

Annex 4: Measurement diagrams to
TEST REPORT
 No.: 6-0592-14-2-11a

According to:

FCC Part 15.407

for

ASCOM AB

Cellular/Wi-Fi Smartphone SH1-ACAA

FCC ID: BXZSH1C







| Laboratory Accreditation and Listings | | | |
|--|--|--|--|
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|  WiFi ALLIANCE AUTHORIZED RF LABORATORY |  CTIA Authorized Test Lab LAB CODE 20011130-00 | | |
| accredited according to DIN EN ISO/IEC 17025 | | | |
| <p align="center"> CETECOM GmbH Laboratory Radio Communications & Electromagnetic Compatibility Im Teelbruch 116 • 45219 Essen • Germany Registered in Essen, Germany, Reg. No.: HRB Essen 8984 Tel.: + 49 (0) 20 54 / 95 19-954 • Fax: + 49 (0) 20 54 / 95 19-964 E-mail: info@cetecom.com • Internet: www.cetecom.com </p> | | | |

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1. Measurement diagrams

1.1. Conducted EMI measurements on AC-mains port according 15.207, class B

1.05

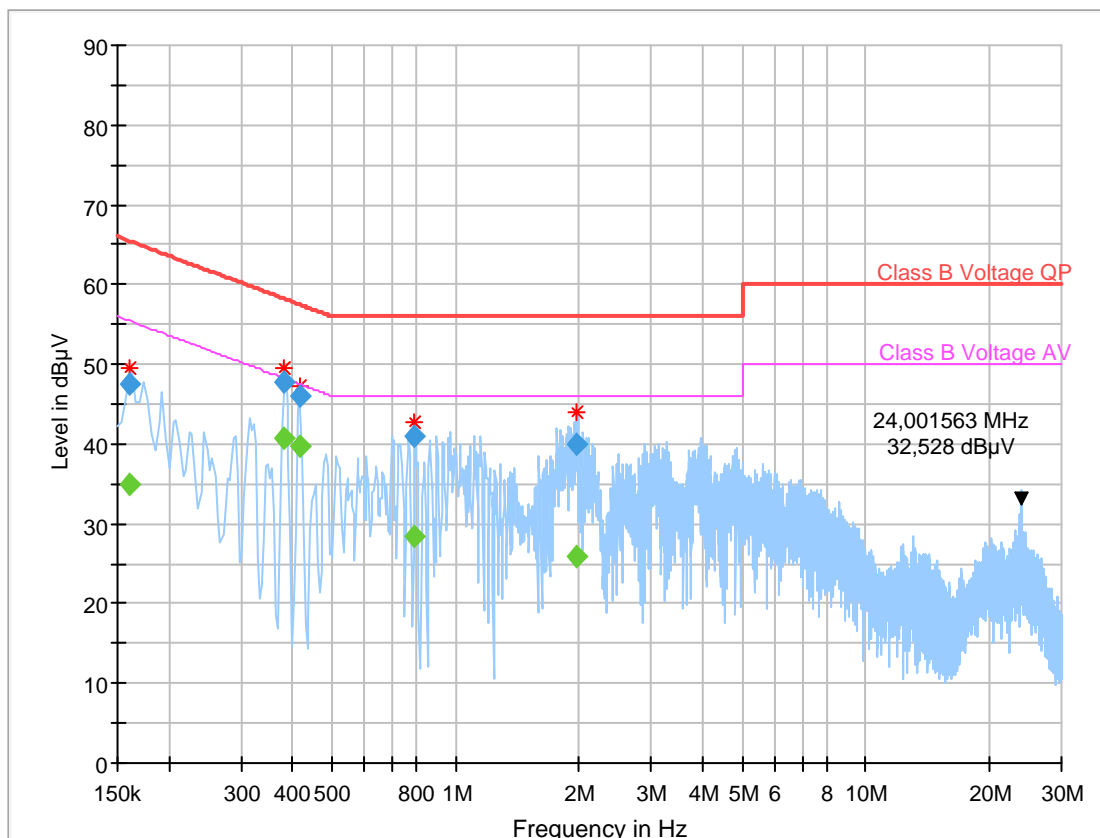
Common Information

| | |
|---------------------------|--|
| Test Description: | Conducted Voltage Measurement Class B |
| Test Site & Location: | Conducted Emission, CETECOM GmbH Essen |
| Test Software: | R&S EMC32 v9.15 |
| Test Specification: | FCC 15.107, FCC 15.207 |
| Operating Mode: | WLAN 5GHz ping + GPS RX |
| Measured on line: | N/L1 |
| Diagram details: | Shows the peak values as a sum of measured ports in maxhold mode |
| Environmental Conditions: | Humidity: 43%rH; Temperature: 21°C |
| Operator: | npe |
| Comments: | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) |
|-----------------|------------------|-----------------|--------------|
| 0.160000 | --- | 34.87 | 55.46 |
| 0.160000 | 47.49 | --- | 65.46 |
| 0.381875 | --- | 40.64 | 48.24 |
| 0.381875 | 47.67 | --- | 58.24 |
| 0.418125 | --- | 39.79 | 47.49 |
| 0.418125 | 45.96 | --- | 57.49 |
| 0.795938 | --- | 28.34 | 46.00 |
| 0.795938 | 40.93 | --- | 56.00 |
| 1.974531 | --- | 25.84 | 46.00 |
| 1.974531 | 39.86 | --- | 56.00 |

Final Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) |
|-----------------|------------------|-----------------|--------------|
| 0.160000 | --- | 34.87 | 55.46 |
| 0.160000 | 47.49 | --- | 65.46 |
| 0.381875 | --- | 40.64 | 48.24 |
| 0.381875 | 47.67 | --- | 58.24 |
| 0.418125 | --- | 39.79 | 47.49 |
| 0.418125 | 45.96 | --- | 57.49 |
| 0.795938 | --- | 28.34 | 46.00 |
| 0.795938 | 40.93 | --- | 56.00 |
| 1.974531 | --- | 25.84 | 46.00 |
| 1.974531 | 39.86 | --- | 56.00 |

1.2. Radiated field strength measurements accord. §15.209 (15.205) and §15.407

1.2.1. Magnetic field measurements $f < 30\text{MHz}$

Diagram No. 2.01_Ch36_mcs0

| | | |
|--------------------------|---|-------------|
| Date: | 17.02.2015 | Page 1 of 1 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V8.51.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 3 | |
| Operator: | Kre | |
| Operating conditions: | WLAN 5GHz | |
| Power during tests: | 120V/60Hz | |
| Comment 1: | Channel low: 36, mcs0 | |
| Comment 2: | | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | |

FCC15.209_magn hor+vert

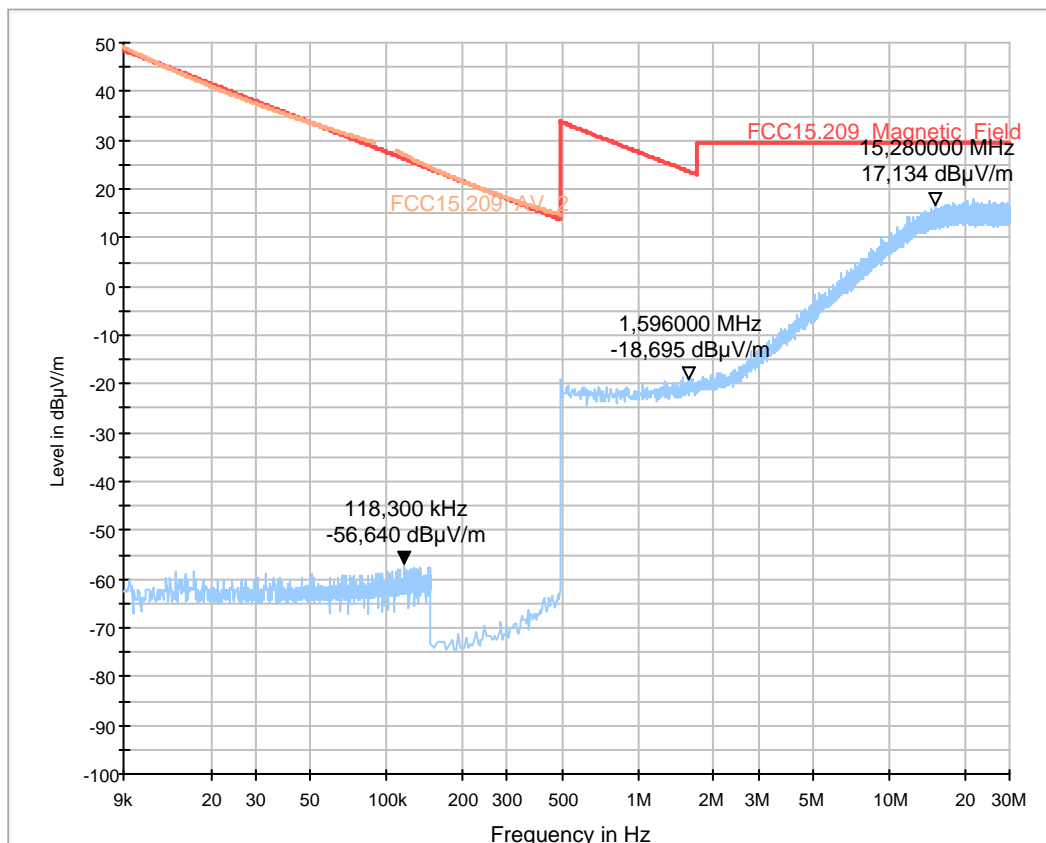


Diagram No. 2.02_Ch64_mcs1

| | | |
|--------------------------|---|-------------|
| Date: | 17.02.2015 | Page 1 of 1 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V8.51.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 3 | |
| Operator: | Kre | |
| Operating conditions: | WLAN 5GHz | |
| Power during tests: | 120V/60Hz | |
| Comment 1: | Channel middle: 64, mcs1 | |
| Comment 2: | | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | |

FCC15.209_magn hor+vert

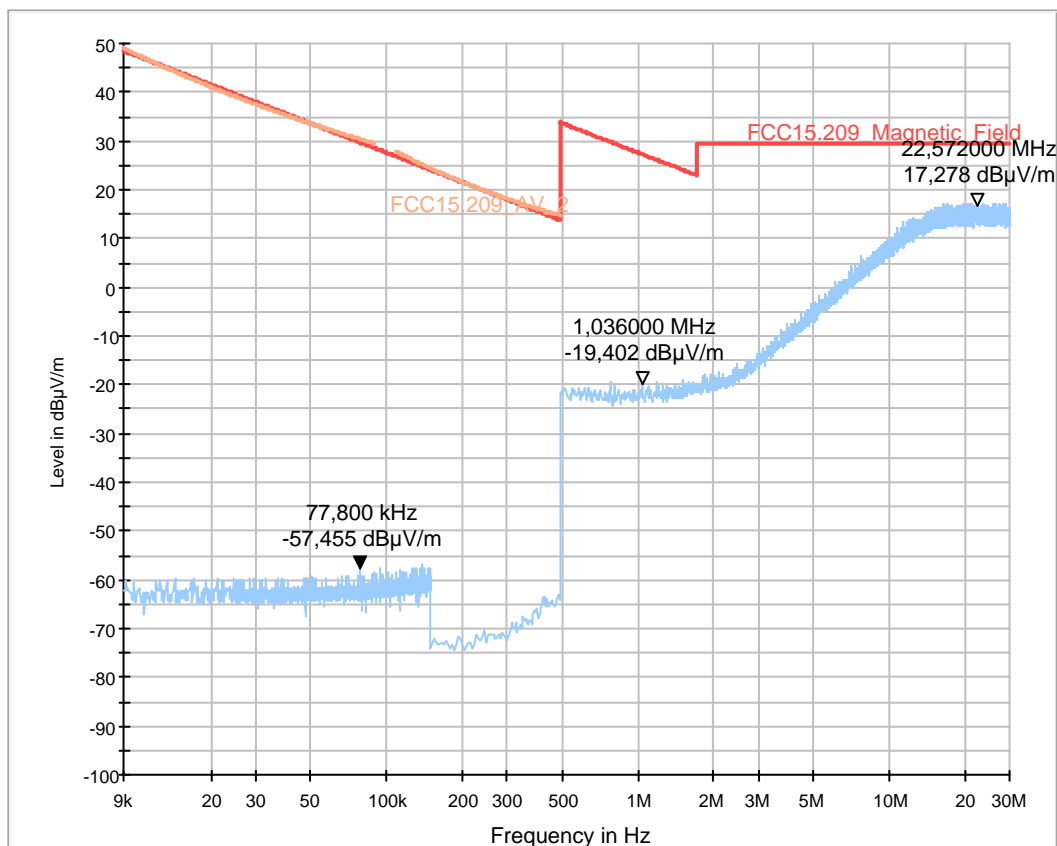


Diagram No. 2.03_Ch116_6Mbit

| | | |
|--------------------------|---|-------------|
| Date: | 17.02.2015 | Page 1 of 1 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V8.51.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 3 | |
| Operator: | Kre | |
| Operating conditions: | WLAN 5GHz | |
| Power during tests: | 120V/60Hz | |
| Comment 1: | Channel high: 116, 6Mbit | |
| Comment 2: | | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VVAC/60Hz |

FCC15.209_magn hor+vert

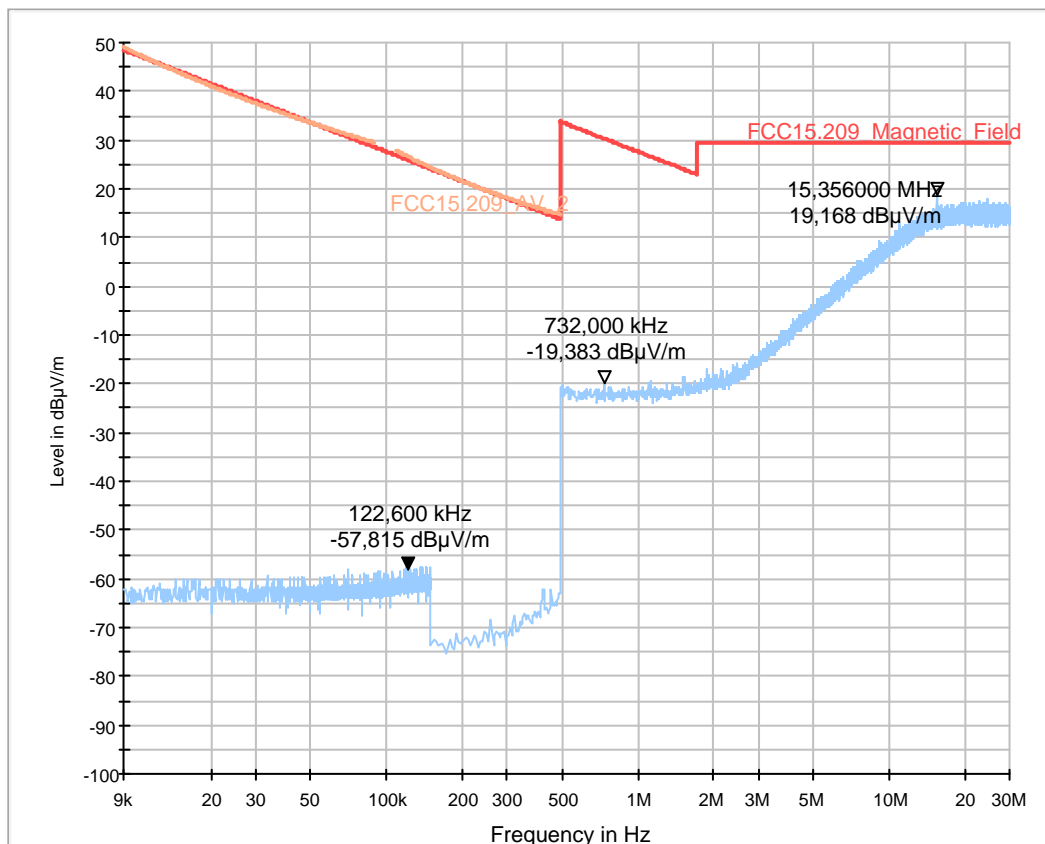


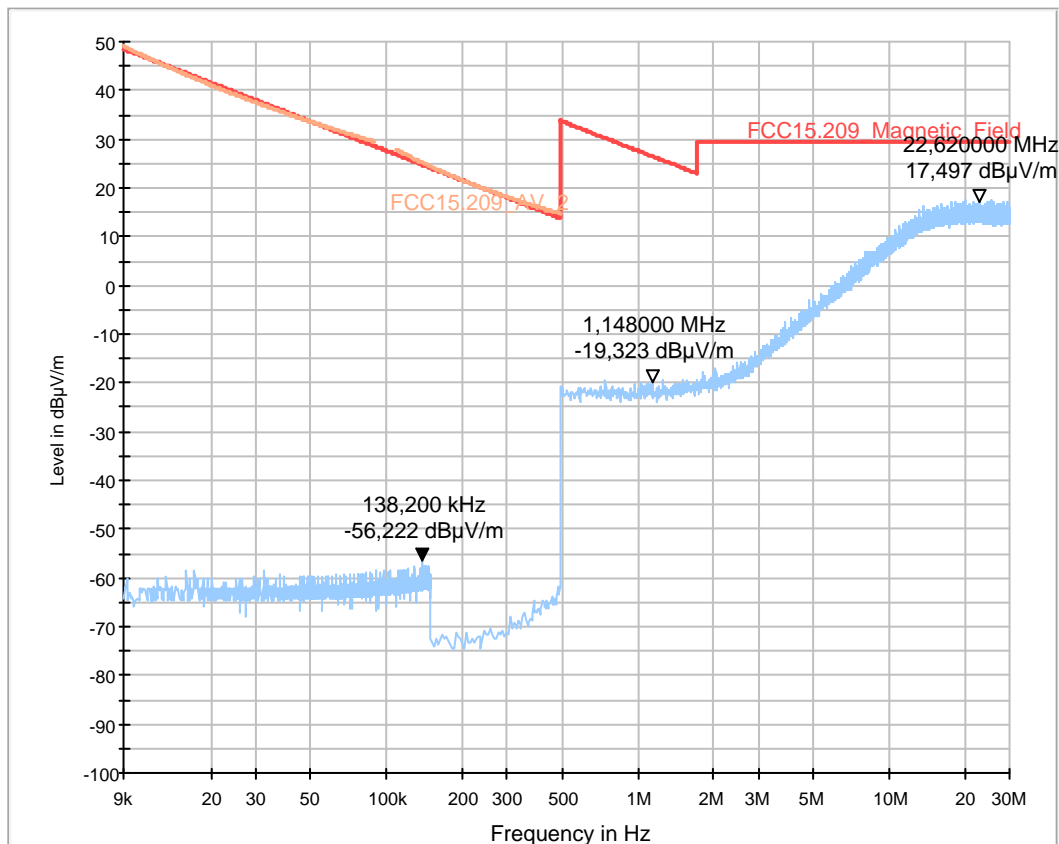
Diagram No. 2.04_Ch149_6Mbit_sweep1

| | |
|--------------------------|---|
| Date: 17.02.2015 | Page 1 of 1 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Version of Testsoftware: | EMC32 V8.51.0 |
| Distance correction: | used accord. table, pls. see test report |
| Technical Data: | Please see page 2 for detailed data of measurement setup |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation |
| Used filter: | bypass |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 3 |
| Operator: | Kre |
| Operating conditions: | WLAN 5GHz |
| Power during tests: | 120V/60Hz |
| Comment 1: | Channel : 149, 6Mbit |
| Comment 2: | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | |

FCC15.209_magn hor+vert



1.2.2. Field strength measurements 30MHz <f <1GHz

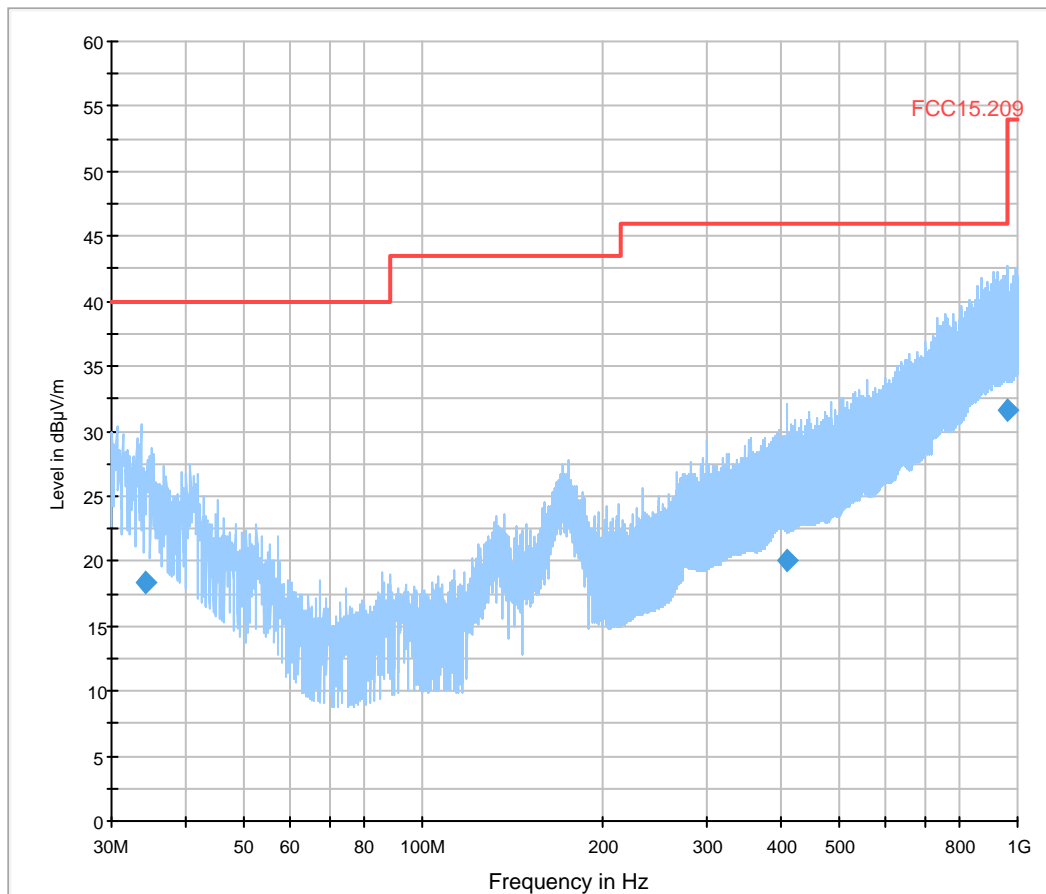
Diagram No. 4.01_ch36_MCS0_Sweep2

| | |
|--------------------------|---|
| Test description: | 18.02.2015 Page 1 of 2 Electric Field Strength Measurement |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Version of Testsoftware: | EMC32 V8.51.0 |
| Distance correction: | not used |
| Used filter: | not used |
| Test specification.: | FCC 15.209; RSS-Gen: Issue 3 |
| Operator: | npe |
| Operating conditions: | WLAN 5GHz, channel 36, MCS0 |
| Power during tests: | 110V 60Hz, full loaded batteries |
| Comment 1: | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |

01_FCC15.209_hor+vert_kipp



Final Result 1

| Frequency (MHz) | QuasiPeak (dB μ V/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) |
|-----------------|--------------------------|-----------------|-----------------|-------------|--------------|---------------|-----------------|------------|-------------|
| 34.230000 | 18.3 | 1000.0 | 120.000 | 360.0 | V | 190.0 | 0.0 | 20.0 | 21.70 |
| 410.570000 | 20.0 | 1000.0 | 120.000 | 282.0 | V | 130.0 | 90.0 | 18.6 | 26.00 |
| 959.760000 | 31.6 | 1000.0 | 120.000 | 309.0 | V | 261.0 | 90.0 | 27.5 | 14.40 |

(continuation of the "Final Result 1" table from column 10 ...)

| Frequency (MHz) | Limit (dB μ V/m) |
|-----------------|----------------------|
| 34.230000 | 40.00 |
| 410.570000 | 46.00 |
| 959.760000 | 46.00 |

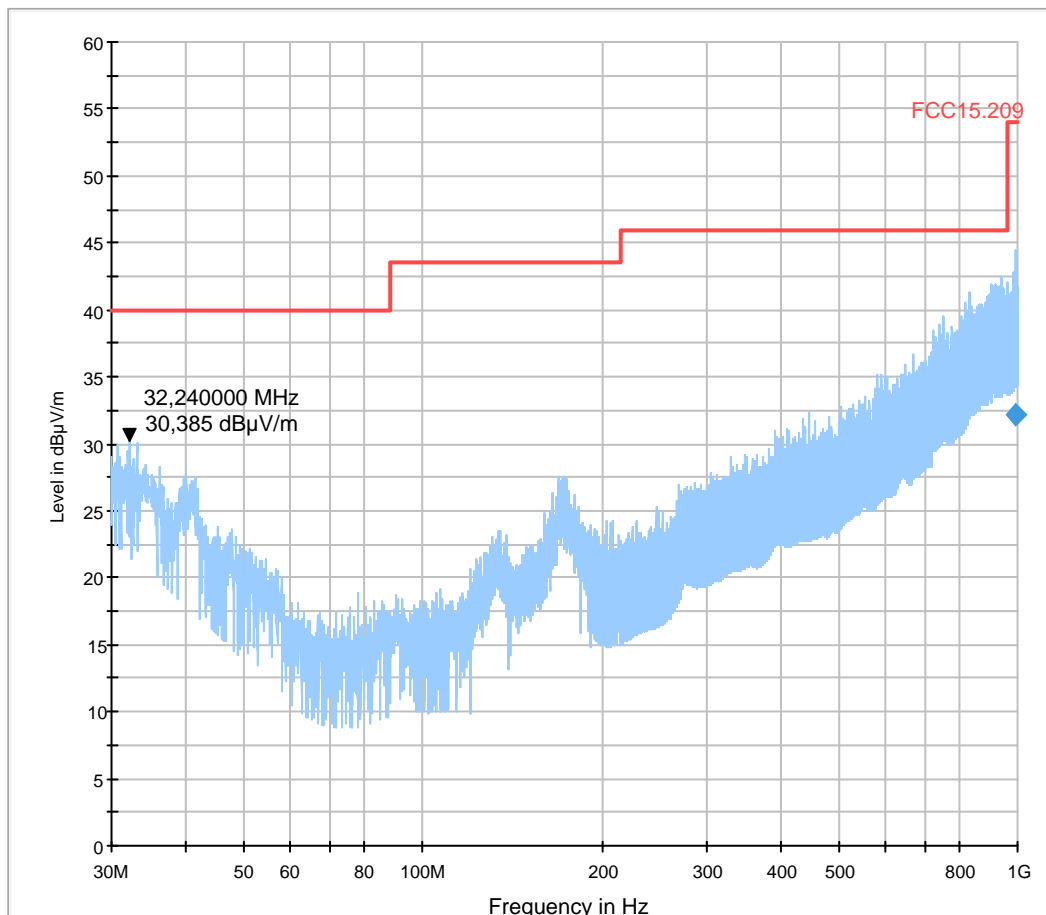
Diagram No. 4.02_ch64_MCS1_Sweep2

| | |
|--------------------------|---|
| Test description: | 18.02.2015 Page 1 of 2 |
| Test site and distance: | Electric Field Strength Measurement |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V8.51.0 |
| Used filter: | not used |
| Test specification.: | not used |
| | FCC 15.209; RSS-Gen: Issue 3 |
| Operator: | YZH |
| Operating conditions: | WLAN 5GHz, channel 64, MCS1 |
| Power during tests: | 110V 60Hz, full loaded batteries |
| Comment 1: | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |

01_FCC15.209_hor+vert_kipp



Final Result 1

| Frequency (MHz) | QuasiPeak (dB μ V/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) |
|-----------------|--------------------------|-----------------|-----------------|-------------|--------------|---------------|-----------------|------------|-------------|
| 994.610000 | 32.1 | 1000.0 | 120.000 | 175.0 | H | 145.0 | 90.0 | 27.9 | 21.90 |

(continuation of the "Final Result 1" table from column 10 ...)

| Frequency (MHz) | Limit (dB μ V/m) |
|-----------------|----------------------|
| 994.610000 | 54.00 |

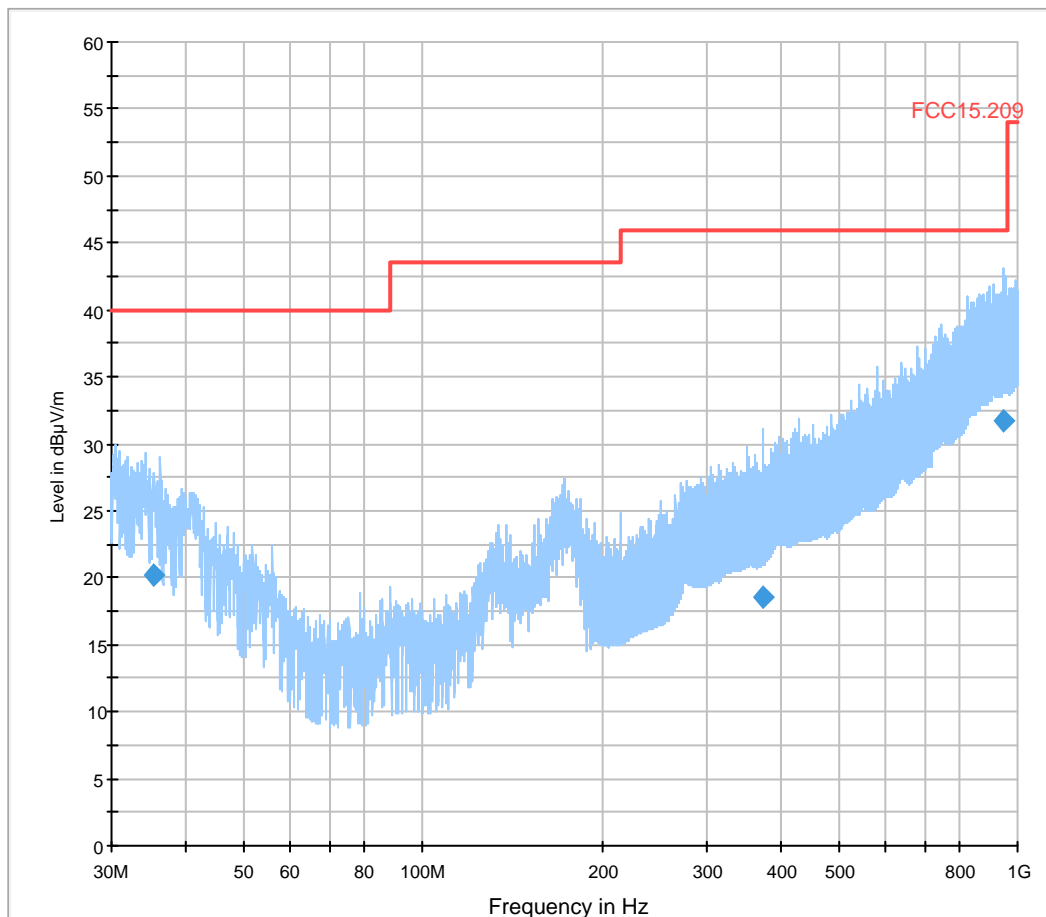
Diagram No. 4.03_ch100_6Mbit_Sweep2

| | | |
|--------------------------|---|-------------|
| | 18.02.2015 | Page 1 of 2 |
| Test description: | Electric Field Strength Measurement | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V8.51.0 | |
| Distance correction: | not used | |
| Used filter: | not used | |
| Test specification.: | FCC 15.209; RSS-Gen: Issue 3 | |
| Operator: | YZH | |
| Operating conditions: | WLAN 5GHz, channel 64, MCS1 | |
| Power during tests: | 110V 60Hz, full loaded batteries | |
| Comment 1: | | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |

01_FCC15.209_hor+vert_kipp



Final Result 1

| Frequency (MHz) | QuasiPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|-----------------|------------|-------------|
| 35.420000 | 20.1 | 1000.0 | 120.000 | 182.0 | H | 142.0 | 90.0 | 19.5 | 19.90 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

(continuation of the "Final Result 1" table from column 10 ...)

| Frequency (MHz) | Limit (dBµV/m) |
|-----------------|----------------|
| 35.420000 | 40.00 |
| ... | ... |

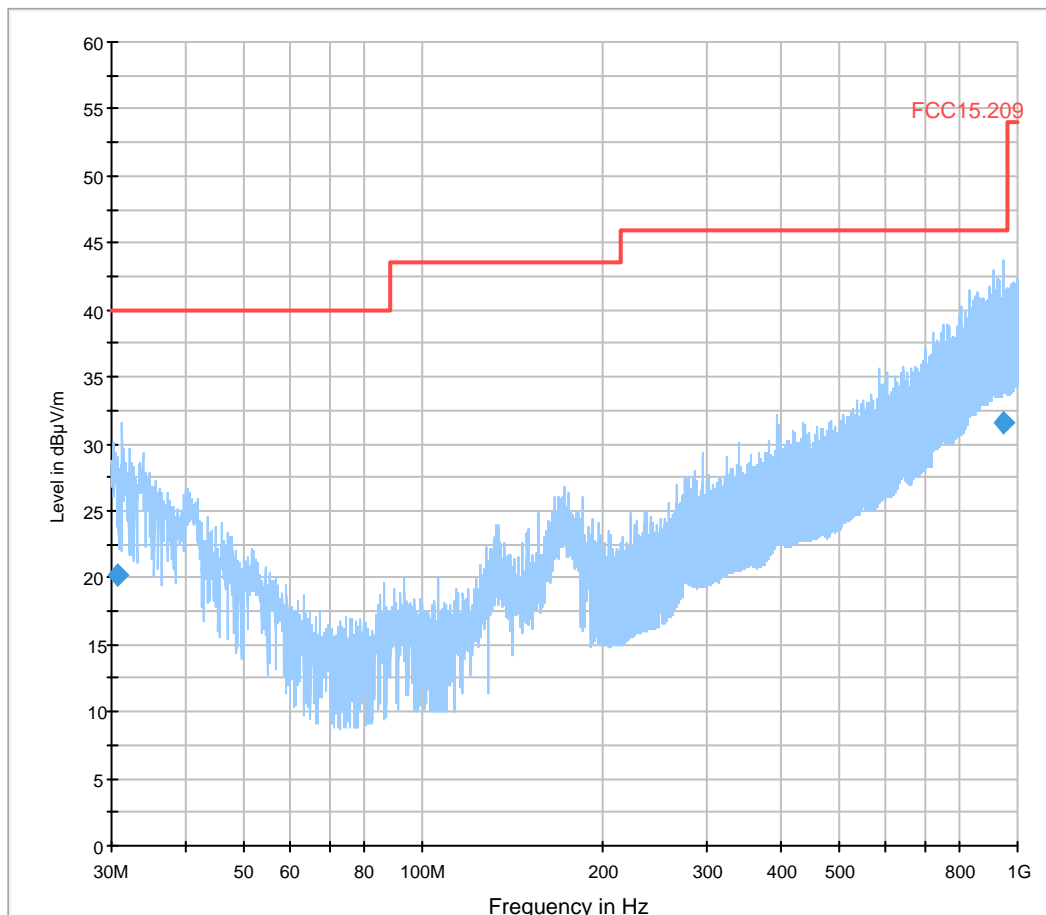
Diagram No. 4.04_ch116_6Mbit_Sweep2

| | |
|--------------------------|---|
| Test description: | 18.02.2015 Page 1 of 2 |
| Test site and distance: | Electric Field Strength Measurement |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V8.51.0 |
| Used filter: | not used |
| Test specification.: | not used |
| | FCC 15.209; RSS-Gen: Issue 3 |
| Operator: | YZH |
| Operating conditions: | WLAN 5GHz, channel 116, 6 Mbit |
| Power during tests: | 110V 60Hz, full loaded batteries |
| Comment 1: | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |

01_FCC15.209_hor+vert_kipp



Data Reduction Result 1

| Frequency (MHz) | MaxPeak- MaxHold (dBμV/m) | Height (cm) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) | Limit (dBμ) | Comment |
|-----------------|------------------------------|-------------|--------------|---------------|-----------------|------------|-------------|-------------|---------|
| 31.280000 | 31.6 | 105.0 | H | 90.0 | 90.0 | 21.5 | 8.40 | 40.0 | |
| 944.560000 | 43.8 | 105.0 | H | 180.0 | 90.0 | 27.3 | 2.20 | 46.0 | |

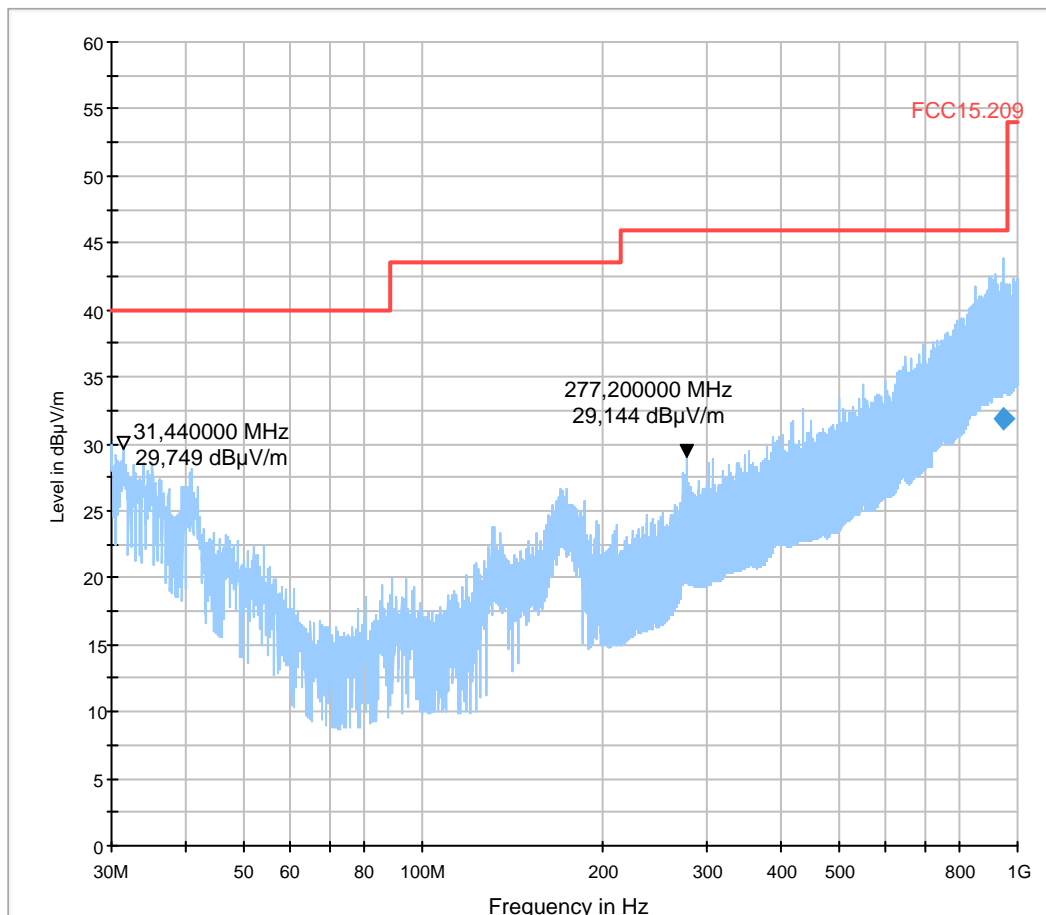
Diagram No. 4.05_ch140_6Mbit_Sweep2

| | |
|--------------------------|---|
| Test description: | 18.02.2015 Page 1 of 2 |
| Test site and distance: | Electric Field Strength Measurement |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V8.51.0 |
| Used filter: | not used |
| Test specification.: | not used |
| | FCC 15.209; RSS-Gen: Issue 3 |
| Operator: | YZH |
| Operating conditions: | WLAN 5GHz, channel 140, 6 Mbit |
| Power during tests: | 110V 60Hz, full loaded batteries |
| Comment 1: | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |

01_FCC15.209_hor+vert_kipp



Data Reduction Result 1

| Frequency (MHz) | MaxPeak- MaxHold (dB μ V/m) | Height (cm) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) | Limit (dB μ) | Comment |
|-----------------|------------------------------------|-------------|--------------|---------------|-----------------|------------|-------------|-------------------|---------|
| 946.800000 | 43.8 | 105.0 | V | 270.0 | 0.0 | 27.4 | 2.20 | 46.0 | |

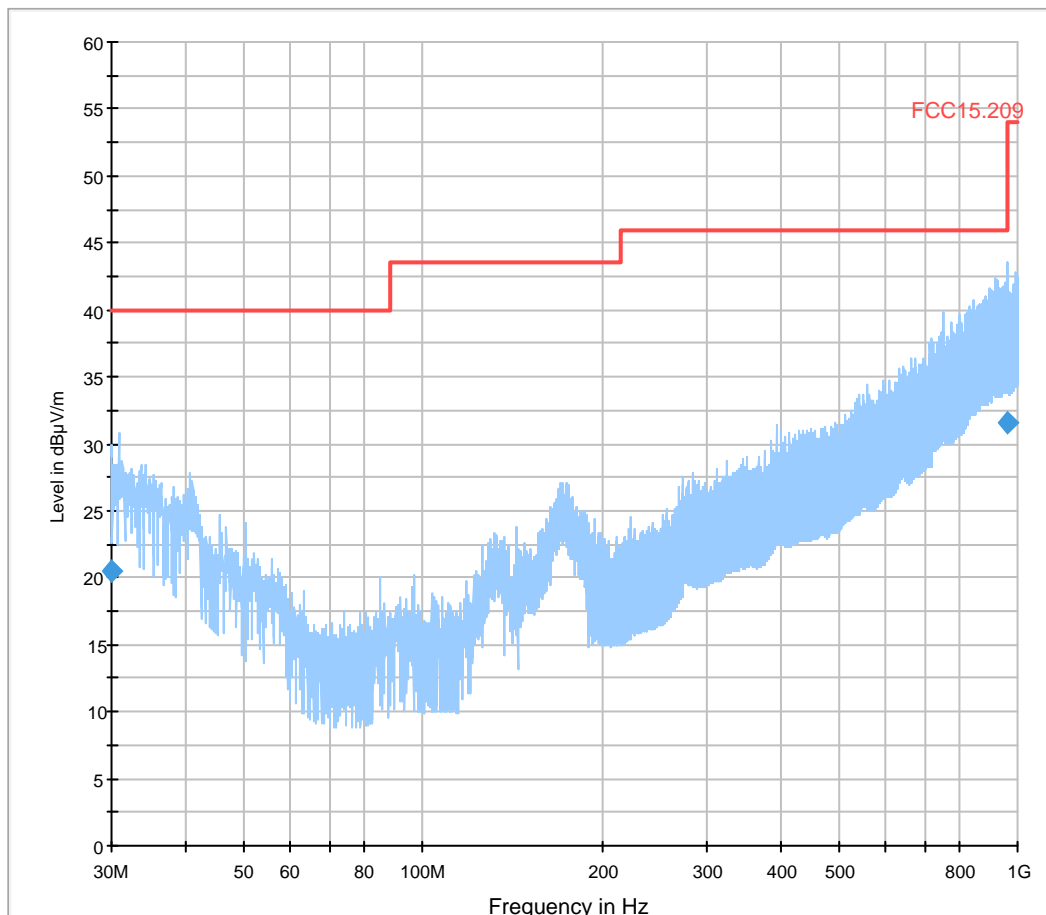
Diagram No. 4.06_ch149_6Mbit_Sweep2

| | | |
|--------------------------|---|-------------|
| | 18.02.2015 | Page 1 of 2 |
| Test description: | Electric Field Strength Measurement | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V8.51.0 | |
| Distance correction: | not used | |
| Used filter: | not used | |
| Test specification.: | FCC 15.209; RSS-Gen: Issue 3 | |
| Operator: | YZH | |
| Operating conditions: | WLAN 5GHz, channel 149, 6 Mbit | |
| Power during tests: | 110V 60Hz, full loaded batteries | |
| Comment 1: | | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |

01_FCC15.209_hor+vert_kipp



Final Result 1

| Frequency (MHz) | QuasiPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|-----------------|------------|-------------|
| 30.030000 | 20.5 | 1000.0 | 120.000 | 182.0 | H | 114.0 | 90.0 | 22.1 | 19.50 |
| 959.910000 | 31.6 | 1000.0 | 120.000 | 105.0 | H | 152.0 | 0.0 | 27.5 | 14.40 |

(continuation of the "Final Result 1" table from column 10 ...)

| Frequency (MHz) | Limit (dBµV/m) |
|-----------------|----------------|
| 30.030000 | 40.00 |
| 959.910000 | 46.00 |

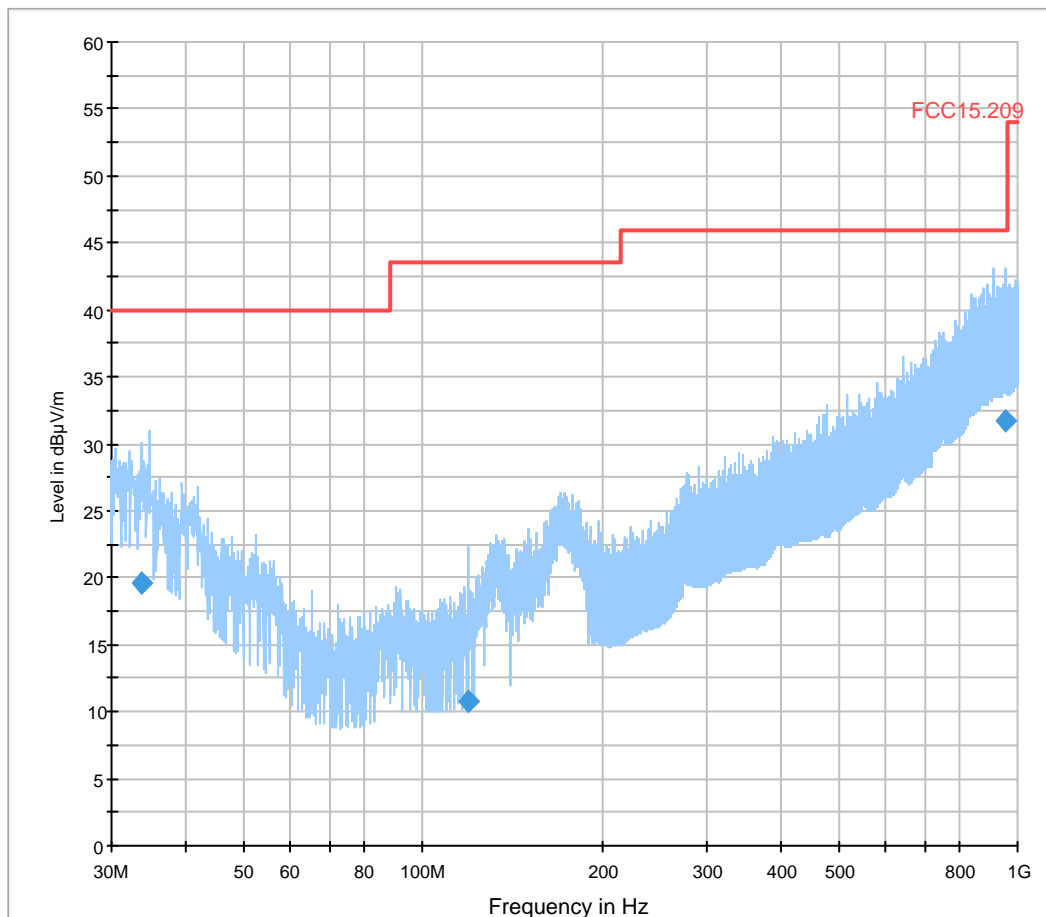
Diagram No. 4.07_ch157_MCS0_Sweep2

| | |
|--------------------------|---|
| Test description: | 18.02.2015 Page 1 of 2 |
| Test site and distance: | Electric Field Strength Measurement |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V8.51.0 |
| Used filter: | not used |
| Test specification.: | not used |
| | FCC 15.209; RSS-Gen: Issue 3 |
| Operator: | YZH |
| Operating conditions: | WLAN 5GHz, channel 157, MCS0 |
| Power during tests: | 110V 60Hz, full loaded batteries |
| Comment 1: | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |

01_FCC15.209_hor+vert_kipp



Data Reduction Result 1

| Frequency (MHz) | MaxPeak-MaxHold (dBμV/m) | Height (cm) | Polarization | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Margin (dB) | Limit (dBμ) | Comment |
|-----------------|--------------------------|-------------|--------------|---------------|-----------------|------------|-------------|-------------|---------|
| 34.840000 | 31.0 | 105.0 | H | 90.0 | 0.0 | 19.7 | 9.00 | 40.0 | |
| 119.000000 | 22.2 | 105.0 | H | 90.0 | 90.0 | 8.0 | 21.30 | 43.5 | |
| 951.400000 | 43.2 | 182.0 | H | 180.0 | 0.0 | 27.5 | 2.80 | 46.0 | |

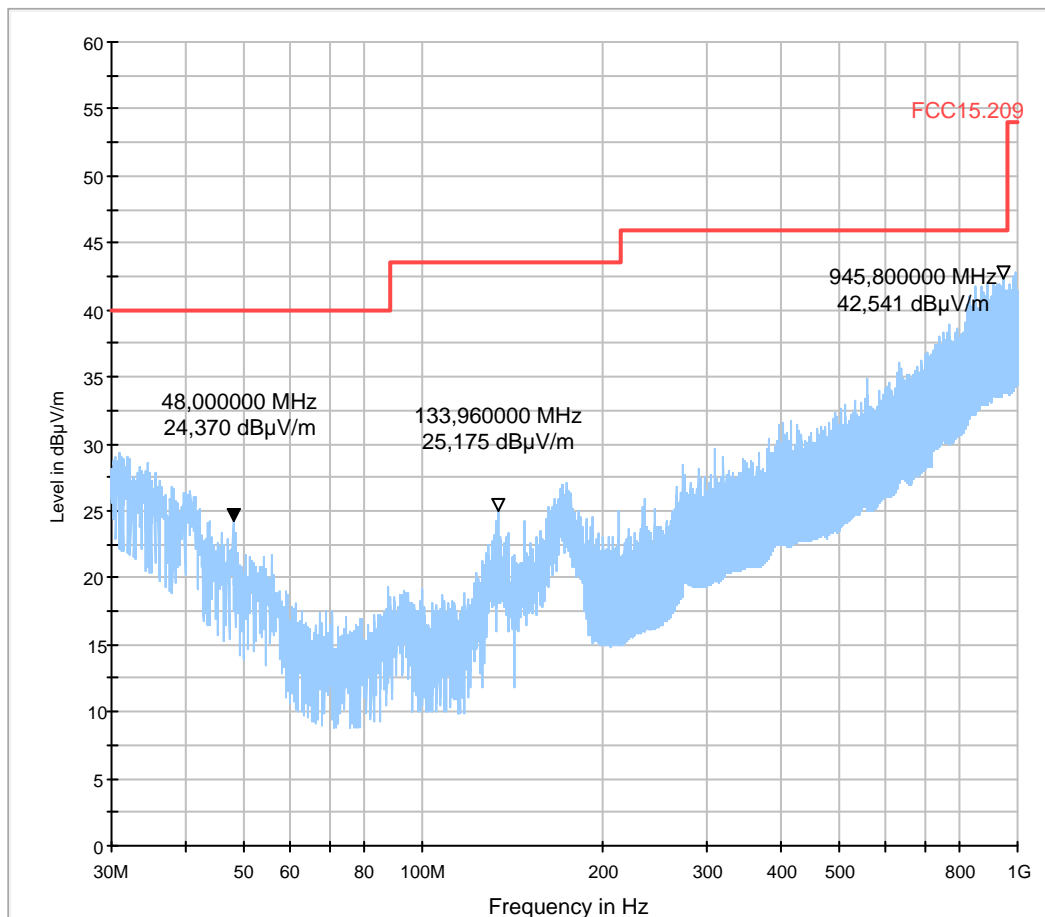
Diagram No. 4.08_ch165_MCS2_Sweep2

| | | |
|--------------------------|---|-------------|
| | 18.02.2015 | Page 1 of 1 |
| Test description: | Electric Field Strength Measurement | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V8.51.0 | |
| Distance correction: | not used | |
| Used filter: | not used | |
| Test specification.: | FCC 15.209; RSS-Gen: Issue 3 | |
| Operator: | YZH | |
| Operating conditions: | WLAN 5GHz, channel 165, MCS2 | |
| Power during tests: | 110V 60Hz, full loaded batteries | |
| Comment 1: | | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EA0D |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |

01_FCC15.209_hor+vert_kipp



1.2.3. Field strength measurements 1GHz < f < 18GHz

4.01_Ch36_MCS0_sweep3

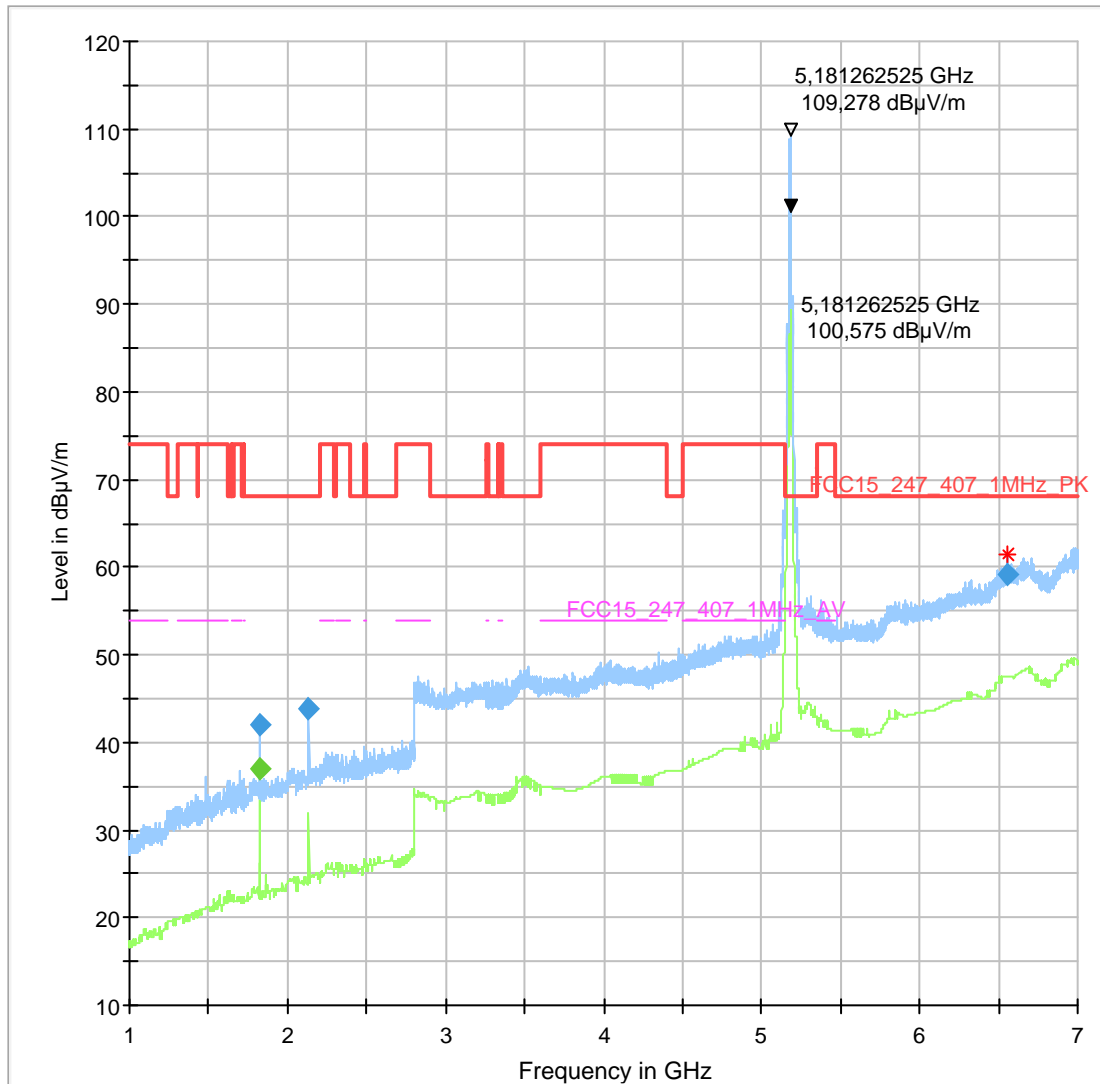
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated field strength emission accord. §15.247/15.407 in 3m distance |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 15.247 / 15.407 |
| Section: | - |
| Operating Mode: | UE allocated channel 36 (fc =5180 MHz); Data rate: MCS0 |
| Equipment Class: | Class B |
| Environmental Conditions: | Humidity: 32%rH; Temperature: 20°C |
| Operator: | YZH |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EB77 |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|-----------------|
| 1825.566533 | --- | 37.08 | --- | --- | 1000.0 | 1000.000 | 155.0 | V | 28.0 | 0.0 |
| 1825.566533 | 42.08 | --- | 68.00 | 25.92 | 1000.0 | 1000.000 | 155.0 | H | 150.0 | 0.0 |
| 2133.992184 | 43.89 | --- | 68.00 | 24.11 | 1000.0 | 1000.000 | 155.0 | V | 62.0 | 0.0 |
| 6552.810621 | 59.15 | --- | 68.00 | 8.85 | 1000.0 | 1000.000 | 155.0 | V | 316.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr | Comment |
|-----------------|------|-----------------------|
| 1825.566533 | 1.1 | 08:59:43 - 17.02.2015 |
| 1825.566533 | 1.1 | 08:51:40 - 17.02.2015 |
| 2133.992184 | 2.8 | 08:47:50 - 17.02.2015 |
| 6552.810621 | 9.0 | 09:25:31 - 17.02.2015 |

Diagram No.: 4.01_Ch36_MCS0_sweep4

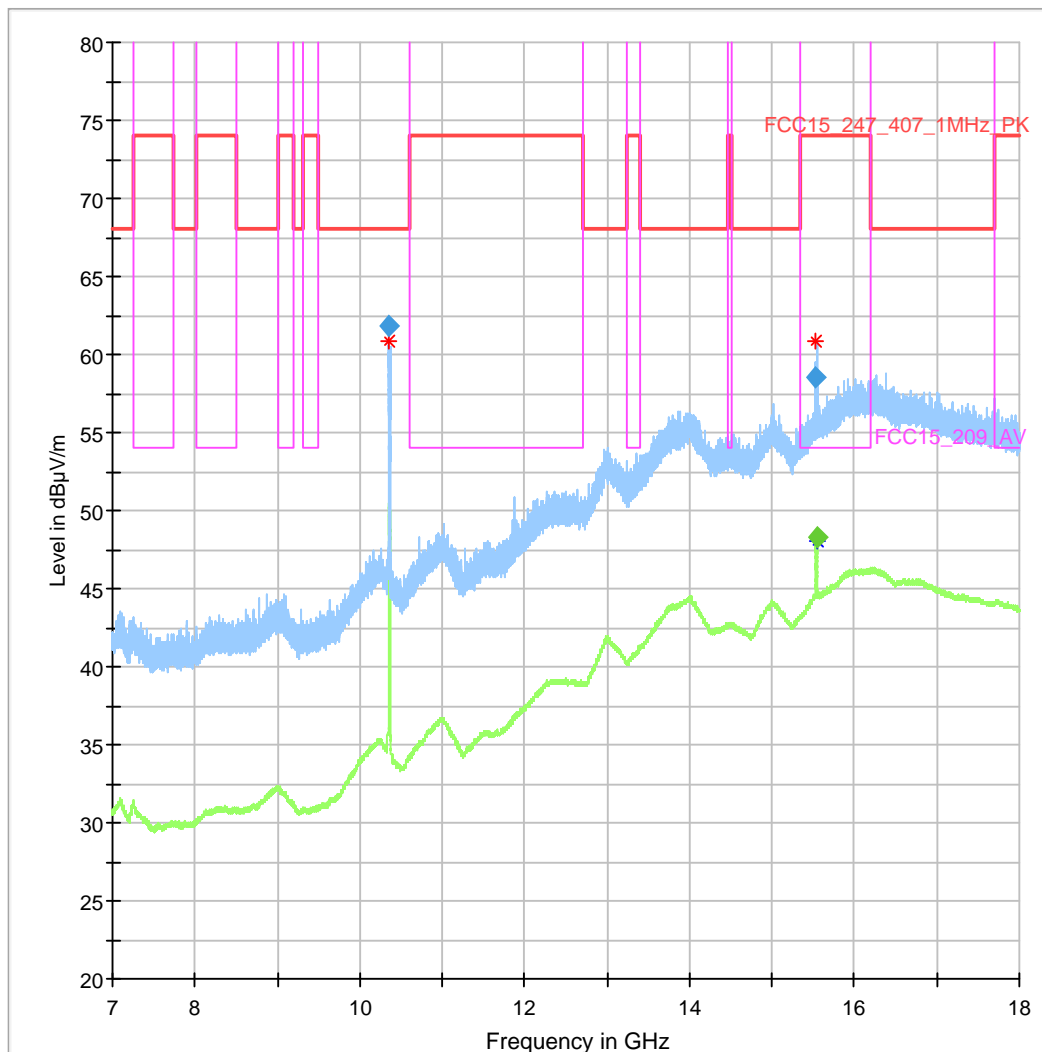
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | MZs |
| Comment: | Channel no. low=36 (5180MHz) |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimut h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 10361.350000 | 61.82 | --- | 68.00 | 6.18 | 100.0 | 1000.000 | 155.0 | V | 146.0 | 90.0 |
| 15529.800000 | 58.55 | --- | 74.00 | 15.45 | 100.0 | 1000.000 | 155.0 | H | 195.0 | 90.0 |
| 15541.000000 | --- | 48.30 | 54.00 | 5.70 | 100.0 | 1000.000 | 155.0 | H | 143.0 | 90.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 10361.350000 | 9.8 | 17:34:11 - 05.03.2015 |
| 15529.800000 | 19.8 | 17:32:49 - 05.03.2015 |
| 15541.000000 | 19.8 | 17:35:30 - 05.03.2015 |

Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimut h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 10361.350000 | 61.82 | --- | 68.00 | 6.18 | 100.0 | 1000.000 | 155.0 | V | 146.0 | 90.0 |
| 15529.800000 | 58.55 | --- | 74.00 | 15.45 | 100.0 | 1000.000 | 155.0 | H | 195.0 | 90.0 |
| 15541.000000 | --- | 48.30 | 54.00 | 5.70 | 100.0 | 1000.000 | 155.0 | H | 143.0 | 90.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 10361.350000 | 9.8 | 17:34:11 - 05.03.2015 |
| 15529.800000 | 19.8 | 17:32:49 - 05.03.2015 |
| 15541.000000 | 19.8 | 17:35:30 - 05.03.2015 |

Diagram No.: 4.02_ch64_mcs1_sweep3

Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | Lor |
| Comment: | Channel no. 64 =5320MHz |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum

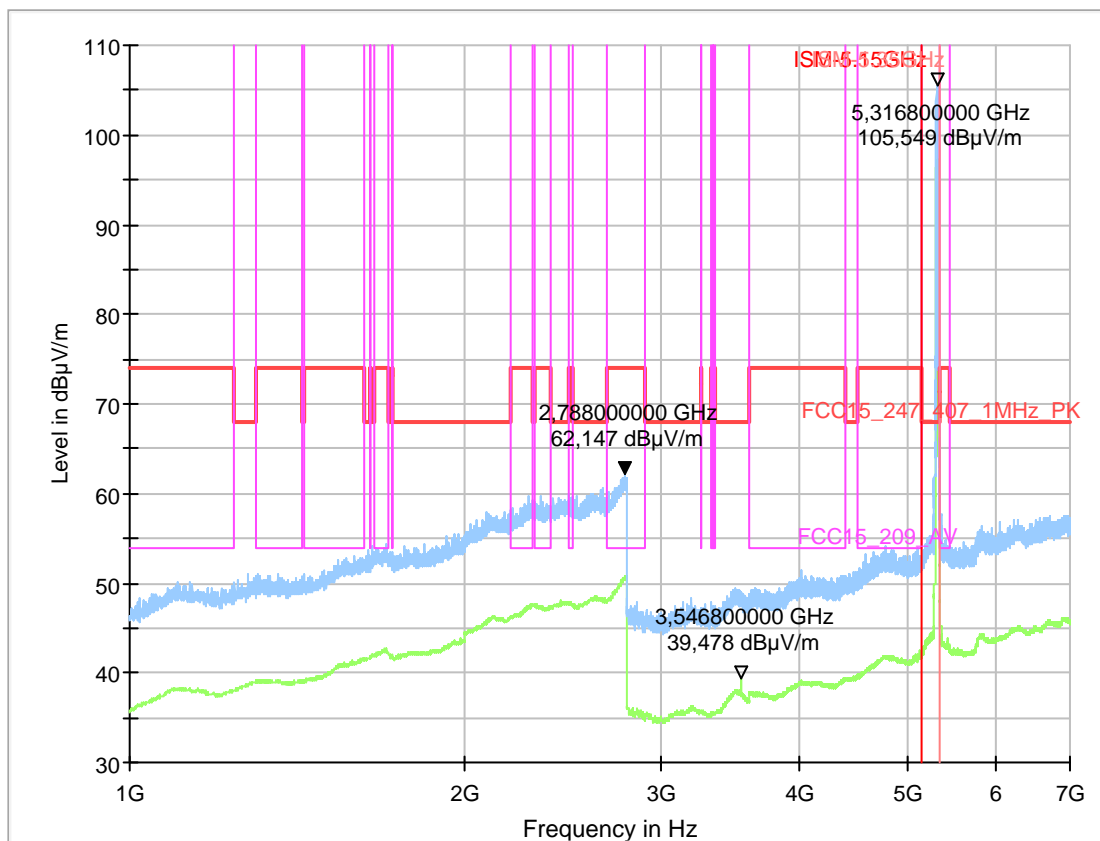


Diagram No.: 4.03_Ch100_6Mbit_sweep3

Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | Lor |
| Comment: | Channel no. low=100, 6MBit |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EB77 |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum

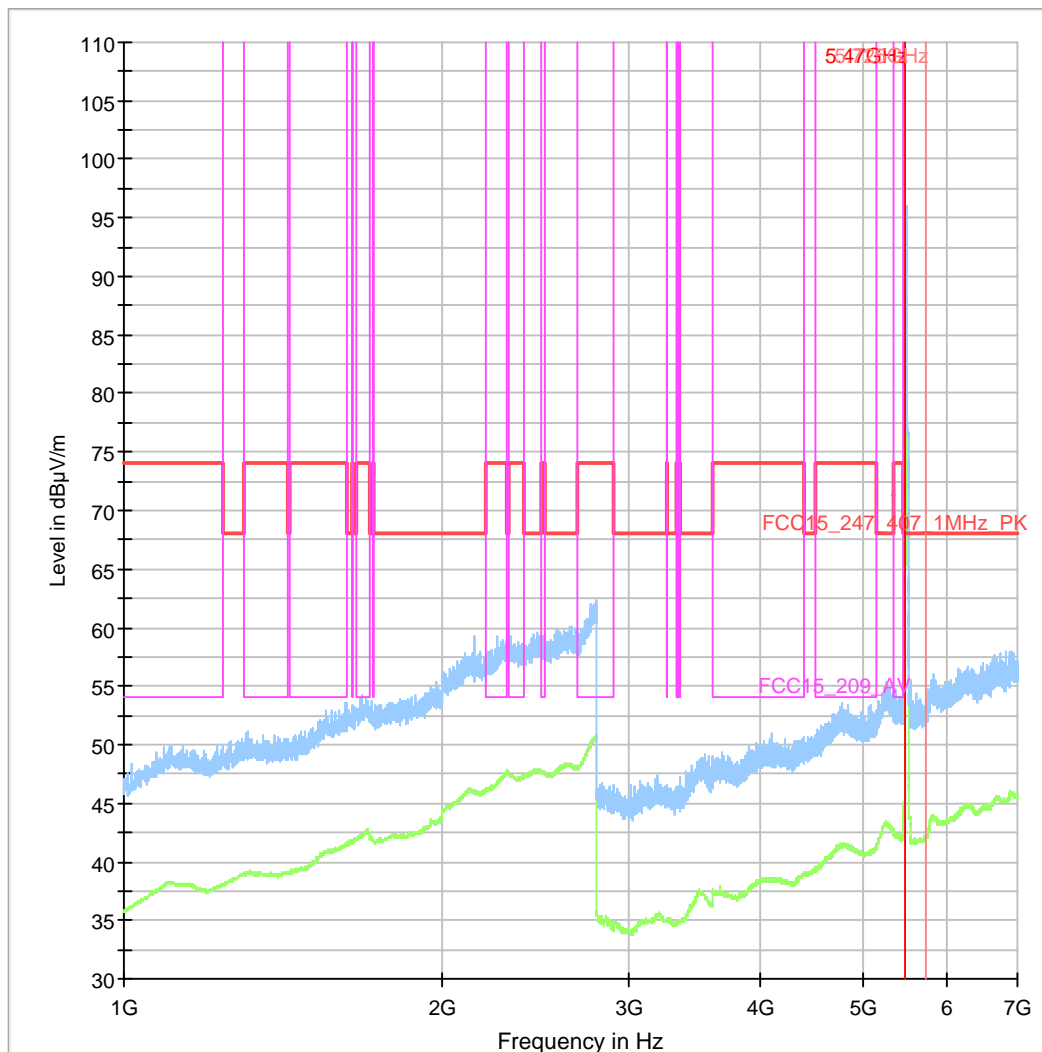


Diagram No.: 4.03_ch100_6Mbit_sweep4

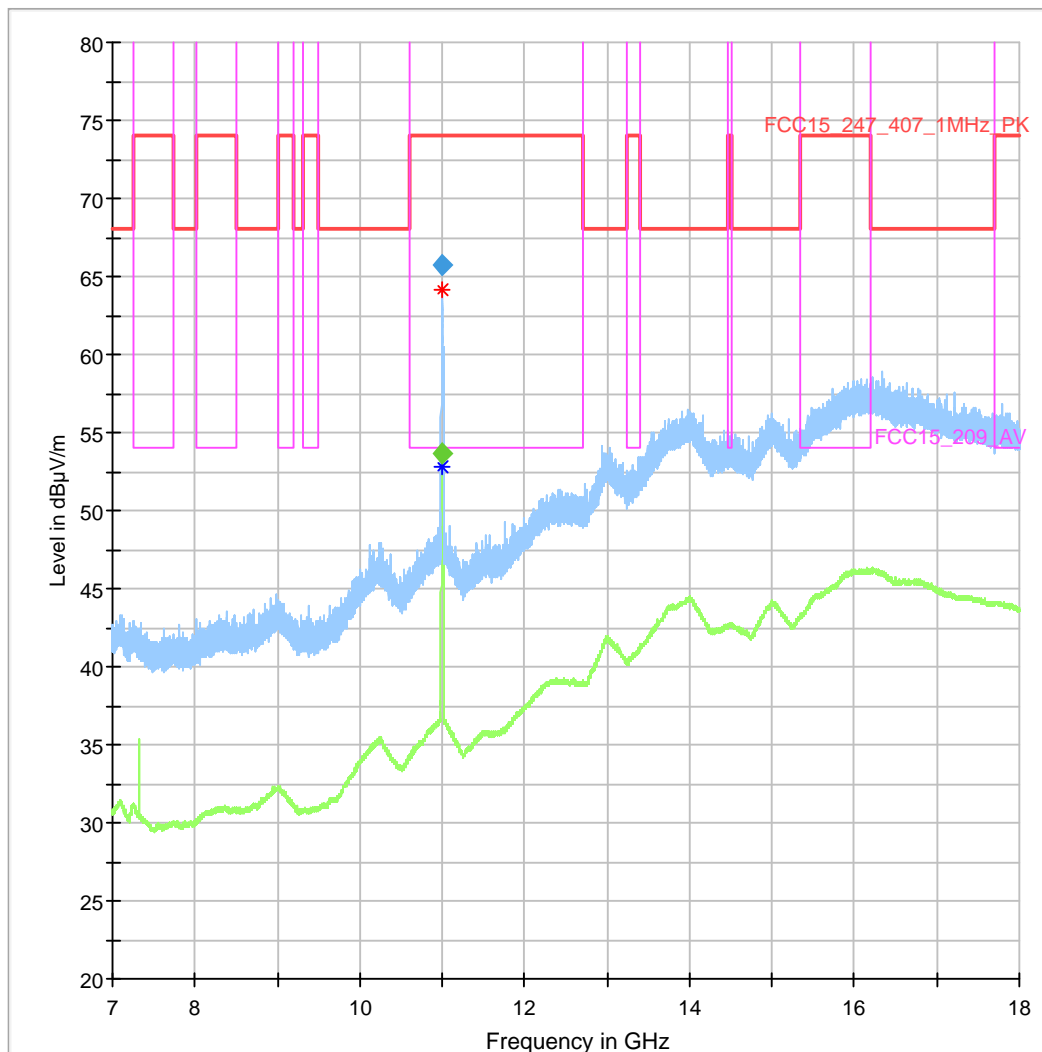
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | MZs |
| Comment: | Channel no. low=100 (5500MHz) |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimut h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 10999.600000 | --- | 53.70 | 54.00 | 0.30 | 100.0 | 1000.000 | 155.0 | V | 233.0 | 90.0 |
| 11001.350000 | 65.76 | --- | 74.00 | 8.24 | 100.0 | 1000.000 | 155.0 | V | 234.0 | 90.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 10999.600000 | 12.2 | 15:56:45 - 05.03.2015 |
| 11001.350000 | 12.2 | 15:55:35 - 05.03.2015 |

Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimut h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 10999.600000 | --- | 53.70 | 54.00 | 0.30 | 100.0 | 1000.000 | 155.0 | V | 233.0 | 90.0 |
| 11001.350000 | 65.76 | --- | 74.00 | 8.24 | 100.0 | 1000.000 | 155.0 | V | 234.0 | 90.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 10999.600000 | 12.2 | 15:56:45 - 05.03.2015 |
| 11001.350000 | 12.2 | 15:55:35 - 05.03.2015 |

Diagram No.: 4.04_Ch116_6Mbit_sweep3

Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | KRe |
| Comment: | Channel no. middle=116, 6MBit |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EB77 |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum

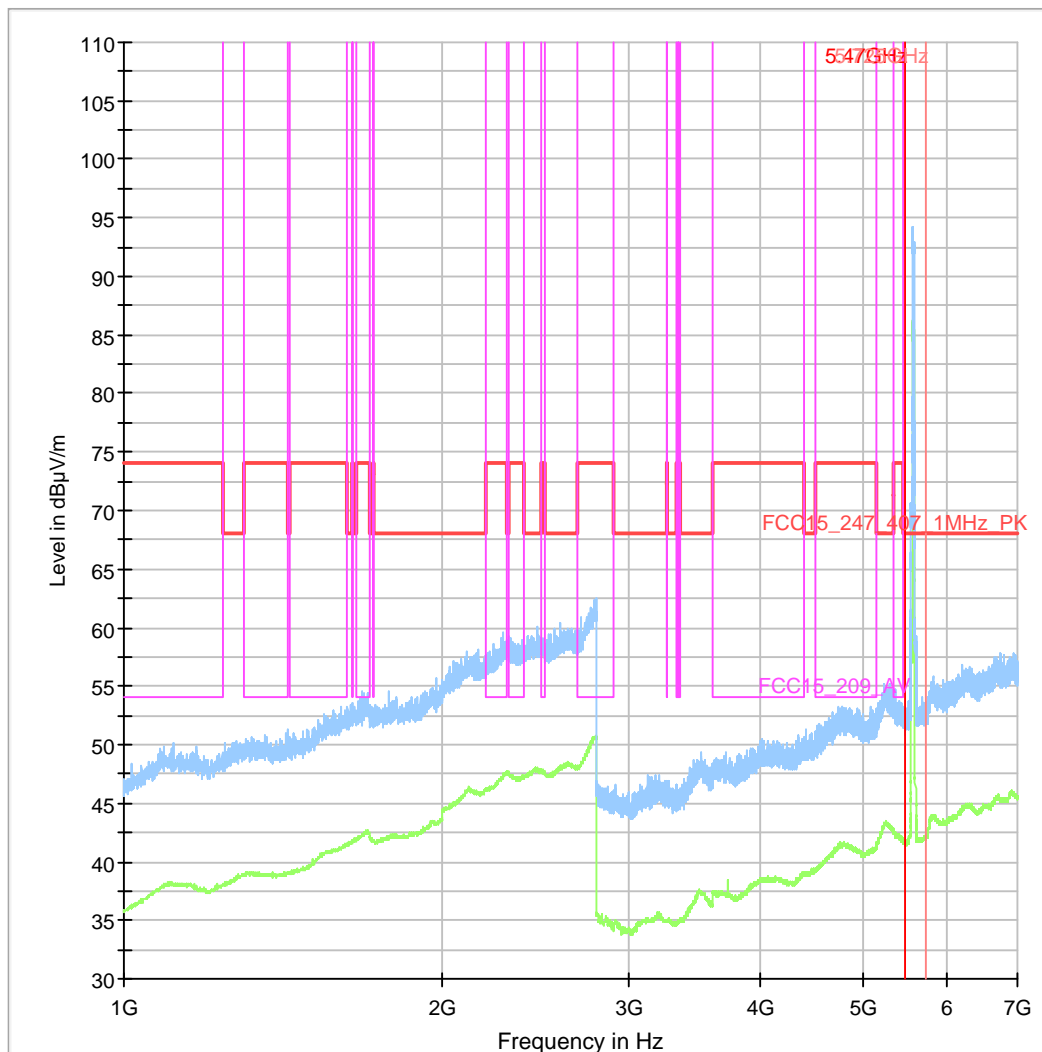


Diagram No.: 4.04_Ch116_6Mbit_sweep4

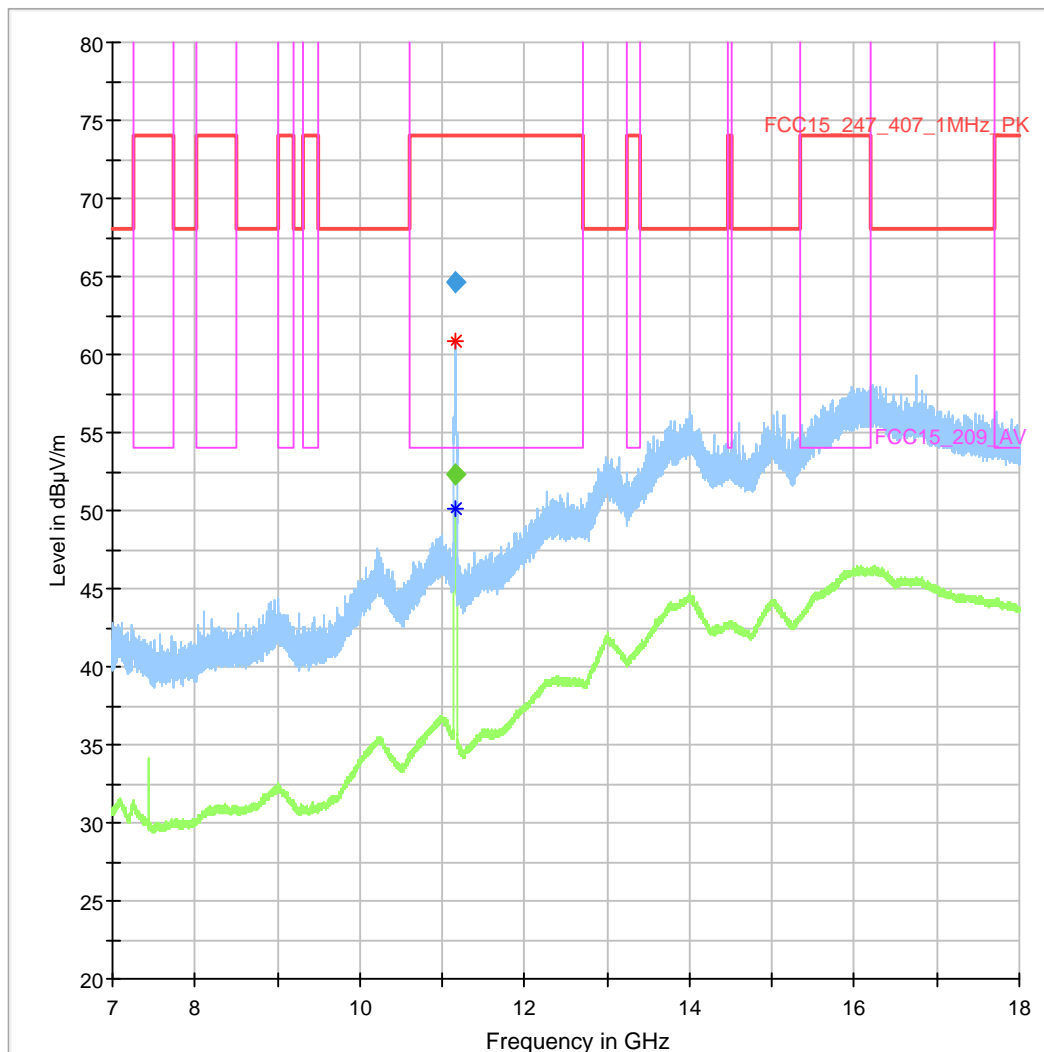
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | npe |
| Comment: | Channel 116, 6MBit, gc=20 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimut h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 11159.700000 | --- | 52.33 | 54.00 | 1.67 | 100.0 | 1000.000 | 155.0 | V | 330.0 | 0.0 |
| 11160.900000 | 64.67 | --- | 74.00 | 9.33 | 100.0 | 1000.000 | 155.0 | V | 330.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 11159.700000 | 10.6 | 09:04:15 - 09.03.2015 |
| 11160.900000 | 10.6 | 09:02:49 - 09.03.2015 |

Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimut h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 11159.700000 | --- | 52.33 | 54.00 | 1.67 | 100.0 | 1000.000 | 155.0 | V | 330.0 | 0.0 |
| 11160.900000 | 64.67 | --- | 74.00 | 9.33 | 100.0 | 1000.000 | 155.0 | V | 330.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 11159.700000 | 10.6 | 09:04:15 - 09.03.2015 |
| 11160.900000 | 10.6 | 09:02:49 - 09.03.2015 |

Diagram No.: 4.05_Ch140_6Mbit_sweep3

Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | KRe |
| Comment: | Channel no. high=140, 6MBit |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EB77 |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum

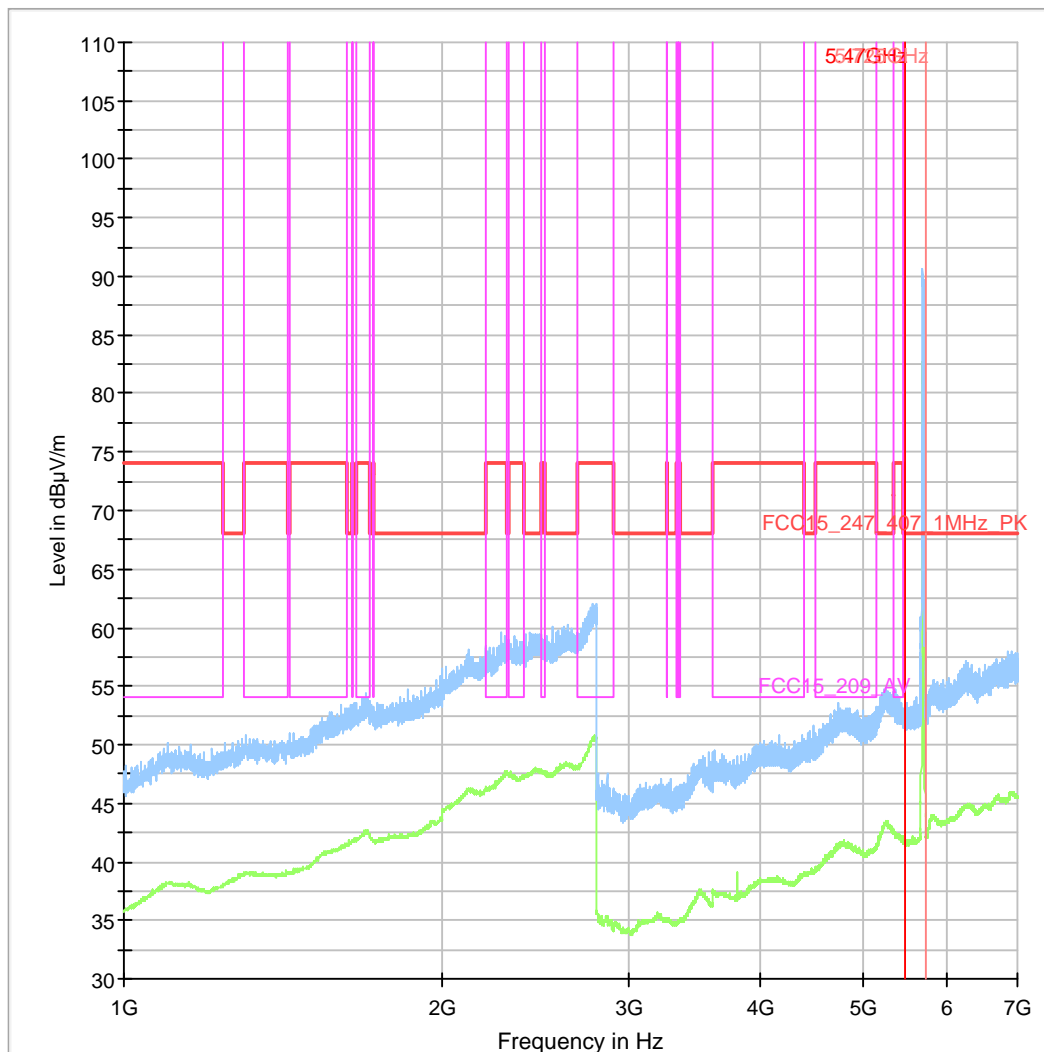


Diagram No.: 4.05_Ch140_6Mbit_sweep4

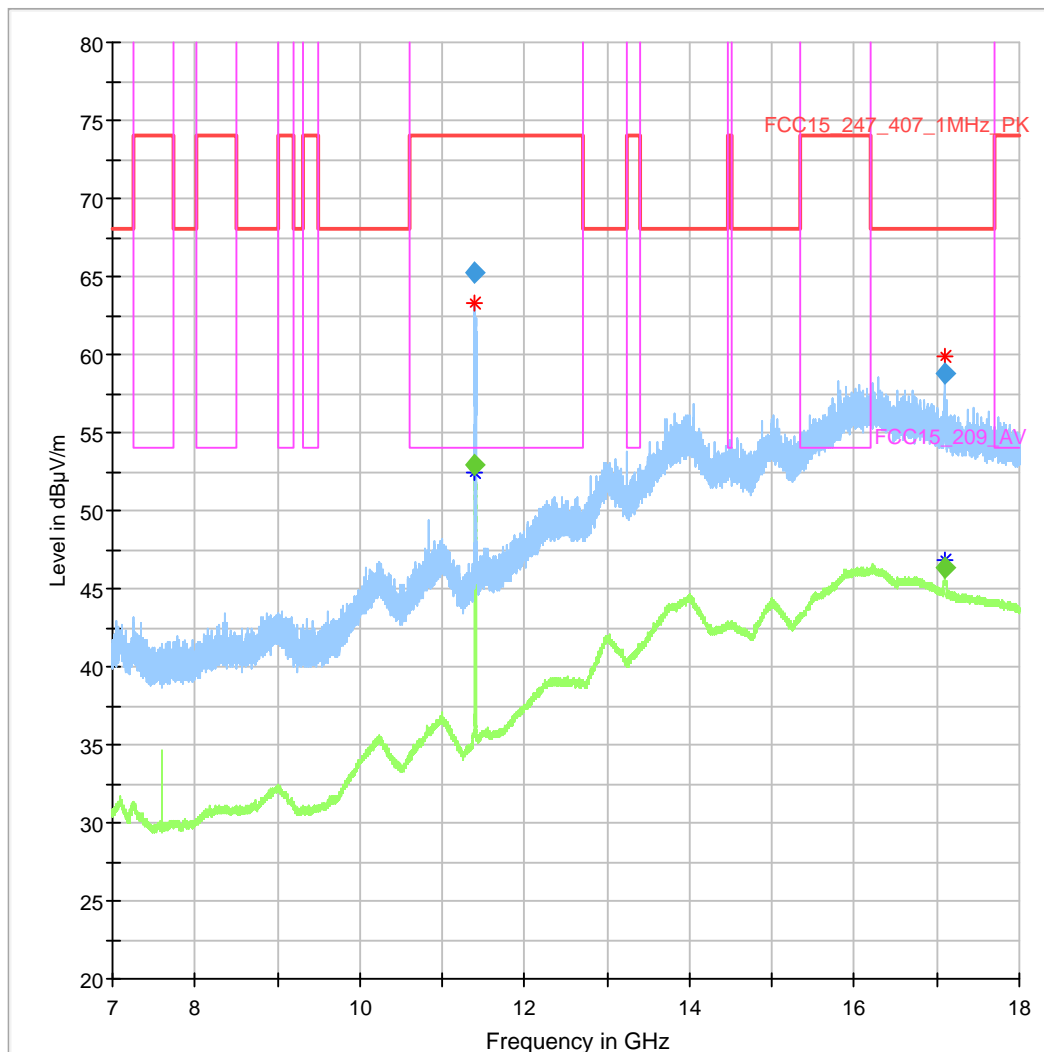
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | MNu |
| Comment: | Channel 140, 6MBit, gc=35 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Po l | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|------|---------------|-----------------|
| 11399.700000 | --- | 52.87 | 54.00 | 1.13 | 100.0 | 1000.000 | 155.0 | V | 329.0 | 0.0 |
| 11400.900000 | 65.22 | --- | 74.00 | 8.78 | 100.0 | 1000.000 | 155.0 | V | 328.0 | 0.0 |
| 17098.700000 | --- | 46.36 | 150.00 | 103.64 | 100.0 | 1000.000 | 155.0 | H | 136.0 | 90.0 |
| 17102.700000 | 58.78 | --- | 68.00 | 9.22 | 100.0 | 1000.000 | 155.0 | H | 125.0 | 90.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 11399.700000 | 10.7 | 09:47:44 - 09.03.2015 |
| 11400.900000 | 10.7 | 09:43:49 - 09.03.2015 |
| 17098.700000 | 19.8 | 09:45:48 - 09.03.2015 |
| 17102.700000 | 19.8 | 09:41:50 - 09.03.2015 |

Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Po l | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|------|---------------|-----------------|
| 11399.700000 | --- | 52.87 | 54.00 | 1.13 | 100.0 | 1000.000 | 155.0 | V | 329.0 | 0.0 |
| 11400.900000 | 65.22 | --- | 74.00 | 8.78 | 100.0 | 1000.000 | 155.0 | V | 328.0 | 0.0 |
| 17098.700000 | --- | 46.36 | 150.00 | 103.64 | 100.0 | 1000.000 | 155.0 | H | 136.0 | 90.0 |
| 17102.700000 | 58.78 | --- | 68.00 | 9.22 | 100.0 | 1000.000 | 155.0 | H | 125.0 | 90.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 11399.700000 | 10.7 | 09:47:44 - 09.03.2015 |
| 11400.900000 | 10.7 | 09:43:49 - 09.03.2015 |
| 17098.700000 | 19.8 | 09:45:48 - 09.03.2015 |
| 17102.700000 | 19.8 | 09:41:50 - 09.03.2015 |

Diagram No.: 4.06_Ch149_6Mbit_sweep3

Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | KRe |
| Comment: | Channel no. low=149, 6MBit |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EB77 |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum

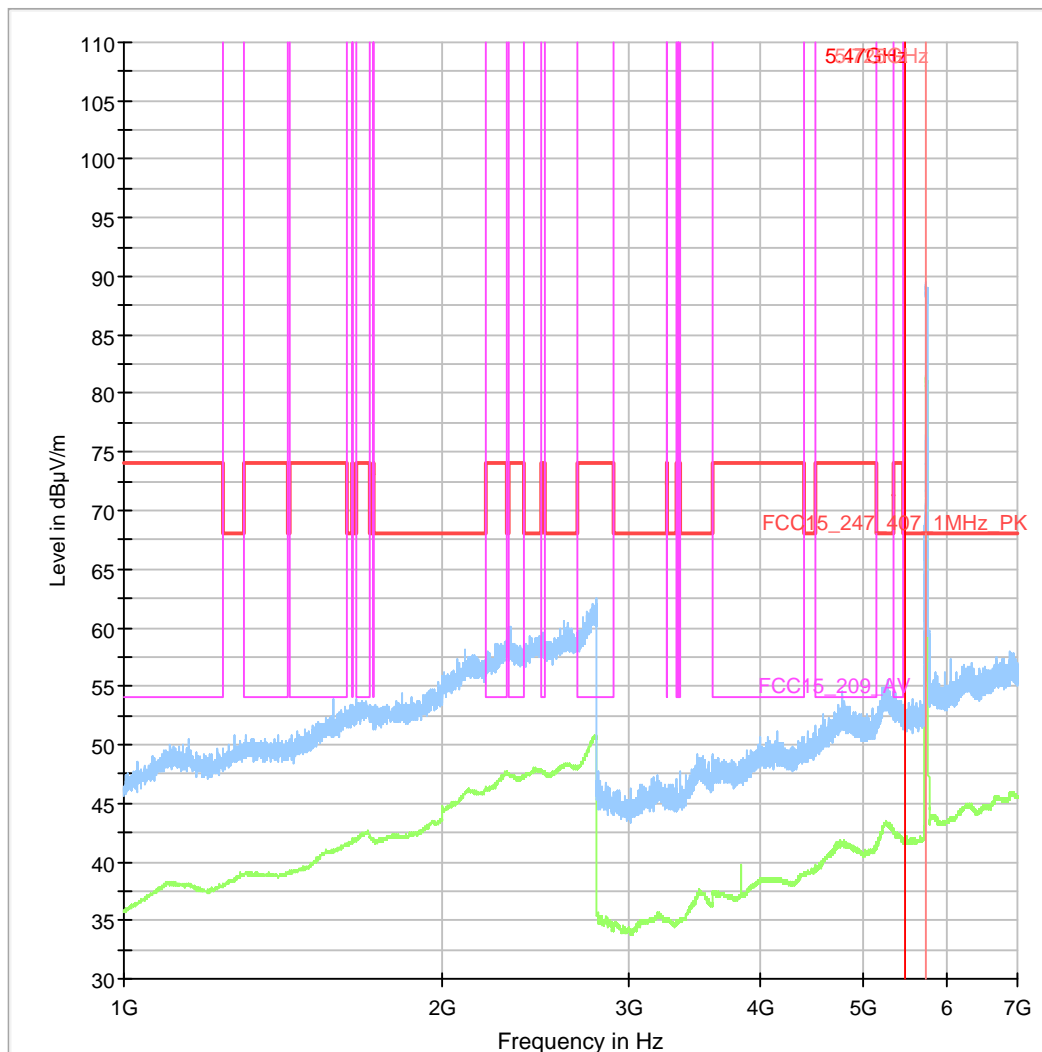


Diagram No.: 4.06_ch149_6Mbit_sweep4

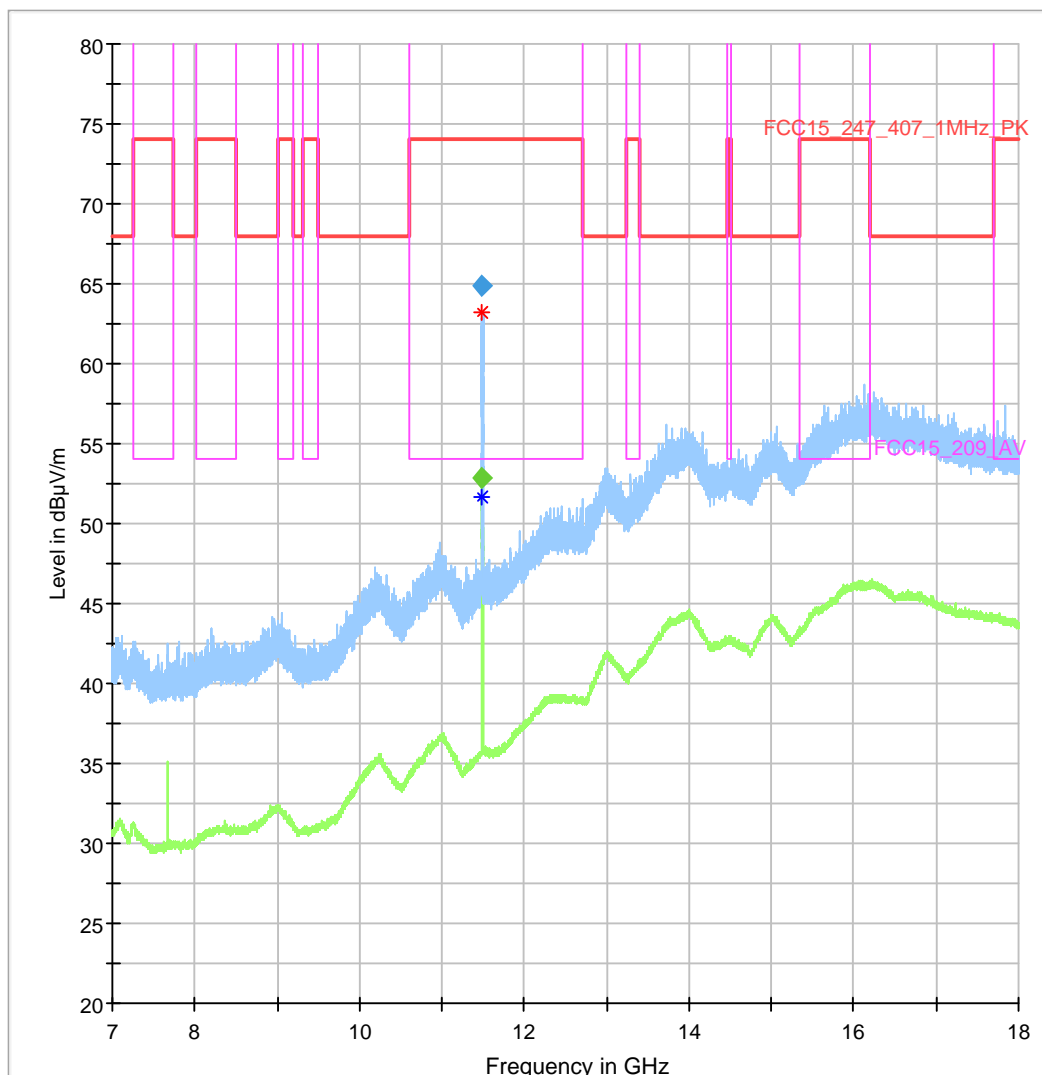
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 1m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | AHo |
| Comment: | Channel no. 149,High, 6Mbit--gc=35, |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimut h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 11489.200000 | 64.92 | --- | 74.00 | 9.08 | 100.0 | 1000.000 | 155.0 | V | 319.0 | 0.0 |
| 11489.700000 | --- | 52.84 | 54.00 | 1.16 | 100.0 | 1000.000 | 155.0 | V | 320.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 11489.200000 | 11.2 | 18:03:54 - 06.03.2015 |
| 11489.700000 | 11.2 | 18:05:22 - 06.03.2015 |

Diagram No.: 4.07_Ch157_mcs0_sweep3

Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | KRe |
| Comment: | Channel no. middle=157, mcs0 |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EB77 |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum

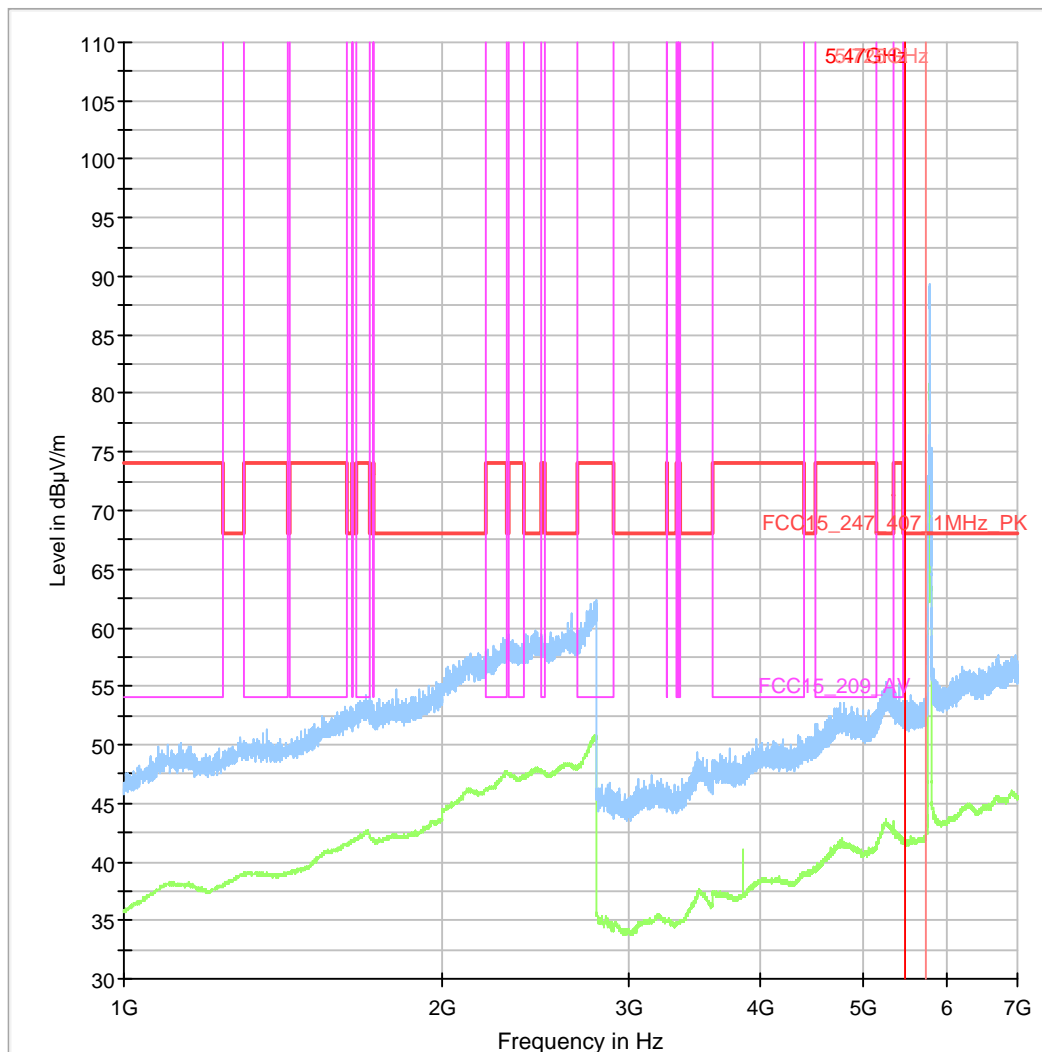


Diagram No.: 4.07_ch157_mcs0_sweep4_gc40

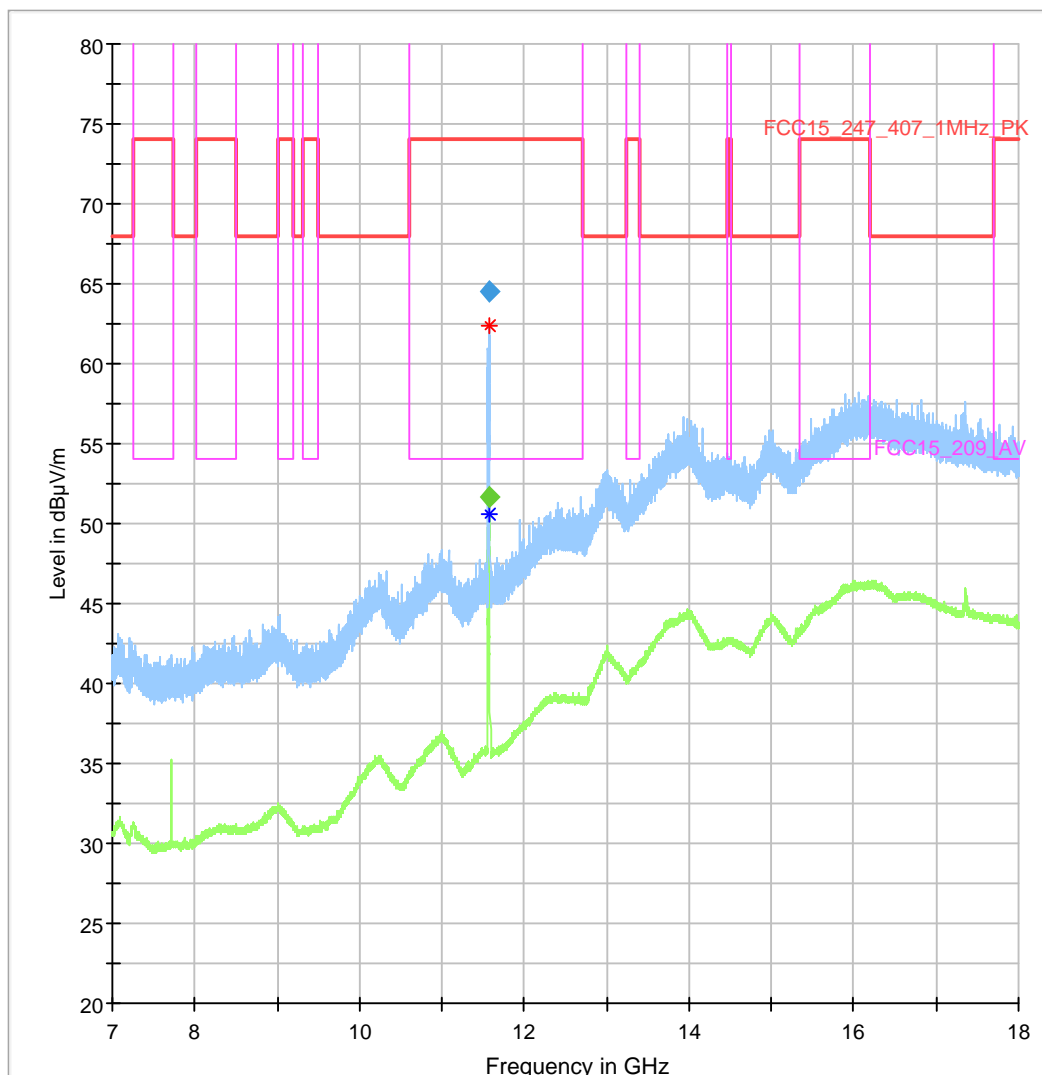
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | AHo |
| Comment: | Channel no. 157,High, gc=40,mcs=0 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimut h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 11569.700000 | --- | 51.69 | 54.00 | 2.31 | 100.0 | 1000.000 | 155.0 | H | 230.0 | 90.0 |
| 11570.300000 | 64.50 | --- | 74.00 | 9.50 | 100.0 | 1000.000 | 155.0 | H | 231.0 | 90.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 11569.700000 | 11.2 | 16:51:39 - 06.03.2015 |
| 11570.300000 | 11.2 | 16:50:15 - 06.03.2015 |

Diagram No.: 4.08_Ch165_mcs2_sweep3

Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | KRe |
| Comment: | Channel no. high=165, mcs2 |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys |
| Serial Number: | T26105EB77 |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120V AC 60 Hz |
| Comments: | |

Full Spectrum

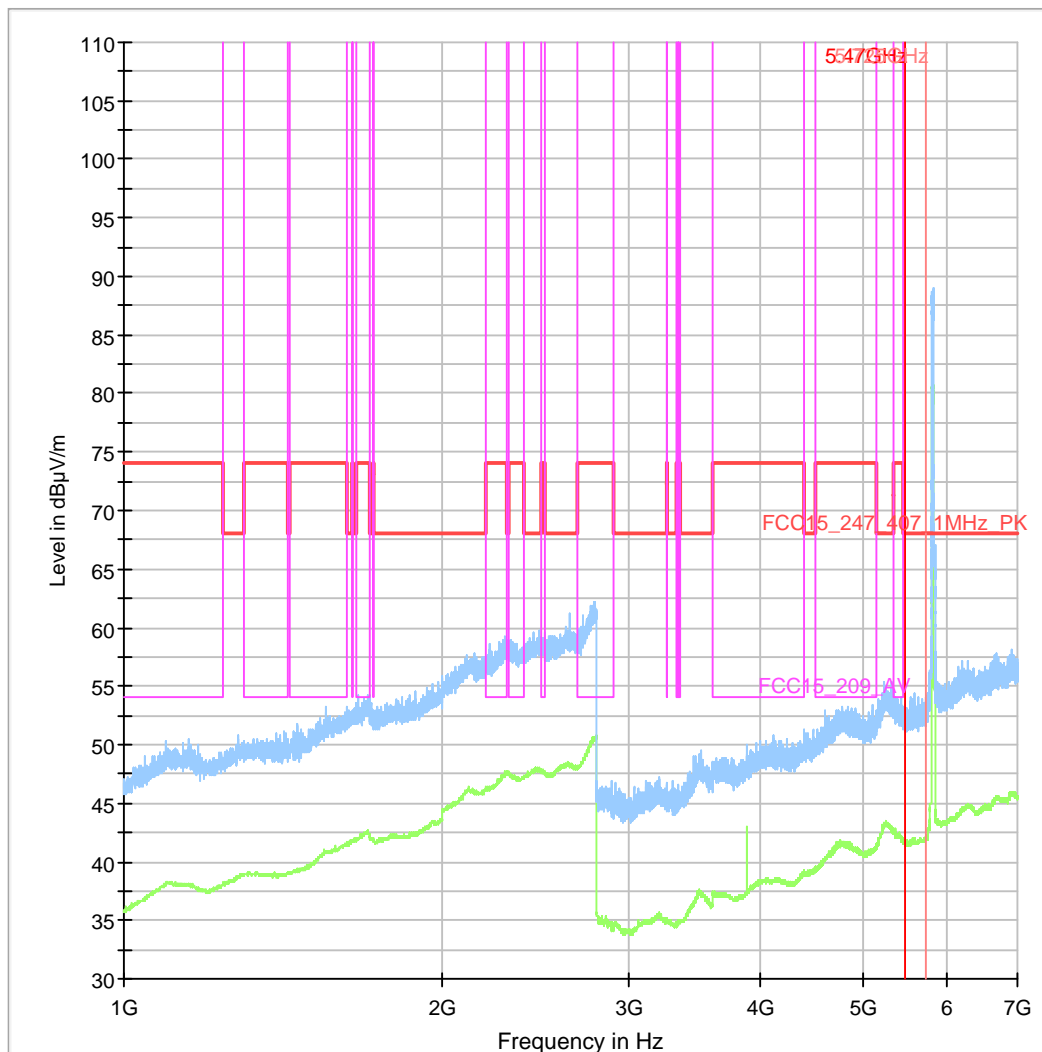


Diagram No.: 4.08_ch165_mcs2_sweep4

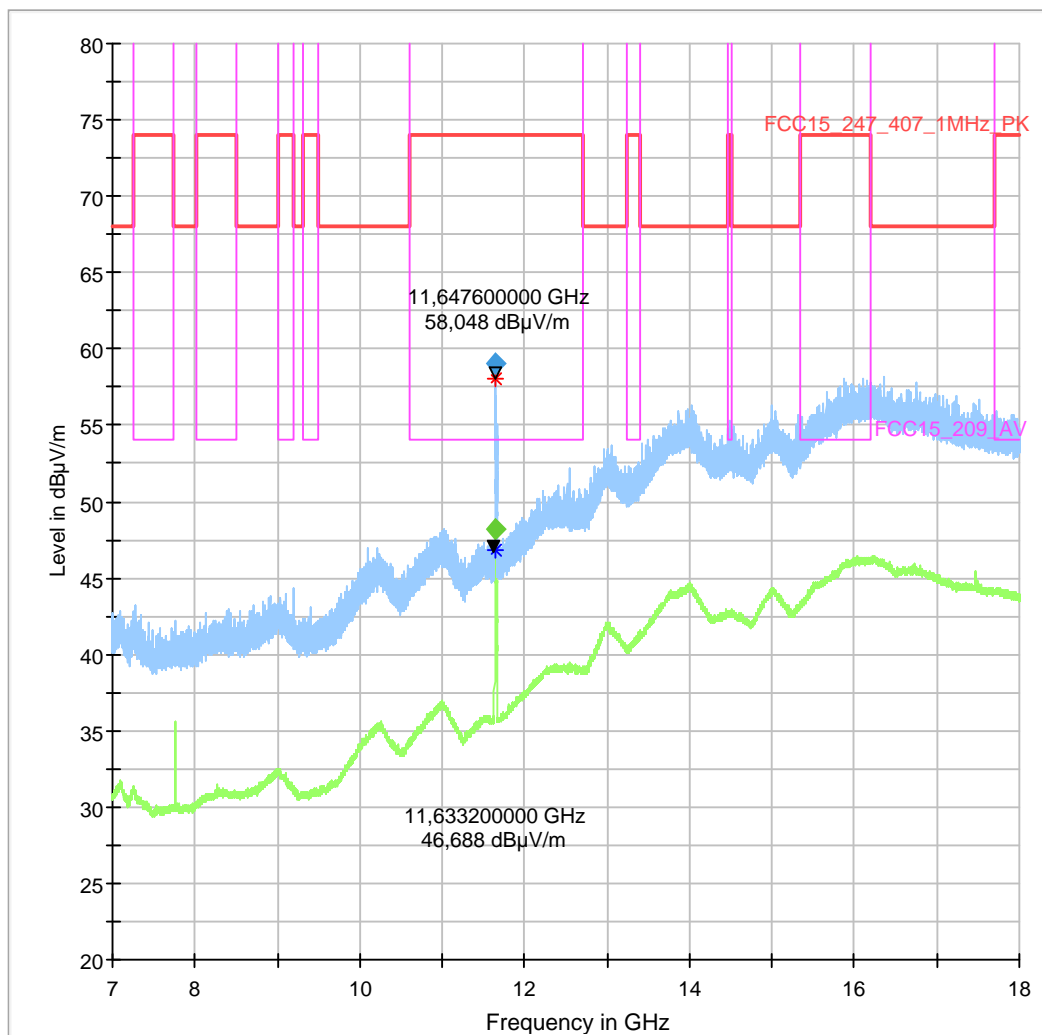
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | Lor |
| Comment: | Channel no. high=165 PWR Level=40, MCS2 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimut h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 11649.000000 | 59.08 | --- | 74.00 | 14.92 | 100.0 | 1000.000 | 155.0 | H | 231.0 | 90.0 |
| 11649.700000 | --- | 48.20 | 54.00 | 5.80 | 100.0 | 1000.000 | 155.0 | H | 230.0 | 90.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 11649.000000 | 11.2 | 16:13:53 - 06.03.2015 |
| 11649.700000 | 11.2 | 16:15:19 - 06.03.2015 |

1.2.4. Field strength measurements 18GHz < f < 40GHz

Diagram No.: 4.01_ch36_mcs0_sweep5

Common Information

| | |
|----------------------------|---|
| Test Description: | Radiated field strength emission in 1m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.247, 15.205&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Distance correction factor | 3 to 1m: -10.5 dB applying to measurement results |
| SW-Version: | EMC32 V8.53.0 |
| Operation mode: | TX mode continuous |
| Operator Name: | npe |
| Comment: | Channel no. low=36 (5180MHz), MSC0 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | |
| Power Supply: | |

FCC_Sweep_15.407_18_40GHz_Pre

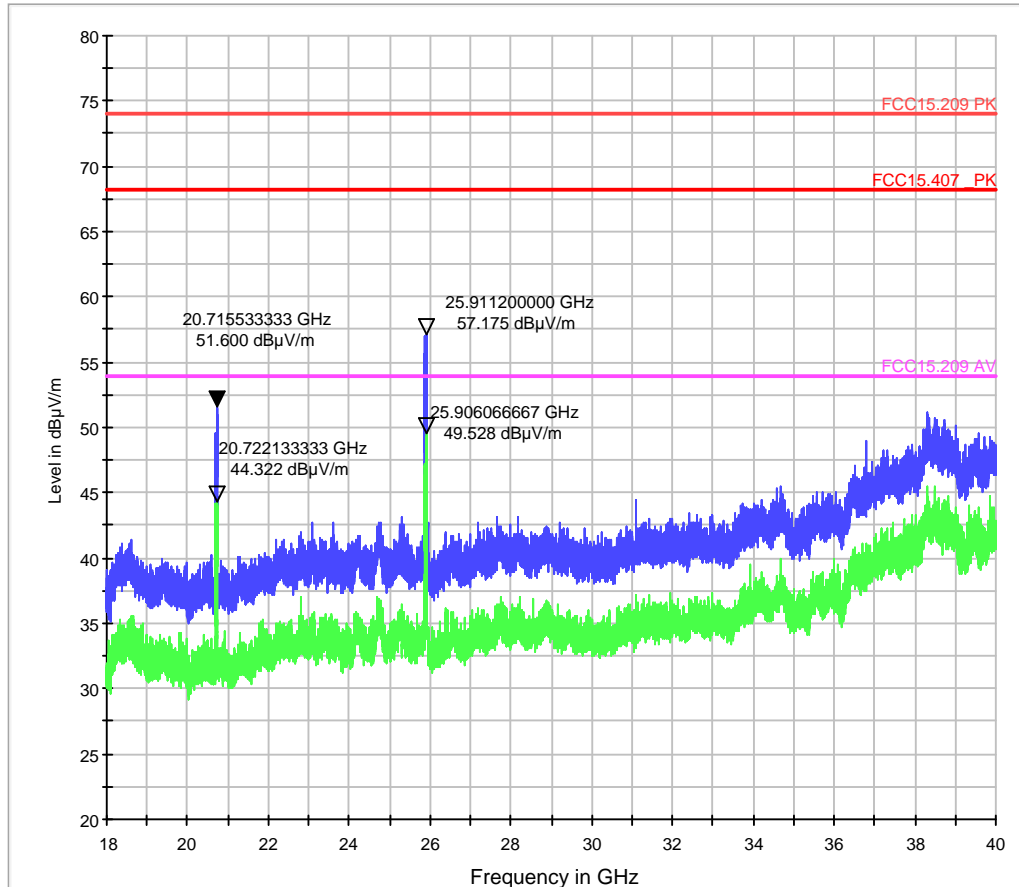


Diagram No.: 4.02_ch64_mcs1_sweep5

Common Information

| | |
|----------------------------|---|
| Test Description: | Radiated field strength emission in 1m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.247, 15.205&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Distance correction factor | 3 to 1m: -10.5 dB applying to measurement results |
| SW-Version: | EMC32 V8.53.0 |
| Operation mode: | TX mode continuous |
| Operator Name: | npe |
| Comment: | Channel no. 64, MSC1 |

EUT Information

| | |
|---------------|-------------|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |

| | |
|-----------------------|---|
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | |
| Power Supply: | |

FCC_Sweep_15.407_18_40GHz_Pre

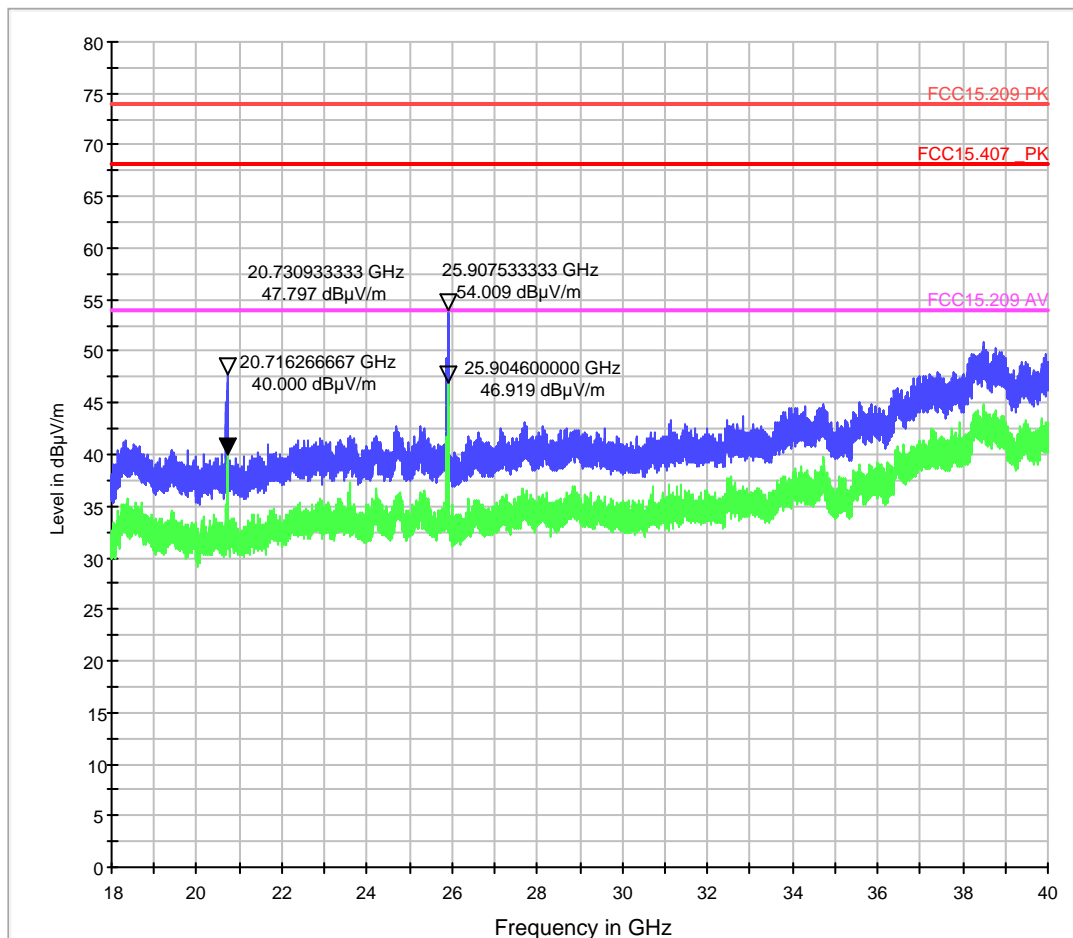


Diagram No.: 4.03_ch100_6MBit_sweep5

Common Information

| | |
|----------------------------|---|
| Test Description: | Radiated field strength emission in 1m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.247, 15.205&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Distance correction factor | 3 to 1m: -10.5 dB applying to measurement results |
| SW-Version: | EMC32 V8.53.0 |
| Operation mode: | TX mode continuous |
| Operator Name: | npe |
| Comment: | Channel no. 100, 6Mbit |

EUT Information

| | |
|---------------|-------------|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |

| | |
|-----------------------|---|
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | |
| Power Supply: | |

FCC_Sweep_15.407_18_40GHz_Pre

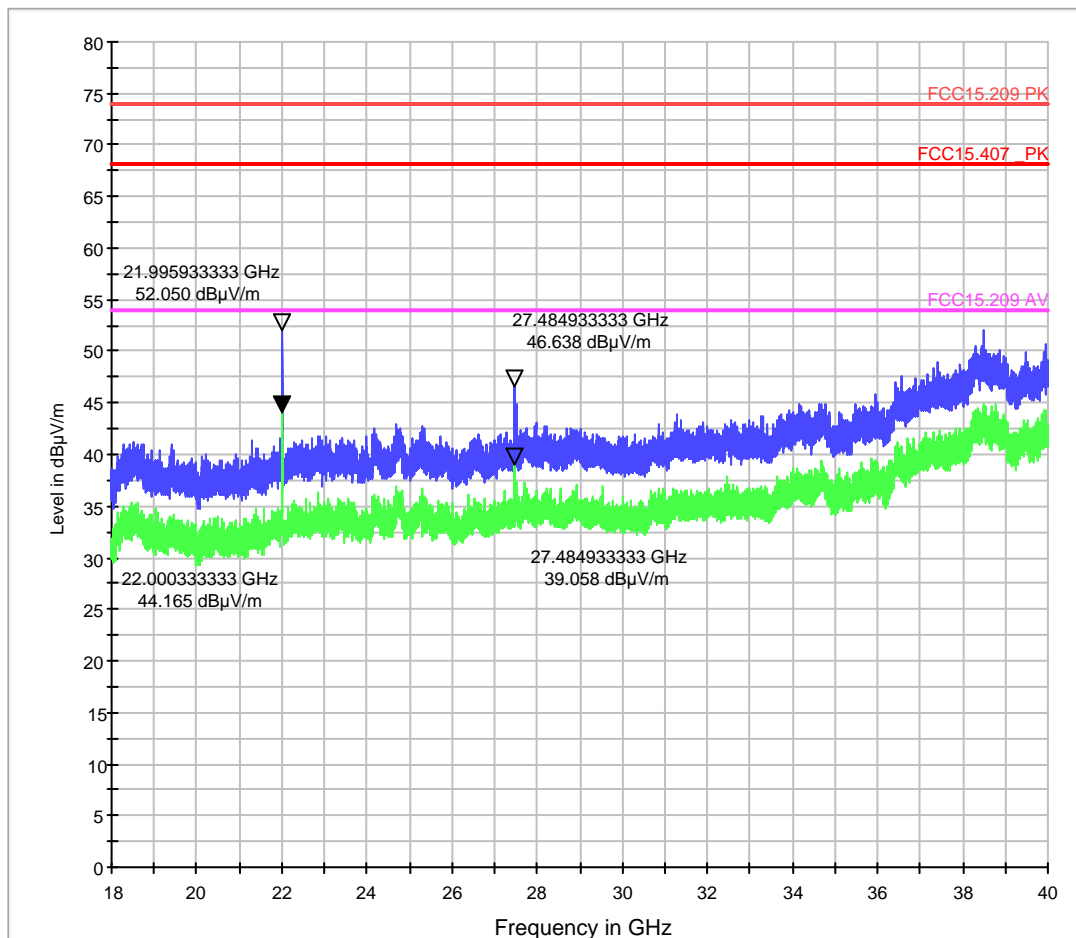


Diagram No.: 4.04_Ch116_6Mbit_sweep5

Common Information

| | |
|----------------------------|---|
| Test Description: | Radiated field strength emission in 1m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.247, 15.205&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Distance correction factor | 3 to 1m: -10.5 dB applying to measurement results |
| SW-Version: | EMC32 V8.53.0 |
| Operation mode: | TX mode continuous |
| Operator Name: | npe |
| Comment: | Channel no. 116, 6Mbit |

EUT Information

| | |
|---------------|-------------|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |

| | |
|-----------------------|---|
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | |
| Power Supply: | |

FCC_Sweep_15.407_18_40GHz_Pre

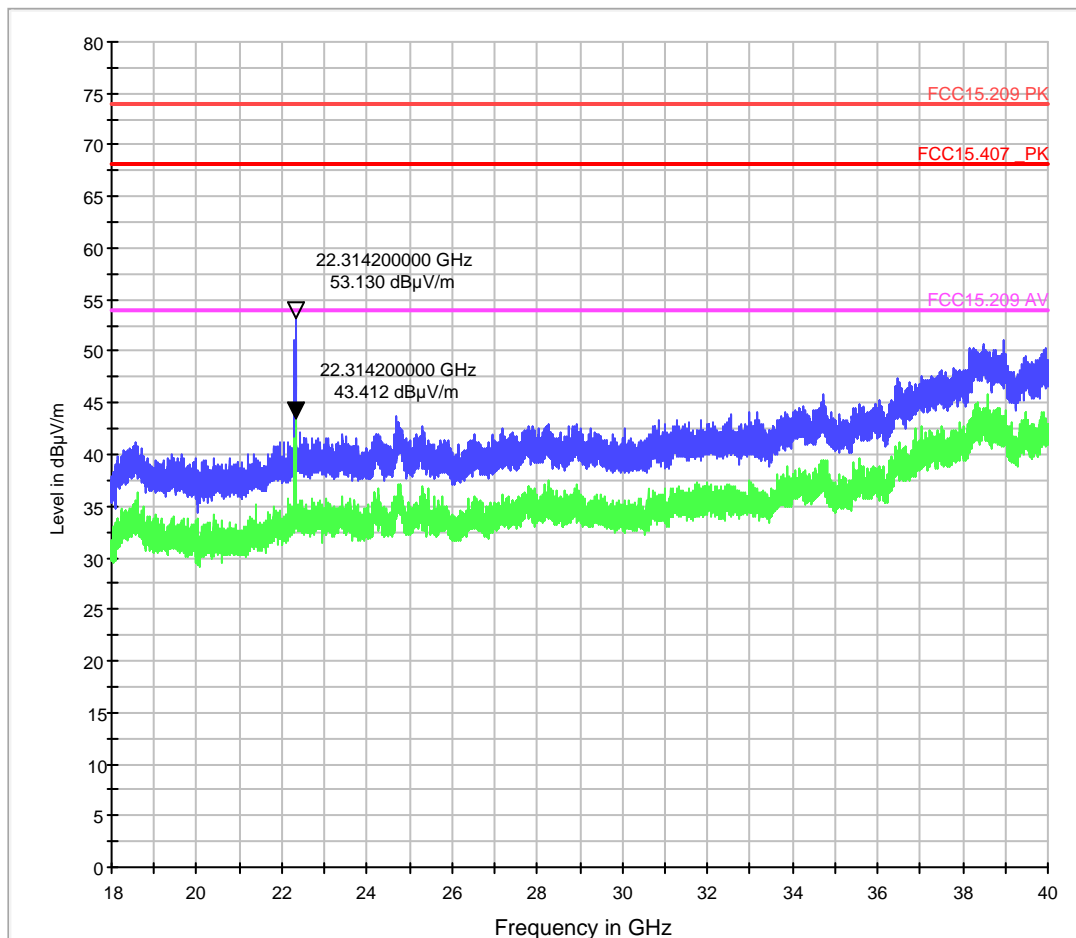


Diagram No.: 4.05_Ch140_6Mbit_sweep5

Common Information

| | |
|----------------------------|---|
| Test Description: | Radiated field strength emission in 1m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.247, 15.205&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Distance correction factor | 3 to 1m: -10.5 dB applying to measurement results |
| SW-Version: | EMC32 V8.53.0 |
| Operation mode: | TX mode continuous |
| Operator Name: | npe |
| Comment: | Channel no. 140, 6Mbit |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | |
| Power Supply: | |

FCC_Sweep_15.407_18_40GHz_Pre

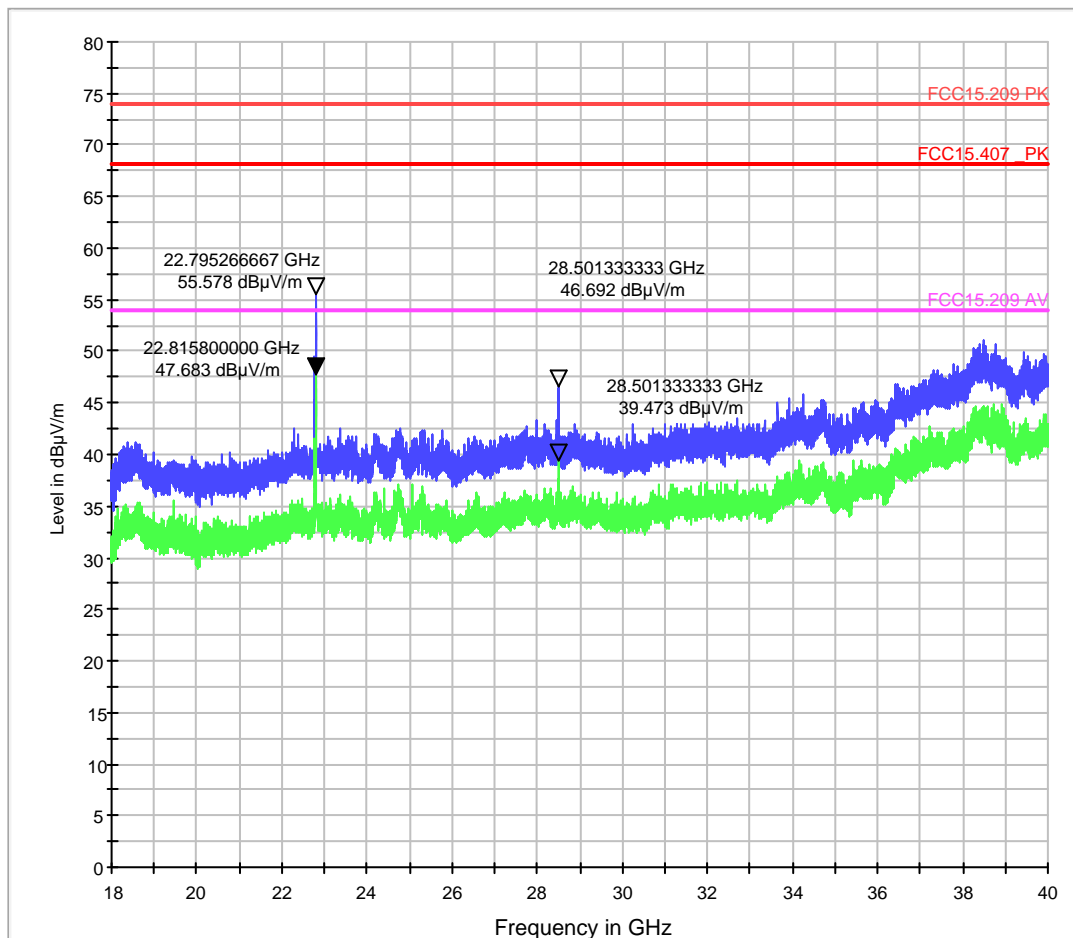


Diagram No.: 4.06_Ch149_6Mbit_sweep5

Common Information

| | |
|----------------------------|---|
| Test Description: | Radiated field strength emission in 1m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.247, 15.205&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Distance correction factor | 3 to 1m: -10.5 dB applying to measurement results |
| SW-Version: | EMC32 V8.53.0 |
| Operation mode: | TX mode continuous |
| Operator Name: | npe |
| Comment: | Channel no. 149, 6Mbit |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | |
| Power Supply: | |

FCC_Sweep_15.407_18_40GHz_Pre

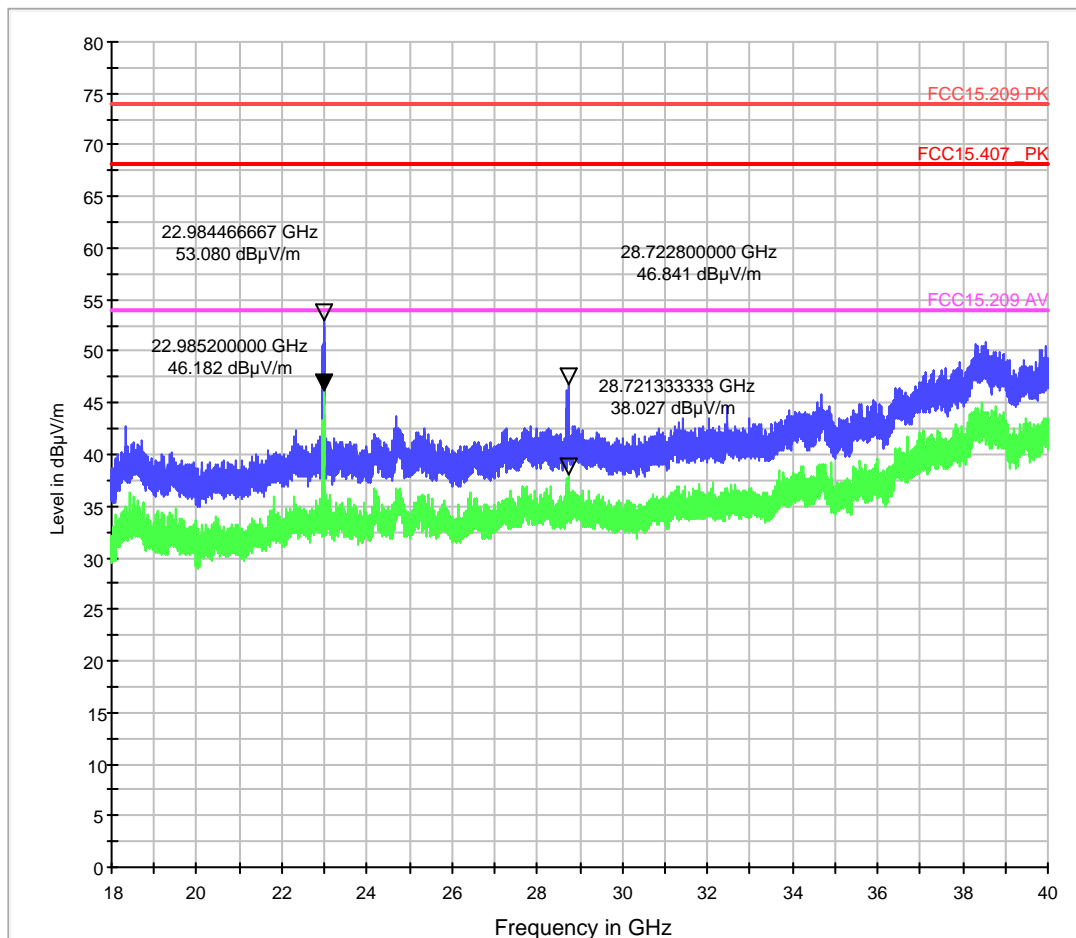


Diagram No.: 4.07_Ch157_mcs0_sweep5

Common Information

| | |
|----------------------------|---|
| Test Description: | Radiated field strength emission in 1m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.247, 15.205&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Distance correction factor | 3 to 1m: -10.5 dB applying to measurement results |
| SW-Version: | EMC32 V8.53.0 |
| Operation mode: | TX mode continuous |
| Operator Name: | npe |
| Comment: | Channel no. 157, MSC0 |

EUT Information

| | |
|---------------|-------------|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |

| | |
|-----------------------|---|
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | |
| Power Supply: | |

FCC_Sweep_15.407_18_40GHz_Pre

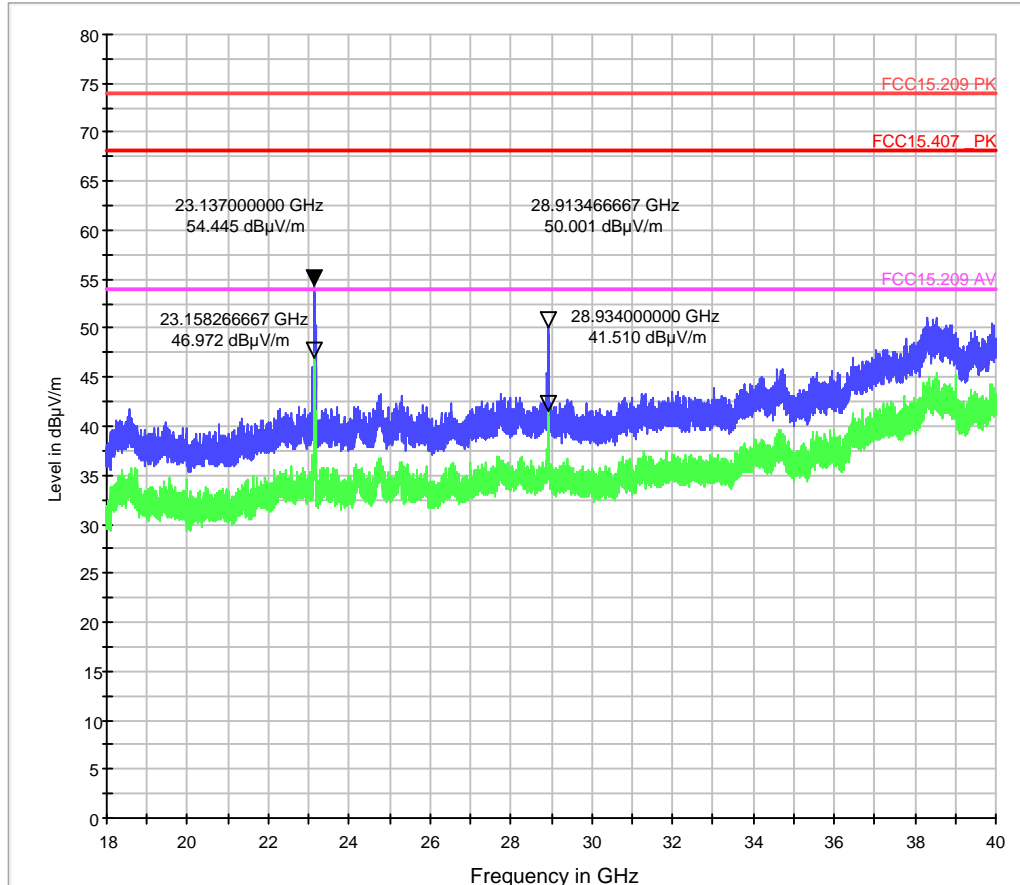


Diagram No.: 4.08_Ch165_mcs2_sweep5

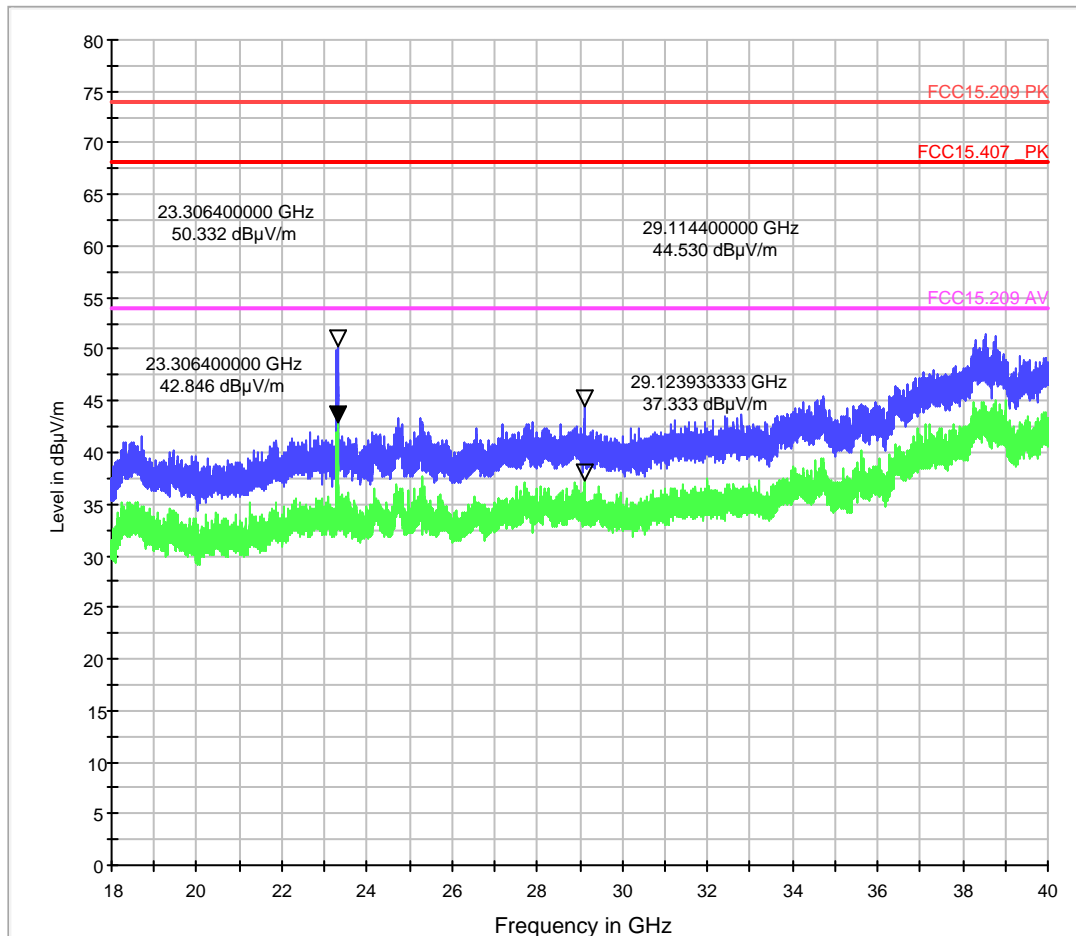
Common Information

| | |
|----------------------------|---|
| Test Description: | Radiated field strength emission in 1m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.247, 15.205&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Distance correction factor | 3 to 1m: -10.5 dB applying to measurement results |
| SW-Version: | EMC32 V8.53.0 |
| Operation mode: | TX mode continuous |
| Operator Name: | npe |
| Comment: | Channel no. 165, MSC2 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | |
| Power Supply: | |

FCC_Sweep_15.407_18_40GHz_Pre



1.3. Radiated band-edge measurements accord. §15.205 (§15.209) and §15.407

1.3.1. Channel 36 (20MHz Signal BW - left band edge)

Diagram No.: 9.01_BE_Low_Ch36_MCS0

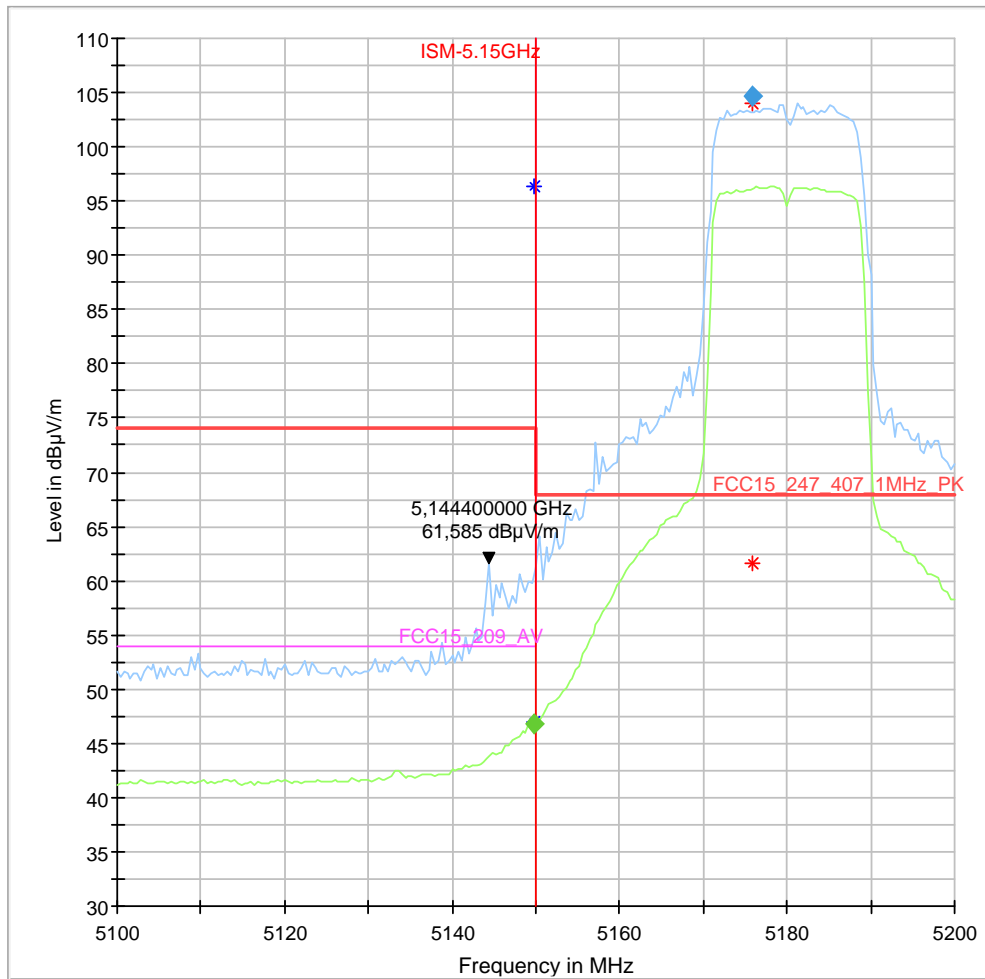
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance (Band-Edge) |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.205 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | Lor |
| Comment: | Channel no. low=36 MCS0, PWR Setting=25 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | ----- |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | -- |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|-----|---------------|-----------------|
| 5149.750000 | --- | 46.87 | 54.00 | 7.13 | 100.0 | 1000.000 | 155.0 | H | 128.0 | 0.0 |
| 5175.950000 | 104.65 | --- | 68.00 | -36.65 | 100.0 | 1000.000 | 155.0 | H | 88.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr. | Comment |
|-----------------|-------|-----------------------|
| 5149.750000 | 10.8 | 09:12:19 - 11.03.2015 |
| 5175.950000 | 11.4 | 09:07:35 - 11.03.2015 |

Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|-----|---------------|-----------------|
| 5149.750000 | --- | 46.87 | 54.00 | 7.13 | 100.0 | 1000.000 | 155.0 | H | 128.0 | 0.0 |
| 5175.950000 | 104.65 | --- | 68.00 | -36.65 | 100.0 | 1000.000 | 155.0 | H | 88.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr. | Comment |
|-----------------|-------|-----------------------|
| 5149.750000 | 10.8 | 09:12:19 - 11.03.2015 |
| 5175.950000 | 11.4 | 09:07:35 - 11.03.2015 |

1.3.2. Channel 64 (20MHz Signal BW - right band edge)

Diagram No.: 9.02_BE_High_Ch64_MCS1

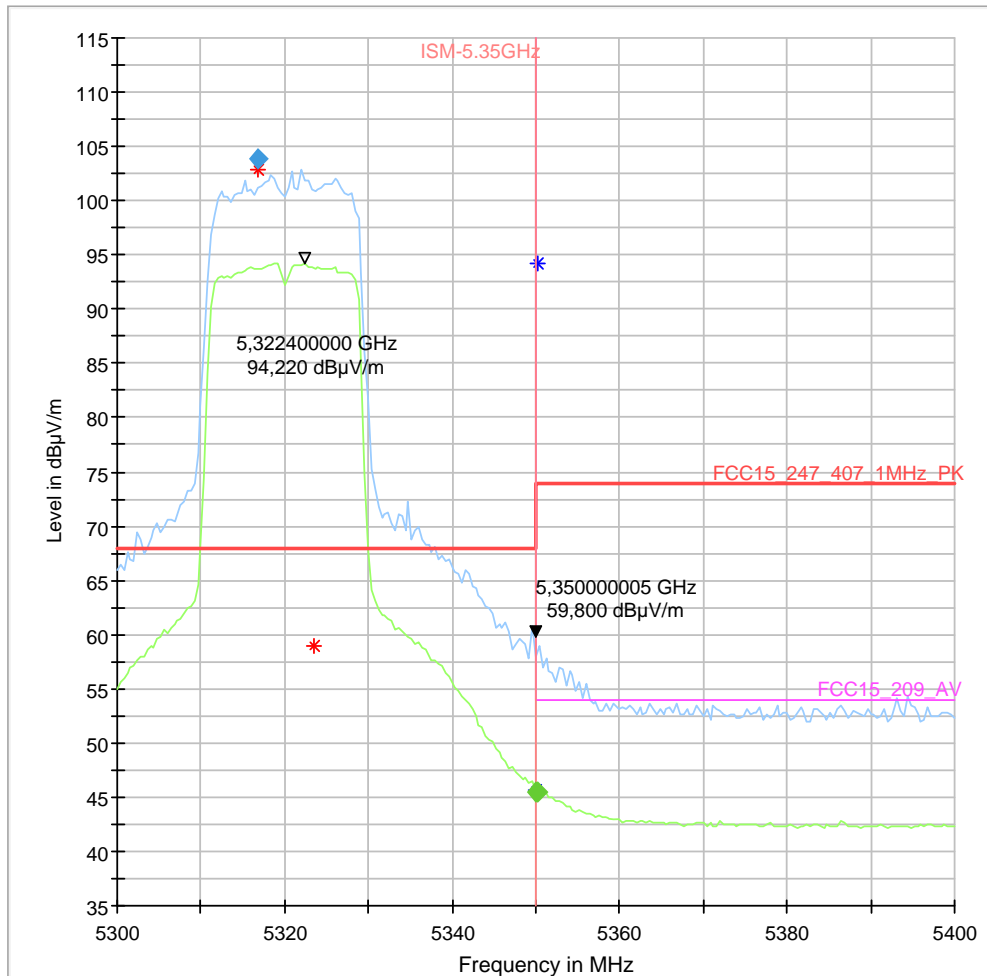
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance (Band-Edge) |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.205 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | KMo |
| Comment: | Channel no. high=64 MCS1, PWR Setting: 20 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EUT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Po l | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|------|---------------|-----------------|
| 5316.750000 | 103.80 | --- | 68.00 | -35.80 | 100.0 | 1000.000 | 155.0 | H | 301.0 | 0.0 |
| 5350.000000 | --- | 45.50 | 54.00 | 8.50 | 100.0 | 1000.000 | 155.0 | H | 294.0 | 0.0 |
| 5350.150000 | --- | 45.41 | 54.00 | 8.59 | 100.0 | 1000.000 | 155.0 | H | 295.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 5316.750000 | 12.4 | 09:32:41 - 11.03.2015 |
| 5350.000000 | 12.2 | 09:36:19 - 11.03.2015 |
| 5350.150000 | 12.2 | 09:35:05 - 11.03.2015 |

Final_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Po l | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|------|---------------|-----------------|
| 5316.750000 | 103.80 | --- | 68.00 | -35.80 | 100.0 | 1000.000 | 155.0 | H | 301.0 | 0.0 |
| 5350.000000 | --- | 45.50 | 54.00 | 8.50 | 100.0 | 1000.000 | 155.0 | H | 294.0 | 0.0 |
| 5350.150000 | --- | 45.41 | 54.00 | 8.59 | 100.0 | 1000.000 | 155.0 | H | 295.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 5316.750000 | 12.4 | 09:32:41 - 11.03.2015 |
| 5350.000000 | 12.2 | 09:36:19 - 11.03.2015 |
| 5350.150000 | 12.2 | 09:35:05 - 11.03.2015 |

1.3.3. Channel 100 (20MHz Signal BW - left band edge)

Diagram No.: 9.03_BE_Low_Ch100_6MBit

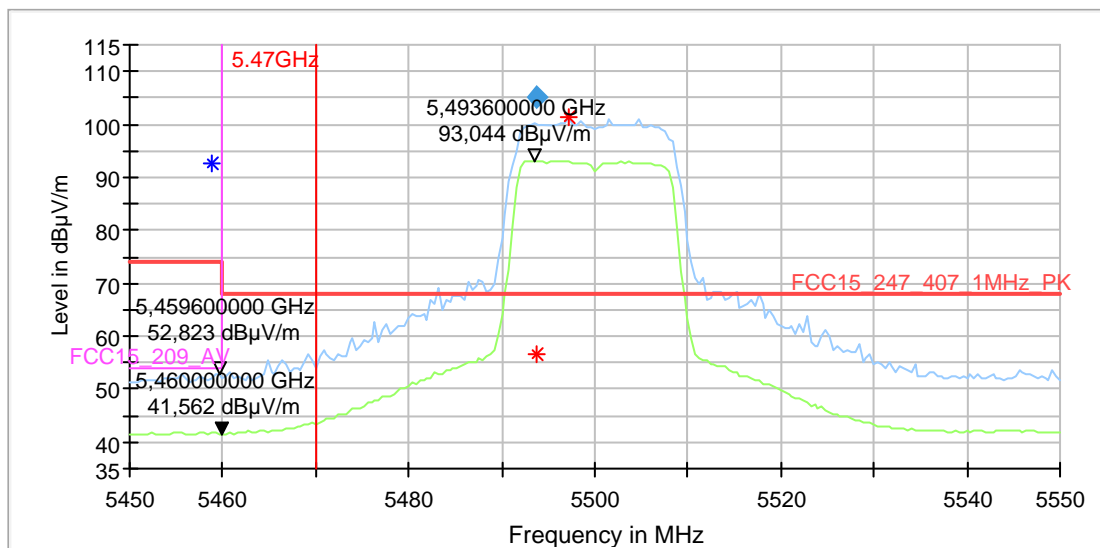
Common Information

Test Description: Radiated field strength emission in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.407&15.209 Intentional Radiator
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous
 Operator Name: Lor
 Comment: Channel no. low=100
 6Mbit, PWR Setting=20

EUT Information

Manufacturer: Ascom AB
 EuT: SH1-ACAA/PF
 HW Version:
 SW Version: myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys
 Serial Number: T26105GL8N
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
 Power Supply: 120VAC
 Comments:

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Po l | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|------|---------------|-----------------|
| 5493.750000 | 105.04 | --- | 68.00 | -37.04 | 100.0 | 1000.000 | 155.0 | H | 16.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 5493.750000 | 11.3 | 09:56:16 - 11.03.2015 |

1.3.4. Channel 140 (20MHz Signal BW - right band edge)

Diagram No.: 9.05_BE_High_Ch140_6MBit

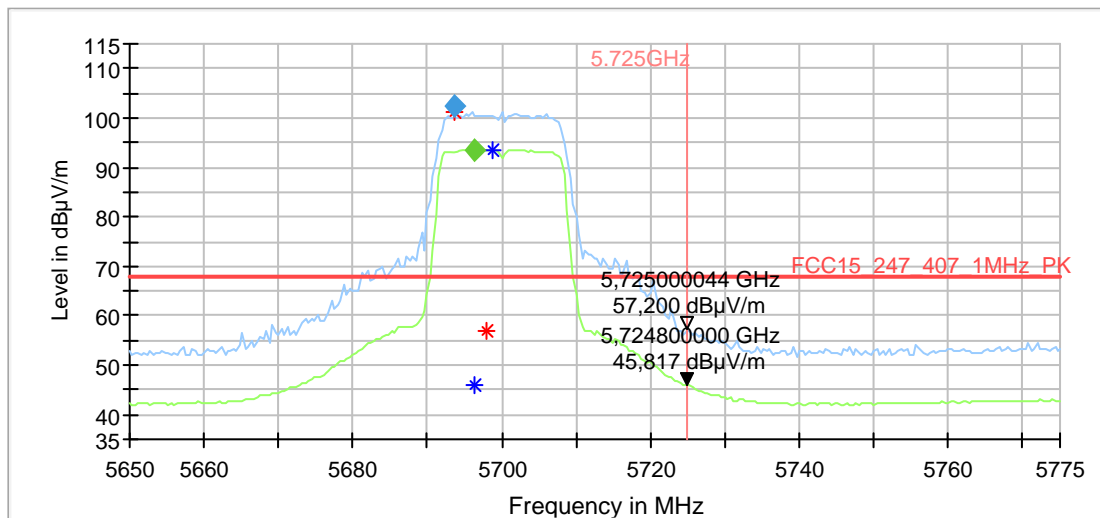
Common Information

Test Description: Radiated field strength emission in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.407&15.209 Intentional Radiator
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous
 Operator Name: Lor
 Comment: Channel no. low=140
 6Mbit, PWR Setting=35

EUT Information

Manufacturer: Ascom AB
 EuT: SH1-ACAA/PF
 HW Version:
 SW Version: myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys
 Serial Number: T26105GL8N
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
 Power Supply: 120VAC
 Comments:

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|-----|---------------|-----------------|
| 5693.750000 | 102.28 | --- | 68.00 | -34.28 | 100.0 | 1000.000 | 155.0 | H | 314.0 | 90.0 |
| 5696.450000 | --- | 93.60 | 150.00 | 56.40 | 100.0 | 1000.000 | 155.0 | H | 314.0 | 90.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr. | Comment |
|-----------------|-------|-----------------------|
| 5693.750000 | 11.5 | 10:15:56 - 11.03.2015 |
| 5696.450000 | 11.6 | 10:19:25 - 11.03.2015 |

1.3.5. Channel 149 (20MHz Signal BW - left band edge)

Diagram No.: 9.06_BE_Low_Ch149_6MBit

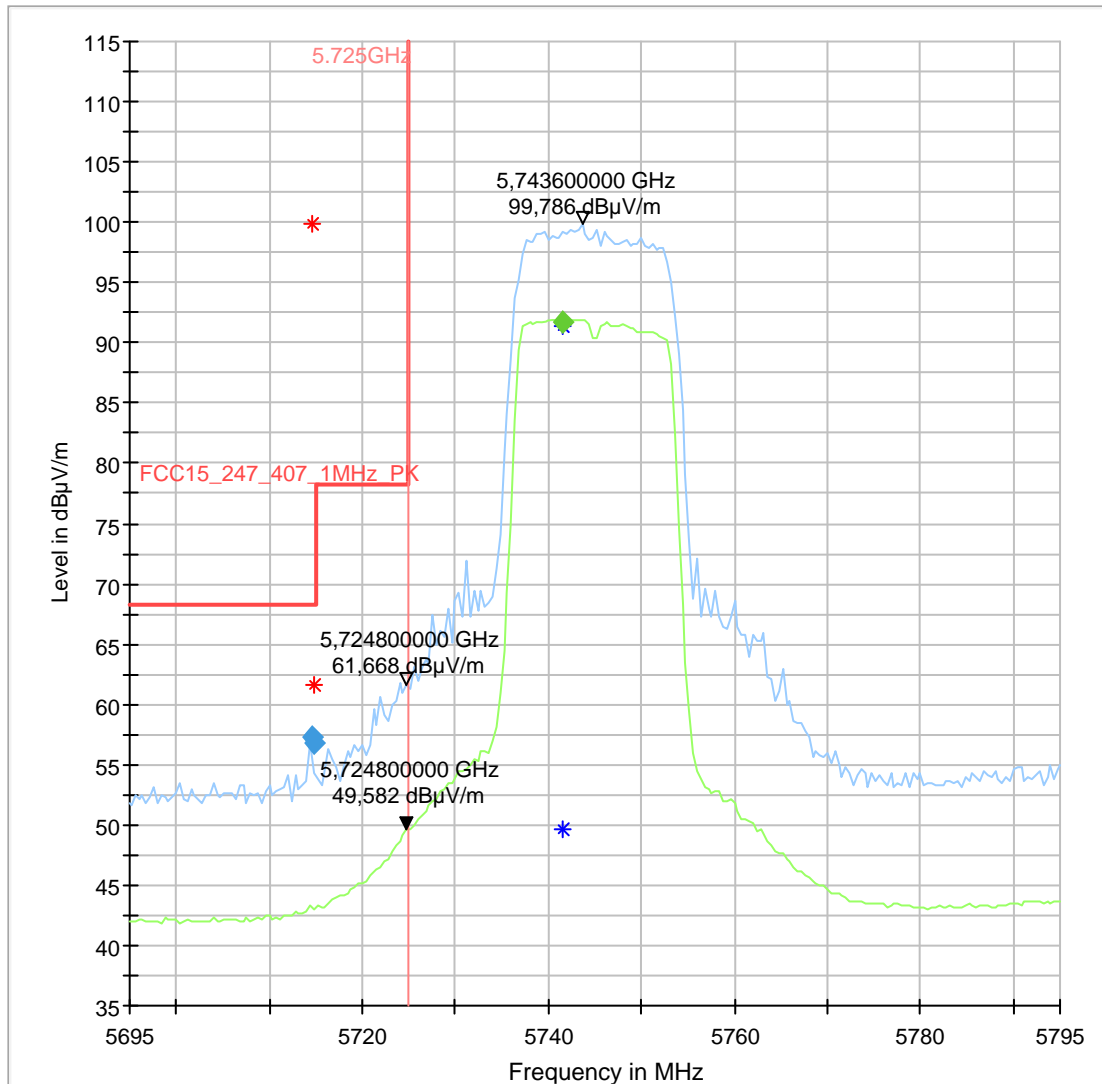
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | Lor |
| Comment: | Channel no. low=149 6Mbit, PWR Setting=35 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margi n (dB) | Meas . Time | Bandwidt h (kHz) | Heigh t (cm) | Po l | Azimet h (deg) | Elevatio n (deg) |
|-----------------|------------------|--------------|----------------|--------------|-------------|------------------|--------------|------|----------------|------------------|
| 5714.600000 | 57.21 | --- | 68.20 | 10.99 | 100.0 | 1000.000 | 155.0 | H | 85.0 | 90.0 |
| 5714.800000 | 56.76 | --- | 68.20 | 11.44 | 100.0 | 1000.000 | 155.0 | H | 81.0 | 90.0 |
| 5741.600000 | --- | 91.77 | 150.00 | 58.23 | 100.0 | 1000.000 | 155.0 | V | 90.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 5714.600000 | 11.7 | 10:46:18 - 11.03.2015 |
| 5714.800000 | 11.7 | 10:45:07 - 11.03.2015 |
| 5741.600000 | 11.8 | 10:48:57 - 11.03.2015 |

1.3.6. Channel 161 (20MHz Signal BW - right band edge)

Diagram No.: 9.07_BE_High_Ch161_MCS0

Common Information

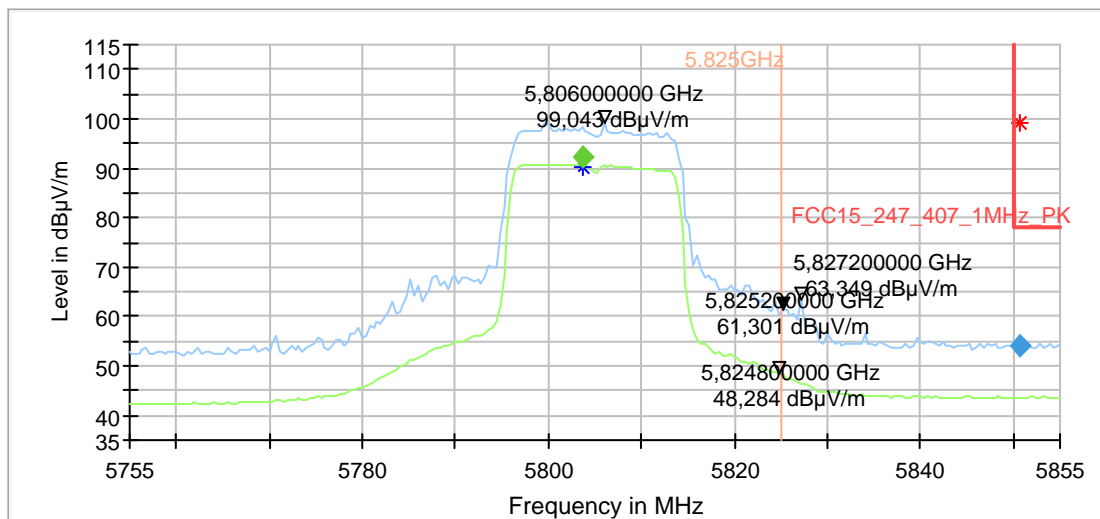
Test Description: Radiated field strength emission in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.407&15.209 Intentional Radiator
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous
 Operator Name: Lor
 Comment: Channel no. low=161
 Mcs0, PWR Setting=40

EUT Information

Manufacturer: Ascom AB
 EuT: SH1-ACAA/PF

 HW Version:
 SW Version: myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys
 Serial Number: T26105GL8N
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
 Power Supply: 120VAC
 Comments:

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Po l | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|------|---------------|-----------------|
| 5803.700000 | --- | 92.38 | 150.00 | 57.62 | 100.0 | 1000.000 | 155.0 | V | 152.0 | 0.0 |
| 5850.750000 | 54.09 | --- | 78.20 | 24.11 | 100.0 | 1000.000 | 155.0 | V | 164.0 | 0.0 |
| 5863.700000 | 53.28 | --- | 68.20 | 14.92 | 100.0 | 1000.000 | 155.0 | V | 105.0 | 0.0 |

(continuation of the "Final_Result" table from column 16...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 5803.700000 | 13.5 | 11:23:09 - 11.03.2015 |
| 5850.750000 | 13.5 | 11:20:39 - 11.03.2015 |
| 5863.700000 | 13.3 | 11:21:57 - 11.03.2015 |

1.3.7. Channel 165 (20MHz Signal BW - right band edge)

Diagram No.: 9.08_BE_High_Ch165_MCS2

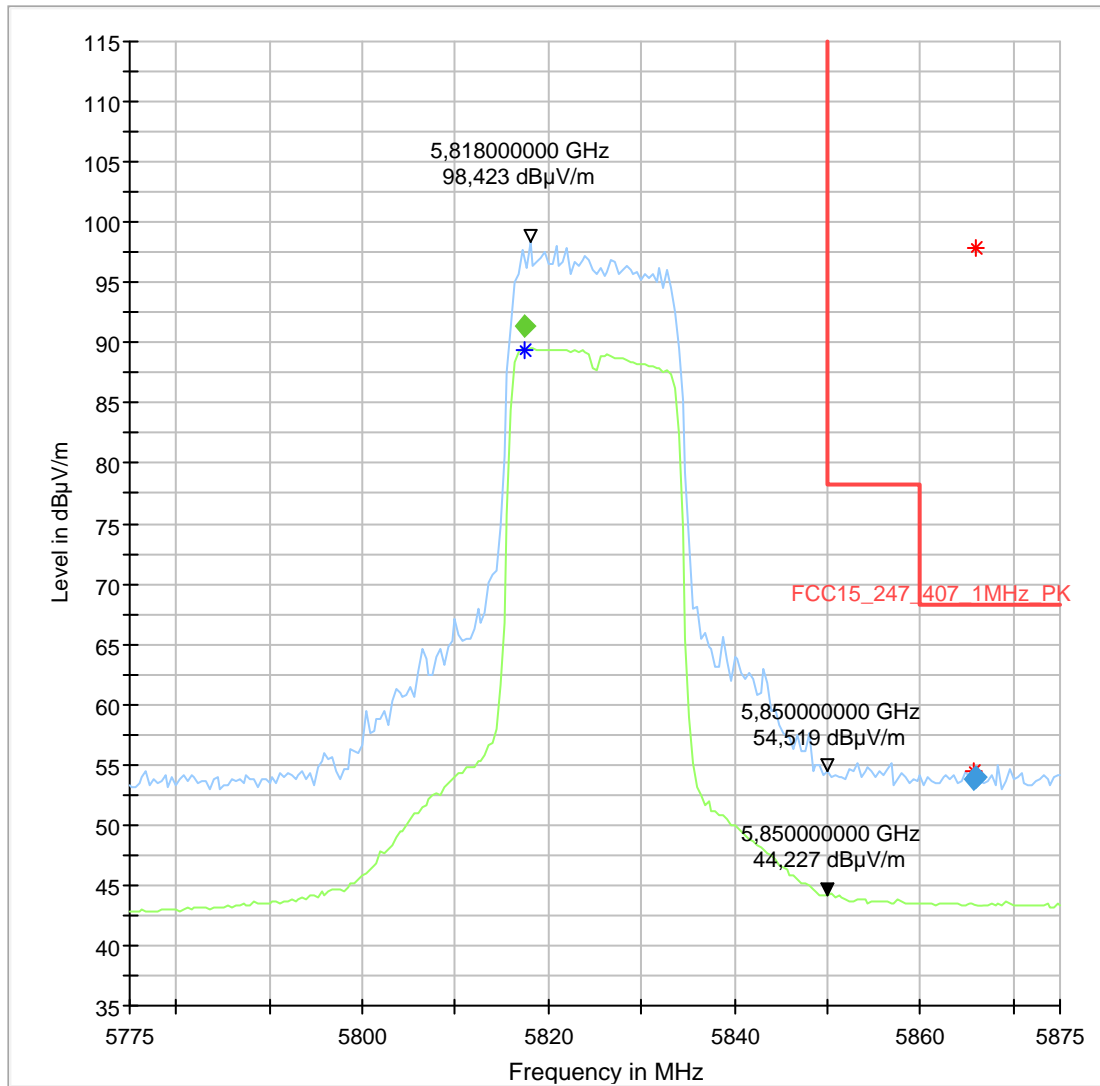
Common Information

| | |
|-----------------------|---|
| Test Description: | Radiated field strength emission in 3m distance |
| Test Site: | CETECOM GmbH Essen |
| Test Standard: | FCC 15.407&15.209 Intentional Radiator |
| Antenna polarisation: | horizontal/vertical |
| Operation mode: | TX, continuous |
| Operator Name: | Lor |
| Comment: | Channel no. High=165 MCS2, PWR Setting: 40 |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | Ascom AB |
| EuT: | SH1-ACAA/PF |
| ----- | ----- |
| HW Version: | |
| SW Version: | myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys |
| Serial Number: | T26105GL8N |
| Connected Interfaces: | 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510) |
| Power Supply: | 120VAC |
| Comments: | |

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBµV/m) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Height (cm) | Po l | Azimuth (deg) | Elevation (deg) |
|-----------------|------------------|--------------|----------------|-------------|------------|-----------------|-------------|------|---------------|-----------------|
| 5817.350000 | --- | 91.30 | 150.00 | 58.70 | 100.0 | 1000.000 | 155.0 | V | 150.0 | 0.0 |
| 5865.750000 | 53.78 | --- | 68.20 | 14.42 | 100.0 | 1000.000 | 155.0 | V | 153.0 | 0.0 |
| 5866.050000 | 53.95 | --- | 68.20 | 14.25 | 100.0 | 1000.000 | 155.0 | V | 150.0 | 0.0 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Corr . | Comment |
|-----------------|--------|-----------------------|
| 5817.350000 | 13.5 | 11:04:18 - 11.03.2015 |
| 5865.750000 | 13.3 | 11:03:05 - 11.03.2015 |
| 5866.050000 | 13.3 | 11:01:54 - 11.03.2015 |

1.4. Conducted RF-measurements on antenna port

1.4.1. Conducted RF-power (20MHz nominal signal bandwidth)

AVERAGE conducted output power

| a-Mode | | U-NII 1 | | U-NII 2A | | U-NII 2C | | | U-NII 3 | | |
|-----------|------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | | Channel no. | | | | | | | | | |
| Data rate | Modulation | Ch 36 (5180MHz) | Ch 48 (5240MHz) | Ch 52 (5260MHz) | Ch 64 (5320MHz) | Ch 100 (5500MHz) | Ch 116 (5580MHz) | Ch 140 (5700MHz) | Ch 149 (5745MHz) | Ch 157 (5785MHz) | Ch 165 (5825MHz) |
| 6Mbit | | 10,7 | 11,3 | 9,4 | 9,7 | 8,8 | 7,2 | 9,3 | 7,8 | 8,2 | 6,6 |
| 9Mbit | | 10,6 | 11,3 | 9,4 | 9,6 | 8,8 | 7,2 | 9,3 | 7,7 | 8,2 | 6,6 |
| 12Mbit | | 10,6 | 11,2 | 9,4 | 9,7 | 8,8 | 7,2 | 9,3 | 7,6 | 8,2 | 6,5 |
| 18Mbit | | 10,6 | 11,2 | 9,4 | 9,7 | 8,8 | 7,2 | 9,3 | 7,8 | 8,1 | 6,5 |
| 24Mbit | | 10,6 | 11,2 | 9,3 | 9,7 | 8,7 | 7,1 | 9,3 | 7,7 | 8,1 | 6,5 |
| 36Mbit | | 10,6 | 11,2 | 9,4 | 9,7 | 8,8 | 7,1 | 9,3 | 7,7 | 8,1 | 6,4 |
| 48Mbit | | 10,6 | 11,1 | 9,4 | 9,7 | 8,7 | 7,2 | 9,3 | 7,7 | 8,1 | 6,5 |
| 54Mbit | | 10,6 | 11,2 | 9,4 | 9,7 | 8,8 | 7,2 | 9,3 | 7,6 | 8,1 | 6,4 |

| n-Mode HT20 (1 spatial stream: 1SS) | | U-NII 1 | | U-NII 2A | | U-NII 2C | | | U-NII 3 | | |
|--|------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | | Channel no. | | | | | | | | | |
| Data rate | Modulation | Ch 36 (5180MHz) | Ch 48 (5240MHz) | Ch 52 (5260MHz) | Ch 64 (5320MHz) | Ch 100 (5500MHz) | Ch 116 (5580MHz) | Ch 140 (5700MHz) | Ch 149 (5745MHz) | Ch 157 (5785MHz) | Ch 165 (5825MHz) |
| MCS0 - 6.5Mbps | BPSK | 12,0 | 11,9 | 9,8 | 10,1 | 9,0 | 7,4 | 9,4 | 7,7 | 8,2 | 6,8 |
| MCS1 - 13Mbps | QPSK | 12,0 | 11,8 | 9,9 | 10,1 | 9,0 | 7,4 | 9,4 | 7,7 | 8,3 | 6,7 |
| MCS2 - 19.5Mbps | QPSK | 11,8 | 11,8 | 9,8 | 10,0 | 9,0 | 7,4 | 9,4 | 7,7 | 8,3 | 6,7 |
| MCS3 - 26Mbps | QAM16 | 11,7 | 11,7 | 9,8 | 9,9 | 8,9 | 7,3 | 9,3 | 7,7 | 8,3 | 6,6 |
| MCS4 - 39Mbps | QAM16 | 11,6 | 11,6 | 9,6 | 9,9 | 8,9 | 7,3 | 9,3 | 7,6 | 8,2 | 6,6 |
| MCS5 - 52Mbps | QAM64 | 11,5 | 11,6 | 9,6 | 9,9 | 8,9 | 7,3 | 9,3 | 7,7 | 8,3 | 6,6 |
| MCS6 - 58.5Mbps | QAM64 | 11,4 | 11,7 | 9,6 | 9,9 | 9,0 | 7,3 | 9,3 | 7,6 | 8,1 | 6,6 |
| MCS7 - 65Mbps | QAM64 | 11,2 | 11,6 | 9,7 | 9,9 | 8,9 | 7,3 | 9,3 | 7,6 | 8,0 | 6,6 |

1.4.2. 26-dB Bandwidth

| a-Mode | | U-NII 1 | | U-NII 2A | | U-NII 2C | | | U-NII 3 | | | |
|--|------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|
| | | Channel no. | | | | | | | | | | |
| Data rate | Modulation | Ch 36 (5180MHz) | Ch 48 (5240MHz) | Ch 52 (5260MHz) | Ch 64 (5320MHz) | Ch 100 (5500MHz) | Ch 116 (5580MHz) | Ch 140 (5700MHz) | Ch 149 (5745MHz) | Ch 157 (5785MHz) | Ch 165 (5825MHz) | |
| 6Mbit | | 27,56 | 28,08 | 27,31 | 24,25 | 20,50 | 20,30 | 23,00 | 16,63 | 16,63 | 16,63 | |
| 9Mbit | | 28,46 | 25,96 | 25,58 | 24,77 | 20,43 | 20,24 | 22,80 | 16,59 | 16,63 | 16,63 | |
| 12Mbit | | 24,17 | 23,53 | 21,60 | 21,22 | 20,17 | 19,97 | 19,91 | | | | |
| 18Mbit | | 24,23 | 23,40 | 21,73 | 20,96 | 20,11 | 20,15 | 20,17 | | | | |
| 24Mbit | | 24,42 | 22,69 | 22,50 | 20,70 | 20,04 | 19,97 | 21,16 | | | | |
| 36Mbit | | 22,18 | 21,35 | 21,35 | 20,43 | 19,97 | 19,84 | 20,30 | | | | |
| 48Mbit | | 21,67 | 21,47 | 21,41 | 20,70 | 19,91 | 19,65 | 20,43 | 16,59 | 16,59 | 16,60 | |
| 54Mbit | | 21,92 | 22,01 | 21,73 | 21,16 | 19,84 | 19,84 | 20,11 | 16,59 | 16,63 | 16,63 | |
| n-Mode HT20 (1 spatial stream: 1SS) | | U-NII 1 | | U-NII 2A | | U-NII 2C | | | | | | |
| | | Channel no. | | | | | | | | | | |
| Data rate | Modulation | Ch 36 (5180MHz) | Ch 48 (5240MHz) | Ch 52 (5260MHz) | Ch 64 (5320MHz) | Ch 100 (5500MHz) | Ch 116 (5580MHz) | Ch 140 (5700MHz) | Ch 149 (5745MHz) | Ch 157 (5785MHz) | Ch 165 (5825MHz) | |
| MCS0 - 6.5Mbps | BPSK | 29,04 | 27,94 | 26,87 | 23,65 | 20,96 | 23,72 | 27,99 | 17,80 | 17,78 | 17,79 | |
| MCS1 - 13Mbps | QPSK | 25,23 | 25,17 | 24,97 | 20,43 | 20,40 | 20,43 | 21,16 | 17,77 | 17,78 | 17,84 | |
| MCS2 - 19.5Mbps | QPSK | | | | | | | | | | | |
| MCS3 - 26Mbps | QAM16 | | | | | | | | | | | |
| MCS4 - 39Mbps | QAM16 | | | | | | | | | | | |
| MCS5 - 52Mbps | QAM64 | | | | | | | | | | | |
| MCS6 - 58.5Mbps | QAM64 | 22,73 | 22,67 | 21,29 | 20,83 | 20,30 | 20,37 | 21,68 | 17,77 | 17,78 | 17,74 | |
| MCS7 - 65Mbps | QAM64 | 23,26 | 22,60 | 21,22 | 20,63 | 20,50 | 20,74 | 23,00 | 17,77 | 17,78 | 17,79 | |

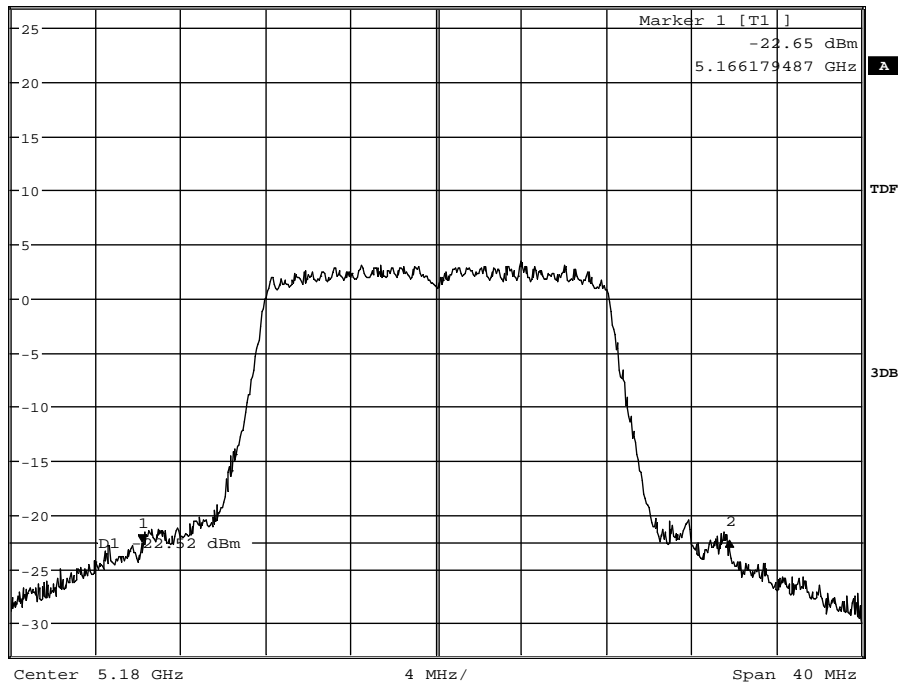
a-mode, Channel 36



*RBW 300 kHz Delta 2 [T1]
 *VBW 5 MHz 0.19 dB
 SWT 20 ms

Ref 27 dBm *Att 30 dB 27.564102564 MHz

1 PK
VIEW



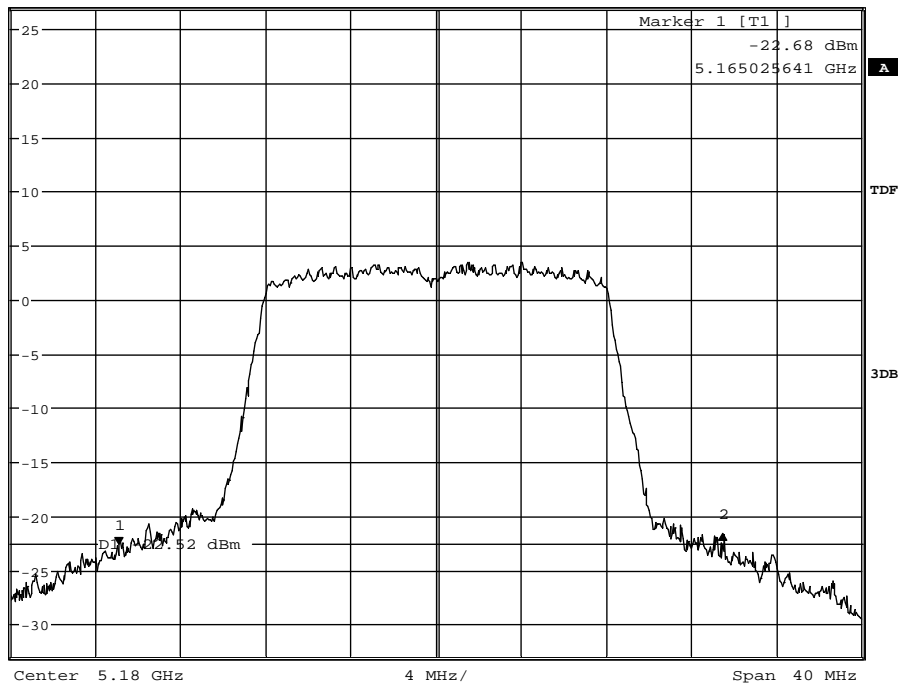
Date: 2.FEB.2015 12:47:52



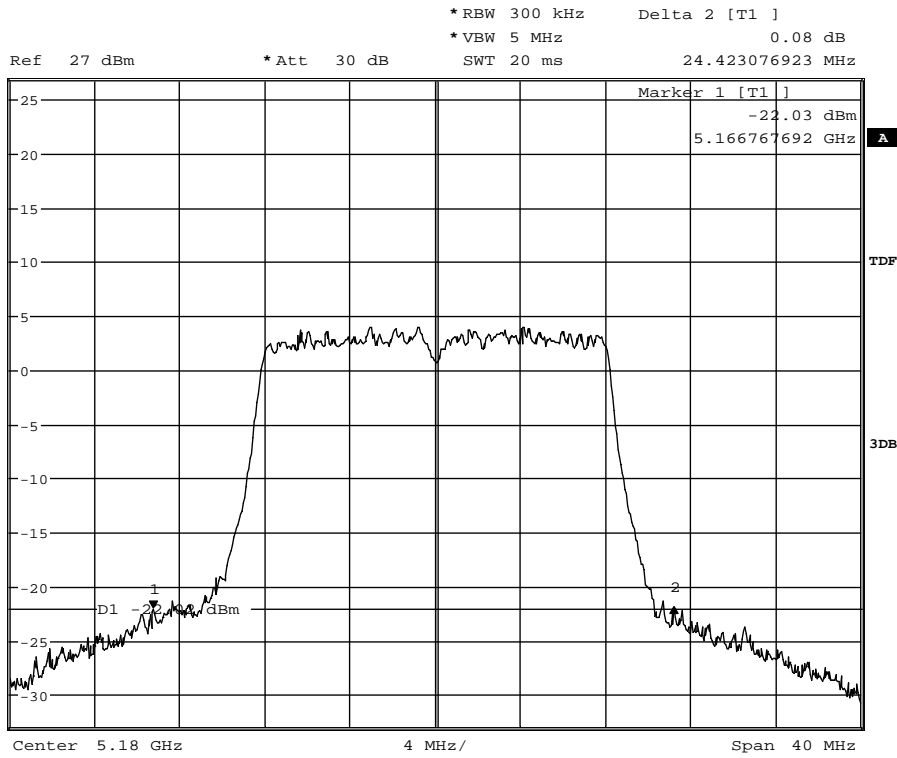
*RBW 300 kHz Delta 2 [T1]
 *VBW 5 MHz 0.95 dB
 SWT 20 ms

Ref 27 dBm *Att 30 dB 28.461538461 MHz

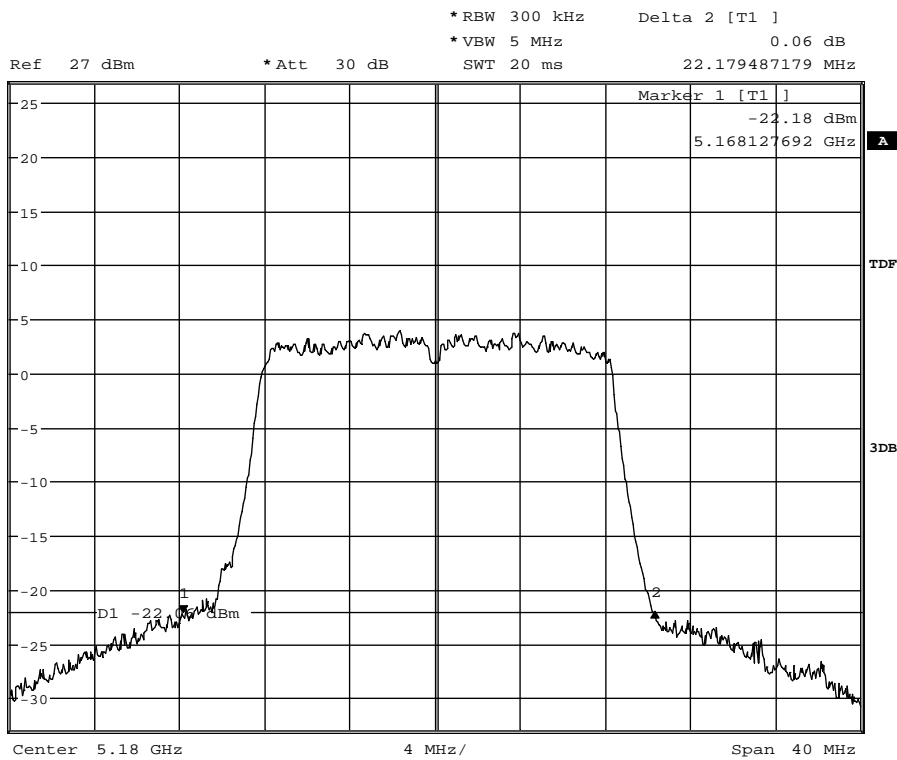
1 PK
VIEW



Date: 2.FEB.2015 12:19:25



Date: 2.FEB.2015 12:34:14



Date: 2.FEB.2015 12:37:44

a-mode, Channel 48



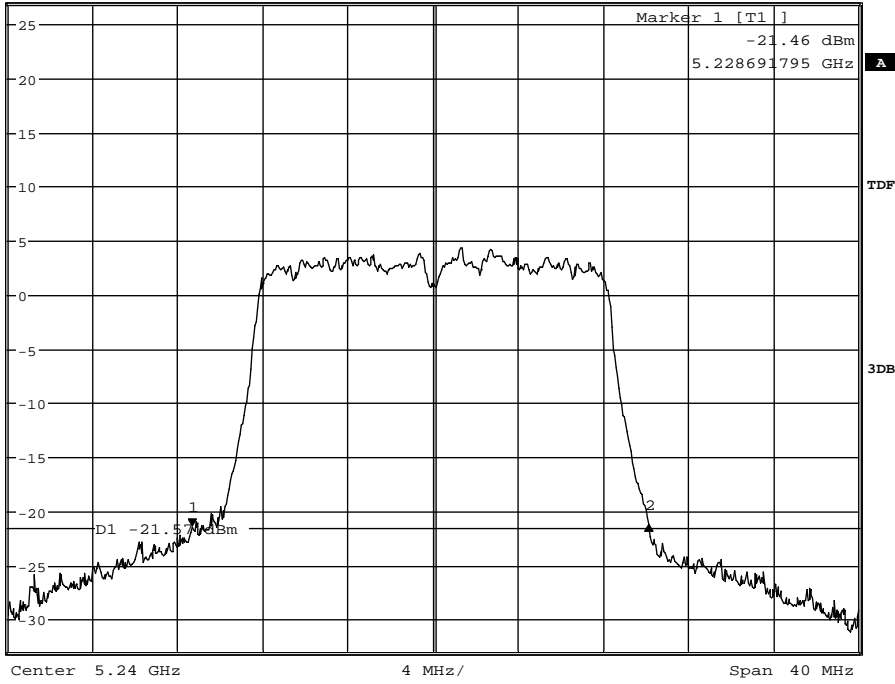
*RBW 300 kHz Delta 2 [T1]
*VBW 5 MHz 0.16 dB
SWT 20 ms 21.474358974 MHz

Ref 27 dBm

*Att 30 dB

21.474358974 MHz

1 PK
VIEW



Date: 2.FEB.2015 13:26:21



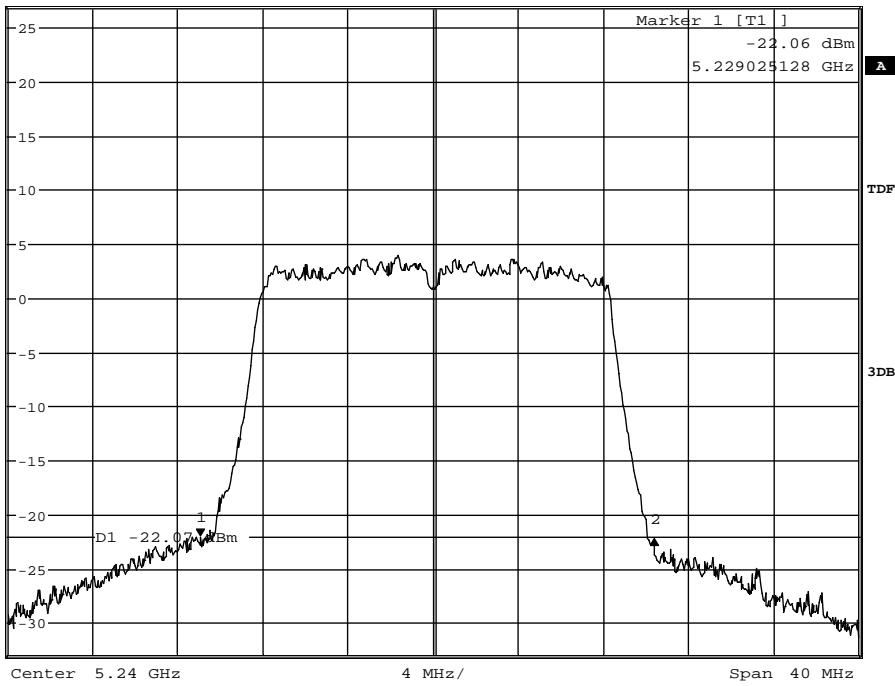
*RBW 300 kHz Delta 2 [T1]
*VBW 5 MHz -0.30 dB
SWT 20 ms 21.346153846 MHz

Ref 27 dBm

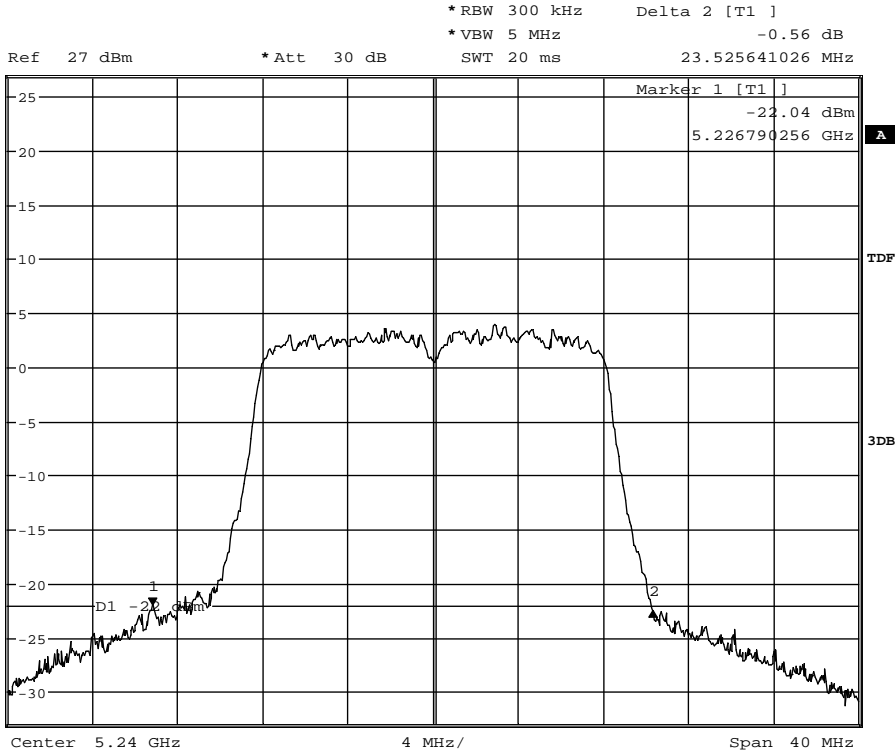
*Att 30 dB

21.346153846 MHz

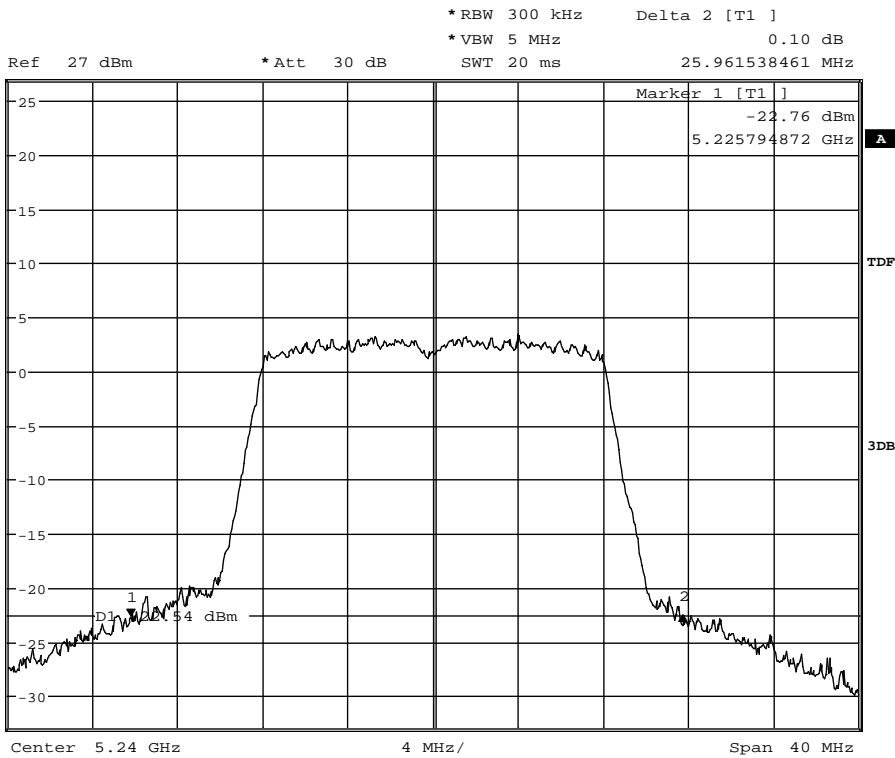
1 PK
VIEW



Date: 2.FEB.2015 13:23:01

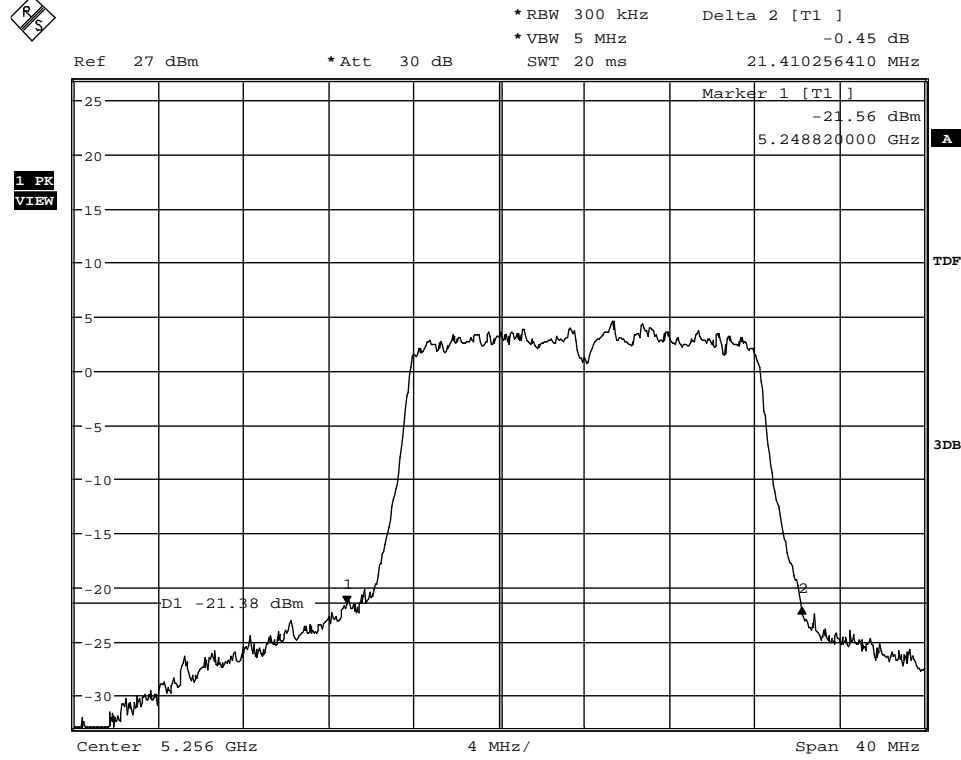


Date: 2.FEB.2015 13:16:23

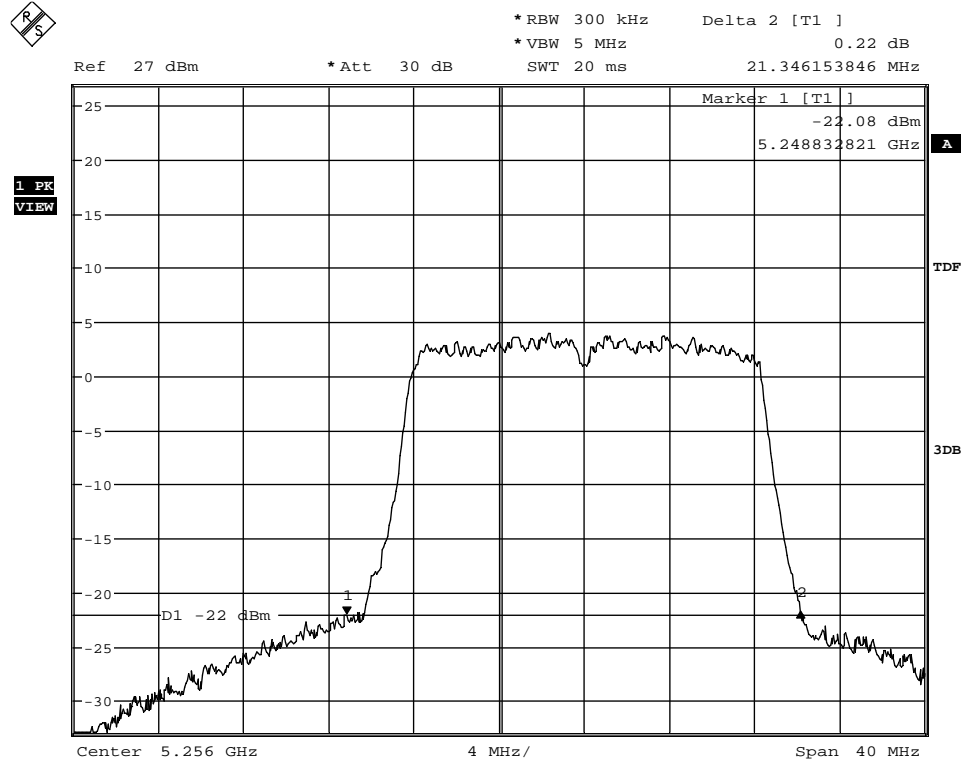


Date: 2.FEB.2015 13:00:50

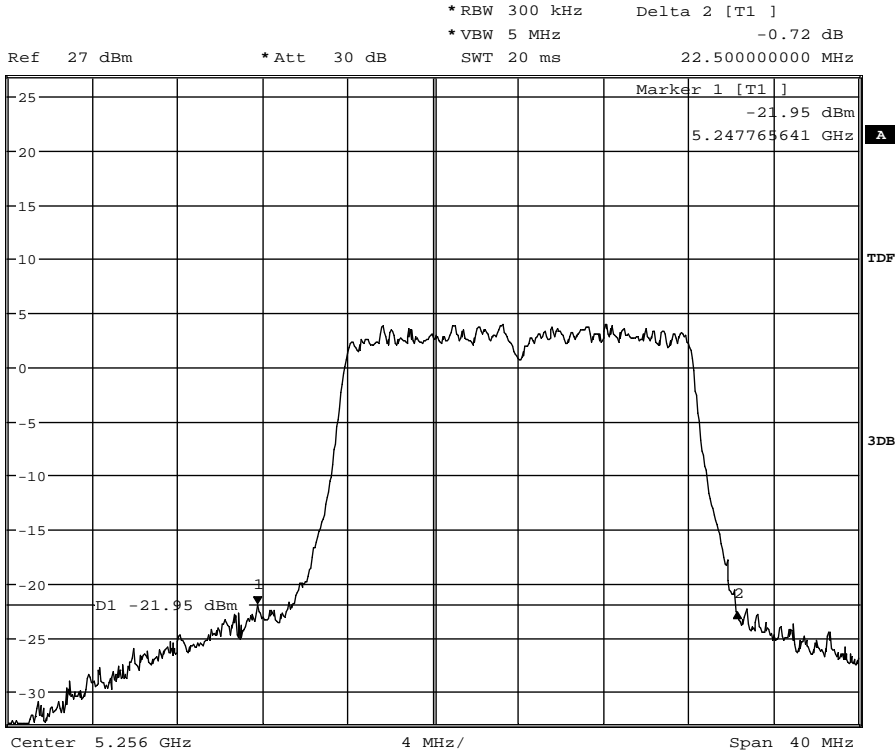
a-mode, Channel 52



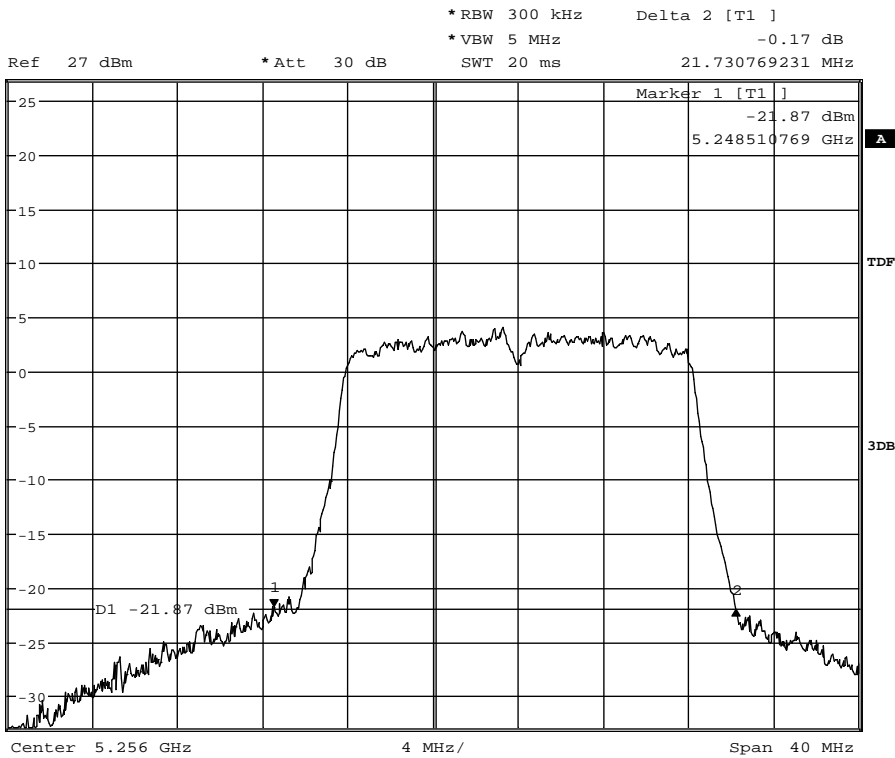
Date: 2.FEB.2015 13:39:06



Date: 2.FEB.2015 13:42:42

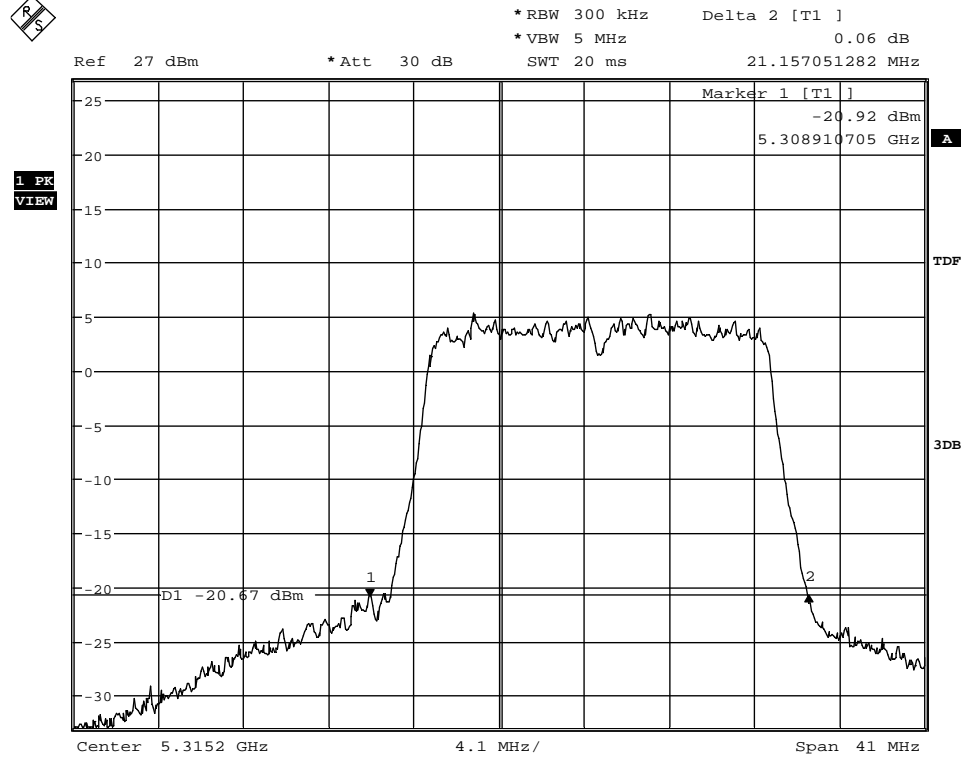


Date: 2.FEB.2015 13:45:44

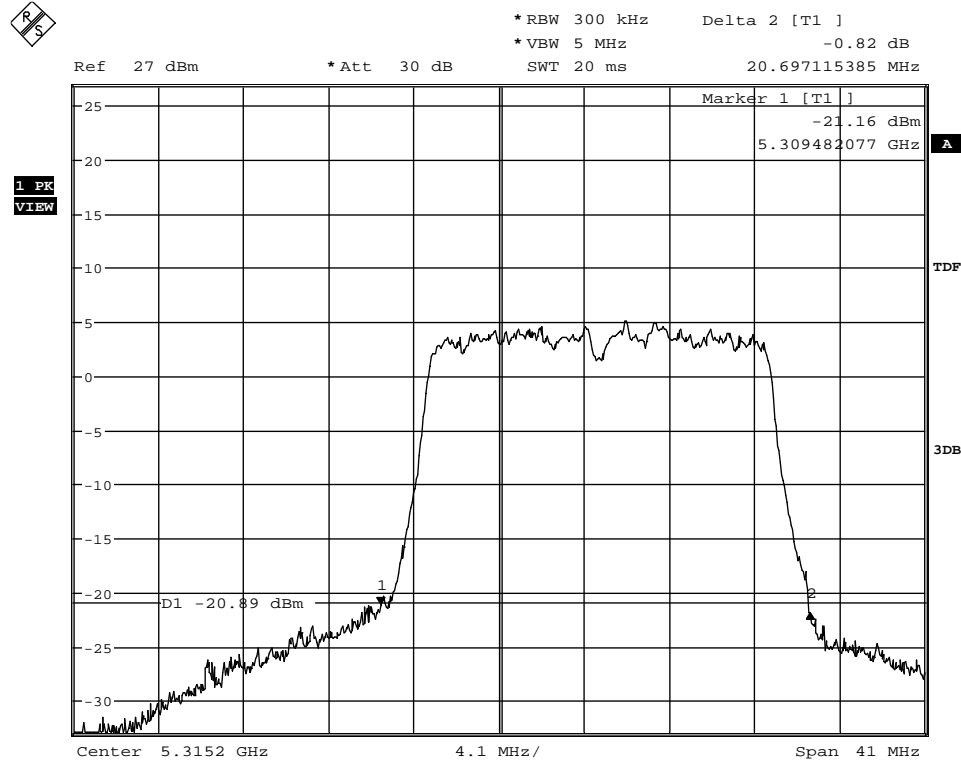


Date: 2.FEB.2015 13:52:26

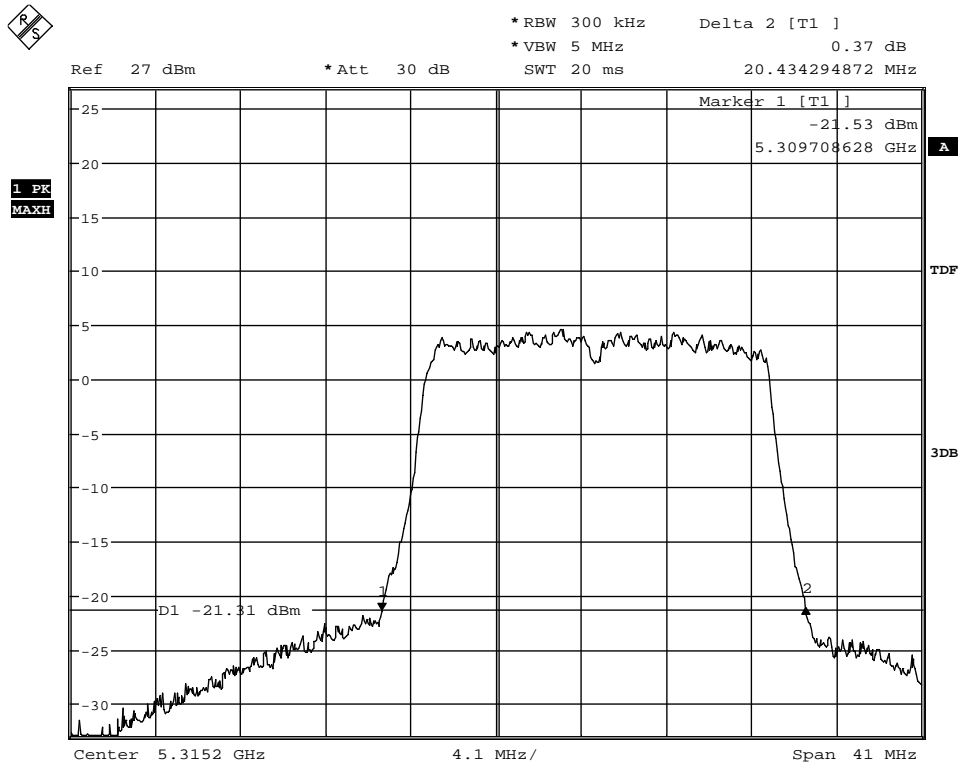
a-mode, Channel 64



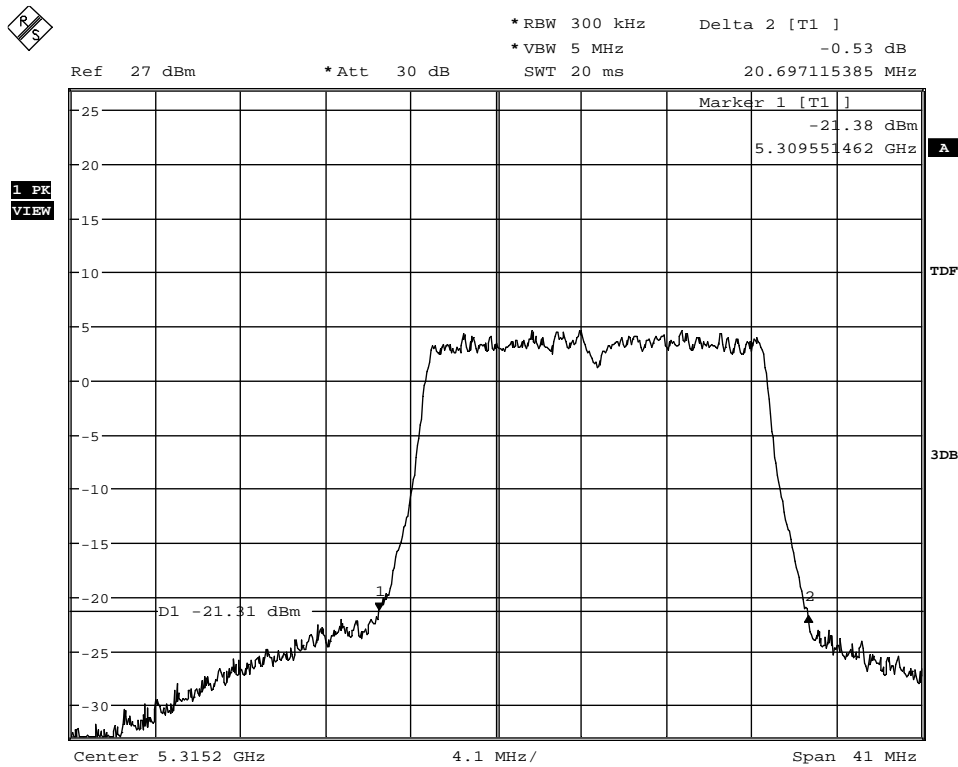
Date: 2.FEB.2015 14:29:21



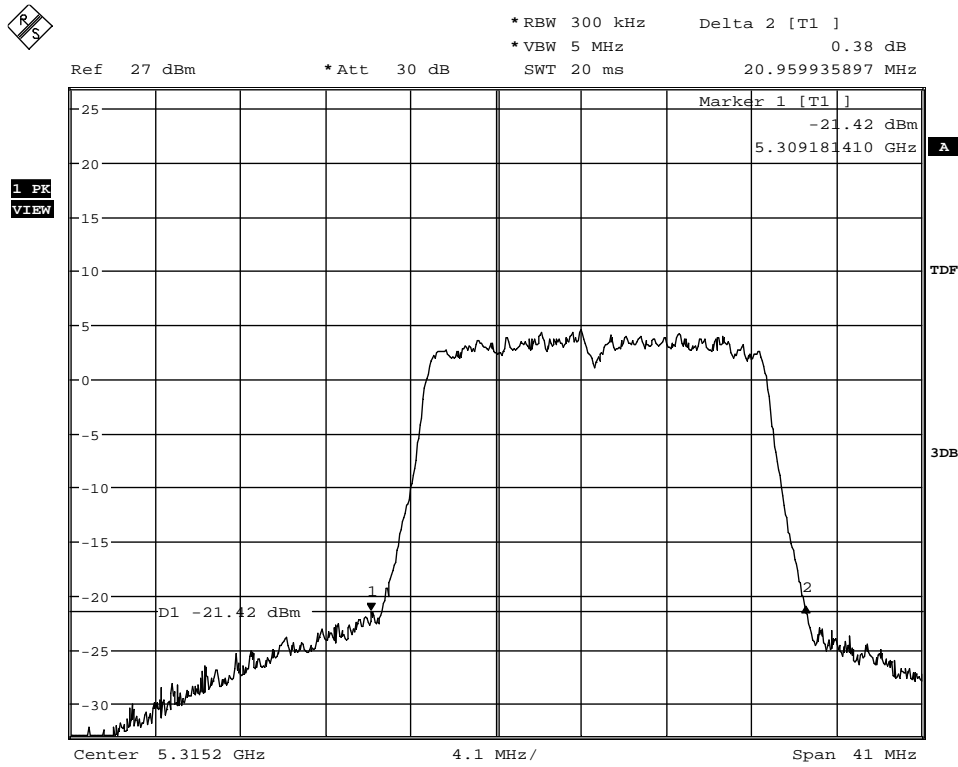
Date: 2.FEB.2015 14:22:49



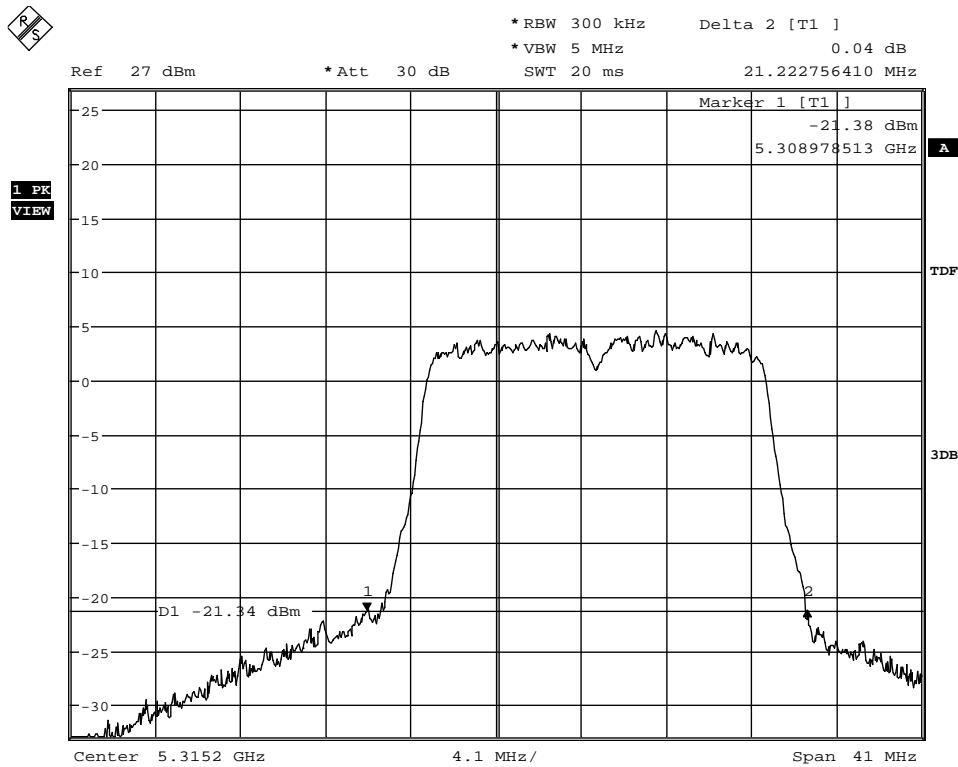
Date: 2.FEB.2015 14:19:50



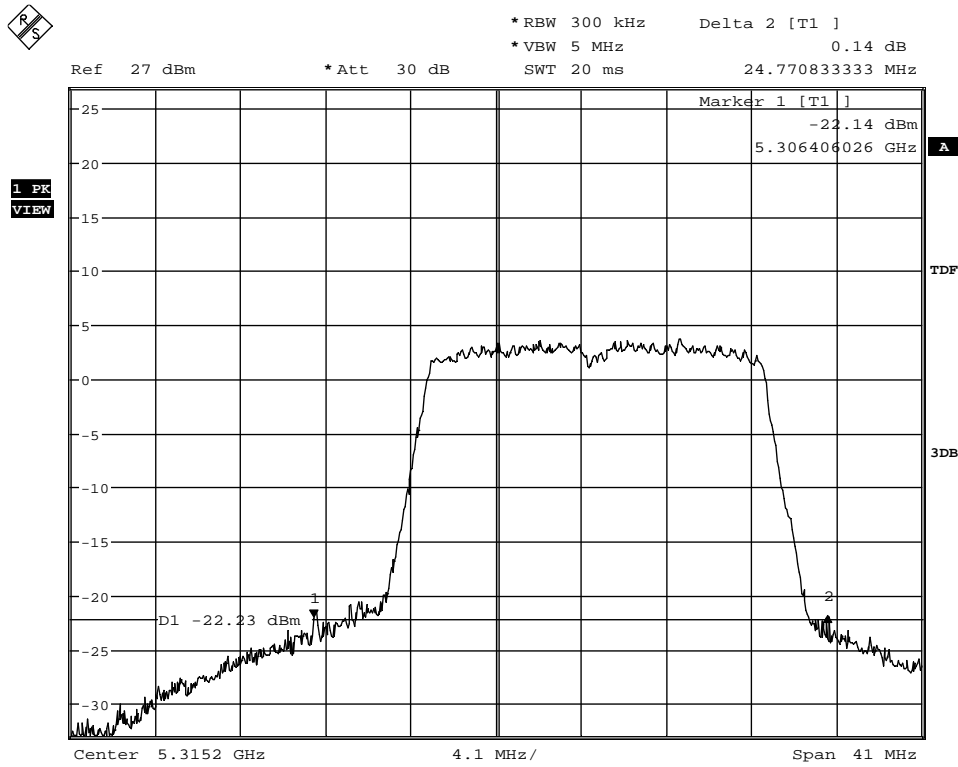
Date: 2.FEB.2015 14:16:11



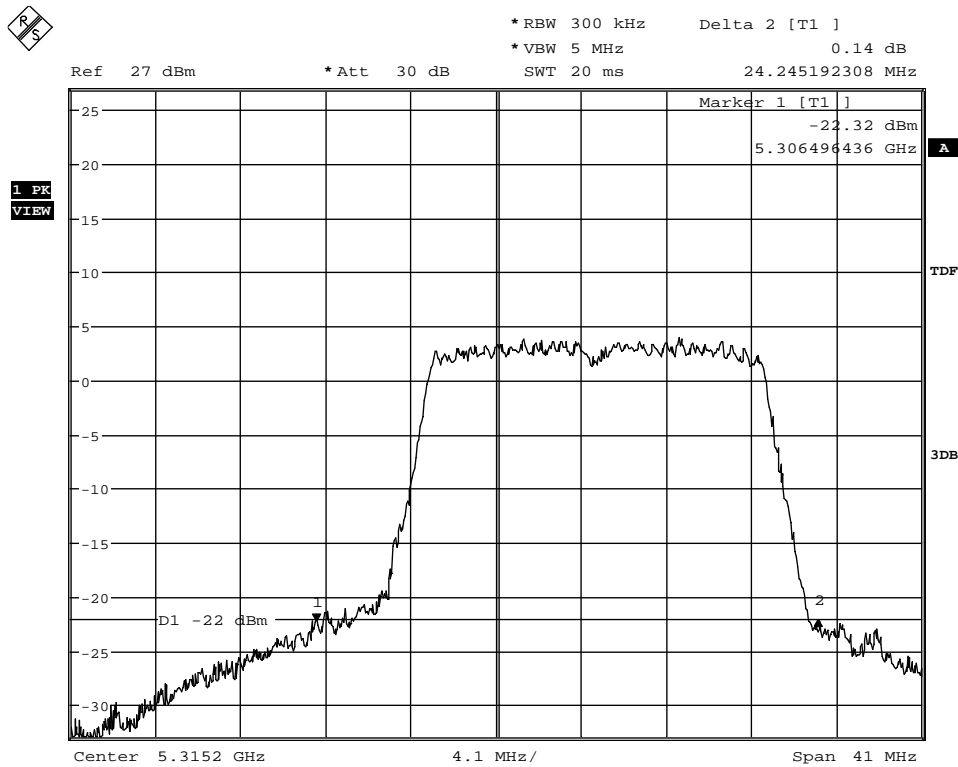
Date: 2.FEB.2015 14:13:21



Date: 2.FEB.2015 14:10:17

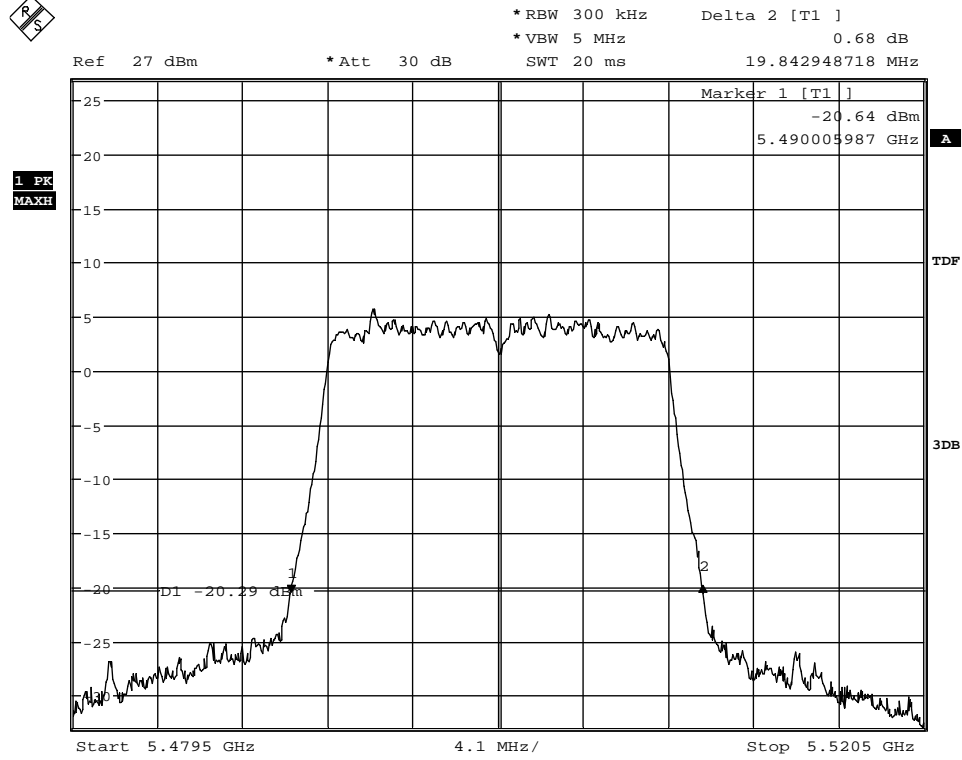


Date: 2.FEB.2015 14:07:04

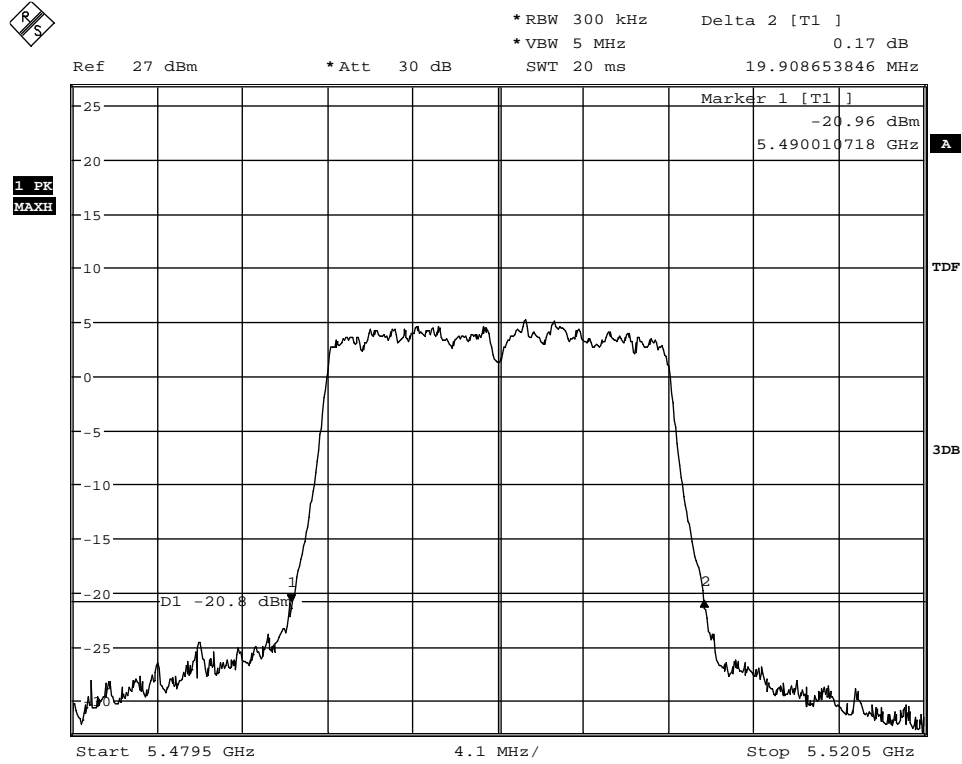


Date: 2.FEB.2015 14:04:29

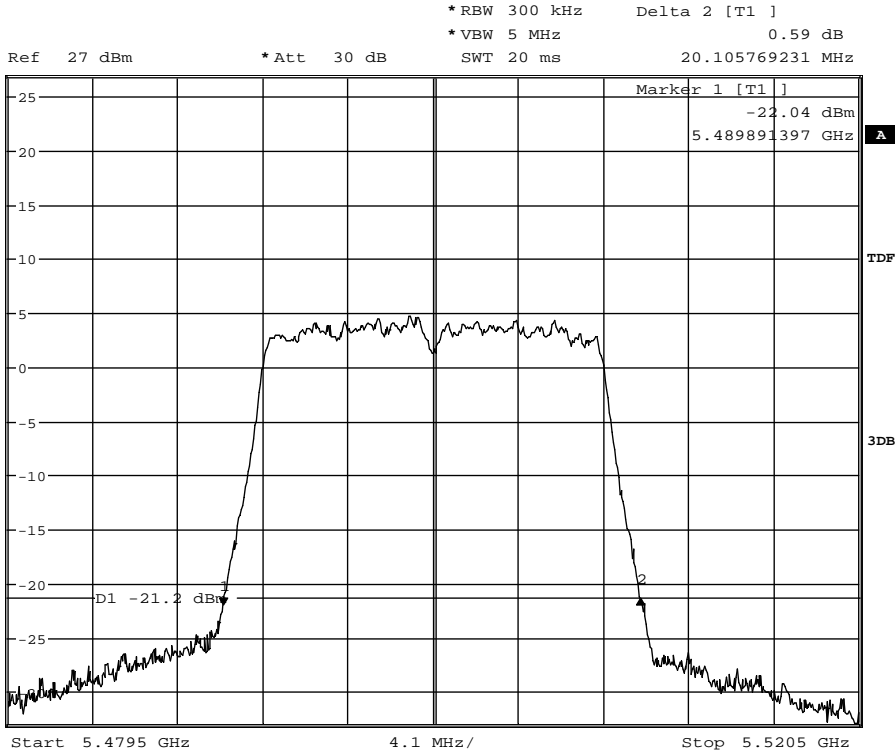
a-mode, Channel 100



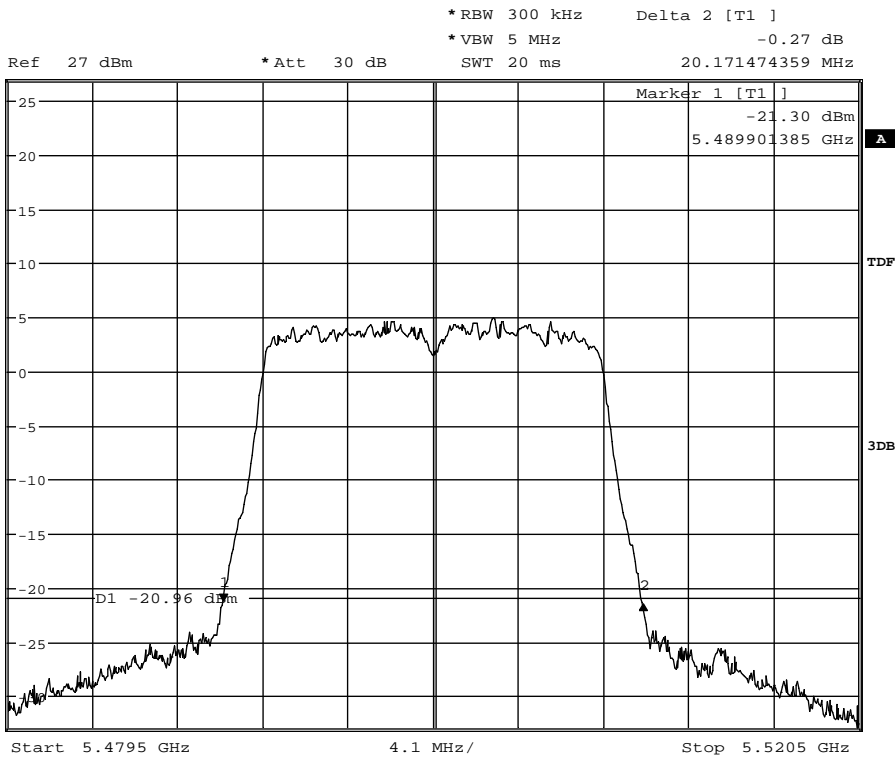
Date: 3.FEB.2015 14:30:38



Date: 3.FEB.2015 14:27:08

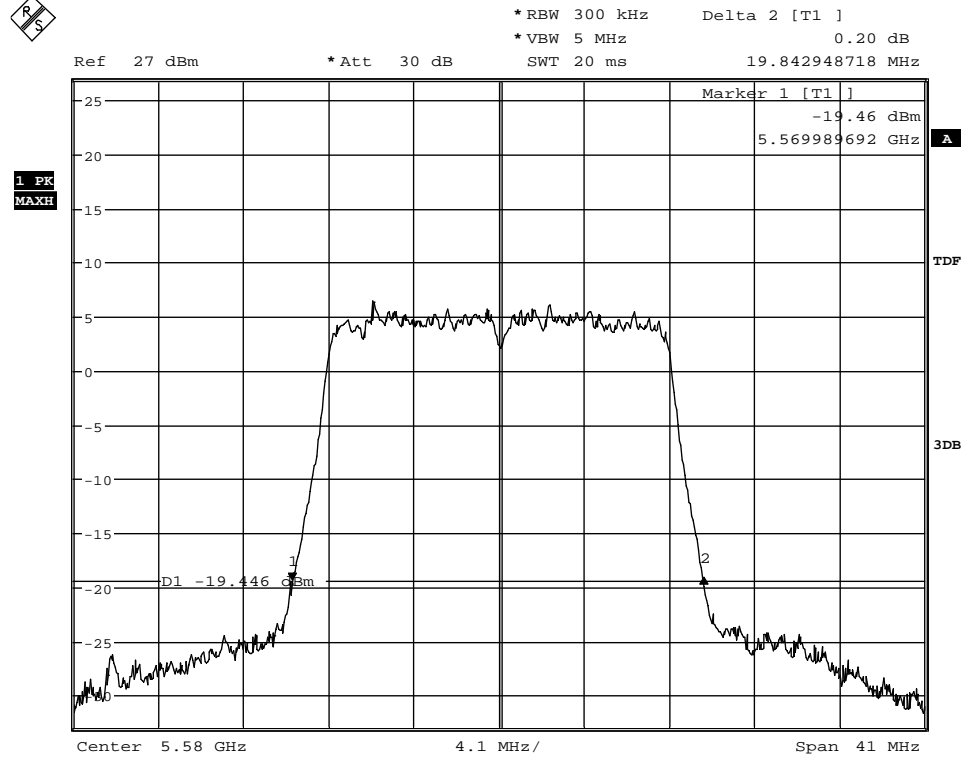


Date: 3.FEB.2015 14:15:49

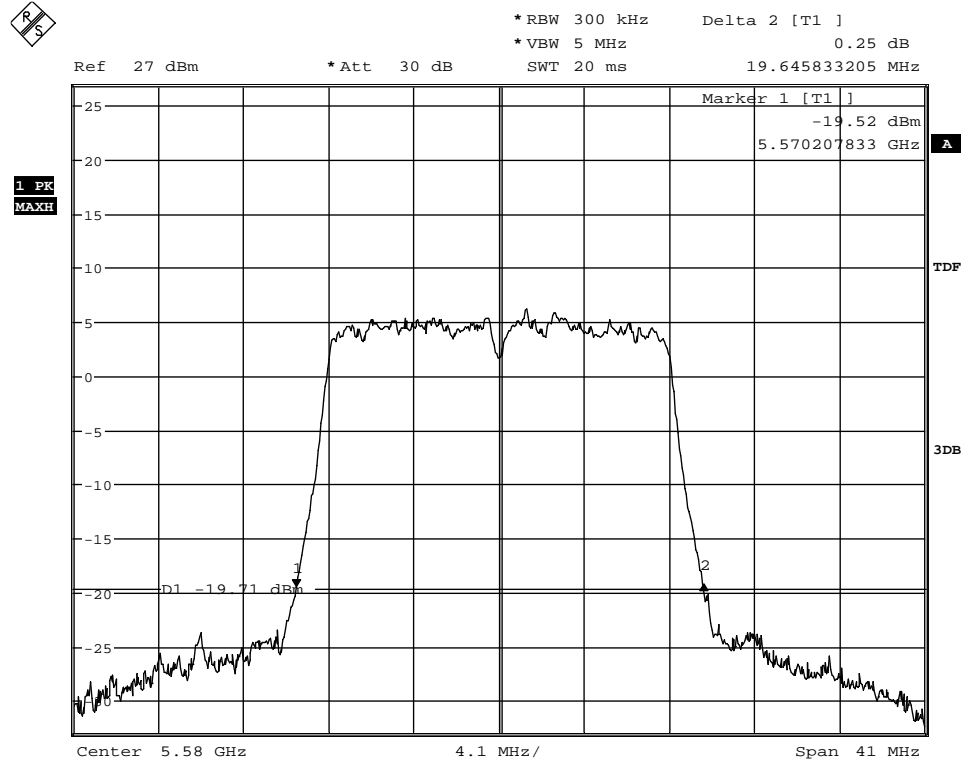


Date: 3.FEB.2015 14:12:31

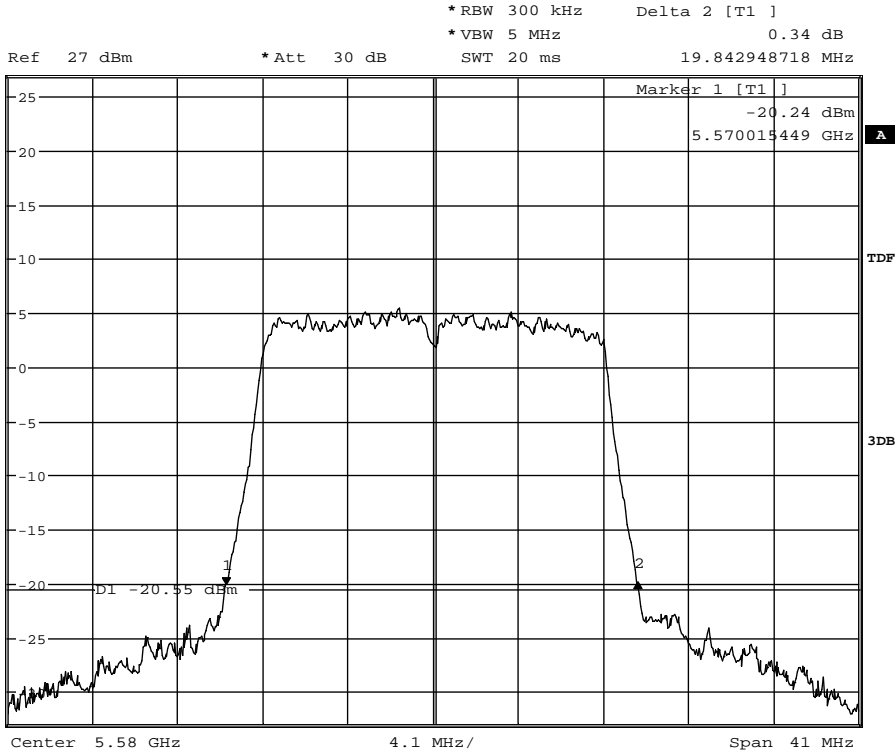
a-mode, Channel 116



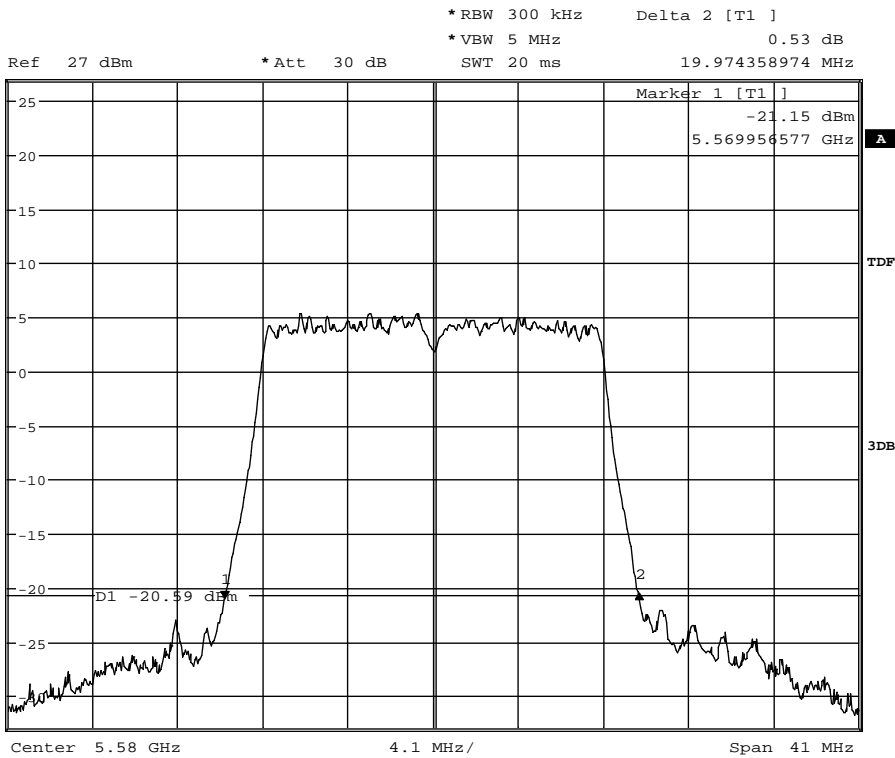
Date: 3.FEB.2015 15:06:51



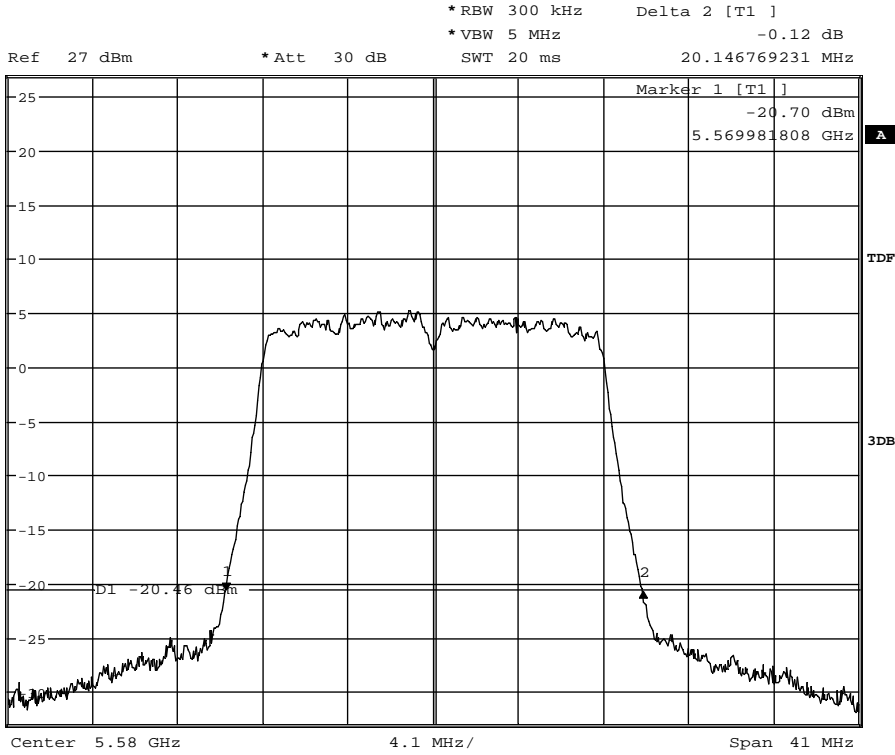
Date: 3.FEB.2015 15:02:05



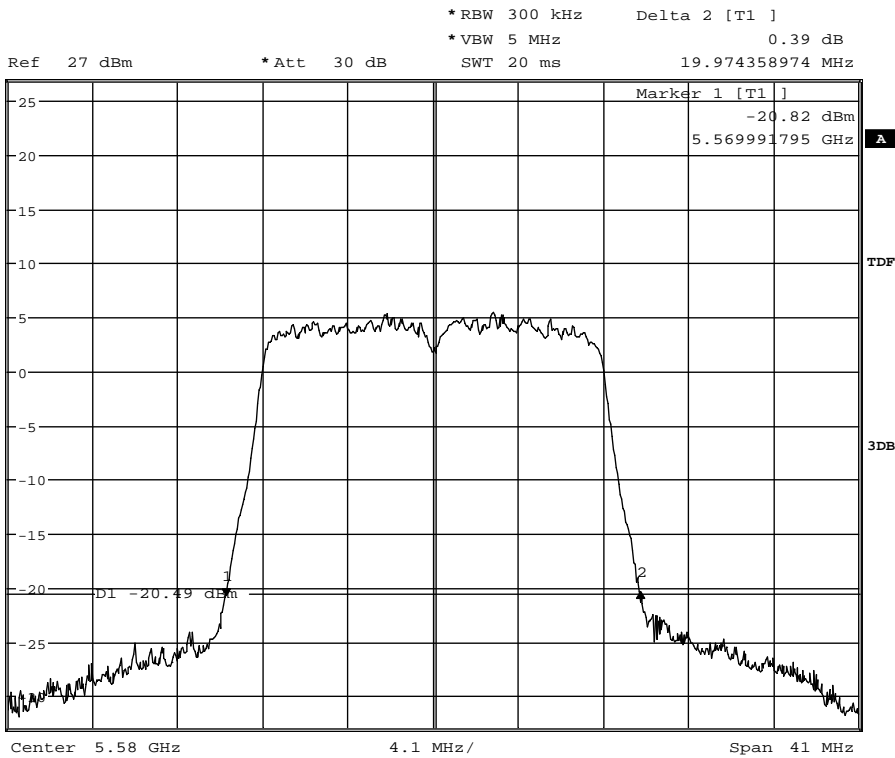
Date: 3.FEB.2015 14:54:56



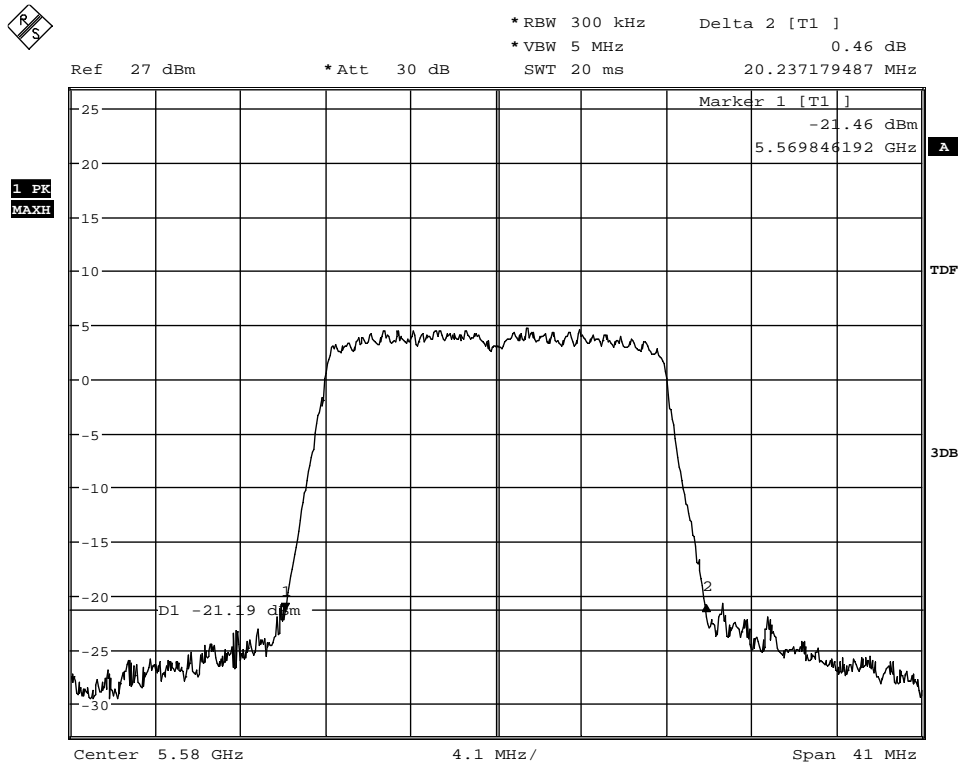
Date: 3.FEB.2015 14:50:23



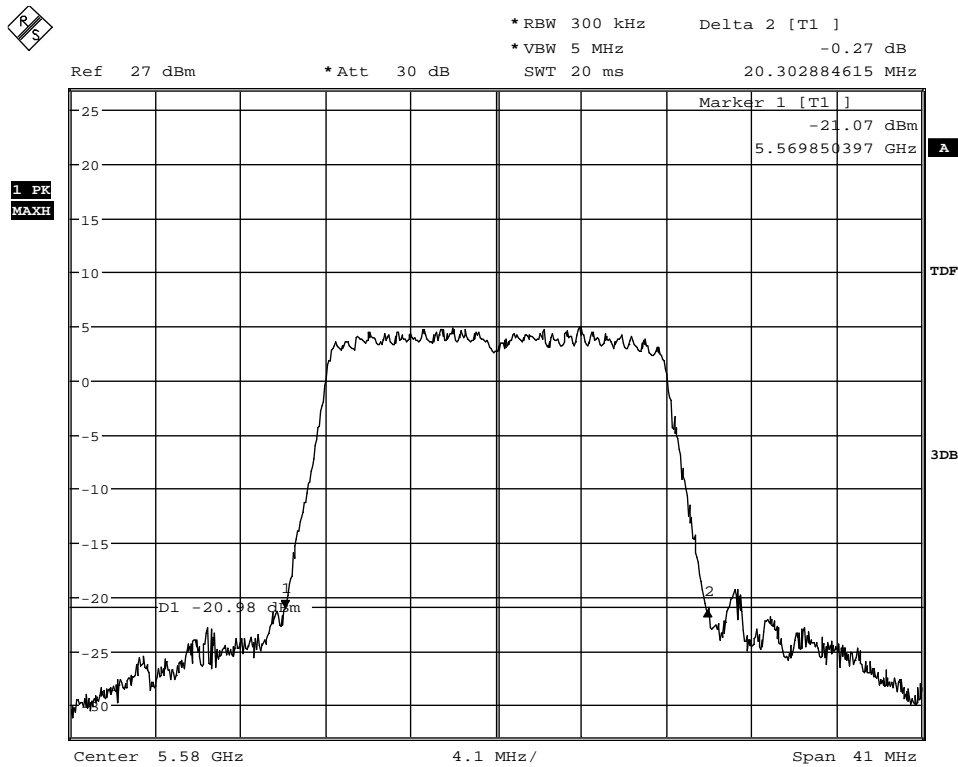
Date: 3.FEB.2015 14:47:02



Date: 3.FEB.2015 14:43:06

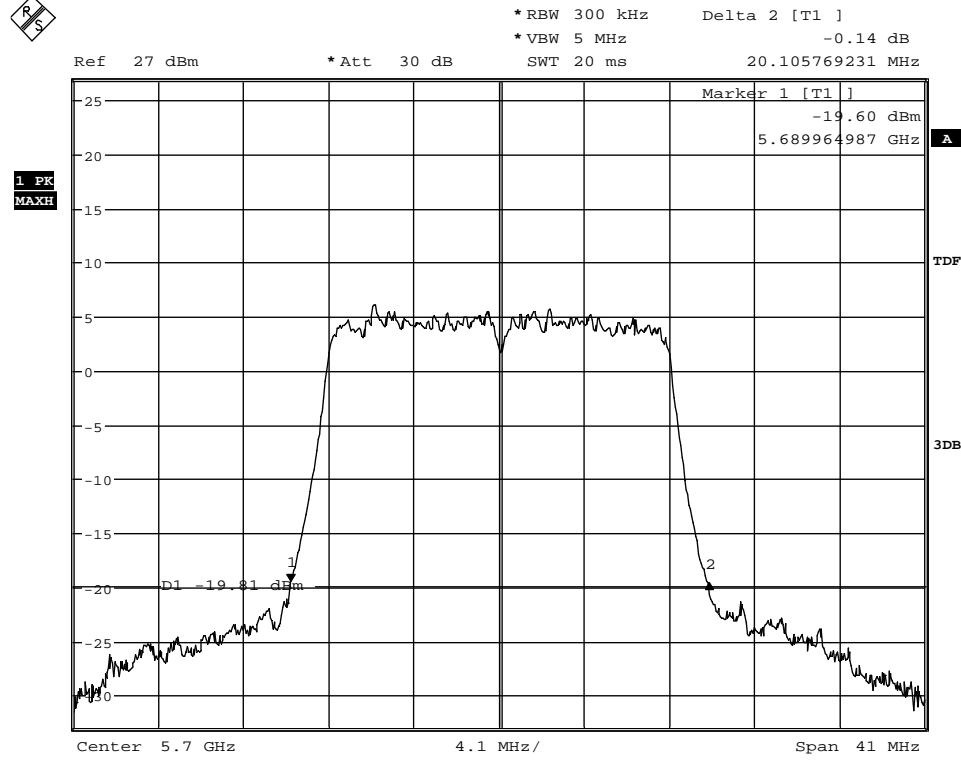


Date: 3.FEB.2015 14:39:55

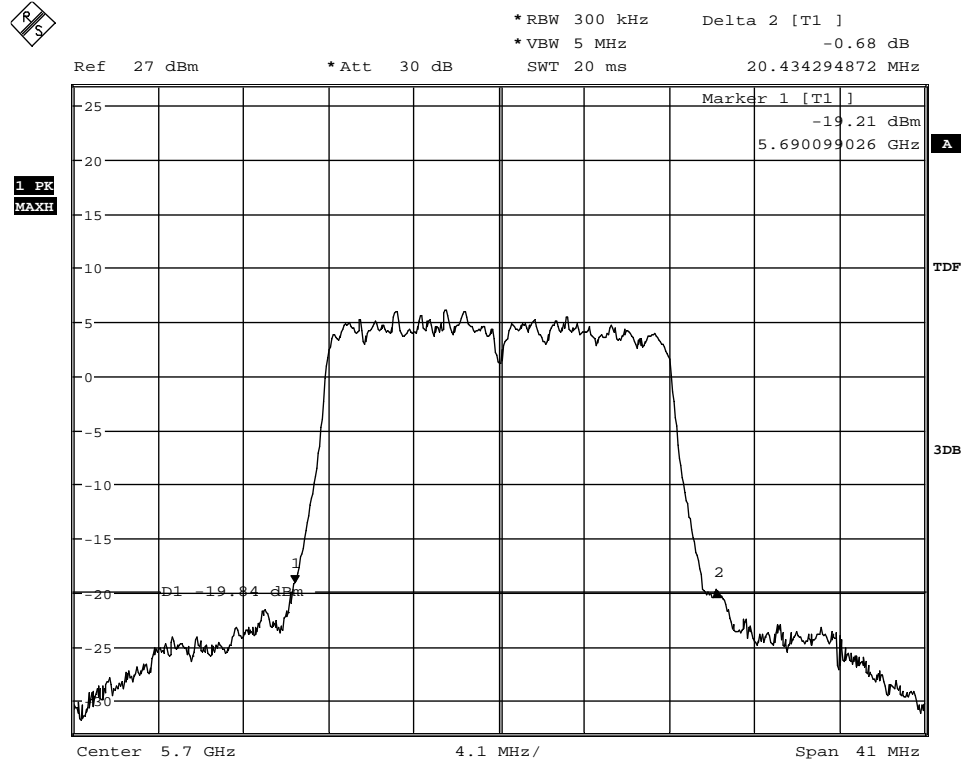


Date: 3.FEB.2015 14:36:23

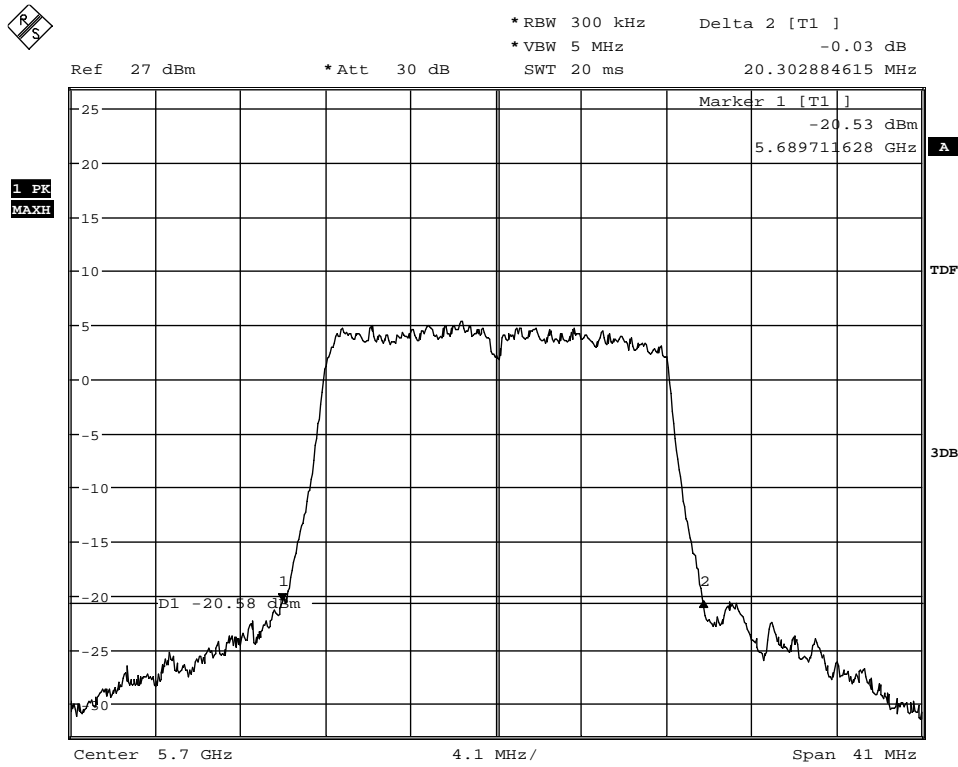
a-mode, Channel 140



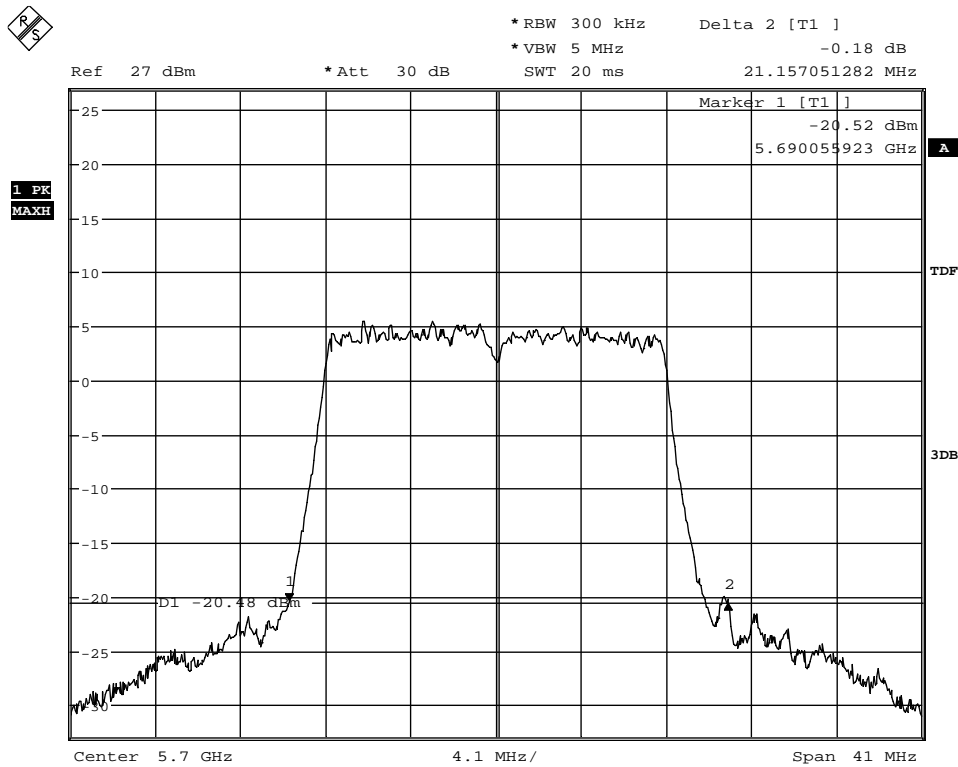
Date: 3.FEB.2015 15:35:53



Date: 3.FEB.2015 15:33:20

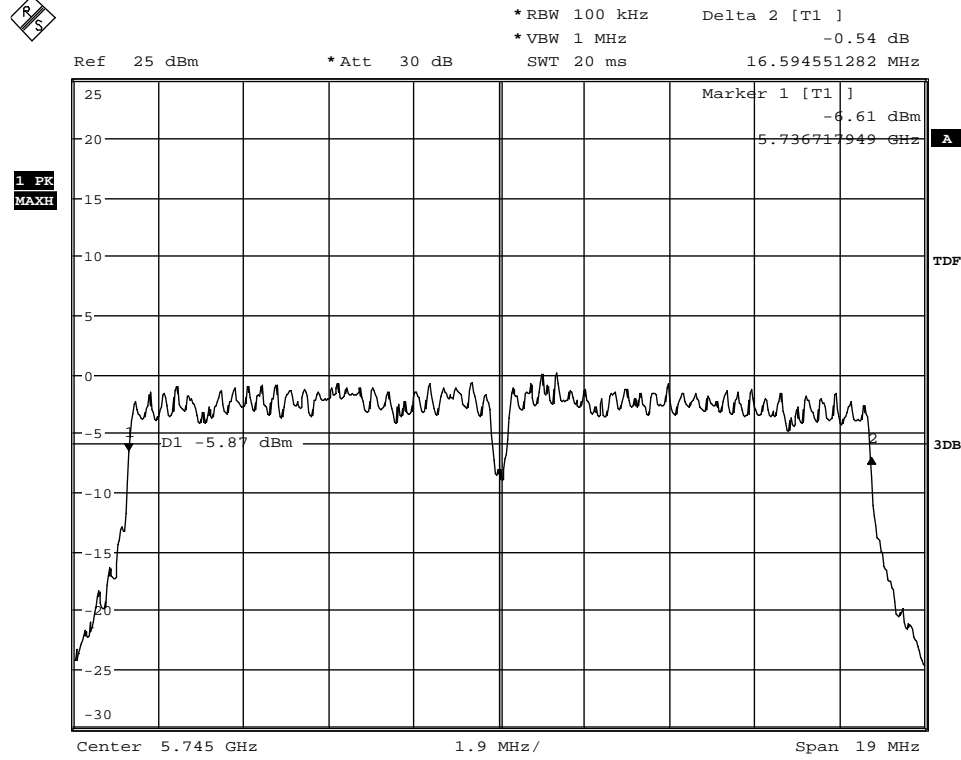


Date: 3.FEB.2015 15:30:22

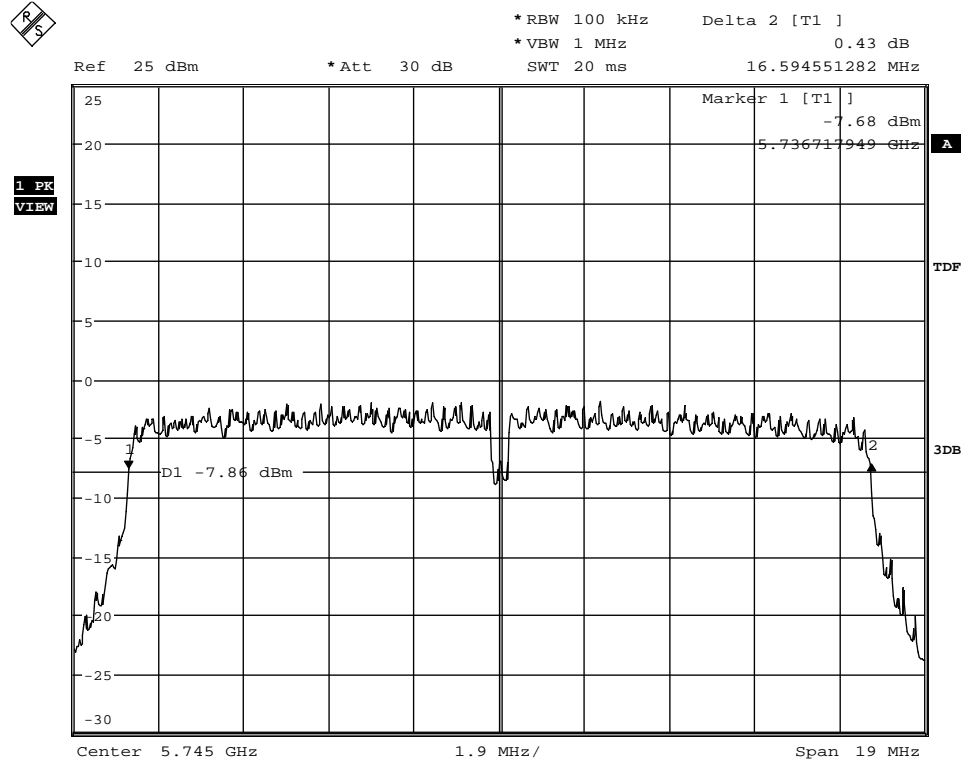


Date: 3.FEB.2015 15:27:52

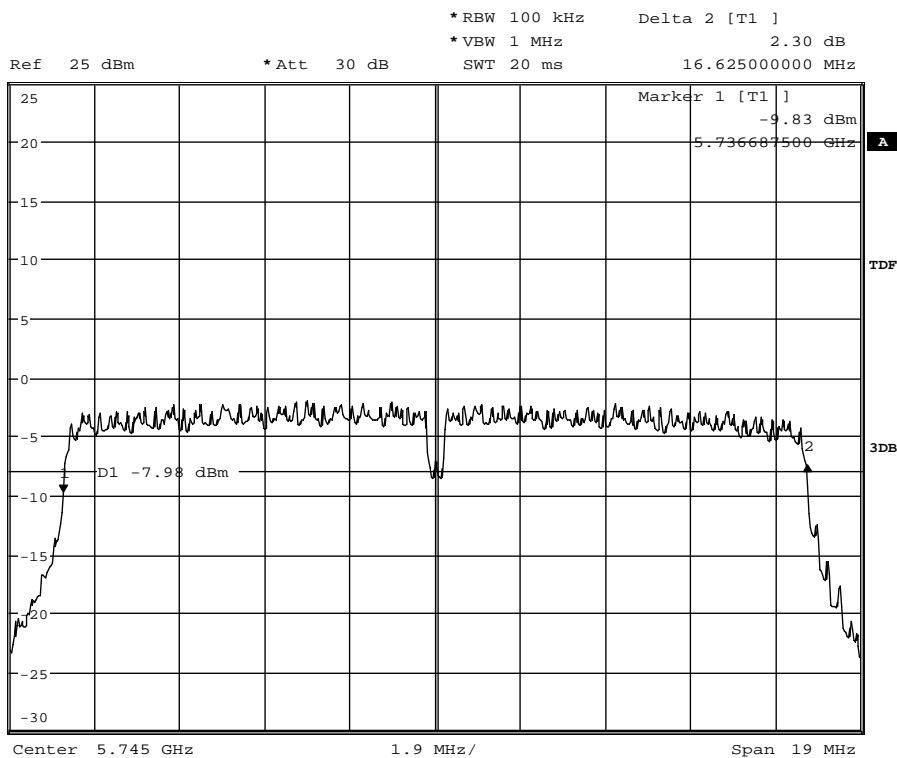
a-mode, Channel 149



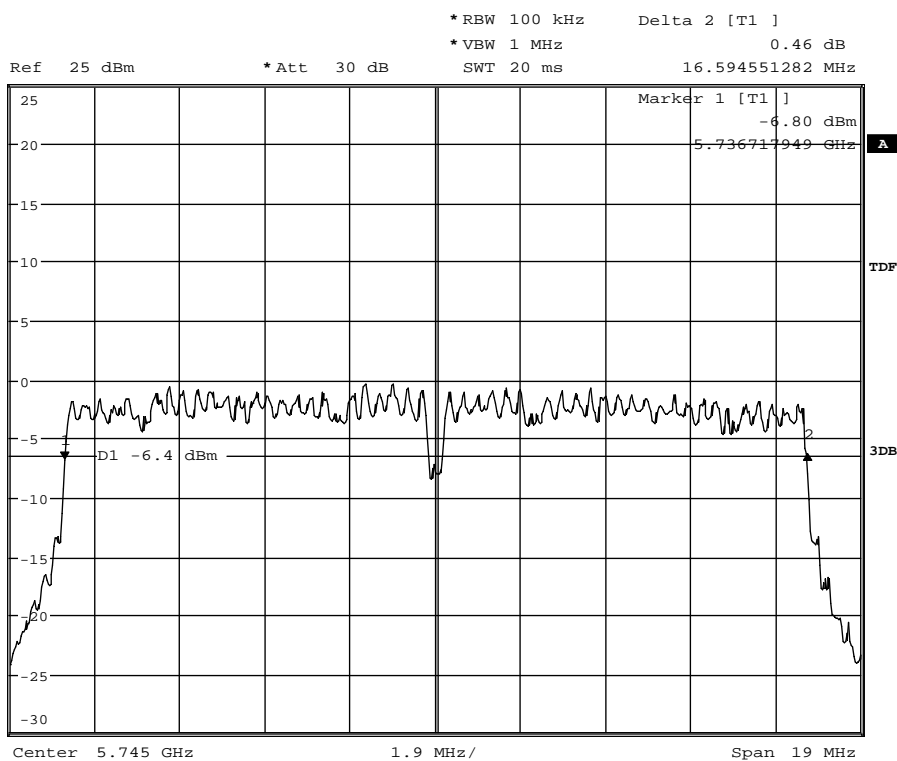
Date: 6.FEB.2015 08:50:49



Date: 6.FEB.2015 08:43:28

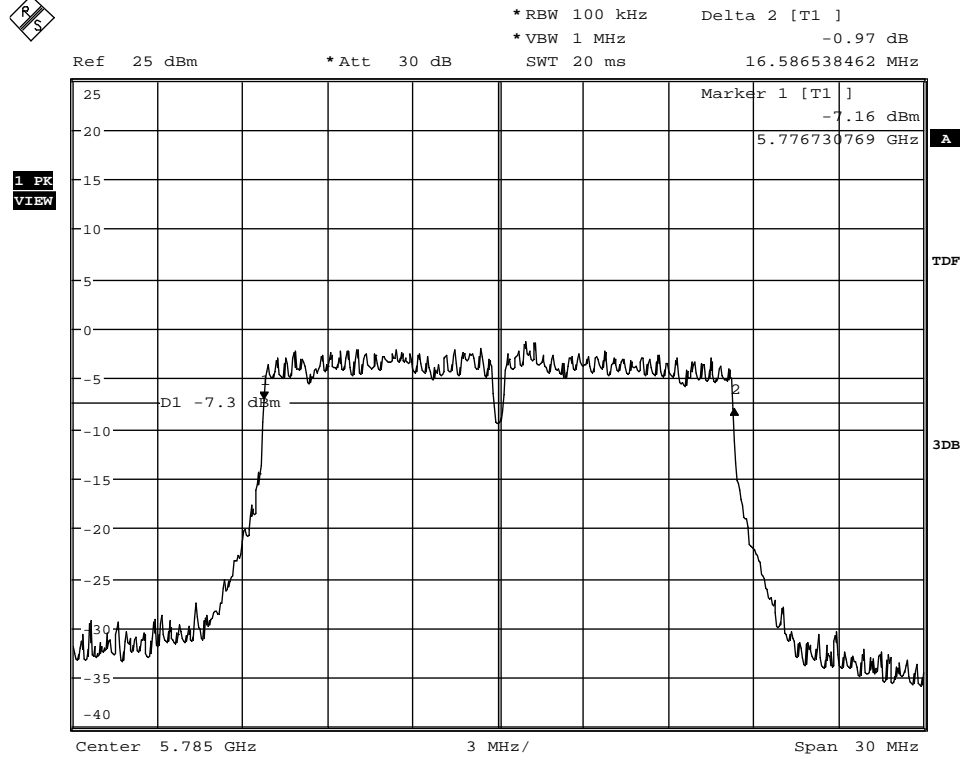


Date: 6.FEB.2015 08:47:21

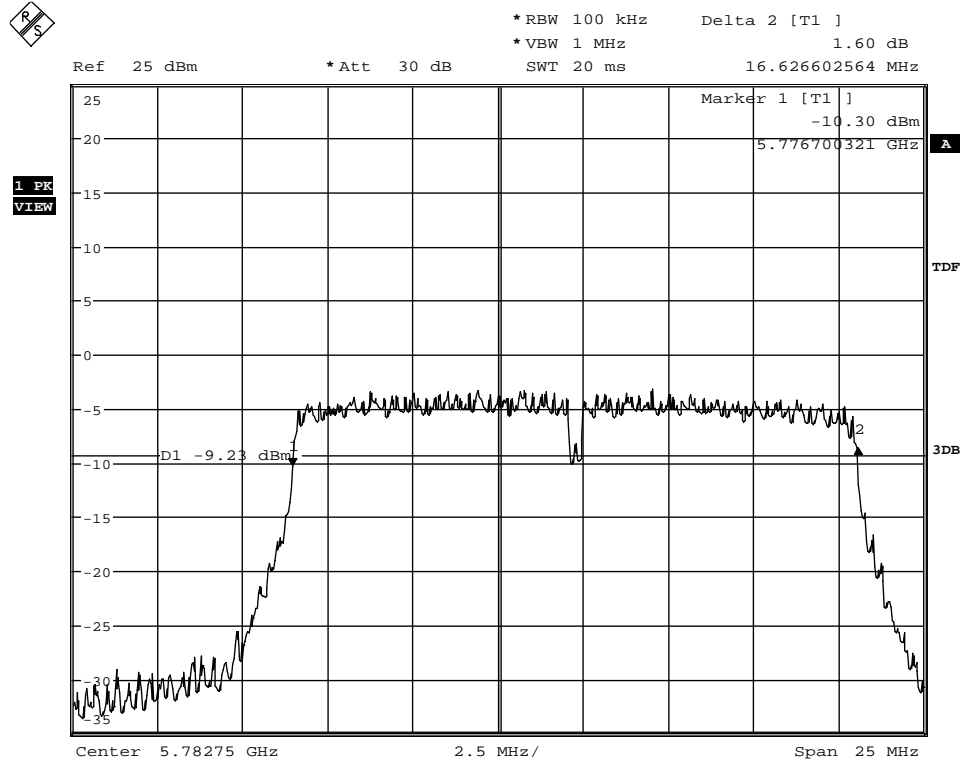


Date: 6.FEB.2015 08:54:00

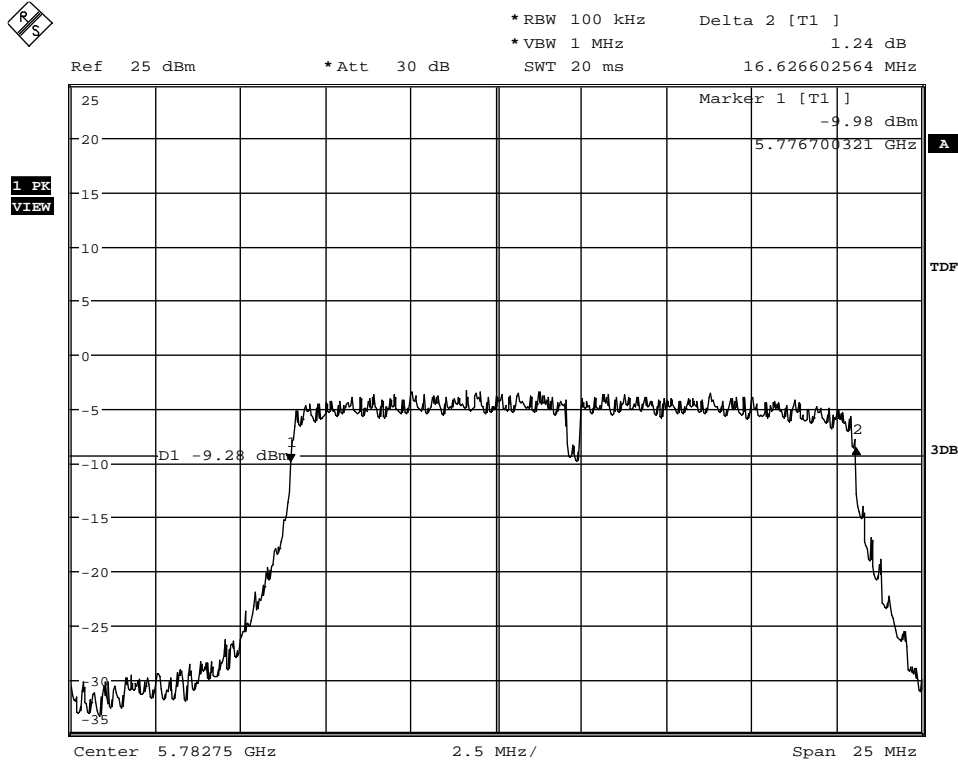
a-mode, Channel 157



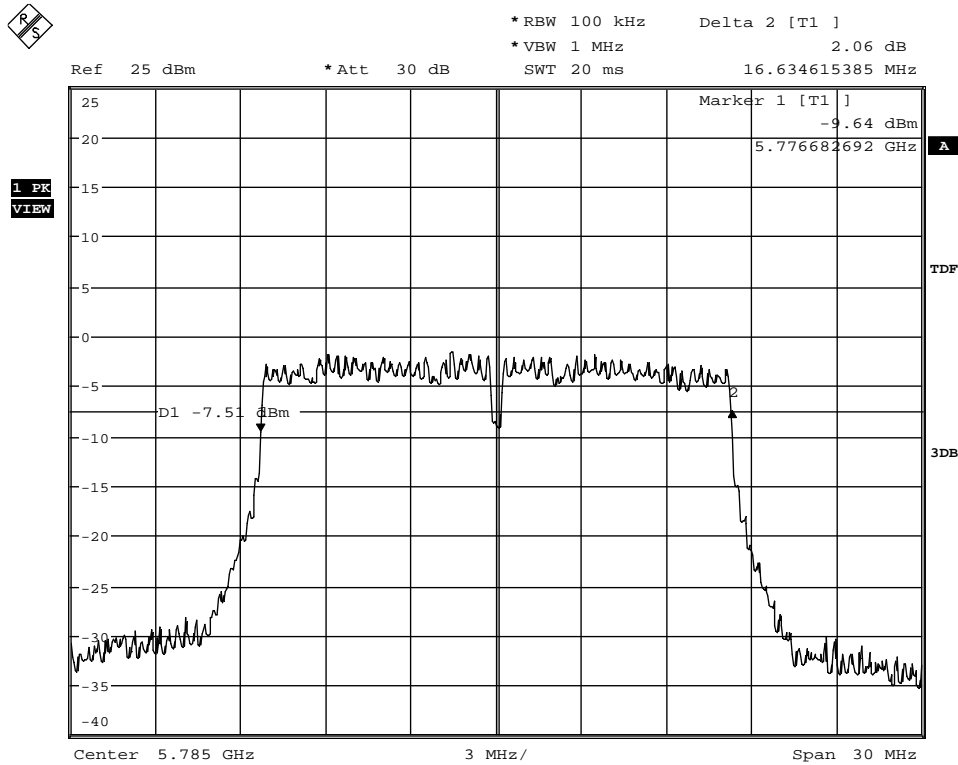
Date: 5.FEB.2015 13:45:06



Date: 5.FEB.2015 13:53:57

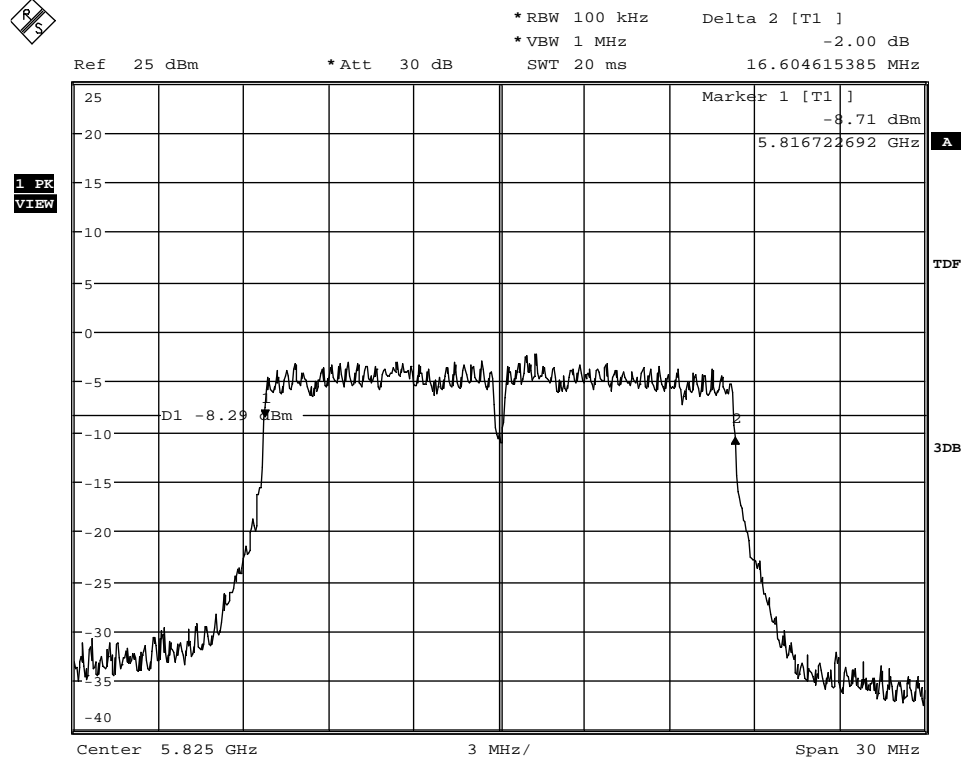


Date: 5.FEB.2015 13:51:17

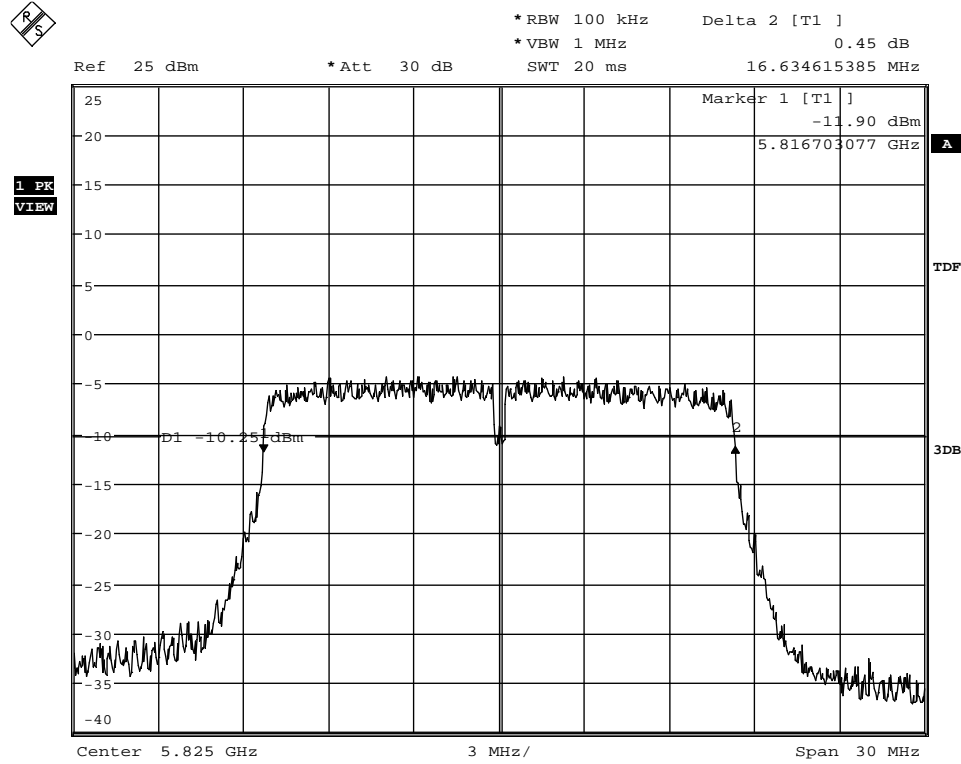


Date: 5.FEB.2015 13:42:24

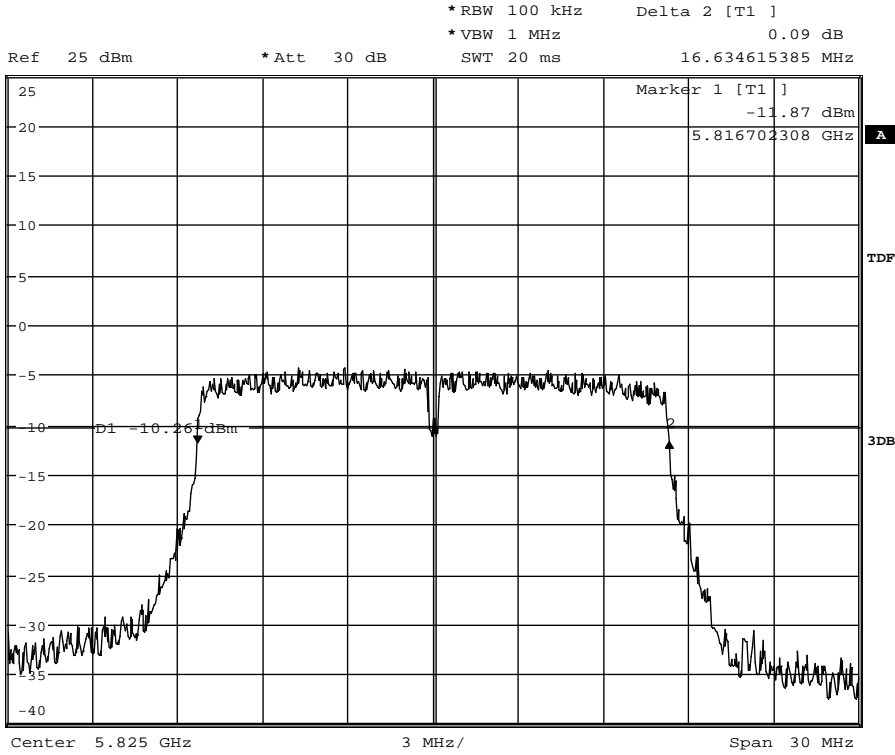
a-mode, Channel 165



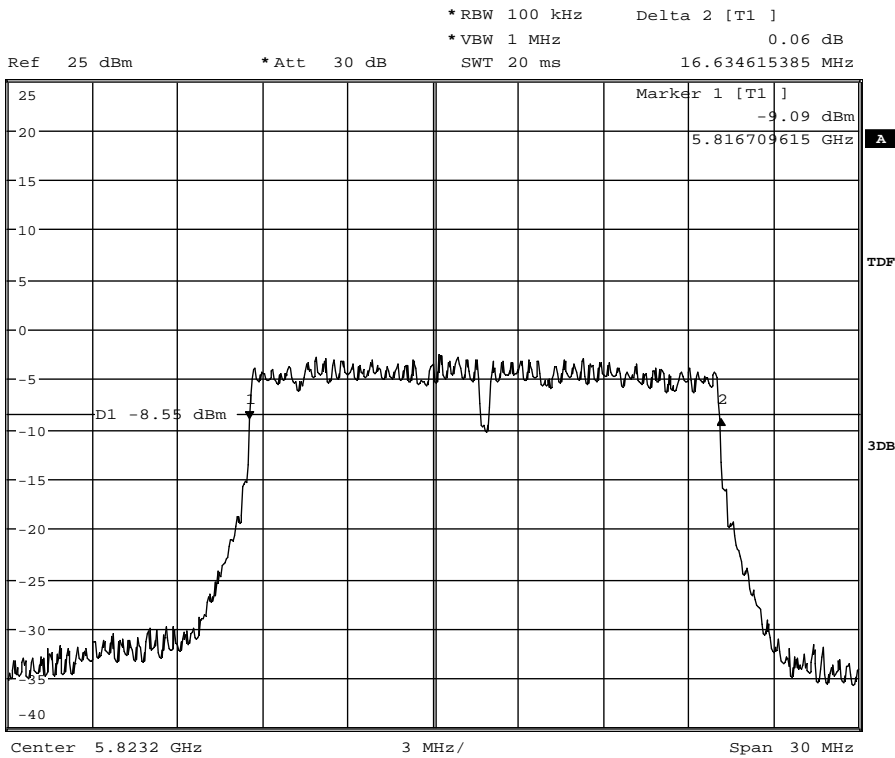
Date: 5.FEB.2015 13:31:19



Date: 5.FEB.2015 13:27:50



Date: 5.FEB.2015 13:24:51

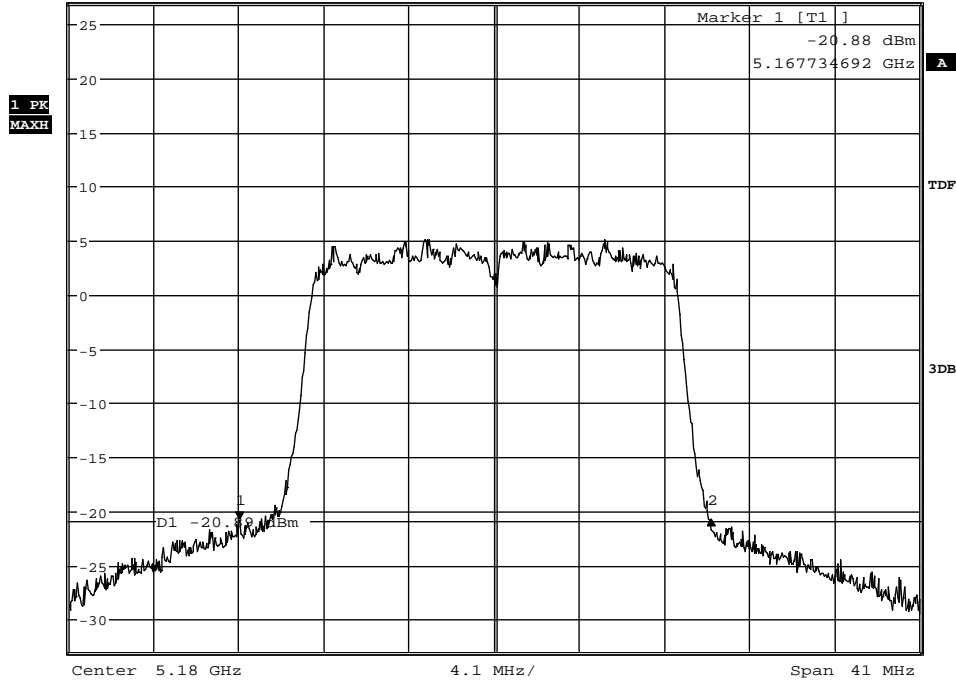


Date: 5.FEB.2015 13:37:31

n-mode, Channel 36



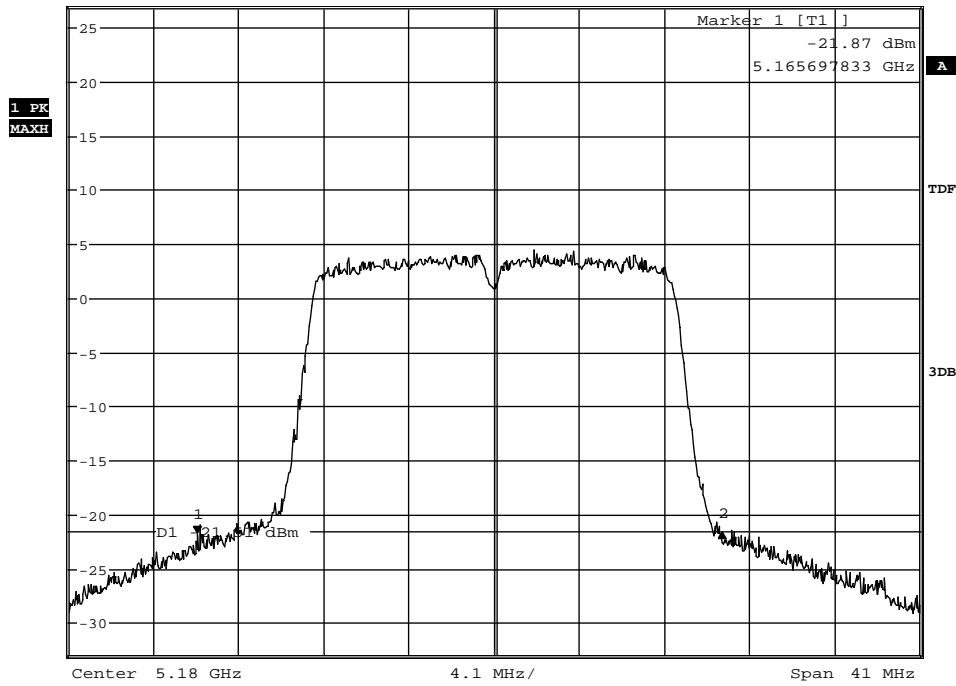
04.Feb 15 10:46
Ref 27 dBm *Att 30 dB *RBW 300 kHz Delta 2 [T1]
*VBW 5 MHz 0.02 dB
*SWT 20 ms 22.733974359 MHz



Date: 4.FEB.2015 10:46:01



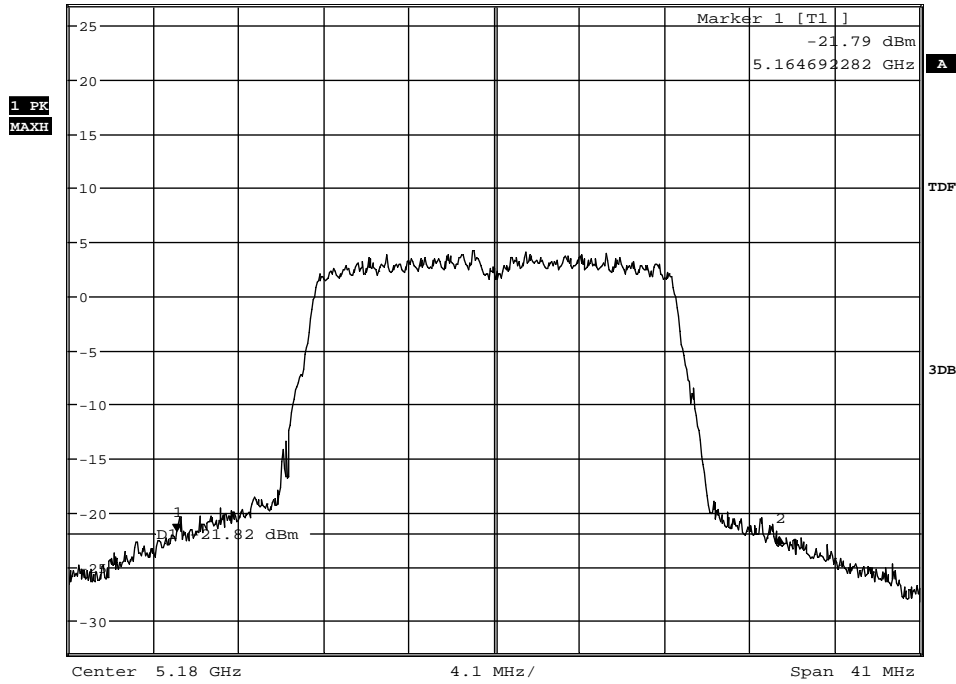
04.Feb 15 10:37
Ref 27 dBm *Att 30 dB *RBW 300 kHz Delta 2 [T1]
*VBW 5 MHz 0.18 dB
*SWT 20 ms 25.230769231 MHz



Date: 4.FEB.2015 10:37:59



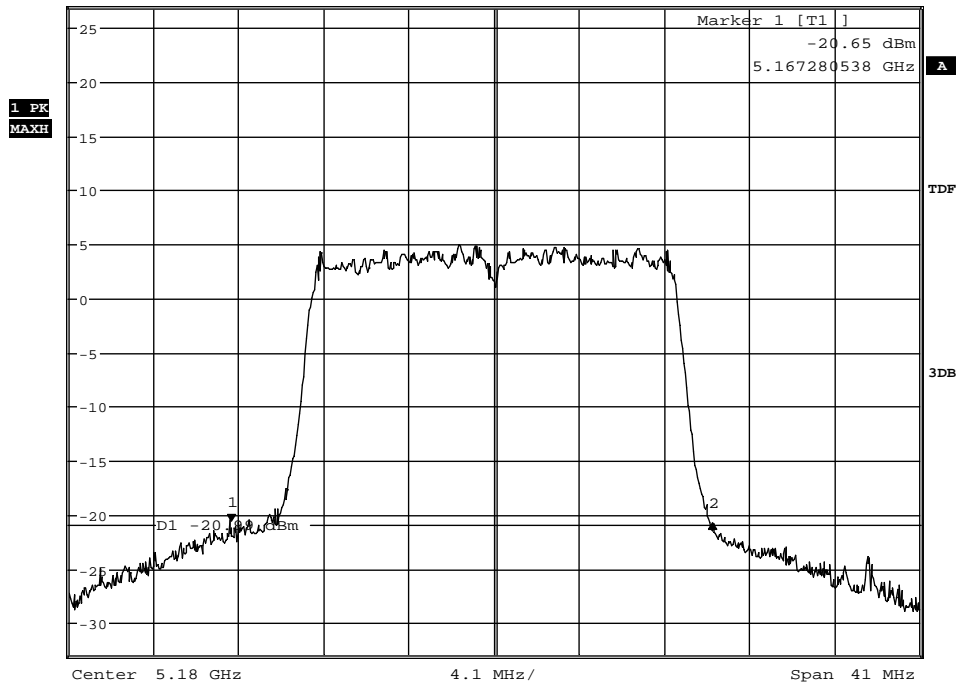
04.Feb 15 10:30 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz -0.55 dB
*SWT 20 ms 29.041666667 MHz



Date: 4.FEB.2015 10:30:47



04.Feb 15 10:50 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz -0.17 dB
*SWT 20 ms 23.259615385 MHz

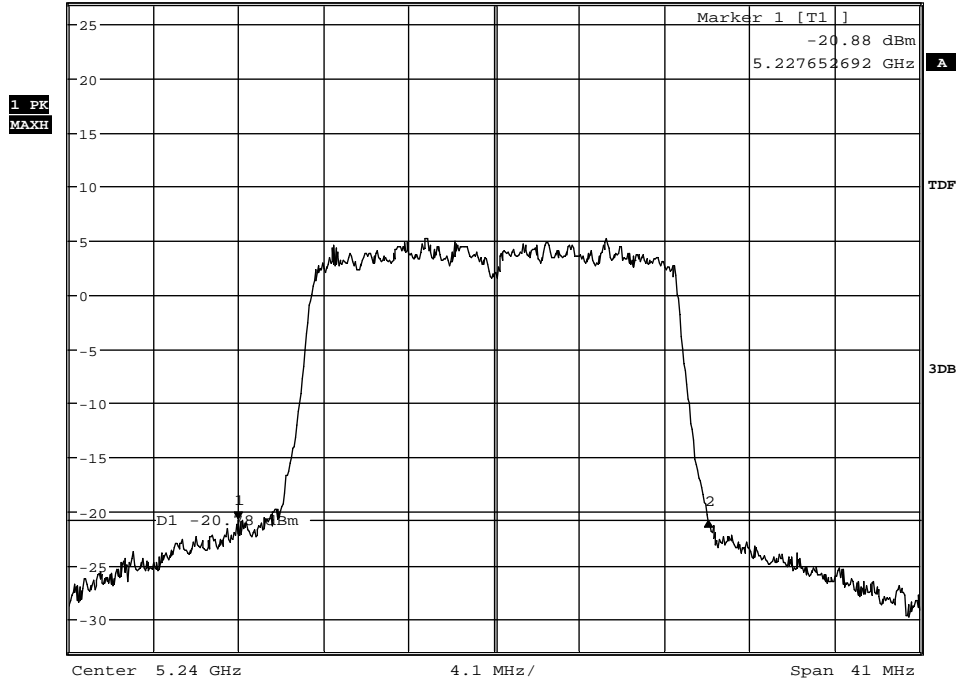


Date: 4.FEB.2015 10:50:04

n-mode, Channel 48



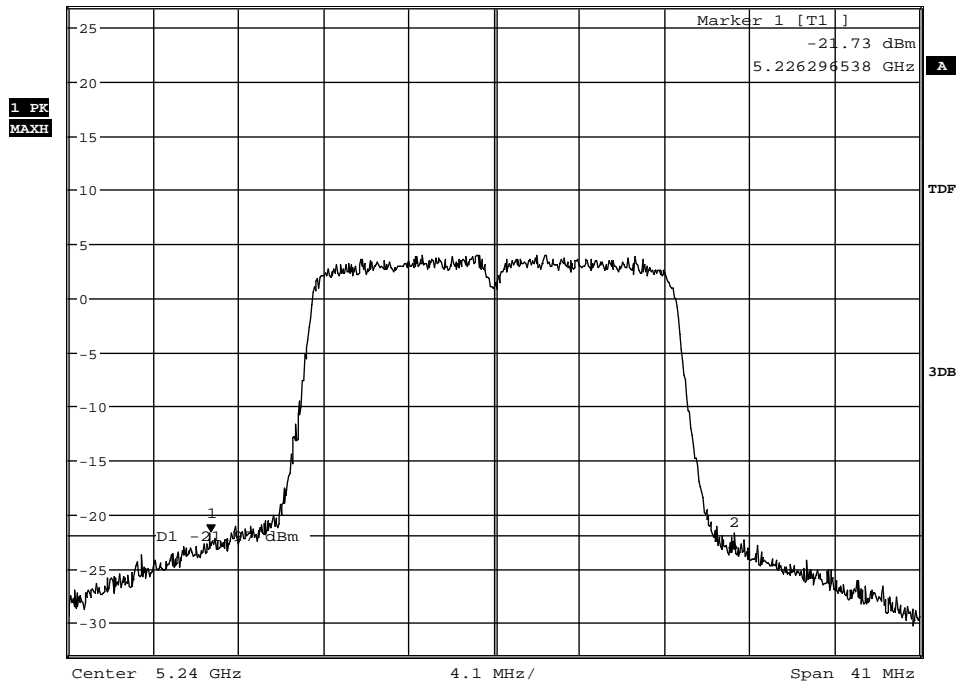
04.Feb 15 11:18 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz -0.13 dB
*SWT 20 ms 22.668269231 MHz



Date: 4.FEB.2015 11:18:19



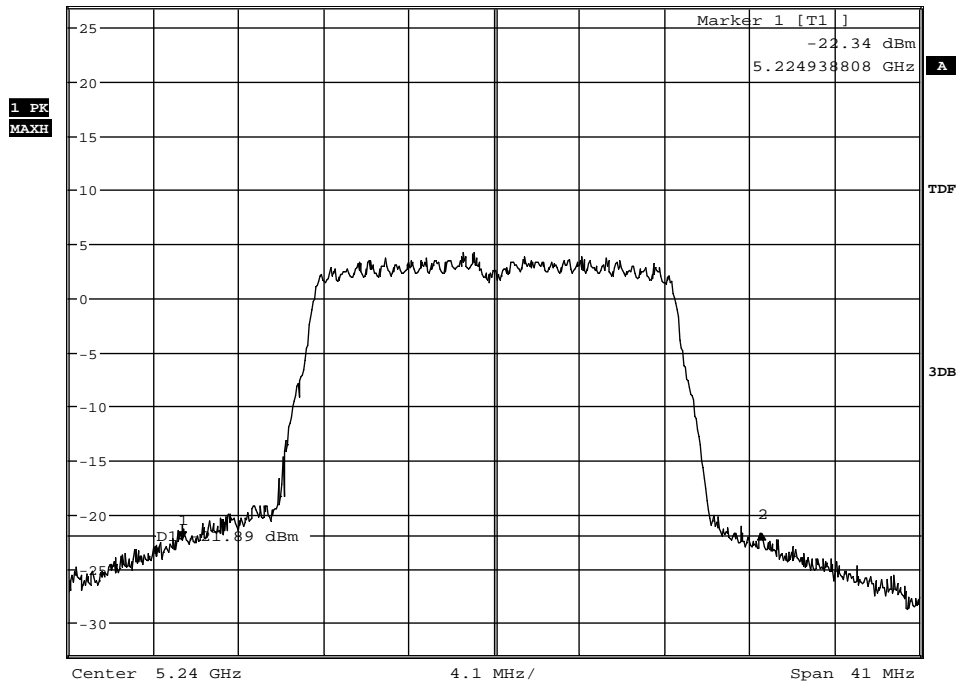
04.Feb 15 11:13 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz -0.90 dB
*SWT 20 ms 25.165064103 MHz



Date: 4.FEB.2015 11:13:15



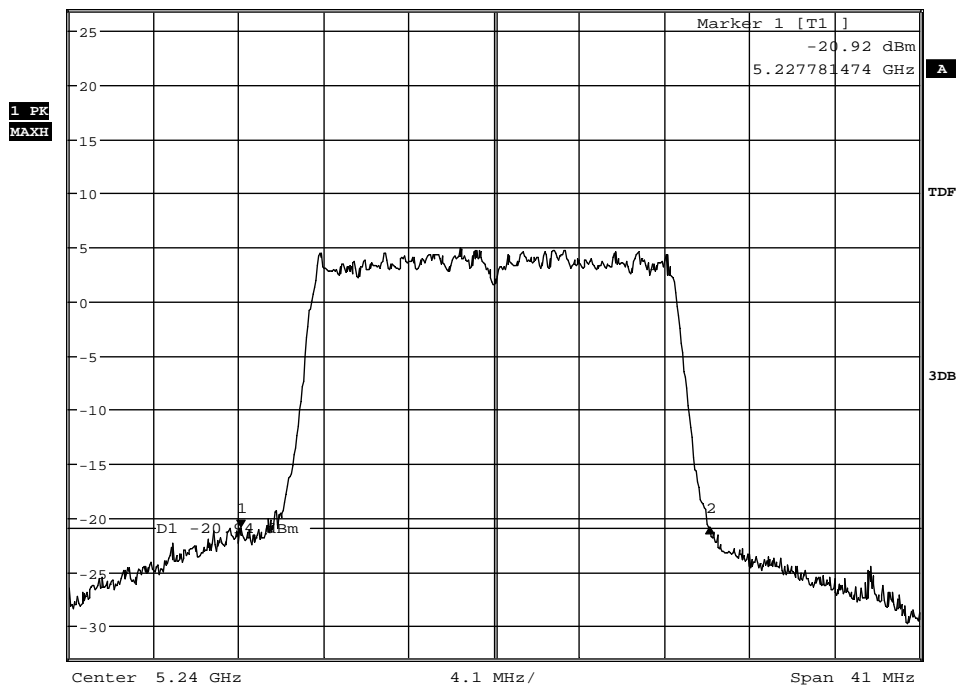
04.Feb 15 10:58 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.47 dB
*SWT 20 ms 27.940974359 MHz



Date: 4.FEB.2015 10:58:33



04.Feb 15 11:23 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz -0.07 dB
*SWT 20 ms 22.602564103 MHz

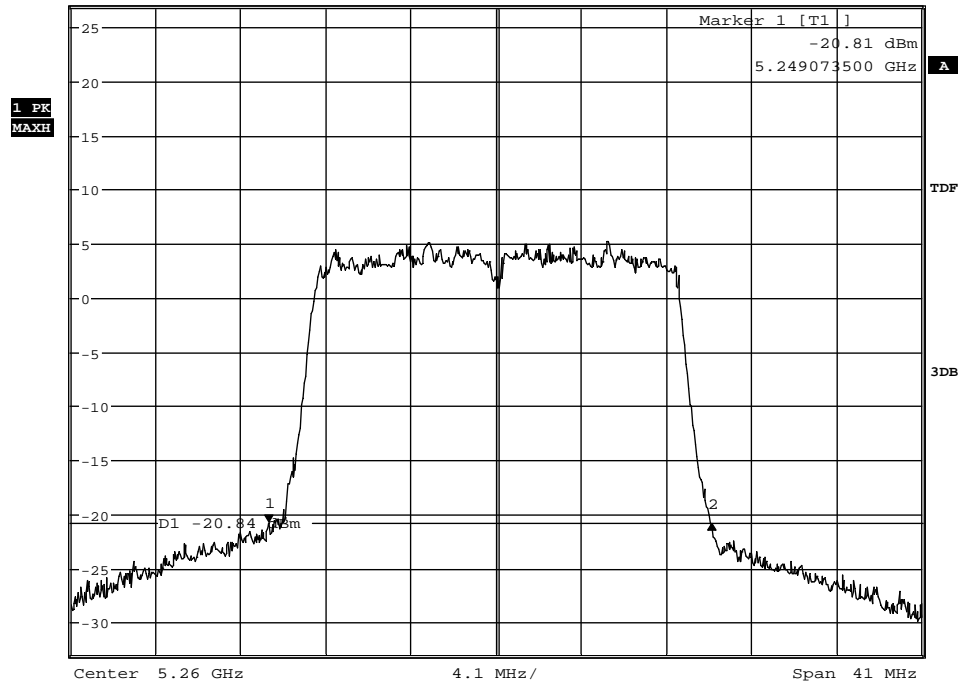


Date: 4.FEB.2015 11:23:03

n-mode, Channel 52



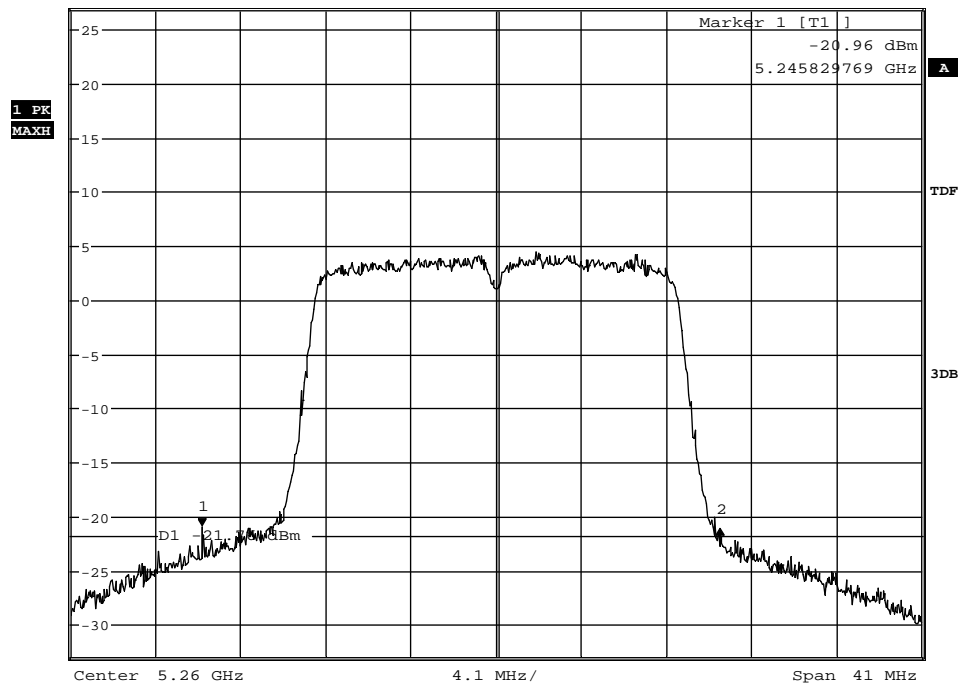
04.Feb 15 11:46
 Ref 27 dBm *Att 30 dB *RBW 300 kHz Delta 2 [T1]
 *VBW 5 MHz -0.17 dB
 *SWT 20 ms 21.291089744 MHz



Date: 4.FEB.2015 11:46:28



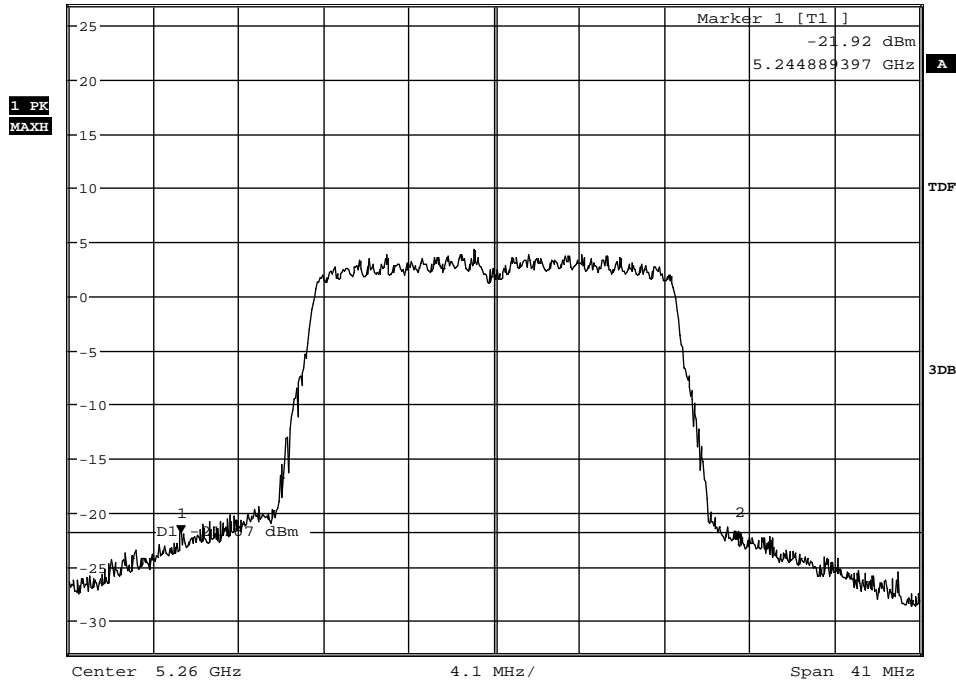
04.Feb 15 11:32
 Ref 27 dBm *Att 30 dB *RBW 300 kHz Delta 2 [T1]
 *VBW 5 MHz -0.29 dB
 *SWT 20 ms 24.967423077 MHz



Date: 4.FEB.2015 11:32:32



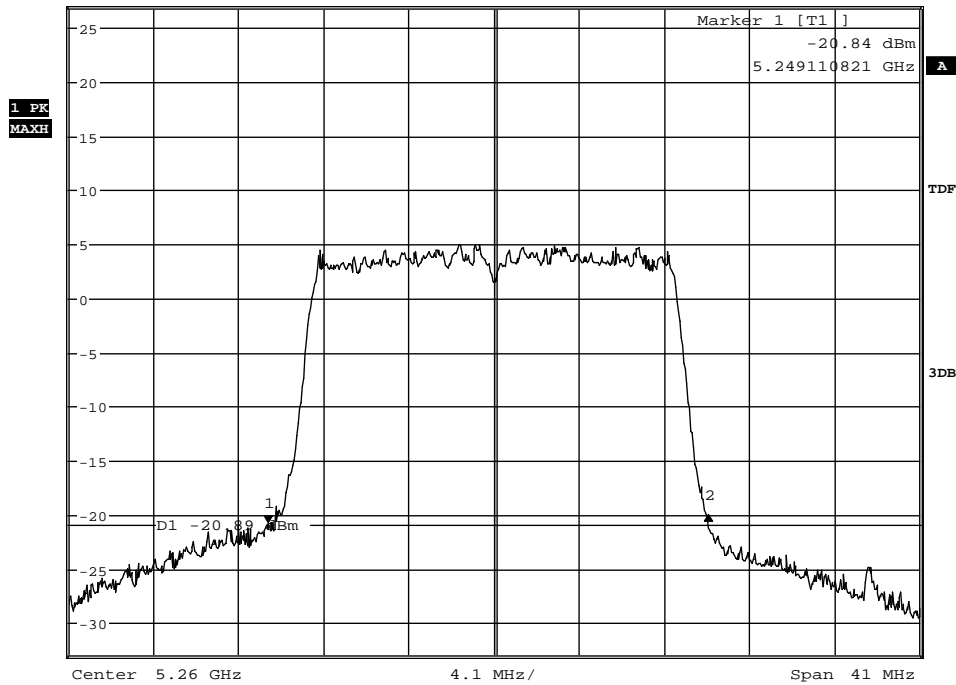
04.Feb 15 11:28 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.08 dB
*SWT 20 ms 26.873397436 MHz



Date: 4.FEB.2015 11:28:19



04.Feb 15 11:50 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.77 dB
*SWT 20 ms 21.222756410 MHz

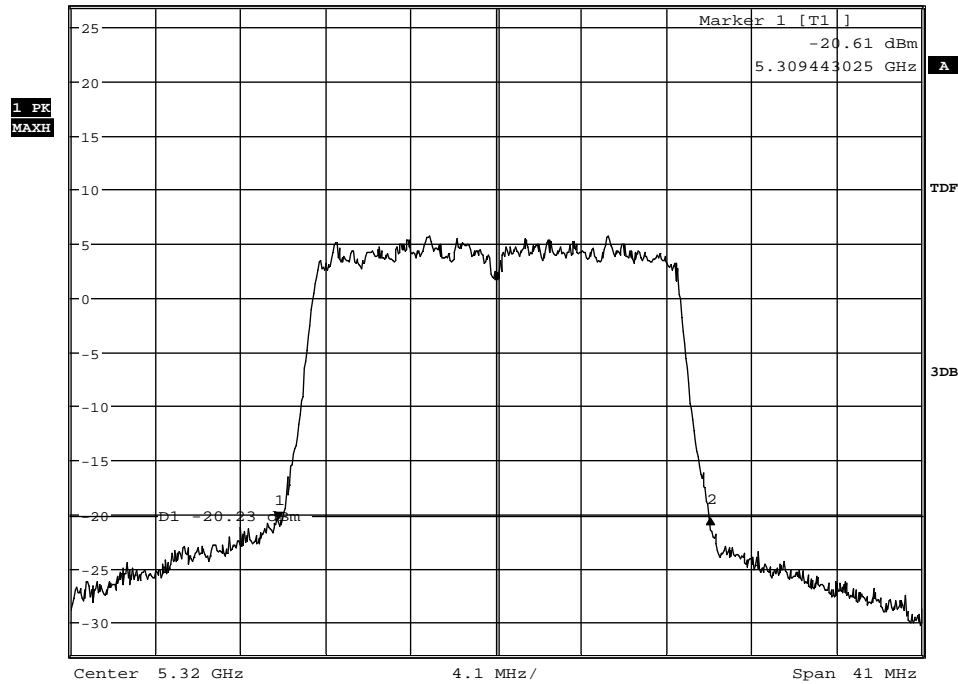


Date: 4.FEB.2015 11:50:50

n-mode, Channel 64



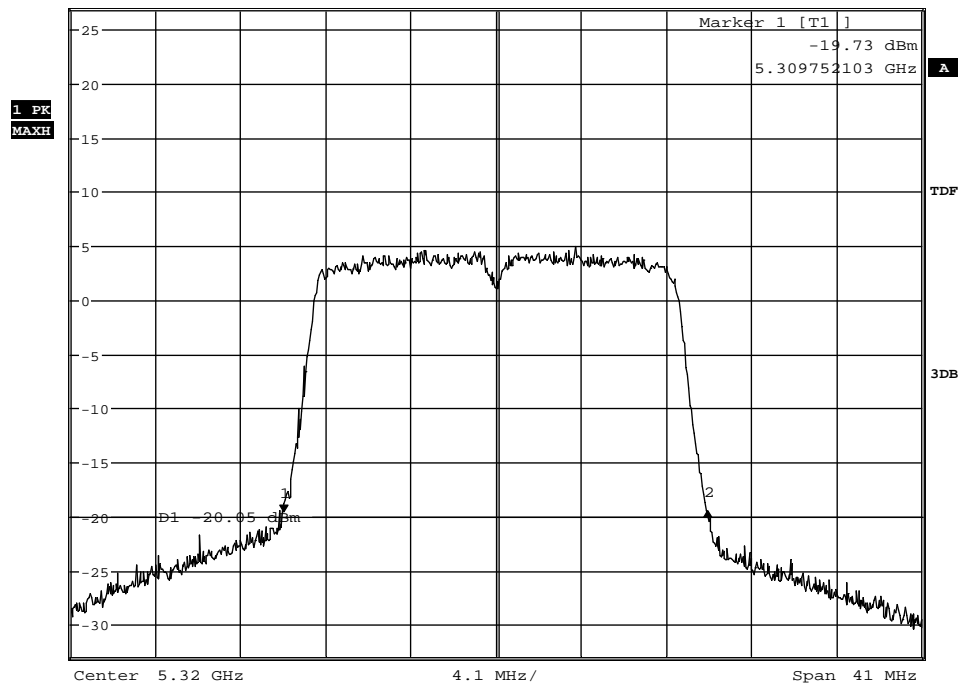
04.Feb 15 13:59 *RBW 300 kHz Delta 2 [T1]
 Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.18 dB
 *SWT 20 ms 20.828525897 MHz



Date: 4.FEB.2015 13:59:07



04.Feb 15 13:54 *RBW 300 kHz Delta 2 [T1]
 Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.13 dB
 *SWT 20 ms 20.434294872 MHz

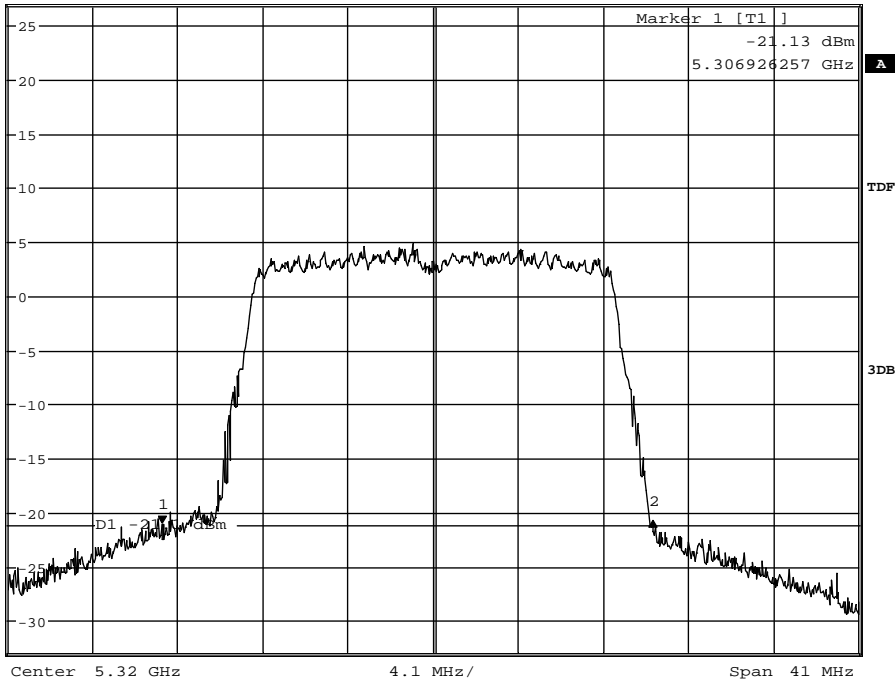


Date: 4.FEB.2015 13:54:42



04.Feb 15 13:51 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.33 dB
*SWT 20 ms 23.653846026 MHz

1 PK
MAXH

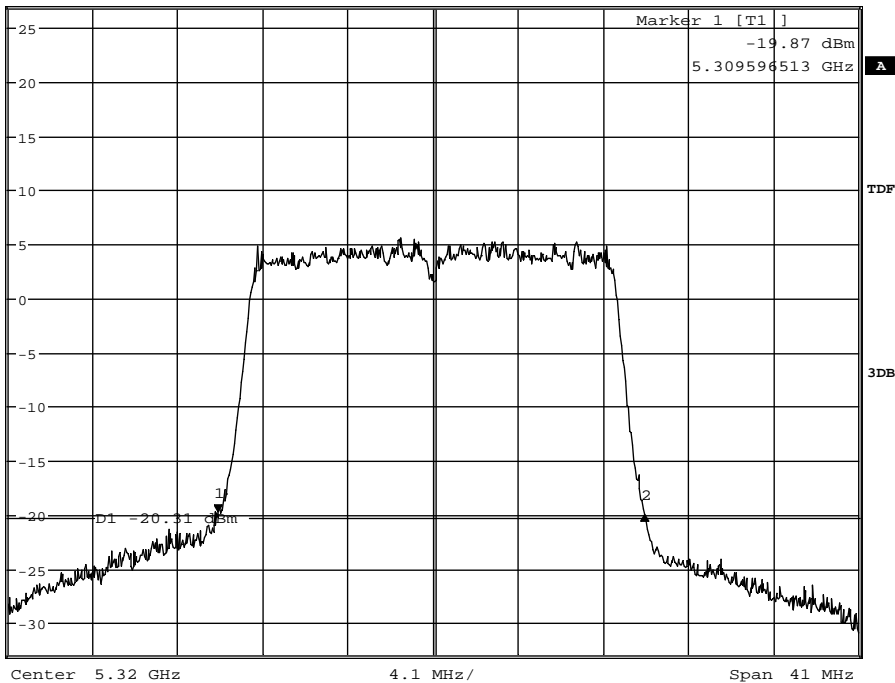


Date: 4.FEB.2015 13:51:22



04.Feb 15 14:01 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz -0.17 dB
*SWT 20 ms 20.631410256 MHz

1 PK
MAXH

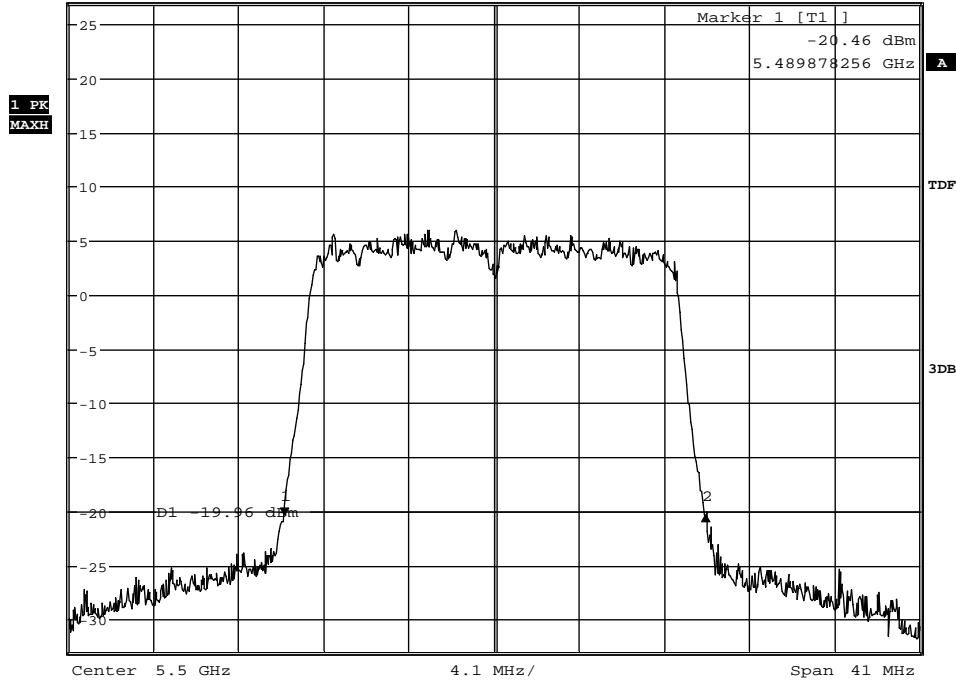


Date: 4.FEB.2015 14:01:44

n-mode, Channel 100



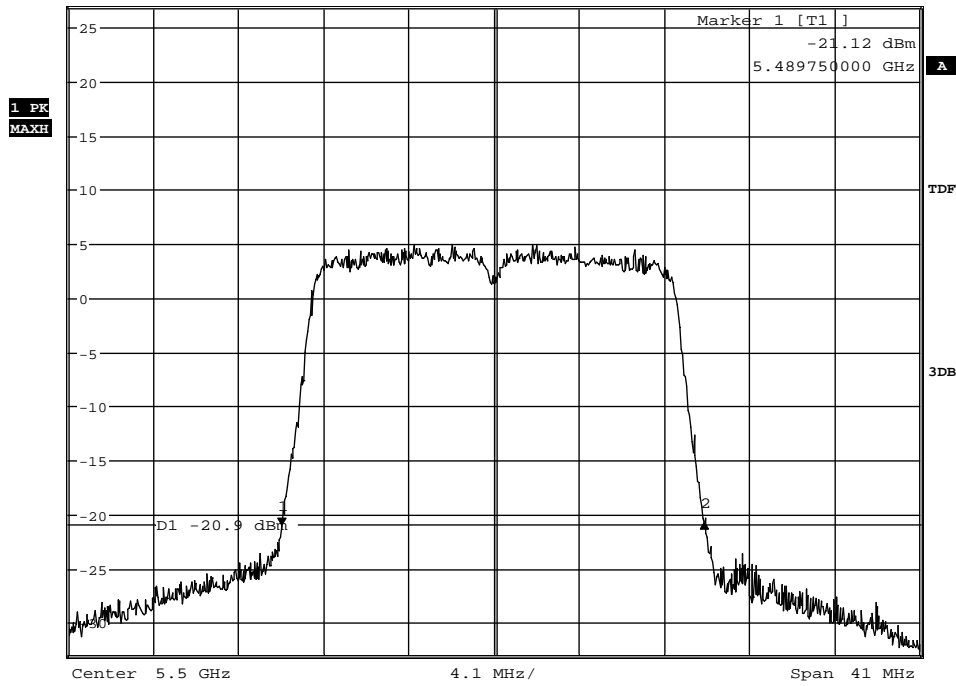
04.Feb 15 14:09 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz -0.04 dB
*SWT 20 ms 20.302884615 MHz



Date: 4.FEB.2015 14:09:11



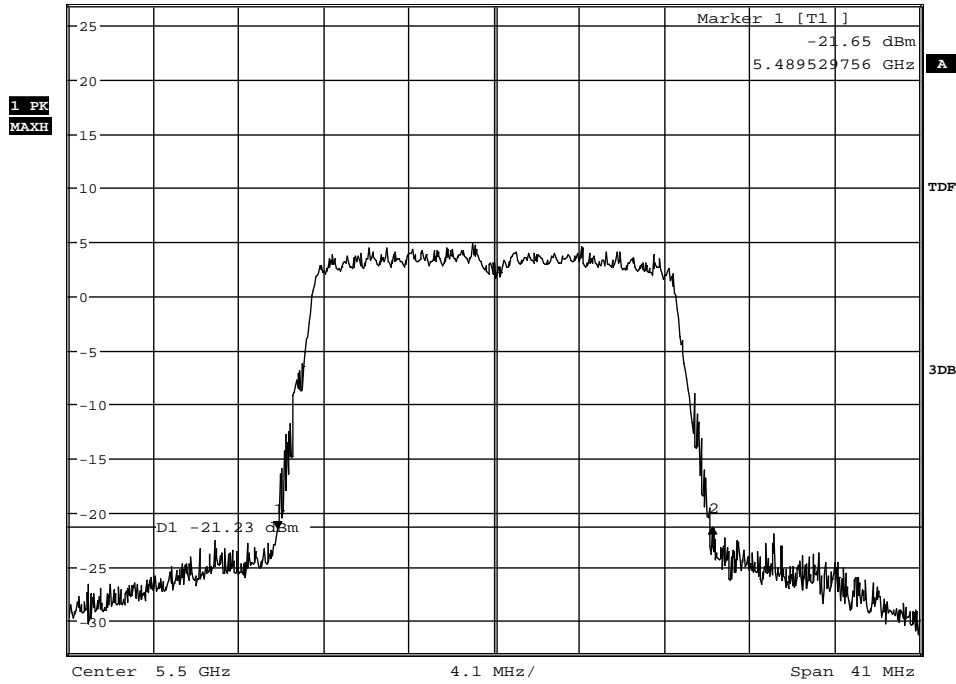
04.Feb 15 14:07 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.31 dB
*SWT 20 ms 20.396448718 MHz



Date: 4.FEB.2015 14:07:17



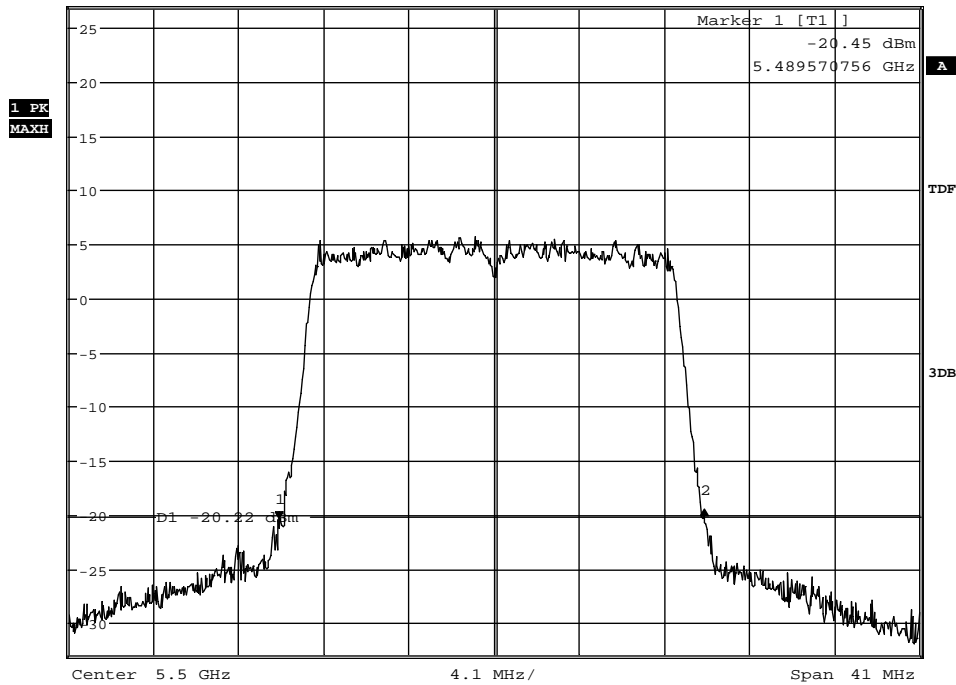
04.Feb 15 14:04 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.15 dB
*SWT 20 ms 20.959935897 MHz



Date: 4.FEB.2015 14:04:25



04.Feb 15 14:11 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.82 dB
*SWT 20 ms 20.500000000 MHz

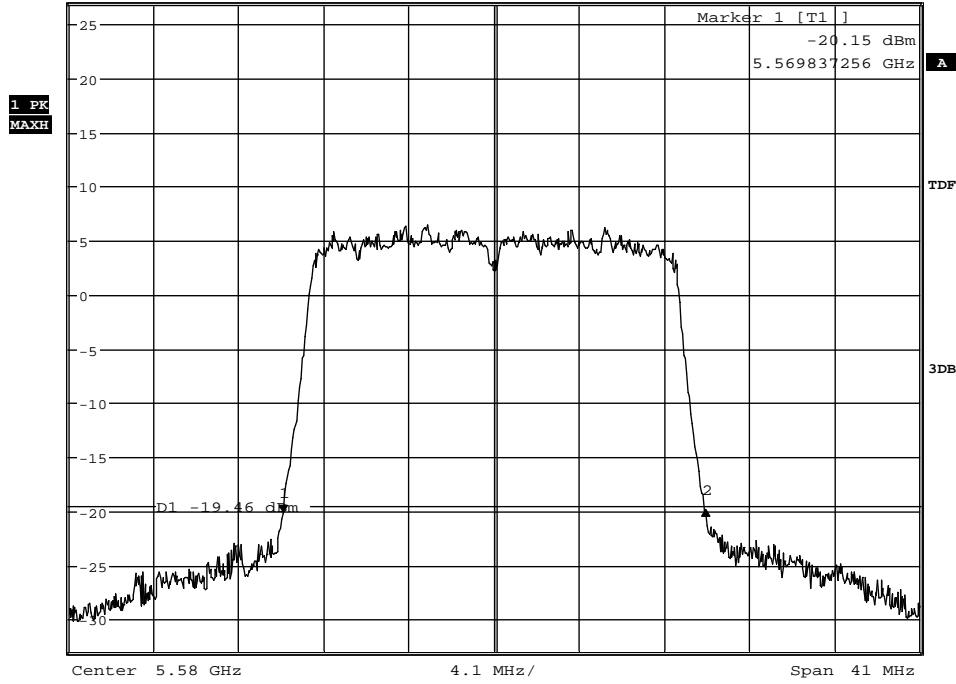


Date: 4.FEB.2015 14:11:18

n-mode, Channel 116



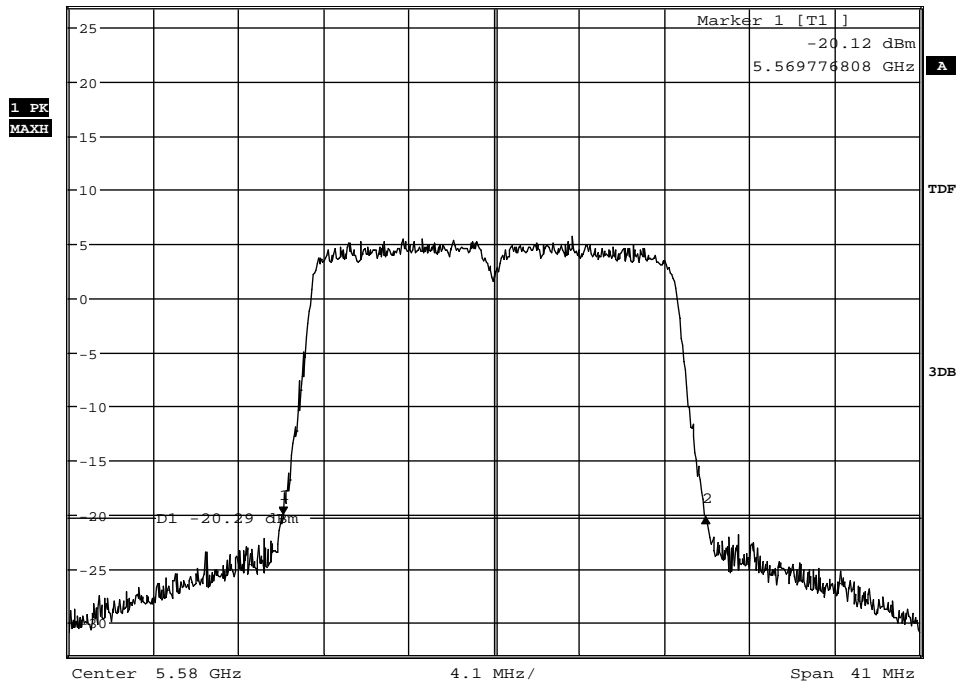
04.Feb 15 14:24 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.14 dB
*SWT 20 ms 20.368589744 MHz



Date: 4.FEB.2015 14:24:09



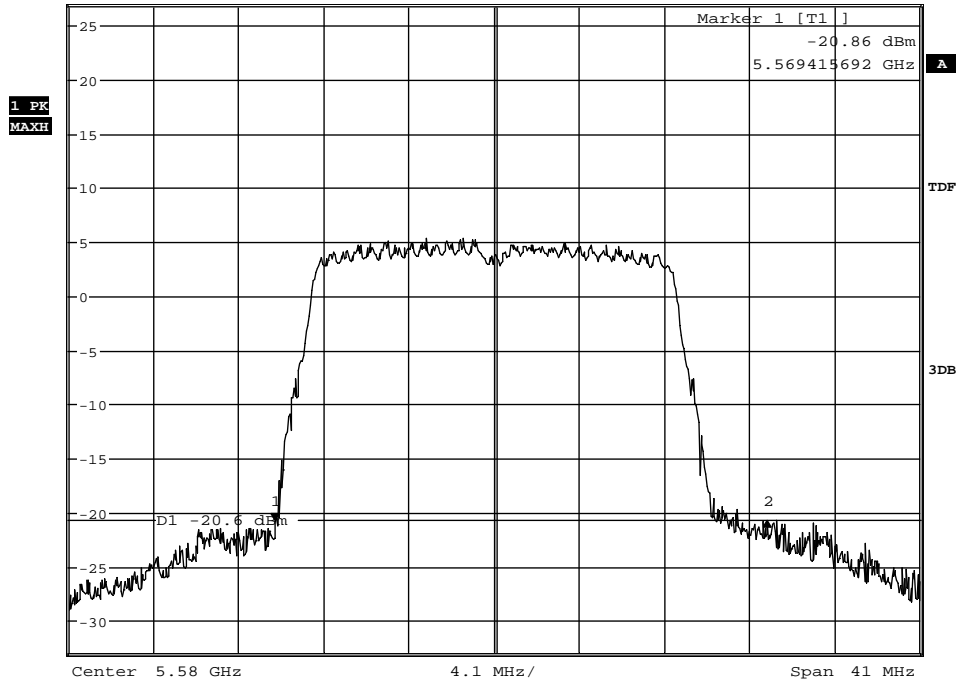
04.Feb 15 14:21 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz -0.22 dB
*SWT 20 ms 20.434294872 MHz



Date: 4.FEB.2015 14:21:31



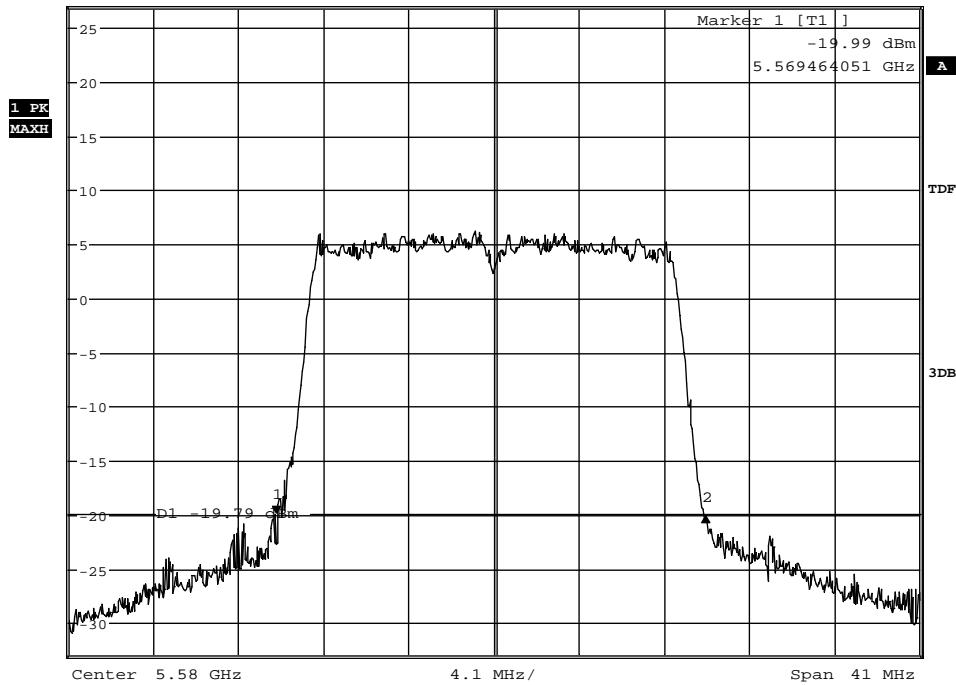
04.Feb 15 14:17
Ref 27 dBm *Att 30 dB *RBW 300 kHz Delta 2 [T1]
*VBW 5 MHz -0.01 dB
*SWT 20 ms 23.719551282 MHz



Date: 4.FEB.2015 14:17:40



04.Feb 15 14:27
Ref 27 dBm *Att 30 dB *RBW 300 kHz Delta 2 [T1]
*VBW 5 MHz -0.24 dB
*SWT 20 ms 20.738115385 MHz

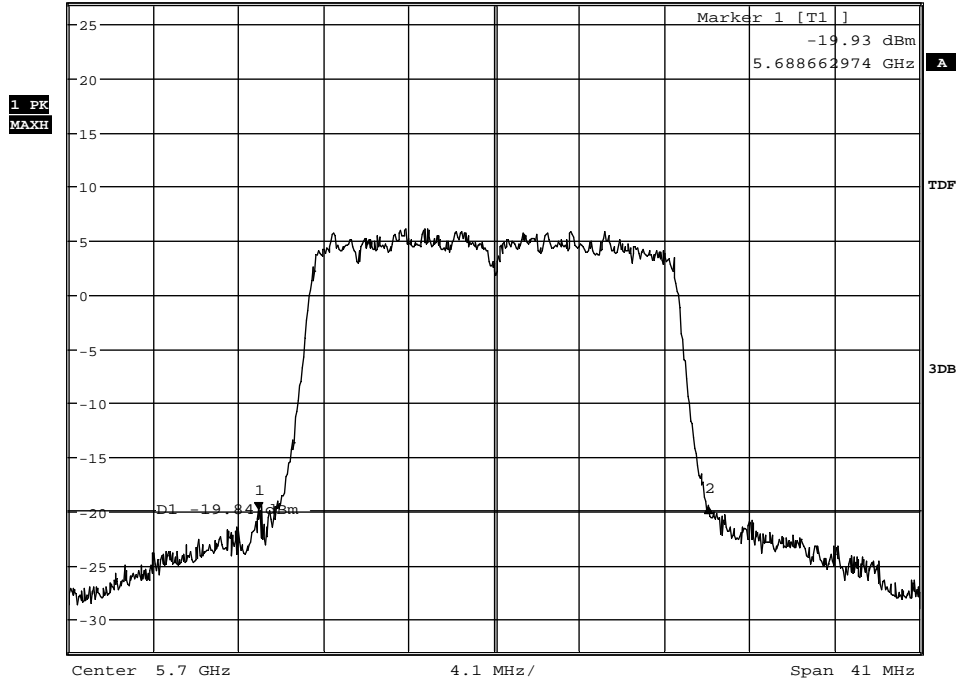


Date: 4.FEB.2015 14:27:14

n-mode, Channel 140



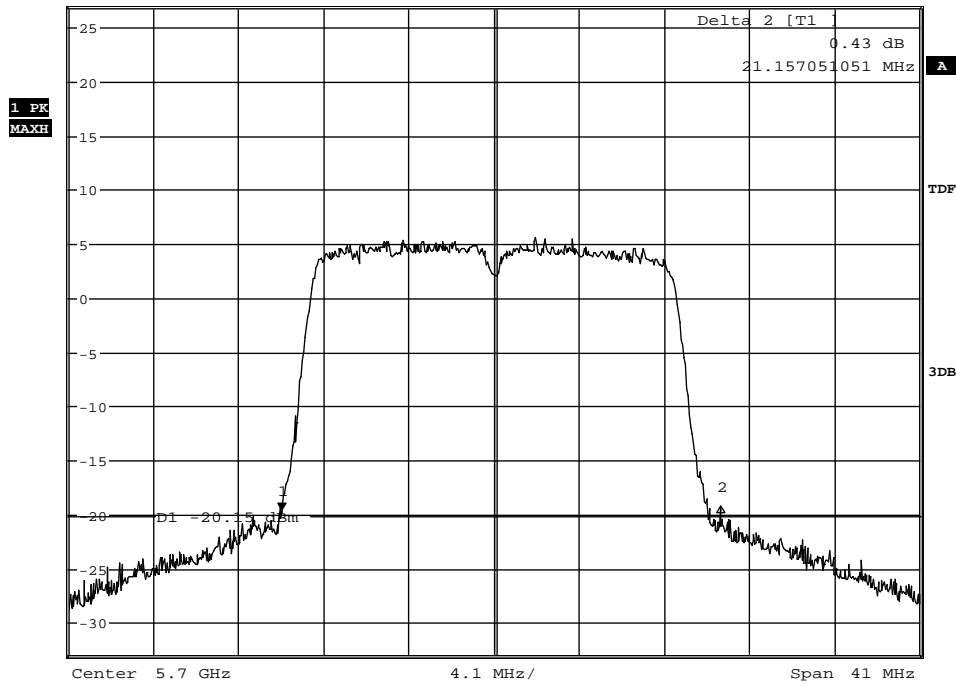
04.Feb 15 14:46
 Ref 27 dBm *Att 30 dB *RBW 300 kHz Delta 2 [T1]
 *VBW 5 MHz 0.26 dB
 *SWT 20 ms 21.682692308 MHz



Date: 4.FEB.2015 14:46:04



04.Feb 15 14:42
 Ref 27 dBm *Att 30 dB *RBW 300 kHz Marker 1 [T1]
 *VBW 5 MHz -19.73 dBm
 *SWT 20 ms 5.689746846 GHz

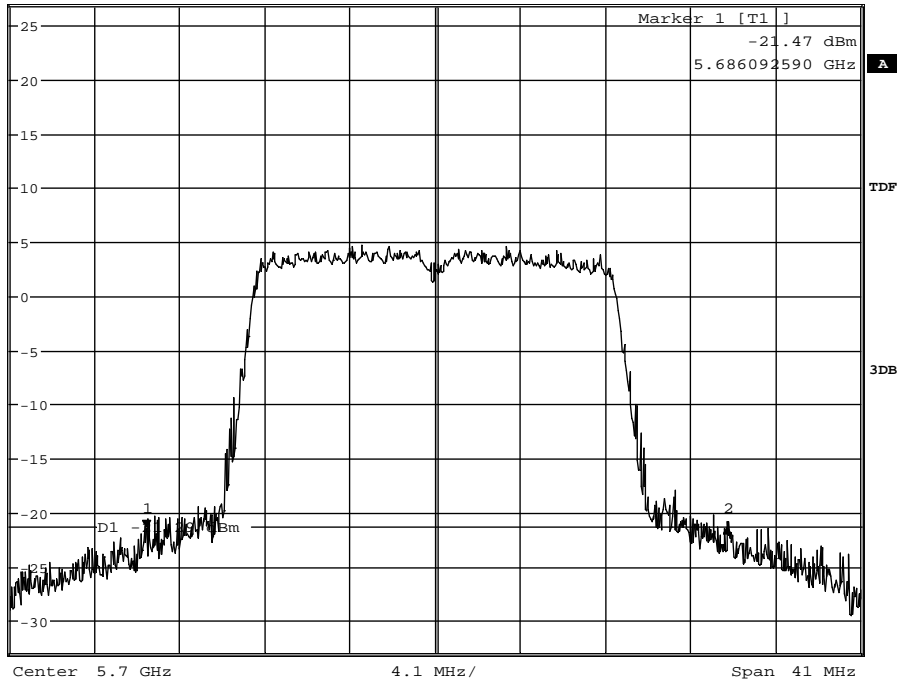


Date: 4.FEB.2015 14:42:54



04.Feb 15 14:36 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz 0.05 dB
*SWT 20 ms 27.990384615 MHz

1 PK
VIEW

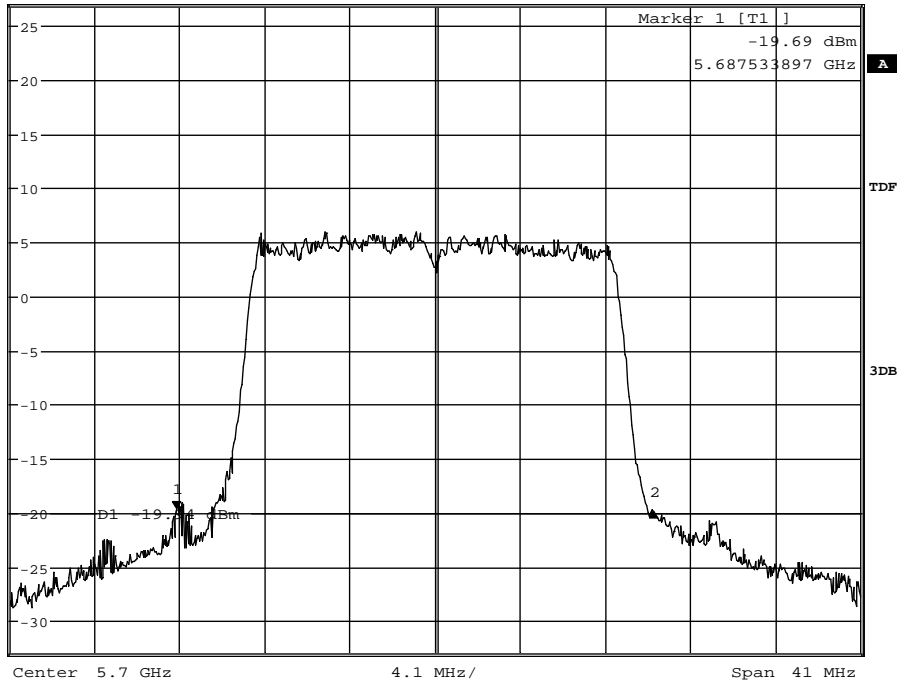


Date: 4.FEB.2015 14:36:04



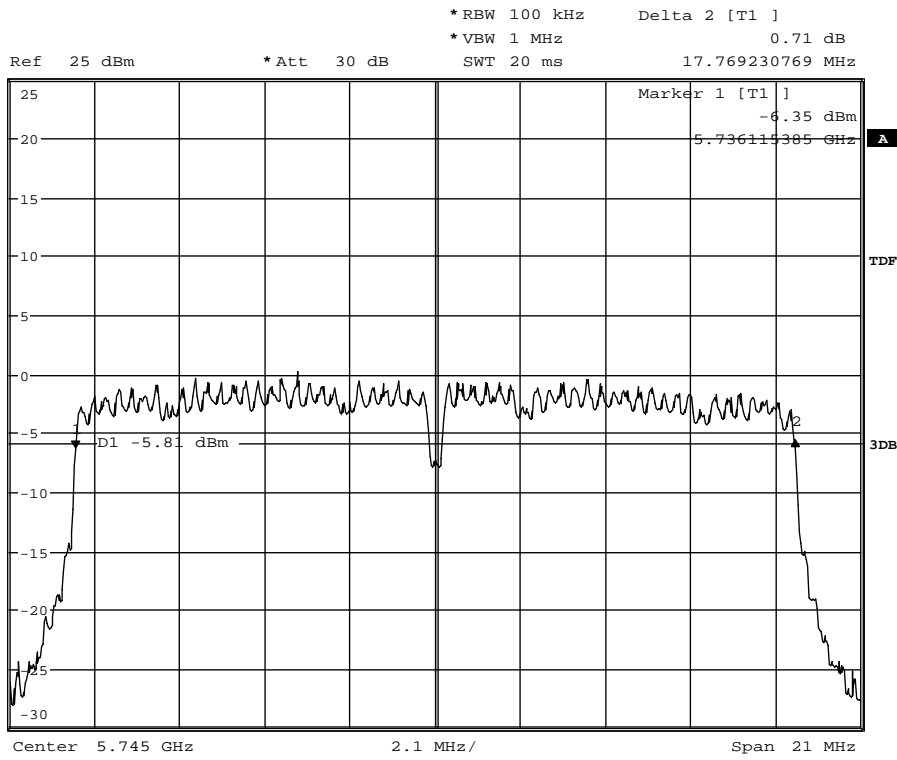
04.Feb 15 14:49 *RBW 300 kHz Delta 2 [T1]
Ref 27 dBm *Att 30 dB *VBW 5 MHz -0.33 dB
*SWT 20 ms 22.996794872 MHz

1 PK
MAXH

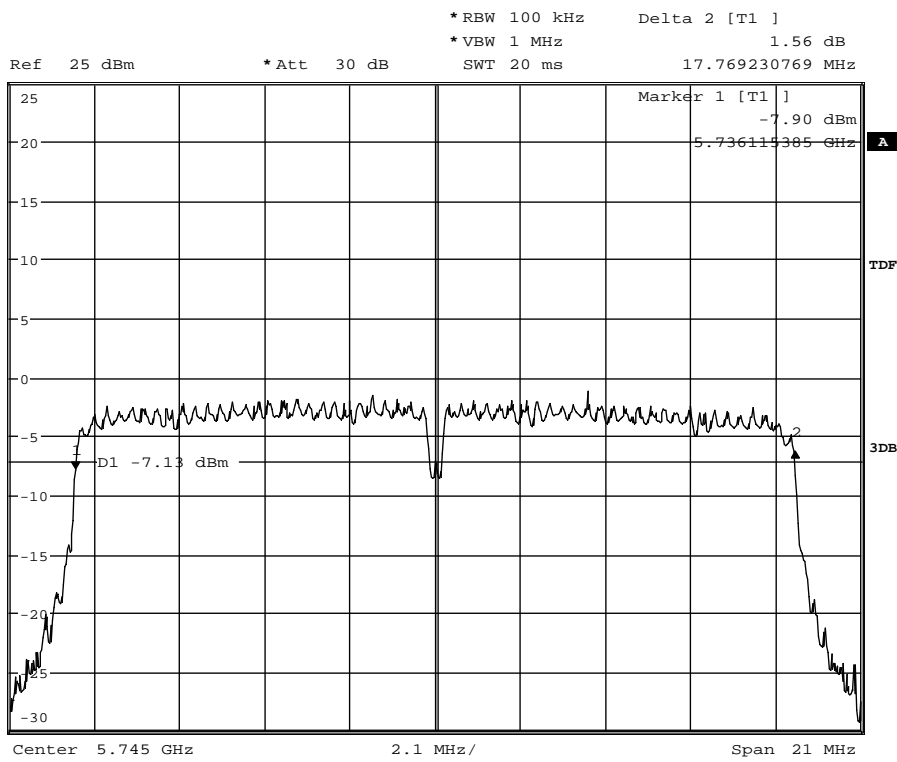


Date: 4.FEB.2015 14:49:05

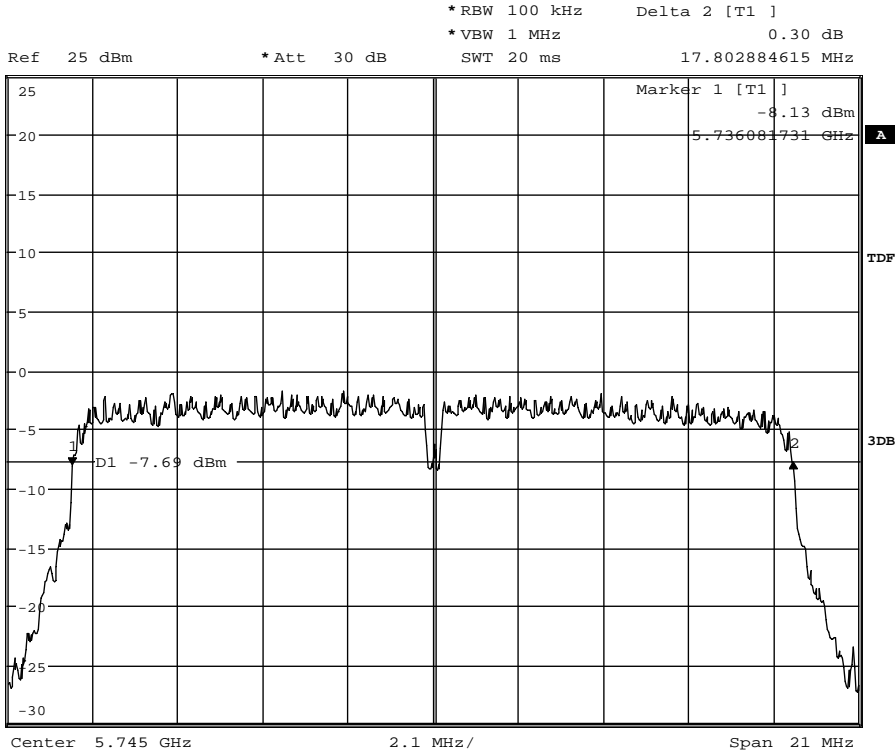
n-mode, Channel 149



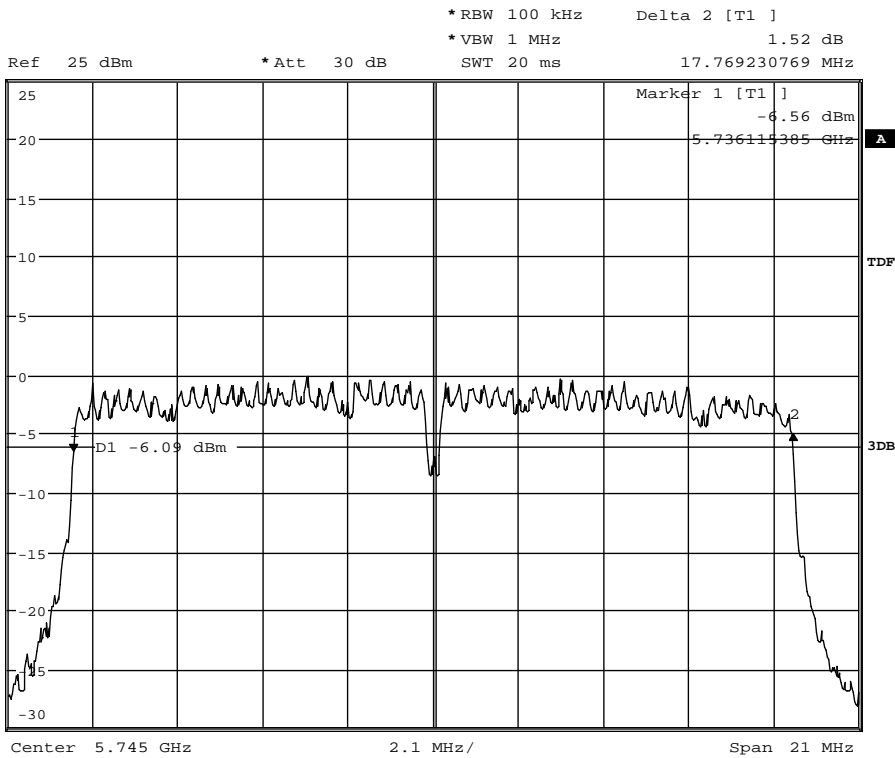
Date: 6.FEB.2015 09:09:41



Date: 6.FEB.2015 09:05:30



Date: 6.FEB.2015 09:01:35



Date: 6.FEB.2015 09:13:47

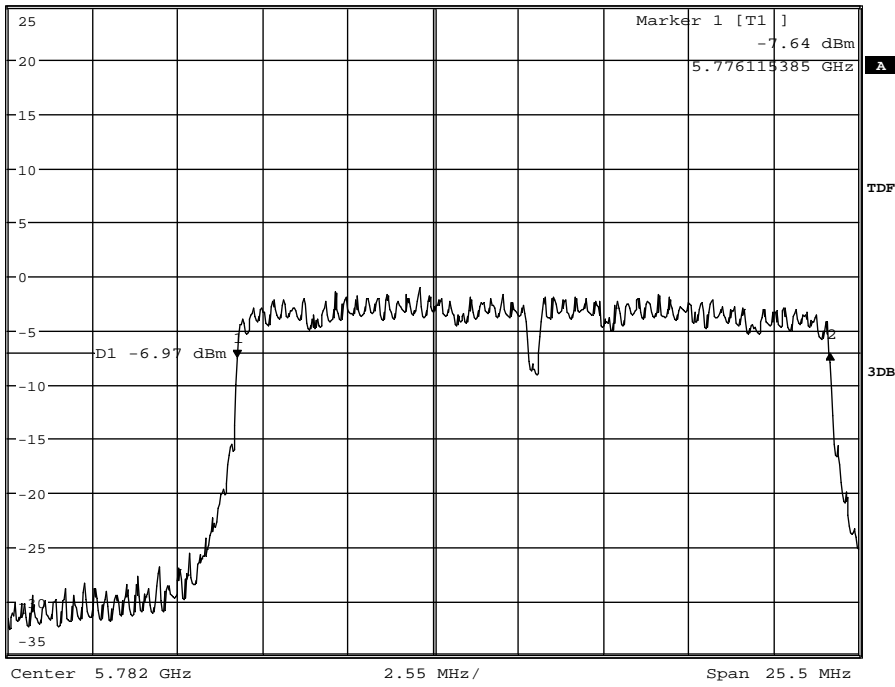
n-mode, Channel 157



*RBW 100 kHz Delta 2 [T1]
*VBW 1 MHz 0.45 dB
SWT 20 ms 17.776442308 MHz

Ref 25 dBm *Att 30 dB

1 PK
VIEW



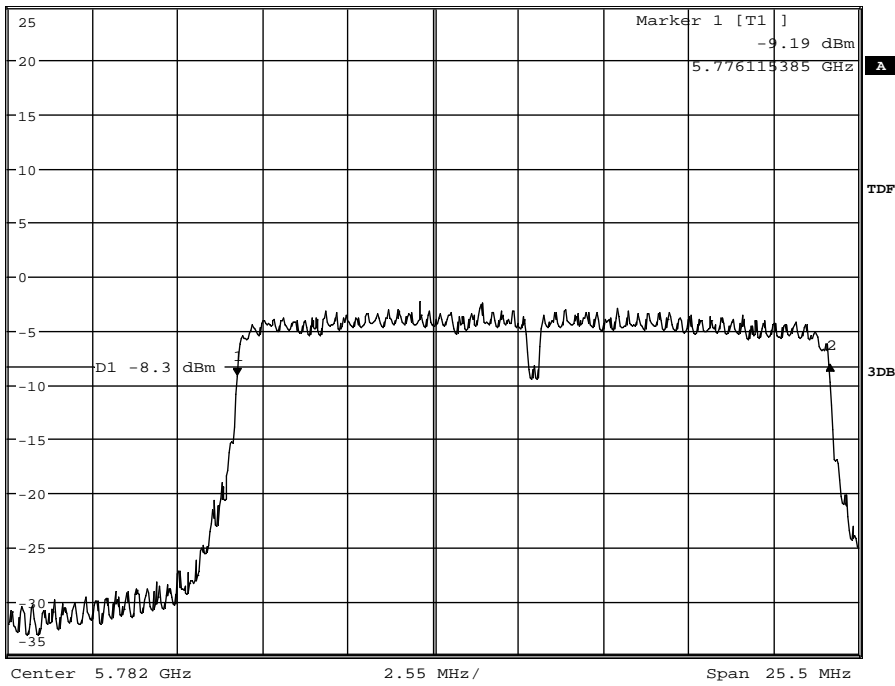
Date: 5.FEB.2015 14:06:40



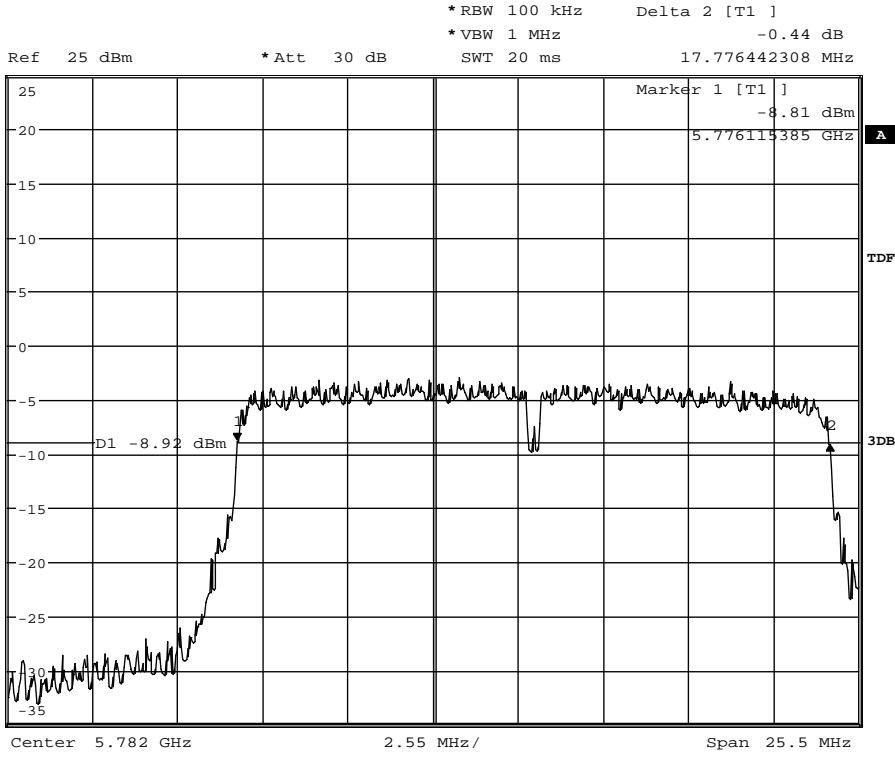
*RBW 100 kHz Delta 2 [T1]
*VBW 1 MHz 0.96 dB
SWT 20 ms 17.776442308 MHz

Ref 25 dBm *Att 30 dB

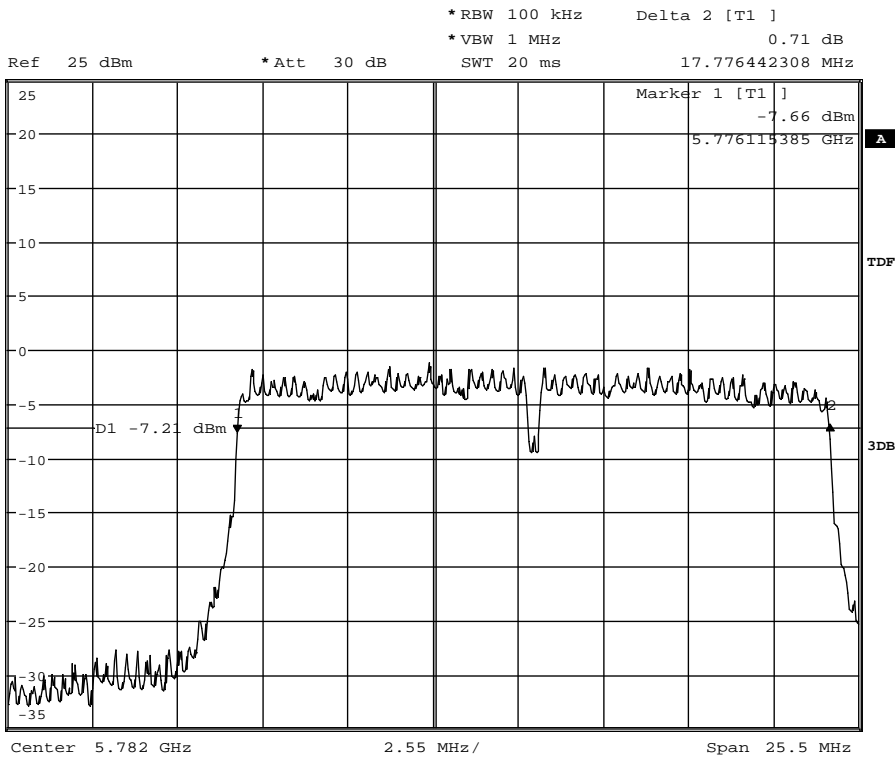
1 PK
VIEW



Date: 5.FEB.2015 14:02:03



Date: 5.FEB.2015 13:58:15



Date: 5.FEB.2015 14:10:03

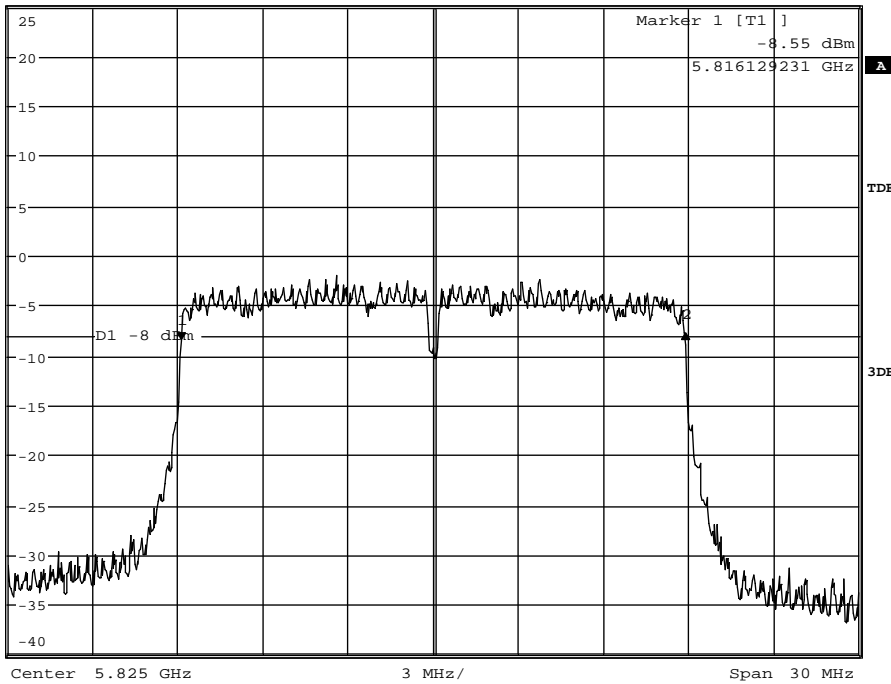
n-mode, Channel 165



*RBW 100 kHz Delta 2 [T1]
*VBW 1 MHz 0.67 dB
SWT 20 ms 17.740384615 MHz

Ref 25 dBm *Att 30 dB

1 PK
VIEW



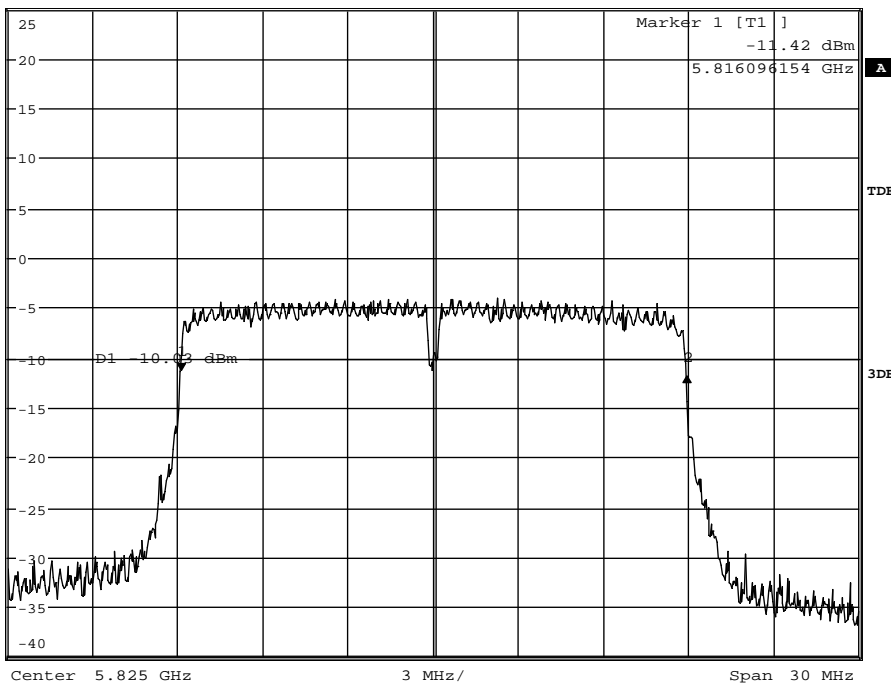
Date: 5.FEB.2015 13:17:57



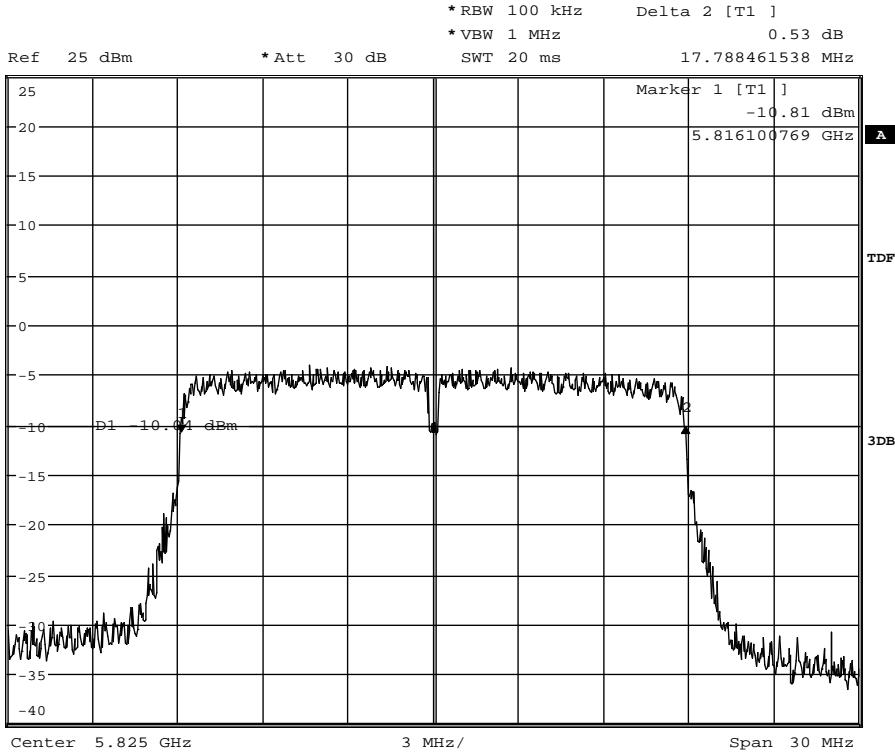
*RBW 100 kHz Delta 2 [T1]
*VBW 1 MHz -0.50 dB
SWT 20 ms 17.836538462 MHz

Ref 25 dBm *Att 30 dB

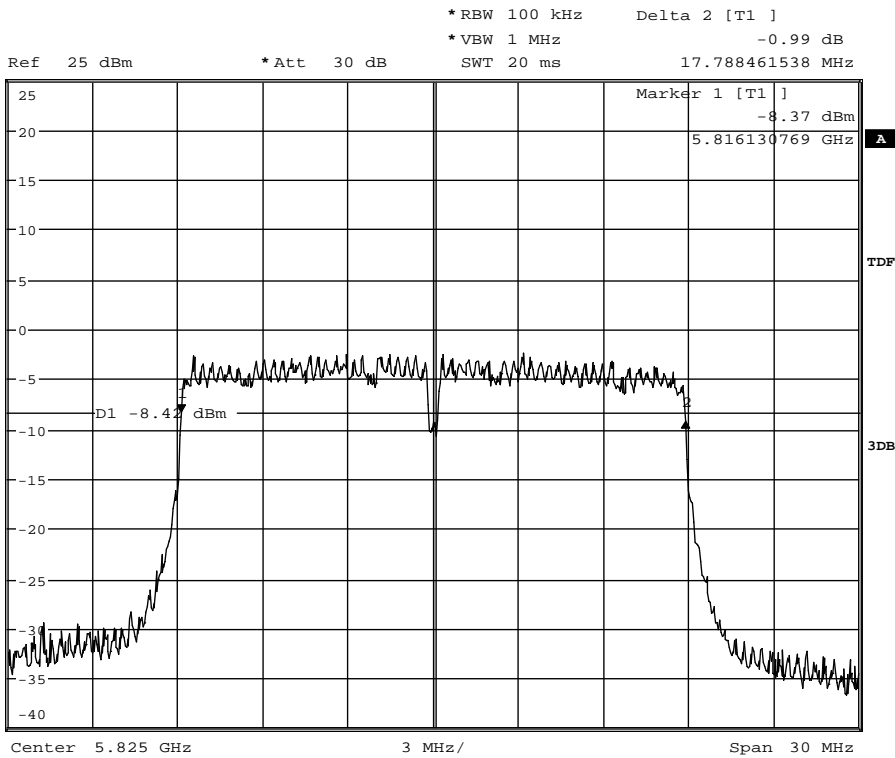
1 PK
VIEW



Date: 5.FEB.2015 13:14:26



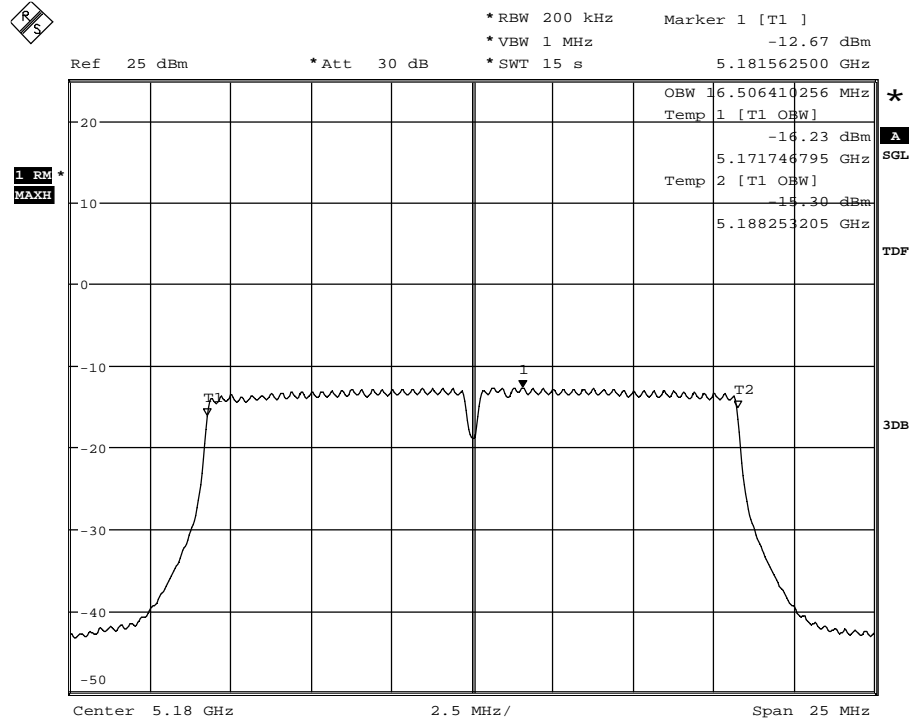
Date: 5.FEB.2015 13:09:54



Date: 5.FEB.2015 13:21:18

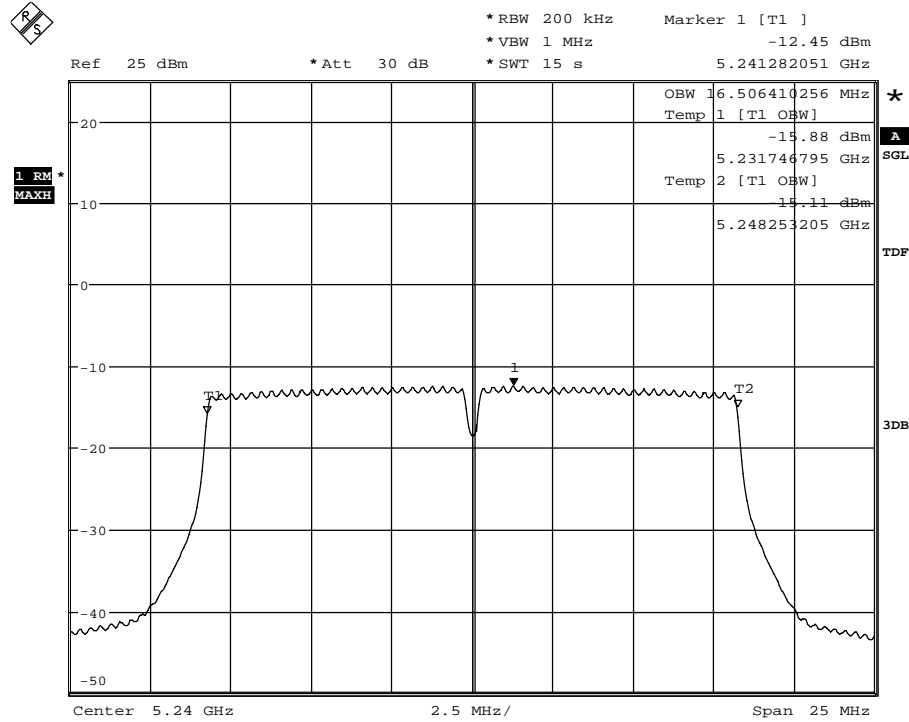
1.4.3. 99% Occupied Bandwidth

a-mode, Channel 36



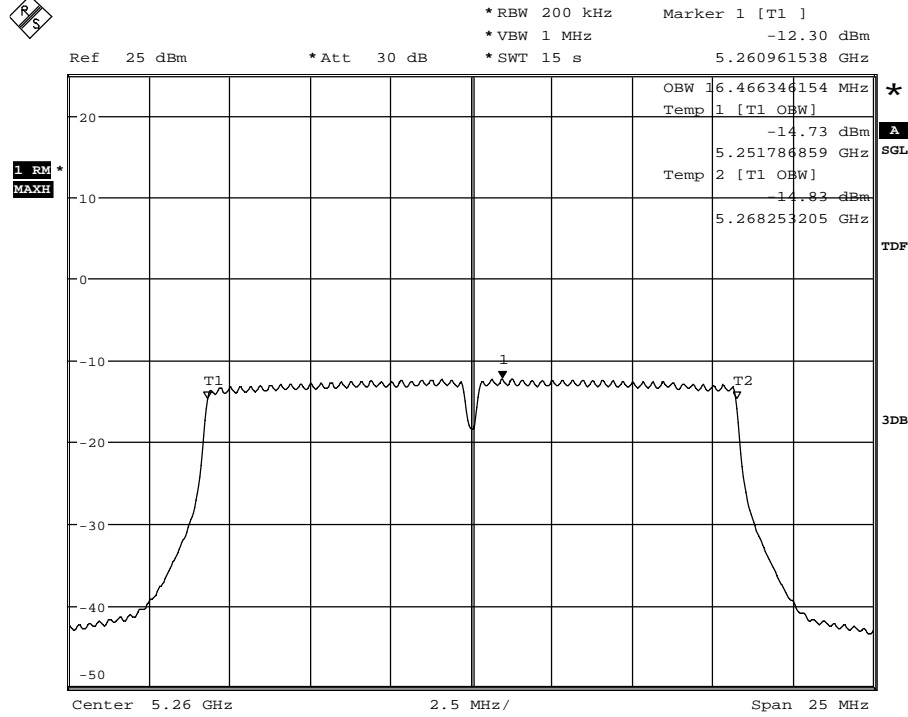
Date: 6.FEB.2015 11:16:40

a-mode, Channel 48



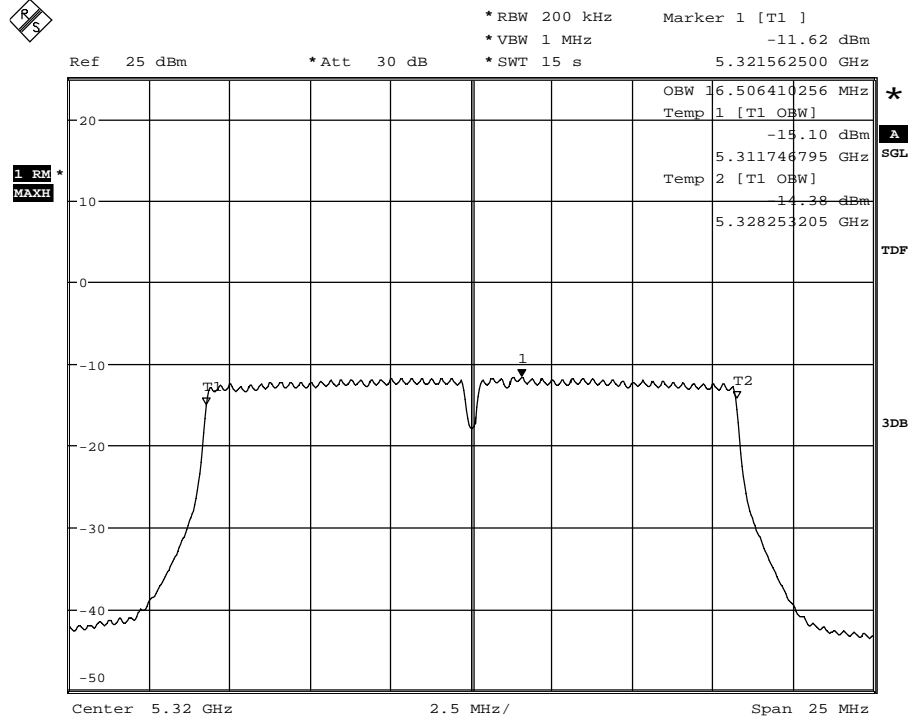
Date: 6.FEB.2015 11:18:58

a-mode, Channel 52



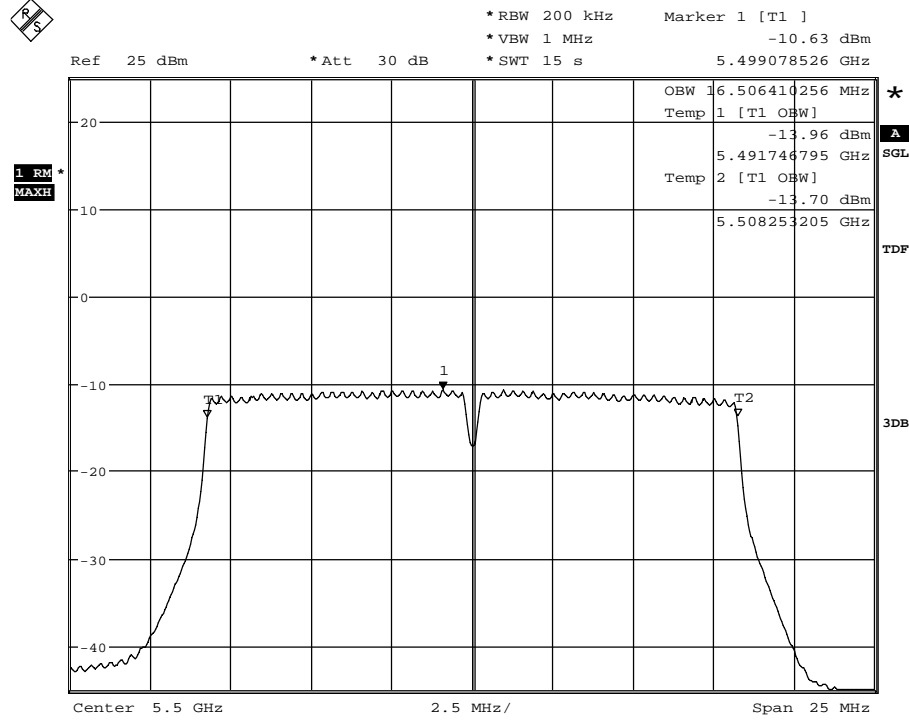
Date: 6.FEB.2015 11:26:19

a-mode, Channel 64



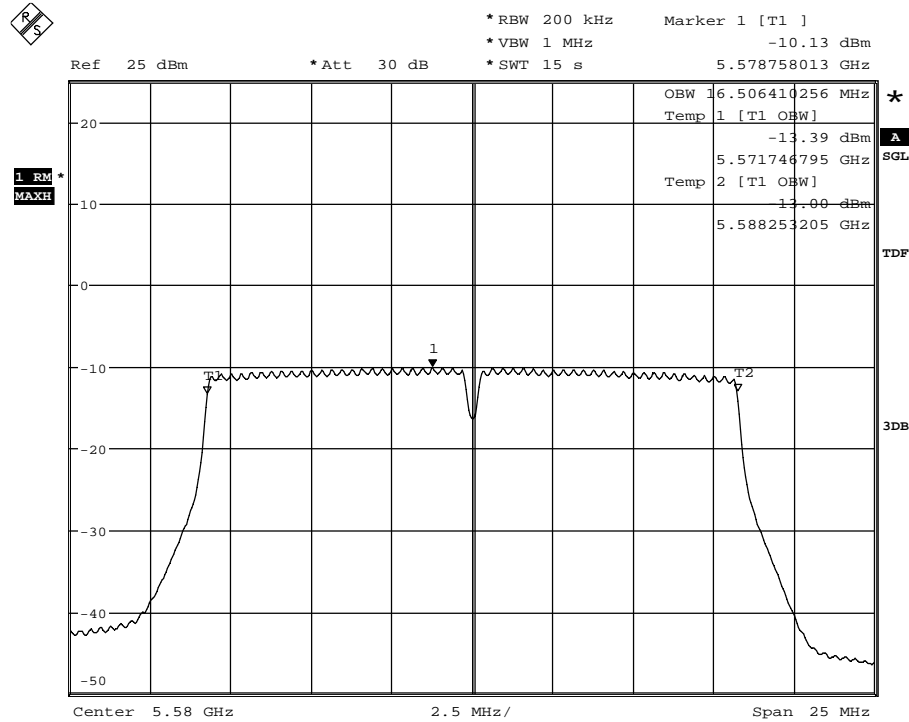
Date: 6.FEB.2015 11:30:47

a-mode, Channel 100



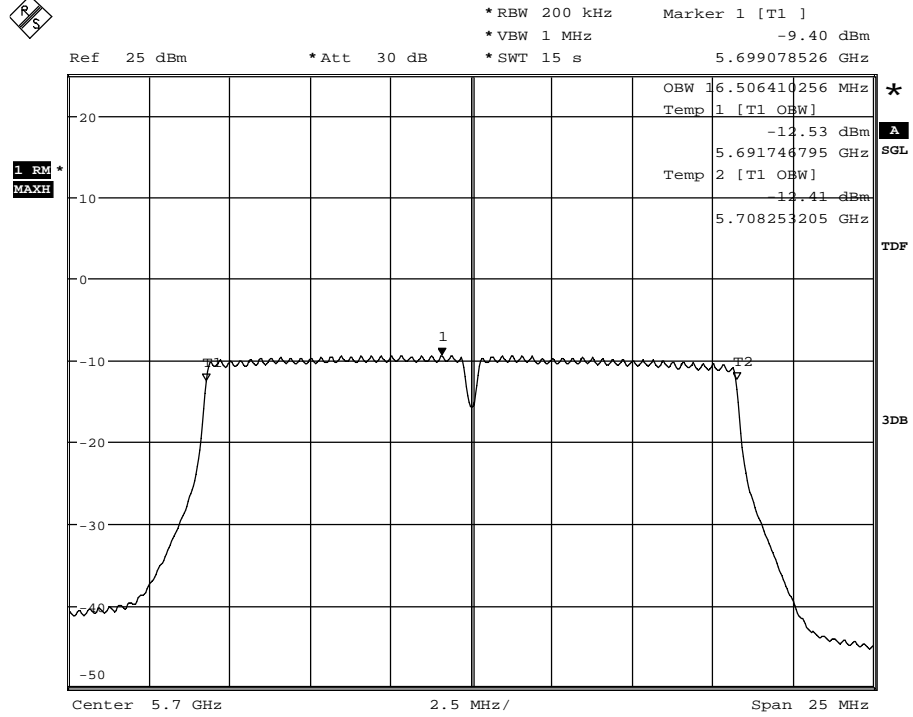
Date: 6.FEB.2015 10:59:02

a-mode, Channel 116



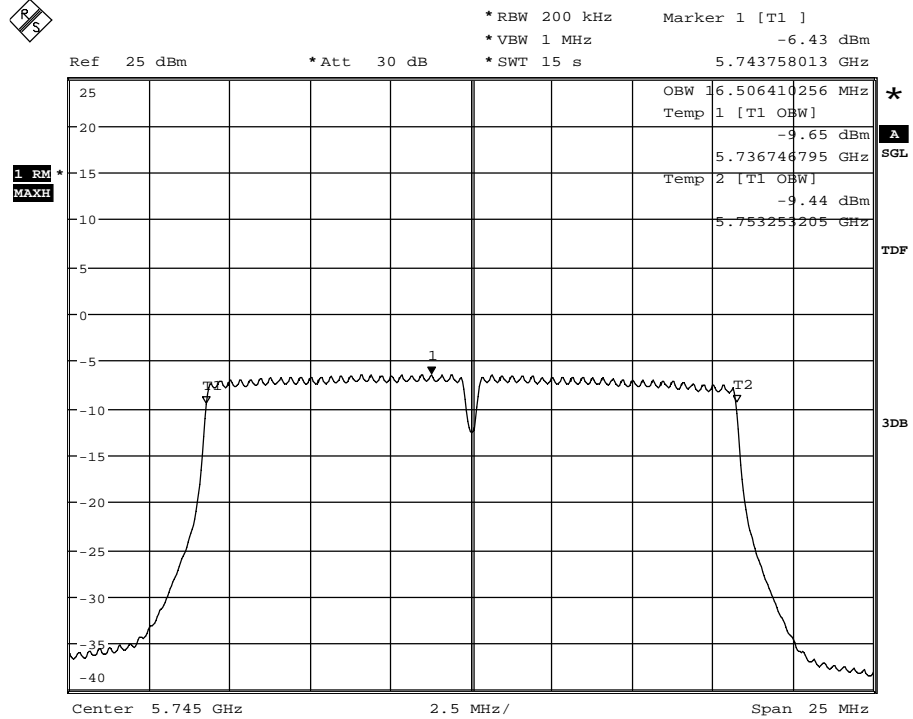
Date: 6.FEB.2015 11:06:31

a-mode, Channel 140



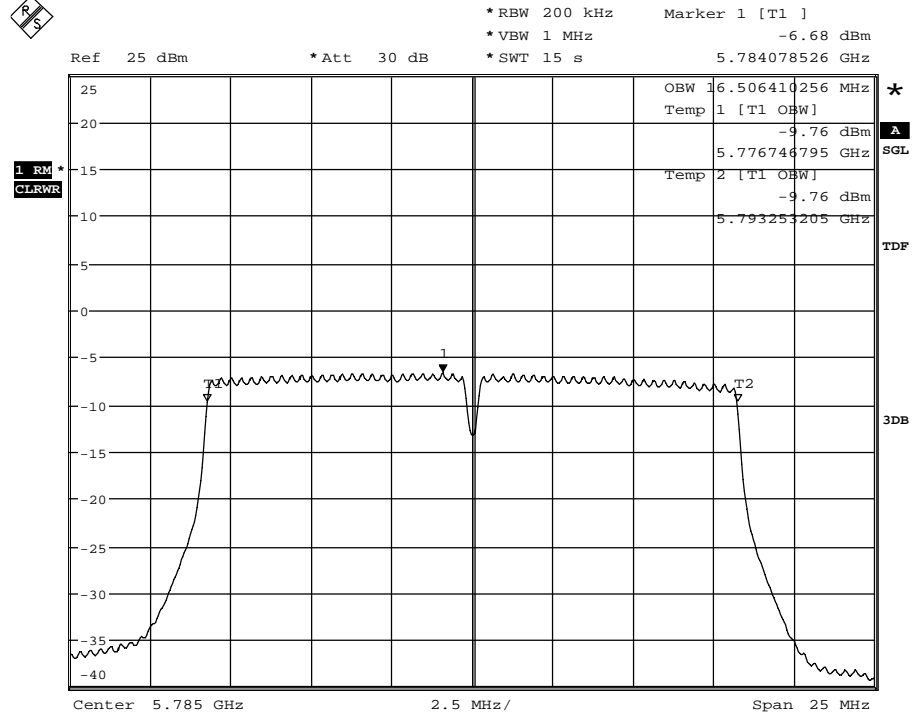
Date: 6.FEB.2015 11:09:37

a-mode, Channel 149



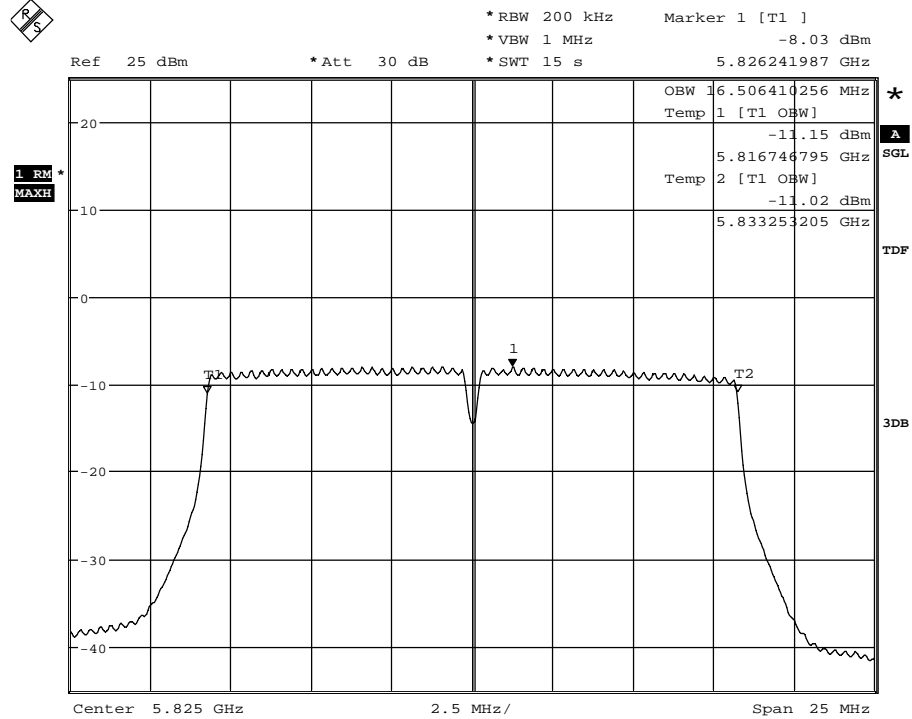
Date: 6.FEB.2015 09:19:58

a-mode, Channel 157



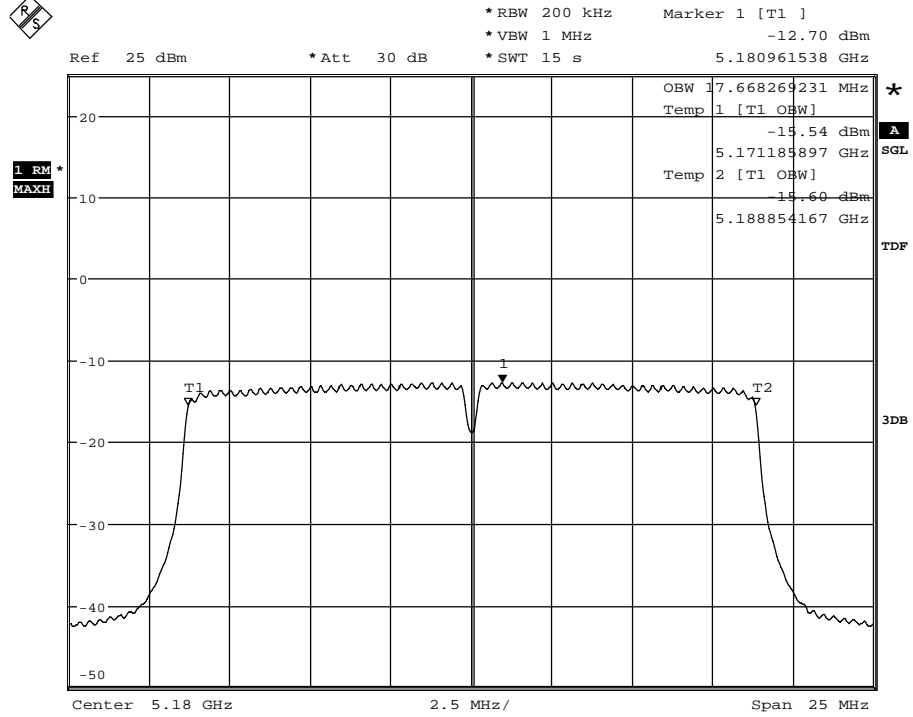
Date: 6.FEB.2015 10:45:54

a-mode, Channel 165



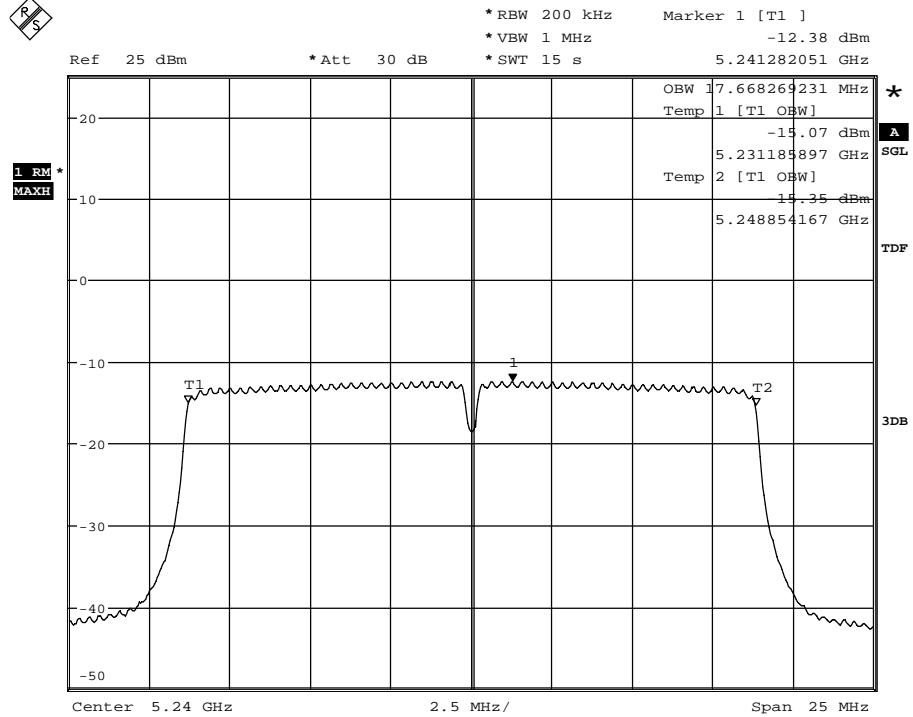
Date: 6.FEB.2015 10:50:49

n-mode, Channel 36



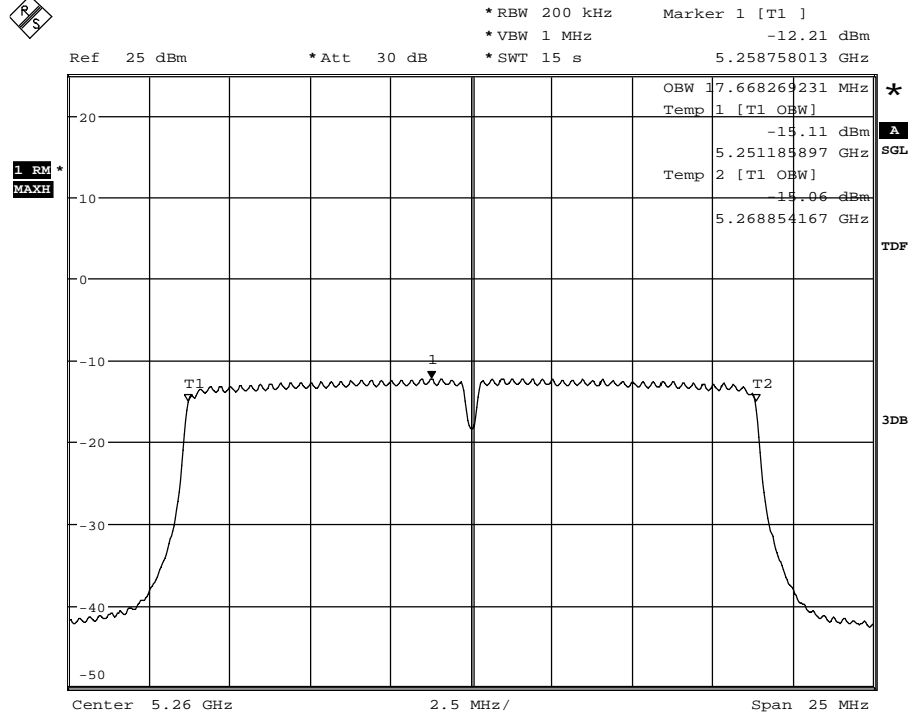
Date: 6.FEB.2015 11:14:55

n-mode, Channel 48



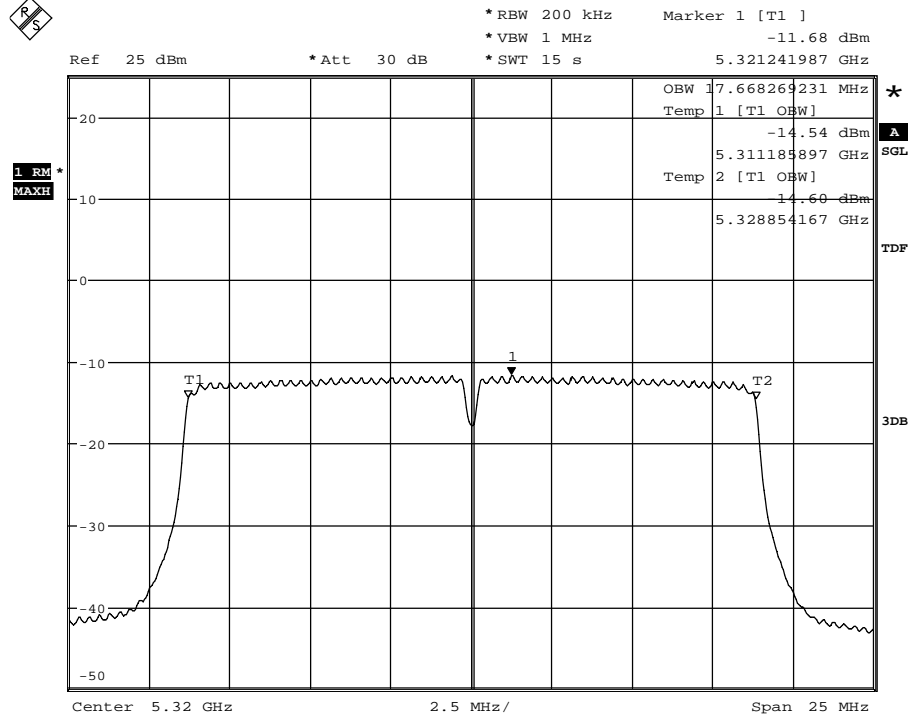
Date: 6.FEB.2015 11:22:36

n-mode, Channel 52



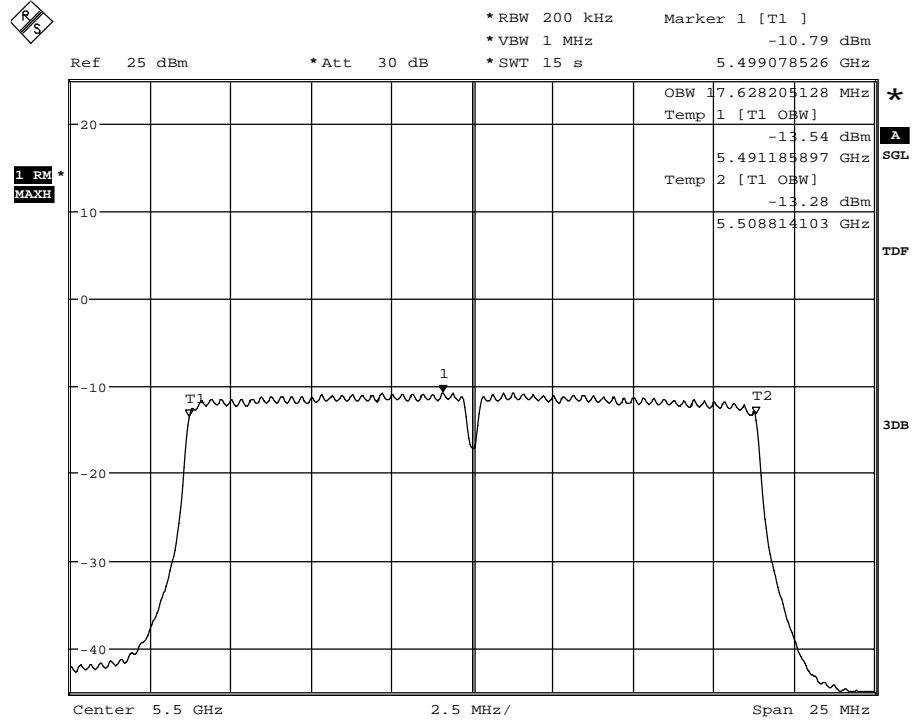
Date: 6.FEB.2015 11:24:43

n-mode, Channel 64



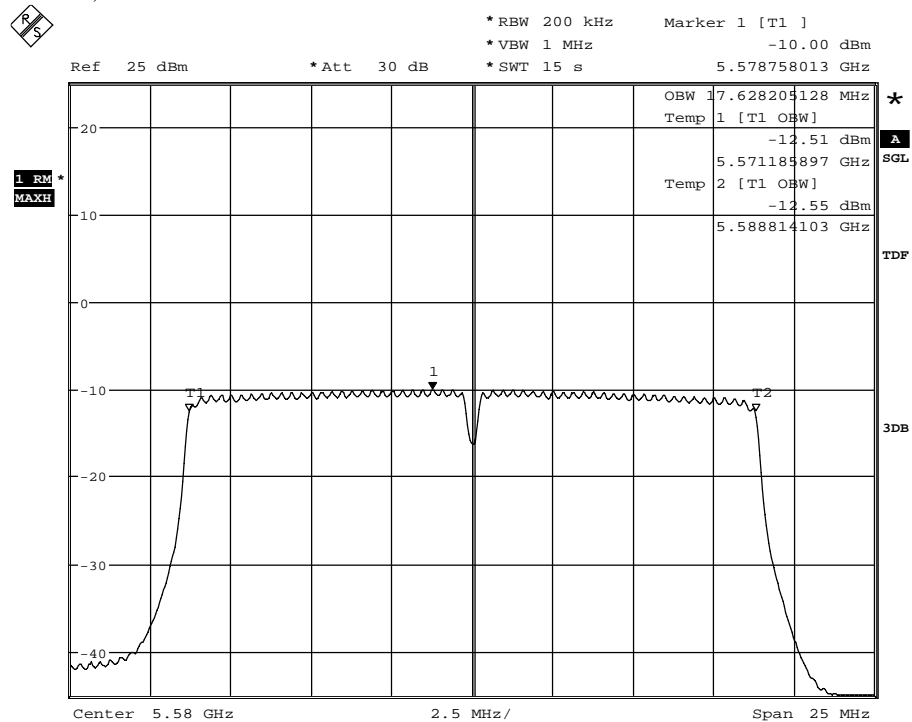
Date: 6.FEB.2015 11:59:17

n-mode, Channel 100



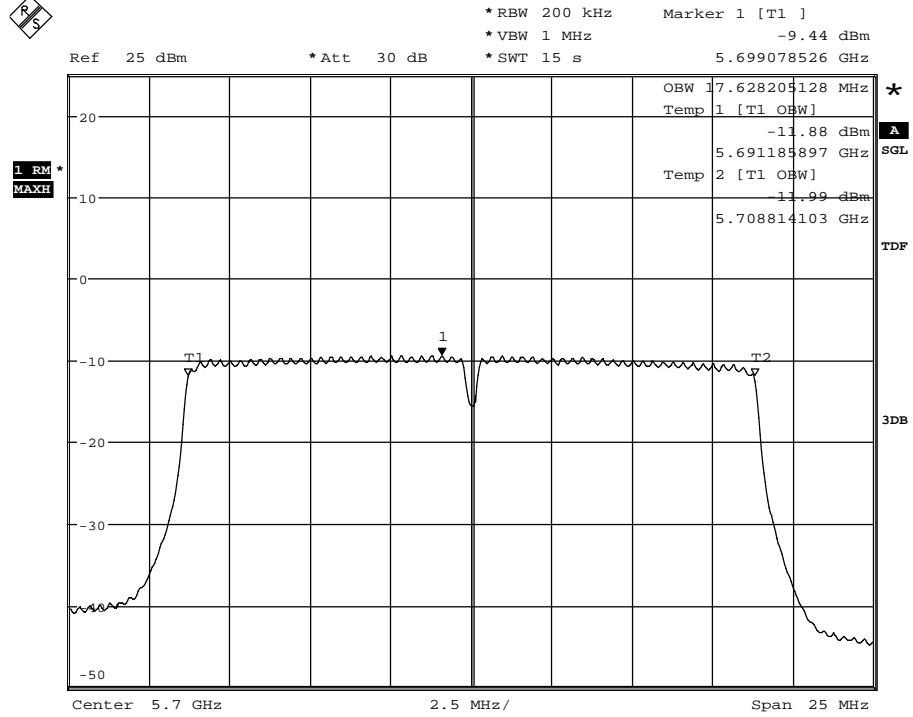
Date: 6.FEB.2015 11:01:11

n-mode, Channel 116



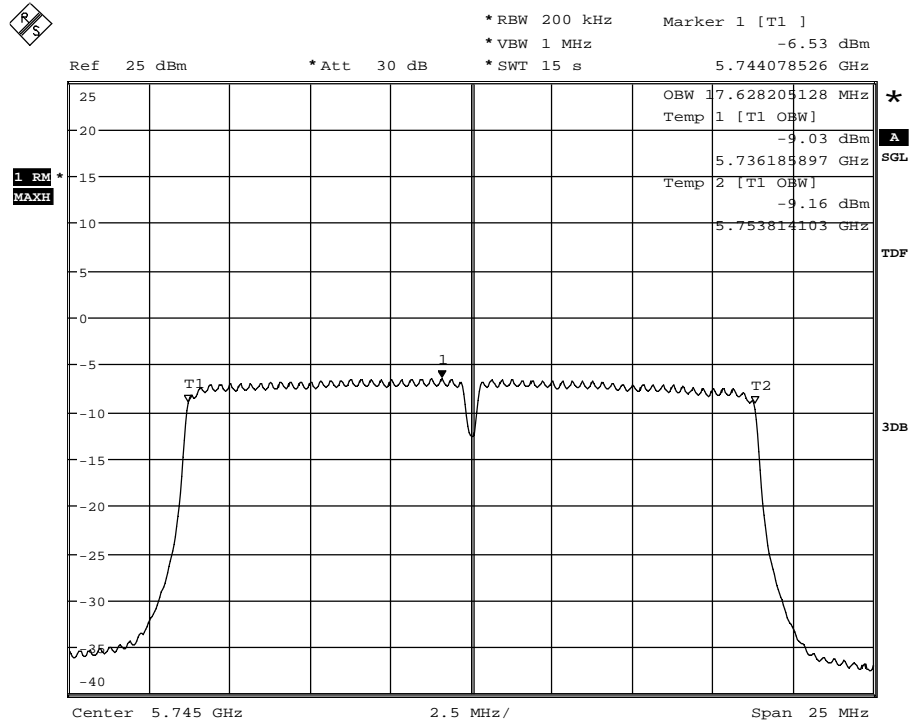
Date: 6.FEB.2015 11:04:13

n-mode, Channel 140



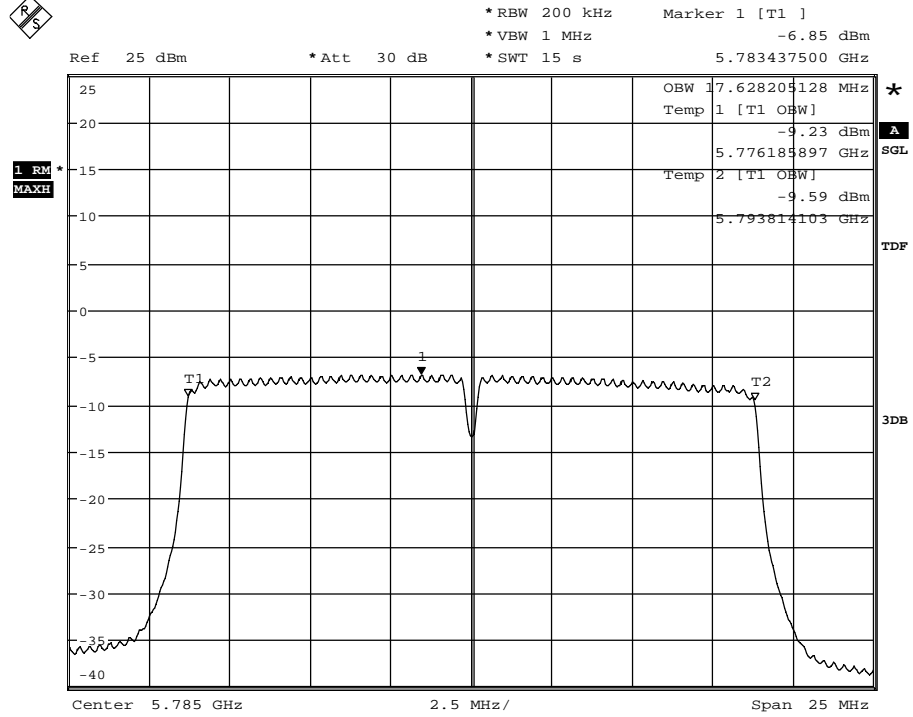
Date: 6.FEB.2015 11:11:04

n-mode, Channel 149



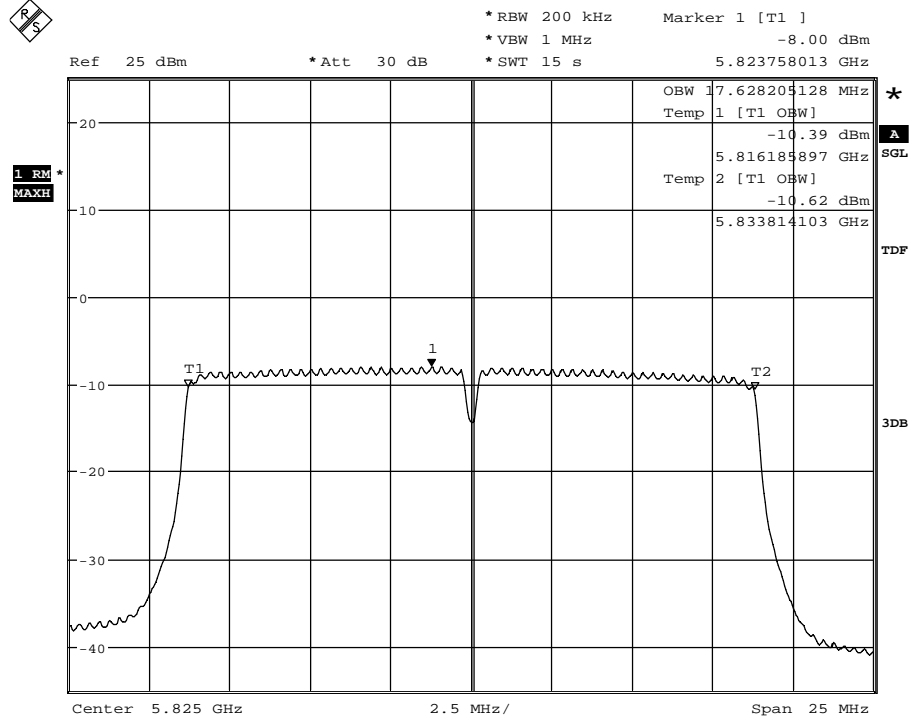
Date: 6.FEB.2015 09:18:22

n-mode, Channel 157



Date: 6.FEB.2015 10:47:51

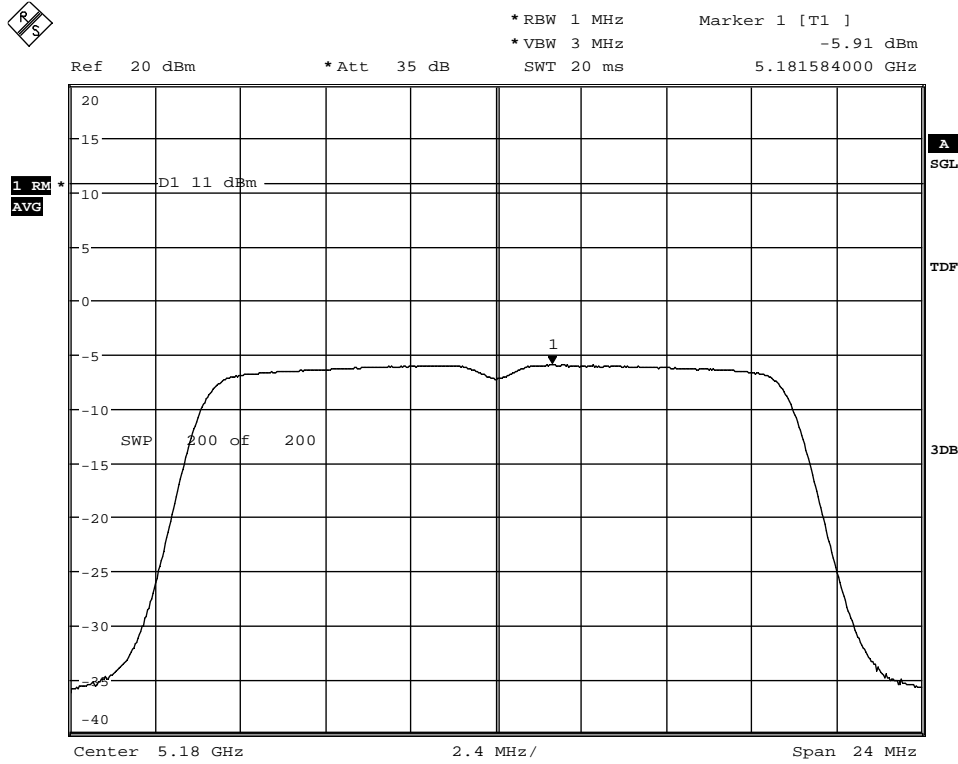
n-mode, Channel 165



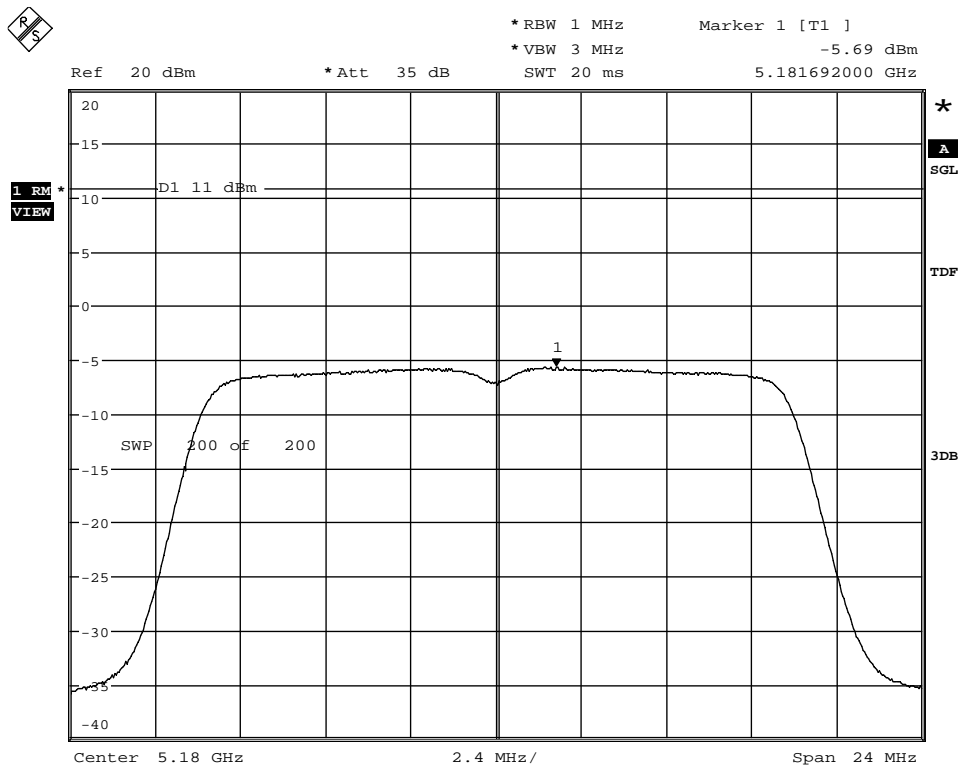
Date: 6.FEB.2015 10:52:14

1.4.4. Power Spectral Density

a-mode, Channel 36

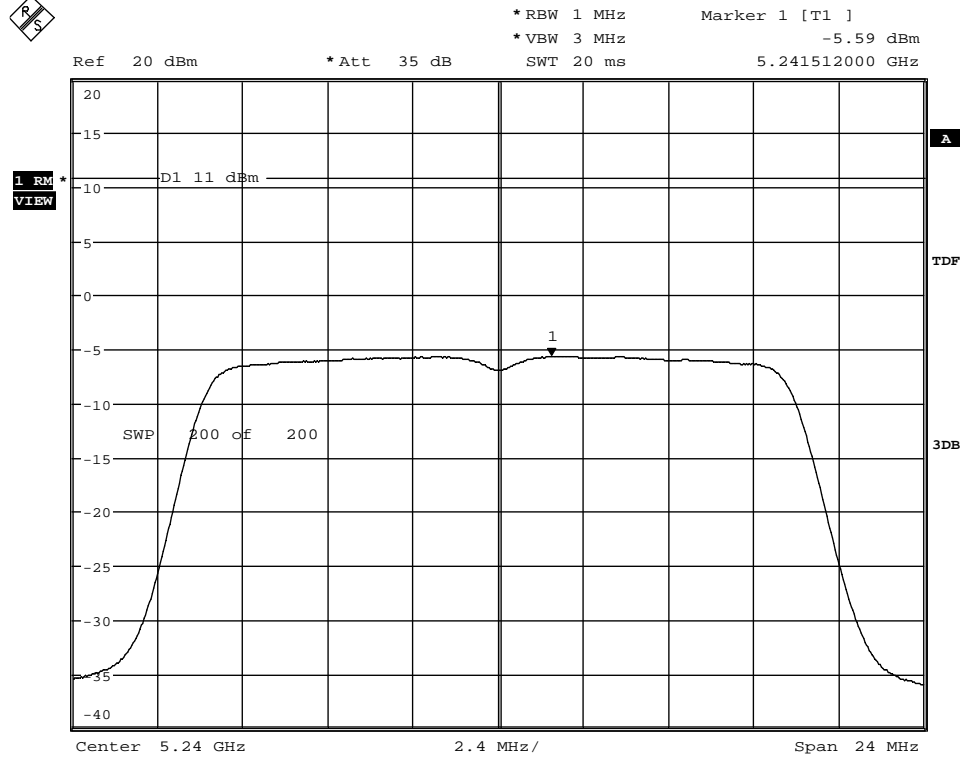


Date: 5.FEB.2015 10:41:23

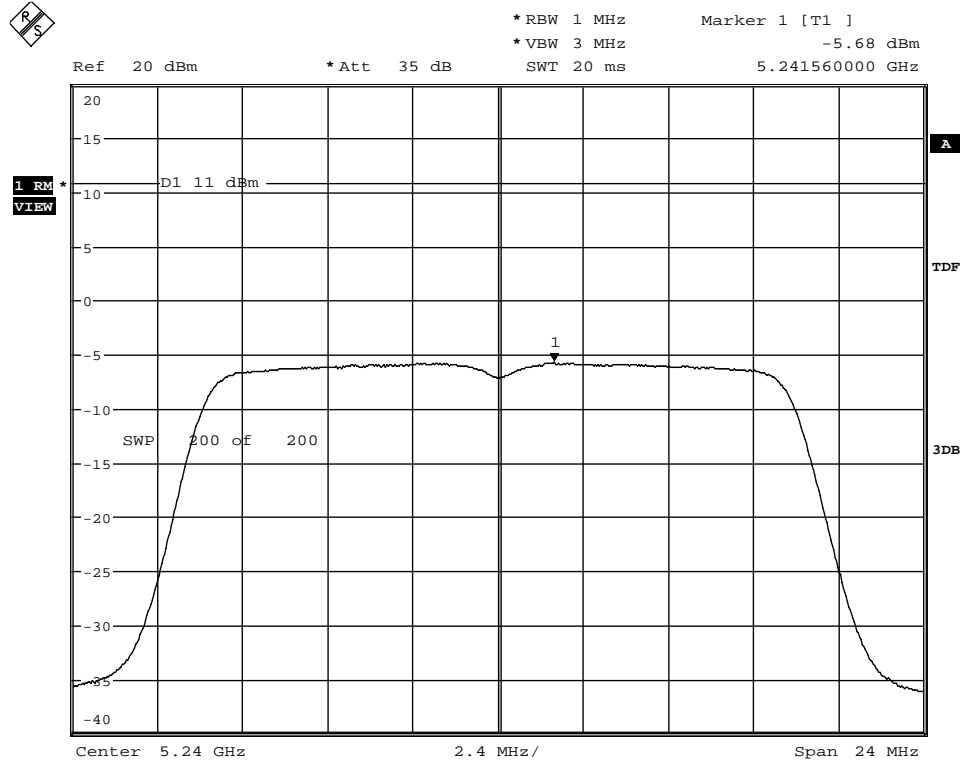


Date: 5.FEB.2015 10:38:28

a-mode, Channel 48

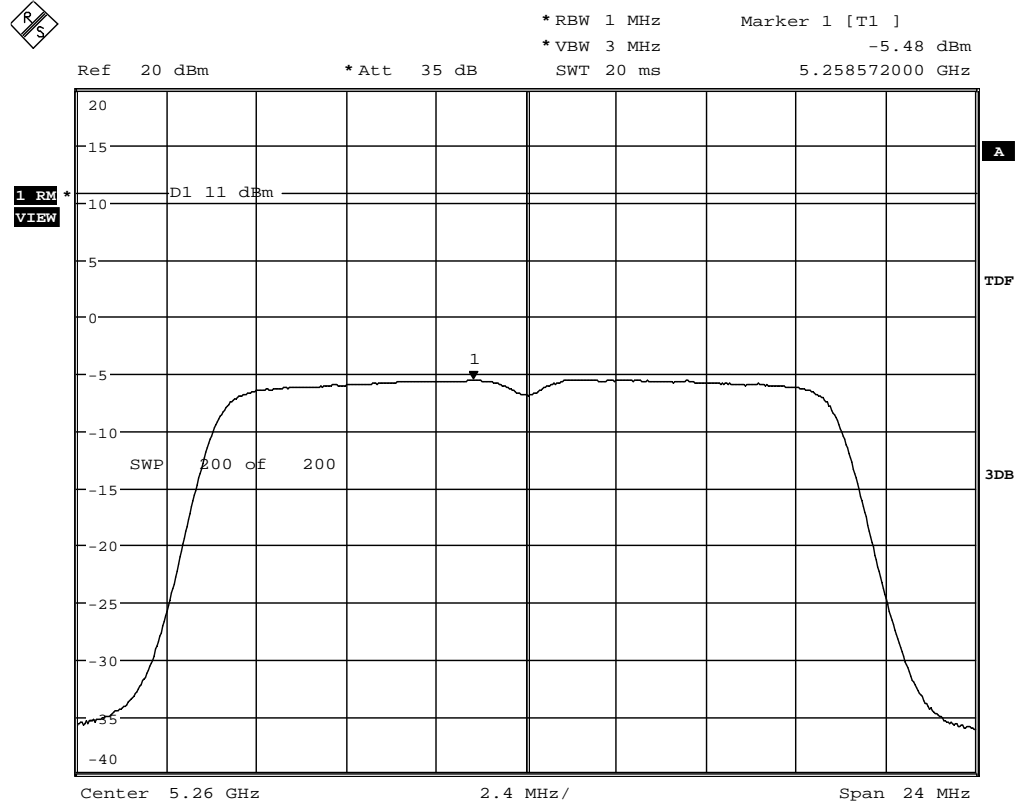


Date: 5.FEB.2015 10:45:55

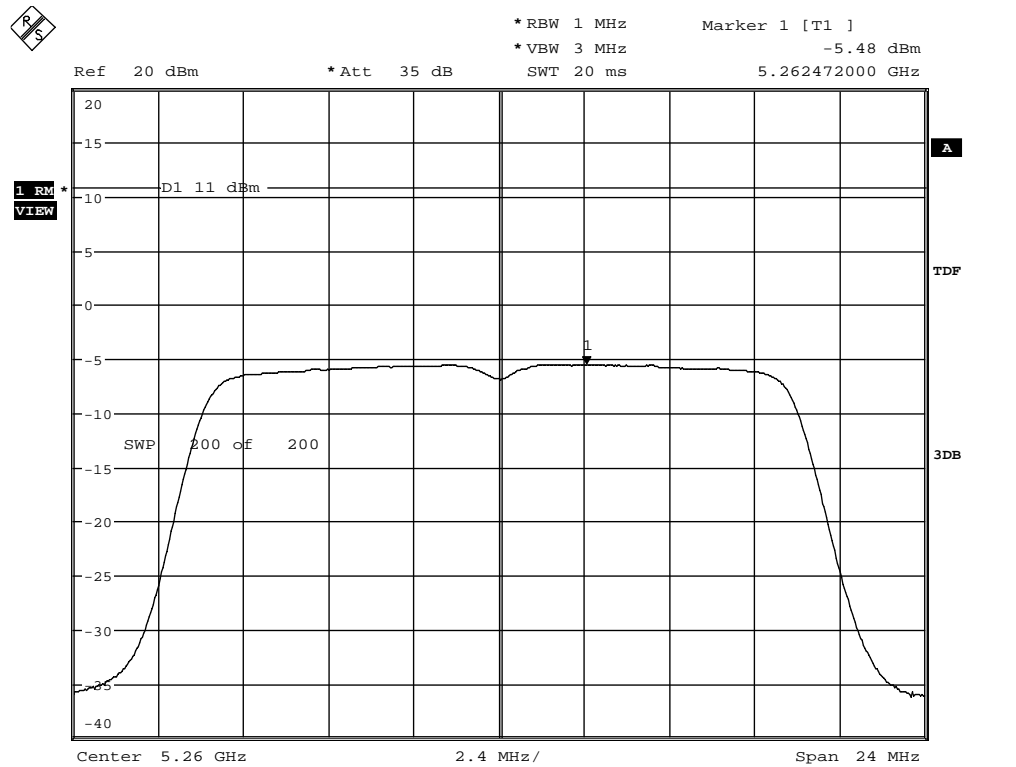


Date: 5.FEB.2015 10:51:57

a-mode, Channel 52

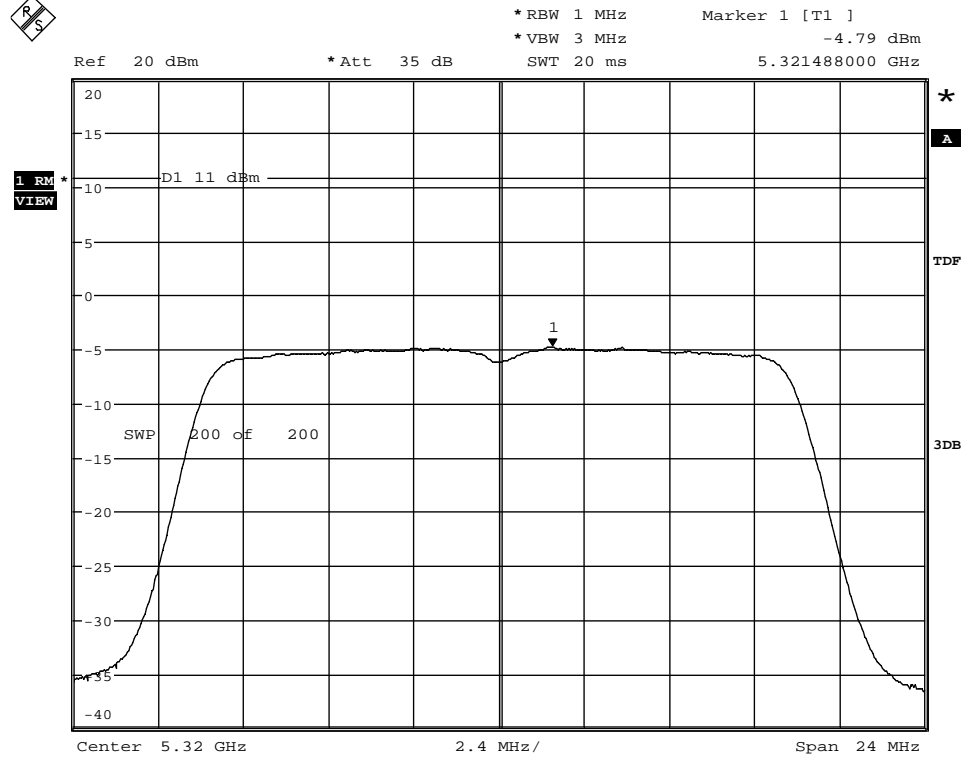


Date: 5.FEB.2015 10:54:10

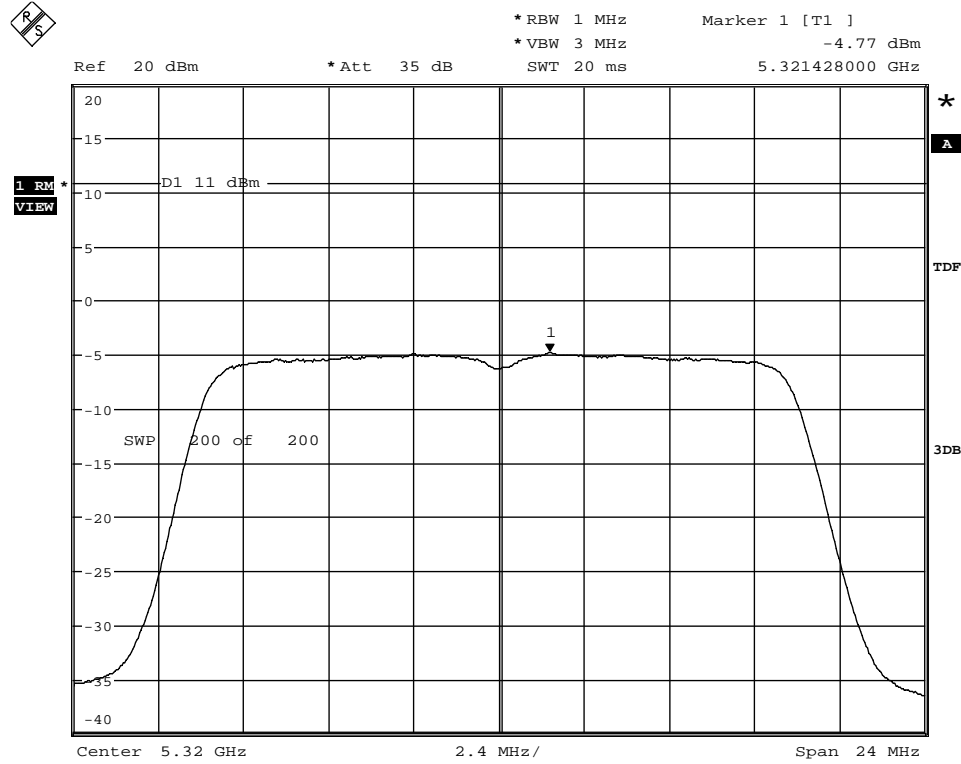


Date: 5.FEB.2015 10:58:40

a-mode, Channel 64

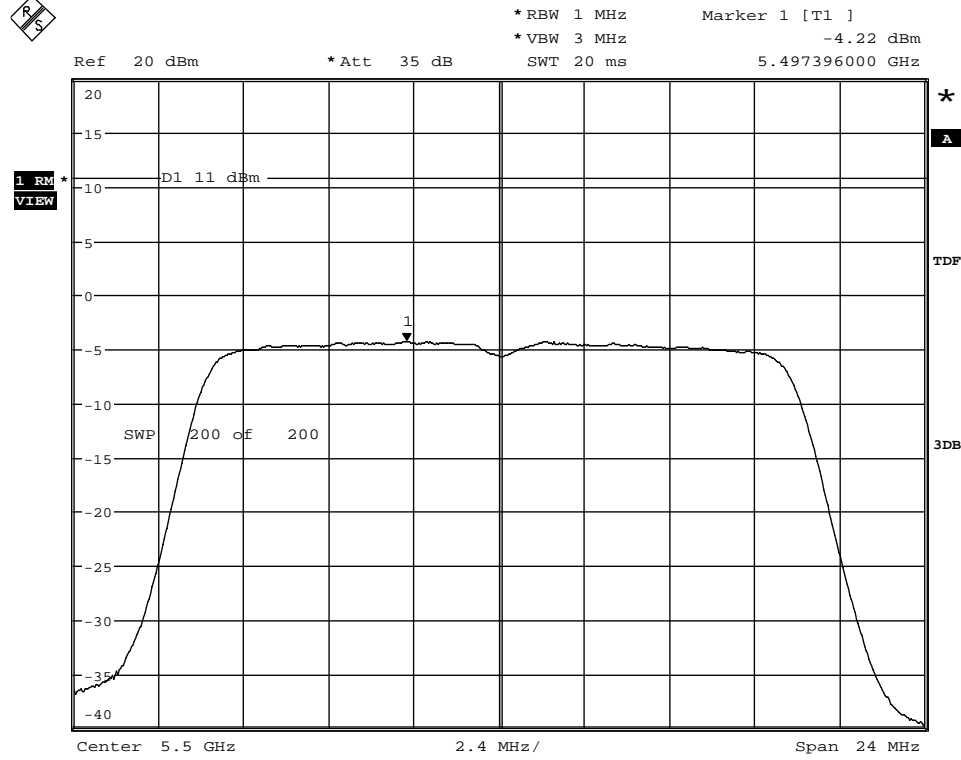


Date: 5.FEB.2015 11:01:20

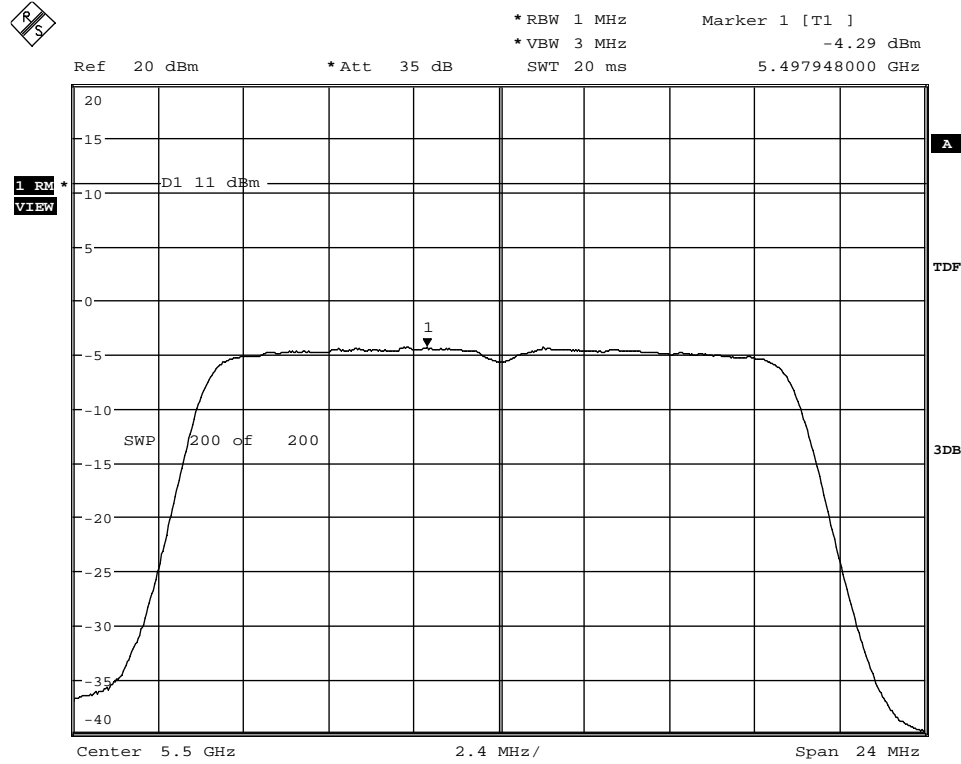


Date: 5.FEB.2015 11:04:45

a-mode, Channel 100

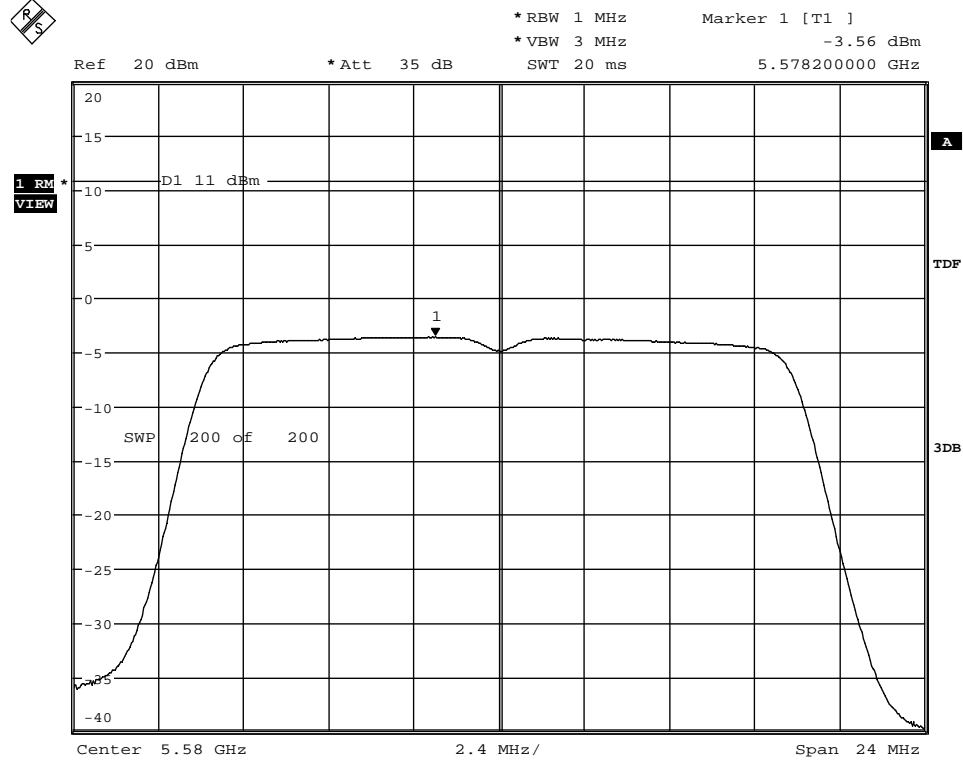


Date: 5.FEB.2015 11:42:14

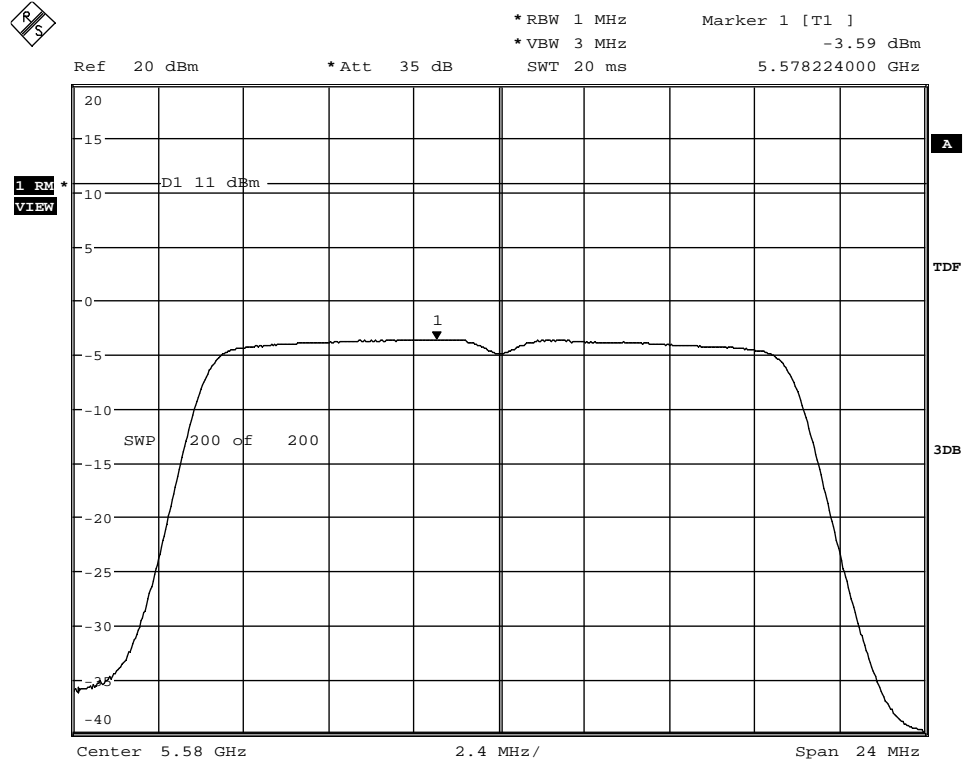


Date: 5.FEB.2015 11:43:58

a-mode, Channel 116

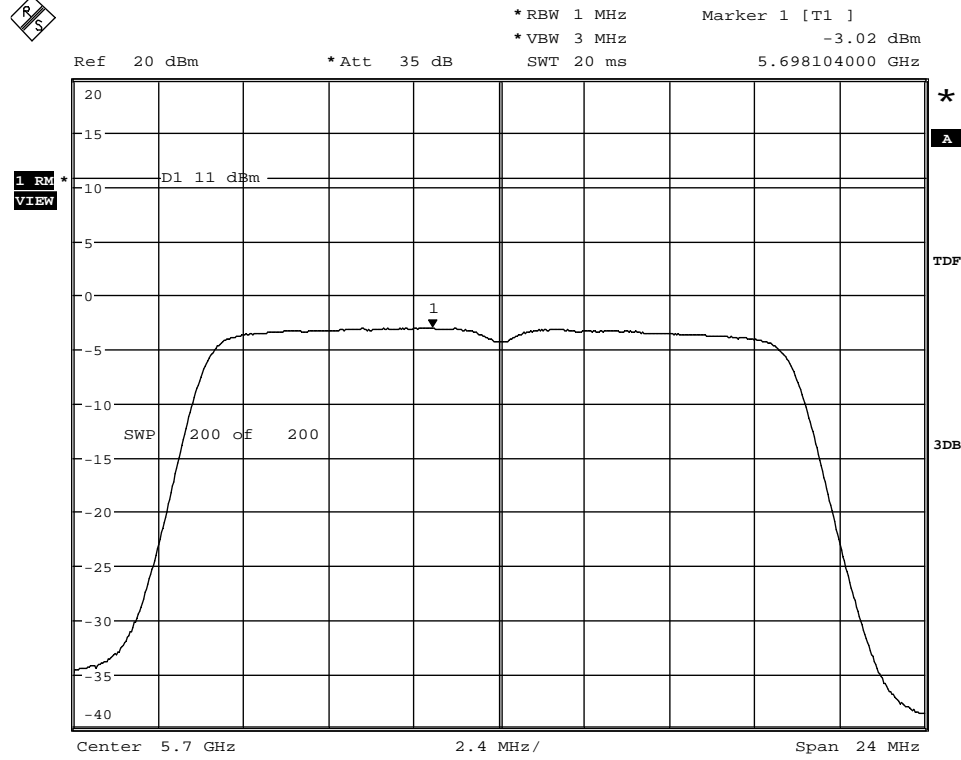


Date: 5.FEB.2015 12:01:38

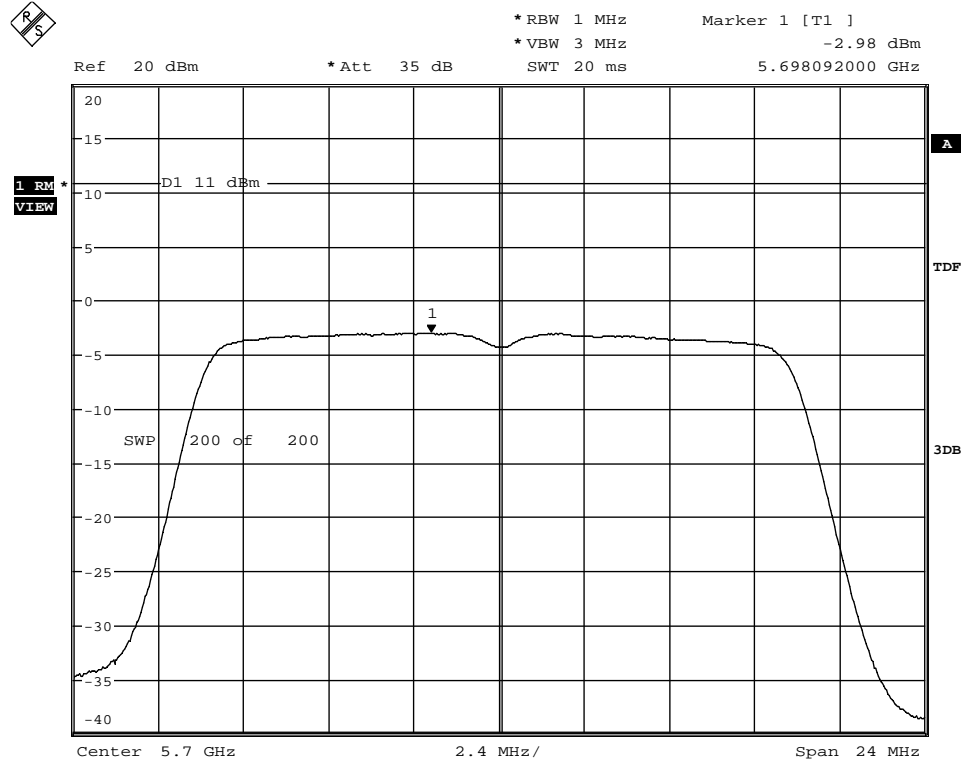


Date: 5.FEB.2015 12:02:54

a-mode, Channel 140



Date: 5.FEB.2015 12:11:52



Date: 5.FEB.2015 12:13:16

a-mode, Channel 149

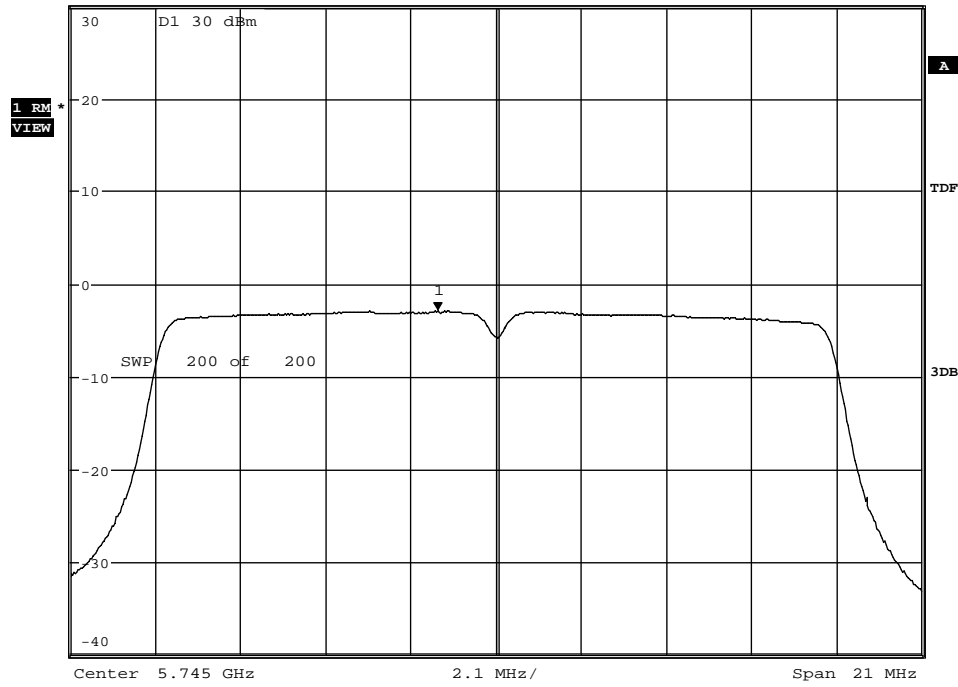


*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -2.89 dBm
SWT 20 ms

Ref 30 dBm

*Att 35 dB

5.743551000 GHz



Date: 5.FEB.2015 12:35:25

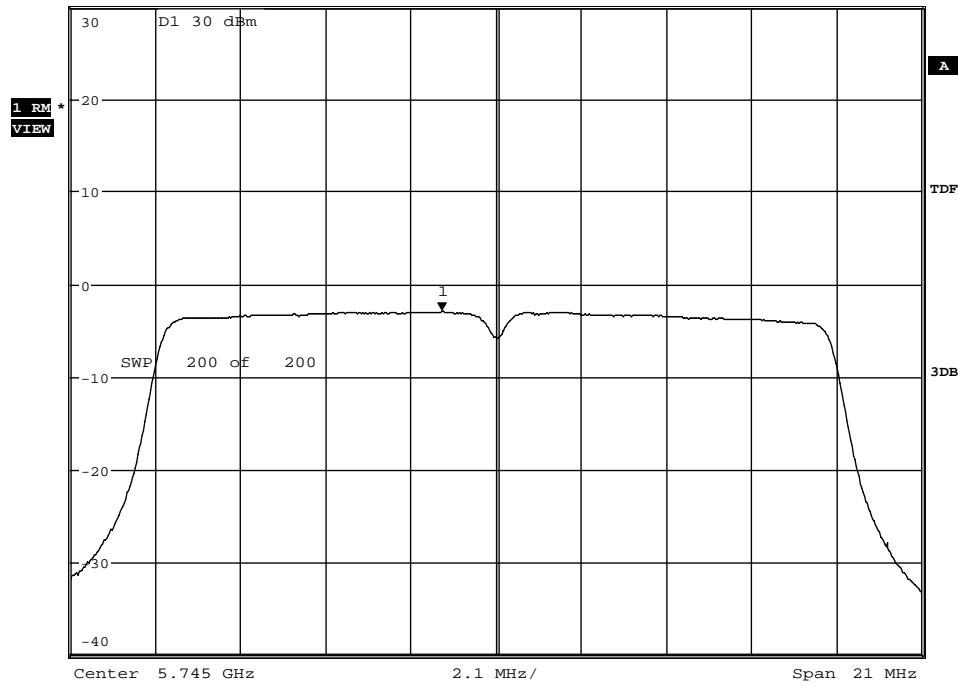


*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -2.91 dBm
SWT 20 ms

Ref 30 dBm

*Att 35 dB

5.743645500 GHz

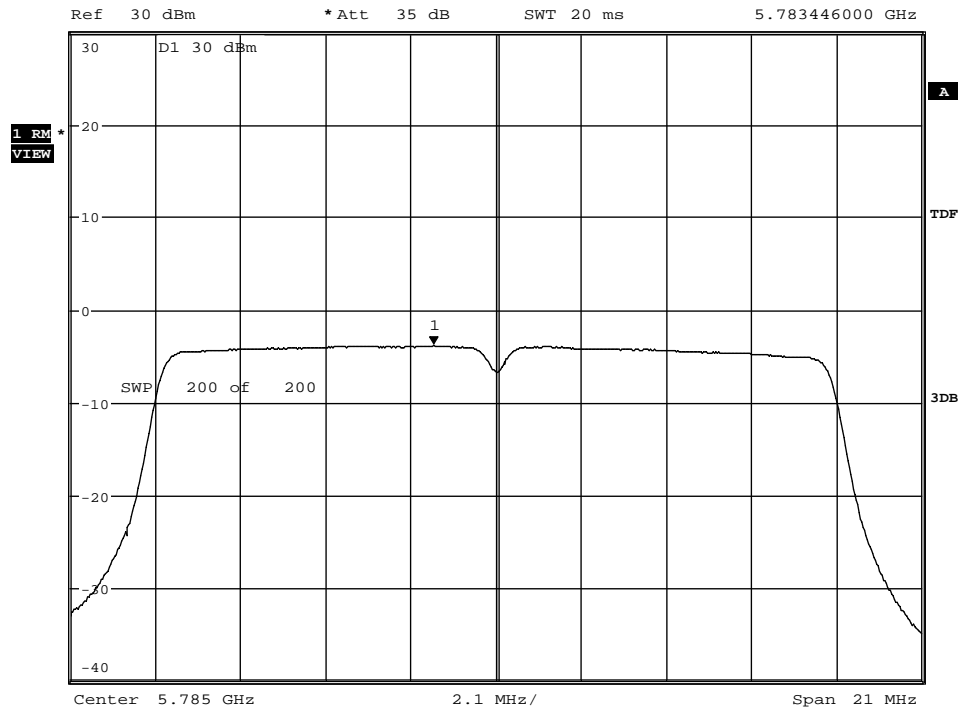


Date: 5.FEB.2015 12:37:17

a-mode, Channel 157



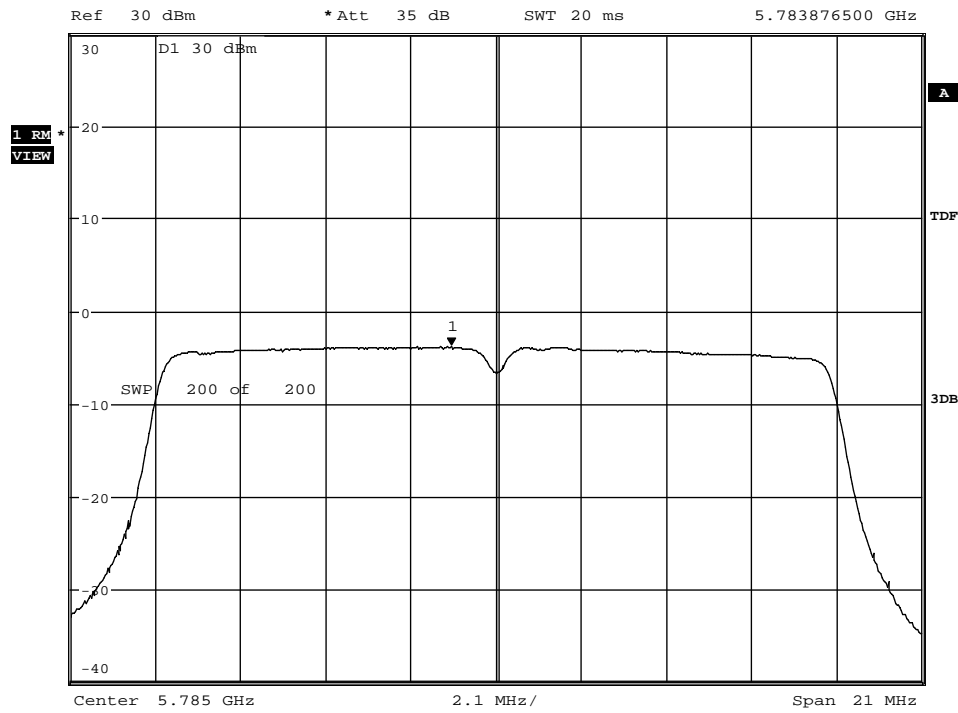
*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -3.82 dBm
SWT 20 ms 5.783446000 GHz



Date: 5.FEB.2015 12:45:20



*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -3.78 dBm
SWT 20 ms 5.783876500 GHz

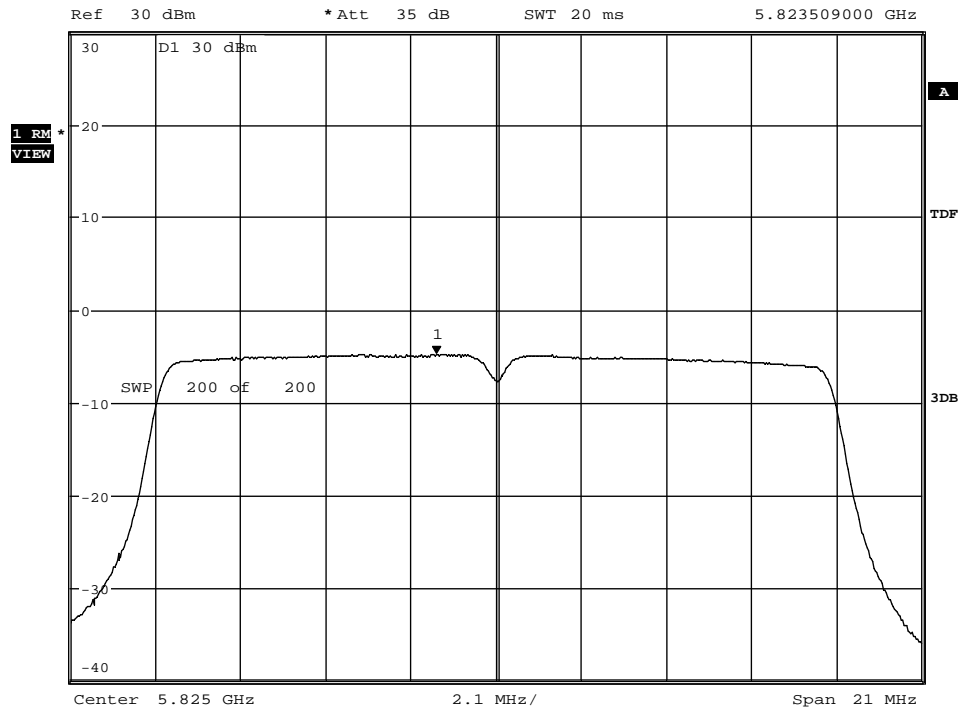


Date: 5.FEB.2015 12:46:43

a-mode, Channel 165



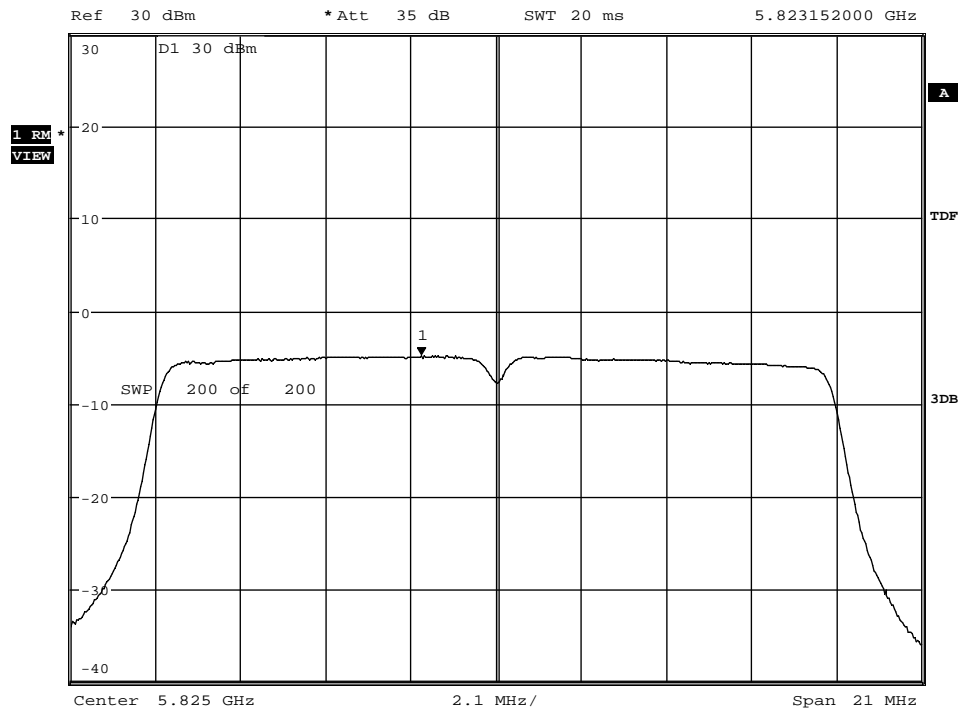
*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -4.78 dBm
SWT 20 ms 5.823509000 GHz



Date: 5.FEB.2015 12:53:44

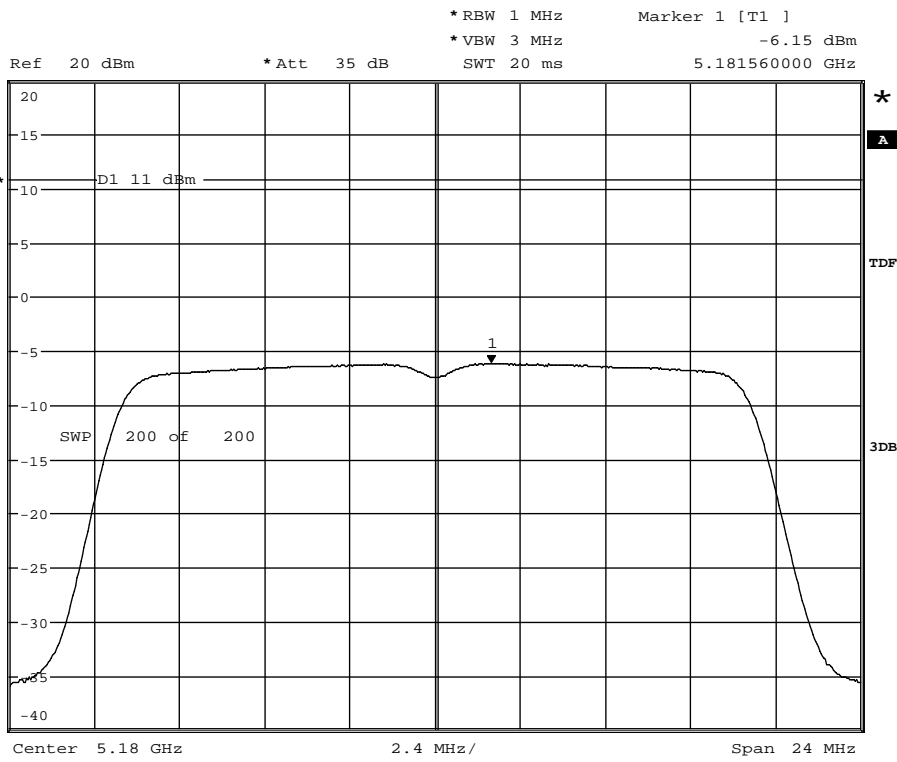


*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -4.77 dBm
SWT 20 ms 5.823152000 GHz

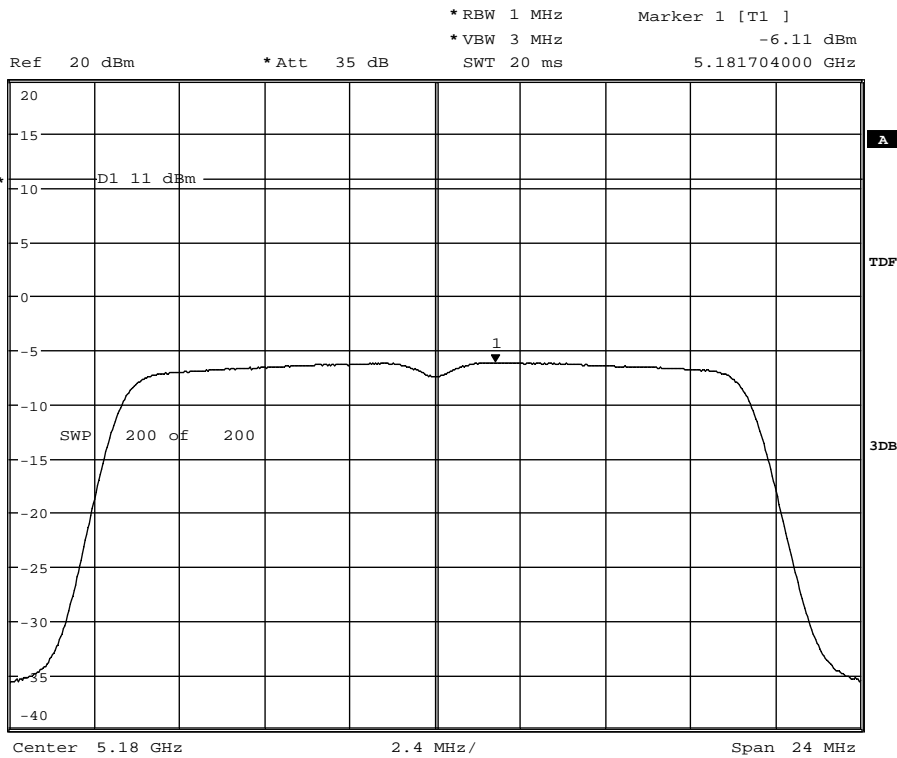


Date: 5.FEB.2015 12:55:19

n-mode, Channel 36

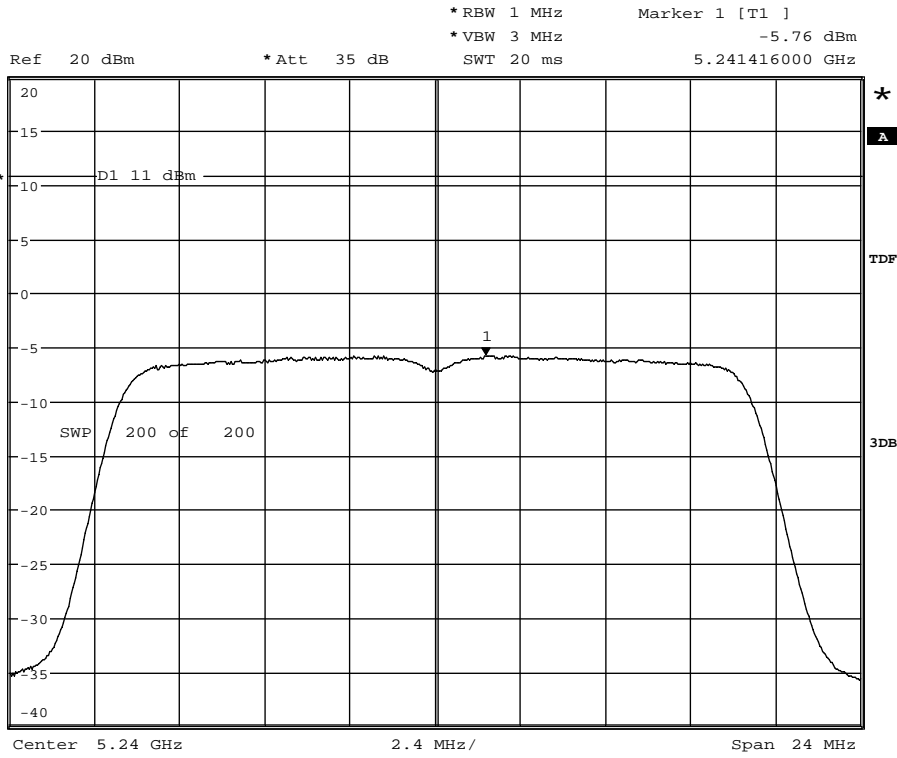


Date: 5.FEB.2015 11:29:29

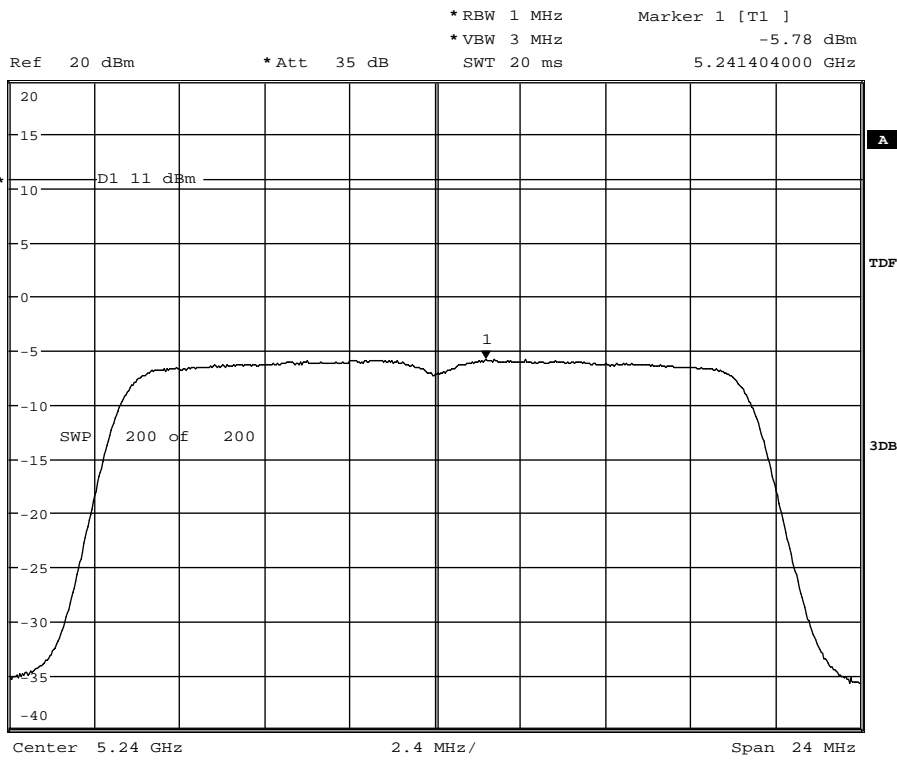


Date: 5.FEB.2015 11:30:57

n-mode, Channel 48



Date: 5.FEB.2015 11:25:28



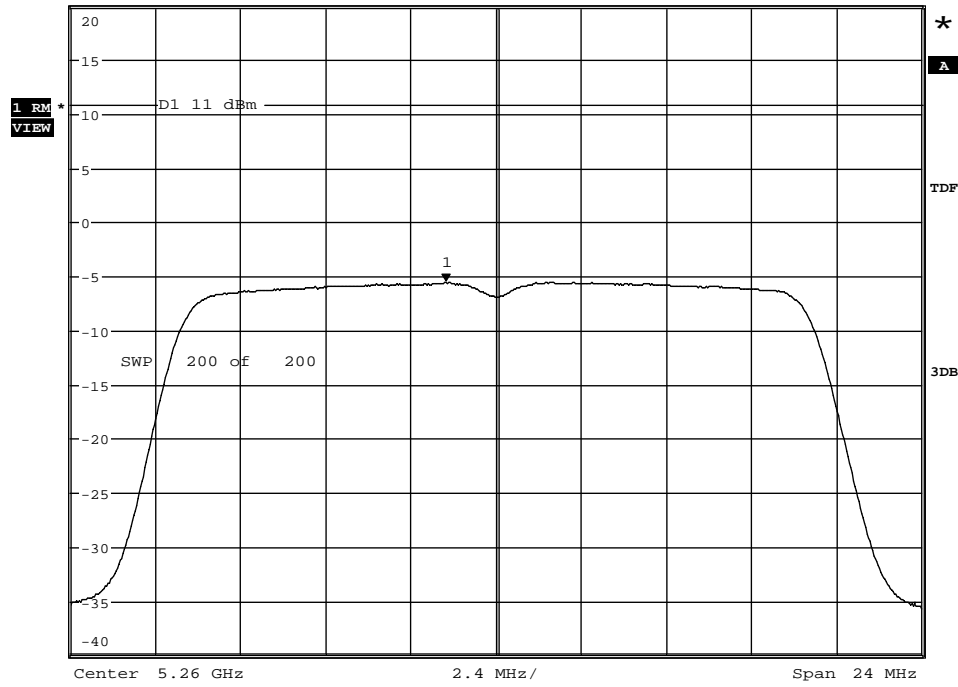
Date: 5.FEB.2015 11:27:31

n-mode, Channel 52



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -5.55 dBm
SWT 20 ms

Ref 20 dBm *Att 35 dB 5.258584000 GHz

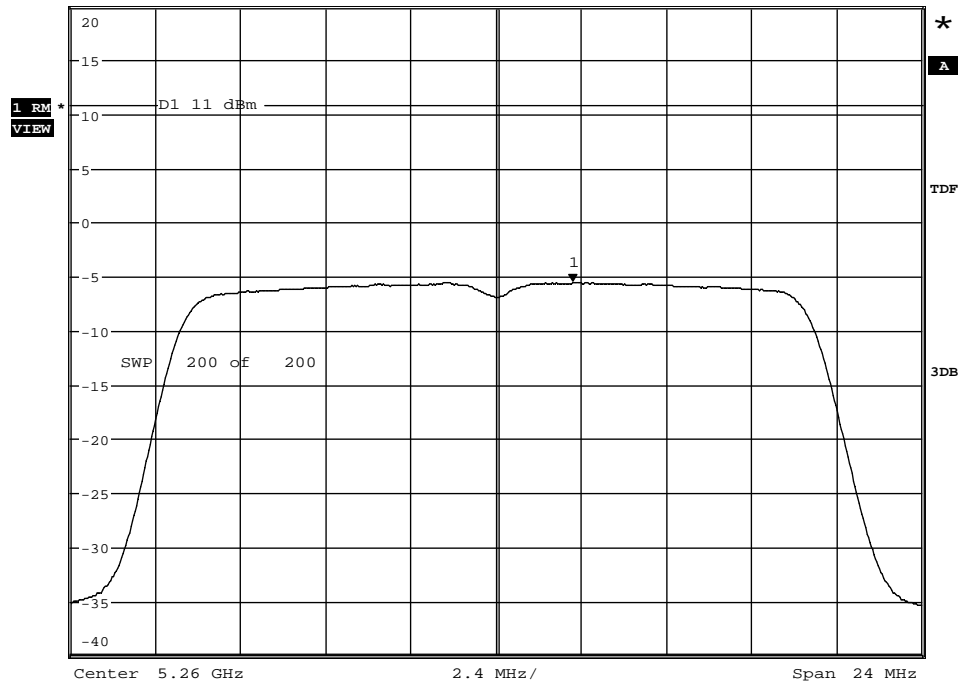


Date: 5.FEB.2015 11:16:36



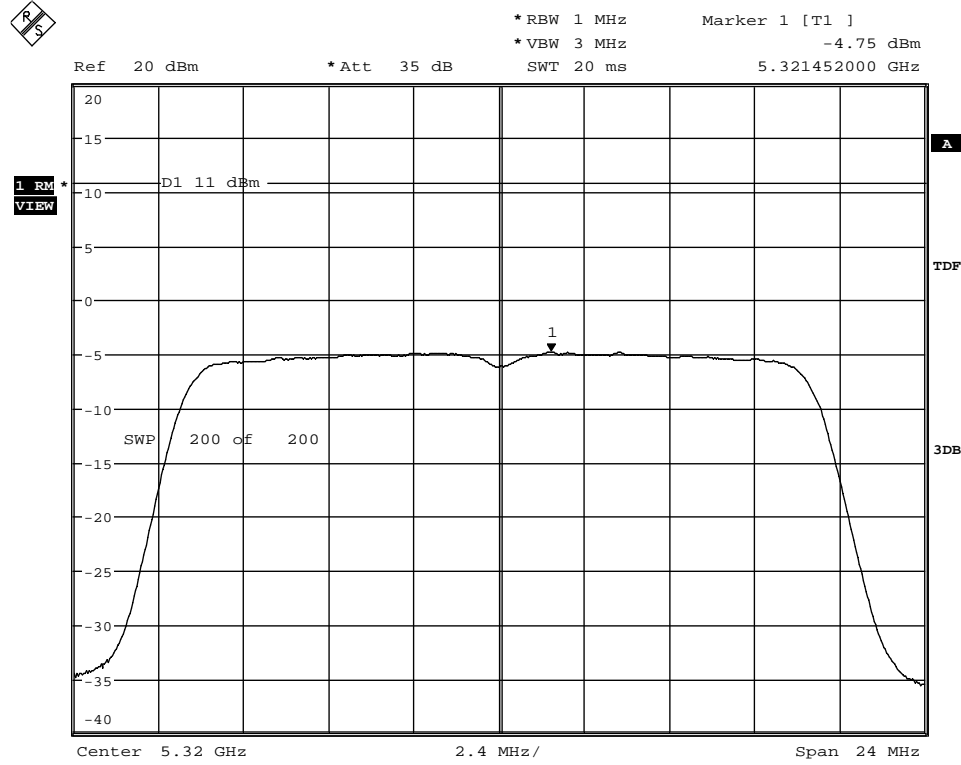
*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -5.54 dBm
SWT 20 ms

Ref 20 dBm *Att 35 dB 5.262160000 GHz

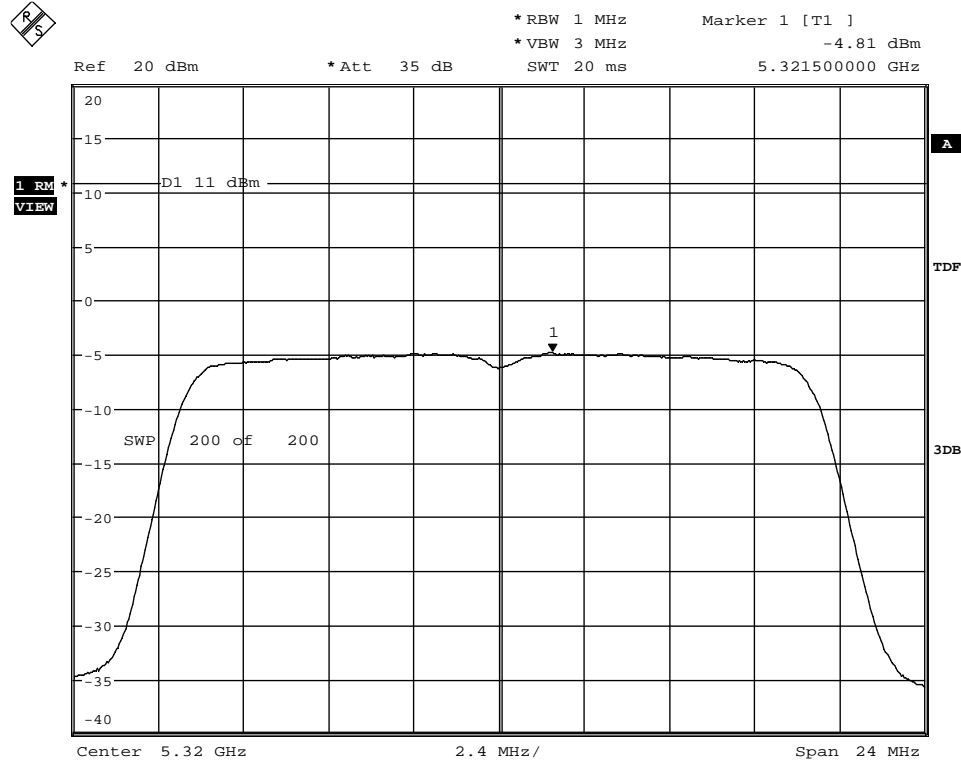


Date: 5.FEB.2015 11:20:24

n-mode, Channel 64



Date: 5.FEB.2015 11:11:49



Date: 5.FEB.2015 11:13:31

n-mode, Channel 100

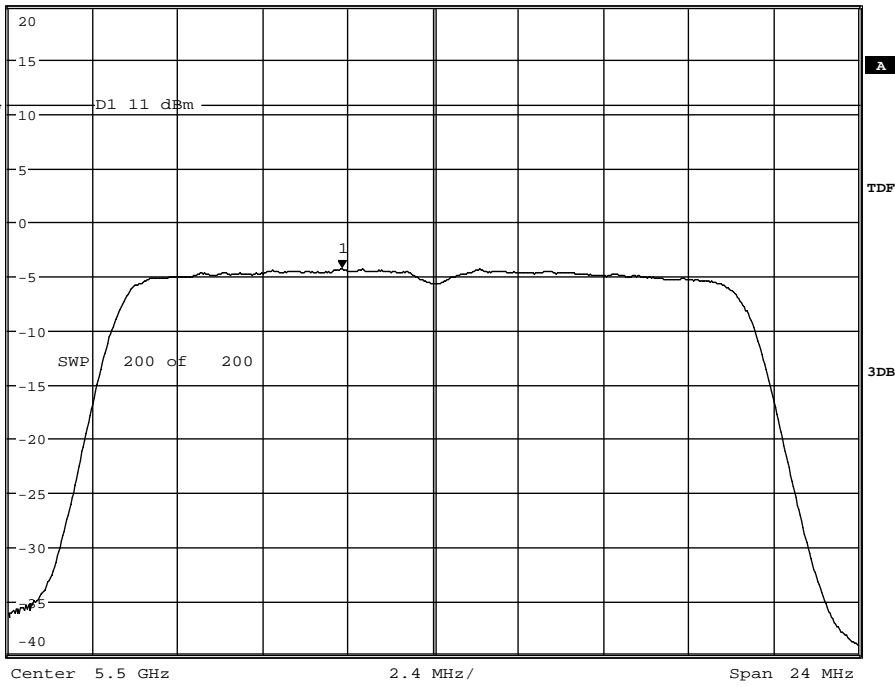


*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -4.29 dBm
SWT 20 ms 5.497420000 GHz

Ref 20 dBm

*Att 35 dB

1 RM
VIEW



Date: 5.FEB.2015 11:45:18

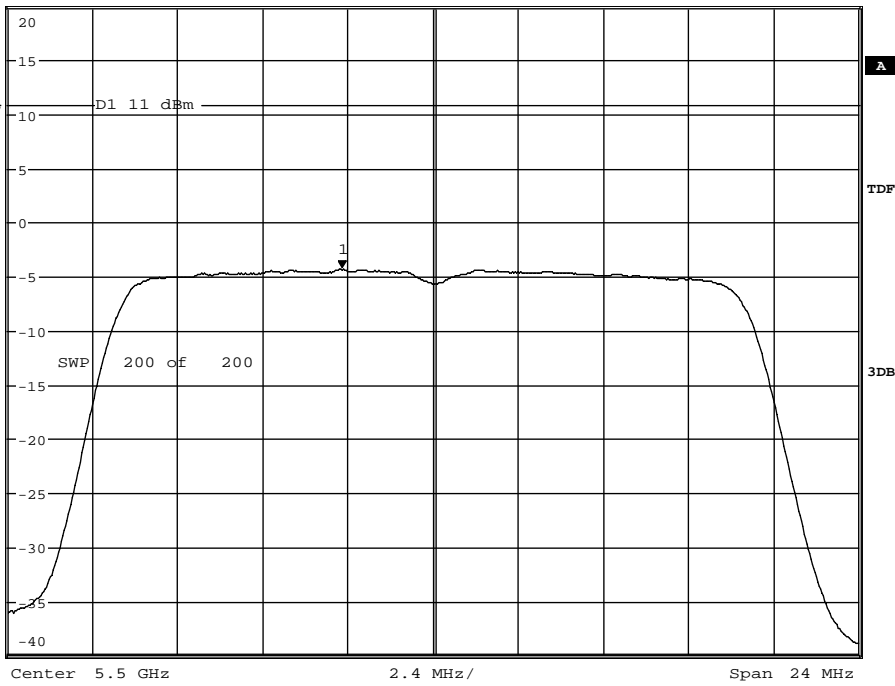


*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -4.31 dBm
SWT 20 ms 5.497408000 GHz

Ref 20 dBm

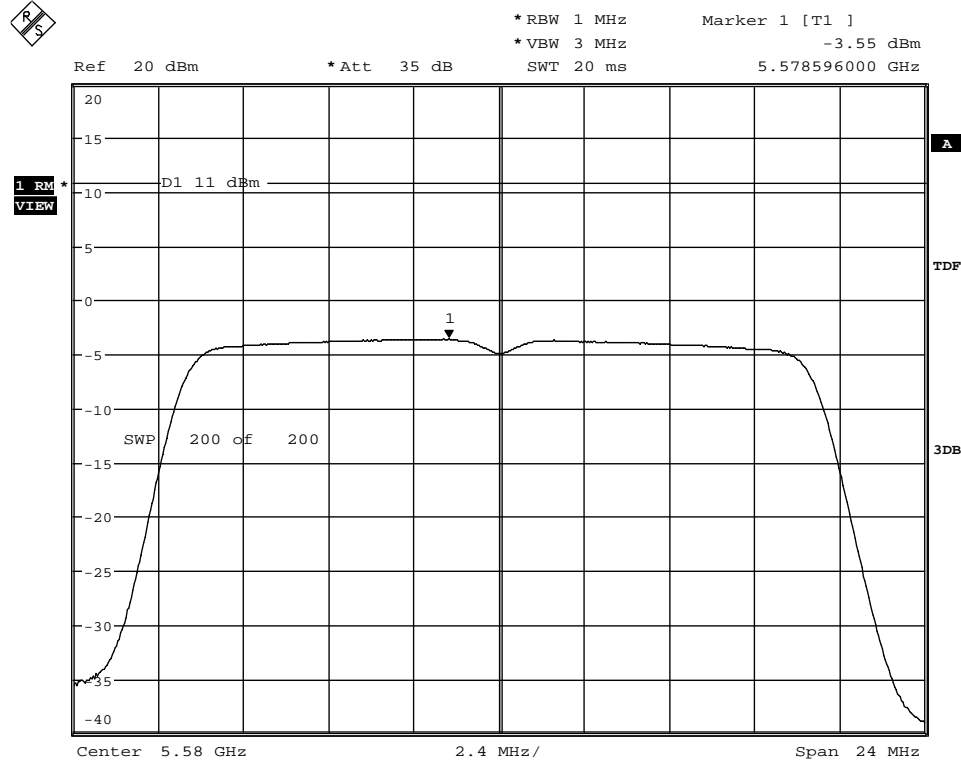
*Att 35 dB

1 RM
VIEW

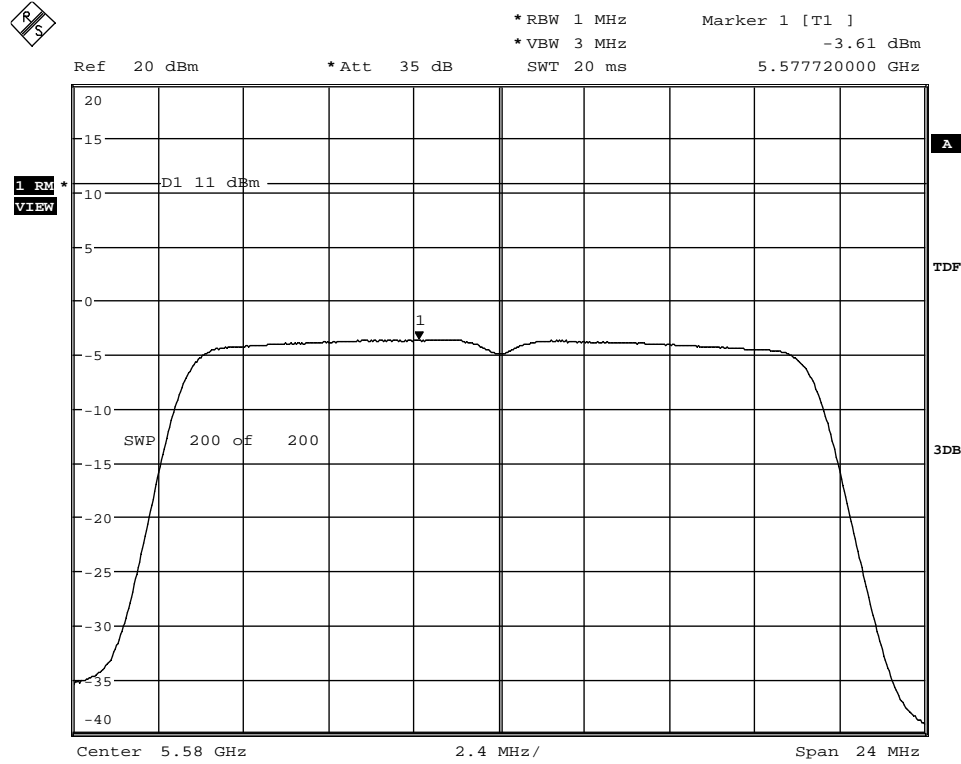


Date: 5.FEB.2015 11:48:59

n-mode, Channel 116



Date: 5.FEB.2015 12:04:22



Date: 5.FEB.2015 12:05:44

n-mode, Channel 140

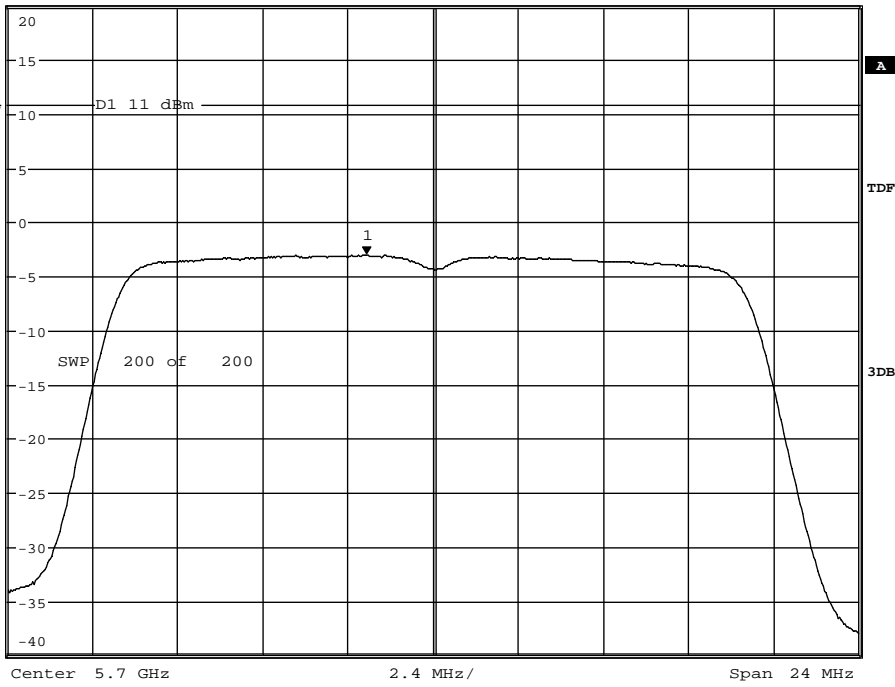


*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -3.02 dBm
SWT 20 ms 5.698116000 GHz

Ref 20 dBm

*Att 35 dB

1 RM
VIEW



Date: 5.FEB.2015 12:14:36

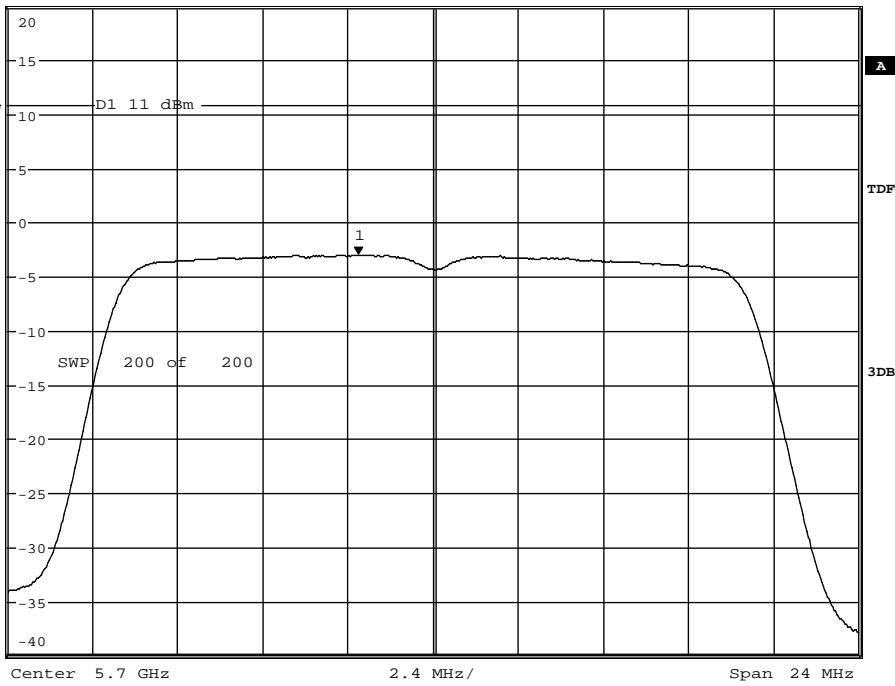


*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -2.96 dBm
SWT 20 ms 5.697900000 GHz

Ref 20 dBm

*Att 35 dB

1 RM
VIEW

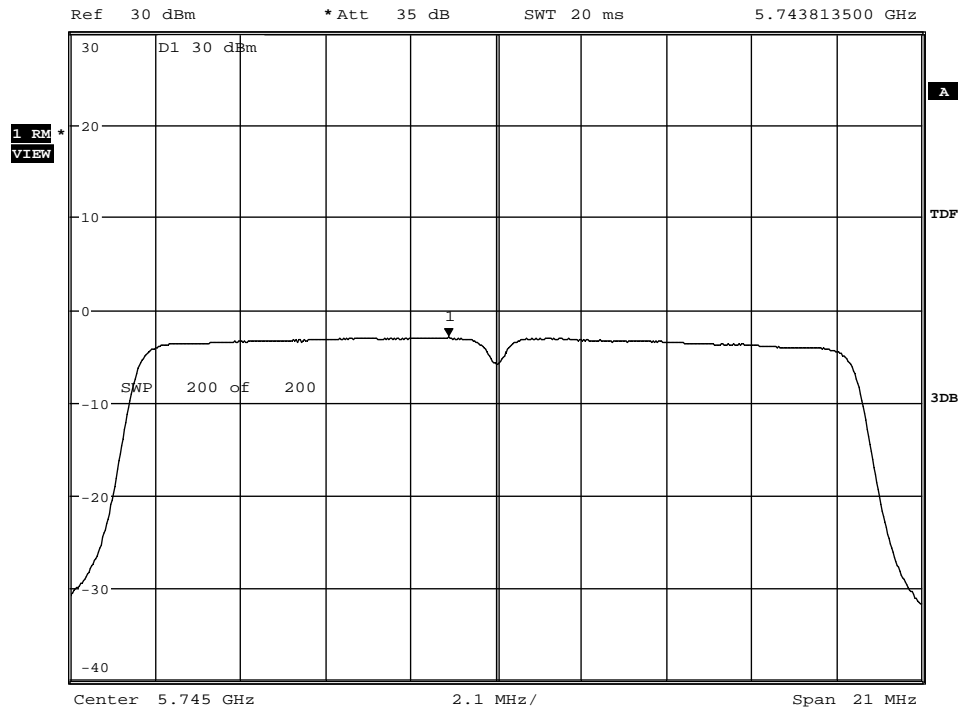


Date: 5.FEB.2015 12:15:48

n-mode, Channel 149



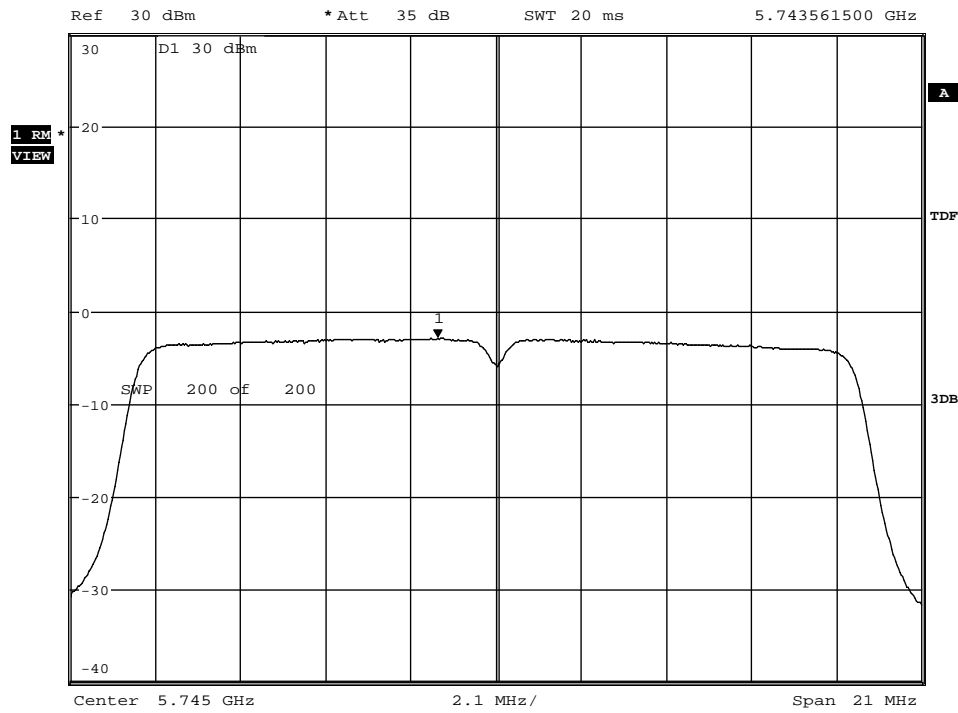
*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -2.92 dBm
SWT 20 ms 5.743813500 GHz



Date: 5.FEB.2015 12:39:10



*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -2.88 dBm
SWT 20 ms 5.743561500 GHz

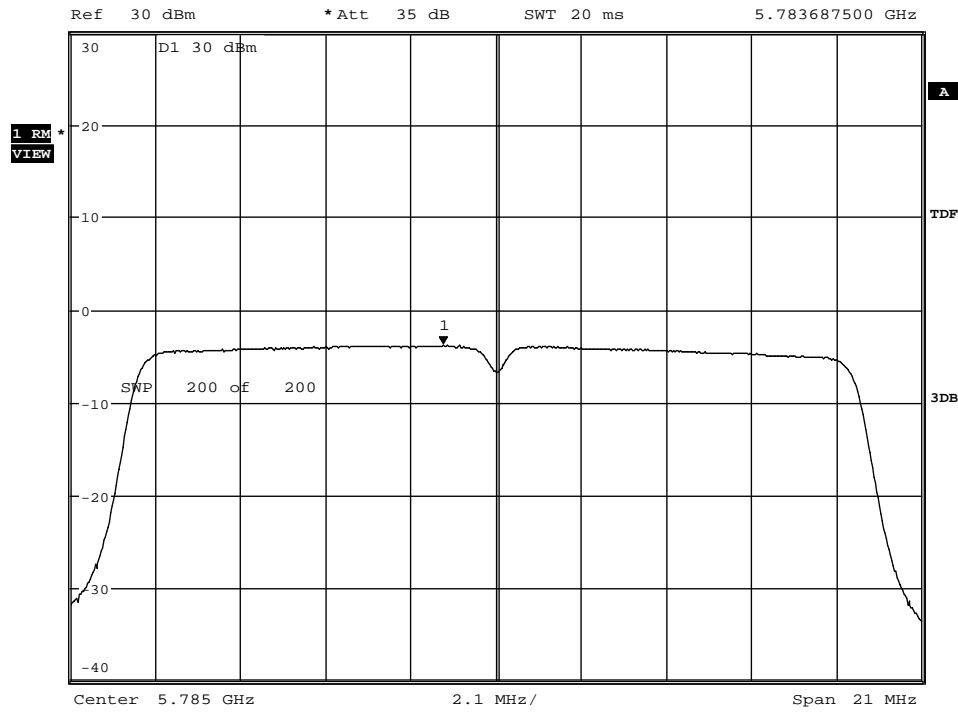


Date: 5.FEB.2015 12:40:44

n-mode, Channel 157



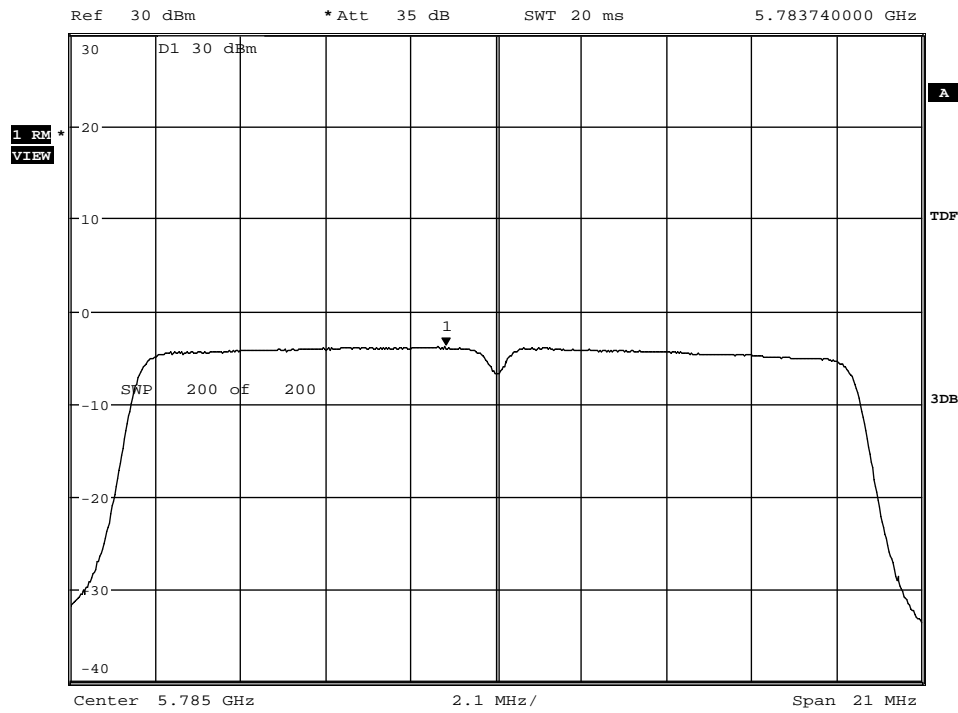
*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -3.75 dBm
SWT 20 ms 5.783687500 GHz



Date: 5.FEB.2015 12:48:41



*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -3.77 dBm
SWT 20 ms 5.783740000 GHz

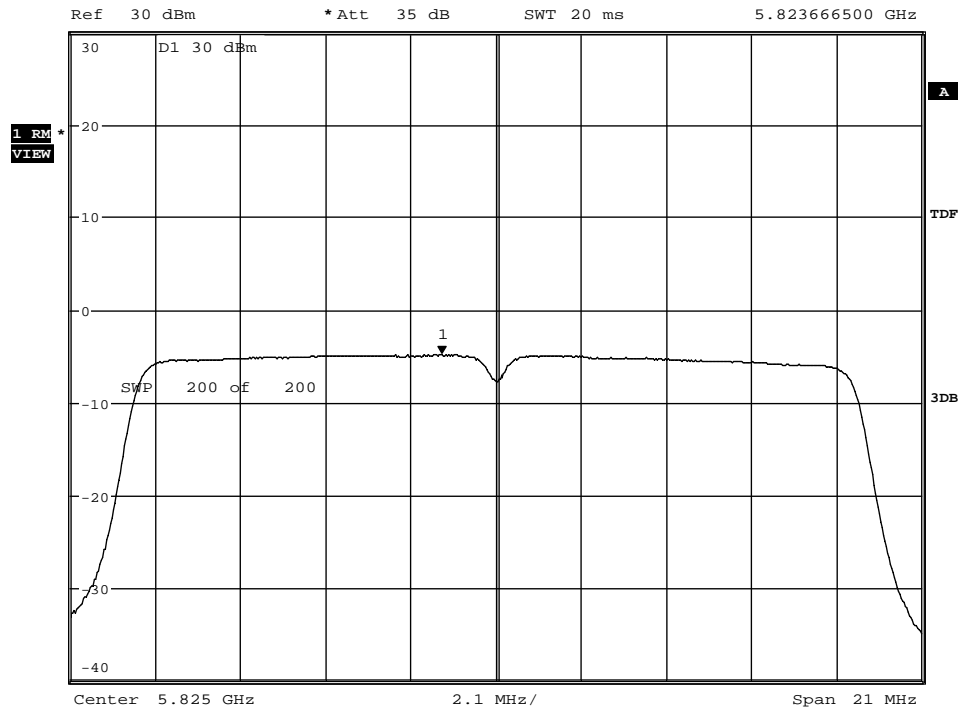


Date: 5.FEB.2015 12:50:03

n-mode, Channel 165



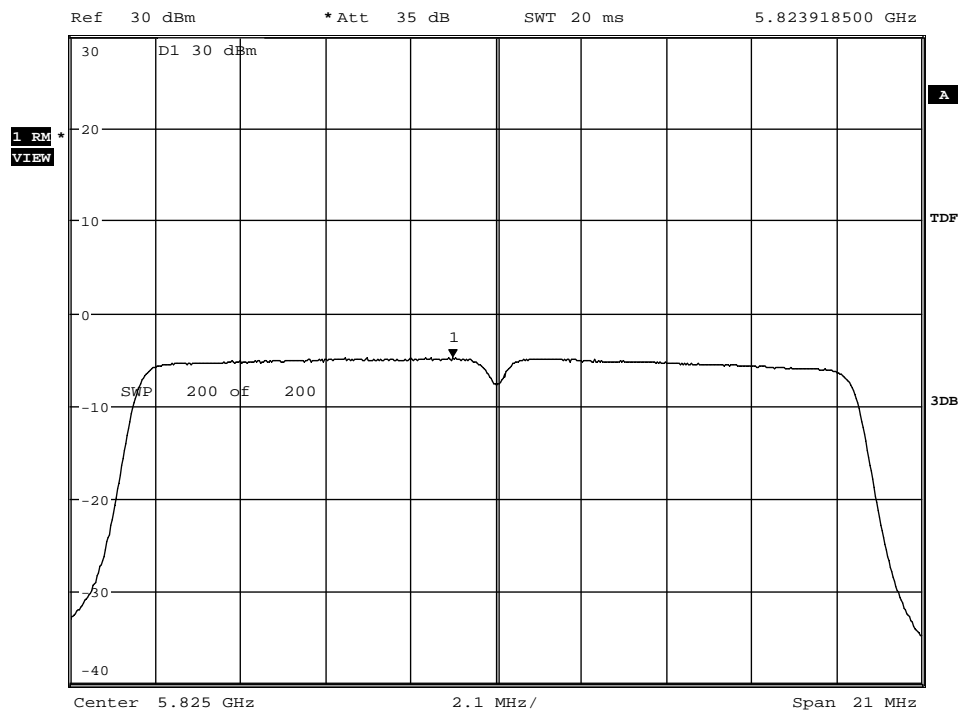
*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -4.79 dBm
SWT 20 ms 5.823666500 GHz



Date: 5.FEB.2015 12:56:41



*RBW 500 kHz Marker 1 [T1]
*VBW 5 MHz -4.75 dBm
SWT 20 ms 5.823918500 GHz



Date: 5.FEB.2015 12:58:13