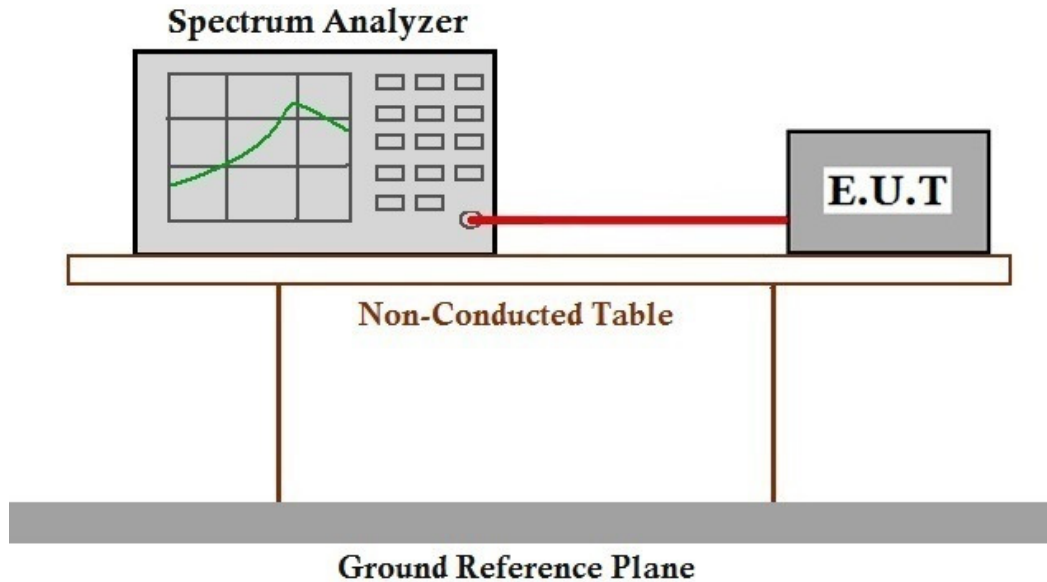
Operating Environment:
Temperature: 21.1 °C Humidity: 39.8 % RH Atmospheric Pressure: 1010 mbar

7.3.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|--------------------------|--------------|--|
| Final test | 03 | TX mode (U-NII-1) Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Final test | 04 | TX mode (U-NII-3) Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |



7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

Please Refer To Appendix For Details



7.4 26dB Emission bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)
Test Method: KDB 789033 D02 II C 1

7.4.1 E.U.T. Operation

Operating Environment:

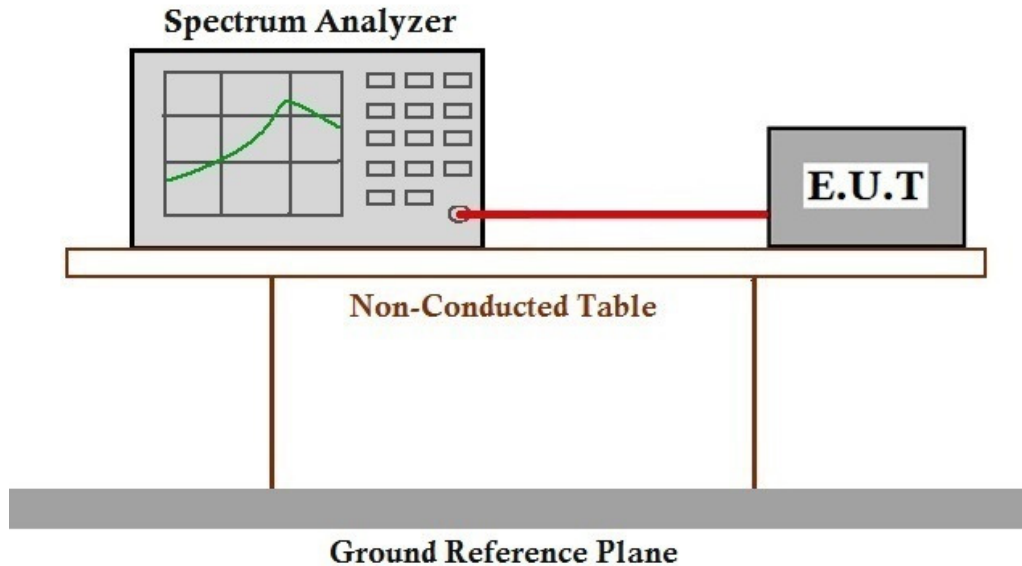
Temperature: 21.1 °C Humidity: 39.8 % RH Atmospheric Pressure: 1010 mbar

7.4.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|--------------------------|--------------|--|
| Final test | 03 | TX mode (U-NII-1) Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Final test | 04 | TX mode (U-NII-3) Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |



7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

Please Refer To Appendix For Details



7.5 Minimum 6 dB bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart C 15.407 (e)

Test Method: KDB 789033 D02 II C 2

Limit:

| Frequency band(MHz) | Limit |
|---------------------|----------|
| 5725-5850 | ≥500 kHz |

7.5.1 E.U.T. Operation

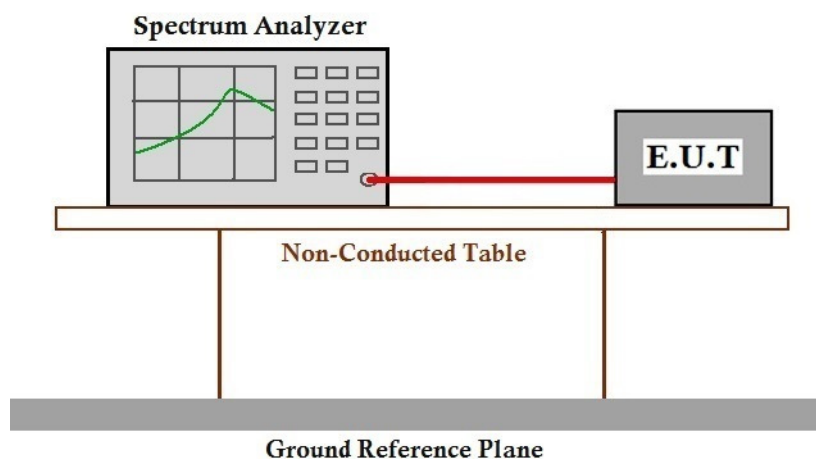
Operating Environment:

Temperature: 21.1 °C Humidity: 39.8 % RH Atmospheric Pressure: 1010 mbar

7.5.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|--------------------------|--------------|---|
| Final test | 04 | TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer To Appendix For Details

7.6 Maximum Conducted output power

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

| Frequency band(MHz) | Limit |
|---------------------|---|
| 5150-5250 | ≤1W(30dBm) for master device |
| | ≤250mW(24dBm) for client device |
| 5250-5350 | ≤250mW(24dBm) for client device or 11dBm+10logB* |
| 5470-5725 | ≤250mW(24dBm) for client device or 11dBm+10logB* |
| 5725-5850 | ≤1W(30dBm) |
| Remark: | <p>* Where B is the 26dB emission bandwidth in MHz.</p> <p>The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.</p> |

7.6.1 E.U.T. Operation

Operating Environment:

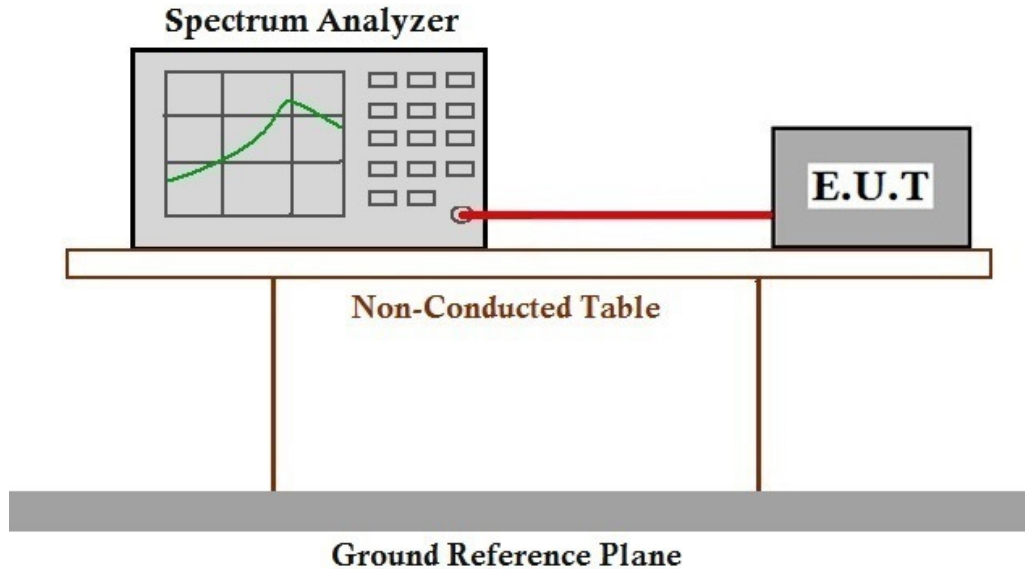
Temperature: 21.1 °C Humidity: 39.8 % RH Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|-----------------------|-----------|--|
| Final test | 03 | TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Final test | 04 | TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types.All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |



7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

Please Refer To Appendix For Details



7.7 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II F

Limit:

| Frequency band(MHz) | Limit |
|---------------------|--|
| 5150-5250 | ≤17dBm in 1MHz for master device |
| | ≤11dBm in 1MHz for client device |
| 5250-5350 | ≤11dBm in 1MHz for client device |
| 5470-5725 | ≤11dBm in 1MHz for client device |
| 5725-5850 | ≤30dBm in 500 kHz |
| Remark: | The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. |

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 21.1 °C

Humidity: 39.8 % RH

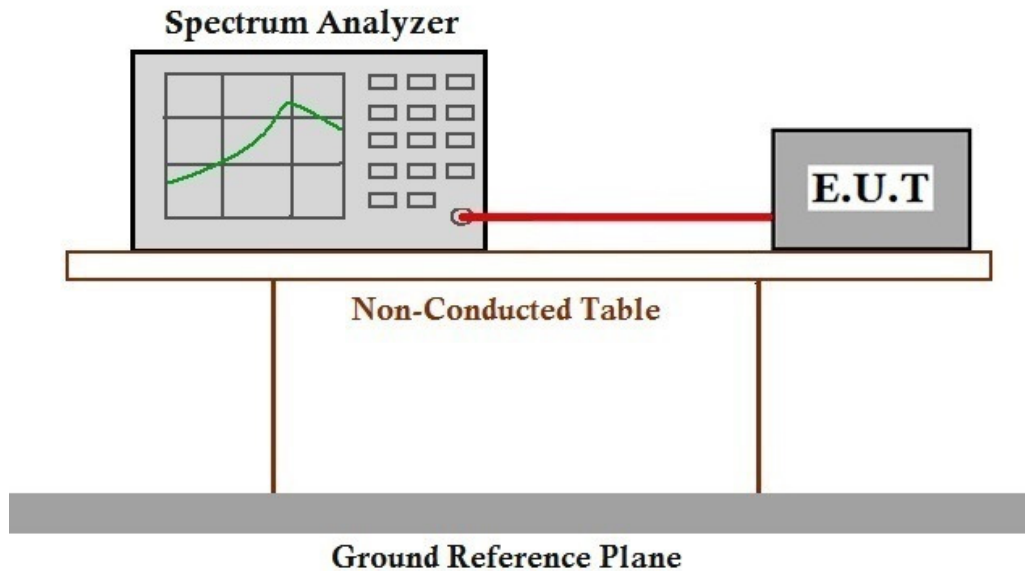
Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|-----------------------|-----------|--|
| Final test | 03 | TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Final test | 04 | TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |



7.7.3 Test Setup Diagram



7.7.4 Measurement Procedure and Data

Please Refer To Appendix For Details



7.8 Radiated Emissions (Below 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)
Test Method: KDB 789033 D02 II G
Limit:

| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|----------------|----------------------------------|------------------------------|
| 0.009-0.490 | 2400/F(kHz) | 300 |
| 0.490-1.705 | 24000/F(kHz) | 30 |
| 1.705-30.0 | 30 | 30 |
| 30-88 | 100 | 3 |
| 88-216 | 150 | 3 |
| 216-960 | 200 | 3 |
| 960-1000 | 500 | 3 |

7.8.1 E.U.T. Operation

Operating Environment:

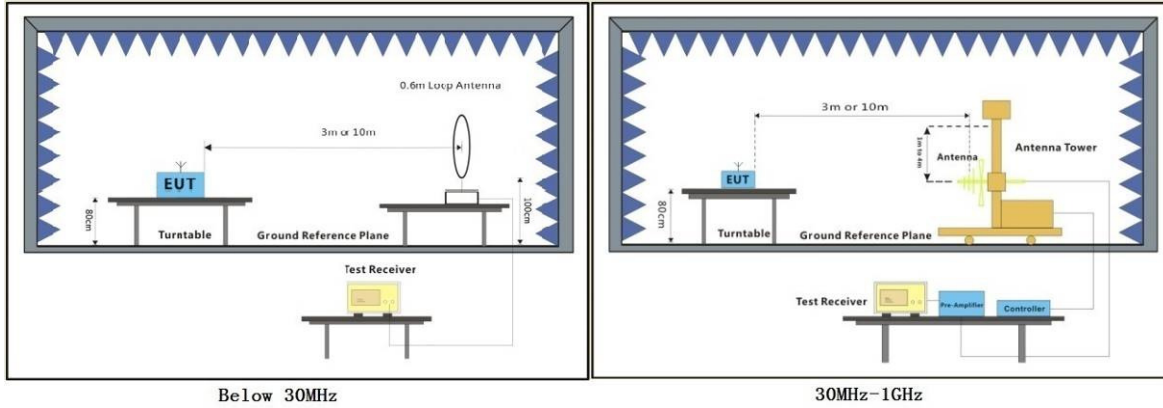
Temperature: 23.2 °C Humidity: 51.3 % RH Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|-----------------------|-----------|--|
| Final test | 03 | TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Final test | 04 | TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |



7.8.3 Test Setup Diagram



7.8.4 Measurement Procedure and Data

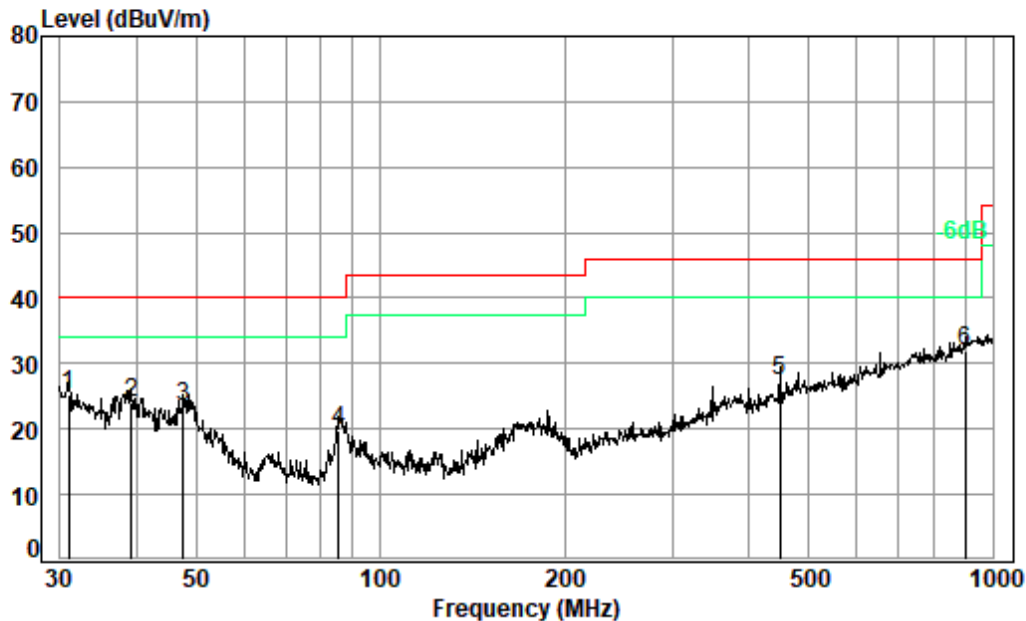
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. For emission below 1GHz, through the pre-scan found the worst case is the lowest channel of 802.11a. Only the worst case is recorded in the report.
3. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
4. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.



Test Mode: 03; Polarity: Horizontal



Condition: 3m HORIZONTAL

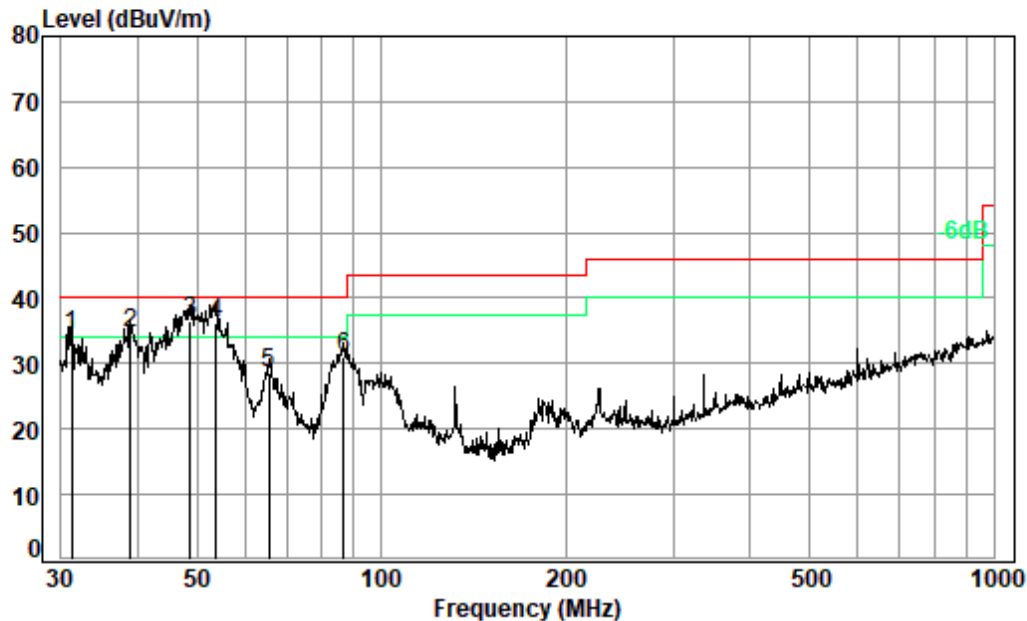
Job No. : 02456CR

Test Mode: 03

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit | Over Limit | Remark |
|------|--------|------------|------------|---------------|------------|--------|--------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 30.96 | 0.61 | 22.27 | 27.73 | 30.21 | 25.36 | 40.00 | -14.64 | QP |
| 2 | 39.30 | 0.69 | 18.41 | 27.71 | 32.71 | 24.10 | 40.00 | -15.90 | QP |
| 3 | 47.66 | 0.70 | 14.77 | 27.69 | 35.55 | 23.33 | 40.00 | -16.67 | QP |
| 4 | 85.60 | 1.26 | 12.46 | 27.63 | 33.82 | 19.91 | 40.00 | -20.09 | QP |
| 5 | 449.56 | 2.40 | 22.78 | 27.61 | 29.79 | 27.36 | 46.00 | -18.64 | QP |
| 6 pp | 900.15 | 3.50 | 28.90 | 27.16 | 26.76 | 32.00 | 46.00 | -14.00 | QP |



Test Mode: 03; Polarity: Vertical



Condition: 3m VERTICAL

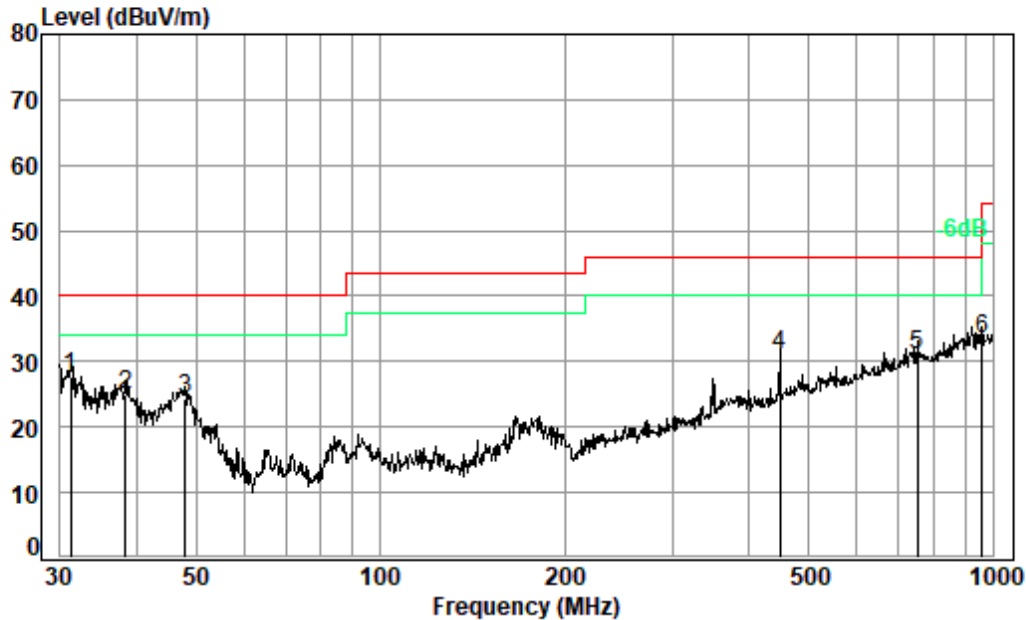
Job No. : 02456CR

Test Mode: 03

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit Line | Over Limit | Remark |
|------|-------|------------|------------|---------------|------------|--------|------------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 31.18 | 0.61 | 22.10 | 27.73 | 39.50 | 34.48 | 40.00 | -5.52 | QP |
| 2 | 39.02 | 0.69 | 18.58 | 27.71 | 43.02 | 34.58 | 40.00 | -5.42 | QP |
| 3 pp | 48.84 | 0.70 | 14.39 | 27.68 | 49.08 | 36.49 | 40.00 | -3.51 | QP |
| 4 | 53.69 | 0.74 | 13.50 | 27.67 | 49.59 | 36.16 | 40.00 | -3.84 | QP |
| 5 | 65.57 | 0.80 | 12.78 | 27.65 | 42.71 | 28.64 | 40.00 | -11.36 | QP |
| 6 | 86.81 | 1.27 | 12.66 | 27.62 | 44.73 | 31.04 | 40.00 | -8.96 | QP |



Test Mode: 04; Polarity: Horizontal



Condition: 3m HORIZONTAL

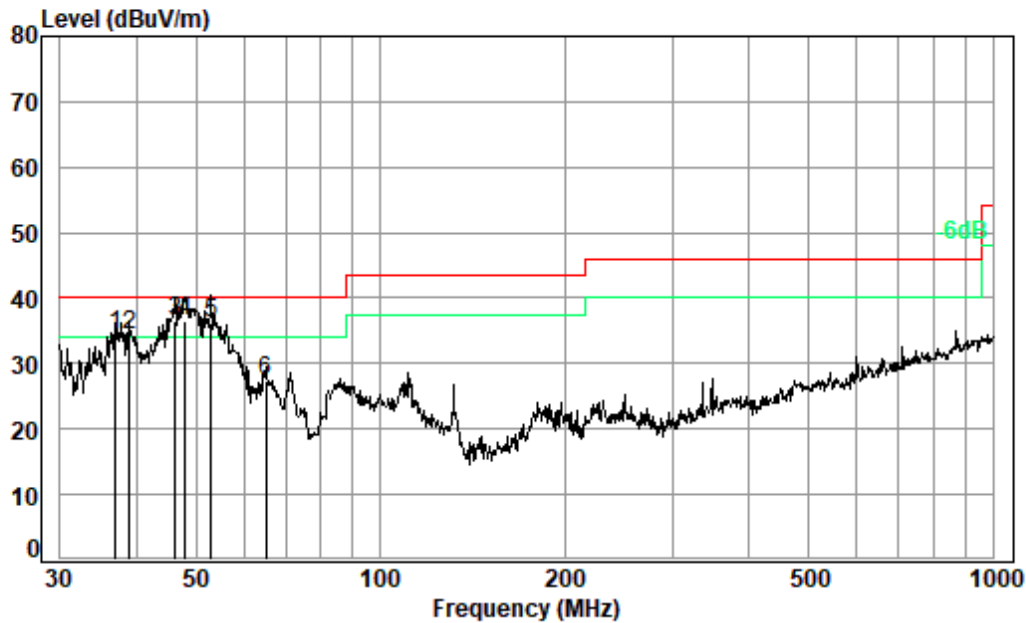
Job No. : 02456CR

Test Mode: 04

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit Line | Over Limit | Remark |
|------|--------|------------|------------|---------------|------------|--------|------------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 pp | 31.18 | 0.61 | 22.10 | 27.73 | 32.57 | 27.55 | 40.00 | -12.45 | QP |
| 2 | 38.35 | 0.69 | 18.99 | 27.71 | 33.08 | 25.05 | 40.00 | -14.95 | QP |
| 3 | 47.99 | 0.70 | 14.60 | 27.69 | 36.65 | 24.26 | 40.00 | -15.74 | QP |
| 4 | 449.56 | 2.40 | 22.78 | 27.61 | 33.32 | 30.89 | 46.00 | -15.11 | QP |
| 5 | 752.74 | 3.12 | 27.94 | 27.81 | 27.90 | 31.15 | 46.00 | -14.85 | QP |
| 6 | 958.79 | 3.56 | 29.48 | 26.86 | 27.22 | 33.40 | 46.00 | -12.60 | QP |



Test Mode: 04; Polarity: Vertical



Condition: 3m VERTICAL

Job No. : 02456CR

Test Mode: 04

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit | Over Limit | Remark |
|------|-------|------------|------------|---------------|------------|--------|--------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 37.02 | 0.67 | 19.44 | 27.71 | 41.86 | 34.26 | 40.00 | -5.74 | QP |
| 2 | 38.89 | 0.69 | 18.66 | 27.71 | 42.75 | 34.39 | 40.00 | -5.61 | QP |
| 3 pp | 46.34 | 0.70 | 15.43 | 27.69 | 47.96 | 36.40 | 40.00 | -3.60 | QP |
| 4 | 47.99 | 0.70 | 14.60 | 27.69 | 48.78 | 36.39 | 40.00 | -3.61 | QP |
| 5 | 52.95 | 0.73 | 13.50 | 27.68 | 49.69 | 36.24 | 40.00 | -3.76 | QP |
| 6 | 65.11 | 0.80 | 12.76 | 27.65 | 41.62 | 27.53 | 40.00 | -12.47 | QP |



7.9 Radiated Emissions (Above 1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|---|----------------------------------|------------------------------|
| Above 1GHz | 500 | 3 |
| <p>*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.</p> <p>(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.</p> <p>(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.</p> <p>(4) For transmitters operating in the 5.725-5.85 GHz band:</p> <p>(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p> <p>Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.</p> | | |

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

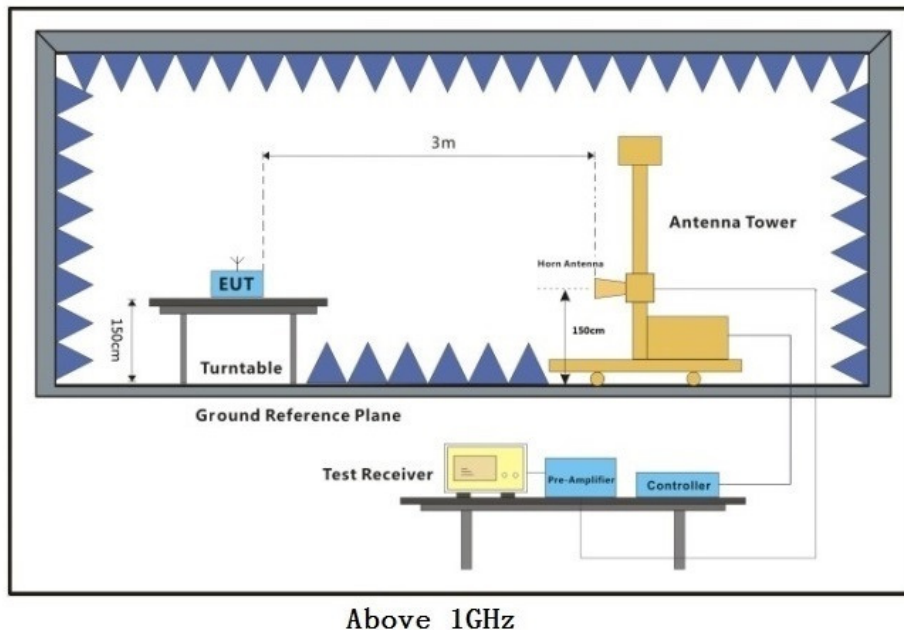
Humidity: 56.3 % RH

Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|-----------------------|-----------|--|
| Final test | 03 | TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Final test | 04 | TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |

7.9.3 Test Setup Diagram



7.9.4 Measurement Procedure and Data

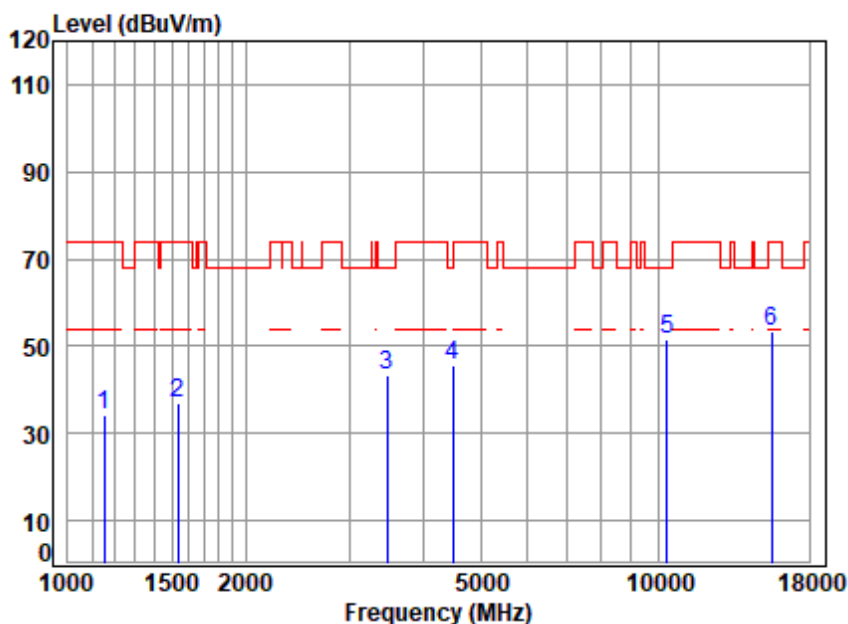
- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak or average method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.



Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

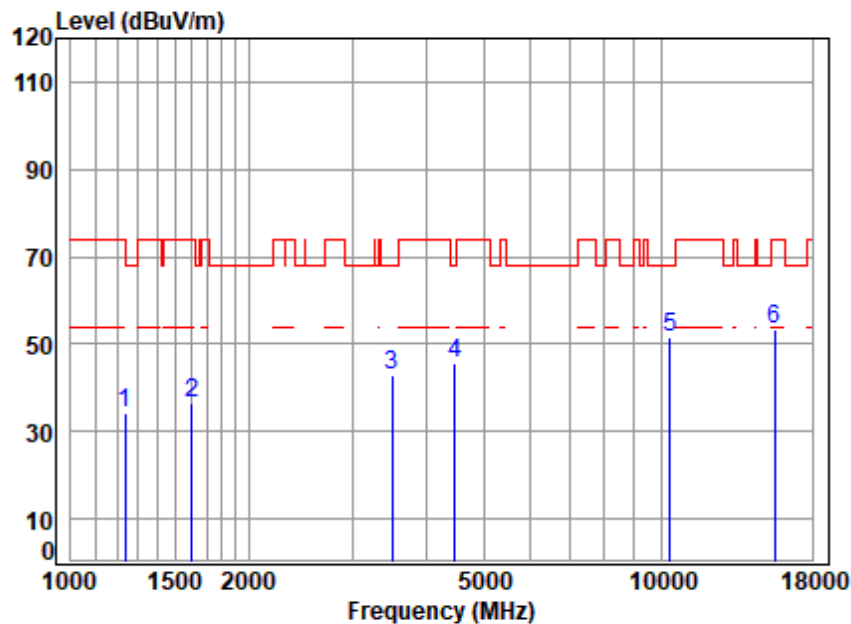


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5180 TX RSE
Note : 5G WIFI 11A

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1152.148 | 2.67 | 24.37 | 39.72 | 46.95 | 34.27 | 74.00 | -39.73 peak |
| 2 1538.281 | 3.29 | 25.98 | 39.97 | 47.75 | 37.05 | 74.00 | -36.95 peak |
| 3 3475.541 | 5.49 | 31.66 | 41.06 | 47.06 | 43.15 | 68.20 | -25.05 peak |
| 4 4482.150 | 6.74 | 33.57 | 41.86 | 47.23 | 45.68 | 68.20 | -22.52 peak |
| 5 10360.000 | 10.57 | 37.76 | 37.29 | 40.30 | 51.34 | 68.20 | -16.86 peak |
| 6 15540.000 | 13.97 | 40.72 | 40.38 | 39.01 | 53.32 | 74.00 | -20.68 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

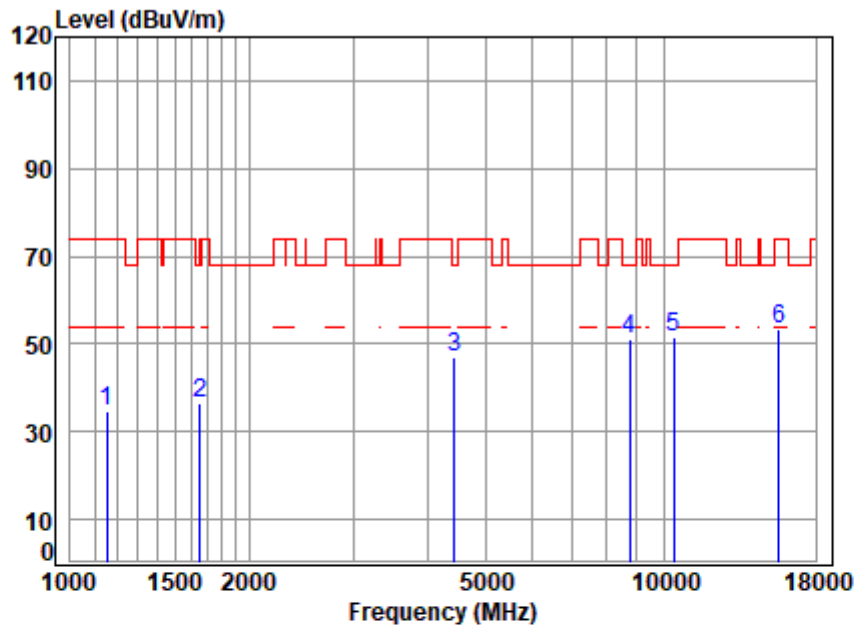


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5180 TX RSE
Note : 5G WIFI 11A

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1238.483 | 2.83 | 24.76 | 39.79 | 46.44 | 34.24 | 74.00 | -39.76 peak |
| 2 1601.804 | 3.35 | 26.26 | 40.01 | 46.85 | 36.45 | 74.00 | -37.55 peak |
| 3 3495.691 | 5.51 | 31.69 | 41.07 | 46.57 | 42.70 | 68.20 | -25.50 peak |
| 4 4469.214 | 6.73 | 33.55 | 41.85 | 47.09 | 45.52 | 68.20 | -22.68 peak |
| 5 10360.000 | 10.57 | 37.76 | 37.29 | 40.43 | 51.47 | 68.20 | -16.73 peak |
| 6 15540.000 | 13.97 | 40.72 | 40.38 | 39.24 | 53.55 | 74.00 | -20.45 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle

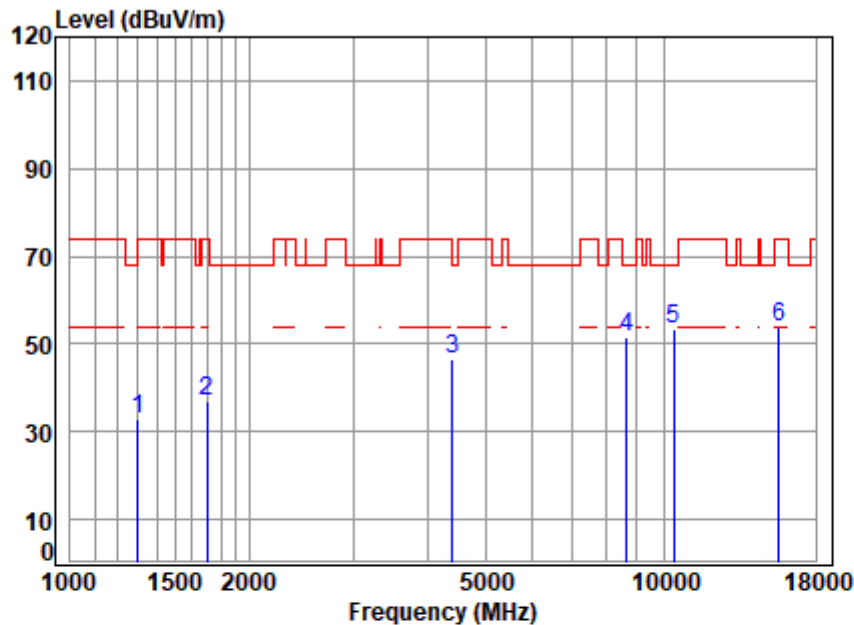


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5200 TX RSE
Note : 5G WIFI 11A

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit Line | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|--------|------------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 47.57 | 34.89 | 74.00 | -39.11 | peak |
| 2 | 1653.550 | 3.39 | 26.48 | 40.04 | 46.74 | 36.57 | 68.20 | -31.63 | peak |
| 3 | 4443.453 | 6.71 | 33.50 | 41.82 | 48.49 | 46.88 | 68.20 | -21.32 | peak |
| 4 | 8764.146 | 10.21 | 37.11 | 39.29 | 43.05 | 51.08 | 68.20 | -17.12 | peak |
| 5 | 10400.000 | 10.56 | 37.74 | 37.32 | 40.49 | 51.47 | 68.20 | -16.73 | peak |
| 6 | 15600.000 | 13.99 | 40.76 | 40.41 | 39.24 | 53.58 | 74.00 | -20.42 | peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle

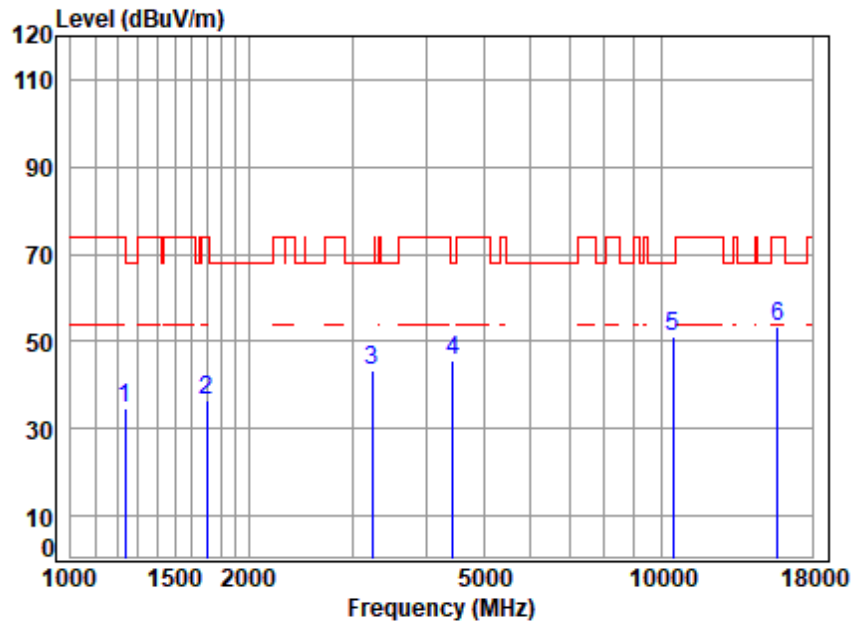


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5200 TX RSE
Note : 5G WIFI 11A

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|--------|--------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1300.858 | 2.94 | 25.03 | 39.83 | 44.93 | 33.07 | 74.00 | -40.93 | peak |
| 2 | 1697.129 | 3.43 | 26.66 | 40.06 | 46.95 | 36.98 | 74.00 | -37.02 | peak |
| 3 | 4405.090 | 6.67 | 33.44 | 41.79 | 48.21 | 46.53 | 68.20 | -21.67 | peak |
| 4 | 8663.404 | 10.17 | 37.07 | 39.48 | 43.73 | 51.49 | 68.20 | -16.71 | peak |
| 5 | 10400.000 | 10.56 | 37.74 | 37.32 | 42.23 | 53.21 | 68.20 | -14.99 | peak |
| 6 | 15600.000 | 13.99 | 40.76 | 40.41 | 39.34 | 53.68 | 74.00 | -20.32 | peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High

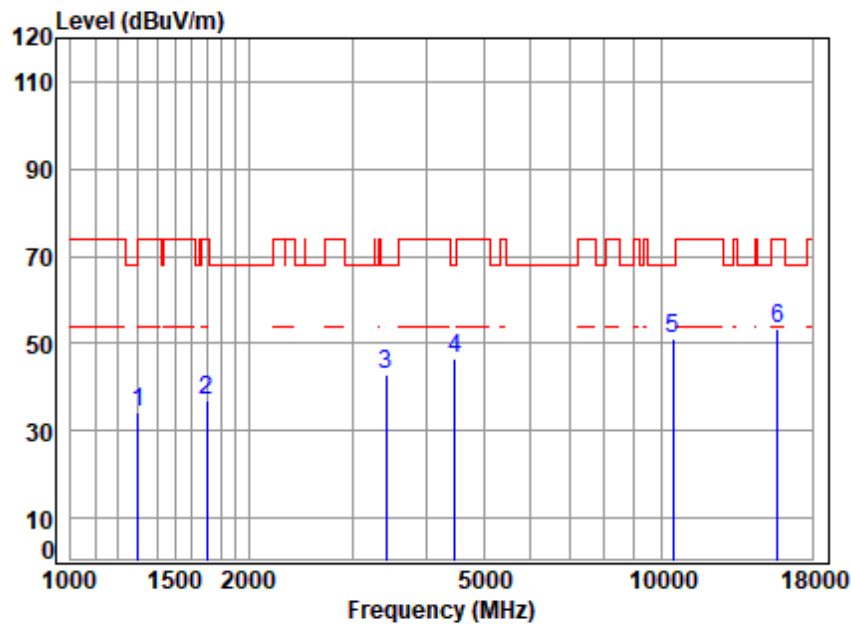


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5240 TX RSE
Note : 5G WIFI 11A

| | Freq | Cable Loss | Ant Factor | Preamplifier Factor | Read Level | Limit Level | Over Limit | Remark |
|---|-----------|------------|------------|---------------------|------------|-------------|------------|-------------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1234.909 | 2.83 | 24.74 | 39.78 | 47.00 | 34.79 | 74.00 | -39.21 peak |
| 2 | 1702.042 | 3.43 | 26.68 | 40.06 | 46.59 | 36.64 | 74.00 | -37.36 peak |
| 3 | 3242.619 | 5.19 | 31.30 | 40.89 | 47.79 | 43.39 | 68.20 | -24.81 peak |
| 4 | 4430.628 | 6.70 | 33.48 | 41.81 | 47.40 | 45.77 | 68.20 | -22.43 peak |
| 5 | 10480.000 | 10.54 | 37.71 | 37.36 | 40.00 | 50.89 | 68.20 | -17.31 peak |
| 6 | 15720.000 | 14.04 | 40.83 | 40.47 | 38.87 | 53.27 | 74.00 | -20.73 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High

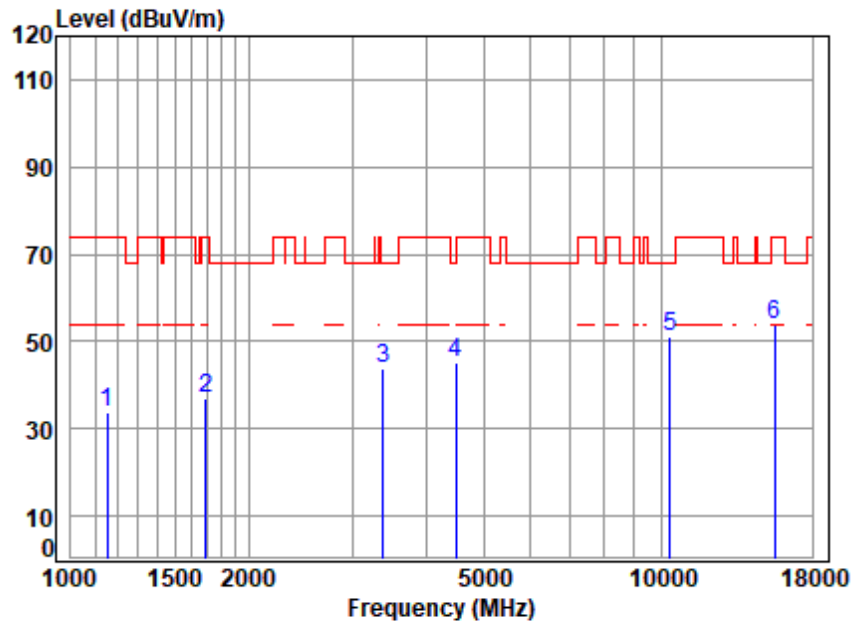


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5240 TX RSE
Note : 5G WIFI 11A

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1300.858 | 2.94 | 25.03 | 39.83 | 46.20 | 34.34 | 74.00 -39.66 peak |
| 2 | 1702.042 | 3.43 | 26.68 | 40.06 | 47.04 | 37.09 | 74.00 -36.91 peak |
| 3 | 3415.787 | 5.42 | 31.57 | 41.02 | 47.02 | 42.99 | 68.20 -25.21 peak |
| 4 | 4469.214 | 6.73 | 33.55 | 41.85 | 48.23 | 46.66 | 68.20 -21.54 peak |
| 5 | 10480.000 | 10.54 | 37.71 | 37.36 | 40.42 | 51.31 | 68.20 -16.89 peak |
| 6 | 15720.000 | 14.04 | 40.83 | 40.47 | 39.13 | 53.53 | 74.00 -20.47 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

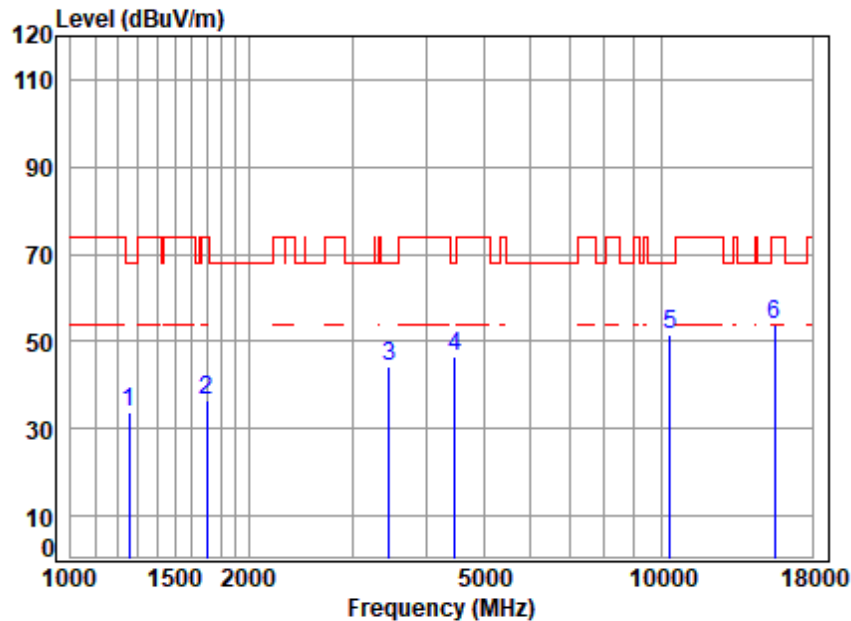


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5180 TX RSE
Note : 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1152.148 | 2.67 | 24.37 | 39.72 | 46.38 | 33.70 | 74.00 | -40.30 peak |
| 2 1692.231 | 3.42 | 26.64 | 40.06 | 46.76 | 36.76 | 74.00 | -37.24 peak |
| 3 3386.297 | 5.38 | 31.53 | 40.99 | 48.01 | 43.93 | 68.20 | -24.27 peak |
| 4 4482.150 | 6.74 | 33.57 | 41.86 | 46.82 | 45.27 | 68.20 | -22.93 peak |
| 5 10360.000 | 10.57 | 37.76 | 37.29 | 39.94 | 50.98 | 68.20 | -17.22 peak |
| 6 15540.000 | 13.97 | 40.72 | 40.38 | 39.30 | 53.61 | 74.00 | -20.39 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

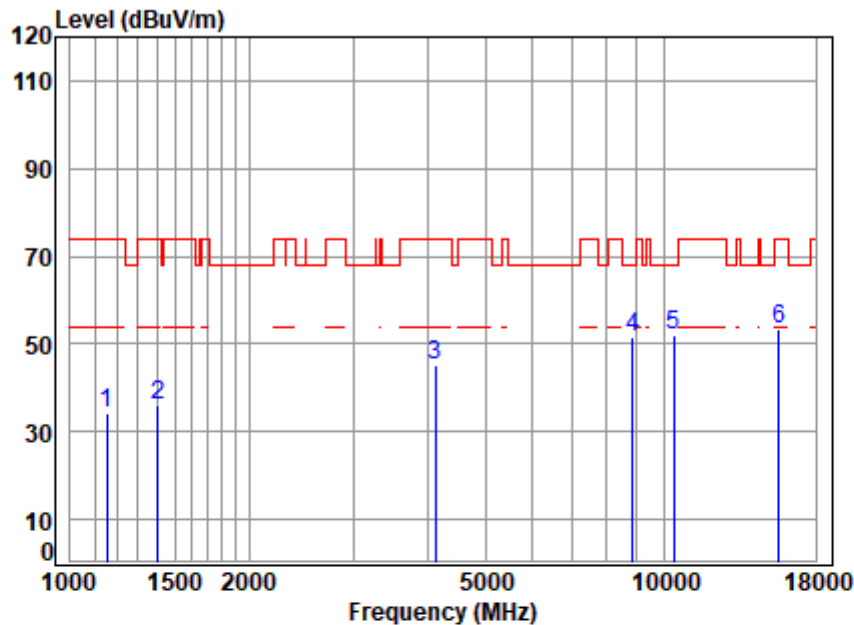


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5180 TX RSE
Note : 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1256.512 | 2.87 | 24.84 | 39.80 | 45.83 | 33.74 | 68.20 -34.46 peak |
| 2 | 1697.129 | 3.43 | 26.66 | 40.06 | 46.44 | 36.47 | 74.00 -37.53 peak |
| 3 | 3465.510 | 5.48 | 31.65 | 41.05 | 47.98 | 44.06 | 68.20 -24.14 peak |
| 4 | 4469.214 | 6.73 | 33.55 | 41.85 | 47.94 | 46.37 | 68.20 -21.83 peak |
| 5 | 10360.000 | 10.57 | 37.76 | 37.29 | 40.71 | 51.75 | 68.20 -16.45 peak |
| 6 | 15540.000 | 13.97 | 40.72 | 40.38 | 39.44 | 53.75 | 74.00 -20.25 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:middle

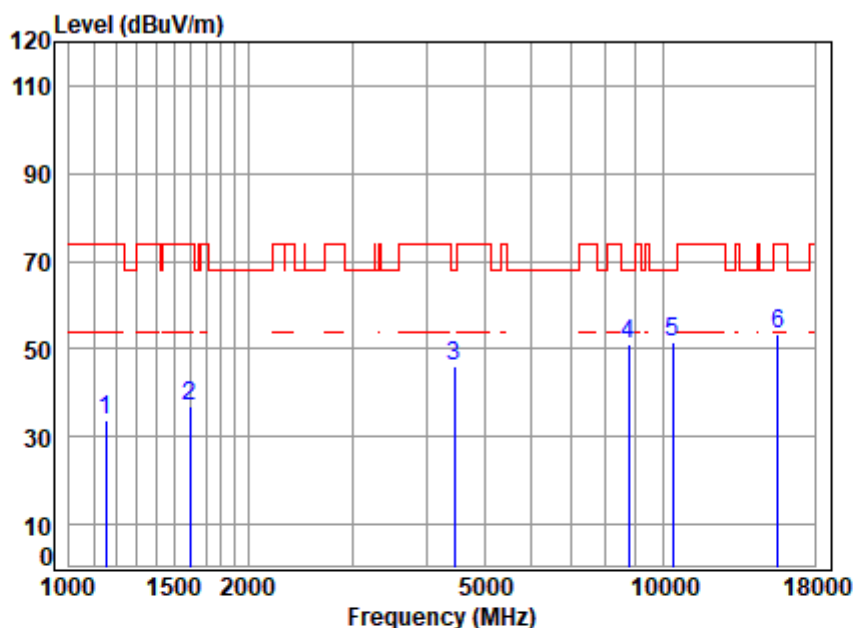


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5200 TX RSE
Note : 5G WIFI 11N20

| | Freq | Cable Loss | Ant Factor | Preamplifier Factor | Read Level | Level | Limit | Over Limit | Remark |
|---|-----------|------------|------------|---------------------|------------|--------|--------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 47.10 | 34.42 | 74.00 | -39.58 | peak |
| 2 | 1406.443 | 3.12 | 25.45 | 39.90 | 47.28 | 35.95 | 74.00 | -38.05 | peak |
| 3 | 4121.768 | 6.40 | 32.93 | 41.52 | 47.58 | 45.39 | 74.00 | -28.61 | peak |
| 4 | 8866.062 | 10.25 | 37.15 | 39.10 | 43.46 | 51.76 | 68.20 | -16.44 | peak |
| 5 | 10400.000 | 10.56 | 37.74 | 37.32 | 41.14 | 52.12 | 68.20 | -16.08 | peak |
| 6 | 15600.000 | 13.99 | 40.76 | 40.41 | 38.99 | 53.33 | 74.00 | -20.67 | peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:middle



Site : chamber

Condition: 3m VERTICAL

Job No : 02456CR

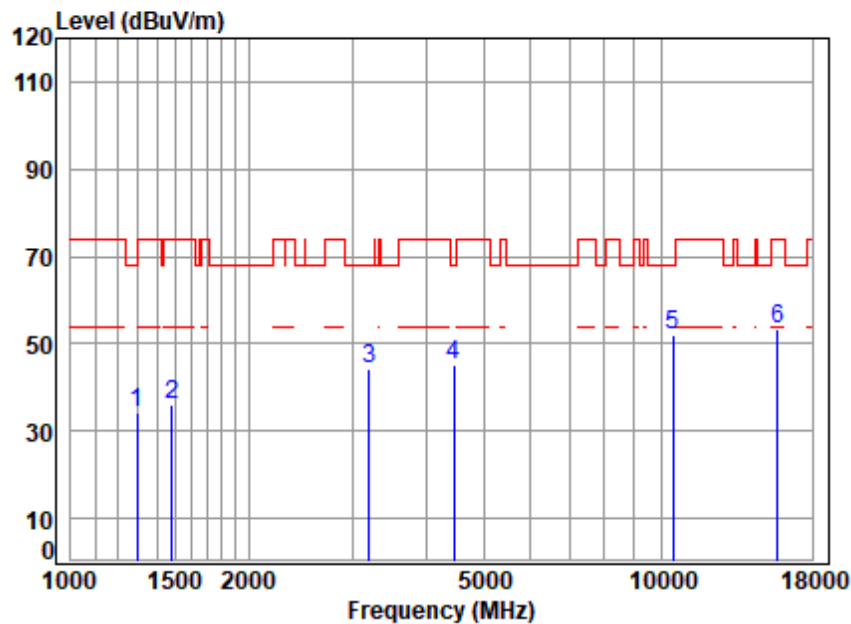
Mode : 5200 TX RSE

Note : 5G WIFI 11N20

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|--------|--------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 46.62 | 33.94 | 74.00 | -40.06 | peak |
| 2 | 1597.181 | 3.35 | 26.24 | 40.01 | 47.16 | 36.74 | 74.00 | -37.26 | peak |
| 3 | 4456.315 | 6.72 | 33.53 | 41.84 | 47.88 | 46.29 | 68.20 | -21.91 | peak |
| 4 | 8764.146 | 10.21 | 37.11 | 39.29 | 43.02 | 51.05 | 68.20 | -17.15 | peak |
| 5 | 10400.000 | 10.56 | 37.74 | 37.32 | 40.44 | 51.42 | 68.20 | -16.78 | peak |
| 6 | 15600.000 | 13.99 | 40.76 | 40.41 | 39.15 | 53.49 | 74.00 | -20.51 | peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High

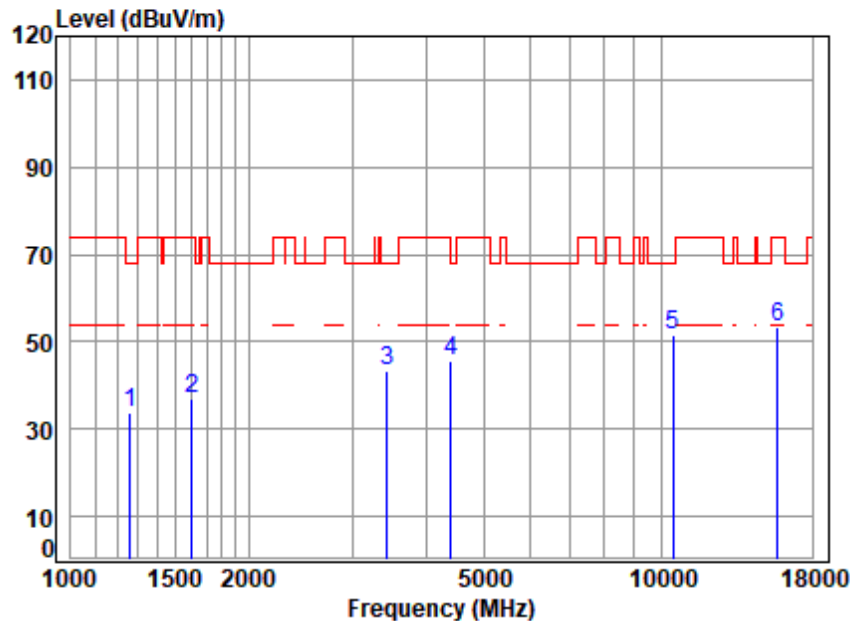


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5240 TX RSE
Note : 5G WIFI 11N20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|-----------|-------|--------|--------|-------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1297.103 | 2.94 | 25.01 | 39.83 | 46.11 | 34.23 | 68.20 | -33.97 peak |
| 2 | 1481.553 | 3.23 | 25.73 | 39.94 | 46.85 | 35.87 | 74.00 | -38.13 peak |
| 3 | 3196.094 | 5.13 | 31.23 | 40.85 | 48.82 | 44.33 | 68.20 | -23.87 peak |
| 4 | 4456.315 | 6.72 | 33.53 | 41.84 | 46.87 | 45.28 | 68.20 | -22.92 peak |
| 5 | 10480.000 | 10.54 | 37.71 | 37.36 | 40.91 | 51.80 | 68.20 | -16.40 peak |
| 6 | 15720.000 | 14.04 | 40.83 | 40.47 | 38.91 | 53.31 | 74.00 | -20.69 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High

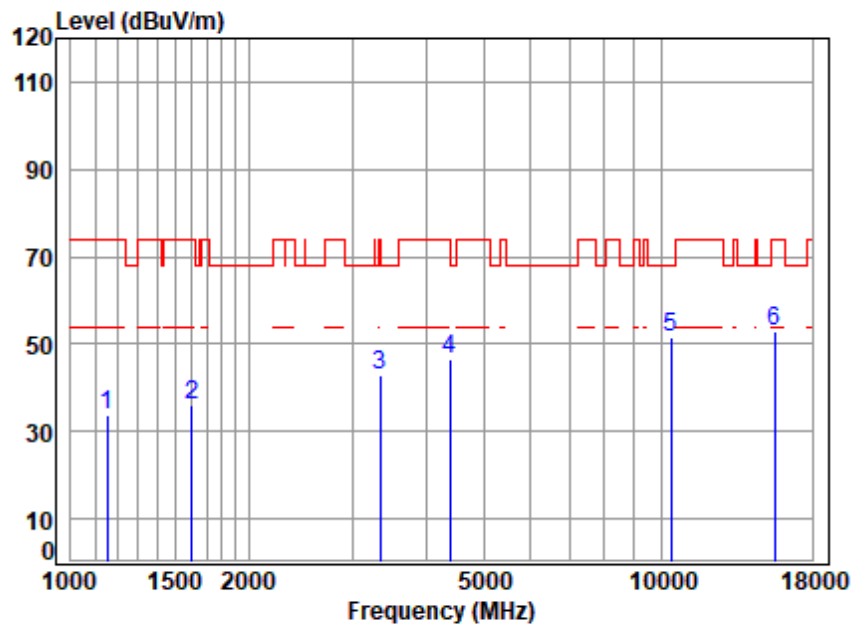


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5240 TX RSE
Note : 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1260.149 | 2.87 | 24.85 | 39.80 | 45.81 | 33.73 | 68.20 | -34.47 peak |
| 2 1601.804 | 3.35 | 26.26 | 40.01 | 47.58 | 37.18 | 74.00 | -36.82 peak |
| 3 3435.590 | 5.44 | 31.60 | 41.03 | 47.26 | 43.27 | 68.20 | -24.93 peak |
| 4 4405.090 | 6.67 | 33.44 | 41.79 | 47.15 | 45.47 | 68.20 | -22.73 peak |
| 5 10480.000 | 10.54 | 37.71 | 37.36 | 40.64 | 51.53 | 68.20 | -16.67 peak |
| 6 15720.000 | 14.04 | 40.83 | 40.47 | 38.79 | 53.19 | 74.00 | -20.81 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

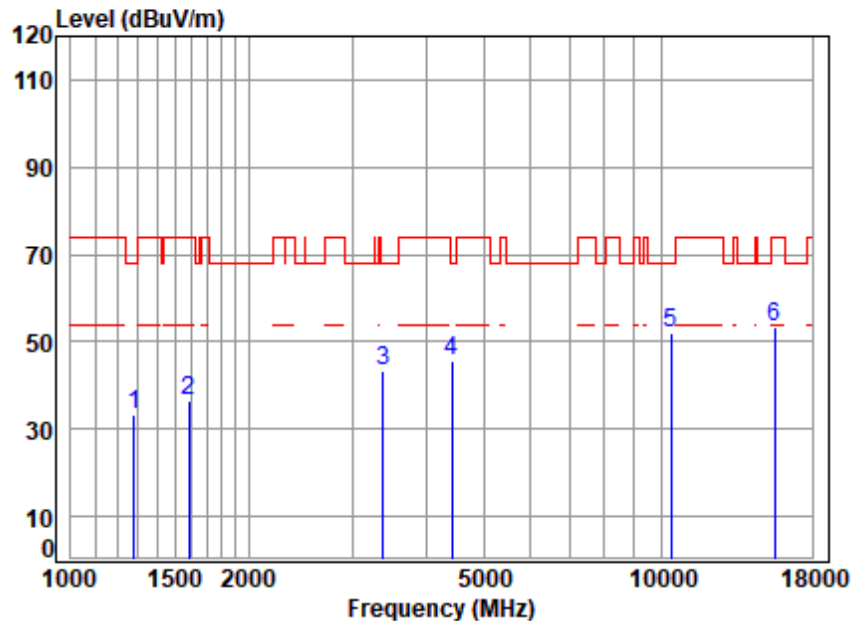


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5190 TX RSE
Note : 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1152.148 | 2.67 | 24.37 | 39.72 | 46.46 | 33.78 | 74.00 | -40.22 peak |
| 2 1601.804 | 3.35 | 26.26 | 40.01 | 46.32 | 35.92 | 74.00 | -38.08 peak |
| 3 3337.710 | 5.32 | 31.45 | 40.96 | 47.23 | 43.04 | 74.00 | -30.96 peak |
| 4 4379.699 | 6.65 | 33.39 | 41.77 | 48.37 | 46.64 | 74.00 | -27.36 peak |
| 5 10380.000 | 10.57 | 37.75 | 37.30 | 40.65 | 51.67 | 68.20 | -16.53 peak |
| 6 15570.000 | 13.98 | 40.74 | 40.40 | 38.68 | 53.00 | 74.00 | -21.00 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

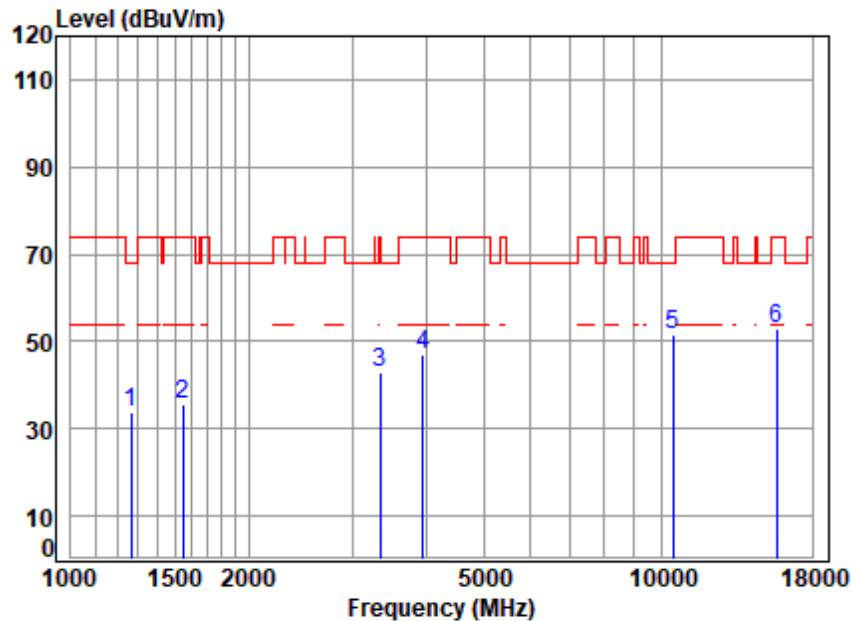


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5190 TX RSE
Note : 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1282.193 | 2.91 | 24.95 | 39.82 | 45.19 | 33.23 | 68.20 | -34.97 peak |
| 2 1587.975 | 3.34 | 26.20 | 40.00 | 47.18 | 36.72 | 74.00 | -37.28 peak |
| 3 3386.297 | 5.38 | 31.53 | 40.99 | 47.48 | 43.40 | 68.20 | -24.80 peak |
| 4 4417.841 | 6.68 | 33.46 | 41.80 | 47.13 | 45.47 | 68.20 | -22.73 peak |
| 5 10380.000 | 10.57 | 37.75 | 37.30 | 40.81 | 51.83 | 68.20 | -16.37 peak |
| 6 15570.000 | 13.98 | 40.74 | 40.40 | 39.01 | 53.33 | 74.00 | -20.67 peak |



Test Mode: 03; Polarity: Horizontal; Modulation: 802.11n; Bandwidth: 40MHz; Channel: High

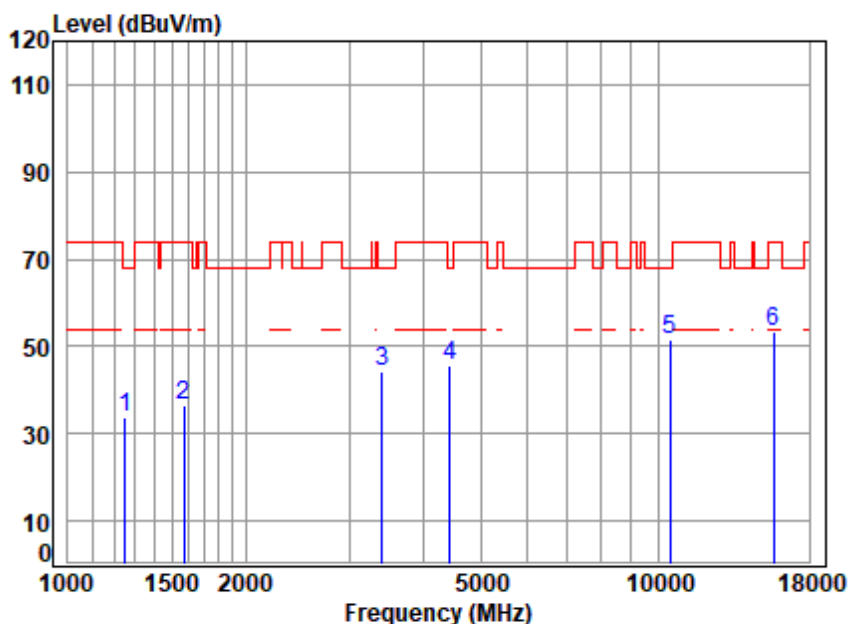


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5230 TX RSE
Note : 5G WIFI 11N40

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Limit Level | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|-------------|------------|-------------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1267.454 | 2.89 | 24.89 | 39.81 | 45.76 | 33.73 | 68.20 | -34.47 peak |
| 2 | 1547.199 | 3.30 | 26.02 | 39.98 | 46.19 | 35.53 | 74.00 | -38.47 peak |
| 3 | 3337.710 | 5.32 | 31.45 | 40.96 | 47.20 | 43.01 | 74.00 | -30.99 peak |
| 4 | 3946.885 | 6.20 | 32.60 | 41.37 | 49.43 | 46.86 | 74.00 | -27.14 peak |
| 5 | 10460.000 | 10.54 | 37.72 | 37.35 | 40.83 | 51.74 | 68.20 | -16.46 peak |
| 6 | 15690.000 | 14.03 | 40.82 | 40.45 | 38.51 | 52.91 | 74.00 | -21.09 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High

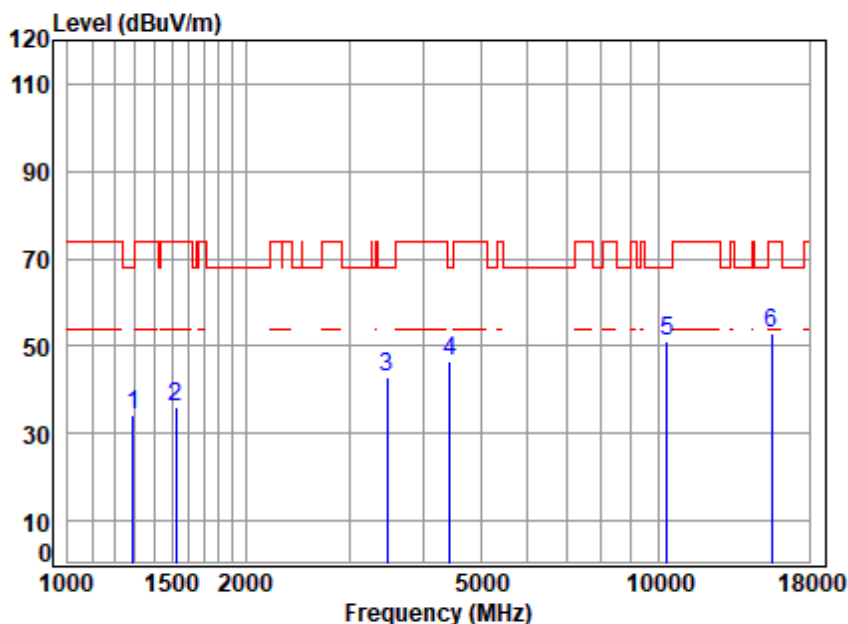


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5230 TX RSE
Note : 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1249.269 | 2.85 | 24.81 | 39.79 | 46.10 | 33.97 | 68.20 | -34.23 peak |
| 2 1574.265 | 3.33 | 26.14 | 39.99 | 46.89 | 36.37 | 74.00 | -37.63 peak |
| 3 3405.929 | 5.40 | 31.56 | 41.01 | 48.22 | 44.17 | 68.20 | -24.03 peak |
| 4 4430.628 | 6.70 | 33.48 | 41.81 | 47.37 | 45.74 | 68.20 | -22.46 peak |
| 5 10460.000 | 10.54 | 37.72 | 37.35 | 40.45 | 51.36 | 68.20 | -16.84 peak |
| 6 15690.000 | 14.03 | 40.82 | 40.45 | 38.80 | 53.20 | 74.00 | -20.80 peak |



Test Mode: 03; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: Low

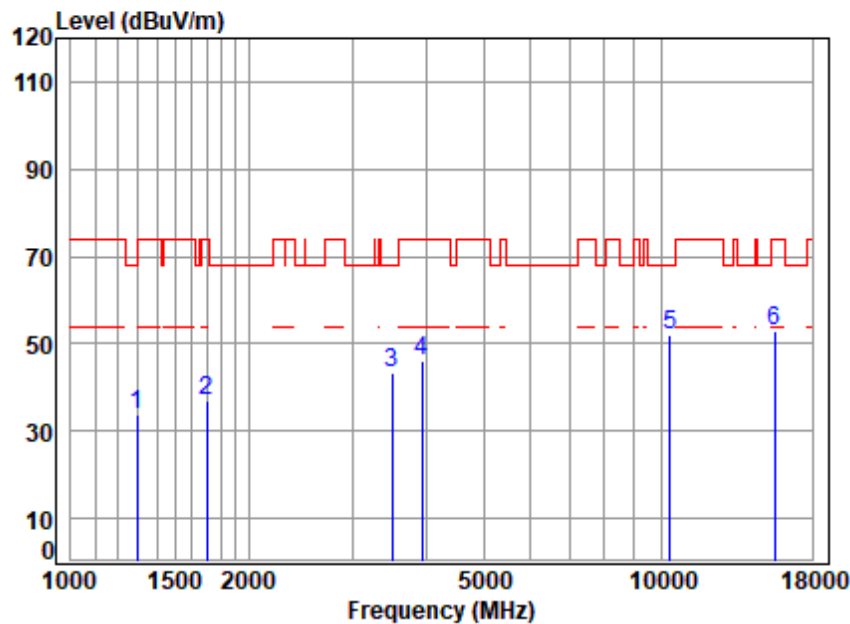


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5180 TX RSE
Note : 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1289.627 | 2.92 | 24.98 | 39.82 | 46.28 | 34.36 | 68.20 | -33.84 peak |
| 2 1525.000 | 3.28 | 25.91 | 39.97 | 46.67 | 35.89 | 74.00 | -38.11 peak |
| 3 3475.541 | 5.49 | 31.66 | 41.06 | 46.94 | 43.03 | 68.20 | -25.17 peak |
| 4 4443.453 | 6.71 | 33.50 | 41.82 | 48.16 | 46.55 | 68.20 | -21.65 peak |
| 5 10360.000 | 10.57 | 37.76 | 37.29 | 40.27 | 51.31 | 68.20 | -16.89 peak |
| 6 15540.000 | 13.97 | 40.72 | 40.38 | 38.51 | 52.82 | 74.00 | -21.18 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low

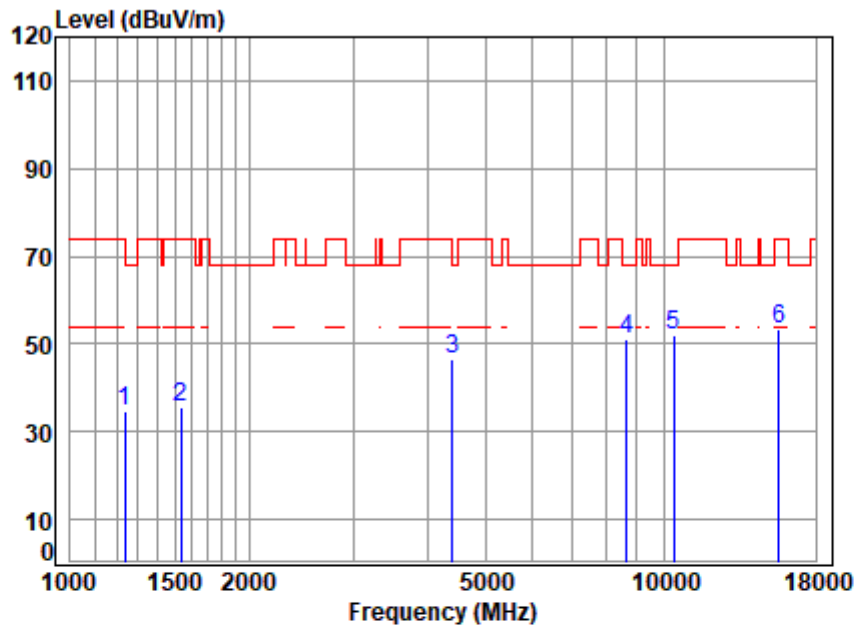


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5180 TX RSE
Note : 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1297.103 | 2.94 | 25.01 | 39.83 | 45.51 | 33.63 | 68.20 -34.57 peak |
| 2 | 1697.129 | 3.43 | 26.66 | 40.06 | 47.05 | 37.08 | 74.00 -36.92 peak |
| 3 | 3495.691 | 5.51 | 31.69 | 41.07 | 47.06 | 43.19 | 68.20 -25.01 peak |
| 4 | 3935.493 | 6.19 | 32.58 | 41.36 | 48.70 | 46.11 | 74.00 -27.89 peak |
| 5 | 10360.000 | 10.57 | 37.76 | 37.29 | 41.00 | 52.04 | 68.20 -16.16 peak |
| 6 | 15540.000 | 13.97 | 40.72 | 40.38 | 38.52 | 52.83 | 74.00 -21.17 peak |



Test Mode: 03; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: middle

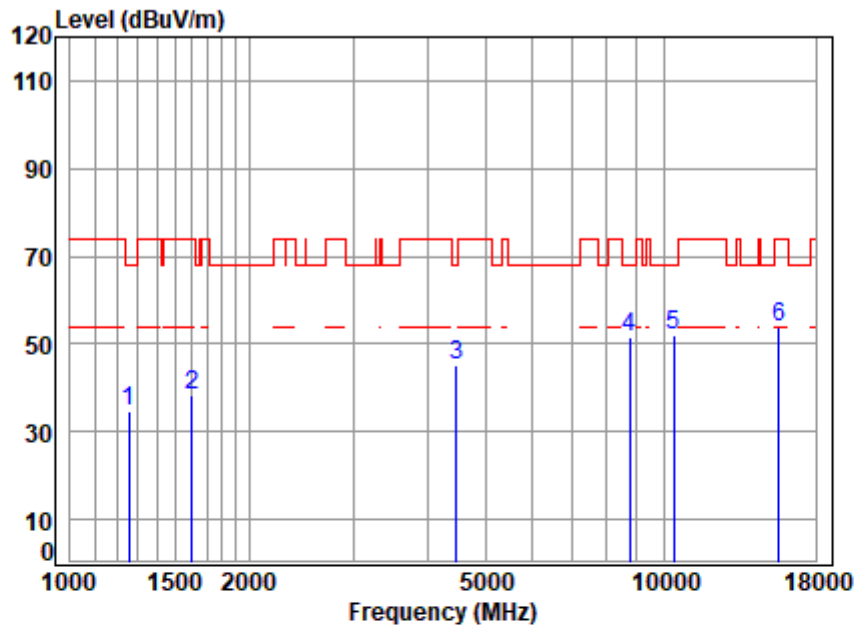


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5200 TX RSE
Note : 5G WIFI 11AC20

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|--------|--------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1238.483 | 2.83 | 24.76 | 39.79 | 46.89 | 34.69 | 74.00 | -39.31 | peak |
| 2 | 1538.281 | 3.29 | 25.98 | 39.97 | 46.45 | 35.75 | 74.00 | -38.25 | peak |
| 3 | 4405.090 | 6.67 | 33.44 | 41.79 | 48.03 | 46.35 | 68.20 | -21.85 | peak |
| 4 | 8638.399 | 10.16 | 37.06 | 39.53 | 43.42 | 51.11 | 68.20 | -17.09 | peak |
| 5 | 10400.000 | 10.56 | 37.74 | 37.32 | 40.90 | 51.88 | 68.20 | -16.32 | peak |
| 6 | 15600.000 | 13.99 | 40.76 | 40.41 | 39.02 | 53.36 | 74.00 | -20.64 | peak |



Test Mode: 03; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: middle

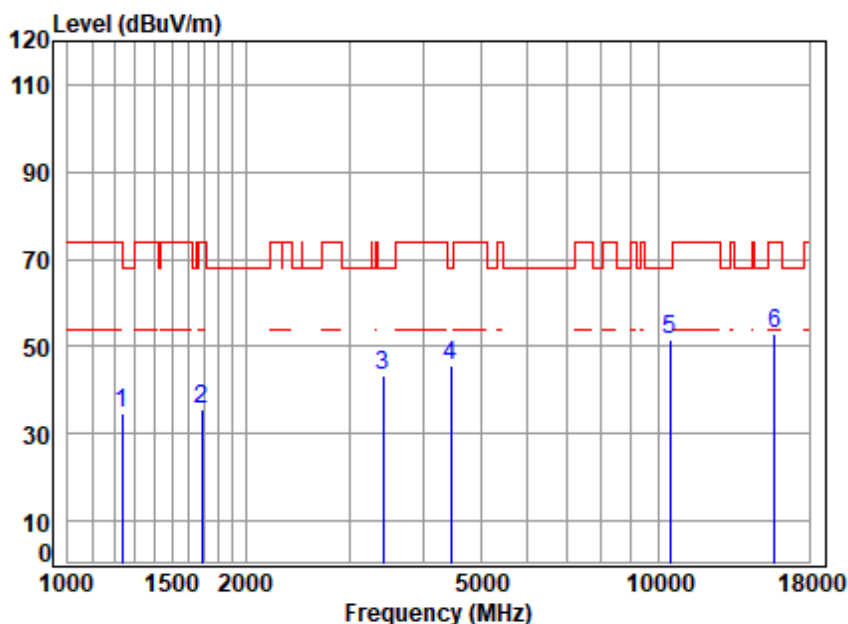


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5200 TX RSE
Note : 5G WIFI 11AC20

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|--------|--------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1256.512 | 2.87 | 24.84 | 39.80 | 46.76 | 34.67 | 68.20 | -33.53 | peak |
| 2 | 1601.804 | 3.35 | 26.26 | 40.01 | 48.67 | 38.27 | 74.00 | -35.73 | peak |
| 3 | 4469.214 | 6.73 | 33.55 | 41.85 | 46.65 | 45.08 | 68.20 | -23.12 | peak |
| 4 | 8764.146 | 10.21 | 37.11 | 39.29 | 43.46 | 51.49 | 68.20 | -16.71 | peak |
| 5 | 10400.000 | 10.56 | 37.74 | 37.32 | 41.00 | 51.98 | 68.20 | -16.22 | peak |
| 6 | 15600.000 | 13.99 | 40.76 | 40.41 | 39.35 | 53.69 | 74.00 | -20.31 | peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High

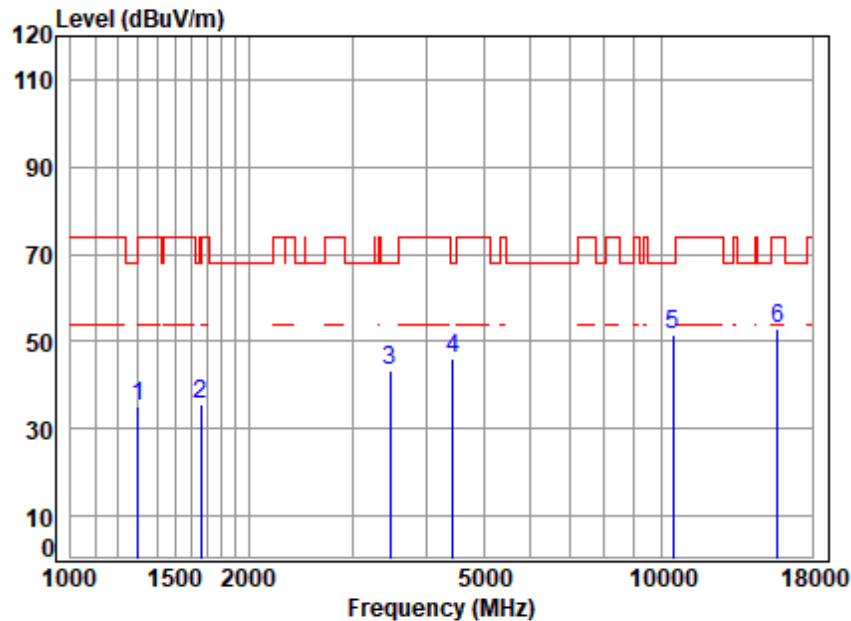


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5240 TX RSE
Note : 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1238.483 | 2.83 | 24.76 | 39.79 | 47.06 | 34.86 | 74.00 | -39.14 peak |
| 2 1687.347 | 3.42 | 26.62 | 40.05 | 45.72 | 35.71 | 74.00 | -38.29 peak |
| 3 3415.787 | 5.42 | 31.57 | 41.02 | 47.59 | 43.56 | 68.20 | -24.64 peak |
| 4 4456.315 | 6.72 | 33.53 | 41.84 | 47.13 | 45.54 | 68.20 | -22.66 peak |
| 5 10480.000 | 10.54 | 37.71 | 37.36 | 40.69 | 51.58 | 68.20 | -16.62 peak |
| 6 15720.000 | 14.04 | 40.83 | 40.47 | 38.39 | 52.79 | 74.00 | -21.21 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High

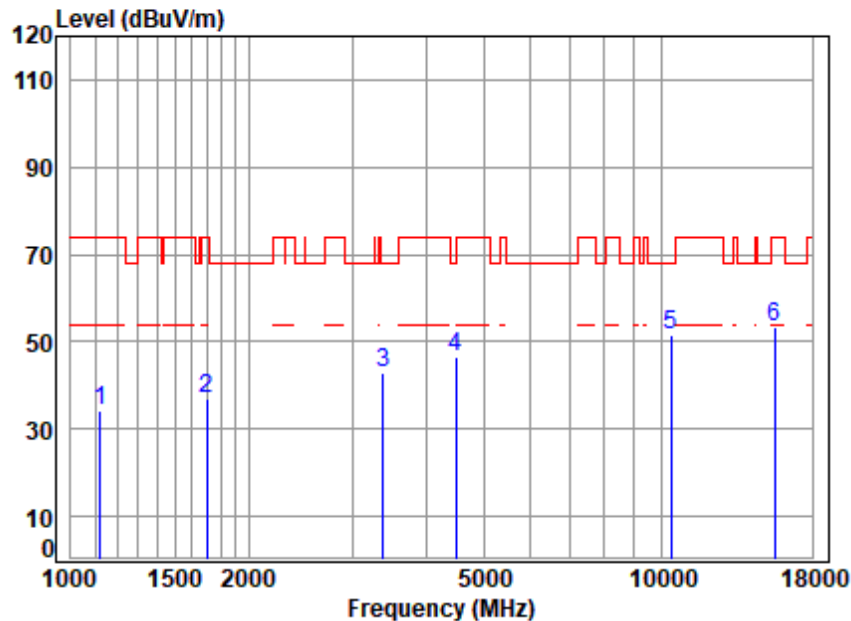


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5240 TX RSE
Note : 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1300.858 | 2.94 | 25.03 | 39.83 | 46.97 | 35.11 | 74.00 | -38.89 peak |
| 2 1663.137 | 3.40 | 26.52 | 40.04 | 45.93 | 35.81 | 74.00 | -38.19 peak |
| 3 3475.541 | 5.49 | 31.66 | 41.06 | 47.42 | 43.51 | 68.20 | -24.69 peak |
| 4 4430.628 | 6.70 | 33.48 | 41.81 | 47.61 | 45.98 | 68.20 | -22.22 peak |
| 5 10480.000 | 10.54 | 37.71 | 37.36 | 40.72 | 51.61 | 68.20 | -16.59 peak |
| 6 15720.000 | 14.04 | 40.83 | 40.47 | 38.43 | 52.83 | 74.00 | -21.17 peak |



Test Mode: 03; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 40MHz; Channel: Low

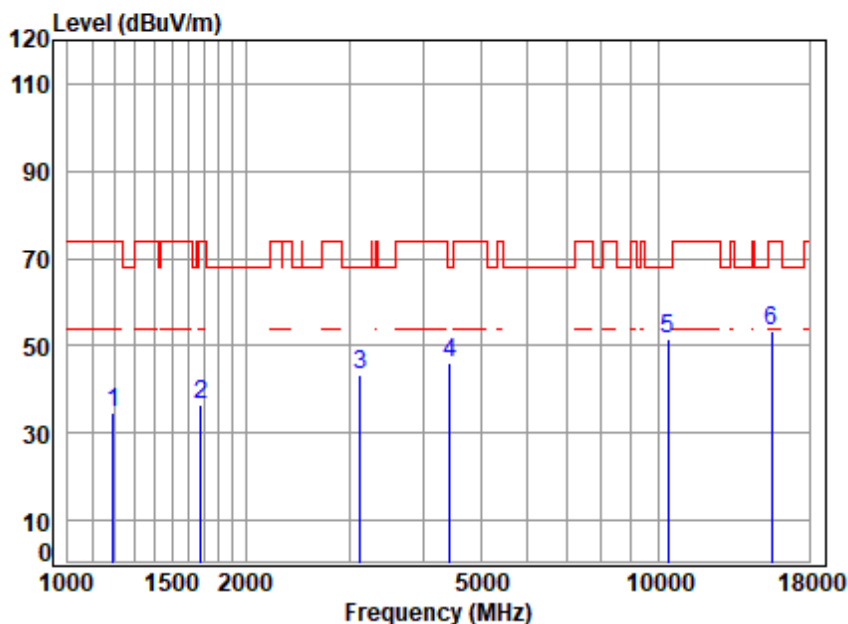


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5190 TX RSE
Note : 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1122.563 | 2.62 | 24.23 | 39.70 | 46.99 | 34.14 | 74.00 | -39.86 peak |
| 2 1697.129 | 3.43 | 26.66 | 40.06 | 46.73 | 36.76 | 74.00 | -37.24 peak |
| 3 3386.297 | 5.38 | 31.53 | 40.99 | 47.12 | 43.04 | 68.20 | -25.16 peak |
| 4 4482.150 | 6.74 | 33.57 | 41.86 | 47.95 | 46.40 | 68.20 | -21.80 peak |
| 5 10380.000 | 10.57 | 37.75 | 37.30 | 40.50 | 51.52 | 68.20 | -16.68 peak |
| 6 15570.000 | 13.98 | 40.74 | 40.40 | 39.10 | 53.42 | 74.00 | -20.58 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low

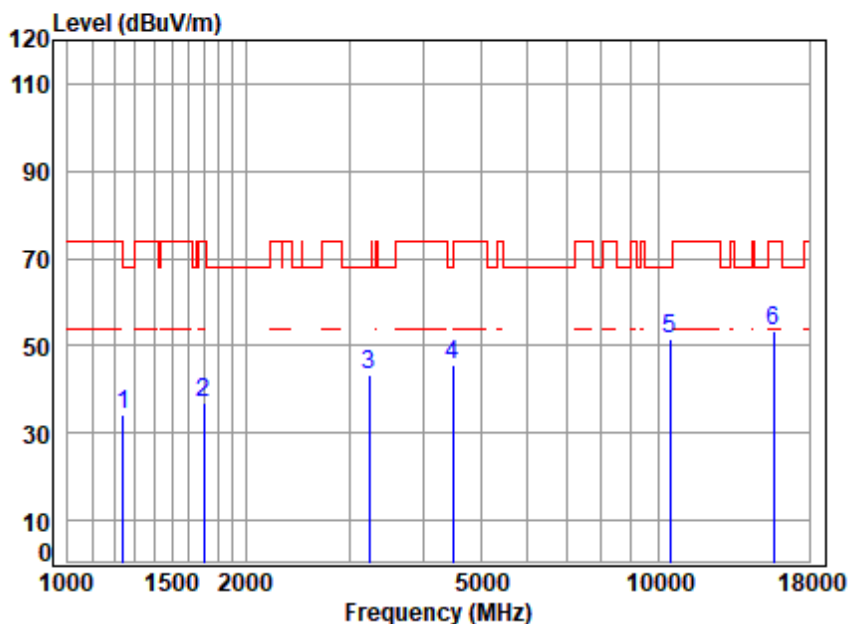


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5190 TX RSE
Note : 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1192.811 | 2.75 | 24.56 | 39.75 | 46.97 | 34.53 | 74.00 -39.47 peak |
| 2 | 1677.621 | 3.41 | 26.58 | 40.05 | 46.77 | 36.71 | 74.00 -37.29 peak |
| 3 | 3123.039 | 5.03 | 31.11 | 40.80 | 47.93 | 43.27 | 68.20 -24.93 peak |
| 4 | 4443.453 | 6.71 | 33.50 | 41.82 | 47.87 | 46.26 | 68.20 -21.94 peak |
| 5 | 10380.000 | 10.57 | 37.75 | 37.30 | 40.52 | 51.54 | 68.20 -16.66 peak |
| 6 | 15570.000 | 13.98 | 40.74 | 40.40 | 39.12 | 53.44 | 74.00 -20.56 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

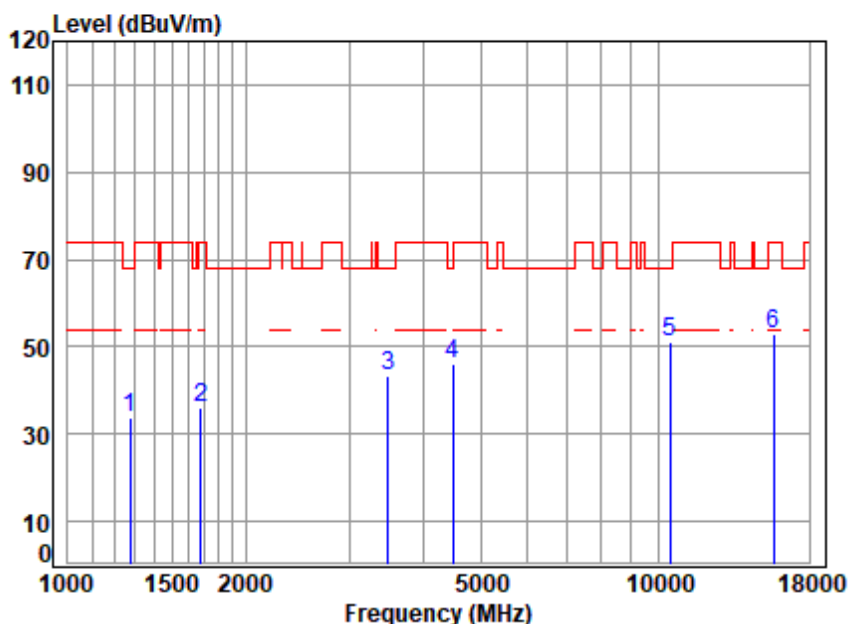


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5230 TX RSE
Note : 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1242.068 | 2.84 | 24.78 | 39.79 | 46.38 | 34.21 | 68.20 | -33.99 peak |
| 2 1697.129 | 3.43 | 26.66 | 40.06 | 46.76 | 36.79 | 74.00 | -37.21 peak |
| 3 3242.619 | 5.19 | 31.30 | 40.89 | 47.81 | 43.41 | 68.20 | -24.79 peak |
| 4 4482.150 | 6.74 | 33.57 | 41.86 | 47.18 | 45.63 | 68.20 | -22.57 peak |
| 5 10460.000 | 10.54 | 37.72 | 37.35 | 40.86 | 51.77 | 68.20 | -16.43 peak |
| 6 15690.000 | 14.03 | 40.82 | 40.45 | 38.78 | 53.18 | 74.00 | -20.82 peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

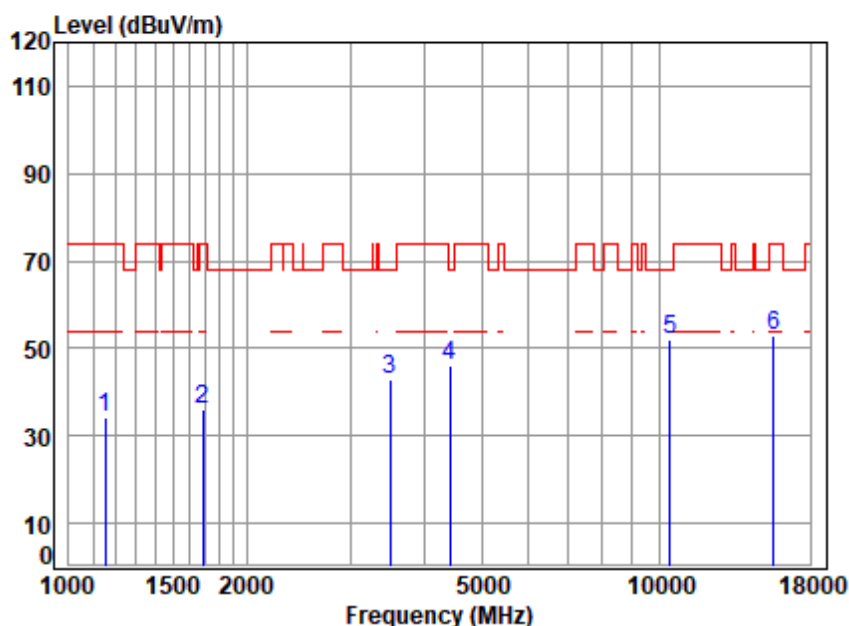


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5230 TX RSE
Note : 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------|-------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1274.802 | 2.90 | 24.92 | 39.81 | 45.86 | 33.87 | 68.20 | -34.33 peak |
| 2 | 1682.477 | 3.42 | 26.60 | 40.05 | 45.88 | 35.85 | 74.00 | -38.15 peak |
| 3 | 3485.601 | 5.50 | 31.68 | 41.07 | 47.35 | 43.46 | 68.20 | -24.74 peak |
| 4 | 4495.125 | 6.76 | 33.59 | 41.87 | 47.73 | 46.21 | 68.20 | -21.99 peak |
| 5 | 10460.000 | 10.54 | 37.72 | 37.35 | 40.30 | 51.21 | 68.20 | -16.99 peak |
| 6 | 15690.000 | 14.03 | 40.82 | 40.45 | 38.31 | 52.71 | 74.00 | -21.29 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



```
Site      : chamber
Condition: 3m HORIZONTAL
Job No    : 02456CR
Mode      : 5210 TX RSE
Note      : 5G WIFI 11AC80
```

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit Line | Over Limit | Remark |
|---|-----------|---------------|---------------|------------------|---------------|--------|---------------|---------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 47.12 | 34.44 | 74.00 | -39.56 | peak |
| 2 | 1687.347 | 3.42 | 26.62 | 40.05 | 45.89 | 35.88 | 74.00 | -38.12 | peak |
| 3 | 3495.691 | 5.51 | 31.69 | 41.07 | 46.87 | 43.00 | 68.20 | -25.20 | peak |
| 4 | 4417.841 | 6.68 | 33.46 | 41.80 | 47.54 | 45.88 | 68.20 | -22.32 | peak |
| 5 | 10420.000 | 10.56 | 37.73 | 37.33 | 40.96 | 51.92 | 68.20 | -16.28 | peak |
| 6 | 15630.000 | 14.01 | 40.78 | 40.42 | 38.48 | 52.85 | 74.00 | -21.15 | peak |



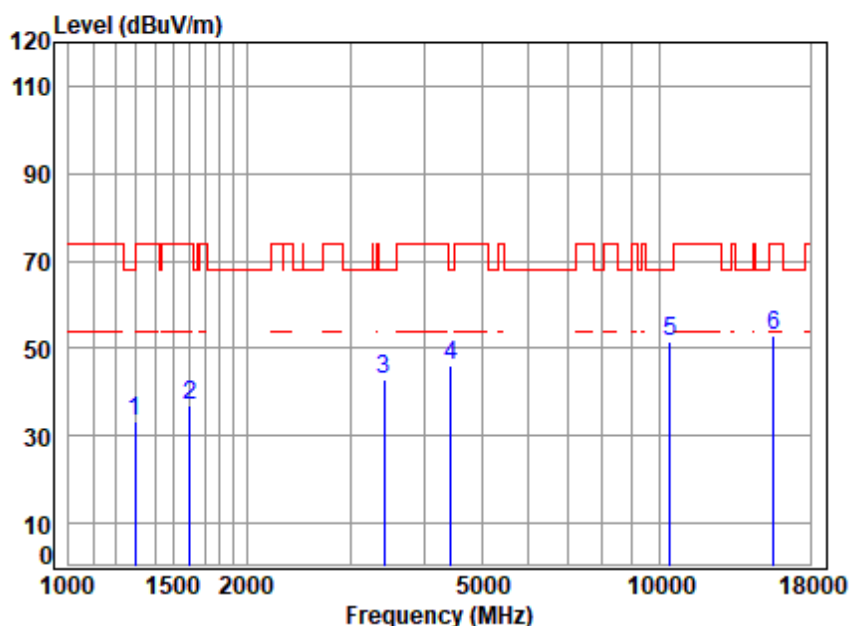
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Test Mode: 03; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: middle

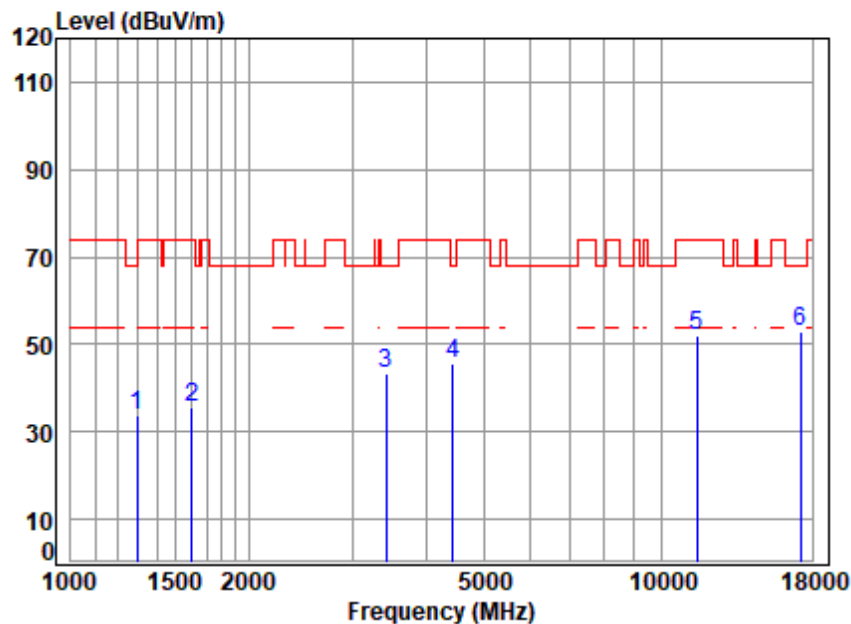


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5210 TX RSE
Note : 5G WIFI 11AC80

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1297.103 | 2.94 | 25.01 | 39.83 | 45.28 | 33.40 | 68.20 | -34.80 peak |
| 2 1606.441 | 3.35 | 26.28 | 40.01 | 47.50 | 37.12 | 74.00 | -36.88 peak |
| 3 3415.787 | 5.42 | 31.57 | 41.02 | 46.91 | 42.88 | 68.20 | -25.32 peak |
| 4 4430.628 | 6.70 | 33.48 | 41.81 | 47.80 | 46.17 | 68.20 | -22.03 peak |
| 5 10420.000 | 10.56 | 37.73 | 37.33 | 40.53 | 51.49 | 68.20 | -16.71 peak |
| 6 15630.000 | 14.01 | 40.78 | 40.42 | 38.76 | 53.13 | 74.00 | -20.87 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

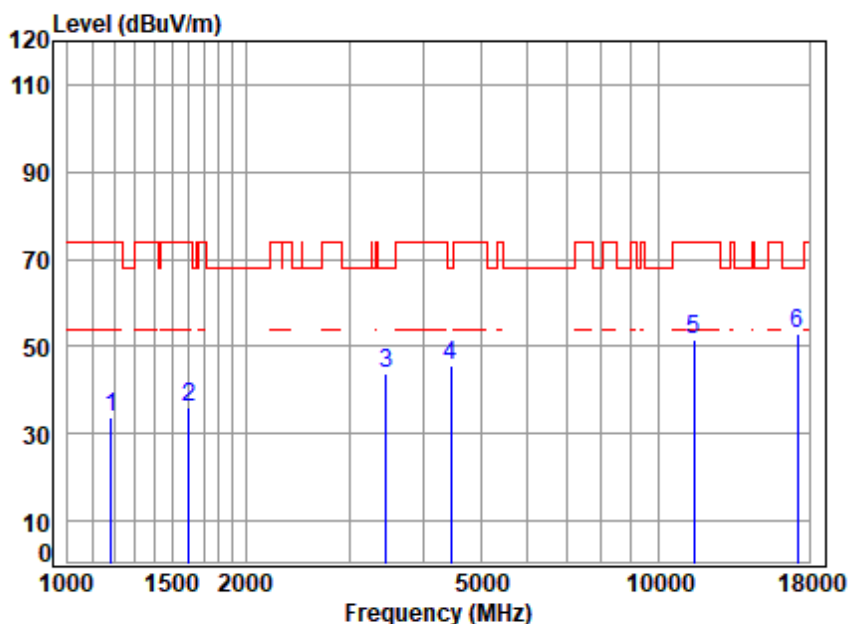


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5745 TX RSE
Note : 5G WIFI 11A

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit | Over | Remark |
|---|-----------|------------|------------|---------------|------------|--------|--------|--------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1297.103 | 2.94 | 25.01 | 39.83 | 45.43 | 33.55 | 68.20 | -34.65 | peak |
| 2 | 1601.804 | 3.35 | 26.26 | 40.01 | 46.18 | 35.78 | 74.00 | -38.22 | peak |
| 3 | 3415.787 | 5.42 | 31.57 | 41.02 | 47.48 | 43.45 | 68.20 | -24.75 | peak |
| 4 | 4430.628 | 6.70 | 33.48 | 41.81 | 47.09 | 45.46 | 68.20 | -22.74 | peak |
| 5 | 11490.000 | 11.62 | 37.90 | 37.86 | 40.14 | 51.80 | 74.00 | -22.20 | peak |
| 6 | 17235.000 | 14.09 | 42.74 | 40.28 | 36.28 | 52.83 | 68.20 | -15.37 | peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

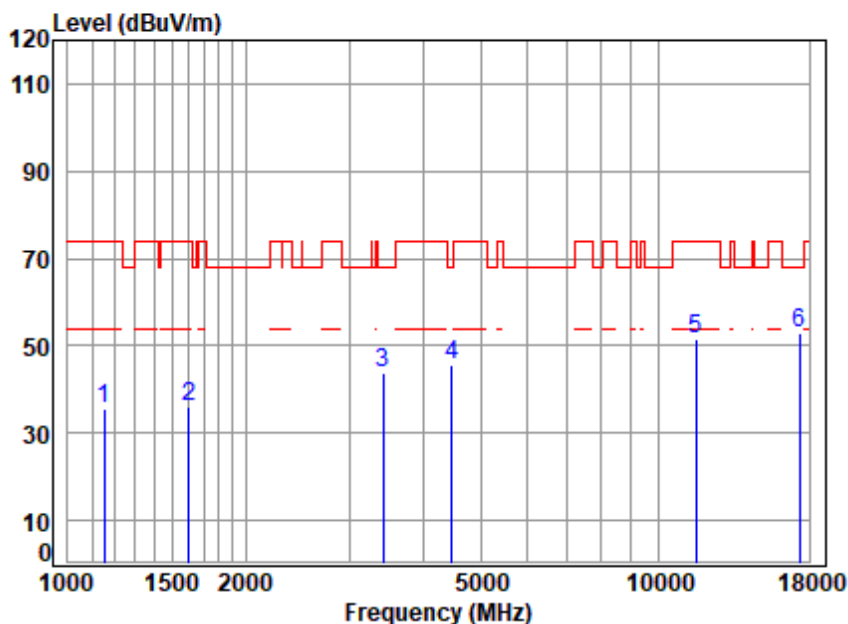


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5745 TX RSE
Note : 5G WIFI 11A

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1185.936 | 2.74 | 24.53 | 39.75 | 46.24 | 33.76 | 74.00 -40.24 peak |
| 2 | 1601.804 | 3.35 | 26.26 | 40.01 | 46.64 | 36.24 | 74.00 -37.76 peak |
| 3 | 3465.510 | 5.48 | 31.65 | 41.05 | 47.61 | 43.69 | 68.20 -24.51 peak |
| 4 | 4456.315 | 6.72 | 33.53 | 41.84 | 47.39 | 45.80 | 68.20 -22.40 peak |
| 5 | 11490.000 | 11.62 | 37.90 | 37.86 | 39.99 | 51.65 | 74.00 -22.35 peak |
| 6 | 17235.000 | 14.09 | 42.74 | 40.28 | 36.41 | 52.96 | 68.20 -15.24 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:middle

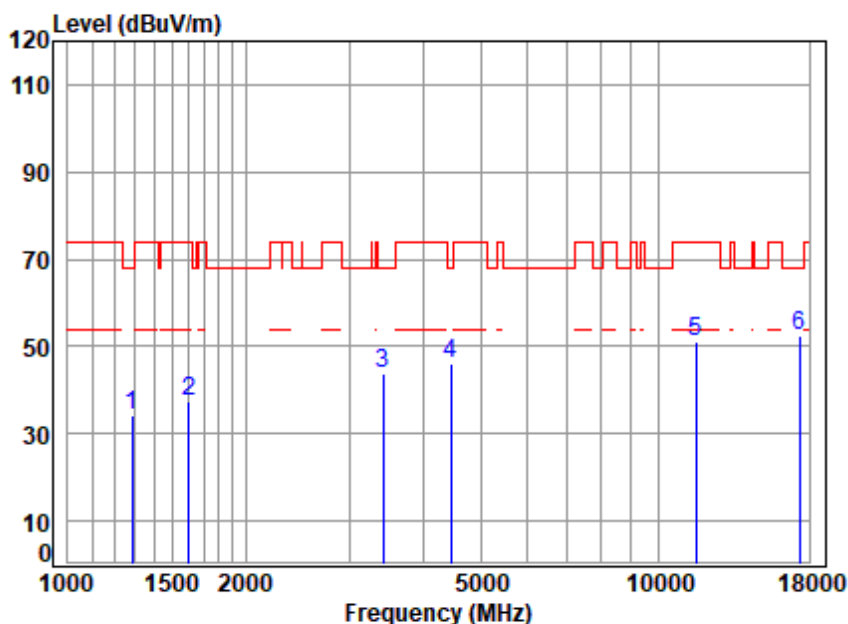


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5785 TX RSE
Note : 5G WIFI 11A

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 48.42 | 35.74 | 74.00 -38.26 peak |
| 2 | 1601.804 | 3.35 | 26.26 | 40.01 | 46.67 | 36.27 | 74.00 -37.73 peak |
| 3 | 3415.787 | 5.42 | 31.57 | 41.02 | 47.90 | 43.87 | 68.20 -24.33 peak |
| 4 | 4469.214 | 6.73 | 33.55 | 41.85 | 47.26 | 45.69 | 68.20 -22.51 peak |
| 5 | 11570.000 | 11.72 | 37.87 | 37.90 | 39.71 | 51.40 | 74.00 -22.60 peak |
| 6 | 17355.000 | 14.06 | 42.81 | 40.25 | 36.35 | 52.97 | 68.20 -15.23 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:middle

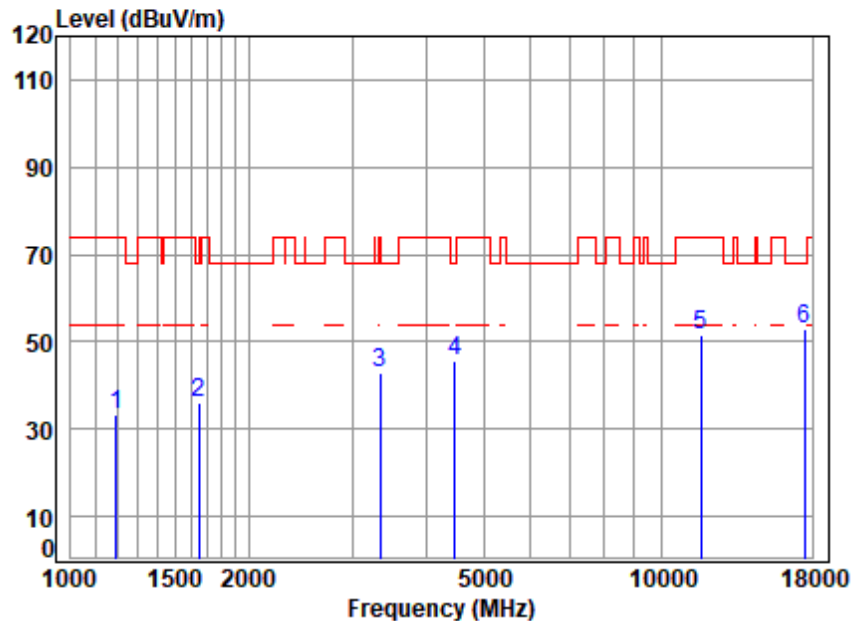


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5785 TX RSE
Note : 5G WIFI 11A

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Limit Level | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|-------------|------------|-------------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1285.904 | 2.92 | 24.96 | 39.82 | 46.04 | 34.10 | 68.20 | -34.10 peak |
| 2 | 1601.804 | 3.35 | 26.26 | 40.01 | 47.60 | 37.20 | 74.00 | -36.80 peak |
| 3 | 3425.675 | 5.43 | 31.59 | 41.02 | 47.67 | 43.67 | 68.20 | -24.53 peak |
| 4 | 4456.315 | 6.72 | 33.53 | 41.84 | 47.63 | 46.04 | 68.20 | -22.16 peak |
| 5 | 11570.000 | 11.72 | 37.87 | 37.90 | 39.52 | 51.21 | 74.00 | -22.79 peak |
| 6 | 17355.000 | 14.06 | 42.81 | 40.25 | 36.02 | 52.64 | 68.20 | -15.56 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High

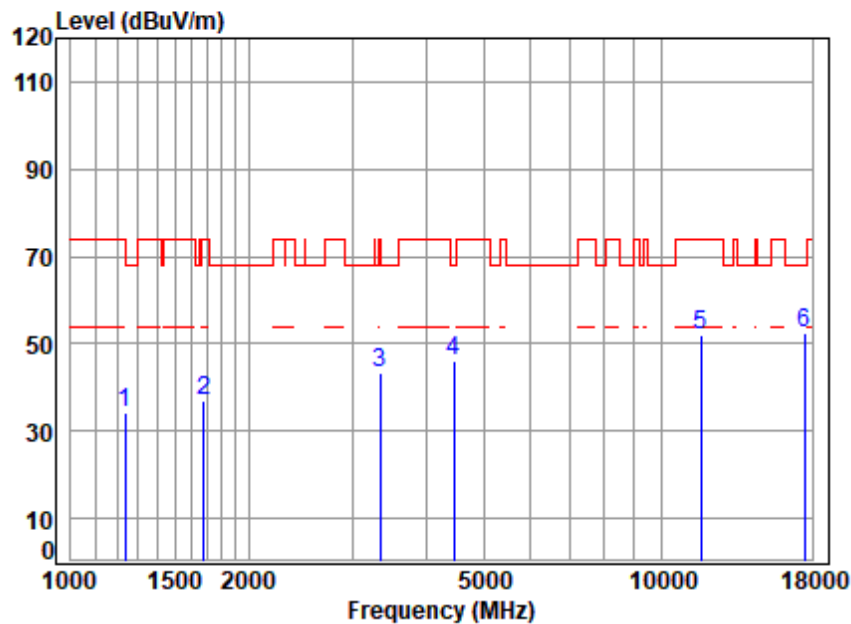


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5825 TX RSE
Note : 5G WIFI 11A

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------|-------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1192.811 | 2.75 | 24.56 | 39.75 | 45.92 | 33.48 | 74.00 | -40.52 peak |
| 2 | 1648.778 | 3.39 | 26.46 | 40.03 | 46.06 | 35.88 | 68.20 | -32.32 peak |
| 3 | 3347.371 | 5.33 | 31.47 | 40.97 | 46.90 | 42.73 | 74.00 | -31.27 peak |
| 4 | 4469.214 | 6.73 | 33.55 | 41.85 | 47.35 | 45.78 | 68.20 | -22.42 peak |
| 5 | 11650.000 | 11.82 | 37.84 | 37.94 | 40.01 | 51.73 | 74.00 | -22.27 peak |
| 6 | 17475.000 | 14.02 | 42.89 | 40.23 | 36.35 | 53.03 | 68.20 | -15.17 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High

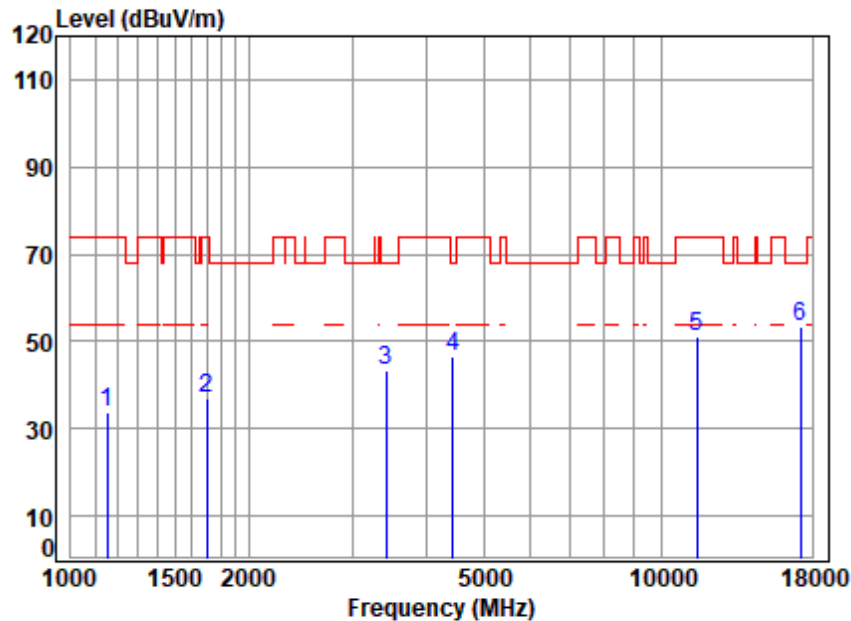


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5825 TX RSE
Note : 5G WIFI 11A

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1238.483 | 2.83 | 24.76 | 39.79 | 46.43 | 34.23 | 74.00 -39.77 peak |
| 2 | 1677.621 | 3.41 | 26.58 | 40.05 | 46.89 | 36.83 | 74.00 -37.17 peak |
| 3 | 3337.710 | 5.32 | 31.45 | 40.96 | 47.58 | 43.39 | 74.00 -30.61 peak |
| 4 | 4456.315 | 6.72 | 33.53 | 41.84 | 47.59 | 46.00 | 68.20 -22.20 peak |
| 5 | 11650.000 | 11.82 | 37.84 | 37.94 | 40.09 | 51.81 | 74.00 -22.19 peak |
| 6 | 17475.000 | 14.02 | 42.89 | 40.23 | 35.66 | 52.34 | 68.20 -15.86 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

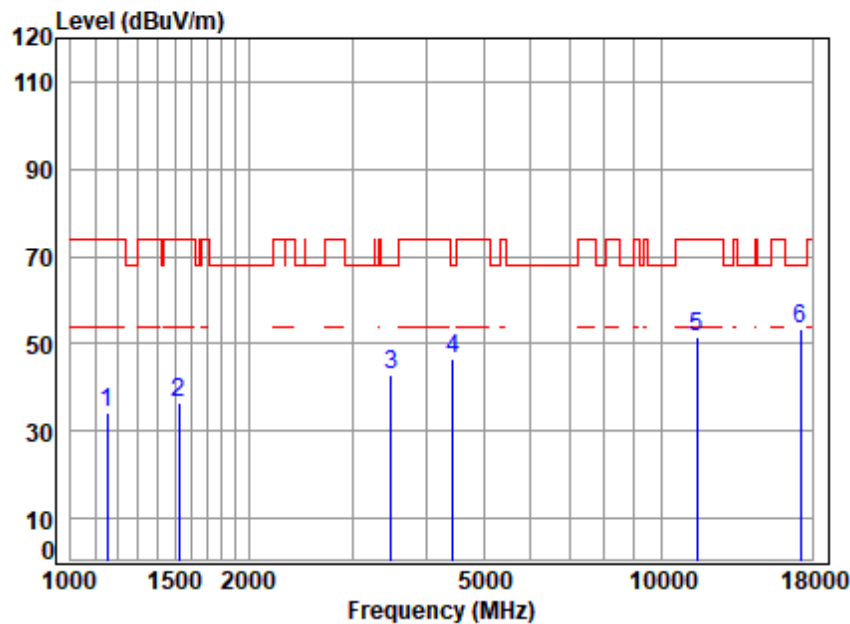


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5745 TX RSE
Note : 5G WIFI 11N20

| | Freq | Cable Loss | Ant Factor | Preamplifier Factor | Read Level | Limit Level | Over Limit | Remark |
|---|-----------|------------|------------|---------------------|------------|-------------|------------|-------------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 46.40 | 33.72 | 74.00 | -40.28 peak |
| 2 | 1702.042 | 3.43 | 26.68 | 40.06 | 46.72 | 36.77 | 74.00 | -37.23 peak |
| 3 | 3425.675 | 5.43 | 31.59 | 41.02 | 47.33 | 43.33 | 68.20 | -24.87 peak |
| 4 | 4430.628 | 6.70 | 33.48 | 41.81 | 48.20 | 46.57 | 68.20 | -21.63 peak |
| 5 | 11490.000 | 11.62 | 37.90 | 37.86 | 39.35 | 51.01 | 74.00 | -22.99 peak |
| 6 | 17235.000 | 14.09 | 42.74 | 40.28 | 36.70 | 53.25 | 68.20 | -14.95 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

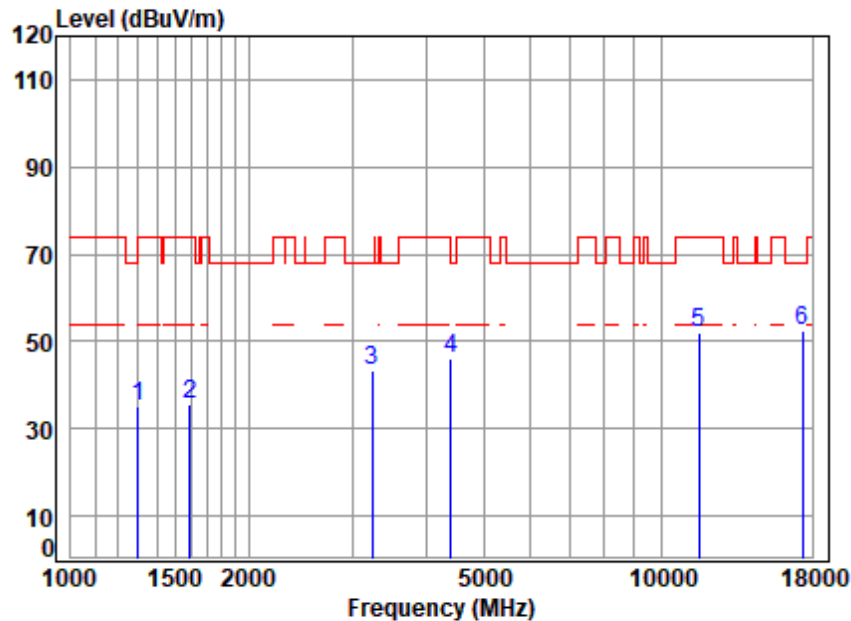


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5745 TX RSE
Note : 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1152.148 | 2.67 | 24.37 | 39.72 | 46.84 | 34.16 | 74.00 | -39.84 peak |
| 2 1525.000 | 3.28 | 25.91 | 39.97 | 47.44 | 36.66 | 74.00 | -37.34 peak |
| 3 3485.601 | 5.50 | 31.68 | 41.07 | 46.97 | 43.08 | 68.20 | -25.12 peak |
| 4 4430.628 | 6.70 | 33.48 | 41.81 | 48.03 | 46.40 | 68.20 | -21.80 peak |
| 5 11490.000 | 11.62 | 37.90 | 37.86 | 39.97 | 51.63 | 74.00 | -22.37 peak |
| 6 17235.000 | 14.09 | 42.74 | 40.28 | 36.87 | 53.42 | 68.20 | -14.78 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:middle

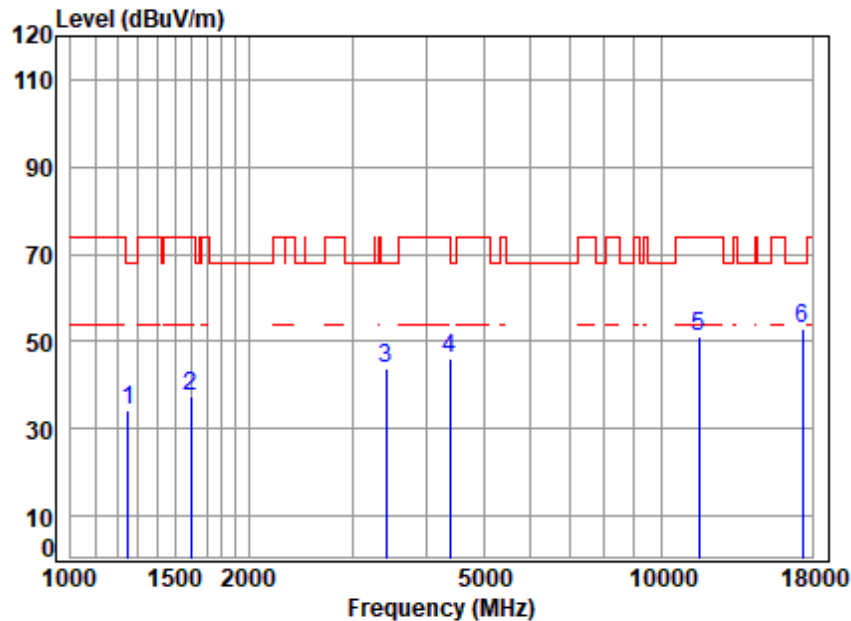


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5785 TX RSE
Note : 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1300.858 | 2.94 | 25.03 | 39.83 | 47.17 | 35.31 | 74.00 | -38.69 peak |
| 2 1592.571 | 3.34 | 26.22 | 40.00 | 46.19 | 35.75 | 74.00 | -38.25 peak |
| 3 3233.260 | 5.18 | 31.29 | 40.88 | 47.61 | 43.20 | 68.20 | -25.00 peak |
| 4 4405.090 | 6.67 | 33.44 | 41.79 | 47.79 | 46.11 | 68.20 | -22.09 peak |
| 5 11570.000 | 11.72 | 37.87 | 37.90 | 40.39 | 52.08 | 74.00 | -21.92 peak |
| 6 17355.000 | 14.06 | 42.81 | 40.25 | 35.97 | 52.59 | 68.20 | -15.61 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:middle

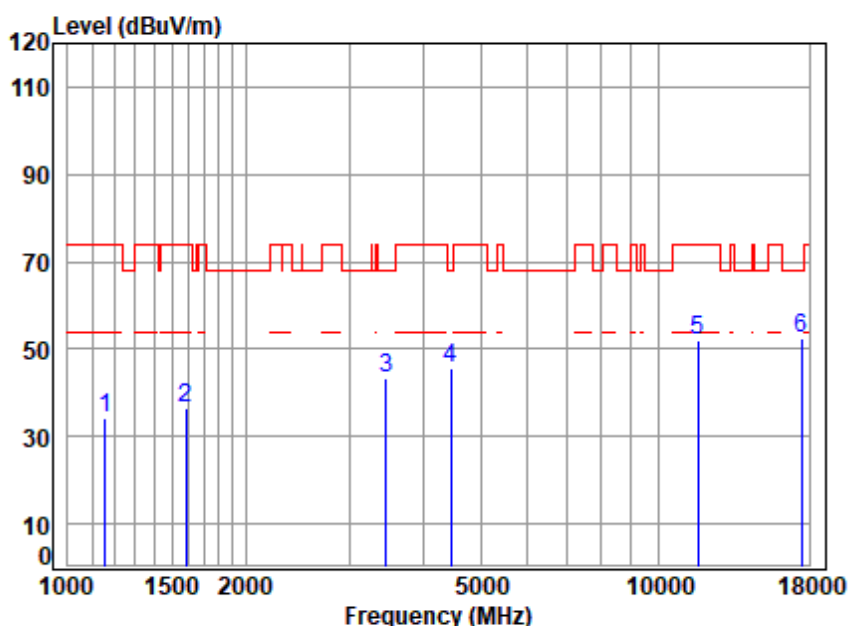


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5785 TX RSE
Note : 5G WIFI 11N20

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Limit Level | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|-------------|------------|-------------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1252.885 | 2.86 | 24.82 | 39.80 | 46.18 | 34.06 | 68.20 | -34.14 peak |
| 2 | 1597.181 | 3.35 | 26.24 | 40.01 | 47.63 | 37.21 | 74.00 | -36.79 peak |
| 3 | 3415.787 | 5.42 | 31.57 | 41.02 | 47.79 | 43.76 | 68.20 | -24.44 peak |
| 4 | 4392.376 | 6.66 | 33.42 | 41.78 | 47.81 | 46.11 | 74.00 | -27.89 peak |
| 5 | 11570.000 | 11.72 | 37.87 | 37.90 | 39.23 | 50.92 | 74.00 | -23.08 peak |
| 6 | 17355.000 | 14.06 | 42.81 | 40.25 | 36.37 | 52.99 | 68.20 | -15.21 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5825 TX RSE
Note : 5G WIFI 11N20

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit Line | Over Limit | Remark |
|---|-----------|---------------|---------------|------------------|---------------|--------|---------------|---------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1158.828 | 2.69 | 24.40 | 39.73 | 46.76 | 34.12 | 74.00 | -39.88 | peak |
| 2 | 1583.392 | 3.33 | 26.18 | 40.00 | 46.89 | 36.40 | 74.00 | -37.60 | peak |
| 3 | 3455.508 | 5.47 | 31.63 | 41.04 | 47.42 | 43.48 | 68.20 | -24.72 | peak |
| 4 | 4456.315 | 6.72 | 33.53 | 41.84 | 47.08 | 45.49 | 68.20 | -22.71 | peak |
| 5 | 11650.000 | 11.82 | 37.84 | 37.94 | 40.17 | 51.89 | 74.00 | -22.11 | peak |
| 6 | 17475.000 | 14.02 | 42.89 | 40.23 | 35.83 | 52.51 | 68.20 | -15.69 | peak |



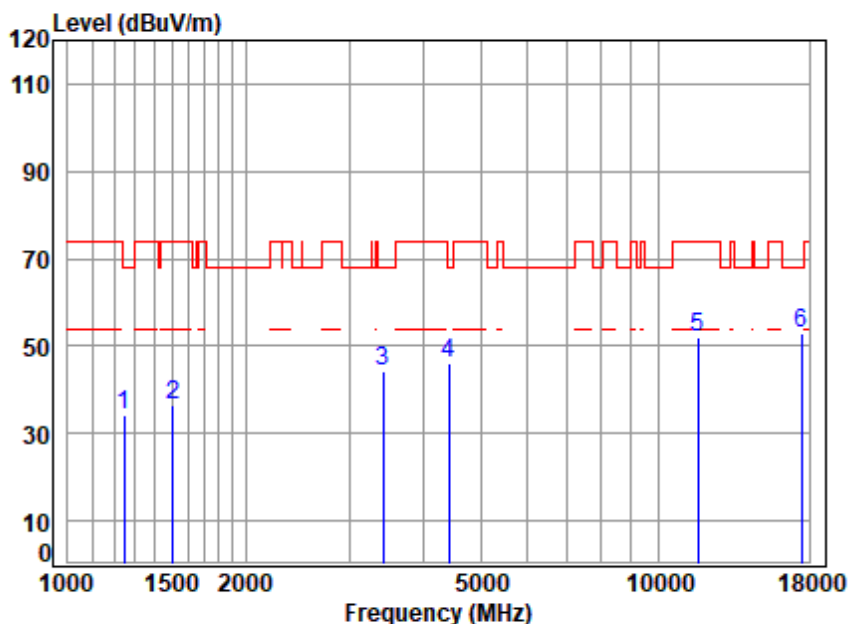
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Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High



Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5825 TX RSE
Note : 5G WIFI 11N20

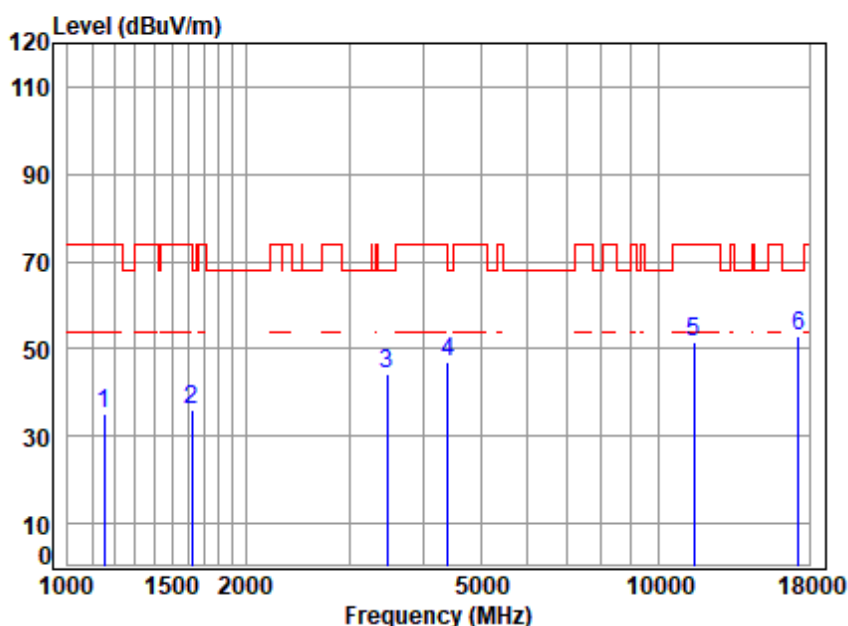
| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1245.663 | 2.85 | 24.79 | 39.79 | 46.25 | 34.10 | 68.20 | -34.10 peak |
| 2 1507.470 | 3.27 | 25.83 | 39.96 | 47.14 | 36.28 | 74.00 | -37.72 peak |
| 3 3415.787 | 5.42 | 31.57 | 41.02 | 48.06 | 44.03 | 68.20 | -24.17 peak |
| 4 4417.841 | 6.68 | 33.46 | 41.80 | 47.55 | 45.89 | 68.20 | -22.31 peak |
| 5 11650.000 | 11.82 | 37.84 | 37.94 | 40.25 | 51.97 | 74.00 | -22.03 peak |
| 6 17475.000 | 14.02 | 42.89 | 40.23 | 36.22 | 52.90 | 68.20 | -15.30 peak |



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Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5755 TX RSE
Note : 5G WIFI 11N40

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit Line | Over Limit | Remark |
|---|-----------|---------------|---------------|------------------|---------------|--------|---------------|---------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 47.89 | 35.21 | 74.00 | -38.79 | peak |
| 2 | 1620.431 | 3.36 | 26.34 | 40.02 | 46.46 | 36.14 | 74.00 | -37.86 | peak |
| 3 | 3475.541 | 5.49 | 31.66 | 41.06 | 48.03 | 44.12 | 68.20 | -24.08 | peak |
| 4 | 4405.090 | 6.67 | 33.44 | 41.79 | 48.48 | 46.80 | 68.20 | -21.40 | peak |
| 5 | 11510.000 | 11.64 | 37.90 | 37.87 | 39.78 | 51.45 | 74.00 | -22.55 | peak |
| 6 | 17265.000 | 14.08 | 42.76 | 40.28 | 36.31 | 52.87 | 68.20 | -15.33 | peak |

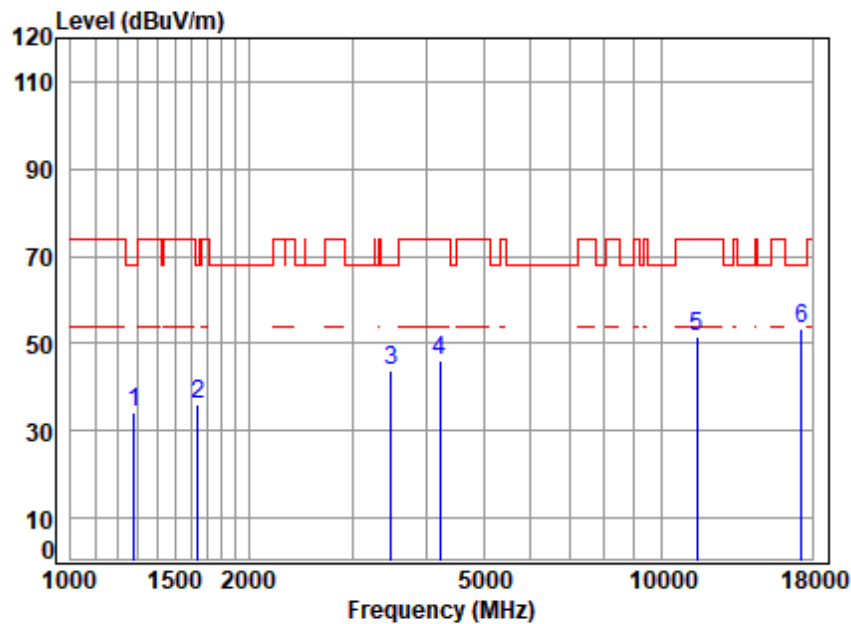


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Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

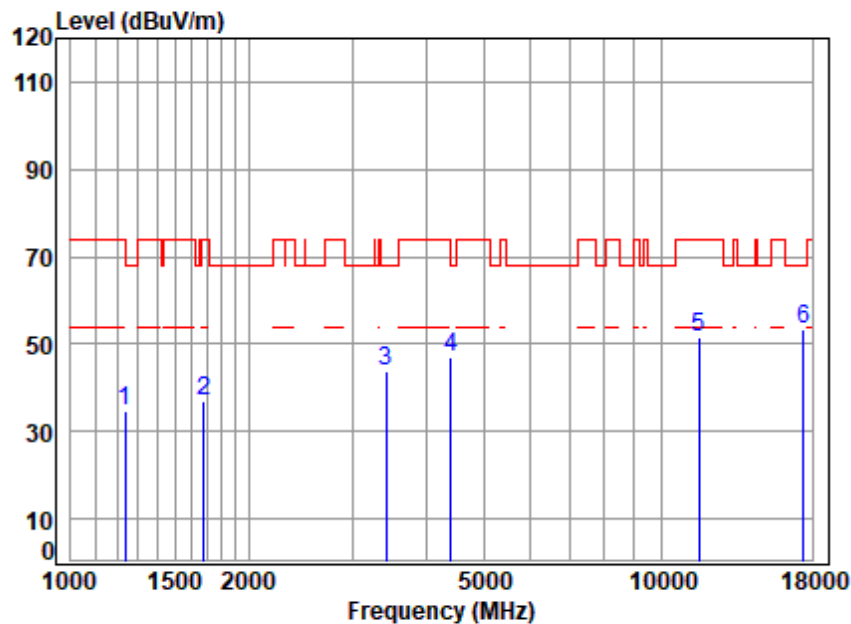


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5755 TX RSE
Note : 5G WIFI 11N40

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|--------|--------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1282.193 | 2.91 | 24.95 | 39.82 | 46.20 | 34.24 | 68.20 | -33.96 | peak |
| 2 | 1644.019 | 3.38 | 26.44 | 40.03 | 46.36 | 36.15 | 68.20 | -32.05 | peak |
| 3 | 3485.601 | 5.50 | 31.68 | 41.07 | 47.62 | 43.73 | 68.20 | -24.47 | peak |
| 4 | 4218.186 | 6.50 | 33.11 | 41.61 | 47.92 | 45.92 | 74.00 | -28.08 | peak |
| 5 | 11510.000 | 11.64 | 37.90 | 37.87 | 39.89 | 51.56 | 74.00 | -22.44 | peak |
| 6 | 17265.000 | 14.08 | 42.76 | 40.28 | 36.76 | 53.32 | 68.20 | -14.88 | peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High

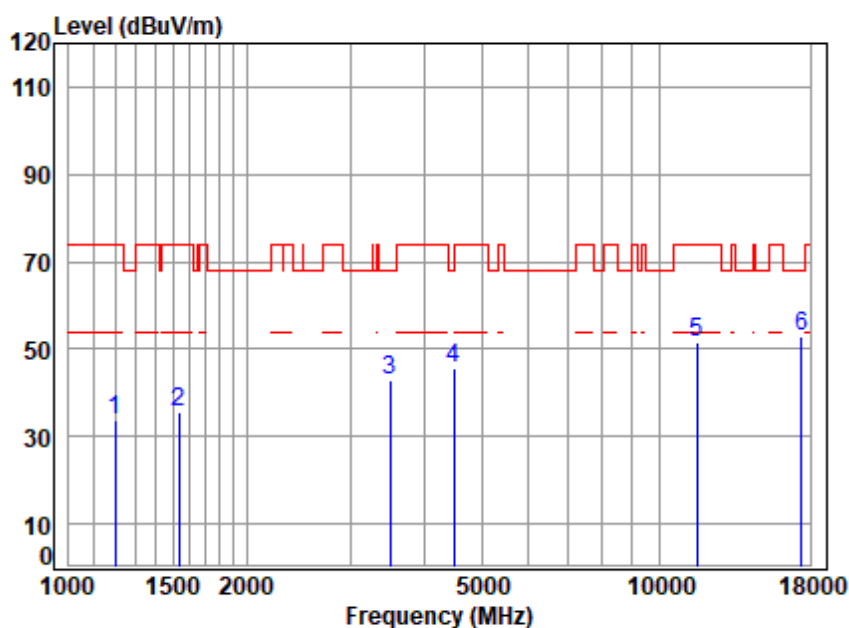


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5795 TX RSE
Note : 5G WIFI 11N40

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Limit Level | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|-------------|------------|-------------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1238.483 | 2.83 | 24.76 | 39.79 | 46.66 | 34.46 | 74.00 | -39.54 peak |
| 2 | 1682.477 | 3.42 | 26.60 | 40.05 | 46.97 | 36.94 | 74.00 | -37.06 peak |
| 3 | 3425.675 | 5.43 | 31.59 | 41.02 | 47.89 | 43.89 | 68.20 | -24.31 peak |
| 4 | 4405.090 | 6.67 | 33.44 | 41.79 | 48.83 | 47.15 | 68.20 | -21.05 peak |
| 5 | 11590.000 | 11.74 | 37.86 | 37.91 | 39.68 | 51.37 | 74.00 | -22.63 peak |
| 6 | 17385.000 | 14.05 | 42.83 | 40.25 | 36.69 | 53.32 | 68.20 | -14.88 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High



Site : chamber

Condition: 3m VERTICAL

Job No : 02456CR

Mode : 5795 TX RSE

Note : 5G WIFI 11N40

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit Line | Over Limit | Remark |
|---|-----------|---------------|---------------|------------------|---------------|--------|---------------|---------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1196.264 | 2.76 | 24.57 | 39.76 | 46.09 | 33.66 | 74.00 | -40.34 | peak |
| 2 | 1533.841 | 3.29 | 25.96 | 39.97 | 46.50 | 35.78 | 74.00 | -38.22 | peak |
| 3 | 3495.691 | 5.51 | 31.69 | 41.07 | 46.90 | 43.03 | 68.20 | -25.17 | peak |
| 4 | 4482.150 | 6.74 | 33.57 | 41.86 | 47.30 | 45.75 | 68.20 | -22.45 | peak |
| 5 | 11590.000 | 11.74 | 37.86 | 37.91 | 39.99 | 51.68 | 74.00 | -22.32 | peak |
| 6 | 17385.000 | 14.05 | 42.83 | 40.25 | 36.40 | 53.03 | 68.20 | -15.17 | peak |



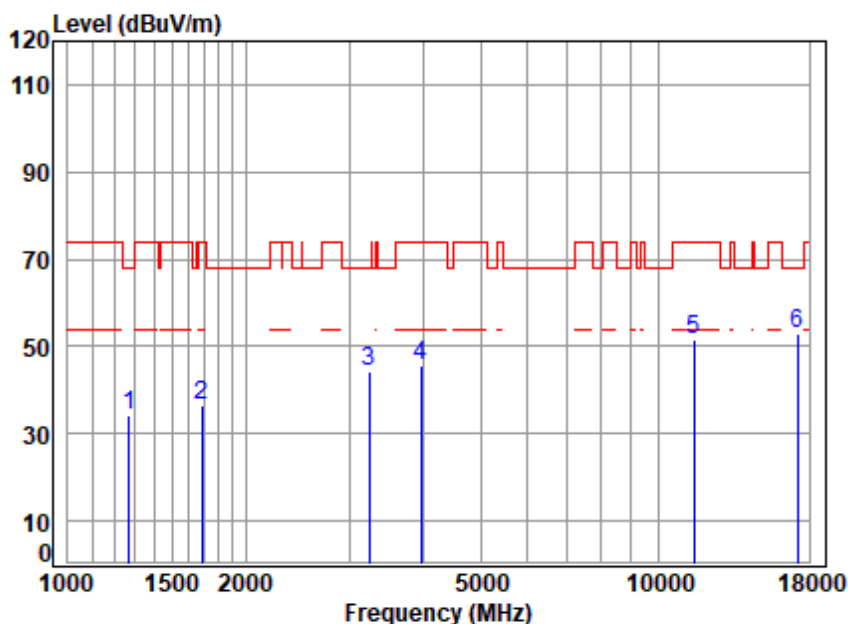
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Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low

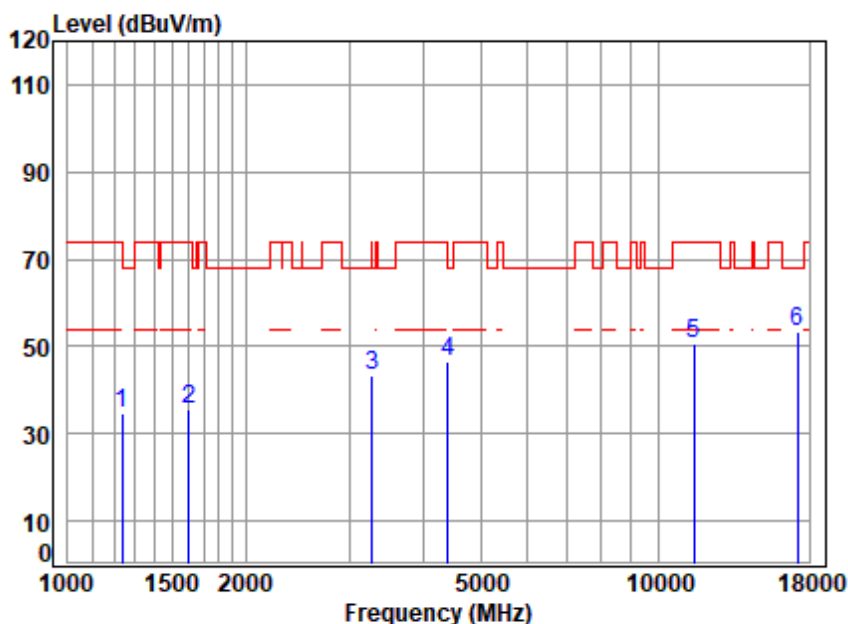


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5745 TX RSE
Note : 5G WIFI 11AC20

| | Freq | Cable Loss | Ant Factor | Preamplifier Factor | Read Level | Level | Limit | Over Limit | Remark |
|---|-----------|------------|------------|---------------------|------------|--------|--------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1271.123 | 2.89 | 24.90 | 39.81 | 46.13 | 34.11 | 68.20 | -34.09 | peak |
| 2 | 1687.347 | 3.42 | 26.62 | 40.05 | 46.29 | 36.28 | 74.00 | -37.72 | peak |
| 3 | 3242.619 | 5.19 | 31.30 | 40.89 | 48.75 | 44.35 | 68.20 | -23.85 | peak |
| 4 | 3958.309 | 6.22 | 32.62 | 41.37 | 48.36 | 45.83 | 74.00 | -28.17 | peak |
| 5 | 11490.000 | 11.62 | 37.90 | 37.86 | 39.80 | 51.46 | 74.00 | -22.54 | peak |
| 6 | 17235.000 | 14.09 | 42.74 | 40.28 | 36.55 | 53.10 | 68.20 | -15.10 | peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low

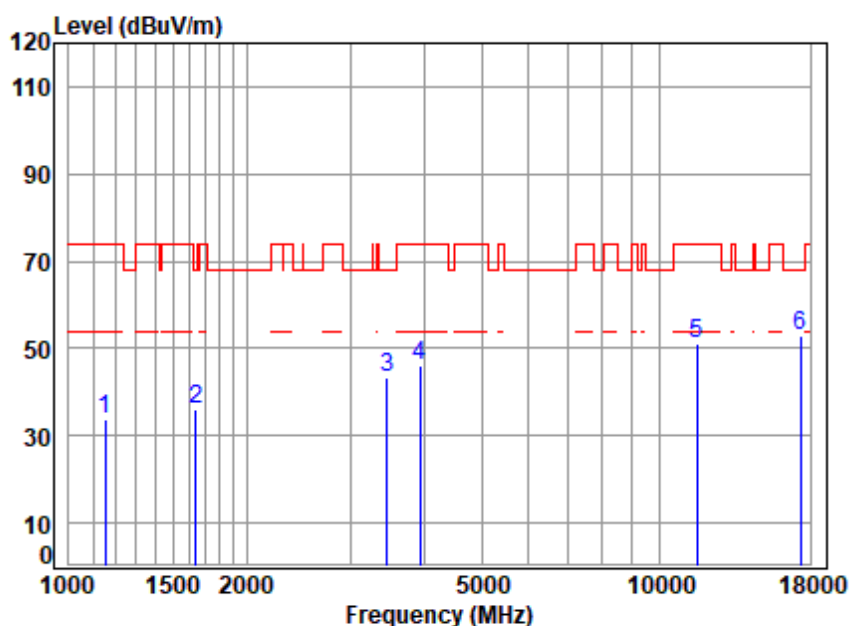


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5745 TX RSE
Note : 5G WIFI 11AC20

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Limit Level | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|-------------|------------|-------------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1234.909 | 2.83 | 24.74 | 39.78 | 47.01 | 34.80 | 74.00 | -39.20 peak |
| 2 | 1601.804 | 3.35 | 26.26 | 40.01 | 45.99 | 35.59 | 74.00 | -38.41 peak |
| 3 | 3280.326 | 5.24 | 31.36 | 40.92 | 47.72 | 43.40 | 68.20 | -24.80 peak |
| 4 | 4405.090 | 6.67 | 33.44 | 41.79 | 48.04 | 46.36 | 68.20 | -21.84 peak |
| 5 | 11490.000 | 11.62 | 37.90 | 37.86 | 39.05 | 50.71 | 74.00 | -23.29 peak |
| 6 | 17235.000 | 14.09 | 42.74 | 40.28 | 36.73 | 53.28 | 68.20 | -14.92 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle

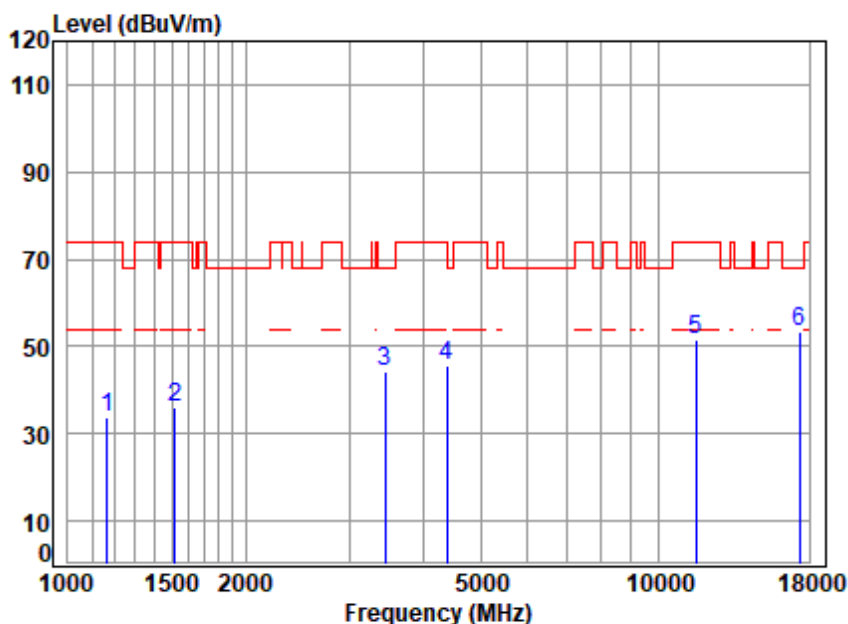


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5785 TX RSE
Note : 5G WIFI 11AC20

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Limit Level | Limit Line | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|-------------|------------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 46.39 | 33.71 | 74.00 | -40.29 | peak |
| 2 | 1644.019 | 3.38 | 26.44 | 40.03 | 46.06 | 35.85 | 68.20 | -32.35 | peak |
| 3 | 3455.508 | 5.47 | 31.63 | 41.04 | 47.12 | 43.18 | 68.20 | -25.02 | peak |
| 4 | 3935.493 | 6.19 | 32.58 | 41.36 | 48.64 | 46.05 | 74.00 | -27.95 | peak |
| 5 | 11570.000 | 11.72 | 37.87 | 37.90 | 39.50 | 51.19 | 74.00 | -22.81 | peak |
| 6 | 17355.000 | 14.06 | 42.81 | 40.25 | 36.39 | 53.01 | 68.20 | -15.19 | peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:middle

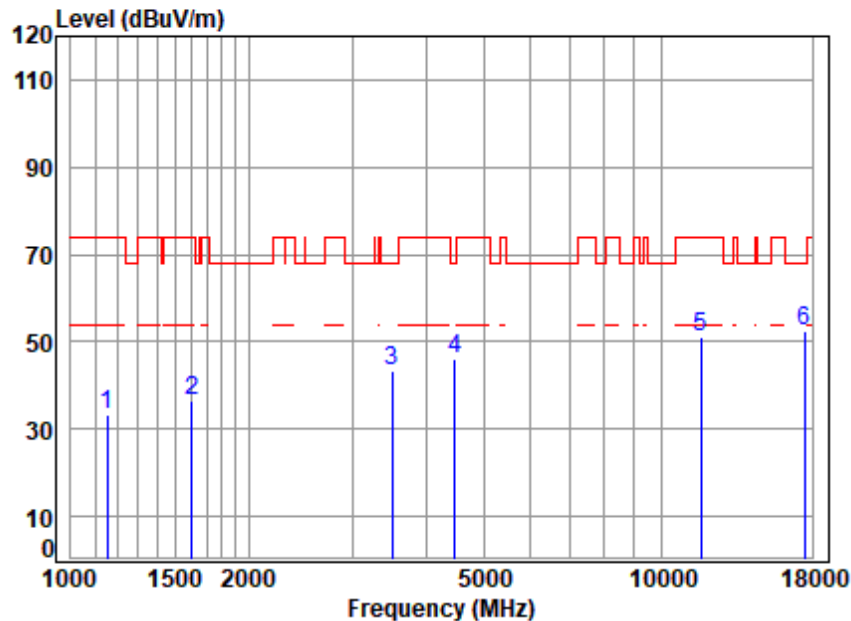


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5785 TX RSE
Note : 5G WIFI 11AC20

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Limit Level | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|-------------|------------|-------------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1165.546 | 2.70 | 24.43 | 39.73 | 46.26 | 33.66 | 74.00 | -40.34 peak |
| 2 | 1520.598 | 3.28 | 25.89 | 39.96 | 46.97 | 36.18 | 74.00 | -37.82 peak |
| 3 | 3445.535 | 5.45 | 31.62 | 41.04 | 48.18 | 44.21 | 68.20 | -23.99 peak |
| 4 | 4379.699 | 6.65 | 33.39 | 41.77 | 47.17 | 45.44 | 74.00 | -28.56 peak |
| 5 | 11570.000 | 11.72 | 37.87 | 37.90 | 39.82 | 51.51 | 74.00 | -22.49 peak |
| 6 | 17355.000 | 14.06 | 42.81 | 40.25 | 36.78 | 53.40 | 68.20 | -14.80 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High

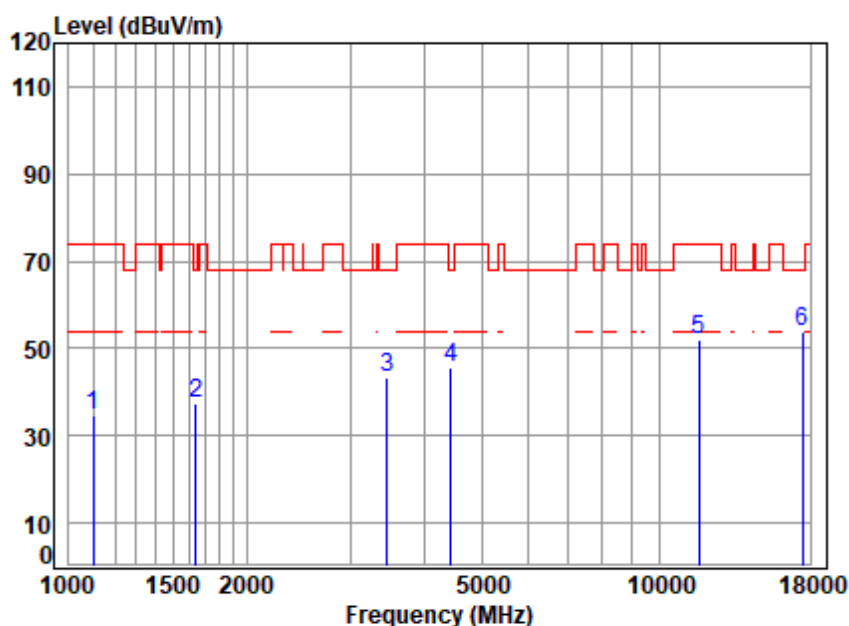


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5825 TX RSE
Note : 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1152.148 | 2.67 | 24.37 | 39.72 | 46.19 | 33.51 | 74.00 | -40.49 peak |
| 2 1601.804 | 3.35 | 26.26 | 40.01 | 46.96 | 36.56 | 74.00 | -37.44 peak |
| 3 3495.691 | 5.51 | 31.69 | 41.07 | 47.28 | 43.41 | 68.20 | -24.79 peak |
| 4 4469.214 | 6.73 | 33.55 | 41.85 | 47.69 | 46.12 | 68.20 | -22.08 peak |
| 5 11650.000 | 11.82 | 37.84 | 37.94 | 39.58 | 51.30 | 74.00 | -22.70 peak |
| 6 17475.000 | 14.02 | 42.89 | 40.23 | 35.89 | 52.57 | 68.20 | -15.63 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High

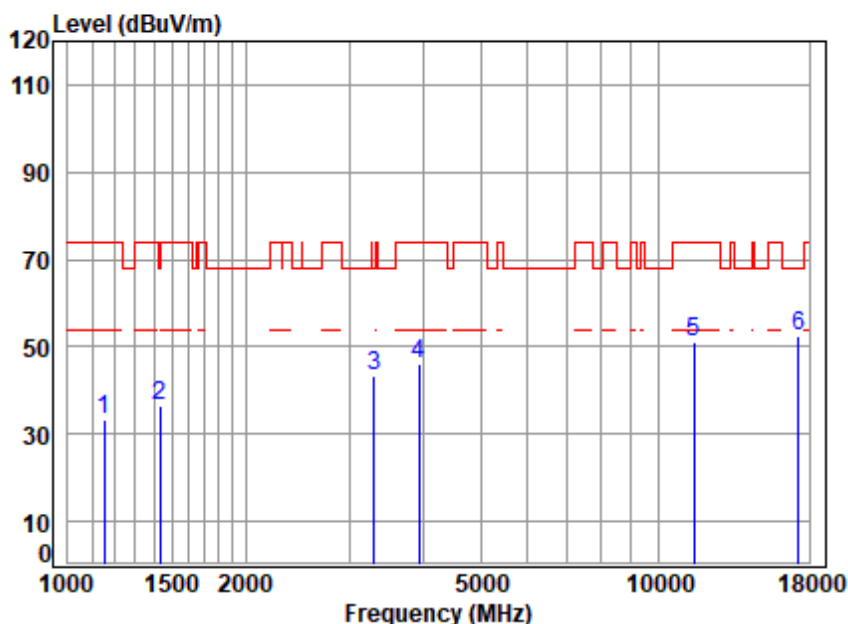


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5825 TX RSE
Note : 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1100.079 | 2.57 | 24.12 | 39.68 | 47.48 | 34.49 | 74.00 -39.51 peak |
| 2 | 1639.274 | 3.38 | 26.42 | 40.03 | 47.81 | 37.58 | 68.20 -30.62 peak |
| 3 | 3455.508 | 5.47 | 31.63 | 41.04 | 47.45 | 43.51 | 68.20 -24.69 peak |
| 4 | 4443.453 | 6.71 | 33.50 | 41.82 | 47.39 | 45.78 | 68.20 -22.42 peak |
| 5 | 11650.000 | 11.82 | 37.84 | 37.94 | 40.51 | 52.23 | 74.00 -21.77 peak |
| 6 | 17475.000 | 14.02 | 42.89 | 40.23 | 37.01 | 53.69 | 68.20 -14.51 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low

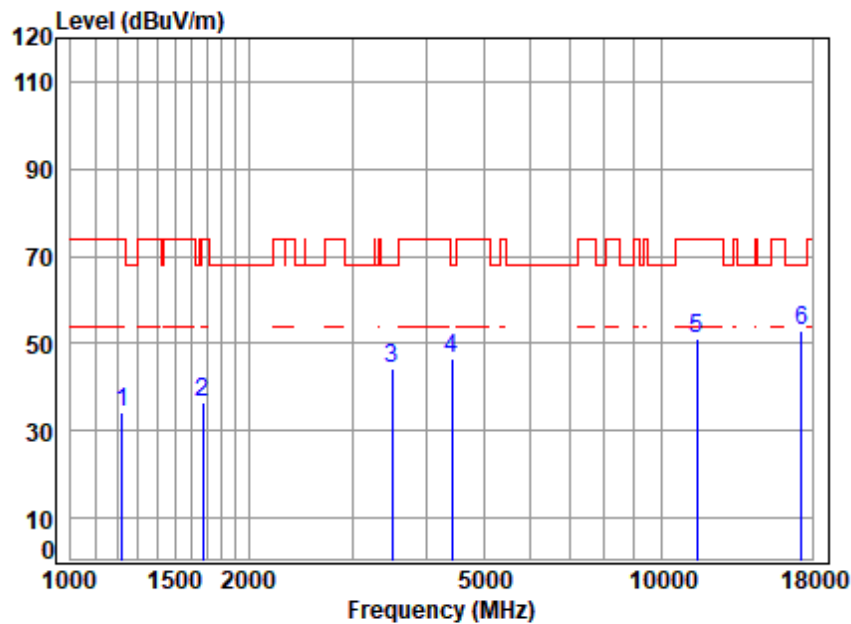


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5755 TX RSE
Note : 5G WIFI 11AC40

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Limit Level | Limit Line | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|-------------|------------|------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 46.08 | 33.40 | 74.00 | -40.60 | peak |
| 2 | 1435.189 | 3.16 | 25.56 | 39.91 | 47.51 | 36.32 | 74.00 | -37.68 | peak |
| 3 | 3299.344 | 5.27 | 31.39 | 40.93 | 47.82 | 43.55 | 68.20 | -24.65 | peak |
| 4 | 3935.493 | 6.19 | 32.58 | 41.36 | 48.66 | 46.07 | 74.00 | -27.93 | peak |
| 5 | 11510.000 | 11.64 | 37.90 | 37.87 | 39.57 | 51.24 | 74.00 | -22.76 | peak |
| 6 | 17265.000 | 14.08 | 42.76 | 40.28 | 36.03 | 52.59 | 68.20 | -15.61 | peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low

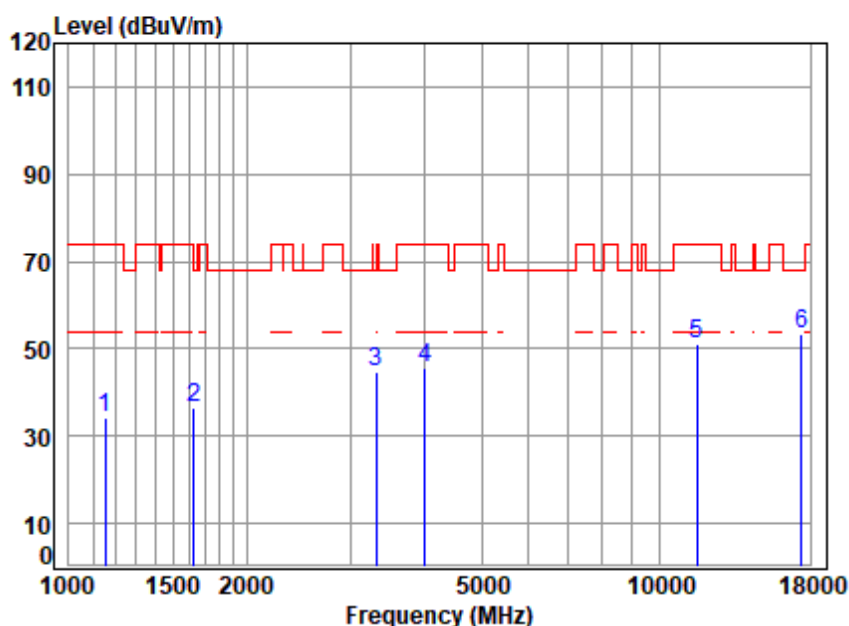


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5755 TX RSE
Note : 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1220.714 | 2.80 | 24.68 | 39.77 | 46.58 | 34.29 | 74.00 -39.71 peak |
| 2 | 1672.779 | 3.41 | 26.56 | 40.05 | 46.65 | 36.57 | 74.00 -37.43 peak |
| 3 | 3495.691 | 5.51 | 31.69 | 41.07 | 48.18 | 44.31 | 68.20 -23.89 peak |
| 4 | 4417.841 | 6.68 | 33.46 | 41.80 | 48.39 | 46.73 | 68.20 -21.47 peak |
| 5 | 11510.000 | 11.64 | 37.90 | 37.87 | 39.42 | 51.09 | 74.00 -22.91 peak |
| 6 | 17265.000 | 14.08 | 42.76 | 40.28 | 36.39 | 52.95 | 68.20 -15.25 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High



```
Site      : chamber
Condition: 3m HORIZONTAL
Job No    : 02456CR
Mode      : 5795 TX RSE
Note      : 5G WIFI 11AC40
```

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Level | Limit Line | Over Limit | Remark |
|---|-----------|---------------|---------------|------------------|---------------|--------|---------------|---------------|--------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 | 1152.148 | 2.67 | 24.37 | 39.72 | 46.84 | 34.16 | 74.00 | -39.84 | peak |
| 2 | 1629.825 | 3.37 | 26.38 | 40.02 | 46.64 | 36.37 | 68.20 | -31.83 | peak |
| 3 | 3318.471 | 5.29 | 31.42 | 40.95 | 48.78 | 44.54 | 68.20 | -23.66 | peak |
| 4 | 4004.339 | 6.28 | 32.71 | 41.40 | 47.84 | 45.43 | 74.00 | -28.57 | peak |
| 5 | 11590.000 | 11.74 | 37.86 | 37.91 | 39.47 | 51.16 | 74.00 | -22.84 | peak |
| 6 | 17385.000 | 14.05 | 42.83 | 40.25 | 36.55 | 53.18 | 68.20 | -15.02 | peak |



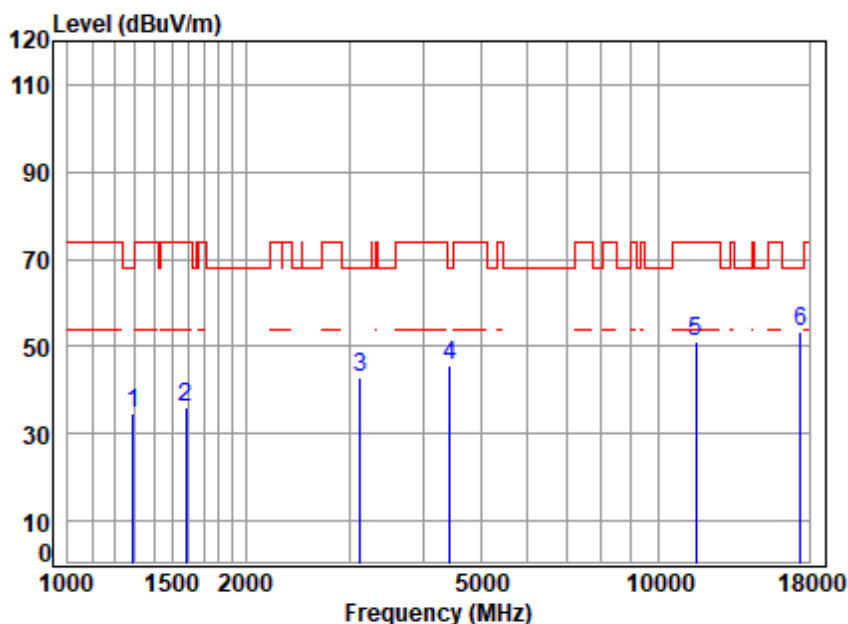
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 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

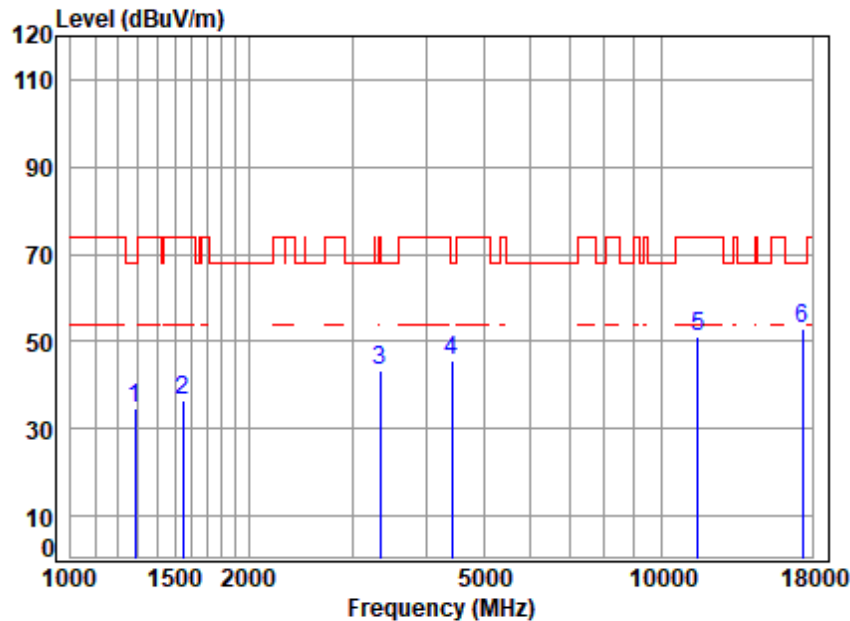


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5795 TX RSE
Note : 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------|-----------|--------|--------|-------|--------|--------|-------------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1289.627 | 2.92 | 24.98 | 39.82 | 46.72 | 34.80 | 68.20 -33.40 peak |
| 2 | 1587.975 | 3.34 | 26.20 | 40.00 | 46.57 | 36.11 | 74.00 -37.89 peak |
| 3 | 3123.039 | 5.03 | 31.11 | 40.80 | 47.34 | 42.68 | 68.20 -25.52 peak |
| 4 | 4443.453 | 6.71 | 33.50 | 41.82 | 47.21 | 45.60 | 68.20 -22.60 peak |
| 5 | 11590.000 | 11.74 | 37.86 | 37.91 | 39.25 | 50.94 | 74.00 -23.06 peak |
| 6 | 17385.000 | 14.05 | 42.83 | 40.25 | 36.55 | 53.18 | 68.20 -15.02 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle

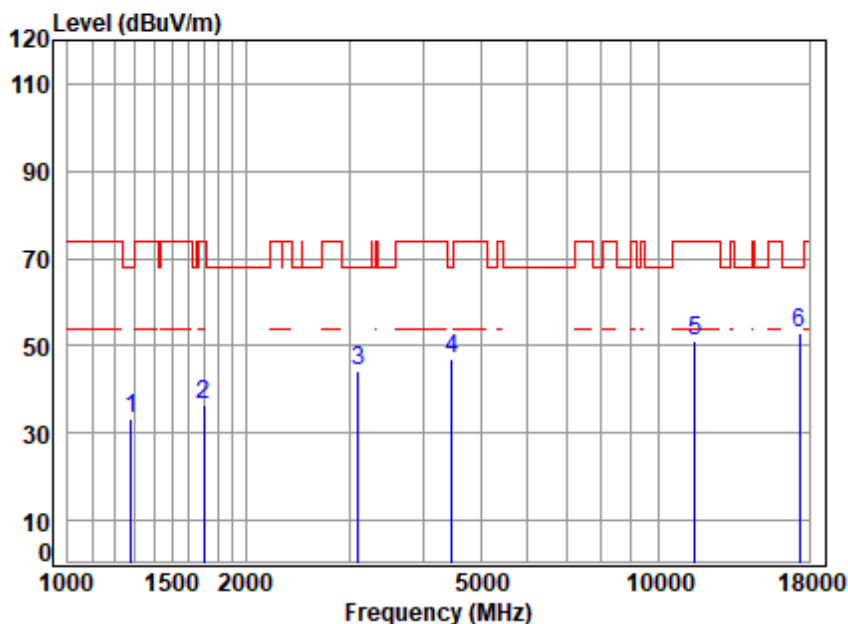


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5775 TX RSE
Note : 5G WIFI 11AC80

| | Freq | Cable Loss | Ant Factor | Preamp Factor | Read Level | Limit Level | Over Limit | Remark |
|---|-----------|------------|------------|---------------|------------|-------------|------------|-------------|
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 1285.904 | 2.92 | 24.96 | 39.82 | 46.46 | 34.52 | 68.20 | -33.68 peak |
| 2 | 1547.199 | 3.30 | 26.02 | 39.98 | 47.35 | 36.69 | 74.00 | -37.31 peak |
| 3 | 3347.371 | 5.33 | 31.47 | 40.97 | 47.49 | 43.32 | 74.00 | -30.68 peak |
| 4 | 4417.841 | 6.68 | 33.46 | 41.80 | 47.06 | 45.40 | 68.20 | -22.80 peak |
| 5 | 11550.000 | 11.69 | 37.88 | 37.89 | 39.38 | 51.06 | 74.00 | -22.94 peak |
| 6 | 17325.000 | 14.07 | 42.80 | 40.26 | 36.44 | 53.05 | 68.20 | -15.15 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle



Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5775 TX RSE
Note : 5G WIFI 11AC80

| | Cable | Ant | Preamp | Read | Limit | Over | |
|-------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 1278.492 | 2.91 | 24.93 | 39.81 | 45.12 | 33.15 | 68.20 | -35.05 peak |
| 2 1702.042 | 3.43 | 26.68 | 40.06 | 46.33 | 36.38 | 74.00 | -37.62 peak |
| 3 3105.037 | 5.01 | 31.08 | 40.78 | 49.15 | 44.46 | 68.20 | -23.74 peak |
| 4 4469.214 | 6.73 | 33.55 | 41.85 | 48.77 | 47.20 | 68.20 | -21.00 peak |
| 5 11550.000 | 11.69 | 37.88 | 37.89 | 39.37 | 51.05 | 74.00 | -22.95 peak |
| 6 17325.000 | 14.07 | 42.80 | 40.26 | 36.29 | 52.90 | 68.20 | -15.30 peak |



7.10 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)
Test Method: KDB 789033 D02 II G
Limit:

| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|----------------|----------------------------------|------------------------------|
| 0.009-0.490 | 2400/F(kHz) | 300 |
| 0.490-1.705 | 24000/F(kHz) | 30 |
| 1.705-30.0 | 30 | 30 |
| 30-88 | 100 | 3 |
| 88-216 | 150 | 3 |
| 216-960 | 200 | 3 |
| Above 960 | 500 | 3 |

*(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 23.5 °C

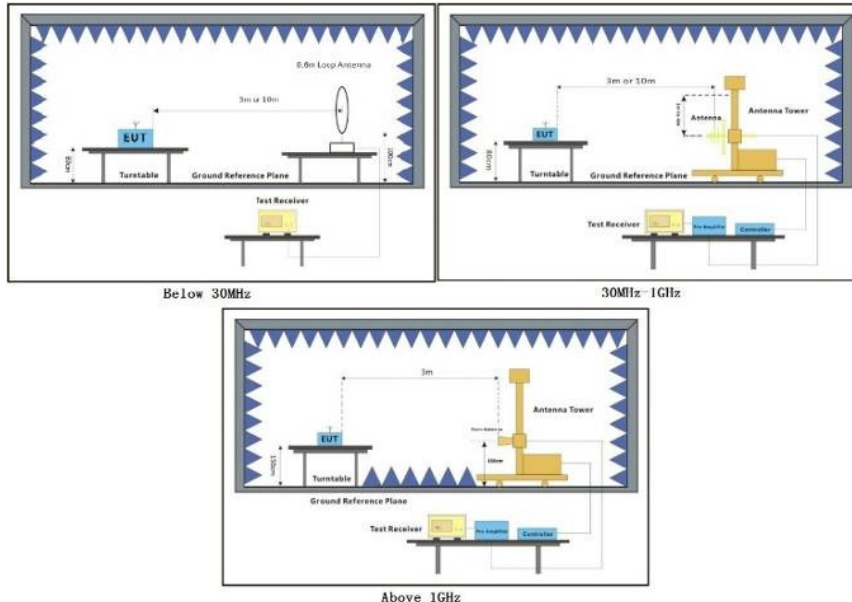
Humidity: 56.3 % RH

Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|-----------------------|-----------|--|
| Final test | 03 | TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Final test | 04 | TX mode (U-NII-3)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |

7.10.3 Test Setup Diagram



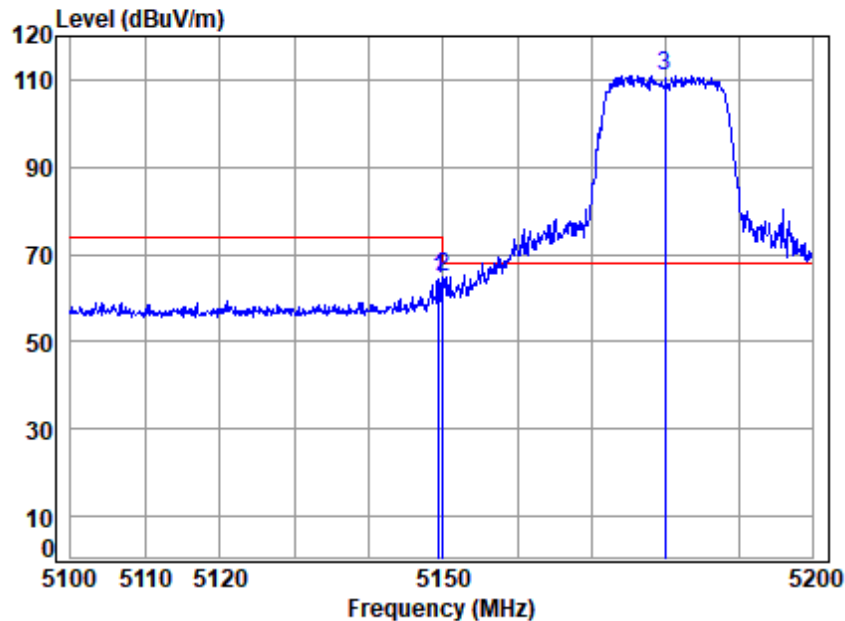
7.10.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

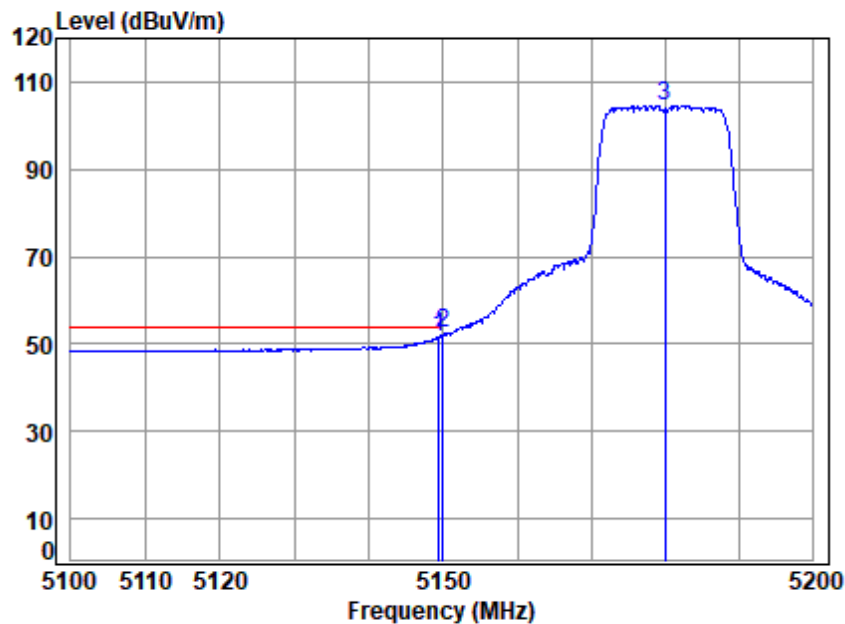


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11A

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5149.458 | 7.57 | 34.32 | 42.32 | 64.57 | 64.14 | 74.00 | -9.86 peak |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 65.11 | 64.68 | 74.00 | -9.32 peak |
| 3 * | 5180.000 | 7.63 | 34.35 | 42.32 | 111.17 | 110.83 | 68.20 | 42.63 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

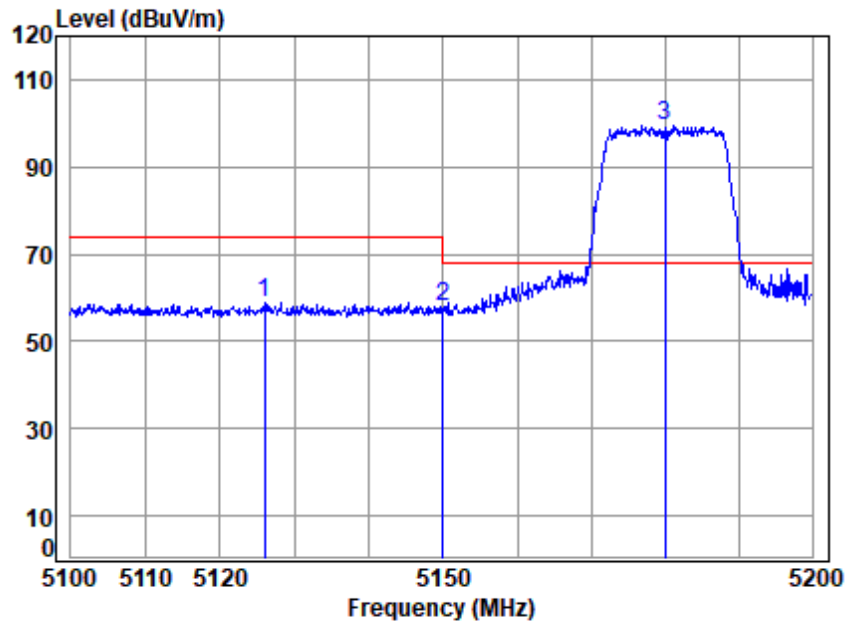


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11A

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|--------|---------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5149.458 | 7.57 | 34.32 | 42.32 | 52.04 | 51.61 | 54.00 | -2.39 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 52.70 | 52.27 | 54.00 | -1.73 Average |
| 3 | 5180.000 | 7.63 | 34.35 | 42.32 | 104.80 | 104.46 | ----- | ----- Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

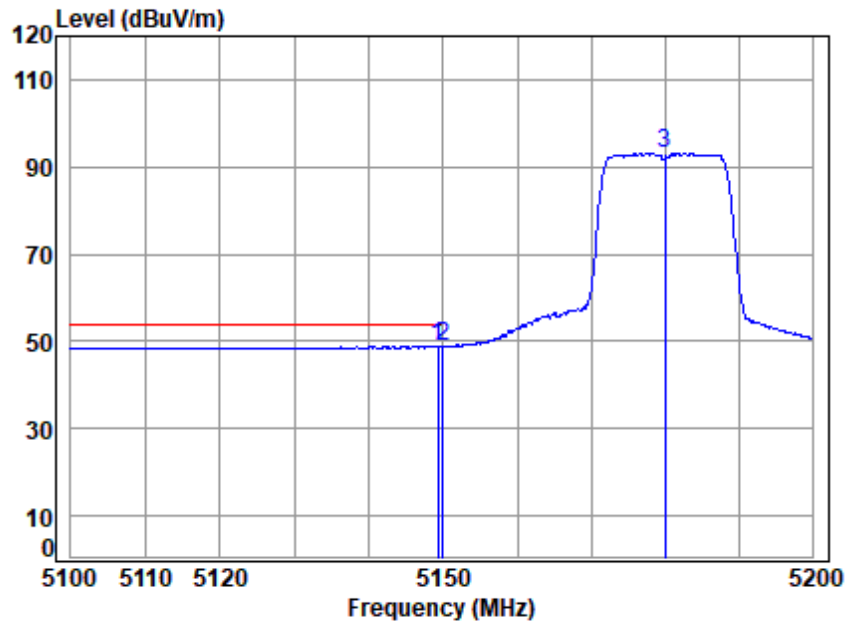


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11A

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|-----|----------|-------|--------|--------|-------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5125.913 | 7.53 | 34.30 | 42.31 | 59.17 | 58.69 | 74.00 | -15.31 Peak |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 58.35 | 57.92 | 74.00 | -16.08 Peak |
| 3 * | 5180.000 | 7.63 | 34.35 | 42.32 | 99.89 | 99.55 | 68.20 | 31.35 Peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

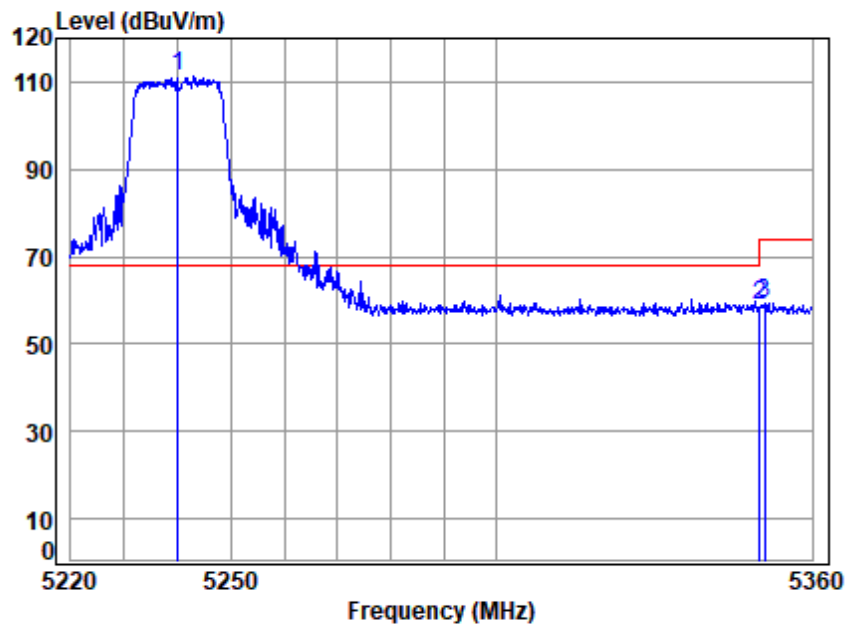


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11A

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5149.257 | 7.57 | 34.32 | 42.32 | 49.28 | 48.85 | 54.00 | -5.15 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 49.30 | 48.87 | 54.00 | -5.13 Average |
| 3 | 5180.000 | 7.63 | 34.35 | 42.32 | 93.38 | 93.04 | ----- | ----- Average |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High



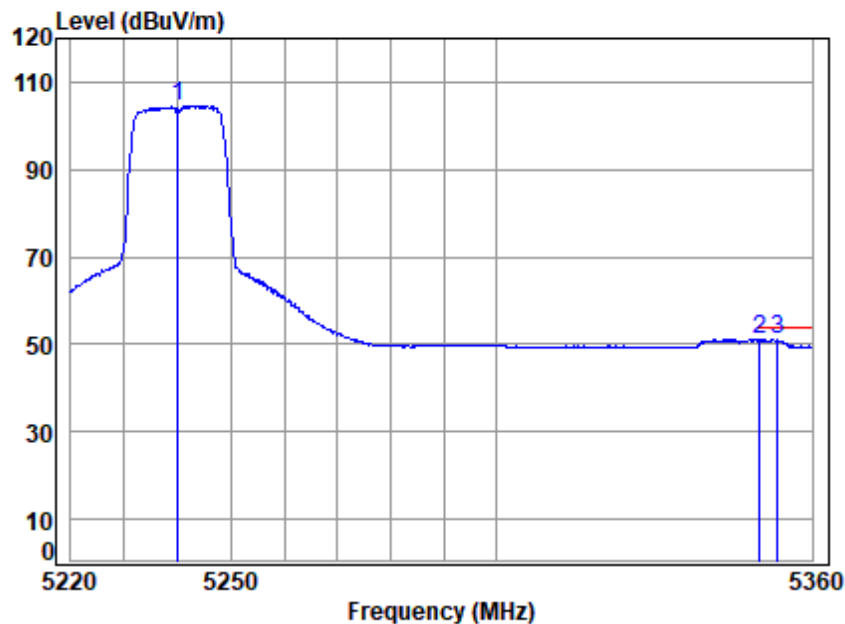
Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11A

| | Cable | Ant | Preamp | Read | Limit | Over | |
|--------------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 * 5240.000 | 7.73 | 34.40 | 42.33 | 111.44 | 111.24 | 68.20 | 43.04 peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 58.61 | 58.67 | 74.00 | -15.33 peak |
| 3 5350.929 | 7.93 | 34.48 | 42.34 | 59.37 | 59.44 | 74.00 | -14.56 peak |



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Test Mode: 03; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High

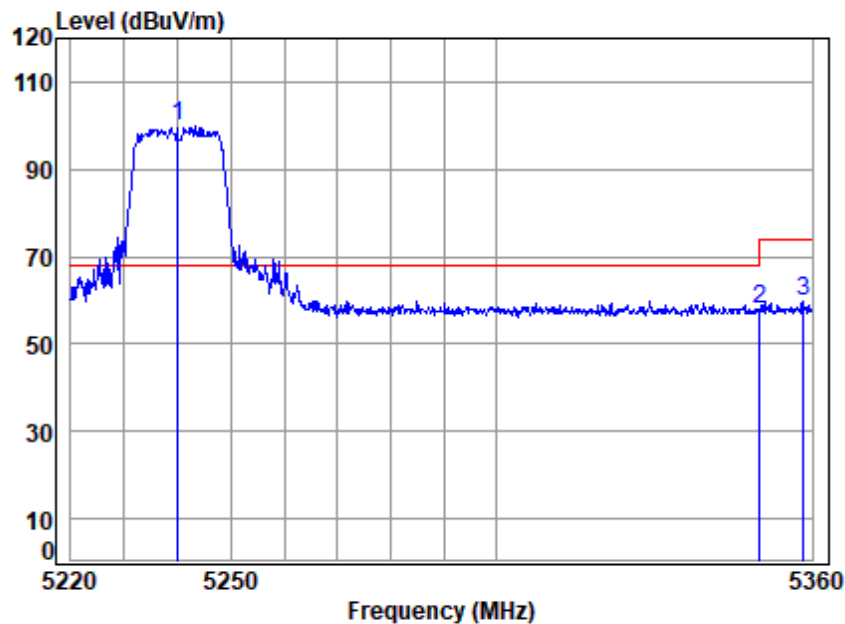


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11A

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|--------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5240.000 | 7.73 | 34.40 | 42.33 | 104.69 | 104.49 | ----- | ----- Average |
| 2 | 5350.020 | 7.92 | 34.48 | 42.34 | 50.85 | 50.91 | 54.00 | -3.09 Average |
| 3 | 5353.337 | 7.93 | 34.49 | 42.34 | 50.96 | 51.04 | 54.00 | -2.96 Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High



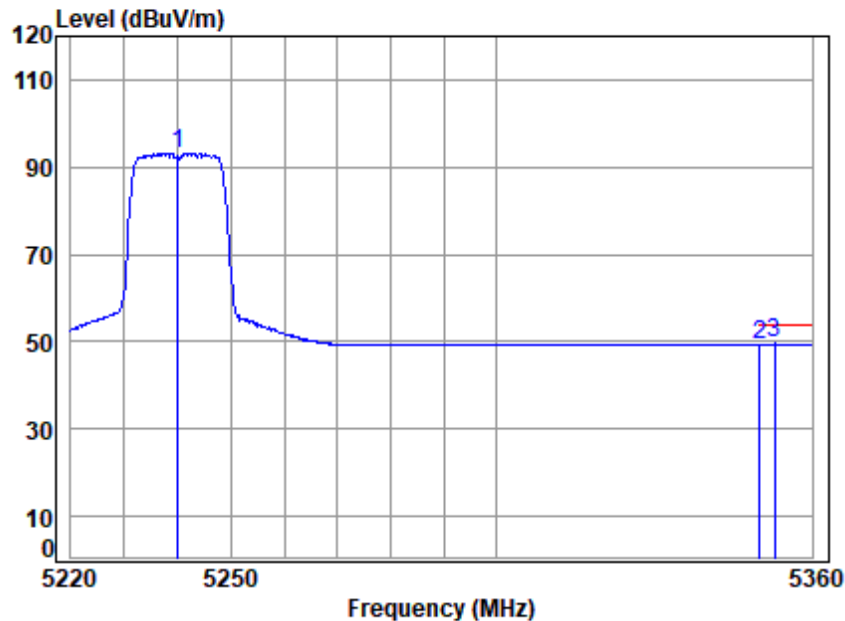
Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11A

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|--------------|-------|--------|--------|-------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 * 5240.000 | 7.73 | 34.40 | 42.33 | 99.99 | 99.79 | 68.20 | 31.59 | Peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 57.98 | 58.04 | 74.00 | -15.96 | Peak |
| 3 5358.440 | 7.94 | 34.49 | 42.34 | 59.48 | 59.57 | 74.00 | -14.43 | Peak |



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Test Mode: 03; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High

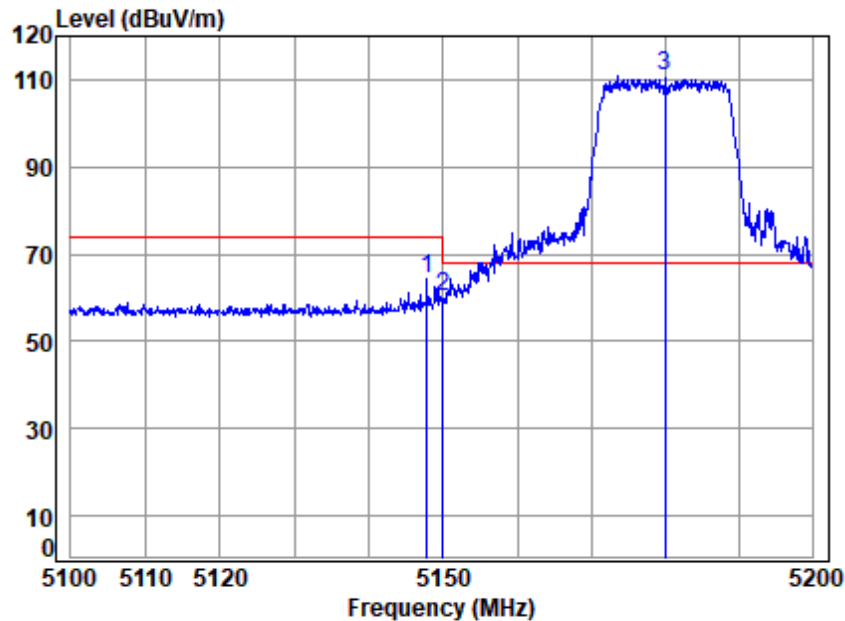


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11A

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|-------|--------|--------|-------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5240.000 | 7.73 | 34.40 | 42.33 | 93.25 | 93.05 | ----- | ----- |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 49.42 | 49.48 | 54.00 | -4.52 |
| 3 5352.912 | 7.93 | 34.49 | 42.34 | 49.44 | 49.52 | 54.00 | -4.48 |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

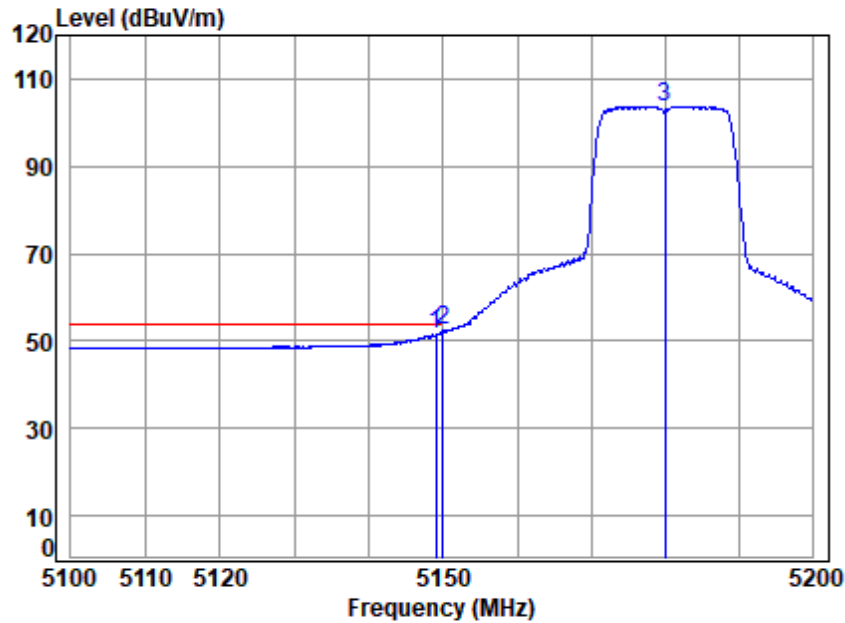


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11N20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5147.758 | 7.57 | 34.32 | 42.32 | 64.60 | 64.17 | 74.00 | -9.83 peak |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 60.61 | 60.18 | 74.00 | -13.82 peak |
| 3 * | 5180.000 | 7.63 | 34.35 | 42.32 | 111.19 | 110.85 | 68.20 | 42.65 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

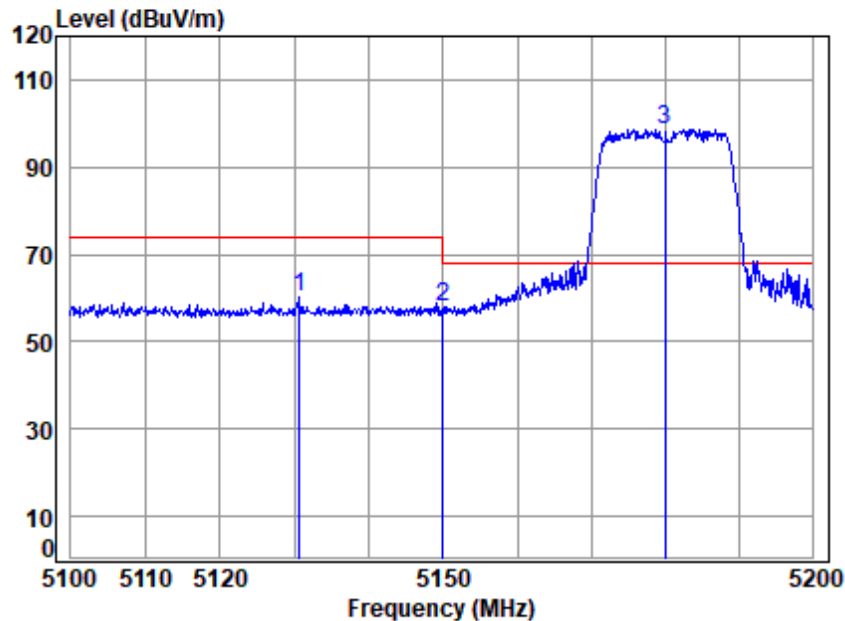


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11N20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|--------|---------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5149.057 | 7.57 | 34.32 | 42.32 | 52.14 | 51.71 | 54.00 | -2.29 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 52.74 | 52.31 | 54.00 | -1.69 Average |
| 3 | 5180.000 | 7.63 | 34.35 | 42.32 | 104.13 | 103.79 | ----- | ----- Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

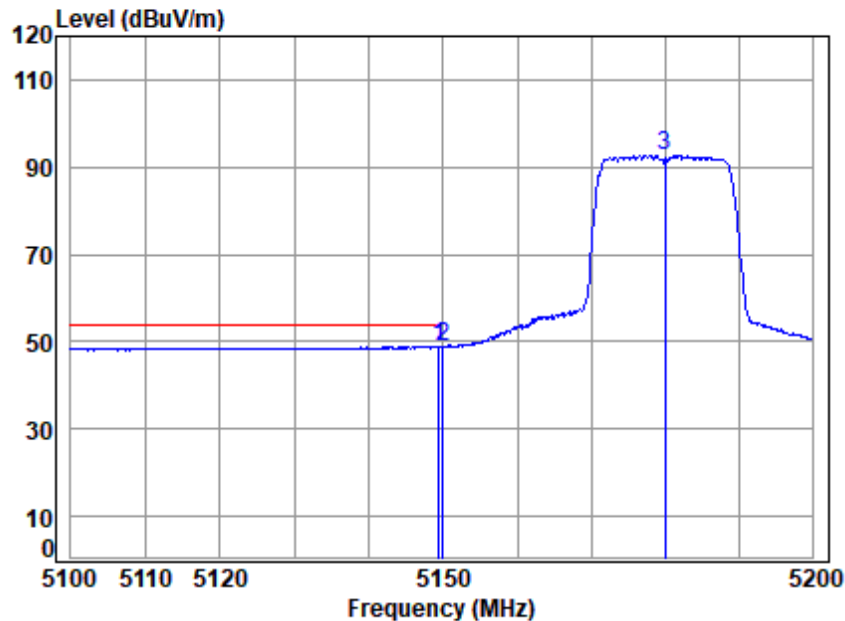


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|--------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5130.693 | 7.54 | 34.31 | 42.31 | 60.68 | 60.22 | 74.00 | -13.78 Peak |
| 2 5149.980 | 7.57 | 34.32 | 42.32 | 58.20 | 57.77 | 74.00 | -16.23 Peak |
| 3 * 5180.000 | 7.63 | 34.35 | 42.32 | 99.05 | 98.71 | 68.20 | 30.51 Peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

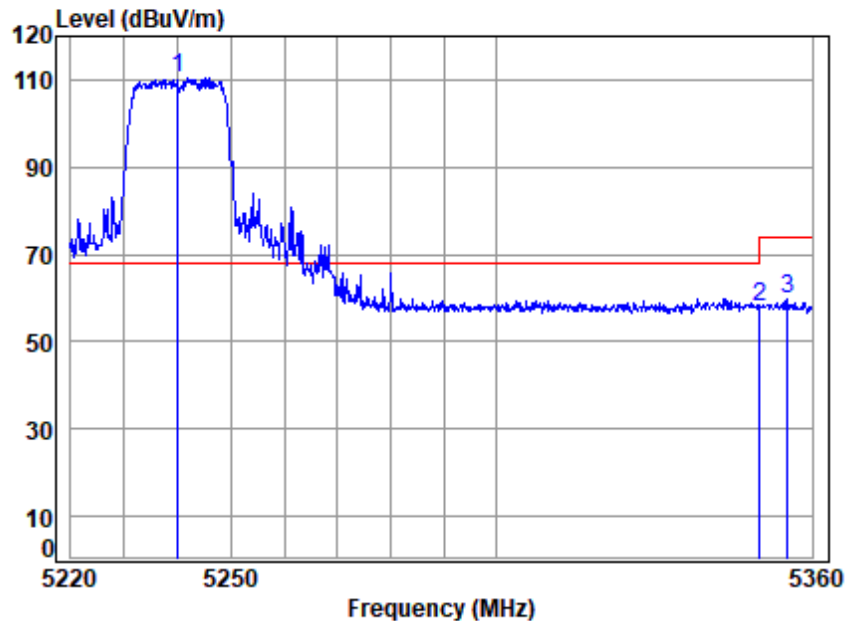


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11N20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|-------|--------|--------|---------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5149.458 | 7.57 | 34.32 | 42.32 | 49.22 | 48.79 | 54.00 | -5.21 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 49.38 | 48.95 | 54.00 | -5.05 Average |
| 3 | 5180.000 | 7.63 | 34.35 | 42.32 | 92.87 | 92.53 | ----- | ----- Average |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High



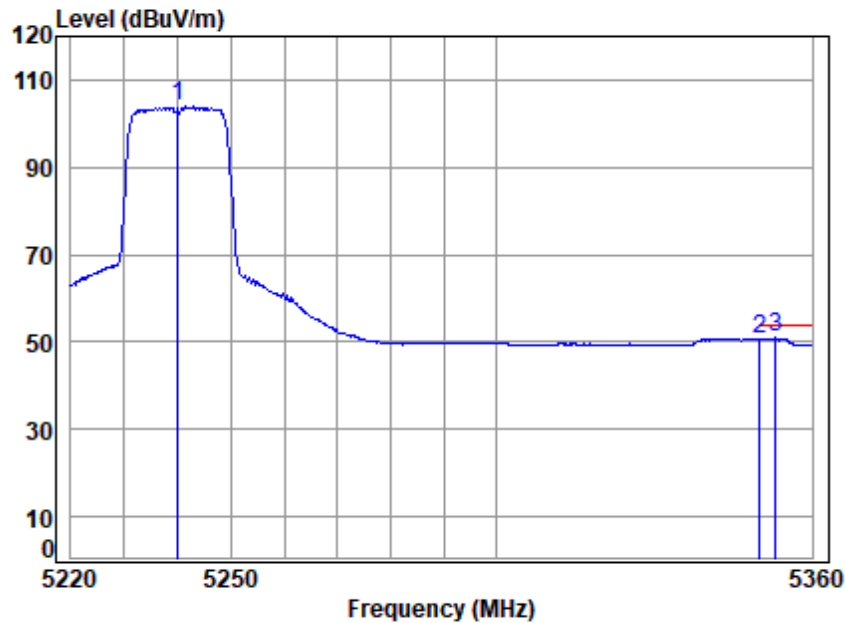
Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|--------------|-------|--------|--------|--------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 * 5240.000 | 7.73 | 34.40 | 42.33 | 110.70 | 110.50 | 68.20 | 42.30 | peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 58.02 | 58.08 | 74.00 | -15.92 | peak |
| 3 5355.321 | 7.93 | 34.49 | 42.34 | 59.60 | 59.68 | 74.00 | -14.32 | peak |



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Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High

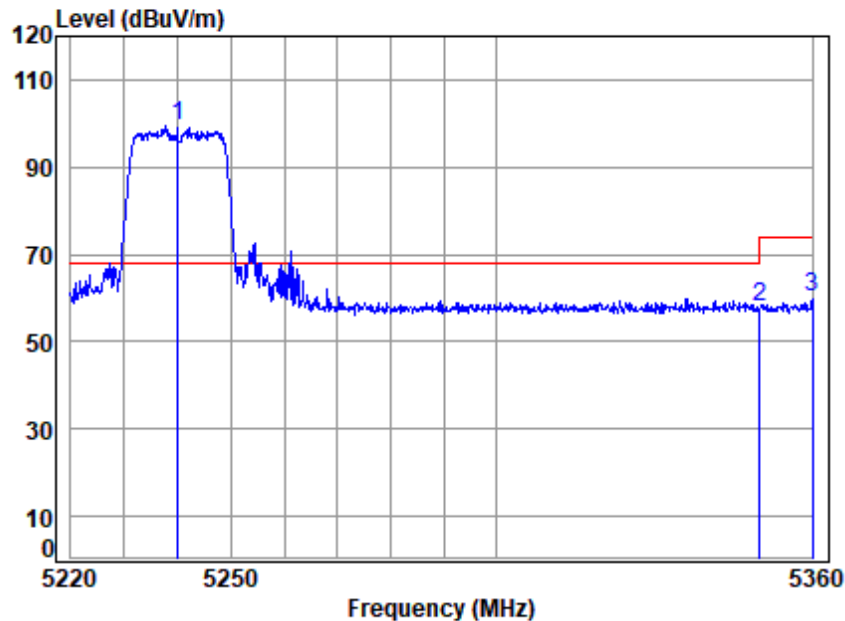


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11N20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|--------|---------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5240.000 | 7.73 | 34.40 | 42.33 | 104.01 | 103.81 | ----- | ----- Average |
| 2 | 5350.020 | 7.92 | 34.48 | 42.34 | 50.68 | 50.74 | 54.00 | -3.26 Average |
| 3 | 5353.053 | 7.93 | 34.49 | 42.34 | 50.81 | 50.89 | 54.00 | -3.11 Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High

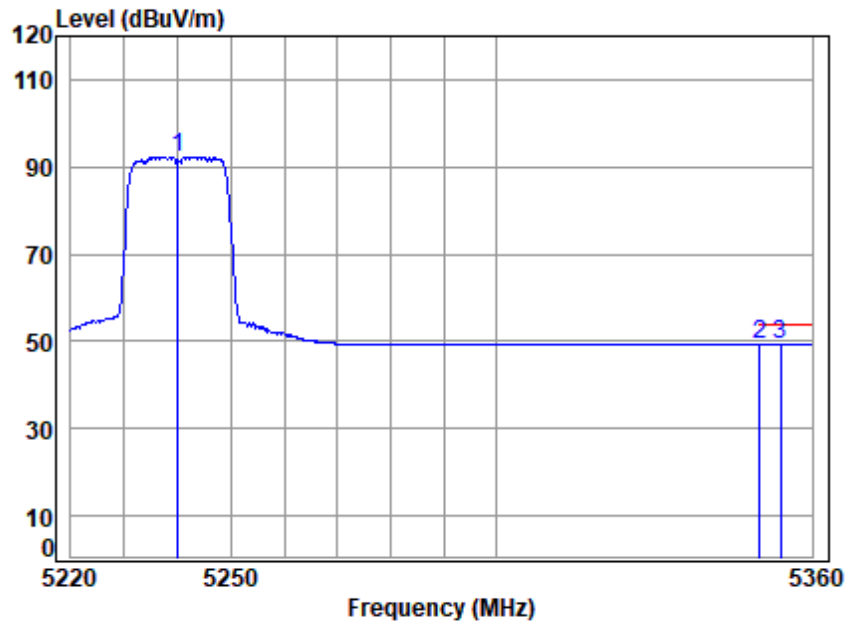


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|--------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 * 5240.000 | 7.73 | 34.40 | 42.33 | 99.57 | 99.37 | 68.20 | 31.17 Peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 58.09 | 58.15 | 74.00 | -15.85 Peak |
| 3 5360.000 | 7.94 | 34.49 | 42.34 | 59.96 | 60.05 | 74.00 | -13.95 Peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High

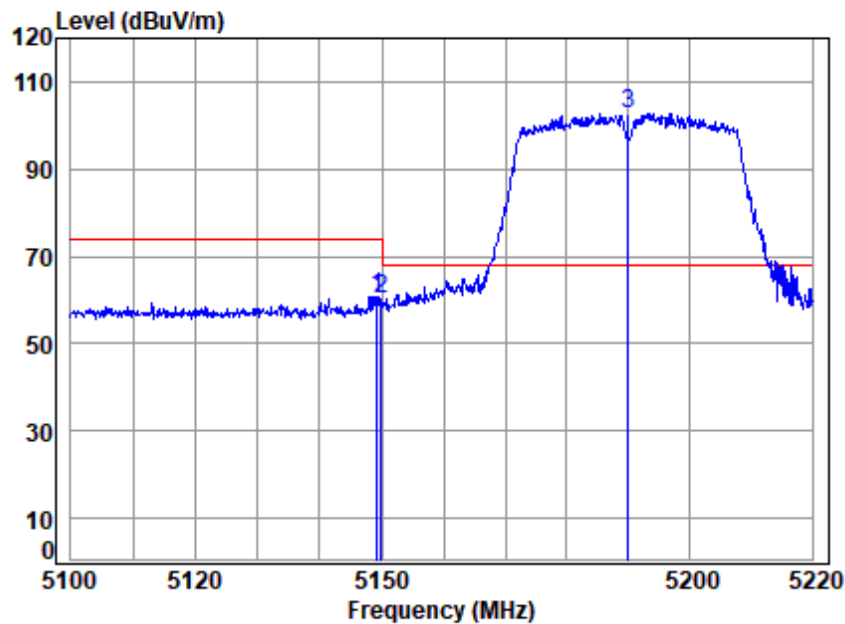


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|-------|--------|--------|---------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5240.000 | 7.73 | 34.40 | 42.33 | 92.55 | 92.35 | ----- | ----- Average |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 49.34 | 49.40 | 54.00 | -4.60 Average |
| 3 5354.045 | 7.93 | 34.49 | 42.34 | 49.42 | 49.50 | 54.00 | -4.50 Average |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

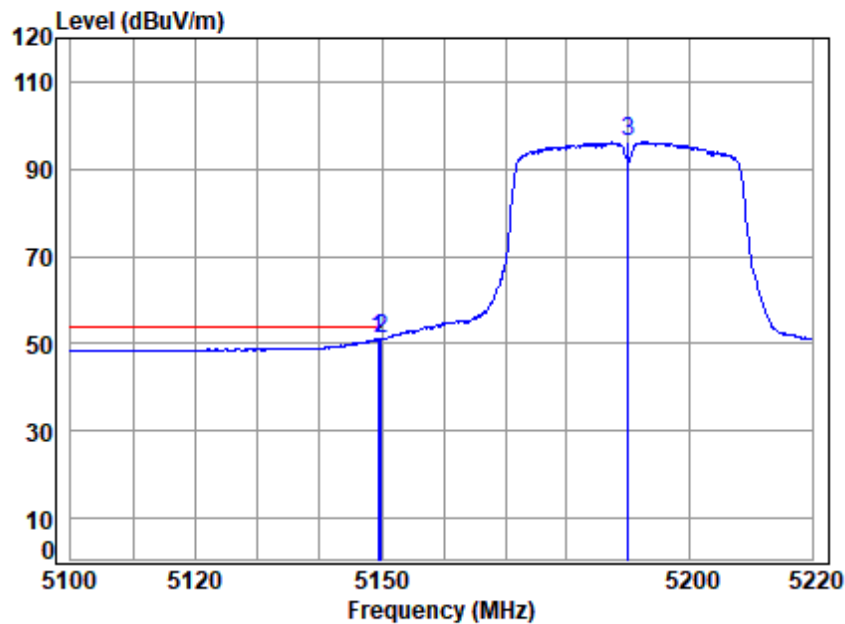


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5190 Band edge
: 5G WIFI 11N40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|-------|-------------|
| Freq | | Loss | Factor | Factor | Level | Line | Limit | Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dB | |
| 1 | 5149.222 | 7.57 | 34.32 | 42.32 | 61.32 | 60.89 | 74.00 | -13.11 peak |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 60.46 | 60.03 | 74.00 | -13.97 peak |
| 3 * | 5190.000 | 7.64 | 34.36 | 42.32 | 103.10 | 102.78 | 68.20 | 34.58 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

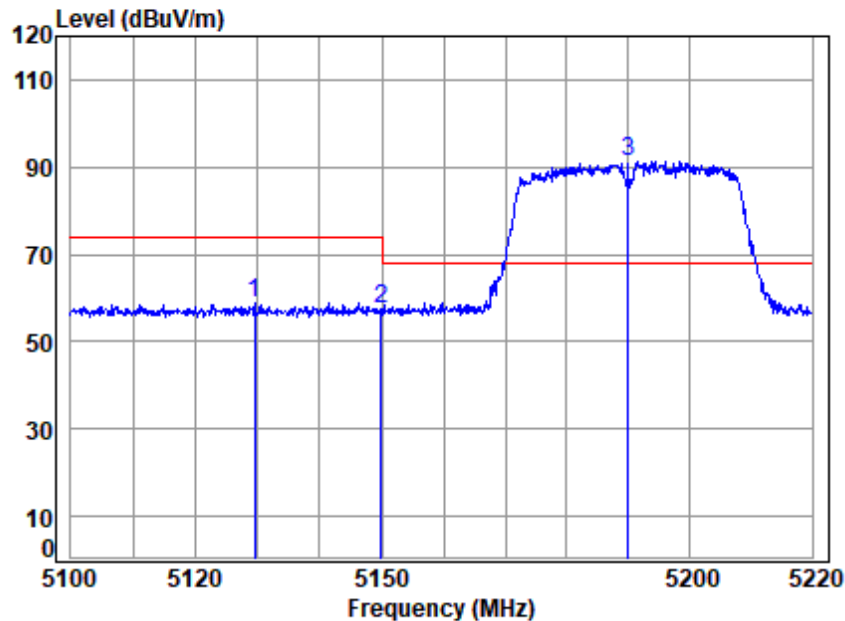


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5190 Band edge
: 5G WIFI 11N40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5149.461 | 7.57 | 34.32 | 42.32 | 51.62 | 51.19 | 54.00 | -2.81 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 51.67 | 51.24 | 54.00 | -2.76 Average |
| 3 | 5190.000 | 7.64 | 34.36 | 42.32 | 96.45 | 96.13 | ----- | ----- Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

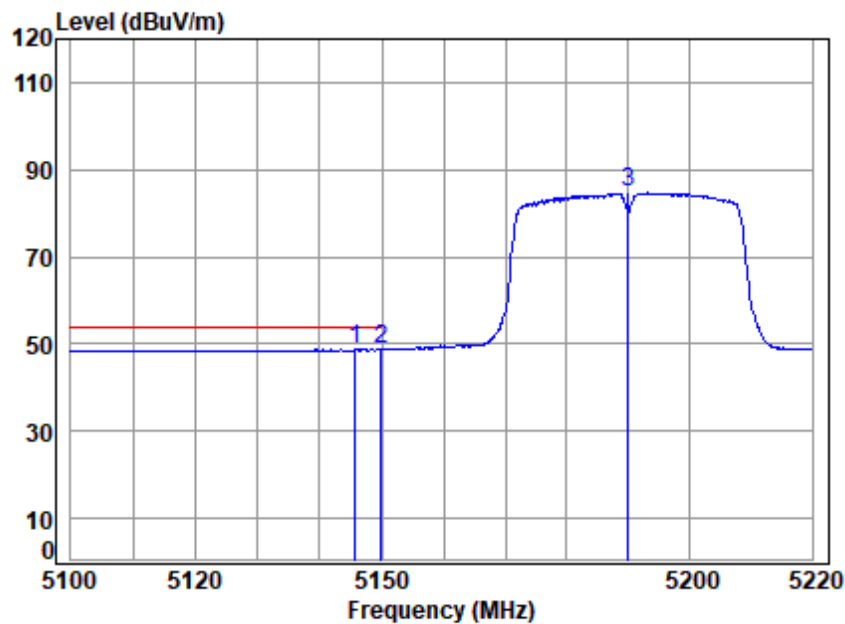


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5190 Band edge
: 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|--------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5129.500 | 7.54 | 34.31 | 42.31 | 59.49 | 59.03 | 74.00 | -14.97 Peak |
| 2 5149.980 | 7.57 | 34.32 | 42.32 | 58.10 | 57.67 | 74.00 | -16.33 Peak |
| 3 * 5190.000 | 7.64 | 34.36 | 42.32 | 91.73 | 91.41 | 68.20 | 23.21 Peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low



Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5190 Band edge
: 5G WIFI 11N40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5145.750 | 7.57 | 34.32 | 42.32 | 49.14 | 48.71 | 54.00 | -5.29 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 49.12 | 48.69 | 54.00 | -5.31 Average |
| 3 | 5190.000 | 7.64 | 34.36 | 42.32 | 85.01 | 84.69 | ----- | ----- Average |

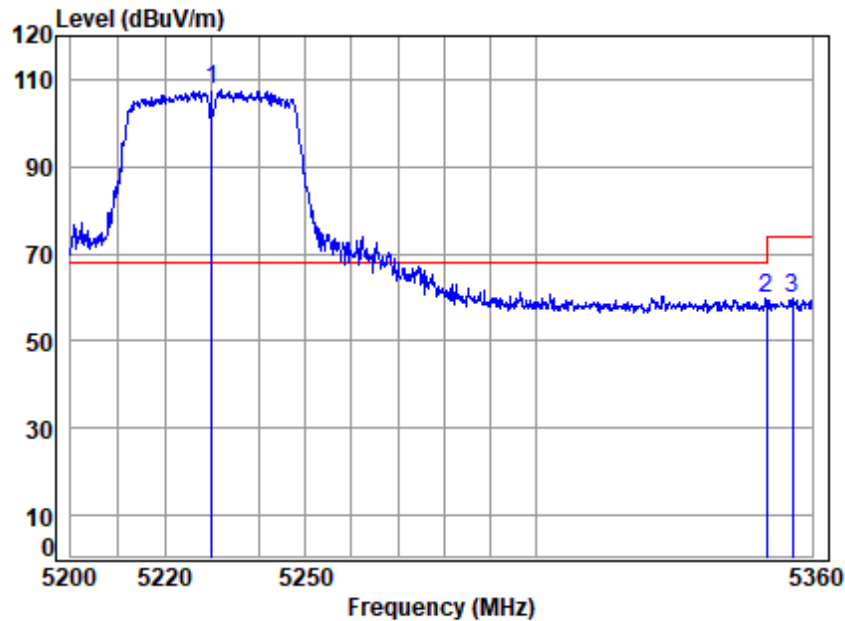


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Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High

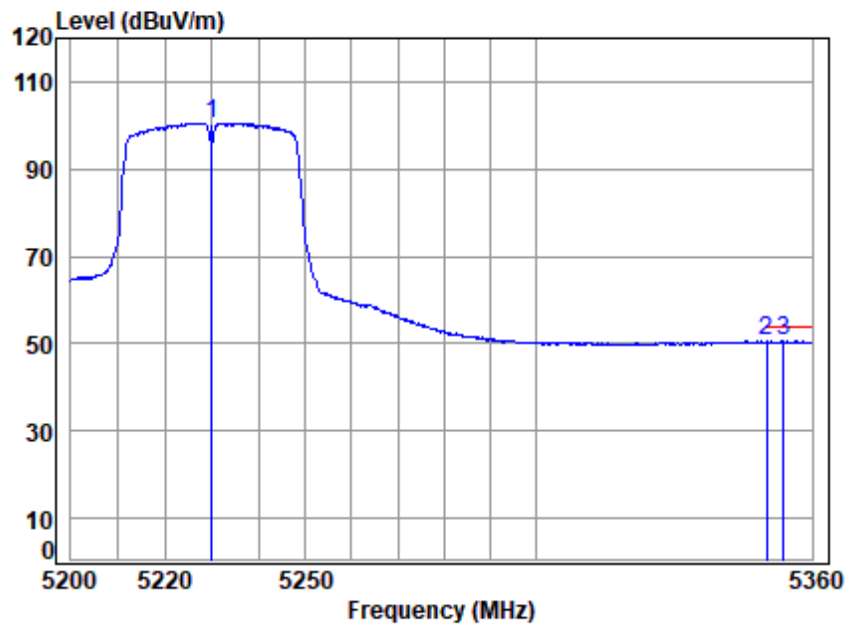


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5230 Band edge
: 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|--------------|-------|--------|--------|--------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 * 5230.000 | 7.72 | 34.39 | 42.32 | 107.70 | 107.49 | 68.20 | 39.29 | peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 59.53 | 59.59 | 74.00 | -14.41 | peak |
| 3 5355.778 | 7.93 | 34.49 | 42.34 | 59.85 | 59.93 | 74.00 | -14.07 | peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High

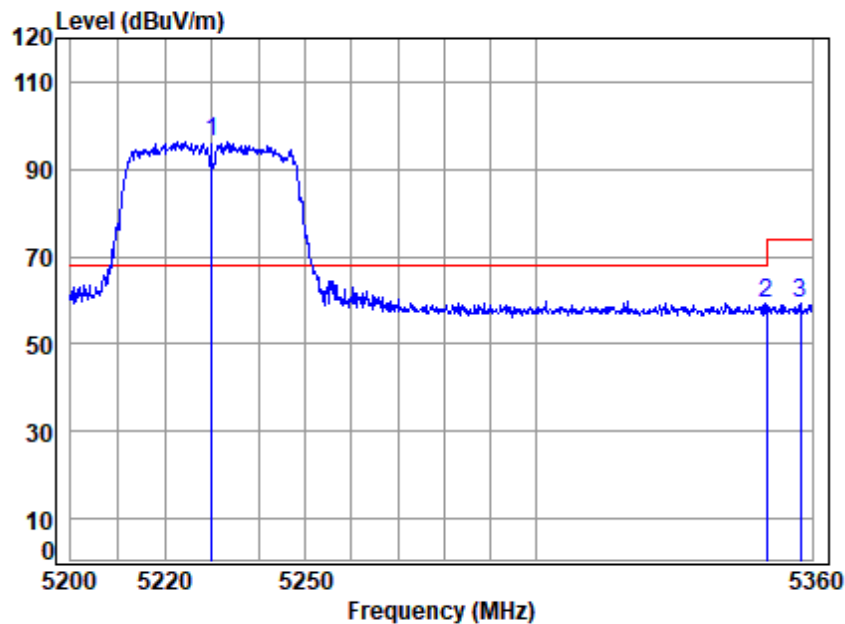


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5230 Band edge
: 5G WIFI 11N40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|--------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5230.000 | 7.72 | 34.39 | 42.32 | 100.76 | 100.55 | ----- | ----- Average |
| 2 | 5350.020 | 7.92 | 34.48 | 42.34 | 50.48 | 50.54 | 54.00 | -3.46 Average |
| 3 | 5353.669 | 7.93 | 34.49 | 42.34 | 50.42 | 50.50 | 54.00 | -3.50 Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High

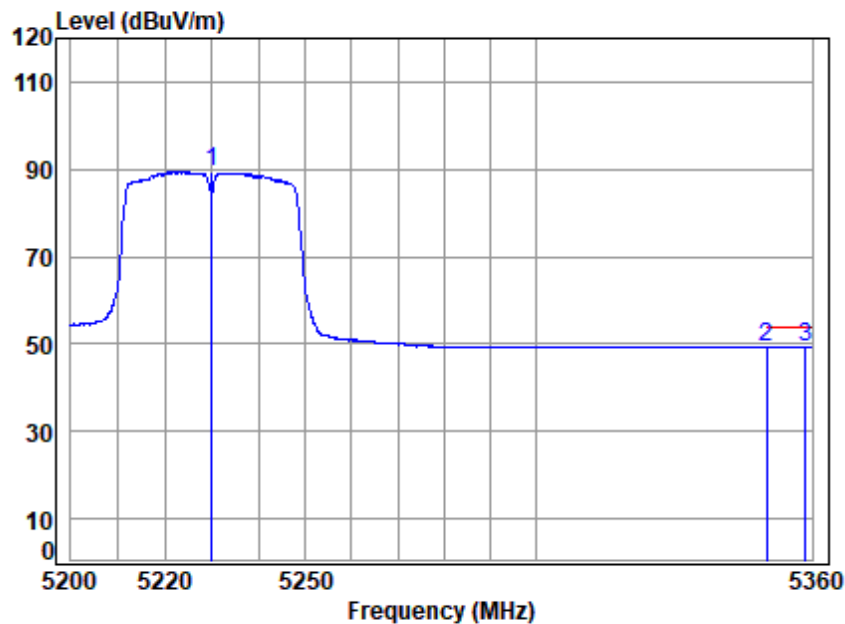


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5230 Band edge
: 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|--------------|-------|--------|--------|-------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 * 5230.000 | 7.72 | 34.39 | 42.32 | 96.56 | 96.35 | 68.20 | 28.15 | Peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 59.36 | 59.42 | 74.00 | -14.58 | Peak |
| 3 5357.402 | 7.94 | 34.49 | 42.34 | 59.18 | 59.27 | 74.00 | -14.73 | Peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High

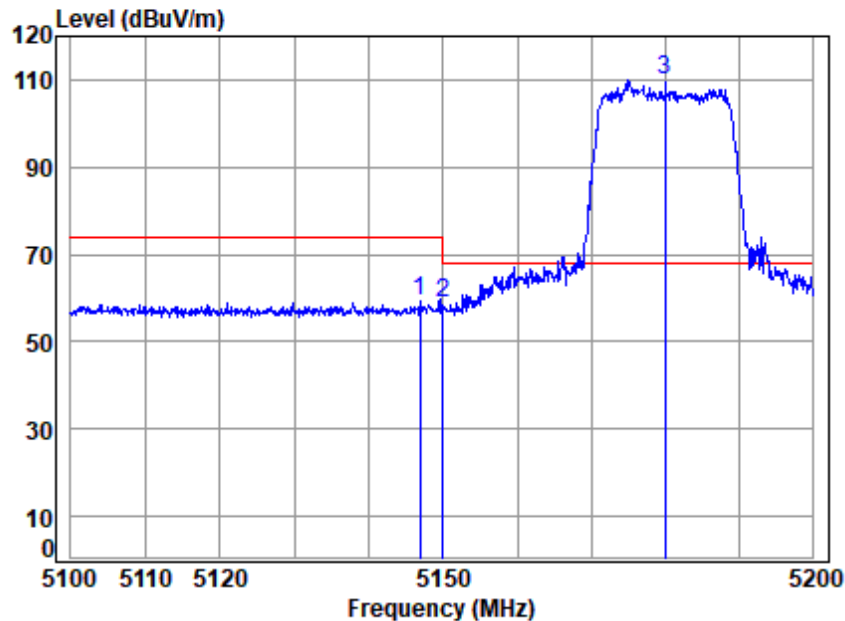


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5230 Band edge
: 5G WIFI 11N40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5230.000 | 7.72 | 34.39 | 42.32 | 89.59 | 89.38 | ----- | ----- Average |
| 2 | 5350.020 | 7.92 | 34.48 | 42.34 | 49.33 | 49.39 | 54.00 | -4.61 Average |
| 3 | 5358.538 | 7.94 | 34.49 | 42.34 | 49.38 | 49.47 | 54.00 | -4.53 Average |



Test Mode: 03; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: Low

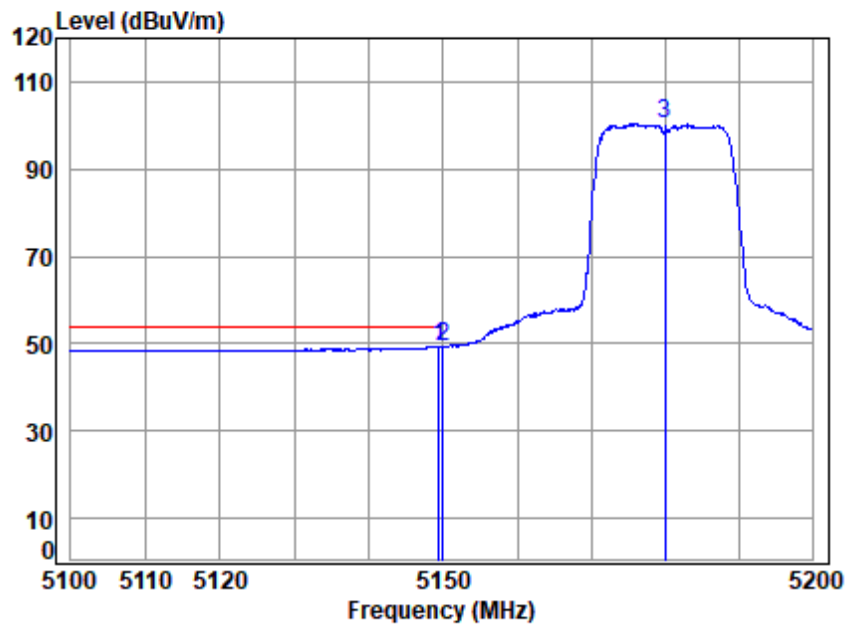


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11AC20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|-------|-------------|
| Freq | | Loss | Factor | Factor | Level | Line | Limit | Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dB | |
| 1 | 5146.858 | 7.57 | 34.32 | 42.32 | 59.52 | 59.09 | 74.00 | -14.91 peak |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 59.16 | 58.73 | 74.00 | -15.27 peak |
| 3 * | 5180.000 | 7.63 | 34.35 | 42.32 | 110.45 | 110.11 | 68.20 | 41.91 peak |



Test Mode: 03; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: Low

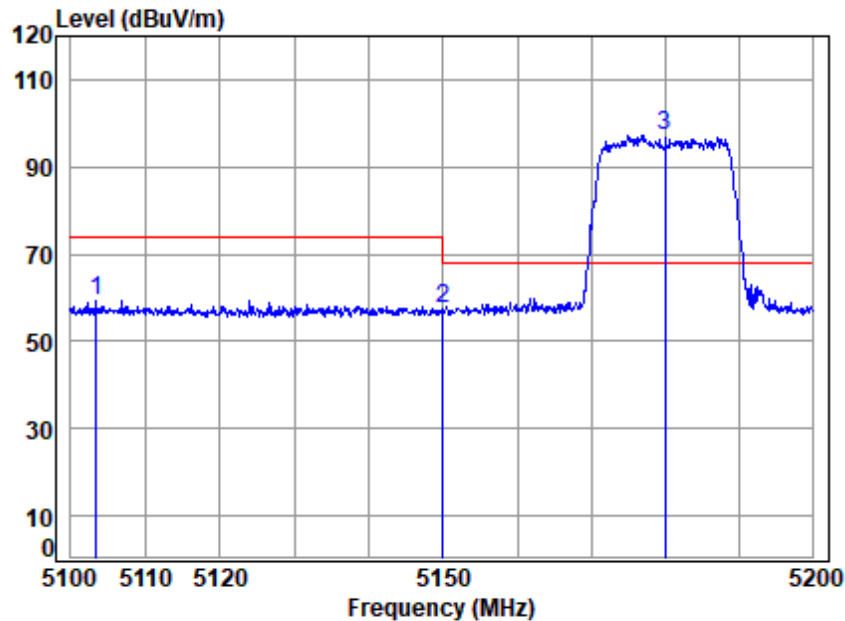


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11AC20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|--------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5149.357 | 7.57 | 34.32 | 42.32 | 49.74 | 49.31 | 54.00 | -4.69 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 49.91 | 49.48 | 54.00 | -4.52 Average |
| 3 | 5180.000 | 7.63 | 34.35 | 42.32 | 100.94 | 100.60 | ----- | ----- Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low

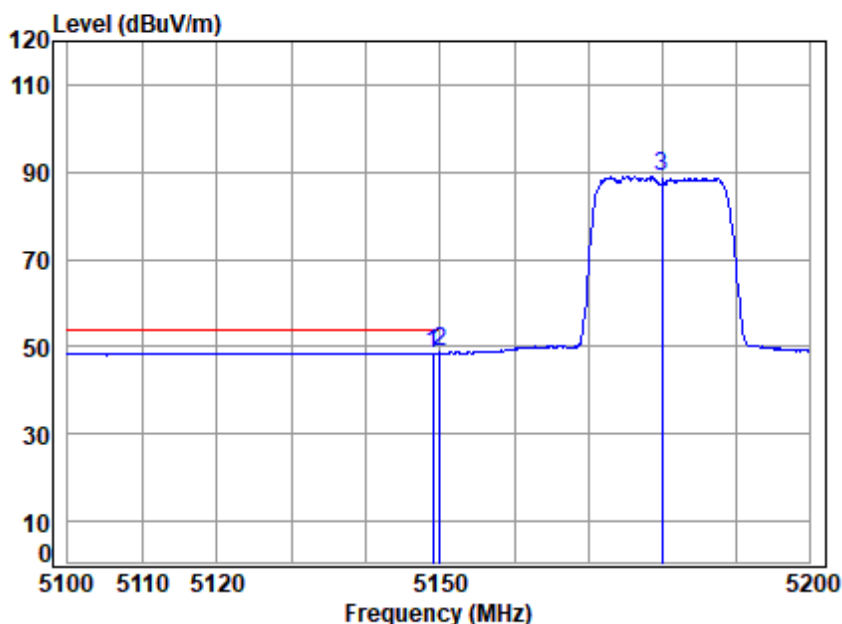


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11AC20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5103.368 | 7.49 | 34.29 | 42.31 | 59.90 | 59.37 | 74.00 | -14.63 Peak |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 57.72 | 57.29 | 74.00 | -16.71 Peak |
| 3 * | 5180.000 | 7.63 | 34.35 | 42.32 | 97.62 | 97.28 | 68.20 | 29.08 Peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low

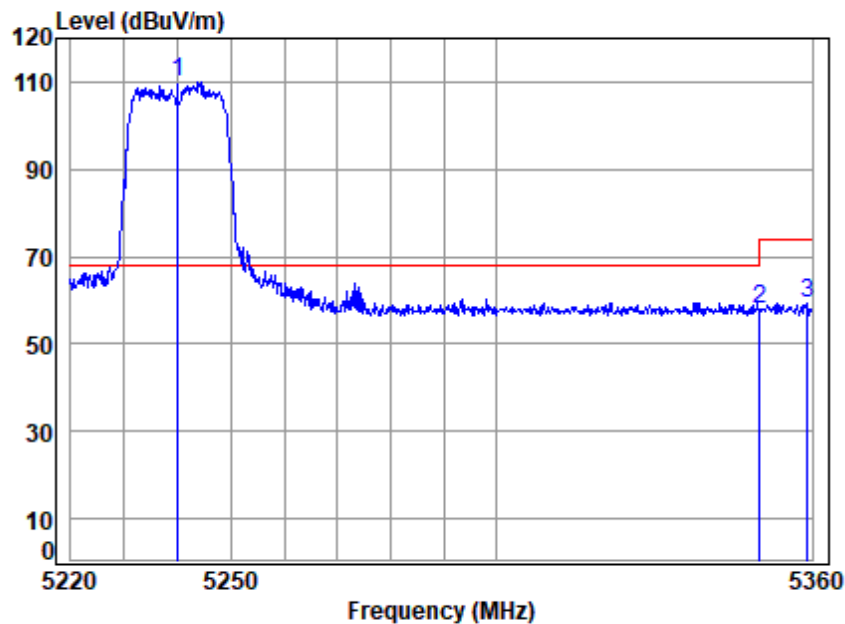


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5180 Band edge
: 5G WIFI 11AC20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|-------|--------|--------|---------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5148.958 | 7.57 | 34.32 | 42.32 | 49.02 | 48.59 | 54.00 | -5.41 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 49.06 | 48.63 | 54.00 | -5.37 Average |
| 3 | 5180.000 | 7.63 | 34.35 | 42.32 | 89.34 | 89.00 | ----- | ----- Average |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|--------------|-------|--------|--------|--------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 * 5240.000 | 7.73 | 34.40 | 42.33 | 110.37 | 110.17 | 68.20 | 41.97 | peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 58.06 | 58.12 | 74.00 | -15.88 | peak |
| 3 5359.149 | 7.94 | 34.49 | 42.34 | 59.24 | 59.33 | 74.00 | -14.67 | peak |

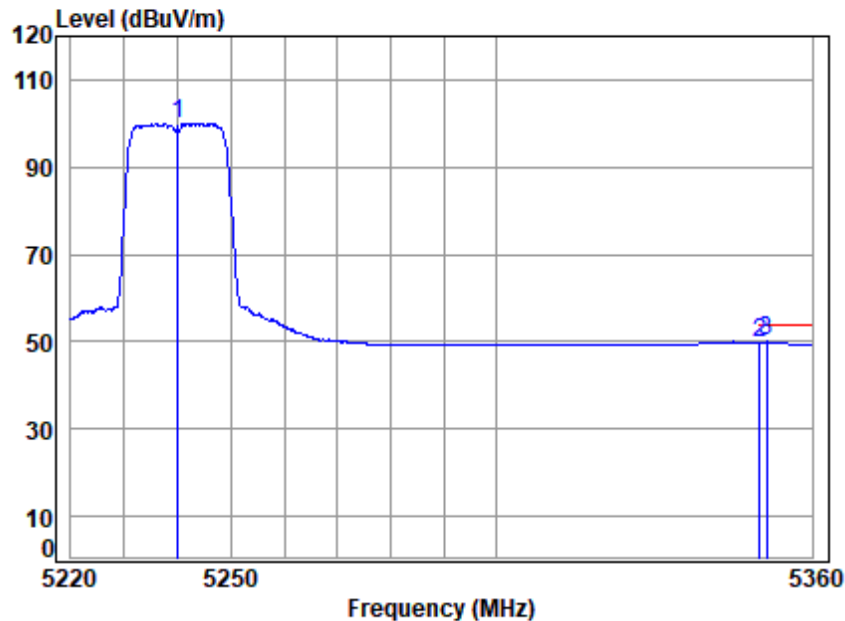


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Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:20MHz; Channel:High

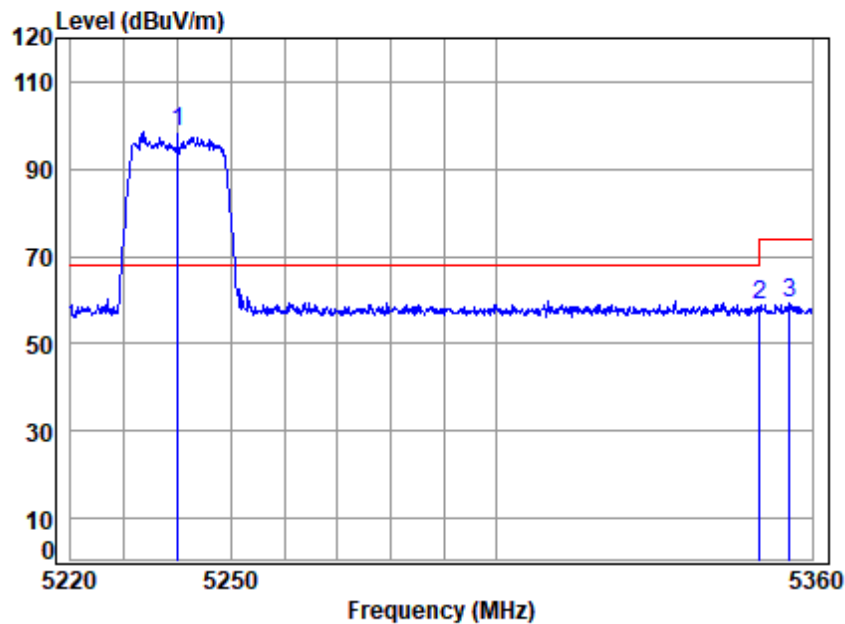


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | | Limit | Over | | |
|------|----------|--------|--------|-------|--------|--------|-------|--------|---------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark | |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | | |
| 1 | 5240.000 | 7.73 | 34.40 | 42.33 | 100.32 | 100.12 | ----- | ----- | Average |
| 2 | 5350.020 | 7.92 | 34.48 | 42.34 | 49.75 | 49.81 | 54.00 | -4.19 | Average |
| 3 | 5351.354 | 7.93 | 34.49 | 42.34 | 49.90 | 49.98 | 54.00 | -4.02 | Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High

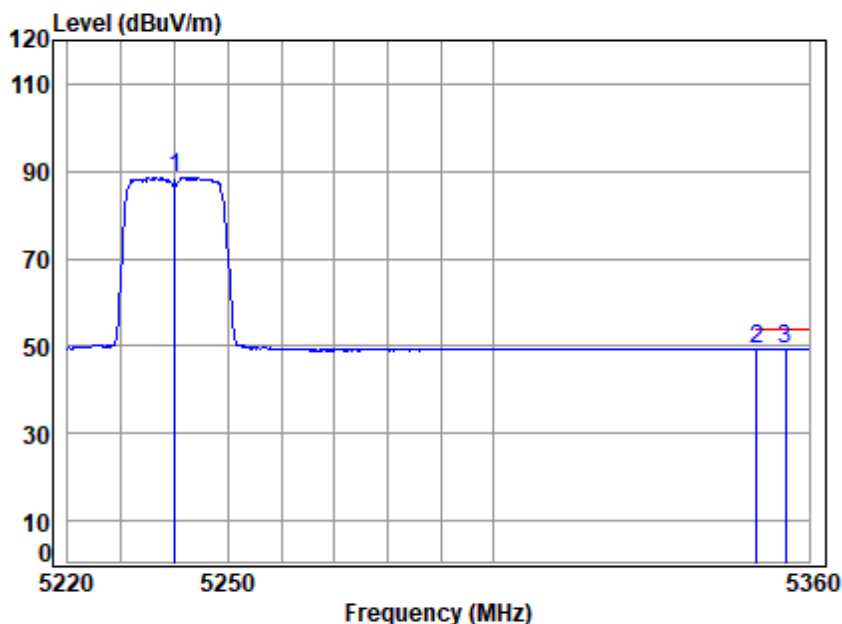


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|--------------|-------|--------|--------|-------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 * 5240.000 | 7.73 | 34.40 | 42.33 | 98.55 | 98.35 | 68.20 | 30.15 | Peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 58.79 | 58.85 | 74.00 | -15.15 | Peak |
| 3 5355.746 | 7.93 | 34.49 | 42.34 | 59.41 | 59.49 | 74.00 | -14.51 | Peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High



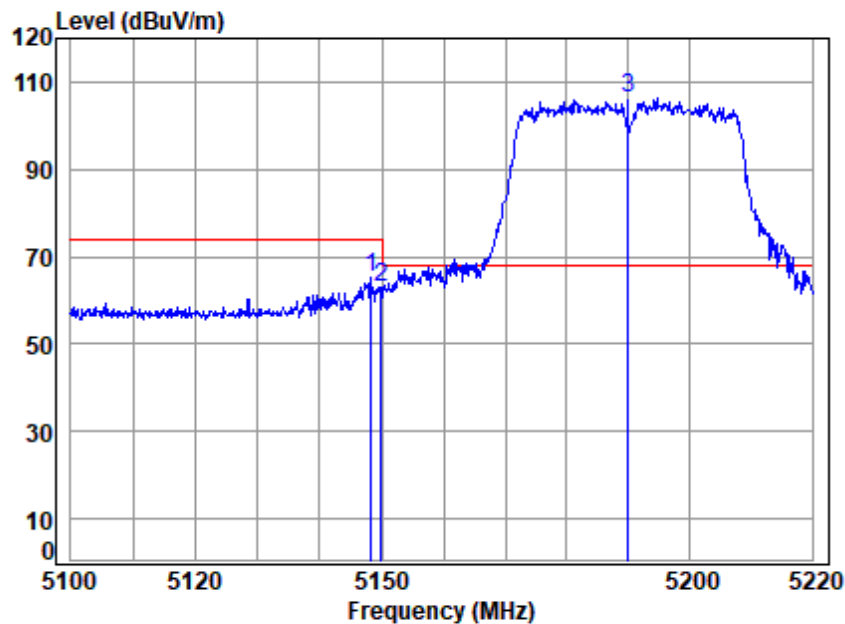
Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5240 Band edge
: 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|-------|--------|--------|-------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5240.000 | 7.73 | 34.40 | 42.33 | 88.84 | 88.64 | ----- | ----- |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 49.22 | 49.28 | 54.00 | -4.72 |
| 3 5355.462 | 7.93 | 34.49 | 42.34 | 49.32 | 49.40 | 54.00 | -4.60 |



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Test Mode: 03; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 40MHz; Channel: Low

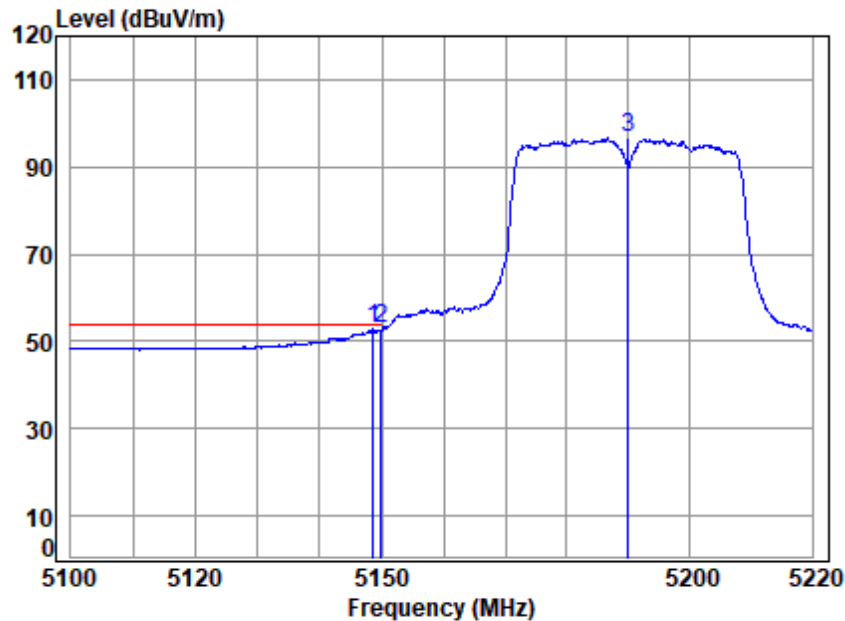


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5190 Band edge
: 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|--------------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5148.264 | 7.57 | 34.32 | 42.32 | 65.67 | 65.24 | 74.00 | -8.76 peak |
| 2 5149.980 | 7.57 | 34.32 | 42.32 | 63.36 | 62.93 | 74.00 | -11.07 peak |
| 3 * 5190.000 | 7.64 | 34.36 | 42.32 | 106.44 | 106.12 | 68.20 | 37.92 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low

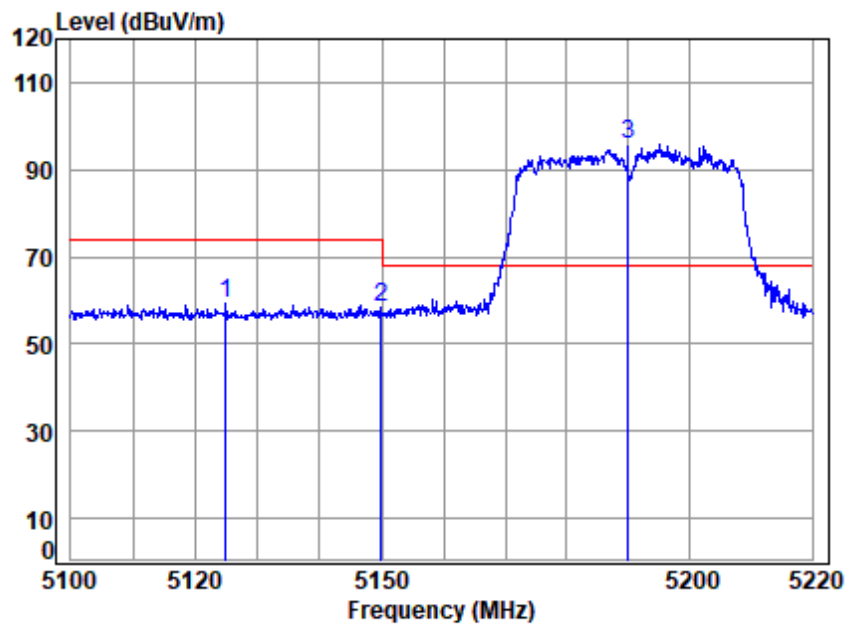


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5190 Band edge
: 5G WIFI 11AC40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5148.623 | 7.57 | 34.32 | 42.32 | 53.13 | 52.70 | 54.00 | -1.30 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 53.53 | 53.10 | 54.00 | -0.90 Average |
| 3 | 5190.000 | 7.64 | 34.36 | 42.32 | 96.84 | 96.52 | ----- | ----- Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low

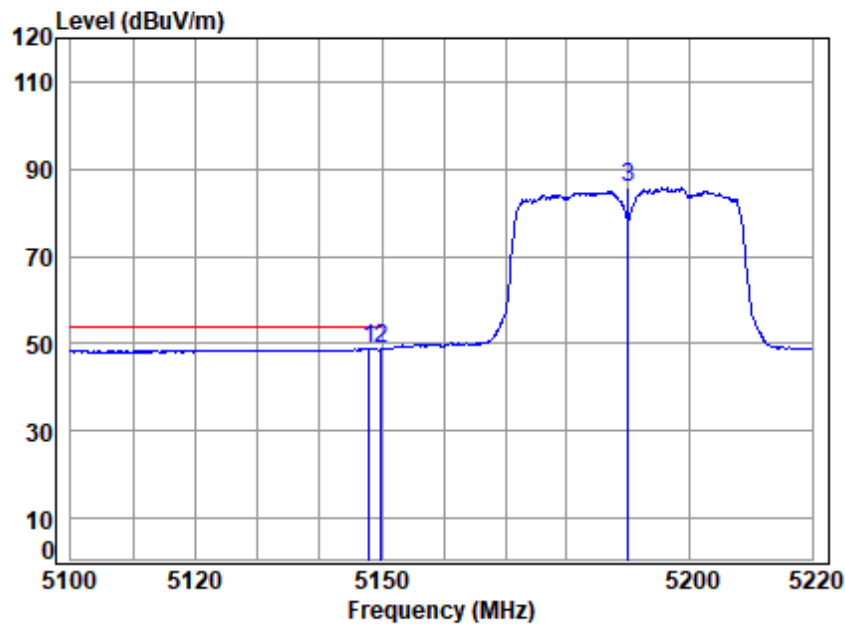


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5190 Band edge
: 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|--------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5124.850 | 7.53 | 34.30 | 42.31 | 59.88 | 59.40 | 74.00 | -14.60 Peak |
| 2 5149.980 | 7.57 | 34.32 | 42.32 | 59.02 | 58.59 | 74.00 | -15.41 Peak |
| 3 * 5190.000 | 7.64 | 34.36 | 42.32 | 96.00 | 95.68 | 68.20 | 27.48 Peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low

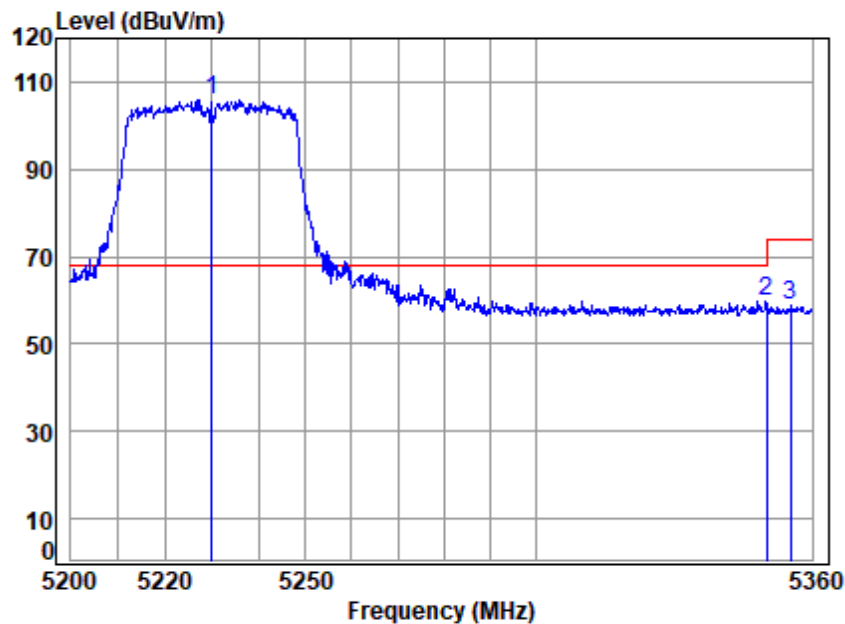


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5190 Band edge
: 5G WIFI 11AC40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Line | Limit | Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5147.905 | 7.57 | 34.32 | 42.32 | 49.15 | 48.72 | 54.00 | -5.28 Average |
| 2 | 5149.980 | 7.57 | 34.32 | 42.32 | 49.12 | 48.69 | 54.00 | -5.31 Average |
| 3 | 5190.000 | 7.64 | 34.36 | 42.32 | 85.95 | 85.63 | ----- | ----- Average |



Test Mode: 03; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 40MHz; Channel: High

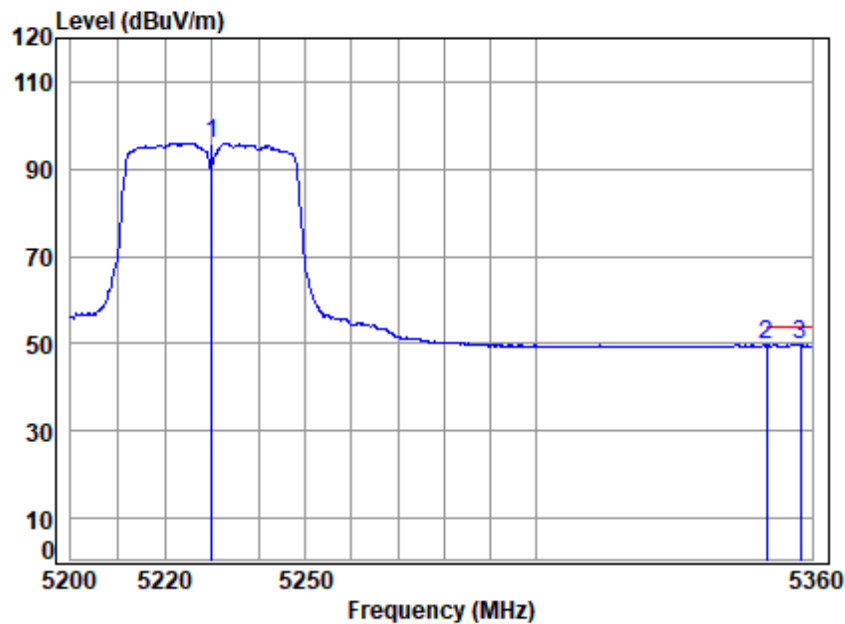


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5230 Band edge
: 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|--------------|-------|--------|--------|--------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 * 5230.000 | 7.72 | 34.39 | 42.32 | 106.25 | 106.04 | 68.20 | 37.84 | peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 59.83 | 59.89 | 74.00 | -14.11 | peak |
| 3 5355.292 | 7.93 | 34.49 | 42.34 | 58.58 | 58.66 | 74.00 | -15.34 | peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

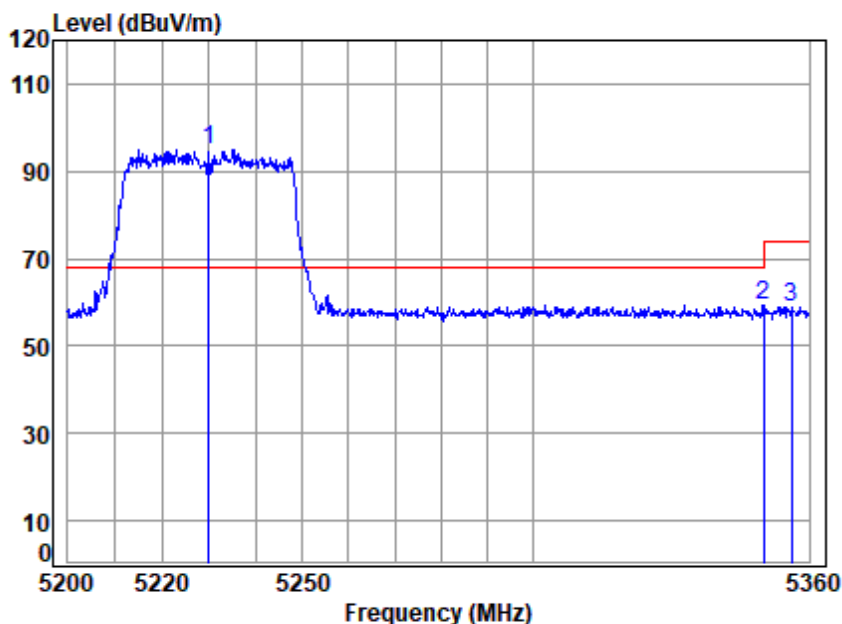


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5230 Band edge
: 5G WIFI 11AC40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5230.000 | 7.72 | 34.39 | 42.32 | 96.19 | 95.98 | ----- | ----- Average |
| 2 | 5350.020 | 7.92 | 34.48 | 42.34 | 49.51 | 49.57 | 54.00 | -4.43 Average |
| 3 | 5357.564 | 7.94 | 34.49 | 42.34 | 49.58 | 49.67 | 54.00 | -4.33 Average |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

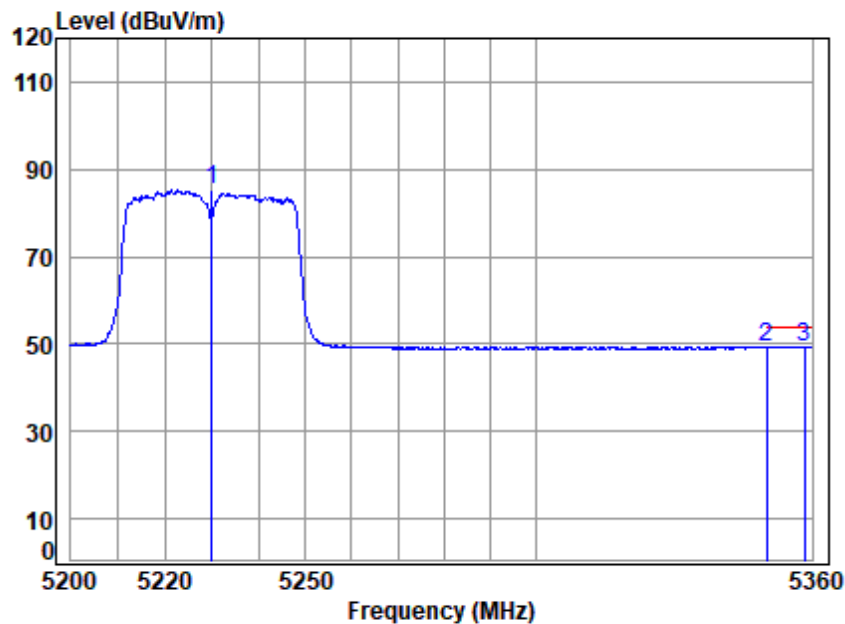


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5230 Band edge
: 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | | Limit | Over | |
|--------------|-------|--------|--------|-------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 * 5230.000 | 7.72 | 34.39 | 42.32 | 95.13 | 94.92 | 68.20 | 26.72 | Peak |
| 2 5350.020 | 7.92 | 34.48 | 42.34 | 59.20 | 59.26 | 74.00 | -14.74 | Peak |
| 3 5356.265 | 7.94 | 34.49 | 42.34 | 58.94 | 59.03 | 74.00 | -14.97 | Peak |



Test Mode: 03; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

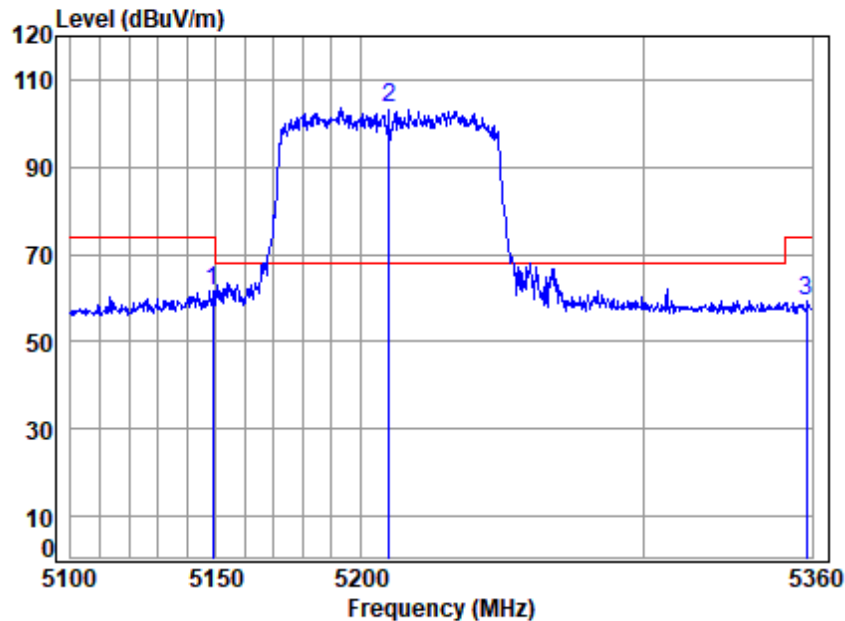


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5230 Band edge
: 5G WIFI 11AC40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5230.000 | 7.72 | 34.39 | 42.32 | 85.34 | 85.13 | ----- | ----- Average |
| 2 | 5350.020 | 7.92 | 34.48 | 42.34 | 49.17 | 49.23 | 54.00 | -4.77 Average |
| 3 | 5358.376 | 7.94 | 34.49 | 42.34 | 49.24 | 49.33 | 54.00 | -4.67 Average |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle

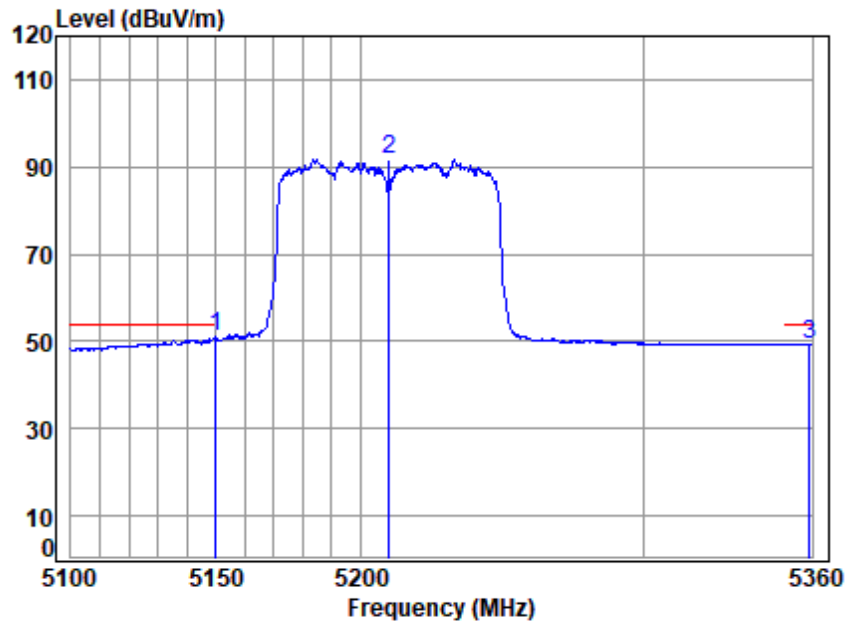


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5210 Band edge
: 5G WIFI 11AC80

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5148.922 | 7.57 | 34.32 | 42.32 | 62.25 | 61.82 | 74.00 | -12.18 peak |
| 2 * | 5210.000 | 7.68 | 34.37 | 42.32 | 103.70 | 103.43 | 68.20 | 35.23 peak |
| 3 | 5358.135 | 7.94 | 34.49 | 42.34 | 59.14 | 59.23 | 74.00 | -14.77 peak |



Test Mode: 03; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle

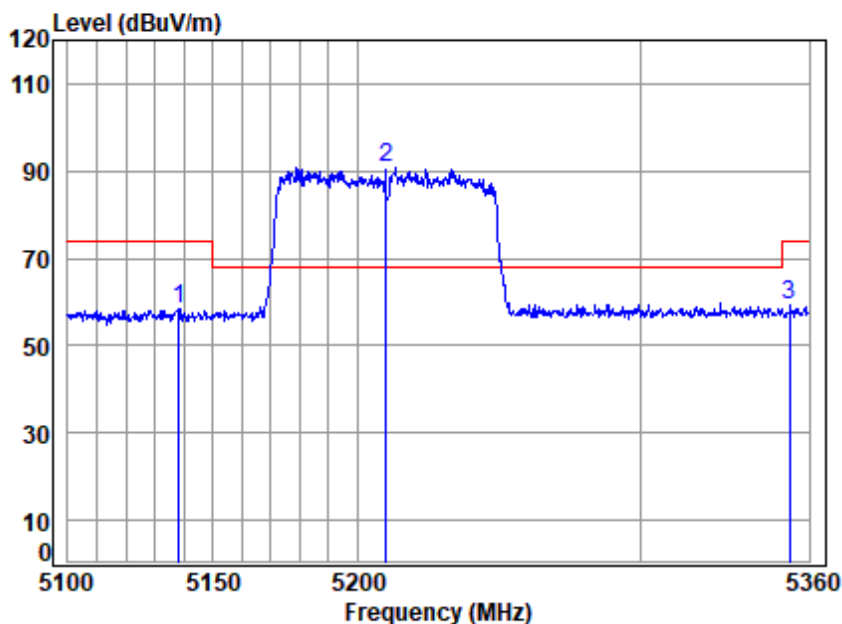


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5210 Band edge
: 5G WIFI 11AC80

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5149.947 | 7.57 | 34.32 | 42.32 | 51.49 | 51.06 | 54.00 | -2.94 Average |
| 2 | 5210.000 | 7.68 | 34.37 | 42.32 | 92.20 | 91.93 | ----- | ----- Average |
| 3 | 5358.934 | 7.94 | 34.49 | 42.34 | 49.37 | 49.46 | 54.00 | -4.54 Average |



Test Mode: 03; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: middle



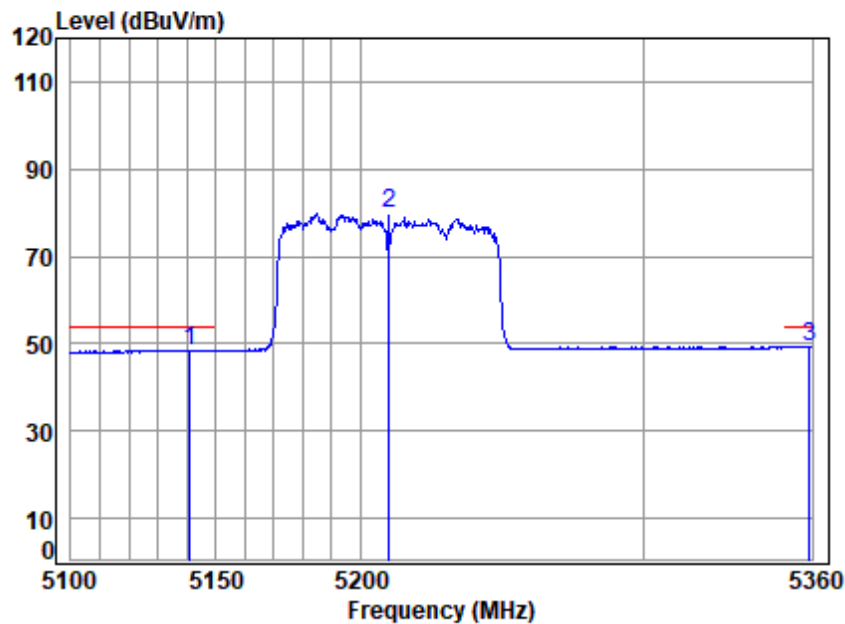
Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5210 Band edge
: 5G WIFI 11AC80

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|-----|----------|-------|--------|--------|-------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5138.181 | 7.55 | 34.31 | 42.31 | 59.07 | 58.62 | 74.00 | -15.38 Peak |
| 2 * | 5210.000 | 7.68 | 34.37 | 42.32 | 91.03 | 90.76 | 68.20 | 22.56 Peak |
| 3 | 5353.075 | 7.93 | 34.49 | 42.34 | 59.41 | 59.49 | 74.00 | -14.51 Peak |



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Attention: To check the authenticity of testing / inspection report and certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Test Mode: 03; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: middle

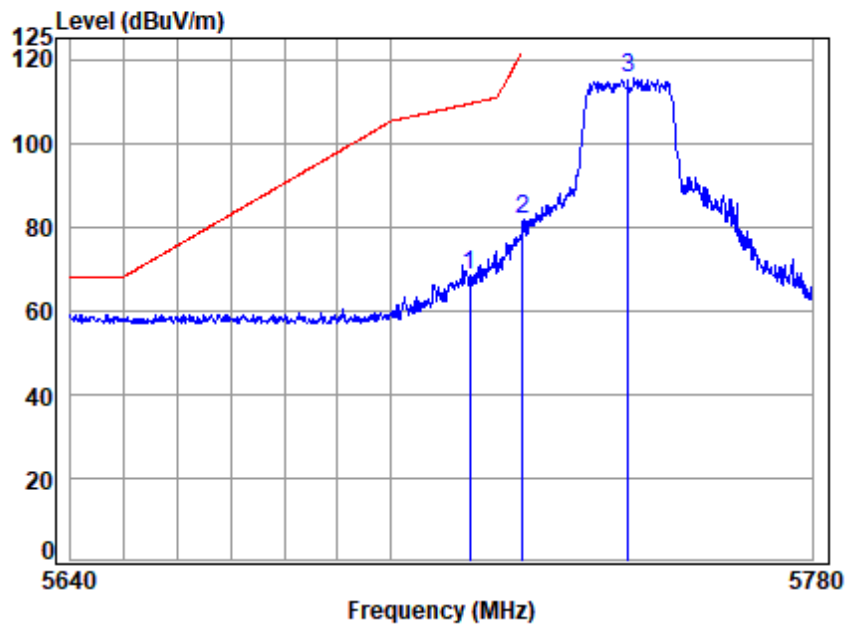


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5210 Band edge
: 5G WIFI 11AC80

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|---------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5140.992 | 7.56 | 34.32 | 42.32 | 48.98 | 48.54 | 54.00 | -5.46 Average |
| 2 | 5210.000 | 7.68 | 34.37 | 42.32 | 79.99 | 79.72 | ----- | ----- Average |
| 3 | 5359.201 | 7.94 | 34.49 | 42.34 | 49.19 | 49.28 | 54.00 | -4.72 Average |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

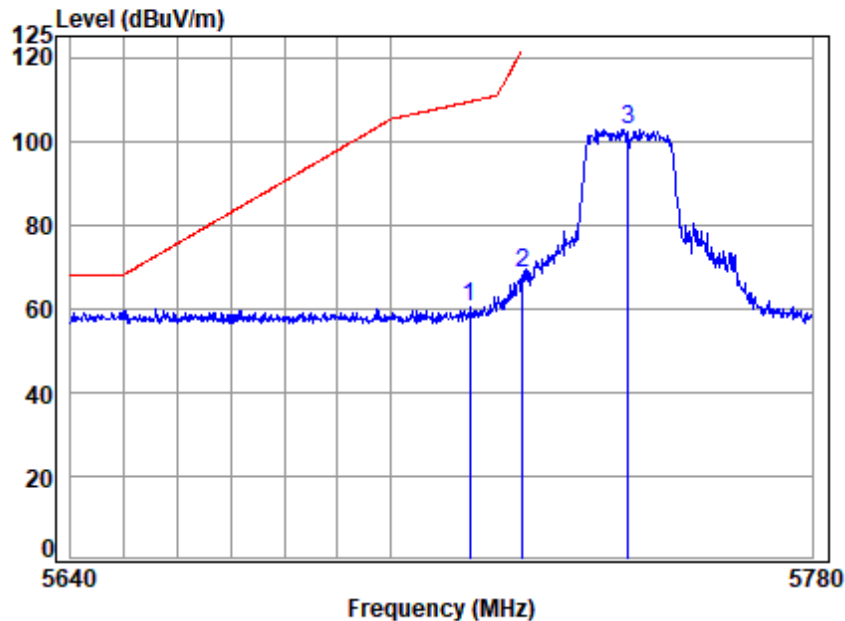


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5745 Band edge
: 5G WIFI 11A

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|--------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5715.000 | 8.22 | 34.82 | 42.37 | 67.80 | 68.47 | 109.40 | -40.93 peak |
| 2 | 5725.000 | 8.22 | 34.83 | 42.37 | 81.16 | 81.84 | 122.20 | -40.36 peak |
| 3 | 5745.000 | 8.22 | 34.85 | 42.38 | 114.80 | 115.49 | ----- | ----- peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:Low

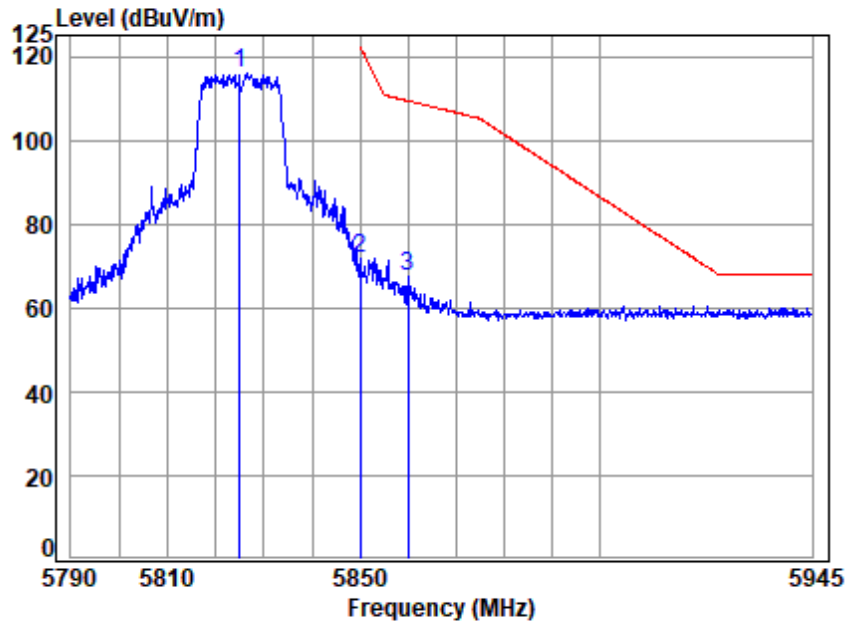


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5745 Band edge
: 5G WIFI 11A

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5715.000 | 8.22 | 34.82 | 42.37 | 59.55 | 60.22 | 109.40 | -49.18 peak |
| 2 | 5725.000 | 8.22 | 34.83 | 42.37 | 67.74 | 68.42 | 122.20 | -53.78 peak |
| 3 | 5745.000 | 8.22 | 34.85 | 42.38 | 102.16 | 102.85 | ----- | ----- peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11a; Bandwidth:20MHz; Channel:High

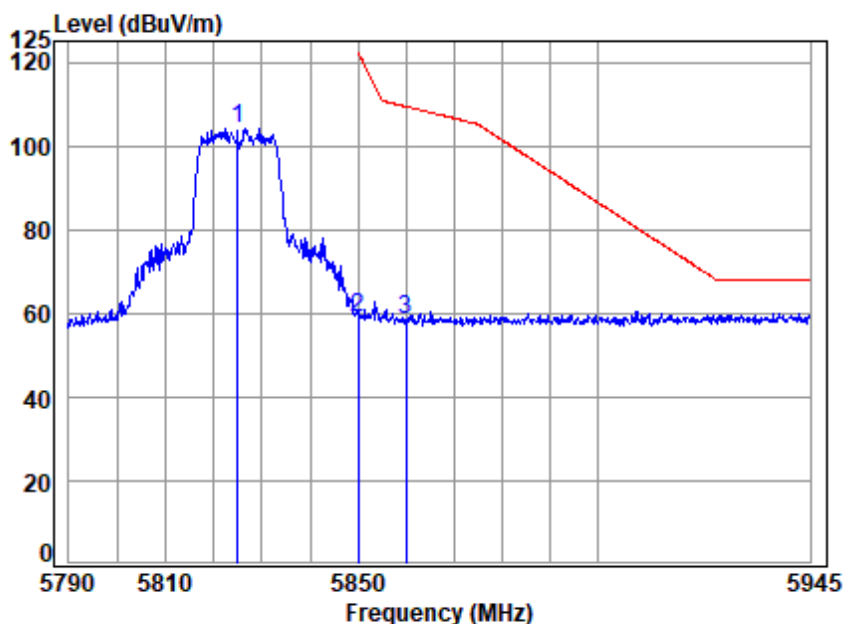


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5825 Band edge
: 5G WIFI 11A

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|------|--------|--------|--------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 5825.000 | 8.23 | 34.93 | 42.38 | 115.03 | 115.81 | ----- | ----- | peak |
| 2 5850.000 | 8.24 | 34.95 | 42.39 | 70.90 | 71.70 | 122.20 | -50.50 | peak |
| 3 5860.000 | 8.24 | 34.96 | 42.39 | 66.83 | 67.64 | 109.40 | -41.76 | peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11a; Bandwidth:20MHz; Channel:High

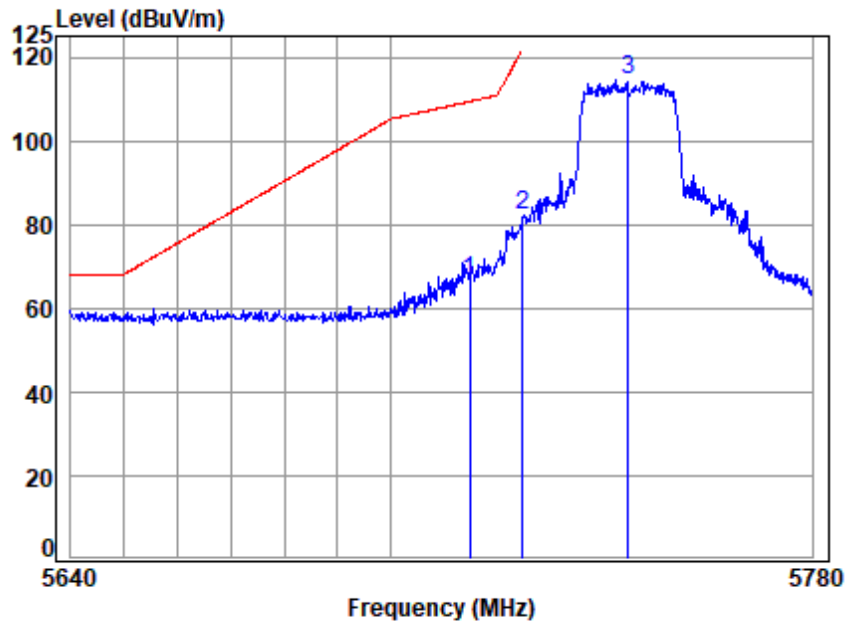


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5825 Band edge
: 5G WIFI 11A

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5825.000 | 8.23 | 34.93 | 42.38 | 103.42 | 104.20 | ----- | ----- peak |
| 2 5850.000 | 8.24 | 34.95 | 42.39 | 58.34 | 59.14 | 122.20 | -63.06 peak |
| 3 5860.000 | 8.24 | 34.96 | 42.39 | 57.80 | 58.61 | 109.40 | -50.79 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

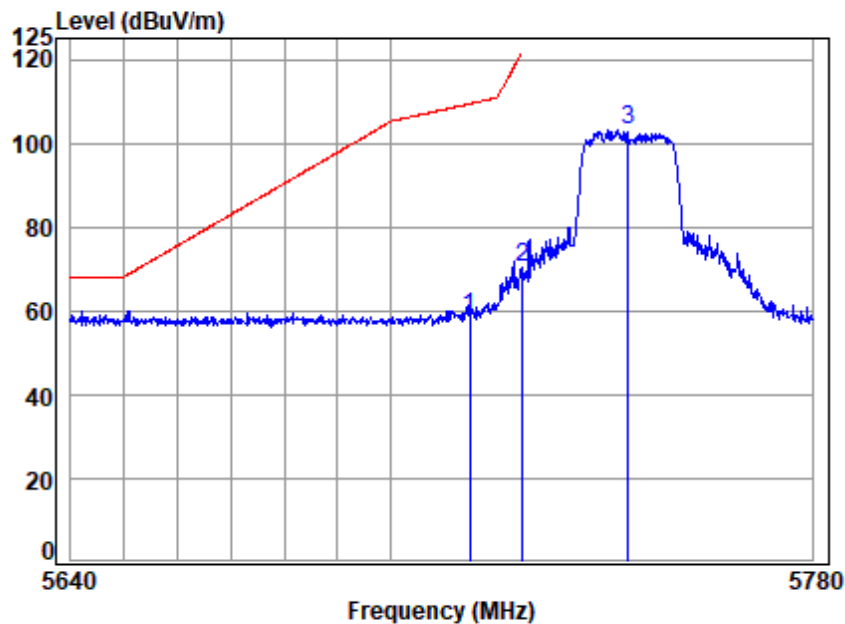


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5745 Band edge
: 5G WIFI 11N20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|--------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5715.000 | 8.22 | 34.82 | 42.37 | 65.84 | 66.51 | 109.40 | -42.89 peak |
| 2 | 5725.000 | 8.22 | 34.83 | 42.37 | 81.76 | 82.44 | 122.20 | -39.76 peak |
| 3 | 5745.000 | 8.22 | 34.85 | 42.38 | 114.04 | 114.73 | ----- | ----- peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:Low

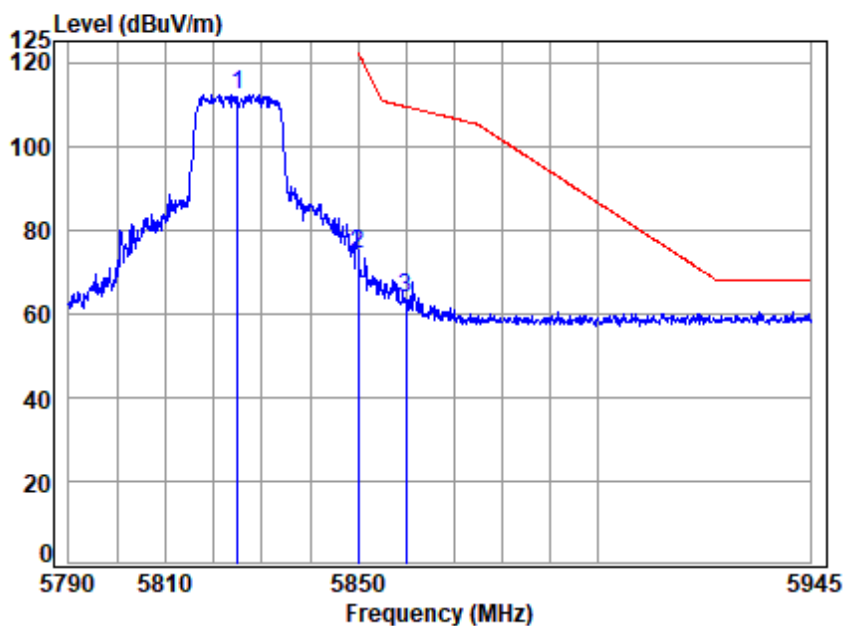


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5745 Band edge
: 5G WIFI 11N20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|--------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5715.000 | 8.22 | 34.82 | 42.37 | 57.78 | 58.45 | 109.40 | -50.95 peak |
| 2 | 5725.000 | 8.22 | 34.83 | 42.37 | 69.90 | 70.58 | 122.20 | -51.62 peak |
| 3 | 5745.000 | 8.22 | 34.85 | 42.38 | 102.22 | 102.91 | ----- | ----- peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:20MHz; Channel:High

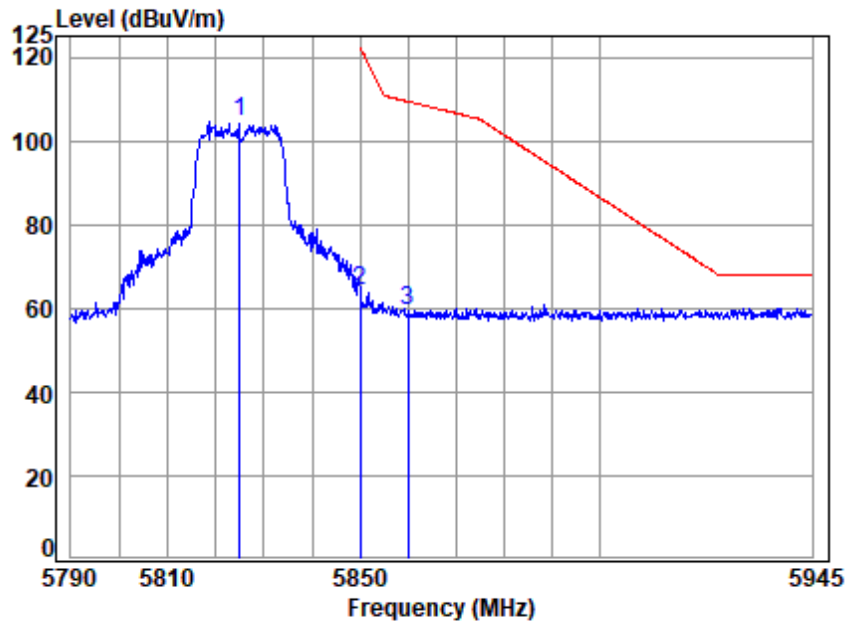


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5825 Band edge
: 5G WIFI 11N20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|--------|--------|--------|-------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5825.000 | 8.23 | 34.93 | 42.38 | 111.58 | 112.36 | ----- | ----- peak |
| 2 5850.000 | 8.24 | 34.95 | 42.39 | 73.57 | 74.37 | 122.20 | -47.83 peak |
| 3 5860.000 | 8.24 | 34.96 | 42.39 | 62.83 | 63.64 | 109.40 | -45.76 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:20MHz; Channel:High

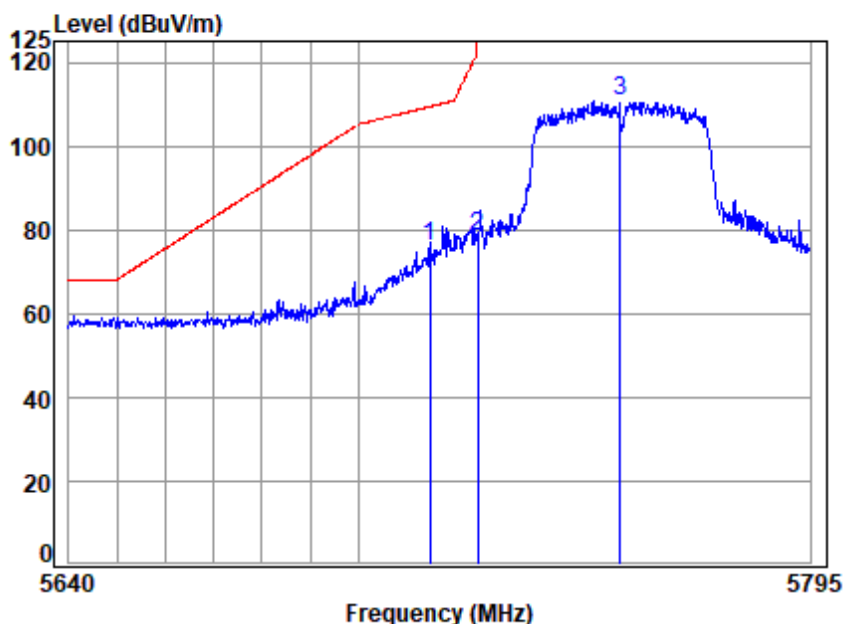


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5825 Band edge
: 5G WIFI 11N20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|------|--------|--------|--------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit | Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB | |
| 1 5825.000 | 8.23 | 34.93 | 42.38 | 103.55 | 104.33 | ----- | ----- | peak |
| 2 5850.000 | 8.24 | 34.95 | 42.39 | 63.39 | 64.19 | 122.20 | -58.01 | peak |
| 3 5860.000 | 8.24 | 34.96 | 42.39 | 58.65 | 59.46 | 109.40 | -49.94 | peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

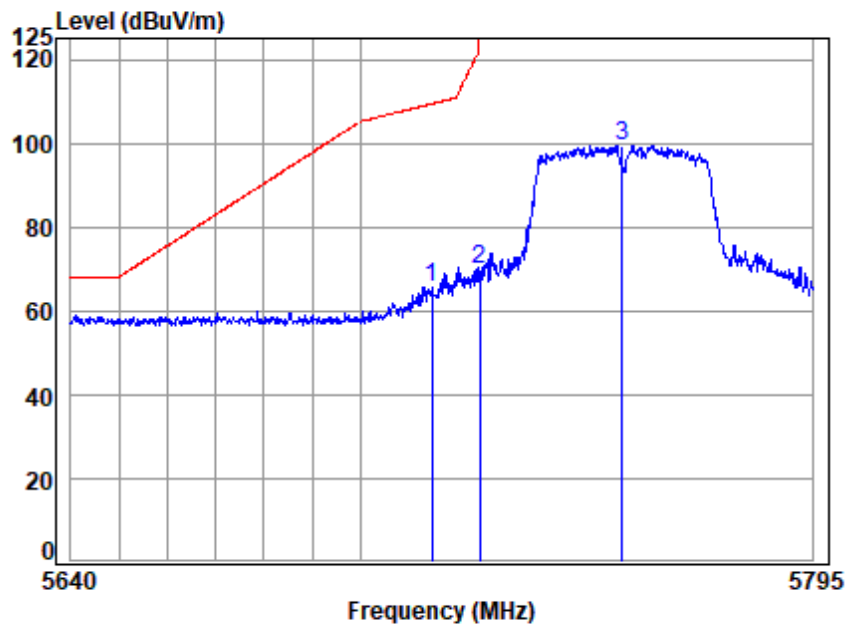


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5755 Band edge
: 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5715.000 | 8.22 | 34.82 | 42.37 | 75.42 | 76.09 | 109.40 | -33.31 peak |
| 2 5725.000 | 8.22 | 34.83 | 42.37 | 77.80 | 78.48 | 122.20 | -43.72 peak |
| 3 5755.000 | 8.22 | 34.86 | 42.38 | 110.03 | 110.73 | ----- | ----- peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:Low

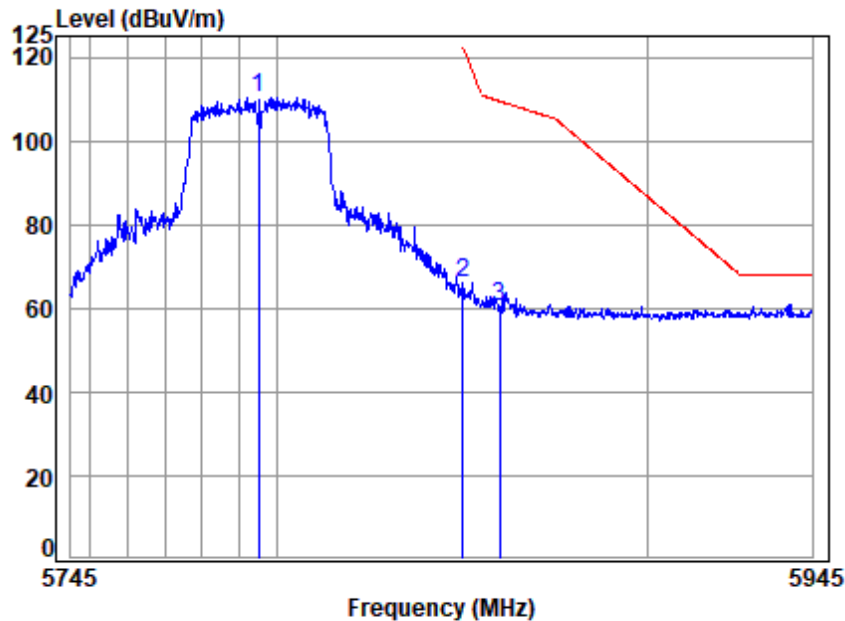


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5755 Band edge
: 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5715.000 | 8.22 | 34.82 | 42.37 | 64.77 | 65.44 | 109.40 | -43.96 peak |
| 2 5725.000 | 8.22 | 34.83 | 42.37 | 69.41 | 70.09 | 122.20 | -52.11 peak |
| 3 5755.000 | 8.22 | 34.86 | 42.38 | 98.75 | 99.45 | ----- | ----- peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11n; Bandwidth:40MHz; Channel:High

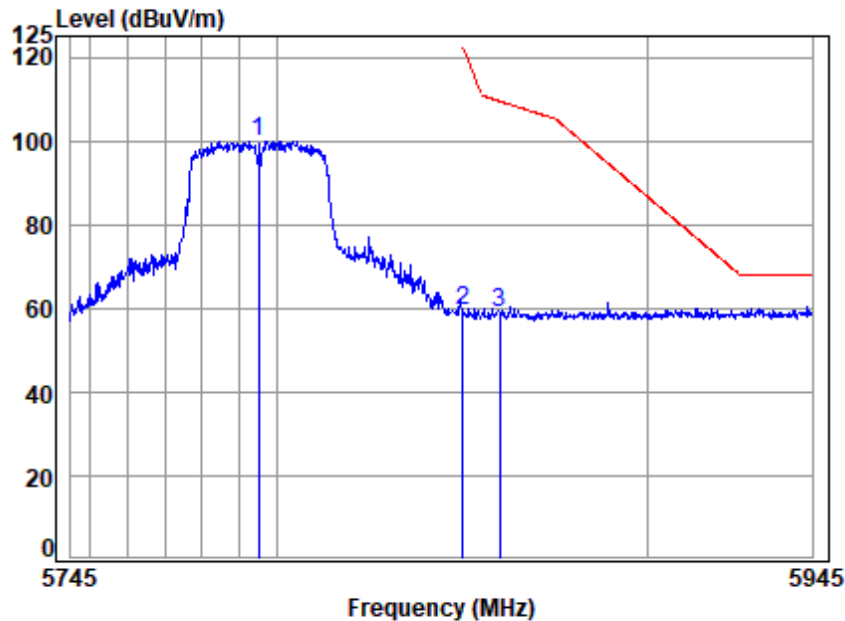


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5795 Band edge
: 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5795.000 | 8.23 | 34.90 | 42.38 | 109.70 | 110.45 | ----- | ----- peak |
| 2 5850.000 | 8.24 | 34.95 | 42.39 | 65.44 | 66.24 | 122.20 | -55.96 peak |
| 3 5860.000 | 8.24 | 34.96 | 42.39 | 59.34 | 60.15 | 109.40 | -49.25 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11n; Bandwidth:40MHz; Channel:High

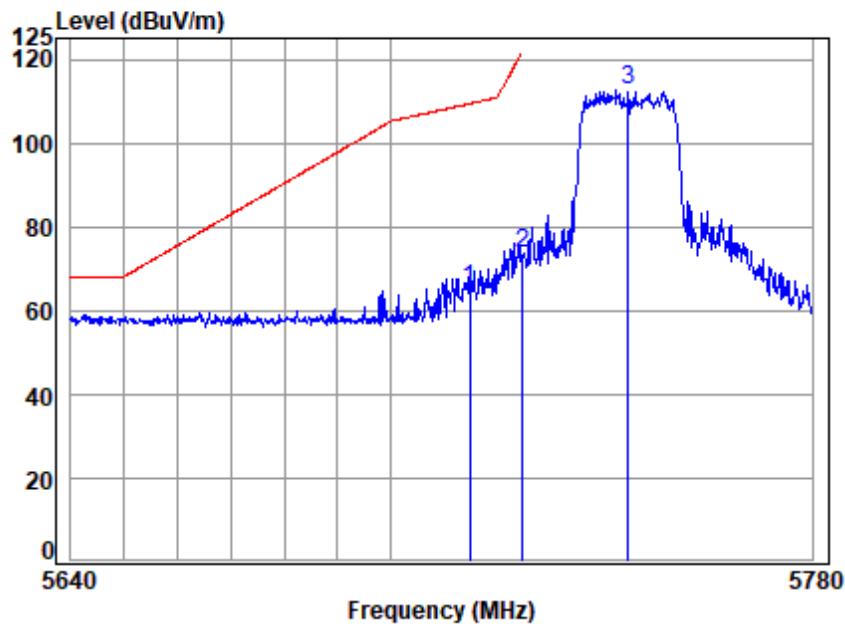


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5795 Band edge
: 5G WIFI 11N40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5795.000 | 8.23 | 34.90 | 42.38 | 99.14 | 99.89 | ----- | ----- peak |
| 2 5850.000 | 8.24 | 34.95 | 42.39 | 58.39 | 59.19 | 122.20 | -63.01 peak |
| 3 5860.000 | 8.24 | 34.96 | 42.39 | 58.33 | 59.14 | 109.40 | -50.26 peak |



Test Mode: 04; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: Low

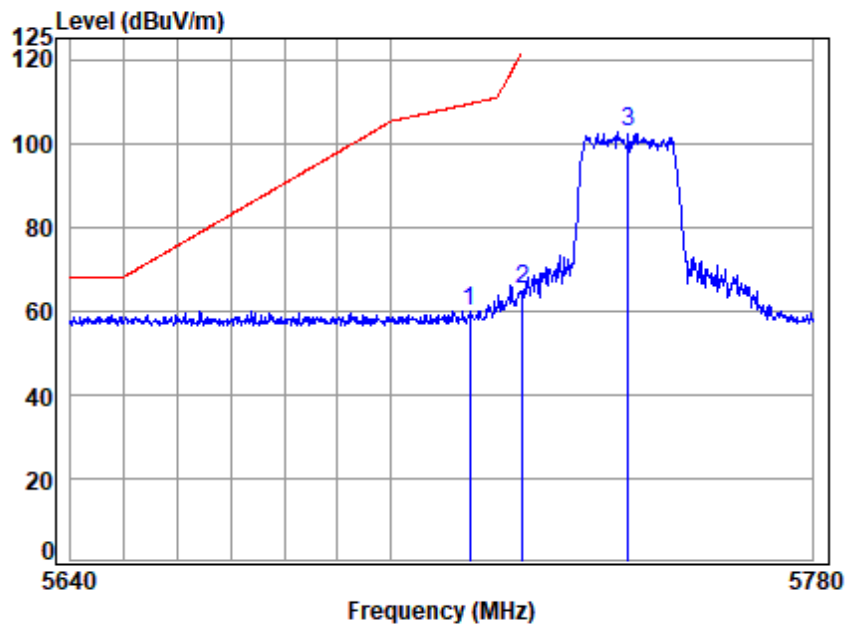


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5745 Band edge
: 5G WIFI 11AC20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|--------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5715.000 | 8.22 | 34.82 | 42.37 | 64.64 | 65.31 | 109.40 | -44.09 peak |
| 2 | 5725.000 | 8.22 | 34.83 | 42.37 | 72.76 | 73.44 | 122.20 | -48.76 peak |
| 3 | 5745.000 | 8.22 | 34.85 | 42.38 | 112.05 | 112.74 | ----- | ----- peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:Low

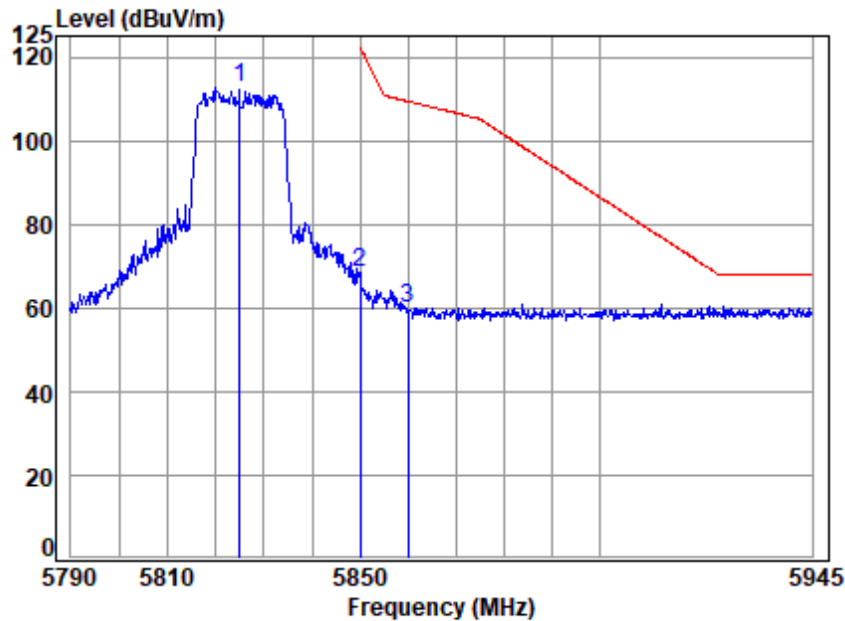


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5745 Band edge
: 5G WIFI 11AC20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|--------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5715.000 | 8.22 | 34.82 | 42.37 | 59.44 | 60.11 | 109.40 | -49.29 peak |
| 2 | 5725.000 | 8.22 | 34.83 | 42.37 | 64.35 | 65.03 | 122.20 | -57.17 peak |
| 3 | 5745.000 | 8.22 | 34.85 | 42.38 | 101.81 | 102.50 | ----- | ----- peak |



Test Mode: 04; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 20MHz; Channel: High

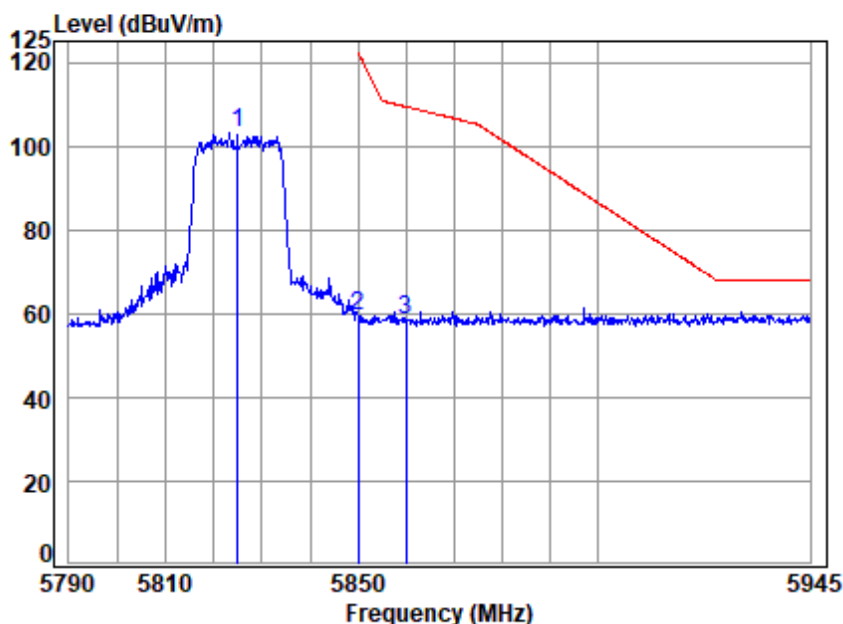


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5825 Band edge
: 5G WIFI 11AC20

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5825.000 | 8.23 | 34.93 | 42.38 | 111.86 | 112.64 | ----- | ----- peak |
| 2 | 5850.000 | 8.24 | 34.95 | 42.39 | 67.78 | 68.58 | 122.20 | -53.62 peak |
| 3 | 5860.000 | 8.24 | 34.96 | 42.39 | 59.10 | 59.91 | 109.40 | -49.49 peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:20MHz; Channel:High

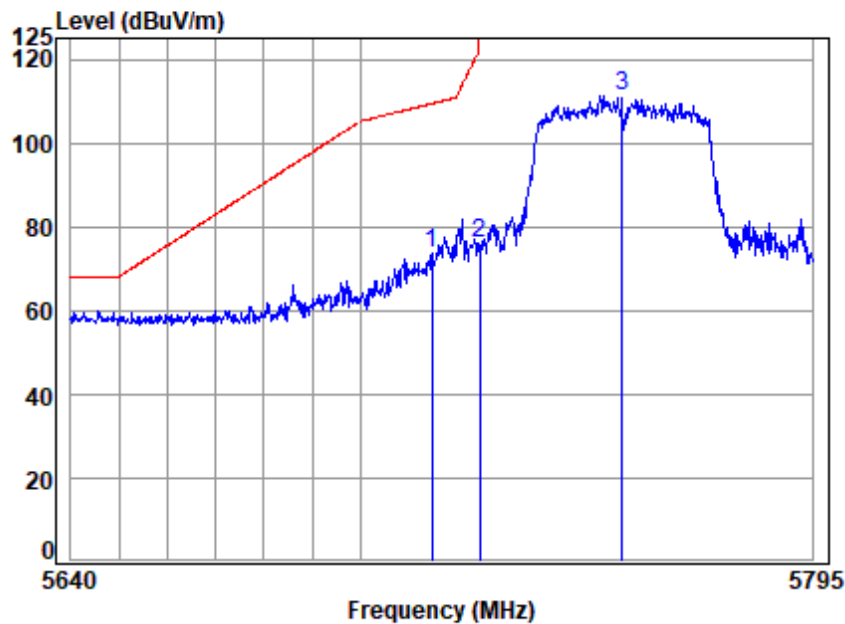


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5825 Band edge
: 5G WIFI 11AC20

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5825.000 | 8.23 | 34.93 | 42.38 | 102.46 | 103.24 | ----- | ----- peak |
| 2 5850.000 | 8.24 | 34.95 | 42.39 | 58.80 | 59.60 | 122.20 | -62.60 peak |
| 3 5860.000 | 8.24 | 34.96 | 42.39 | 57.85 | 58.66 | 109.40 | -50.74 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low

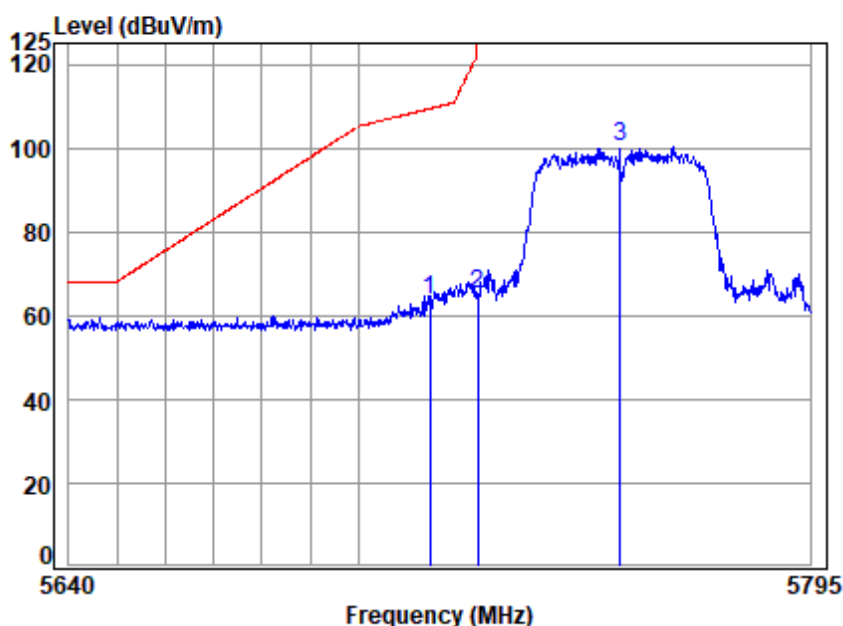


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5755 Band edge
: 5G WIFI 11AC40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|--------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5715.000 | 8.22 | 34.82 | 42.37 | 73.16 | 73.83 | 109.40 | -35.57 peak |
| 2 | 5725.000 | 8.22 | 34.83 | 42.37 | 75.16 | 75.84 | 122.20 | -46.36 peak |
| 3 | 5755.000 | 8.22 | 34.86 | 42.38 | 110.48 | 111.18 | ----- | ----- peak |



Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:Low

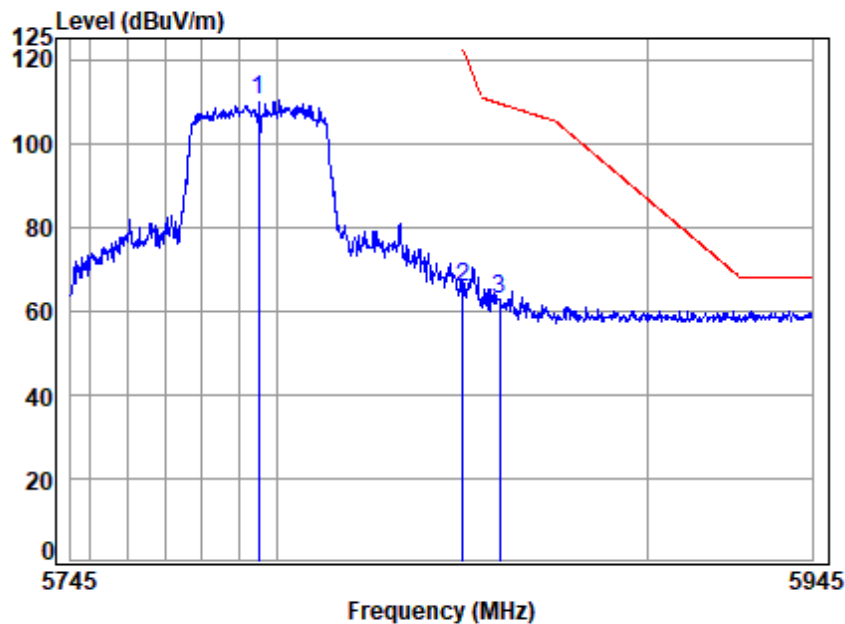


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5755 Band edge
: 5G WIFI 11AC40

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|------|----------|-------|--------|--------|-------|--------|--------|--------------|
| Freq | | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5715.000 | 8.22 | 34.82 | 42.37 | 63.07 | 63.74 | 109.40 | -45.66 peak |
| 2 | 5725.000 | 8.22 | 34.83 | 42.37 | 64.62 | 65.30 | 122.20 | -56.90 peak |
| 3 | 5755.000 | 8.22 | 34.86 | 42.38 | 99.47 | 100.17 | ----- | ----- peak |



Test Mode: 04; Polarity: Horizontal; Modulation: 802.11ac; Bandwidth: 40MHz; Channel: High



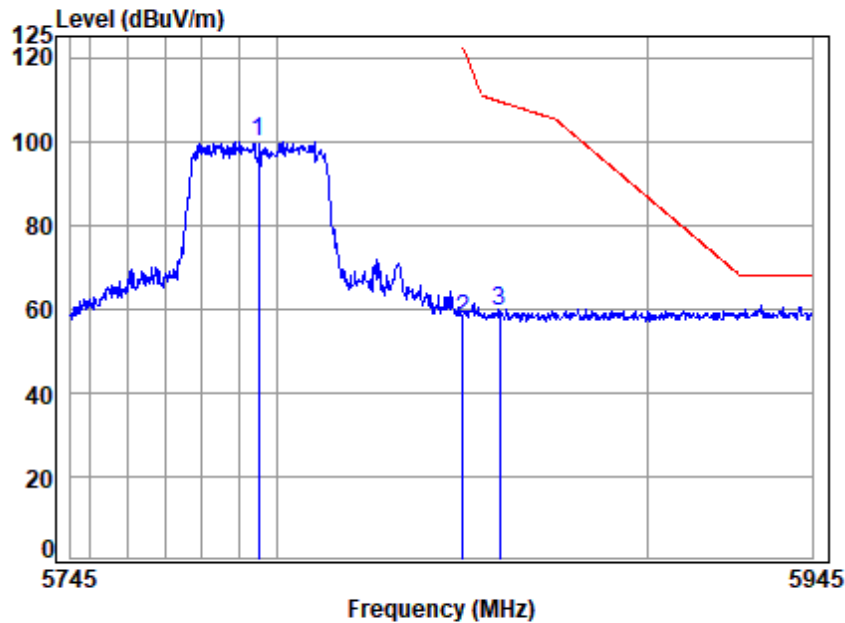
Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5795 Band edge
: 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|--------|--------|--------|--------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5795.000 | 8.23 | 34.90 | 42.38 | 109.51 | 110.26 | ----- | ----- |
| 2 5850.000 | 8.24 | 34.95 | 42.39 | 64.60 | 65.40 | 122.20 | -56.80 |
| 3 5860.000 | 8.24 | 34.96 | 42.39 | 62.02 | 62.83 | 109.40 | -46.57 |



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Test Mode: 04; Polarity: Vertical; Modulation:802.11ac; Bandwidth:40MHz; Channel:High

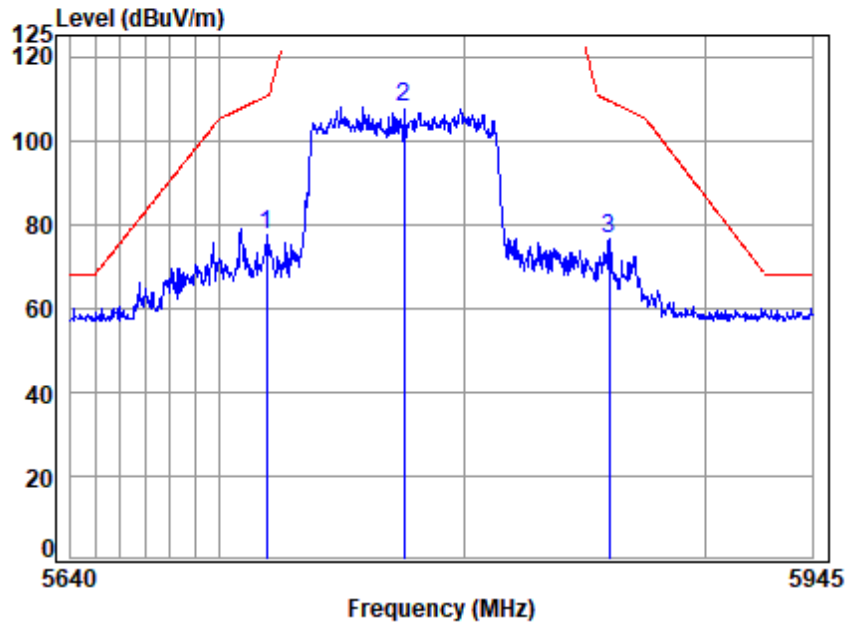


Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5795 Band edge
: 5G WIFI 11AC40

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|-------|--------|--------|-------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5795.000 | 8.23 | 34.90 | 42.38 | 99.13 | 99.88 | ----- | ----- peak |
| 2 5850.000 | 8.24 | 34.95 | 42.39 | 56.85 | 57.65 | 122.20 | -64.55 peak |
| 3 5860.000 | 8.24 | 34.96 | 42.39 | 58.69 | 59.50 | 109.40 | -49.90 peak |



Test Mode: 04; Polarity: Horizontal; Modulation:802.11ac; Bandwidth:80MHz; Channel:middle

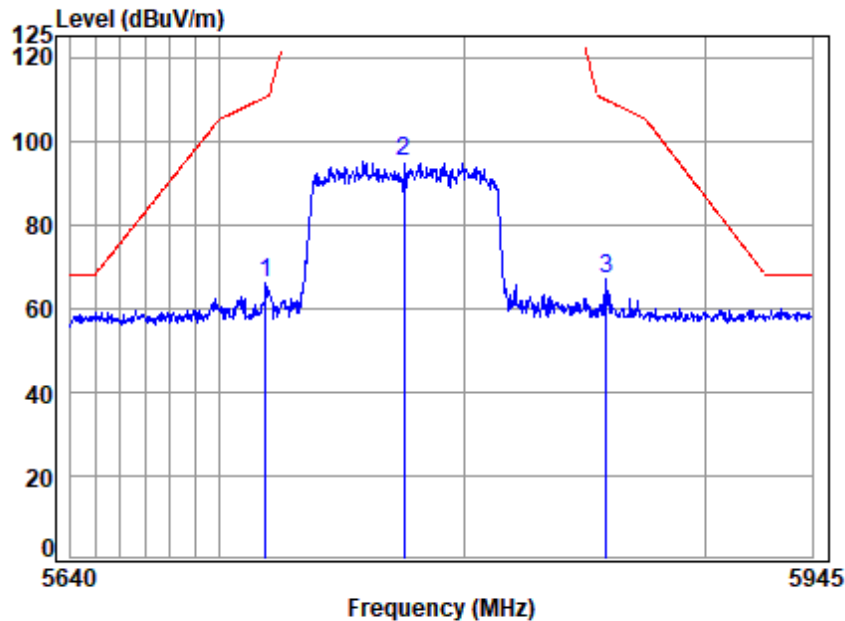


Site : chamber
Condition: 3m HORIZONTAL
Job No : 02456CR
Mode : 5775 Band edge
: 5G WIFI 11AC80

| | Cable | Ant | Preamp | Read | Limit | Over | |
|------------|-------|--------|--------|--------|--------|--------|--------------|
| Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 5718.966 | 8.22 | 34.82 | 42.37 | 76.96 | 77.63 | 110.51 | -32.88 peak |
| 2 5775.000 | 8.22 | 34.88 | 42.38 | 107.01 | 107.73 | ----- | ----- peak |
| 3 5859.826 | 8.24 | 34.96 | 42.39 | 75.95 | 76.76 | 109.45 | -32.69 peak |



Test Mode: 04; Polarity: Vertical; Modulation: 802.11ac; Bandwidth: 80MHz; Channel: middle



Site : chamber
Condition: 3m VERTICAL
Job No : 02456CR
Mode : 5775 Band edge
: 5G WIFI 11AC80

| | | Cable | Ant | Preamp | Read | Limit | Over | |
|---|----------|-------|--------|--------|-------|--------|--------|--------------|
| | Freq | Loss | Factor | Factor | Level | Level | Line | Limit Remark |
| | MHz | dB | dB/m | dB | dBuV | dBuV/m | dBuV/m | dB |
| 1 | 5718.665 | 8.22 | 34.82 | 42.37 | 65.26 | 65.93 | 110.43 | -44.50 peak |
| 2 | 5775.000 | 8.22 | 34.88 | 42.38 | 94.33 | 95.05 | ----- | ----- peak |
| 3 | 5858.900 | 8.24 | 34.96 | 42.39 | 66.06 | 66.87 | 109.71 | -42.84 peak |



7.11 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)
Test Method: ANSI C63.10 (2013) Section 6.8

7.11.1 E.U.T. Operation

Operating Environment:

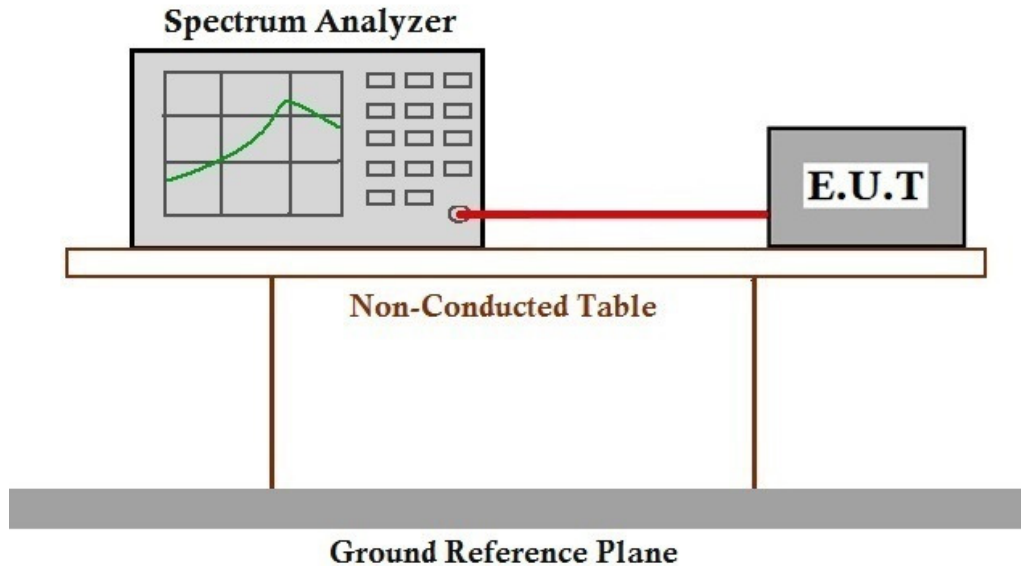
Temperature: 21.1 °C Humidity: 39.8 % RH Atmospheric Pressure: 1010 mbar

7.11.2 Test Mode Description

| Pre-scan / Final test | Mode Code | Description |
|--------------------------|--------------|--|
| Final test | 03 | TX mode (U-NII-1) Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |
| Final test | 04 | TX mode (U-NII-3) Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n(HT20); data rate @ MCS0 is the worst case of IEEE 802.11n(HT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT20); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT40); data rate @ MCS0 is the worst case of IEEE 802.11ac(VHT80). Only the data of worst case is recorded in the report. |



7.11.3 Test Setup Diagram



7.11.4 Measurement Procedure and Data

Please Refer To Appendix For Details



8 Test Setup Photo

Refer to Setup Photos

9 EUT Constructional Details (EUT Photos)

Refer to EUT External and Internal photos



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10 Appendix

Appendix for 15.407

1. Duty Cycle

1.1 Test Result

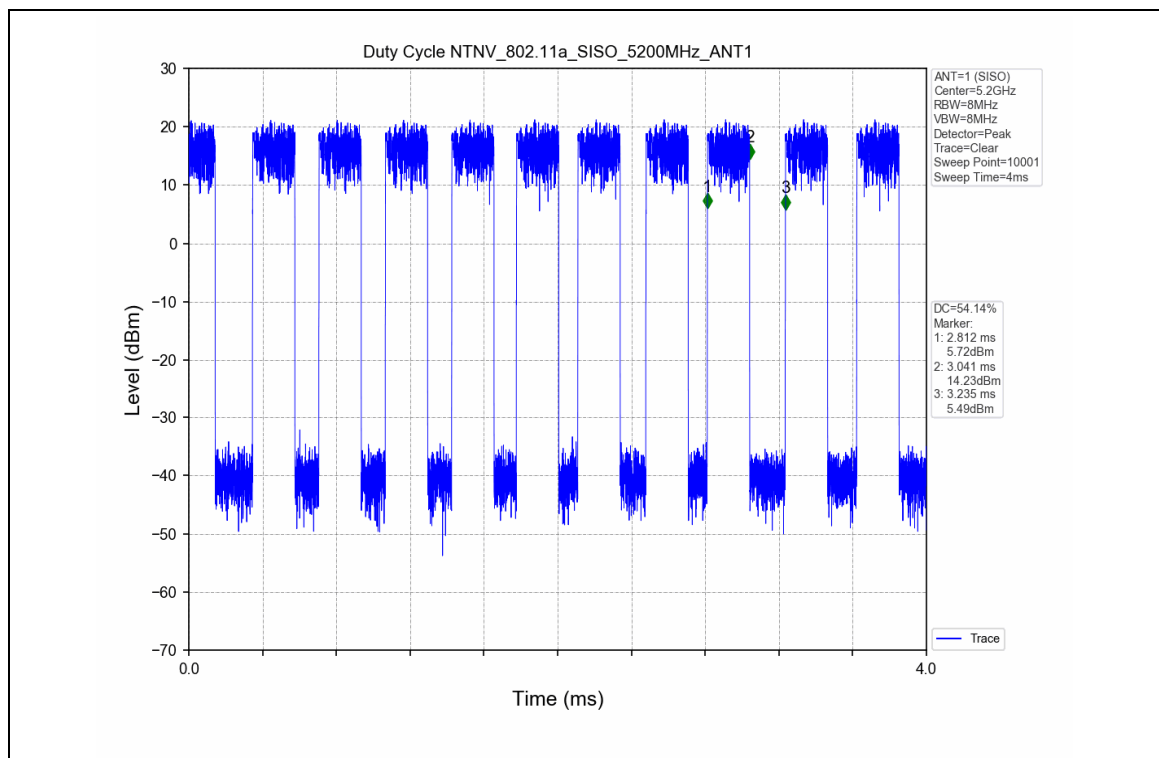
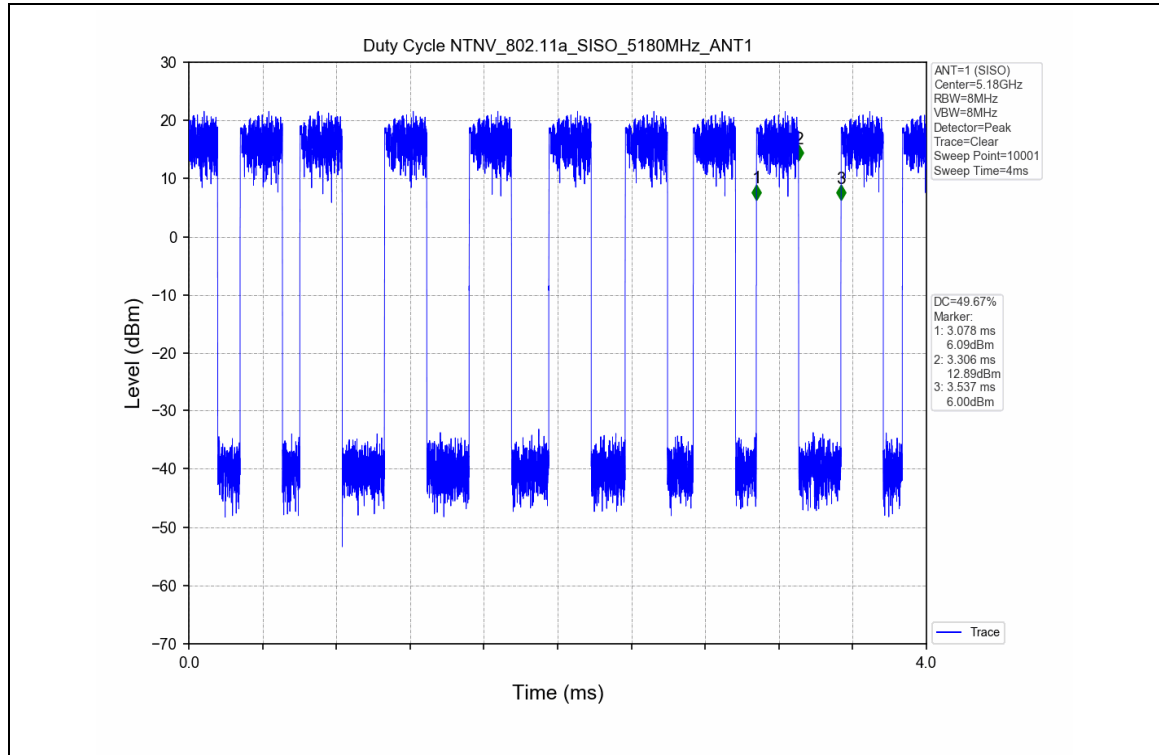
| Test Mode | Channel Frequency (MHz) | TX Type | ANT No. | T_on (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) |
|-----------------|-------------------------|---------|---------|-----------|-------------|----------------|-----------------------------------|
| 802.11a | 5180 | SISO | 1 | 0.228 | 0.459 | 49.67 | 3.04 |
| | 5200 | SISO | 1 | 0.229 | 0.423 | 54.14 | 2.66 |
| | 5240 | SISO | 1 | 0.228 | 0.459 | 49.67 | 3.04 |
| | 5745 | SISO | 1 | 0.229 | 0.460 | 49.78 | 3.03 |
| | 5785 | SISO | 1 | 0.229 | 0.459 | 49.89 | 3.02 |
| | 5825 | SISO | 1 | 0.228 | 0.450 | 50.67 | 2.95 |
| 802.11n(HT20) | 5180 | MIMO | 1 | 0.248 | 0.479 | 51.77 | 2.86 |
| | 5200 | MIMO | 1 | 0.228 | 0.459 | 49.67 | 3.04 |
| | 5240 | MIMO | 1 | 0.228 | 0.450 | 50.67 | 2.95 |
| | 5745 | MIMO | 1 | 0.228 | 0.460 | 49.57 | 3.05 |
| | 5785 | MIMO | 1 | 0.228 | 0.459 | 49.67 | 3.04 |
| | 5825 | MIMO | 1 | 0.228 | 0.459 | 49.67 | 3.04 |
| 802.11n(HT40) | 5190 | MIMO | 1 | 0.229 | 0.459 | 49.89 | 3.02 |
| | 5230 | MIMO | 1 | 0.129 | 0.359 | 35.93 | 4.45 |
| | 5755 | MIMO | 1 | 0.229 | 0.450 | 50.89 | 2.93 |
| | 5795 | MIMO | 1 | 0.128 | 0.359 | 35.65 | 4.48 |
| 802.11ac(VHT20) | 5180 | MIMO | 1 | 0.200 | 0.455 | 43.96 | 3.57 |
| | 5200 | MIMO | 1 | 0.201 | 0.438 | 45.89 | 3.38 |
| | 5240 | MIMO | 1 | 0.200 | 0.455 | 43.96 | 3.57 |
| | 5745 | MIMO | 1 | 0.200 | 0.428 | 46.73 | 3.30 |
| | 5785 | MIMO | 1 | 0.229 | 0.459 | 49.89 | 3.02 |
| | 5825 | MIMO | 1 | 0.201 | 0.455 | 44.18 | 3.55 |
| 802.11ac(VHT40) | 5190 | MIMO | 1 | 0.117 | 0.362 | 32.32 | 4.91 |
| | 5230 | MIMO | 1 | 0.116 | 0.368 | 31.52 | 5.01 |
| | 5755 | MIMO | 1 | 0.117 | 0.335 | 34.93 | 4.57 |
| | 5795 | MIMO | 1 | 0.117 | 0.371 | 31.54 | 5.01 |
| 802.11ac(VHT80) | 5210 | MIMO | 1 | 0.229 | 0.450 | 50.89 | 2.93 |
| | 5775 | MIMO | 1 | 0.073 | 0.300 | 24.33 | 6.14 |

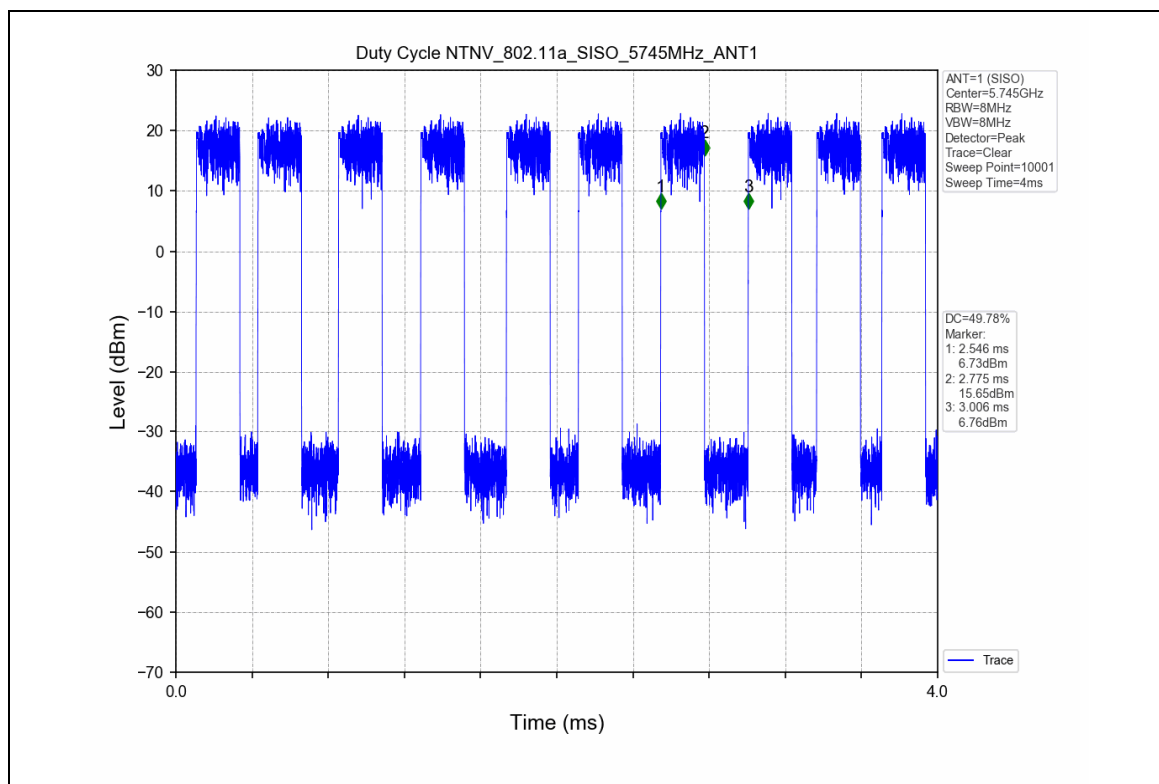
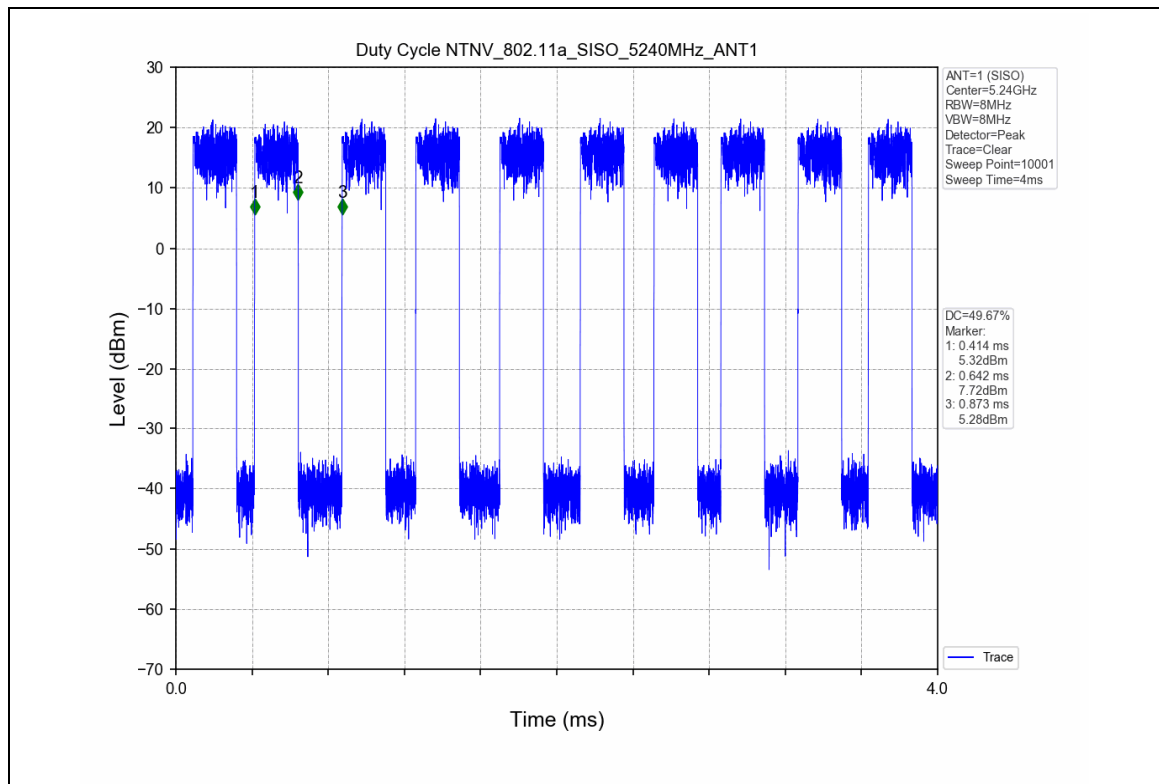


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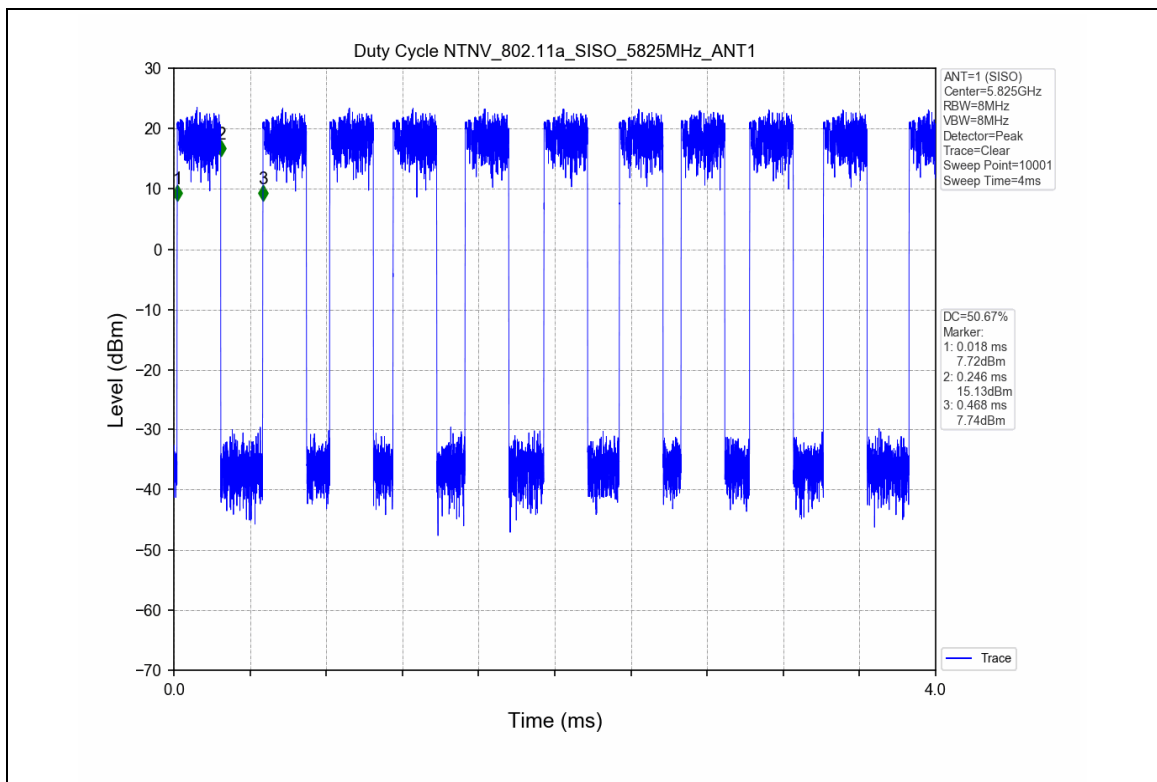
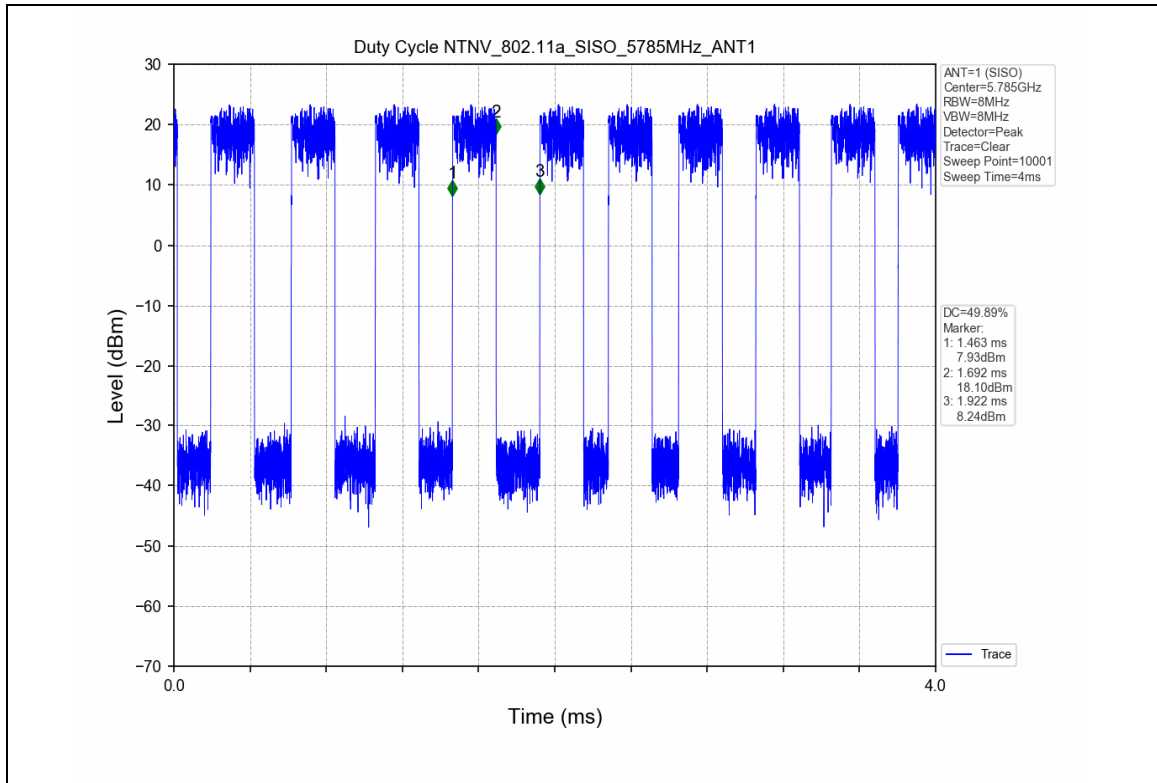
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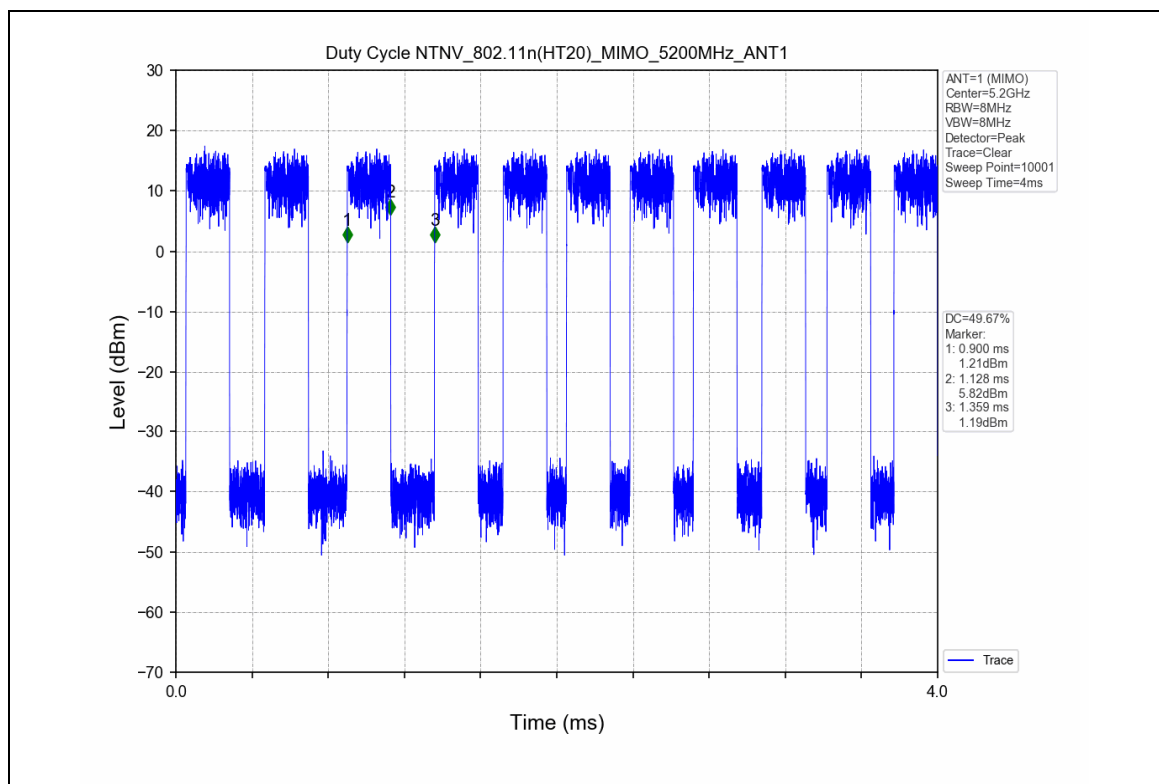
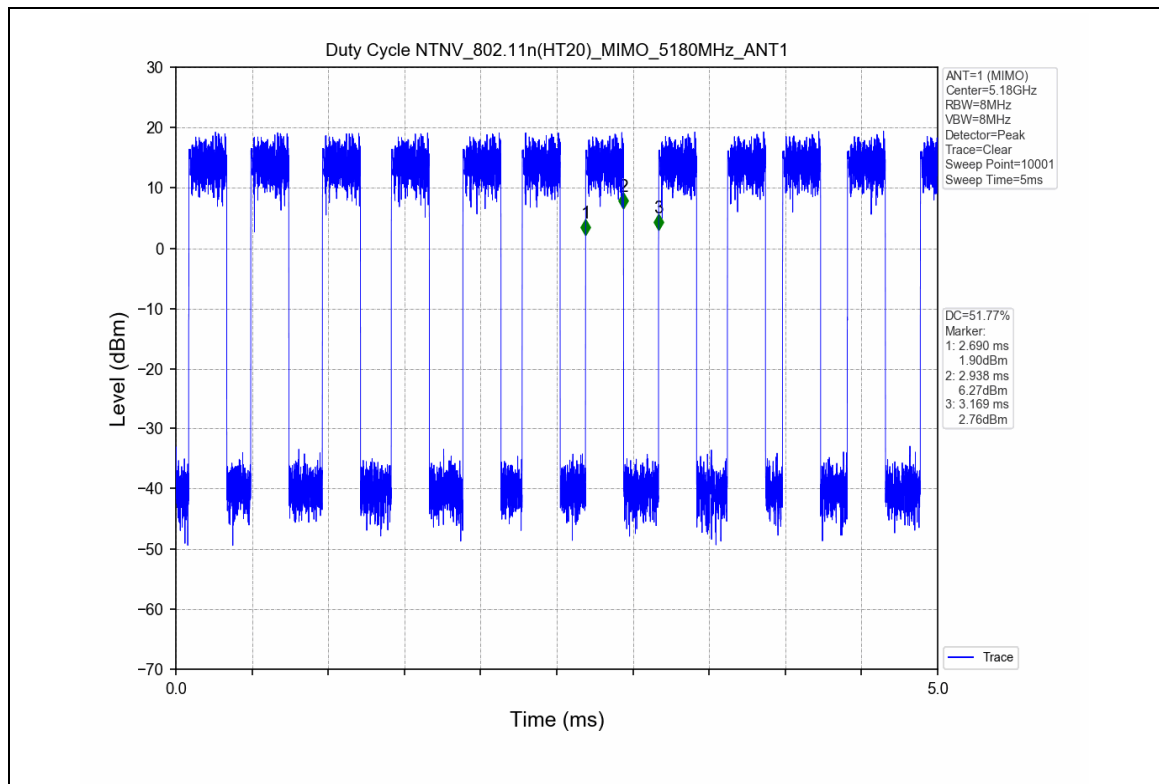




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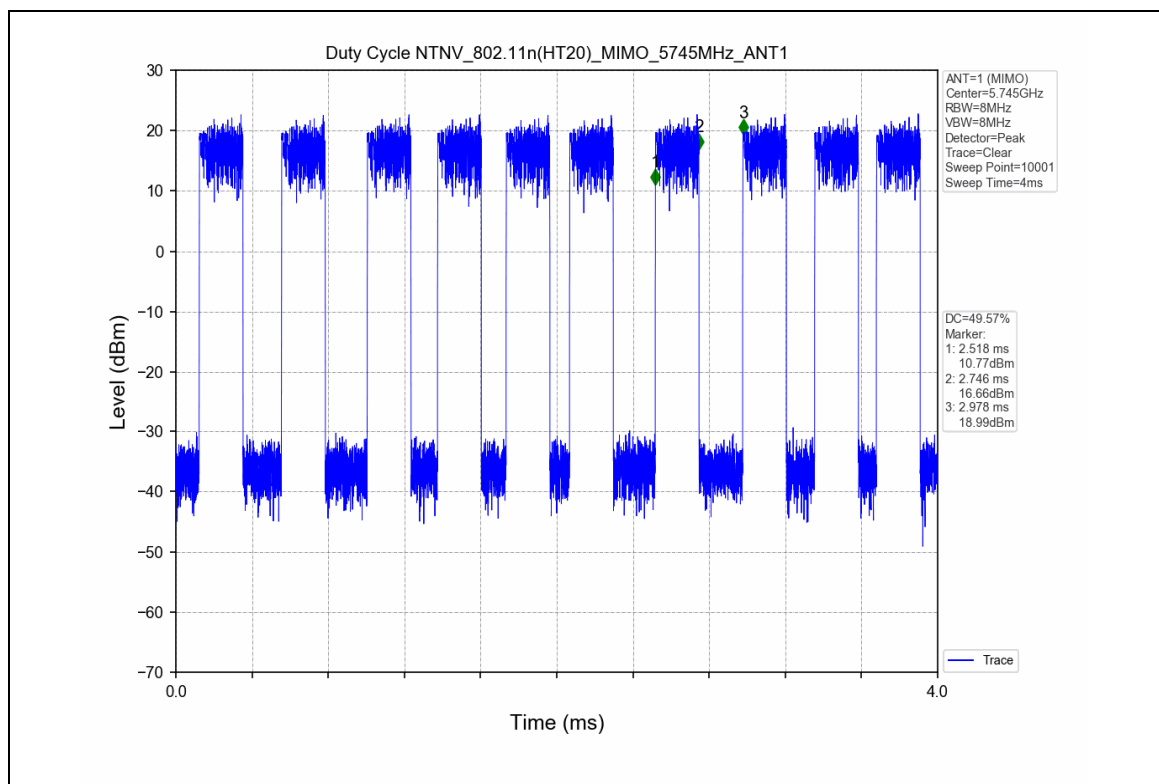
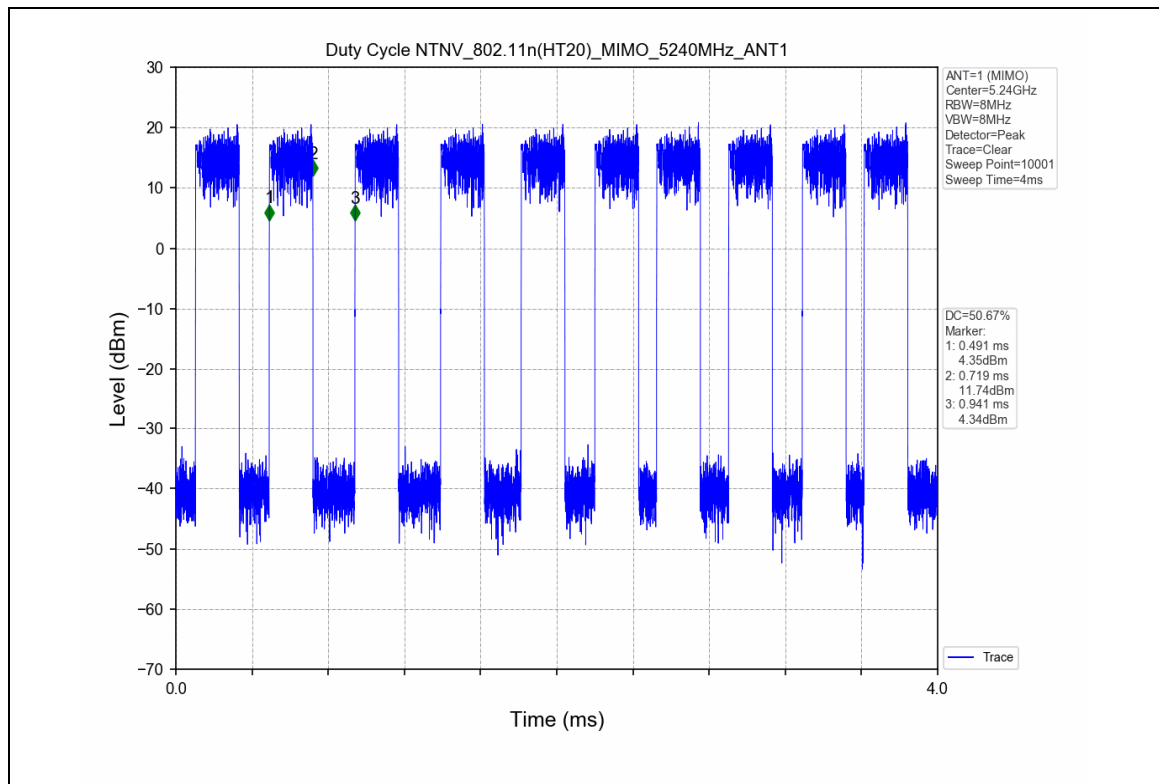
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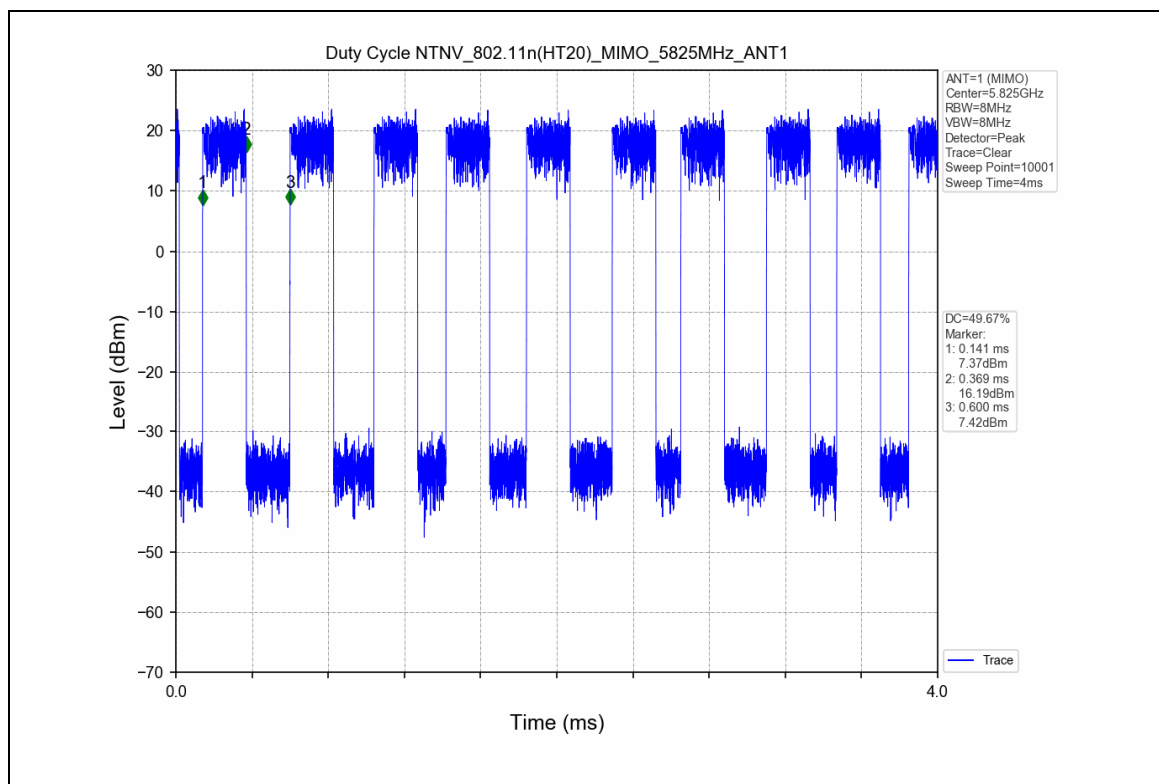
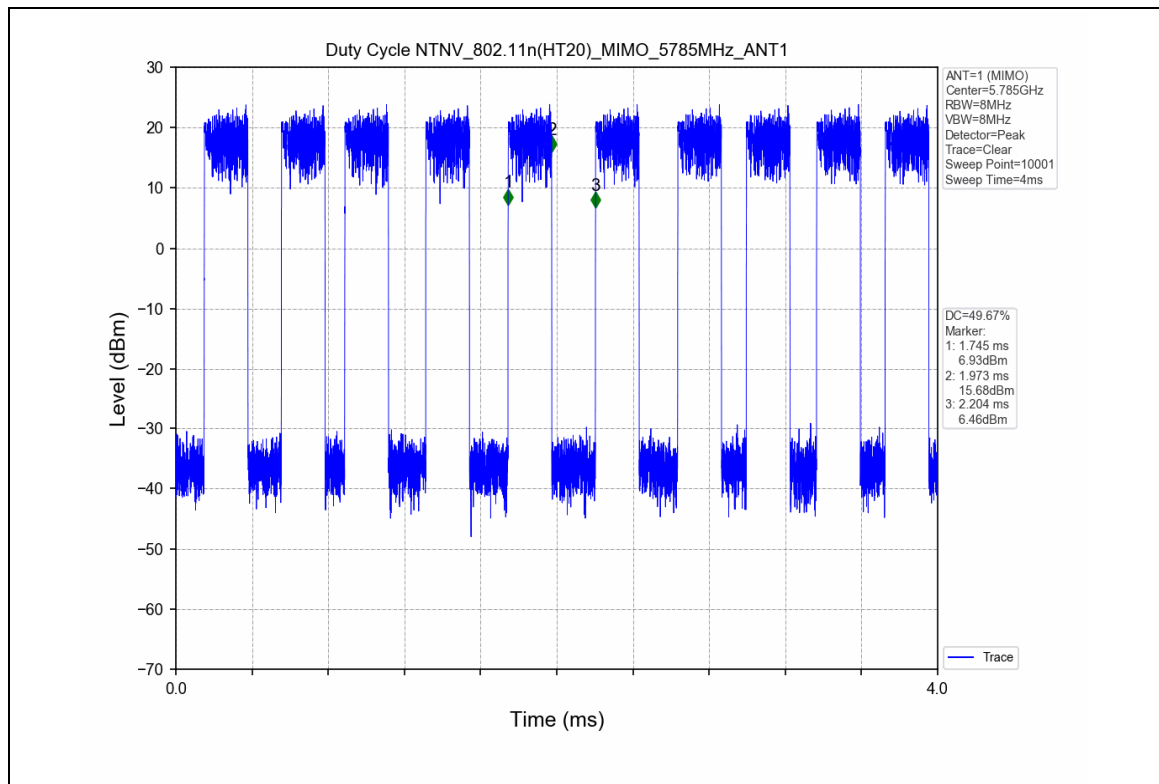




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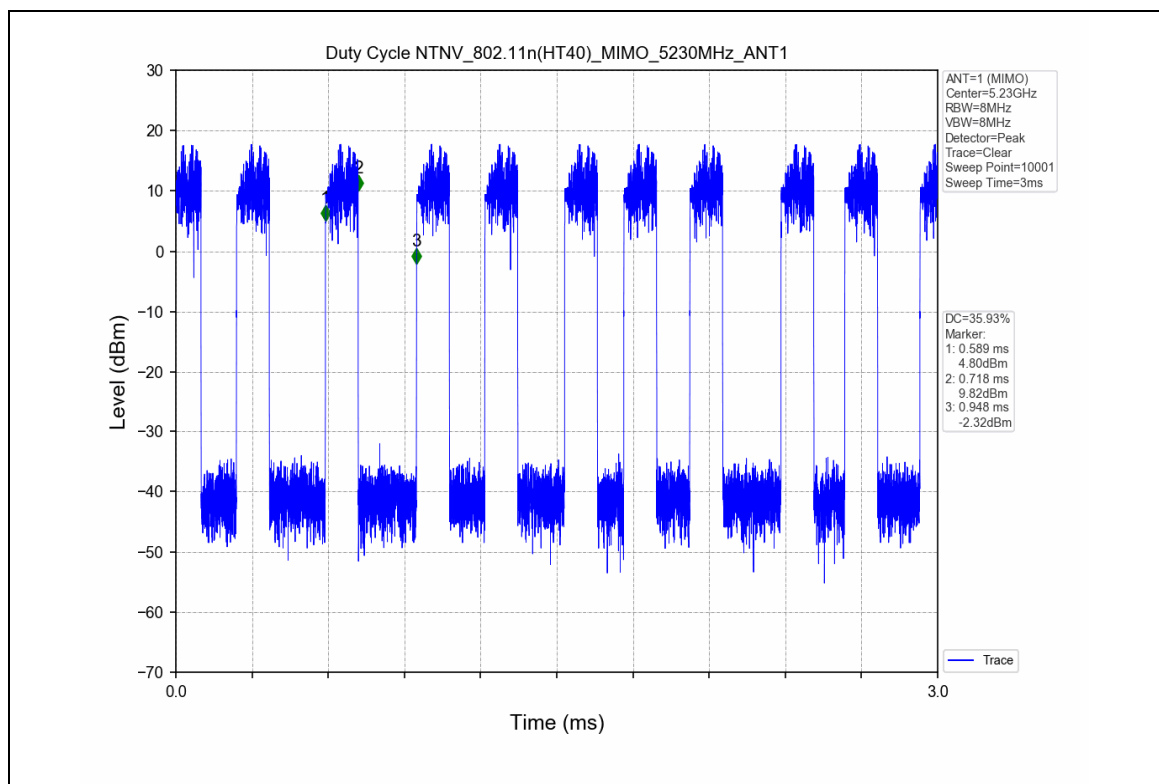
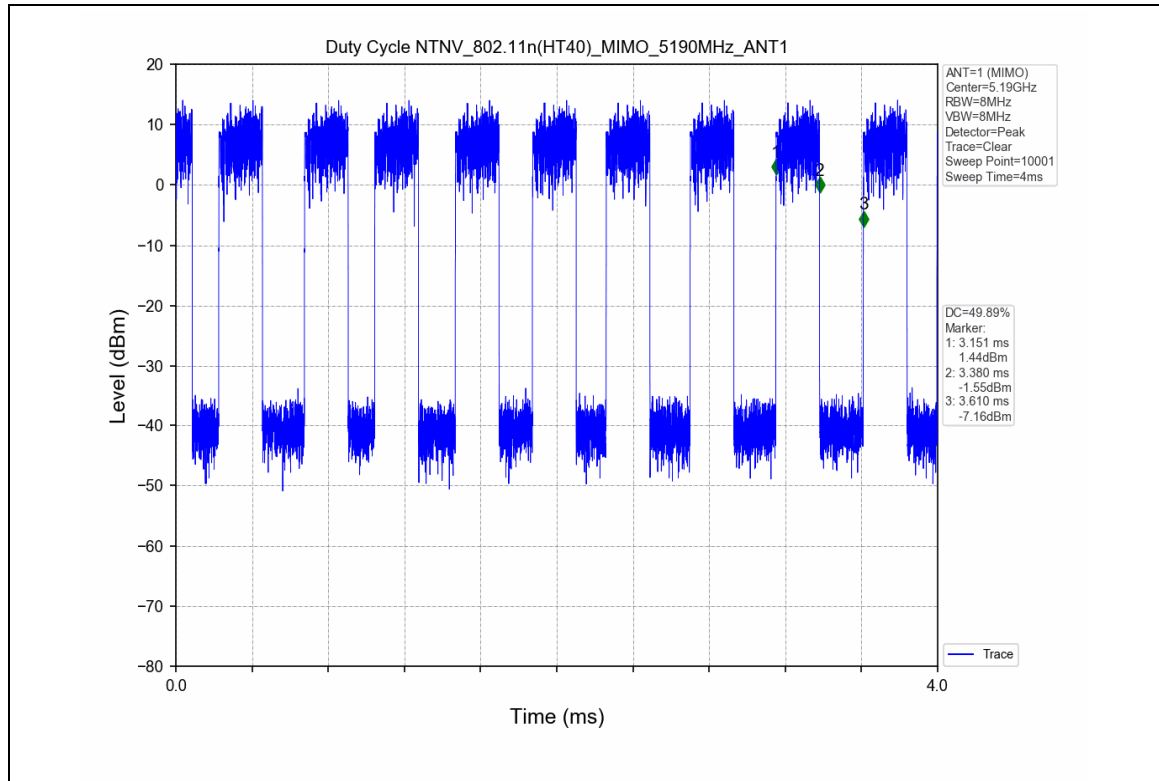
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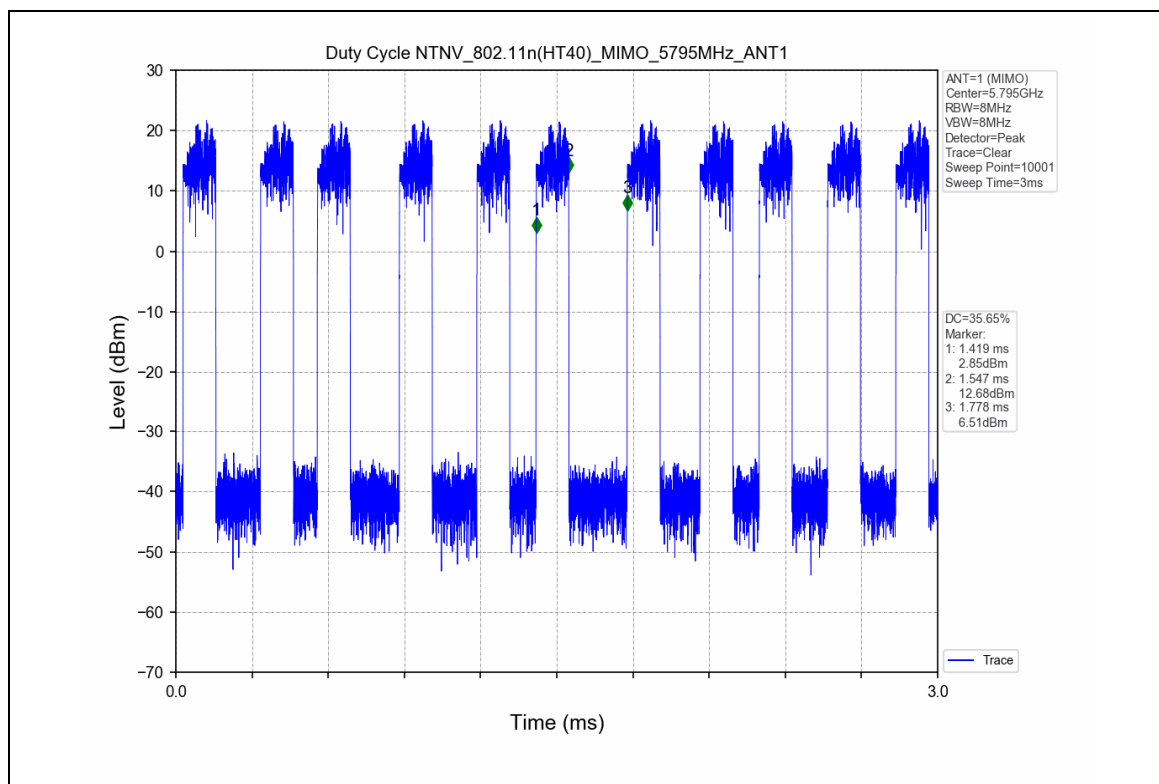
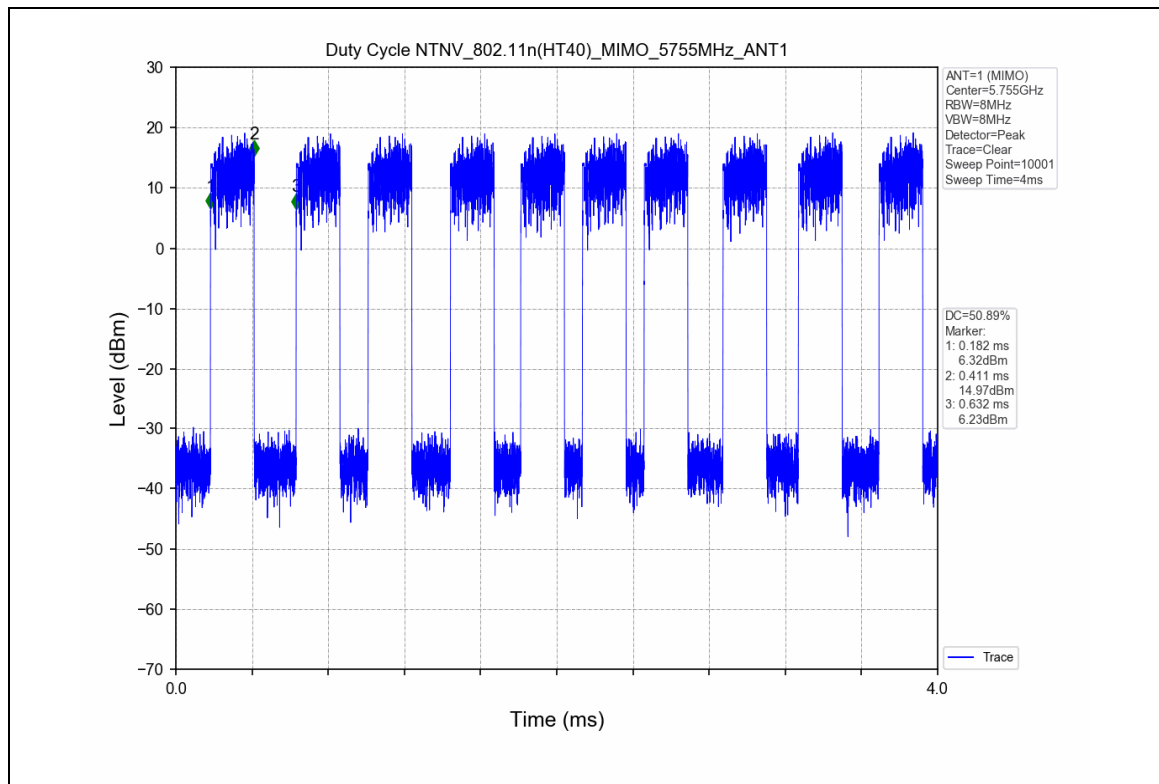
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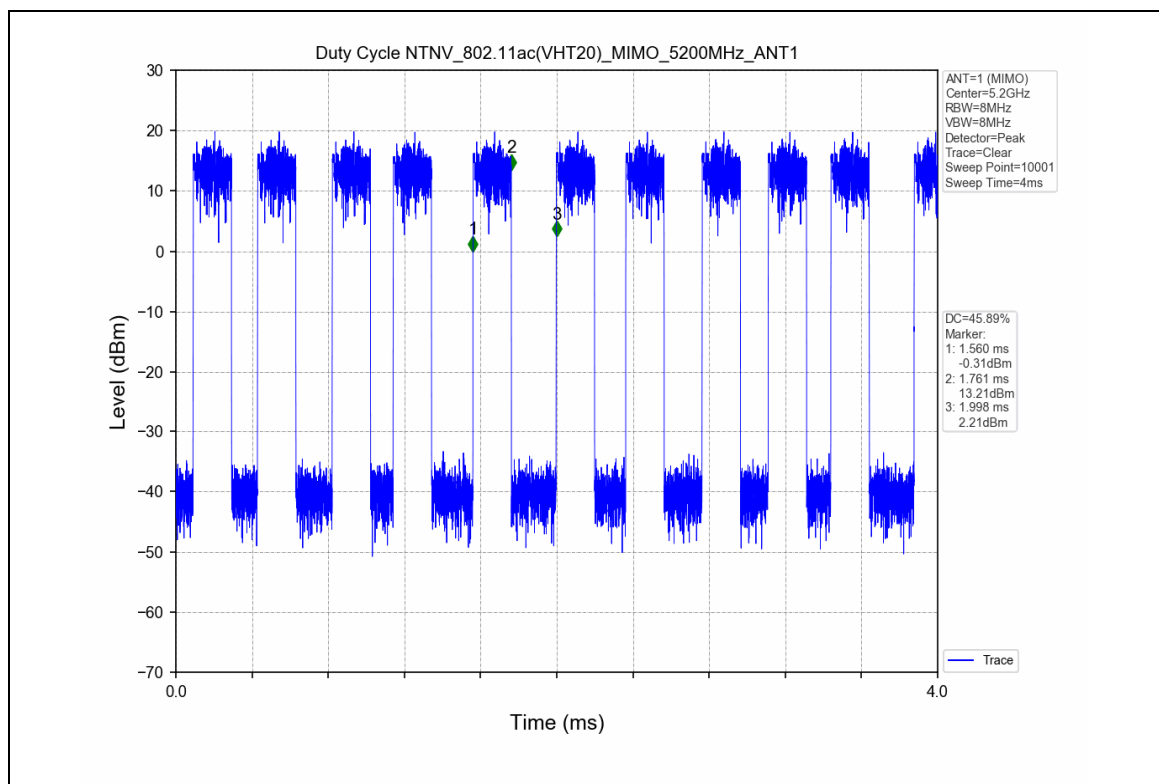
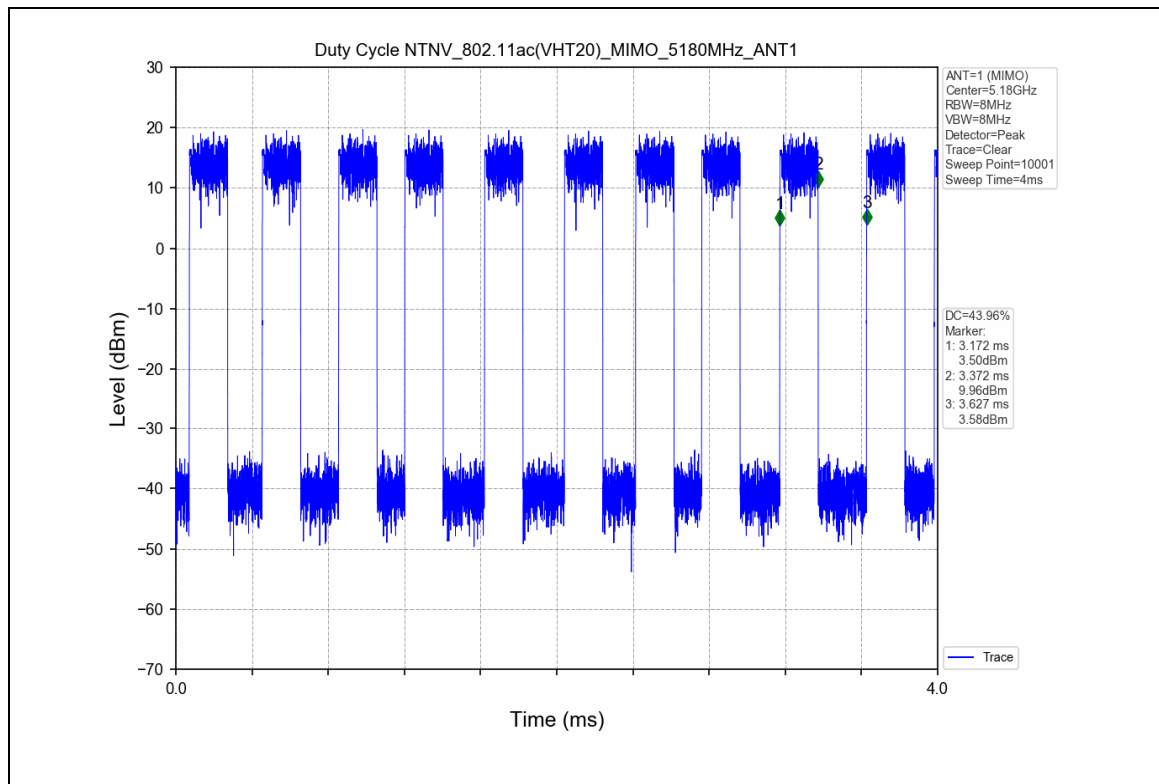
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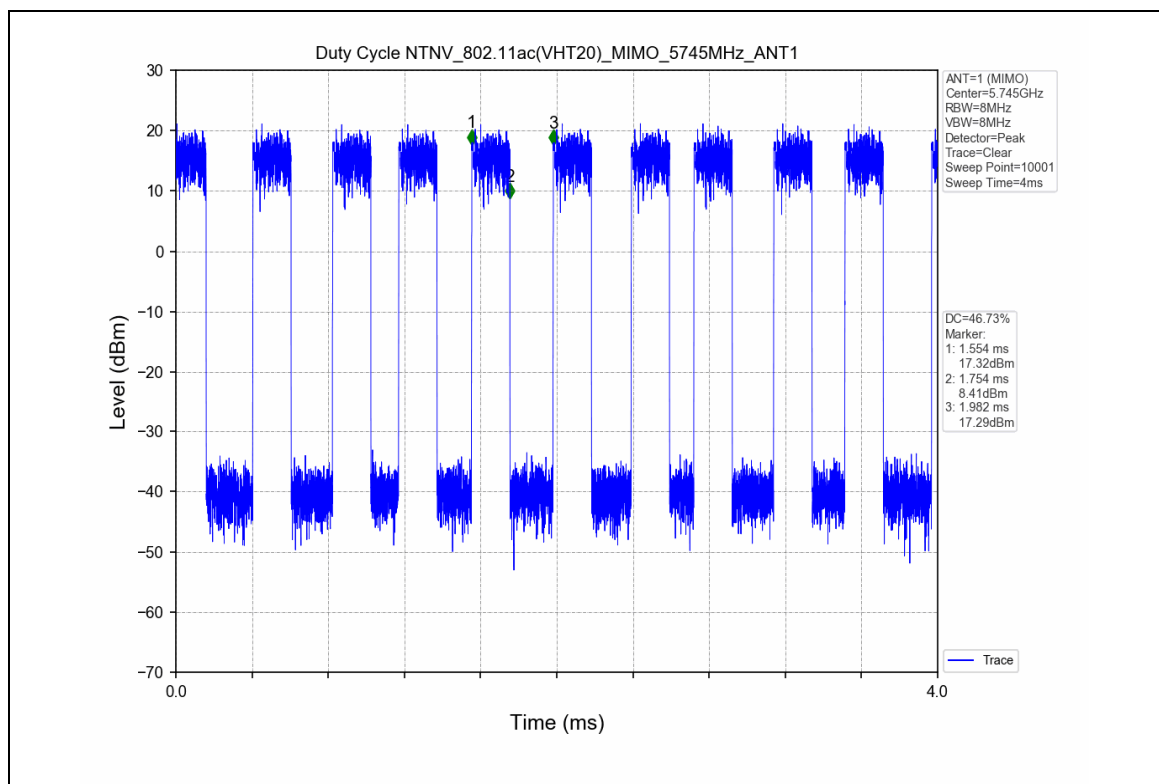
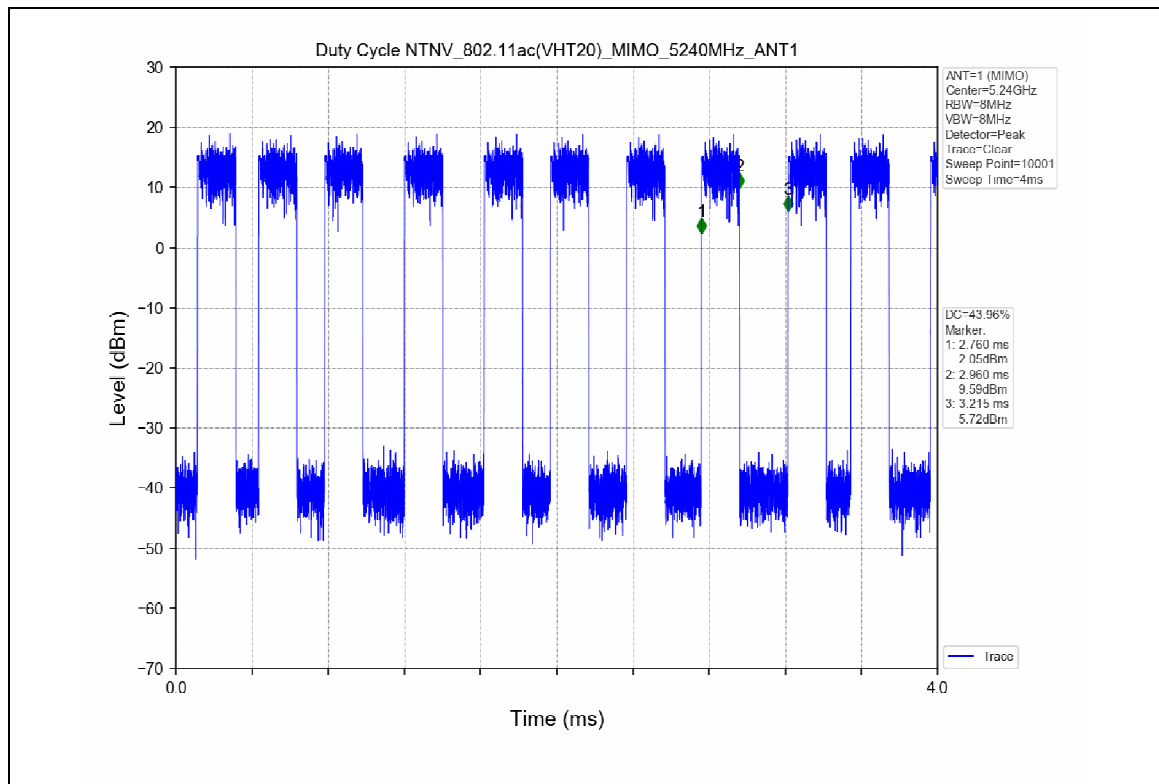
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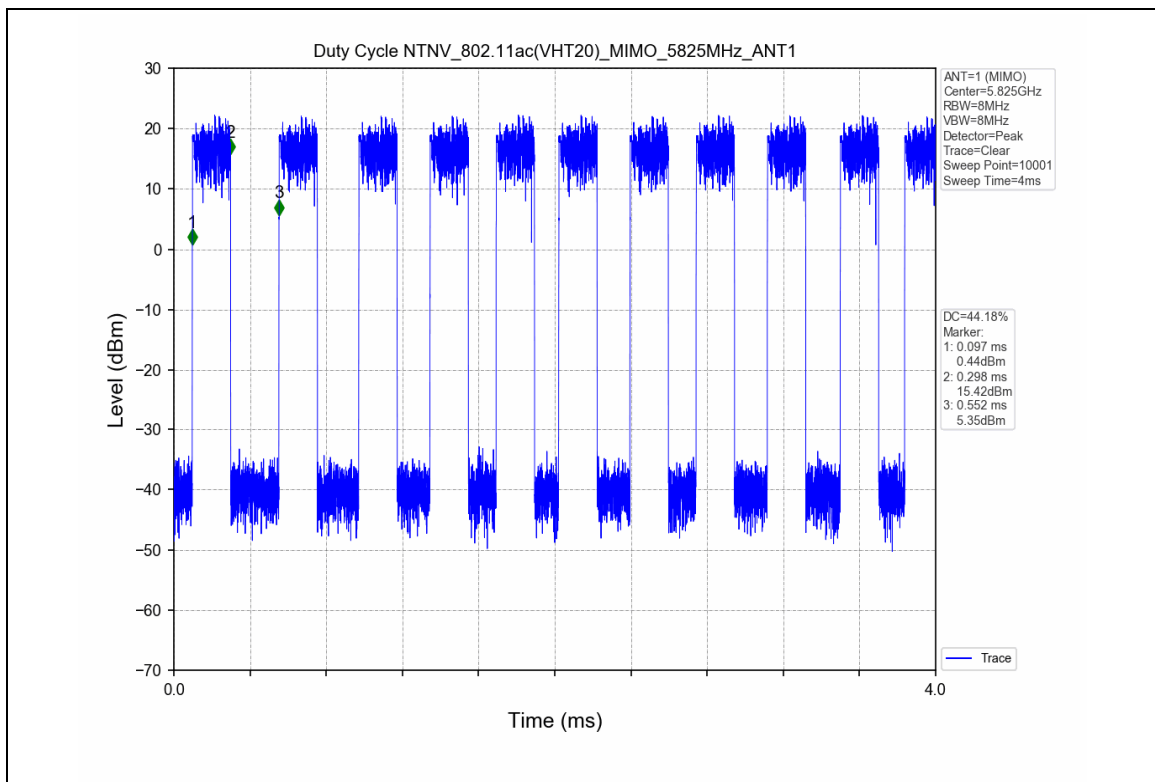
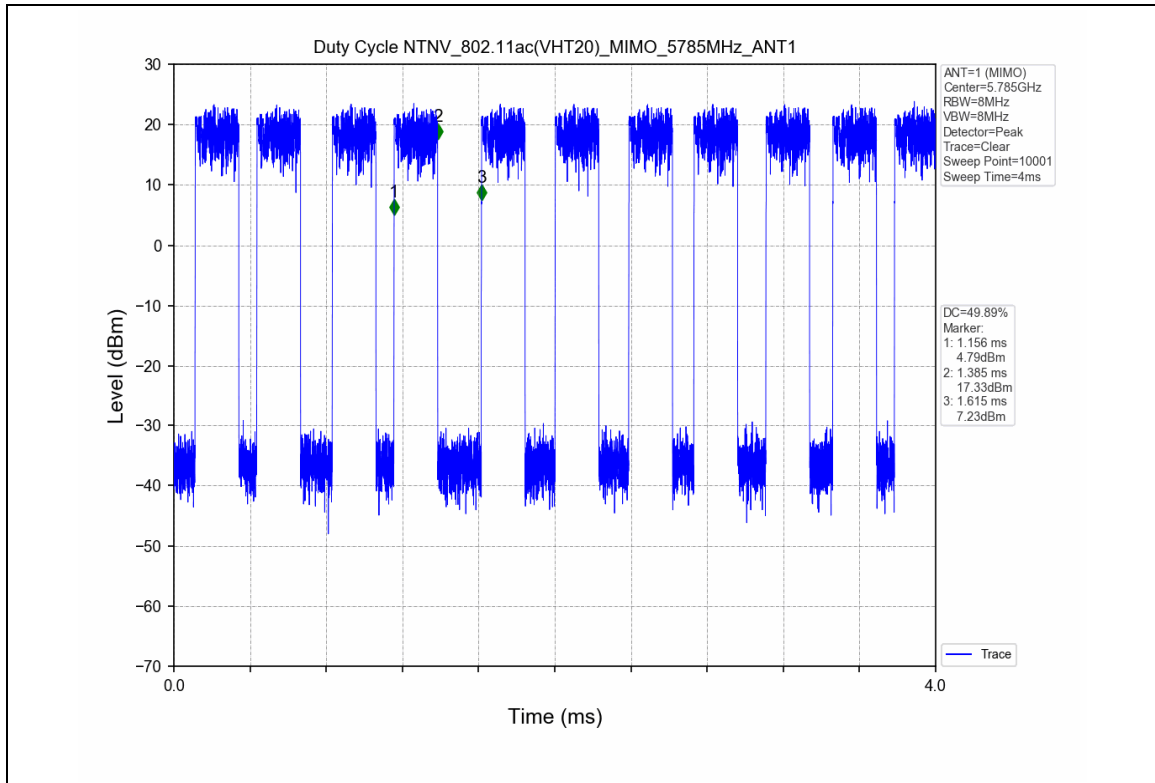
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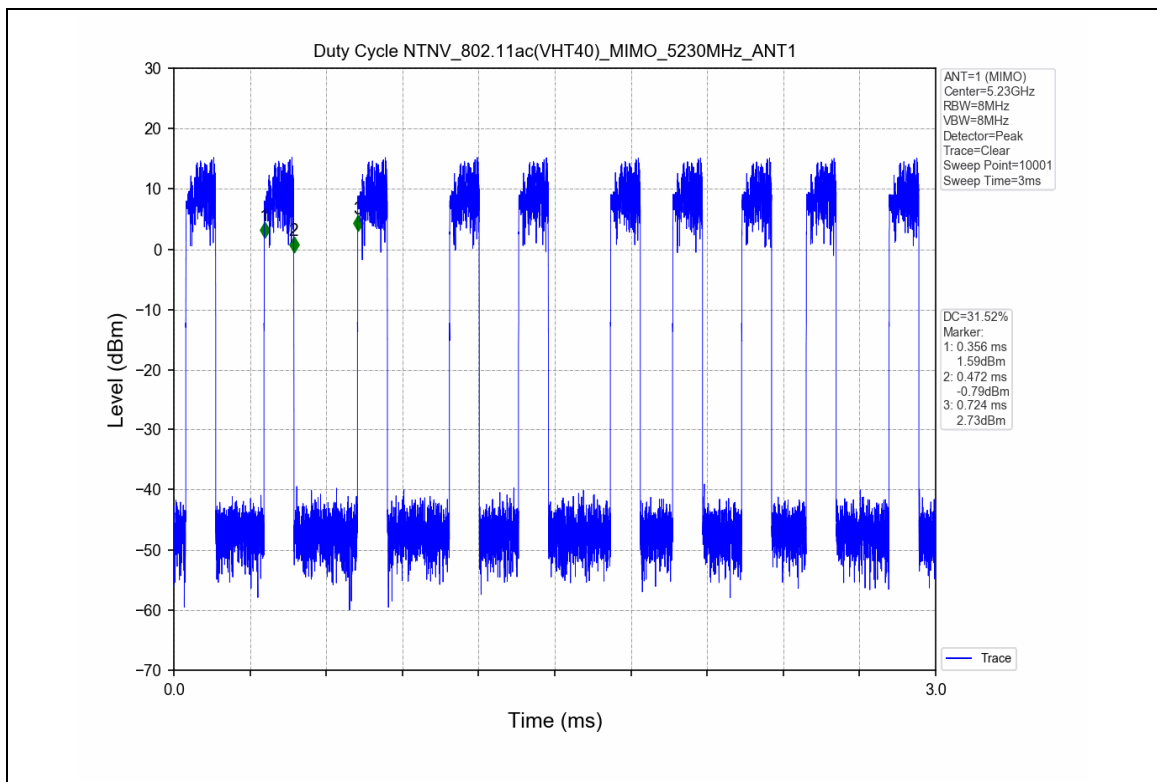
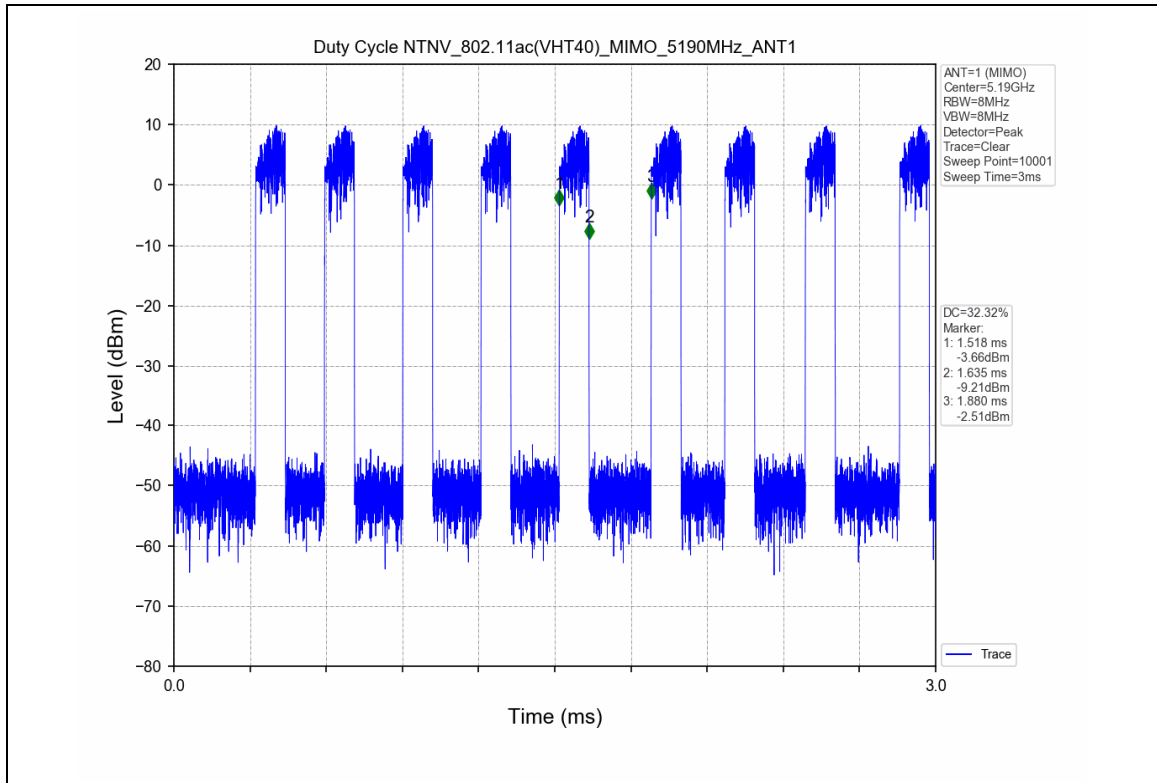
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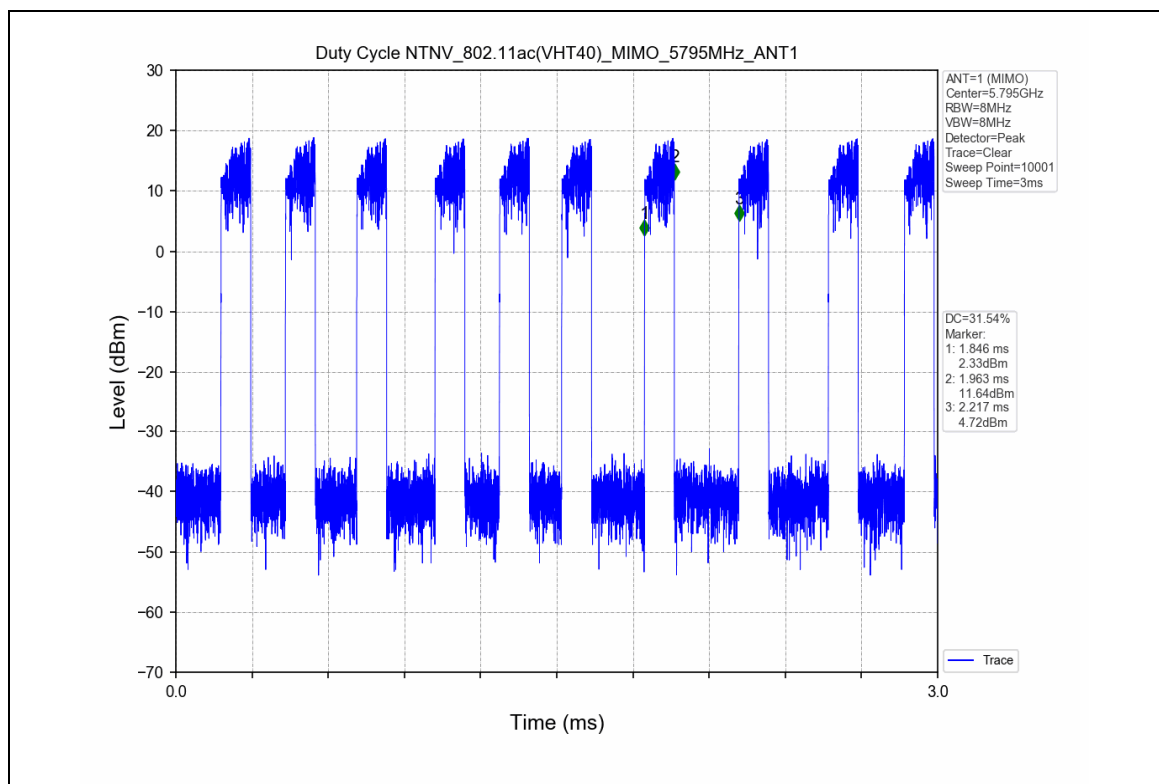
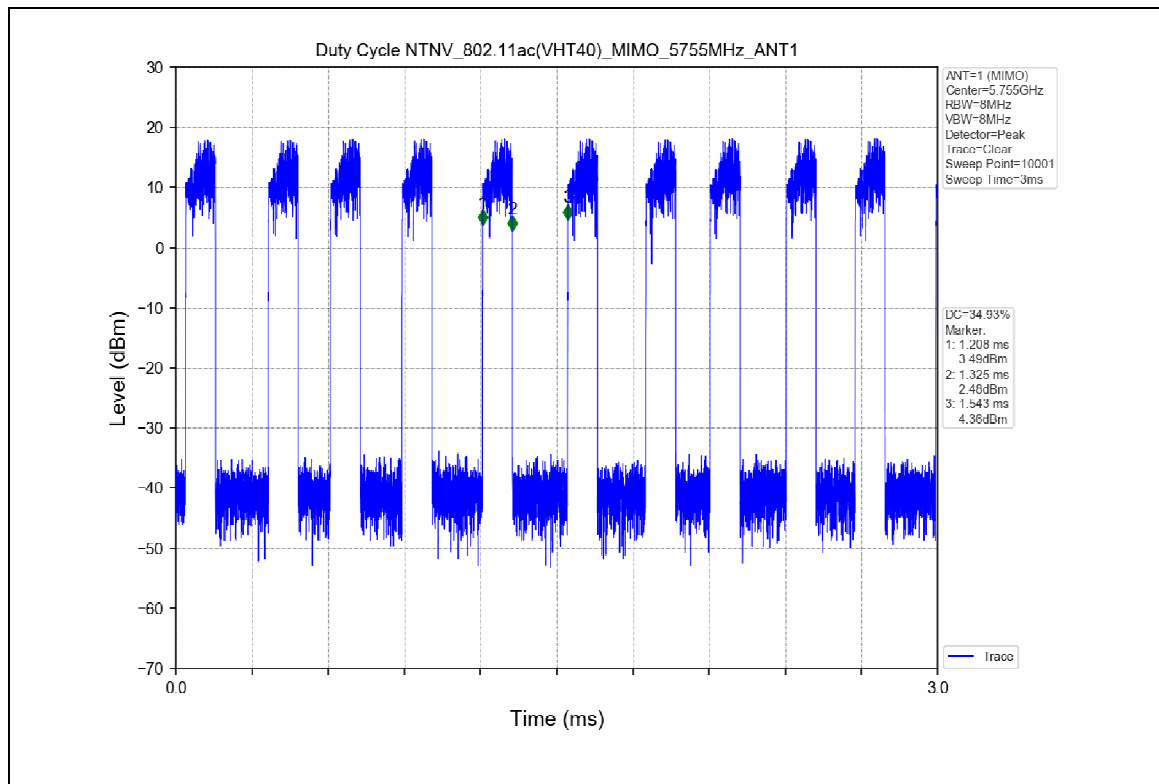
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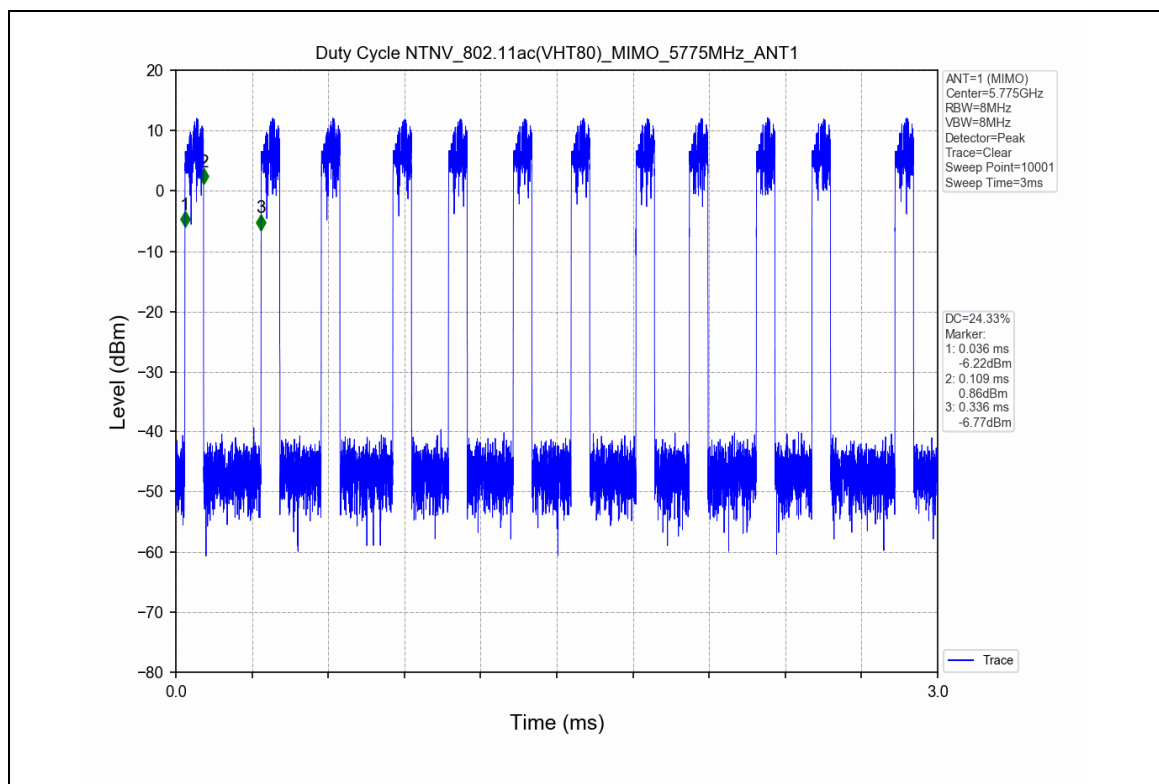
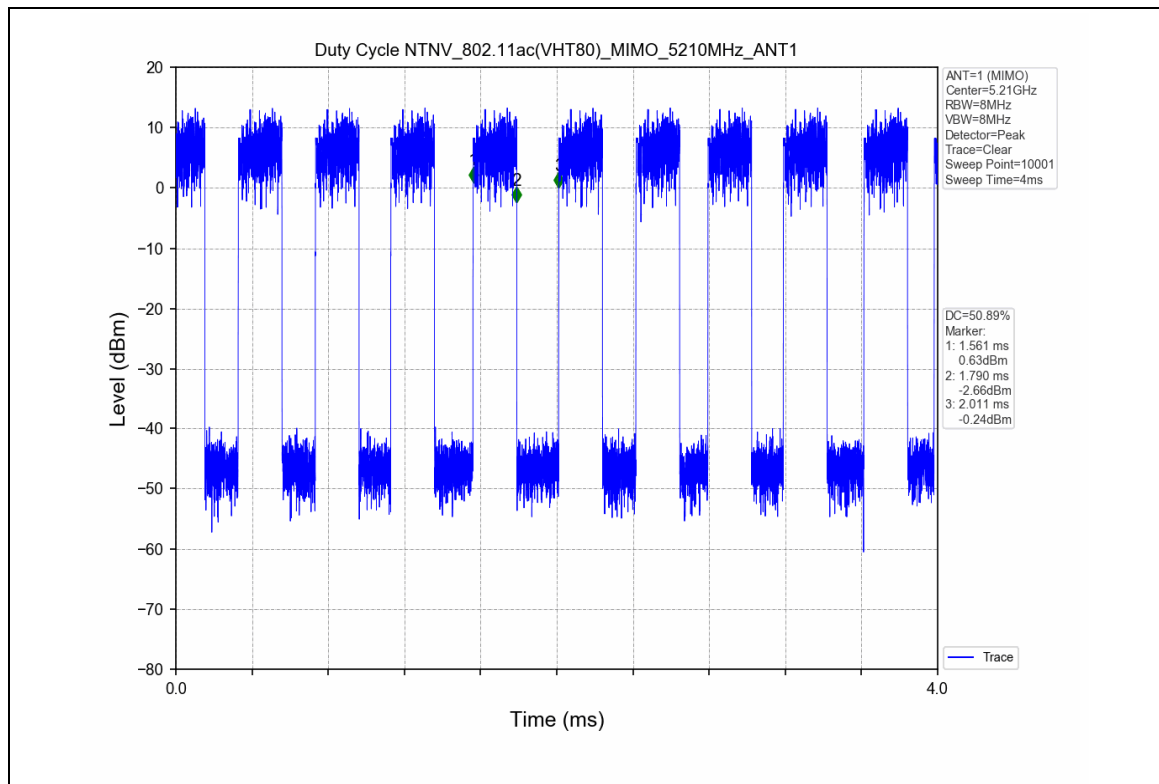
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2. Bandwidth

2.1 Test Result

| Test Mode | Frequency (MHz) | TX Type | ANT No. | Emission Bandwidth | | Verdict |
|-----------------|-----------------|---------|---------|--------------------|---------------------|---------|
| | | | | Test Result (MHz) | Limits (MHz) | |
| 802.11a | 5180 | SISO | 1 | 19.248 | Only for Report Use | PASS |
| | 5200 | SISO | 1 | 19.260 | Only for Report Use | PASS |
| | 5240 | SISO | 1 | 19.323 | Only for Report Use | PASS |
| 802.11n(HT20) | 5180 | MIMO | 1 | 18.192 | Only for Report Use | PASS |
| | 5200 | MIMO | 1 | 18.021 | Only for Report Use | PASS |
| | 5240 | MIMO | 1 | 19.238 | Only for Report Use | PASS |
| 802.11n(HT40) | 5190 | MIMO | 1 | 40.564 | Only for Report Use | PASS |
| | 5230 | MIMO | 1 | 40.626 | Only for Report Use | PASS |
| 802.11ac(VHT20) | 5180 | MIMO | 1 | 19.362 | Only for Report Use | PASS |
| | 5200 | MIMO | 1 | 19.314 | Only for Report Use | PASS |
| | 5240 | MIMO | 1 | 19.213 | Only for Report Use | PASS |
| 802.11ac(VHT40) | 5190 | MIMO | 1 | 40.229 | Only for Report Use | PASS |
| | 5230 | MIMO | 1 | 41.448 | Only for Report Use | PASS |
| 802.11ac(VHT80) | 5210 | MIMO | 1 | 81.049 | Only for Report Use | PASS |

| Test Mode | Frequency (MHz) | TX Type | ANT No. | Emission Bandwidth | | Verdict |
|-----------------|-----------------|---------|---------|--------------------|--------------|---------|
| | | | | Test Result (MHz) | Limits (MHz) | |
| 802.11a | 5745 | SISO | 1 | 17.703 | ≥0.5 | PASS |
| | 5785 | SISO | 1 | 17.654 | ≥0.5 | PASS |
| | 5825 | SISO | 1 | 17.574 | ≥0.5 | PASS |
| 802.11n(HT20) | 5745 | MIMO | 1 | 17.744 | ≥0.5 | PASS |
| | 5785 | MIMO | 1 | 17.739 | ≥0.5 | PASS |
| | 5825 | MIMO | 1 | 17.743 | ≥0.5 | PASS |
| 802.11n(HT40) | 5755 | MIMO | 1 | 35.669 | ≥0.5 | PASS |
| | 5795 | MIMO | 1 | 35.517 | ≥0.5 | PASS |
| 802.11ac(VHT20) | 5745 | MIMO | 1 | 17.660 | ≥0.5 | PASS |
| | 5785 | MIMO | 1 | 17.390 | ≥0.5 | PASS |
| | 5825 | MIMO | 1 | 17.692 | ≥0.5 | PASS |
| 802.11ac(VHT40) | 5755 | MIMO | 1 | 35.354 | ≥0.5 | PASS |
| | 5795 | MIMO | 1 | 35.544 | ≥0.5 | PASS |
| 802.11ac(VHT80) | 5775 | MIMO | 1 | 75.417 | ≥0.5 | PASS |



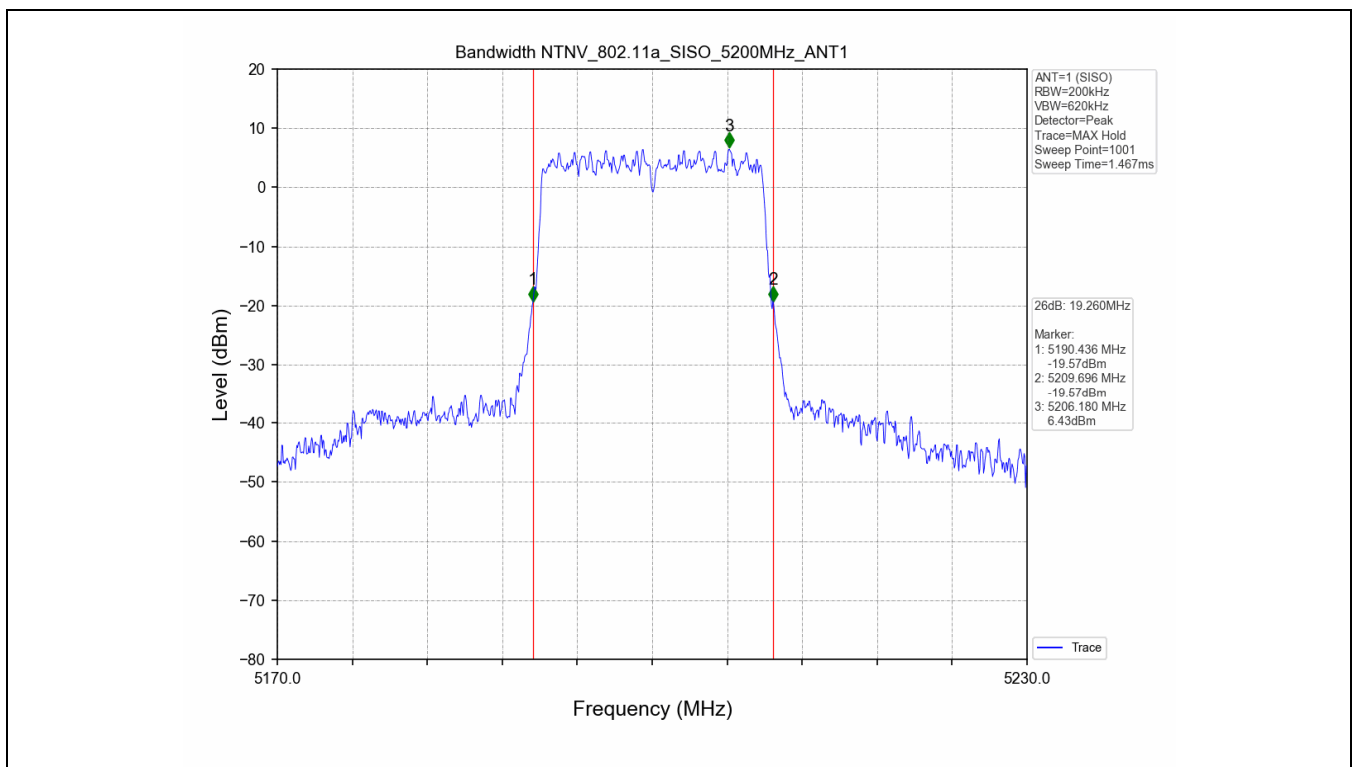
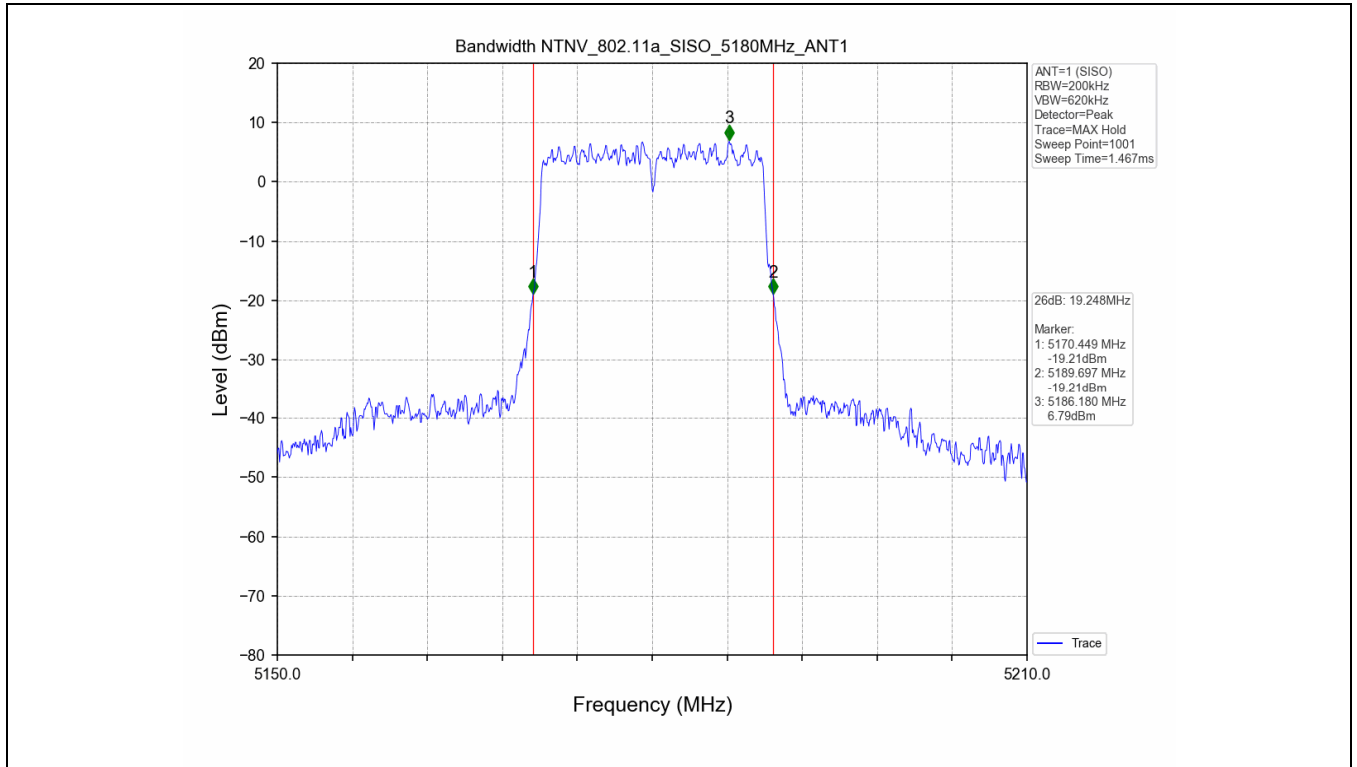
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| Test Mode | Frequency (MHz) | TX Type | ANT No. | 99% Occupied Bandwidth | |
|-----------------|-----------------|---------|---------|------------------------|---------------------|
| | | | | Test Result (MHz) | |
| 802.11a | 5180 | SISO | 1 | 17.665 | Only for Report Use |
| | 5200 | SISO | 1 | 17.687 | Only for Report Use |
| | 5240 | SISO | 1 | 17.693 | Only for Report Use |
| | 5745 | SISO | 1 | 17.724 | Only for Report Use |
| | 5785 | SISO | 1 | 17.752 | Only for Report Use |
| | 5825 | SISO | 1 | 17.793 | Only for Report Use |
| 802.11n(HT20) | 5180 | MIMO | 1 | 16.478 | Only for Report Use |
| | 5200 | MIMO | 1 | 16.507 | Only for Report Use |
| | 5240 | MIMO | 1 | 17.742 | Only for Report Use |
| | 5745 | MIMO | 1 | 17.721 | Only for Report Use |
| | 5785 | MIMO | 1 | 17.731 | Only for Report Use |
| | 5825 | MIMO | 1 | 17.754 | Only for Report Use |
| 802.11n(HT40) | 5190 | MIMO | 1 | 36.684 | Only for Report Use |
| | 5230 | MIMO | 1 | 36.574 | Only for Report Use |
| | 5755 | MIMO | 1 | 36.917 | Only for Report Use |
| | 5795 | MIMO | 1 | 36.936 | Only for Report Use |
| 802.11ac(VHT20) | 5180 | MIMO | 1 | 17.703 | Only for Report Use |
| | 5200 | MIMO | 1 | 17.684 | Only for Report Use |
| | 5240 | MIMO | 1 | 17.741 | Only for Report Use |
| | 5745 | MIMO | 1 | 17.699 | Only for Report Use |
| | 5785 | MIMO | 1 | 17.678 | Only for Report Use |
| | 5825 | MIMO | 1 | 17.733 | Only for Report Use |
| 802.11ac(VHT40) | 5190 | MIMO | 1 | 36.221 | Only for Report Use |
| | 5230 | MIMO | 1 | 36.812 | Only for Report Use |
| | 5755 | MIMO | 1 | 36.651 | Only for Report Use |
| | 5795 | MIMO | 1 | 36.524 | Only for Report Use |
| 802.11ac(VHT80) | 5210 | MIMO | 1 | 75.542 | Only for Report Use |
| | 5775 | MIMO | 1 | 75.712 | Only for Report Use |



2.2 Test Graph - Emission Bandwidth



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