

FCC RF Test Report (WLAN 5GHz)

Report No.: RF191209E01-2

FCC ID: RSE-FGA5330

Equipment Name: Gateway

Trade Name: Technicolor

Model Number: FGA5330

Product Code: FGA5330TCH2

Received Date: Dec. 09, 2019

Test Date: Jan. 09 to Apr. 07, 2020

Issued Date: June 17, 2020

Applicant: Technicolor Delivery Technologies Belgium

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
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**FCC Registration /
Designation Number:** 723255 / TW2022



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Release Control Record

| Issue No. | Description | Date Issued |
|---------------|-------------------|---------------|
| RF191209E01-2 | Original release. | June 17, 2020 |

1 Certificate of Conformity

Equipment Name: Gateway

Trade Name: Technicolor

Test Model: FGA5330

Product Code: FGA5330TCH2

Sample Status: LAB2A

Applicant: Technicolor Delivery Technologies Belgium

Test Date: Jan. 09 to Apr. 07, 2020

Standards: 47 CFR FCC Part 15, Subpart E (Section 15.407)
ANSI C63.10: 2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by :  , **Date:** June 17, 2020
Claire Kuan / Specialist

Approved by :  , **Date:** June 17, 2020
Clark Lin / Technical Manager

2 Summary of Test Results

| Applied Standard: 47 CFR FCC Part 15 Subpart E | | | | | |
|--|------------------|---|---|---------|--------|
| Report Clause | Ref. Std. Clause | Description | Measured | Limit | Result |
| 3.9 | 15.203 | Antenna Requirements | - | - | PASS |
| 4.1 | 15.407(b)(6) | AC Power Conducted Emissions | Margin is -16.01dB at 0.34922MHz. | - | PASS |
| 4.2 | - | 99% Occupied Bandwidth & 26dB Bandwidth | 99% Occupied Bandwidth 5150-5250MHz: 11ax (160M):78.72 MHz 5250-5350MHz: 11ax (20M):19.32 MHz 11ax (40M):38.16 MHz 11ax (80M):77.28 MHz 11ax (160M):78.61 MHz 5470-5725MHz: 11ax (20M):19.32 MHz 11ax (40M):37.92 MHz 11ax (80M):77.76 MHz 11ax (160M):156.48 MHz 5725-5850MHz: 11ax (20M):4.60 MHz 11ax (40M):3.96 MHz 11ax (80M):3.40 MHz 26dB Bandwidth 5150-5250MHz: 11ax (160M):82.50 MHz 5250-5350MHz: 11ax (20M):22.12 MHz 11ax (40M):41.69 MHz 11ax (80M):83.15 MHz 11ax (160M):82.48 MHz 5470-5725MHz: 11ax (20M):22.08 MHz 11ax (40M):41.73 MHz 11ax (80M):83.25 MHz 11ax (160M):165.03 MHz | - | - |
| 4.7 | 15.407(e) | 6dB bandwidth for U-NII-3 | 5725-5850MHz: 11ax (20M):4.52 MHz 11ax (40M):3.84 MHz 11ax (80M):3.83 MHz | ≥500KHz | PASS |

| Applied Standard: 47 CFR FCC Part 15 Subpart E | | | | | |
|--|----------------------|--------------------------------|--|--|--------|
| Report Clause | Ref. Std. Clause | Description | Measured | Limit | Result |
| 4.3 | 15.407 (a)(1/2/3) | Maximum Conducted Output Power | 5150-5250MHz: 11ax (160M): 1S4T CDD: 18.00 dBm 1S4T TxBF: 17.97 dBm 2S4T TxBF: 17.95 dBm 3S4T TxBF: 16.24 dBm 5250-5350MHz: 11ax (20M): 1S4T CDD: 23.89 dBm 1S4T TxBF: 23.84 dBm 2S4T TxBF: 23.82 dBm 3S4T TxBF: 23.80 dBm 11ax (40M): 1S4T CDD: 23.94 dBm 1S4T TxBF: 23.87 dBm 2S4T TxBF: 23.92 dBm 3S4T TxBF: 23.91 dBm 11ax (80M): 1S4T CDD: 23.83 dBm 1S4T TxBF: 23.89 dBm 2S4T TxBF: 22.57 dBm 3S4T TxBF: 23.87 dBm 11ax (160M): 1S4T CDD: 17.91 dBm 1S4T TxBF: 18.08 dBm 2S4T TxBF: 17.85 dBm 3S4T TxBF: 16.20 dBm 5470-5725MHz: 11ax (20M): 1S4T CDD: 23.93 dBm 1S4T TxBF: 23.81 dBm 2S4T TxBF: 23.79 dBm 3S4T TxBF: 23.81 dBm 11ax (40M): 1S4T CDD: 23.89 dBm 1S4T TxBF: 23.84 dBm 2S4T TxBF: 23.72 dBm 3S4T TxBF: 23.83 dBm 11ax (80M): 1S4T CDD: 23.55 dBm 1S4T TxBF: 23.56 dBm 2S4T TxBF: 23.54 dBm 3S4T TxBF: 23.52 dBm 11ax (160M): 1S4T CDD: 23.61 dBm 1S4T TxBF: 23.37 dBm 2S4T TxBF: 23.57 dBm 3S4T TxBF: 22.15 dBm | Power [dBm] 5150-5250MHz:30 5250-5350MHz:24 5470-5725MHz:24 | PASS |

Applied Standard: 47 CFR FCC Part 15 Subpart E

| Report Clause | Ref. Std. Clause | Description | Measured | Limit | Result |
|---------------|------------------|-------------|--|-----------------|--------|
| | | | 5725-5850MHz: 11ax (20M): 1S4T CDD: 15.63 dBm 1S4T TxBF: 15.64 dBm 2S4T TxBF: 15.08 dBm 3S4T TxBF: 14.77 dBm 11ax (40M): 1S4T CDD: 12.11 dBm 1S4T TxBF: 12.30 dBm 2S4T TxBF: 10.64 dBm 3S4T TxBF: 9.75 dBm 11ax (80M): 1S4T CDD: 7.86 dBm 1S4T TxBF: 6.68 dBm 2S4T TxBF: 6.01 dBm 3S4T TxBF: 6.07 dBm | 5725-5850MHz:30 | |

| Applied Standard: 47 CFR FCC Part 15 Subpart E | | | | | |
|--|----------------------|------------------------|--|---|--------|
| Report Clause | Ref. Std. Clause | Description | Measured | Limit | Result |
| 4.4 | 15.407 (a)(1/2/3) | Power Spectral Density | 5150-5250MHz: [dBm/MHz] 11ax (160M): 1S4T CDD: 0.50 1S4T TxBF: 0.44 2S4T TxBF: 0.79 3S4T TxBF: -0.92 5250-5350MHz: [dBm/MHz] 11ax (20M): 1S4T CDD: 9.46 1S4T TxBF: 9.77 2S4T TxBF: 9.42 3S4T TxBF: 9.44 11ax (40M): 1S4T CDD: 7.21 1S4T TxBF: 6.87 2S4T TxBF: 7.56 3S4T TxBF: 7.59 11ax (80M): 1S4T CDD: 4.42 1S4T TxBF: 4.42 2S4T TxBF: 3.16 3S4T TxBF: 4.77 11ax (160M): 1S4T CDD: 0.40 1S4T TxBF: 0.39 2S4T TxBF: 0.72 3S4T TxBF: -0.94 5470-5725MHz: [dBm/MHz] 11ax (20M): 1S4T CDD: 9.90 1S4T TxBF: 9.66 2S4T TxBF: 9.82 3S4T TxBF: 9.83 11ax (40M): 1S4T CDD: 6.79 1S4T TxBF: 6..81 2S4T TxBF: 6.43 3S4T TxBF: 6.61 11ax (80M): 1S4T CDD: 4.26 1S4T TxBF: 4.26 2S4T TxBF: 3.61 3S4T TxBF: 3.91 11ax (160M): 1S4T CDD: 1.31 1S4T TxBF: 0.90 2S4T TxBF: 1.35 3S4T TxBF: 0.08 | 5150-5250MHz: 17 [dBm/MHz] 5250-5350MHz: 11 [dBm/MHz] 5470-5725MHz: 11 [dBm/MHz] | PASS |

| | | | | | |
|-----|--------------------------|---------------------|---|----------------------------------|------|
| | | | 5470-5725MHz: [dBm/500kHz] 11ax (20M): 1S4T CDD: 2.44 1S4T TxBF: 2.70 2S4T TxBF: 2.38 3S4T TxBF: 2.50 11ax (40M): 1S4T CDD: -1.13 1S4T TxBF: -1.01 2S4T TxBF: -0.86 3S4T TxBF: -0.47 11ax (80M): 1S4T CDD: -4.39 1S4T TxBF: -4.91 2S4T TxBF: -4.77 3S4T TxBF: -4.40 | 5725-5850MHz: 30 [dBm/500kHz] | |
| 4.5 | 15.407 (b)(1/2/3/4/6) | Radiated Emissions | Margin is -16.2dB at 15780.00MHz | - | PASS |
| | | Band Edge | Margin is -0.1dB at 5139.10MHz, 5470.00MHz | - | PASS |
| 4.6 | 15.407(g) | Frequency Stability | - | Signal shall remain in-band | PASS |

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement | Frequency | Expanded Uncertainty (k=2) (\pm) |
|------------------------------------|----------------|---|
| Conducted Emissions at mains ports | 150kHz ~ 30MHz | 1.8 dB |
| Radiated Emissions up to 1 GHz | 9kHz ~ 30MHz | 3.0 dB |
| | 30MHz ~ 1GHz | 5.1 dB |
| Radiated Emissions above 1 GHz | 1GHz ~ 6GHz | 5.1 dB |
| | 6GHz ~ 18GHz | 5.0 dB |
| | 18GHz ~ 40GHz | 5.2 dB |

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 Basic Description of Equipment Under Test (WLAN 5GHz)

| Items | Description | | |
|---|--|-------------------------------------|--|
| Equipment Name | Gateway | | |
| Trade Name | Technicolor | | |
| Model Number | FGA5330 | | |
| Product Code | FGA5330TCH2 | | |
| FCC ID | RSE-FGA5330 | | |
| Power Type | From power adapter | | |
| Antenna | Refer section 3.10 | | |
| EUT Stage | <input checked="" type="checkbox"/> Product Unit | <input type="checkbox"/> | Pre-Sample |
| Operating Band and Conducted Output Power | U-NII-1 5150~5250MHz | <input type="checkbox"/> | IEEE 802.11ax (20MHz): |
| | | <input type="checkbox"/> | IEEE 802.11ax (40MHz): |
| | | <input type="checkbox"/> | IEEE 802.11ax (80MHz) |
| | | <input checked="" type="checkbox"/> | IEEE 802.11ax (160MHz) 1S4T CDD: 18.00 dBm 1S4T TxBF: 17.97 dBm 2S4T TxBF: 17.95 dBm 3S4T TxBF: 16.24 dBm |
| | U-NII-2A 5250~5350MHz | <input checked="" type="checkbox"/> | IEEE 802.11ax (20MHz): 1S4T CDD: 23.89 dBms 1S4T TxBF: 23.84 dBm 2S4T TxBF: 23.82 dBm 3S4T TxBF: 23.80 dBm |
| | | <input checked="" type="checkbox"/> | IEEE 802.11ax (40MHz): 1S4T CDD: 23.94 dBm 1S4T TxBF: 23.87 dBm 2S4T TxBF: 23.92 dBm 3S4T TxBF: 23.91 dBm |
| | | <input checked="" type="checkbox"/> | IEEE 802.11ax (80MHz): 1S4T CDD: 23.83 dBm 1S4T TxBF: 23.89 dBm 2S4T TxBF: 22.57 dBm 3S4T TxBF: 23.87 dBm |
| | | <input checked="" type="checkbox"/> | IEEE 802.11ax (160MHz): 1S4T CDD: 17.91 dBm 1S4T TxBF: 18.08 dBm 2S4T TxBF: 17.85 dBm 3S4T TxBF: 16.20 dBm |

| | | | |
|---|---|-------------------------------------|--|
| Operating Band and Conducted Output Power | U-NII-2C 5470~ 5725 MHz | <input checked="" type="checkbox"/> | IEEE 802.11ax (20MHz): 1S4T CDD: 23.93 dBm 1S4T TxBF: 23.81 dBm 2S4T TxBF: 23.79 dBm 3S4T TxBF: 23.81 dBm |
| | | <input checked="" type="checkbox"/> | IEEE 802.11ax (40MHz): 1S4T CDD: 23.89 dBm 1S4T TxBF: 23.84 dBm 2S4T TxBF: 23.72 dBm 3S4T TxBF: 23.83 dBm |
| | | <input checked="" type="checkbox"/> | IEEE 802.11ax (80MHz): 1S4T CDD: 23.55 dBm 1S4T TxBF: 23.56 dBm 2S4T TxBF: 23.54 dBm 3S4T TxBF: 23.52 dBm |
| | | <input checked="" type="checkbox"/> | IEEE 802.11ax (160MHz): 1S4T CDD: 23.61 dBm 1S4T TxBF: 23.37 dBm 2S4T TxBF: 23.57 dBm 3S4T TxBF: 22.15 dBm |
| | U-NII-3 5725~ 5850 MHz | <input type="checkbox"/> | IEEE 802.11ax (20MHz): |
| | | <input type="checkbox"/> | IEEE 802.11ax (40MHz): |
| | | <input type="checkbox"/> | IEEE 802.11ax (80MHz) |
| Product Type | For IEEE 802.11a: WLAN(4TX, 4RX) For IEEE 802.11n: WLAN(4TX, 4RX) For IEEE 802.11ac: WLAN (4TX, 4RX) For IEEE 802.11ax: WLAN (4TX, 4RX) | | |
| Nominal Bandwidth | 20MHz / 40MHz / 80MHz /160MHz | | |
| Modulation | 802.11a: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM/ 256QAM) 802.11ax: OFDMA (BPSK / QPSK / 16QAM / 64QAM/ 256QAM/ 1024QAM) | | |
| Data Rate (Mbps) | 11a mode : OFDM (6/9/12/18/24/36/48/54) 11n(20MHz) mode : MCS0~MCS31 11n(40MHz) mode : MCS0~MCS31 11ac(20MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ac(40MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ac(80MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ac(160MHz) mode : MCS0~MCS9 for NSS1~NSS4 See the below table 11ax(20MHz) mode : MCS0~MCS11 for NSS1~NSS4 See the below table 11ax(40MHz) mode : MCS0~MCS11 for NSS1~NSS4 See the below table 11ax(80MHz) mode : MCS0~MCS11 for NSS1~NSS4 See the below table 11ax(160MHz) mode : MCS0~MCS11 for NSS1~NSS4 See the below table | | |
| TPC Function | <input checked="" type="checkbox"/> | With TPC | <input type="checkbox"/> Without TPC |
| Beam forming Function | <input checked="" type="checkbox"/> | With Beam forming | <input type="checkbox"/> Without Beam forming |
| DFS Operating Mode(s) | <input checked="" type="checkbox"/> | Master | <input type="checkbox"/> Slave without radar detection |
| DFS Function | <input checked="" type="checkbox"/> | 5250~5350MHz | |
| | <input checked="" type="checkbox"/> | 5470~5725MHz | |
| | <input checked="" type="checkbox"/> | 5600~5650MHz | |
| Off Channel CAC Feature Implemented | <input checked="" type="checkbox"/> | No | |

| | | |
|--------------------------|---|--|
| Ad-hoc/Hotspot Mode | ■ | No Ad-hoc/Hotspot operation in 5150 - 5350 MHz and 5470 - 5725 MHz. |
| User Access Restrictions | ■ | DFS controls (hardware or software) related to radar detection are NOT accessible to the user. |
| I/O Ports | | LAN 1G Port x 3 LAN 10G Port x 1 WAN Port x 1 USB 3.0 Port x 1 SFP Port x1 FXS Port x 1 |
| Hardware Version | | LAB2A |
| Software Version | | 19.4.0146-2809002-20191218052751-4850d0484027485160796c5b1652d62267f114fc9 |

802.11n Data Rate spec

| Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | |
|-----------------------|-------|------------------|-------------|-----------------------|-------|------------------|-------------|
| | | LGI (800ns) | Sgi (400ns) | | | LGI (800ns) | Sgi (400ns) |
| 11n 20MHz Nss=1 | MCS0 | 6.5 | 7.2 | 11n 40MHz Nss=1 | MCS0 | 13.5 | 15 |
| | MCS1 | 13 | 14.4 | | MCS1 | 27 | 30 |
| | MCS2 | 19.5 | 21.7 | | MCS2 | 40.5 | 45 |
| | MCS3 | 26 | 28.9 | | MCS3 | 54 | 60 |
| | MCS4 | 39 | 43.3 | | MCS4 | 81 | 90 |
| | MCS5 | 52 | 57.8 | | MCS5 | 108 | 120 |
| | MCS6 | 58.5 | 65 | | MCS6 | 121.5 | 135 |
| 11n 20MHz Nss=2 | MCS7 | 65 | 72.2 | MCS7 | 135 | 150 | |
| | MCS8 | 13 | 14.4 | 11n 40MHz Nss=2 | MCS8 | 27 | 30 |
| | MCS9 | 26 | 28.9 | | MCS9 | 54 | 60 |
| | MCS10 | 39 | 43.3 | | MCS10 | 81 | 90 |
| | MCS11 | 52 | 57.8 | | MCS11 | 108 | 120 |
| | MCS12 | 78 | 86.7 | | MCS12 | 162 | 180 |
| | MCS13 | 104 | 115.6 | | MCS13 | 216 | 240 |
| MCS14 | 117 | 130 | MCS14 | | 243 | 270 | |
| 11n 20MHz Nss=3 | MCS15 | 130 | 144.4 | MCS15 | 270 | 300 | |
| | MCS16 | 19.5 | 21.7 | 11n 40MHz Nss=3 | MCS16 | 40.5 | 45 |
| | MCS17 | 39 | 43.3 | | MCS17 | 81 | 90 |
| | MCS18 | 58.5 | 65 | | MCS18 | 121.5 | 135 |
| | MCS19 | 78 | 86.7 | | MCS19 | 162 | 180 |
| | MCS20 | 117 | 130 | | MCS20 | 243 | 270 |
| | MCS21 | 156 | 173.3 | | MCS21 | 324 | 360 |
| MCS22 | 175.5 | 195 | MCS22 | | 364.5 | 405 | |
| 11n 20MHz Nss=4 | MCS23 | 195 | 216.7 | MCS23 | 405 | 450 | |
| | MCS24 | 26 | 28.9 | 11n 40MHz Nss=4 | MCS24 | 54 | 60 |
| | MCS25 | 52 | 57.8 | | MCS25 | 108 | 120 |
| | MCS26 | 78 | 86.7 | | MCS26 | 162 | 180 |
| | MCS27 | 104 | 115.6 | | MCS27 | 216 | 240 |
| | MCS28 | 156 | 173.3 | | MCS28 | 324 | 360 |
| | MCS29 | 208 | 231.1 | | MCS29 | 432 | 480 |
| MCS30 | 234 | 260 | MCS30 | | 486 | 540 | |
| MCS31 | 260 | 288.9 | MCS31 | 540 | 600 | | |

802.11ac Data Rate spec

| Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | |
|--------------------------|-------|------------------|-------------|--------------------------|-------|------------------|-------------|--------------------------|-------|------------------|-------------|
| | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) |
| 11ac 20MHz NSS = 1 | MCS0 | 6.5 | 7.2 | 11ac 40MHz NSS = 1 | MCS0 | 13.5 | 15.0 | 11ac 80MHz NSS = 1 | MCS0 | 29.3 | 32.5 |
| | MCS1 | 13.0 | 14.4 | | MCS1 | 27 | 30.0 | | MCS1 | 58.5 | 65.0 |
| | MCS2 | 19.5 | 21.7 | | MCS2 | 40.5 | 45.0 | | MCS2 | 87.8 | 97.5 |
| | MCS3 | 26 | 28.9 | | MCS3 | 54 | 60.0 | | MCS3 | 117.0 | 130.0 |
| | MCS4 | 39 | 43.3 | | MCS4 | 81 | 90.0 | | MCS4 | 175.5 | 195.0 |
| | MCS5 | 52 | 57.8 | | MCS5 | 108 | 120.0 | | MCS5 | 234.0 | 260.0 |
| | MCS6 | 58.5 | 65 | | MCS6 | 121.5 | 135.0 | | MCS6 | 263.3 | 292.5 |
| | MCS7 | 65 | 72.2 | | MCS7 | 135.0 | 150.0 | | MCS7 | 292.5 | 325.0 |
| | MCS8 | 78 | 86.7 | | MCS8 | 162.0 | 180.0 | | MCS8 | 351.0 | 390.0 |
| | MCS9 | Note | Note | | MCS9 | 180.0 | 200.0 | | MCS9 | 390.0 | 433.3 |

Note: MCS 9 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.

| Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | |
|--------------------------|-------|------------------|-------------|--------------------------|-------|------------------|-------------|--------------------------|-------|------------------|-------------|
| | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) |
| 11ac 20MHz NSS = 2 | MCS0 | 13.0 | 14.4 | 11ac 40MHz NSS = 2 | MCS0 | 27.0 | 30.0 | 11ac 80MHz NSS = 2 | MCS0 | 58.5 | 65.0 |
| | MCS1 | 26.0 | 28.9 | | MCS1 | 54.0 | 60.0 | | MCS1 | 117.0 | 130.0 |
| | MCS2 | 39.0 | 43.3 | | MCS2 | 81.0 | 90.0 | | MCS2 | 175.5 | 195.0 |
| | MCS3 | 52.0 | 57.8 | | MCS3 | 108.0 | 120.0 | | MCS3 | 234.0 | 260.0 |
| | MCS4 | 78.0 | 86.7 | | MCS4 | 162.0 | 180.0 | | MCS4 | 351.0 | 390.0 |
| | MCS5 | 104.0 | 115.6 | | MCS5 | 216.0 | 240.0 | | MCS5 | 468.0 | 520.0 |
| | MCS6 | 117.0 | 130.0 | | MCS6 | 243.0 | 270.0 | | MCS6 | 526.5 | 585.0 |
| | MCS7 | 130.0 | 144.4 | | MCS7 | 270.0 | 300.0 | | MCS7 | 585.0 | 650.0 |
| | MCS8 | 156.0 | 173.3 | | MCS8 | 324.0 | 360.0 | | MCS8 | 702.0 | 780.0 |
| | MCS9 | Note | Note | | MCS9 | 360.0 | 400.0 | | MCS9 | 780.0 | 866.7 |

Note: MCS 9 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.

| Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | |
|--------------------------|-------|------------------|-------------|--------------------------|-------|------------------|-------------|--------------------------|-------|------------------|-------------|
| | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) |
| 11ac 20MHz NSS = 3 | MCS0 | 19.5 | 21.7 | 11ac 40MHz NSS = 3 | MCS0 | 40.5 | 45.0 | 11ac 80MHz NSS = 3 | MCS0 | 87.8 | 97.5 |
| | MCS1 | 39.0 | 43.3 | | MCS1 | 81.0 | 90.0 | | MCS1 | 175.5 | 195.0 |
| | MCS2 | 58.5 | 65.0 | | MCS2 | 121.5 | 135.0 | | MCS2 | 263.3 | 292.5 |
| | MCS3 | 78.0 | 86.7 | | MCS3 | 162.0 | 180.0 | | MCS3 | 351.0 | 190.0 |
| | MCS4 | 117.0 | 130 | | MCS4 | 243.0 | 270.0 | | MCS4 | 526.5 | 585.0 |
| | MCS5 | 156.0 | 173.3 | | MCS5 | 324.0 | 360.0 | | MCS5 | 702.0 | 780.0 |
| | MCS6 | 175.5 | 195.0 | | MCS6 | 364.5 | 405.0 | | MCS6 | Note | Note |
| | MCS7 | 195.0 | 216.7 | | MCS7 | 405.0 | 450.0 | | MCS7 | 877.5 | 975.0 |
| | MCS8 | 234.0 | 260.0 | | MCS8 | 486.0 | 540.0 | | MCS8 | 1053.0 | 1170.0 |
| | MCS9 | 260.0 | 228.9 | | MCS9 | 540.0 | 600.0 | | MCS9 | 1170.0 | 1300.0 |

Note: MCS 9 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.

| Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | |
|--------------------------|-------|------------------|-------------|--------------------------|-------|------------------|-------------|--------------------------|-------|------------------|-------------|
| | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) |
| 11ac 20MHz NSS = 4 | MCS0 | 26.0 | 28.9 | 11ac 40MHz NSS = 4 | MCS0 | 54.0 | 60.0 | 11ac 80MHz NSS = 4 | MCS0 | 117.0 | 130.0 |
| | MCS1 | 52.0 | 57.8 | | MCS1 | 108.0 | 120.0 | | MCS1 | 234.0 | 260.0 |
| | MCS2 | 78.0 | 86.7 | | MCS2 | 162.0 | 180.0 | | MCS2 | 351.0 | 390.0 |
| | MCS3 | 104.0 | 115.6 | | MCS3 | 216.0 | 240.0 | | MCS3 | 468.0 | 520.0 |
| | MCS4 | 156.0 | 173.3 | | MCS4 | 324.0 | 360.0 | | MCS4 | 702.0 | 780.0 |
| | MCS5 | 208.0 | 231.1 | | MCS5 | 432.0 | 480.0 | | MCS5 | 936.0 | 1040.0 |
| | MCS6 | 234.0 | 260.0 | | MCS6 | 486.0 | 540.0 | | MCS6 | 1053.0 | 1170.0 |
| | MCS7 | 260.0 | 288.9 | | MCS7 | 540.0 | 600.0 | | MCS7 | 1170.0 | 1300.0 |
| | MCS8 | 312.0 | 346.7 | | MCS8 | 648.0 | 720.0 | | MCS8 | 1404.0 | 1560.0 |
| | MCS9 | Note | Note | | MCS9 | 720.0 | 800.0 | | MCS9 | 1560.0 | 1733.3 |

Note: MCS 9 is invalid due to mod(NCBPS/NES, DR) not being equal to 0.

| Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | |
|---------------------------|-------|------------------|-------------|---------------------------|-------|------------------|-------------|
| | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) |
| 11ac 160MHz NSS = 1 | MCS0 | 58.5 | 65 | 11ac 160MHz NSS = 2 | MCS0 | 117 | 130 |
| | MCS1 | 117 | 130 | | MCS1 | 234 | 260 |
| | MCS2 | 175.5 | 195 | | MCS2 | 351 | 390 |
| | MCS3 | 234 | 260 | | MCS3 | 468 | 520 |
| | MCS4 | 351 | 390 | | MCS4 | 702 | 780 |
| | MCS5 | 468 | 520 | | MCS5 | 936 | 1040 |
| | MCS6 | 526.5 | 585 | | MCS6 | 1053 | 1170 |
| | MCS7 | 585 | 650 | | MCS7 | 1170 | 1300 |
| | MCS8 | 702 | 780 | | MCS8 | 1404 | 1560 |
| | MCS9 | 780 | 866.7 | | MCS9 | 1560 | 1733.3 |
| Standard | Index | Data Rate (Mbps) | | Standard | Index | Data Rate (Mbps) | |
| | | LGI (800ns) | SGI (400ns) | | | LGI (800ns) | SGI (400ns) |
| 11ac 160MHz NSS = 3 | MCS0 | 175.5 | 195 | 11ac 160MHz NSS = 4 | MCS0 | 234 | 260 |
| | MCS1 | 351 | 390 | | MCS1 | 468 | 520 |
| | MCS2 | 526.5 | 585 | | MCS2 | 702 | 780 |
| | MCS3 | 702 | 780 | | MCS3 | 936 | 1040 |
| | MCS4 | 1053 | 1170 | | MCS4 | 1404 | 1560 |
| | MCS5 | 1404 | 1560 | | MCS5 | 1872 | 2080 |
| | MCS6 | 1579.5 | 1755 | | MCS6 | 2106 | 2340 |
| | MCS7 | 1755 | 1950 | | MCS7 | 2340 | 2600 |
| | MCS8 | 2106 | 2340 | | MCS8 | 2808 | 3120 |
| | MCS9 | N/A | N/A | | MCS9 | 3120 | 3466.7 |

Note: MCS 9 is invalid due to mod (NCBPS/NES, DR) not being equal to 0.

802.11ax Data Rate spec

| Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | |
|------------------------|-------|------------------|----------------|----------------|------------------------|-------|------------------|----------------|----------------|------------------------|--------|------------------|----------------|----------------|
| | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) |
| 11ax 20MHz NSS=1 | MCS0 | 8.6 | 8.1 | 7.3 | 11ax 40MHz NSS=1 | MCS0 | 17.2 | 16.3 | 14.6 | 11ax 80MHz NSS=1 | MCS0 | 36 | 34 | 30.6 |
| | MCS1 | 17.2 | 16.3 | 14.6 | | MCS1 | 34.4 | 32.5 | 29.3 | | MCS1 | 72.1 | 68.1 | 61.3 |
| | MCS2 | 25.8 | 24.4 | 21.9 | | MCS2 | 51.6 | 48.8 | 43.9 | | MCS2 | 108.1 | 102.1 | 91.9 |
| | MCS3 | 34.4 | 32.5 | 29.3 | | MCS3 | 68.8 | 65 | 58.5 | | MCS3 | 144.1 | 136.1 | 122.5 |
| | MCS4 | 51.6 | 48.8 | 43.9 | | MCS4 | 103.2 | 97.5 | 87.8 | | MCS4 | 216.2 | 204.2 | 183.8 |
| | MCS5 | 68.8 | 65 | 58.5 | | MCS5 | 137.6 | 130 | 117 | | MCS5 | 288.2 | 272.2 | 245 |
| | MCS6 | 77.4 | 73.1 | 65.8 | | MCS6 | 154.9 | 146.3 | 131.6 | | MCS6 | 324.3 | 306.3 | 275.6 |
| | MCS7 | 86 | 81.3 | 73.1 | | MCS7 | 172.1 | 162.5 | 146.3 | | MCS7 | 360.3 | 340.3 | 306.3 |
| | MCS8 | 103.2 | 97.5 | 87.8 | | MCS8 | 206.5 | 195 | 175.5 | | MCS8 | 432.4 | 408.3 | 367.5 |
| | MCS9 | 114.7 | 108.3 | 97.5 | | MCS9 | 229.4 | 216.7 | 195 | | MCS9 | 480.4 | 453.7 | 408.3 |
| | MCS10 | 129 | 121.9 | 109.7 | | MCS10 | 258.1 | 243.8 | 219.4 | | MCS10 | 540.4 | 510.4 | 459.4 |
| MCS11 | 143.4 | 135.4 | 121.9 | MCS11 | 286.8 | 270.8 | 243.8 | MCS11 | 600.5 | 567.1 | 510.4 | | | |
| Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | |
| | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) |
| 11ax 20MHz NSS=2 | MCS0 | 17.2 | 16.3 | 14.6 | 11ax 40MHz NSS=2 | MCS0 | 34.4 | 32.5 | 29.3 | 11ax 80MHz NSS=2 | MCS0 | 72.1 | 68.1 | 61.3 |
| | MCS1 | 34.4 | 32.5 | 29.3 | | MCS1 | 68.8 | 65 | 58.5 | | MCS1 | 144.1 | 136.1 | 122.5 |
| | MCS2 | 51.6 | 48.8 | 43.9 | | MCS2 | 103.2 | 97.5 | 87.8 | | MCS2 | 216.2 | 204.2 | 183.8 |
| | MCS3 | 68.8 | 65 | 58.5 | | MCS3 | 137.6 | 130 | 117 | | MCS3 | 288.2 | 272.2 | 245 |
| | MCS4 | 103.2 | 97.5 | 87.8 | | MCS4 | 206.5 | 195 | 175.5 | | MCS4 | 432.4 | 408.3 | 367.5 |
| | MCS5 | 137.6 | 130 | 117 | | MCS5 | 275.3 | 260 | 234 | | MCS5 | 576.5 | 544.4 | 490 |
| | MCS6 | 154.9 | 146.3 | 131.6 | | MCS6 | 309.7 | 292.5 | 263.3 | | MCS6 | 648.5 | 612.5 | 551.3 |
| | MCS7 | 172.1 | 162.5 | 146.3 | | MCS7 | 344.1 | 325 | 292.5 | | MCS7 | 720.6 | 680.6 | 612.5 |
| | MCS8 | 206.5 | 195 | 175.5 | | MCS8 | 412.9 | 390 | 351 | | MCS8 | 864.7 | 816.7 | 735 |
| | MCS9 | 229.4 | 216.7 | 195 | | MCS9 | 458.8 | 433.3 | 390 | | MCS9 | 960.8 | 907.4 | 816.7 |
| | MCS10 | 258.1 | 243.8 | 219.4 | | MCS10 | 516.2 | 487.5 | 438.8 | | MCS10 | 1080.9 | 1020.8 | 918.8 |
| MCS11 | 286.8 | 270.8 | 243.8 | MCS11 | 573.5 | 541.7 | 487.5 | MCS11 | 1201 | 1134.3 | 1020.8 | | | |

| Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | |
|------------------------|-------|------------------|-------------|-------------|------------------------|-------|------------------|-------------|-------------|------------------------|-------|------------------|-------------|-------------|
| | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) |
| 11ax 20MHz NSS=3 | MCS0 | 25.8 | 24.4 | 21.9 | 11ax 40MHz NSS=3 | MCS0 | 51.6 | 48.8 | 43.9 | 11ax 80MHz NSS=3 | MCS0 | 108.1 | 102.1 | 91.9 |
| | MCS1 | 51.6 | 48.8 | 43.9 | | MCS1 | 103.2 | 97.5 | 87.8 | | MCS1 | 216.2 | 204.2 | 183.8 |
| | MCS2 | 77.4 | 73.1 | 65.8 | | MCS2 | 154.9 | 146.3 | 131.6 | | MCS2 | 324.3 | 306.3 | 275.6 |
| | MCS3 | 103.2 | 97.5 | 87.8 | | MCS3 | 206.5 | 195 | 175.5 | | MCS3 | 432.4 | 408.3 | 367.5 |
| | MCS4 | 154.9 | 146.3 | 131.6 | | MCS4 | 309.7 | 292.5 | 263.3 | | MCS4 | 648.5 | 612.5 | 551.3 |
| | MCS5 | 206.5 | 195 | 175.5 | | MCS5 | 412.9 | 390 | 351 | | MCS5 | 864.7 | 816.7 | 735 |
| | MCS6 | 232.3 | 219.4 | 197.4 | | MCS6 | 464.6 | 438.8 | 394.9 | | MCS6 | 972.8 | 918.8 | 826.9 |
| | MCS7 | 258.1 | 243.8 | 219.4 | | MCS7 | 516.2 | 487.5 | 438.8 | | MCS7 | 1080.9 | 1020.8 | 918.8 |
| | MCS8 | 309.7 | 292.5 | 263.3 | | MCS8 | 619.4 | 585 | 526.5 | | MCS8 | 1297.1 | 1225 | 1102.5 |
| | MCS9 | 344.1 | 325 | 292.5 | | MCS9 | 688.2 | 650 | 585 | | MCS9 | 1441.2 | 1361.1 | 1225 |
| | MCS10 | 387.1 | 365.6 | 329.1 | | MCS10 | 774.3 | 731.3 | 658.1 | | MCS10 | 1621.3 | 1531.3 | 1378.1 |
| | MCS11 | 430.1 | 406.3 | 365.6 | | MCS11 | 860.3 | 812.5 | 731.3 | | MCS11 | 1801.5 | 1701.4 | 1531.3 |
| Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | |
| | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) |
| 11ax 20MHz NSS=4 | MCS0 | 34.4 | 32.5 | 29.3 | 11ax 40MHz NSS=4 | MCS0 | 68.8 | 65 | 58.5 | 11ax 80MHz NSS=4 | MCS0 | 144.1 | 136.1 | 122.5 |
| | MCS1 | 68.8 | 65 | 58.5 | | MCS1 | 137.6 | 130 | 117 | | MCS1 | 288.2 | 272.2 | 245 |
| | MCS2 | 103.2 | 97.5 | 87.8 | | MCS2 | 206.5 | 195 | 175.5 | | MCS2 | 432.4 | 408.3 | 367.5 |
| | MCS3 | 137.6 | 130 | 117 | | MCS3 | 275.3 | 260 | 234 | | MCS3 | 576.5 | 544.4 | 490 |
| | MCS4 | 206.5 | 195 | 175.5 | | MCS4 | 412.9 | 390 | 351 | | MCS4 | 864.7 | 816.7 | 735 |
| | MCS5 | 275.3 | 260 | 234 | | MCS5 | 550.6 | 520 | 468 | | MCS5 | 1152.9 | 1088.9 | 980 |
| | MCS6 | 309.7 | 292.5 | 263.3 | | MCS6 | 619.4 | 585 | 526.5 | | MCS6 | 1297.1 | 1225 | 1102.5 |
| | MCS7 | 344.1 | 325 | 292.5 | | MCS7 | 688.2 | 650 | 585 | | MCS7 | 1441.2 | 1361.1 | 1225 |
| | MCS8 | 412.9 | 390 | 351 | | MCS8 | 825.9 | 780 | 702 | | MCS8 | 1729.4 | 1633.3 | 1470 |
| | MCS9 | 458.8 | 433.3 | 390 | | MCS9 | 917.6 | 866.7 | 780 | | MCS9 | 1921.6 | 1814.8 | 1633.3 |
| | MCS10 | 516.2 | 487.5 | 438.8 | | MCS10 | 1032.4 | 975 | 877.5 | | MCS10 | 2161.8 | 2041.7 | 1837.5 |
| | MCS11 | 573.5 | 541.7 | 487.5 | | MCS11 | 1147.1 | 1083.3 | 975 | | MCS11 | 2401.9 | 2268.5 | 2041.7 |

| Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | |
|---------------------------|--------|------------------|----------------|----------------|---------------------------|--------|------------------|----------------|----------------|
| | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) |
| 11ax 160MHz NSS = 1 | MCS0 | 72.1 | 68.1 | 61.3 | 11ax 160MHz NSS = 2 | MCS0 | 144.1 | 136.1 | 122.5 |
| | MCS1 | 144.1 | 136.1 | 122.5 | | MCS1 | 288.2 | 272.2 | 245 |
| | MCS2 | 216.2 | 204.2 | 183.8 | | MCS2 | 432.4 | 408.3 | 367.5 |
| | MCS3 | 288.2 | 272.2 | 245 | | MCS3 | 576.5 | 544.4 | 490 |
| | MCS4 | 432.4 | 408.3 | 367.5 | | MCS4 | 864.7 | 816.7 | 735 |
| | MCS5 | 576.5 | 544.4 | 490 | | MCS5 | 1152.9 | 1088.9 | 980 |
| | MCS6 | 648.5 | 612.5 | 551.3 | | MCS6 | 1297.1 | 1225 | 1102.5 |
| | MCS7 | 720.6 | 680.6 | 612.5 | | MCS7 | 1441.2 | 1361.1 | 1225 |
| | MCS8 | 864.7 | 816.7 | 735 | | MCS8 | 1729.4 | 1633.3 | 1470 |
| | MCS9 | 960.8 | 907.4 | 816.7 | | MCS9 | 1921.6 | 1814.8 | 1633.3 |
| | MCS10 | 1080.9 | 1020.8 | 918.8 | | MCS10 | 2161.8 | 2041.7 | 1837.5 |
| MCS11 | 1201 | 1134.3 | 1020.8 | MCS11 | 2402 | 2268.5 | 2041.7 | | |
| Standard | Index | Data Rate (Mbps) | | | Standard | Index | Data Rate (Mbps) | | |
| | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) | | | SGI (0.8us) | MGI (1.6us) | LGI (3.2us) |
| 11ax 160MHz NSS = 3 | MCS0 | 216.2 | 204.2 | 183.8 | 11ax 160MHz NSS = 4 | MCS0 | 288.2 | 272.2 | 245 |
| | MCS1 | 432.4 | 408.3 | 367.5 | | MCS1 | 576.5 | 544.4 | 490 |
| | MCS2 | 648.5 | 612.5 | 551.3 | | MCS2 | 864.7 | 816.7 | 735 |
| | MCS3 | 864.7 | 816.7 | 735 | | MCS3 | 1152.9 | 1088.9 | 980 |
| | MCS4 | 1297.1 | 1225 | 1102.5 | | MCS4 | 1729.4 | 1633.3 | 1470 |
| | MCS5 | 1729.4 | 1633.3 | 1470 | | MCS5 | 2305.9 | 2177.8 | 1960 |
| | MCS6 | 1945.6 | 1837.5 | 1653.8 | | MCS6 | 2594.1 | 2450 | 2205 |
| | MCS7 | 2161.8 | 2041.7 | 1837.5 | | MCS7 | 2882.4 | 2722.2 | 2450 |
| | MCS8 | 2594.1 | 2450 | 2205 | | MCS8 | 3458.8 | 3266.7 | 2940 |
| | MCS9 | 2882.4 | 2722.2 | 2450 | | MCS9 | 3843.1 | 3629.6 | 3266.7 |
| | MCS10 | 3242.6 | 3062.5 | 2756.3 | | MCS10 | 4323.5 | 4083.3 | 3675 |
| MCS11 | 3602.9 | 3402.8 | 3062.5 | MCS11 | 4803.9 | 4537 | 4083.3 | | |

3.2 Accessories

Power supply:

| | |
|--------------|---|
| Brand | HONOR |
| Model | ADS-36FKJ-12 12036EPCU |
| P/N | 6274615A |
| ID | 03 |
| Input Power | 100-240Vac, 50/60Hz, Max.1.0A |
| Output Power | 12Vdc, 3.0A |
| Power Line | 1.8m power cable without core attached on adapter |



3.3 Feature of Equipment under Test

Please refer to user manual.

3.4 Information Provided by the Manufacturer

Interface Availability:

| Interface Model | DC Power | Ethernet LAN 10Gbps | Ethernet LAN 1000Mbps | Ethernet WAN 1000Mbps | SFP 10Gbps | USB 3. 0 | FXS | WLAN IEEE 802.11ax (2.4G+ 5GHz)4X4 |
|--------------------|-------------|---------------------------|-----------------------------|-----------------------------|---------------|-----------|-----------|--|
| FGA5330 | 12Vdc 3A | ●(1 port) | ●(3 port) | ●(1 port) | ●(1 port) | ●(1 port) | ●(1 port) | ● |

●: Equipped

○: Not Equipped

3.5 General Description of Applied Standards and references

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

Test standard:

FCC Part 15, Subpart E (15.407)
ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

References Test Guidance:

KDB 789033 D02 General UNII Test Procedure New Rules v02r01, 12/14/2017
KDB 662911 D01 Multiple Transmitter Output v02r01, 10/31/2013

All test items have been performed as a reference to the above KDB test guidance.

3.6 Cabling Attached to the Equipment

Cable and Interconnection

| Interface | Cable type | Cable length delivered with the modem | "Real life" Cable length that can be attached to this type of interface | Cable length to be used for testing | Internal/ external connection |
|-----------|------------|---------------------------------------|---|-------------------------------------|-------------------------------|
| LAN1, WAN | UTP Cat 5 | 2 meter | > 10 meter | Two 10 meter cables; | Internal |
| 10G-LAN | UTP Cat 6 | 2 meter | > 10 meter | 10 meter cables; | Internal |
| SFP | Optical | 2 meter | > 10 meter | 10 meter cables; | External |
| FXS | UTP Cat 3 | 2 meter | > 10 meter | 1 meter flat cable | Internal |
| USB | STP | NA | NA | NA | Internal |
| AC power | UTP | 1.8 meter | >10 meter | 1.8 meter | External |

3.7 Panel Drawing



FXS

LAN1~3

WAN

10G-LAN

USB3.0

SFP

3.8 Transmit Operating Mode

For 5250~5350MHz & 5470~5725MHz

| Transmit Operating Mode | | | | Transmit Multiple Antennas | | | | |
|-------------------------|--|----------------|---|----------------------------|-----|-----|-----|-----|
| ■ | Operating mode 1 (single antenna) | | | ■ | 1TX | | | |
| ■ | Operating mode 2 (multiple antenna, no beam forming) | | | ■ | 2TX | ■ | 3TX | |
| ■ | Operating mode 3 (multiple antenna, with beam forming) | | | ■ | 2TX | ■ | 3TX | |
| ■ | 802.11a | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11n (20MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11n (40MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11ac (20MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11ac (40MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11ac (80MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11ac (160MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11ax (20MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11ax (40MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11ax (80MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |
| ■ | 802.11ax (160MHz) | Operating mode | ■ | 1TX | ■ | 2TX | ■ | 3TX |

For IEEE802.11a, 6Mbps~54Mbps: 1 Stream 4TX

For IEEE802.11n,

MCS0~MCS7: 1 Stream 1TX, 1 Stream 2TX, 1 Stream 3TX, 1 Stream 4TX

MCS8~MCS15: 2 Stream 2TX; 2 Stream 3TX; 2 Stream 4TX

MCS16~MCS23: 3 Stream 3TX; 3 Stream 4TX

MCS24~MCS31: 4 Stream 4TX;

For IEEE802.11ac 20MHz

Nss1MCS0~Nss1MCS8: 1 Stream 1TX, 1 Stream 2TX, 1 Stream 3TX, 1 Stream 4TX

Nss2MCS0~Nss2MCS9: 2 Stream 2TX; 2 Stream 3TX; 2 Stream 4TX

Nss3MCS0~Nss3MCS9: 3 Stream 3TX; 3 Stream 4TX

Nss4MCS0~Nss4MCS8: 4 Stream 4TX

For IEEE802.11ac 40/80MHz/160MHz

Nss1MCS0~Nss1MCS9: 1 Stream 1TX, 1 Stream 2TX, 1 Stream 3TX, 1 Stream 4TX

Nss2MCS0~Nss2MCS9: 2 Stream 2TX; 2 Stream 3TX; 2 Stream 4TX

Nss3MCS0~Nss3MCS9: 3 Stream 3TX; 3 Stream 4TX

Nss4MCS0~Nss4MCS9: 4 Stream 4TX

For IEEE802.11ax 20/40/80/160MHz

Nss1MCS0~Nss1MCS11: 1 Stream 1TX, 1 Stream 2TX, 1 Stream 4TX, 1 Stream 4TX

Nss2MCS0~Nss2MCS11: 2 Stream 2TX; 2 Stream 3TX; 2 Stream 4TX

Nss3MCS0~Nss3MCS11: 3 Stream 3TX; 3 Stream 4TX

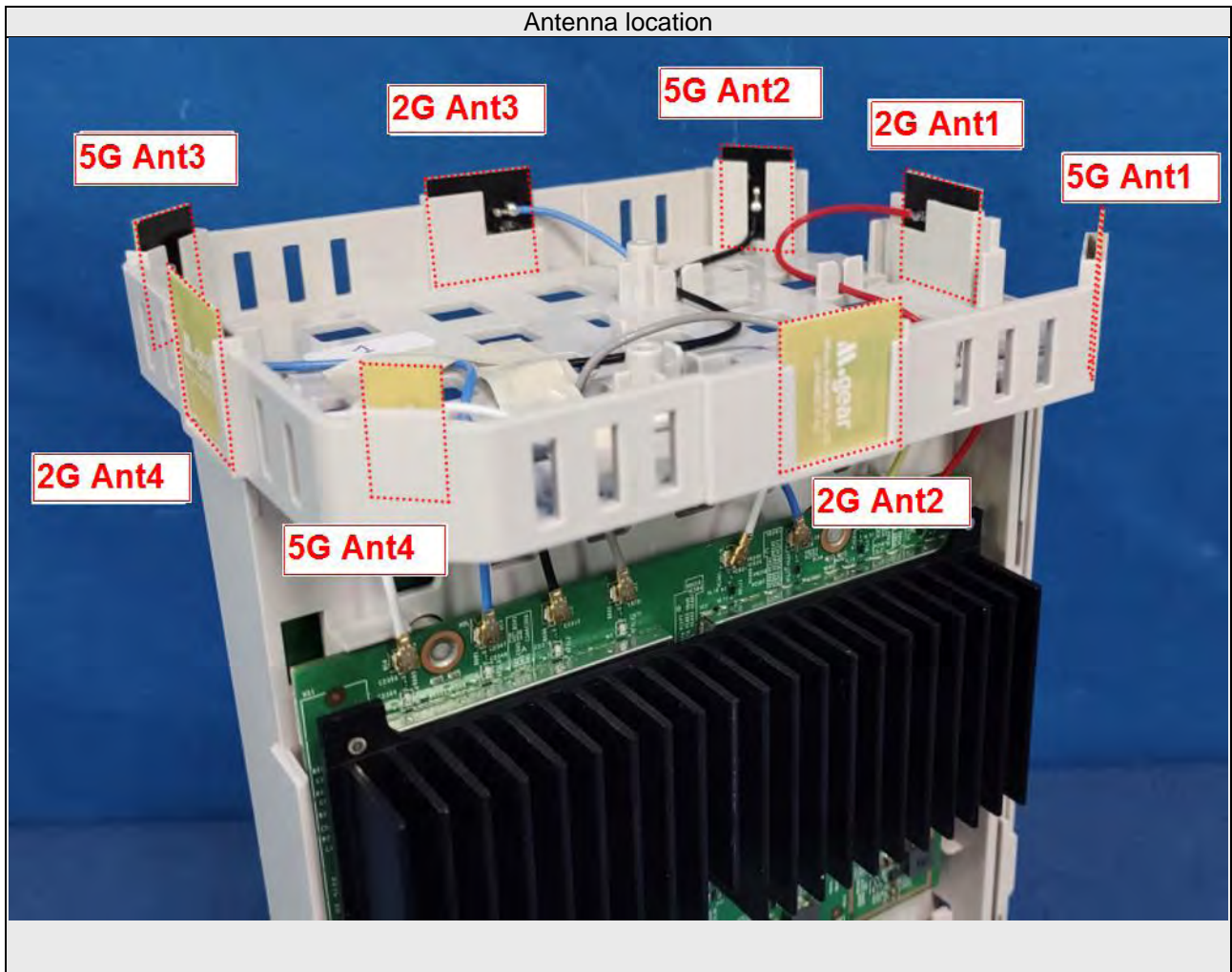
Nss4MCS0~Nss4MCS11: 4 Stream 4TX

3.9 Antenna Requirements

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. 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 uses a 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 the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

3.10 Antenna Information

| Ant. | Brand | Model Name | Antenna Type | Connector |
|------|--------|---------------|--------------|-----------|
| 2G-1 | WHA YU | C107-511586-A | PCB PIFA | I-pex |
| 2G-2 | WHA YU | C107-511589-A | PCB PIFA | I-pex |
| 2G-3 | WHA YU | C107-511587-A | PCB PIFA | I-pex |
| 2G-4 | WHA YU | C107-511588-A | PCB PIFA | I-pex |
| 5G-1 | WHA YU | C107-511590-A | PCB Loop | I-pex |
| 5G-2 | WHA YU | C107-511591-A | PCB Dipole | I-pex |
| 5G-3 | WHA YU | C107-511592-A | PCB Dipole | I-pex |
| 5G-4 | WHA YU | C107-511593-A | PCB Dipole | I-pex |



Antenna & Bandwidth

| Antenna | 1st (TX) | | | | 2nd (TX) | | | |
|-------------------|----------|--------|--------|---------|----------|--------|--------|---------|
| Bandwidth Mode | 20 MHz | 40 MHz | 80 MHz | 160 MHz | 20 MHz | 40 MHz | 80 MHz | 160 MHz |
| 802.11a | V | X | X | X | V | X | X | X |
| 802.11n | V | V | X | X | V | V | X | X |
| 802.11ac | V | V | V | V | V | V | V | V |
| 802.11ax | V | V | V | V | V | V | V | V |

| Antenna | 3rd (TX) | | | | 4th (TX) | | | |
|-------------------|----------|--------|--------|---------|----------|--------|--------|---------|
| Bandwidth Mode | 20 MHz | 40 MHz | 80 MHz | 160 MHz | 20 MHz | 40 MHz | 80 MHz | 160 MHz |
| 802.11a | V | X | X | X | V | X | X | X |
| 802.11n | V | V | X | X | V | V | X | X |
| 802.11ac | V | V | V | V | V | V | V | V |
| 802.11ax | V | V | V | V | V | V | V | V |

| Frequency | Maximum Gain (dBi) for CDD mode | | | | | | | |
|-----------|--|--------|--------|---------|--|--------|--------|---------|
| | CDD mode (1 Stream 4 TX) for Power Gain | | | | CDD mode (1 Stream 4 TX) for PSD Gain | | | |
| | 20 MHz | 40 MHz | 80 MHz | 160 MHz | 20 MHz | 40 MHz | 80 MHz | 160 MHz |
| 5250MHz | - | - | - | 3.04 | - | - | - | 6.16 |
| 5260MHz | 3.04 | - | - | - | 5.87 | - | - | - |
| 5270MHz | - | 2.60 | - | - | - | 6.33 | - | - |
| 5290MHz | - | - | 2.81 | - | - | - | 5.98 | - |
| 5300MHz | 2.69 | - | - | - | 6.18 | - | - | - |
| 5310MHz | - | 2.30 | - | - | - | 6.01 | - | - |
| 5320MHz | 2.56 | - | - | - | 5.75 | - | - | - |
| 5500MHz | 2.38 | - | - | - | 6.08 | - | - | - |
| 5510MHz | - | 2.78 | - | - | - | 6.32 | - | - |
| 5530MHz | - | - | 2.97 | - | - | - | 6.59 | - |
| 5550MHz | - | 2.75 | - | - | - | 6.00 | - | - |
| 5570MHz | - | - | - | 3.45 | - | - | - | 5.70 |
| 5580MHz | 3.13 | - | - | - | 6.58 | - | - | - |
| 5610MHz | - | - | 2.92 | - | - | - | 5.47 | - |
| 5670MHz | - | 3.09 | - | - | - | 5.67 | - | - |
| 5690MHz | - | - | 3.72 | - | - | - | 6.63 | - |
| 5700MHz | 3.17 | - | - | - | 5.86 | - | - | - |
| 5710MHz | - | 3.23 | - | - | - | 5.96 | - | - |
| 5720MHz | 3.18 | - | - | - | 5.85 | - | - | - |

Note:

1. Antenna Gain refer to "FGA5330_Antenna Test Report V1.18.pdf" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$ dBi

| Frequency | Maximum Gain (dBi) for TxBF mode | | | |
|-----------|--|--------|--------|---------|
| | TxBF mode (1 Stream 4 TX) for Power Gain & PSD Gain | | | |
| | 20 MHz | 40 MHz | 80 MHz | 160 MHz |
| 5250MHz | - | - | - | 6.16 |
| 5260MHz | 5.87 | - | - | - |
| 5270MHz | - | 6.33 | - | - |
| 5290MHz | - | - | 5.98 | - |
| 5300MHz | 6.18 | - | - | - |
| 5310MHz | - | 6.01 | - | - |
| 5320MHz | 5.75 | - | - | - |
| 5500MHz | 6.08 | - | - | - |
| 5510MHz | - | 6.32 | - | - |
| 5530MHz | - | - | 6.59 | - |
| 5550MHz | - | 6.00 | - | - |
| 5570MHz | - | - | - | 5.70 |
| 5580MHz | 6.58 | - | - | - |
| 5610MHz | - | - | 5.47 | - |
| 5670MHz | - | 5.67 | - | - |
| 5690MHz | - | - | 6.63 | - |
| 5700MHz | 5.86 | - | - | - |
| 5710MHz | - | 5.96 | - | - |
| 5720MHz | 5.85 | - | - | - |

Note:

1. Antenna Gain refer to "FGA5330_Antenna Test Report V1.18.pdf" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$ dBi

| Frequency | Maximum Gain (dBi) for TXBF mode | | | |
|-----------|--|--------|--------|---------|
| | TXBF mode (2 Stream 4 TX) Power Gain & PSD Gain | | | |
| | 20 MHz | 40 MHz | 80 MHz | 160 MHz |
| 5250MHz | - | - | - | 4.64 |
| 5260MHz | 4.47 | - | - | - |
| 5270MHz | - | 4.86 | - | - |
| 5290MHz | - | - | 4.55 | - |
| 5300MHz | 4.61 | - | - | - |
| 5310MHz | - | 4.48 | - | - |
| 5320MHz | 4.25 | - | - | - |
| 5500MHz | 4.28 | - | - | - |
| 5510MHz | - | 4.56 | - | - |
| 5530MHz | - | - | 4.87 | - |
| 5550MHz | - | 4.58 | - | - |
| 5570MHz | - | - | - | 4.27 |
| 5580MHz | 4.66 | - | - | - |
| 5610MHz | - | - | 3.87 | - |
| 5670MHz | - | 4.16 | - | - |
| 5690MHz | - | - | 5.02 | - |
| 5700MHz | 4.43 | - | - | - |
| 5710MHz | - | 4.20 | - | - |
| 5720MHz | 4.32 | - | - | - |

Note:

1. Antenna Gain refer to "FGA5330_Antenna Test Report V1.18.pdf" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$ dBi

| Frequency | Maximum Gain (dBi) for TXBF mode | | | |
|-----------|--|--------|--------|---------|
| | TXBF mode (3 Stream 4 TX) Power Gain & PSD Gain | | | |
| | 20 MHz | 40 MHz | 80 MHz | 160 MHz |
| 5250MHz | - | - | - | 2.40 |
| 5260MHz | 2.25 | - | - | - |
| 5270MHz | - | 2.66 | - | - |
| 5290MHz | - | - | 2.32 | - |
| 5300MHz | 2.31 | - | - | - |
| 5310MHz | - | 2.17 | - | - |
| 5320MHz | 1.94 | - | - | - |
| 5500MHz | 2.19 | - | - | - |
| 5510MHz | - | 2.58 | - | - |
| 5530MHz | - | - | 2.88 | - |
| 5550MHz | - | 2.56 | - | - |
| 5570MHz | - | - | - | 2.25 |
| 5580MHz | 2.46 | - | - | - |
| 5610MHz | - | - | 1.99 | - |
| 5670MHz | - | 2.26 | - | - |
| 5690MHz | - | - | 3.05 | - |
| 5700MHz | 2.57 | - | - | - |
| 5710MHz | - | 2.31 | - | - |
| 5720MHz | 2.48 | - | - | - |

Note:

1. Antenna Gain refer to "FGA5330_Antenna Test Report V1.18.pdf" files
2. Maximum Correlated Directional Gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi
3. Maximum Uncorrelated Directional Gain = $10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10}) / N_{ANT}]$ dBi

3.11 Table for Carrier Frequency

16 channels are provided for Bandwidth 20MHz:

| Frequency Band | Channel No. | Frequency | Channel No. | Frequency |
|---------------------------|-------------|-----------|-------------|-----------|
| 5250~5350 MHz U-NII-2A | 52 | 5260 MHz | 60 | 5300 MHz |
| | 56 | 5280 MHz | 64 | 5320 MHz |
| 5470~5725 MHz U-NII-2C | 100 | 5500 MHz | 124 | 5620 MHz |
| | 104 | 5520 MHz | 128 | 5640 MHz |
| | 108 | 5540 MHz | 132 | 5660 MHz |
| | 112 | 5560 MHz | 136 | 5680 MHz |
| | 116 | 5580 MHz | 140 | 5700 MHz |
| | 120 | 5600 MHz | 144 | 5720 MHz |

8 channels are provided for Bandwidth 40MHz:

| Frequency Band | Channel No. | Frequency | Channel No. | Frequency |
|---------------------------|-------------|-----------|-------------|-----------|
| 5250~5350 MHz U-NII-2A | 54 | 5270 MHz | 62 | 5310 MHz |
| 5470~5725 MHz U-NII-2C | 102 | 5510 MHz | 126 | 5630 MHz |
| | 110 | 5550 MHz | 134 | 5670 MHz |
| | 118 | 5590 MHz | 142 | 5710 MHz |

4 channels are provided for Bandwidth 80MHz:

| Frequency Band | Channel No. | Frequency | Channel No. | Frequency |
|---------------------------|-------------|-----------|-------------|-----------|
| 5250~5350 MHz U-NII-2A | 58 | 5290 MHz | - | - |
| 5470~5725 MHz U-NII-2C | 106 | 5530 MHz | 138 | 5690 MHz |
| | 122 | 5610 MHz | | |

2 channels are provided for Bandwidth 160MHz:

| Frequency Band | Channel No. | Frequency | Channel No. | Frequency |
|---------------------------|-------------|-----------|-------------|-----------|
| 5150~5350 MHz U-NII-2A | 50 | 5250 MHz | - | - |
| 5470~5725 MHz U-NII-2C | 114 | 5570 MHz | - | - |

3.12 Table for Test Modes

Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

| Test Items | Mode | Note | Channel | Data Rate | Antenna |
|------------------------------|--------------|-----------|-----------------------------|-----------------------|---------|
| AC Power Conducted Emissions | 11ax(20MHz) | OFDM/BPSK | 116 | - | 1+2+3+4 |
| Emission Bandwidth | 11ax(20MHz) | OFDM/BPSK | 52/60/64 100/116/140/144 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(40MHz) | | 54/62 102/110/134/142 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(80MHz) | | 58/106 122/138 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(160MHz) | | 50/114 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |

| Test Items | Mode | Note | Channel | Data Rate | Antenna |
|---|--------------|-----------|-----------------------------|--------------------------|---------|
| Maximum Peak Output Power Maximum Average Output Power | 11ax(20MHz) | OFDM/BPSK | 52/60/64 100/116/140/144 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(40MHz) | | 54/62 102/110/134/142 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(80MHz) | | 58/106 122/138 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(160MHz) | | 50/114 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |

| Test Items | Mode | Note | Channel | Data Rate | Antenna |
|------------------------|--------------|-----------|-----------------------------|--------------------------|---------|
| Power Spectral Density | 11ax(20MHz) | OFDM/BPSK | 52/60/64 100/116/140/144 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(40MHz) | | 54/62 102/110/134/142 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(80MHz) | | 58/106 122/138 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(160MHz) | | 50/114 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |

| Test Items | Mode | Note | Channel | Data Rate | Antenna |
|---|--------------|------------------------|-----------------------------|-----------------------|---------|
| Unwanted Emission in the restricted bands Above 1GHz (Radiated) | 11ax(20MHz) | OFDM/BPSK OFDM/BPSK | 52/60/64 100/116/140/144 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(40MHz) | | 54/62 102/110/134/142 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(80MHz) | | 58/106 122/138 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(160MHz) | | 50/114 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |

| Test Items | Mode | Note | Channel | Data Rate | Antenna |
|---|--------------|-----------|-----------------------------|-----------------------|---------|
| Unwanted Emission out of the restricted bands Above 1GHz (Radiated) | 11ax(20MHz) | OFDM/BPSK | 52/60/64 100/116/140/144 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(40MHz) | | 54/62 102/110/134/142 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(80MHz) | | 58/106 122/138 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |
| | 11ax(160MHz) | | 50/114 | Nss1 MCS0 (1S4T CDD) | 1+2+3+4 |
| | | | | Nss1 MCS0 (1S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (2S4T TxBF) | 1+2+3+4 |
| | | | | Nss1 MCS0 (3S4T TxBF) | 1+2+3+4 |

| Test Items | Mode | Note | Channel | Data Rate | Antenna |
|---|-------------|---------------|-----------------------------|------------------|------------|
| Radiated Emissions Below 1GHz(Radiated) | 11ax(20MHz) | OFDM/BPSK | 116 | Nss1 MCS0 (TxBF) | 1+2+3+4 |
| Frequency Stability | 20MHz | Un-modulation | 52/60/64 100/116/140/144 | - | 1, 2, 3, 4 |
| | 40MHz | | 54/62 102/110/134/142 | - | 1, 2, 3, 4 |
| | 80MHz | | 58/106 122/138 | - | 1, 2, 3, 4 |
| | 160MHz | | 50/114 | - | 1, 2, 3, 4 |

Note:

- The device with multiple operating mode, measurements on the middle channel were tested to determine the worst case mode. (Each modulation family were tested in band edge, spurious emission and in band PSD after investigate worst case mode)
- Base on txcore command, the 11a default mode is 1S4T CDD, the 802.11ax 20MHz/40MHz/80MHz/160MHz default mode are 1S4T CDD,1S4T TxBF, 2S4T TxBF, 3S4T TxBF; the SDM mode covered by the CDD mode with the same setting.

```
wl -i wl1 txcore
txcore enabled bitmap (Nsts {4..1}) 0x0f 0x0f 0x0f 0x0f
txcore mask OFDM 0x0f CCK 0x0f
```


3.13 Parameters of Test Software Settings

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

| The Power Setting Parameter | | | | | |
|-----------------------------|---|-------------------------------|----------------------|---------------|-----------------|
| Test Software Version | 19.4.0146-2809002-20191218052751-4850d0484027485160796c5b1652d62267f14fc9 | | | | |
| Worst Modulation Mode | Number of Transmit Chains (NTX) | Frequency (MHz) | P _H (dBm) | Power Setting | Data Rate / MCS |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5260 | 23.89 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5300 | 23.73 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5320 | 23.81 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5500 | 23.93 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5580 | 23.86 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5700 | 23.72 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5720(UNII-2c) 5720(UNII-3) | 21.79 15.63 | 18.5 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5260 | 23.84 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5300 | 23.73 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5320 | 23.82 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5500 | 23.81 | 17 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5580 | 23.33 | 16.5 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5700 | 22.53 | 15.75 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5720(UNII-2c) 5720(UNII-3) | 21.69 15.64 | 18.5 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5260 | 23.82 | 17 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5300 | 23.75 | 17 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5320 | 23.78 | 17 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5500 | 23.79 | 17 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5580 | 23.75 | 17 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5700 | 23.55 | 16.75 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5720(UNII-2c) 5720(UNII-3) | 21.27 15.08 | 19 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5260 | 23.79 | 17 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5300 | 23.77 | 17 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5320 | 23.80 | 17 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5500 | 23.81 | 17 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5580 | 23.77 | 17 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5700 | 23.80 | 17 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5720(UNII-2c) 5720(UNII-3) | 20.80 14.77 | 19 | Nss3MCS0 (25.8) |

| Worst Modulation Mode | Number of Transmit Chains (NTX) | Frequency (MHz) | P _H (dBm) | Power Setting | Data Rate / MCS |
|-----------------------|---------------------------------|-------------------------------|----------------------|---------------|-----------------|
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5270 | 23.94 | 17.25 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5310 | 23.79 | 17.00 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5510 | 23.65 | 16.50 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5550 | 23.61 | 16.50 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5670 | 23.77 | 16.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5710(UNII-2c) 5710(UNII-3) | 23.89 12.11 | 17.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5270 | 23.46 | 16.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5310 | 23.87 | 17 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5510 | 23.15 | 16 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5550 | 23.56 | 16.5 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5670 | 23.84 | 16.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5710(UNII-2c) 5710(UNII-3) | 23.84 12.30 | 17.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5270 | 23.92 | 17.25 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5310 | 23.92 | 17 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5510 | 23.15 | 16 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5550 | 23.56 | 16.5 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5670 | 23.72 | 16.75 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5710(UNII-2c) 5710(UNII-3) | 23.64 10.64 | 17.75 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5270 | 23.90 | 17.25 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5310 | 23.91 | 17 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5510 | 23.59 | 16.5 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5550 | 23.50 | 16.5 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5670 | 23.83 | 16.75 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5710(UNII-2c) 5710(UNII-3) | 23.39 9.75 | 17.75 | Nss3MCS0 (51.6) |

| Worst Modulation Mode | Number of Transmit Chains (NTX) | Frequency (MHz) | P _H (dBm) | Power Setting | Data Rate / MCS |
|------------------------|---------------------------------|-------------------------------|----------------------|---------------|------------------|
| 802.11ax 80MHz (CDD) | 1 stream 4TX | 5290 | 23.83 | 17 | Nss1MCS0 (36) |
| 802.11ax 80MHz (CDD) | 1 stream 4TX | 5530 | 23.51 | 16.25 | Nss1MCS0 (36) |
| 802.11ax 80MHz (CDD) | 1 stream 4TX | 5610 | 23.55 | 16.5 | Nss1MCS0 (36) |
| 802.11ax 80MHz (CDD) | 1 stream 4TX | 5690(UNII-2c) 5690(UNII-3) | 23.55 7.86 | 18 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 1 stream 4TX | 5290 | 23.89 | 17 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 1 stream 4TX | 5530 | 22.94 | 15.75 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 1 stream 4TX | 5610 | 23.56 | 16.5 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 1 stream 4TX | 5690(UNII-2c) 5690(UNII-3) | 22.83 6.68 | 18 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 2 stream 4TX | 5290 | 22.57 | 15.5 | Nss2MCS0 (72.1) |
| 802.11ax 80MHz (TxBF) | 2 stream 4TX | 5530 | 23.50 | 16.25 | Nss2MCS0 (72.1) |
| 802.11ax 80MHz (TxBF) | 2 stream 4TX | 5610 | 23.54 | 16.5 | Nss2MCS0 (72.1) |
| 802.11ax 80MHz (TxBF) | 2 stream 4TX | 5690(UNII-2c) 5690(UNII-3) | 23.49 6.01 | 18 | Nss2MCS0 (72.1) |
| 802.11ax 80MHz (TxBF) | 3 stream 4TX | 5290 | 23.87 | 17 | Nss3MCS0 (108.1) |
| 802.11ax 80MHz (TxBF) | 3 stream 4TX | 5530 | 22.72 | 15.5 | Nss3MCS0 (108.1) |
| 802.11ax 80MHz (TxBF) | 3 stream 4TX | 5610 | 23.52 | 16.5 | Nss3MCS0 (108.1) |
| 802.11ax 80MHz (TxBF) | 3 stream 4TX | 5690(UNII-2c) 5690(UNII-3) | 23.31 6.07 | 18 | Nss3MCS0 (108.1) |
| 802.11ax 160MHz (CDD) | 1 stream 4TX | 5250(UNII-1) 5250(UNII-2A) | 18.00 17.91 | 14.75 | Nss1MCS0 (72.1) |
| 802.11ax 160MHz (CDD) | 1 stream 4TX | 5570 | 23.61 | 16.50 | Nss1MCS0 (72.1) |
| 802.11ax 160MHz (TxBF) | 1 stream 4TX | 5250(UNII-1) 5250(UNII-2A) | 17.97 18.08 | 14.75 | Nss1MCS0 (72.1) |
| 802.11ax 160MHz (TxBF) | 1 stream 4TX | 5570 | 23.37 | 16.25 | Nss1MCS0 (72.1) |
| 802.11ax 160MHz (TxBF) | 2 stream 4TX | 5250(UNII-1) 5250(UNII-2A) | 17.95 17.85 | 14.75 | Nss1MCS0 (144.1) |
| 802.11ax 160MHz (TxBF) | 2 stream 4TX | 5570 | 23.57 | 16.50 | Nss1MCS0 (144.1) |
| 802.11ax160MHz (TxBF) | 3 stream 4TX | 5250(UNII-1) 5250(UNII-2A) | 16.24 16.20 | 13.50 | Nss1MCS0 (216.2) |
| 802.11ax 160MHz (TxBF) | 3 stream 4TX | 5570 | 22.15 | 15.00 | Nss1MCS0 (216.2) |

The Power Setting Parameter

| Test Software Version | 19.4.0146-2809002-20191218052751-4850d0484027485160796c5b1652d62267f14fc9 | | | | |
|-----------------------|---|-------------------------------|----------------------|---------------|-----------------|
| Worst Modulation Mode | Number of Transmit Chains (NTX) | Frequency (MHz) | P _L (dBm) | Power Setting | Data Rate / MCS |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5260 | 16.86 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5300 | 16.90 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5320 | 16.86 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5500 | 16.83 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5580 | 16.90 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5700 | 16.67 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (CDD) | 1 stream 4TX | 5720(UNII-2c) 5720(UNII-3) | 14.85 8.50 | 11.5 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5260 | 16.75 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5300 | 16.71 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5320 | 16.80 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5500 | 16.77 | 10 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5580 | 16.36 | 9.5 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5700 | 15.56 | 8.75 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 1 stream 4TX | 5720(UNII-2c) 5720(UNII-3) | 14.54 8.49 | 11.5 | Nss1MCS0 (8.6) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5260 | 16.75 | 10 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5300 | 16.73 | 10 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5320 | 16.81 | 10 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5500 | 16.82 | 10 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5580 | 16.75 | 10 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5700 | 16.52 | 9.75 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 2 stream 4TX | 5720(UNII-2c) 5720(UNII-3) | 14.51 8.16 | 12 | Nss2MCS0 (17.2) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5260 | 16.85 | 10 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5300 | 16.72 | 10 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5320 | 16.74 | 10 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5500 | 16.67 | 10 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5580 | 16.77 | 10 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5700 | 16.86 | 10 | Nss3MCS0 (25.8) |
| 802.11ax 20MHz (TxBF) | 3 stream 4TX | 5720(UNII-2c) 5720(UNII-3) | 13.91 7.90 | 12 | Nss3MCS0 (25.8) |

| Worst Modulation Mode | Number of Transmit Chains (NTX) | Frequency (MHz) | P _L (dBm) | Power Setting | Data Rate / MCS |
|-----------------------|---------------------------------|-------------------------------|----------------------|---------------|-----------------|
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5270 | 16.85 | 10.25 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5310 | 16.72 | 10 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5510 | 16.61 | 9.5 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5550 | 16.59 | 9.5 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5670 | 16.87 | 9.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (CDD) | 1 stream 4TX | 5710(UNII-2c) 5710(UNII-3) | 17.05 5.29 | 10.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5270 | 16.54 | 9.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5310 | 16.80 | 10 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5510 | 16.14 | 9 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5550 | 16.52 | 9.5 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5670 | 16.72 | 9.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 1 stream 4TX | 5710(UNII-2c) 5710(UNII-3) | 16.85 5.33 | 10.75 | Nss1MCS0 (17.2) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5270 | 16.91 | 10.25 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5310 | 16.88 | 10 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5510 | 16.21 | 9 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5550 | 16.53 | 9.5 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5670 | 16.72 | 9.75 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 2 stream 4TX | 5710(UNII-2c) 5710(UNII-3) | 16.72 3.66 | 10.75 | Nss2MCS0 (34.4) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5270 | 16.74 | 10.25 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5310 | 16.75 | 10 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5510 | 16.50 | 9.5 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5550 | 16.52 | 9.5 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5670 | 16.70 | 9.75 | Nss3MCS0 (51.6) |
| 802.11ax 40MHz (TxBF) | 3 stream 4TX | 5710(UNII-2c) 5710(UNII-3) | 16.43 2.73 | 10.75 | Nss3MCS0 (51.6) |

| Worst Modulation Mode | Number of Transmit Chains (NTX) | Frequency (MHz) | P _L (dBm) | Power Setting | Data Rate / MCS |
|------------------------|---------------------------------|-------------------------------|----------------------|---------------|------------------|
| 802.11ax 80MHz (CDD) | 1 stream 4TX | 5290 | 16.71 | 10 | Nss1MCS0 (36) |
| 802.11ax 80MHz (CDD) | 1 stream 4TX | 5530 | 16.30 | 9.25 | Nss1MCS0 (36) |
| 802.11ax 80MHz (CDD) | 1 stream 4TX | 5610 | 16.55 | 9.5 | Nss1MCS0 (36) |
| 802.11ax 80MHz (CDD) | 1 stream 4TX | 5690(UNII-2c) 5690(UNII-3) | 16.56 0.71 | 11 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 1 stream 4TX | 5290 | 16.84 | 10 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 1 stream 4TX | 5530 | 15.83 | 8.75 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 1 stream 4TX | 5610 | 16.71 | 9.5 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 1 stream 4TX | 5690(UNII-2c) 5690(UNII-3) | 15.84 -0.17 | 11 | Nss1MCS0 (36) |
| 802.11ax 80MHz (TxBF) | 2 stream 4TX | 5290 | 15.63 | 8.5 | Nss2MCS0 (72.1) |
| 802.11ax 80MHz (TxBF) | 2 stream 4TX | 5530 | 16.40 | 9.25 | Nss2MCS0 (72.1) |
| 802.11ax 80MHz (TxBF) | 2 stream 4TX | 5610 | 16.51 | 9.5 | Nss2MCS0 (72.1) |
| 802.11ax 80MHz (TxBF) | 2 stream 4TX | 5690(UNII-2c) 5690(UNII-3) | 16.51 -1.05 | 11 | Nss2MCS0 (72.1) |
| 802.11ax 80MHz (TxBF) | 3 stream 4TX | 5290 | 16.83 | 10 | Nss3MCS0 (108.1) |
| 802.11ax 80MHz (TxBF) | 3 stream 4TX | 5530 | 15.57 | 8.5 | Nss3MCS0 (108.1) |
| 802.11ax 80MHz (TxBF) | 3 stream 4TX | 5610 | 16.50 | 9.5 | Nss3MCS0 (108.1) |
| 802.11ax 80MHz (TxBF) | 3 stream 4TX | 5690(UNII-2c) 5690(UNII-3) | 16.12 -0.95 | 11 | Nss3MCS0 (108.1) |
| 802.11ax 160MHz (CDD) | 1 stream 4TX | 5250(UNII-1) 5250(UNII-2A) | 10.98 10.88 | 7.75 | Nss1MCS0 (72.1) |
| 802.11ax 160MHz (CDD) | 1 stream 4TX | 5570 | 16.59 | 9.5 | Nss1MCS0 (72.1) |
| 802.11ax 160MHz (TxBF) | 1 stream 4TX | 5250(UNII-1) 5250(UNII-2A) | 10.95 11.12 | 7.75 | Nss1MCS0 (72.1) |
| 802.11ax 160MHz (TxBF) | 1 stream 4TX | 5570 | 16.24 | 9.25 | Nss1MCS0 (72.1) |
| 802.11ax 160MHz (TxBF) | 2 stream 4TX | 5250(UNII-1) 5250(UNII-2A) | 11.16 10.65 | 7.75 | Nss1MCS0 (144.1) |
| 802.11ax 160MHz (TxBF) | 2 stream 4TX | 5570 | 16.39 | 9.5 | Nss1MCS0 (144.1) |
| 802.11ax160MHz (TxBF) | 3 stream 4TX | 5250(UNII-1) 5250(UNII-2A) | 9.29 9.14 | 6.5 | Nss1MCS0 (216.2) |
| 802.11ax 160MHz (TxBF) | 3 stream 4TX | 5570 | 15.14 | 8 | Nss1MCS0 (216.2) |

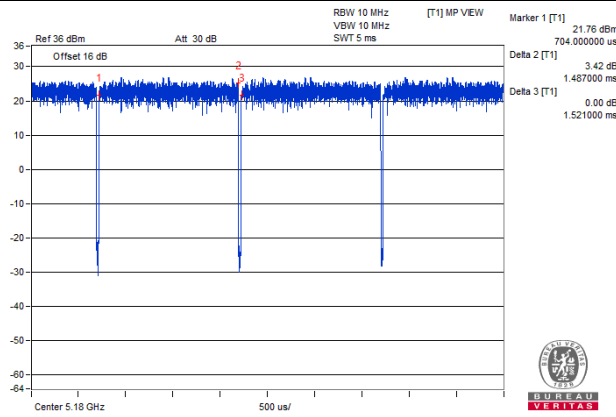
3.14 On Time and Duty Cycle

| Mode | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle Correction Factor (dB) | 1/T Minimum VBW (kHz) |
|-------------------------|--------------|-------------|----------------|-----------------------------------|-----------------------|
| 11ax (20MHz) 1S4T CDD | 1.487 | 1.521 | 97.8 | 0.10 | 3 |
| 11ax (20MHz) 1S4T TxBF | 1.486 | 1.511 | 98.3 | 0 | 0.01 |
| 11ax (20MHz) 2S4T TxBF | 0.778 | 0.812 | 95.8 | 0.19 | 3 |
| 11ax (20MHz) 3S4T TxBF | 0.556 | 0.588 | 94.6 | 0.24 | 3 |
| 11ax (40MHz) 1S4T CDD | 1.703 | 1.734 | 98.2 | 0 | 0.01 |
| 11ax (40MHz) 1S4T TxBF | 1.702 | 1.732 | 98.3 | 0 | 0.01 |
| 11ax (40MHz) 2S4T TxBF | 0.421 | 0.444 | 94.8 | 0.23 | 3 |
| 11ax (40MHz) 3S4T TxBF | 0.317 | 0.342 | 92.7 | 0.33 | 10 |
| 11ax (80MHz) 1S4T CDD | 0.400 | 0.423 | 94.6 | 0.24 | 3 |
| 11ax (80MHz) 1S4T TxBF | 0.400 | 0.424 | 94.3 | 0.25 | 3 |
| 11ax (80MHz) 2S4T TxBF | 0.238 | 0.260 | 91.5 | 0.38 | 10 |
| 11ax (80MHz) 3S4T TxBF | 0.195 | 0.215 | 90.7 | 0.42 | 10 |
| 11ax (160MHz) 1S4T CDD | 0.231 | 0.253 | 91.3 | 0.40 | 10 |
| 11ax (160MHz) 1S4T TxBF | 0.232 | 0.252 | 92.1 | 0.36 | 10 |
| 11ax (160MHz) 2S4T TxBF | 0.154 | 0.176 | 87.5 | 0.58 | 10 |
| 11ax (160MHz) 3S4T TxBF | 0.137 | 0.159 | 86.2 | 0.65 | 10 |

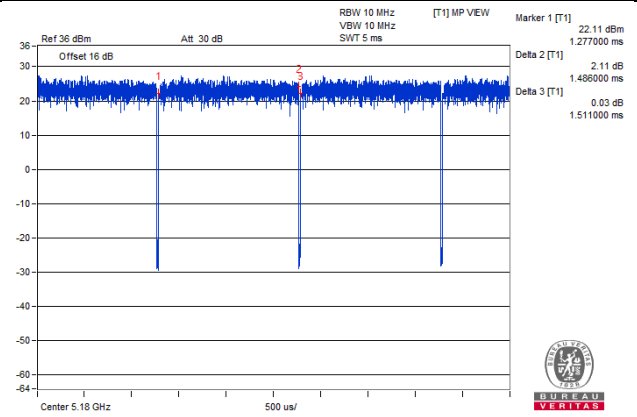
Note:

1. Power measurement using sweep trigger and gating of the power meter, duty factor is not required.
2. Duty cycle > 98%, duty factor is not required.

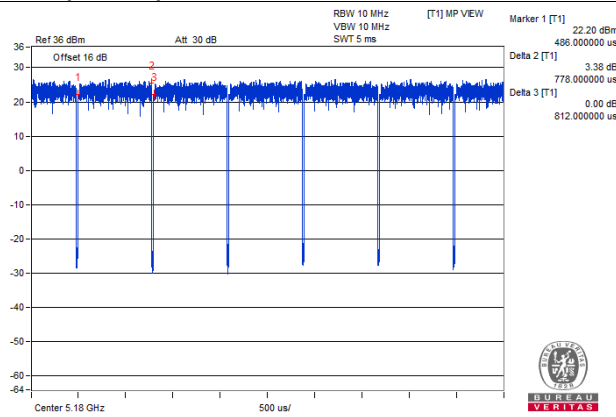
11ax (20MHz) 1S4T CDD



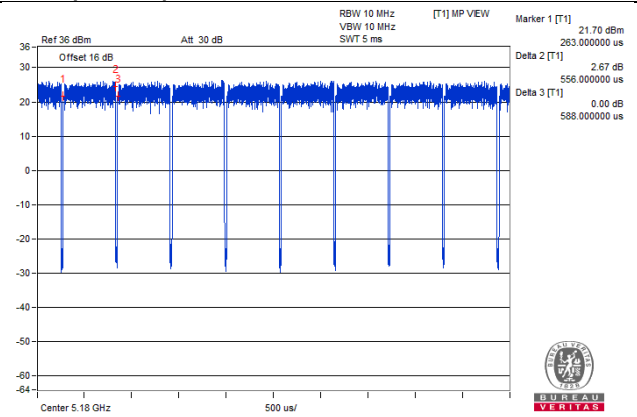
11ax (20MHz) 1S4T TxBF



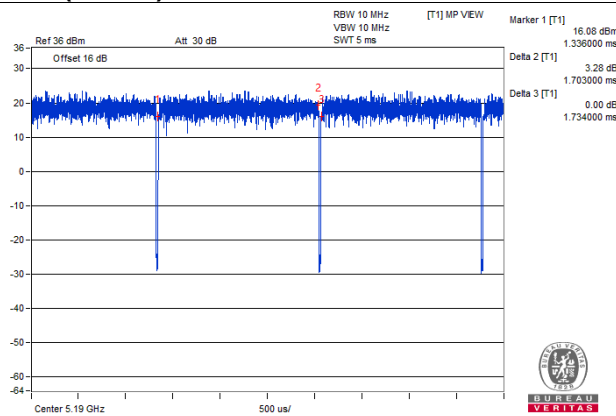
11ax (20MHz) 2S4T TxBF



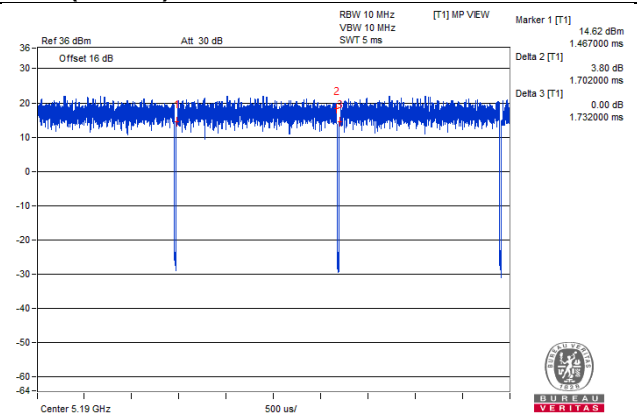
11ax (20MHz) 3S4T TxBF



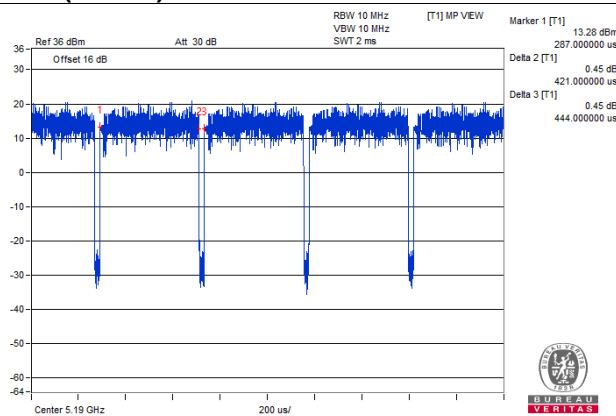
11ax (40MHz) 1S4T CDD



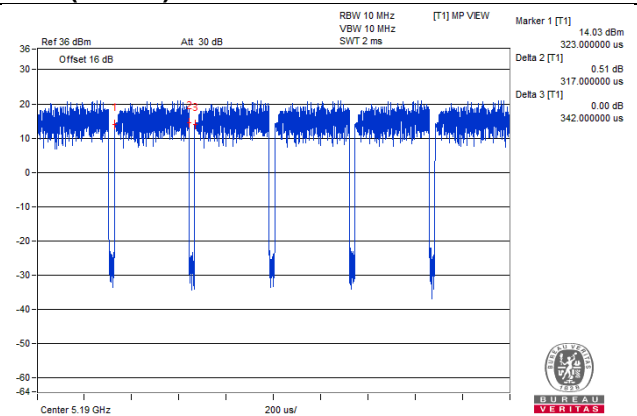
11ax (40MHz) 1S4T TxBF



11ax (40MHz) 2S4T TxBF

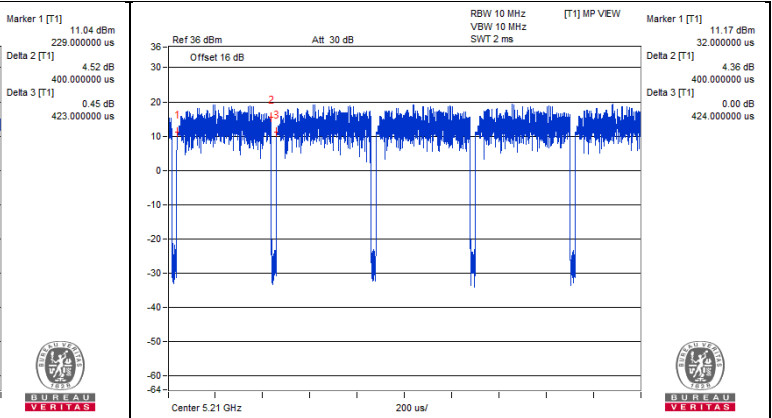
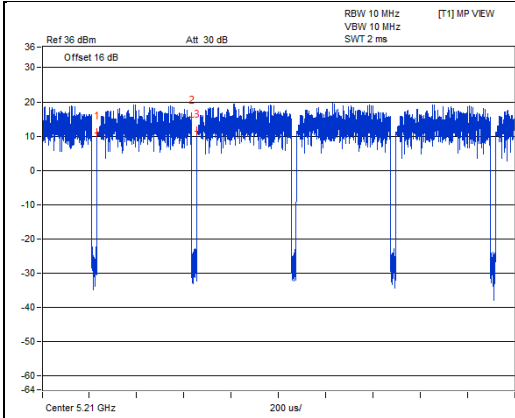


11ax (40MHz) 3S4T TxBF



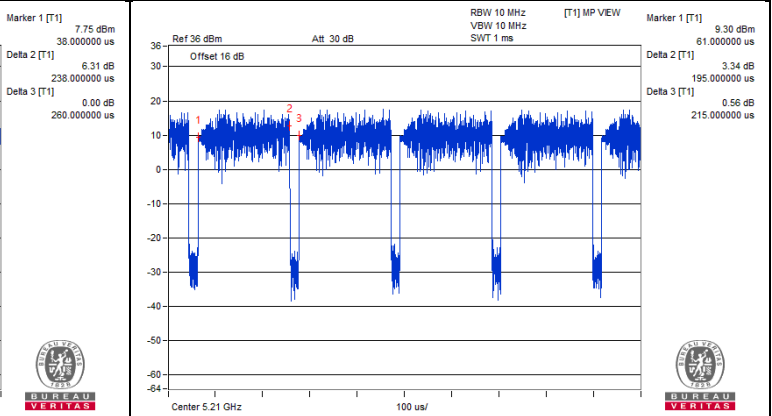
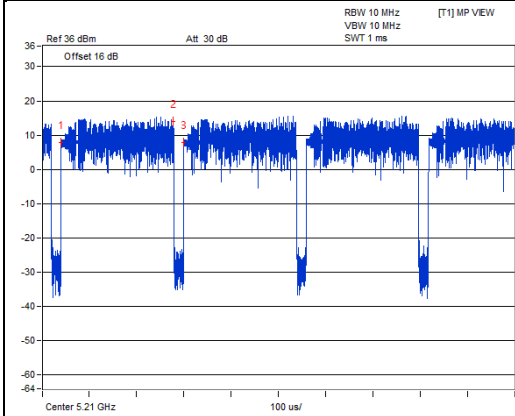
11ax (80MHz) 1S4T CDD

11ax (80MHz) 1S4T TxBF



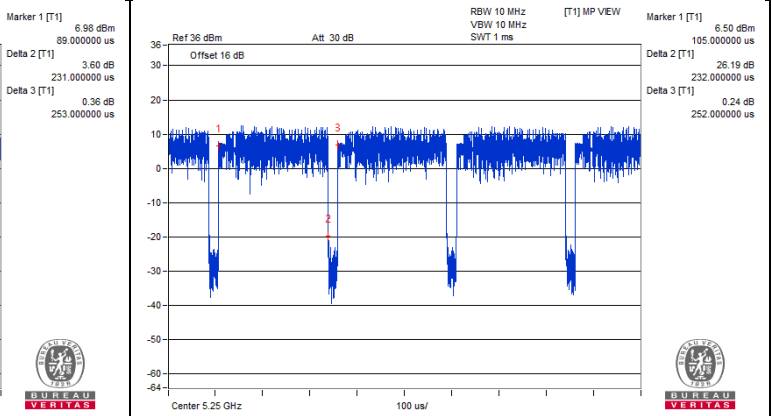
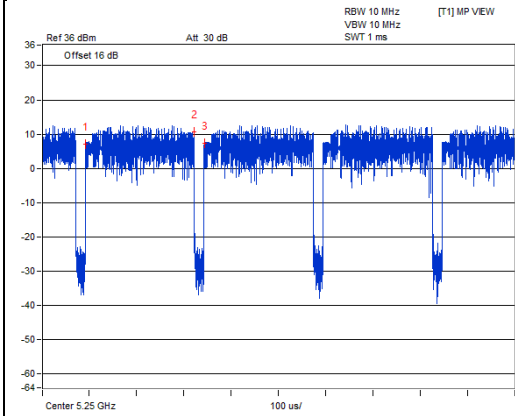
11ax (80MHz) 2S4T TxBF

11ax (80MHz) 3S4T TxBF



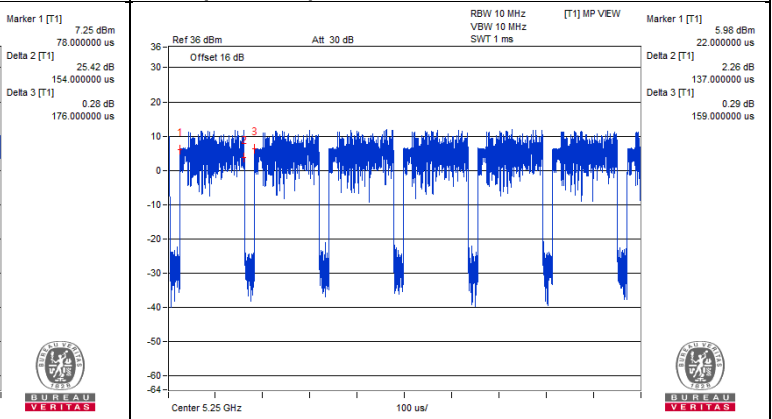
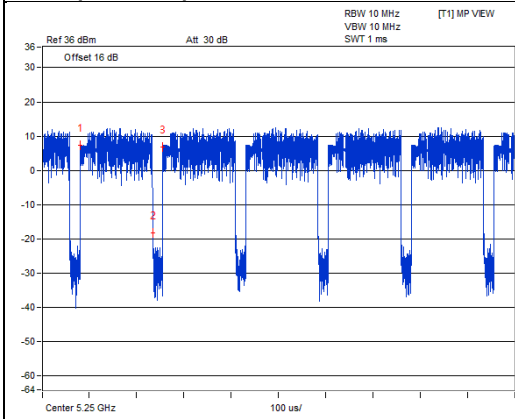
11ax (160MHz) 1S4T CDD

11ax (160MHz) 1S4T TxBF



11ax (160MHz) 2S4T TxBF

11ax (160MHz) 3S4T TxBF



3.15 Testing Location Information

| Test Site Location | | | | |
|----------------------|---|-----------------|--------------------|---------------------|
| Address | (1) E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan | | | |
| TEL | 886-3-6668565 | | | |
| FAX | 886-3-6668323 | | | |
| Test Site No. | Site Category | Location | IC Reg. No. | VCCI Reg. No |
| Conduction 1 | Conduction | Hsinchu | - | - |
| Chamber 3 | 966 Chamber | Hsinchu | - | - |
| Oven 2 | Oven | Hsinchu | - | - |

3.16 EUT Diagram and Support Equipment

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

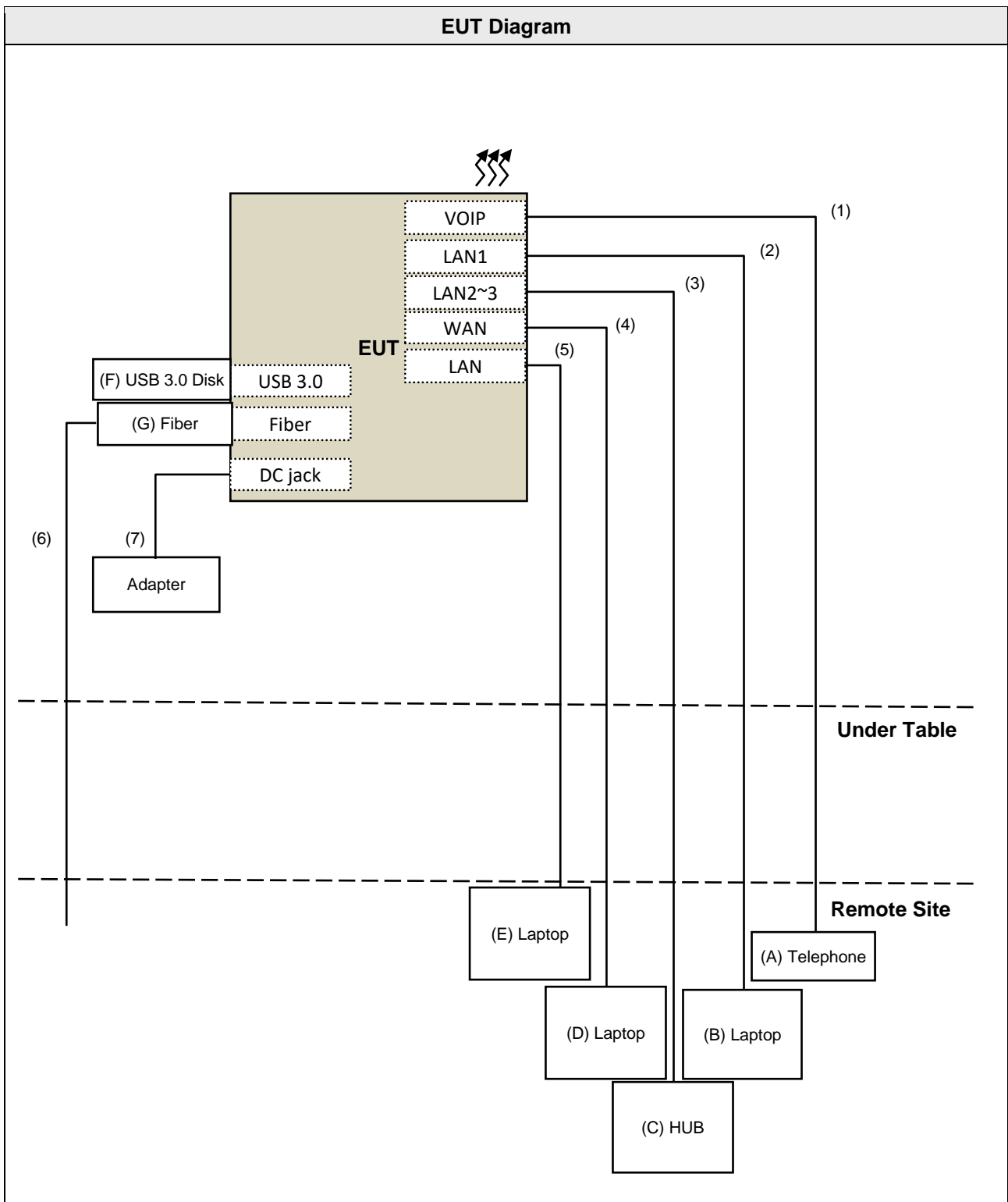
| ID | Product | Brand | Model No. | Serial No. | FCC ID | Remarks |
|----|-----------|---------|-----------|---------------|---------|--------------------|
| A. | Telephone | Romeo | TE-812 | 97280903 | NA | Provided by Lab |
| B. | Laptop | DELL | PP27L | 7YLB32S | FCC DoC | Provided by Lab |
| C. | HUB | ZyXEL | ES-116P | S060H02000215 | FCC DoC | Provided by Lab |
| D. | Laptop | DELL | E5430 | GM1SKV1 | FCC DoC | Provided by Lab |
| E. | Laptop | DELL | E5430 | DM1SKV1 | FCC DoC | Provided by Lab |
| F. | USB Disk | Sandisk | NA | NA | NA | Provided by Lab |
| G. | Fiber | RoHS | GFLT210 | JHCG94200152 | NA | Supplied by client |

Note:

1. All power cords of the above support units are non-shielded (1.8m).

| ID | Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks |
|----|--------------|------|------------|--------------------|--------------|--------------------------------|
| 1. | RJ-11 Cable | 1 | 10 | No | 0 | Provided by Lab |
| 2. | RJ-45 Cable | 1 | 10 | No | 0 | Provided by Lab (for RF Setup) |
| 3. | RJ-45 Cable | 2 | 10 | No | 0 | Provided by Lab |
| 4. | RJ-45 Cable | 1 | 10 | No | 0 | Provided by Lab |
| 5. | RJ-45 Cable | 1 | 10 | No | 0 | Provided by Lab |
| 6. | Fiber cable | 1 | 10 | No | 0 | Provided by Lab |
| 7. | DC Cable | 1 | 1.8 | No | 0 | Supplied by client |

EUT Diagram



4 TEST TYPES AND RESULTS

4.1 AC Power Conducted Emissions Measurement

4.1.1 Limit

For this product which is designed to be connected to the AC power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed below limits table.

| Frequency (MHz) | Conducted Limit (dBuV) | |
|-----------------|------------------------|---------|
| | Quasi-peak | Average |
| 0.15 - 0.5 | 66 - 56 | 56 - 46 |
| 0.50 - 5.0 | 56 | 46 |
| 5.0 - 30.0 | 60 | 50 |

4.1.2 Measuring Instruments and Setting

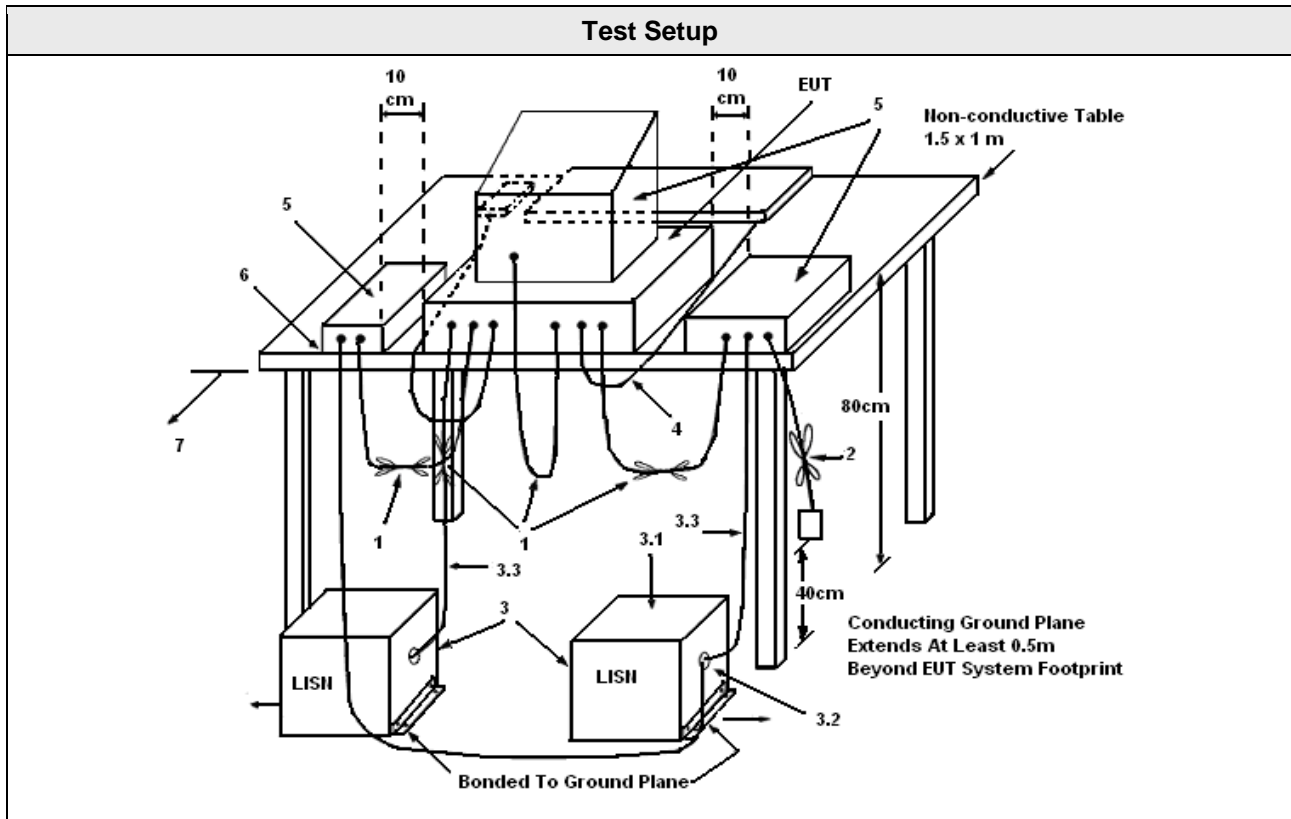
Please refer to section 5 of equipments list in this report. The following table is the setting of the receiver

| Receiver Parameters | Setting |
|---------------------|----------|
| Attenuation | 10 dB |
| Start Frequency | 0.15 MHz |
| Stop Frequency | 30 MHz |
| IF Bandwidth | 9 kHz |

4.1.3 Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT or host of EUT has to be placed 0.4 meter far from the conducting wall of the shielding room and at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT or host of EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISNs. The LISN should provide 50uH/50ohms coupling impedance.
4. The frequency range from 150 kHz to 30 MHz was searched.
5. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The measurement has to be done between each power line and ground at the power terminal.

4.1.4 Test Setup Layout



1. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
2. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3. EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω . LISN can be placed on top of, or immediately beneath, reference ground plane.
4. All other equipment powered from additional LISN(s).
5. Multiple outlet strip can be used for multiple power cords of non-EUT equipment.
6. LISN at least 80 cm from nearest part of EUT chassis.
7. Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.
8. Non-EUT components of EUT system being tested.
9. Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.
10. Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.

4.1.5 Test Deviation

There are no deviations with the original standard.

4.1.6 EUT Operating during Test

The EUT was placed on the test table and programmed in normal function.

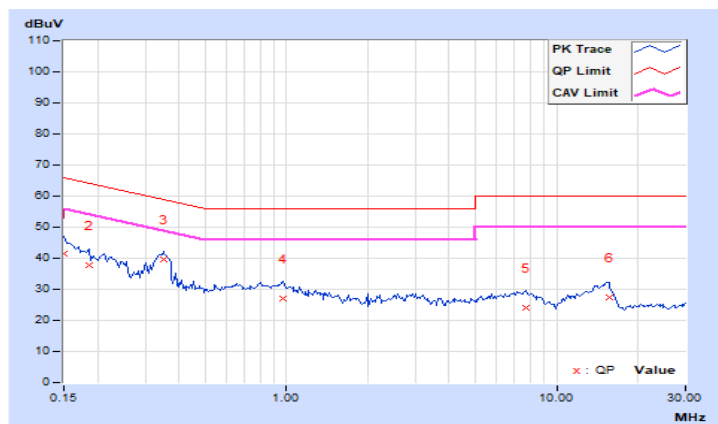
4.1.7 Test Results of AC Power Conducted Emissions

| | | | |
|------------------------|----------------|---|--------------------------------------|
| Frequency Range | 150kHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9kHz |
| Input Power | 120Vac, 60Hz | Environmental Conditions | 25°C, 75%RH |
| Tested by | Kevin Ko | | |

| Phase Of Power : Line (L) | | | | | | | | | | |
|---------------------------|-----------------|------------------------|----------------------|--------------|-----------------------|--------------|--------------|--------------|---------------|---------------|
| No | Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) | | Emission Level (dBuV) | | Limit (dBuV) | | Margin (dB) | |
| | | | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.15000 | 9.99 | 31.36 | 19.95 | 41.35 | 29.94 | 66.00 | 56.00 | -24.65 | -26.06 |
| 2 | 0.18516 | 9.99 | 27.89 | 14.78 | 37.88 | 24.77 | 64.25 | 54.25 | -26.37 | -29.48 |
| 3 | 0.34922 | 10.00 | 29.49 | 22.97 | 39.49 | 32.97 | 58.98 | 48.98 | -19.49 | -16.01 |
| 4 | 0.97422 | 10.05 | 17.14 | 12.40 | 27.19 | 22.45 | 56.00 | 46.00 | -28.81 | -23.55 |
| 5 | 7.73438 | 10.50 | 13.64 | 8.81 | 24.14 | 19.31 | 60.00 | 50.00 | -35.86 | -30.69 |
| 6 | 15.62500 | 11.06 | 16.32 | 11.67 | 27.38 | 22.73 | 60.00 | 50.00 | -32.62 | -27.27 |

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

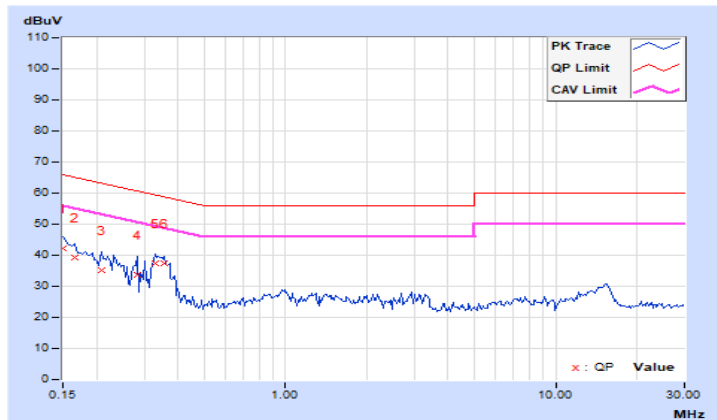


| | | | |
|------------------------|----------------|---|--------------------------------------|
| Frequency Range | 150kHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9kHz |
| Input Power | 120Vac, 60Hz | Environmental Conditions | 25°C, 75%RH |
| Tested by | Kevin Ko | | |

| Phase Of Power : Neutral (N) | | | | | | | | | | |
|------------------------------|-----------------|------------------------|----------------------|-------|-----------------------|-------|--------------|-------|-------------|--------|
| No | Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) | | Emission Level (dBuV) | | Limit (dBuV) | | Margin (dB) | |
| | | | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.15000 | 9.99 | 32.31 | 18.13 | 42.30 | 28.12 | 66.00 | 56.00 | -23.70 | -27.88 |
| 2 | 0.16562 | 9.99 | 29.27 | 15.50 | 39.26 | 25.49 | 65.18 | 55.18 | -25.92 | -29.69 |
| 3 | 0.20859 | 9.99 | 25.27 | 15.14 | 35.26 | 25.13 | 63.26 | 53.26 | -28.00 | -28.13 |
| 4 | 0.28281 | 10.00 | 23.55 | 15.78 | 33.55 | 25.78 | 60.73 | 50.73 | -27.18 | -24.95 |
| 5 | 0.32969 | 10.00 | 27.55 | 21.40 | 37.55 | 31.40 | 59.46 | 49.46 | -21.91 | -18.06 |
| 6 | 0.35703 | 10.01 | 27.25 | 19.65 | 37.26 | 29.66 | 58.80 | 48.80 | -21.54 | -19.14 |

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

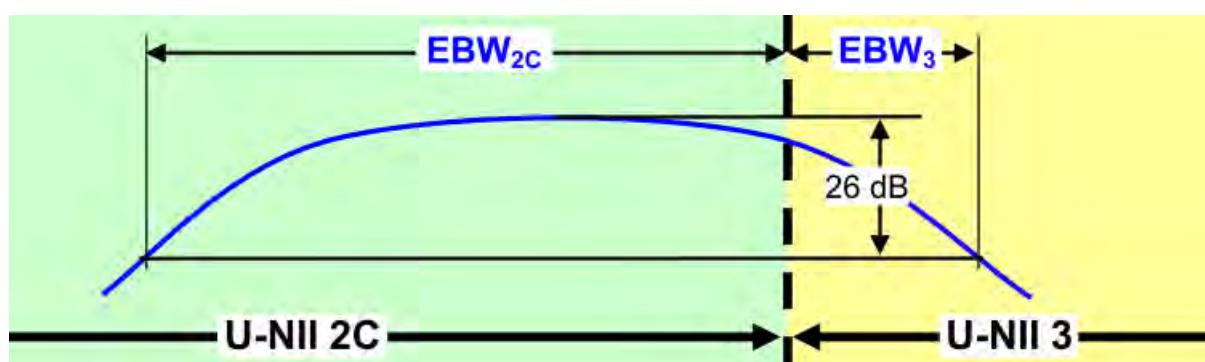


4.2 Occupied Bandwidth and 26dB Bandwidth Measurement

4.2.1 Measuring Instruments and Setting

The following table is the setting of the Spectrum Analyzer.

| 99% Occupied Bandwidth | |
|------------------------|--|
| Spectrum Parameter | Setting |
| Attenuation | Auto |
| Span Frequency | 1.5 times to 5.0 times the OBW |
| RBW | 1% to 5% of the anticipated emission bandwidth |
| VBW | $\geq 3 \times \text{RBW}$ |
| Detector | Peak |
| Trace | Max hold |
| Sweep Time | Auto |
| 26dB Bandwidth | |
| Spectrum Parameter | Setting |
| Attenuation | Auto |
| Span Frequency | $> 26\text{dB Bandwidth}$ |
| RBW | Approximately 1% of the emission bandwidth. |
| VBW | $> \text{RBW}$ |
| Detector | Peak |
| Trace | Max hold |
| Sweep Time | Auto |

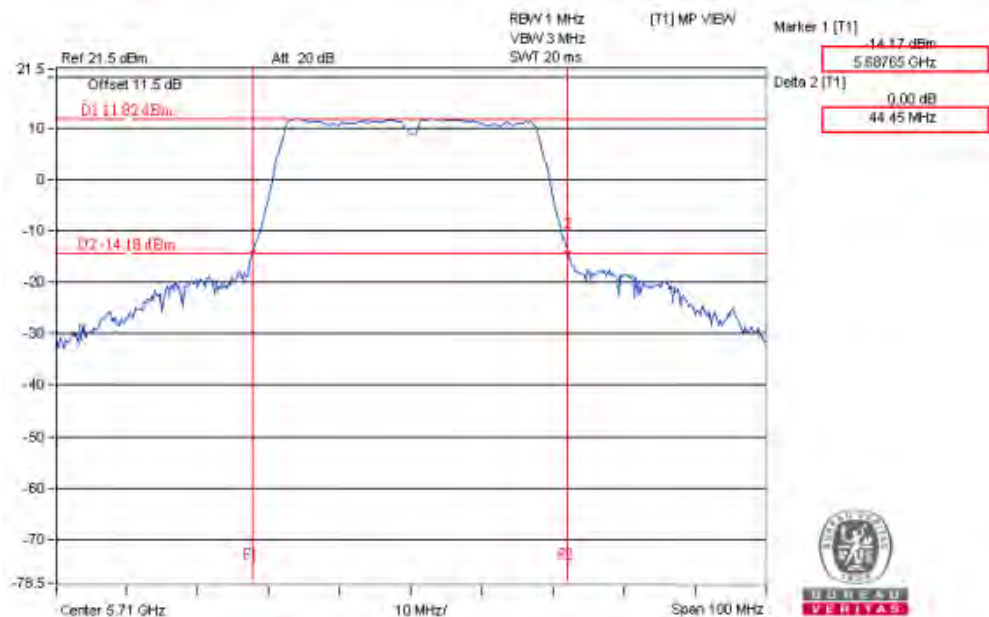


Emission Bandwidth (EBW) within a Band for Band-Crossing Signals

4.2.2 Test Procedure

- 1 The transmitter output (antenna port) was connected to the spectrum analyzer.
- 2 Test was performed in accordance with Measurement of Digital Transmission Systems Operating under 789033 D02 General UNII Test Procedures New Rules v02r01, in section "Emission bandwidth (C)(1)" & "99 Percent Occupied Bandwidth"(D). 12/14/2017.
- 3 When measuring Emission bandwidth with multiple antenna systems, add every result of the values by mathematic formula.

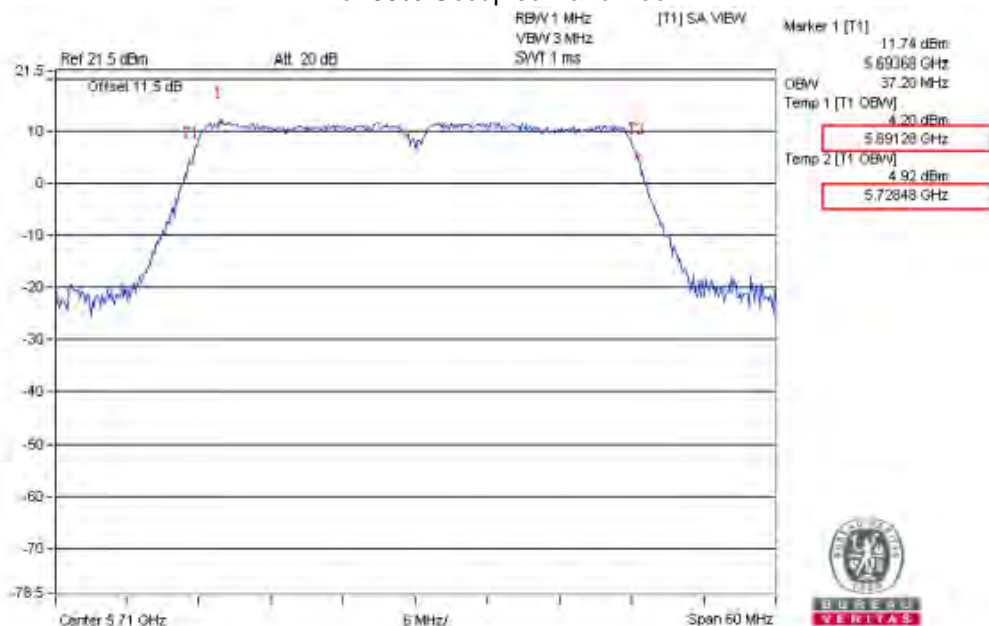
For 26dB Bandwidth



$$EBW_{2C} = 5.725\text{GHz} - \text{Marker 1 [T1]}$$

$$EBW_3 = \text{Marker 1 [T1]} + \text{Delta 2 [T1]} \text{MHz} - 5.725\text{GHz}$$

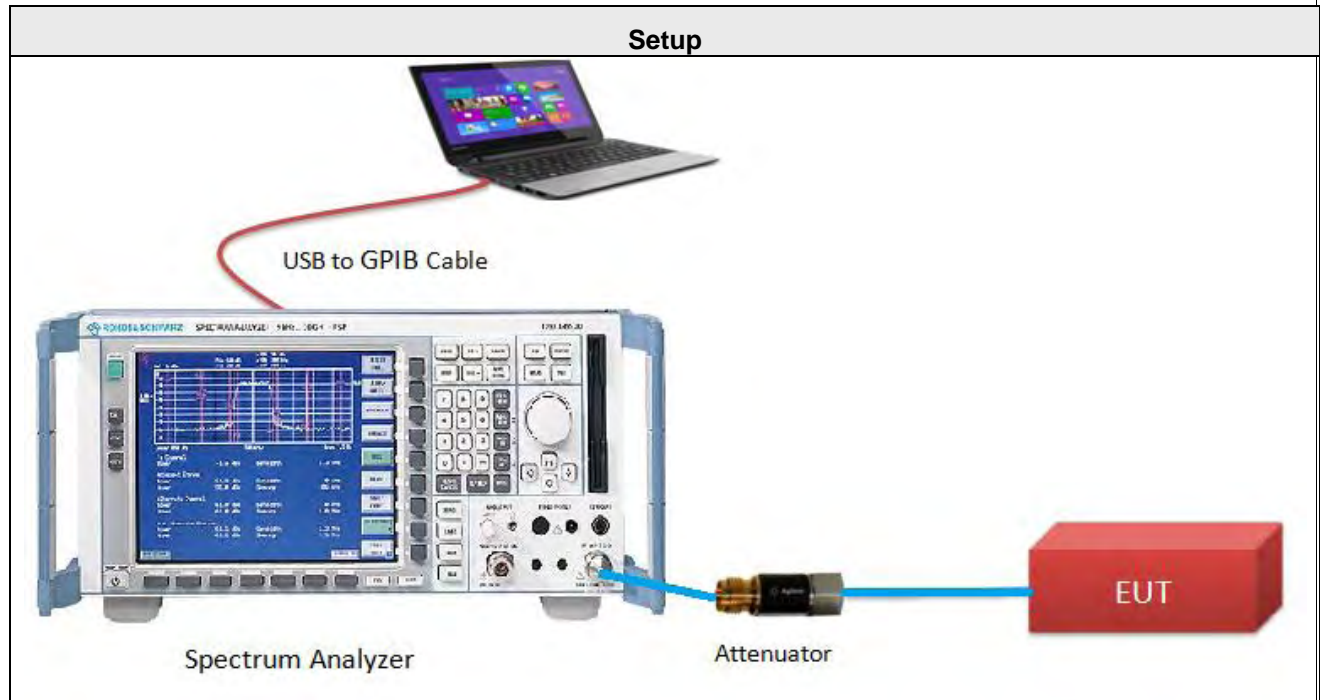
For 99% Occupied Bandwidth



$$EBW_{2C} = 5.725\text{GHz} - \text{Marker 1 [T1 OBW]}$$

$$EBW_3 = \text{Temp 2 [T1 OBW]} - 5.725\text{GHz}$$

4.2.3 Test Setup Layout



4.2.4 Test Deviation

There are no deviations with the original standard.

4.2.5 EUT Operating Conditions

The EUT was programmed to be in continuously transmitting mode.

4.2.6 Test Results

| | | | |
|---------------|--------------|----------|-----|
| Temperature | 25°C | Humidity | 60% |
| Test Engineer | Jyunchun Lin | | |

11ax (20MHz) 1S4T CDD

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 52 | 5260 | 21.89 | 21.71 | 21.97 | 21.92 |
| 60 | 5300 | 21.91 | 21.78 | 21.92 | 21.95 |
| 64 | 5320 | 21.94 | 21.81 | 21.75 | 21.97 |
| 100 | 5500 | 21.90 | 21.82 | 21.96 | 21.89 |
| 116 | 5580 | 21.92 | 21.87 | 21.77 | 21.99 |
| 140 | 5700 | 21.93 | 21.67 | 21.73 | 22.08 |
| 144 (U-NII-2C Band) | 5720 | 16.01 | 15.83 | 16.02 | 15.95 |
| 144 (U-NII-3 Band) | 5720 | 5.82 | 5.93 | 5.90 | 5.98 |

11ax (20MHz) 1S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 52 | 5260 | 21.87 | 21.80 | 21.96 | 21.85 |
| 60 | 5300 | 21.86 | 21.75 | 21.97 | 21.97 |
| 64 | 5320 | 21.92 | 21.84 | 21.95 | 21.97 |
| 100 | 5500 | 21.84 | 21.80 | 21.71 | 21.86 |
| 116 | 5580 | 21.95 | 21.81 | 21.90 | 21.93 |
| 140 | 5700 | 21.96 | 21.80 | 21.74 | 21.91 |
| 144 (U-NII-2C Band) | 5720 | 15.97 | 15.84 | 16.01 | 16.03 |
| 144 (U-NII-3 Band) | 5720 | 5.89 | 5.84 | 5.91 | 6.02 |

11ax (20MHz) 2S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 52 | 5260 | 22.03 | 21.56 | 22.00 | 21.67 |
| 60 | 5300 | 22.10 | 21.63 | 21.99 | 21.71 |
| 64 | 5320 | 22.12 | 21.61 | 22.00 | 21.79 |
| 100 | 5500 | 22.08 | 21.70 | 22.02 | 21.74 |
| 116 | 5580 | 21.96 | 21.64 | 21.94 | 21.73 |
| 140 | 5700 | 22.06 | 21.73 | 22.18 | 21.72 |
| 144 (U-NII-2C Band) | 5720 | 16.10 | 15.79 | 16.08 | 15.89 |
| 144 (U-NII-3 Band) | 5720 | 5.93 | 5.87 | 5.95 | 5.81 |

11ax (20MHz) 3S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 52 | 5260 | 21.74 | 21.61 | 21.59 | 21.74 |
| 60 | 5300 | 21.98 | 21.67 | 21.66 | 21.79 |
| 64 | 5320 | 21.86 | 21.58 | 21.69 | 21.75 |
| 100 | 5500 | 21.85 | 21.54 | 21.59 | 21.73 |
| 116 | 5580 | 21.94 | 21.70 | 21.67 | 21.79 |
| 140 | 5700 | 21.93 | 21.62 | 21.70 | 21.79 |
| 144 (U-NII-2C Band) | 5720 | 16.06 | 15.77 | 15.89 | 15.90 |
| 144 (U-NII-3 Band) | 5720 | 5.82 | 5.89 | 5.77 | 5.79 |

11ax (40MHz) 1S4T CDD

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 54 | 5270 | 41.66 | 41.63 | 41.32 | 41.53 |
| 62 | 5310 | 41.30 | 41.69 | 41.65 | 41.59 |
| 102 | 5510 | 41.70 | 41.60 | 41.36 | 41.58 |
| 110 | 5550 | 41.73 | 41.63 | 41.46 | 41.59 |
| 134 | 5670 | 41.37 | 41.54 | 41.54 | 41.60 |
| 142 (U-NII-2C Band) | 5710 | 35.80 | 35.77 | 35.67 | 35.61 |
| 142 (U-NII-3 Band) | 5710 | 5.62 | 5.55 | 5.54 | 5.51 |

11ax (40MHz) 1S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 54 | 5270 | 41.42 | 41.58 | 41.47 | 41.52 |
| 62 | 5310 | 41.62 | 41.62 | 41.50 | 41.57 |
| 102 | 5510 | 41.53 | 41.44 | 41.36 | 41.59 |
| 110 | 5550 | 41.60 | 41.58 | 41.27 | 41.44 |
| 134 | 5670 | 41.51 | 41.58 | 41.36 | 41.54 |
| 142 (U-NII-2C Band) | 5710 | 35.80 | 35.80 | 35.72 | 35.70 |
| 142 (U-NII-3 Band) | 5710 | 5.70 | 5.55 | 5.47 | 5.64 |

11ax (40MHz) 2S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 54 | 5270 | 41.34 | 41.28 | 41.33 | 41.27 |
| 62 | 5310 | 41.32 | 41.36 | 41.32 | 41.28 |
| 102 | 5510 | 41.30 | 41.33 | 41.29 | 41.42 |
| 110 | 5550 | 41.31 | 41.23 | 41.30 | 41.28 |
| 134 | 5670 | 41.34 | 41.17 | 41.27 | 41.40 |
| 142 (U-NII-2C Band) | 5710 | 35.54 | 35.68 | 35.66 | 35.70 |
| 142 (U-NII-3 Band) | 5710 | 5.49 | 5.71 | 5.60 | 5.69 |

11ax (40MHz) 3S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 54 | 5270 | 41.37 | 40.97 | 41.22 | 41.23 |
| 62 | 5310 | 41.26 | 41.03 | 41.19 | 41.27 |
| 102 | 5510 | 41.37 | 40.96 | 41.23 | 41.36 |
| 110 | 5550 | 41.36 | 41.05 | 41.16 | 41.32 |
| 134 | 5670 | 41.32 | 40.94 | 41.17 | 41.26 |
| 142 (U-NII-2C Band) | 5710 | 35.71 | 35.53 | 35.63 | 35.88 |
| 142 (U-NII-3 Band) | 5710 | 5.54 | 5.47 | 5.54 | 5.40 |

11ax (80MHz) 1S4T CDD

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 58 | 5290 | 83.15 | 83.09 | 83.03 | 82.82 |
| 106 | 5530 | 83.11 | 83.11 | 83.25 | 82.84 |
| 122 | 5610 | 82.91 | 83.07 | 83.04 | 83.00 |
| 138 (U-NII-2C Band) | 5690 | 76.27 | 76.20 | 76.30 | 76.13 |
| 138 (U-NII-3 Band) | 5690 | 6.60 | 6.50 | 6.03 | 5.91 |

11ax (80MHz) 1S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 58 | 5290 | 82.15 | 82.58 | 82.36 | 82.55 |
| 106 | 5530 | 81.94 | 82.52 | 82.33 | 82.53 |
| 122 | 5610 | 82.08 | 82.57 | 82.39 | 82.46 |
| 138 (U-NII-2C Band) | 5690 | 75.74 | 75.88 | 75.85 | 76.06 |
| 138 (U-NII-3 Band) | 5690 | 6.31 | 6.48 | 6.43 | 6.34 |

11ax (80MHz) 2S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 58 | 5290 | 82.31 | 83.04 | 82.59 | 82.44 |
| 106 | 5530 | 82.38 | 83.10 | 82.54 | 82.36 |
| 122 | 5610 | 82.35 | 83.04 | 82.42 | 82.30 |
| 138 (U-NII-2C Band) | 5690 | 76.00 | 76.36 | 76.12 | 76.29 |
| 138 (U-NII-3 Band) | 5690 | 6.21 | 6.62 | 6.25 | 6.04 |

11ax (80MHz) 3S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|---------------------|--------------------|----------------------|-------|-------|-------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 58 | 5290 | 83.10 | 82.76 | 82.95 | 82.94 |
| 106 | 5530 | 83.09 | 83.11 | 82.76 | 82.31 |
| 122 | 5610 | 83.08 | 83.10 | 82.74 | 82.40 |
| 138 (U-NII-2C Band) | 5690 | 76.09 | 76.22 | 76.46 | 76.25 |
| 138 (U-NII-3 Band) | 5690 | 6.39 | 6.55 | 6.09 | 6.20 |

11ax (160MHz) 1S4T CDD

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|--------------------|--------------------|----------------------|--------|--------|--------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 50 | 5250 | 82.08 | 82.00 | 81.36 | 81.58 |
| 50 (U-NII-2A Band) | 5250 | 82.15 | 81.36 | 81.47 | 81.83 |
| 114 | 5570 | 163.10 | 163.11 | 163.46 | 163.48 |

11ax (160MHz) 1S4T TxBF

| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|--------------------|--------------------|----------------------|--------|--------|--------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 50 | 5250 | 82.00 | 82.05 | 81.96 | 81.52 |
| 50 (U-NII-2A Band) | 5250 | 82.05 | 81.47 | 81.32 | 82.06 |
| 114 | 5570 | 163.32 | 163.43 | 163.72 | 163.45 |

11ax (160MHz) 2S4T TxBF

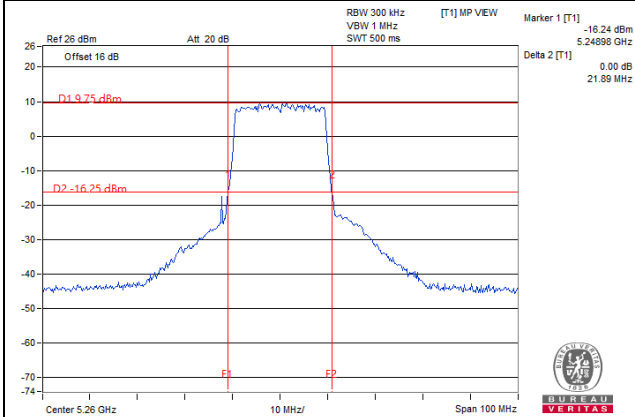
| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|--------------------|--------------------|----------------------|--------|--------|--------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 50 | 5250 | 81.21 | 81.96 | 81.65 | 81.47 |
| 50 (U-NII-2A Band) | 5250 | 81.71 | 80.81 | 81.37 | 81.01 |
| 114 | 5570 | 163.67 | 163.13 | 163.55 | 163.27 |

11ax (160MHz) 3S4T TxBF

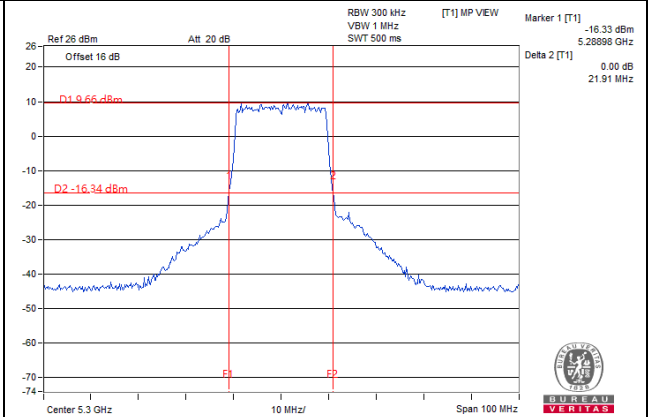
| CHANNEL | FREQUENCY (MHz) | 26dB Bandwidth (MHz) | | | |
|--------------------|--------------------|----------------------|--------|--------|--------|
| | | ANT 1 | ANT 2 | ANT 3 | ANT 4 |
| 50 | 5250 | 81.81 | 82.50 | 81.71 | 81.76 |
| 50 (U-NII-2A Band) | 5250 | 82.48 | 81.26 | 80.99 | 81.36 |
| 114 | 5570 | 163.08 | 163.67 | 163.87 | 165.03 |

26dB BANDWIDTH SPECTRUM PLOT

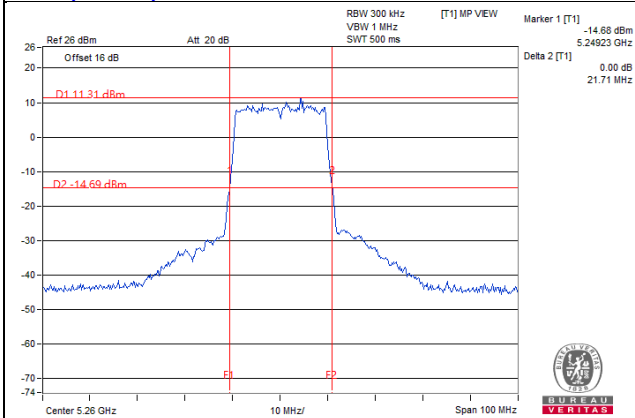
11ax (20MHz) 1S4T CDD CH52 Ant1



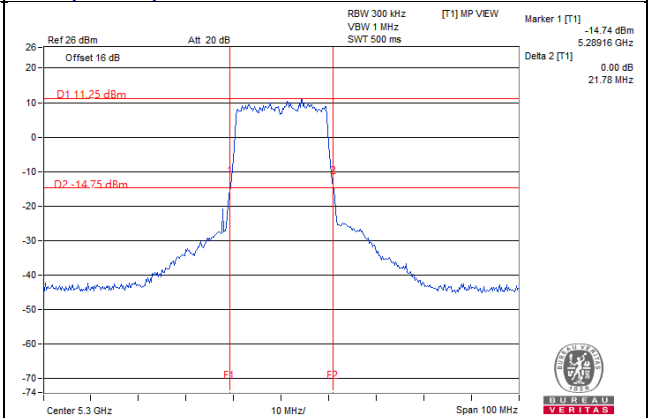
11ax (20MHz) 1S4T CDD CH60 Ant1



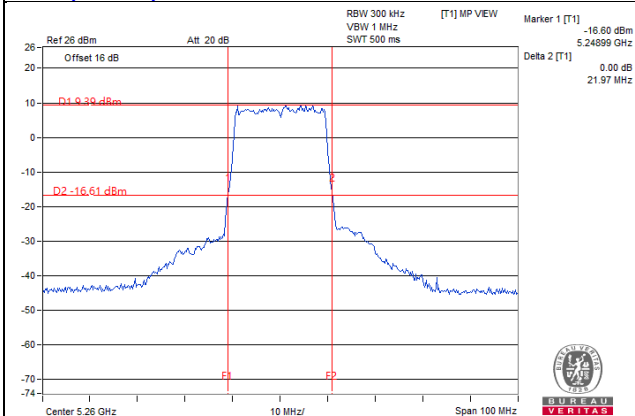
11ax (20MHz) 1S4T CDD CH52 Ant2



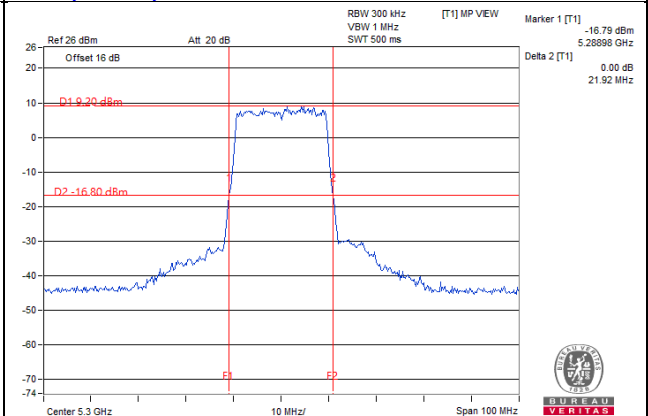
11ax (20MHz) 1S4T CDD CH60 Ant2



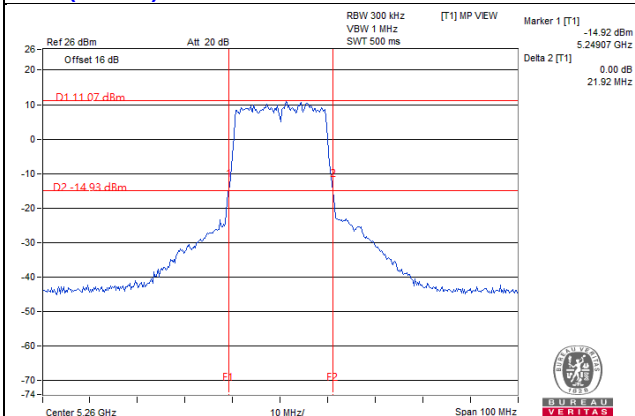
11ax (20MHz) 1S4T CDD CH52 Ant3



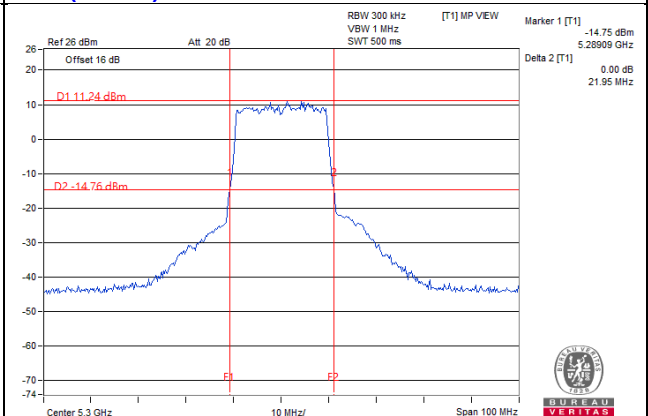
11ax (20MHz) 1S4T CDD CH60 Ant3



11ax (20MHz) 1S4T CDD CH52 Ant4

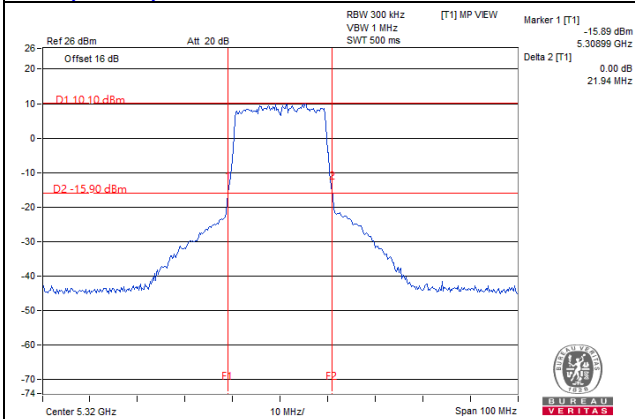


11ax (20MHz) 1S4T CDD CH60 Ant4

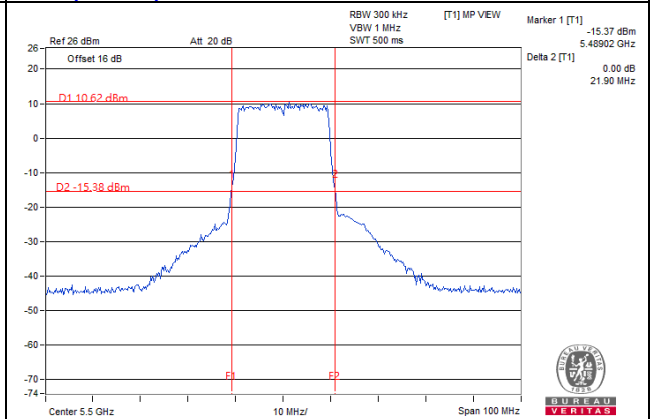


26dB BANDWIDTH SPECTRUM PLOT

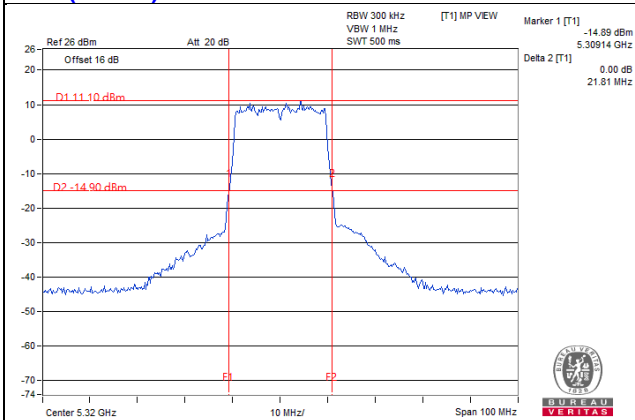
11ax (20MHz) 1S4T CDD CH64 Ant1



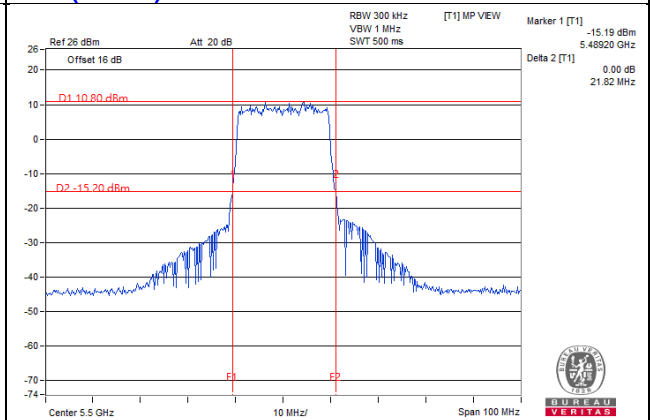
11ax (20MHz) 1S4T CDD CH100 Ant1



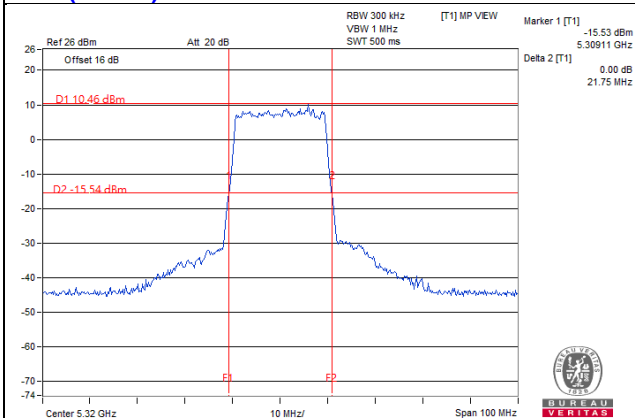
11ax (20MHz) 1S4T CDD CH64 Ant2



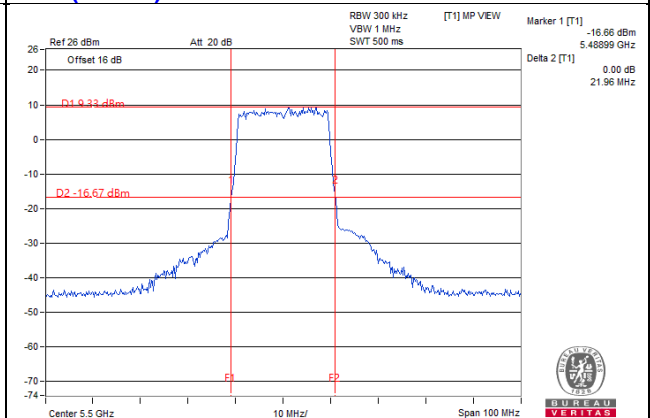
11ax (20MHz) 1S4T CDD CH100 Ant2



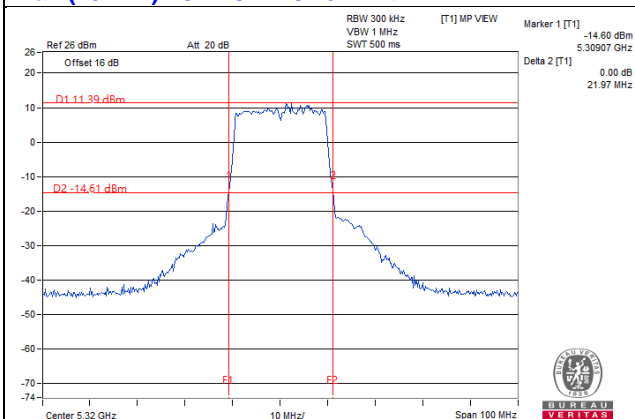
11ax (20MHz) 1S4T CDD CH64 Ant3



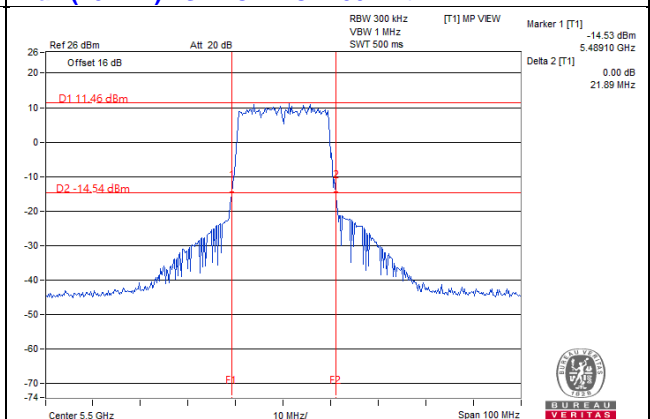
11ax (20MHz) 1S4T CDD CH100 Ant3



11ax (20MHz) 1S4T CDD CH64 Ant4

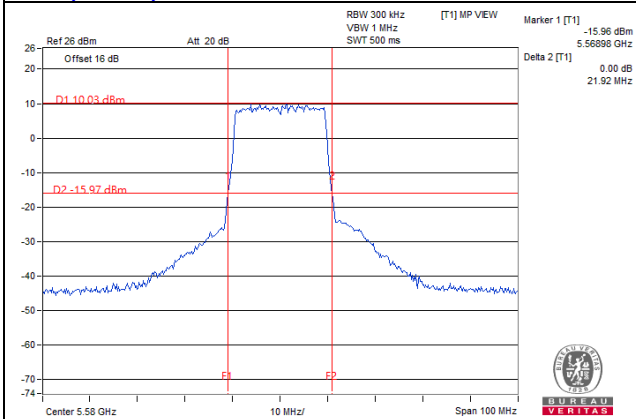


11ax (20MHz) 1S4T CDD CH100 Ant4

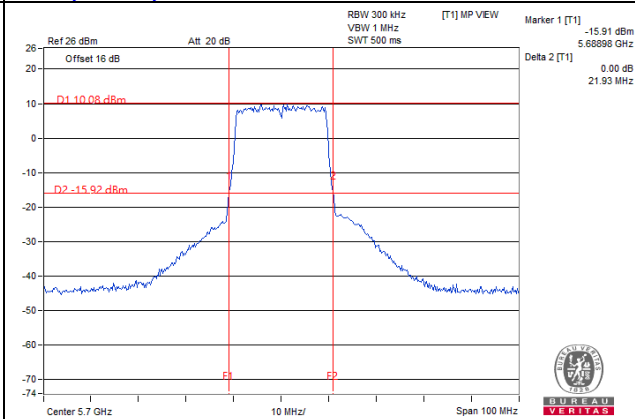


26dB BANDWIDTH SPECTRUM PLOT

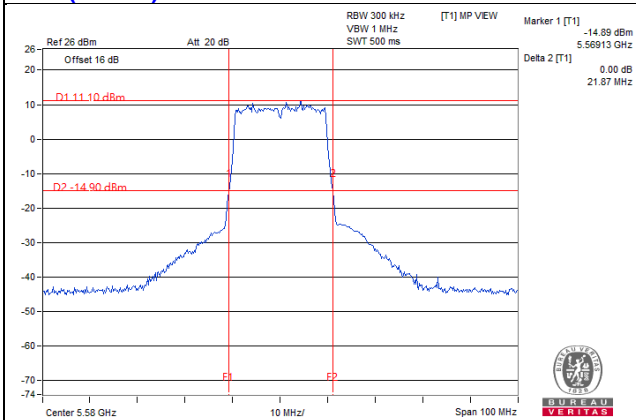
11ax (20MHz) 1S4T CDD CH116 Ant1



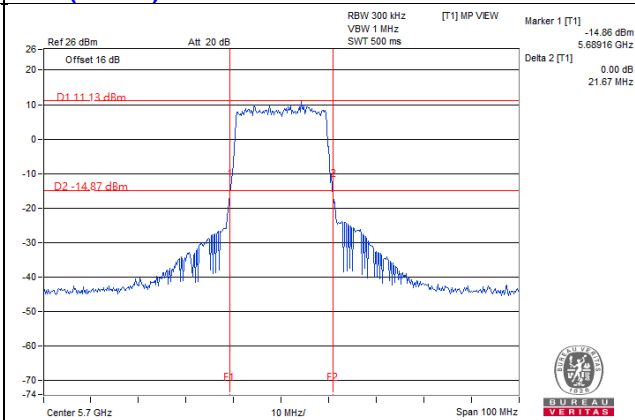
11ax (20MHz) 1S4T CDD CH140 Ant1



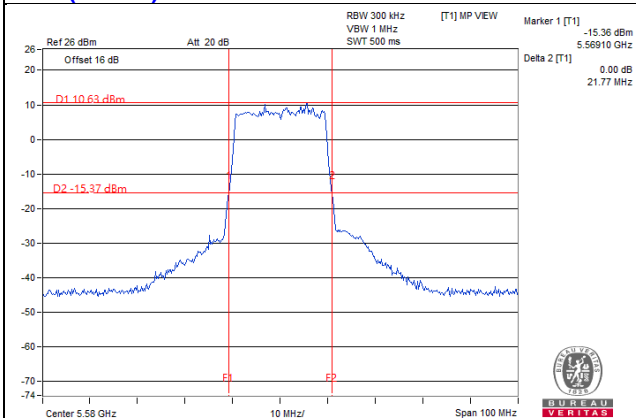
11ax (20MHz) 1S4T CDD CH116 Ant2



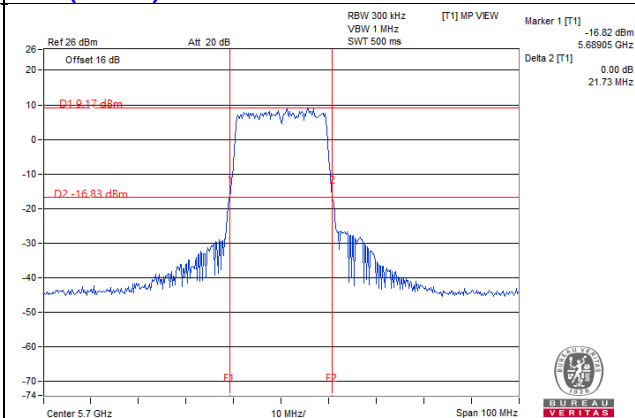
11ax (20MHz) 1S4T CDD CH140 Ant2



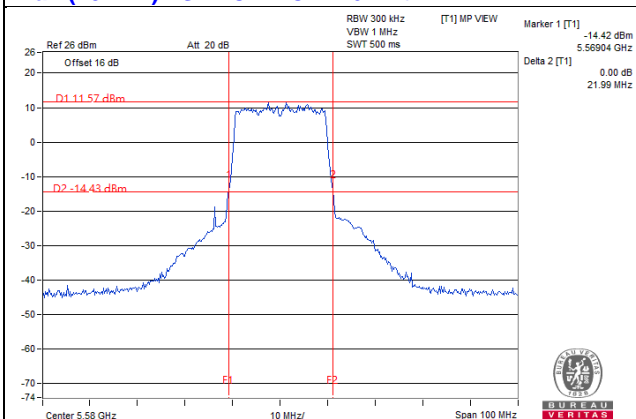
11ax (20MHz) 1S4T CDD CH116 Ant3



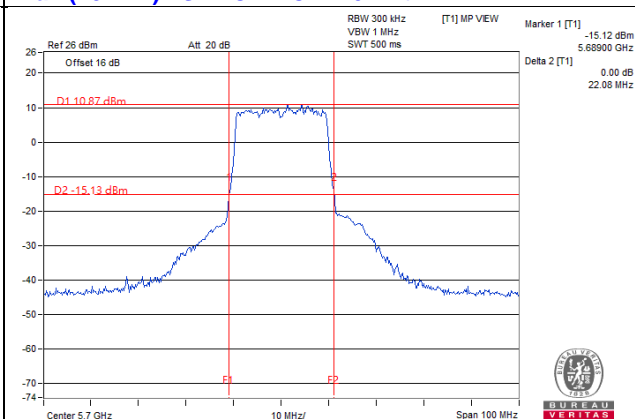
11ax (20MHz) 1S4T CDD CH140 Ant3



11ax (20MHz) 1S4T CDD CH116 Ant4

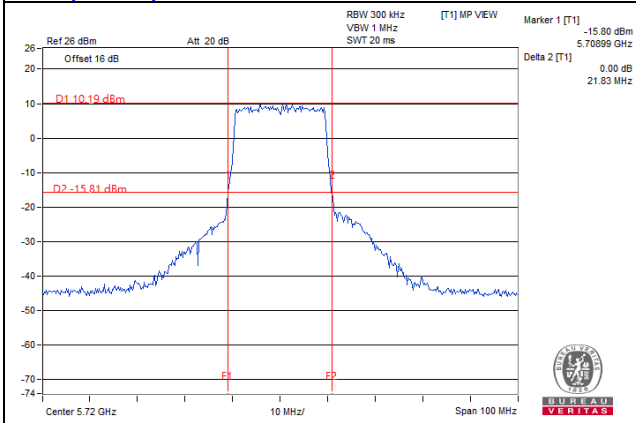


11ax (20MHz) 1S4T CDD CH140 Ant4

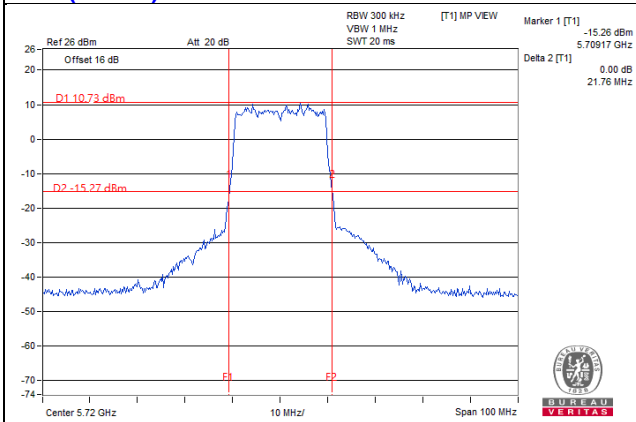


26dB BANDWIDTH SPECTRUM PLOT

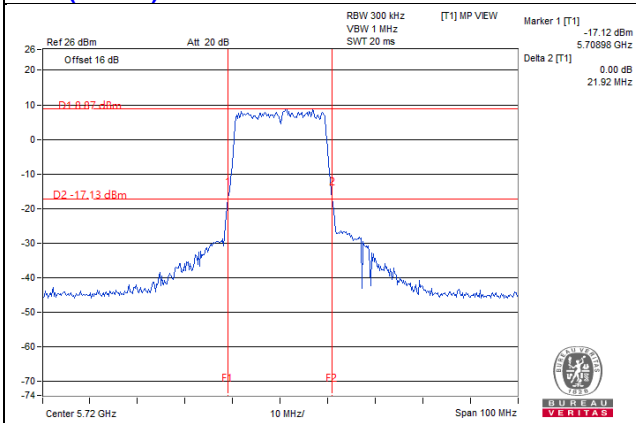
11ax (20MHz) 1S4T CDD CH144 Ant1



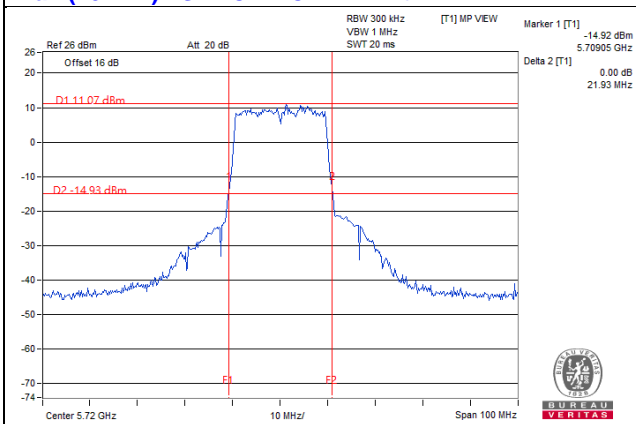
11ax (20MHz) 1S4T CDD CH144 Ant2



11ax (20MHz) 1S4T CDD CH144 Ant3

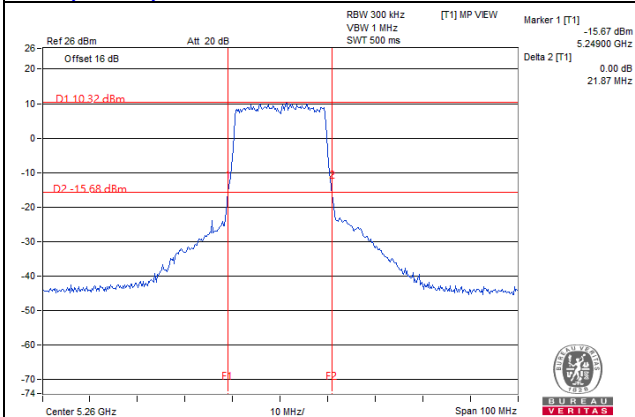


11ax (20MHz) 1S4T CDD CH144 Ant4

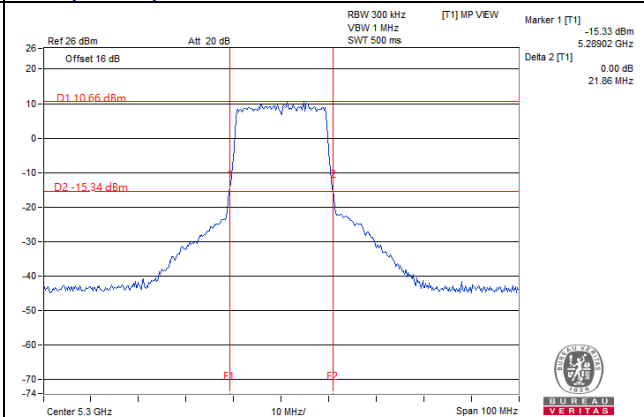


26dB BANDWIDTH SPECTRUM PLOT

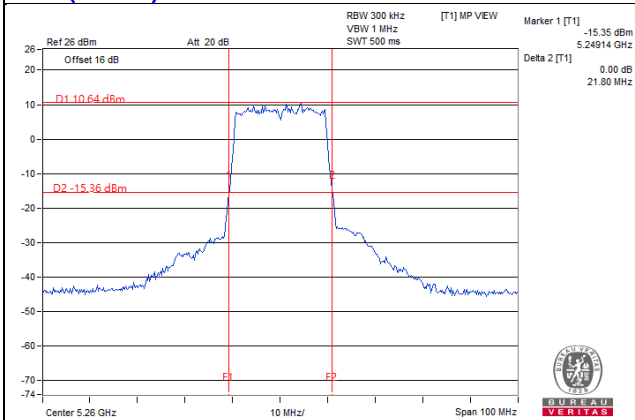
11ax (20MHz) 1S4T TxBF CH52 Ant1



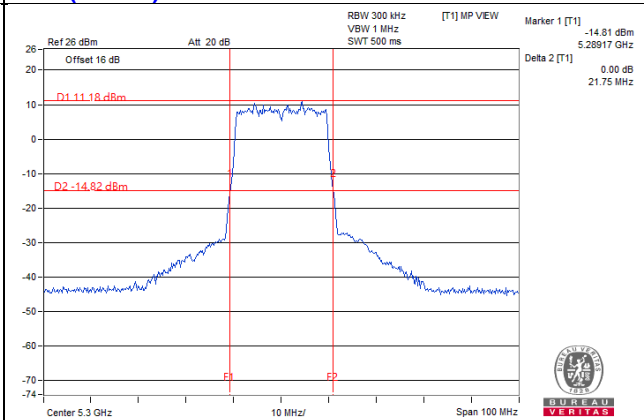
11ax (20MHz) 1S4T TxBF CH60 Ant1



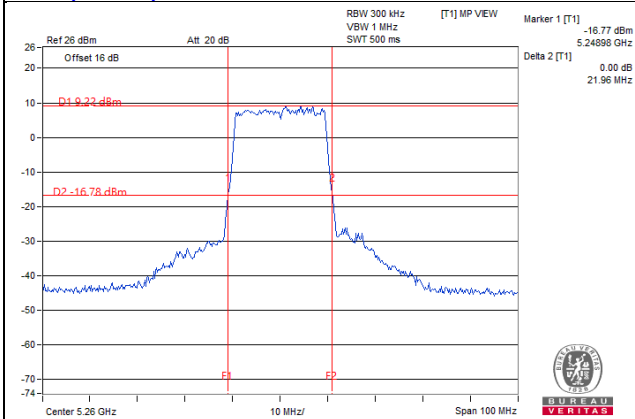
11ax (20MHz) 1S4T TxBF CH52 Ant2



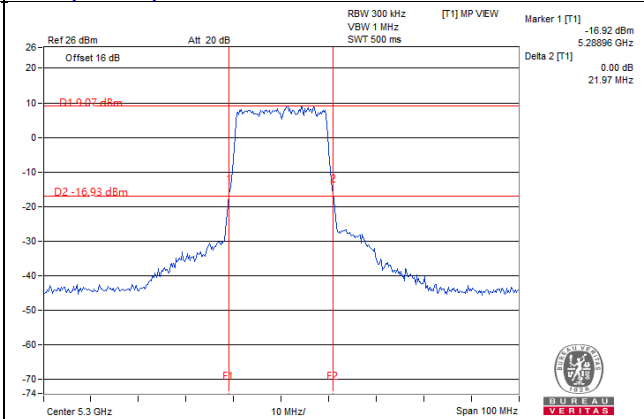
11ax (20MHz) 1S4T TxBF CH60 Ant2



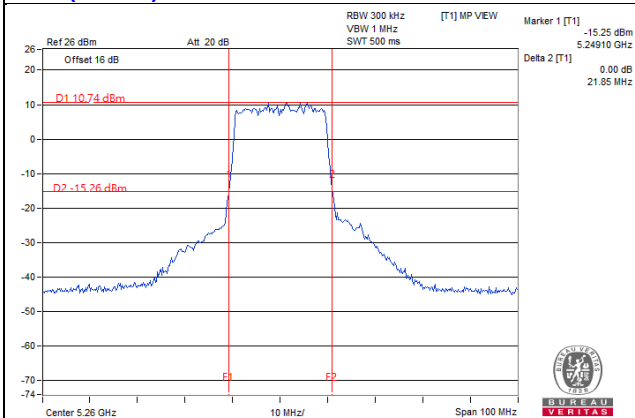
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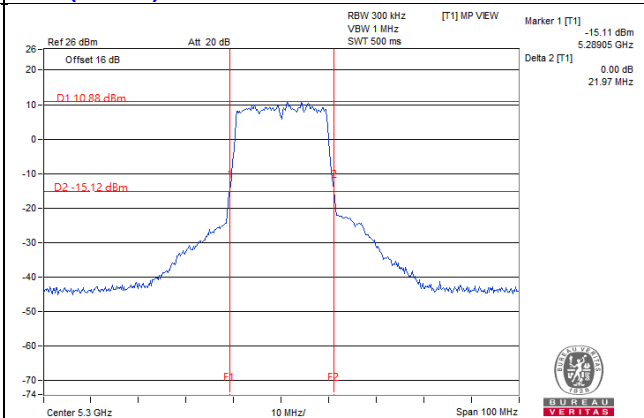
11ax (20MHz) 1S4T TxBF CH60 Ant3



11ax (20MHz) 1S4T TxBF CH52 Ant4

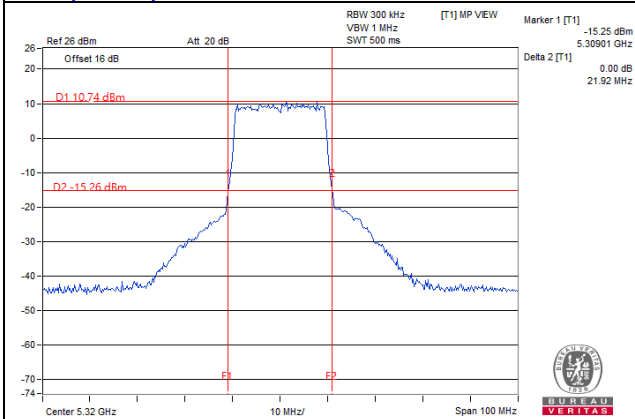


11ax (20MHz) 1S4T TxBF CH60 Ant4

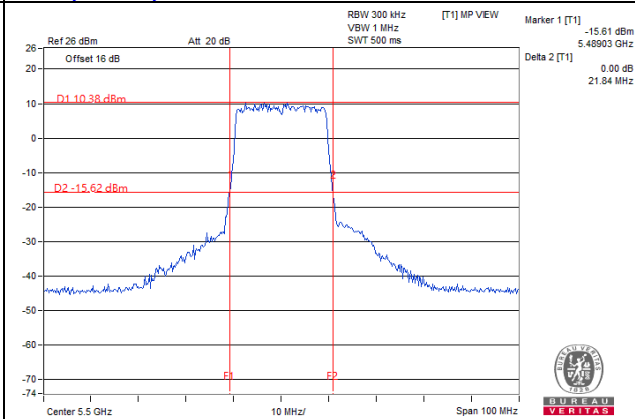


26dB BANDWIDTH SPECTRUM PLOT

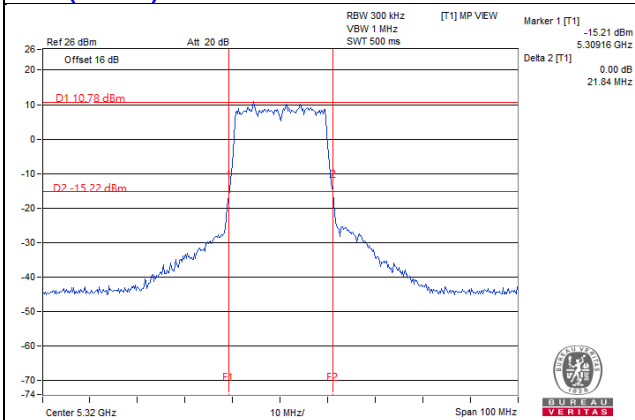
11ax (20MHz) 1S4T TxBF CH64 Ant1



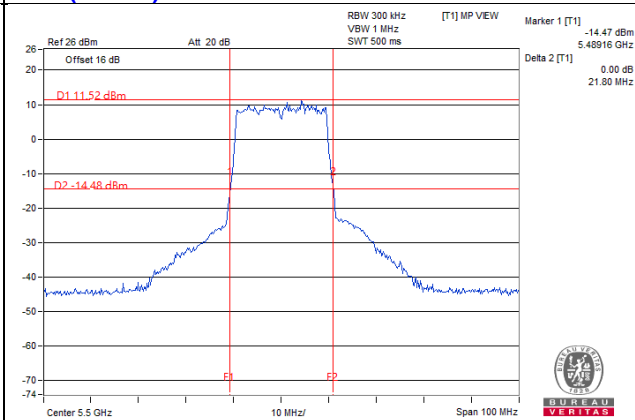
11ax (20MHz) 1S4T TxBF CH100 Ant1



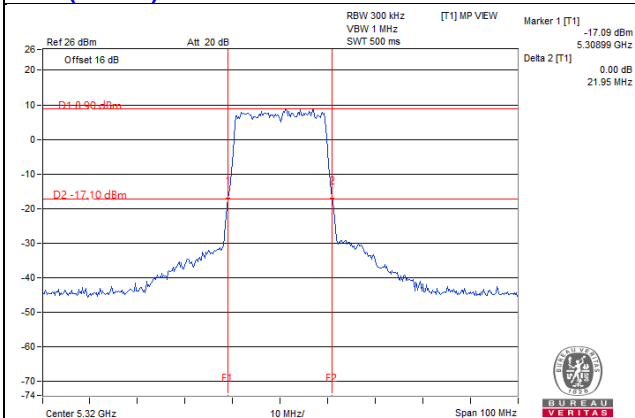
11ax (20MHz) 1S4T TxBF CH64 Ant2



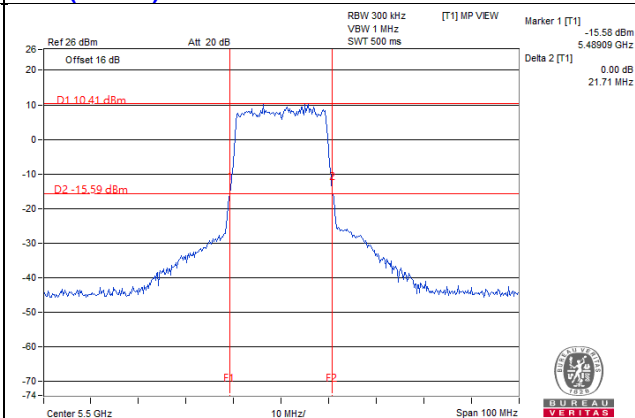
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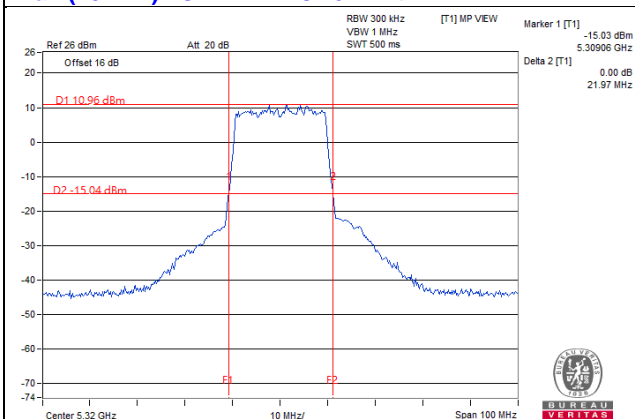
11ax (20MHz) 1S4T TxBF CH64 Ant3



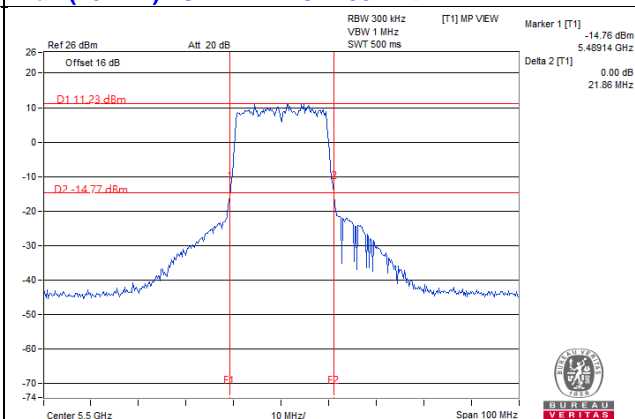
11ax (20MHz) 1S4T TxBF CH100 Ant3



11ax (20MHz) 1S4T TxBF CH64 Ant4

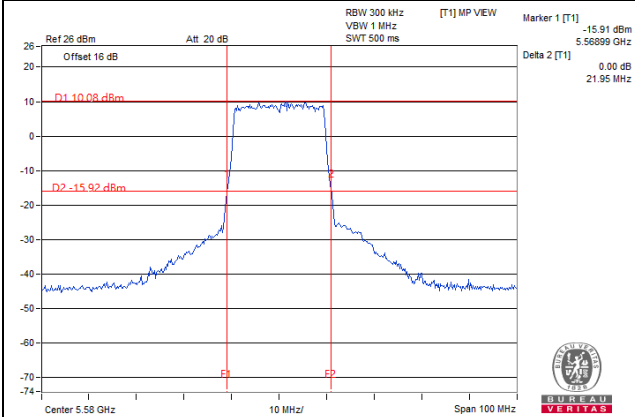


11ax (20MHz) 1S4T TxBF CH100 Ant4

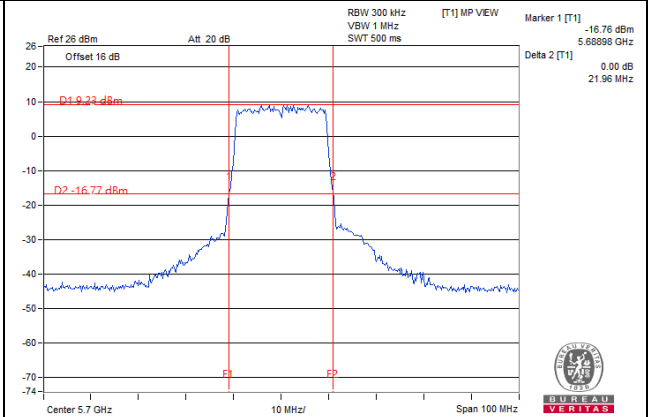


26dB BANDWIDTH SPECTRUM PLOT

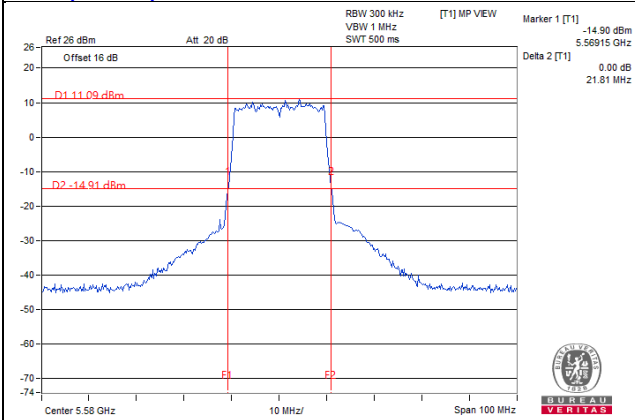
11ax (20MHz) 1S4T TxBF CH116 Ant1



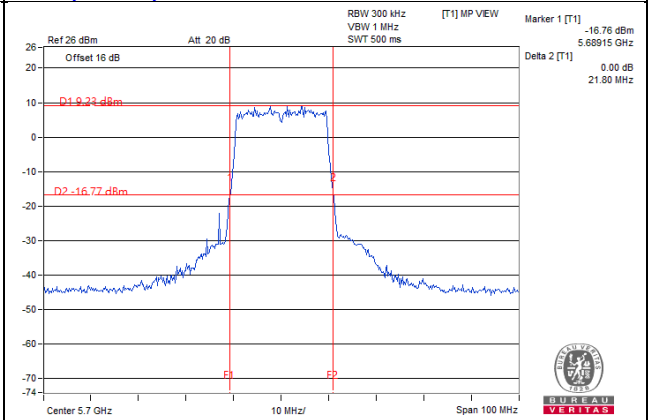
11ax (20MHz) 1S4T TxBF CH140 Ant1



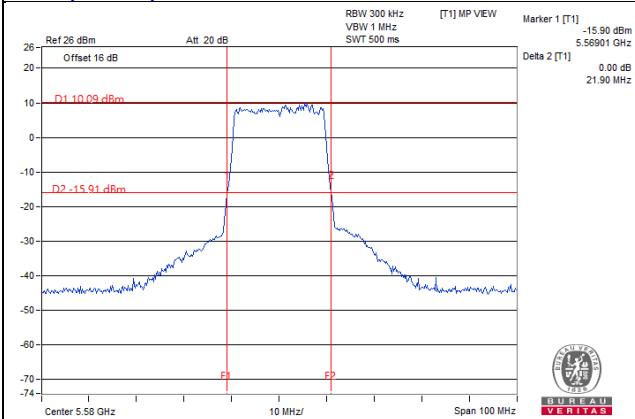
11ax (20MHz) 1S4T TxBF CH116 Ant2



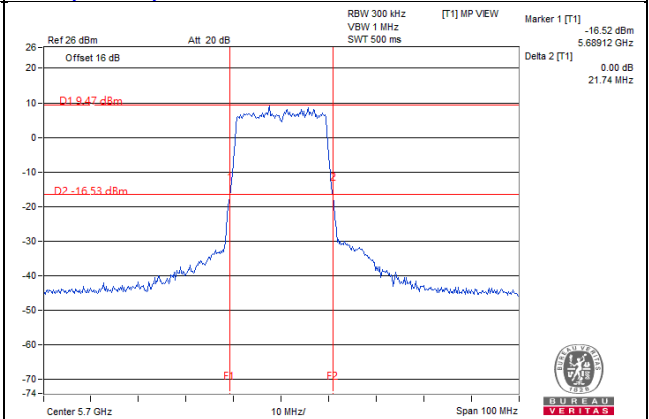
11ax (20MHz) 1S4T TxBF CH140 Ant2



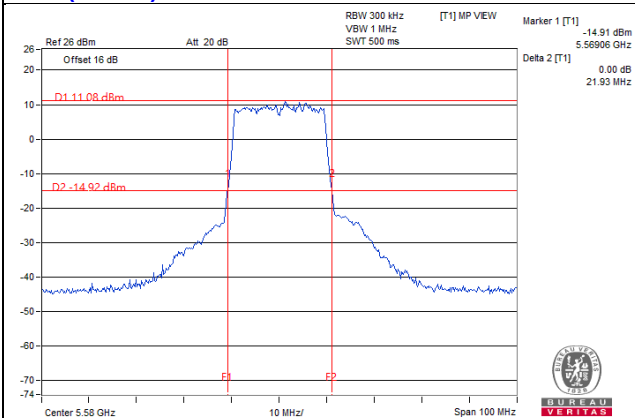
11ax (20MHz) 1S4T TxBF CH116 Ant3



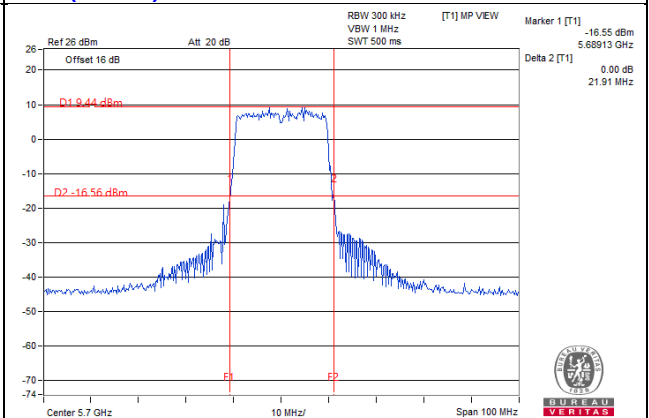
11ax (20MHz) 1S4T TxBF CH140 Ant3



11ax (20MHz) 1S4T TxBF CH116 Ant4

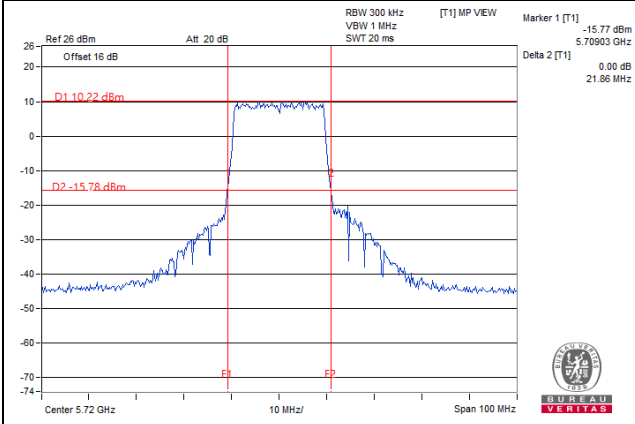


11ax (20MHz) 1S4T TxBF CH140 Ant4

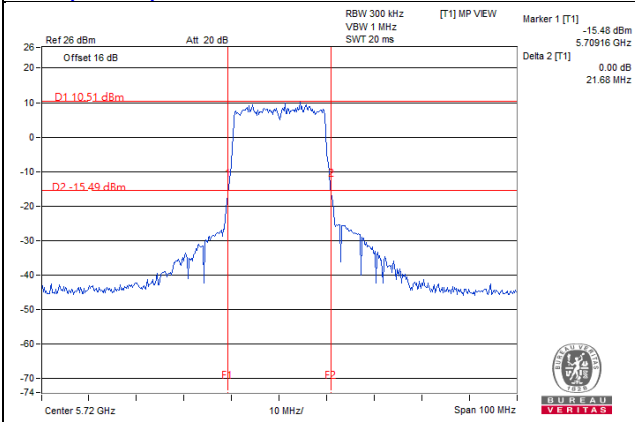


26dB BANDWIDTH SPECTRUM PLOT

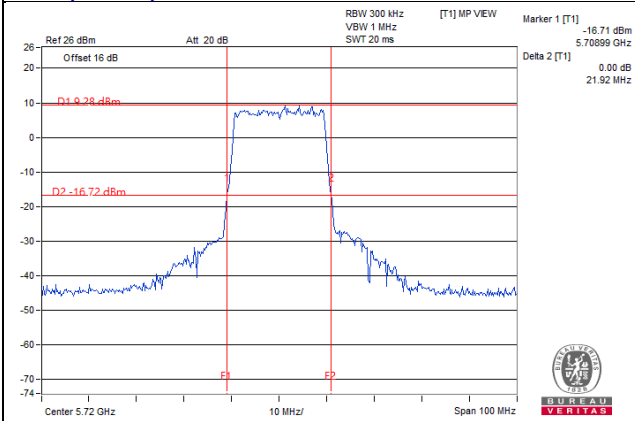
11ax (20MHz) 1S4T TxBF CH144 Ant1



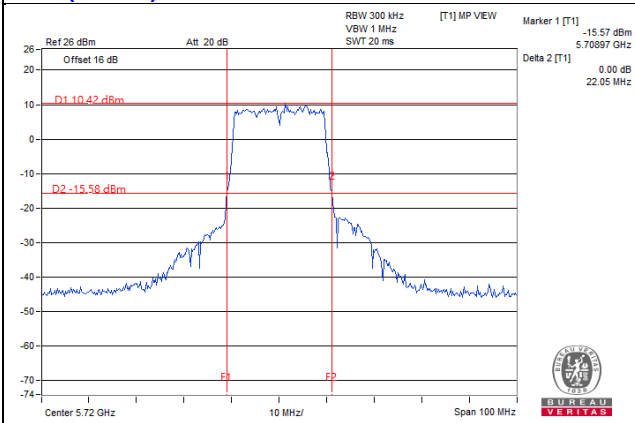
11ax (20MHz) 1S4T TxBF CH144 Ant2



11ax (20MHz) 1S4T TxBF CH144 Ant3

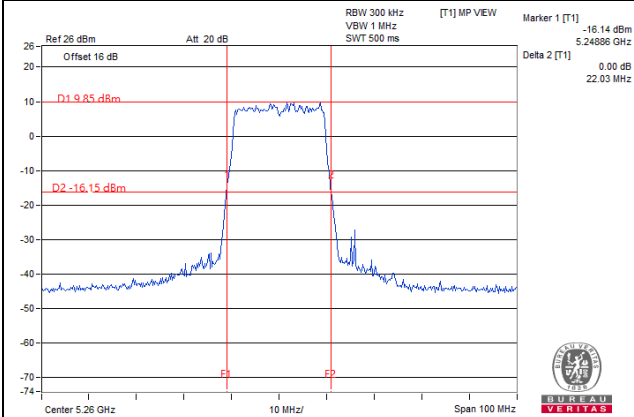


11ax (20MHz) 1S4T TxBF CH144 Ant4

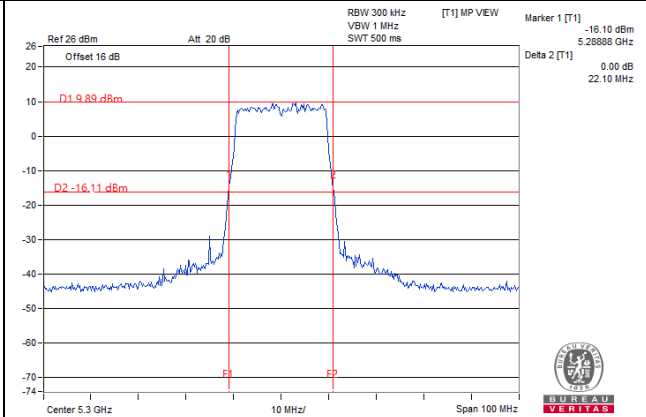


26dB BANDWIDTH SPECTRUM PLOT

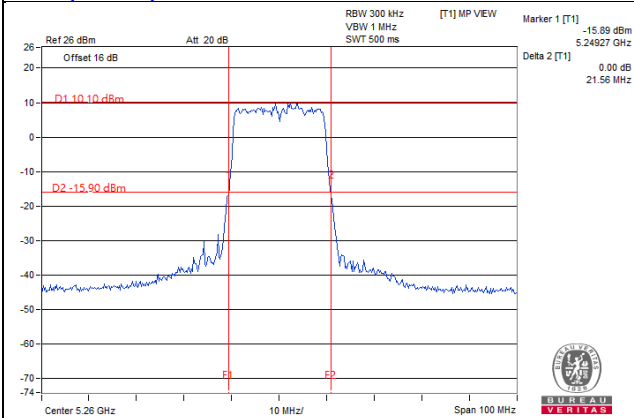
11ax (20MHz) 2S4T TxBF CH52 Ant1



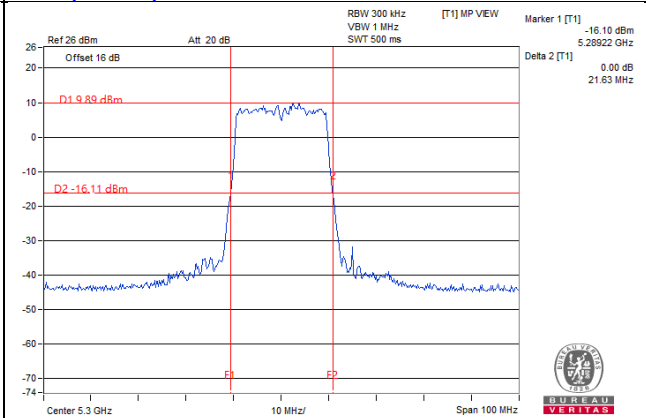
11ax (20MHz) 2S4T TxBF CH60 Ant1



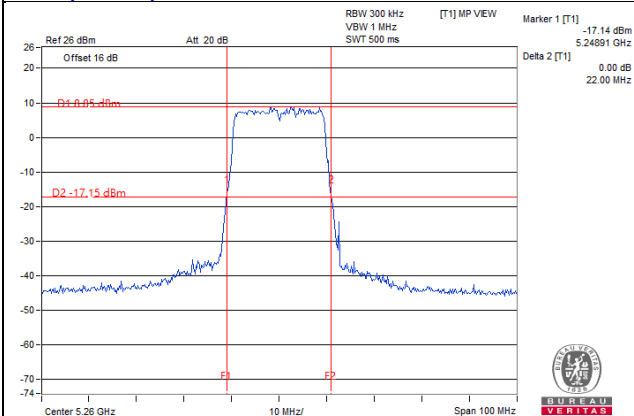
11ax (20MHz) 2S4T TxBF CH52 Ant2



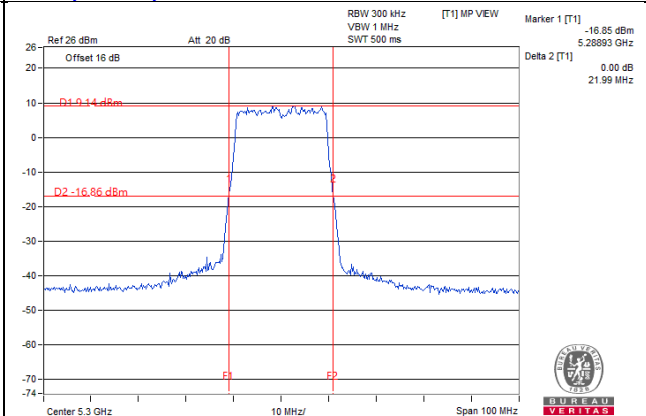
11ax (20MHz) 2S4T TxBF CH60 Ant2



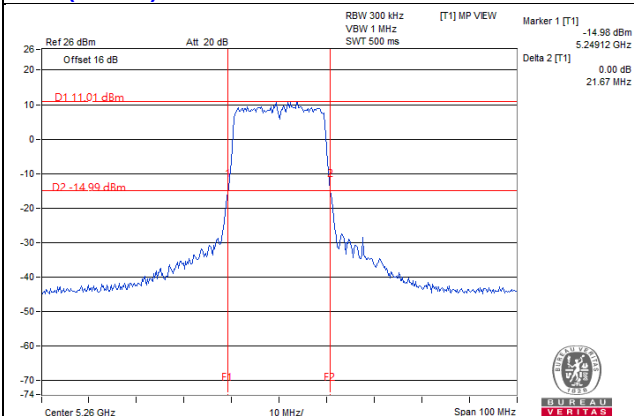
11ax (20MHz) 2S4T TxBF CH52 Ant3



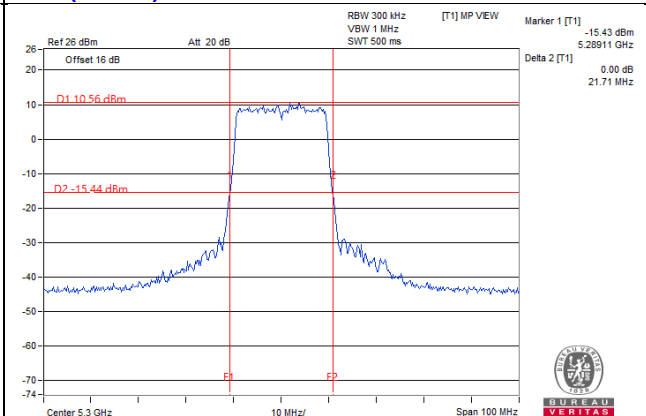
11ax (20MHz) 2S4T TxBF CH60 Ant3



11ax (20MHz) 2S4T TxBF CH52 Ant4

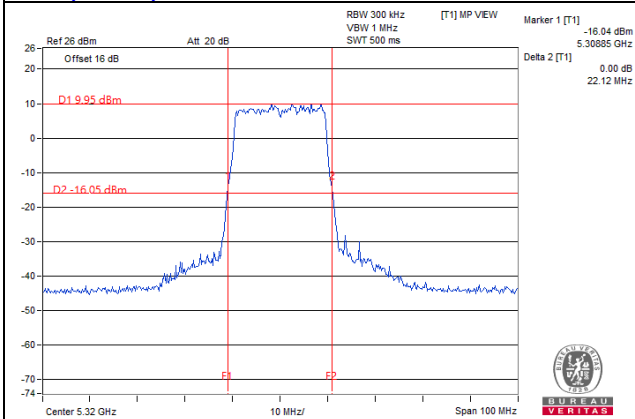


11ax (20MHz) 2S4T TxBF CH60 Ant4

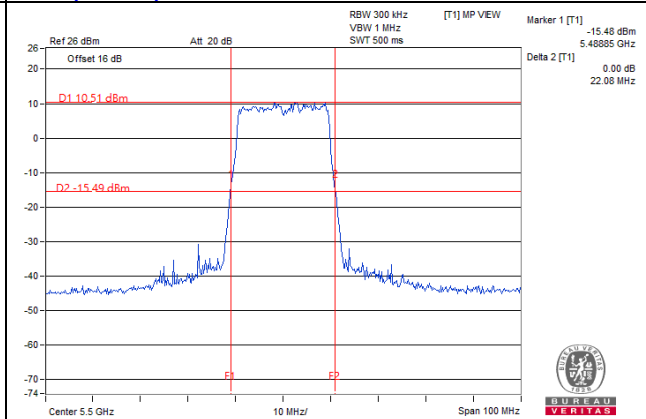


26dB BANDWIDTH SPECTRUM PLOT

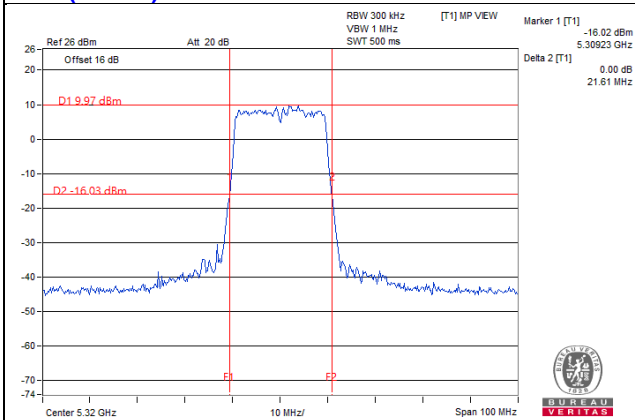
11ax (20MHz) 2S4T TxBF CH64 Ant1



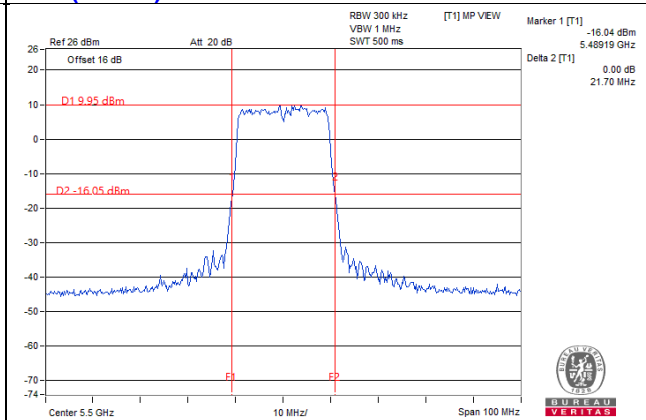
11ax (20MHz) 2S4T TxBF CH100 Ant1



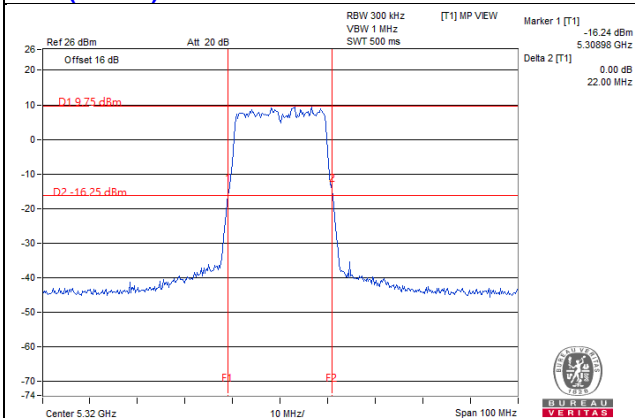
11ax (20MHz) 2S4T TxBF CH64 Ant2



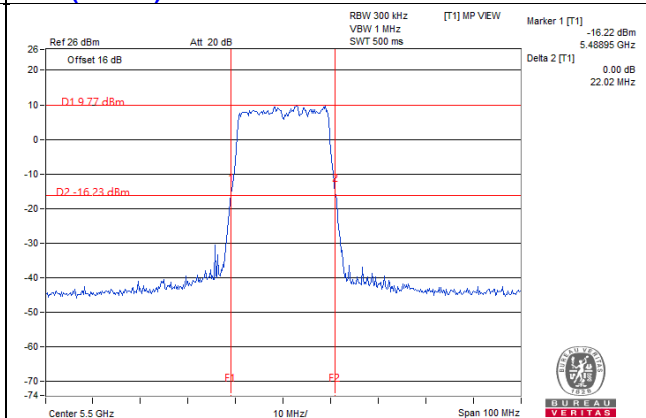
11ax (20MHz) 2S4T TxBF CH100 Ant2



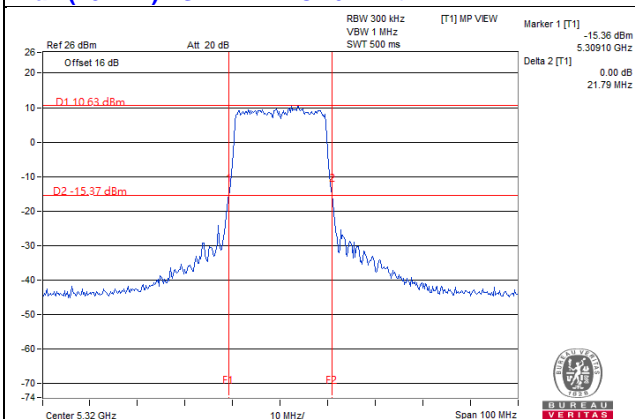
11ax (20MHz) 2S4T TxBF CH64 Ant3



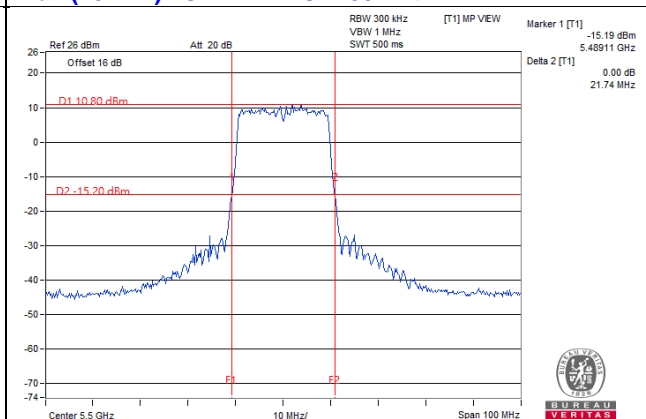
11ax (20MHz) 2S4T TxBF CH100 Ant3



11ax (20MHz) 2S4T TxBF CH64 Ant4

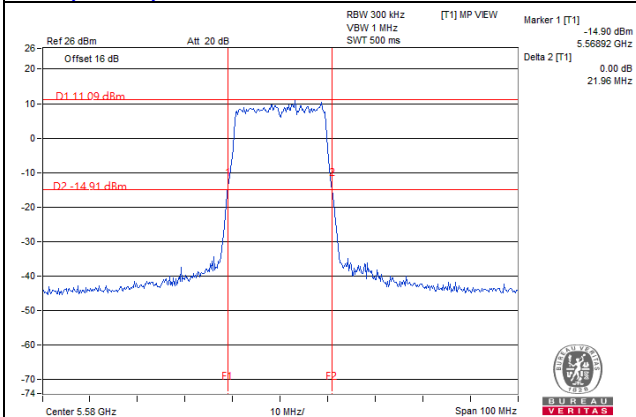


11ax (20MHz) 2S4T TxBF CH100 Ant4

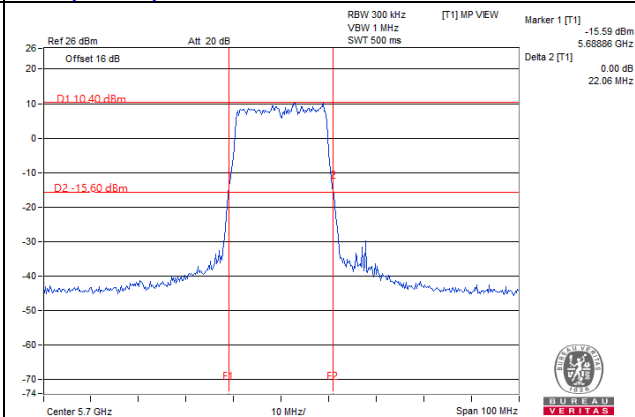


26dB BANDWIDTH SPECTRUM PLOT

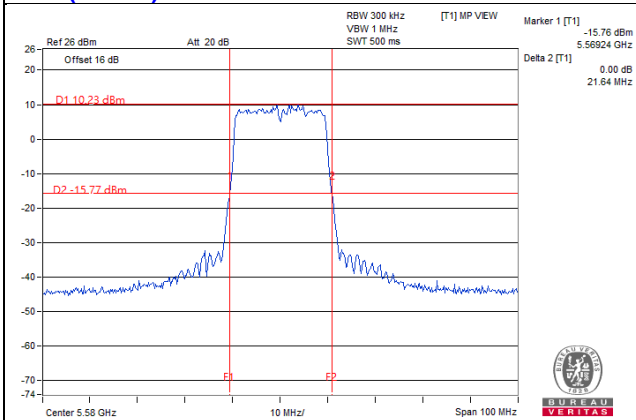
11ax (20MHz) 2S4T TxBF CH116 Ant1



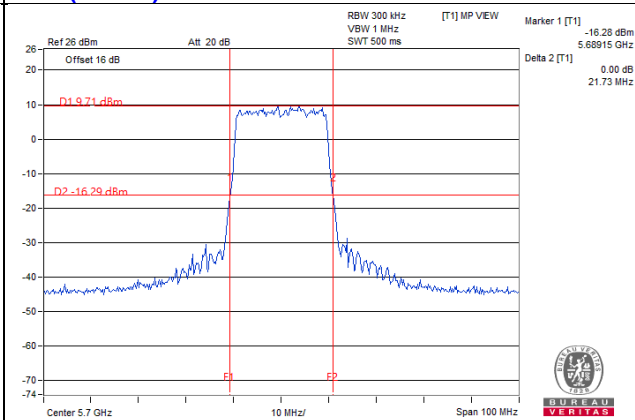
11ax (20MHz) 2S4T TxBF CH140 Ant1



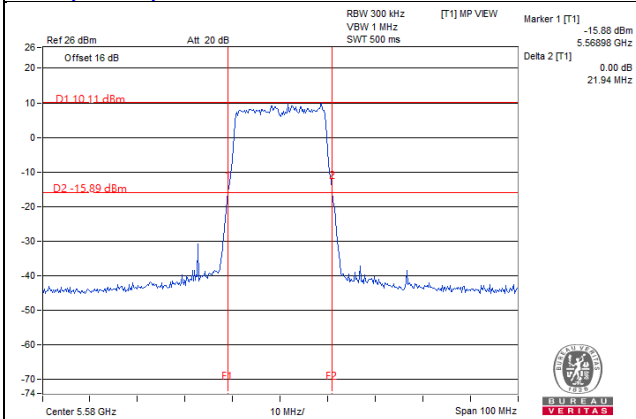
11ax (20MHz) 2S4T TxBF CH116 Ant2



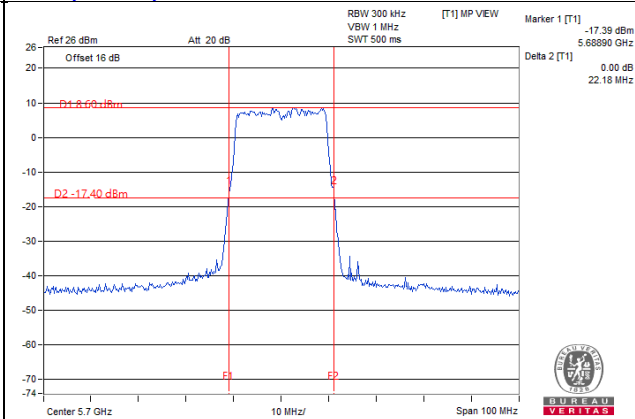
11ax (20MHz) 2S4T TxBF CH140 Ant2



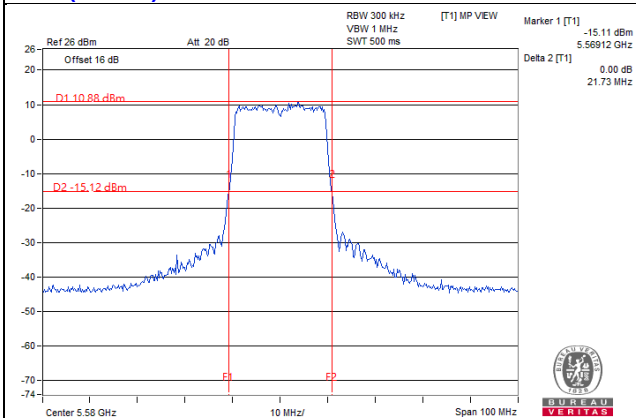
11ax (20MHz) 2S4T TxBF CH116 Ant3



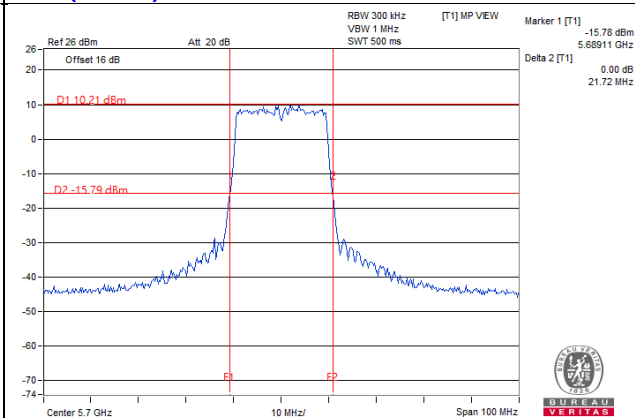
11ax (20MHz) 2S4T TxBF CH140 Ant3



11ax (20MHz) 2S4T TxBF CH116 Ant4

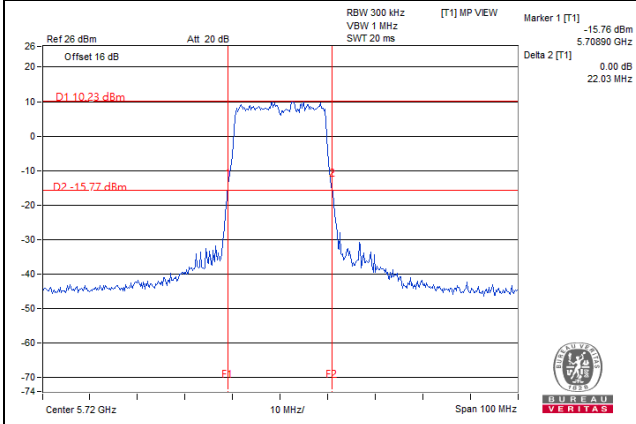


11ax (20MHz) 2S4T TxBF CH140 Ant4

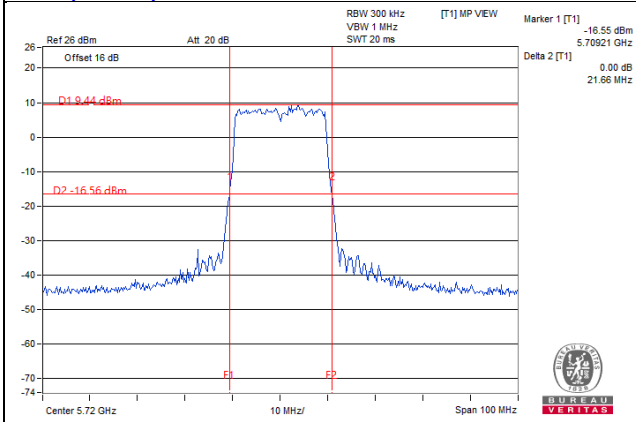


26dB BANDWIDTH SPECTRUM PLOT

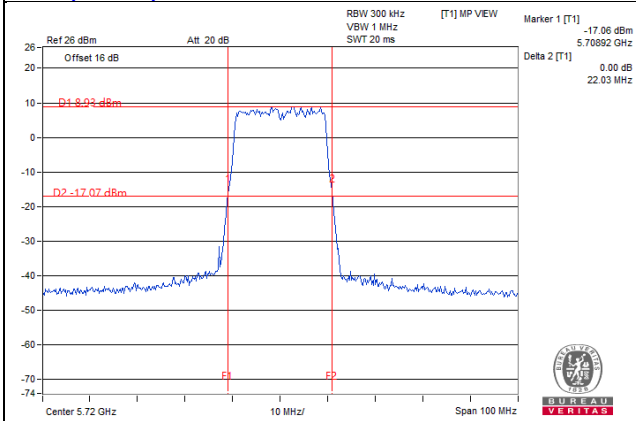
11ax (20MHz) 2S4T TxBF CH144 Ant1



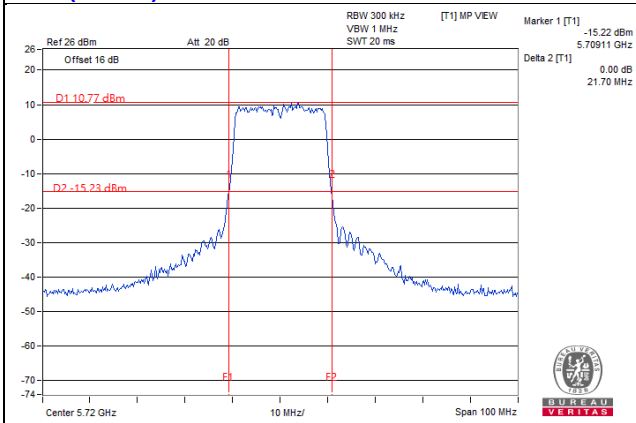
11ax (20MHz) 2S4T TxBF CH144 Ant2



11ax (20MHz) 2S4T TxBF CH144 Ant3

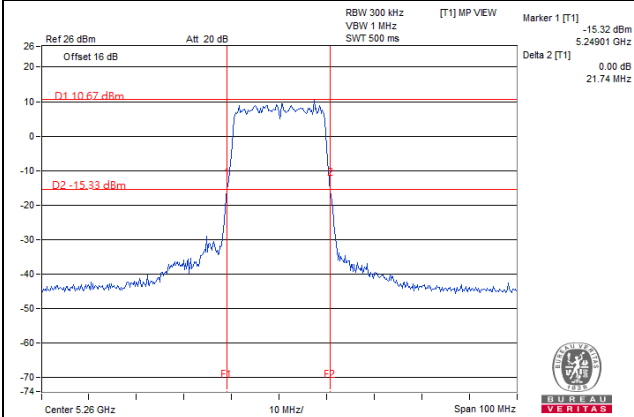


11ax (20MHz) 2S4T TxBF CH144 Ant4

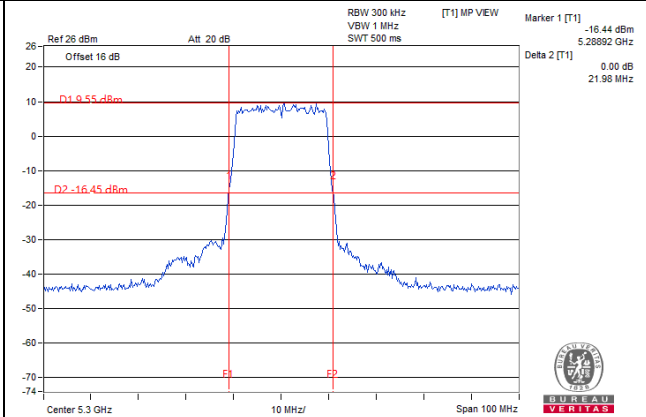


26dB BANDWIDTH SPECTRUM PLOT

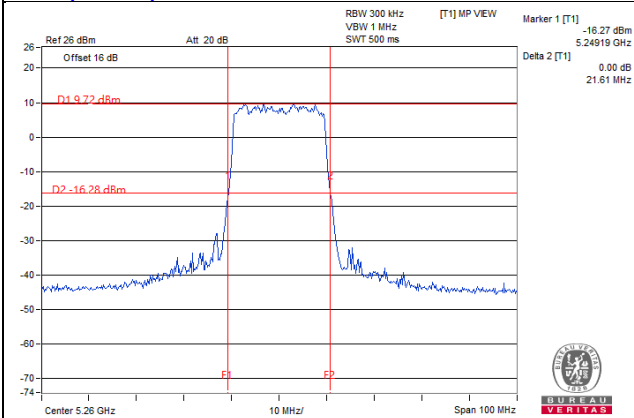
11ax (20MHz) 3S4T TxBF CH52 Ant1



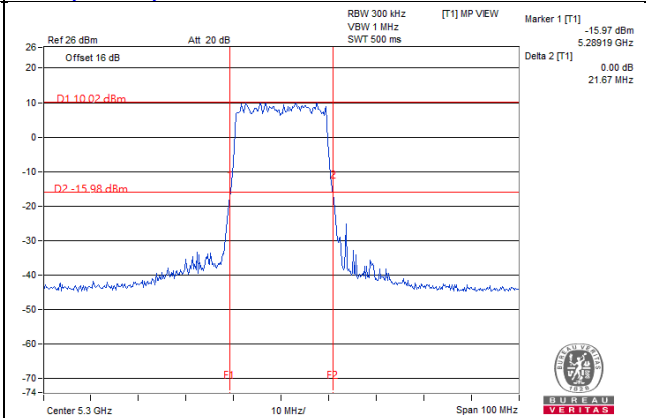
11ax (20MHz) 3S4T TxBF CH60 Ant1



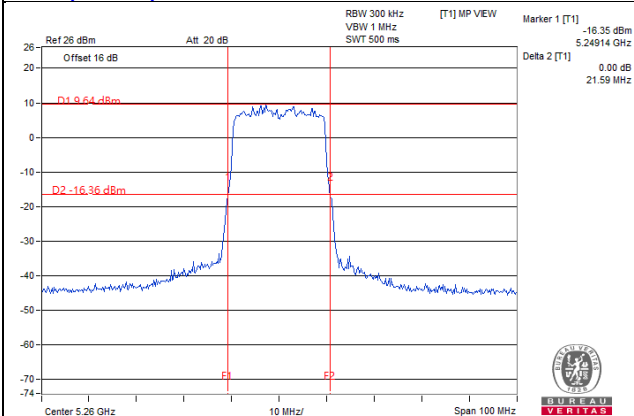
11ax (20MHz) 3S4T TxBF CH52 Ant2



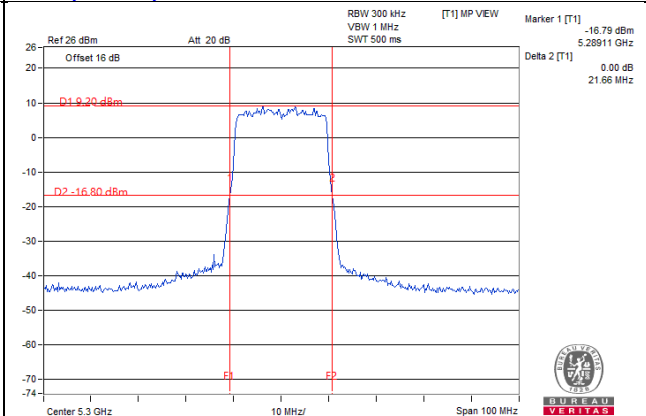
11ax (20MHz) 3S4T TxBF CH60 Ant2



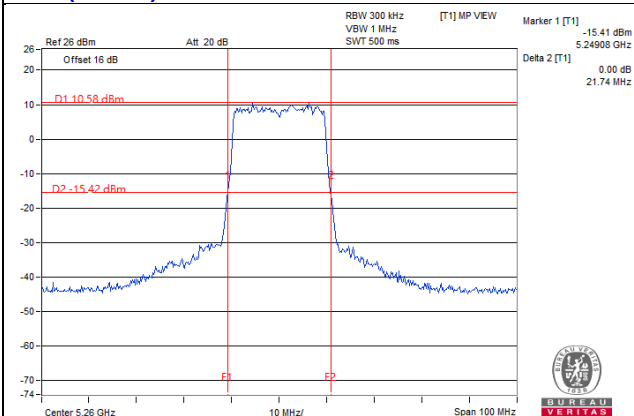
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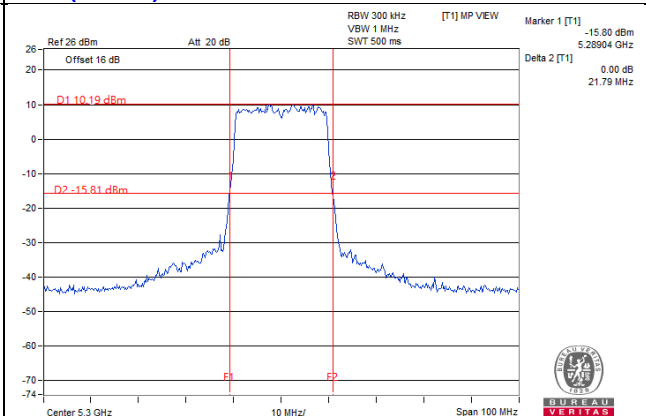
11ax (20MHz) 3S4T TxBF CH60 Ant3



11ax (20MHz) 3S4T TxBF CH52 Ant4

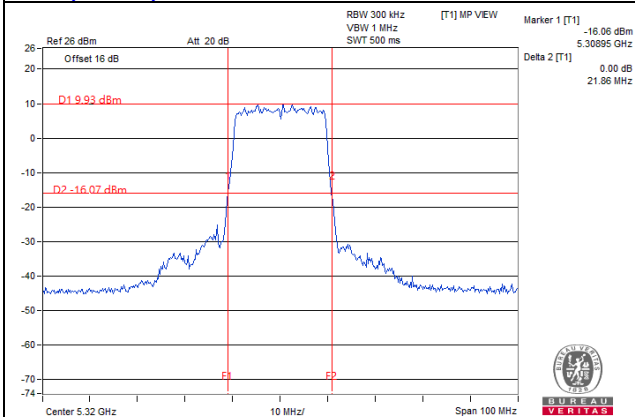


11ax (20MHz) 3S4T TxBF CH60 Ant4

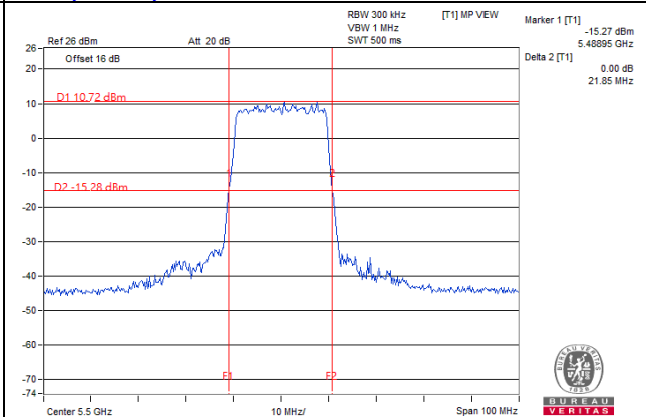


26dB BANDWIDTH SPECTRUM PLOT

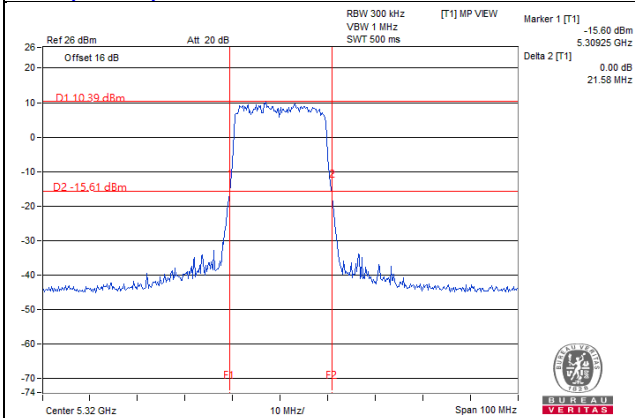
11ax (20MHz) 3S4T TxBF CH64 Ant1



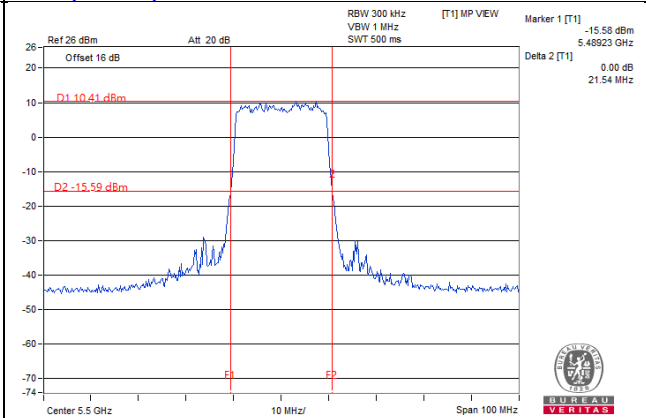
11ax (20MHz) 3S4T TxBF CH100 Ant1



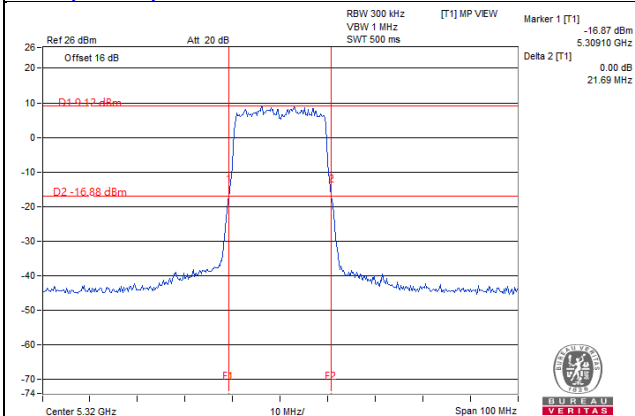
11ax (20MHz) 3S4T TxBF CH64 Ant2



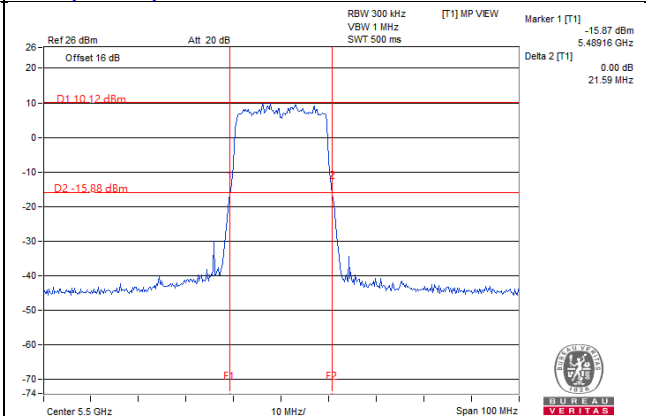
11ax (20MHz) 3S4T TxBF CH100 Ant2



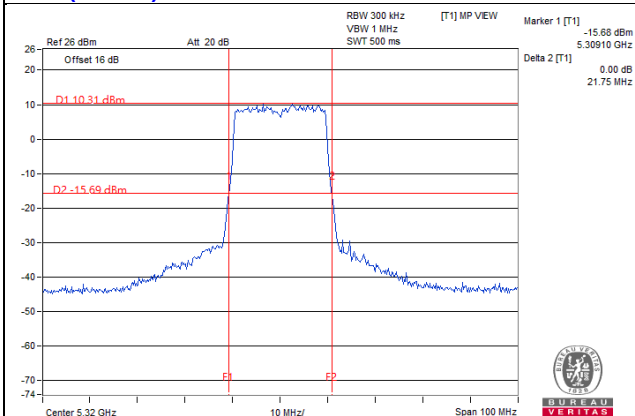
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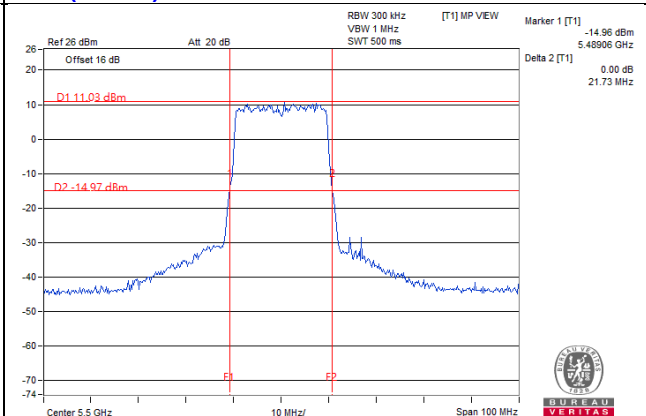
11ax (20MHz) 3S4T TxBF CH100 Ant3



11ax (20MHz) 3S4T TxBF CH64 Ant4

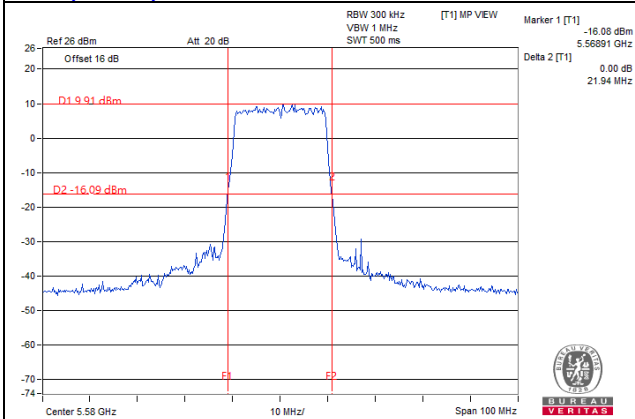


11ax (20MHz) 3S4T TxBF CH100 Ant4

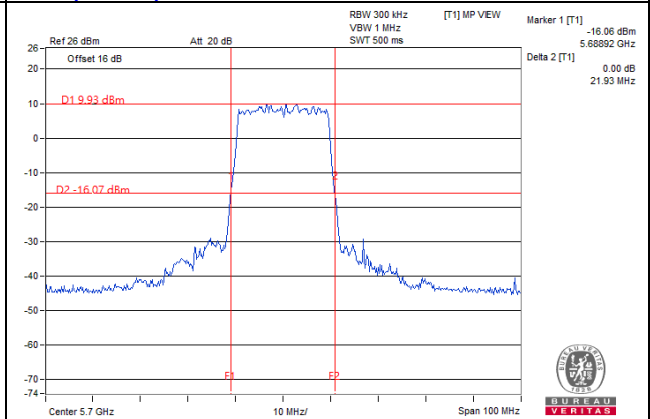


26dB BANDWIDTH SPECTRUM PLOT

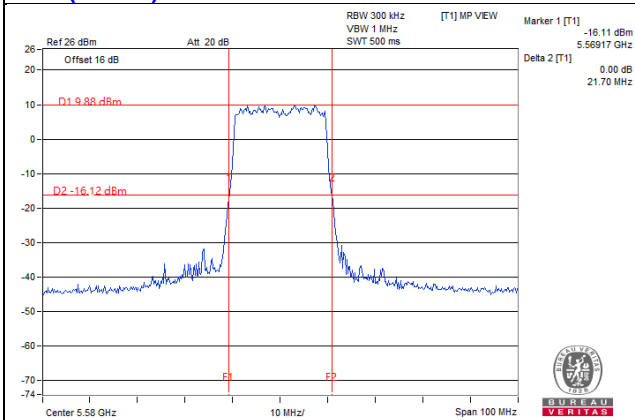
11ax (20MHz) 3S4T TxBF CH116 Ant1



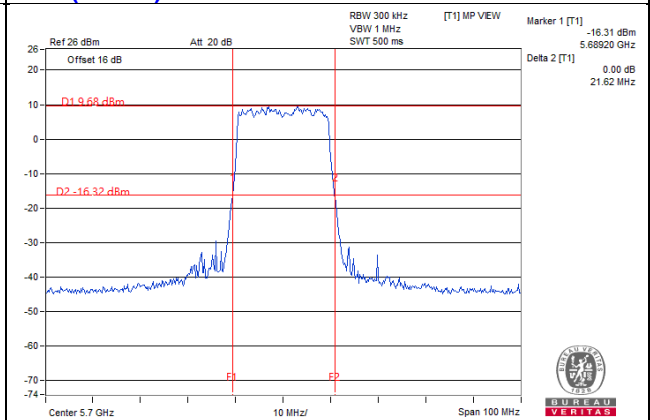
11ax (20MHz) 3S4T TxBF CH140 Ant1



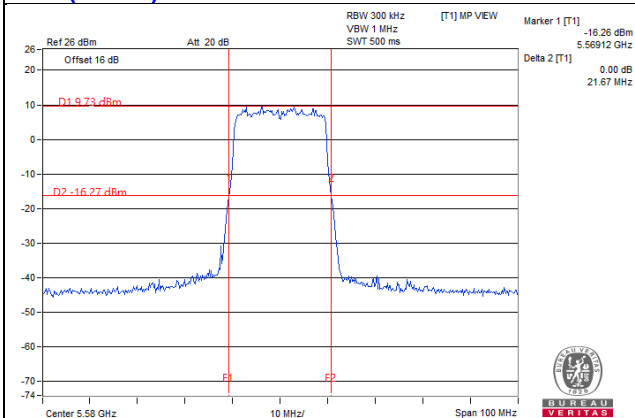
11ax (20MHz) 3S4T TxBF CH116 Ant2



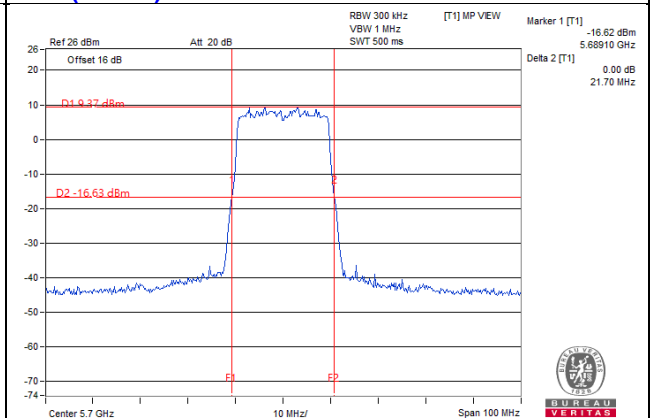
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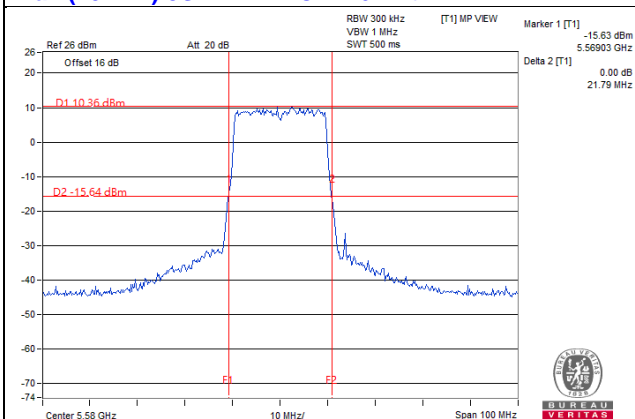
11ax (20MHz) 3S4T TxBF CH116 Ant3



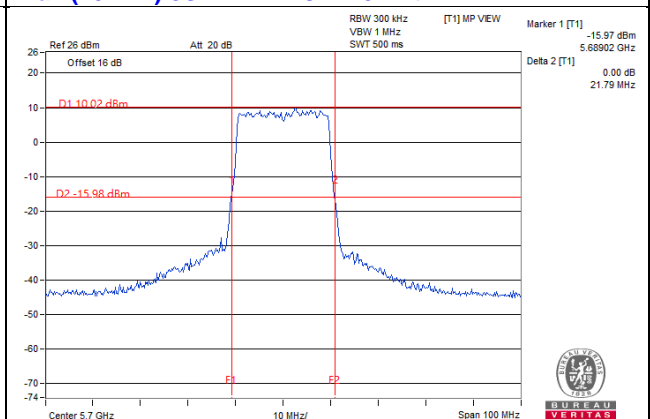
11ax (20MHz) 3S4T TxBF CH140 Ant3



11ax (20MHz) 3S4T TxBF CH116 Ant4

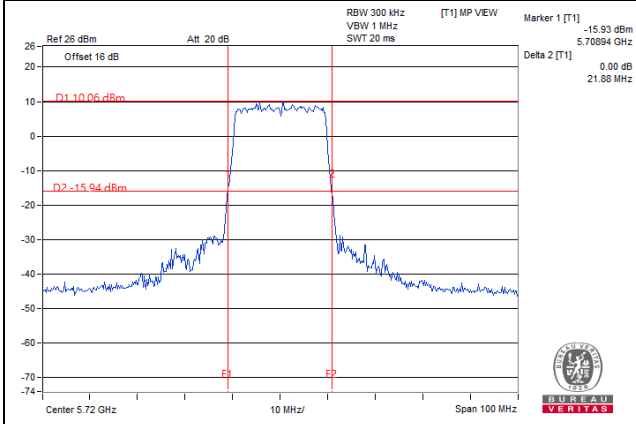


11ax (20MHz) 3S4T TxBF CH140 Ant4

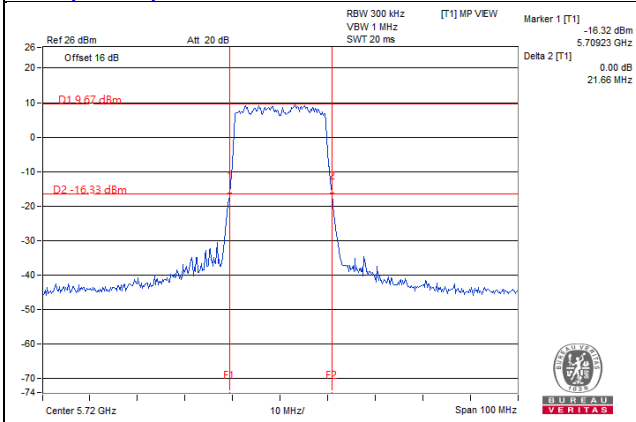


26dB BANDWIDTH SPECTRUM PLOT

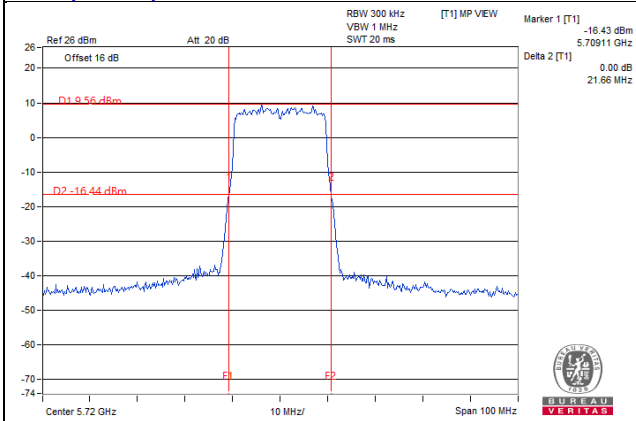
11ax (20MHz) 3S4T TxBF CH144 Ant1



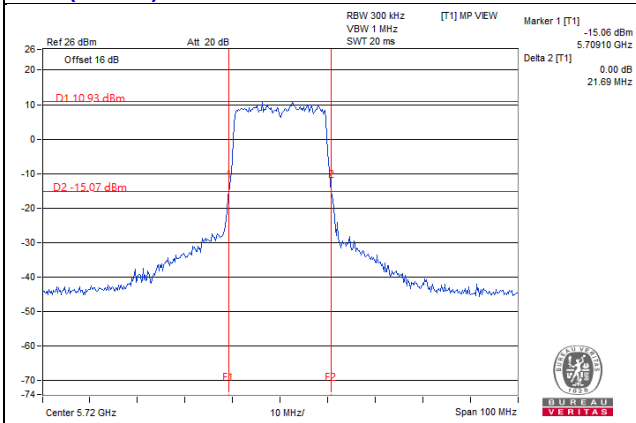
11ax (20MHz) 3S4T TxBF CH144 Ant2



11ax (20MHz) 3S4T TxBF CH144 Ant3

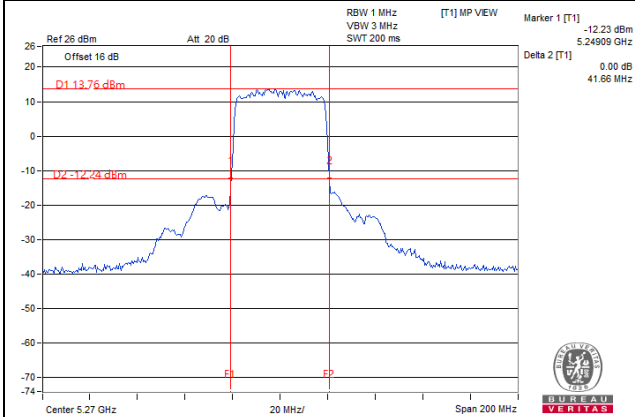


11ax (20MHz) 3S4T TxBF CH144 Ant4

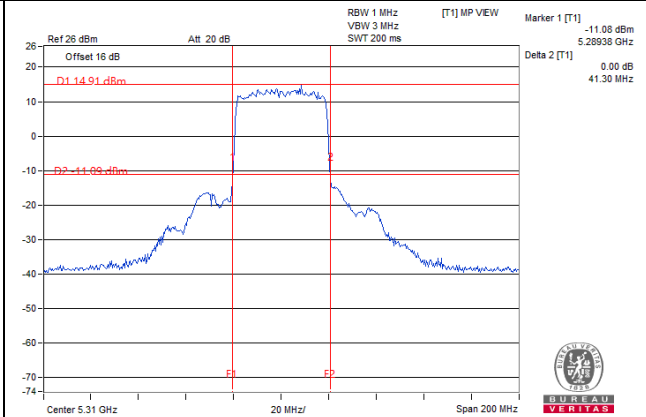


26dB BANDWIDTH SPECTRUM PLOT

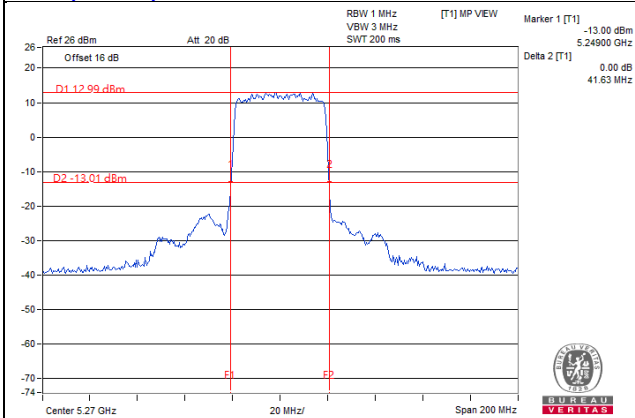
11ax (40MHz) 1S4T CDD CH54 Ant1



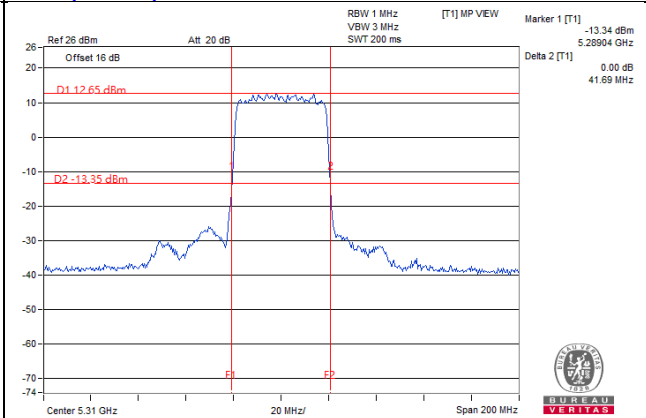
11ax (40MHz) 1S4T CDD CH62 Ant1



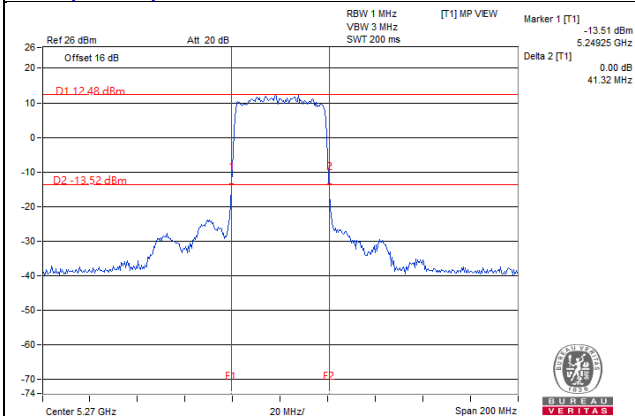
11ax (40MHz) 1S4T CDD CH54 Ant2



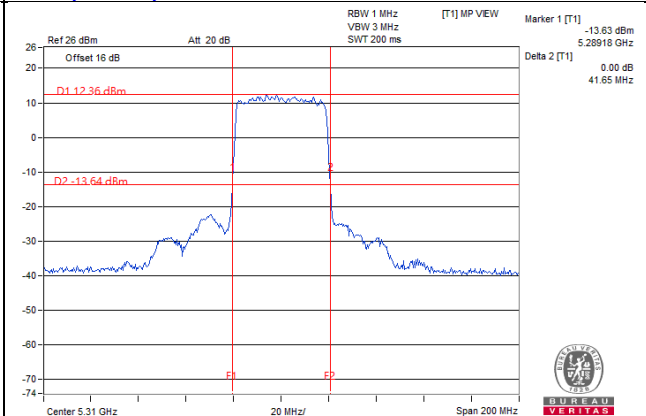
11ax (40MHz) 1S4T CDD CH62 Ant2



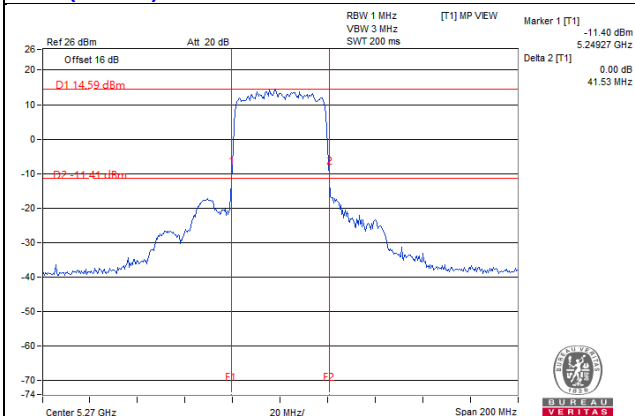
11ax (40MHz) 1S4T CDD CH54 Ant3



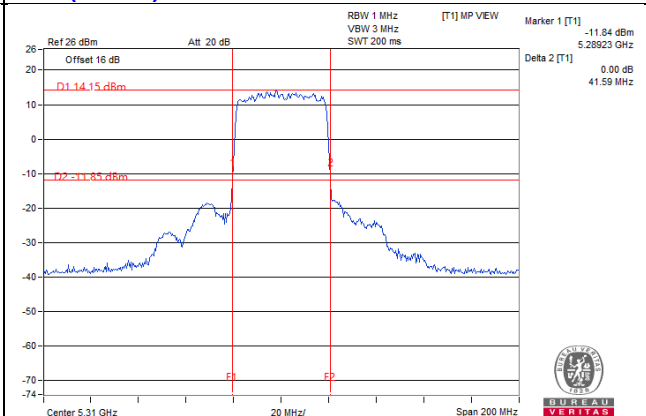
11ax (40MHz) 1S4T CDD CH62 Ant3



11ax (40MHz) 1S4T CDD CH54 Ant3

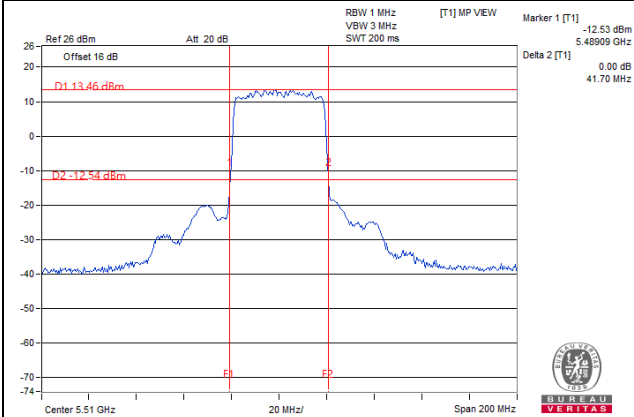


11ax (40MHz) 1S4T CDD CH62 Ant3

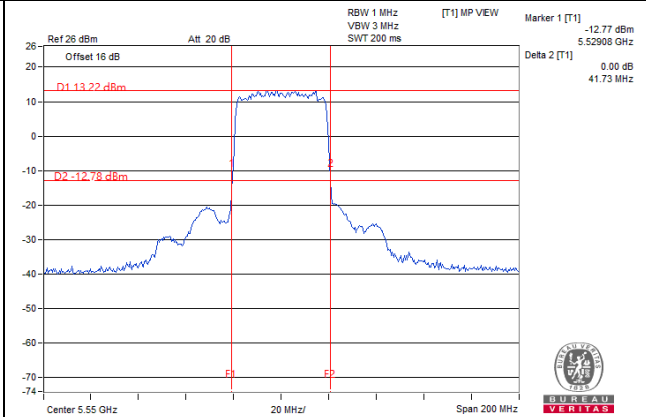


26dB BANDWIDTH SPECTRUM PLOT

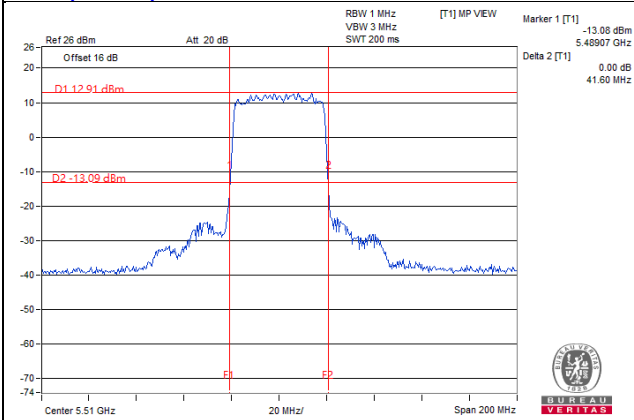
11ax (40MHz) 1S4T CDD CH102 Ant1



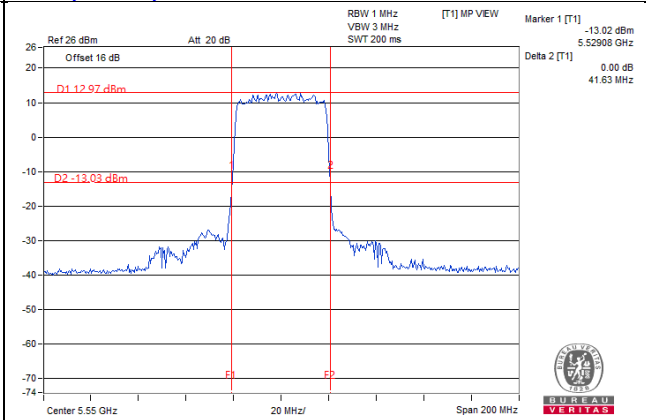
11ax (40MHz) 1S4T CDD CH110 Ant1



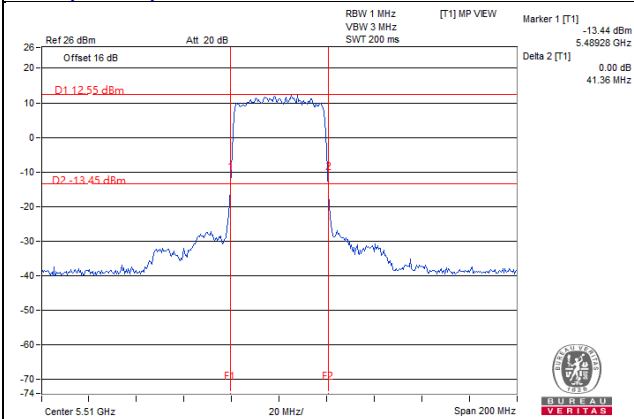
11ax (40MHz) 1S4T CDD CH102 Ant2



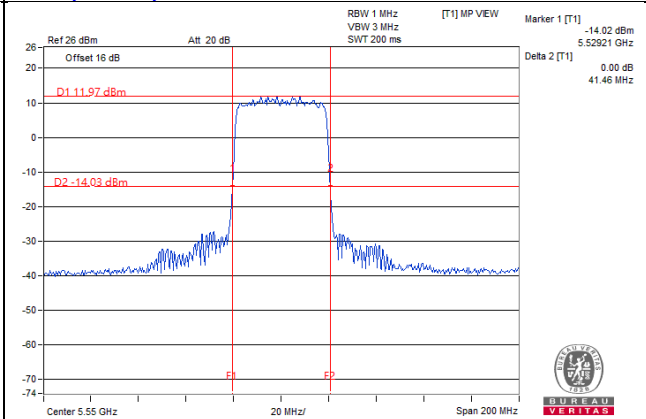
11ax (40MHz) 1S4T CDD CH110 Ant2



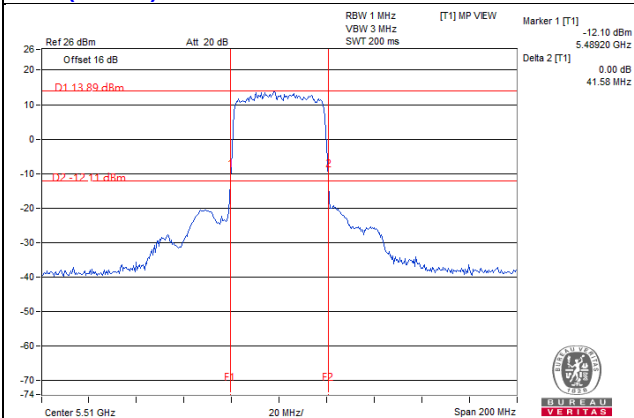
11ax (40MHz) 1S4T CDD CH102 Ant3



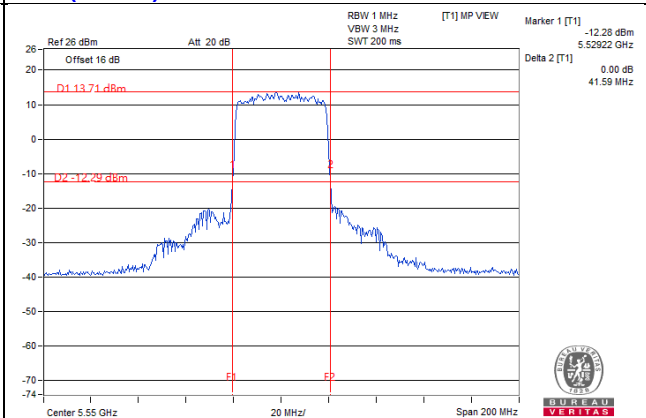
11ax (40MHz) 1S4T CDD CH110 Ant3



11ax (40MHz) 1S4T CDD CH102 Ant4

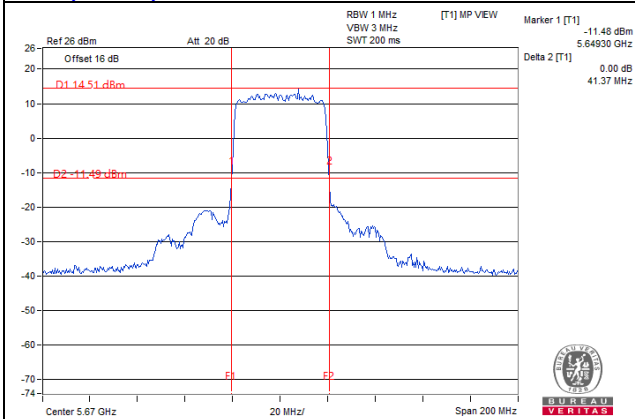


11ax (40MHz) 1S4T CDD CH110 Ant4

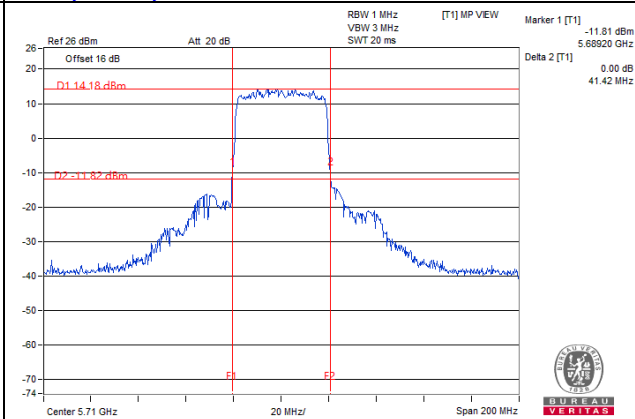


26dB BANDWIDTH SPECTRUM PLOT

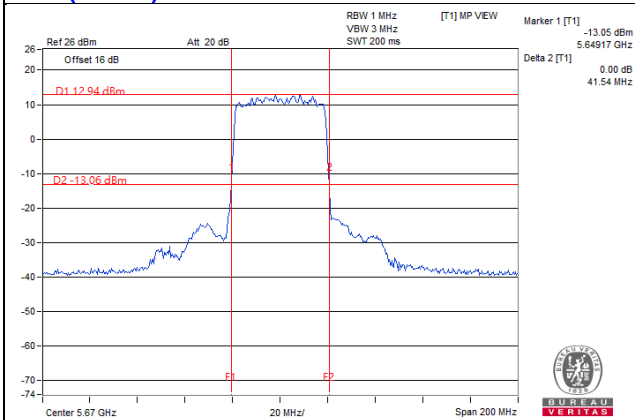
11ax (40MHz) 1S4T CDD CH134 Ant1



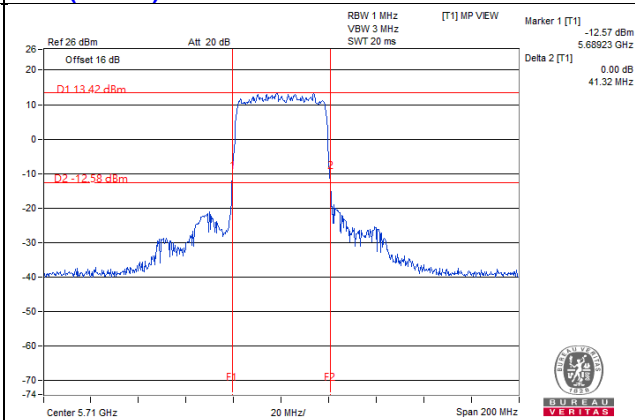
11ax (40MHz) 1S4T CDD CH142 Ant1



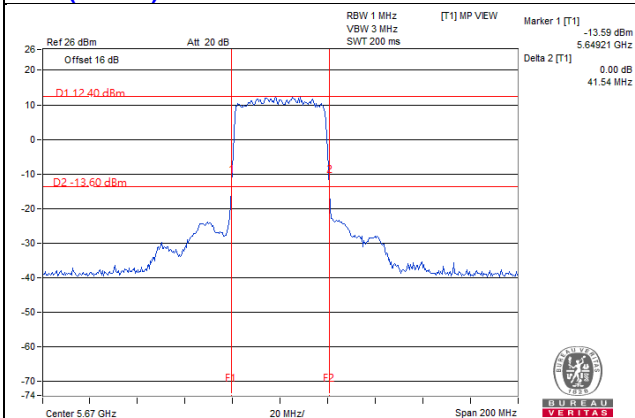
11ax (40MHz) 1S4T CDD CH134 Ant2



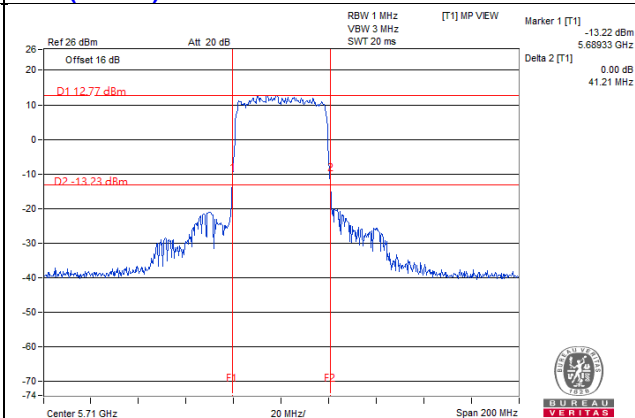
11ax (40MHz) 1S4T CDD CH142 Ant2



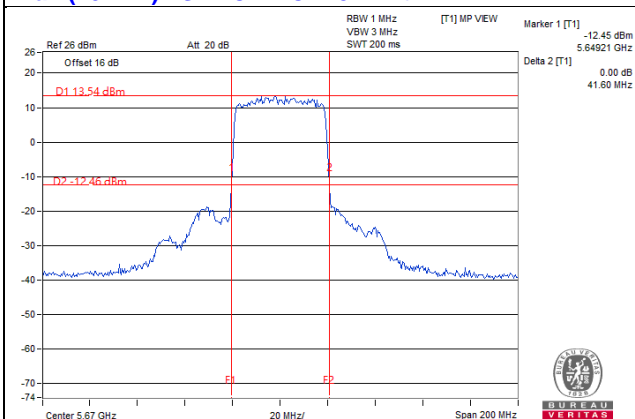
11ax (40MHz) 1S4T CDD CH134 Ant3



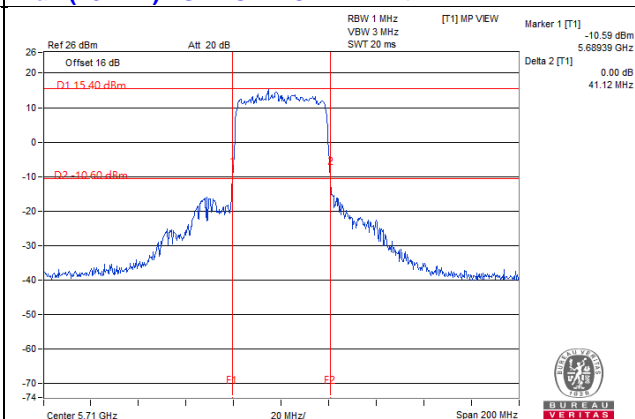
11ax (40MHz) 1S4T CDD CH142 Ant3



11ax (40MHz) 1S4T CDD CH134 Ant4

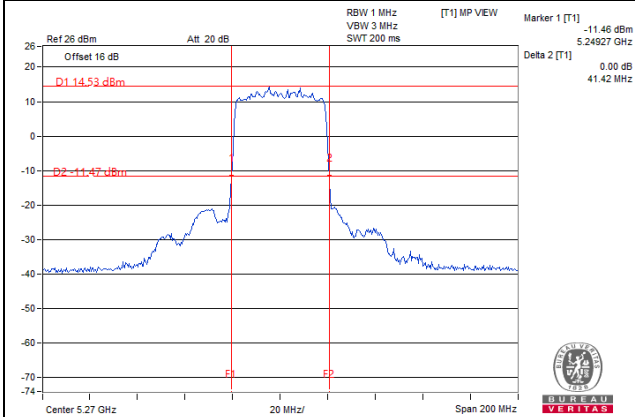


11ax (40MHz) 1S4T CDD CH142 Ant4

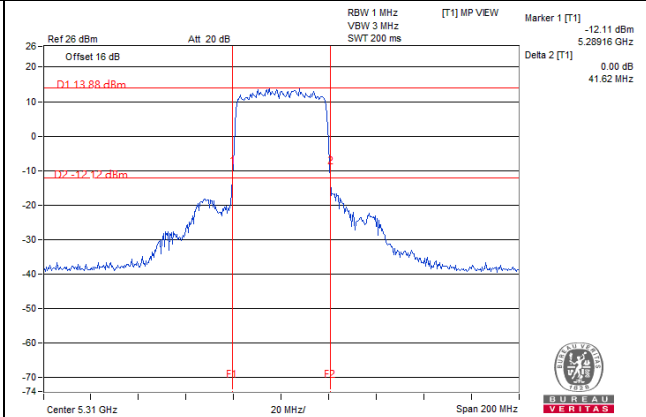


26dB BANDWIDTH SPECTRUM PLOT

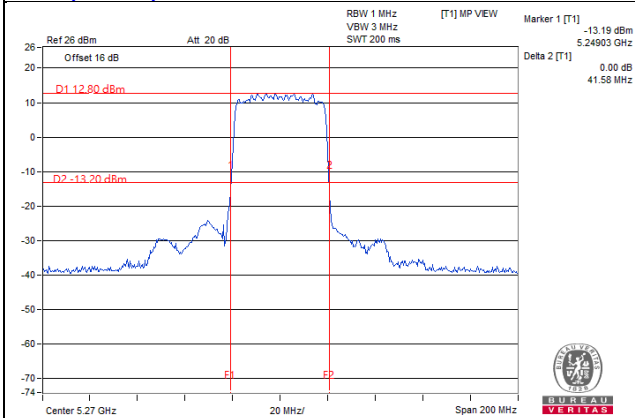
11ax (40MHz) 1S4T TxBF CH54 Ant1



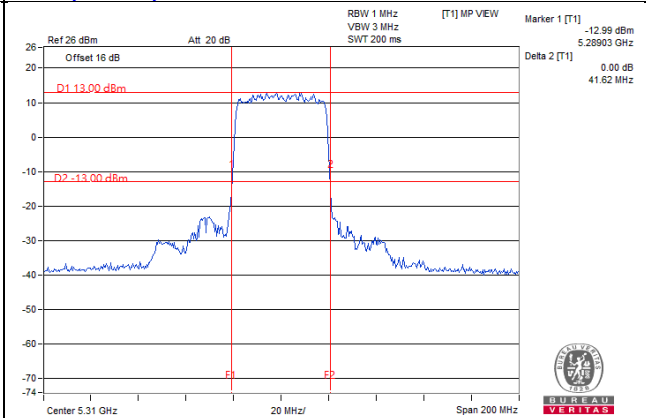
11ax (40MHz) 1S4T TxBF CH62 Ant1



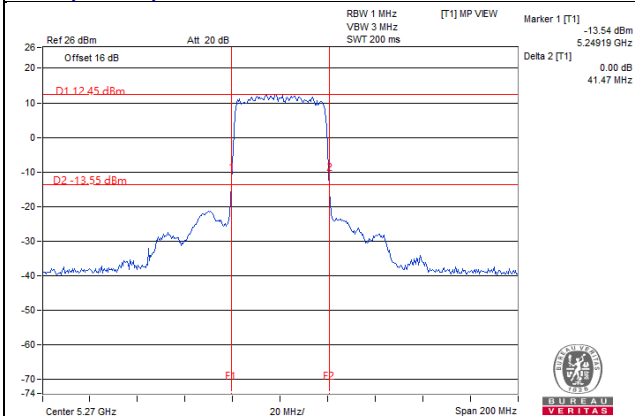
11ax (40MHz) 1S4T TxBF CH54 Ant2



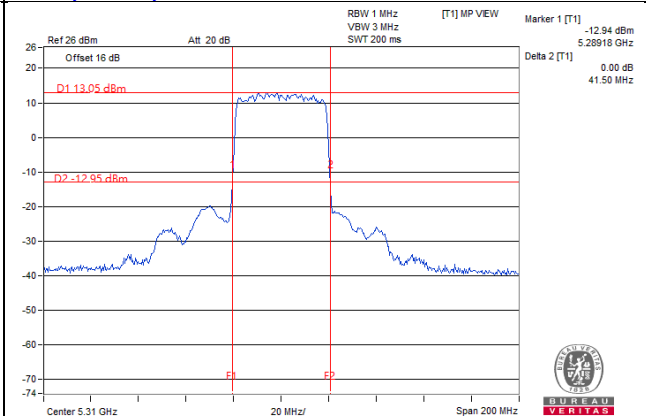
11ax (40MHz) 1S4T TxBF CH62 Ant2



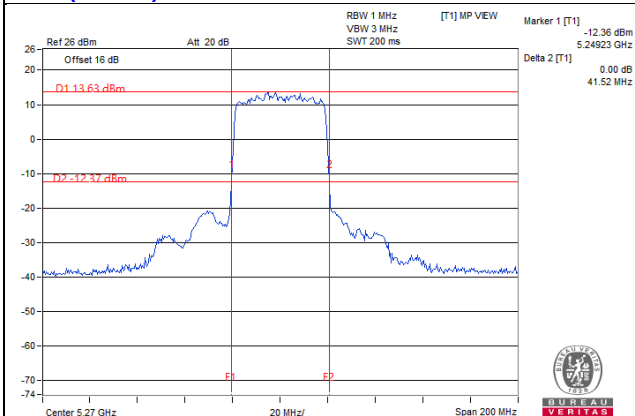
11ax (40MHz) 1S4T TxBF CH54 Ant3



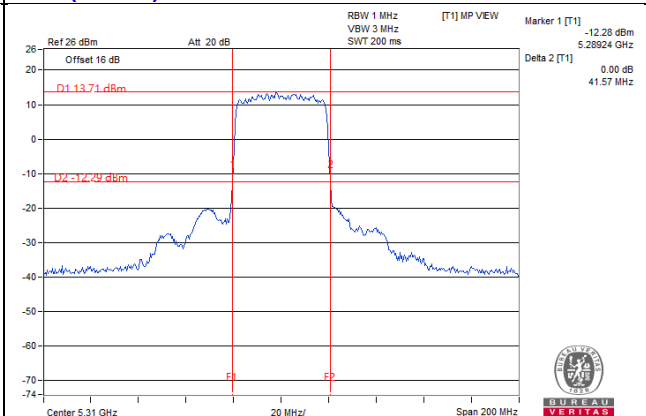
11ax (40MHz) 1S4T TxBF CH62 Ant3



11ax (40MHz) 1S4T TxBF CH54 Ant4

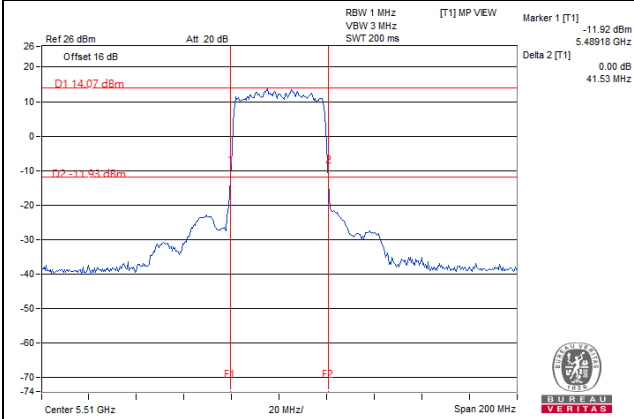


11ax (40MHz) 1S4T TxBF CH62 Ant4

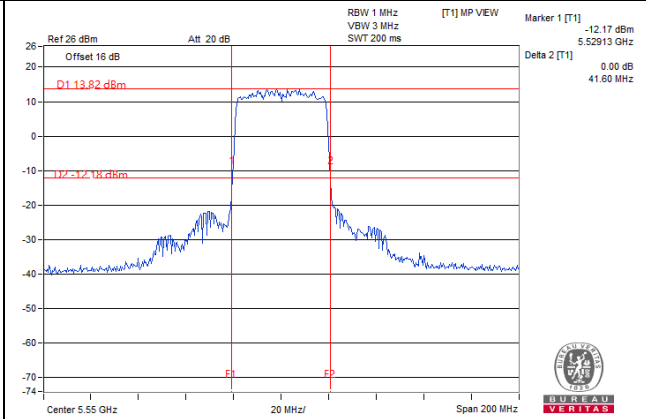


26dB BANDWIDTH SPECTRUM PLOT

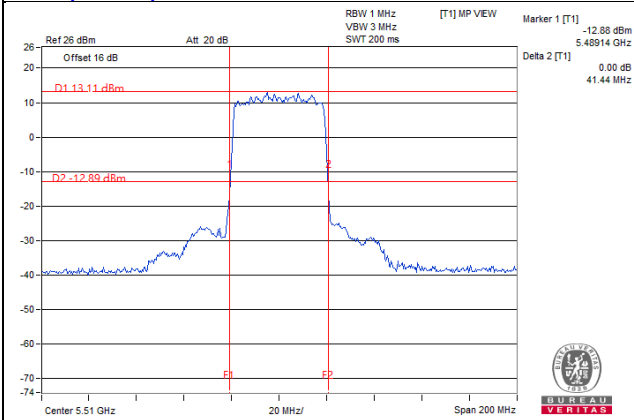
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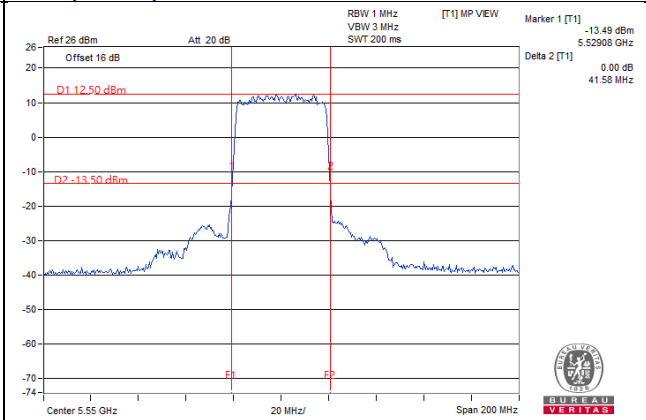
11ax (40MHz) 1S4T TxBF CH110 Ant1



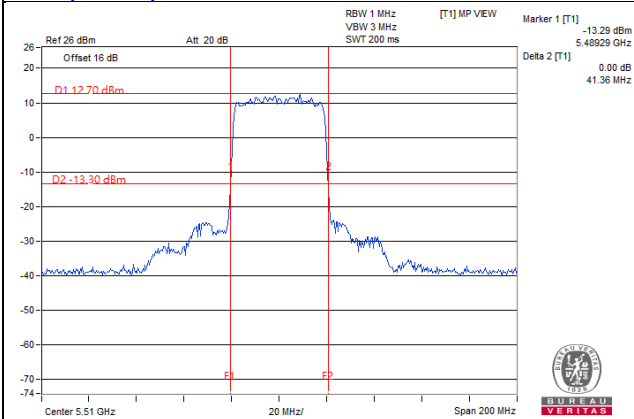
11ax (40MHz) 1S4T TxBF CH102 Ant2



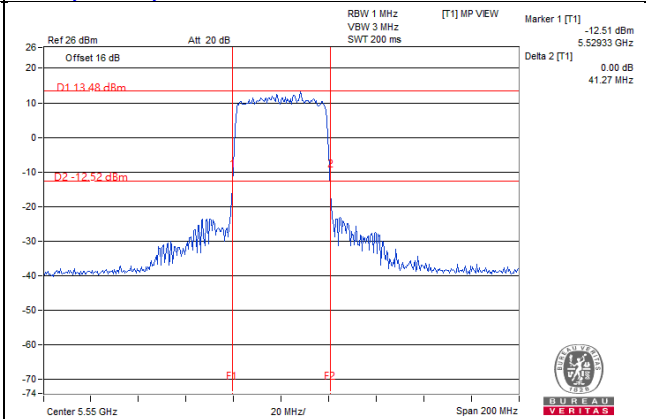
11ax (40MHz) 1S4T TxBF CH110 Ant2



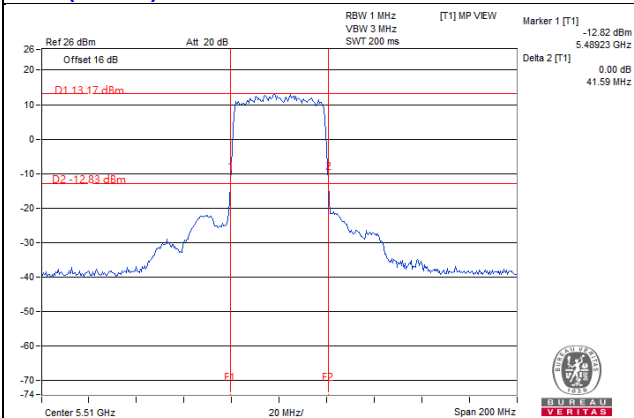
11ax (40MHz) 1S4T TxBF CH102 Ant3



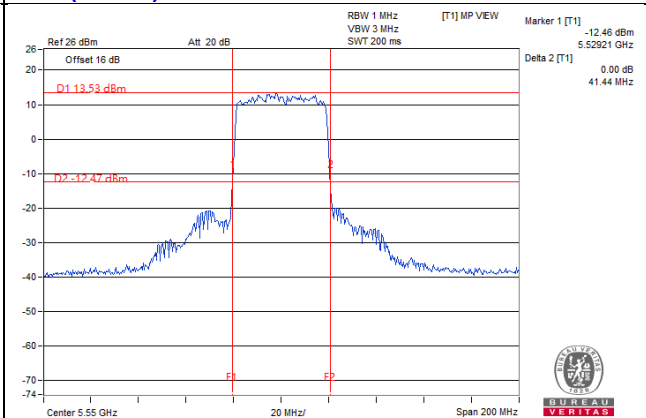
11ax (40MHz) 1S4T TxBF CH110 Ant3



11ax (40MHz) 1S4T TxBF CH102 Ant4

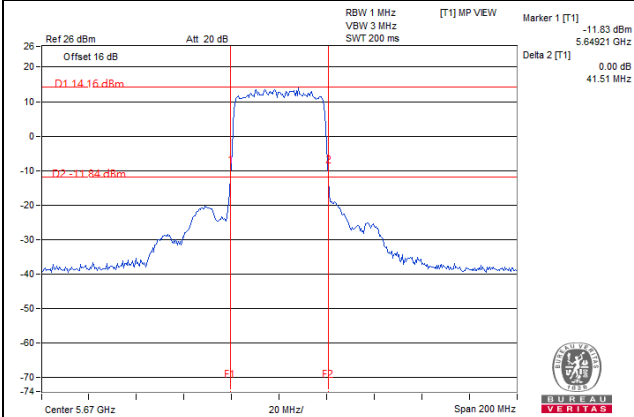


11ax (40MHz) 1S4T TxBF CH110 Ant4

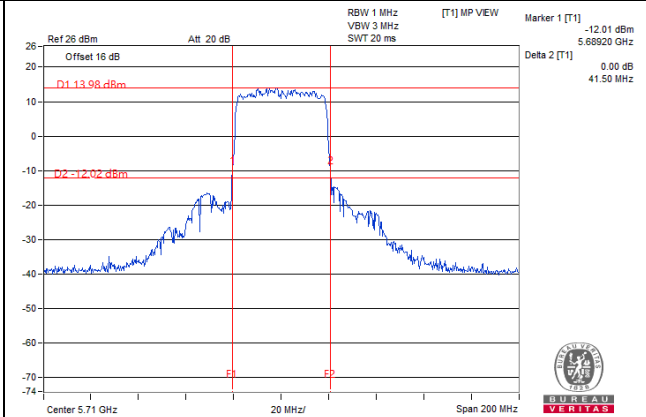


26dB BANDWIDTH SPECTRUM PLOT

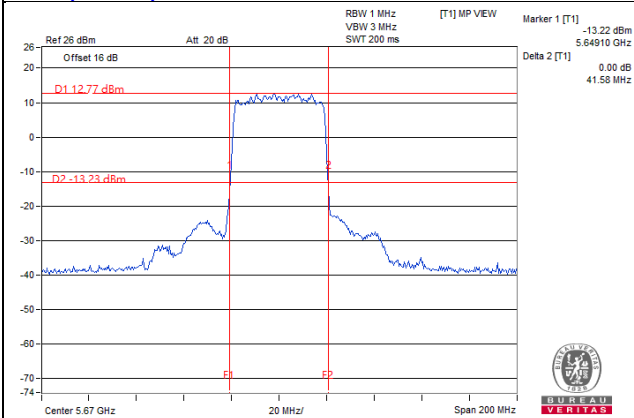
11ax (40MHz) 1S4T TxBF CH134 Ant1



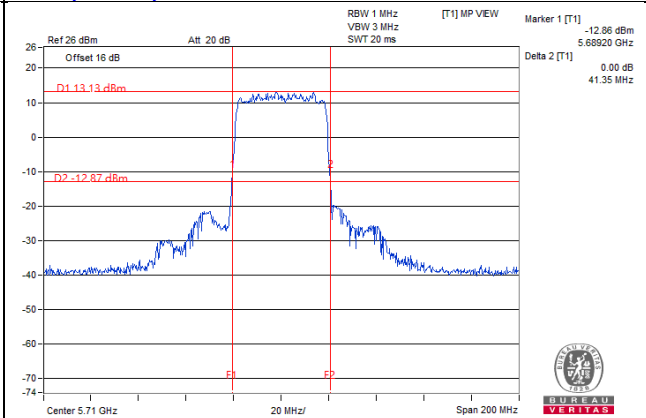
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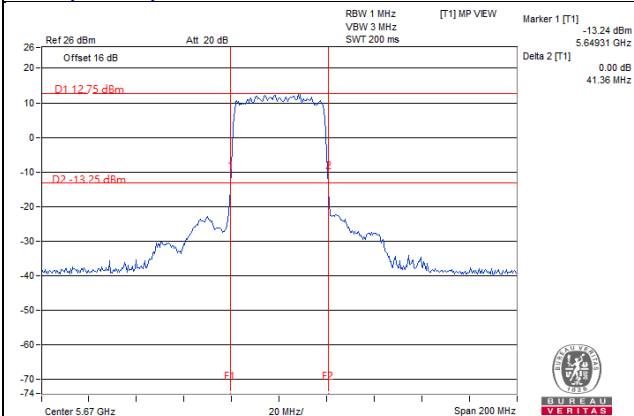
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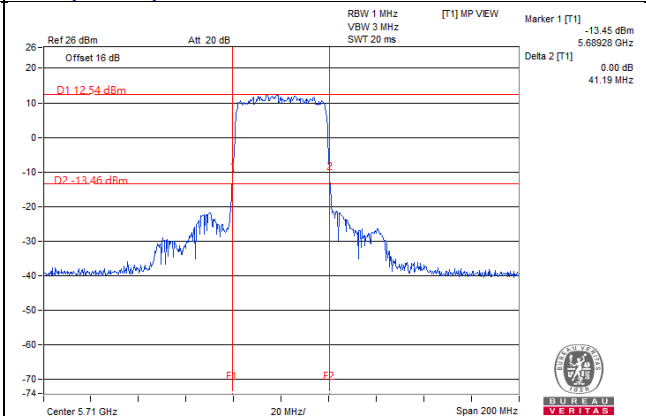
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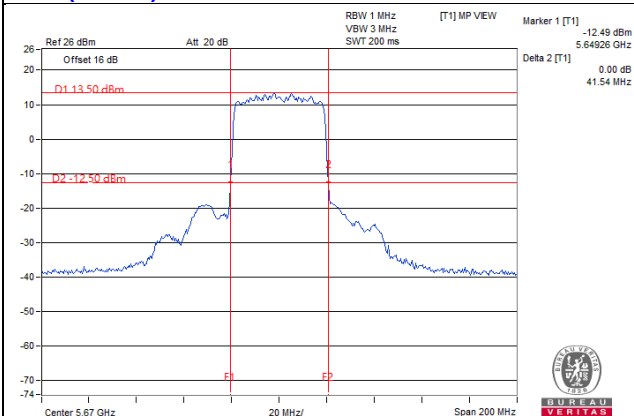
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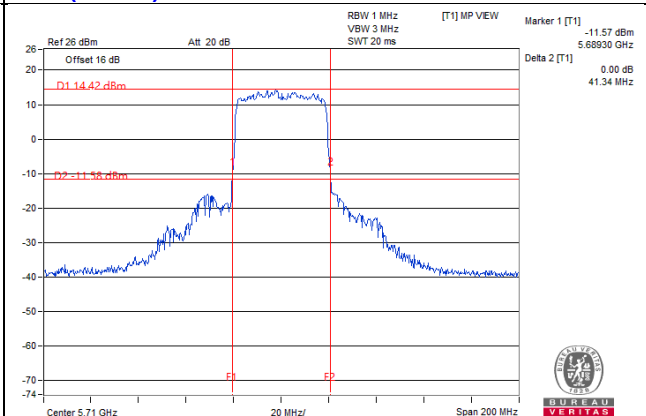
11ax (40MHz) 1S4T TxBF CH142 Ant3



11ax (40MHz) 1S4T TxBF CH134 Ant4

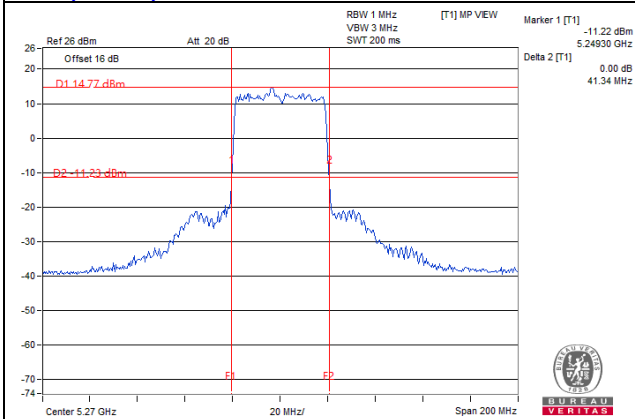


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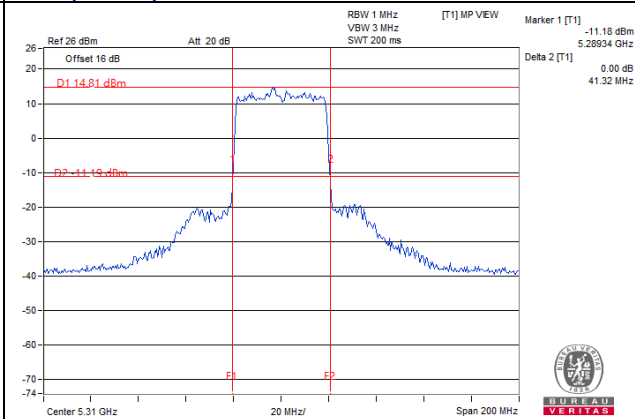


26dB BANDWIDTH SPECTRUM PLOT

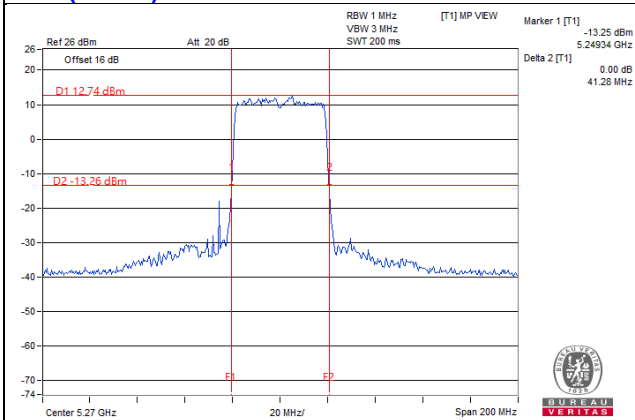
11ax (40MHz) 2S4T TxBF CH54 Ant1



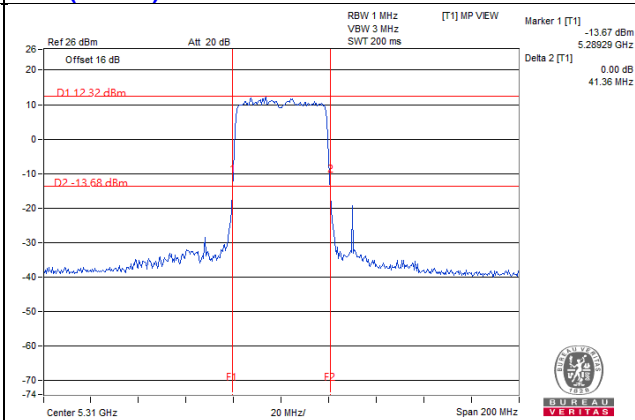
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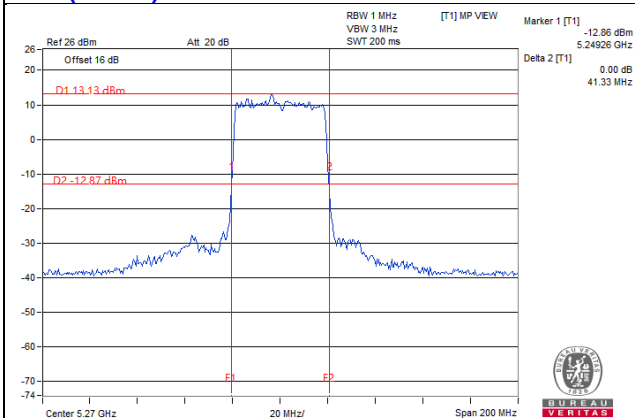
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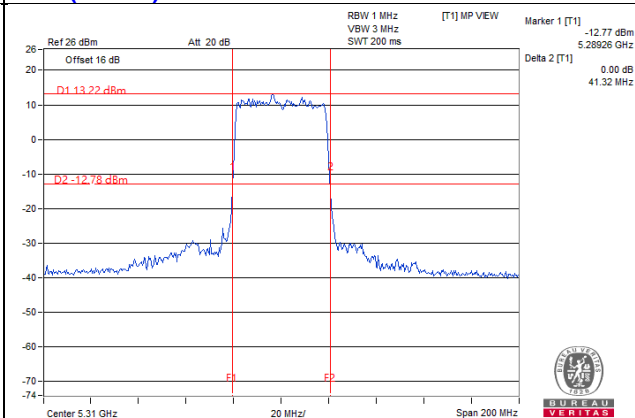
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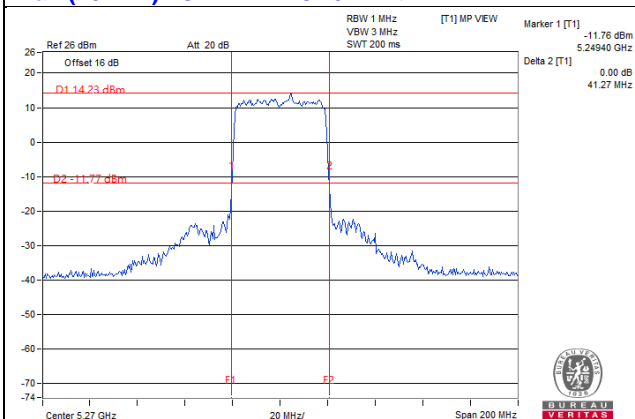
11ax (40MHz) 2S4T TxBF CH54 Ant3



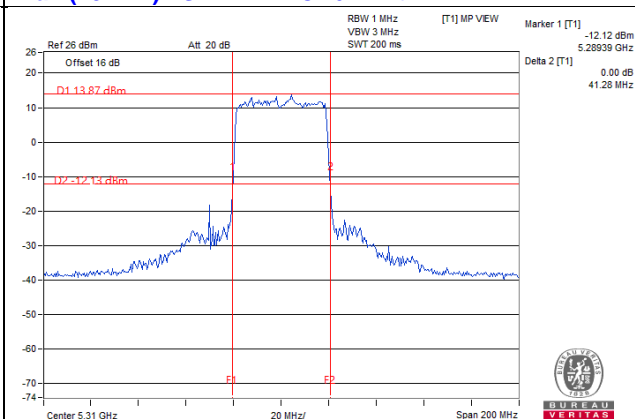
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11ax (40MHz) 2S4T TxBF CH54 Ant4

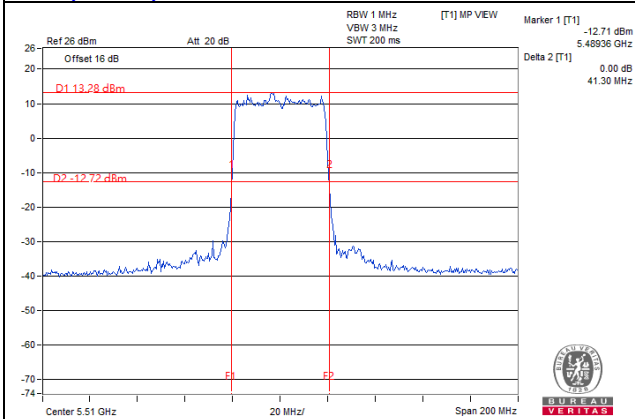


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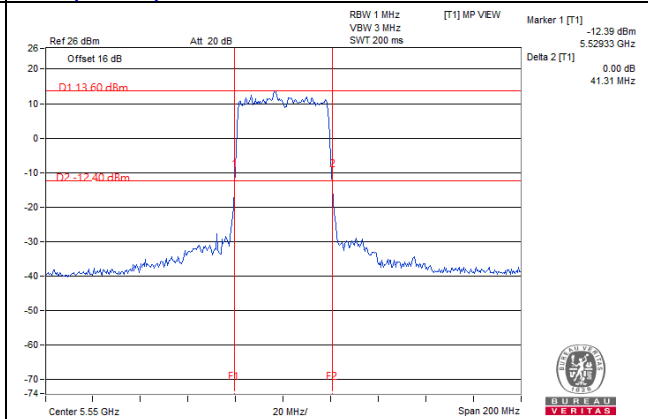


26dB BANDWIDTH SPECTRUM PLOT

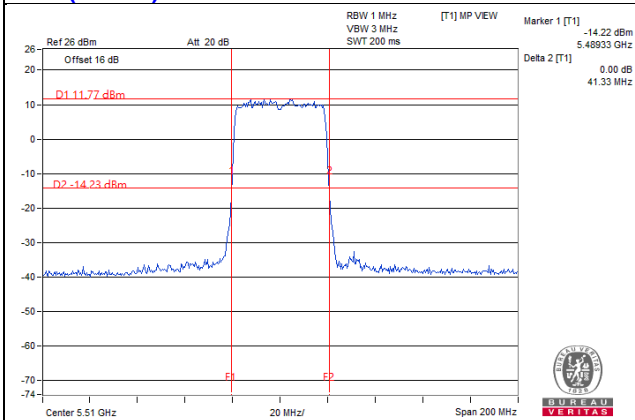
11ax (40MHz) 2S4T TxBF CH102 Ant1



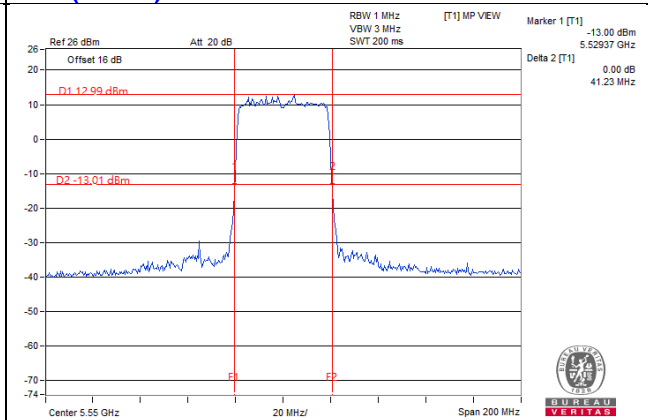
11ax (40MHz) 2S4T TxBF CH110 Ant1



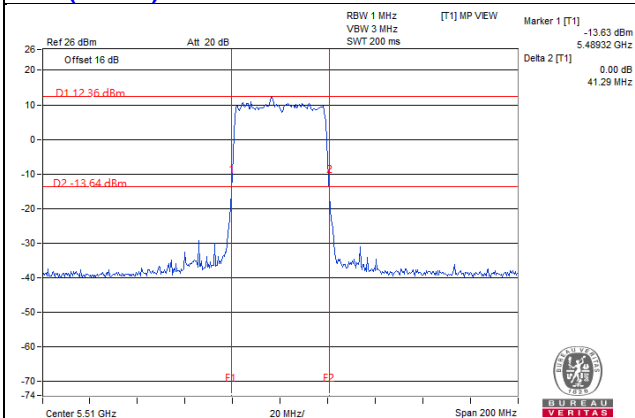
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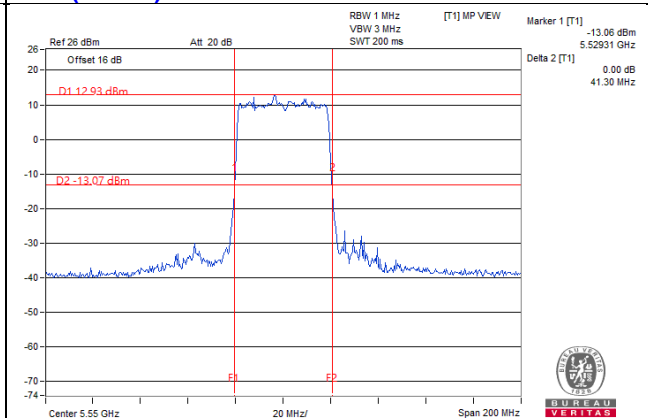
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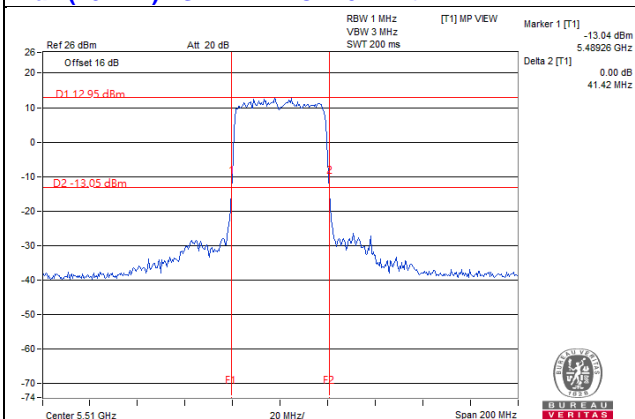
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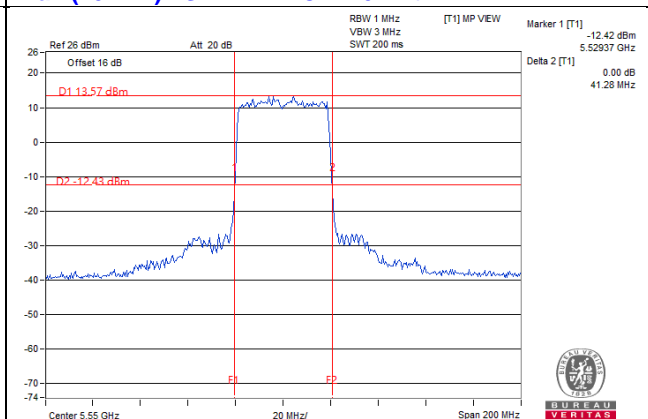
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11ax (40MHz) 2S4T TxBF CH102 Ant4

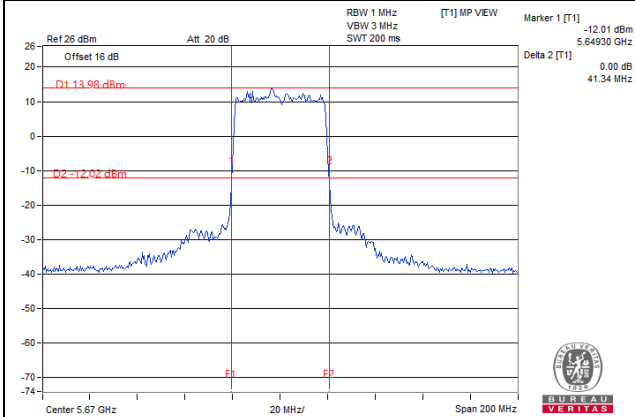


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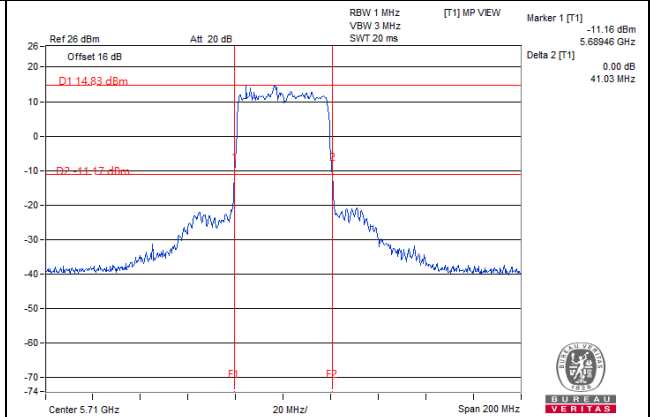


26dB BANDWIDTH SPECTRUM PLOT

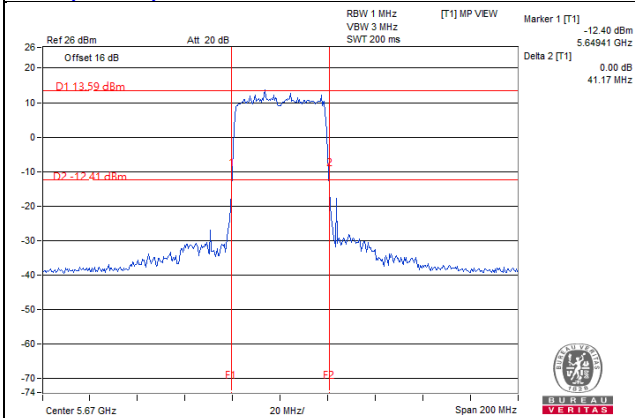
11ax (40MHz) 2S4T TxBF CH134 Ant1



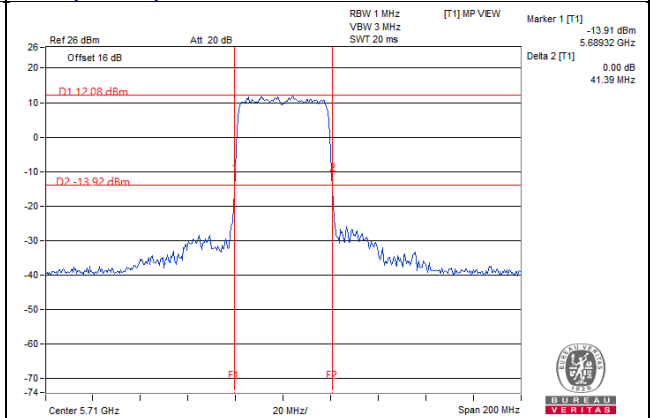
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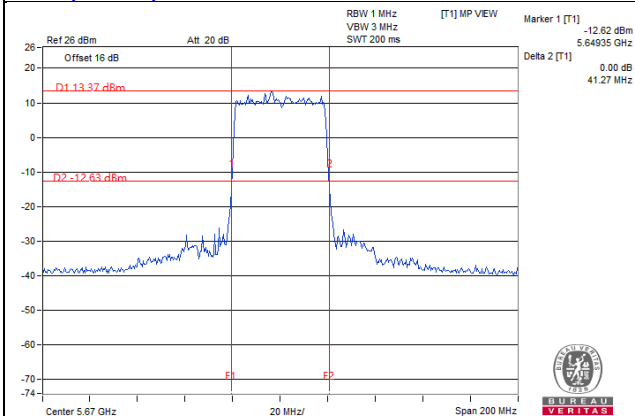
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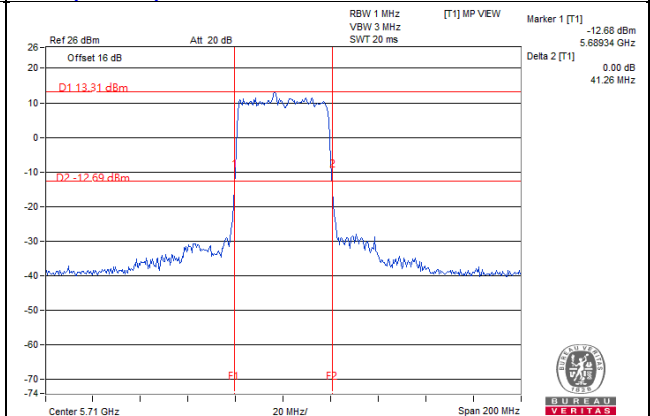
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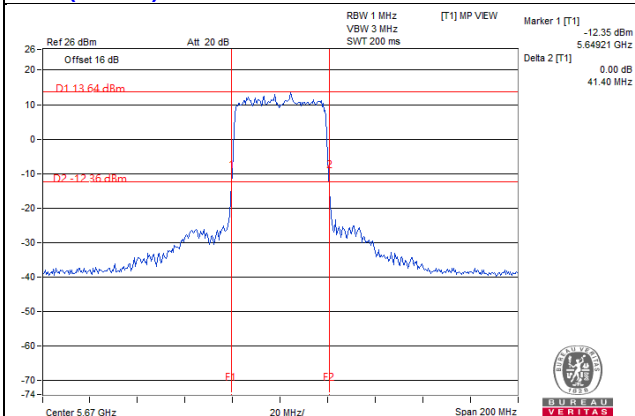
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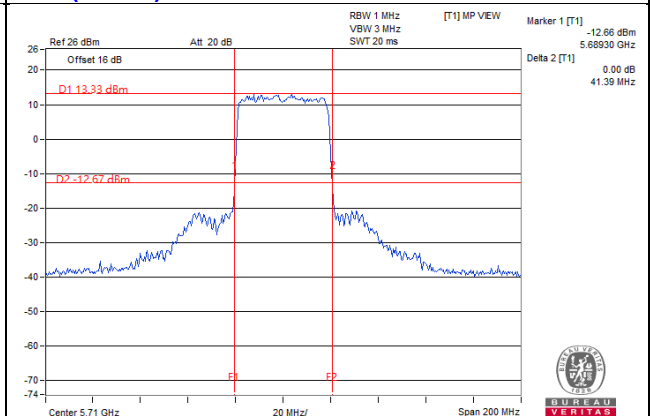
11ax (40MHz) 2S4T TxBF CH142 Ant3



11ax (40MHz) 2S4T TxBF CH134 Ant4

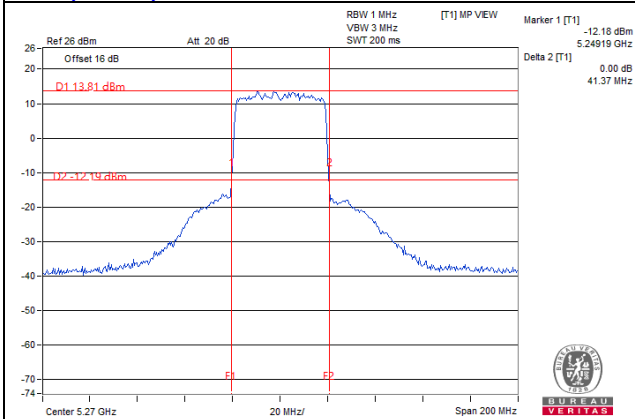


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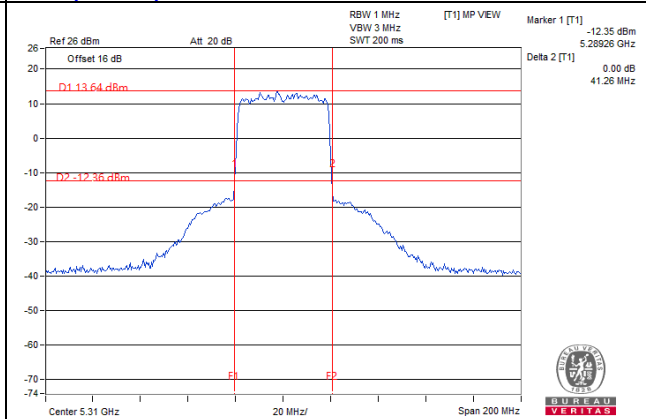


26dB BANDWIDTH SPECTRUM PLOT

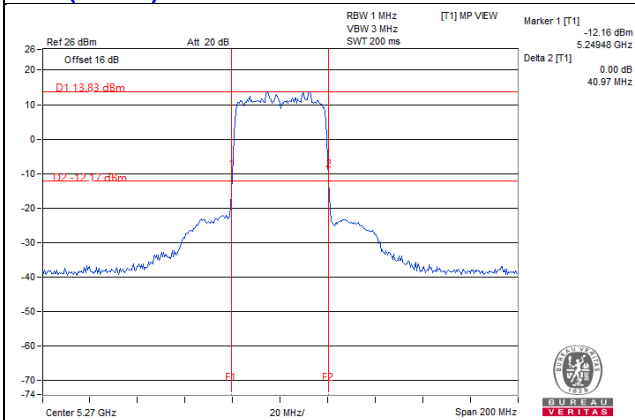
11ax (40MHz) 3S4T TxBF CH54 Ant1



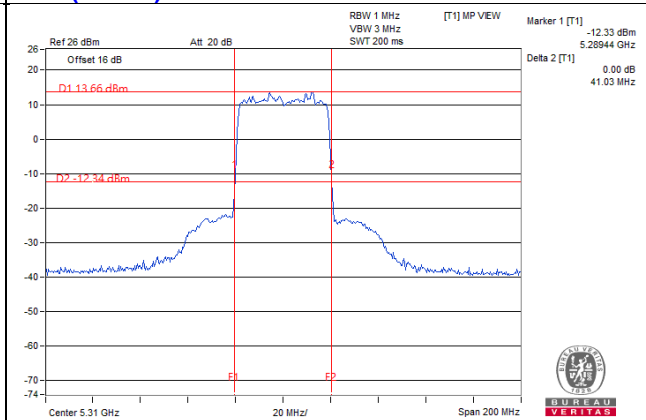
11ax (40MHz) 3S4T TxBF CH62 Ant1



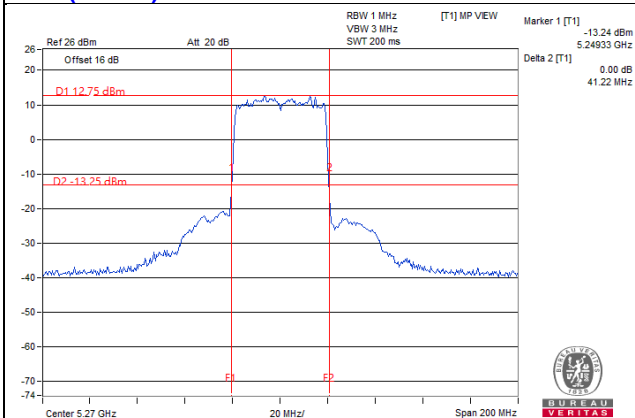
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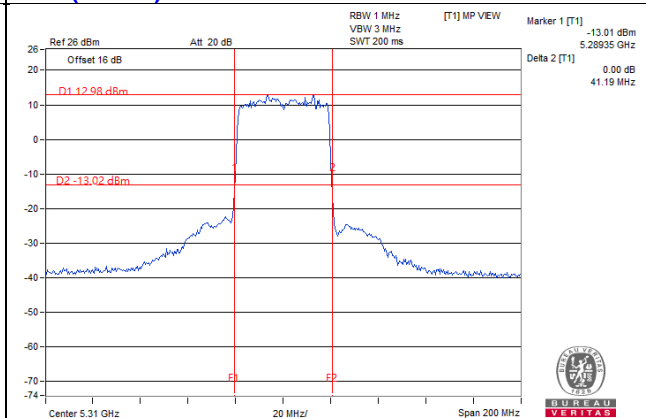
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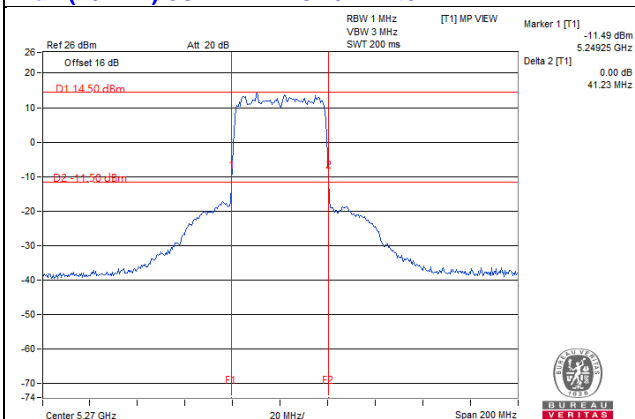
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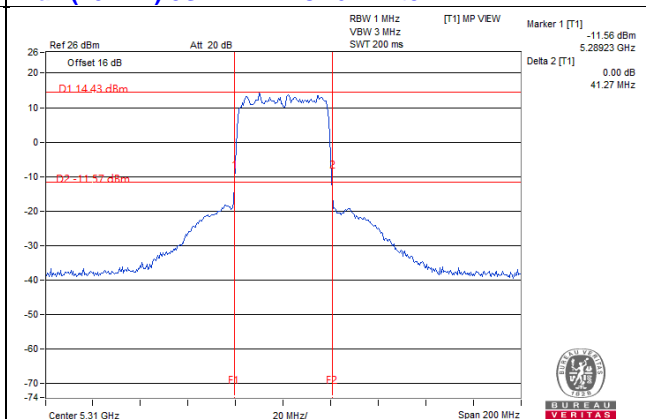
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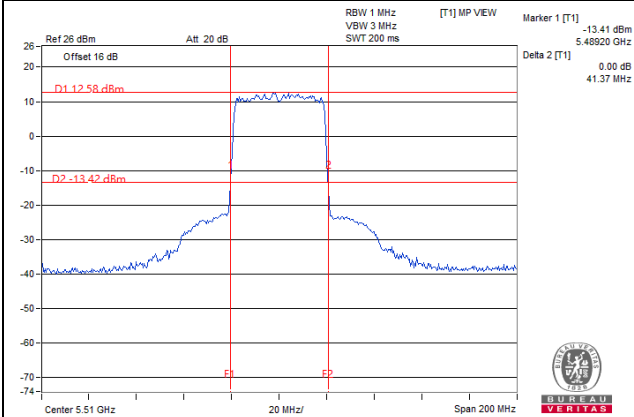


11ax (40MHz) 3S4T TxBF CH62 Ant3

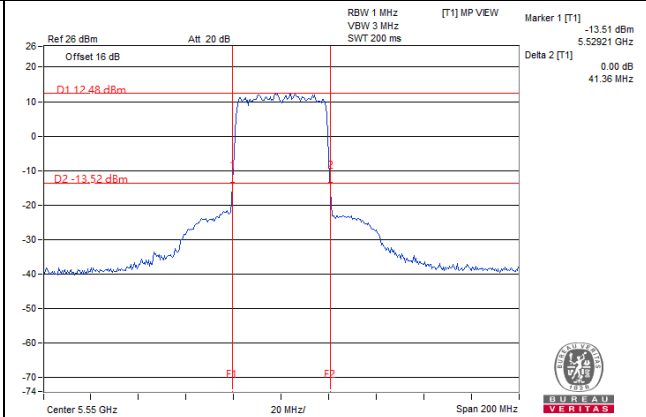


26dB BANDWIDTH SPECTRUM PLOT

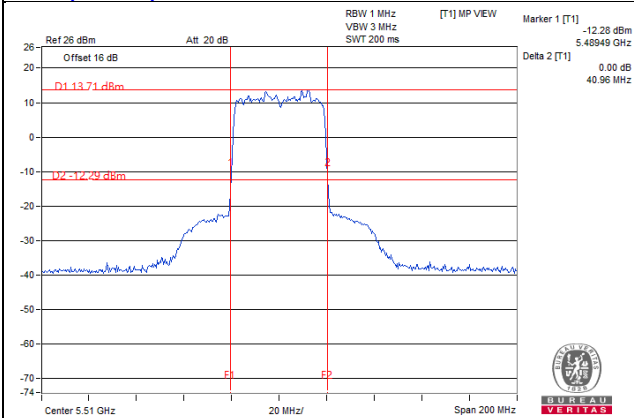
11ax (40MHz) 3S4T TxBF CH102 Ant1



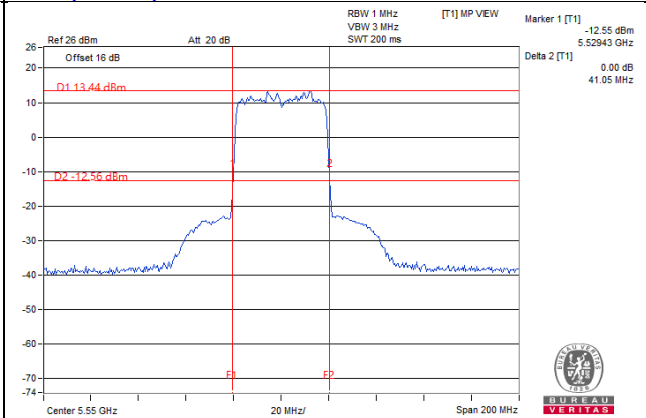
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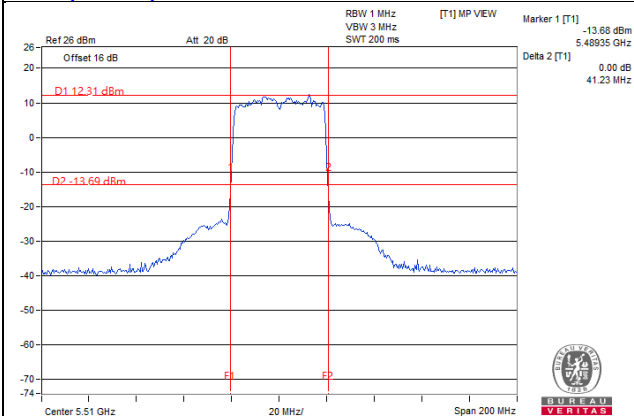
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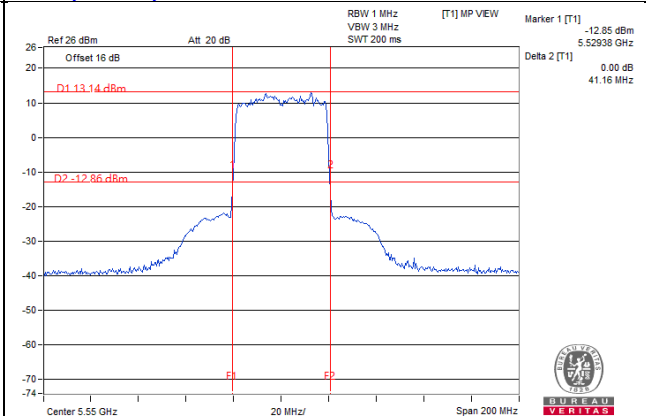
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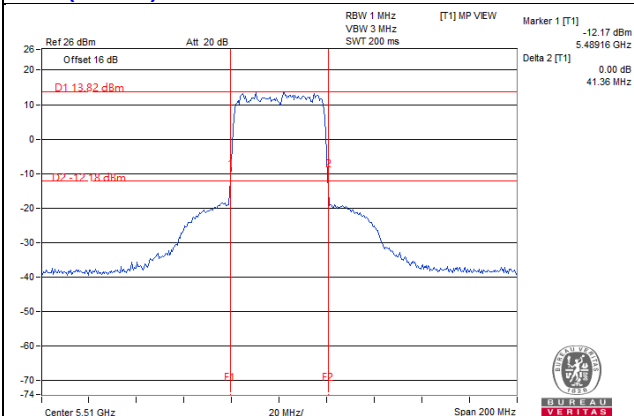
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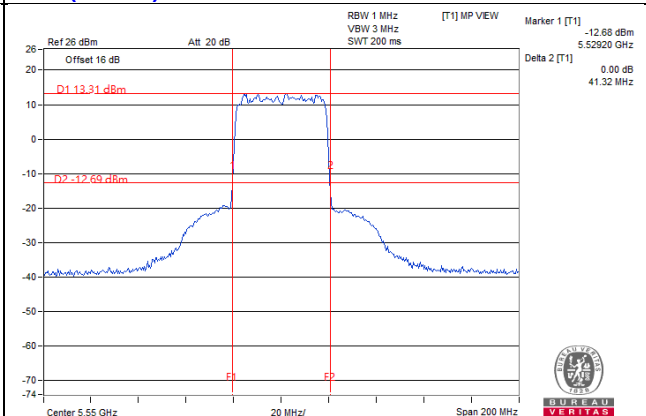
11ax (40MHz) 3S4T TxBF CH110 Ant3



11ax (40MHz) 3S4T TxBF CH102 Ant4

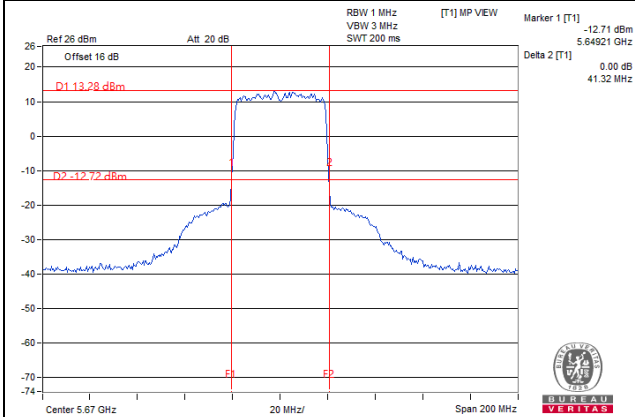


11ax (40MHz) 3S4T TxBF CH110 Ant4

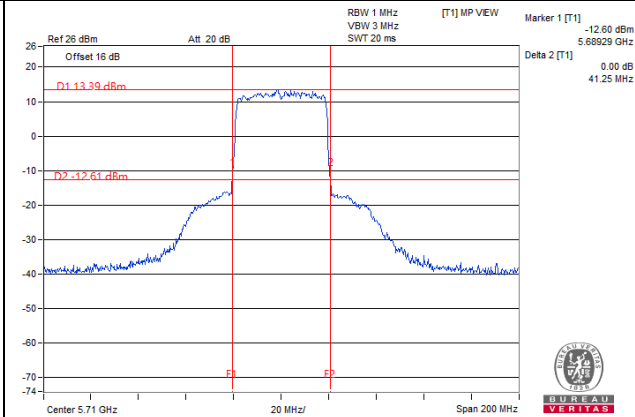


26dB BANDWIDTH SPECTRUM PLOT

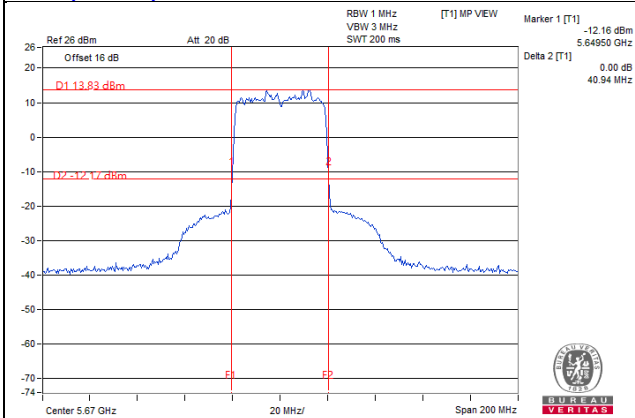
11ax (40MHz) 3S4T TxBF CH134 Ant1



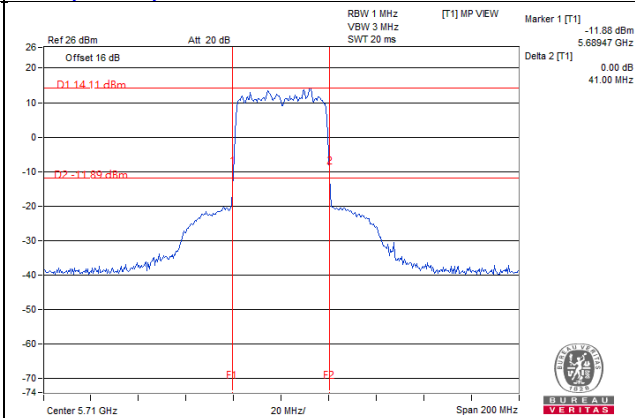
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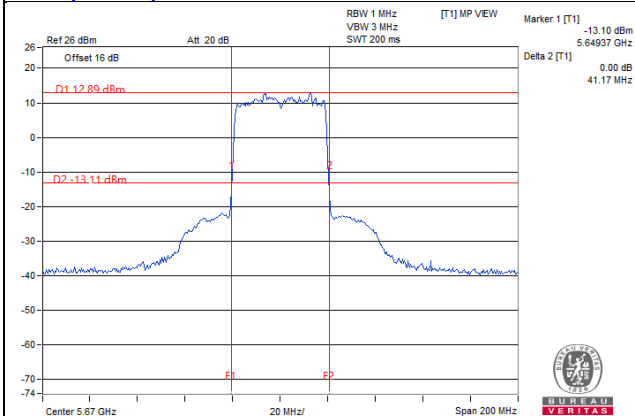
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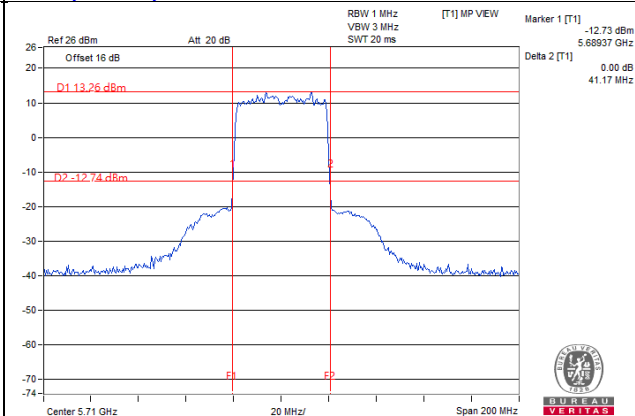
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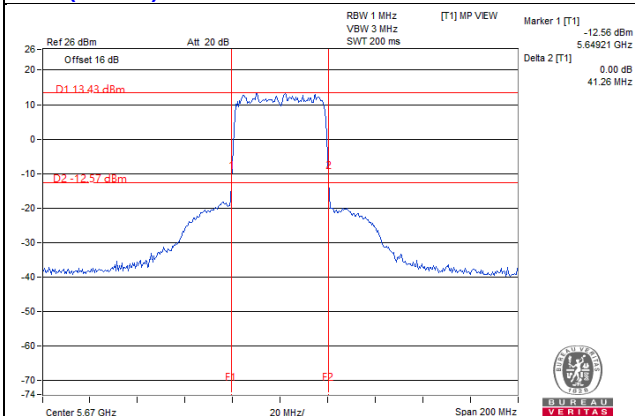
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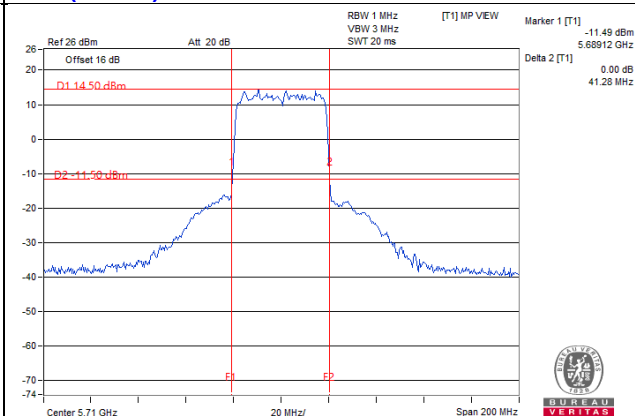
11ax (40MHz) 3S4T TxBF CH142 Ant3



11ax (40MHz) 3S4T TxBF CH134 Ant4

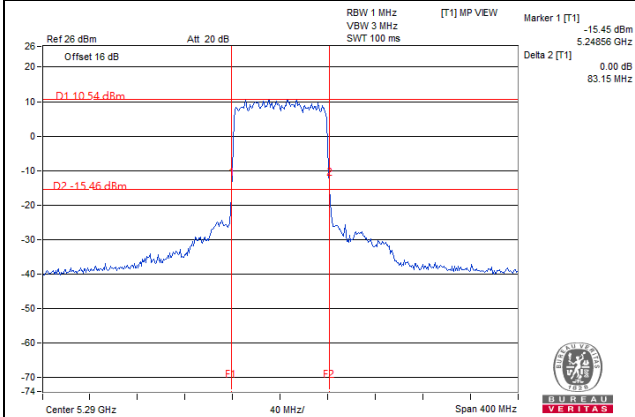


11ax (40MHz) 3S4T TxBF CH142 Ant4

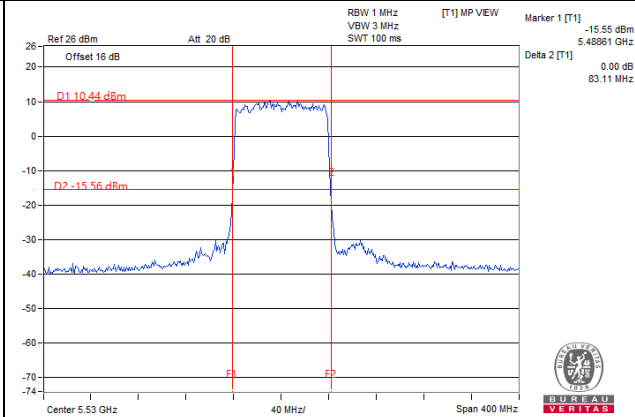


26dB BANDWIDTH SPECTRUM PLOT

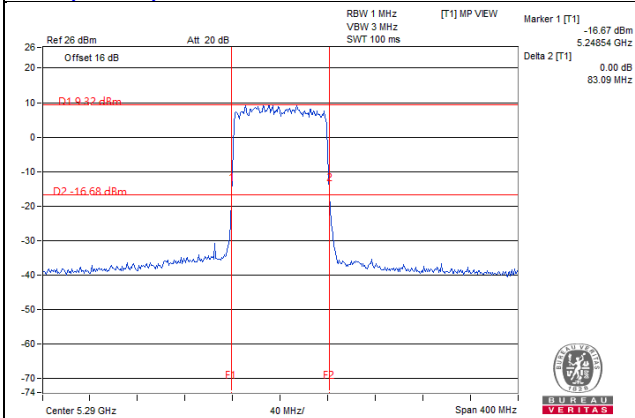
11ax (80MHz) 1S4T CDD CH58 Ant1



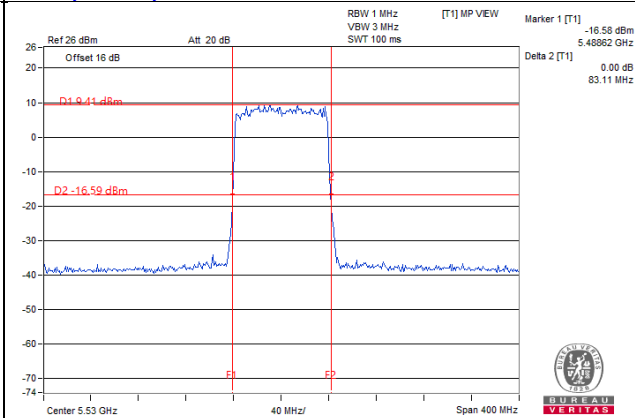
11ax (80MHz) 1S4T CDD CH106 Ant1



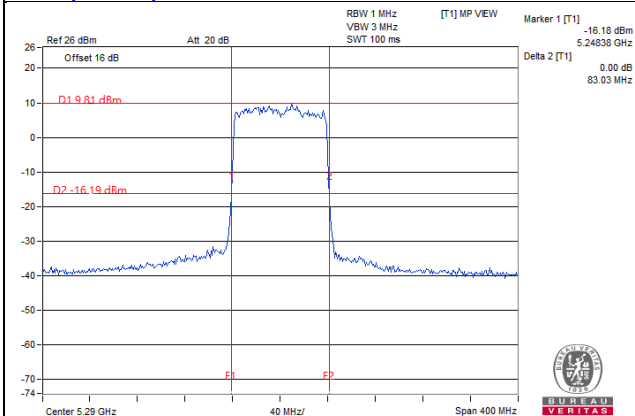
11ax (80MHz) 1S4T CDD CH58 Ant2



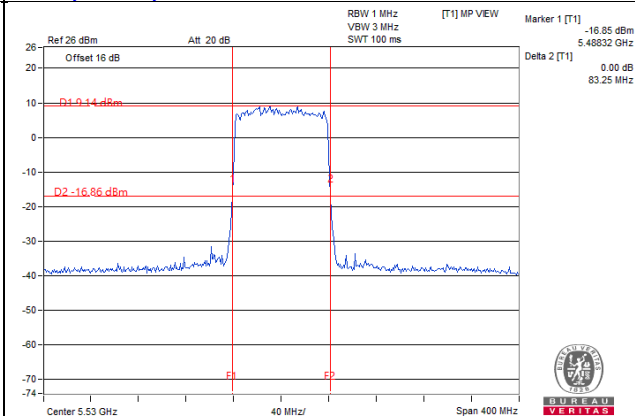
11ax (80MHz) 1S4T CDD CH106 Ant2



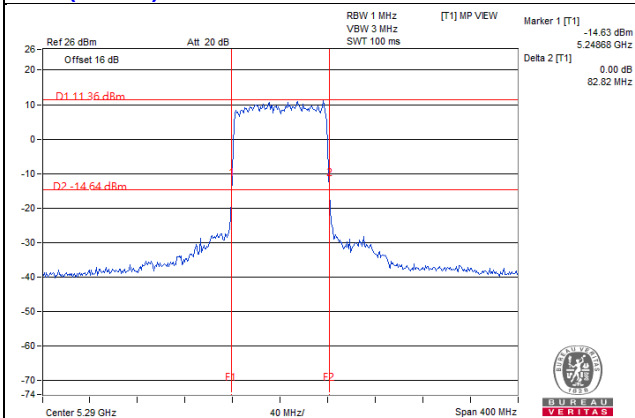
11ax (80MHz) 1S4T CDD CH58 Ant3



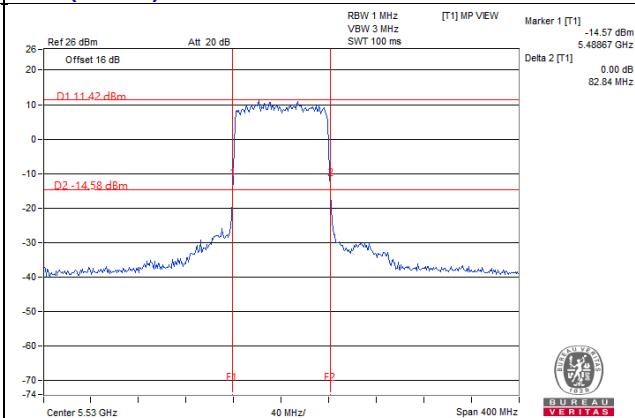
11ax (80MHz) 1S4T CDD CH106 Ant3



11ax (80MHz) 1S4T CDD CH58 Ant4

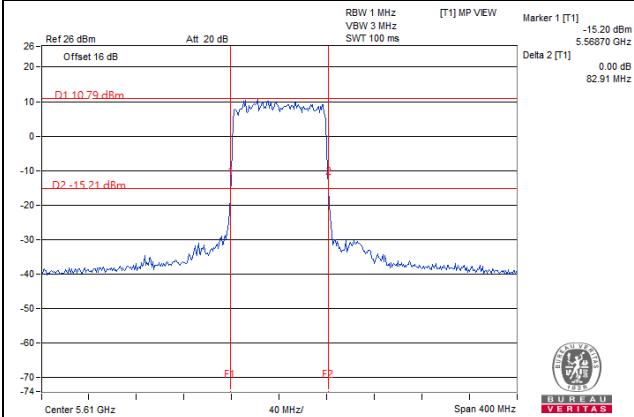


11ax (80MHz) 1S4T CDD CH106 Ant4

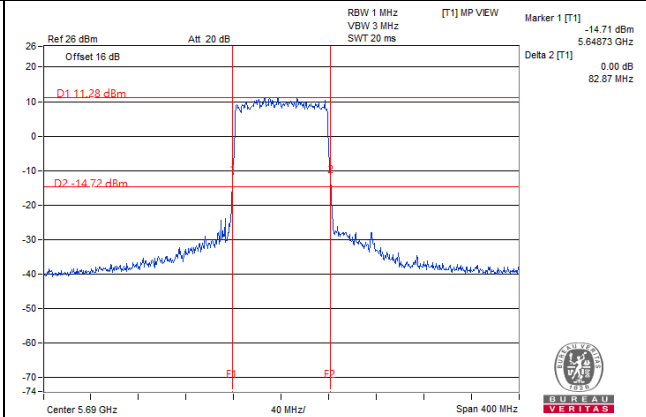


26dB BANDWIDTH SPECTRUM PLOT

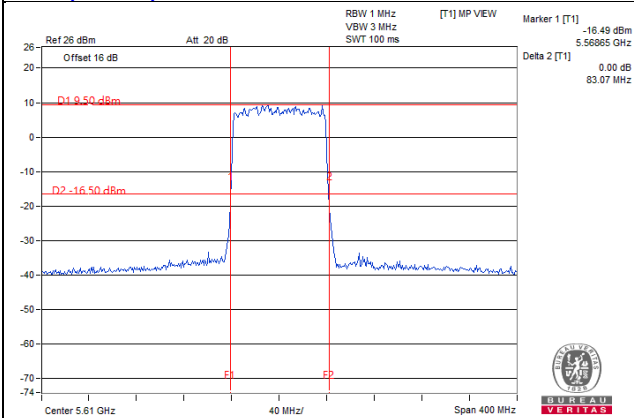
11ax (80MHz) 1S4T CDD CH122 Ant1



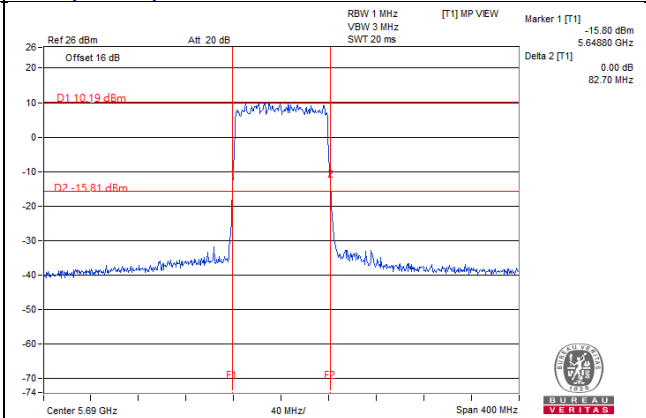
11ax (80MHz) 1S4T CDD CH138 Ant1



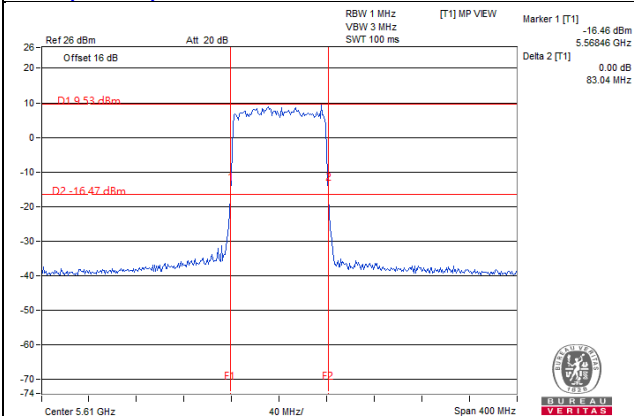
11ax (80MHz) 1S4T CDD CH122 Ant2



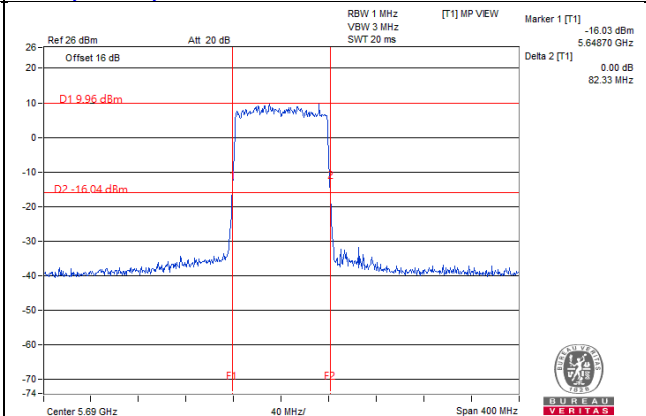
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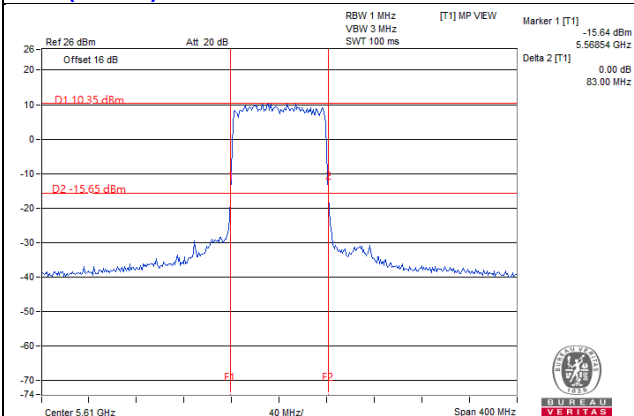
11ax (80MHz) 1S4T CDD CH122 Ant3



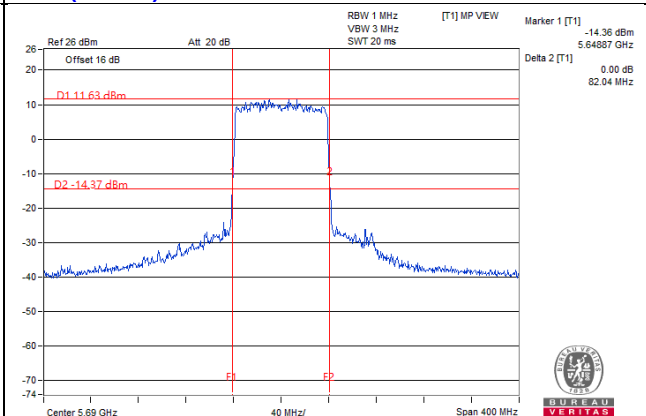
11ax (80MHz) 1S4T CDD CH138 Ant3



11ax (80MHz) 1S4T CDD CH122 Ant4

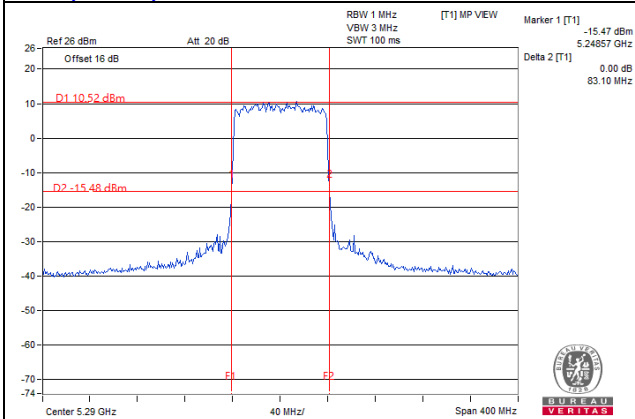


11ax (80MHz) 1S4T CDD CH138 Ant4

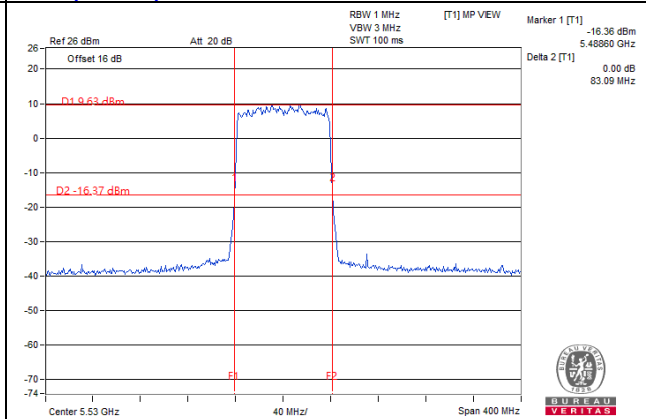


26dB BANDWIDTH SPECTRUM PLOT

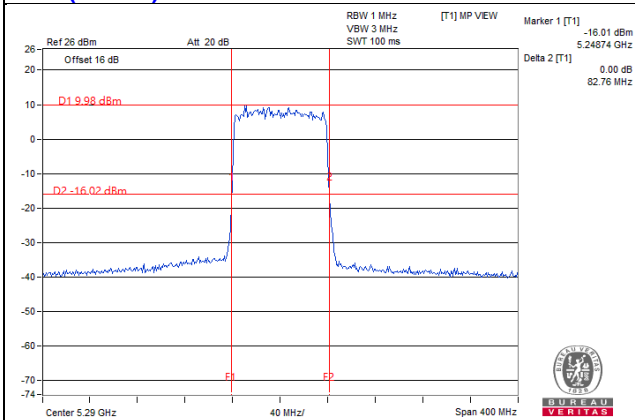
11ax (80MHz) 1S4T TxBF CH58 Ant1



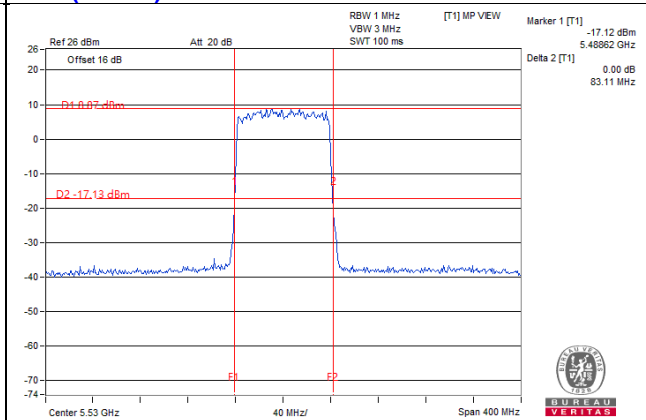
11ax (80MHz) 1S4T TxBF CH106 Ant1



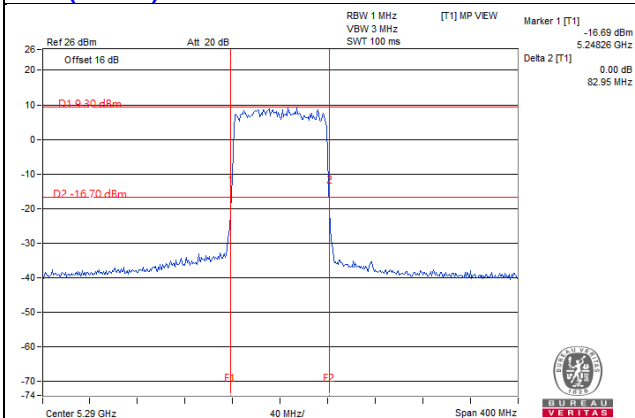
11ax (80MHz) 1S4T TxBF CH58 Ant2



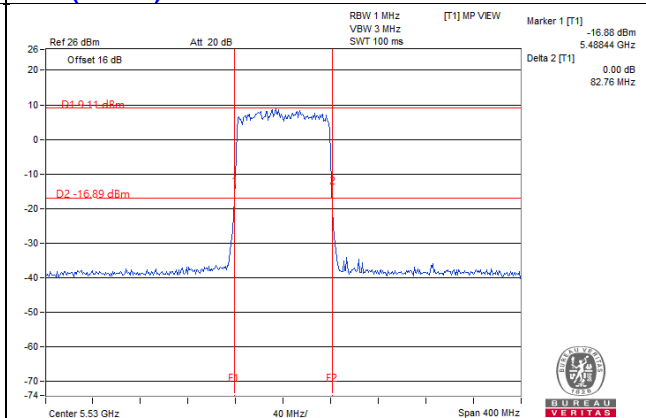
11ax (80MHz) 1S4T TxBF CH106 Ant2



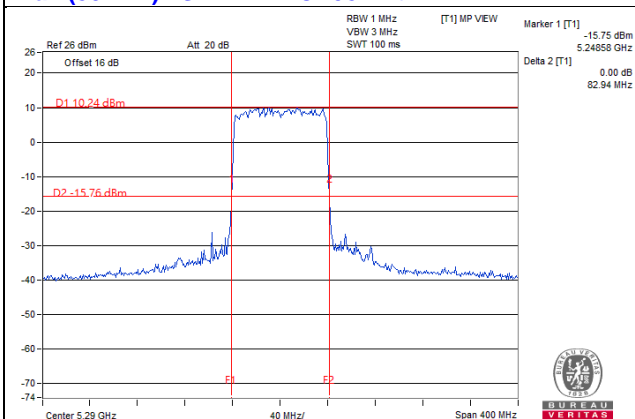
11ax (80MHz) 1S4T TxBF CH58 Ant3



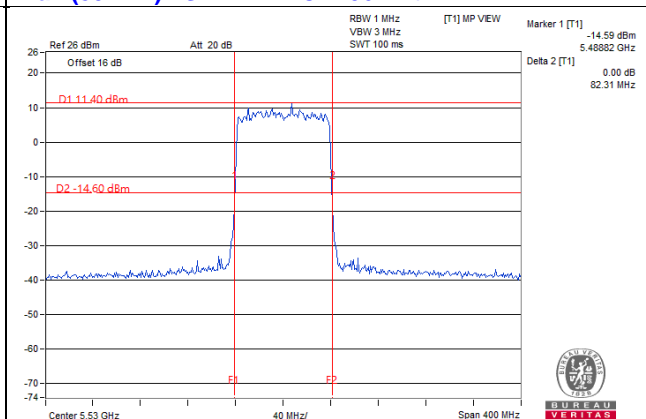
11ax (80MHz) 1S4T TxBF CH106 Ant3



11ax (80MHz) 1S4T TxBF CH58 Ant4

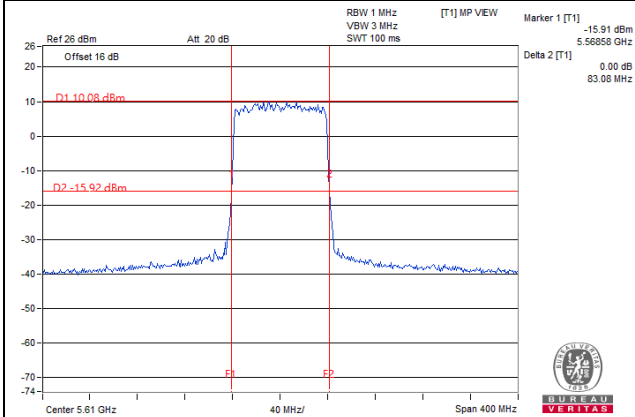


11ax (80MHz) 1S4T TxBF CH106 Ant4

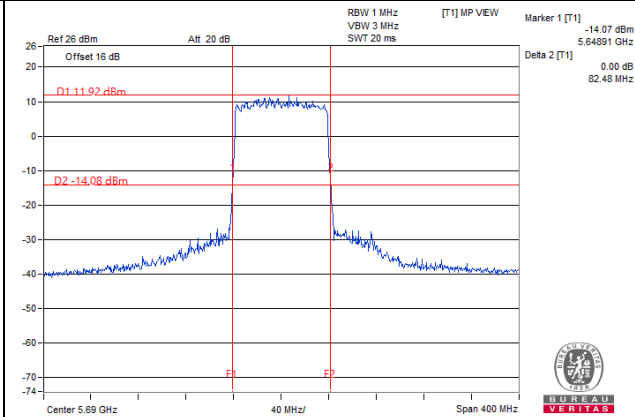


26dB BANDWIDTH SPECTRUM PLOT

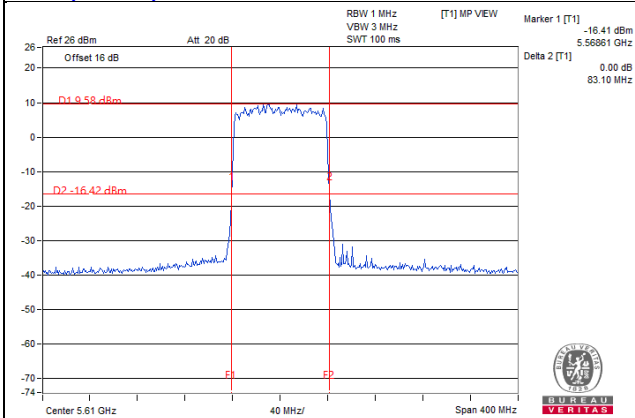
11ax (80MHz) 1S4T TxBF CH122 Ant1



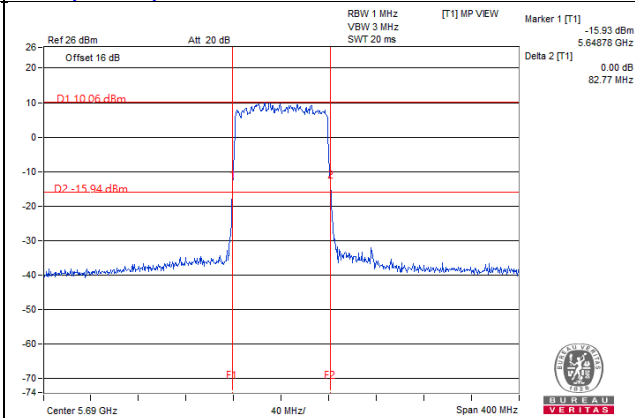
11ax (80MHz) 1S4T TxBF CH138 Ant1



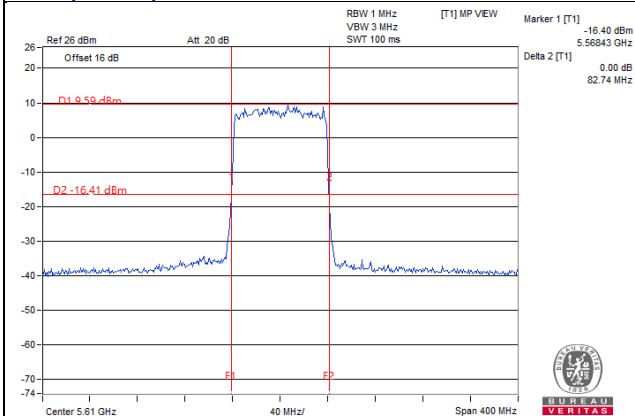
11ax (80MHz) 1S4T TxBF CH122 Ant2



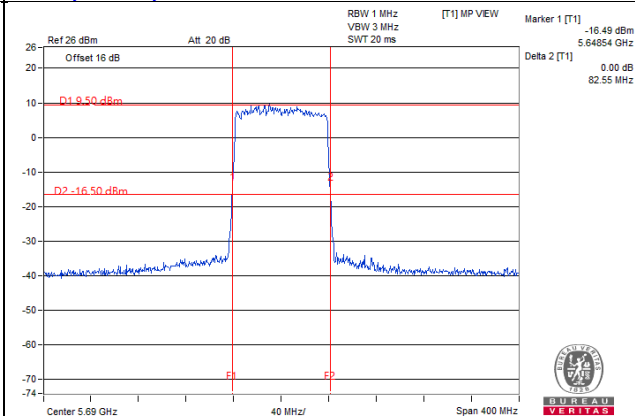
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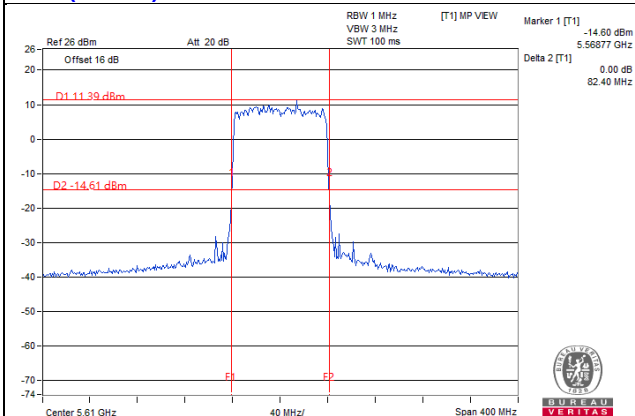
11ax (80MHz) 1S4T TxBF CH122 Ant3



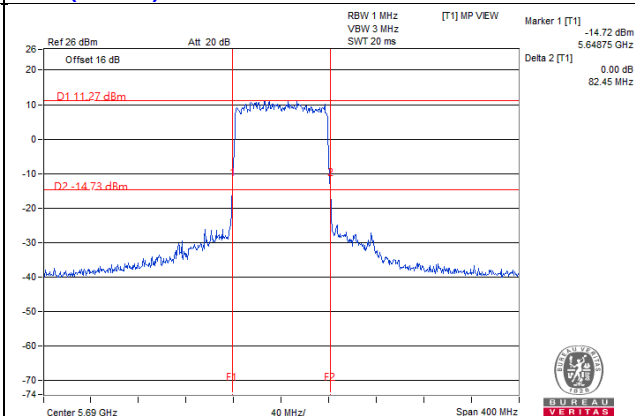
11ax (80MHz) 1S4T TxBF CH138 Ant3



11ax (80MHz) 1S4T TxBF CH122 Ant4

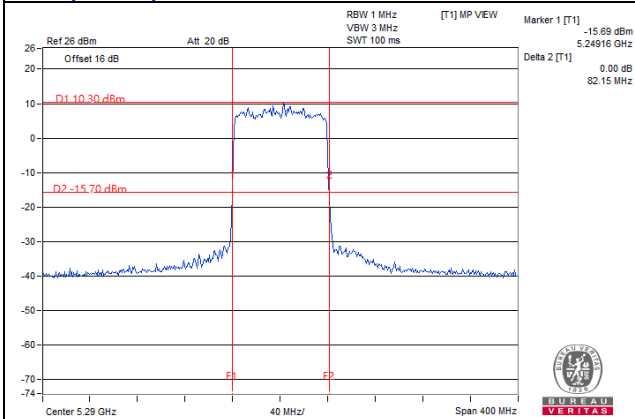


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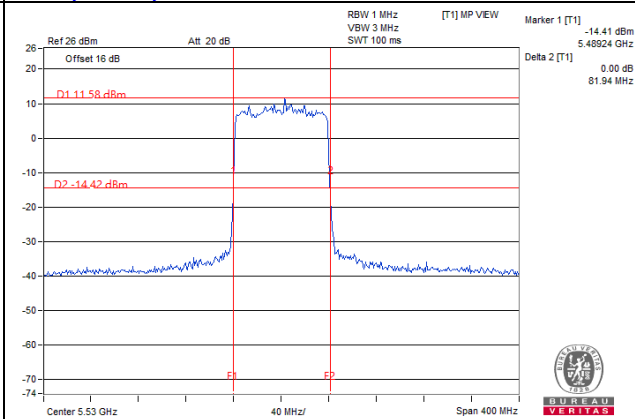


26dB BANDWIDTH SPECTRUM PLOT

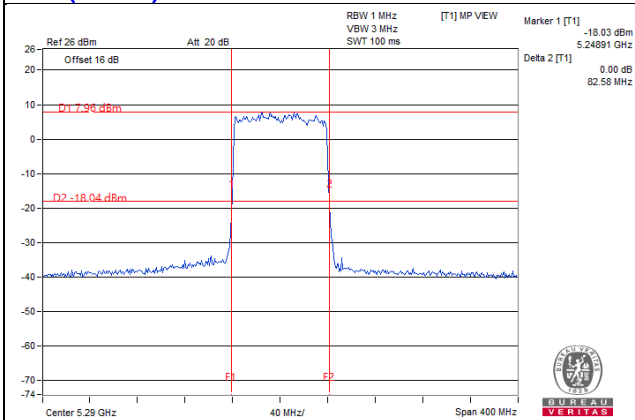
11ax (80MHz) 2S4T TxBF CH58 Ant1



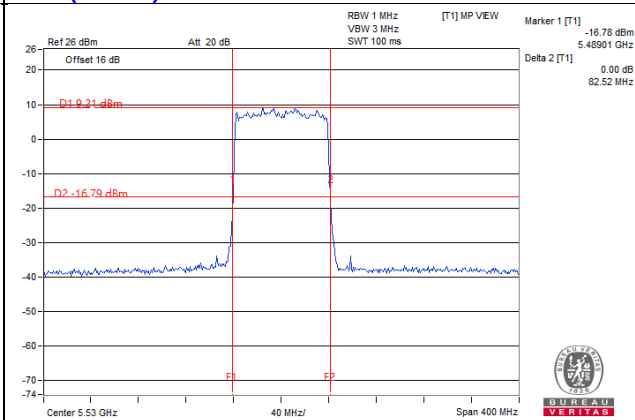
11ax (80MHz) 2S4T TxBF CH106 Ant1



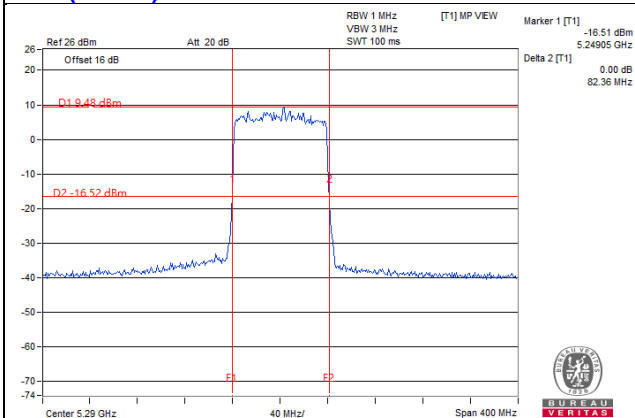
11ax (80MHz) 2S4T TxBF CH58 Ant2



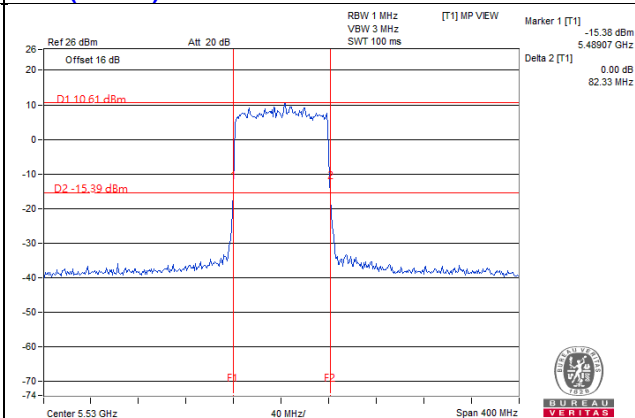
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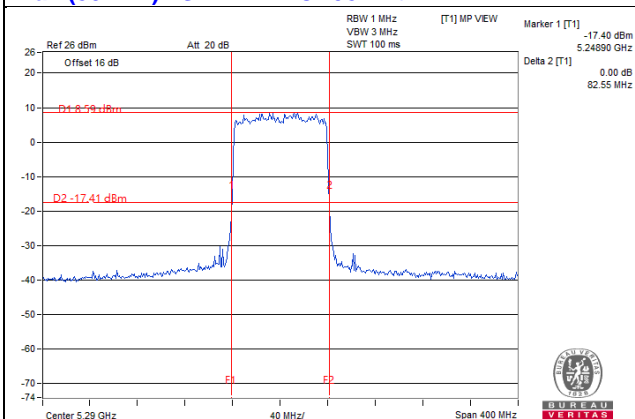
11ax (80MHz) 2S4T TxBF CH58 Ant3



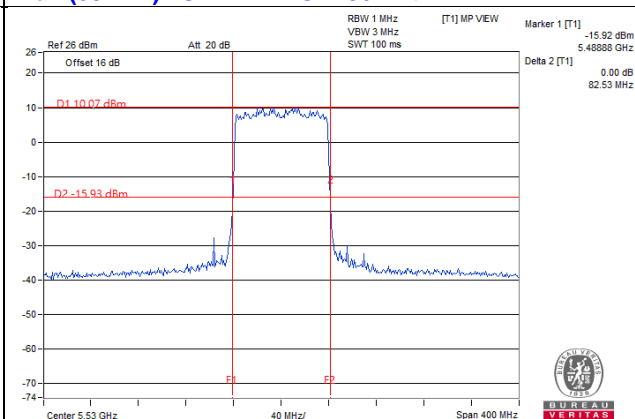
11ax (80MHz) 2S4T TxBF CH106 Ant3



11ax (80MHz) 2S4T TxBF CH58 Ant4

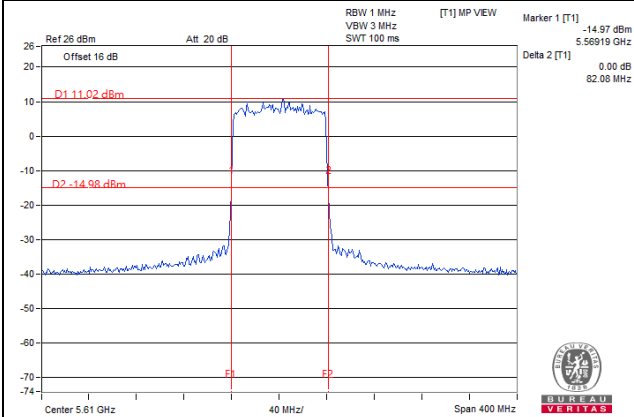


11ax (80MHz) 2S4T TxBF CH106 Ant4

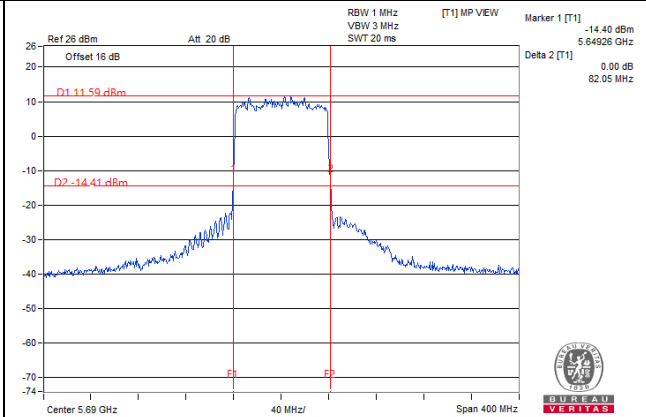


26dB BANDWIDTH SPECTRUM PLOT

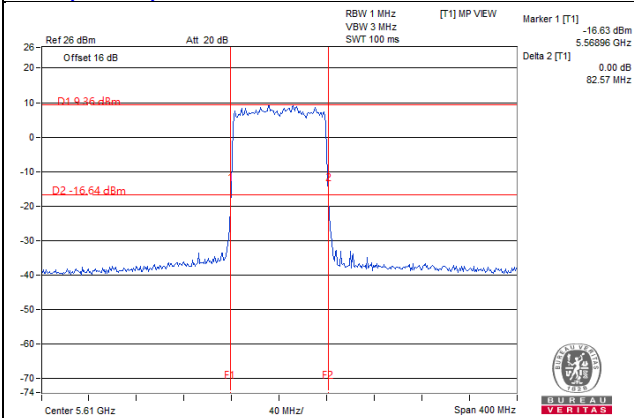
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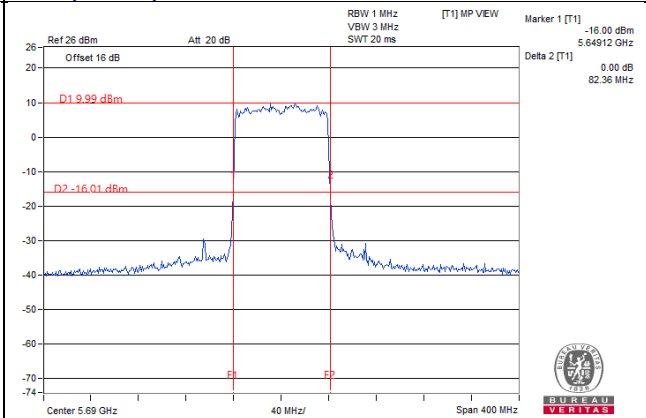
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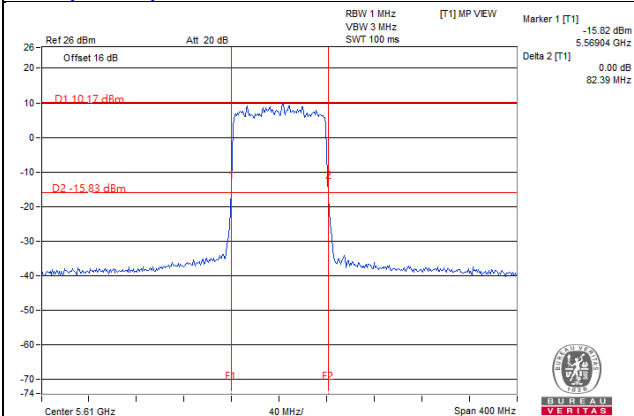
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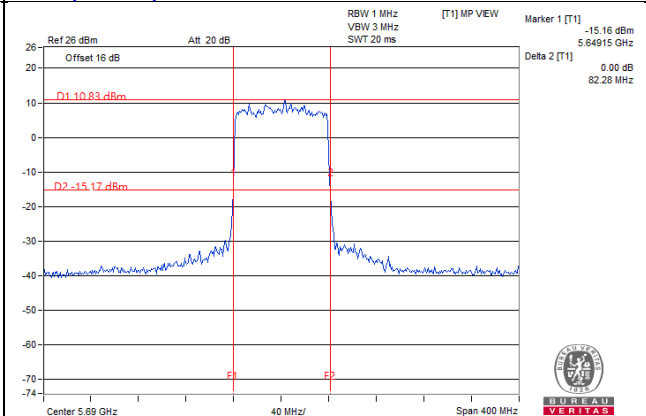
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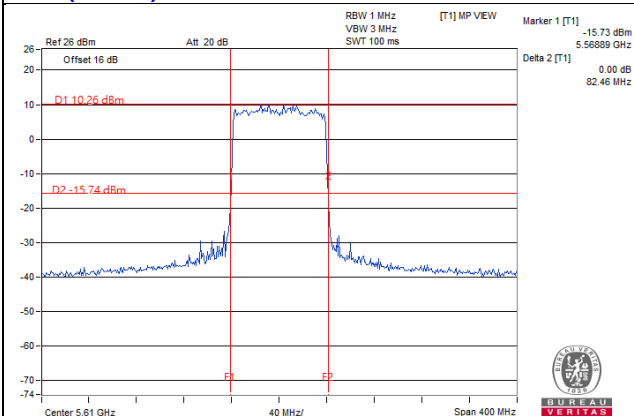
11ax (80MHz) 2S4T TxBF CH122 Ant3



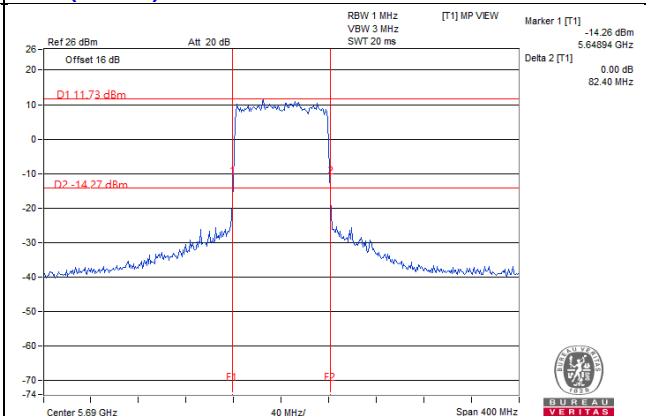
11ax (80MHz) 2S4T TxBF CH138 Ant3



11ax (80MHz) 2S4T TxBF CH122 Ant4

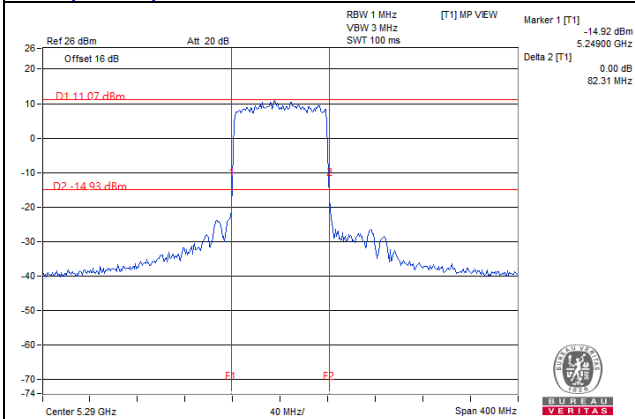


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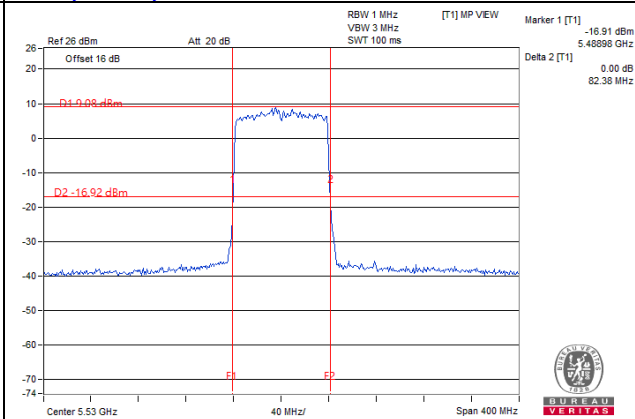


26dB BANDWIDTH SPECTRUM PLOT

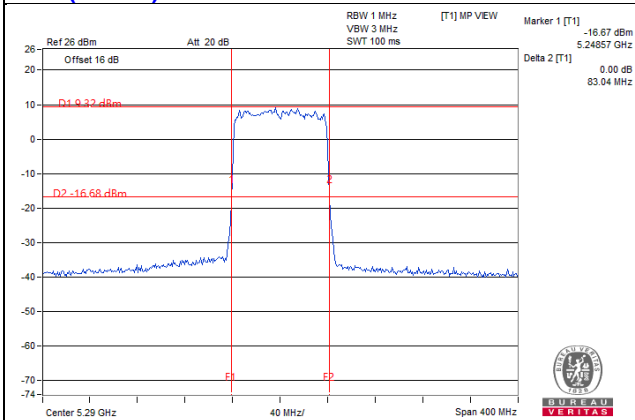
11ax (80MHz) 3S4T TxBF CH58 Ant1



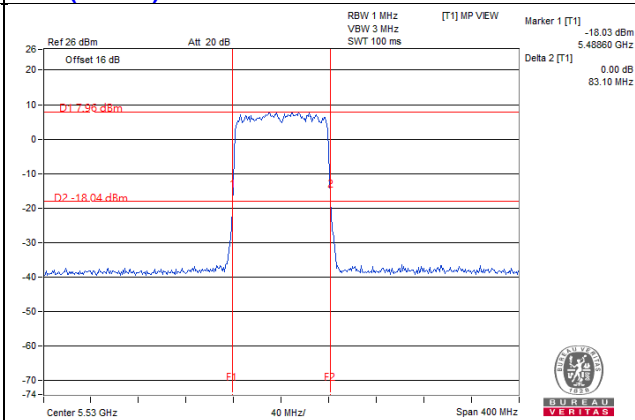
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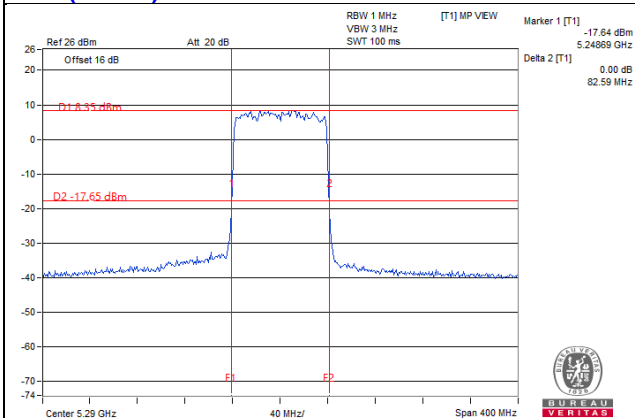
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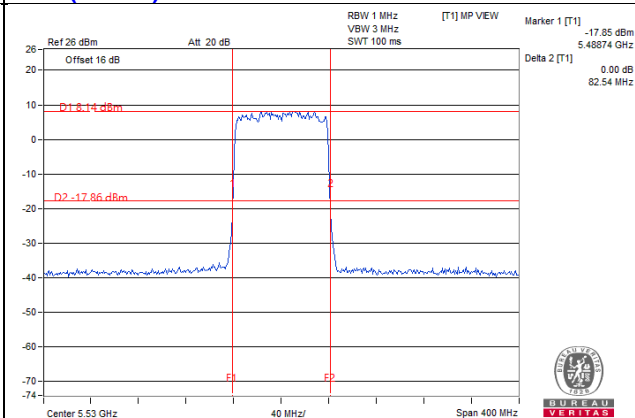
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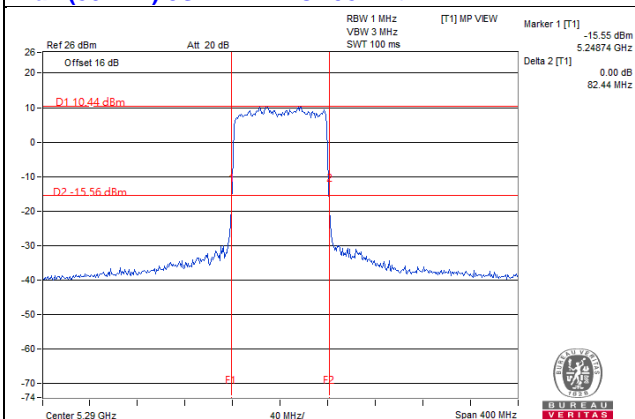
11ax (80MHz) 3S4T TxBF CH58 Ant3



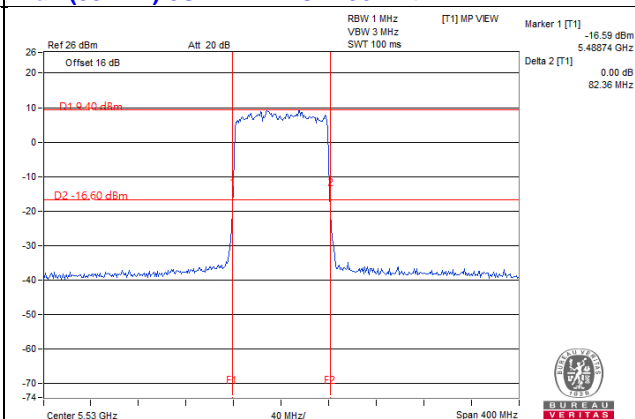
11ax (80MHz) 3S4T TxBF CH106 Ant3



11ax (80MHz) 3S4T TxBF CH58 Ant4

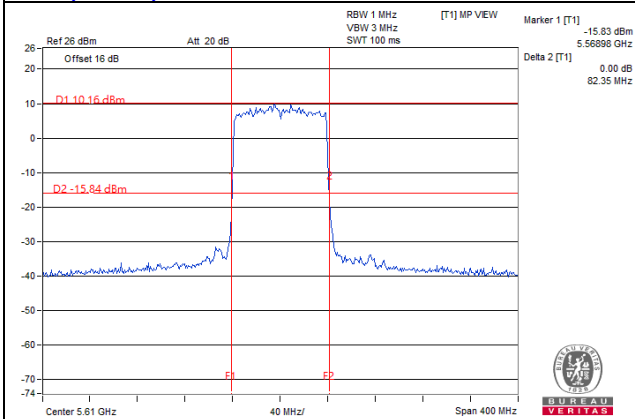


11ax (80MHz) 3S4T TxBF CH106 Ant4

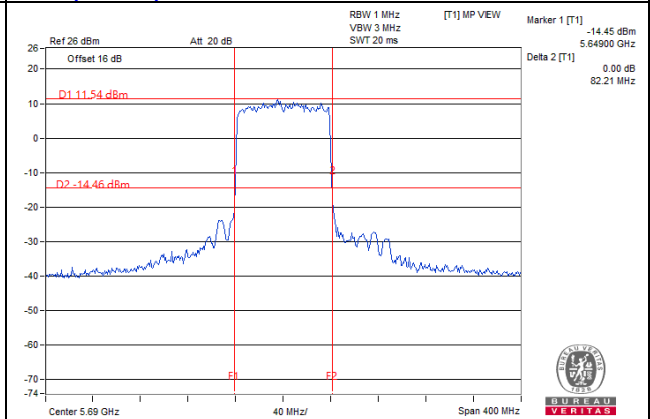


26dB BANDWIDTH SPECTRUM PLOT

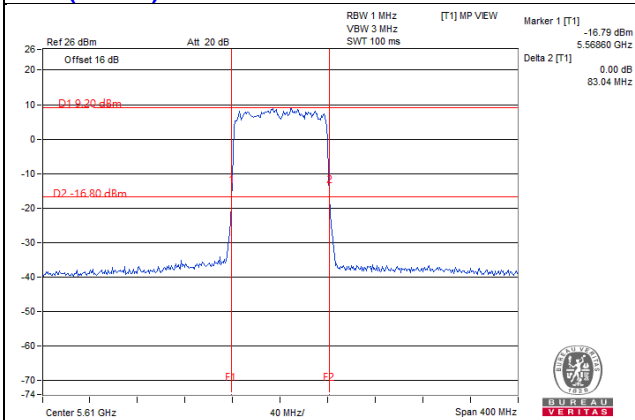
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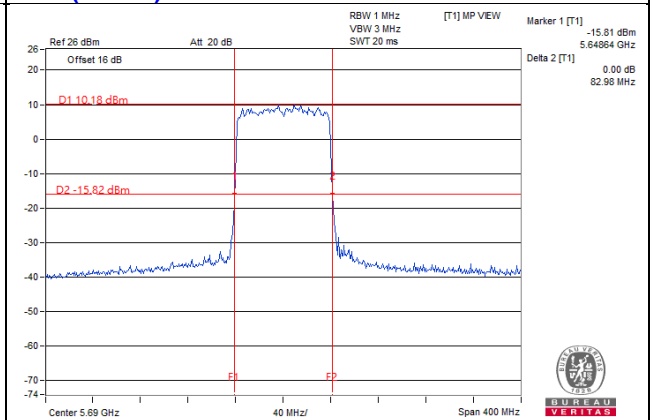
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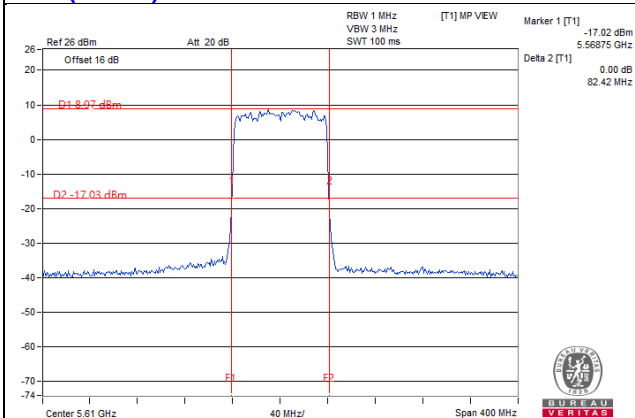
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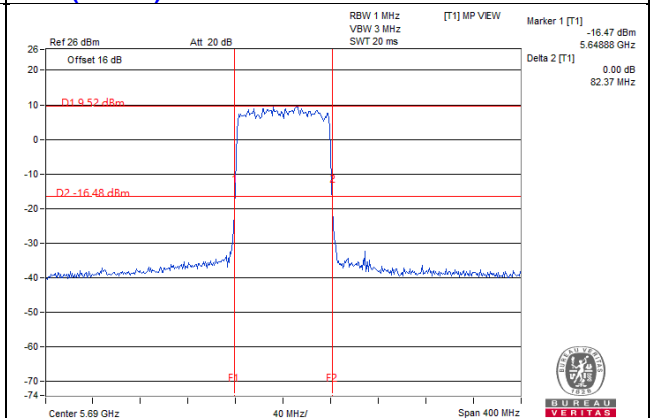
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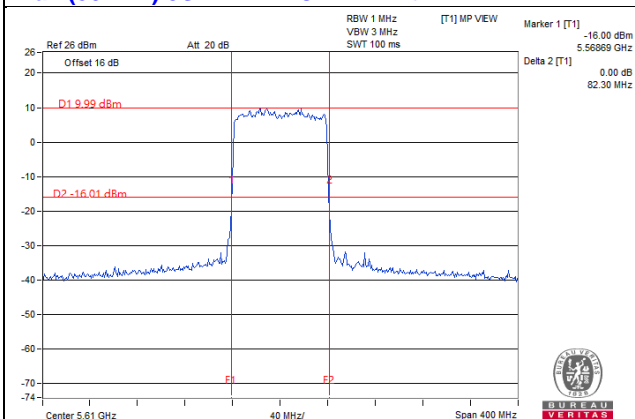
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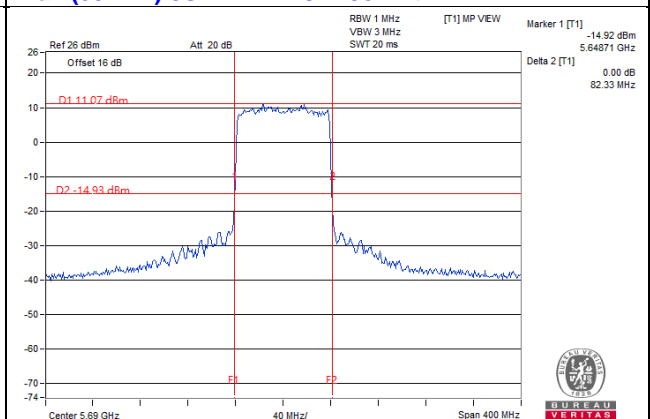
11ax (80MHz) 3S4T TxBF CH138 Ant3



11ax (80MHz) 3S4T TxBF CH122 Ant4

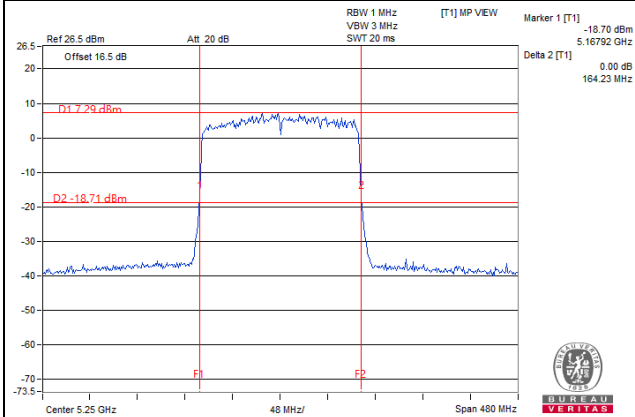


11ax (80MHz) 3S4T TxBF CH138 Ant4

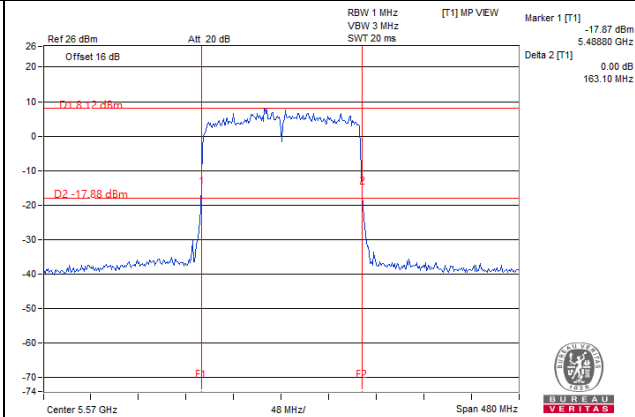


26dB BANDWIDTH SPECTRUM PLOT

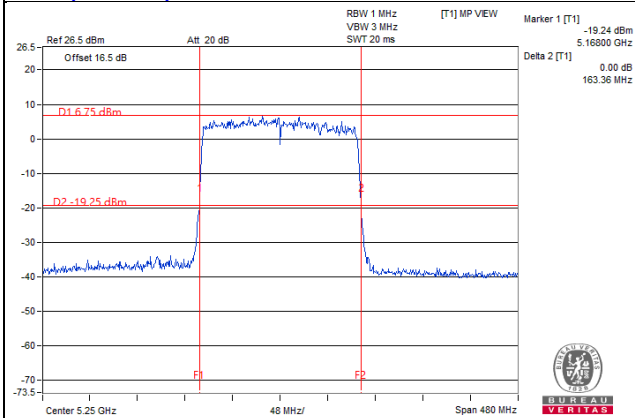
11ax (160MHz) 1S4T CDD CH50 Ant1



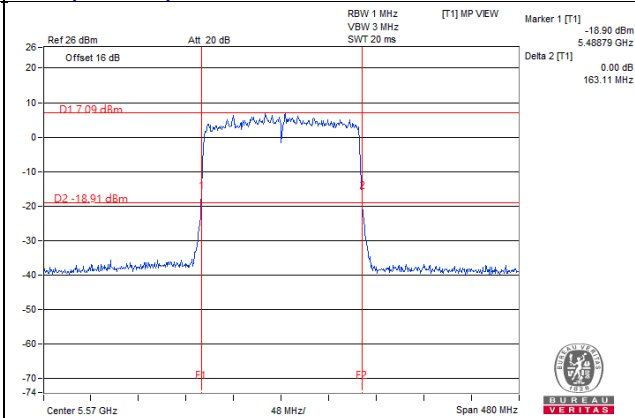
11ax (160MHz) 1S4T CDD CH114 Ant1



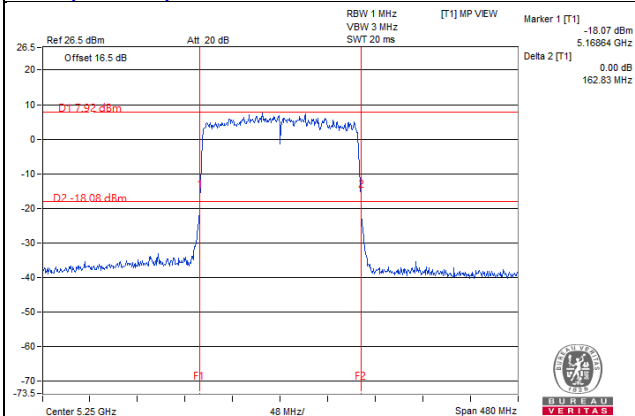
11ax (160MHz) 1S4T CDD CH50 Ant2



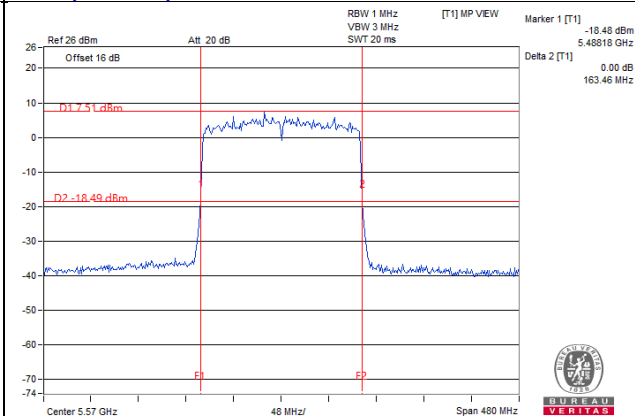
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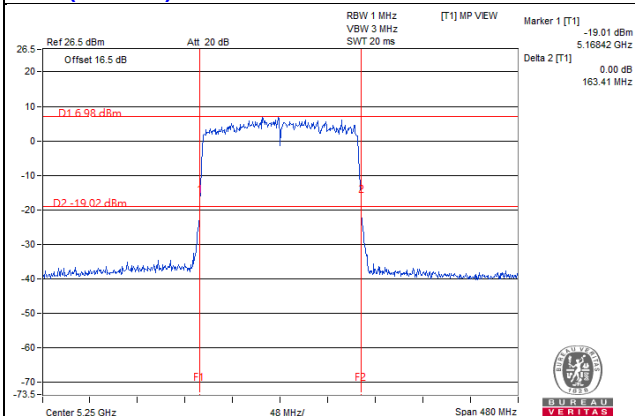
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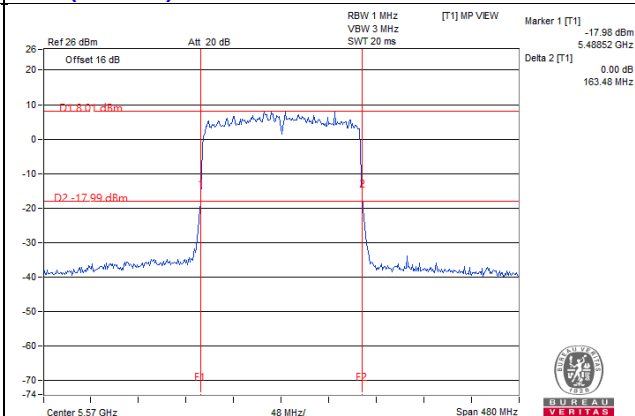
11ax (160MHz) 1S4T CDD CH114 Ant3



11ax (160MHz) 1S4T CDD CH50 Ant4

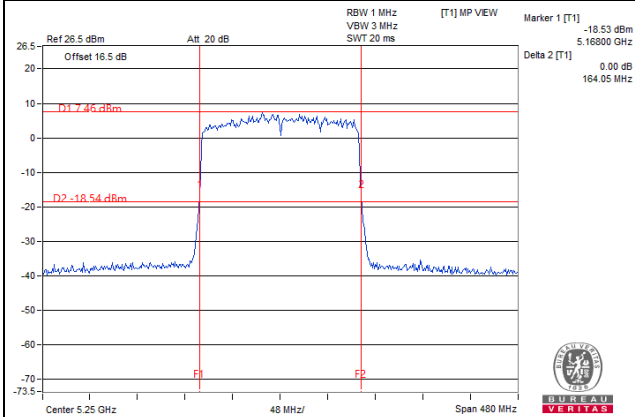


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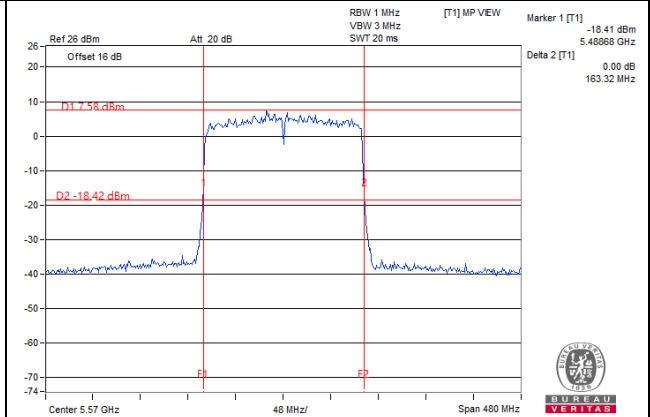


26dB BANDWIDTH SPECTRUM PLOT

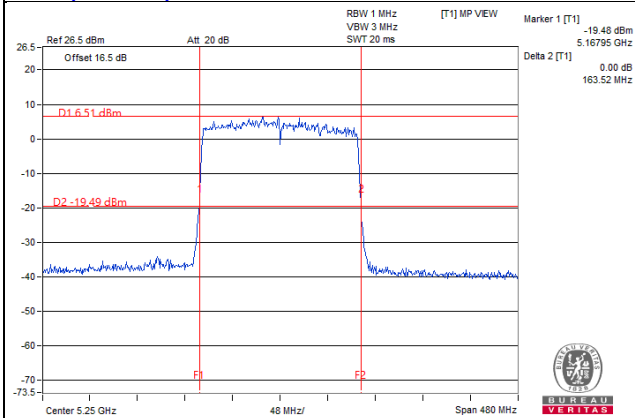
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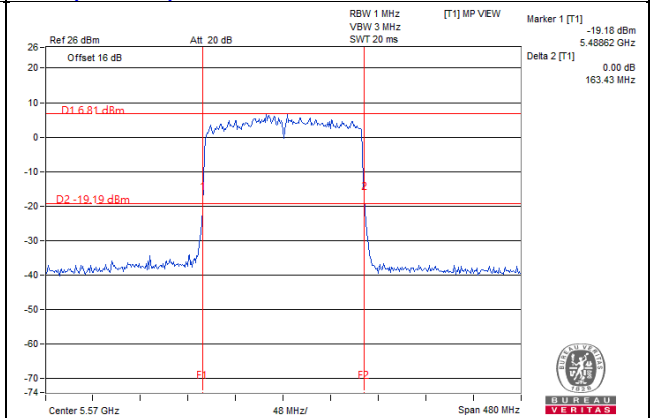
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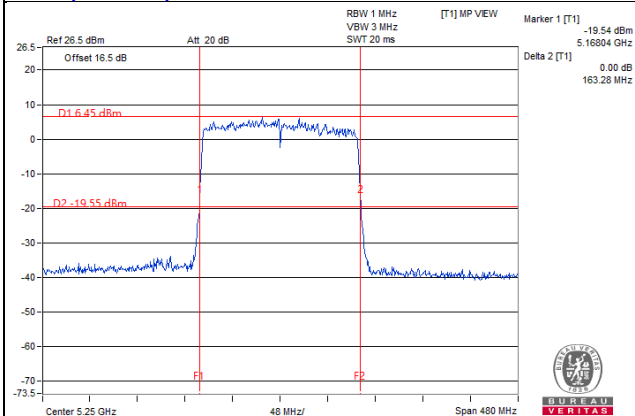
11ax (160MHz) 1S4T TxBF CH50 Ant2



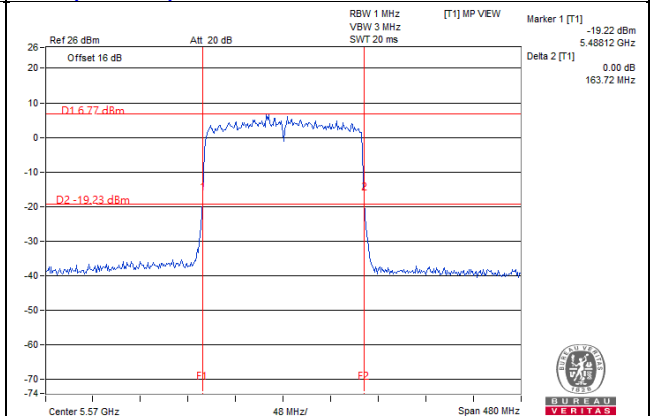
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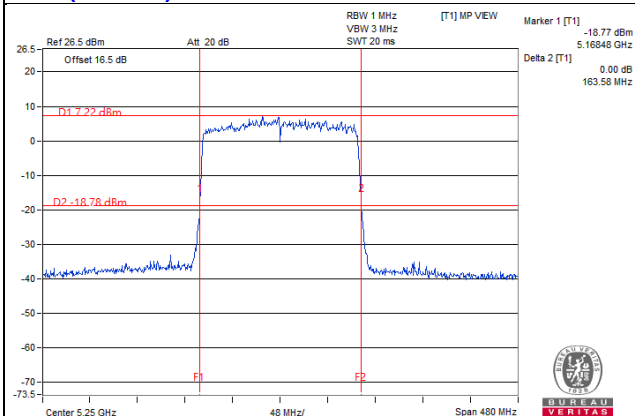
11ax (160MHz) 1S4T TxBF CH50 Ant3



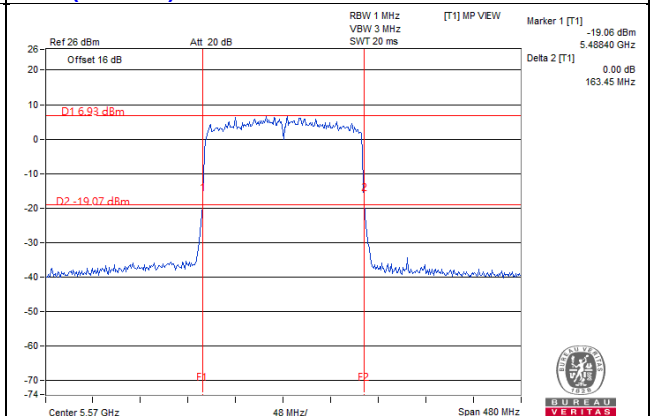
11ax (160MHz) 1S4T TxBF CH114 Ant3



11ax (160MHz) 1S4T TxBF CH50 Ant4

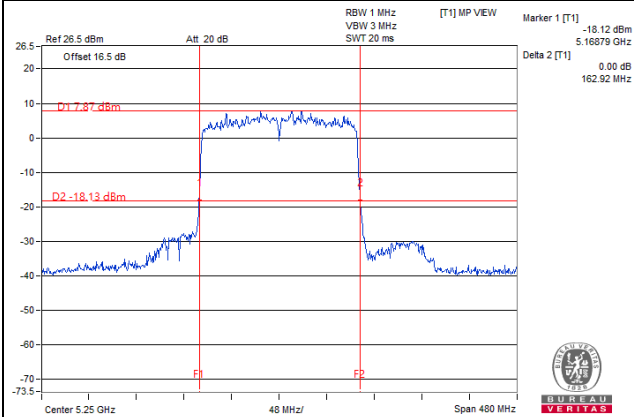


11ax (160MHz) 1S4T TxBF CH114 Ant4

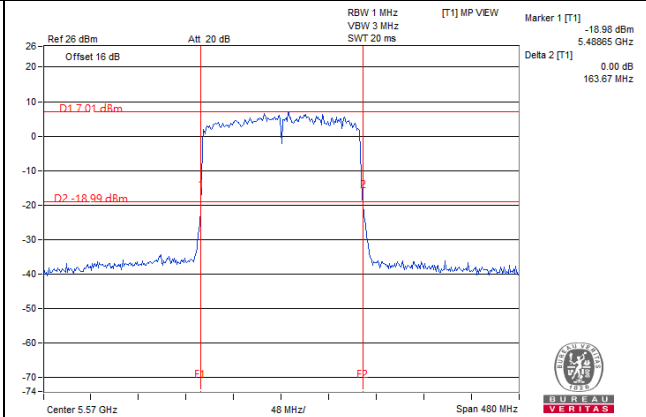


26dB BANDWIDTH SPECTRUM PLOT

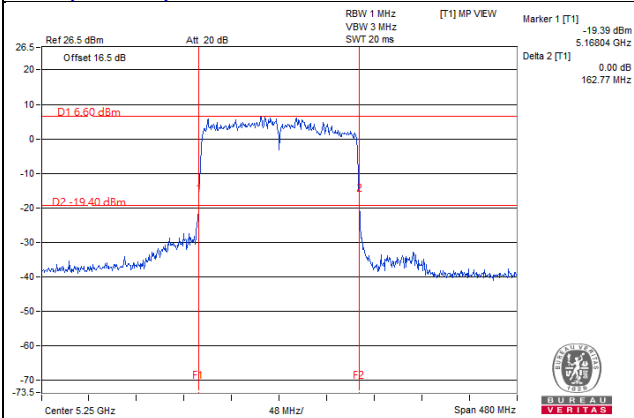
11ax (160MHz) 2S4T TxBF CH50 Ant1



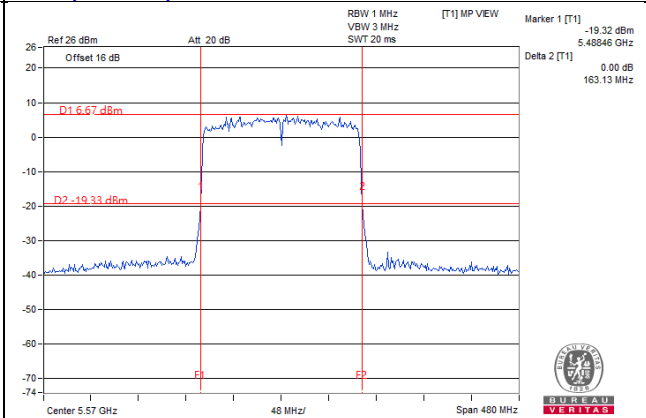
11ax (160MHz) 2S4T TxBF CH114 Ant1



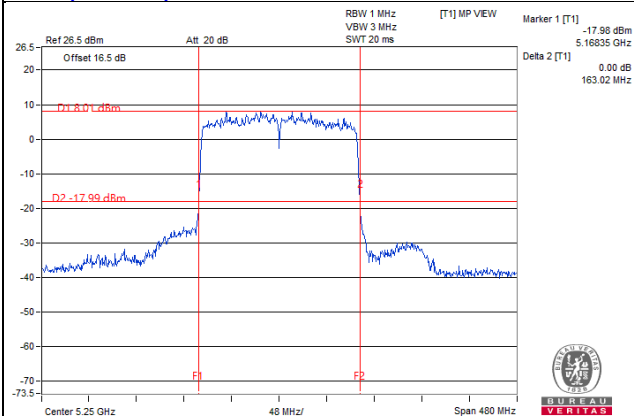
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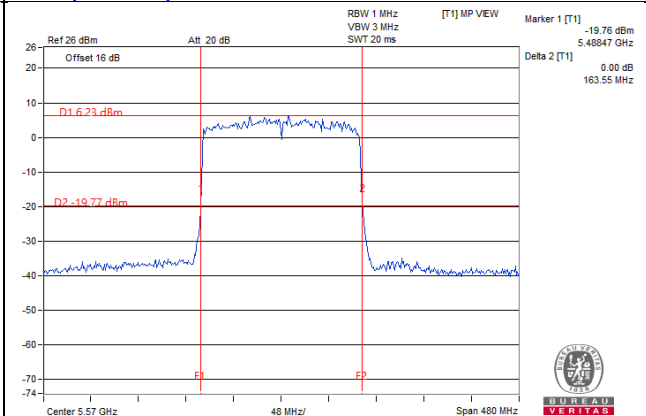
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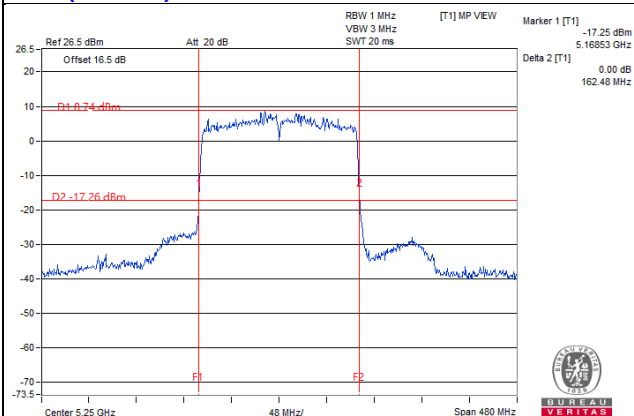
11ax (160MHz) 2S4T TxBF CH50 Ant3



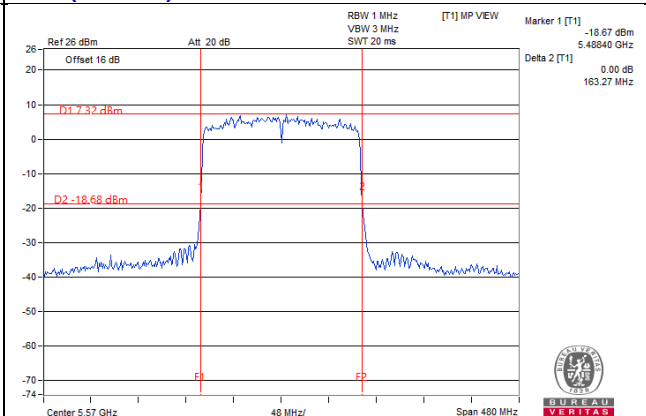
11ax (160MHz) 2S4T TxBF CH114 Ant3



11ax (160MHz) 2S4T TxBF CH50 Ant4

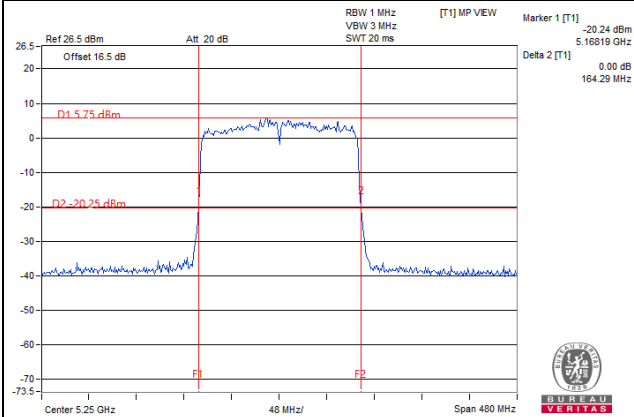


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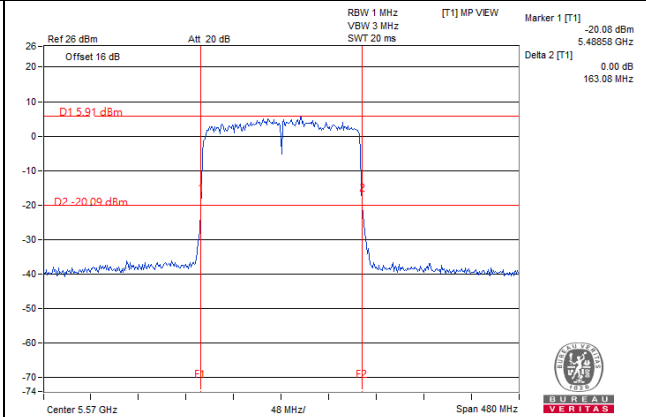


26dB BANDWIDTH SPECTRUM PLOT

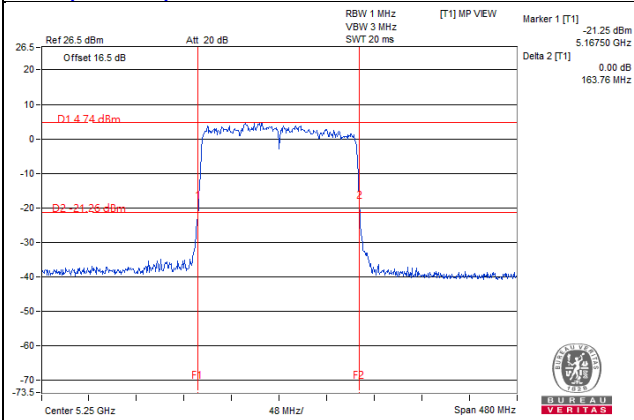
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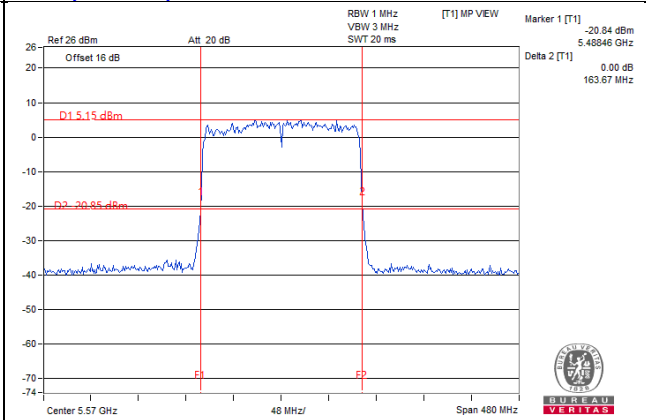
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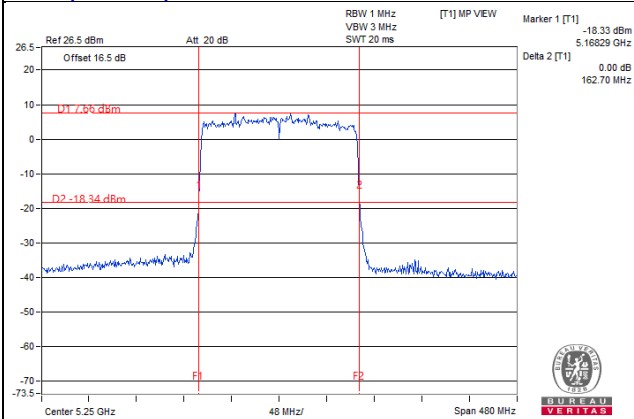
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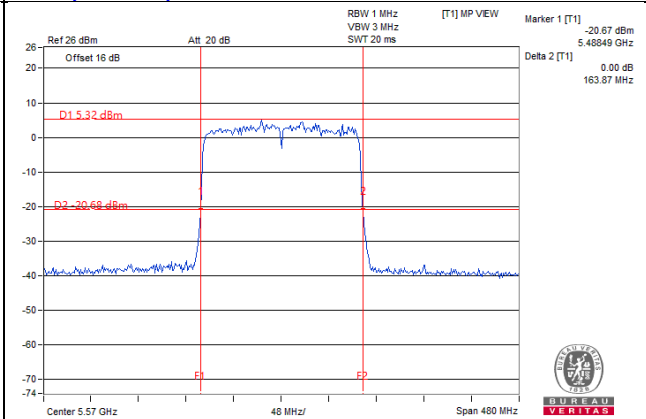
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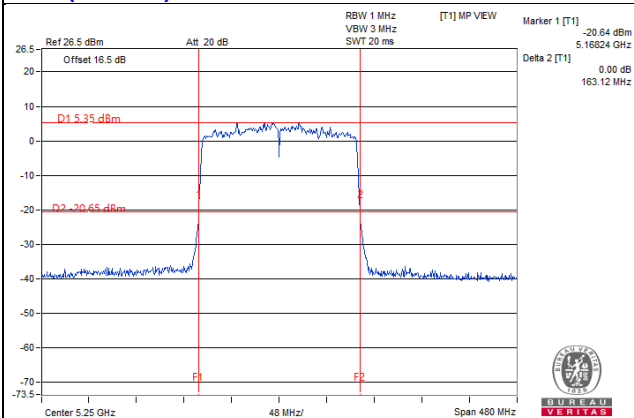
11ax (160MHz) 3S4T TxBF CH50 Ant3



11ax (160MHz) 3S4T TxBF CH114 Ant3



11ax (160MHz) 3S4T TxBF CH50 Ant4



11ax (160MHz) 3S4T TxBF CH114 Ant4

