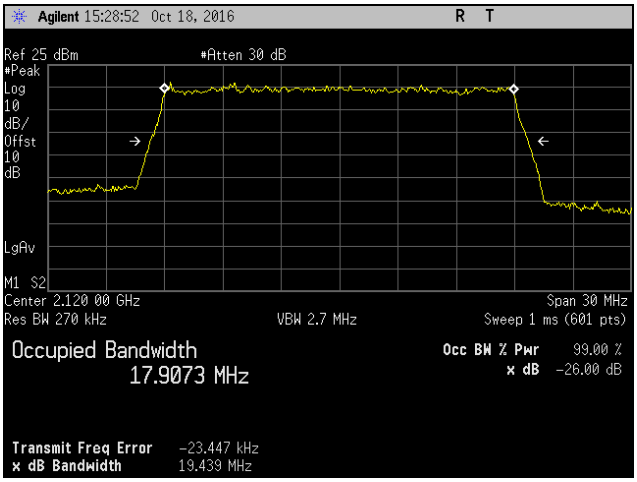
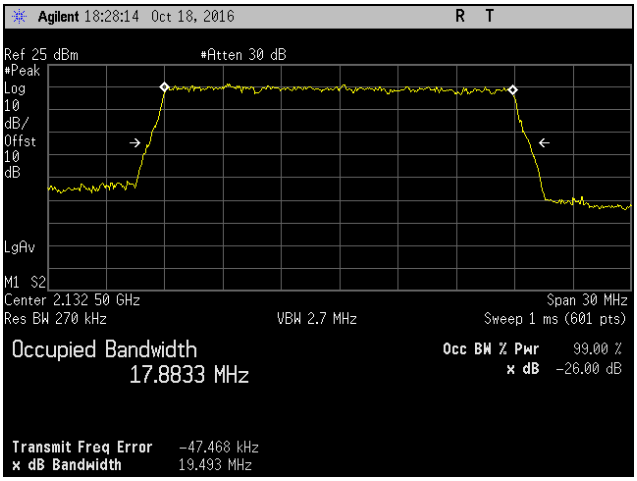
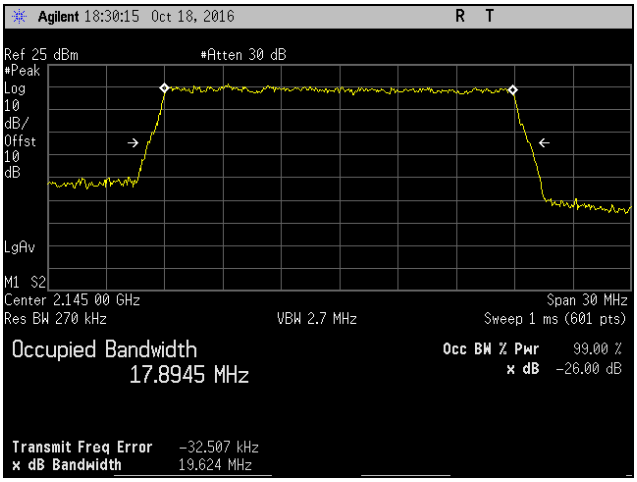


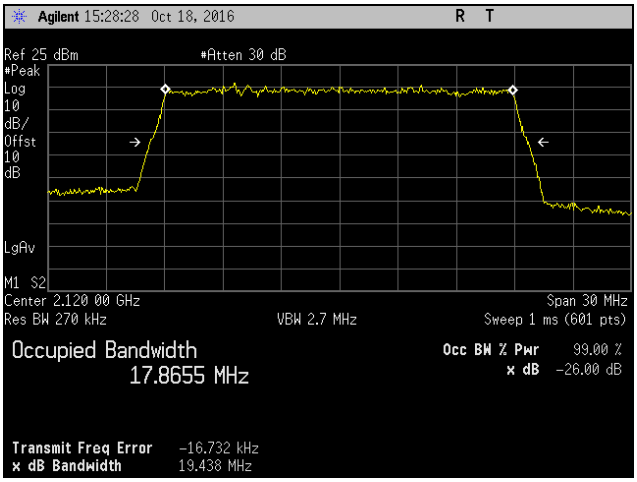
Plot 538. Occupied Bandwidth, QAM-64, Low Channel, Band 4, Port 1, 20 MHz



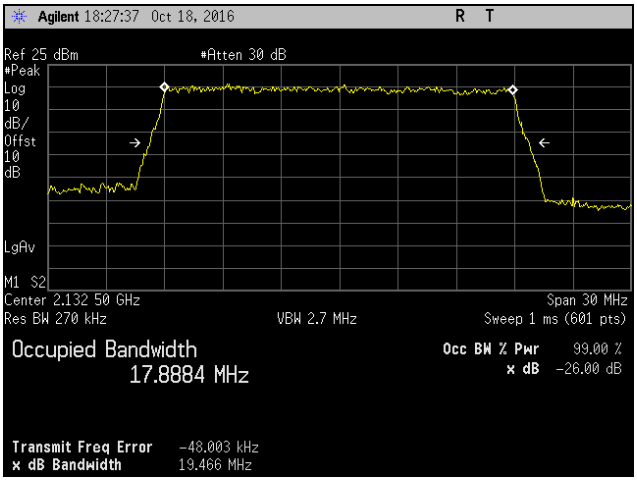
Plot 539. Occupied Bandwidth, QAM-64, Mid Channel, Band 4, Port 1, 20 MHz



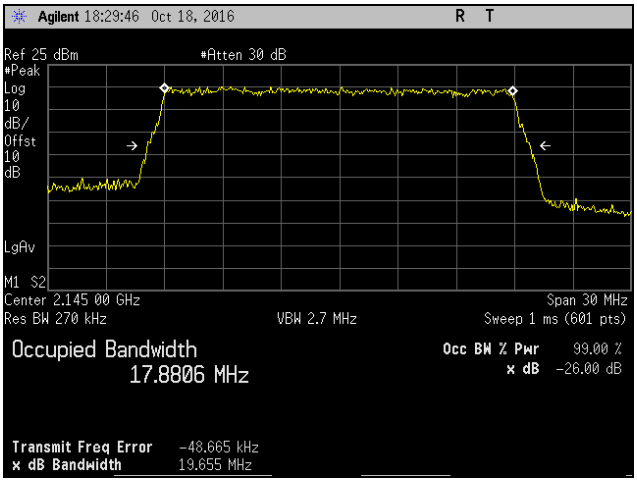
Plot 540. Occupied Bandwidth, QAM-64, High Channel, Band 4, Port 1, 20 MHz



Plot 541. Occupied Bandwidth, QPSK, Low Channel, Band 4, Port 1, 20 MHz

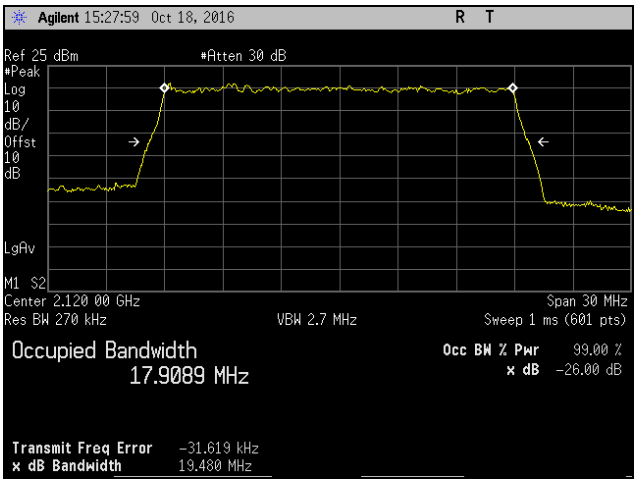


Plot 542. Occupied Bandwidth, QPSK, Mid Channel, Band 4, Port 1, 20 MHz

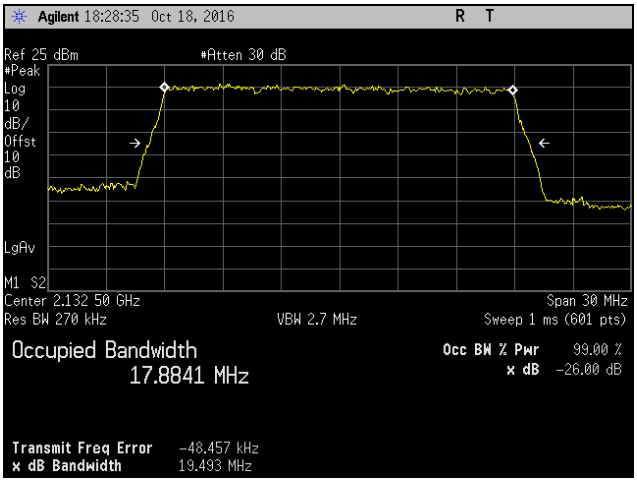


Plot 543. Occupied Bandwidth, QPSK, High Channel, Band 4, Port 1, 20 MHz

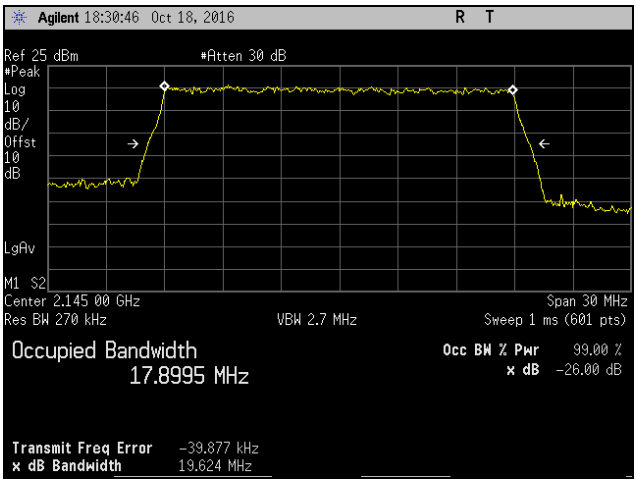
Occupied Bandwidth, Band 4, Port 2



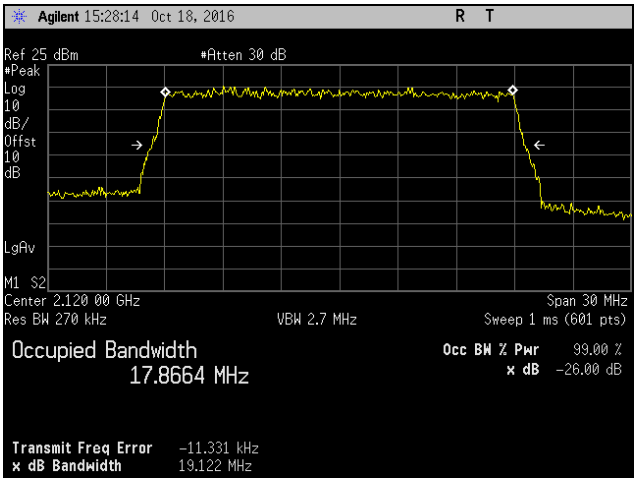
Plot 544. Occupied Bandwidth, -QAM-16, Low Channel, Band 4, Port 2, 20 MHz



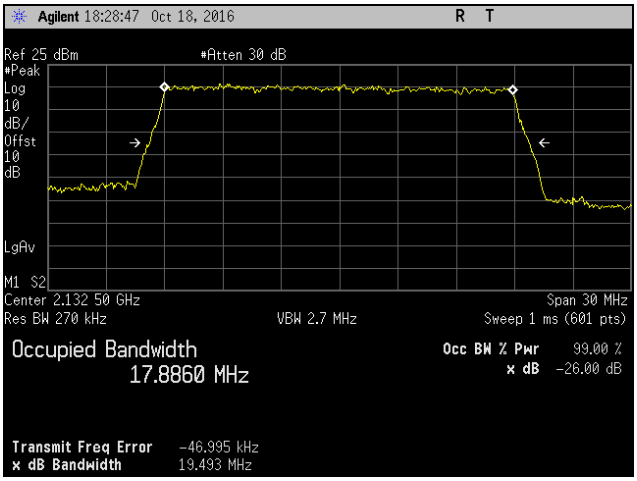
Plot 545. Occupied Bandwidth, QAM-16, Mid Channel, Band 4, Port 2, 20 MHz



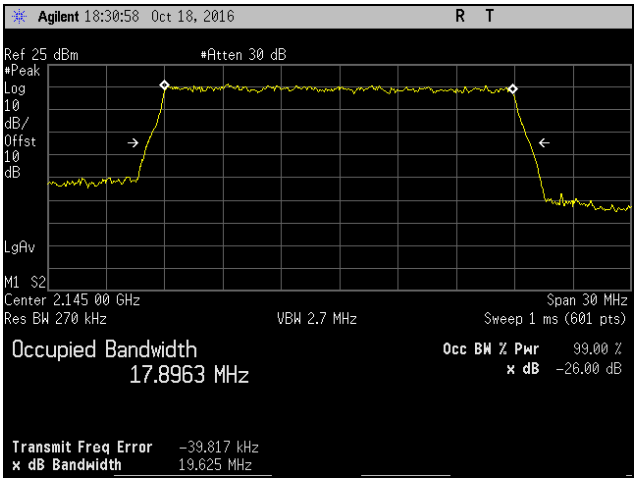
Plot 546. Occupied Bandwidth, QAM-16, High Channel, Band 4, Port 2, 20 MHz



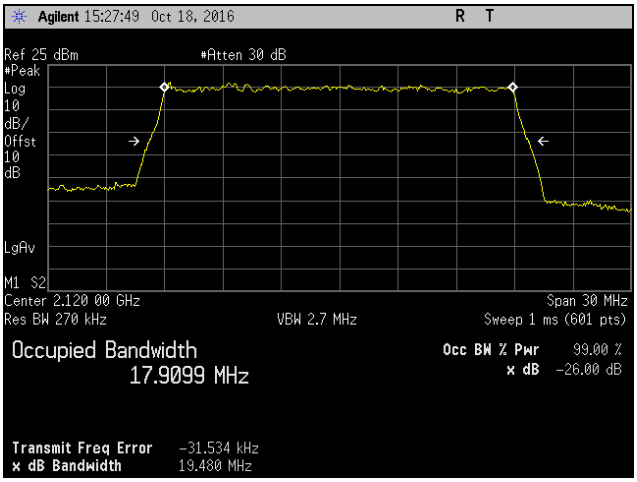
Plot 547. Occupied Bandwidth, QAM-64, Low Channel, Band 4, Port 2, 20 MHz



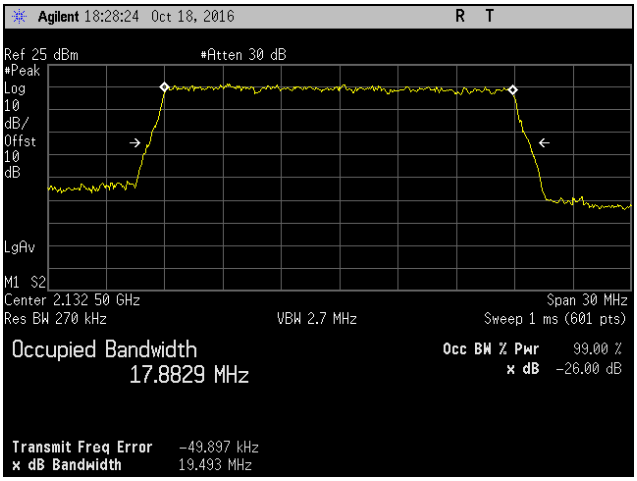
Plot 548. Occupied Bandwidth, QAM-64, Mid Channel, Band 4, Port 2, 20 MHz



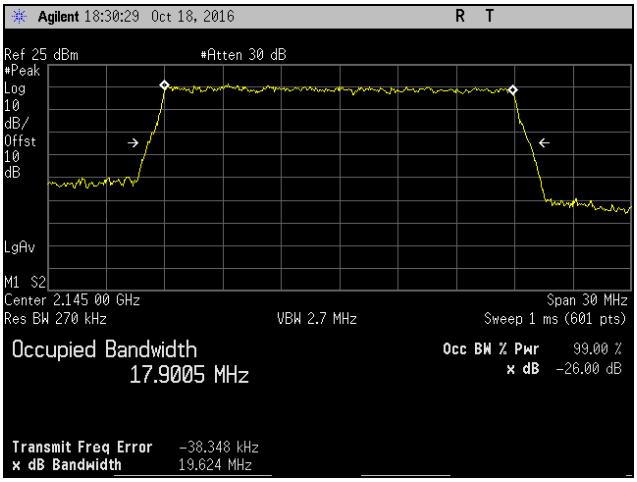
Plot 549. Occupied Bandwidth, QAM-64, High Channel, Band 4, Port 2, 20 MHz



Plot 550. Occupied Bandwidth, QPSK, Low Channel, Band 4, Port 2, 20 MHz

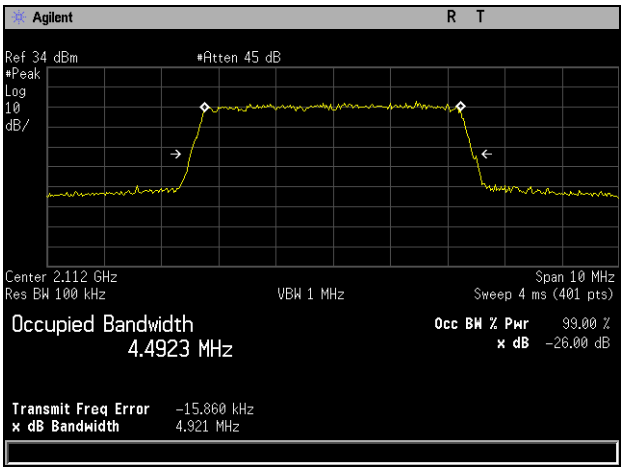


Plot 551. Occupied Bandwidth, QPSK, Mid Channel, Band 4, Port 2, 20 MHz

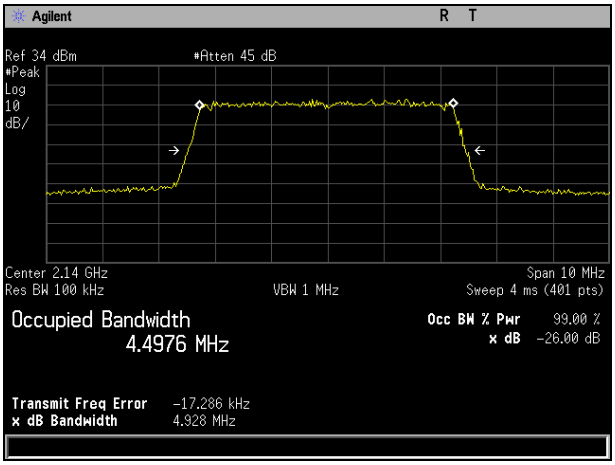


Plot 552. Occupied Bandwidth, QPSK, High Channel, Band 4, Port 2, 20 MHz

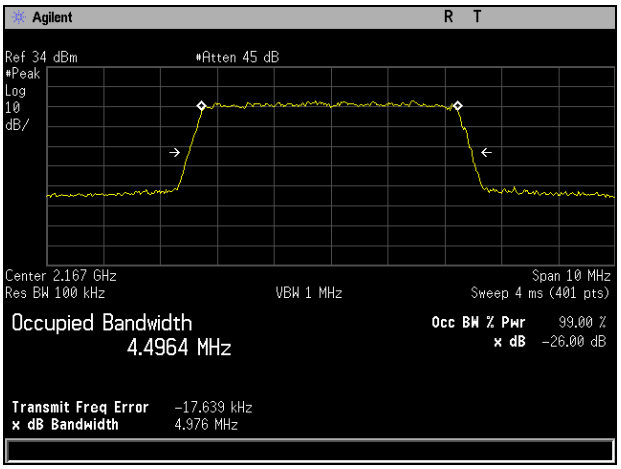
Occupied Bandwidth, Band 10, Port 1, 5 MHz



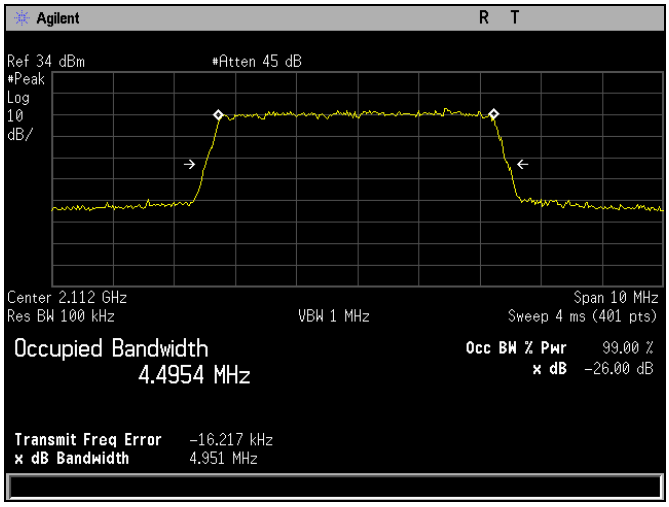
Plot 553. Occupied Bandwidth, QAM-16, Low Channel, Band 10, Port 1, 5 MHz



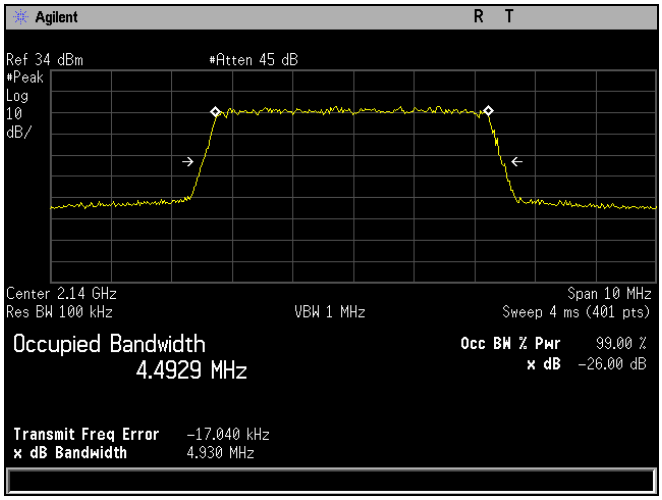
Plot 554. Occupied Bandwidth, QAM-16, Mid Channel, Band 10, Port 1, 5 MHz



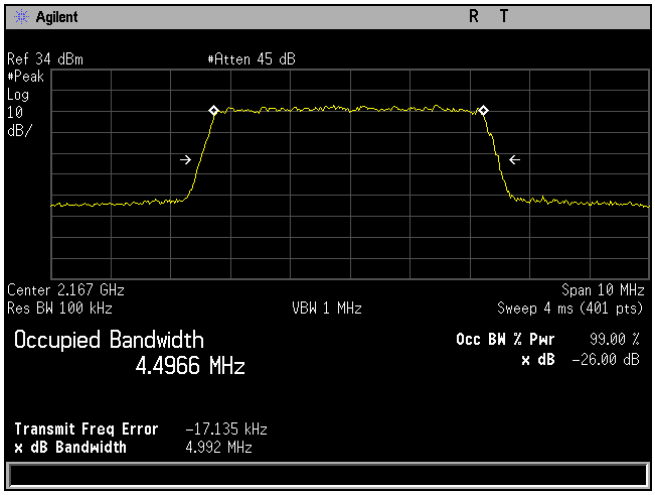
Plot 555. Occupied Bandwidth, QAM-16, High Channel, Band 10, Port 1, 5 MHz



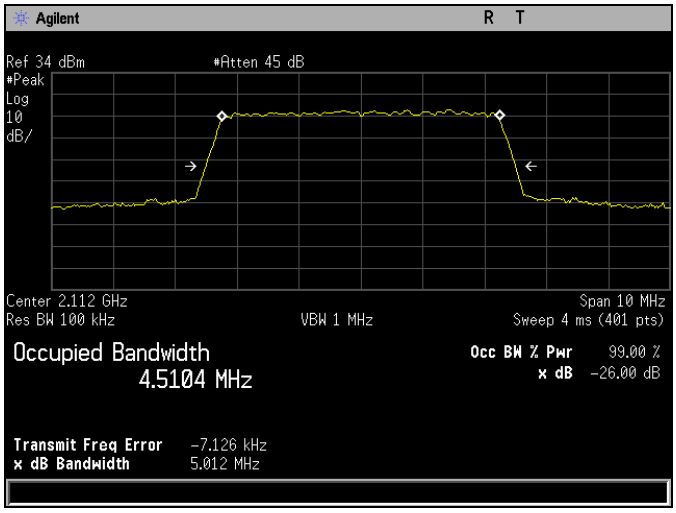
Plot 556. Occupied Bandwidth, QAM-64, Low Channel, Band 10, Port 1, 5 MHz



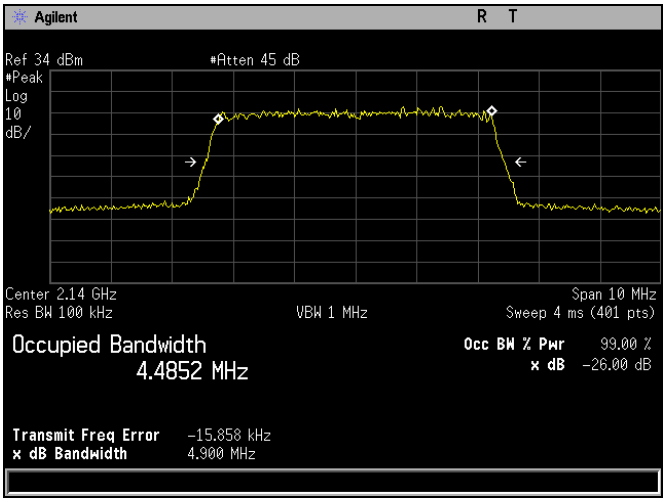
Plot 557. Occupied Bandwidth, QAM-64, Mid Channel, Band 10, Port 1, 5 MHz



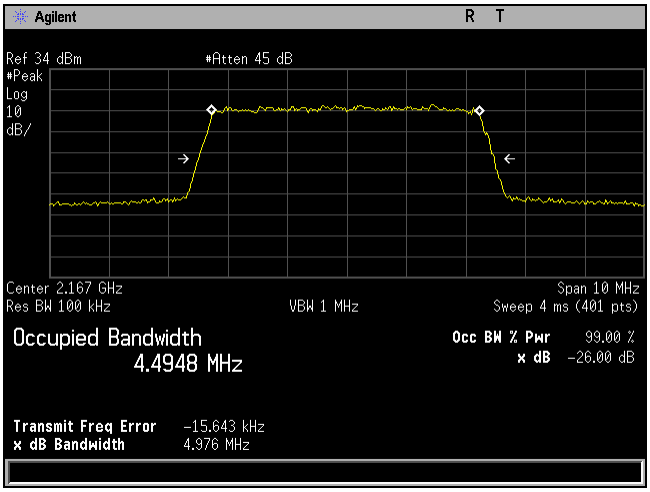
Plot 558. Occupied Bandwidth, QAM-64, High Channel, Band 10, Port 1, 5 MHz



Plot 559. Occupied Bandwidth, QPSK, Low Channel, Band 10, Port 1, 5 MHz

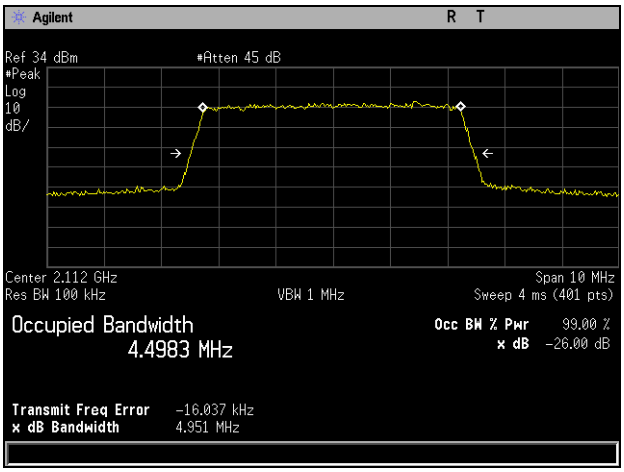


Plot 560. Occupied Bandwidth, QPSK, Mid Channel, Band 10, Port 1, 5 MHz

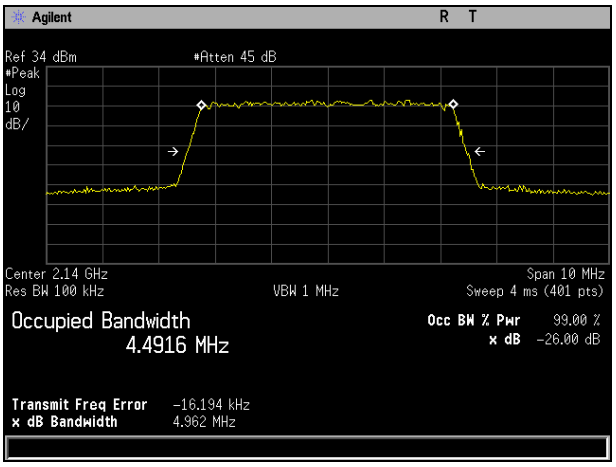


Plot 561. Occupied Bandwidth, QPSK, High Channel, Band 10, Port 1, 5 MHz

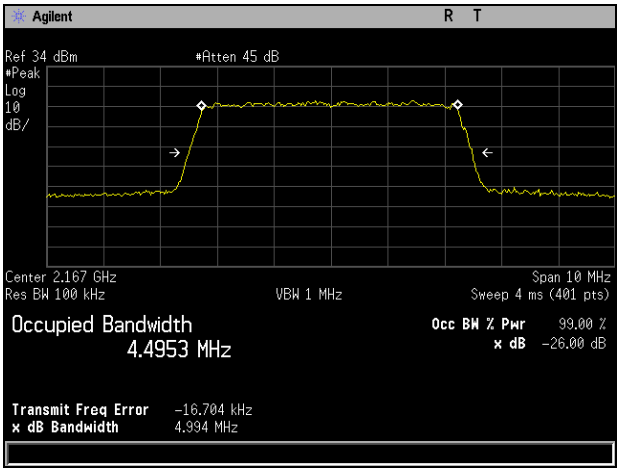
Occupied Bandwidth, Band 10, Port 2, 5 MHz



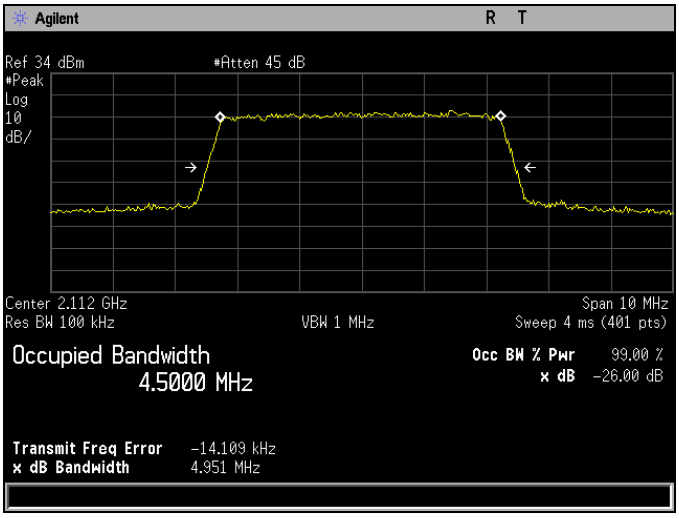
Plot 562. Occupied Bandwidth, QAM-16, Low Channel, Band 10, Port 2, 5 MHz



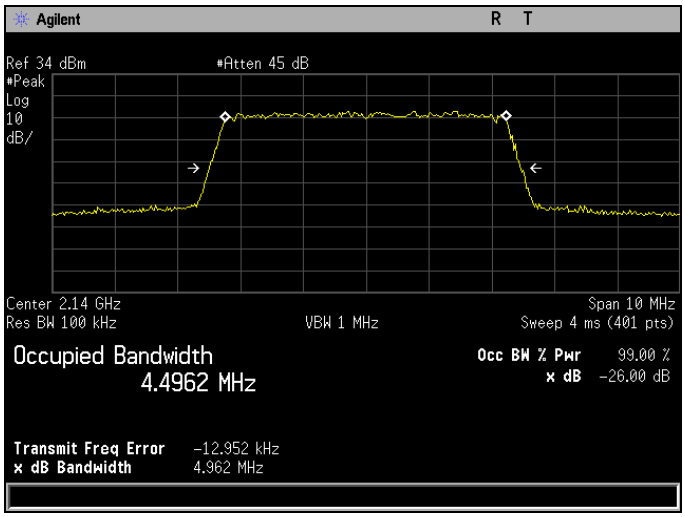
Plot 563. Occupied Bandwidth, QAM-16, Mid Channel, Band 10, Port 2, 5 MHz



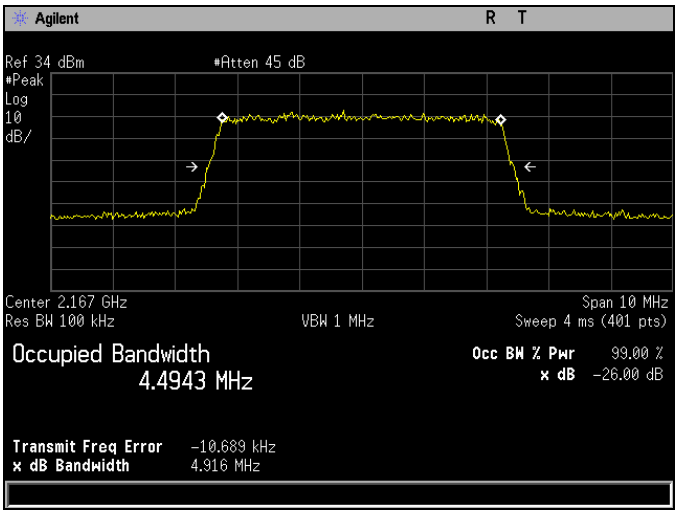
Plot 564. Occupied Bandwidth, QAM-16, High Channel, Band 10, Port 2, 5 MHz



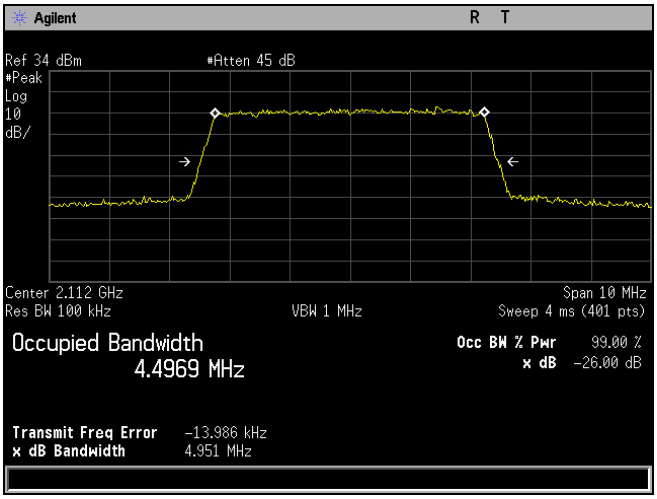
Plot 565. Occupied Bandwidth, QAM-64, Low Channel, Band 10, Port 2, 5 MHz



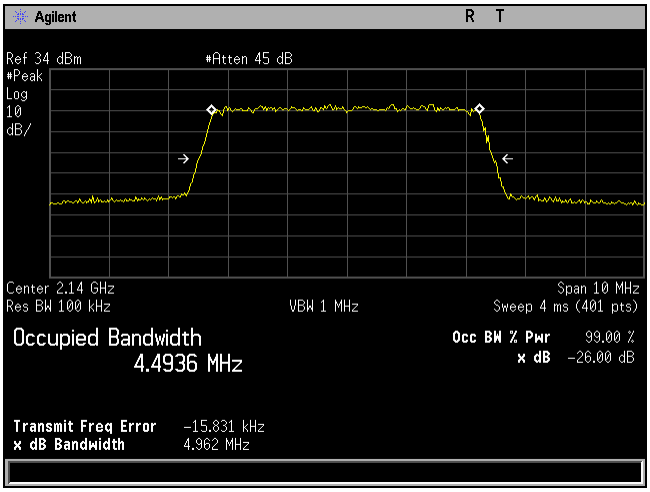
Plot 566. Occupied Bandwidth, QAM-64, Mid Channel, Band 10, Port 2, 5 MHz



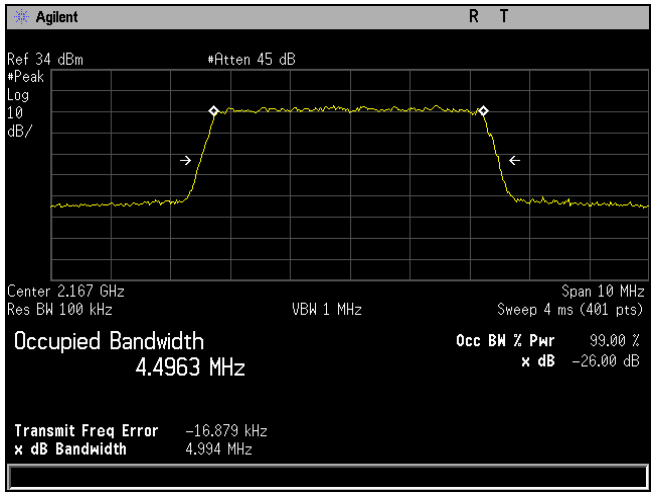
Plot 567. Occupied Bandwidth, QAM-64, High Channel, Band 10, Port 2, 5 MHz



Plot 568. Occupied Bandwidth, QPSK, Low Channel, Band 10, Port 2, 5 MHz

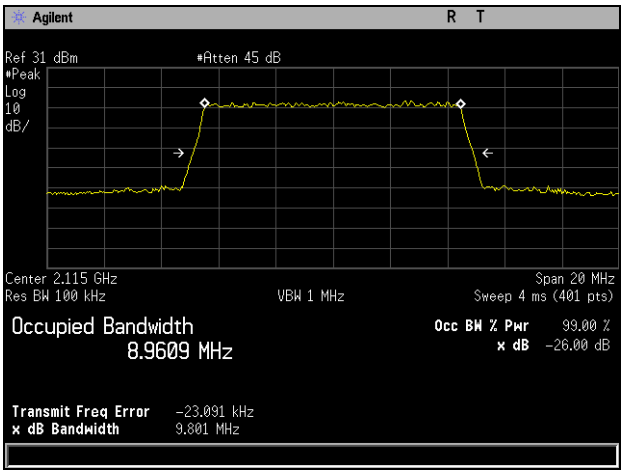


Plot 569. Occupied Bandwidth, QPSK, Mid Channel, Band 10, Port 2, 5 MHz

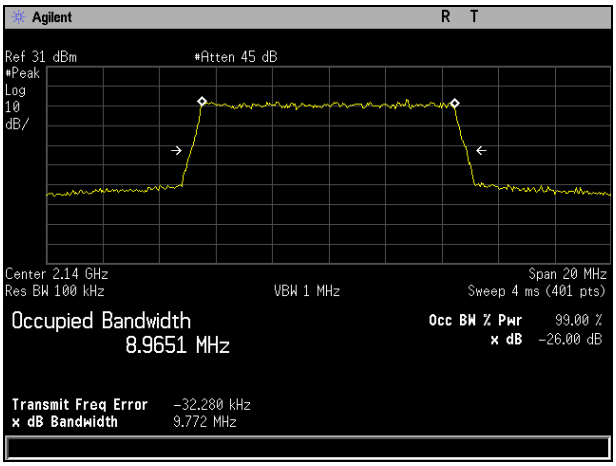


Plot 570. Occupied Bandwidth, QPSK, High Channel, Band 10, Port 2, 5 MHz

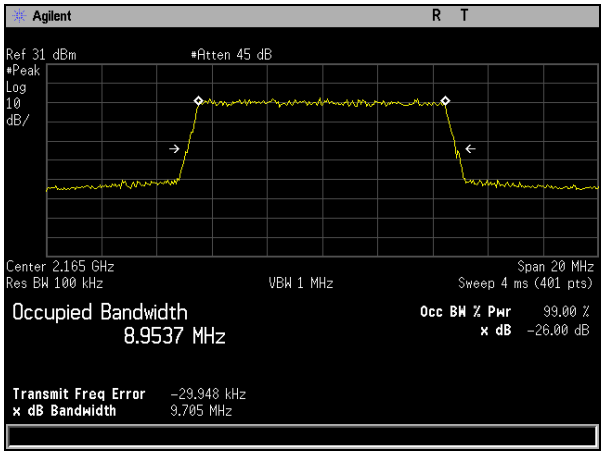
Occupied Bandwidth, Band 10, Port 1, 10 MHz



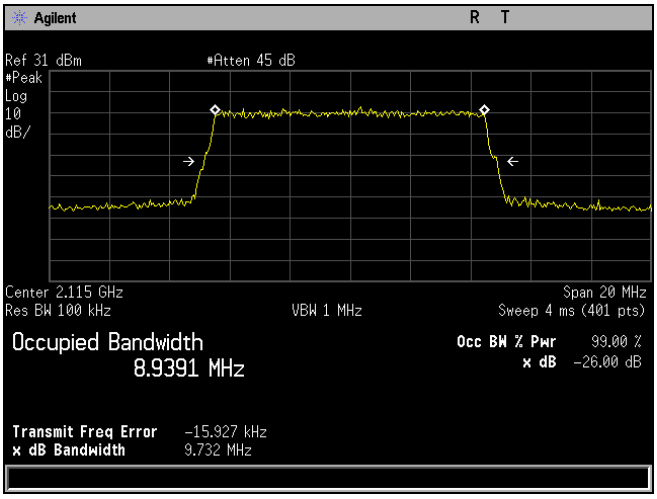
Plot 571. Occupied Bandwidth, QAM-16, Low Channel, Band 10, Port 1, 10 MHz



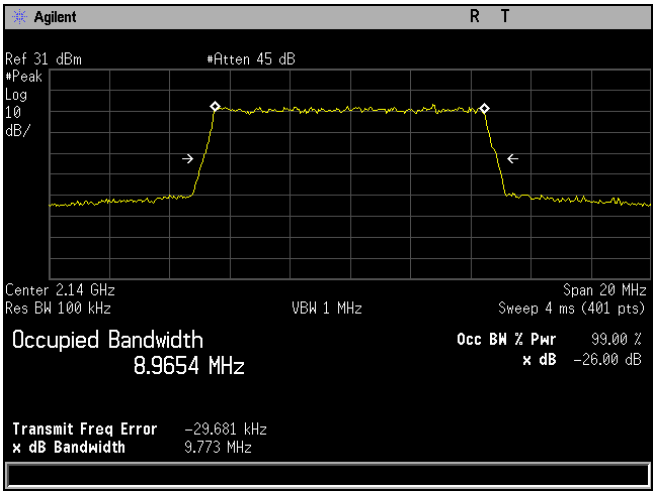
Plot 572. Occupied Bandwidth, QAM-16, Mid Channel, Band 10, Port 1, 10 MHz



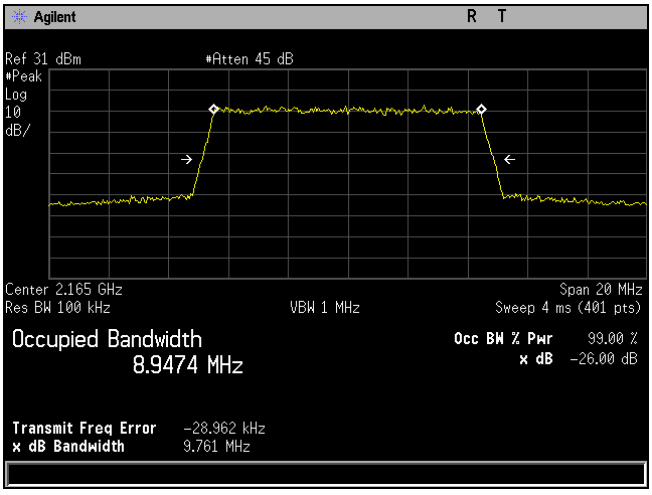
Plot 573. Occupied Bandwidth, QAM-16, High Channel, Band 10, Port 1, 10 MHz



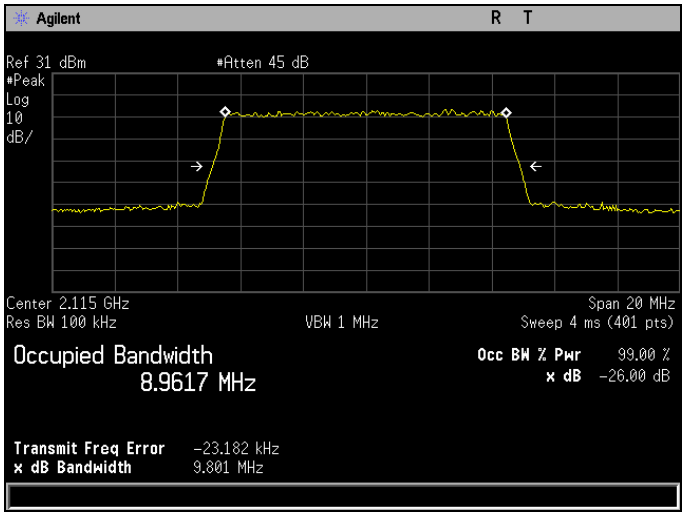
Plot 574. Occupied Bandwidth, QAM-64, Low Channel, Band 10, Port 1, 10 MHz



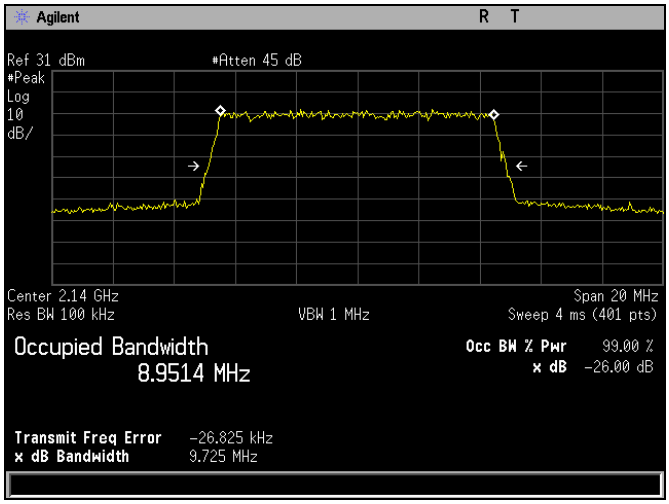
Plot 575. Occupied Bandwidth, QAM-64, Mid Channel, Band 10, Port 1, 10 MHz



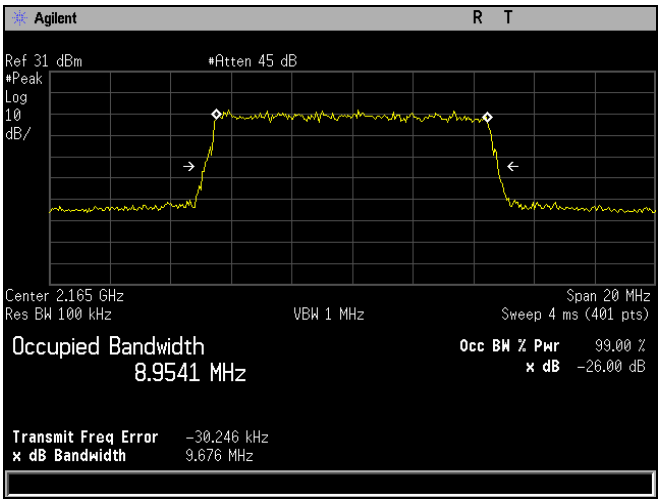
Plot 576. Occupied Bandwidth, QAM-64, High Channel, Band 10, Port 1, 10 MHz



Plot 577. Occupied Bandwidth, QPSK, Low Channel, Band 10, Port 1, 10 MHz

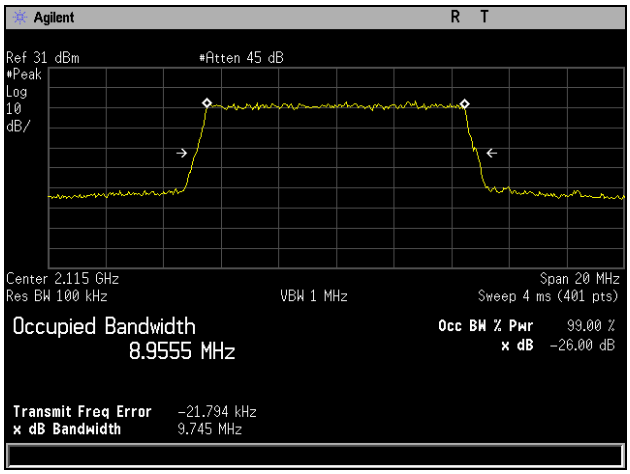


Plot 578. Occupied Bandwidth, QPSK, Mid Channel, Band 10, Port 1, 10 MHz

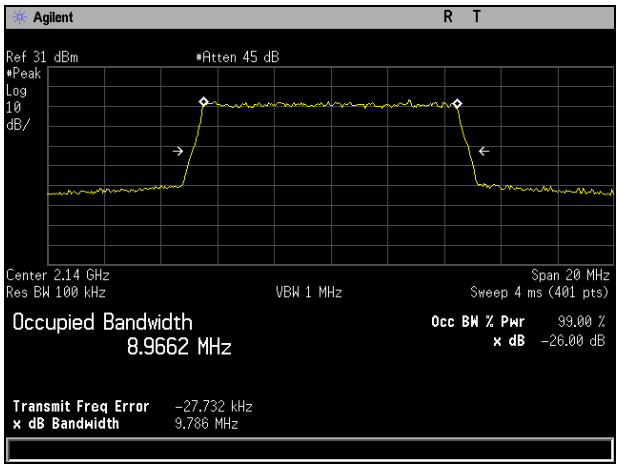


Plot 579. Occupied Bandwidth, QPSK, High Channel, Band 10, Port 1, 10 MHz

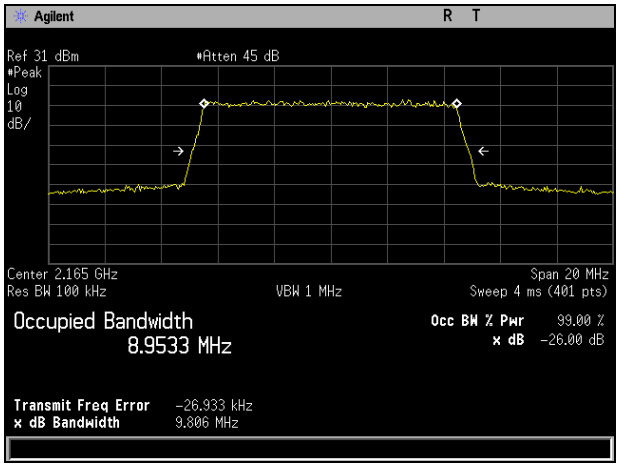
Occupied Bandwidth, Band 10, Port 2, 10 MHz



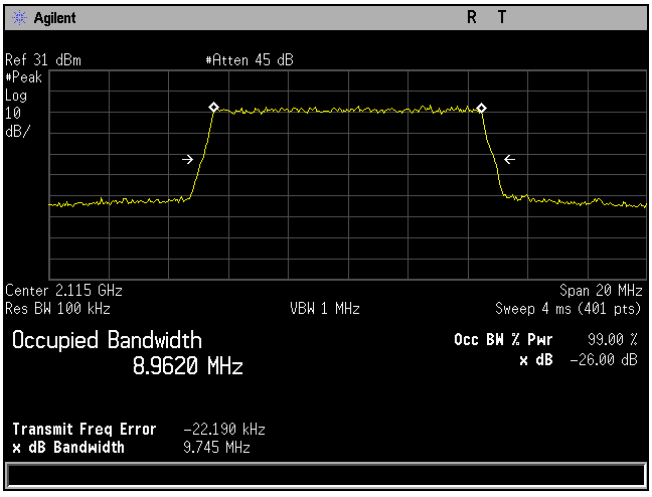
Plot 580. Occupied Bandwidth, QAM-16, Low Channel, Band 10, Port 2, 10 MHz



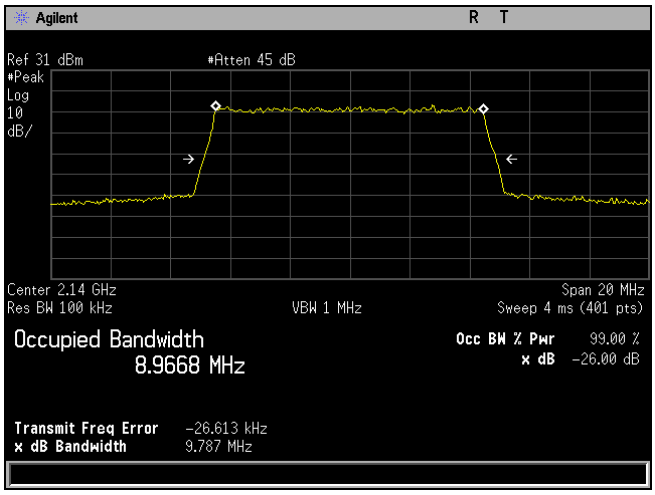
Plot 581. Occupied Bandwidth, QAM-16, Mid Channel, Band 10, Port 2, 10 MHz



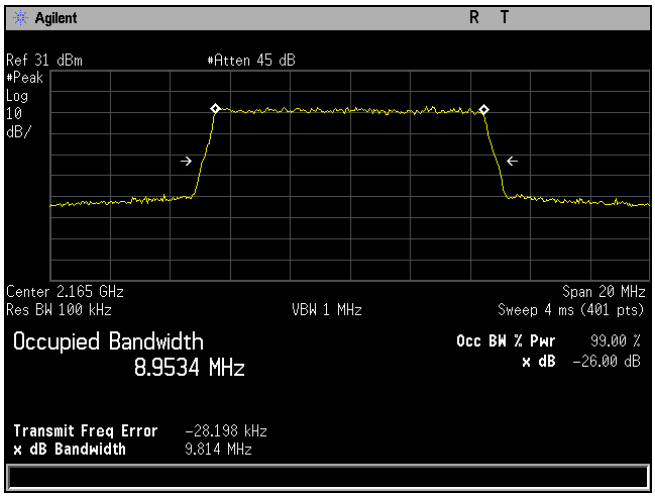
Plot 582. Occupied Bandwidth, QAM-16, High Channel, Band 10, Port 2, 10 MHz



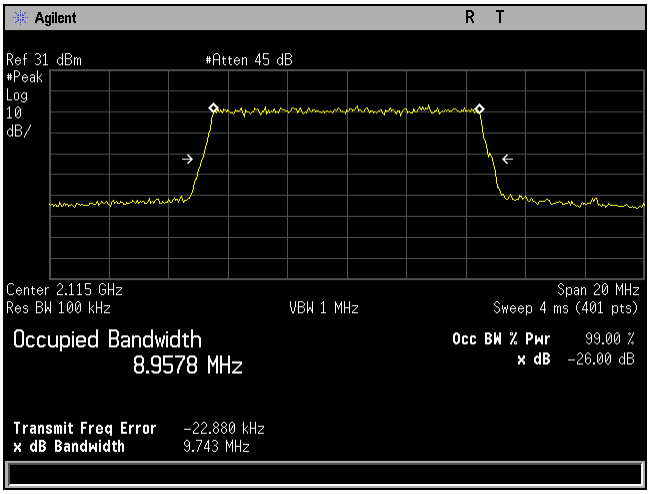
Plot 583. Occupied Bandwidth, QAM-64, Low Channel, Band 10, Port 2, 10 MHz



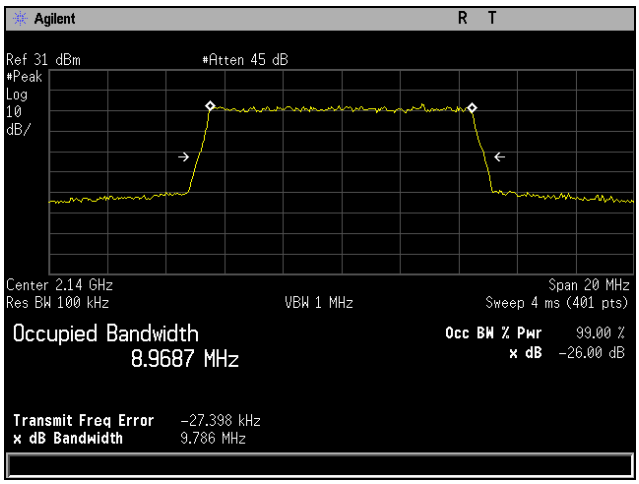
Plot 584. Occupied Bandwidth, QAM-64, Mid Channel, Band 10, Port 2, 10 MHz



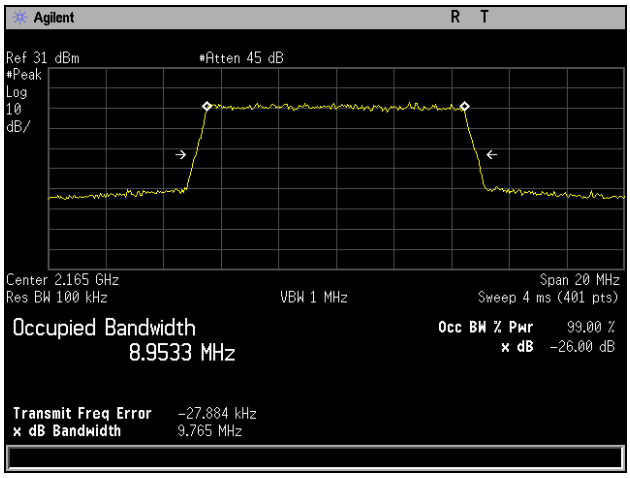
Plot 585. Occupied Bandwidth, QAM-64, High Channel, Band 10, Port 2, 10 MHz



Plot 586. Occupied Bandwidth, QPSK, Low Channel, Band 10, Port 2, 10 MHz

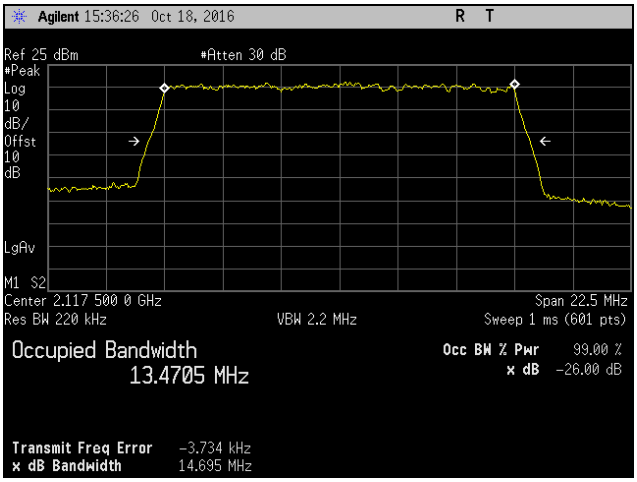


Plot 587. Occupied Bandwidth, QPSK, Mid Channel, Band 10, Port 2, 10 MHz

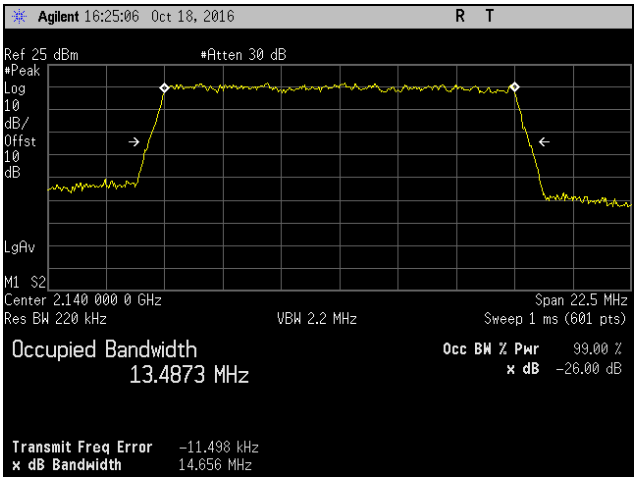


Plot 588. Occupied Bandwidth, QPSK, High Channel, Band 10, Port 2, 10 MHz

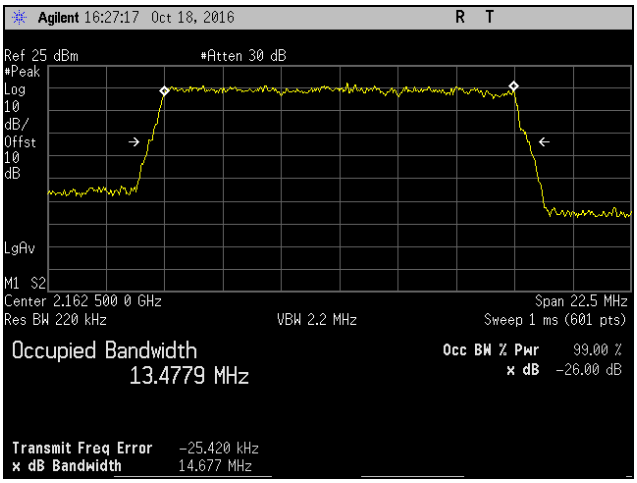
Occupied Bandwidth, Band 10, Port 1, 15 MHz



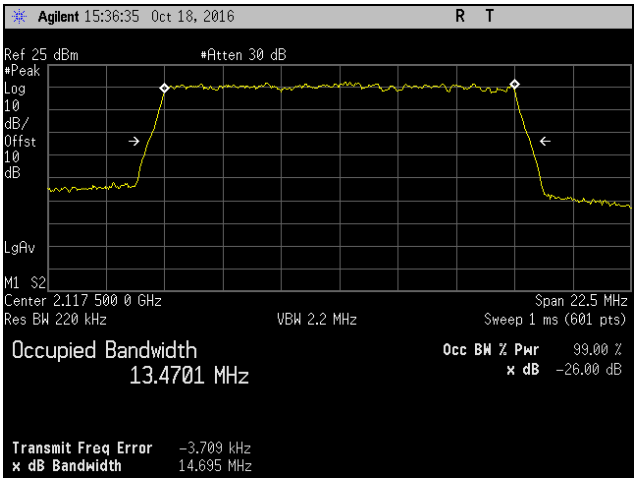
Plot 589. Occupied Bandwidth, QAM-16, Low Channel, Band 10, Port 1, 15 MHz



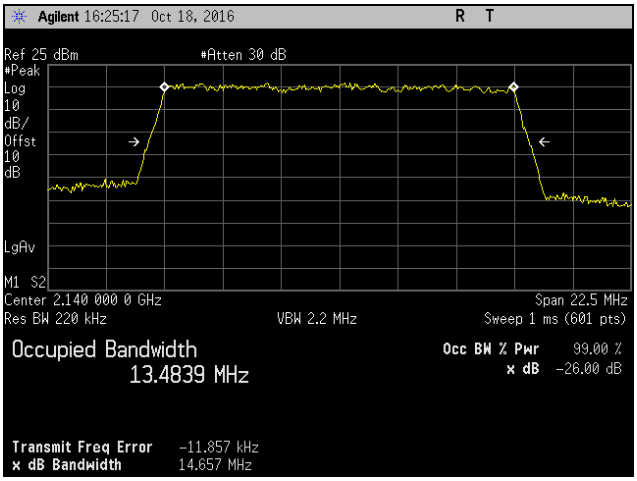
Plot 590. Occupied Bandwidth, QAM-16, Mid Channel, Band 10, Port 1, 15 MHz



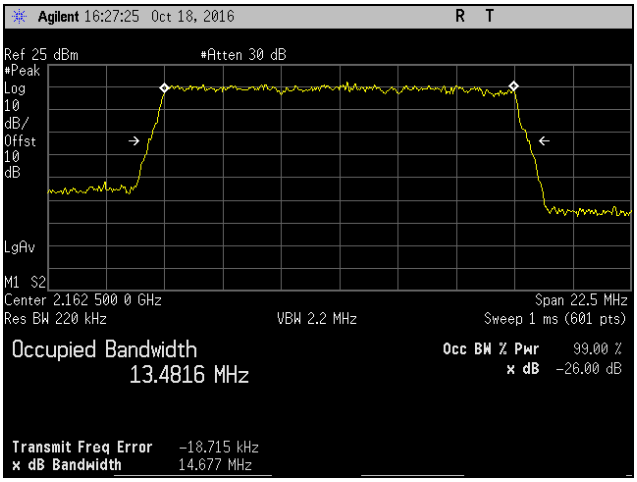
Plot 591. Occupied Bandwidth, QAM-16, High Channel, Band 10, Port 1, 15 MHz



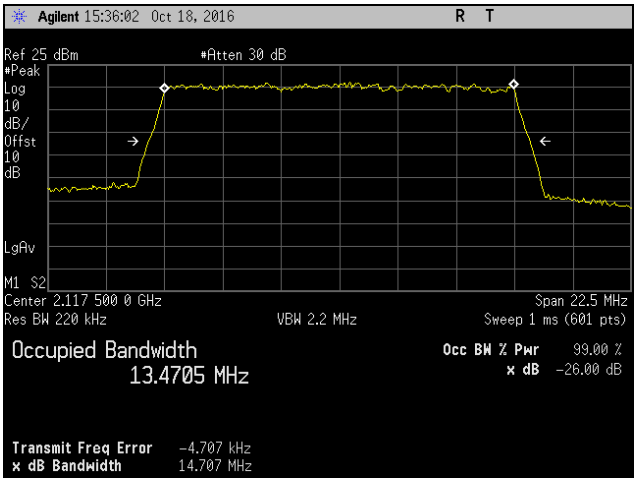
Plot 592. Occupied Bandwidth, QAM-64, Low Channel, Band 10, Port 1, 15 MHz



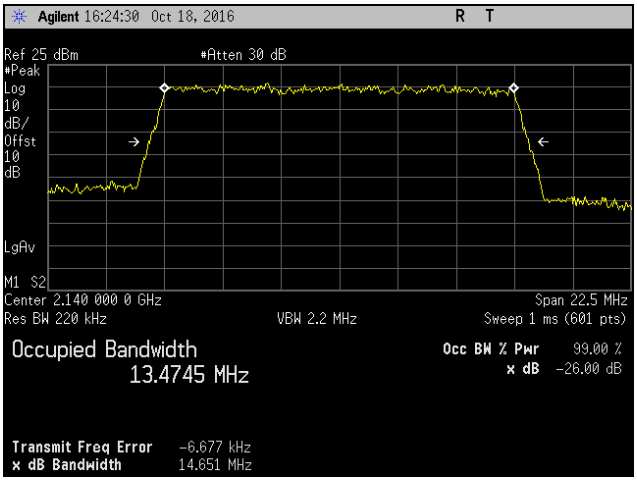
Plot 593. Occupied Bandwidth, QAM-64, Mid Channel, Band 10, Port 1, 15 MHz



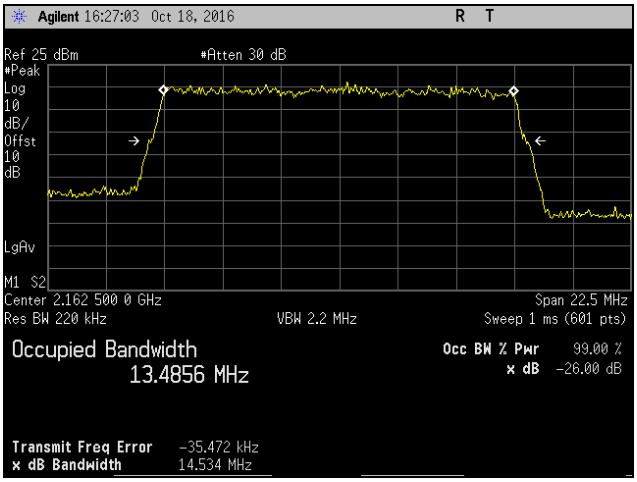
Plot 594. Occupied Bandwidth, QAM-64, High Channel, Band 10, Port 1, 15 MHz



Plot 595. Occupied Bandwidth, QPSK, Low Channel, Band 10, Port 1, 15 MHz

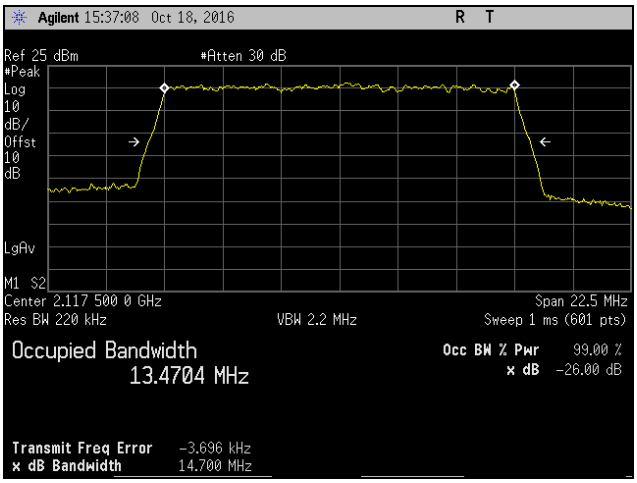


Plot 596. Occupied Bandwidth, QPSK, Mid Channel, Band 10, Port 1, 15 MHz

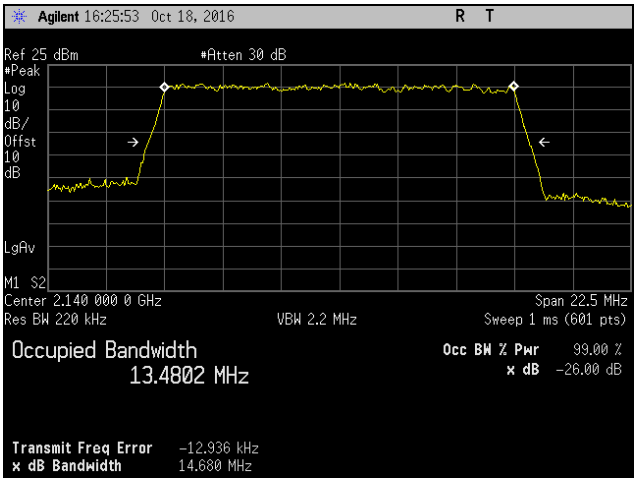


Plot 597. Occupied Bandwidth, QPSK, High Channel, Band 10, Port 1, 15 MHz

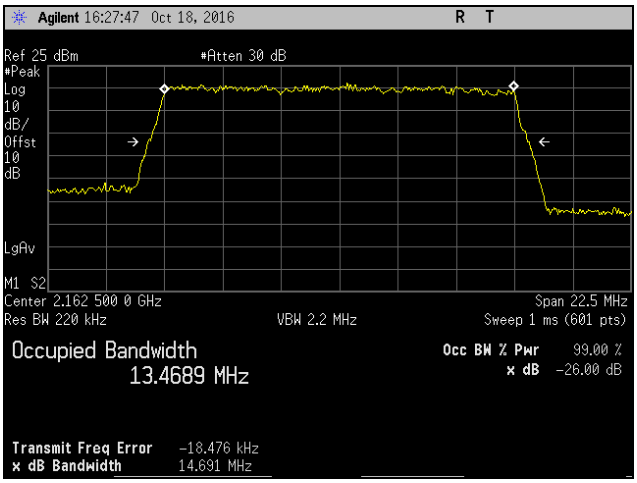
Occupied Bandwidth, Band 10, Port 2, 15 MHz



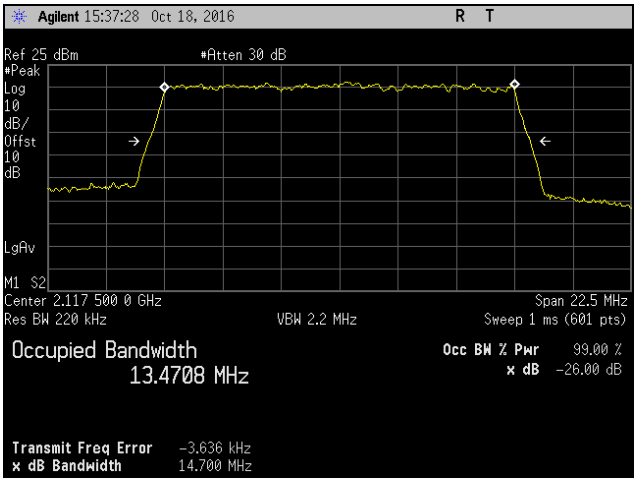
Plot 598. Occupied Bandwidth, -QAM-16, Low Channel, Band 10, Port 2, 15 MHz



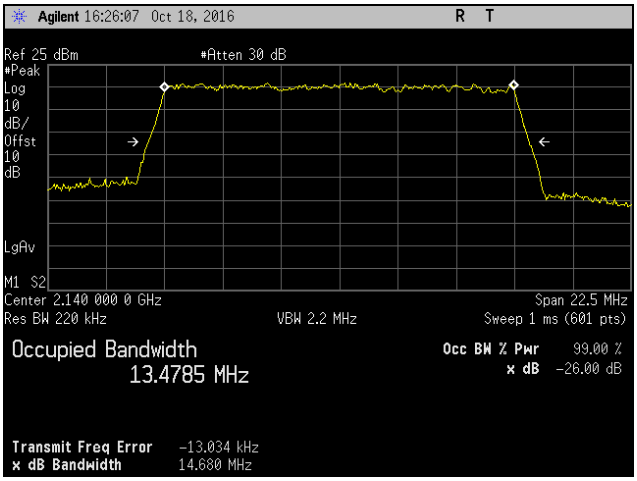
Plot 599. Occupied Bandwidth, QAM-16, Mid Channel, Band 10, Port 2, 15 MHz



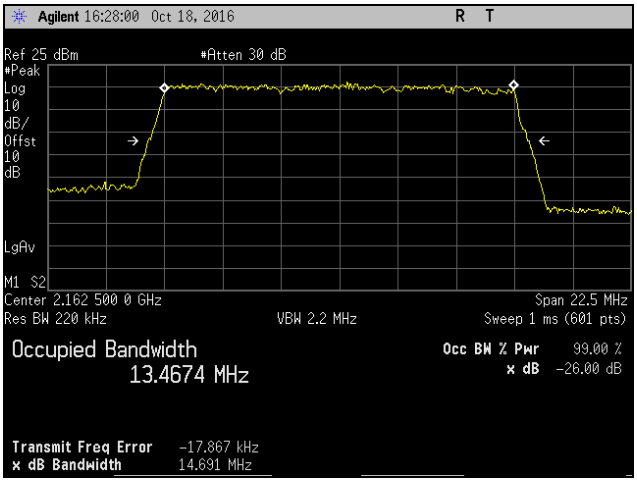
Plot 600. Occupied Bandwidth, QAM-16, High Channel, Band 10, Port 2, 15 MHz



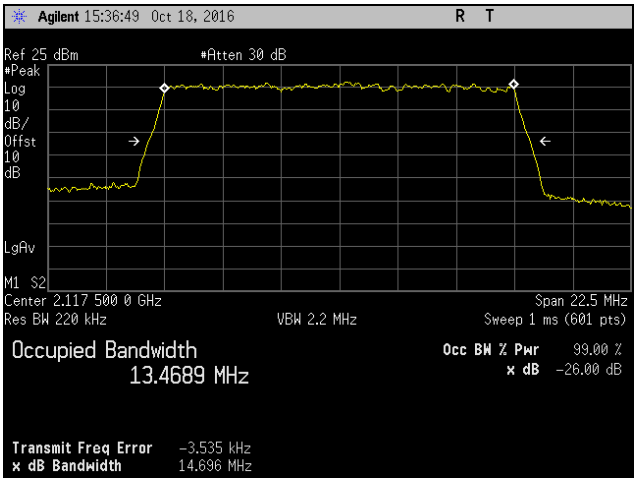
Plot 601. Occupied Bandwidth, QAM-64, Low Channel, Band 10, Port 2, 15 MHz



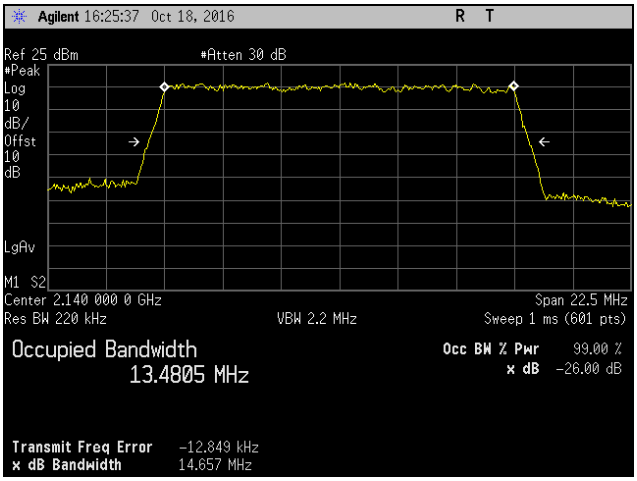
Plot 602. Occupied Bandwidth, QAM-64, Mid Channel, Band 10, Port 2, 15 MHz



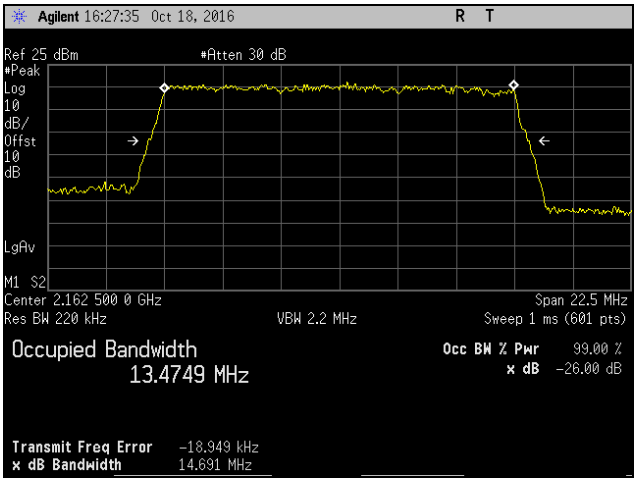
Plot 603. Occupied Bandwidth, QAM-64, High Channel, Band 10, Port 2, 15 MHz



Plot 604. Occupied Bandwidth, QPSK, Low Channel, Band 10, Port 2, 15 MHz

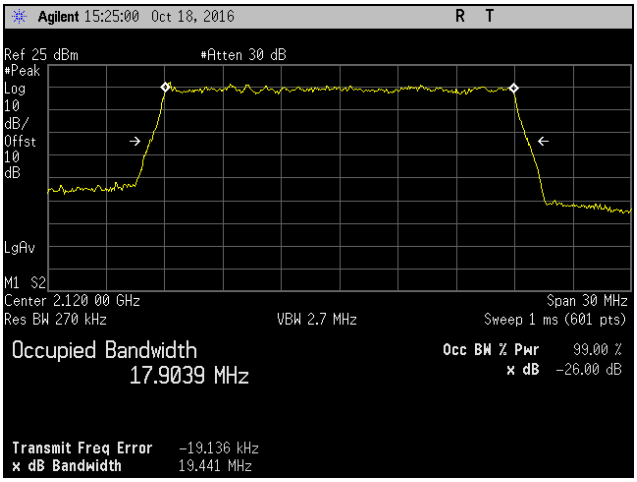


Plot 605. Occupied Bandwidth, QPSK, Mid Channel, Band 10, Port 2, 15 MHz

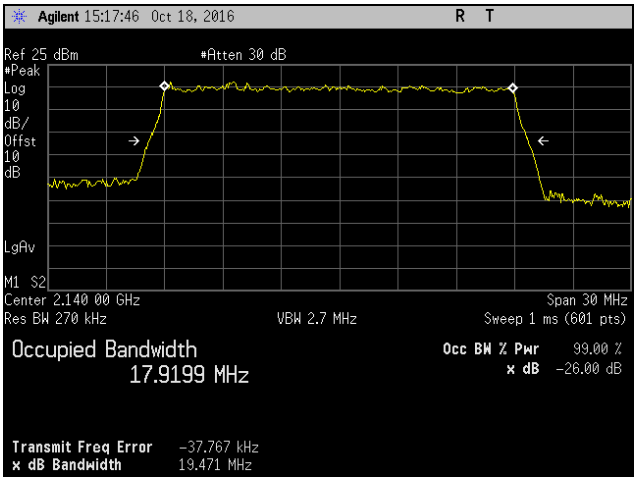


Plot 606. Occupied Bandwidth, QPSK, High Channel, Band 10, Port 2, 15 MHz

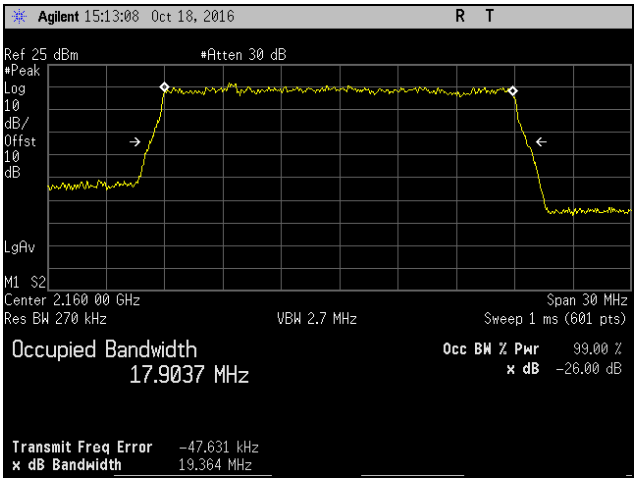
Occupied Bandwidth, Band 10, Port 1, 20 MHz



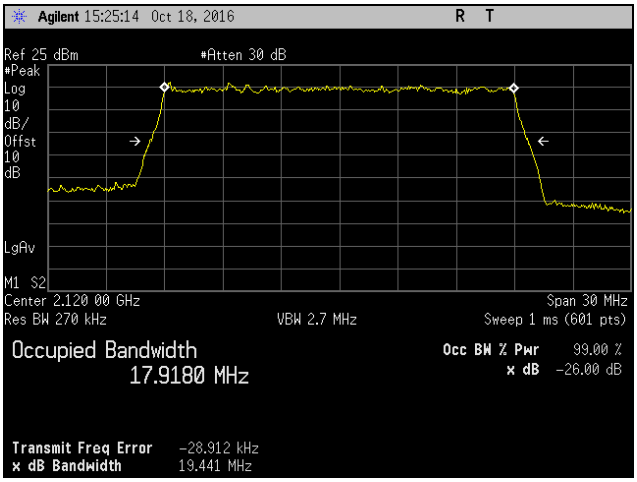
Plot 607. Occupied Bandwidth, QAM-16, Low Channel, Band 10, Port 1, 20 MHz



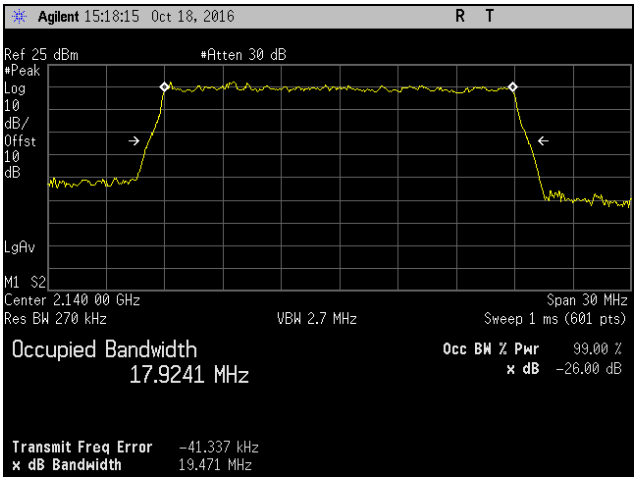
Plot 608. Occupied Bandwidth, QAM-16, Mid Channel, Band 10, Port 1, 20 MHz



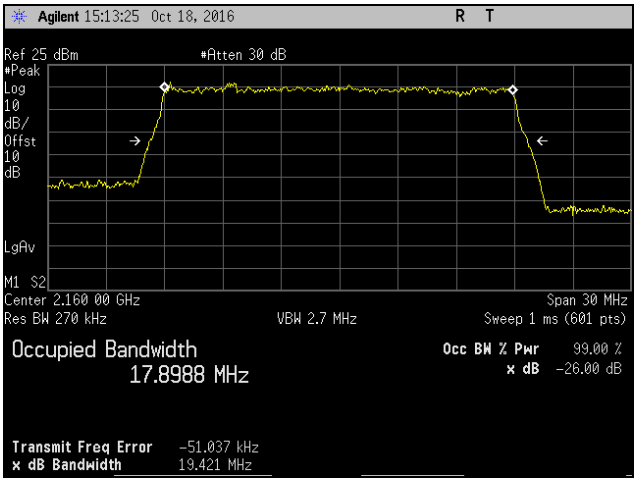
Plot 609. Occupied Bandwidth, QAM-16, High Channel, Band 10, Port 1, 20 MHz



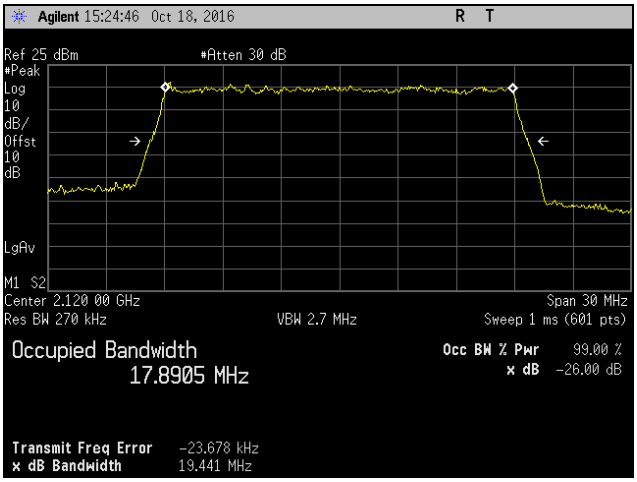
Plot 610. Occupied Bandwidth, QAM-64, Low Channel, Band 10, Port 1, 20 MHz



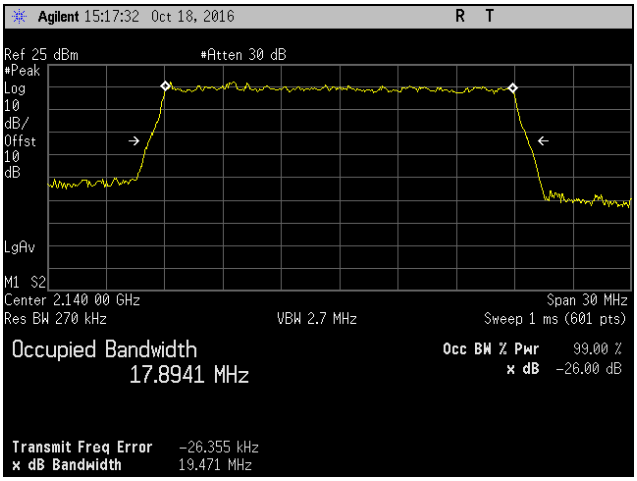
Plot 611. Occupied Bandwidth, QAM-64, Mid Channel, Band 10, Port 1, 20 MHz



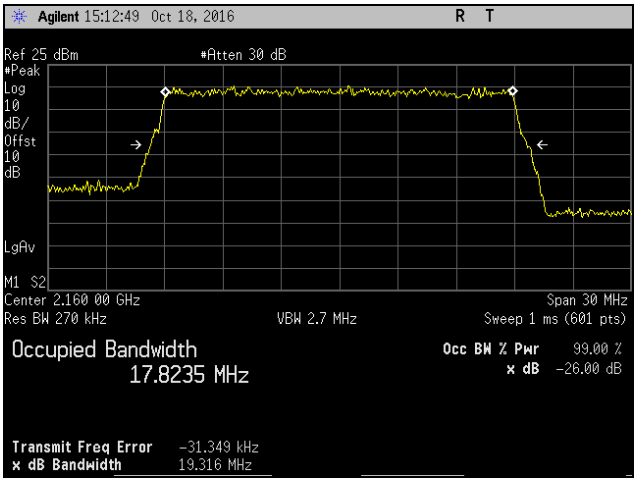
Plot 612. Occupied Bandwidth, QAM-64, High Channel, Band 10, Port 1, 20 MHz



Plot 613. Occupied Bandwidth, QPSK, Low Channel, Band 10, Port 1, 20 MHz

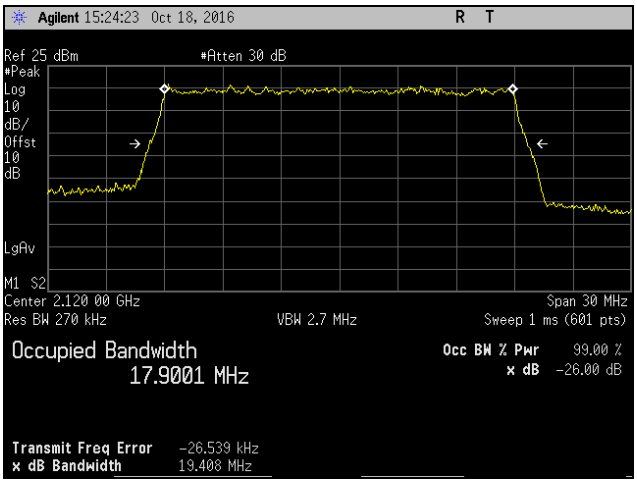


Plot 614. Occupied Bandwidth, QPSK, Mid Channel, Band 10, Port 1, 20 MHz

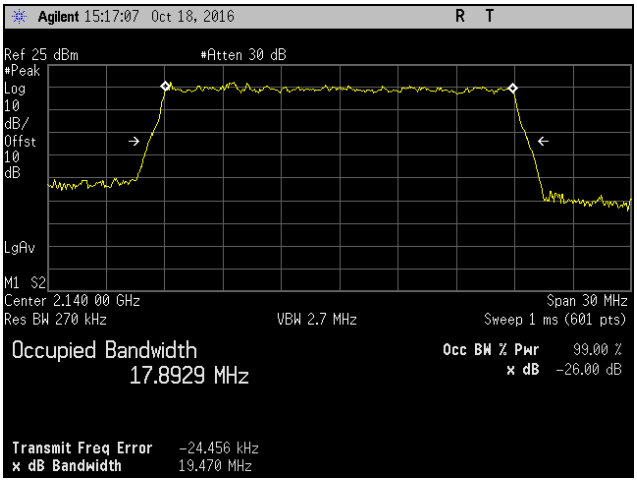


Plot 615. Occupied Bandwidth, QPSK, High Channel, Band 10, Port 1, 20 MHz

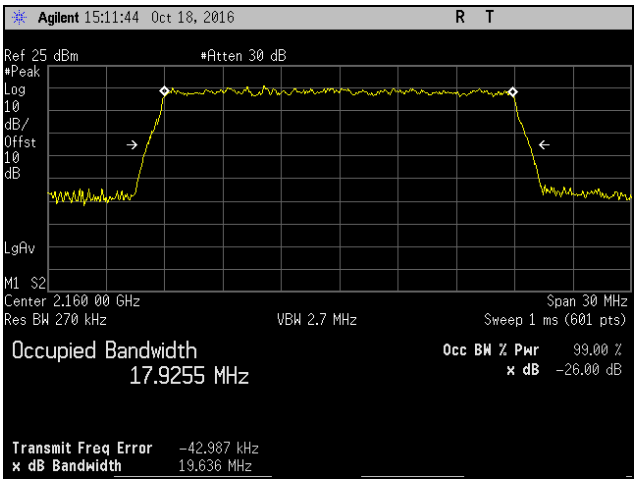
Occupied Bandwidth, Band 10, Port 2



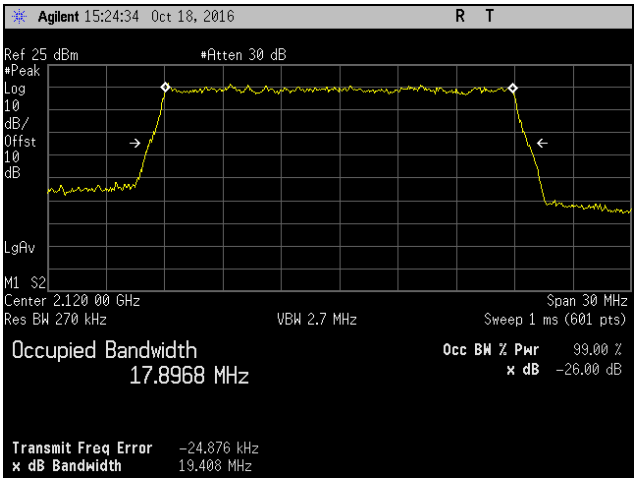
Plot 616. Occupied Bandwidth, -QAM-16, Low Channel, Band 10, Port 2, 20 MHz



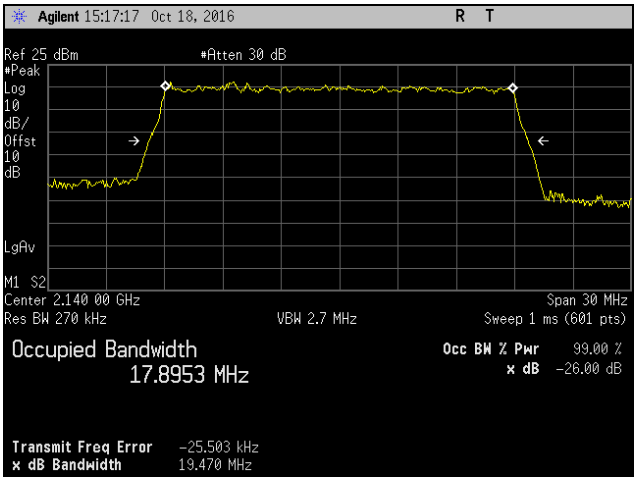
Plot 617. Occupied Bandwidth, QAM-16, Mid Channel, Band 10, Port 2, 20 MHz



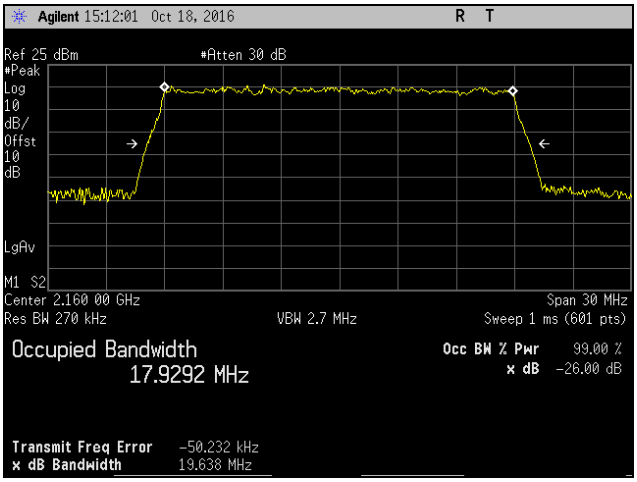
Plot 618. Occupied Bandwidth, QAM-16, High Channel, Band 10, Port 2, 20 MHz



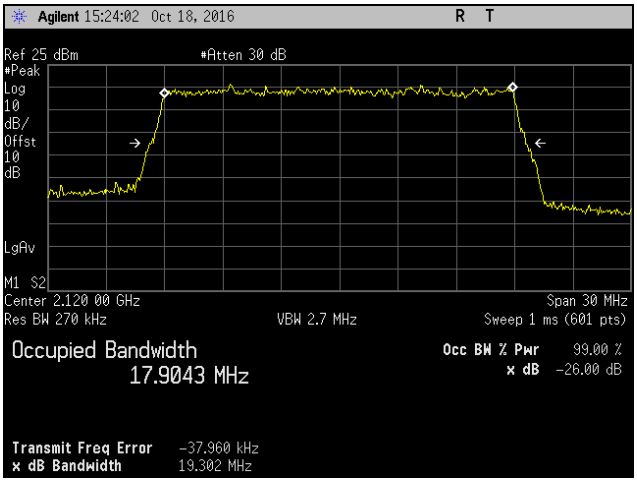
Plot 619. Occupied Bandwidth, QAM-64, Low Channel, Band 10, Port 2, 20 MHz



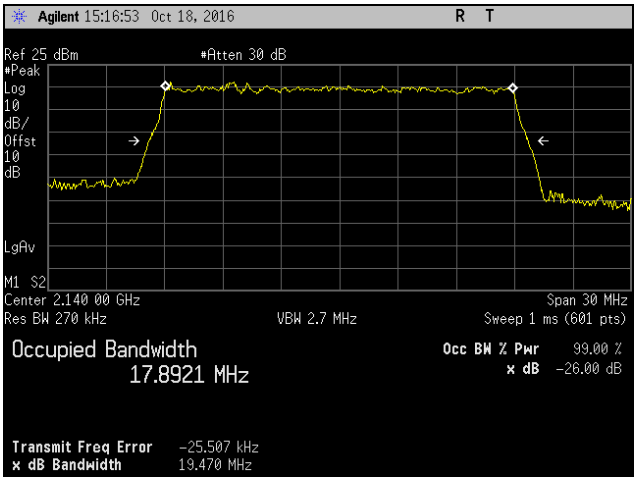
Plot 620. Occupied Bandwidth, QAM-64, Mid Channel, Band 10, Port 2, 20 MHz



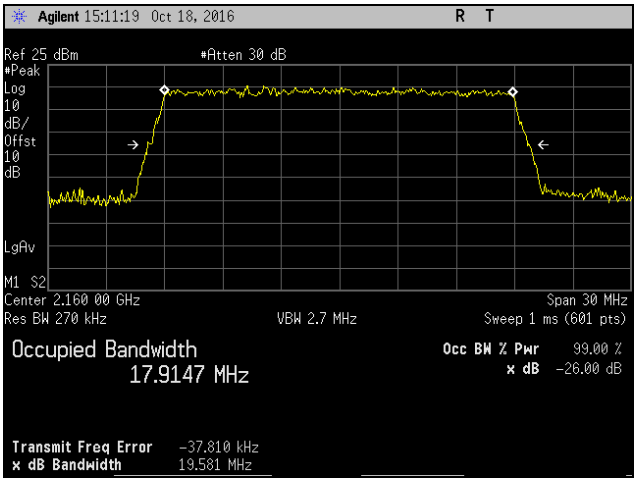
Plot 621. Occupied Bandwidth, QAM-64, High Channel, Band 10, Port 2, 20 MHz



Plot 622. Occupied Bandwidth, QPSK, Low Channel, Band 10, Port 2, 20 MHz

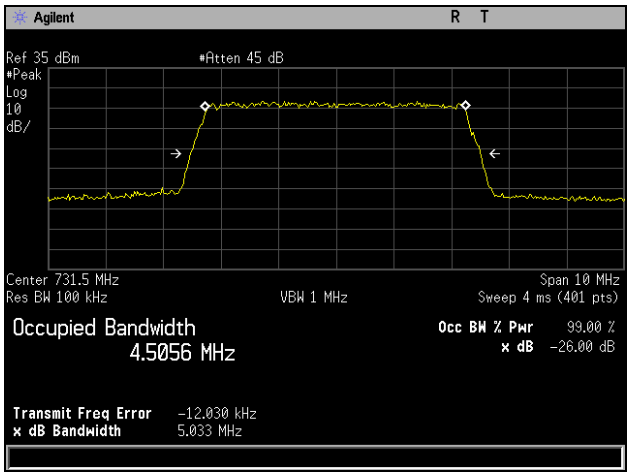


Plot 623. Occupied Bandwidth, QPSK, Mid Channel, Band 10, Port 2, 20 MHz

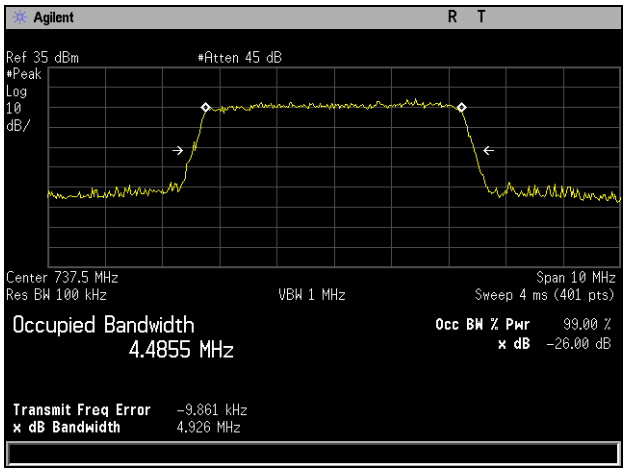


Plot 624. Occupied Bandwidth, QPSK, High Channel, Band 10, Port 2, 20 MHz

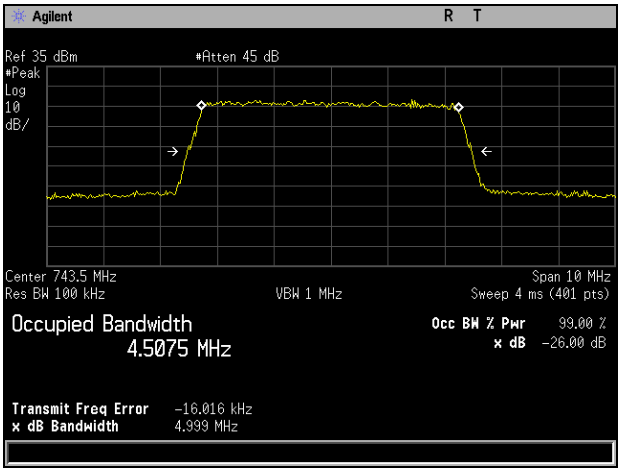
Occupied Bandwidth, Band 12, Port 1, 5 MHz



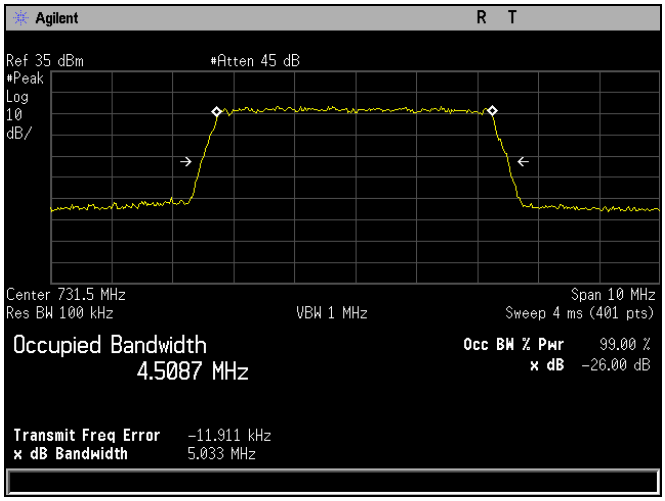
Plot 625. Occupied Bandwidth, QAM-16, Low Channel, Band 12, Port 1, 5 MHz



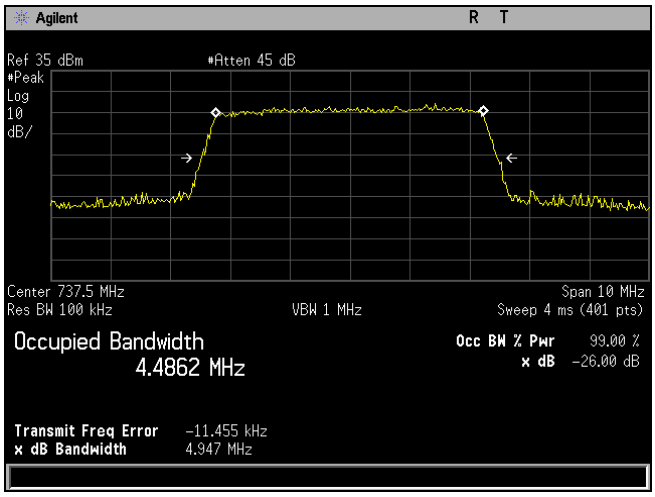
Plot 626. Occupied Bandwidth, QAM-16, Mid Channel, Band 12, Port 1, 5 MHz



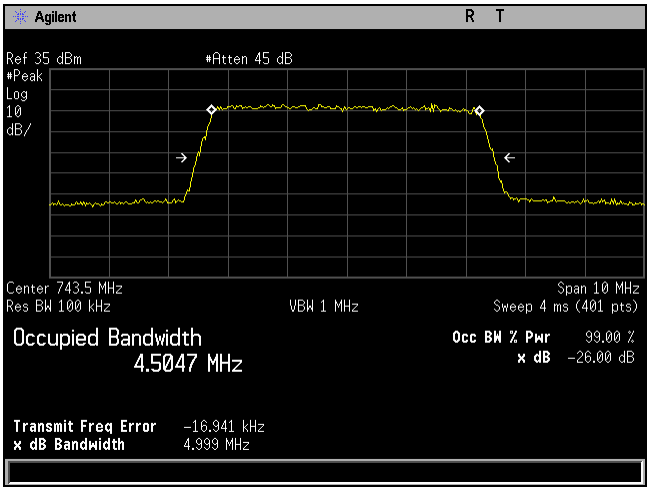
Plot 627. Occupied Bandwidth, QAM-16, High Channel, Band 12, Port 1, 5 MHz



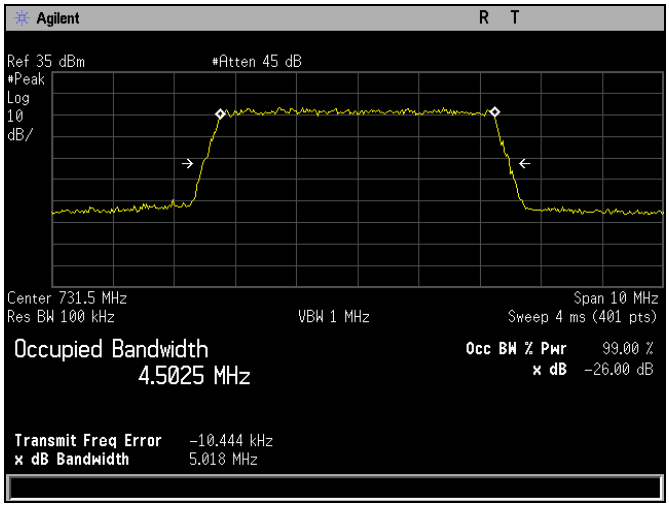
Plot 628. Occupied Bandwidth, QAM-64, Low Channel, Band 12, Port 1, 5 MHz



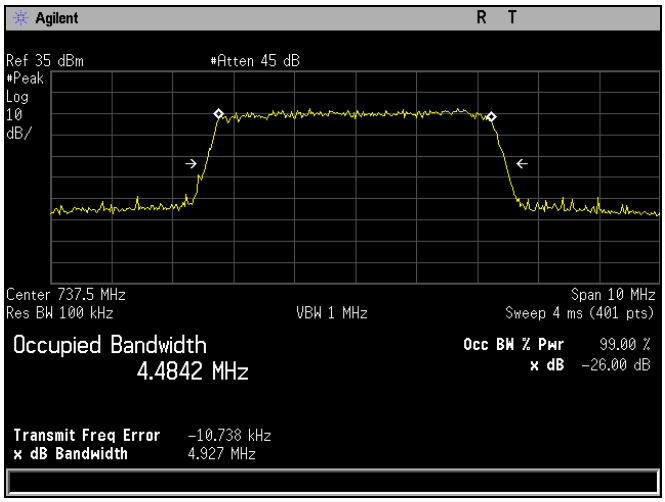
Plot 629. Occupied Bandwidth, QAM-64, Mid Channel, Band 12, Port 1, 5 MHz



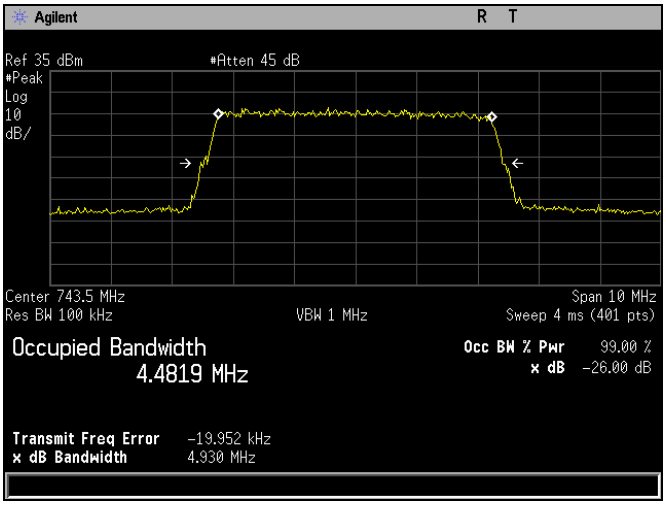
Plot 630. Occupied Bandwidth, QAM-64, High Channel, Band 12, Port 1, 5 MHz



Plot 631. Occupied Bandwidth, QPSK, Low Channel, Band 12, Port 1, 5 MHz

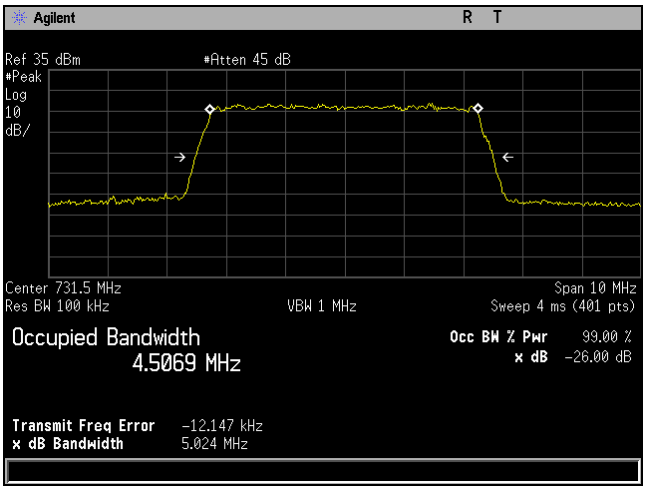


Plot 632. Occupied Bandwidth, QPSK, Mid Channel, Band 12, Port 1, 5 MHz

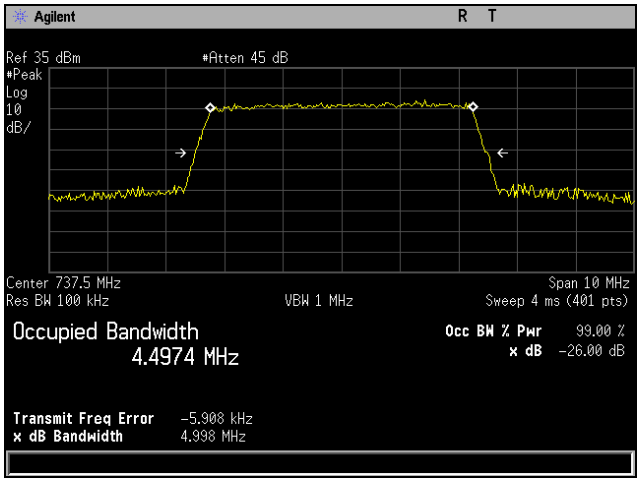


Plot 633. Occupied Bandwidth, QPSK, High Channel, Band 12, Port 1, 5 MHz

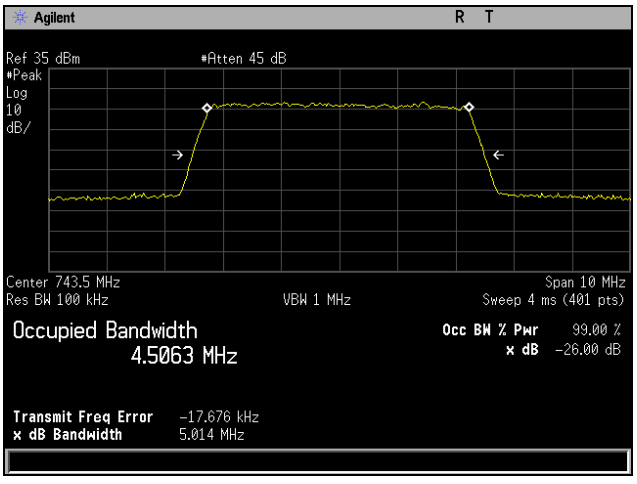
Occupied Bandwidth, Band 12, Port 2, 5 MHz



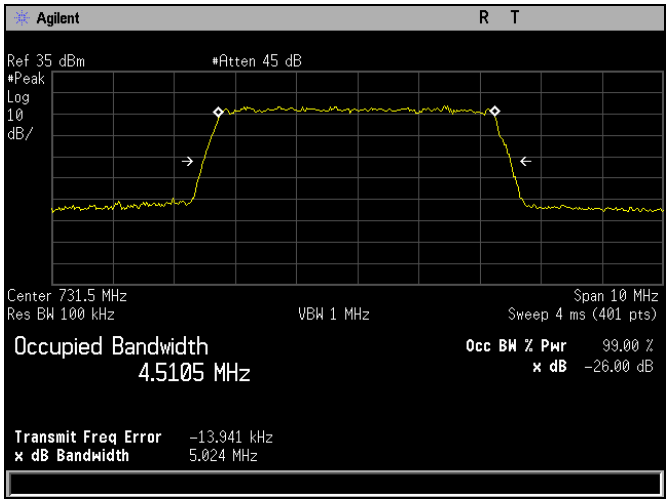
Plot 634. Occupied Bandwidth, QAM-16, Low Channel, Band 12, Port 2, 5 MHz



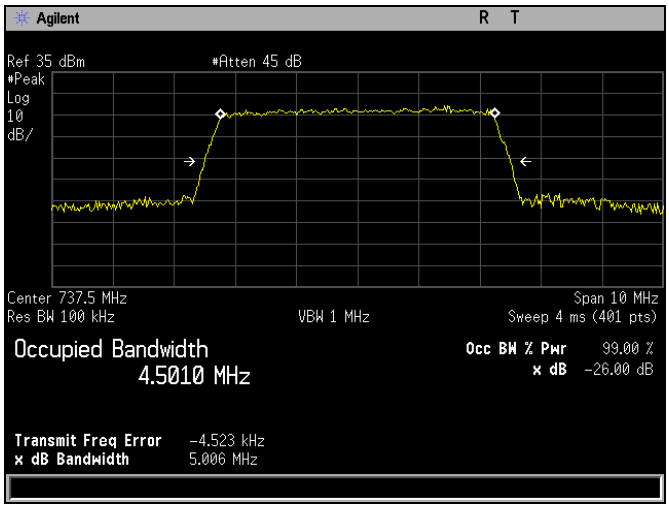
Plot 635. Occupied Bandwidth, QAM-16, Mid Channel, Band 12, Port 2, 5 MHz



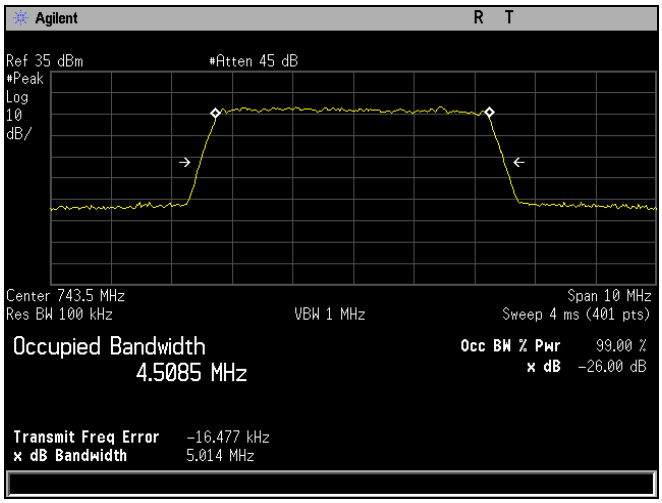
Plot 636. Occupied Bandwidth, QAM-16, High Channel, Band 12, Port 2, 5 MHz



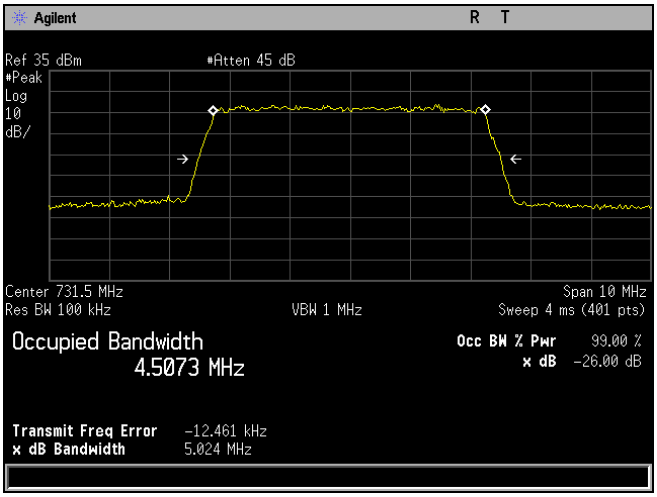
Plot 637. Occupied Bandwidth, QAM-64, Low Channel, Band 12, Port 2, 5 MHz



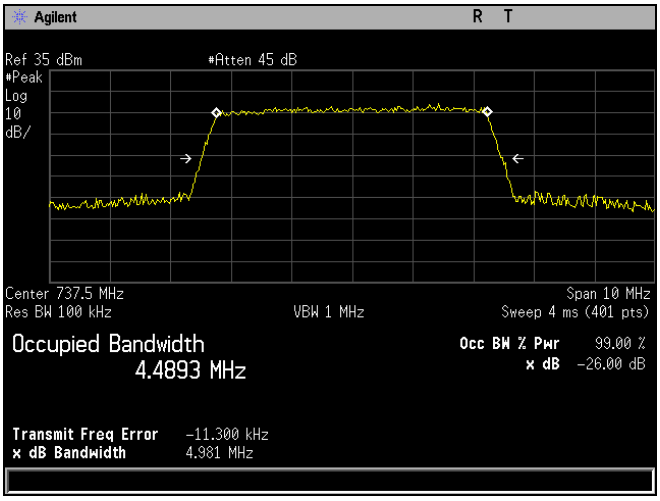
Plot 638. Occupied Bandwidth, QAM-64, Mid Channel, Band 12, Port 2, 5 MHz



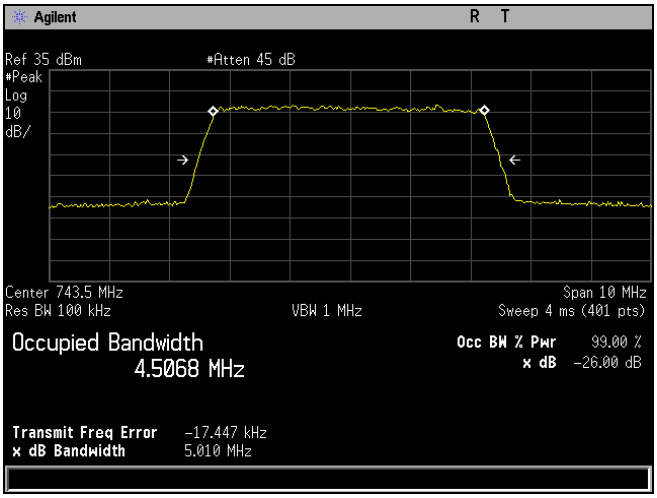
Plot 639. Occupied Bandwidth, QAM-64, High Channel, Band 12, Port 2, 5 MHz



Plot 640. Occupied Bandwidth, QPSK, Low Channel, Band 12, Port 2, 5 MHz

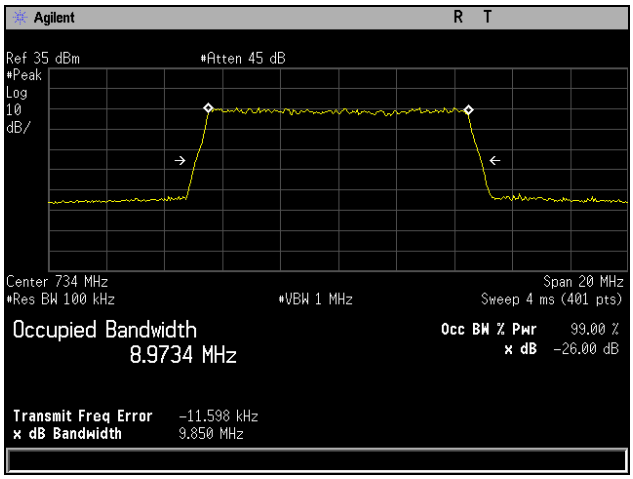


Plot 641. Occupied Bandwidth, QPSK, Mid Channel, Band 12, Port 2, 5 MHz

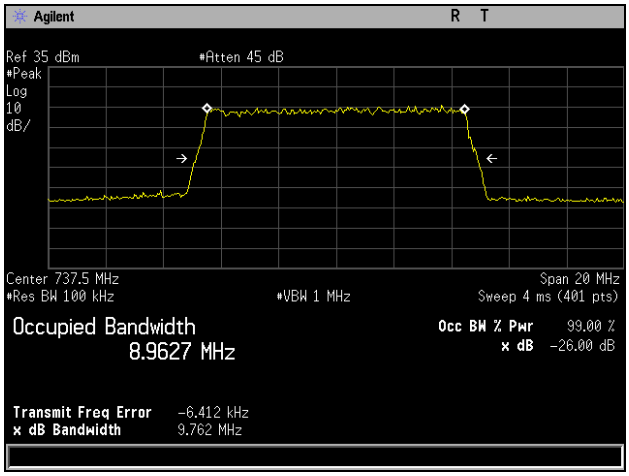


Plot 642. Occupied Bandwidth, QPSK, High Channel, Band 12, Port 2, 5 MHz

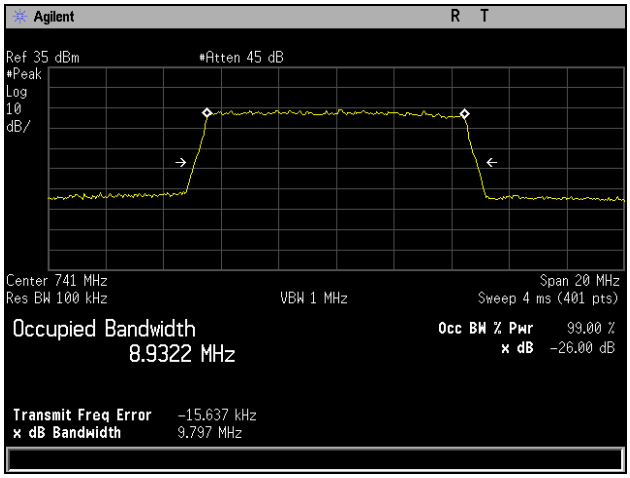
Occupied Bandwidth, Band 12, Port 1, 10 MHz



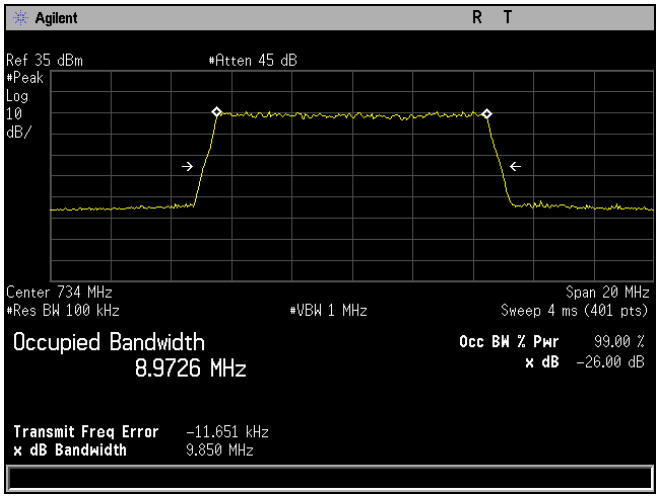
Plot 643. Occupied Bandwidth, QAM-16, Low Channel, Band 12, Port 1, 10 MHz



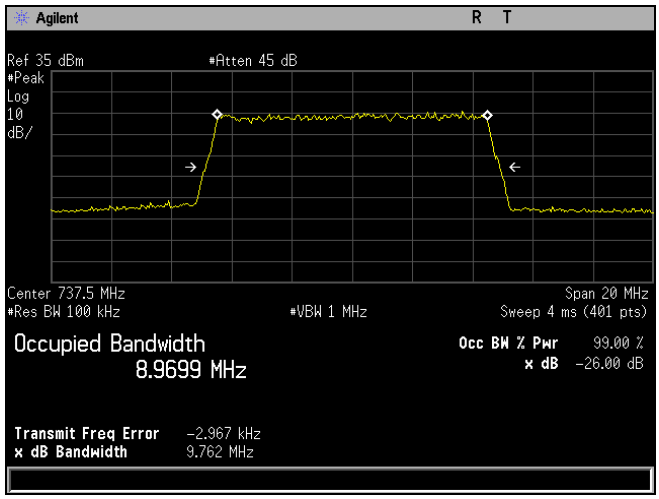
Plot 644. Occupied Bandwidth, QAM-16, Mid Channel, Band 12, Port 1, 10 MHz



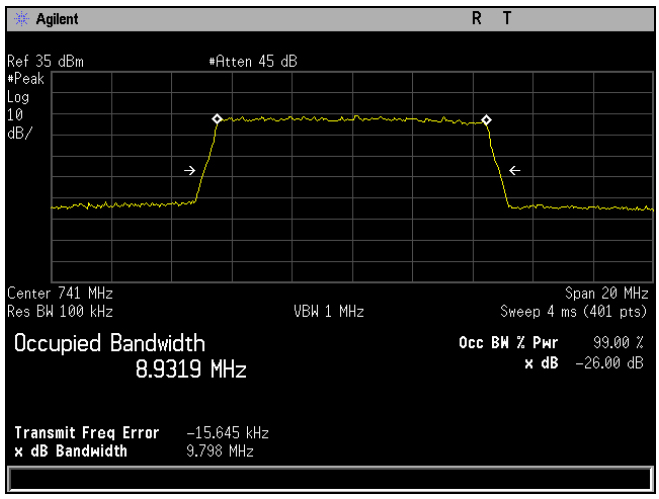
Plot 645. Occupied Bandwidth, QAM-16, High Channel, Band 12, Port 1, 10 MHz



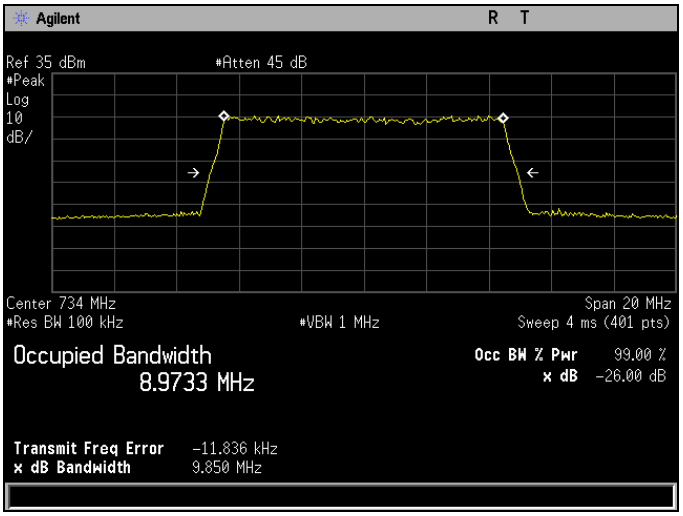
Plot 646. Occupied Bandwidth, QAM-64, Low Channel, Band 12, Port 1, 10 MHz



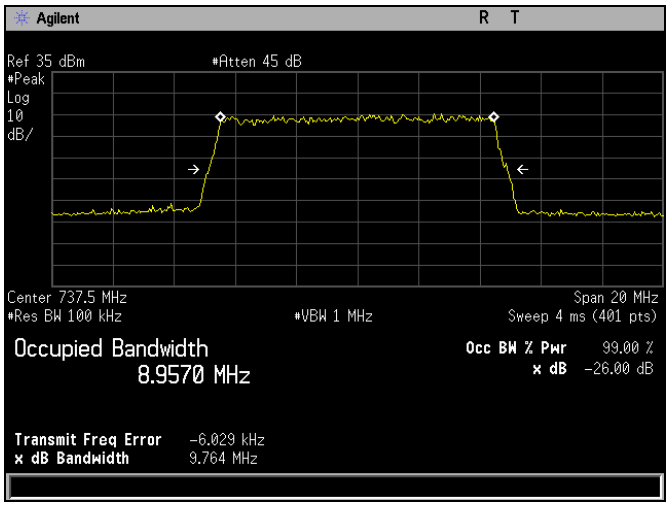
Plot 647. Occupied Bandwidth, QAM-64, Mid Channel, Band 12, Port 1, 10 MHz



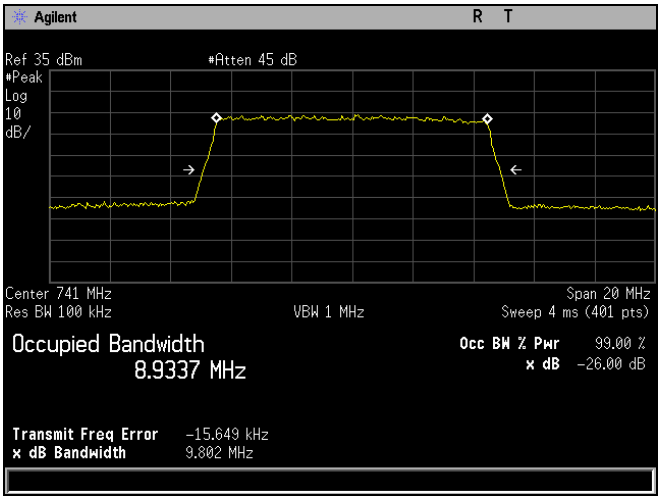
Plot 648. Occupied Bandwidth, QAM-64, High Channel, Band 12, Port 1, 10 MHz



Plot 649. Occupied Bandwidth, QPSK, Low Channel, Band 12, Port 1, 10 MHz

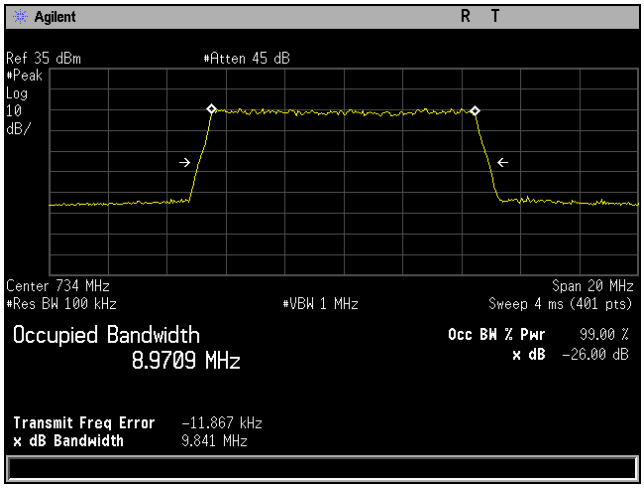


Plot 650. Occupied Bandwidth, QPSK, Mid Channel, Band 12, Port 1, 10 MHz

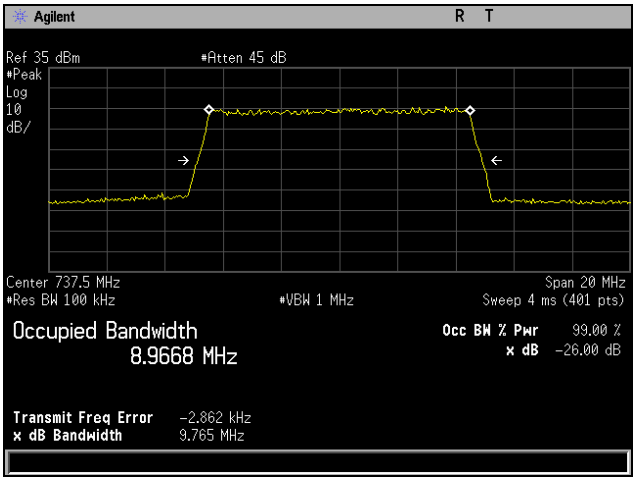


Plot 651. Occupied Bandwidth, QPSK, High Channel, Band 12, Port 1, 10 MHz

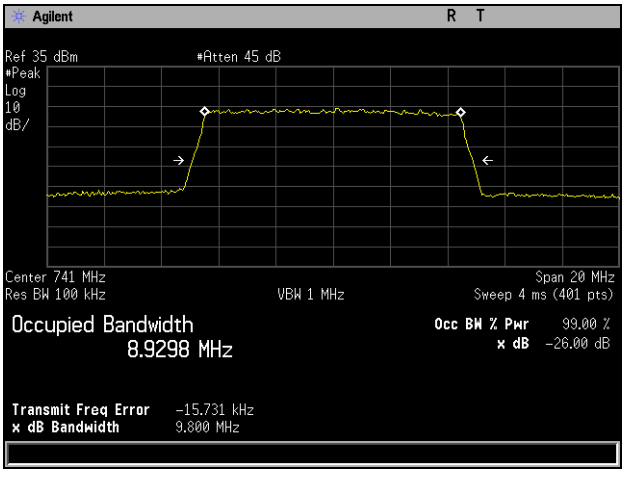
Occupied Bandwidth, Band 12, Port 2, 10 MHz



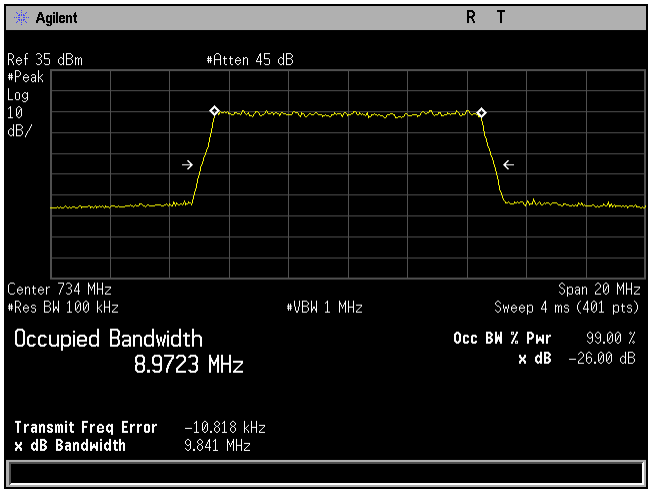
Plot 652. Occupied Bandwidth, QAM-16, Low Channel, Band 12, Port 2, 10 MHz



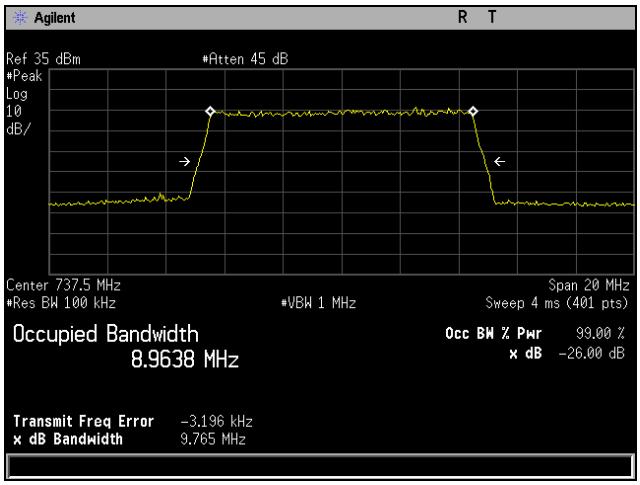
Plot 653. Occupied Bandwidth, QAM-16, Mid Channel, Band 12, Port 2, 10 MHz



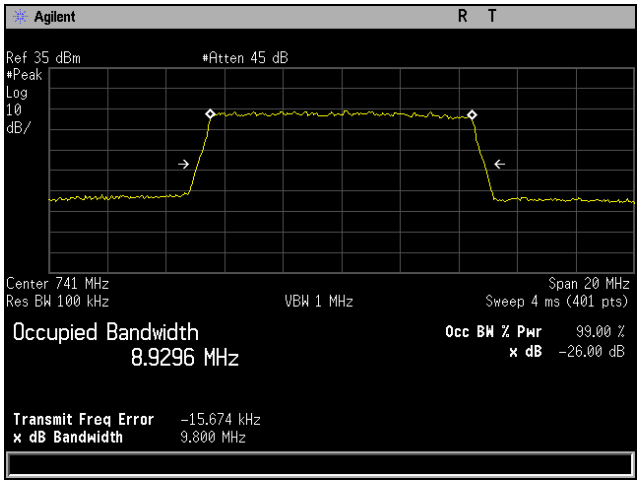
Plot 654. Occupied Bandwidth, QAM-16, High Channel, Band 12, Port 2, 10 MHz



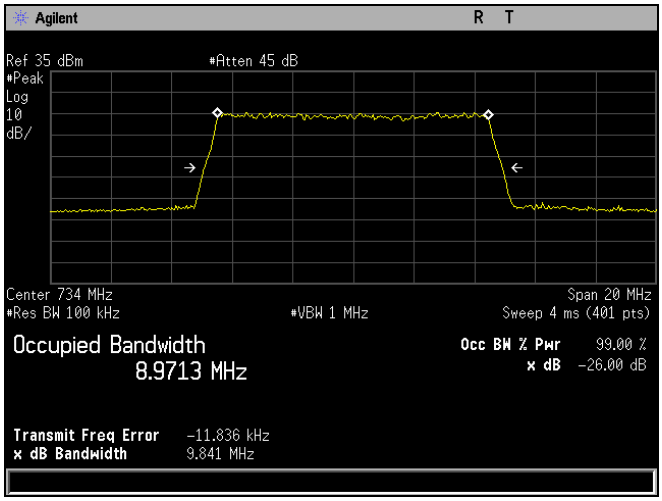
Plot 655. Occupied Bandwidth, QAM-64, Low Channel, Band 12, Port 2, 10 MHz



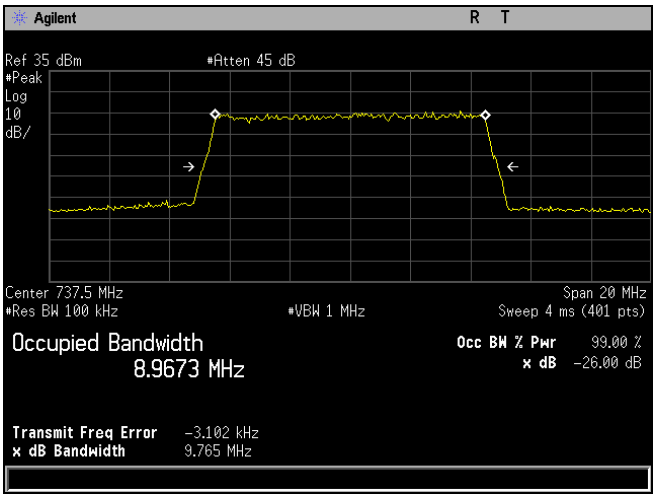
Plot 656. Occupied Bandwidth, QAM-64, Mid Channel, Band 12, Port 2, 10 MHz



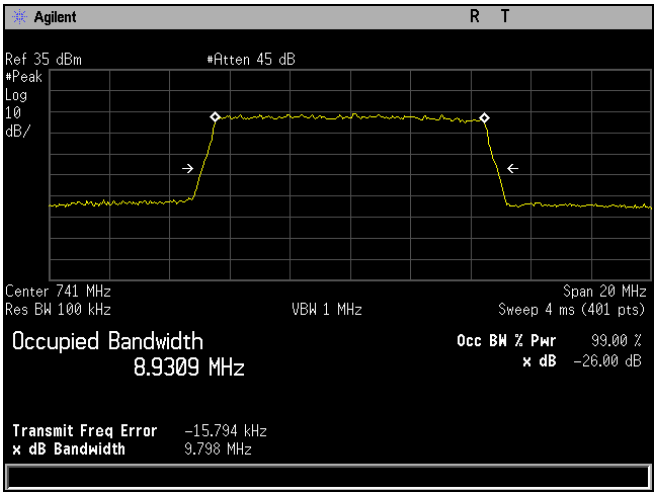
Plot 657. Occupied Bandwidth, QAM-64, High Channel, Band 12, Port 2, 10 MHz



Plot 658. Occupied Bandwidth, QPSK, Low Channel, Band 12, Port 2, 10 MHz

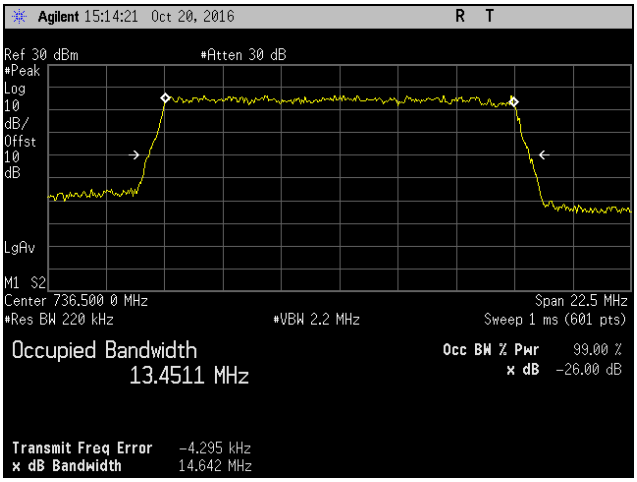


Plot 659. Occupied Bandwidth, QPSK, Mid Channel, Band 12, Port 2, 10 MHz

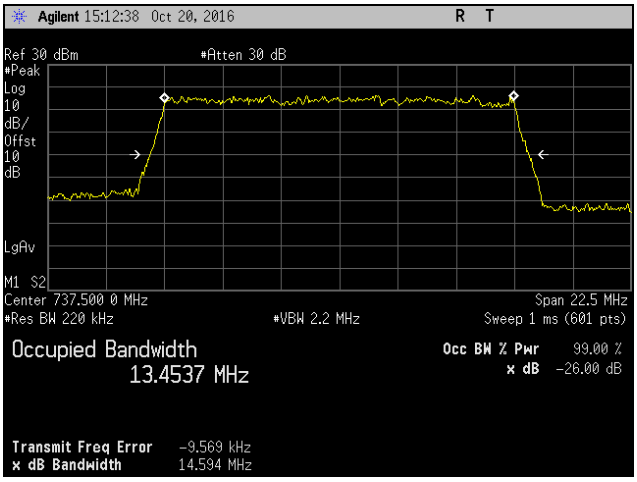


Plot 660. Occupied Bandwidth, QPSK, High Channel, Band 12, Port 2, 10 MHz

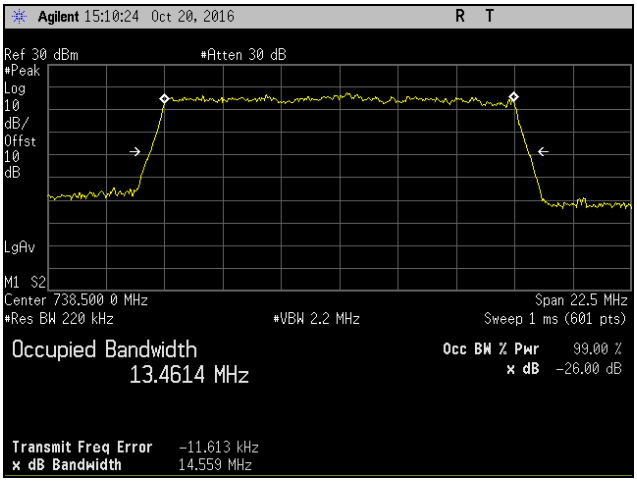
Occupied Bandwidth, Band 12, Port 1, 15 MHz



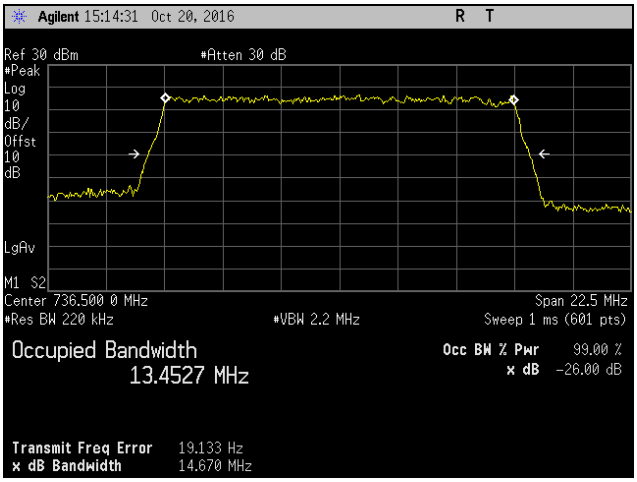
Plot 661. Occupied Bandwidth, QAM-16, Low Channel, Band 12, Port 1, 15 MHz



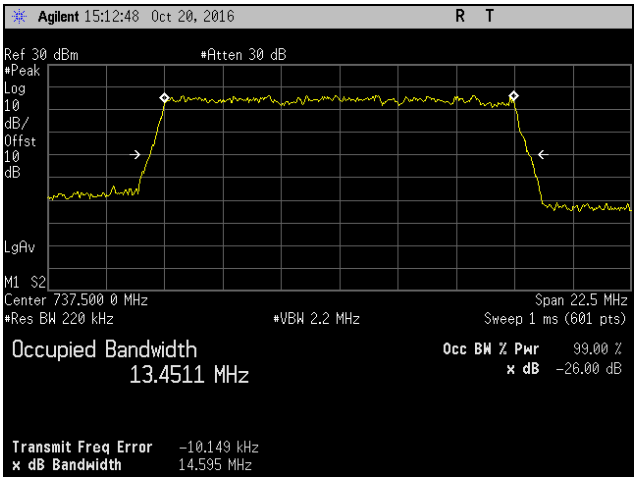
Plot 662. Occupied Bandwidth, QAM-16, Mid Channel, Band 12, Port 1, 15 MHz



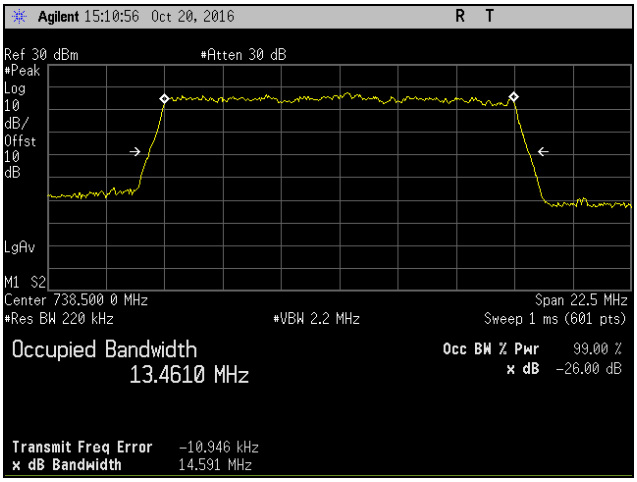
Plot 663. Occupied Bandwidth, QAM-16, High Channel, Band 12, Port 1, 15 MHz



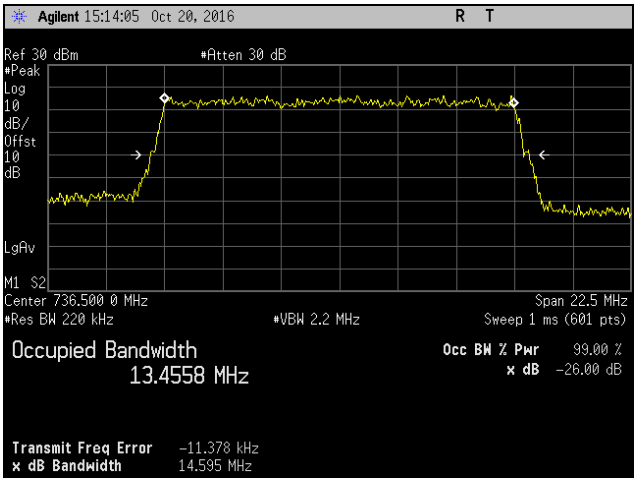
Plot 664. Occupied Bandwidth, QAM-64, Low Channel, Band 12, Port 1, 15 MHz



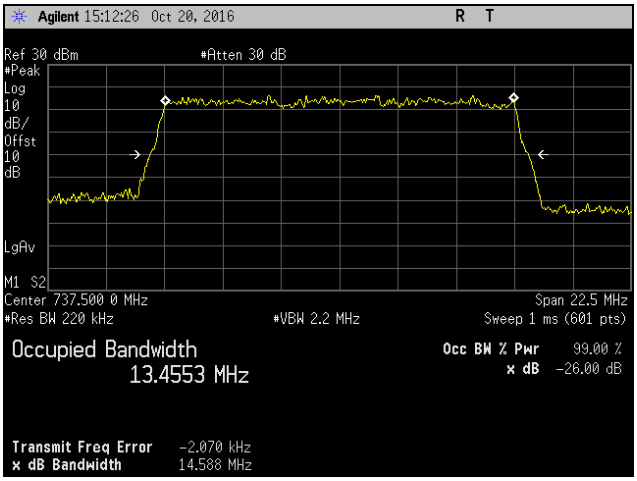
Plot 665. Occupied Bandwidth, QAM-64, Mid Channel, Band 12, Port 1, 15 MHz



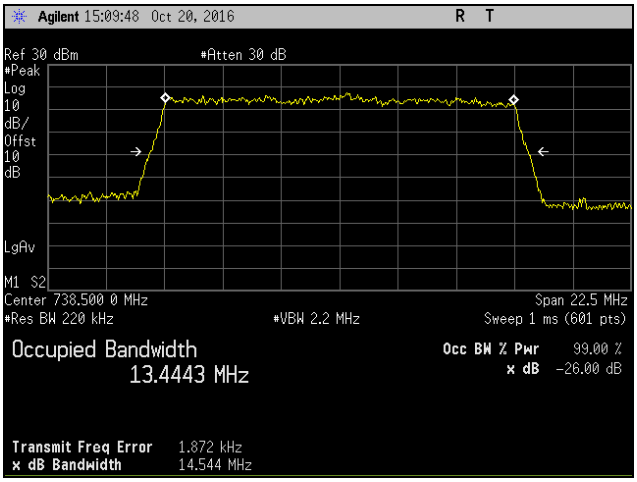
Plot 666. Occupied Bandwidth, QAM-64, High Channel, Band 12, Port 1, 15 MHz



Plot 667. Occupied Bandwidth, QPSK, Low Channel, Band 12, Port 1, 15 MHz

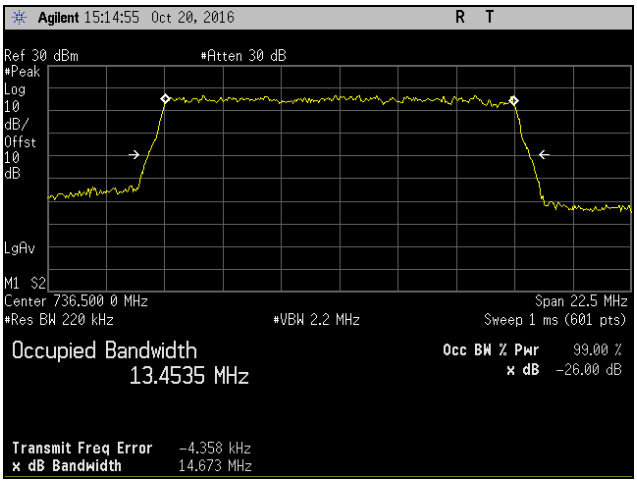


Plot 668. Occupied Bandwidth, QPSK, Mid Channel, Band 12, Port 1, 15 MHz

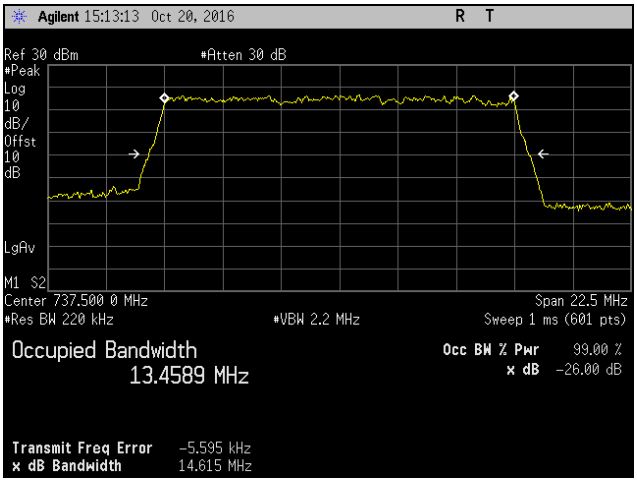


Plot 669. Occupied Bandwidth, QPSK, High Channel, Band 12, Port 1, 15 MHz

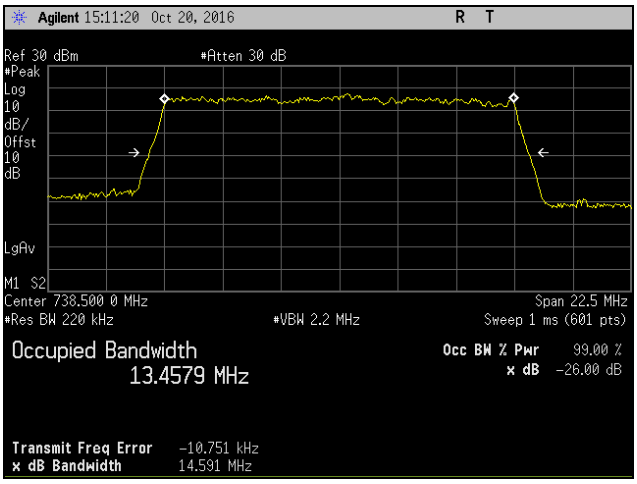
Occupied Bandwidth, Band 12, Port 2, 15 MHz



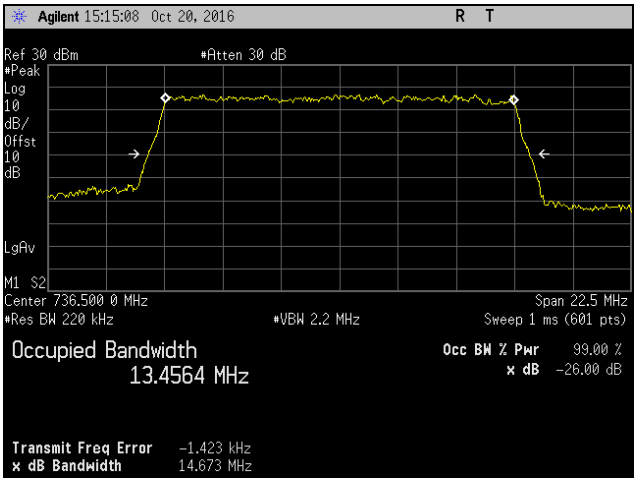
Plot 670. Occupied Bandwidth, -QAM-16, Low Channel, Band 12, Port 2, 15 MHz



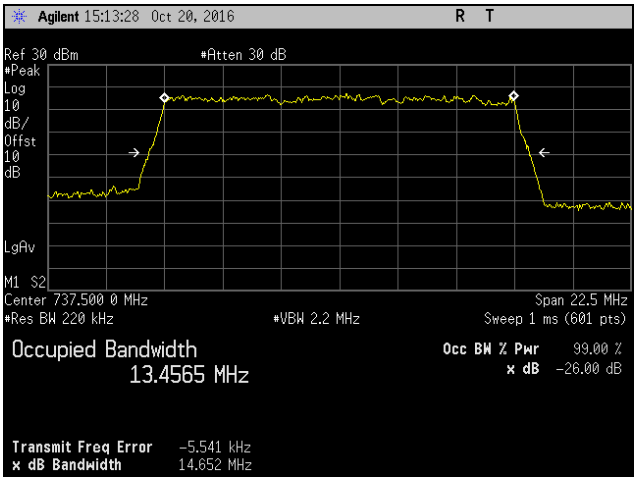
Plot 671. Occupied Bandwidth, QAM-16, Mid Channel, Band 12, Port 2, 15 MHz



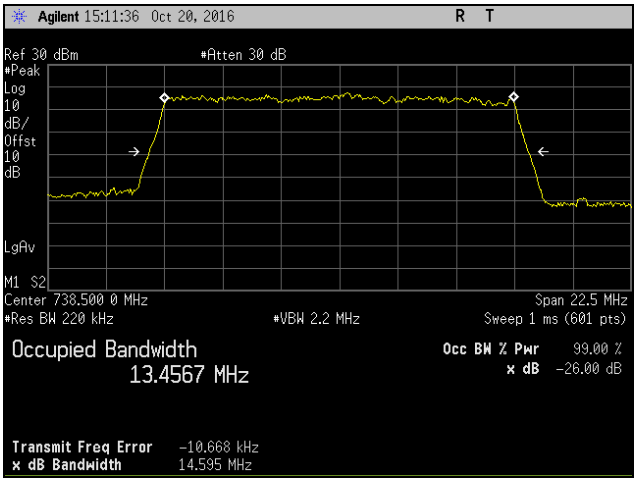
Plot 672. Occupied Bandwidth, QAM-16, High Channel, Band 12, Port 2, 15 MHz



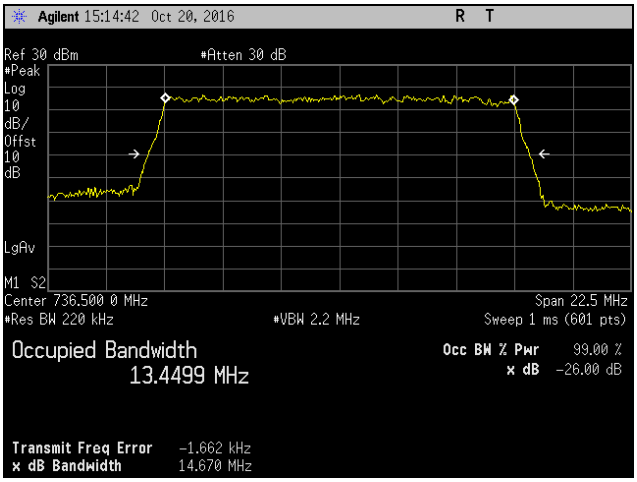
Plot 673. Occupied Bandwidth, QAM-64, Low Channel, Band 12, Port 2, 15 MHz



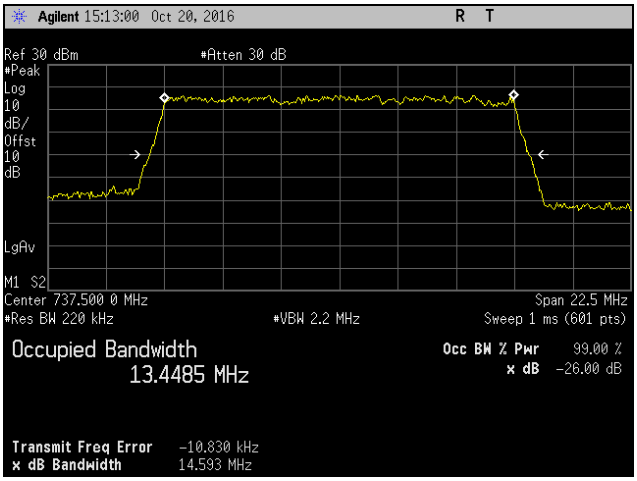
Plot 674. Occupied Bandwidth, QAM-64, Mid Channel, Band 12, Port 2, 15 MHz



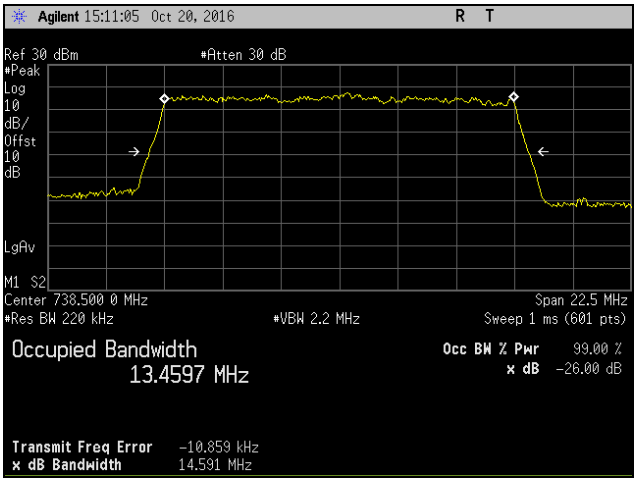
Plot 675. Occupied Bandwidth, QAM-64, High Channel, Band 12, Port 2, 15 MHz



Plot 676. Occupied Bandwidth, QPSK, Low Channel, Band 12, Port 2, 15 MHz

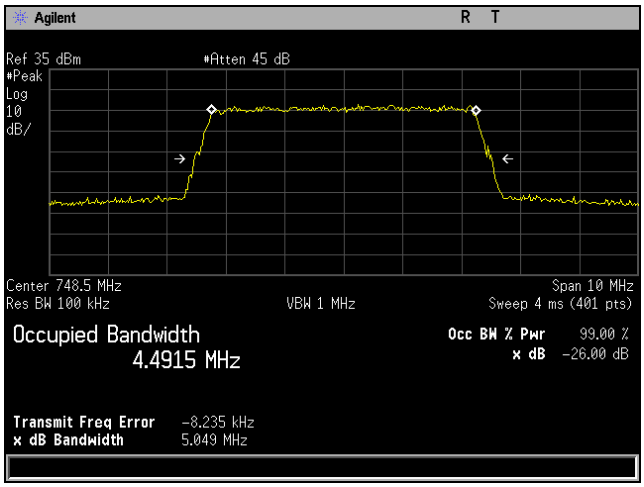


Plot 677. Occupied Bandwidth, QPSK, Mid Channel, Band 12, Port 2, 15 MHz

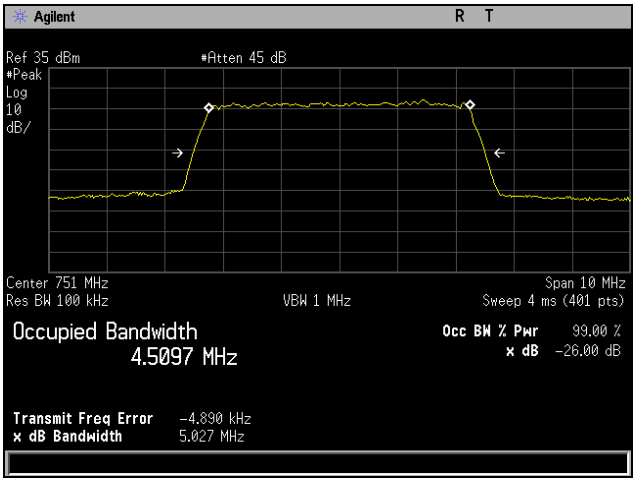


Plot 678. Occupied Bandwidth, QPSK, High Channel, Band 12, Port 2, 15 MHz

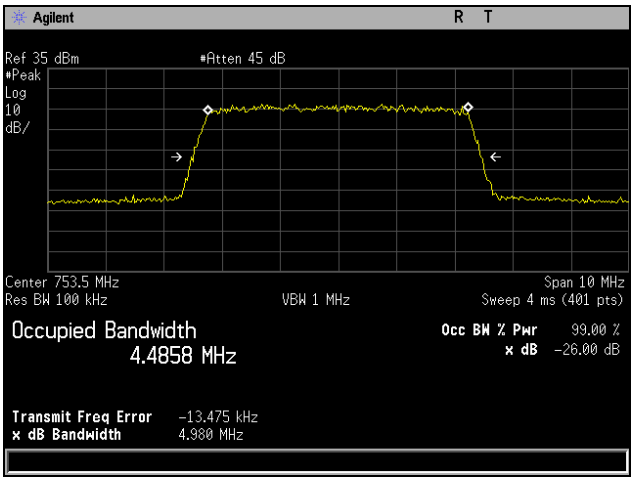
Occupied Bandwidth, Band 13, Port 1, 5 MHz



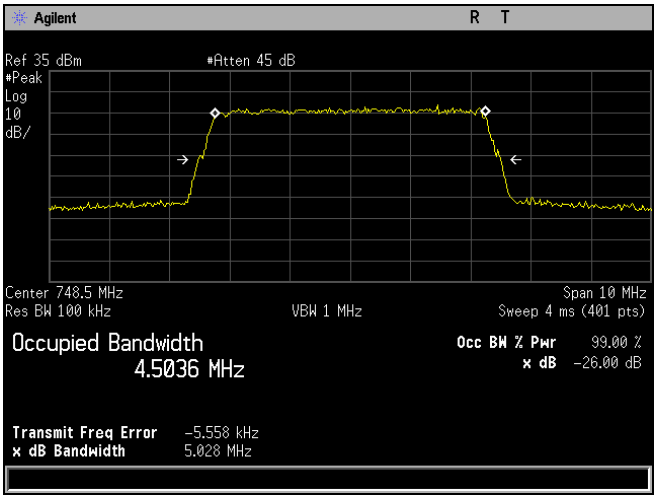
Plot 679. Occupied Bandwidth, QAM-16, Low Channel, Band 13, Port 1, 5 MHz



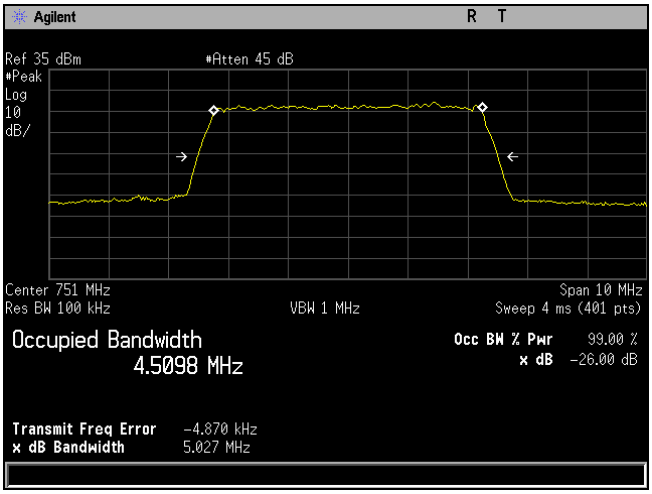
Plot 680. Occupied Bandwidth, QAM-16, Mid Channel, Band 13, Port 1, 5 MHz



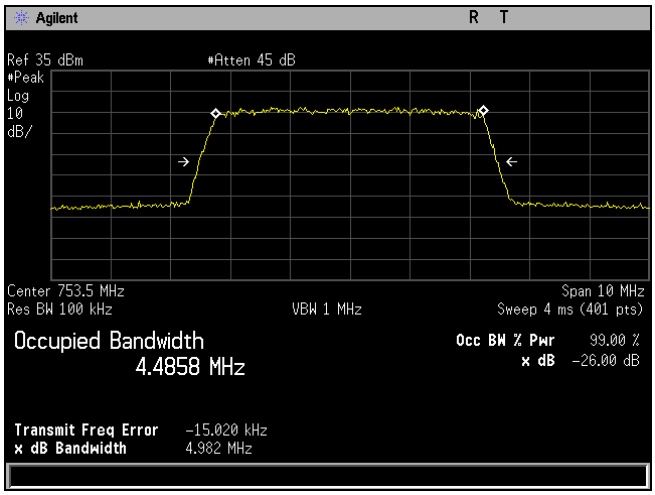
Plot 681. Occupied Bandwidth, QAM-16, High Channel, Band 13, Port 1, 5 MHz



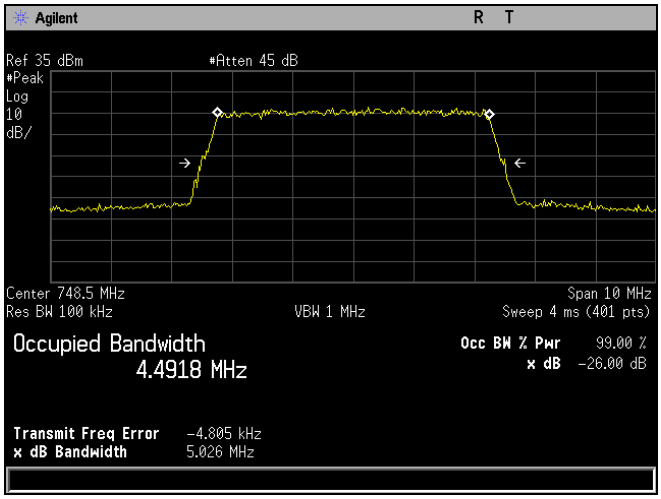
Plot 682. Occupied Bandwidth, QAM-64, Low Channel, Band 13, Port 1, 5 MHz



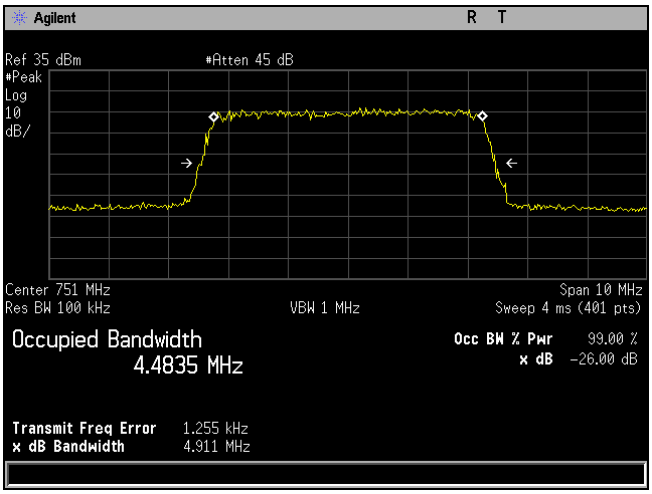
Plot 683. Occupied Bandwidth, QAM-64, Mid Channel, Band 13, Port 1, 5 MHz



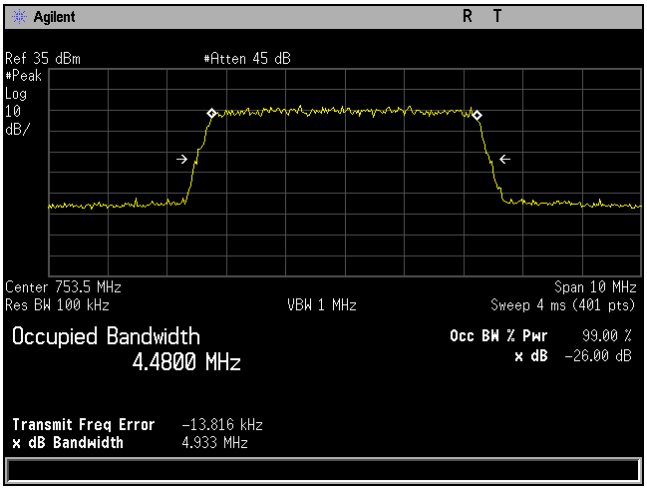
Plot 684. Occupied Bandwidth, QAM-64, High Channel, Band 13, Port 1, 5 MHz



Plot 685. Occupied Bandwidth, QPSK, Low Channel, Band 13, Port 1, 5 MHz

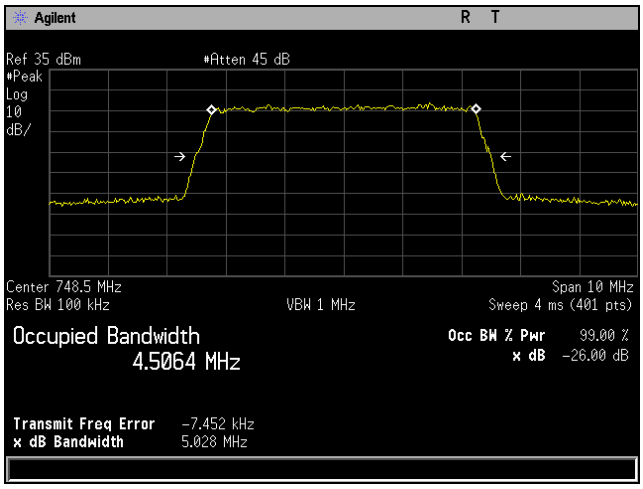


Plot 686. Occupied Bandwidth, QPSK, Mid Channel, Band 13, Port 1, 5 MHz

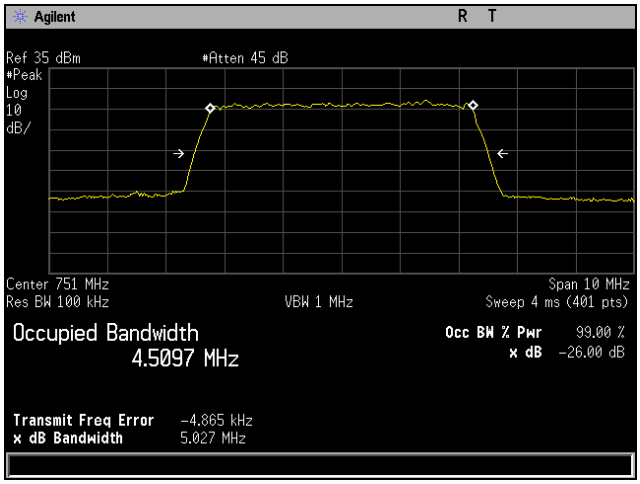


Plot 687. Occupied Bandwidth, QPSK, High Channel, Band 13, Port 1, 5 MHz

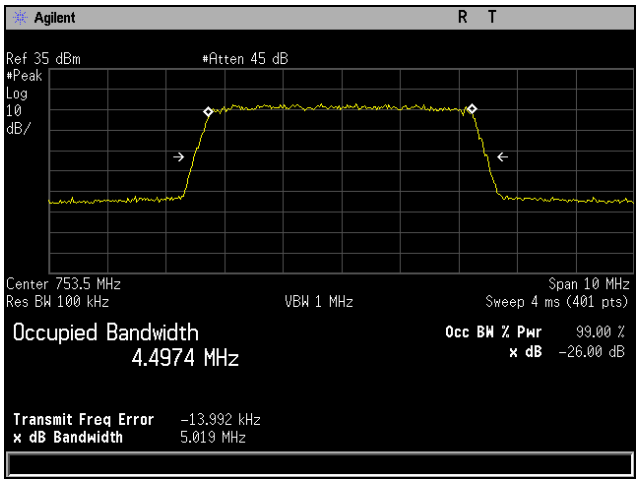
Occupied Bandwidth, Band 13, Port 2, 5 MHz



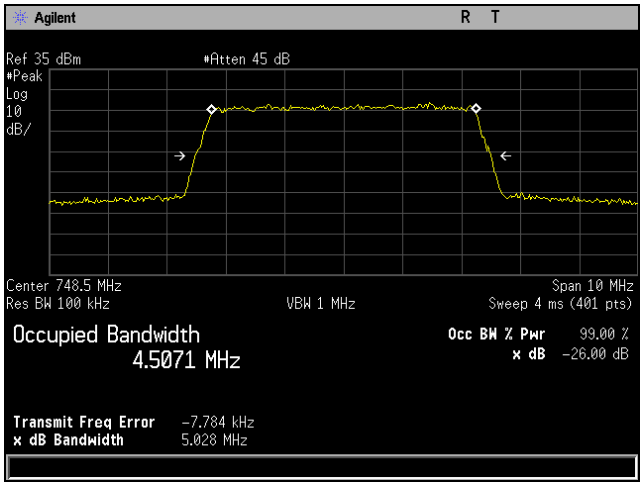
Plot 688. Occupied Bandwidth, QAM-16, Low Channel, Band 13, Port 2, 5 MHz



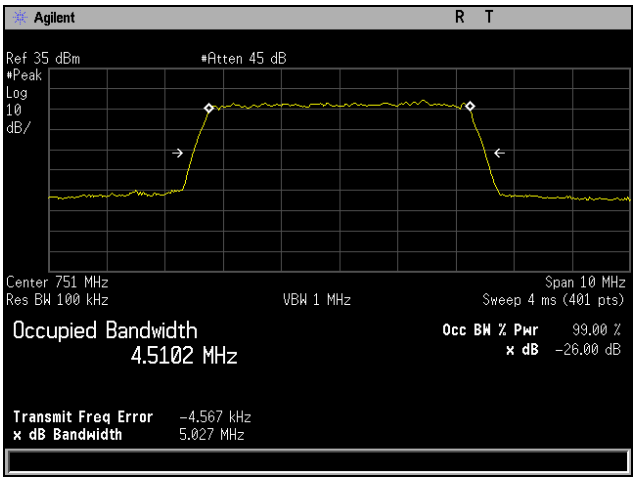
Plot 689. Occupied Bandwidth, QAM-16, Mid Channel, Band 13, Port 2, 5 MHz



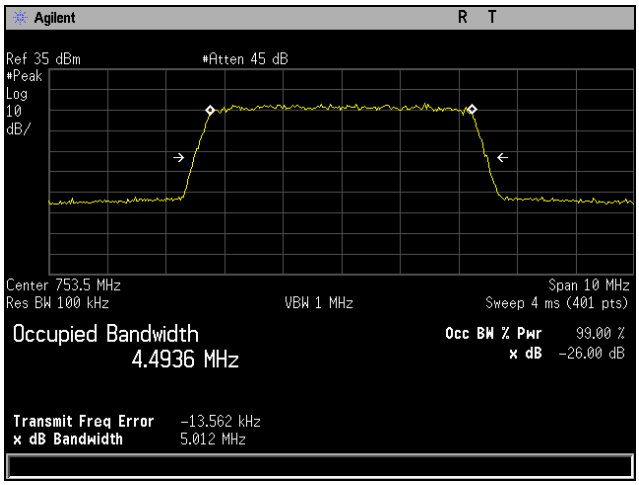
Plot 690. Occupied Bandwidth, QAM-16, High Channel, Band 13, Port 2, 5 MHz



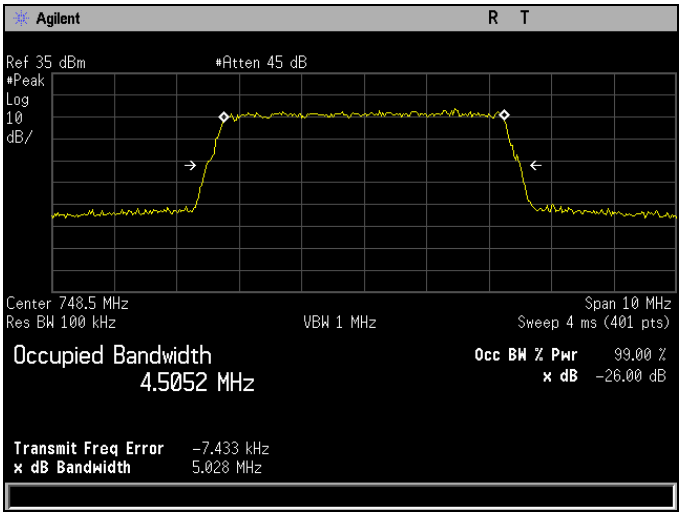
Plot 691. Occupied Bandwidth, QAM-64, Low Channel, Band 13, Port 2, 5 MHz



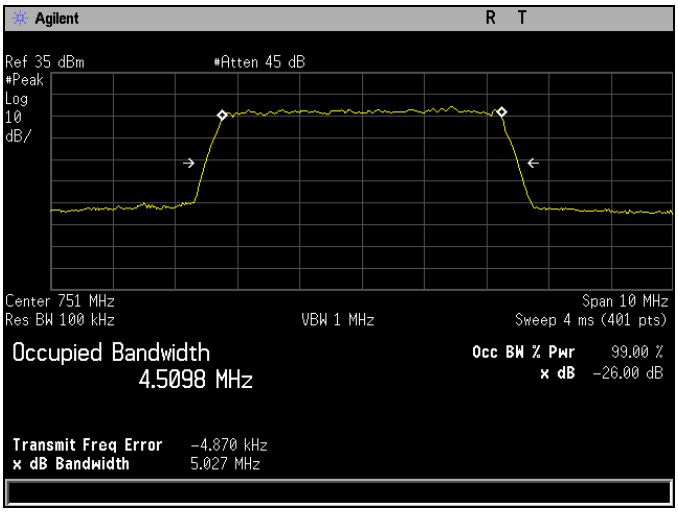
Plot 692. Occupied Bandwidth, QAM-64, Mid Channel, Band 13, Port 2, 5 MHz



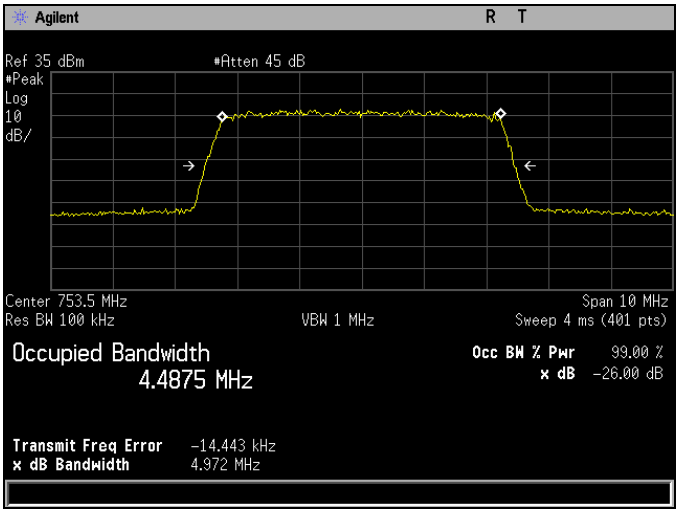
Plot 693. Occupied Bandwidth, QAM-64, High Channel, Band 13, Port 2, 5 MHz



Plot 694. Occupied Bandwidth, QPSK, Low Channel, Band 13, Port 2, 5 MHz

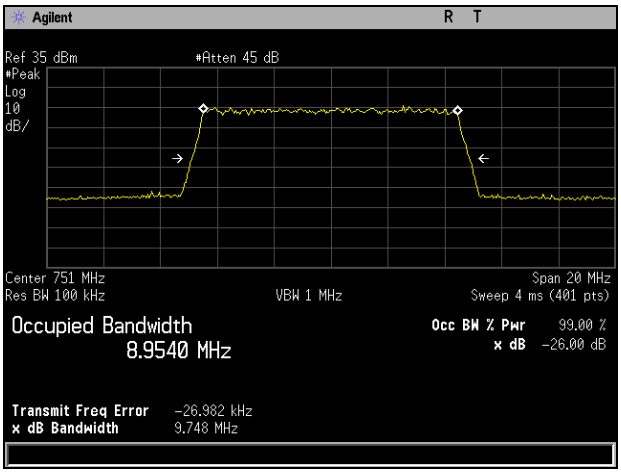


Plot 695. Occupied Bandwidth, QPSK, Mid Channel, Band 13, Port 2, 5 MHz

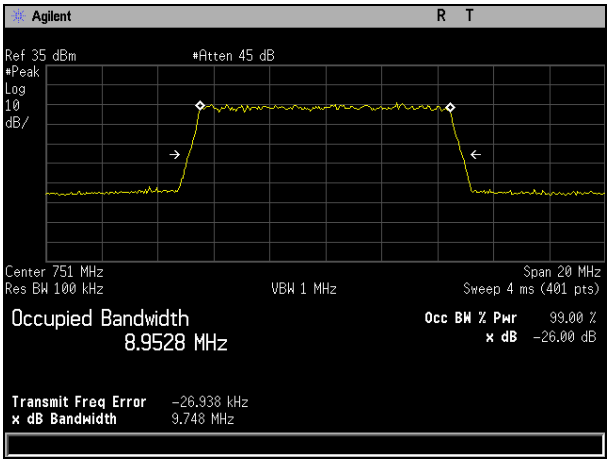


Plot 696. Occupied Bandwidth, QPSK, High Channel, Band 13, Port 2, 5 MHz

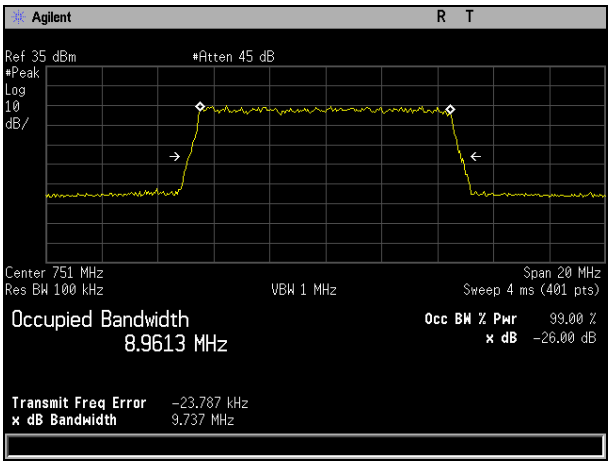
Occupied Bandwidth, Band 13, Port 1, 10 MHz



Plot 697. Occupied Bandwidth, QAM-16, Band 13, Port 1, 10 MHz

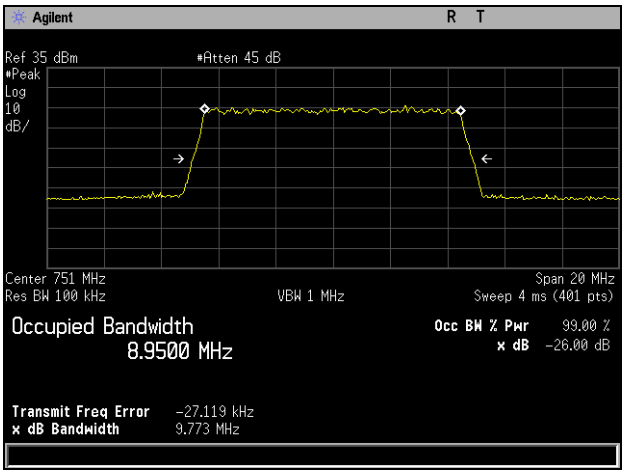


Plot 698. Occupied Bandwidth, QAM-64, Band 13, Port 1, 10 MHz

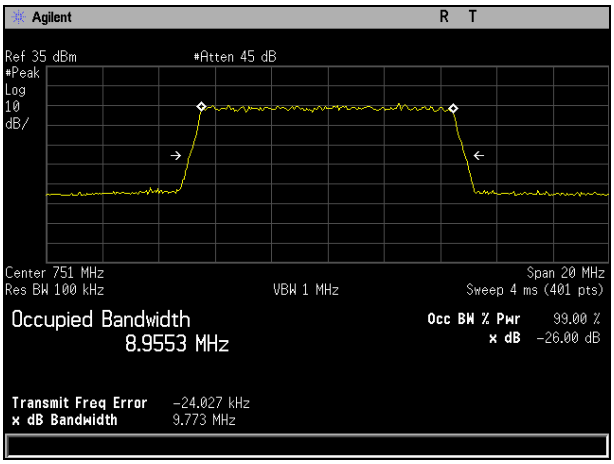


Plot 699. Occupied Bandwidth, QPSK, Band 13, Port 1, 10 MHz

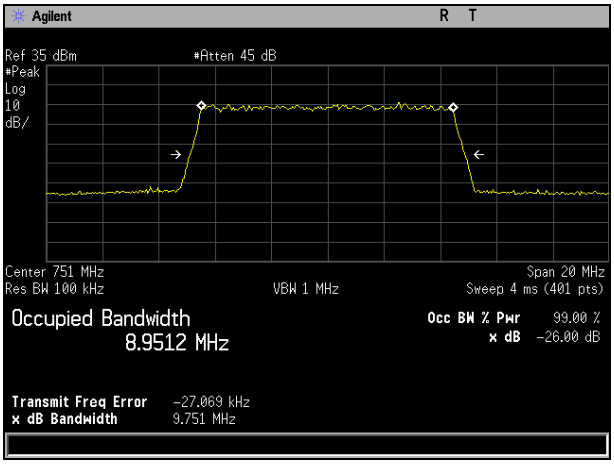
Occupied Bandwidth, Band 13, Port 2, 10 MHz



Plot 700. Occupied Bandwidth, QAM-16, Band 13, Port 2, 10 MHz

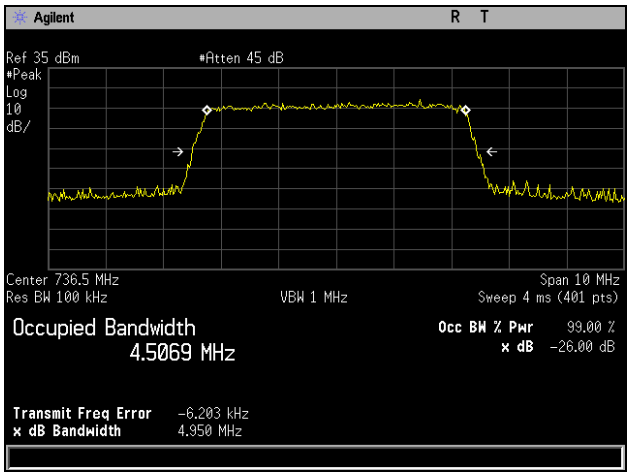


Plot 701. Occupied Bandwidth, QAM-64, Band 13, Port 2, 10 MHz

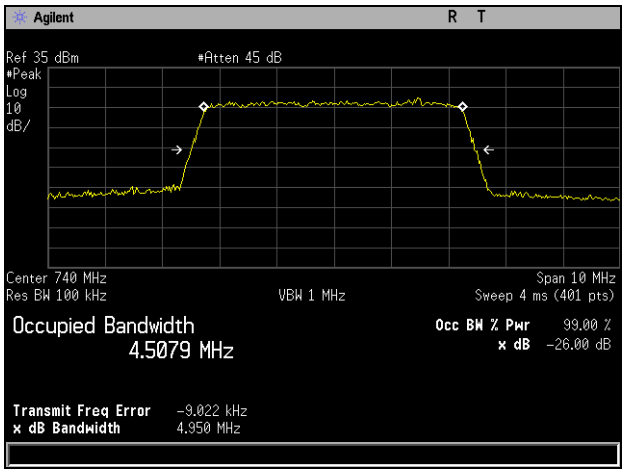


Plot 702. Occupied Bandwidth, QPSK, Band 13, Port 2, 10 MHz

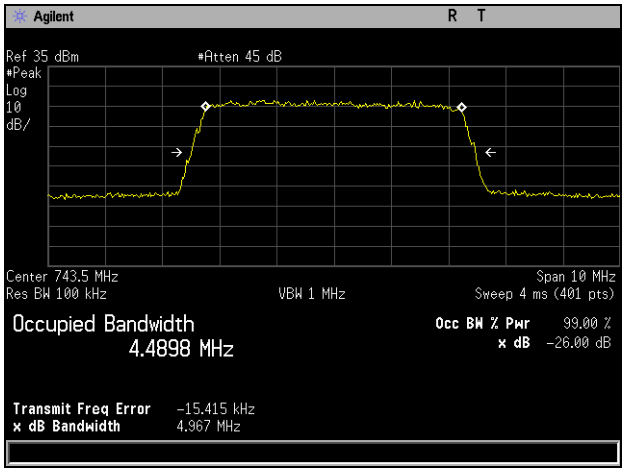
Occupied Bandwidth, Band 17, Port 1, 5 MHz



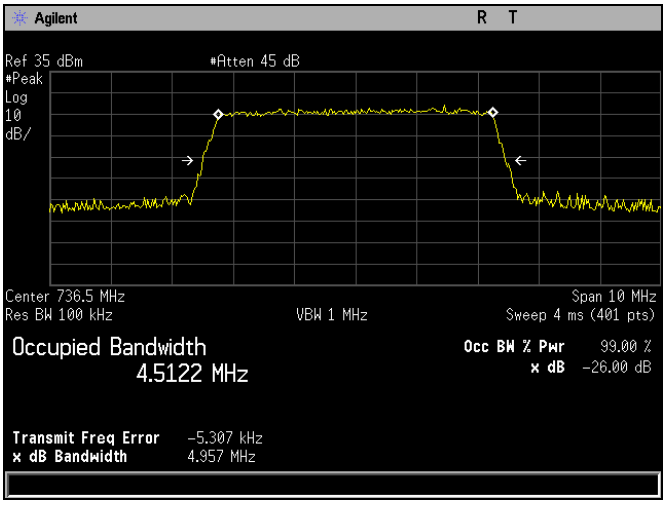
Plot 703. Occupied Bandwidth, QAM-16, Low Channel, Band 17, Port 1, 5 MHz



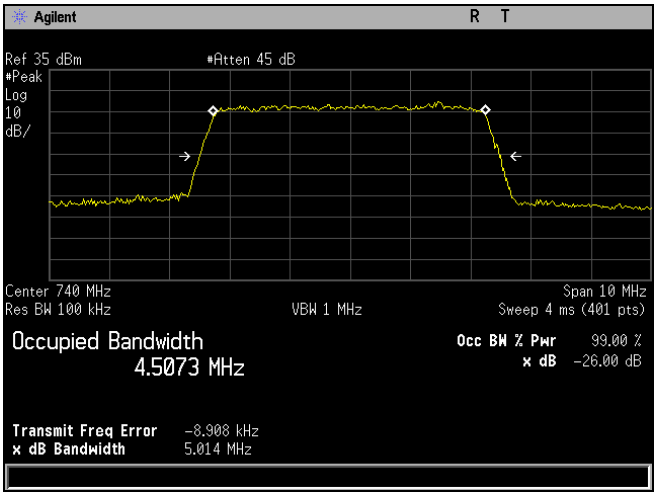
Plot 704. Occupied Bandwidth, QAM-16, Mid Channel, Band 17, Port 1, 5 MHz



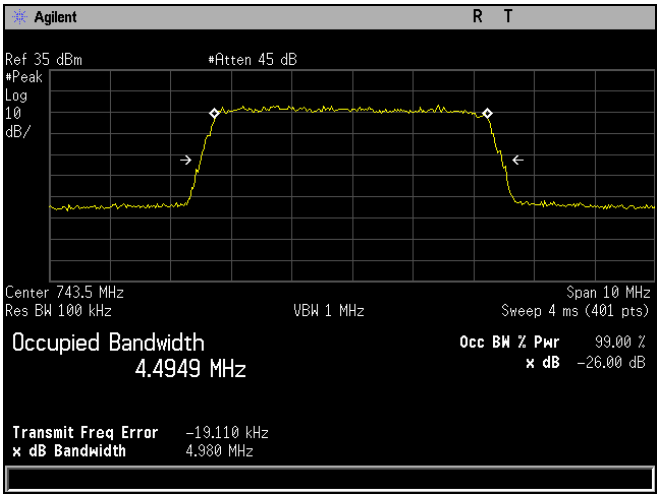
Plot 705. Occupied Bandwidth, QAM-16, High Channel, Band 17, Port 1, 5 MHz



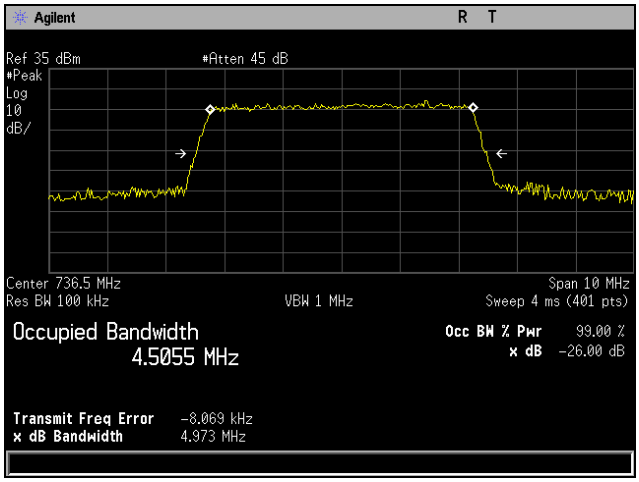
Plot 706. Occupied Bandwidth, QAM-64, Low Channel, Band 17, Port 1, 5 MHz



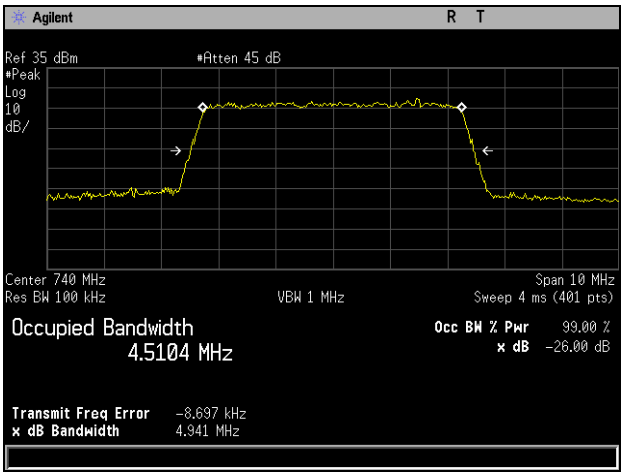
Plot 707. Occupied Bandwidth, QAM-64, Mid Channel, Band 17, Port 1, 5 MHz



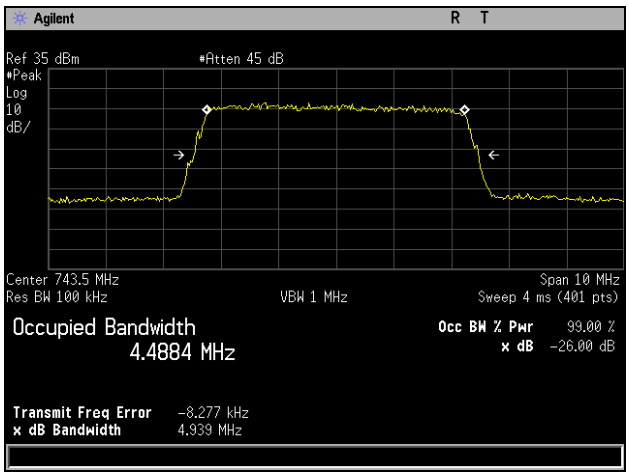
Plot 708. Occupied Bandwidth, QAM-64, High Channel, Band 17, Port 1, 5 MHz



Plot 709. Occupied Bandwidth, QPSK, Low Channel, Band 17, Port 1, 5 MHz

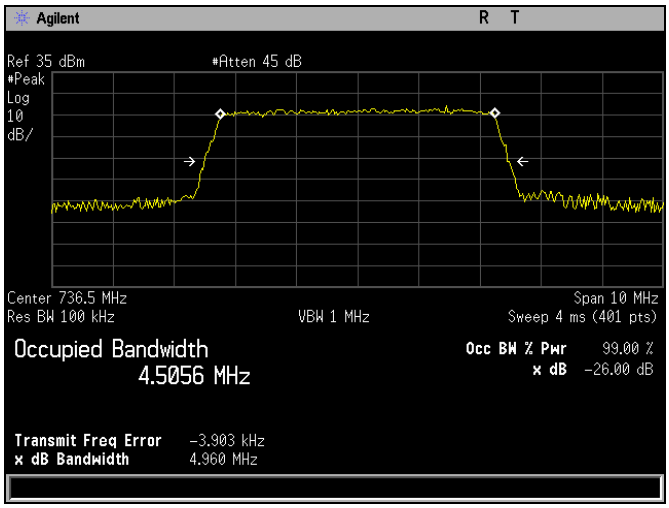


Plot 710. Occupied Bandwidth, QPSK, Mid Channel, Band 17, Port 1, 5 MHz

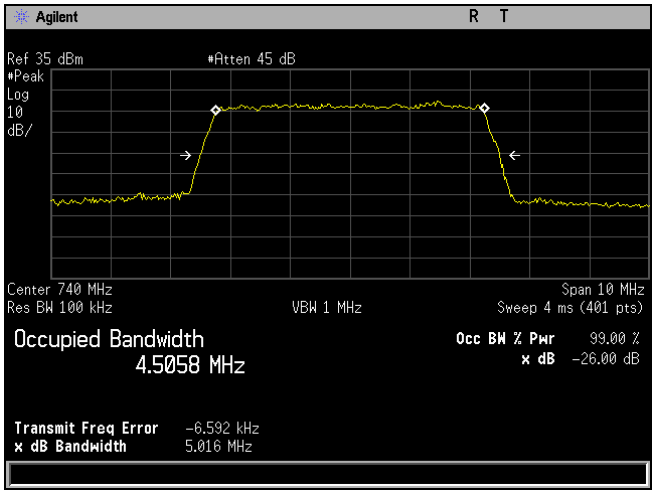


Plot 711. Occupied Bandwidth, QPSK, High Channel, Band 17, Port 1, 5 MHz

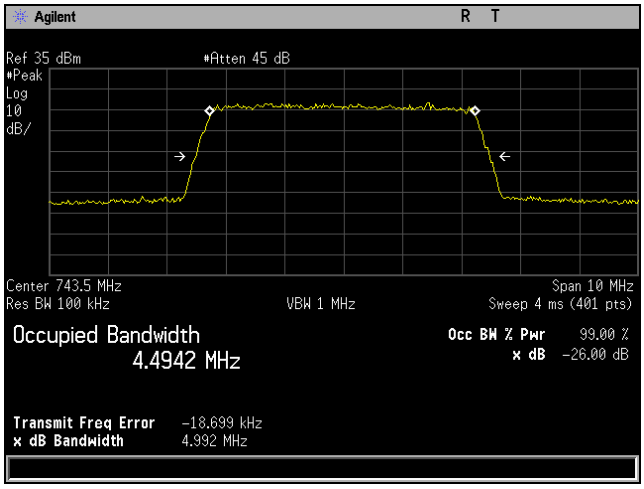
Occupied Bandwidth, Band 17, Port 2, 5 MHz



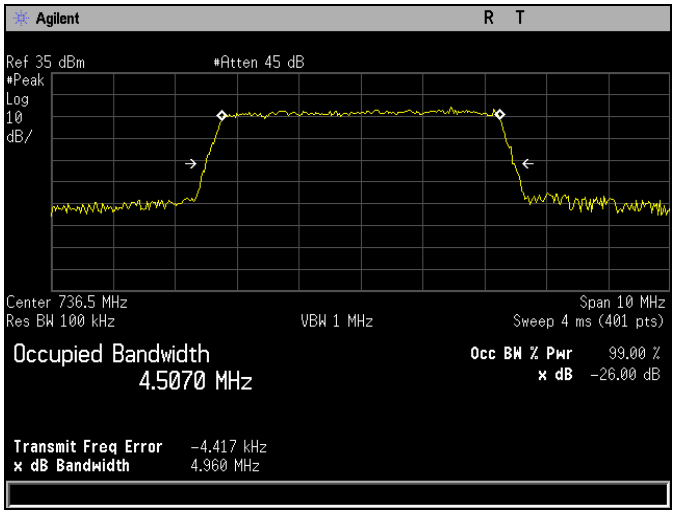
Plot 712. Occupied Bandwidth, QAM-16, Low Channel, Band 17, Port 2, 5 MHz



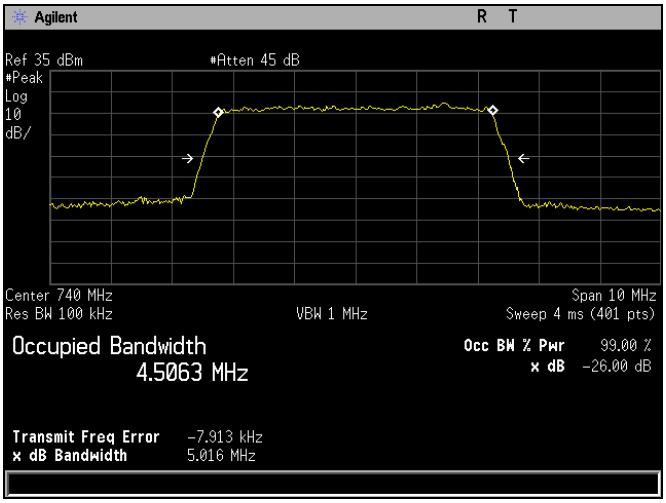
Plot 713. Occupied Bandwidth, QAM-16, Mid Channel, Band 17, Port 2, 5 MHz



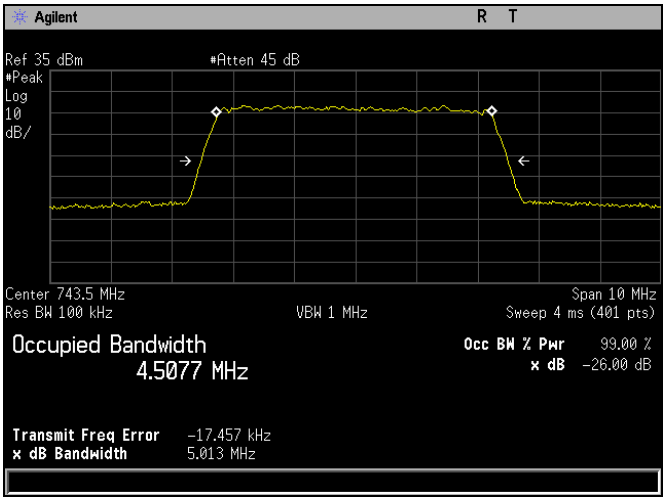
Plot 714. Occupied Bandwidth, QAM-16, High Channel, Band 17, Port 2, 5 MHz



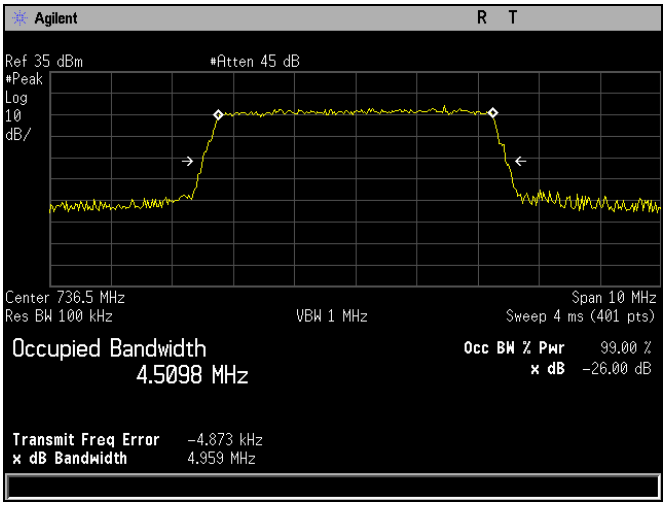
Plot 715. Occupied Bandwidth, QAM-64, Low Channel, Band 17, Port 2, 5 MHz



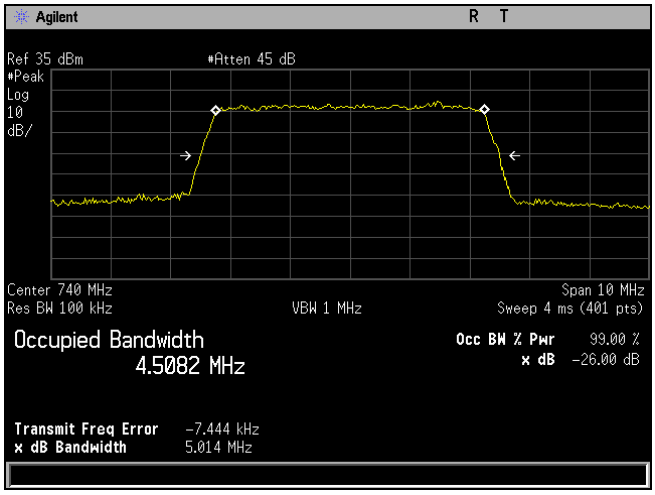
Plot 716. Occupied Bandwidth, QAM-64, Mid Channel, Band 17, Port 2, 5 MHz



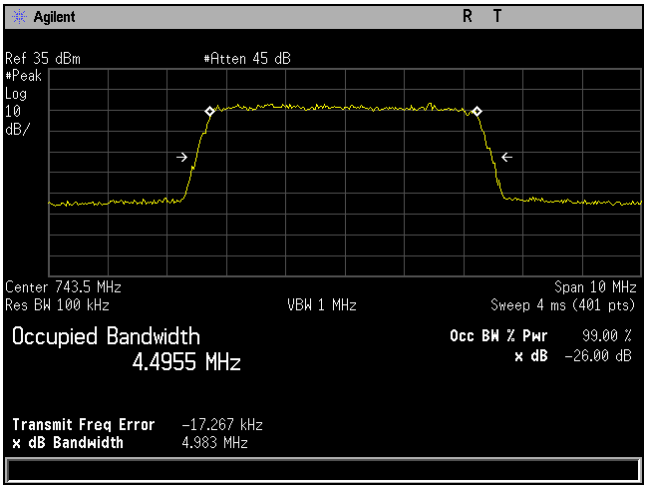
Plot 717. Occupied Bandwidth, QAM-64, High Channel, Band 17, Port 2, 5 MHz



Plot 718. Occupied Bandwidth, QPSK, Low Channel, Band 17, Port 2, 5 MHz

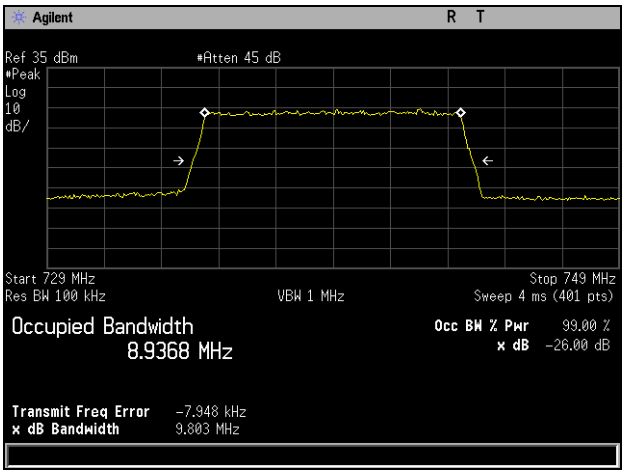


Plot 719. Occupied Bandwidth, QPSK, Mid Channel, Band 17, Port 2, 5 MHz

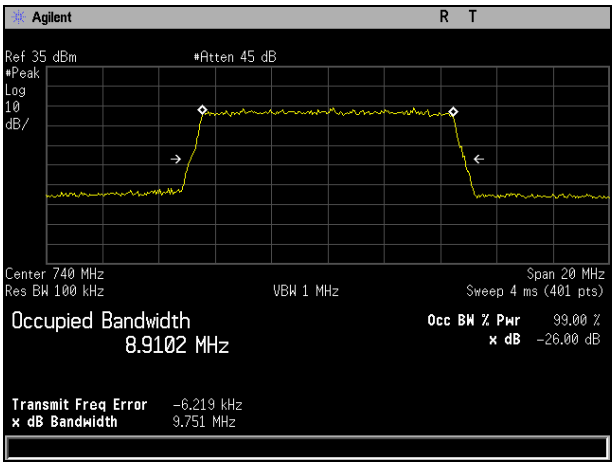


Plot 720. Occupied Bandwidth, QPSK, High Channel, Band 17, Port 2, 5 MHz

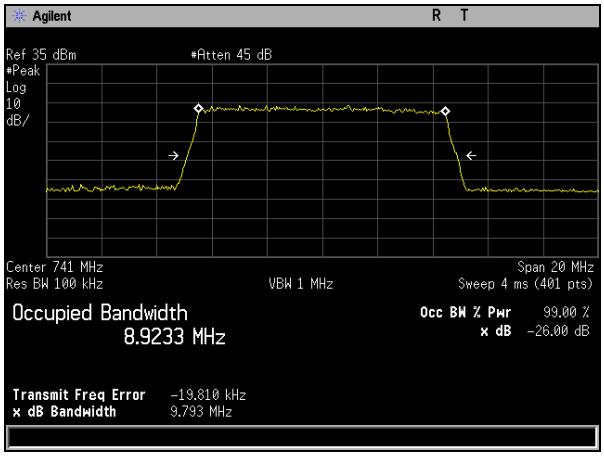
Occupied Bandwidth, Band 17, Port 1, 10 MHz



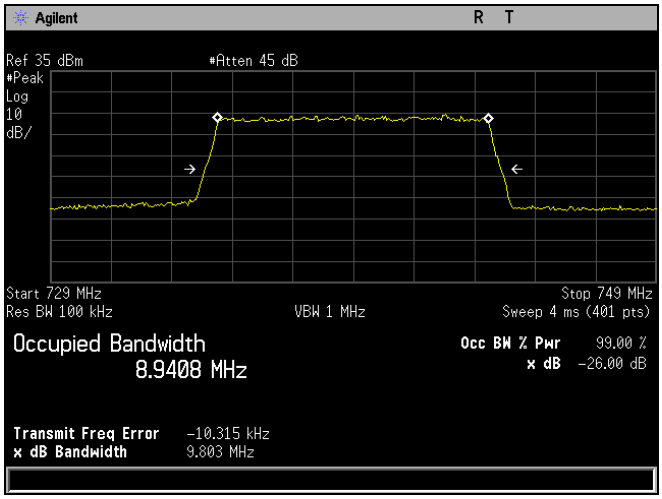
Plot 721. Occupied Bandwidth, QAM-16, Low Channel, Band 17, Port 1, 10 MHz



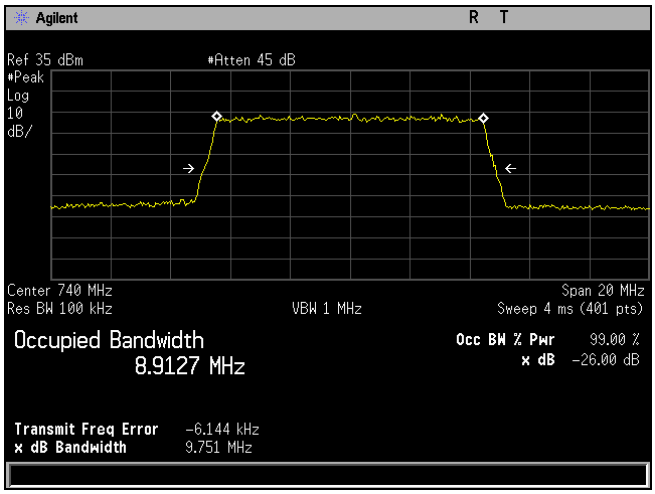
Plot 722. Occupied Bandwidth, QAM-16, Mid Channel, Band 17, Port 1, 10 MHz



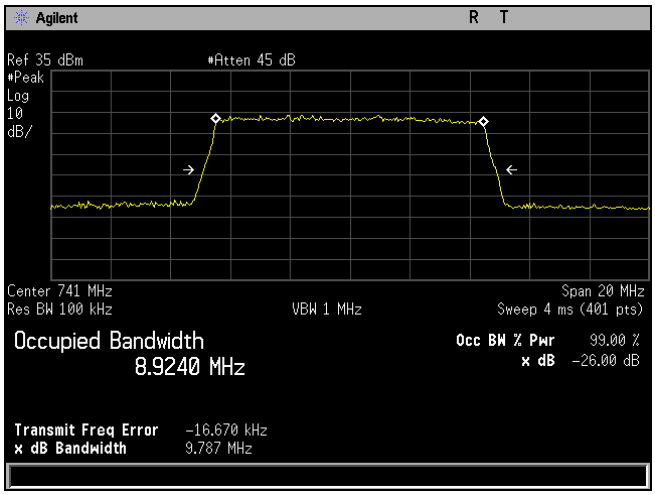
Plot 723. Occupied Bandwidth, QAM-16, High Channel, Band 17, Port 1, 10 MHz



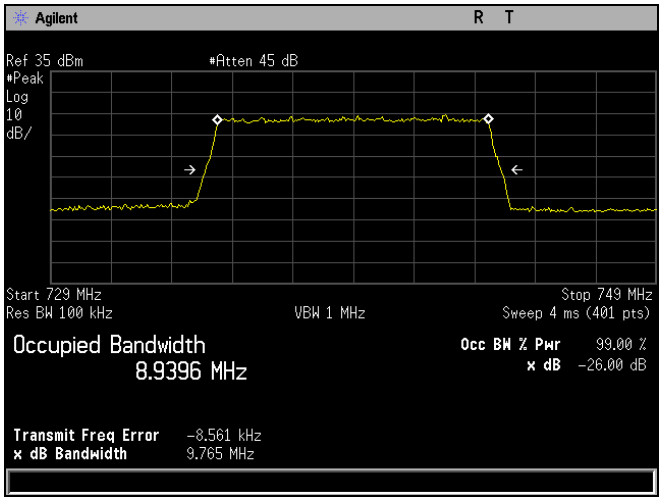
Plot 724. Occupied Bandwidth, QAM-64, Low Channel, Band 17, Port 1, 10 MHz



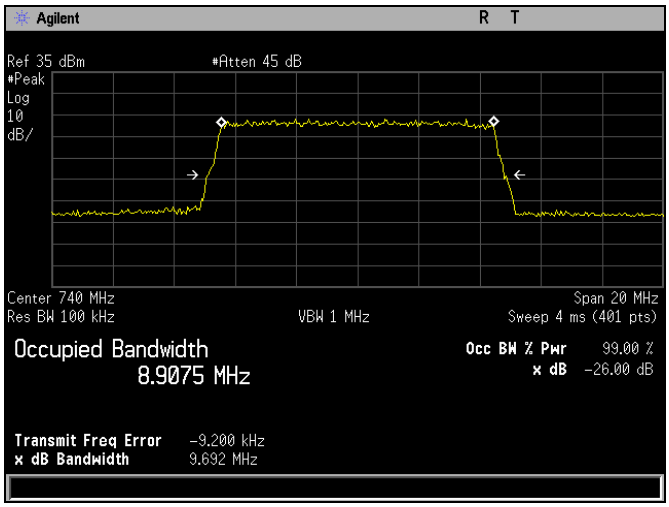
Plot 725. Occupied Bandwidth, QAM-64, Mid Channel, Band 17, Port 1, 10 MHz



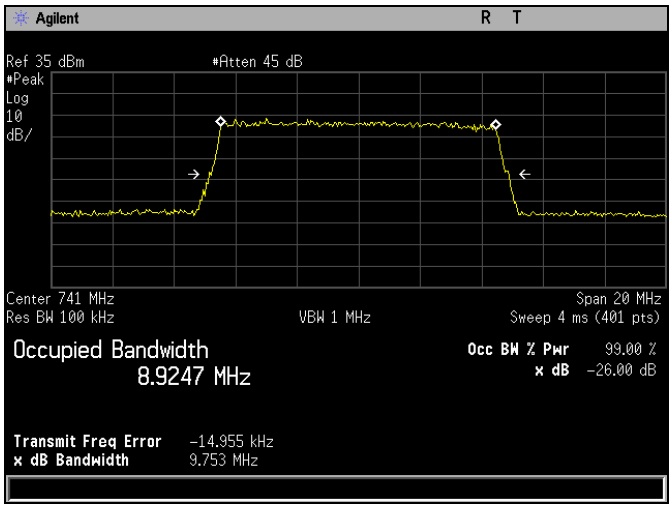
Plot 726. Occupied Bandwidth, QAM-64, High Channel, Band 17, Port 1, 10 MHz



Plot 727. Occupied Bandwidth, QPSK, Low Channel, Band 17, Port 1, 10 MHz

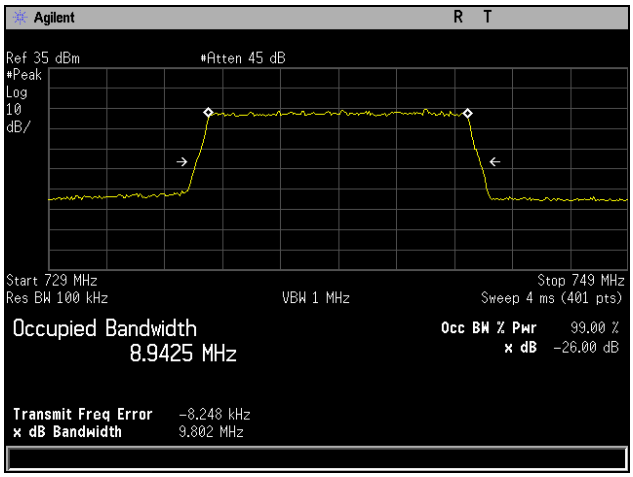


Plot 728. Occupied Bandwidth, QPSK, Mid Channel, Band 17, Port 1, 10 MHz

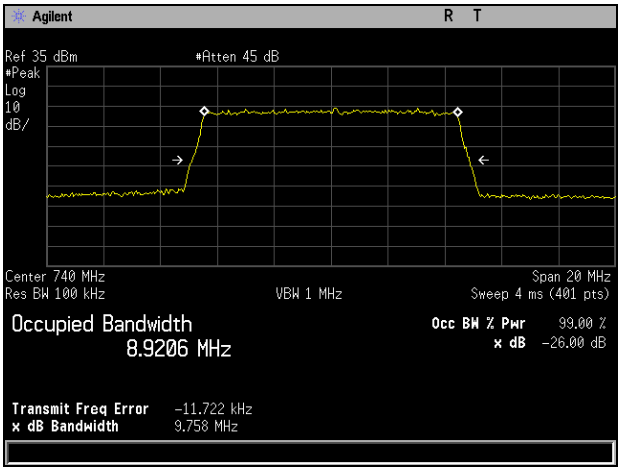


Plot 729. Occupied Bandwidth, QPSK, High Channel, Band 17, Port 1, 10 MHz

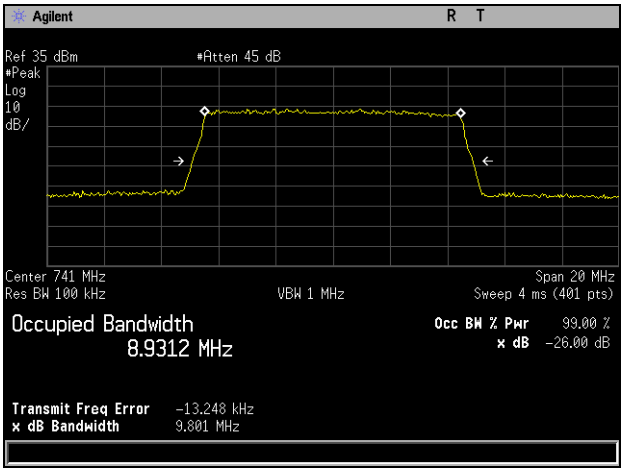
Occupied Bandwidth, Band 17, Port 2, 10 MHz



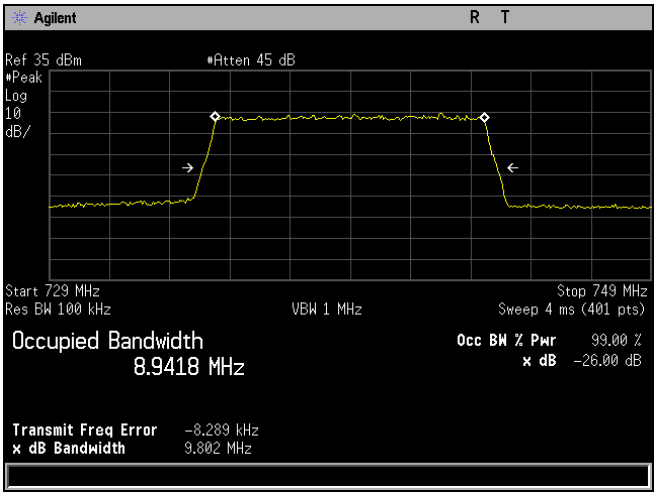
Plot 730. Occupied Bandwidth, QAM-16, Low Channel, Band 17, Port 2, 10 MHz



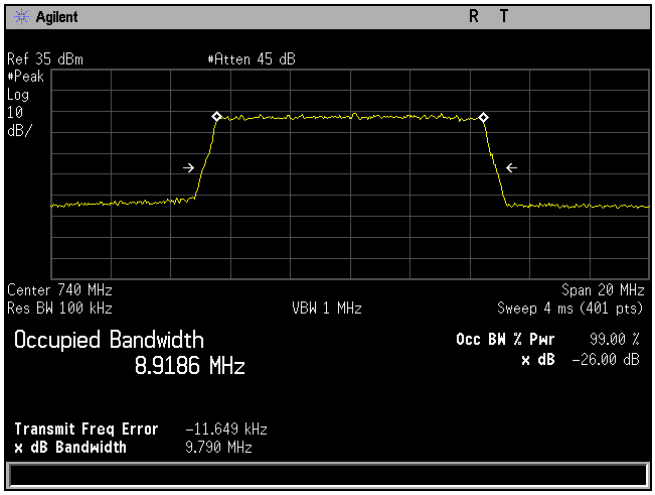
Plot 731. Occupied Bandwidth, QAM-16, Mid Channel, Band 17, Port 2, 10 MHz



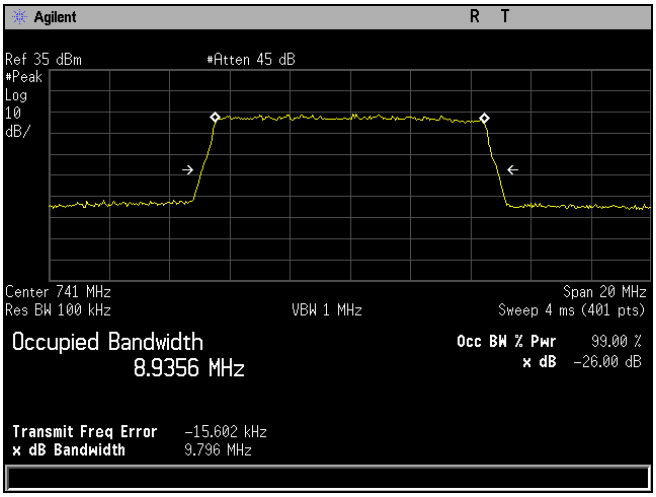
Plot 732. Occupied Bandwidth, QAM-16, High Channel, Band 17, Port 2, 10 MHz



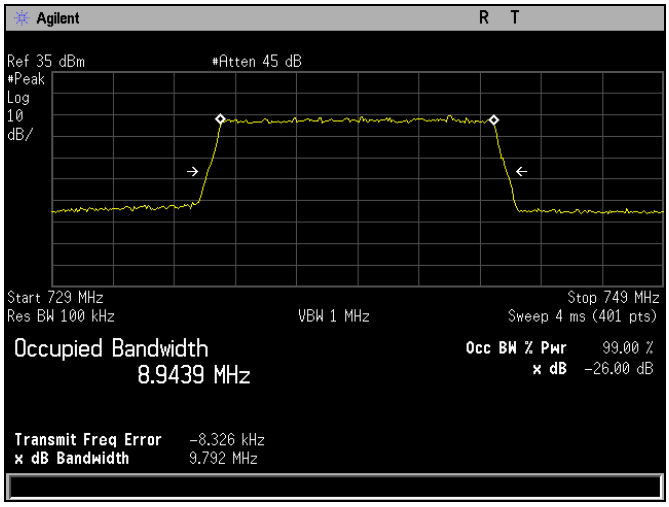
Plot 733. Occupied Bandwidth, QAM-64, Low Channel, Band 17, Port 2, 10 MHz



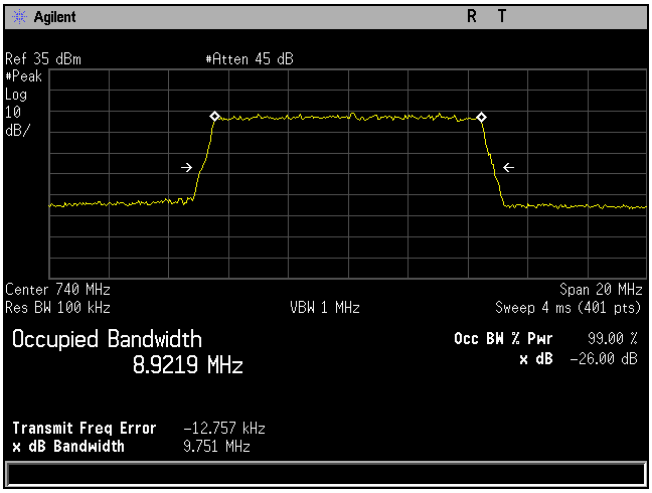
Plot 734. Occupied Bandwidth, QAM-64, Mid Channel, Band 17, Port 2, 10 MHz



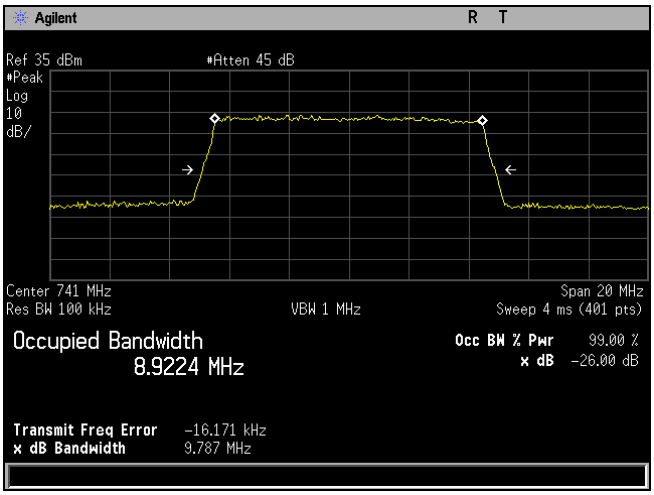
Plot 735. Occupied Bandwidth, QAM-64, High Channel, Band 17, Port 2, 10 MHz



Plot 736. Occupied Bandwidth, QPSK, Low Channel, Band 17, Port 2, 10 MHz



Plot 737. Occupied Bandwidth, QPSK, Mid Channel, Band 17, Port 2, 10 MHz



Plot 738. Occupied Bandwidth, QPSK, High Channel, Band 17, Port 2, 10 MHz

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 2.1053 Radiated Spurious Emissions

Test Requirement(s): **§ 2.1053 Measurements required: Field strength of spurious radiation.**

§ 2.1053 (a) Measurements shall be made to detect spurious emissions that may be radiated directly from the cabinet, control circuits, power leads, or intermediate circuit elements under normal conditions of installation and operation. Curves or equivalent data shall be supplied showing the magnitude of each harmonic and other spurious emission. For this test, single sideband, independent sideband, and controlled carrier transmitters shall be modulated under the conditions specified in paragraph (c) of § 2.1049, as appropriate. For equipment operating on frequencies below 890 MHz, an open field test is normally required with the measuring instrument antenna located in the far-field at all test frequencies. In the event it is either impractical or impossible to make open field measurements (e.g. a broadcast transmitter installed in a building) measurements will be accepted of the equipment as installed. Such measurements must be accompanied by a description of the site where the measurements were made showing the location of any possible source of reflections which might distort the field strength measurements. Information submitted shall include the relative radiated power of each spurious emission with reference to the rated power output of the transmitter, assuming all emissions are radiated from half-wave dipole antennas.

§ 2.1053 (b): The measurements specified in paragraph (a) of this section shall be made for the following equipment:

(1) Those in which the spurious emissions are required to be 60 dB or more below the mean power of the transmitter.

(2) All equipment operating on frequencies higher than 25 MHz.

(3) All equipment where the antenna is an integral part of, and attached directly to the transmitter.

(4) Other types of equipment as required, when deemed necessary by the Commission.

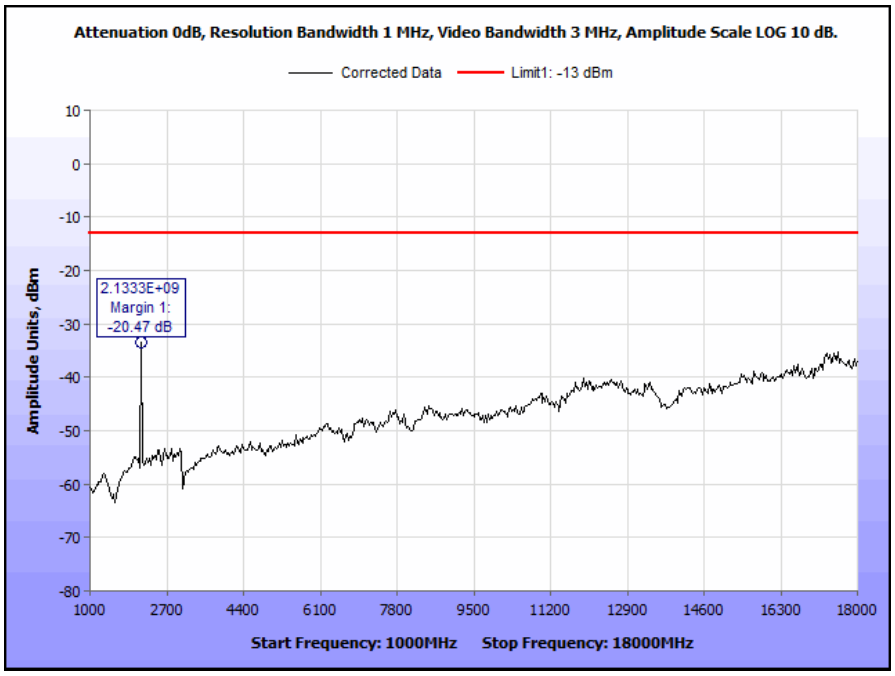
Test Procedures: As required by 47 CFR 2.1053, the *field strengths of radiated spurious emissions* were made in accordance with the procedures of ANSI/EIA-603-D-2010 "Land Mobile FM or PM Communications Equipment Measurement and Performance Standards".

Radiated emission measurements were performed inside a 3 meter semi-anechoic chamber (equivalent to an Open Area Test Site). The distance between the EUT and the test antenna was 3 meters for below 1 GHz and 1m for frequencies above 1 GHz. The EUT's RF port was connected to a dummy load. The intensities of the radiated emissions were maximized by rotating the turntable 360 degrees and varying the receive antenna from 1 to 4m. Measurements were made with the receive antenna in both horizontal and vertical polarizations.

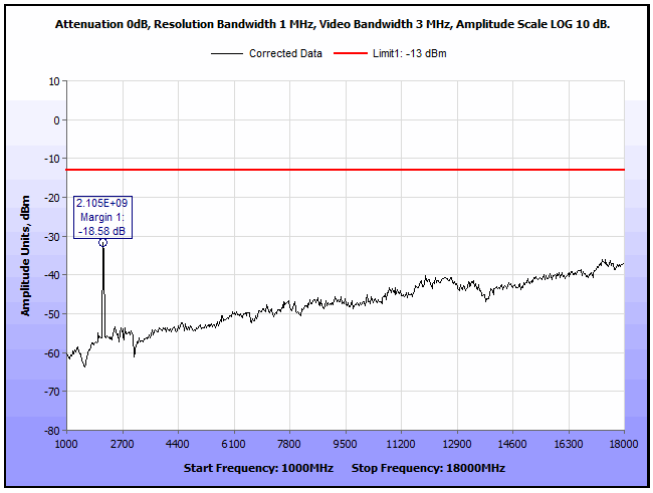
Test Results: Equipment complies with Section 2.1053. The limit for spurs is -13 dBm. Measurements were made with a pre-amp for above 1 GHz. Only noise floor was measured below 1 GHz and above 18 GHz. Plots below represent worst case for each band.

Test Engineer: Deepak Giri

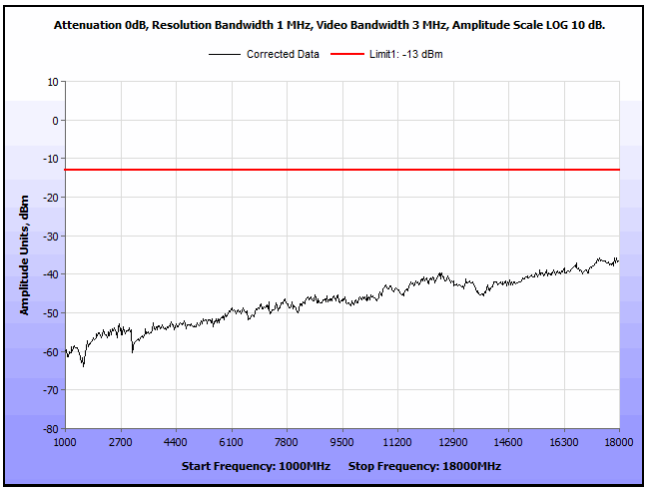
Test Date(s): 10/30/16



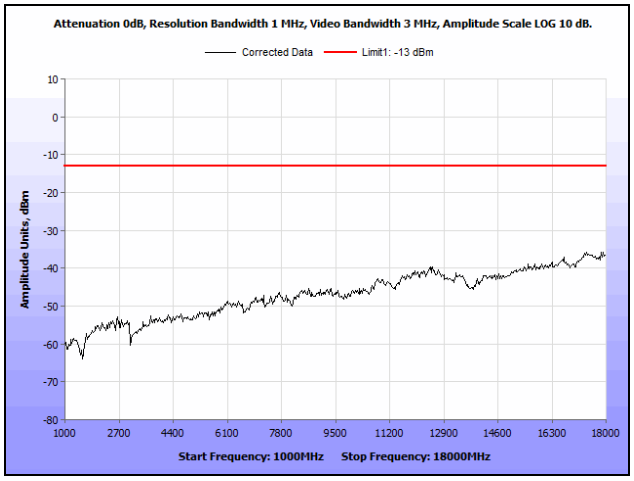
Plot 739. Radiated Spurious Emissions, Band 4, 1 GHz – 18 GHz



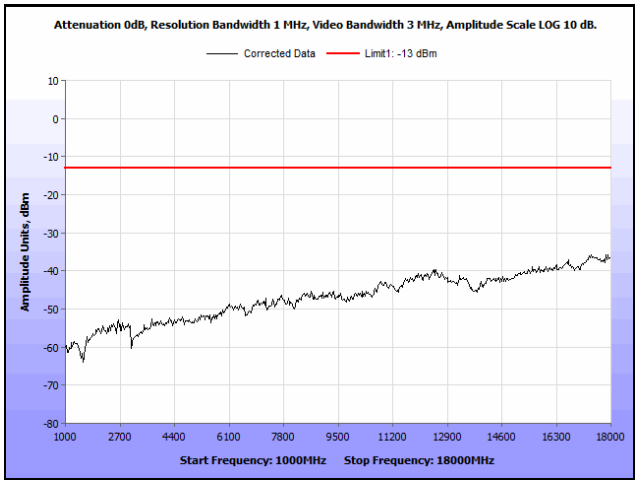
Plot 740. Radiated Spurious Emissions, Band 10, 1 GHz – 18 GHz



Plot 741. Radiated Spurious Emissions, Band 12, 1 GHz – 18 GHz

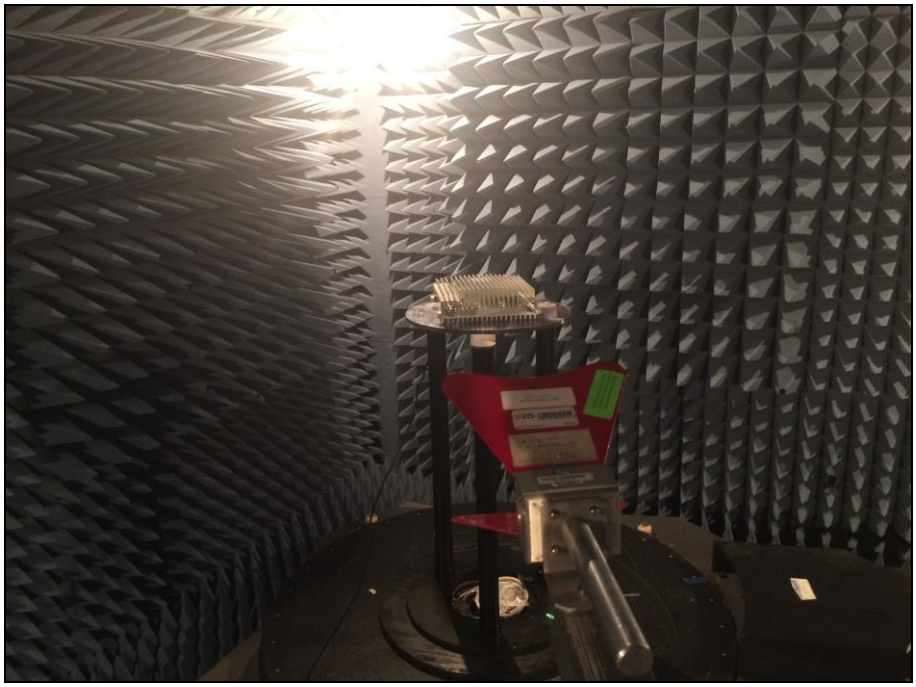


Plot 742. Radiated Spurious Emissions, Band 13, 1 GHz – 18 GHz



Plot 743. Radiated Spurious Emissions, Band 17, 1 GHz – 18 GHz

Electromagnetic Compatibility Criteria for Intentional Radiators



Photograph 1. Radiated Spurious Emissions 1 GHz – 18 GHz, Test Setup

Electromagnetic Compatibility Criteria for Intentional Radiators

§ 2.1051 Spurious Emissions at Antenna Terminals

Test Requirement(s): **§ 2.1051and 27.53(l) Measurements required: Spurious emissions at antenna terminals:** The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in § 2.1049 as appropriate.

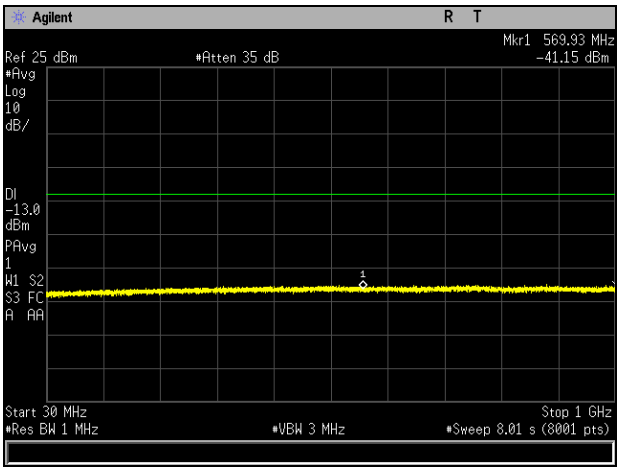
Test Procedures: A modulated carrier generated by the EUT/its support equipment; a spectrum analyzer was connected to the Downlink RF port. The spectrum analyzer was set to 1MHz RBW and 3MHz VBW. The spectrum was investigated from 30MHz to the 10th harmonic of the carrier. QPSK modulation (worst case) was used for this test.

Test Results: Equipment complies with Section 2.1051 and 27.53(g). The following pages show measurements of Spurious Emission plots. All Spurious Emissions are below -13dBm.
The following analysis and plots are included below to illustrate compliance with the required rule parts.

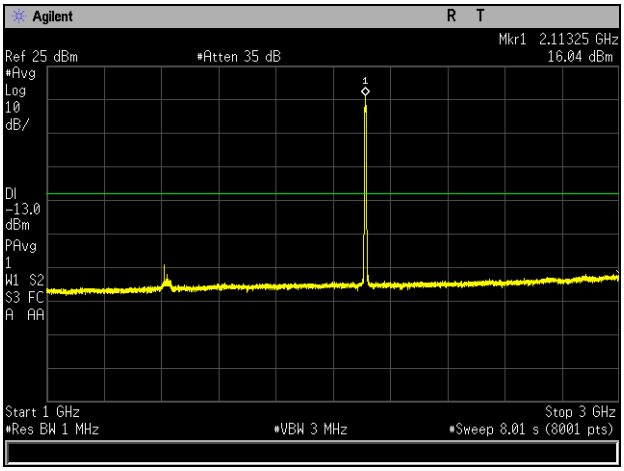
Test Engineer(s): Deepak Giri

Test Date(s): 10/30/16, 12/14/16, 12/15/16, and 12/16/16

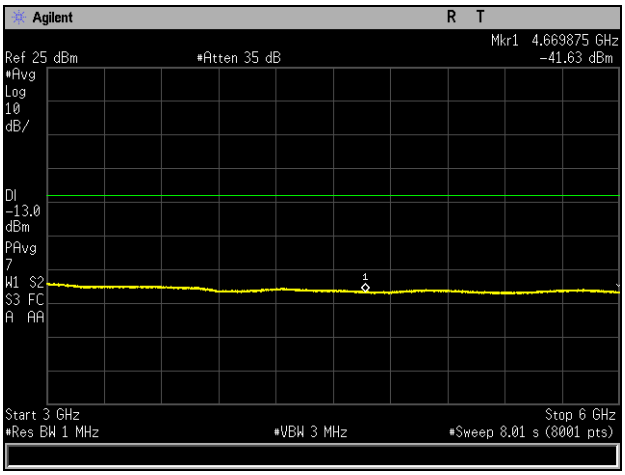
Spurious Emissions at Antenna Terminals, Band 4



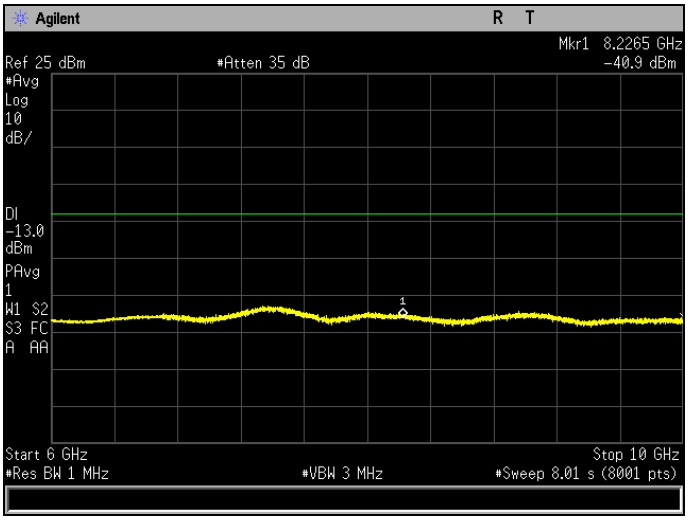
Plot 744. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 30 MHz – 1 GHz, 5 MHz



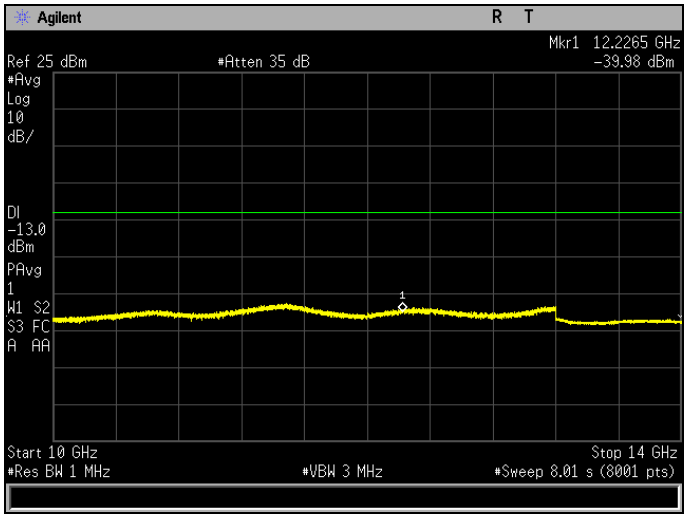
Plot 745. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 1 GHz – 3 GHz, 5 MHz



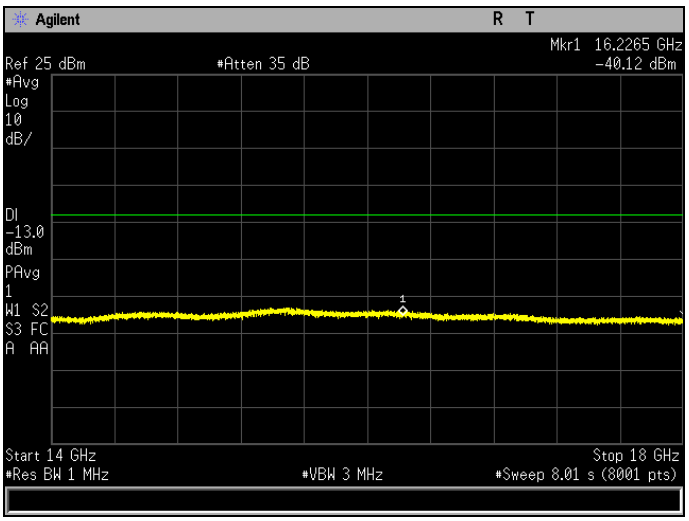
Plot 746. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 3 GHz – 6 GHz, 5 MHz



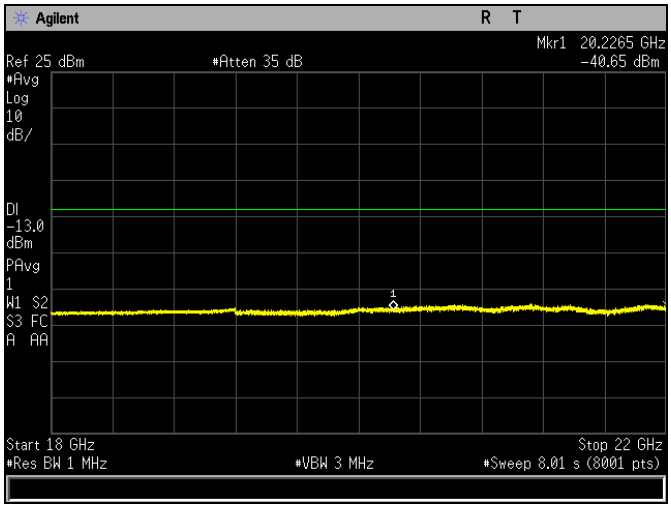
Plot 747. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 6 GHz – 10 GHz, 5 MHz



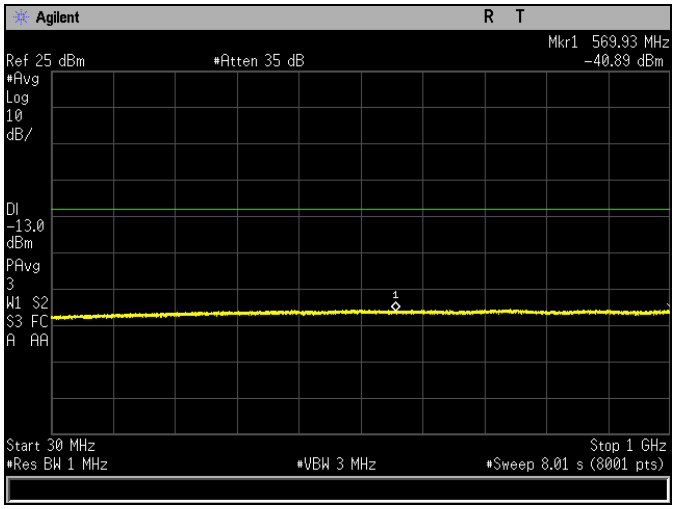
Plot 748. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 10 GHz – 14 GHz, 5 MHz



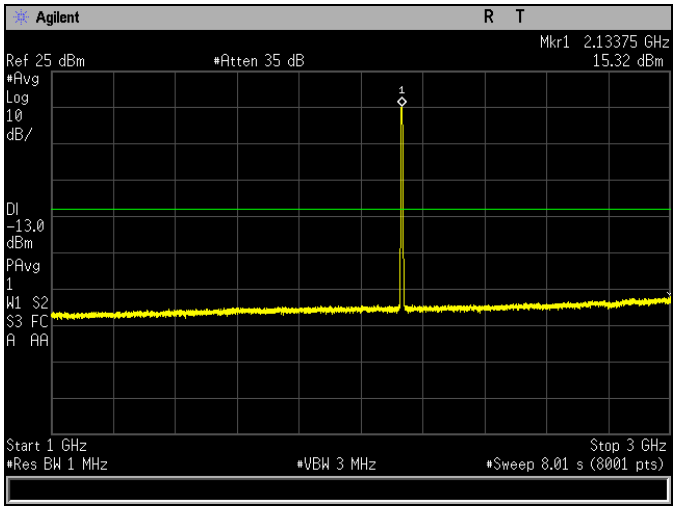
Plot 749. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 14 GHz – 18 GHz, 5 MHz



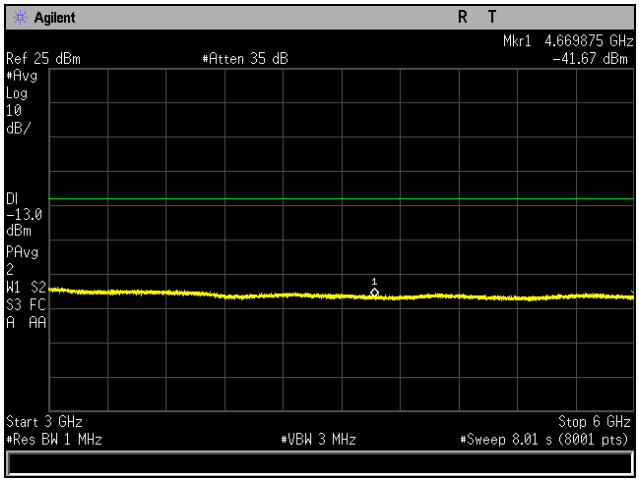
Plot 750. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 18 GHz – 22 GHz, 5 MHz



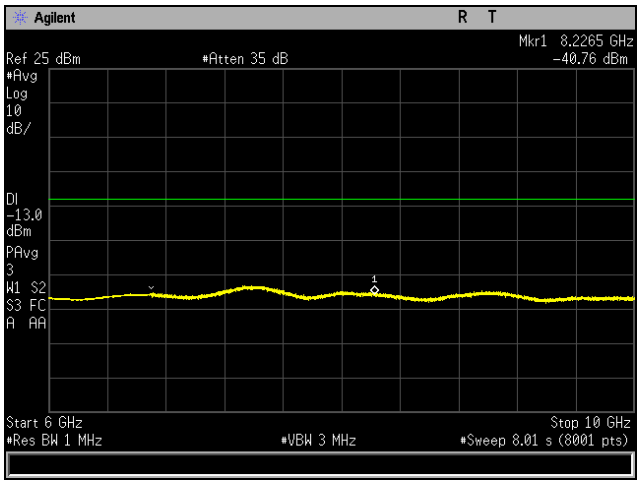
Plot 751. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 30 MHz – 1 GHz, 5 MHz



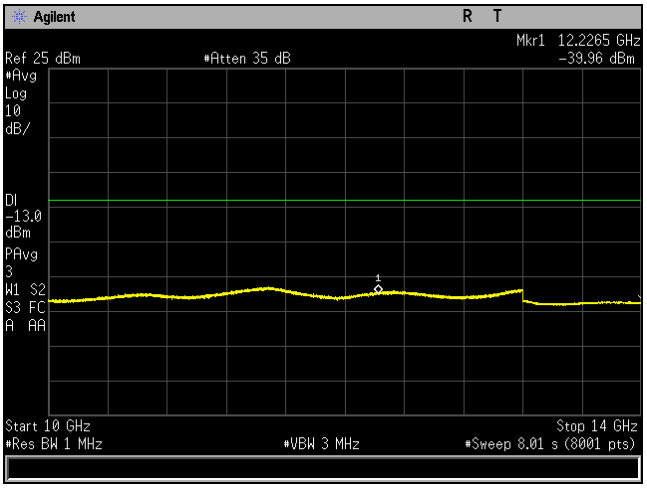
Plot 752. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 1 GHz – 3 GHz, 5 MHz



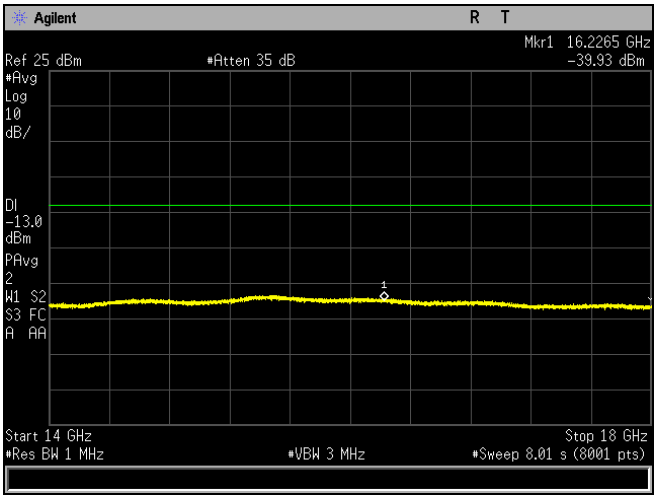
Plot 753. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 3 GHz – 6 GHz, 5 MHz



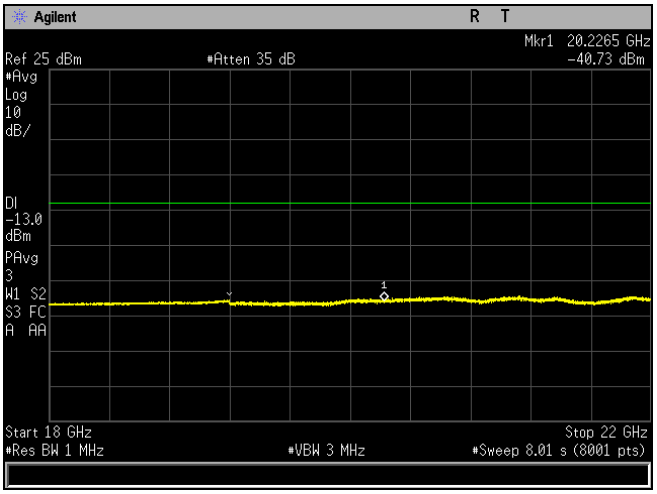
Plot 754. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 6 GHz – 10 GHz, 5 MHz



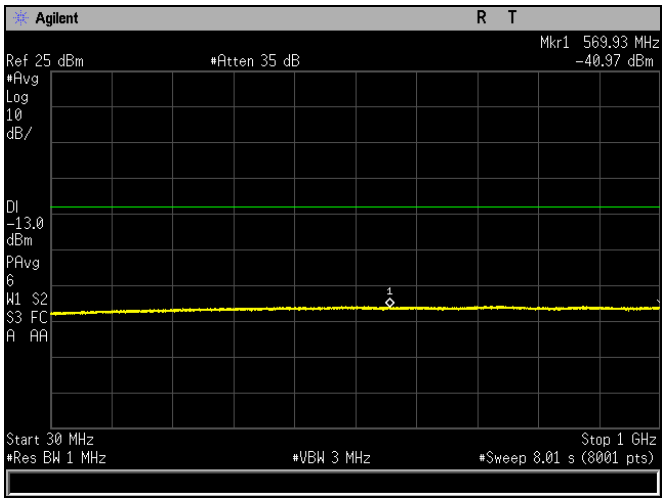
Plot 755. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 10 GHz – 14 GHz, 5 MHz



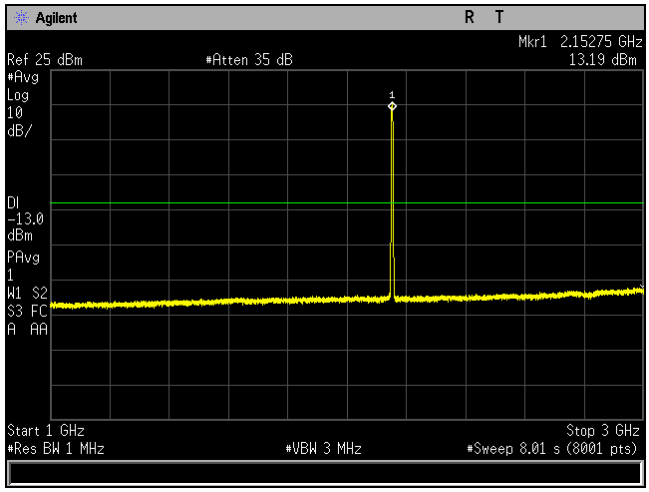
Plot 756. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 14 GHz – 18 GHz, 5 MHz



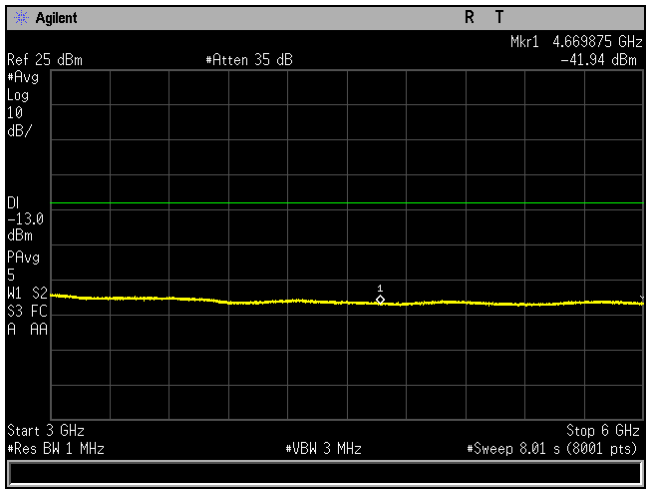
Plot 757. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 18 GHz – 22 GHz, 5 MHz



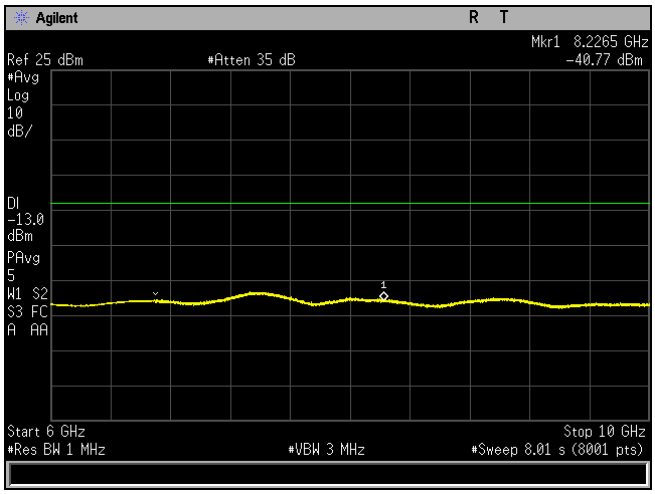
Plot 758. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 30 MHz – 1 GHz, 5 MHz



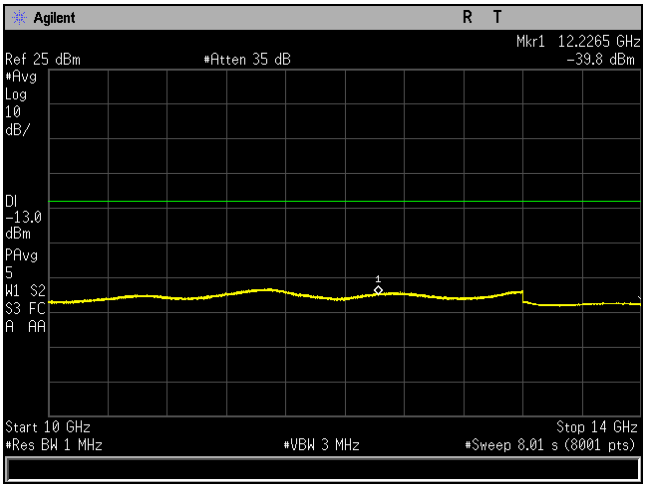
Plot 759. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 1 GHz – 3 GHz, 5 MHz



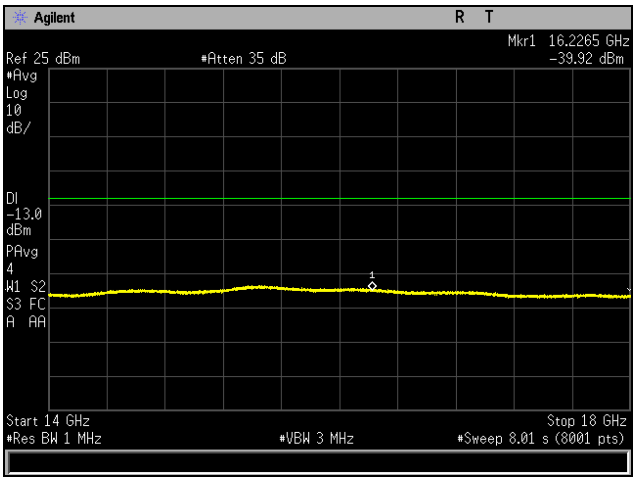
Plot 760. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 3 GHz – 6 GHz, 5 MHz



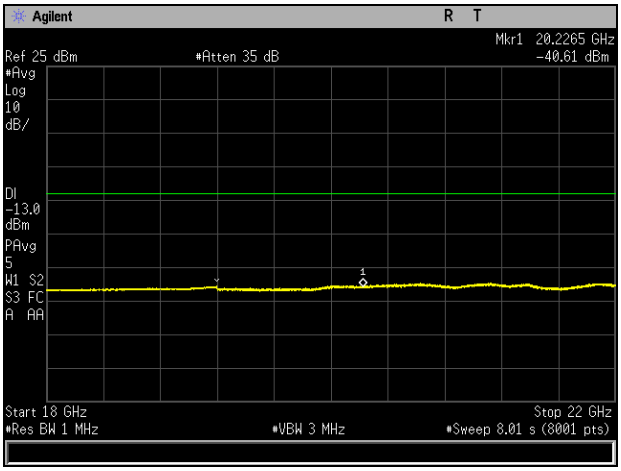
Plot 761. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 6 GHz – 10 GHz, 5 MHz



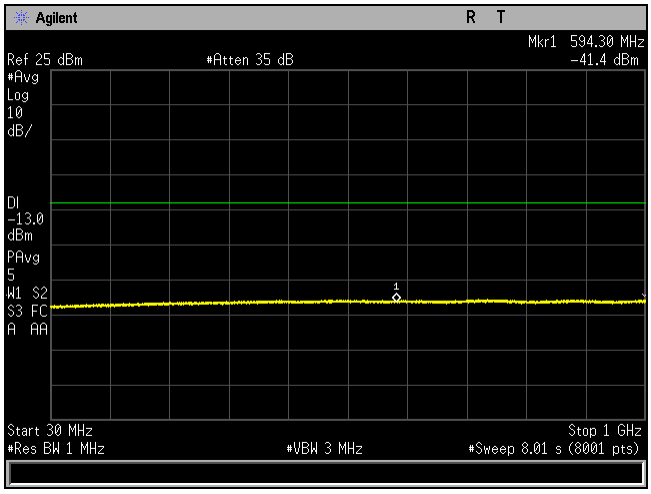
Plot 762. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 10 GHz – 14 GHz, 5 MHz



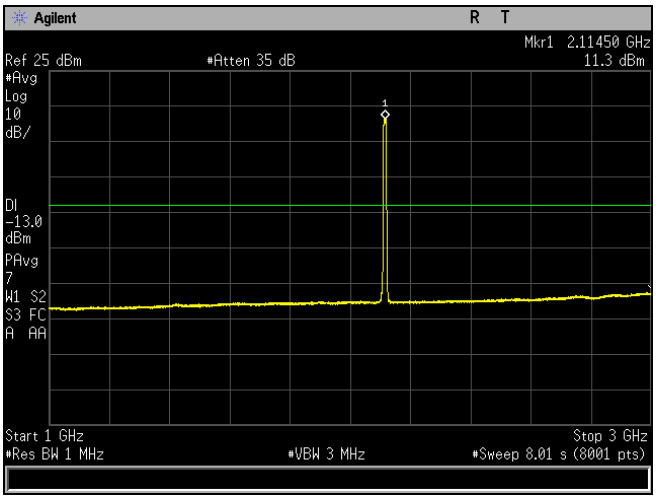
Plot 763. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 14 GHz – 18 GHz, 5 MHz



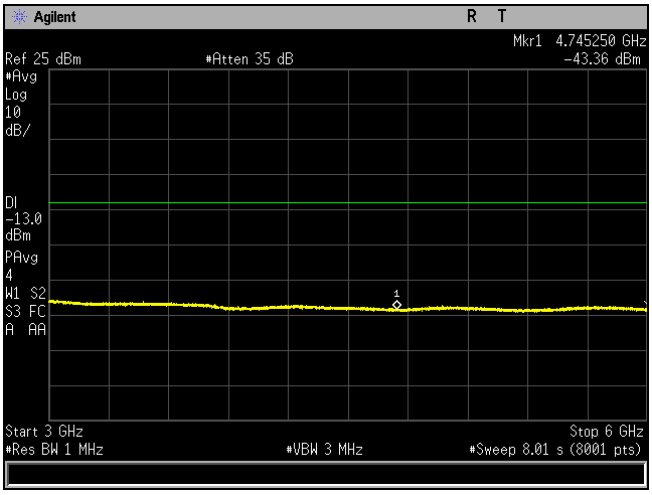
Plot 764. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 18 GHz – 22 GHz, 5 MHz



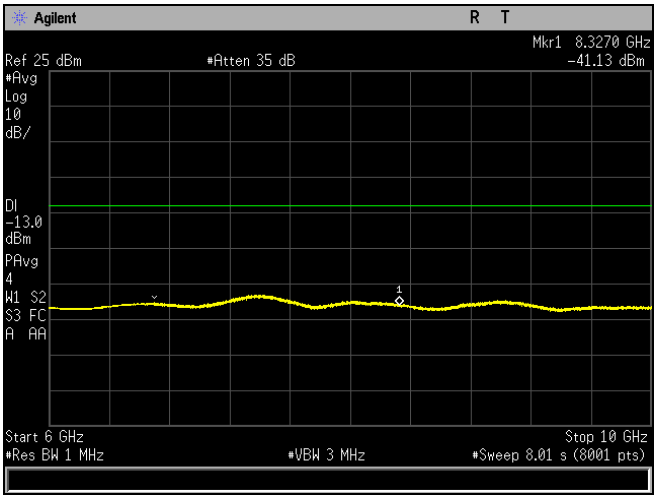
Plot 765. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 30 MHz – 1 GHz, 10 MHz



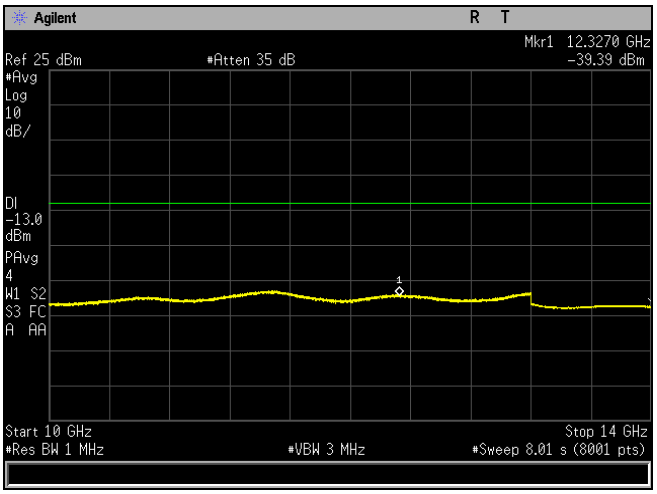
Plot 766. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 1 GHz – 3 GHz, 10 MHz



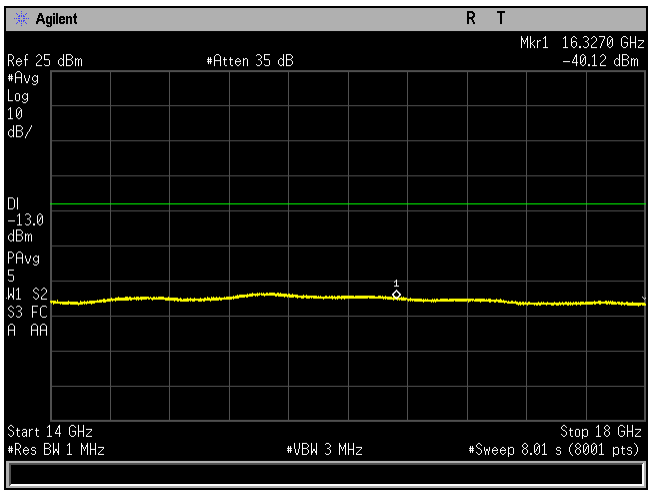
Plot 767. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 3 GHz – 6 GHz, 10 MHz



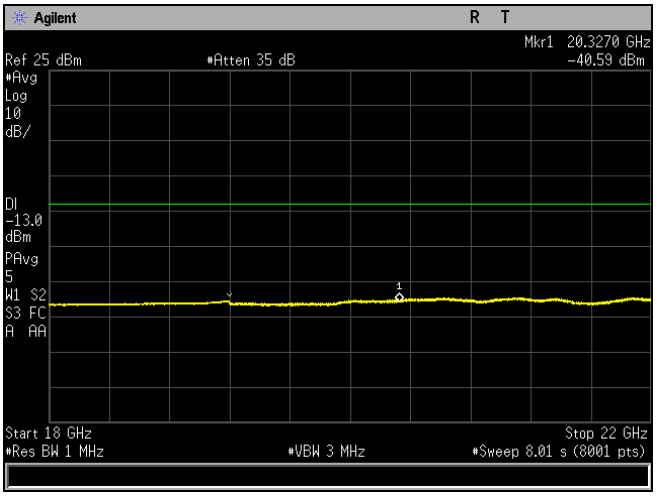
Plot 768. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 6 GHz – 10 GHz, 10 MHz



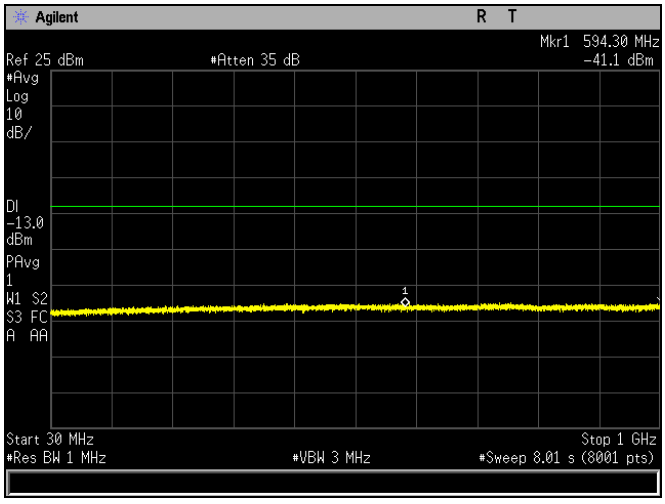
Plot 769. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 10 GHz – 14 GHz, 10 MHz



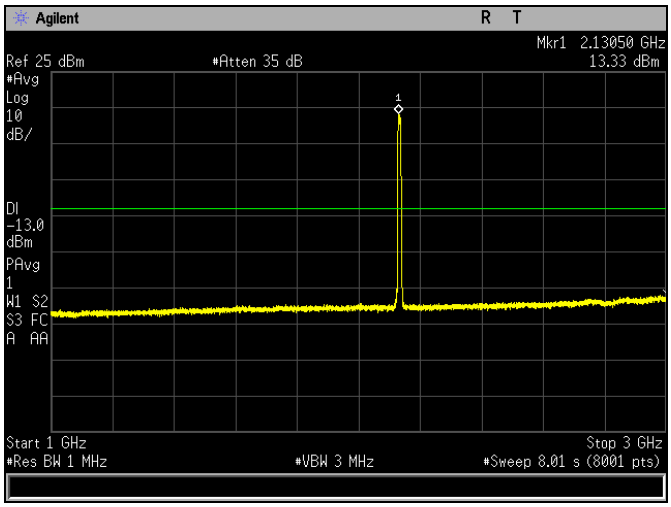
Plot 770. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 14 GHz – 18 GHz, 10 MHz



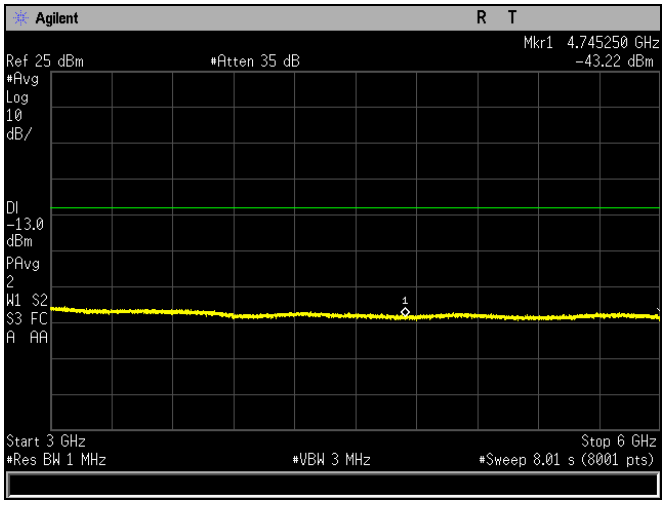
Plot 771. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 18 GHz – 22 GHz, 10 MHz



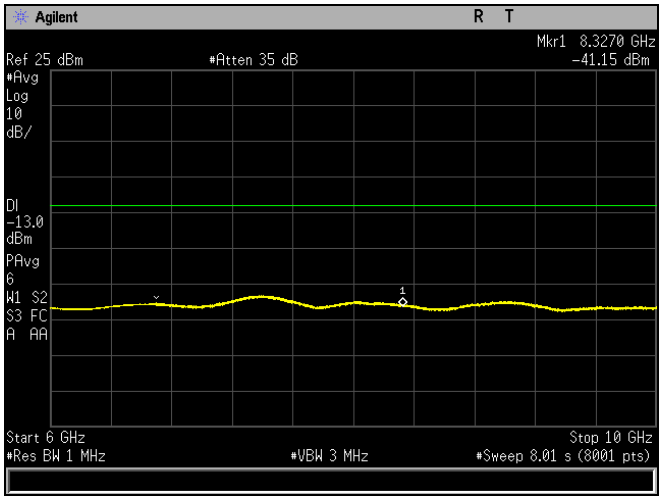
Plot 772. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 30 MHz – 1 GHz, 10 MHz



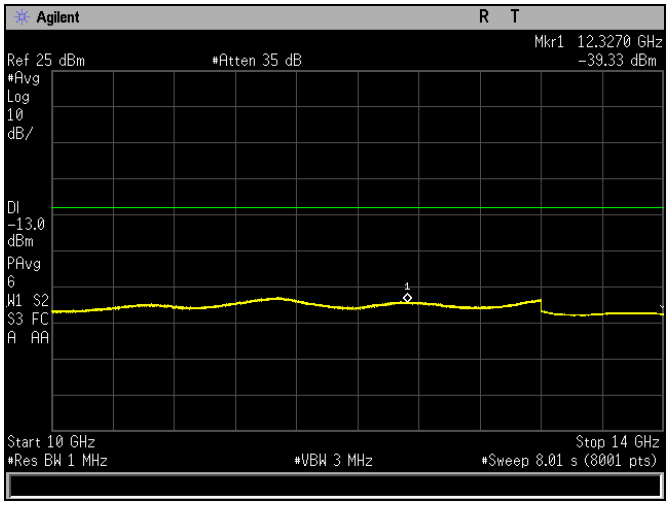
Plot 773. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 1 GHz – 3 GHz, 10 MHz



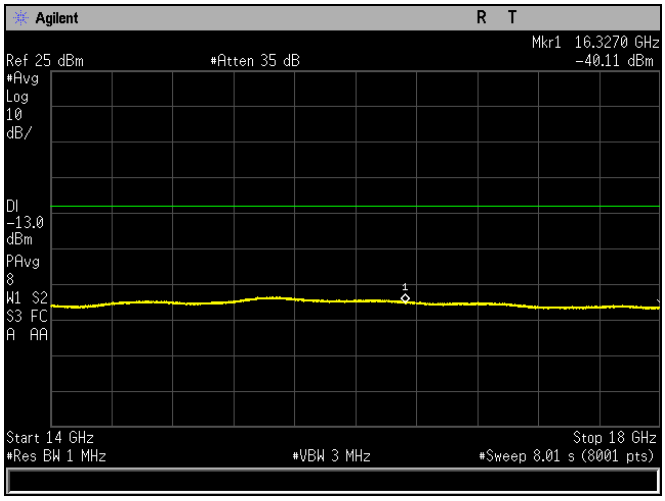
Plot 774. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 3 GHz – 6 GHz, 10 MHz



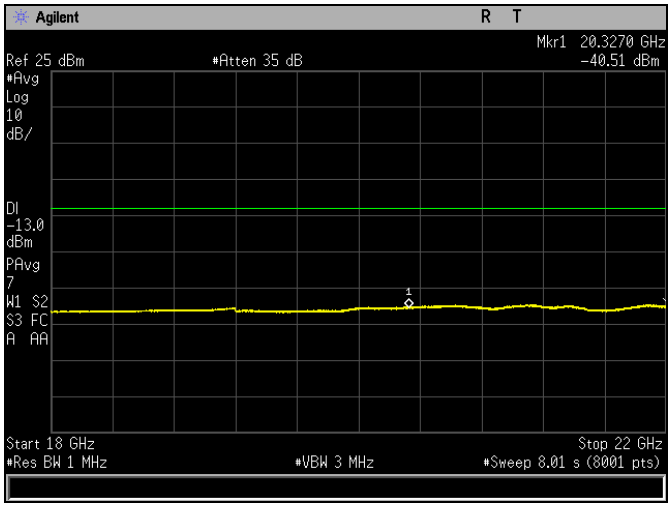
Plot 775. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 6 GHz – 10 GHz, 10 MHz



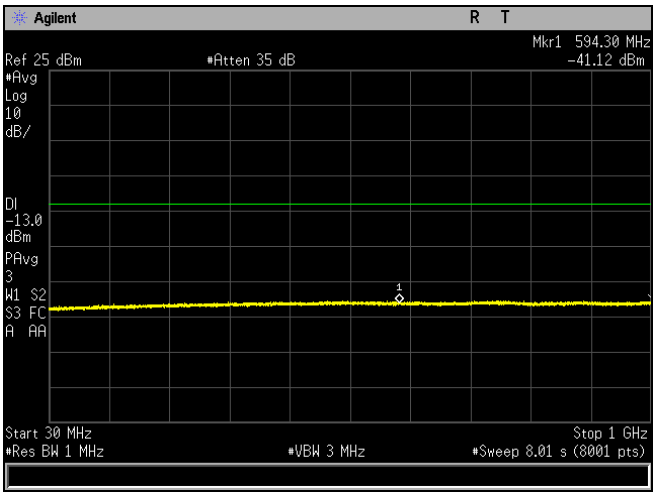
Plot 776. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 10 GHz – 14 GHz, 10 MHz



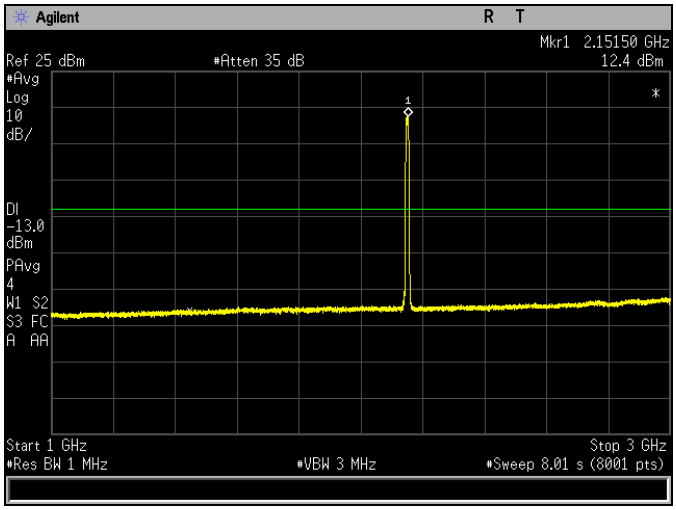
Plot 777. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 14 GHz – 18 GHz, 10 MHz



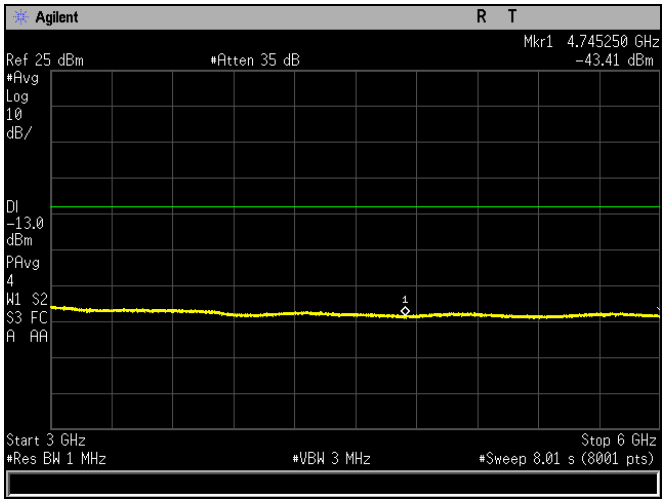
Plot 778. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 18 GHz – 22 GHz, 10 MHz



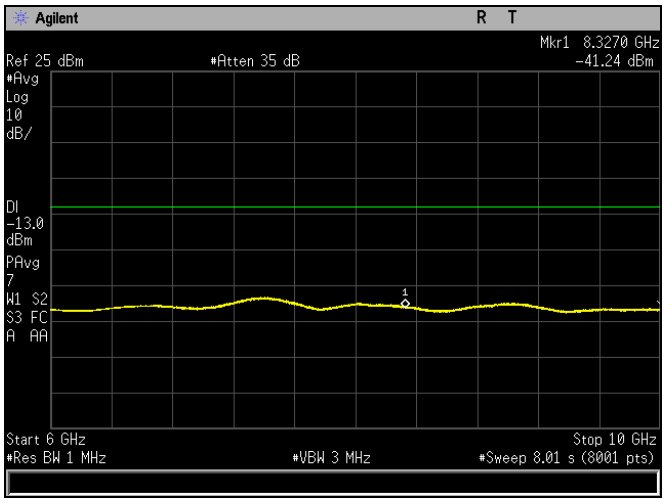
Plot 779. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 30 MHz – 1 GHz, 10 MHz



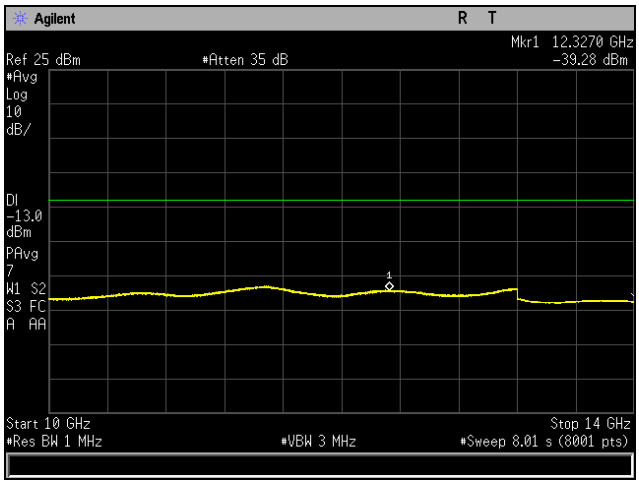
Plot 780. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 1 GHz – 3 GHz, 10 MHz



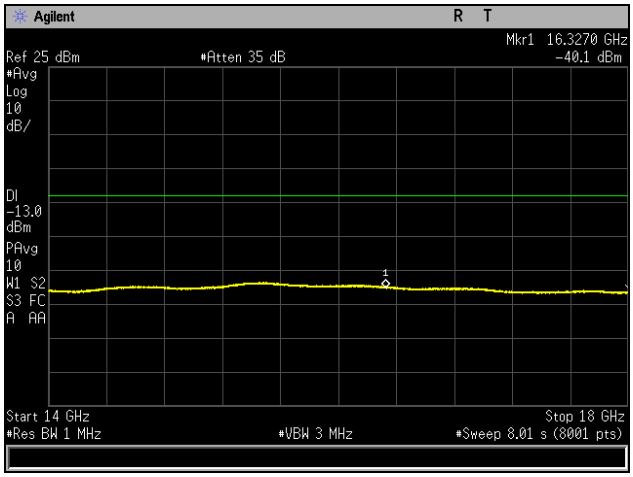
Plot 781. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 3 GHz – 6 GHz, 10 MHz



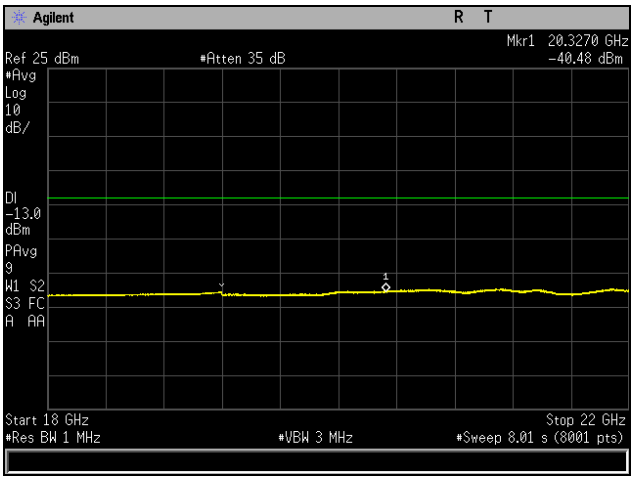
Plot 782. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 6 GHz – 10 GHz, 10 MHz



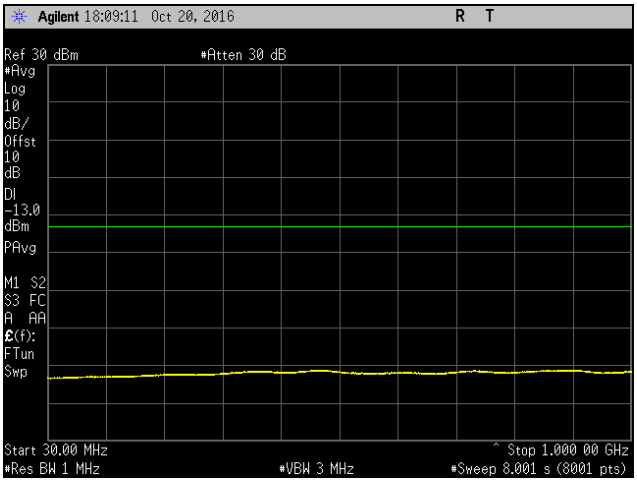
Plot 783. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 10 GHz – 14 GHz, 10 MHz



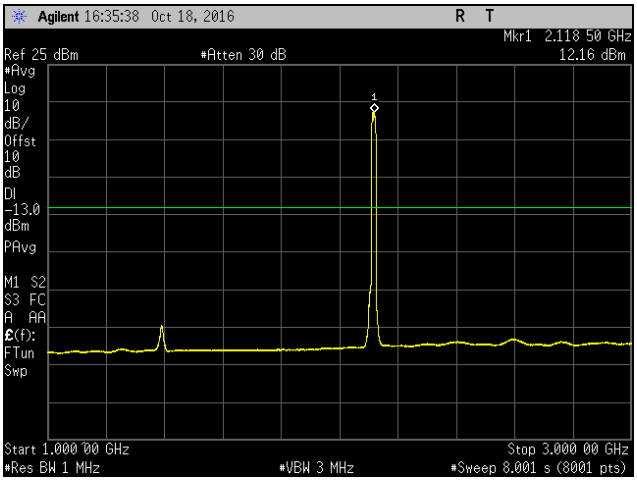
Plot 784. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 14 GHz – 18 GHz, 10 MHz



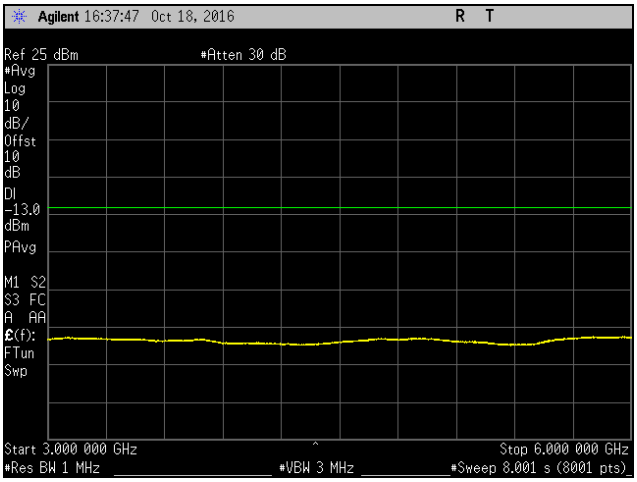
Plot 785. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 18 GHz – 22 GHz, 10 MHz



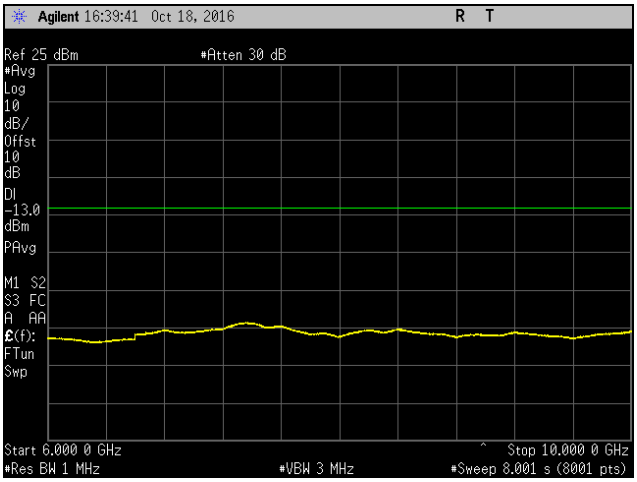
Plot 786. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 30 MHz – 1 GHz, 15 MHz



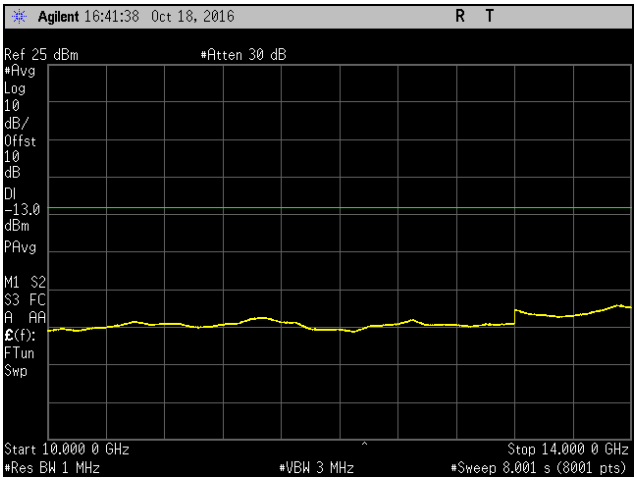
Plot 787. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 1 GHz – 3 GHz, 15 MHz



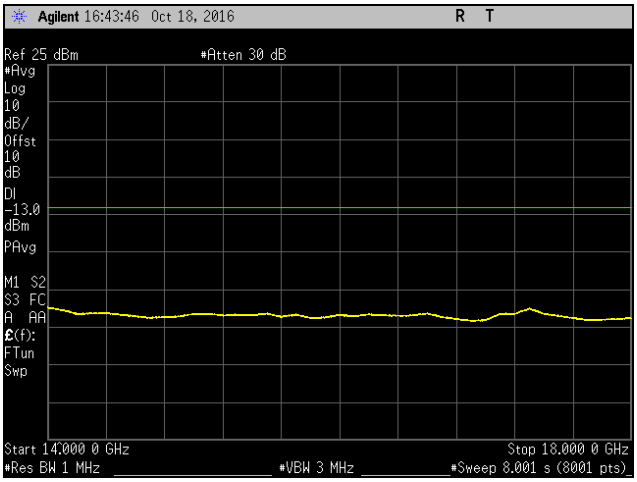
Plot 788. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 3 GHz – 6 GHz, 15 MHz



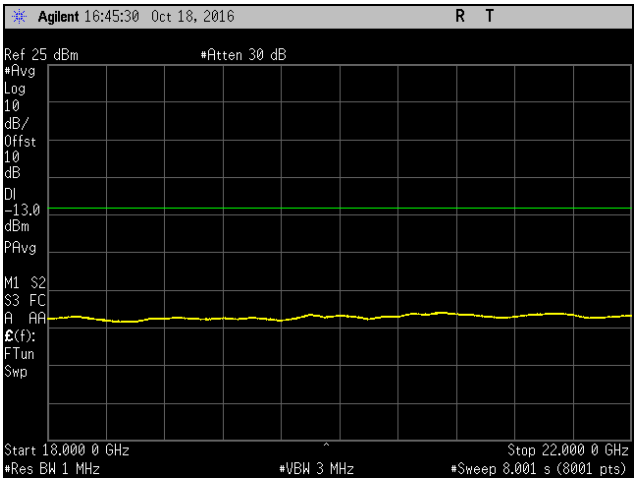
Plot 789. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 6 GHz – 10 GHz, 15 MHz



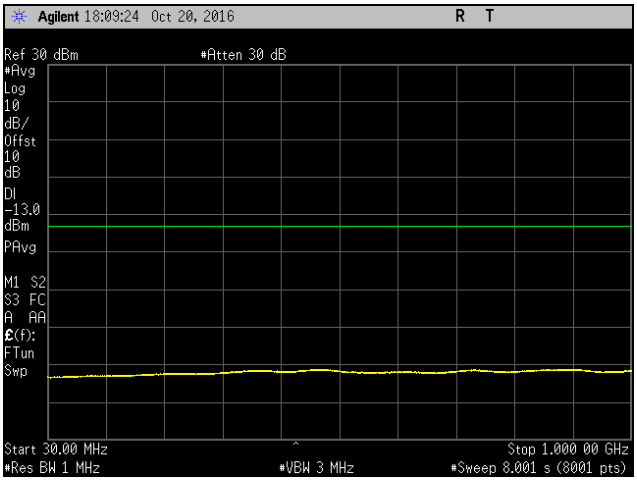
Plot 790. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 10 GHz – 14 GHz, 15 MHz



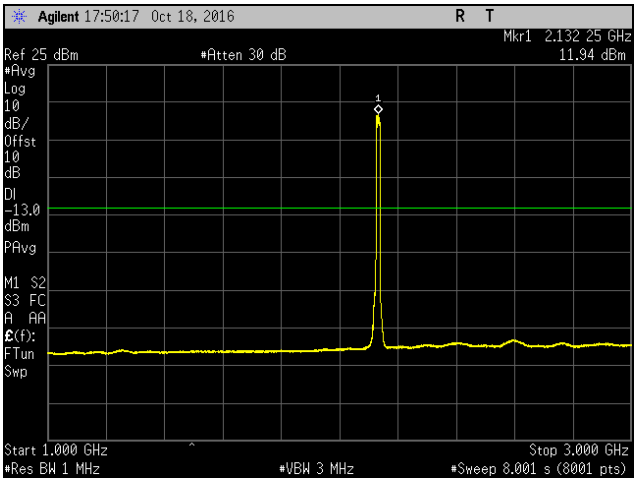
Plot 791. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 14 GHz – 18 GHz, 15 MHz



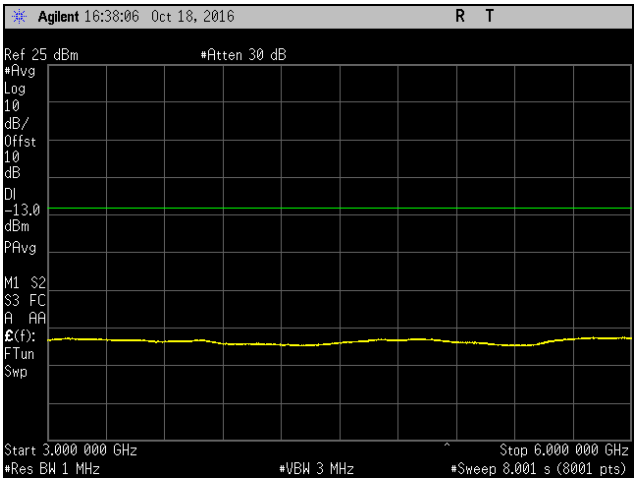
Plot 792. Spurious Emissions at Antenna Terminal, Low Channel, Band 4, Port 2, 18 GHz – 22 GHz, 15 MHz



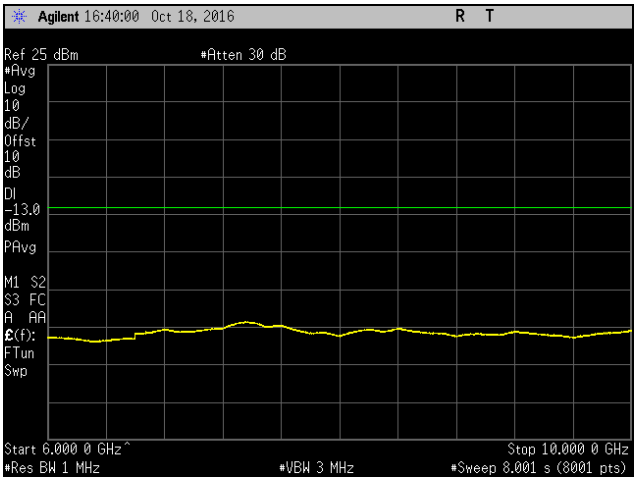
Plot 793. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 30 MHz – 1 GHz, 15 MHz



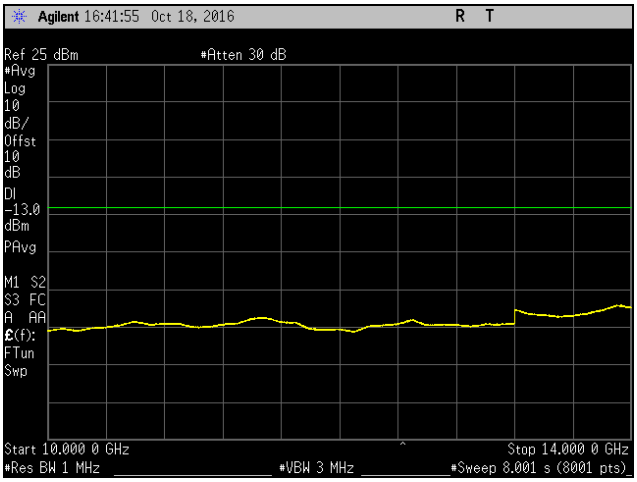
Plot 794. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 1 GHz – 3 GHz, 15 MHz



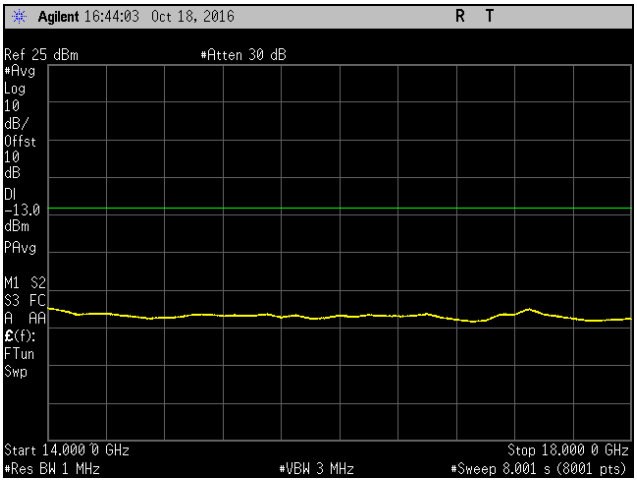
Plot 795. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 3 GHz – 6 GHz, 15 MHz



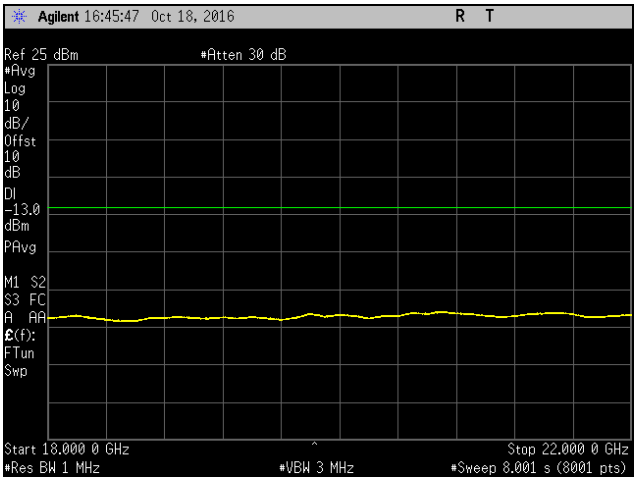
Plot 796. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 6 GHz – 10 GHz, 15 MHz



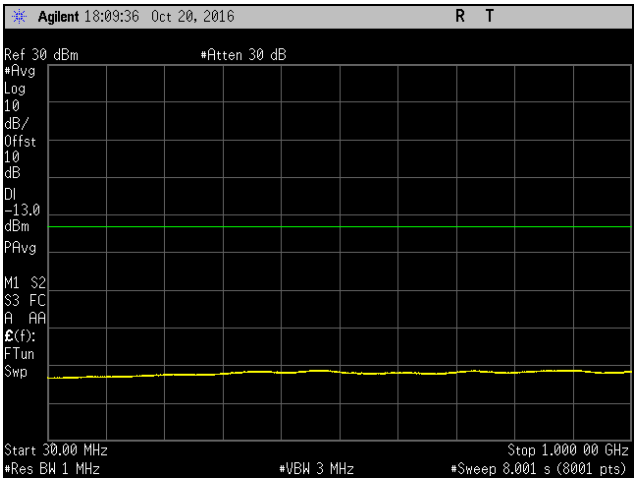
Plot 797. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 10 GHz – 14 GHz, 15 MHz



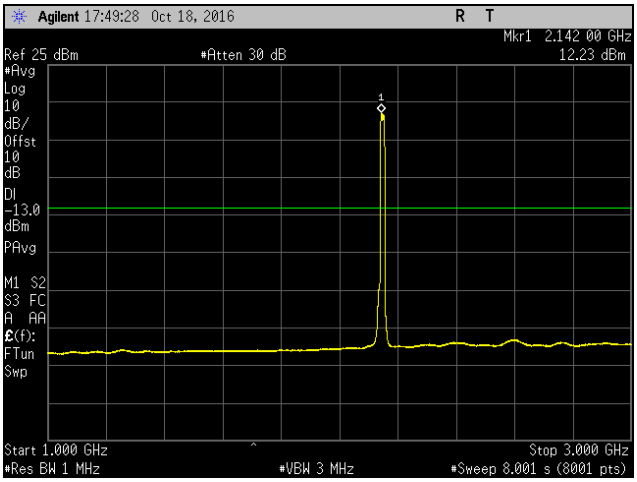
Plot 798. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 14 GHz – 18 GHz, 15 MHz



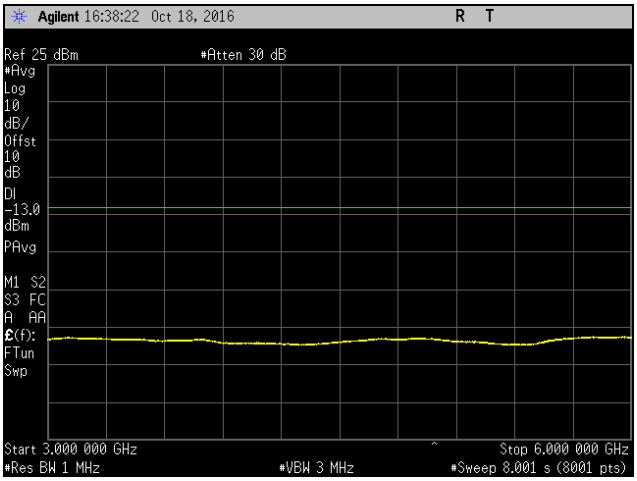
Plot 799. Spurious Emissions at Antenna Terminal, Mid Channel, Band 4, Port 2, 18 GHz – 22 GHz, 15 MHz



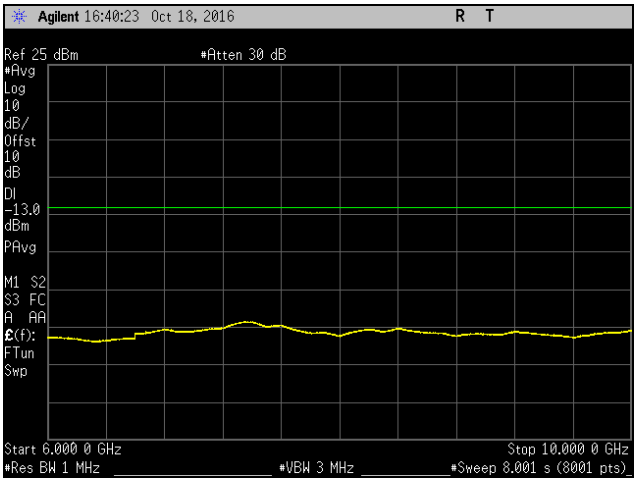
Plot 800. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 30 MHz – 1 GHz, 15 MHz



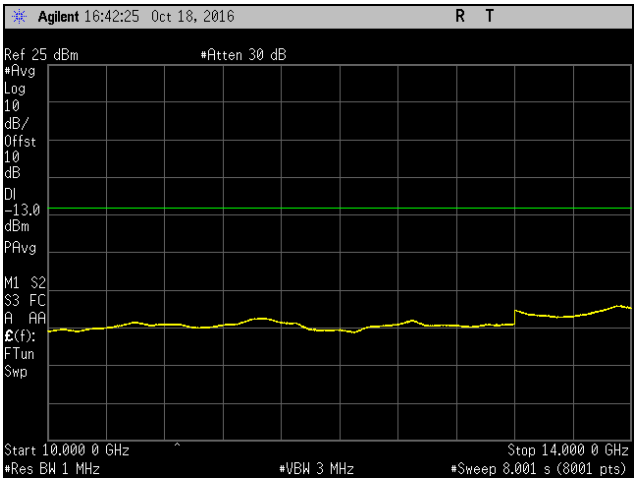
Plot 801. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 1 GHz – 3 GHz, 15 MHz



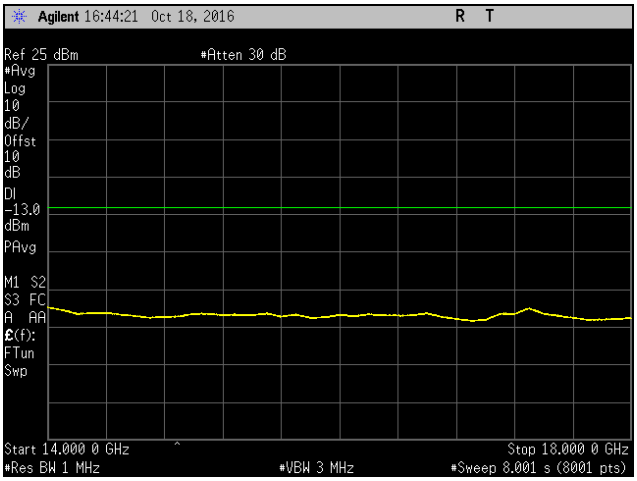
Plot 802. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 3 GHz – 6 GHz, 15 MHz



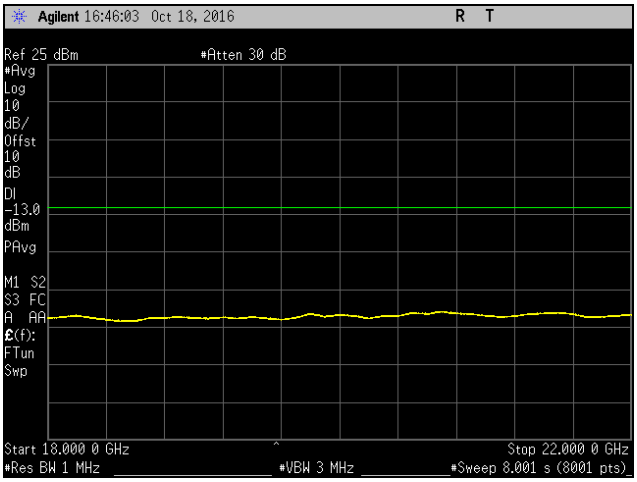
Plot 803. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 6 GHz – 10 GHz, 15 MHz



Plot 804. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 10 GHz – 14 GHz, 15 MHz

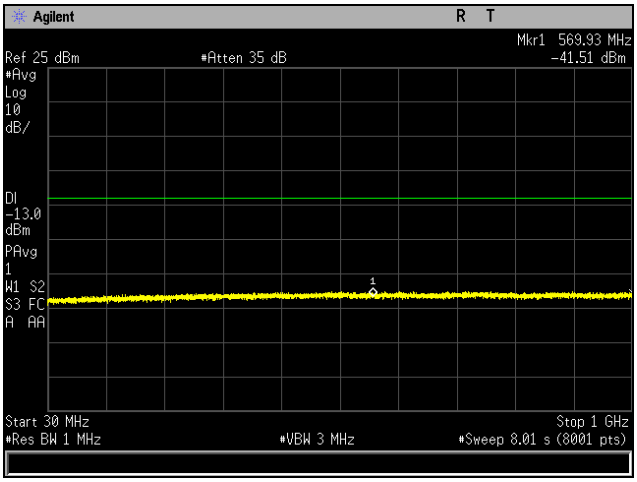


Plot 805. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 14 GHz – 18 GHz, 15 MHz

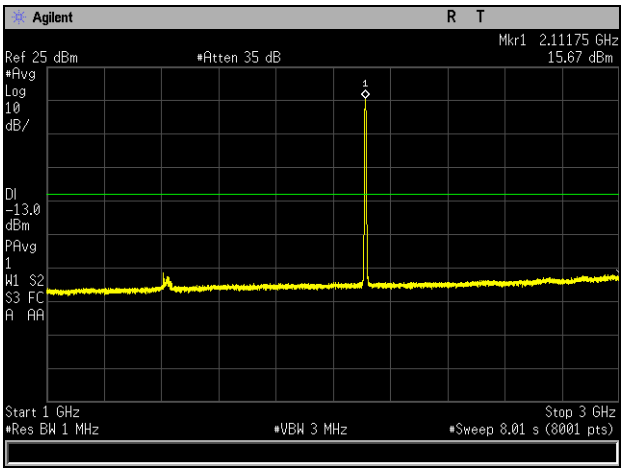


Plot 806. Spurious Emissions at Antenna Terminal, High Channel, Band 4, Port 2, 18 GHz – 22 GHz, 15 MHz

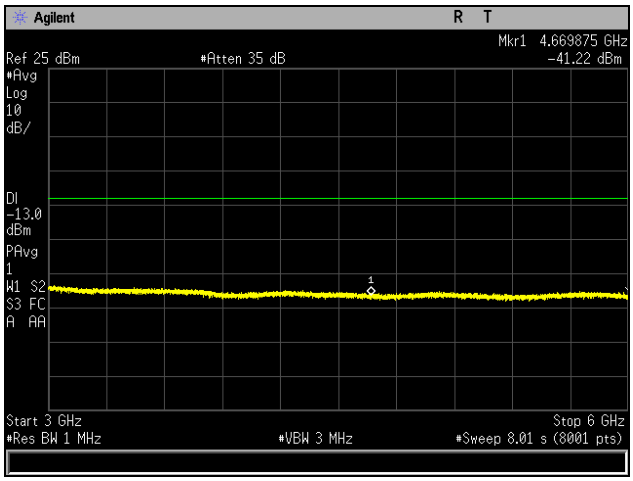
Spurious Emissions at Antenna Terminals, Band 10



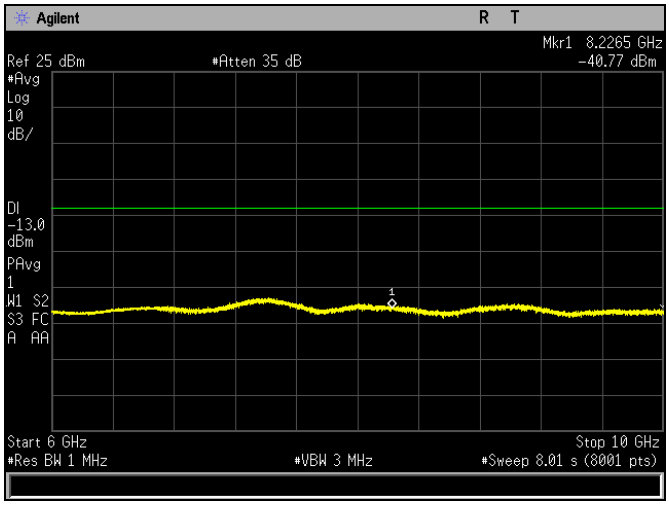
Plot 807. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 30 MHz – 1 GHz, 5 MHz



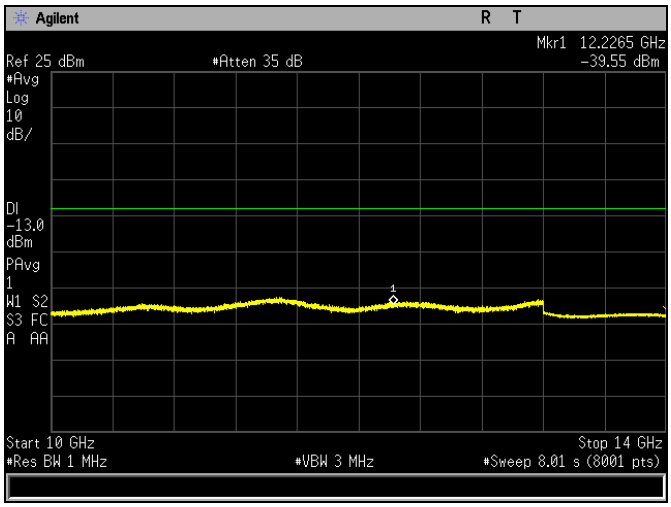
Plot 808. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 1 GHz – 3 GHz, 5 MHz



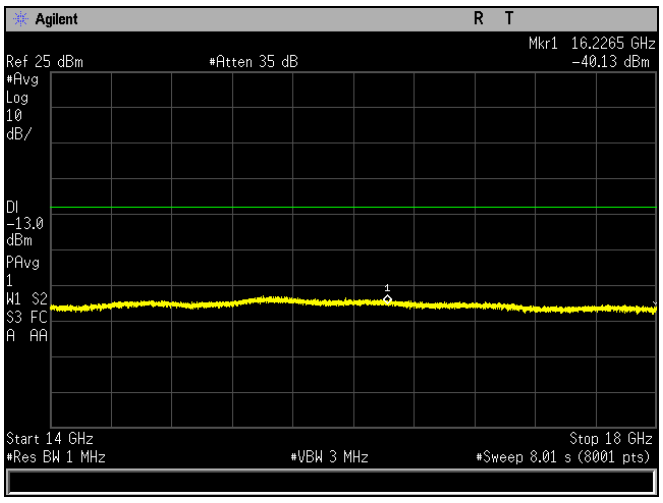
Plot 809. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 3 GHz – 6 GHz, 5 MHz



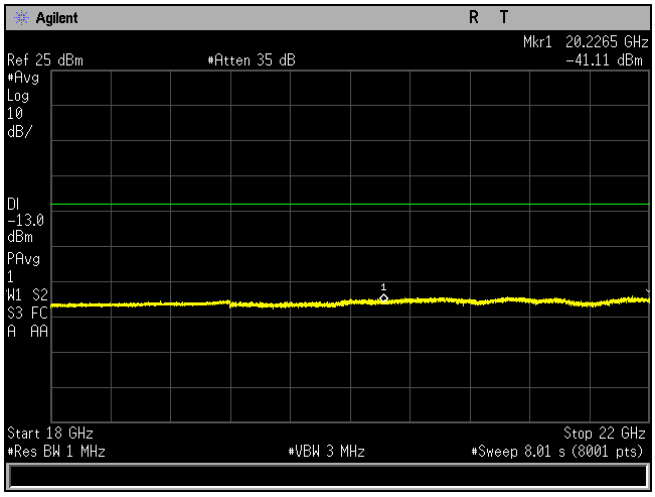
Plot 810. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 6 GHz – 10 GHz, 5 MHz



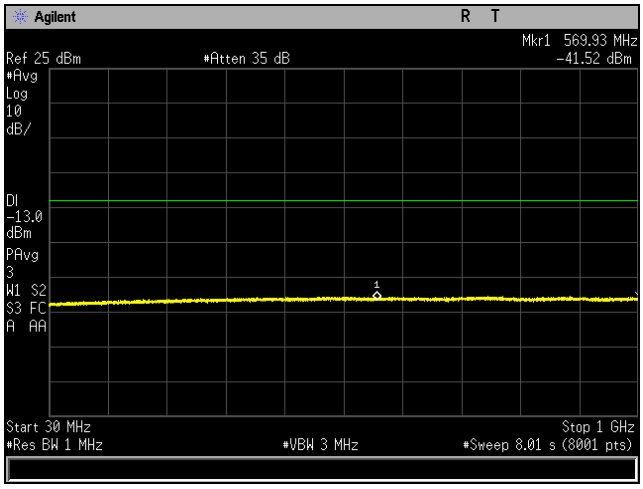
Plot 811. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 10 GHz – 14 GHz, 5 MHz



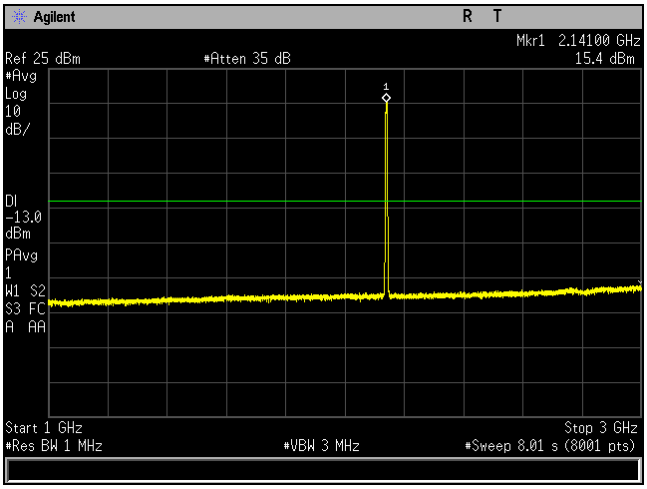
Plot 812. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 14 GHz – 18 GHz, 5 MHz



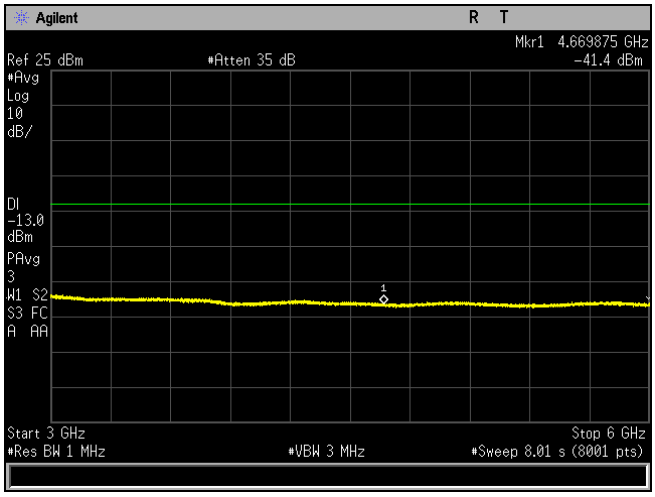
Plot 813. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 18 GHz – 22 GHz, 5 MHz



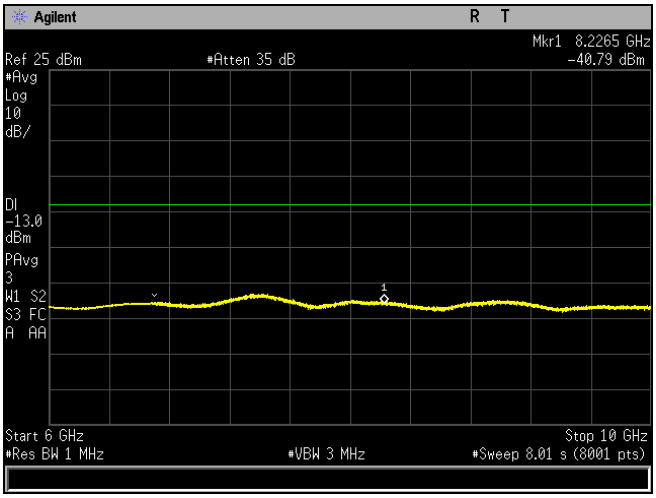
Plot 814. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 30 MHz – 1 GHz, 5 MHz



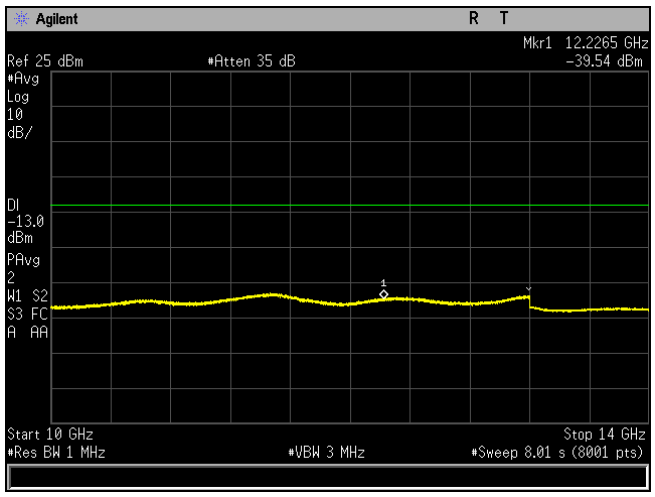
Plot 815. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 1 GHz – 3 GHz, 5 MHz



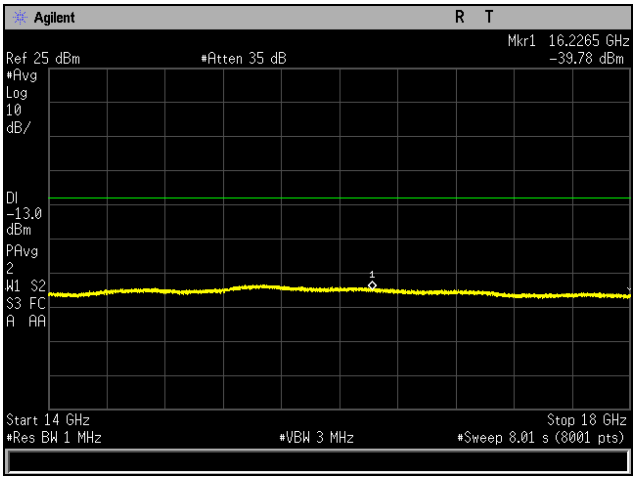
Plot 816. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 3 GHz – 6 GHz, 5 MHz



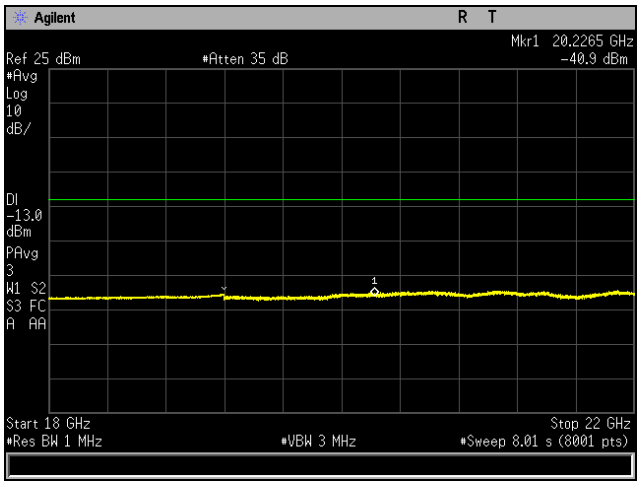
Plot 817. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 6 GHz – 10 GHz, 5 MHz



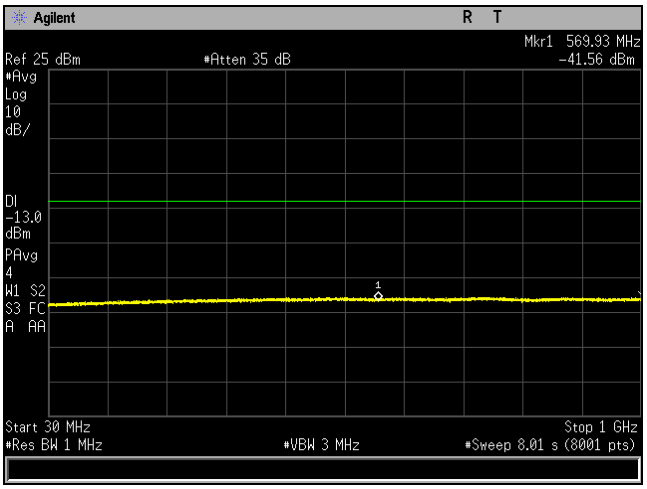
Plot 818. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 10 GHz – 14 GHz, 5 MHz



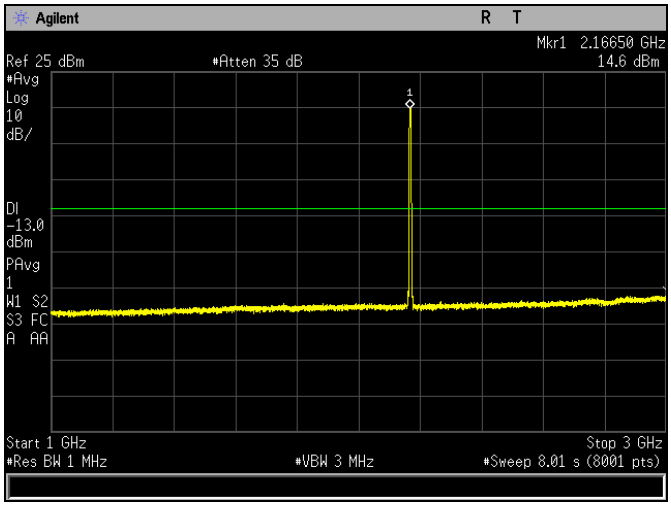
Plot 819. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 14 GHz – 18 GHz, 5 MHz



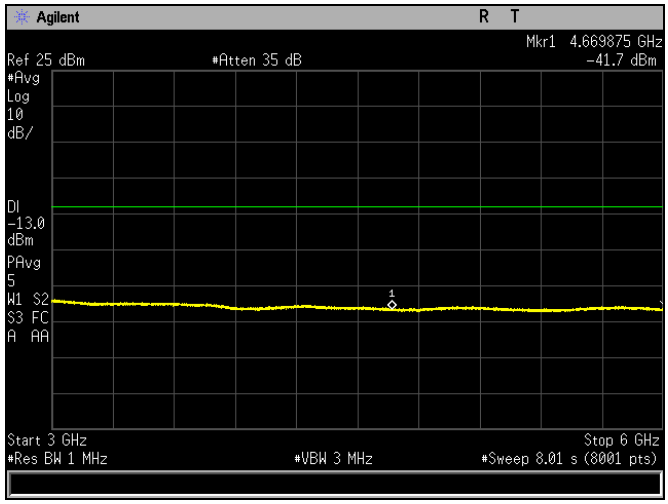
Plot 820. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 18 GHz – 22 GHz, 5 MHz



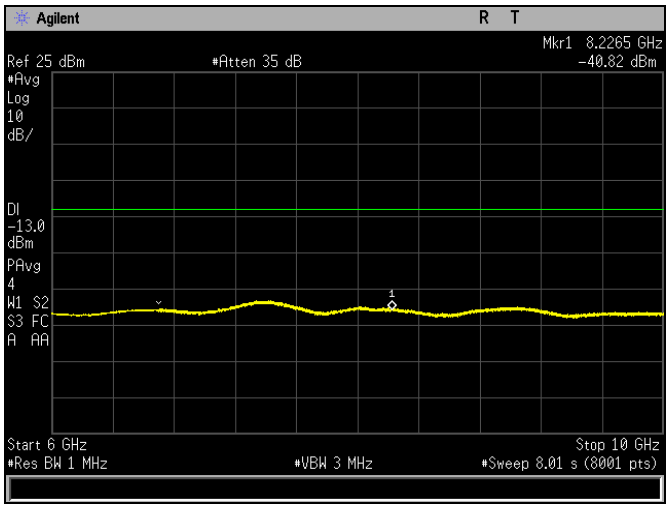
Plot 821. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 30 MHz – 1 GHz, 5 MHz



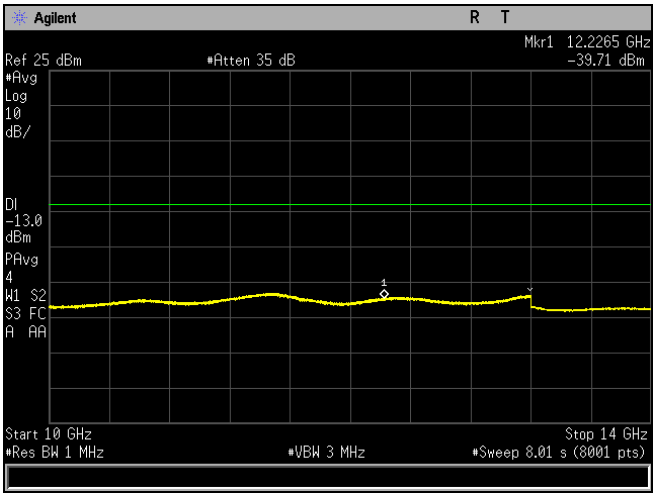
Plot 822. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 1 GHz – 3 GHz, 5 MHz



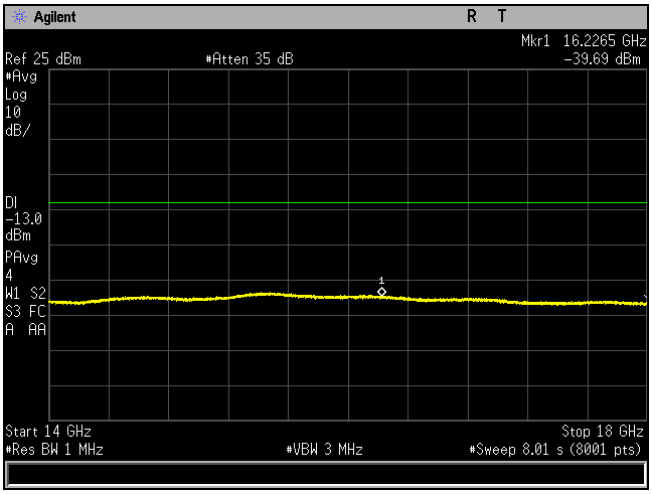
Plot 823. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 3 GHz – 6 GHz, 5 MHz



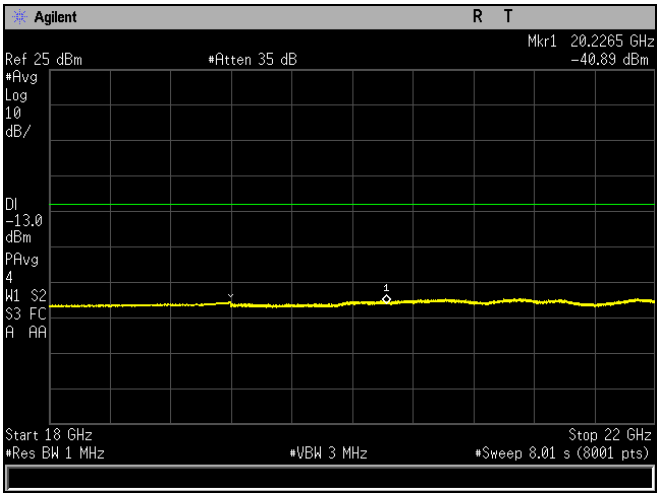
Plot 824. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 6 GHz – 10 GHz, 5 MHz



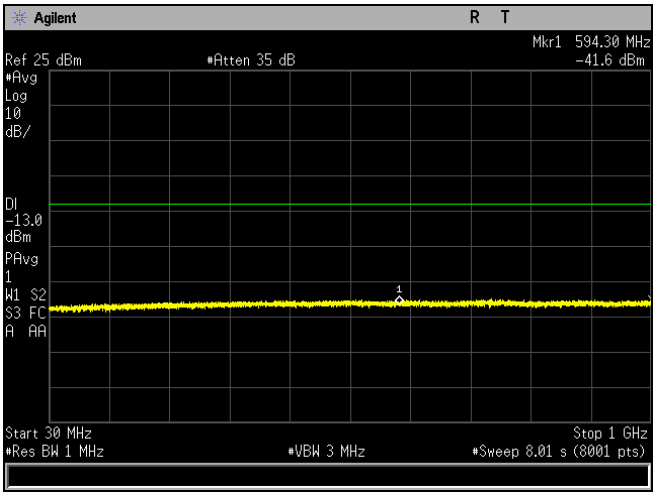
Plot 825. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 10 GHz – 14 GHz, 5 MHz



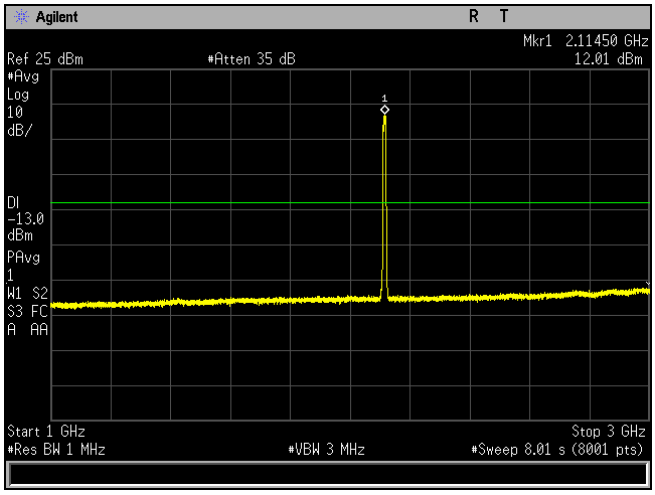
Plot 826. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 14 GHz – 18 GHz, 5 MHz



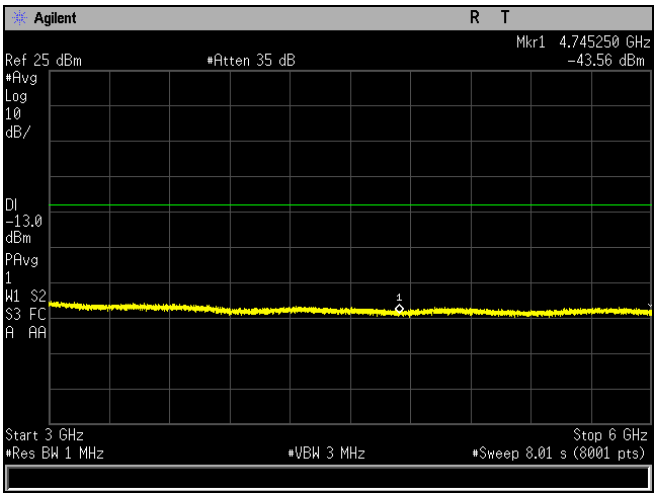
Plot 827. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 18 GHz – 22 GHz, 5 MHz



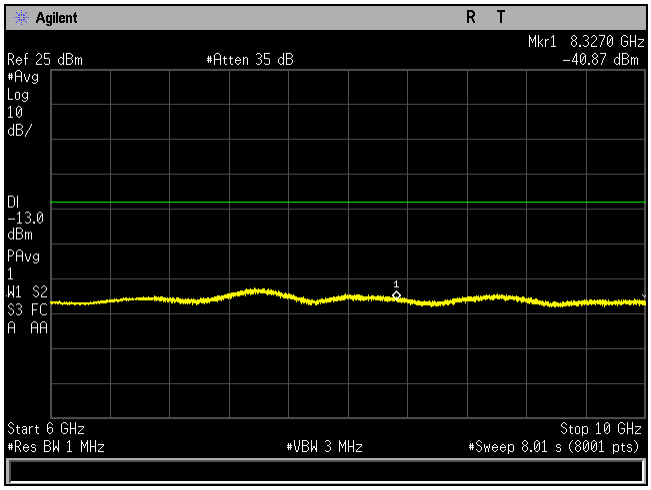
Plot 828. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 30 MHz – 1 GHz, 10 MHz



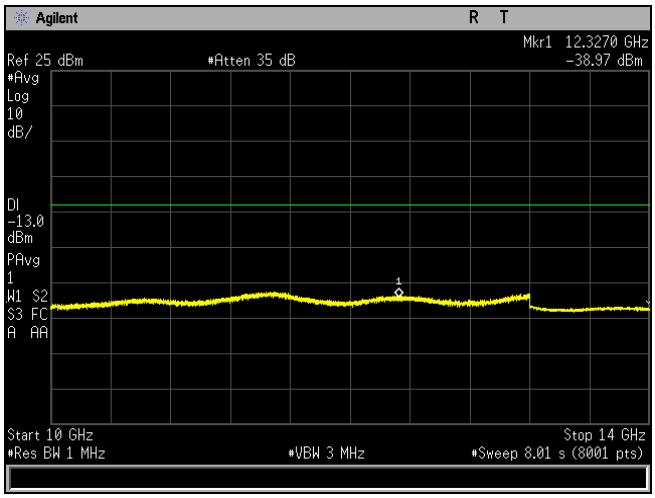
Plot 829. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 1 GHz – 3 GHz, 10 MHz



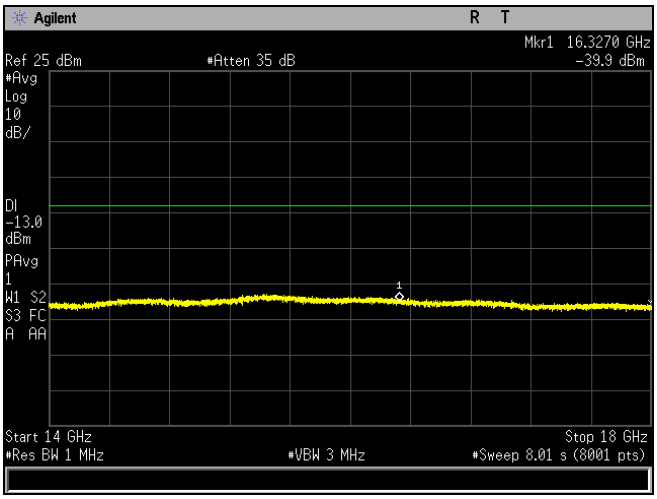
Plot 830. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 3 GHz – 6 GHz, 10 MHz



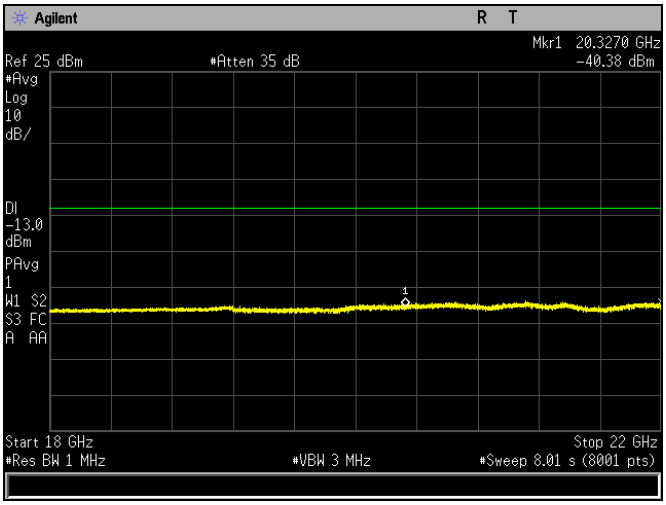
Plot 831. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 6 GHz – 10 GHz, 10 MHz



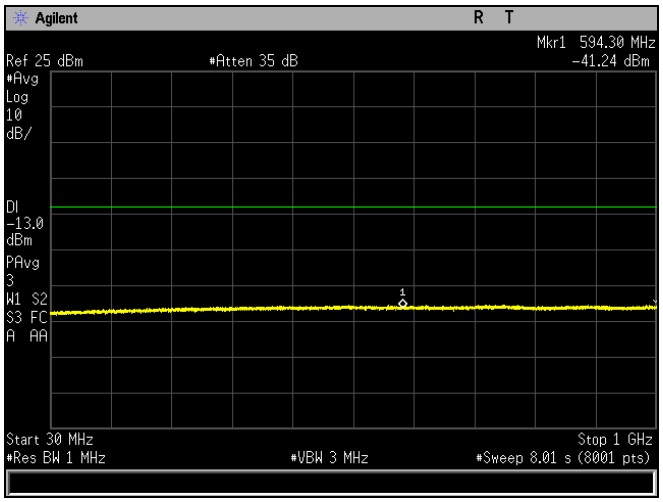
Plot 832. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 10 GHz – 14 GHz, 10 MHz



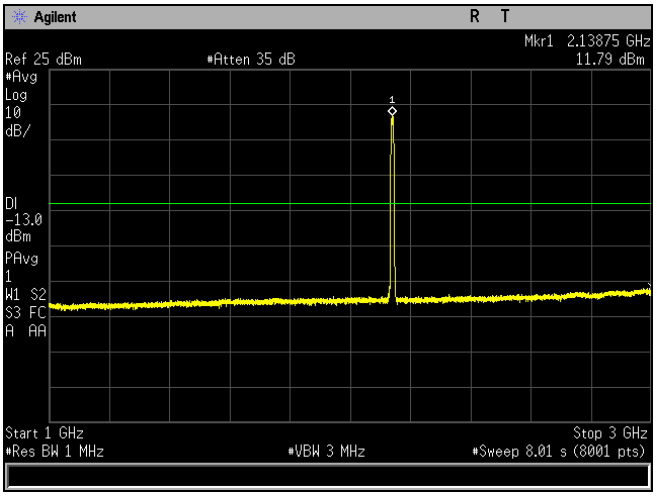
Plot 833. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 14 GHz – 18 GHz, 10 MHz



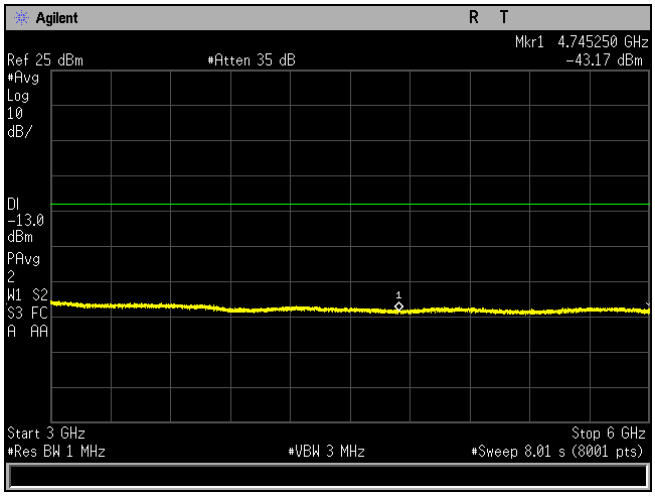
Plot 834. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 18 GHz – 22 GHz, 10 MHz



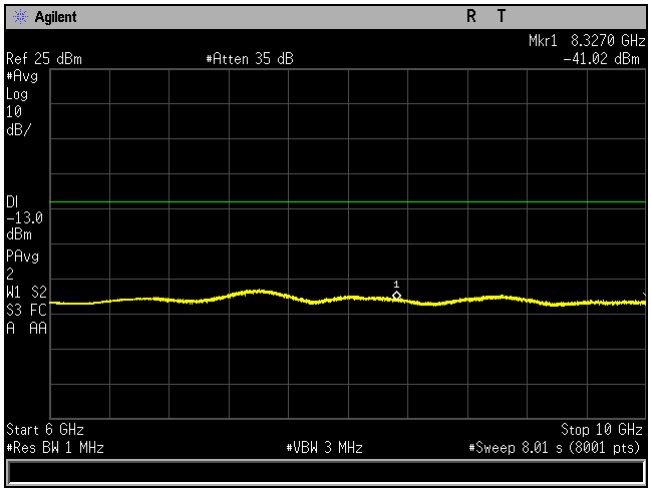
Plot 835. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 30 MHz – 1 GHz, 10 MHz



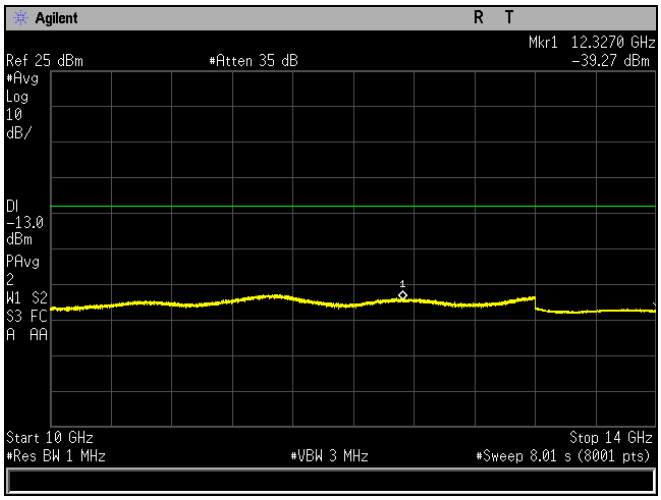
Plot 836. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 1 GHz – 3 GHz, 10 MHz



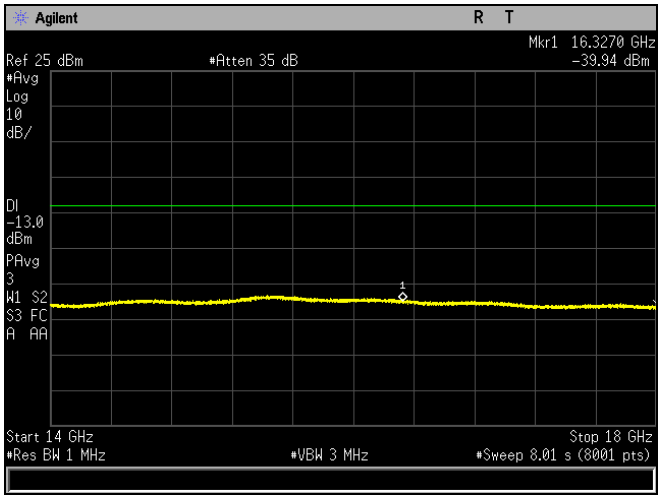
Plot 837. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 3 GHz – 6 GHz, 10 MHz



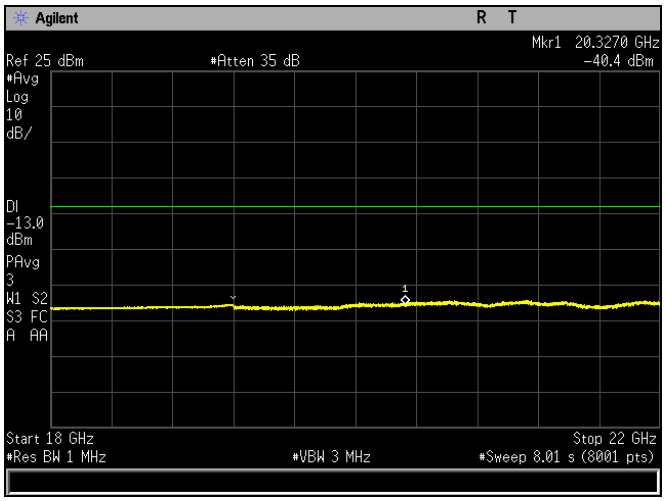
Plot 838. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 6 GHz – 10 GHz, 10 MHz



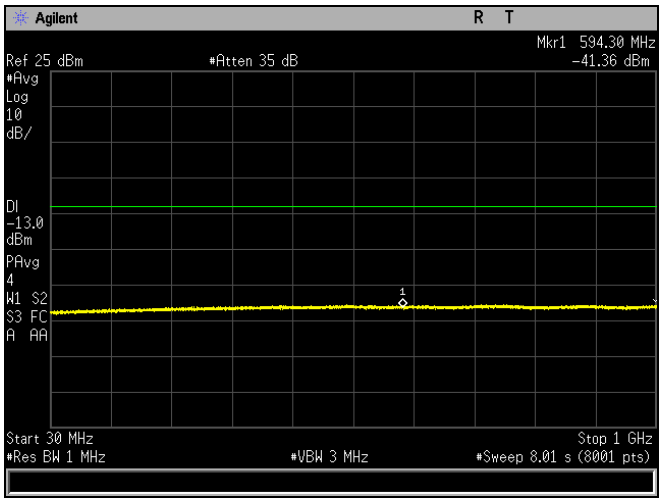
Plot 839. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 10 GHz – 14 GHz, 10 MHz



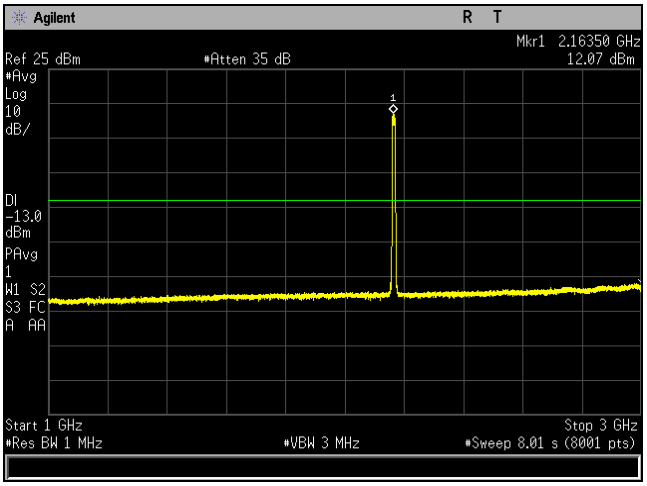
Plot 840. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 14 GHz – 18 GHz, 10 MHz



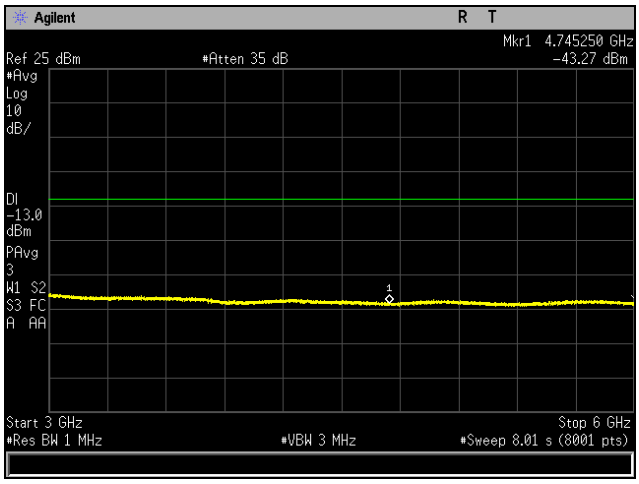
Plot 841. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 18 GHz – 22 GHz, 10 MHz



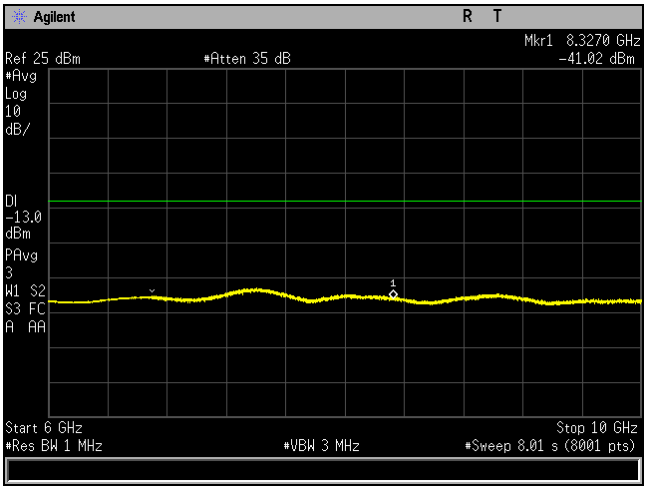
Plot 842. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 30 MHz – 1 GHz, 10 MHz



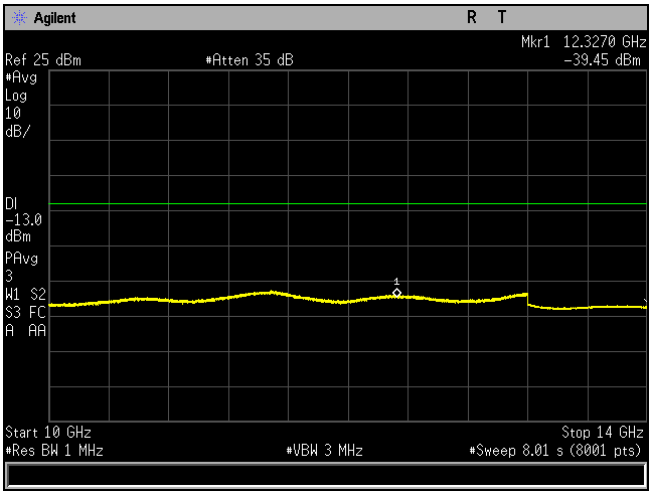
Plot 843. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 1 GHz – 3 GHz, 10 MHz



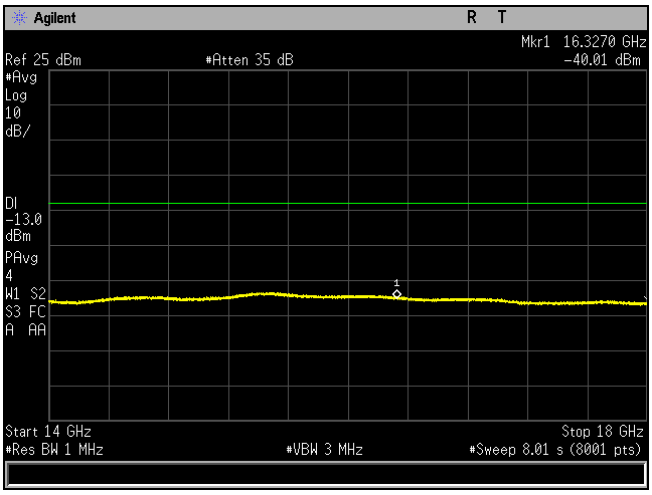
Plot 844. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 3 GHz – 6 GHz, 10 MHz



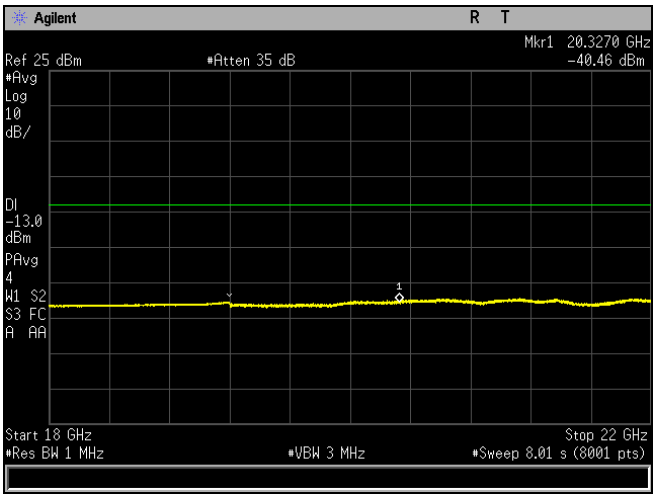
Plot 845. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 6 GHz – 10 GHz, 10 MHz



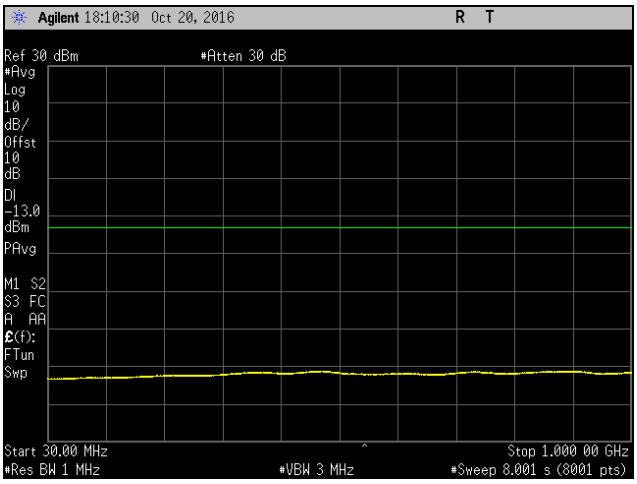
Plot 846. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 10 GHz – 14 GHz, 10 MHz



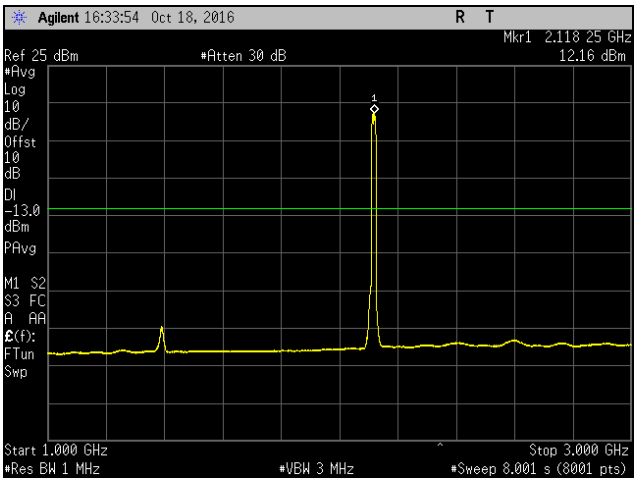
Plot 847. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 14 GHz – 18 GHz, 10 MHz



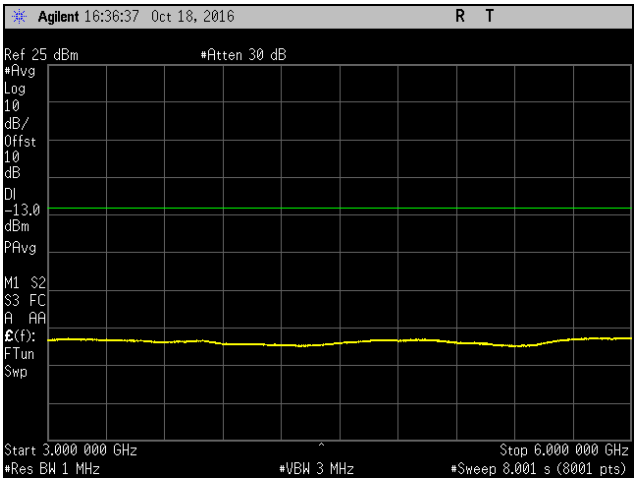
Plot 848. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 18 GHz – 22 GHz, 10 MHz



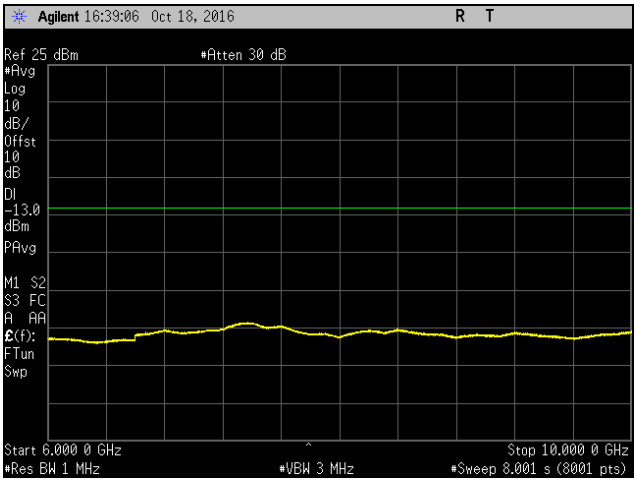
Plot 849. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 30 MHz – 1 GHz, 15 MHz



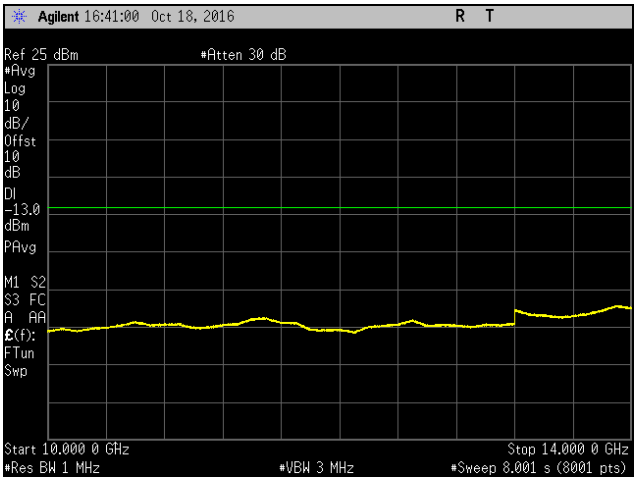
Plot 850. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 1 GHz – 3 GHz, 15 MHz



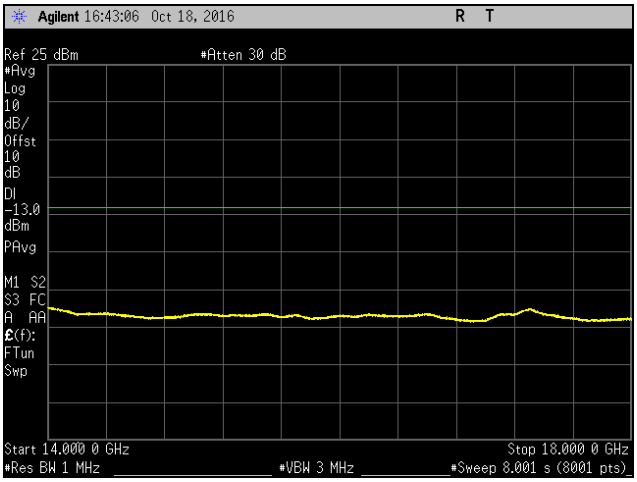
Plot 851. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 3 GHz – 6 GHz, 15 MHz



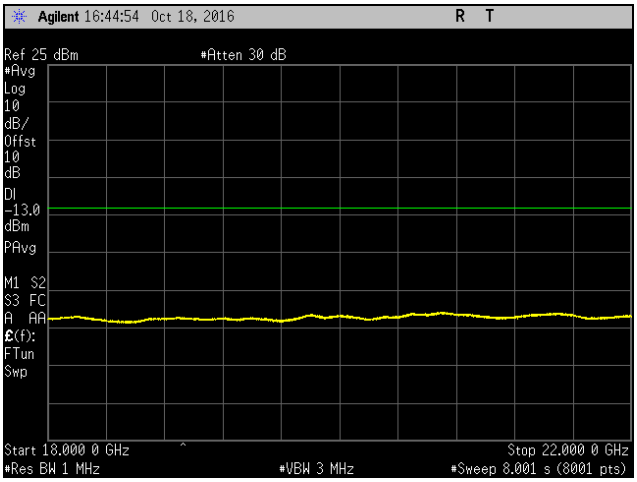
Plot 852. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 6 GHz – 10 GHz, 15 MHz



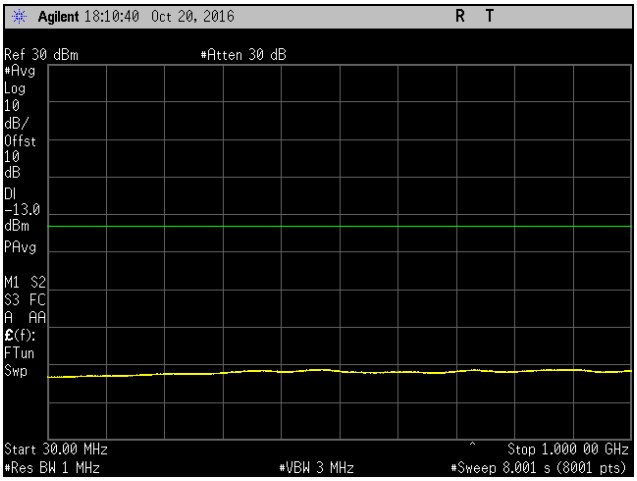
Plot 853. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 10 GHz – 14 GHz, 15 MHz



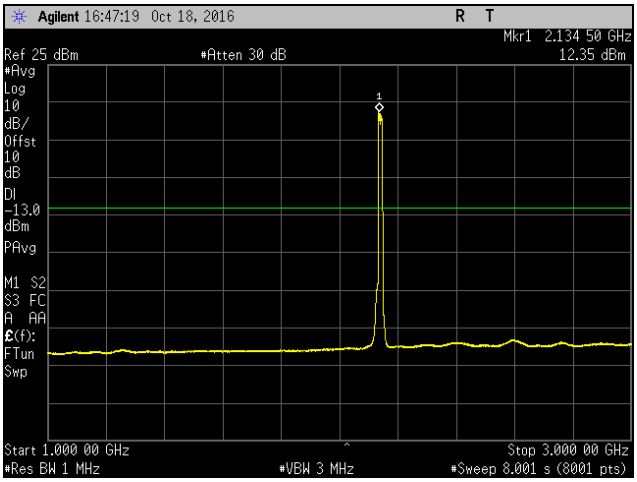
Plot 854. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 14 GHz – 18 GHz, 15 MHz



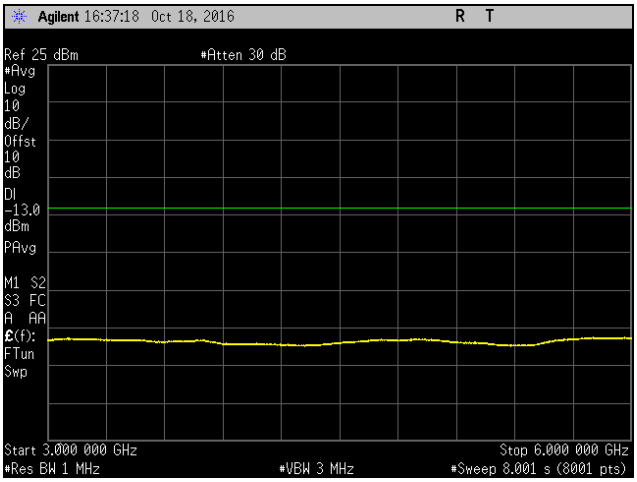
Plot 855. Spurious Emissions at Antenna Terminal, Low Channel, Band 10, Port 2, 18 GHz – 22 GHz, 15 MHz



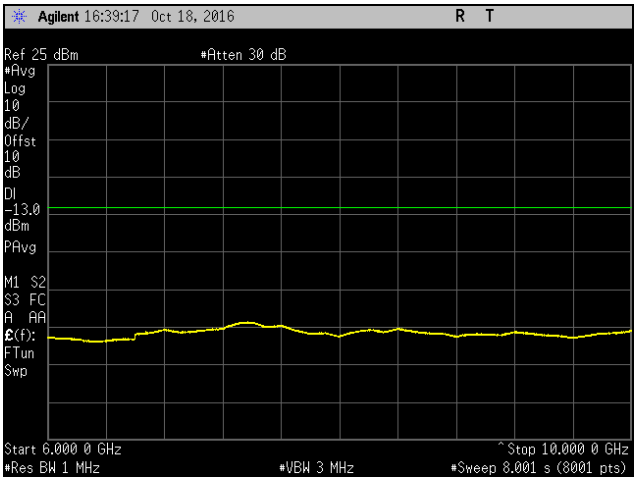
Plot 856. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 30 MHz – 1 GHz, 15 MHz



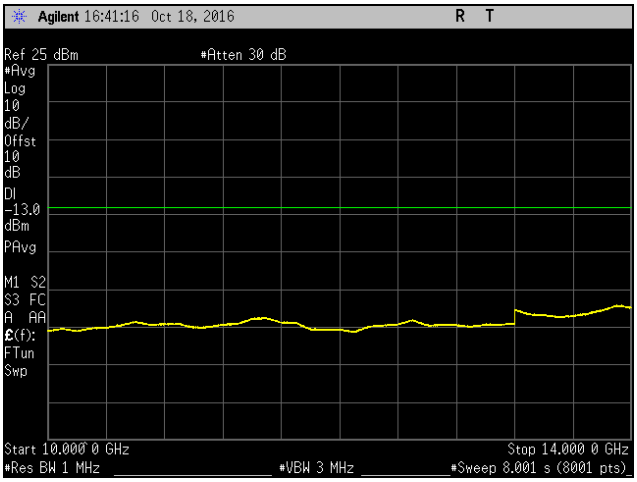
Plot 857. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 1 GHz – 3 GHz, 15 MHz



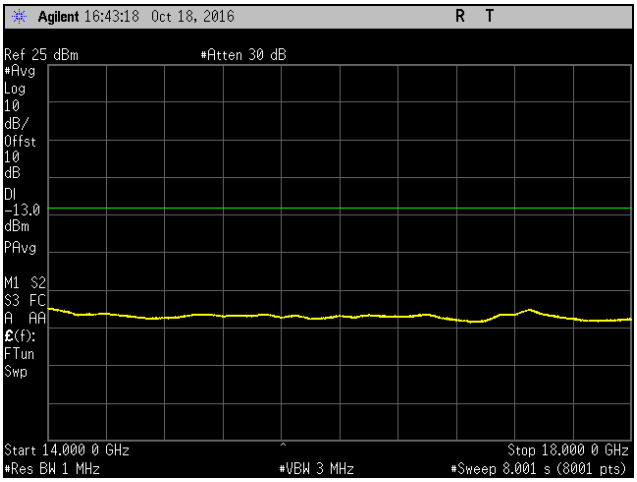
Plot 858. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 3 GHz – 6 GHz, 15 MHz



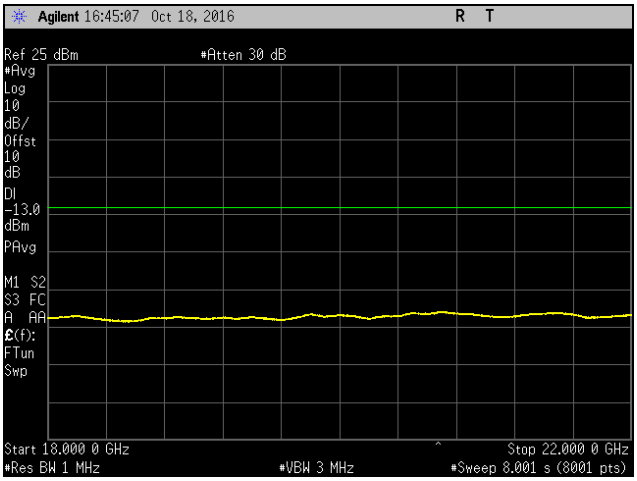
Plot 859. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 6 GHz – 10 GHz, 15 MHz



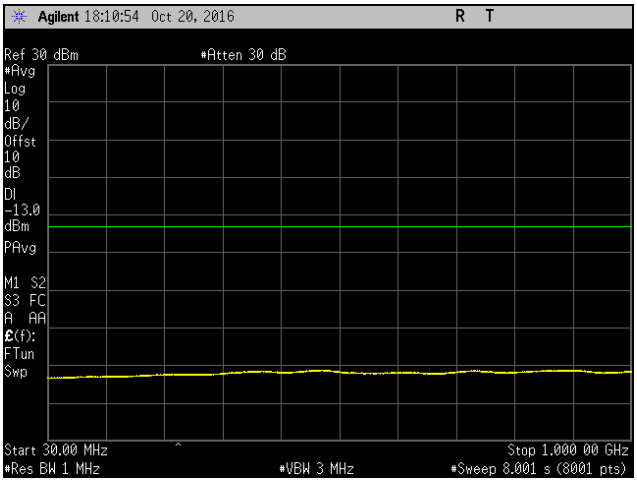
Plot 860. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 10 GHz – 14 GHz, 15 MHz



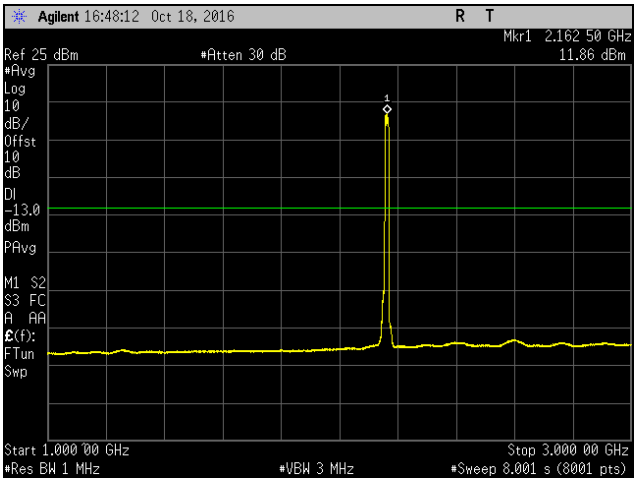
Plot 861. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 14 GHz – 18 GHz, 15 MHz



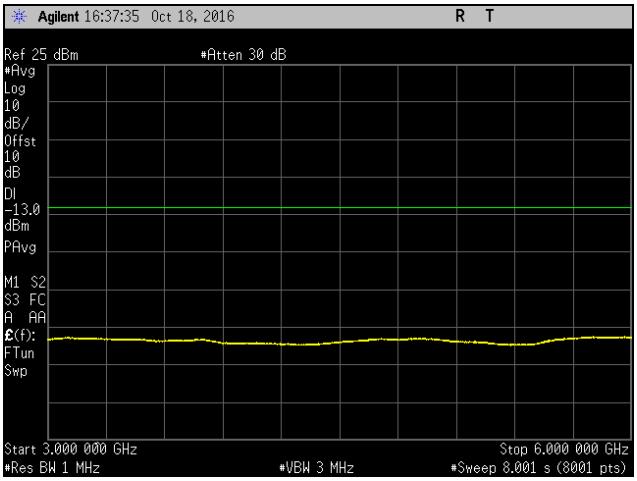
Plot 862. Spurious Emissions at Antenna Terminal, Mid Channel, Band 10, Port 2, 18 GHz – 22 GHz, 15 MHz



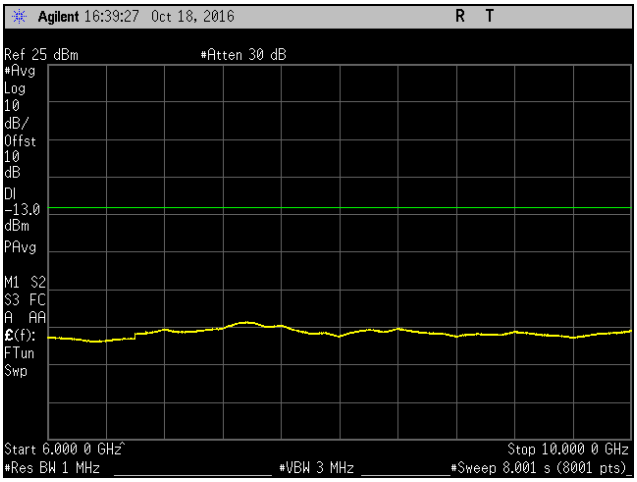
Plot 863. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 30 MHz – 1 GHz, 15 MHz



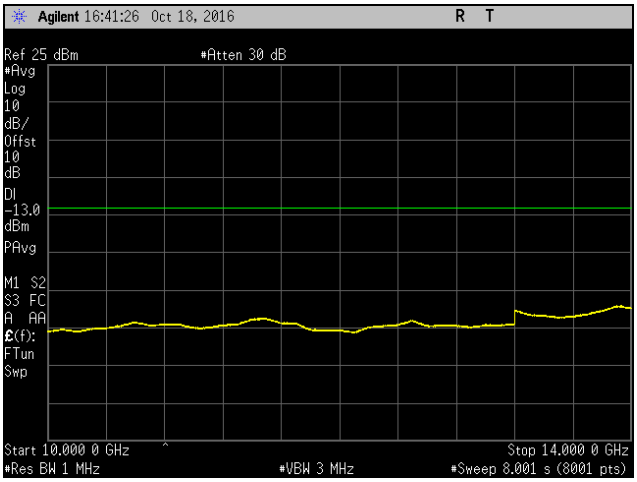
Plot 864. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 1 GHz – 3 GHz, 15 MHz



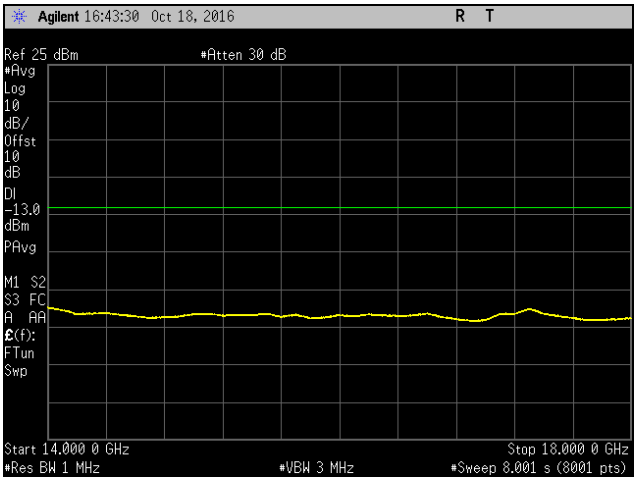
Plot 865. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 3 GHz – 6 GHz, 15 MHz



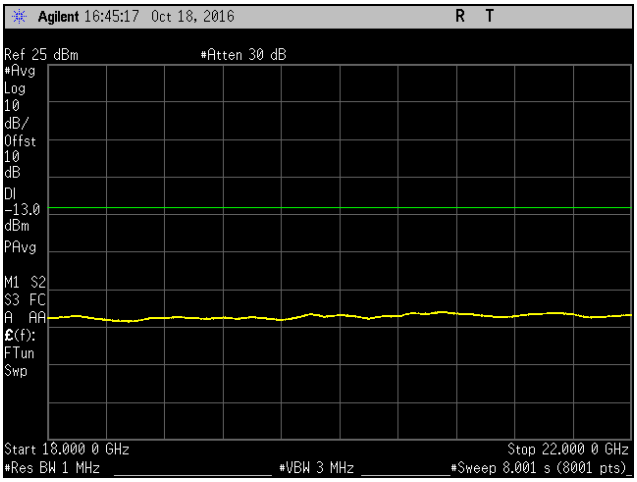
Plot 866. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 6 GHz – 10 GHz, 15 MHz



Plot 867. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 10 GHz – 14 GHz, 15 MHz

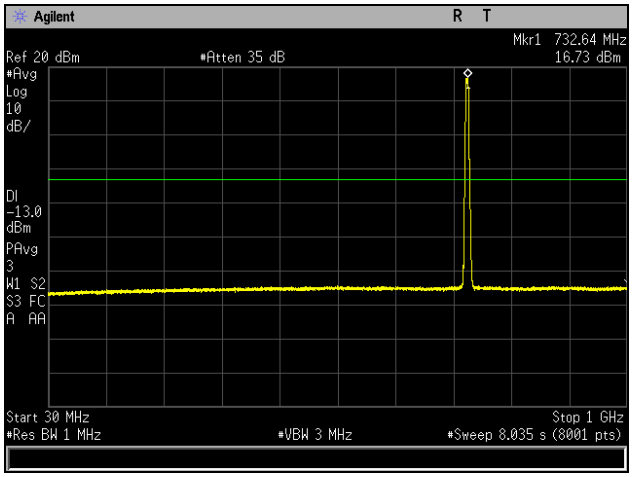


Plot 868. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 14 GHz – 18 GHz, 15 MHz

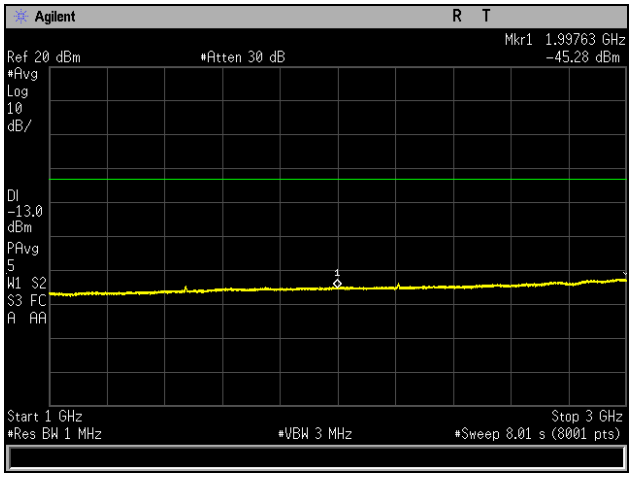


Plot 869. Spurious Emissions at Antenna Terminal, High Channel, Band 10, Port 2, 18 GHz – 22 GHz, 15 MHz

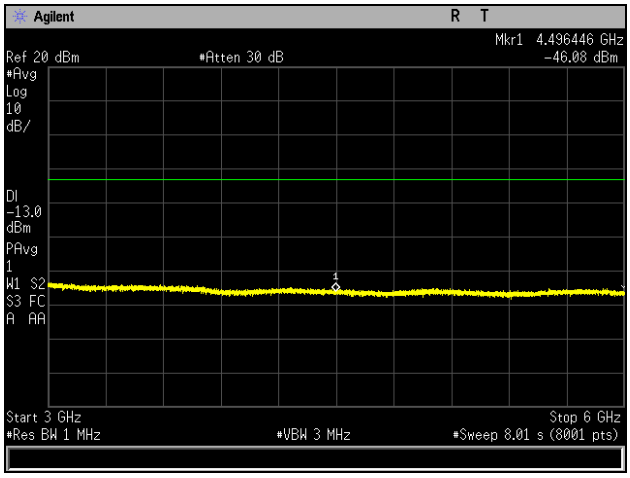
Spurious Emissions at Antenna Terminals, Band 12



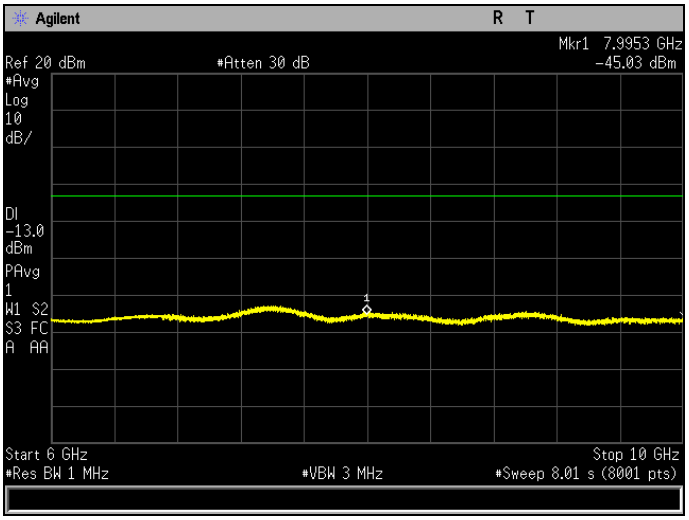
Plot 870. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 30 MHz – 1 GHz, 5 MHz



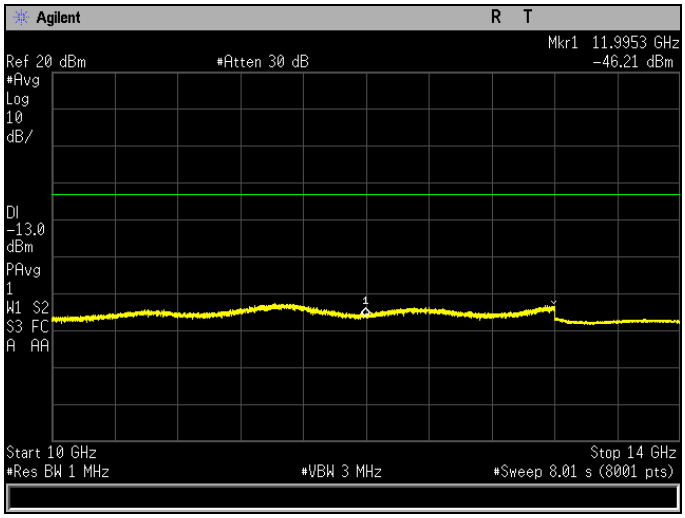
Plot 871. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 1 GHz – 3 GHz, 5 MHz



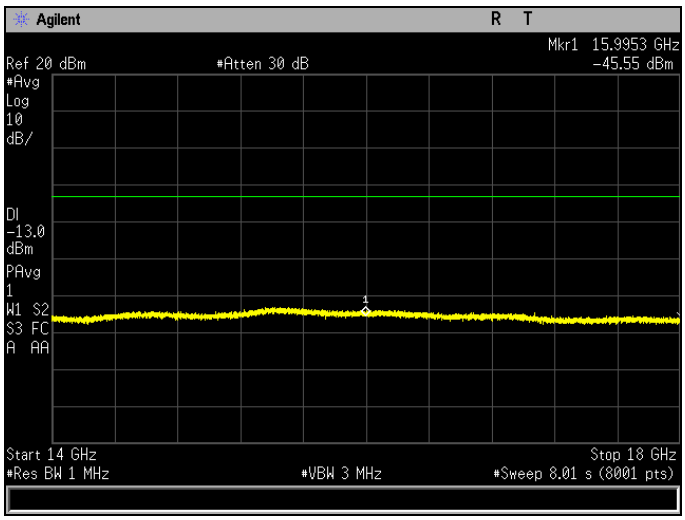
Plot 872. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 3 GHz – 6 GHz, 5 MHz



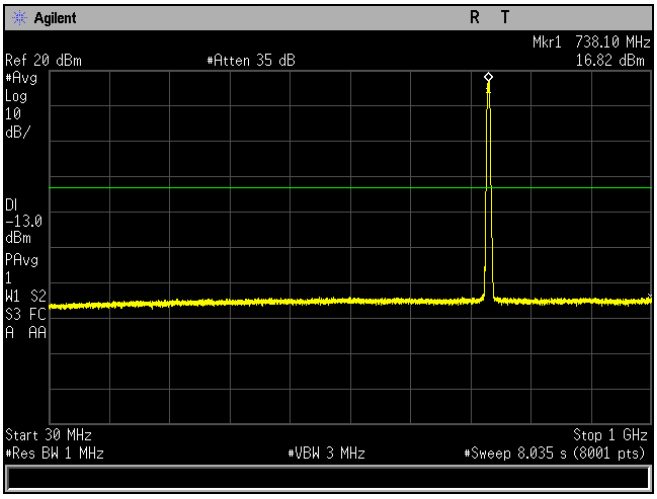
Plot 873. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 6 GHz – 10 GHz, 5 MHz



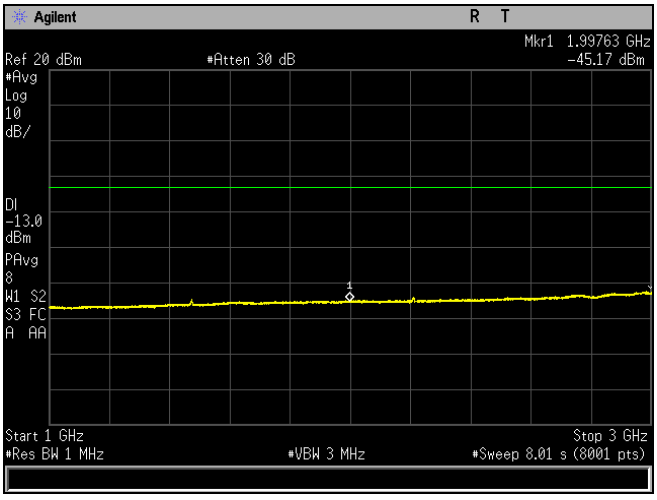
Plot 874. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 10 GHz – 14 GHz, 5 MHz



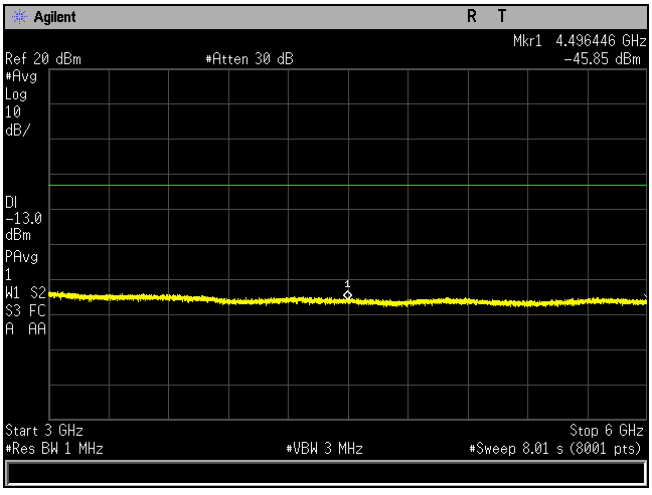
Plot 875. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 14 GHz – 18 GHz, 5 MHz



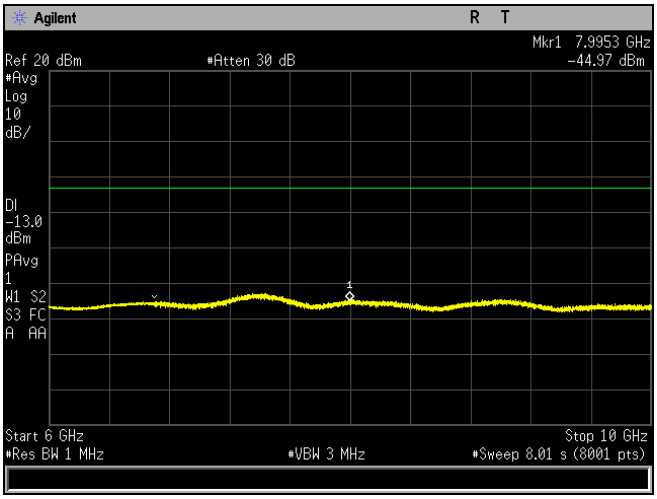
Plot 876. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 30 MHz – 1 GHz, 5 MHz



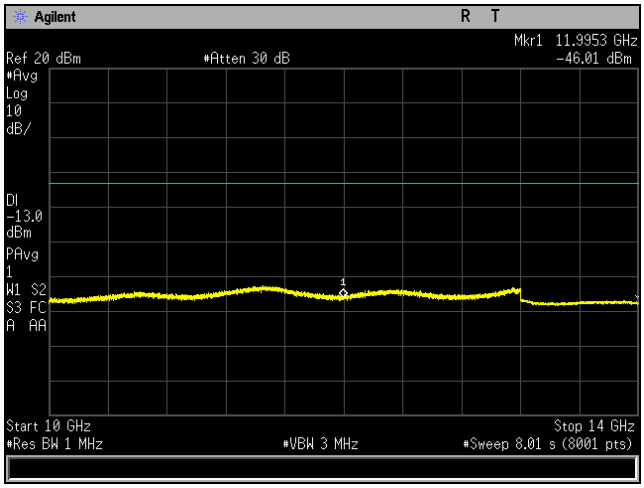
Plot 877. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 1 GHz – 3 GHz, 5 MHz



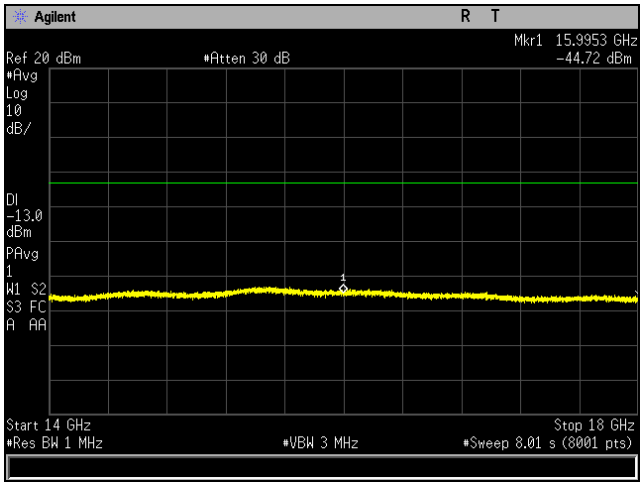
Plot 878. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 3 GHz – 6 GHz, 5 MHz



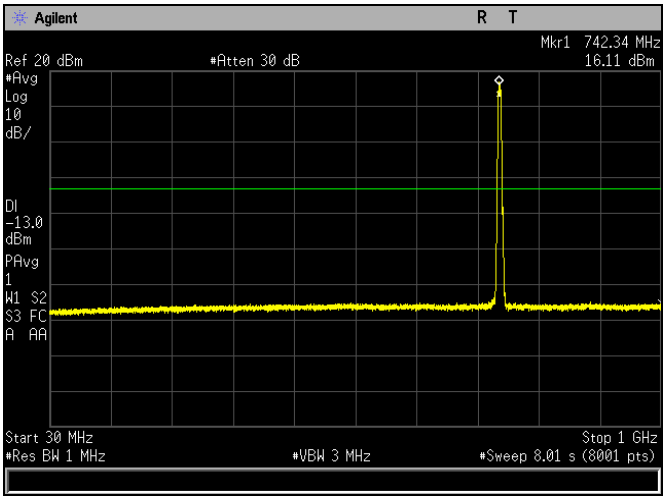
Plot 879. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 6 GHz – 10 GHz, 5 MHz



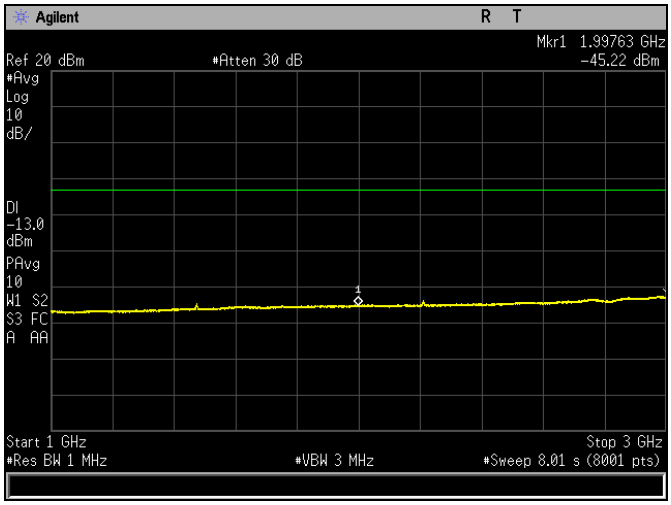
Plot 880. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 10 GHz – 14 GHz, 5 MHz



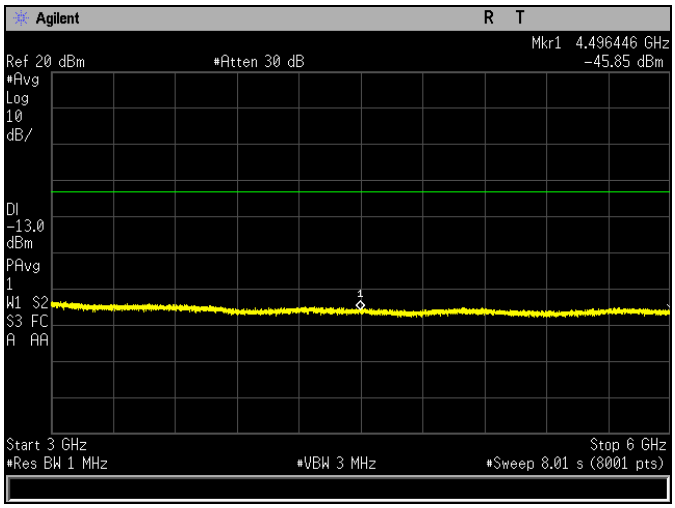
Plot 881. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 14 GHz – 18 GHz, 5 MHz



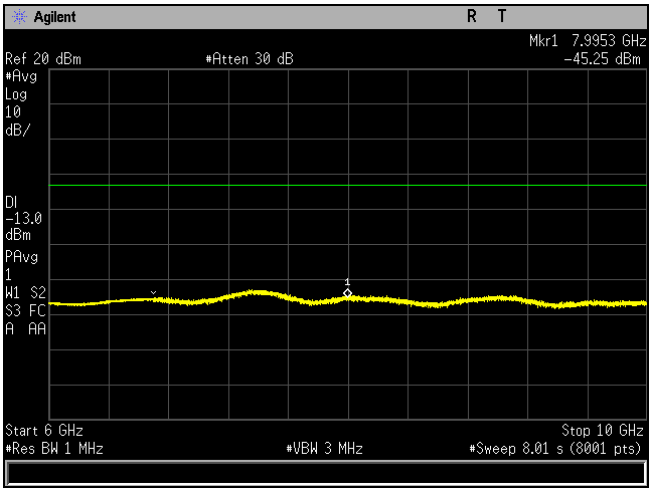
Plot 882. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 30 MHz – 1 GHz, 5 MHz



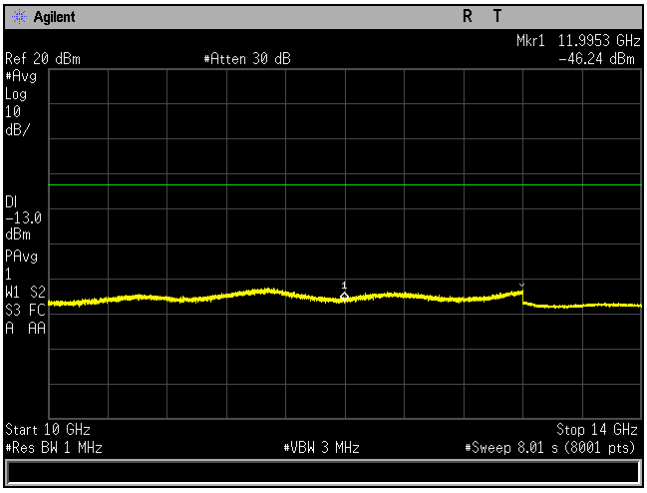
Plot 883. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 1 GHz – 3 GHz, 5 MHz



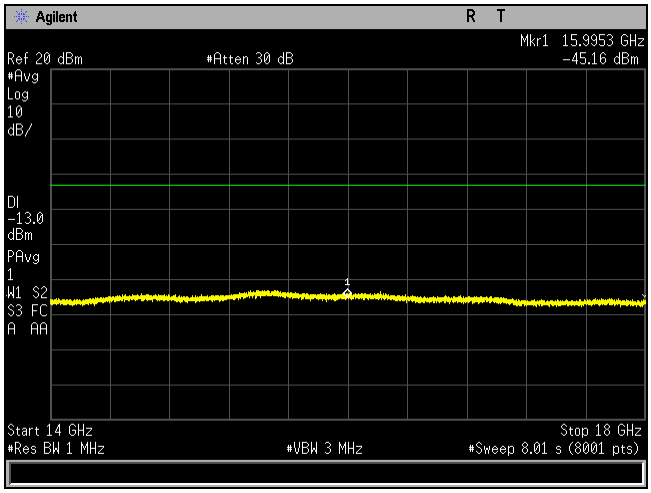
Plot 884. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 3 GHz – 6 GHz, 5 MHz



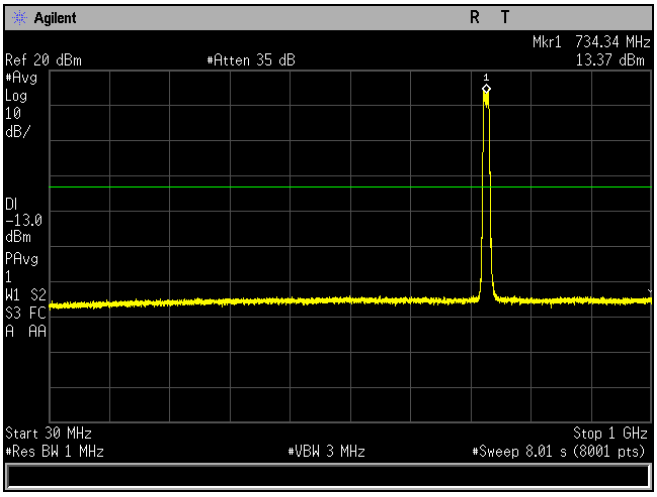
Plot 885. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 6 GHz – 10 GHz, 5 MHz



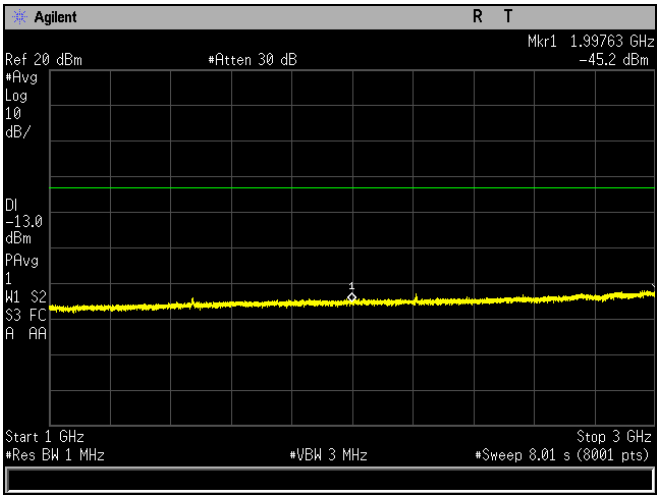
Plot 886. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 10 GHz – 14 GHz, 5 MHz



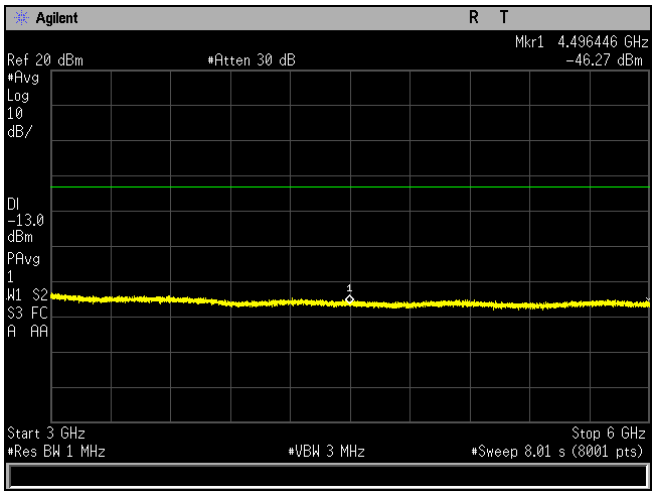
Plot 887. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 14 GHz – 18 GHz, 5 MHz



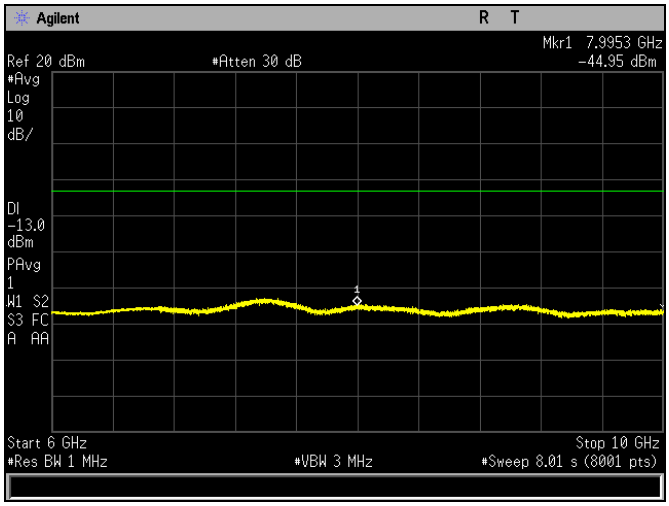
Plot 888. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 30 MHz – 1 GHz, 10 MHz



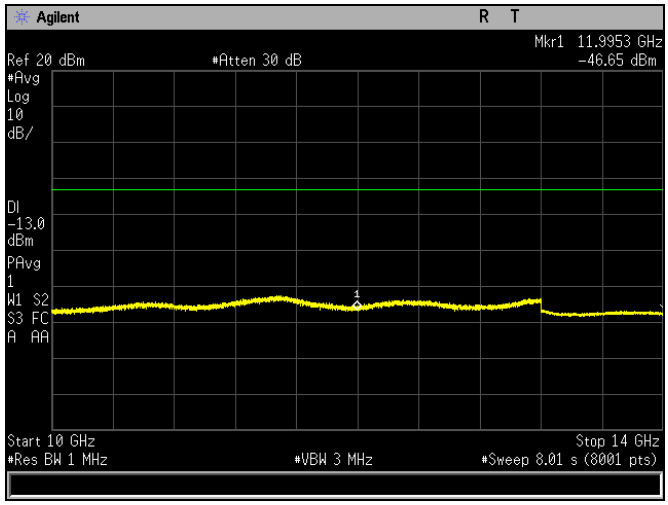
Plot 889. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 1 GHz – 3 GHz, 10 MHz



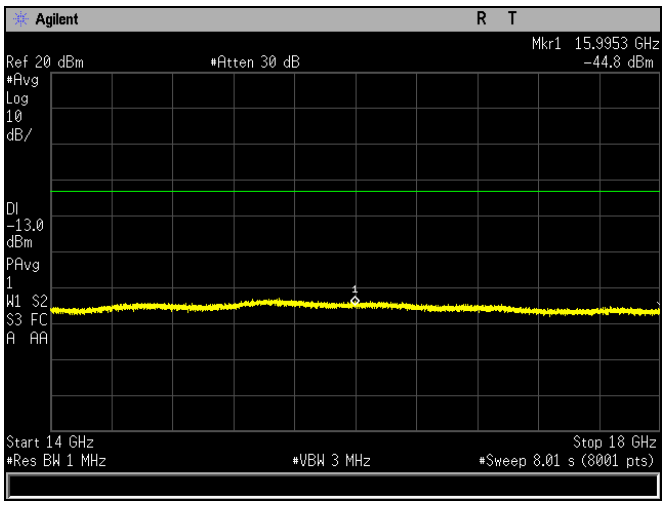
Plot 890. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 3 GHz – 6 GHz, 10 MHz



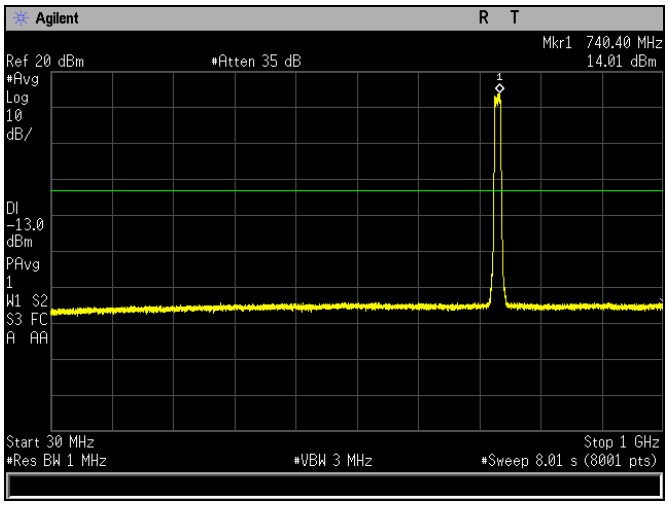
Plot 891. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 6 GHz – 10 GHz, 10 MHz



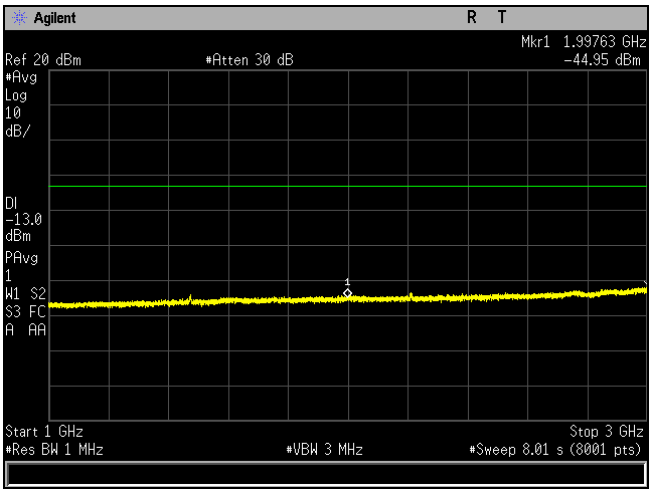
Plot 892. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 10 GHz – 14 GHz, 10 MHz



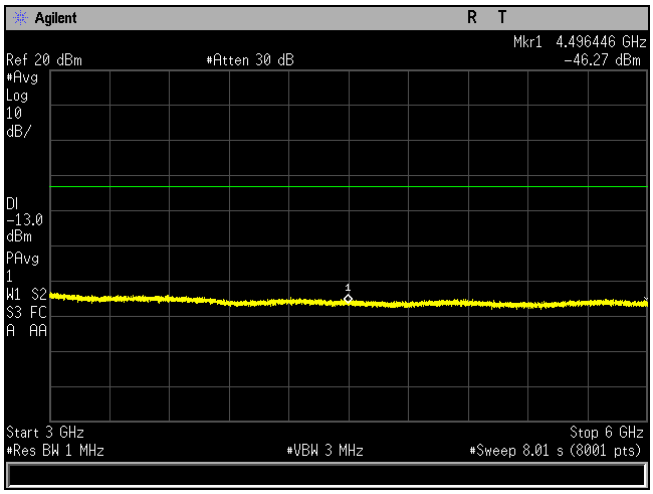
Plot 893. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 14 GHz – 18 GHz, 10 MHz



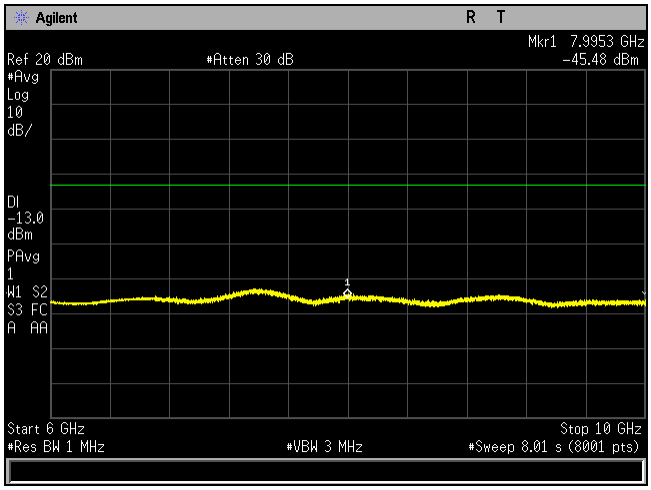
Plot 894. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 30 MHz – 1 GHz, 10 MHz



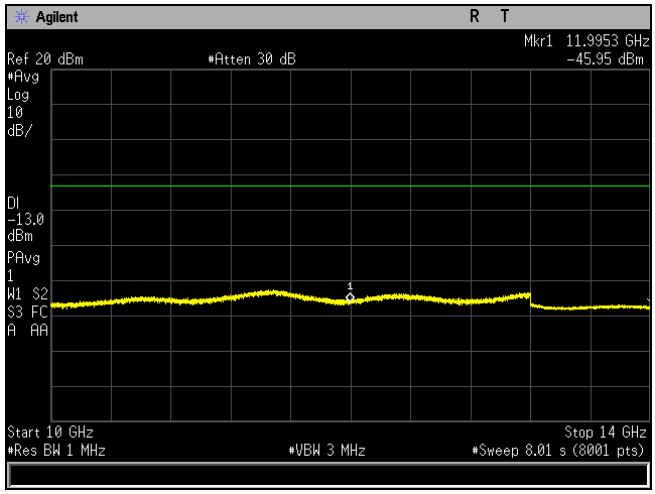
Plot 895. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 1 GHz – 3 GHz, 10 MHz



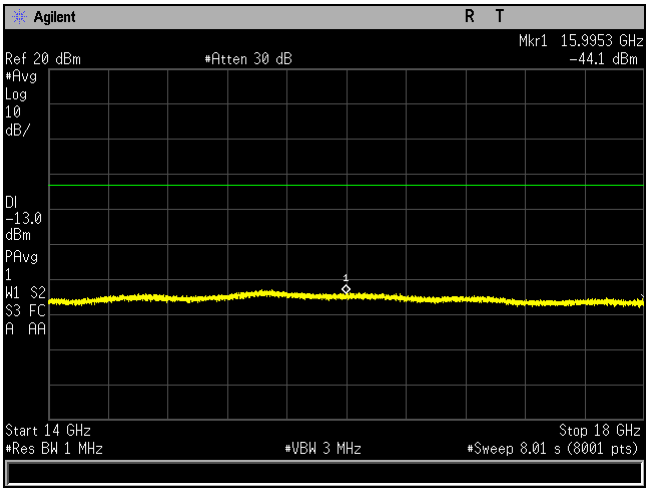
Plot 896. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 3 GHz – 6 GHz, 10 MHz



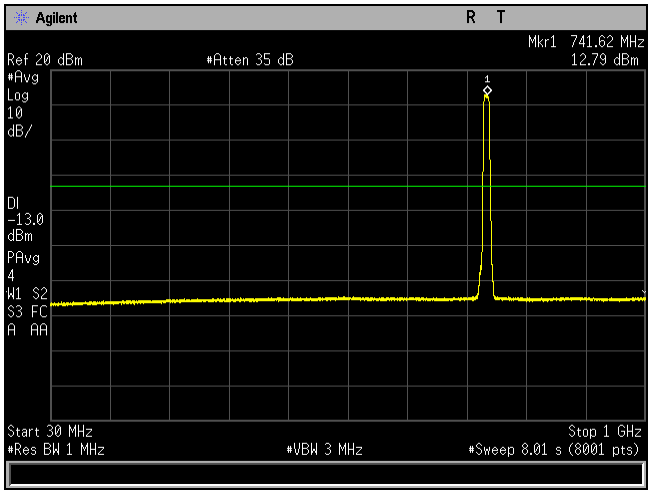
Plot 897. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 6 GHz – 10 GHz, 10 MHz



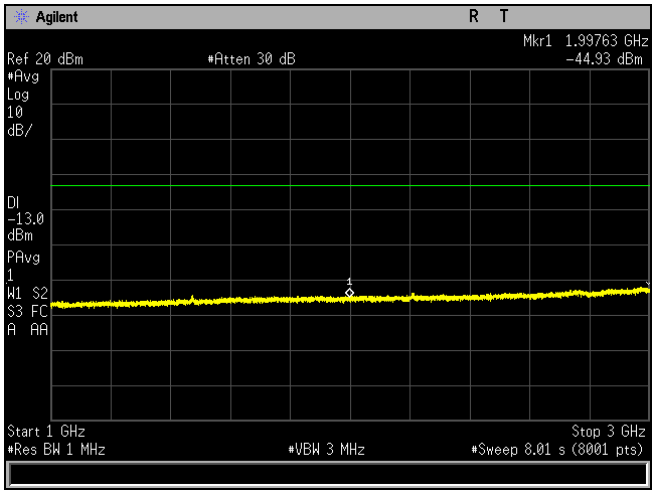
Plot 898. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 10 GHz – 14 GHz, 10 MHz



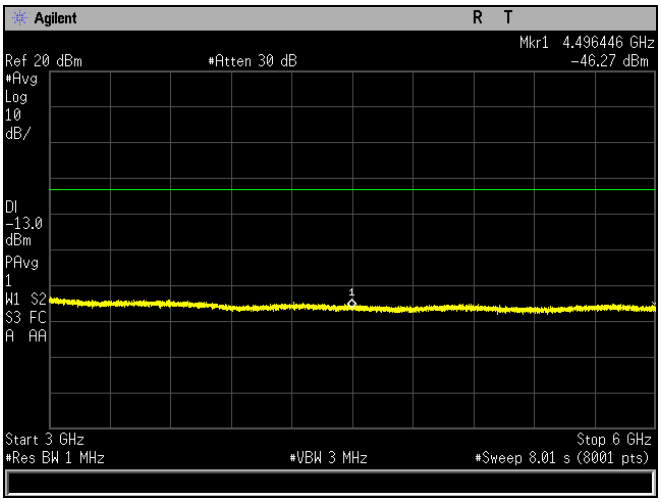
Plot 899. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 14 GHz – 18 GHz, 10 MHz



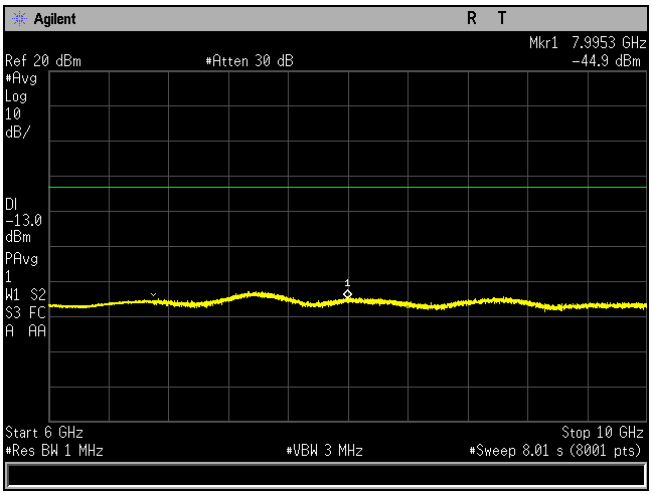
Plot 900. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 30 MHz – 1 GHz, 10 MHz



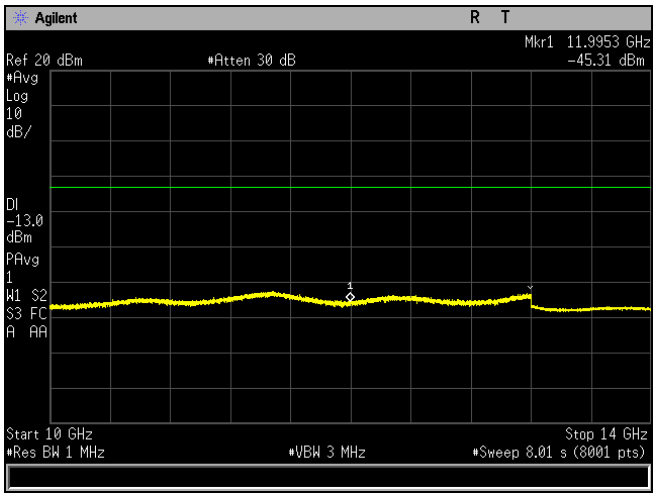
Plot 901. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 1 GHz – 3 GHz, 10 MHz



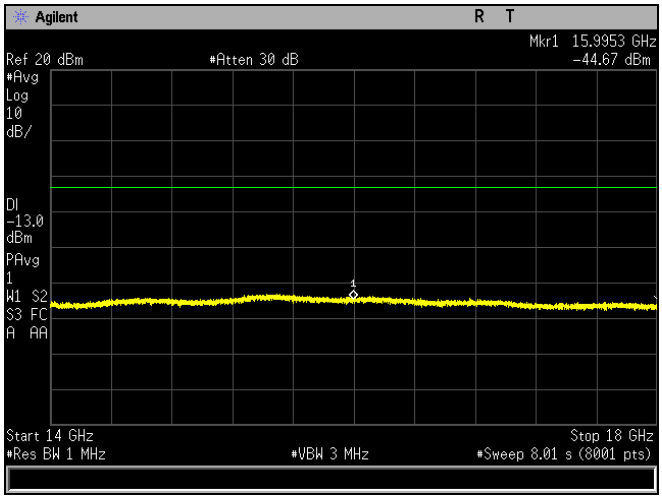
Plot 902. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 3 GHz – 6 GHz, 10 MHz



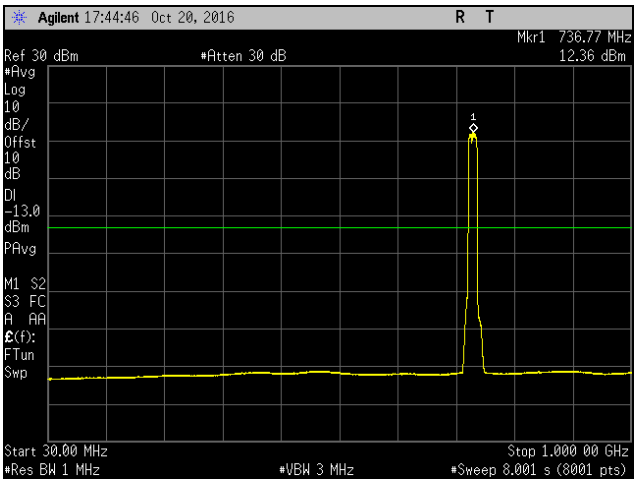
Plot 903. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 6 GHz – 10 GHz, 10 MHz



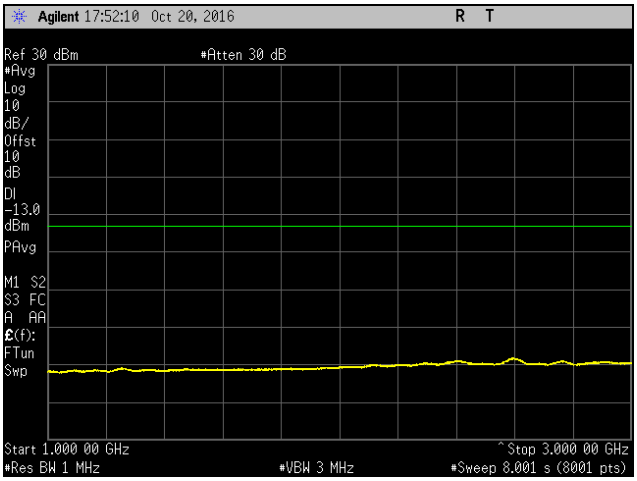
Plot 904. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 10 GHz – 14 GHz, 10 MHz



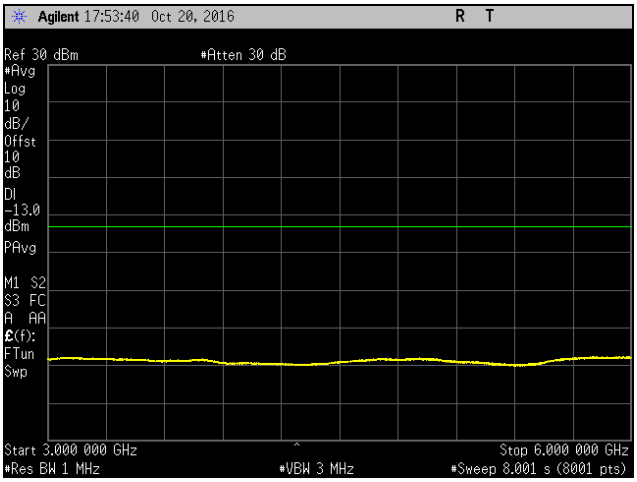
Plot 905. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 14 GHz – 18 GHz, 10 MHz



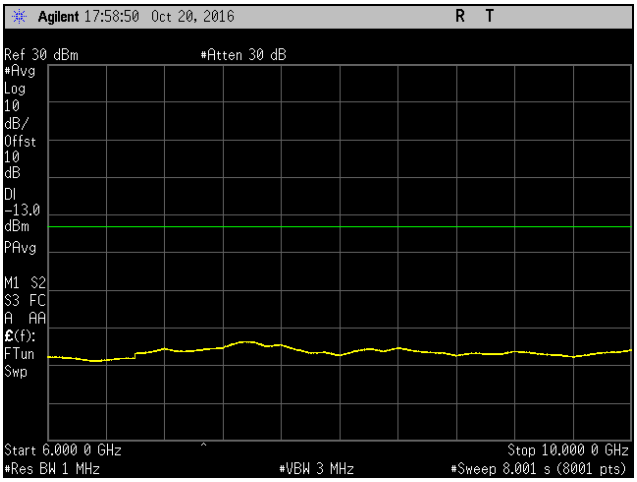
Plot 906. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 30 MHz – 1 GHz, 15 MHz



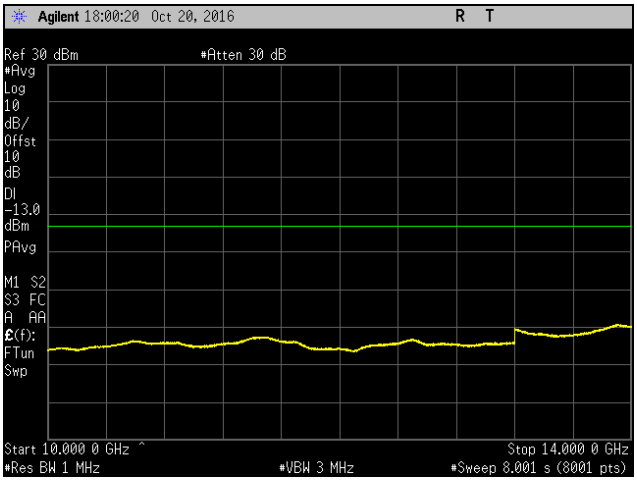
Plot 907. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 1 GHz – 3 GHz, 15 MHz



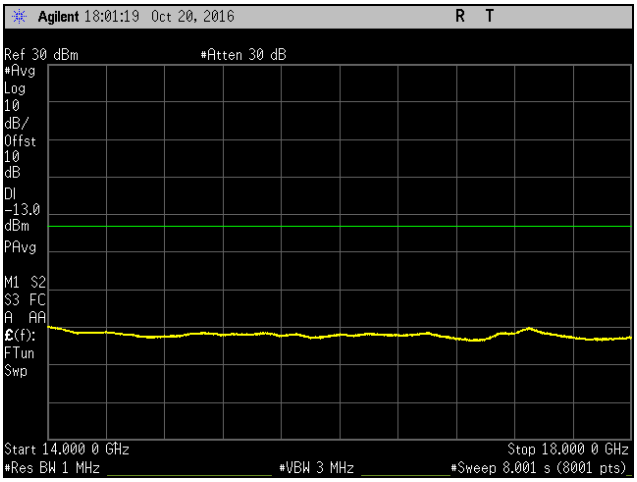
Plot 908. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 3 GHz – 6 GHz, 15 MHz



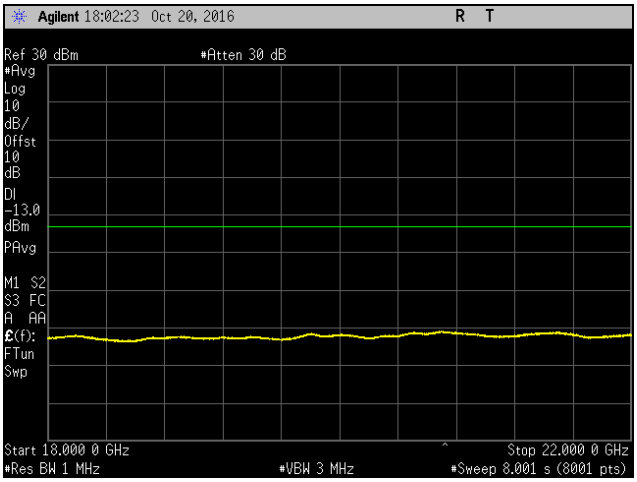
Plot 909. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 6 GHz – 10 GHz, 15 MHz



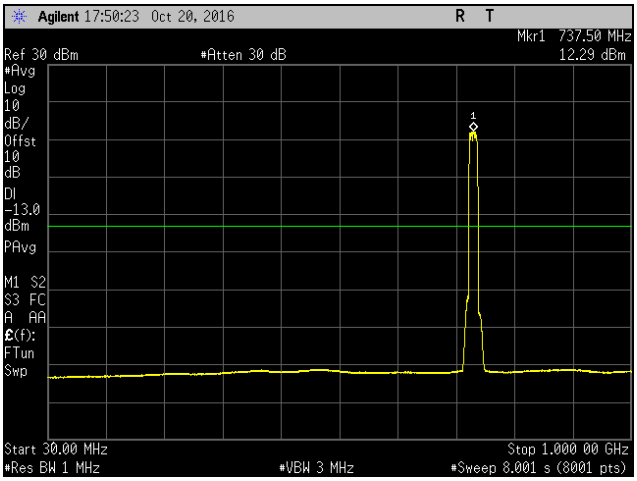
Plot 910. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 10 GHz – 14 GHz, 15 MHz



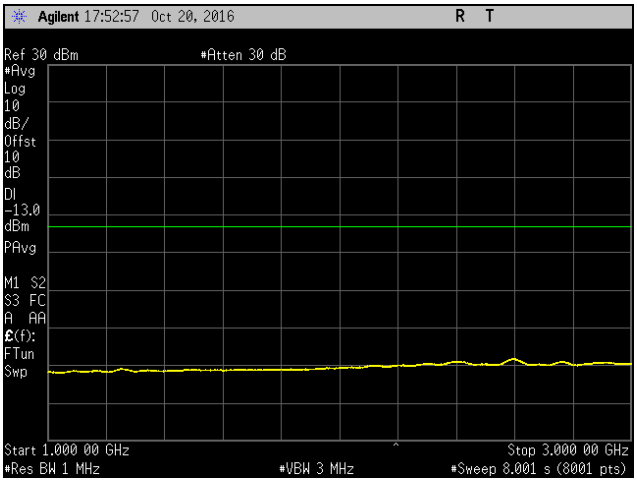
Plot 911. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 14 GHz – 18 GHz, 15 MHz



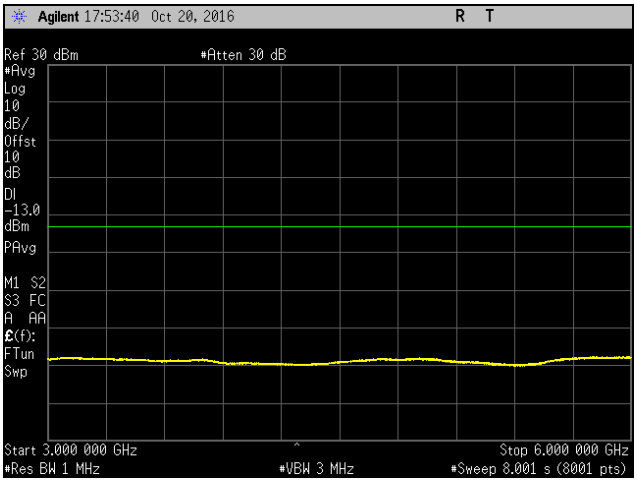
Plot 912. Spurious Emissions at Antenna Terminal, Low Channel, Band 12, Port 2, 18 GHz – 22 GHz, 15 MHz



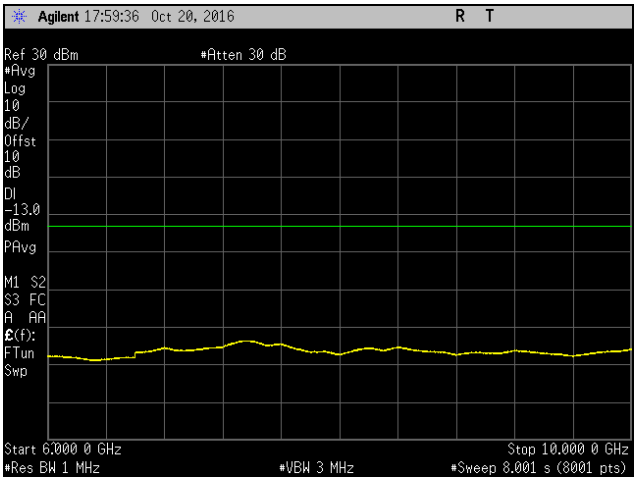
Plot 913. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 30 MHz – 1 GHz, 15 MHz



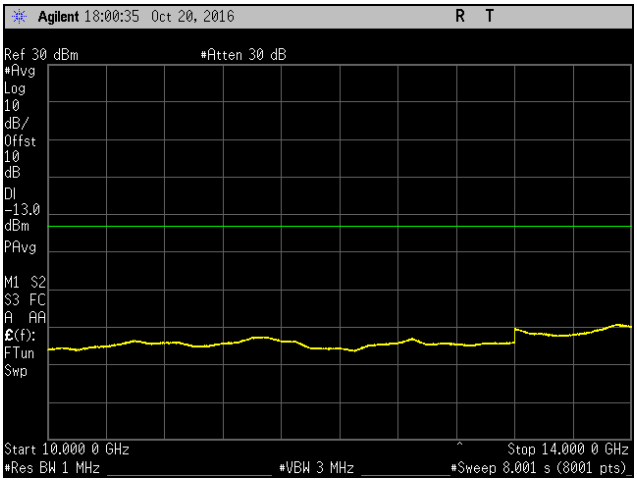
Plot 914. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 1 GHz – 3 GHz, 15 MHz



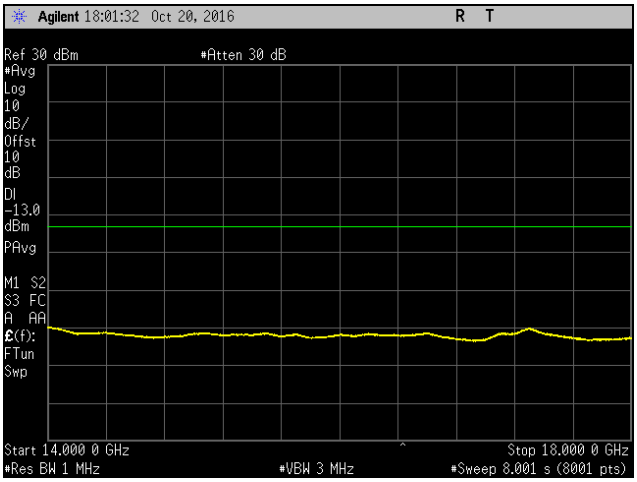
Plot 915. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 3 GHz – 6 GHz, 15 MHz



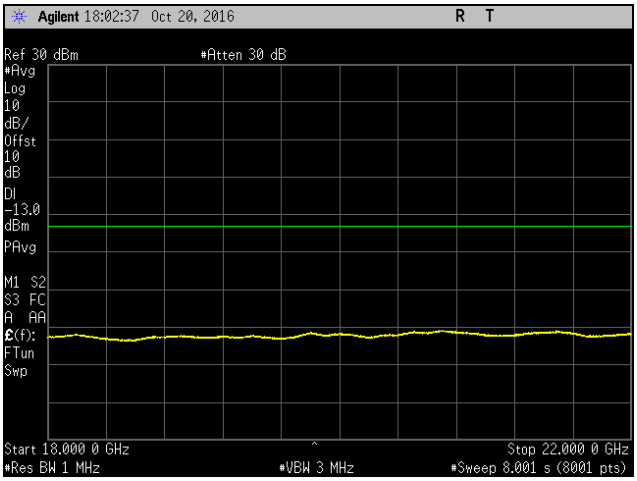
Plot 916. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 6 GHz – 10 GHz, 15 MHz



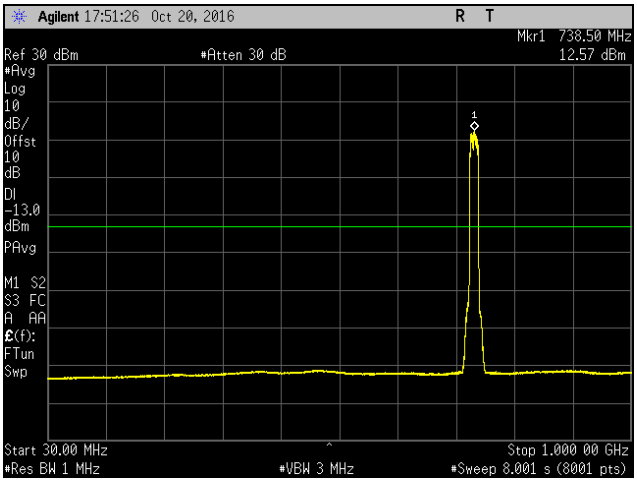
Plot 917. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 10 GHz – 14 GHz, 15 MHz



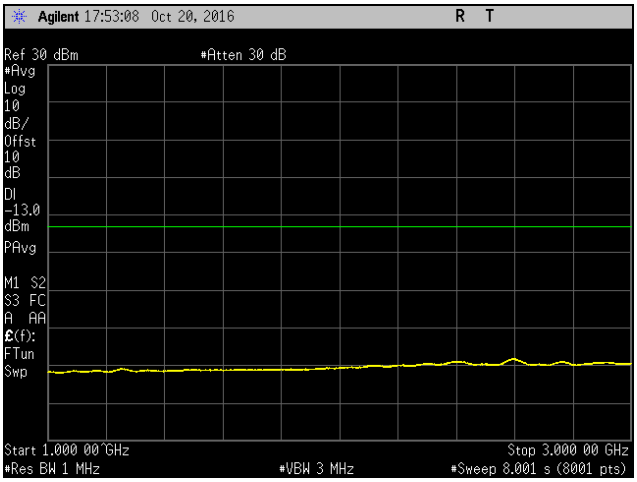
Plot 918. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 14 GHz – 18 GHz, 15 MHz



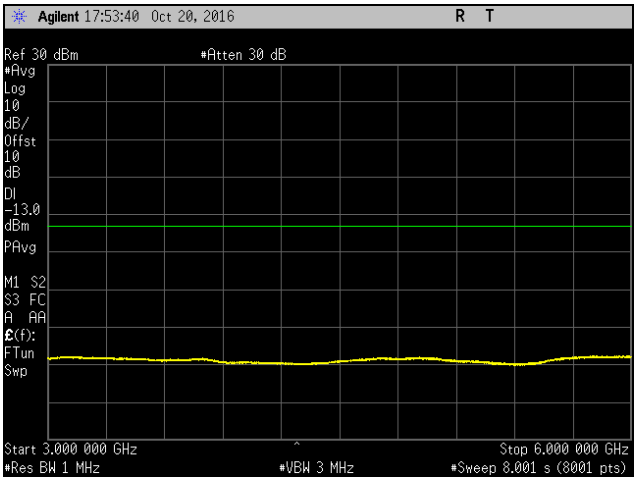
Plot 919. Spurious Emissions at Antenna Terminal, Mid Channel, Band 12, Port 2, 18 GHz – 22 GHz, 15 MHz



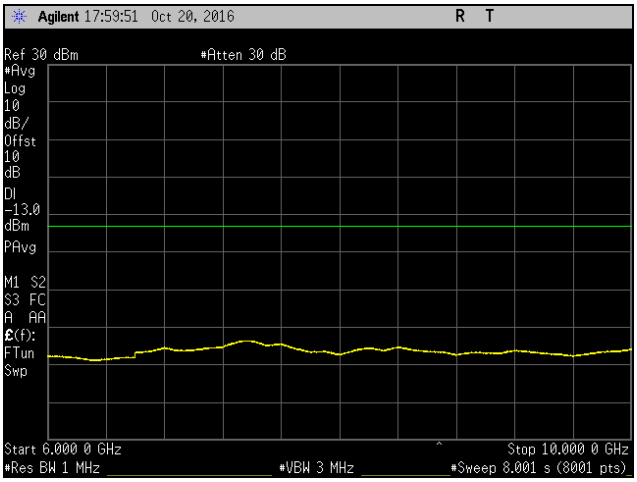
Plot 920. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 30 MHz – 1 GHz, 15 MHz



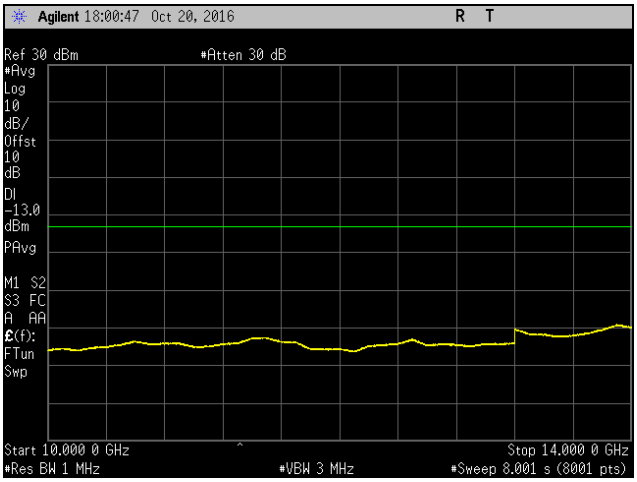
Plot 921. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 1 GHz – 3 GHz, 15 MHz



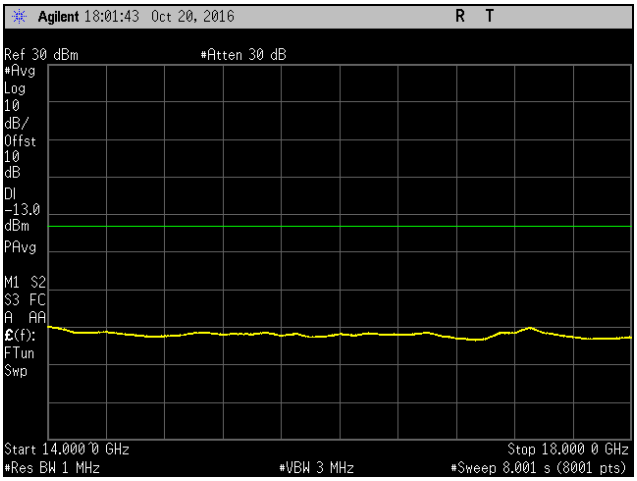
Plot 922. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 3 GHz – 6 GHz, 15 MHz



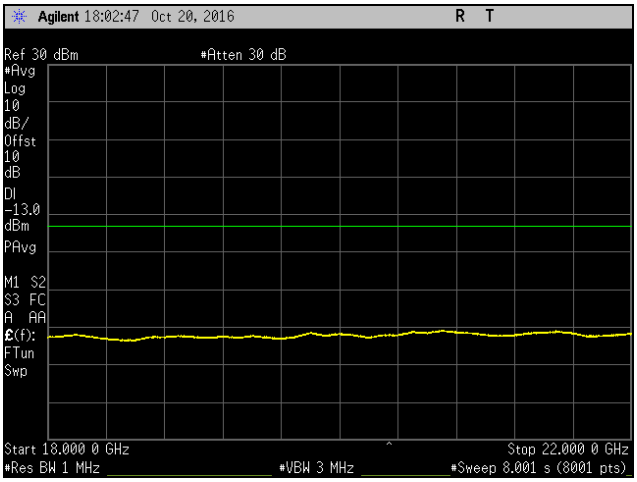
Plot 923. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 6 GHz – 10 GHz, 15 MHz



Plot 924. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 10 GHz – 14 GHz, 15 MHz

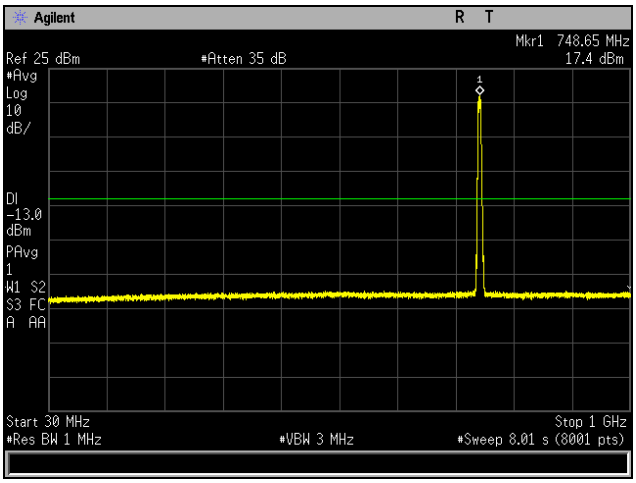


Plot 925. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 14 GHz – 18 GHz, 15 MHz

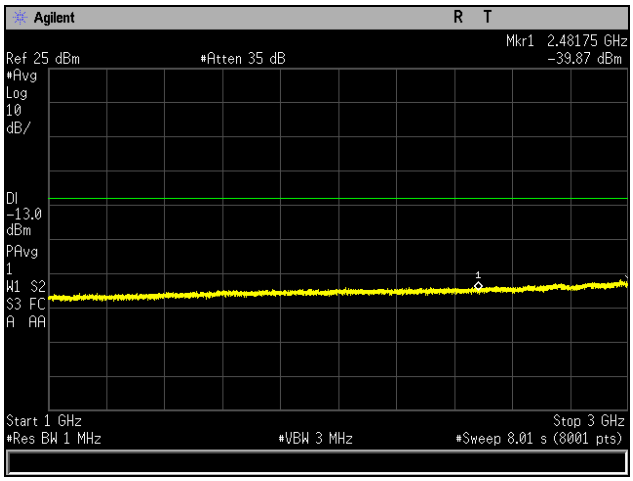


Plot 926. Spurious Emissions at Antenna Terminal, High Channel, Band 12, Port 2, 18 GHz – 22 GHz, 15 MHz

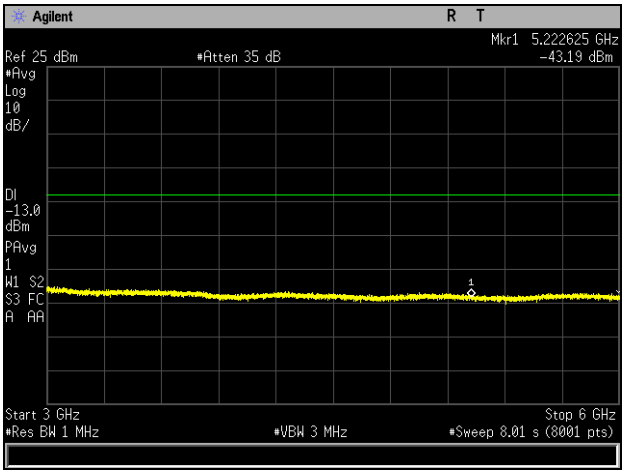
Spurious Emissions at Antenna Terminals, Band 13



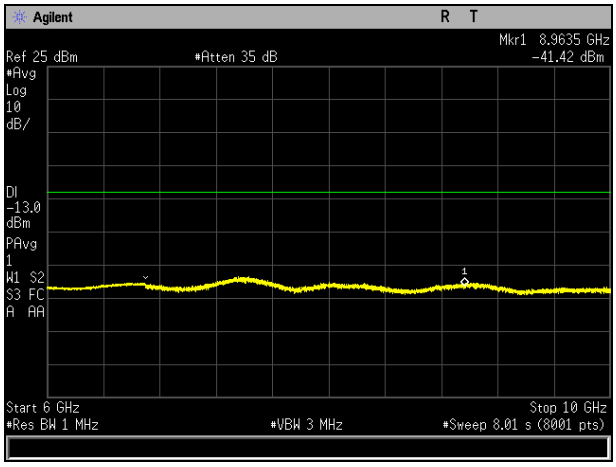
Plot 927. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 30 MHz – 1 GHz, 5 MHz



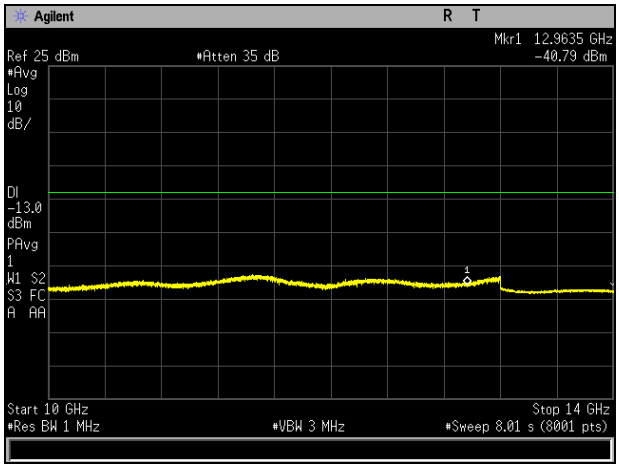
Plot 928. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 1 GHz – 3 GHz, 5 MHz



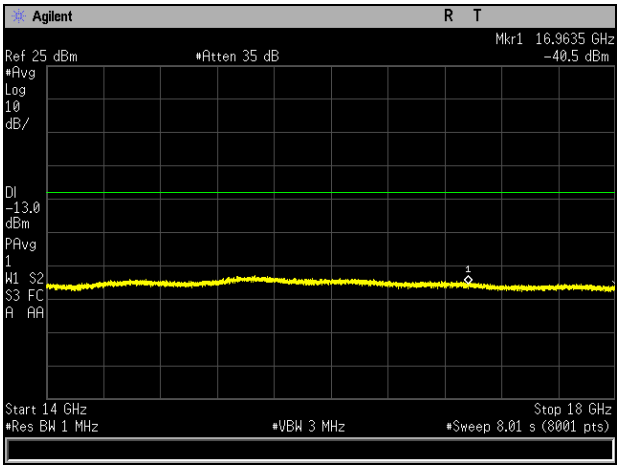
Plot 929. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 3 GHz – 6 GHz, 5 MHz



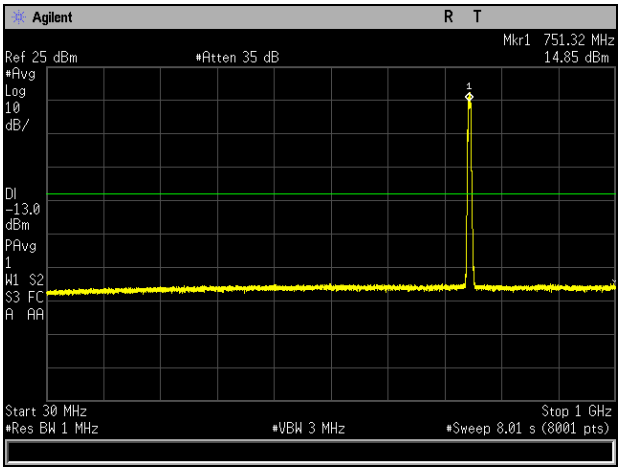
Plot 930. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 6 GHz – 10 GHz, 5 MHz



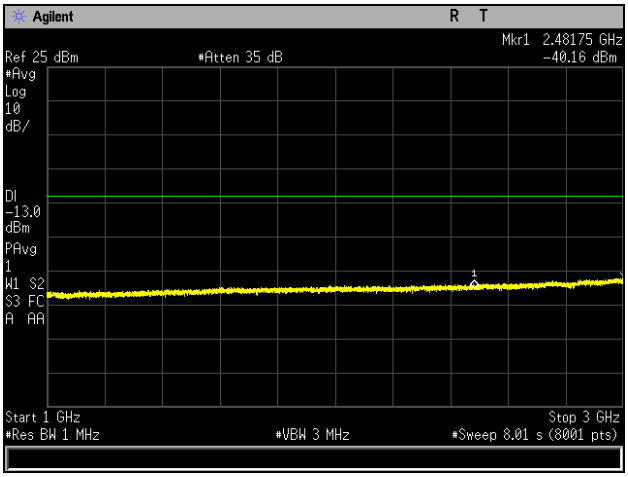
Plot 931. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 10 GHz – 14 GHz, 5 MHz



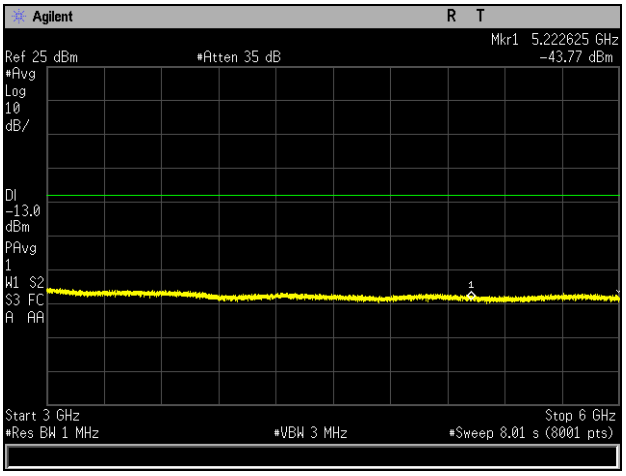
Plot 932. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 14 GHz – 18 GHz, 5 MHz



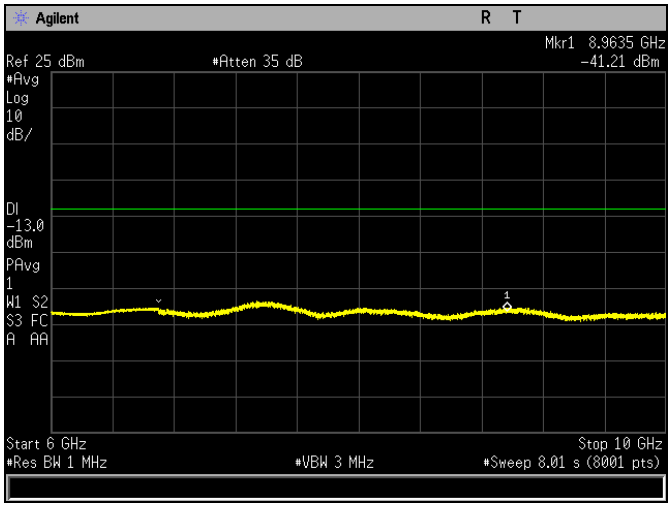
Plot 933. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 30 MHz – 1 GHz, 5 MHz



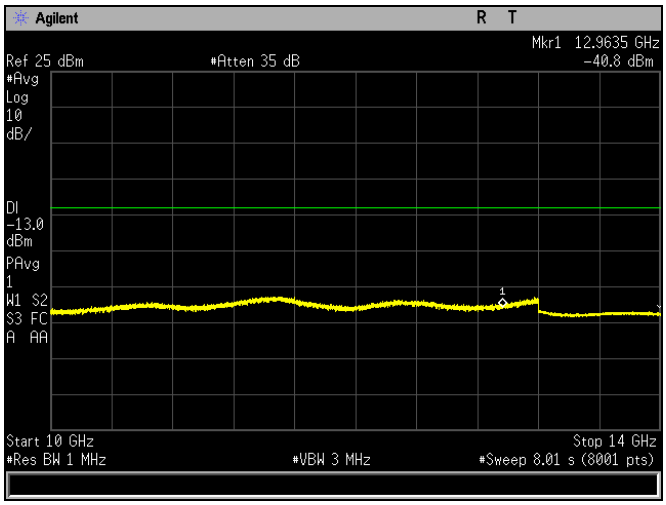
Plot 934. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 1 GHz – 3 GHz, 5 MHz



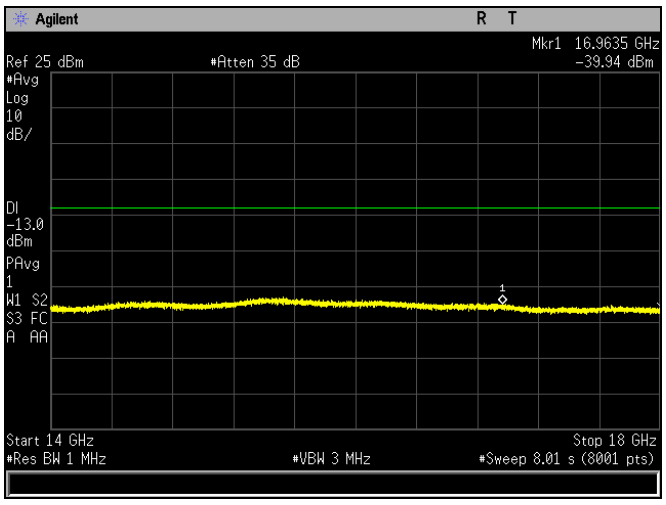
Plot 935. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 3 GHz – 6 GHz, 5 MHz



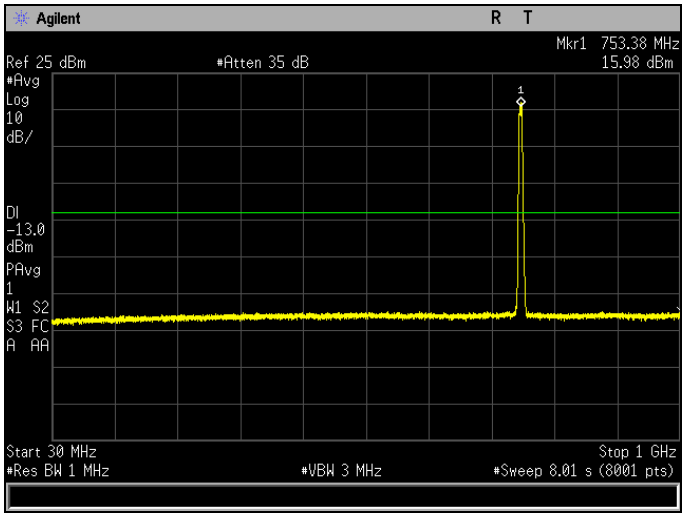
Plot 936. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 6 GHz – 10 GHz, 5 MHz



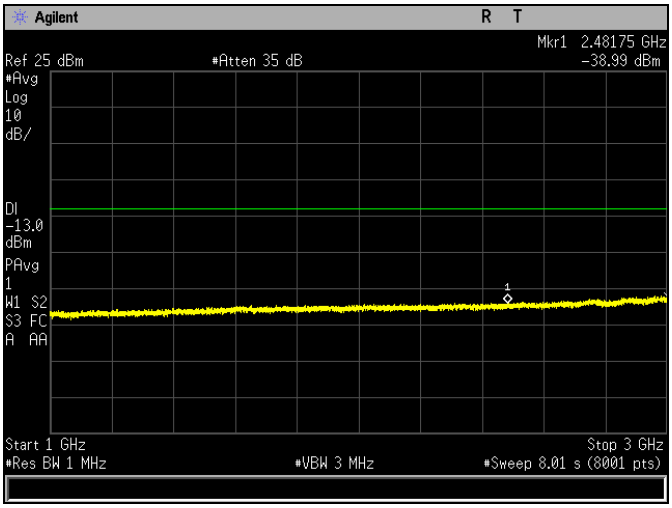
Plot 937. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 10 GHz – 14 GHz, 5 MHz



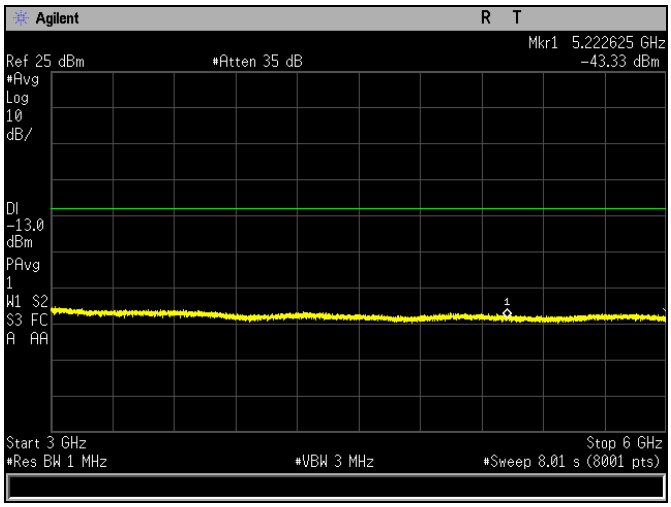
Plot 938. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 14 GHz – 18 GHz, 5 MHz



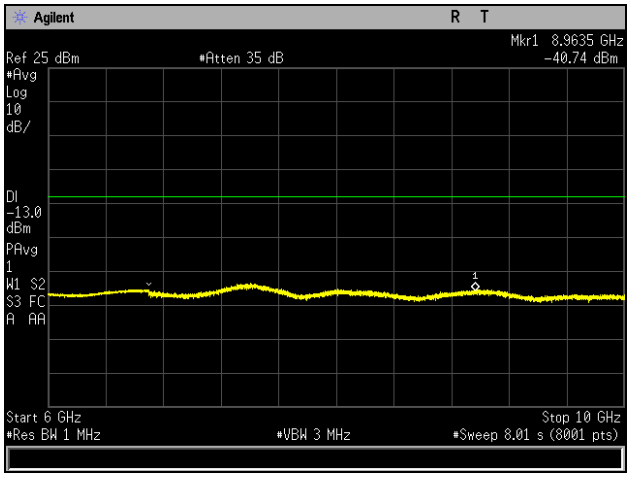
Plot 939. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 30 MHz – 1 GHz, 5 MHz



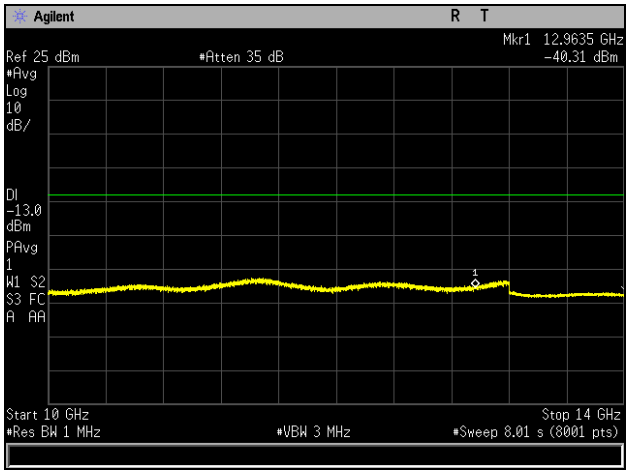
Plot 940. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 1 GHz – 3 GHz, 5 MHz



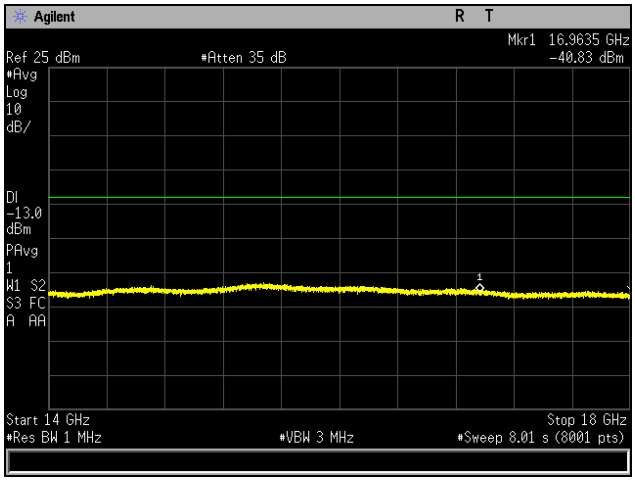
Plot 941. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 3 GHz – 6 GHz, 5 MHz



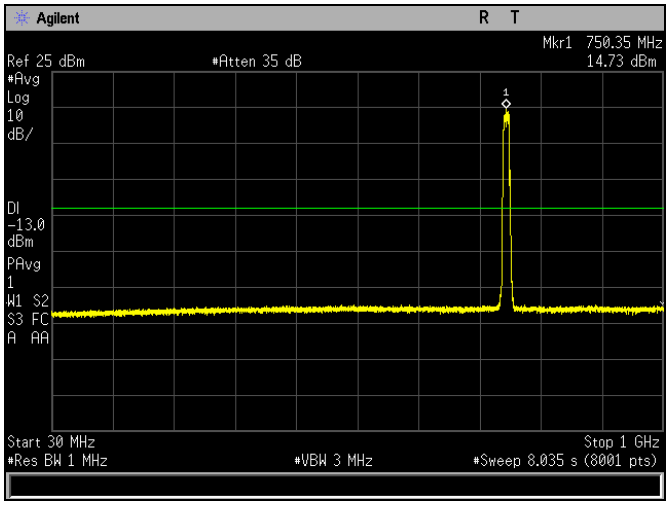
Plot 942. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 6 GHz – 10 GHz, 5 MHz



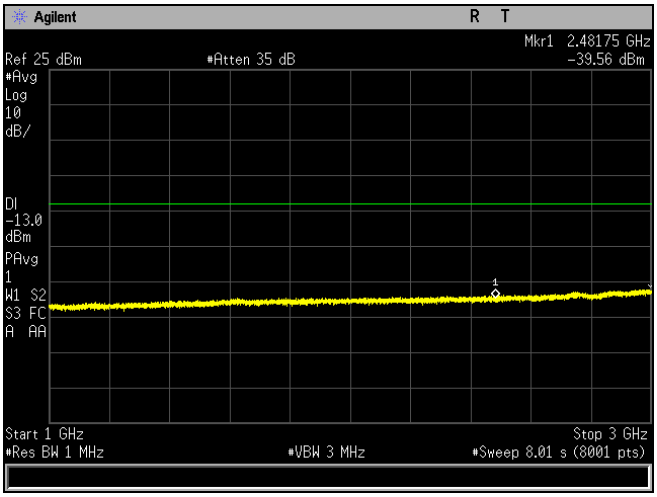
Plot 943. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 10 GHz – 14 GHz, 5 MHz



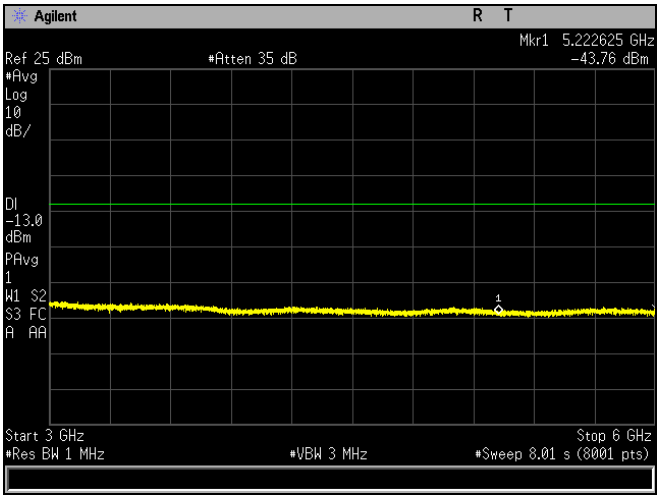
Plot 944. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 14 GHz – 18 GHz, 5 MHz



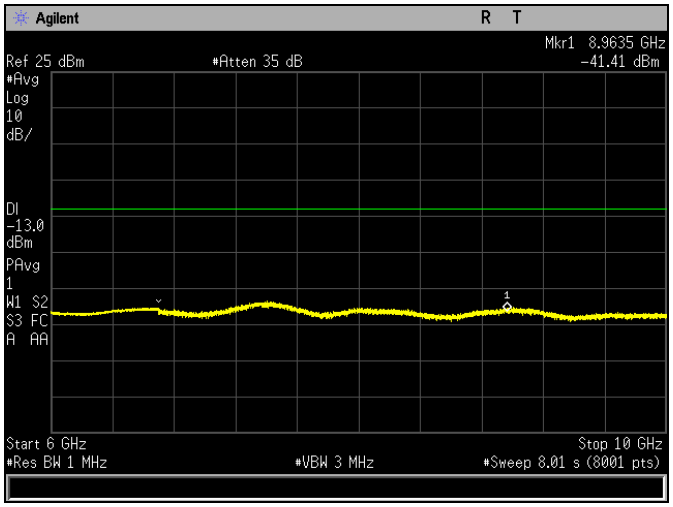
Plot 945. Spurious Emissions at Antenna Terminal, Low, Mid, and High Channels, Band 13, Port 2, 30 MHz – 1 GHz, 10 MHz



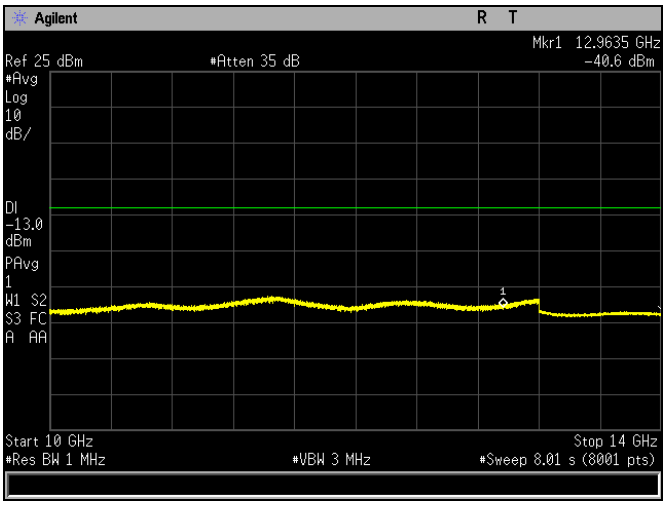
Plot 946. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 1 GHz – 3 GHz, 10 MHz



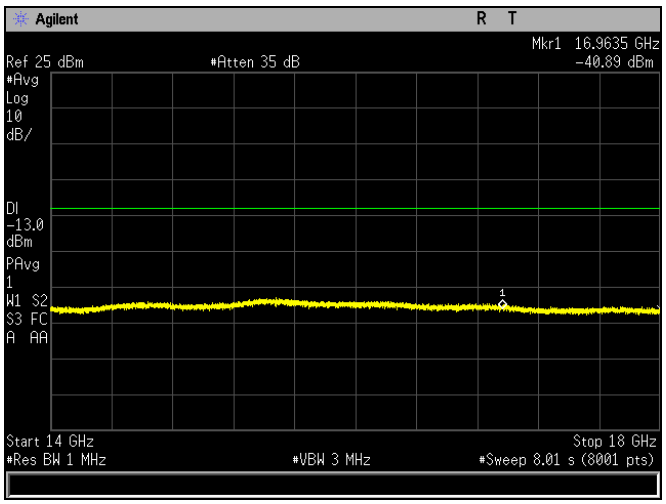
Plot 947. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 3 GHz – 6 GHz, 10 MHz



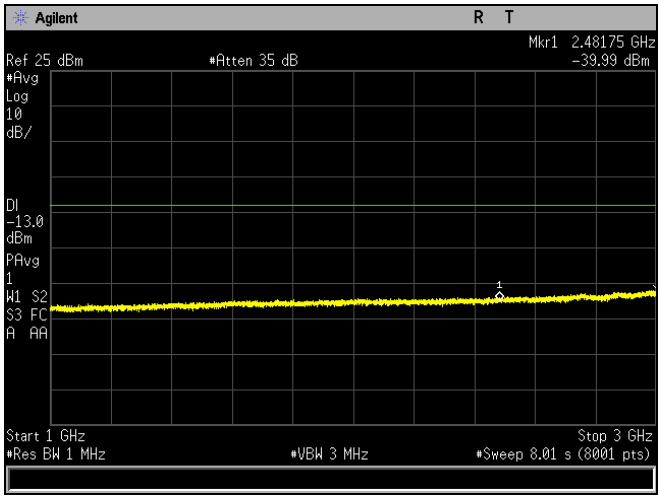
Plot 948. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 6 GHz – 10 GHz, 10 MHz



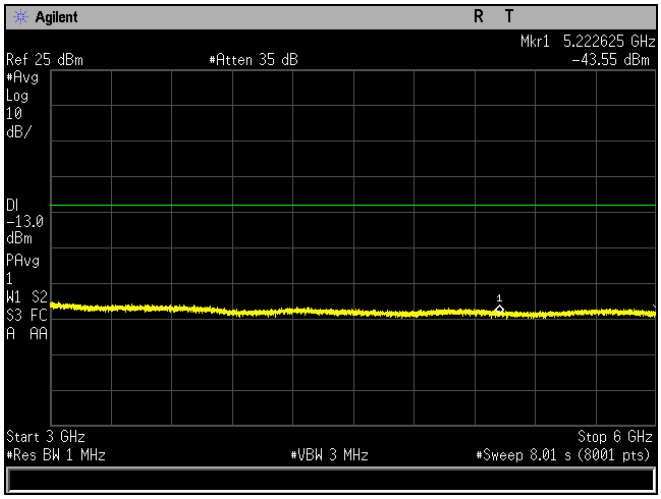
Plot 949. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 10 GHz – 14 GHz, 10 MHz



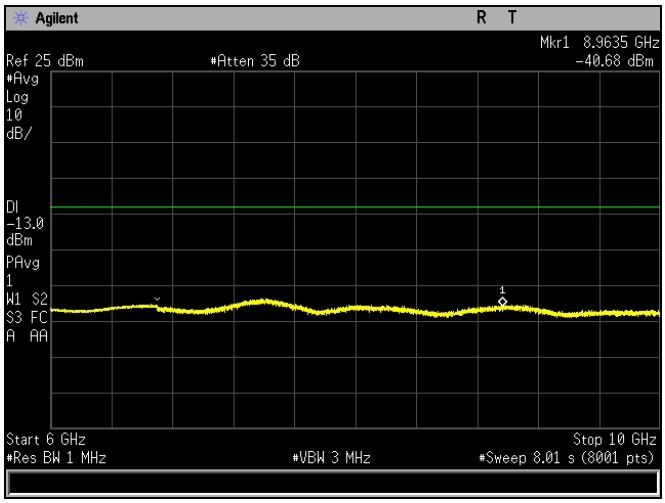
Plot 950. Spurious Emissions at Antenna Terminal, Low Channel, Band 13, Port 2, 14 GHz – 18 GHz, 10 MHz



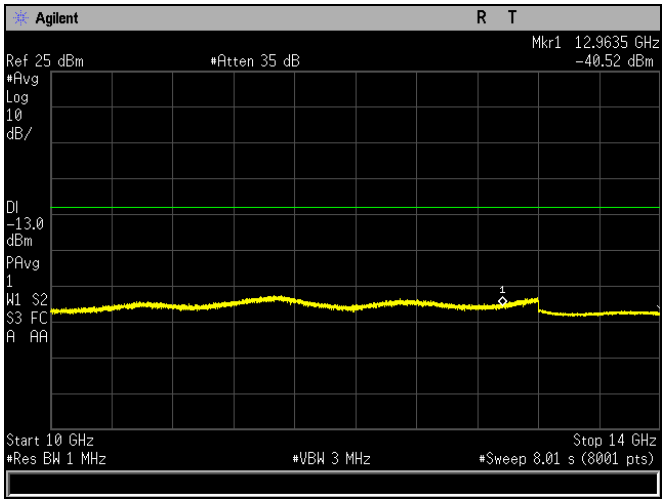
Plot 951. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 1 GHz – 3 GHz, 10 MHz



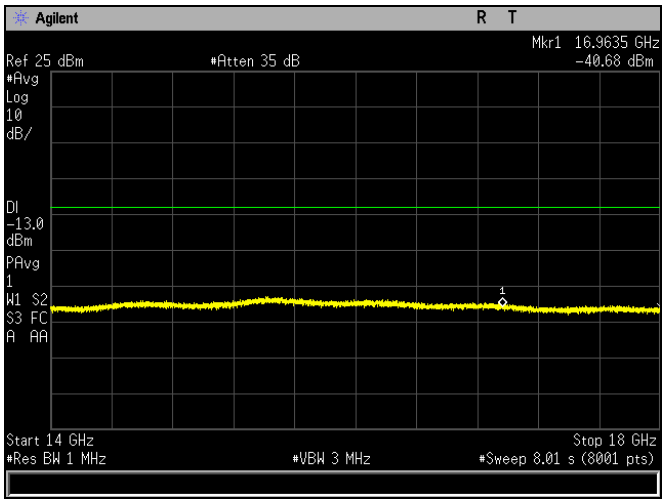
Plot 952. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 3 GHz – 6 GHz, 10 MHz



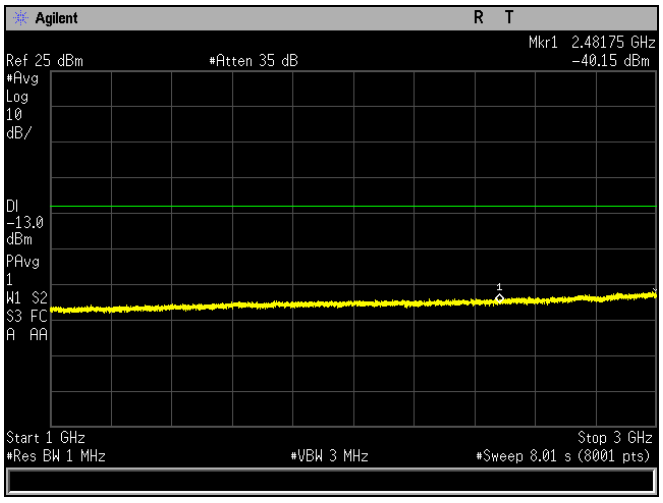
Plot 953. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 6 GHz – 10 GHz, 10 MHz



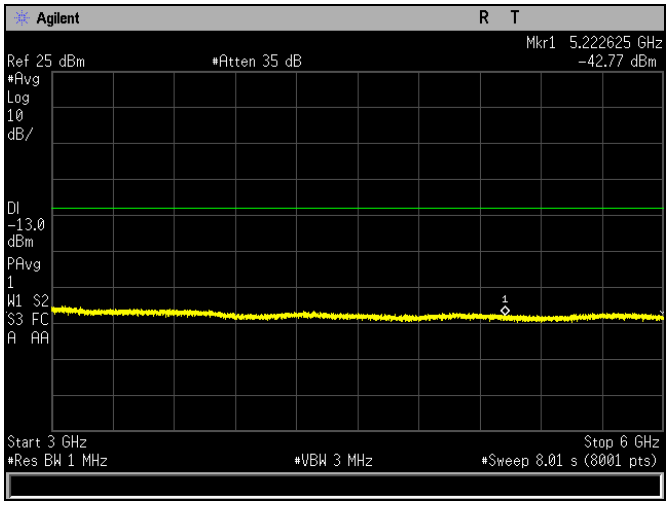
Plot 954. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 10 GHz – 14 GHz, 10 MHz



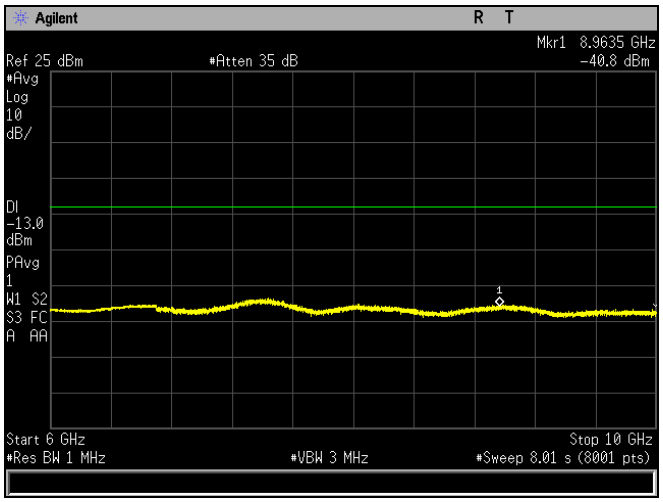
Plot 955. Spurious Emissions at Antenna Terminal, Mid Channel, Band 13, Port 2, 14 GHz – 18 GHz, 10 MHz



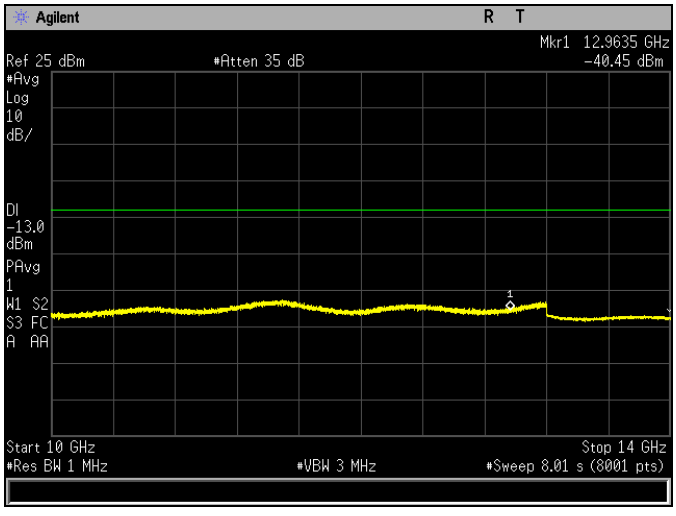
Plot 956. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 1 GHz – 3 GHz, 10 MHz



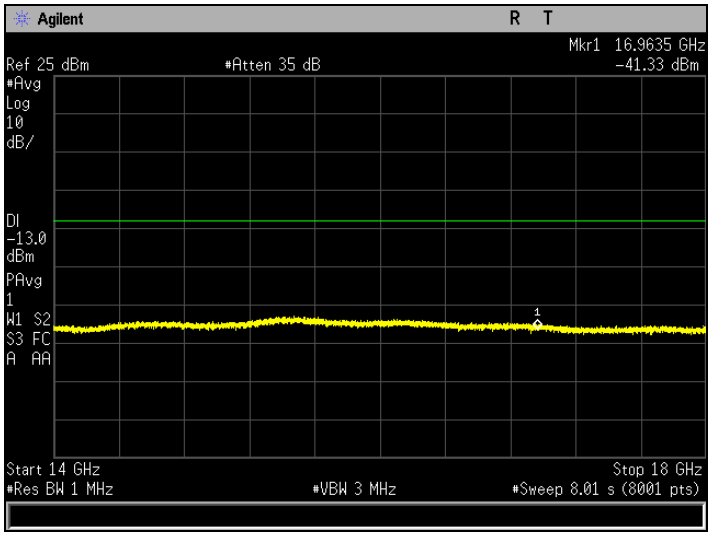
Plot 957. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 3 GHz – 6 GHz, 10 MHz



Plot 958. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 6 GHz – 10 GHz, 10 MHz

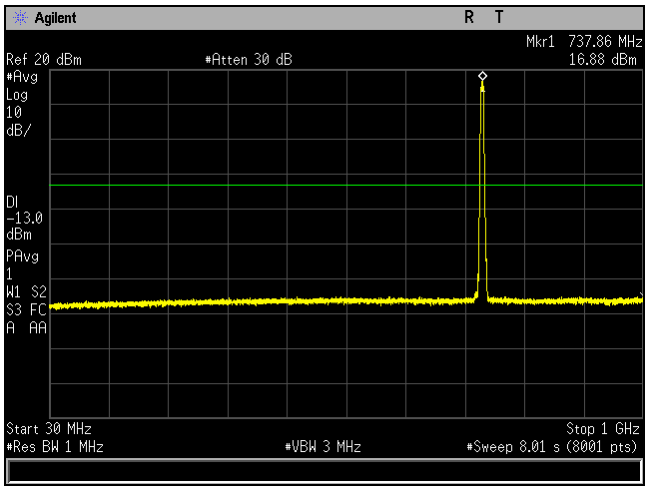


Plot 959. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 10 GHz – 14 GHz, 10 MHz

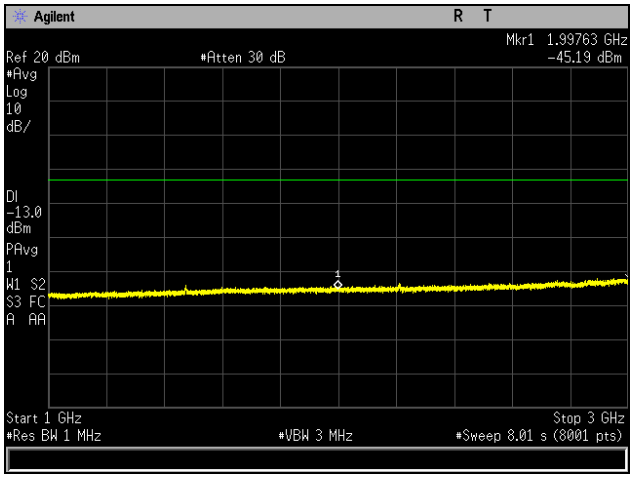


Plot 960. Spurious Emissions at Antenna Terminal, High Channel, Band 13, Port 2, 14 GHz – 18 GHz, 10 MHz

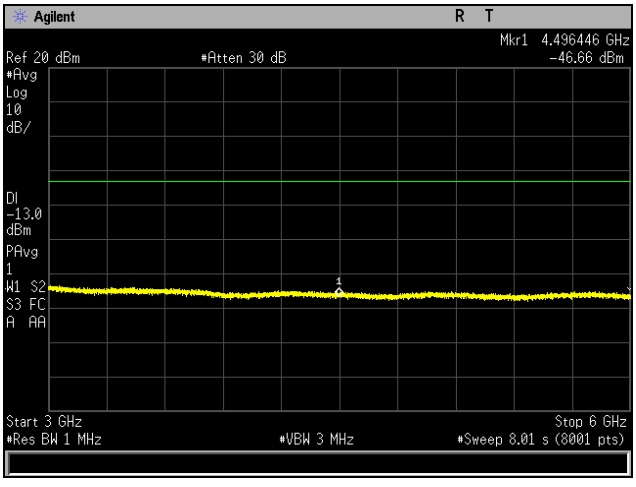
Spurious Emissions at Antenna Terminals, Band 17



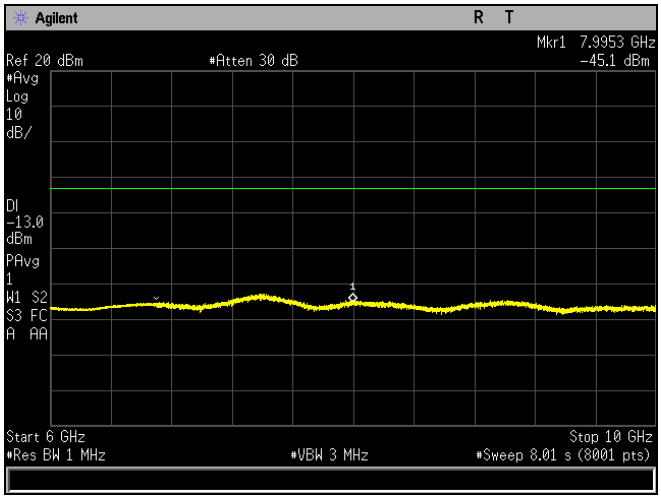
Plot 961. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 30 MHz – 1 GHz, 5 MHz



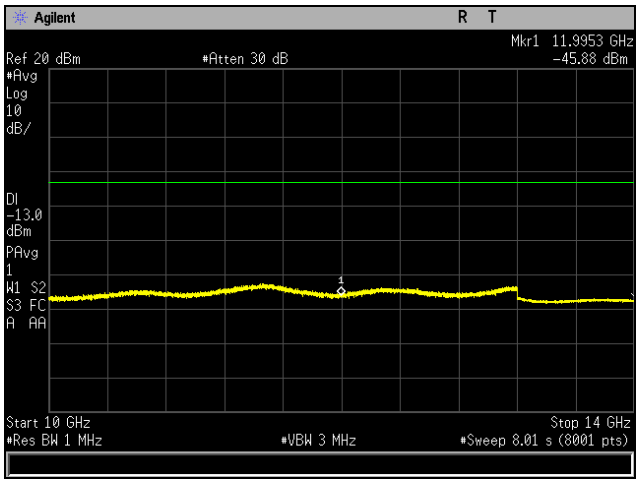
Plot 962. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 1 GHz – 3 GHz, 5 MHz



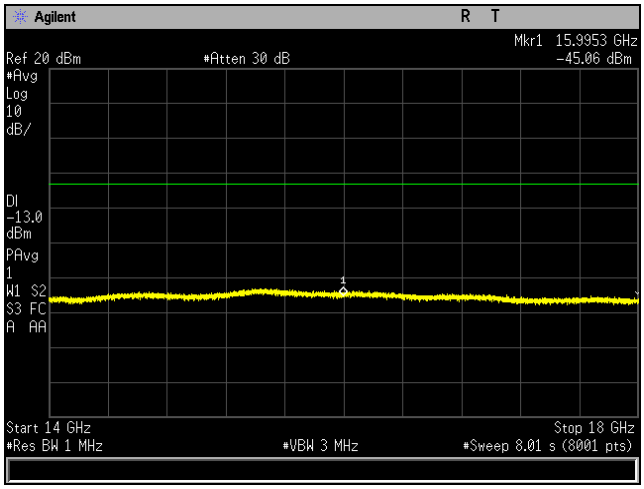
Plot 963. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 3 GHz – 6 GHz, 5 MHz



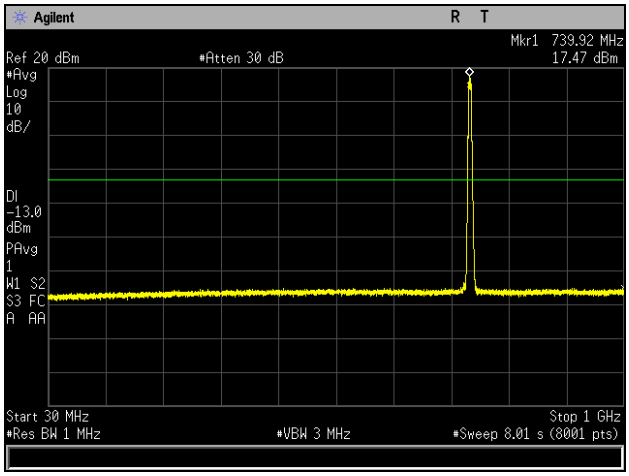
Plot 964. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 6 GHz – 10 GHz, 5 MHz



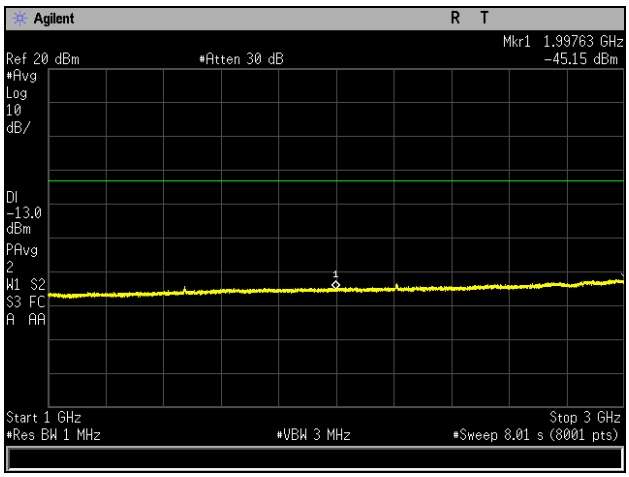
Plot 965. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 10 GHz – 14 GHz, 5 MHz



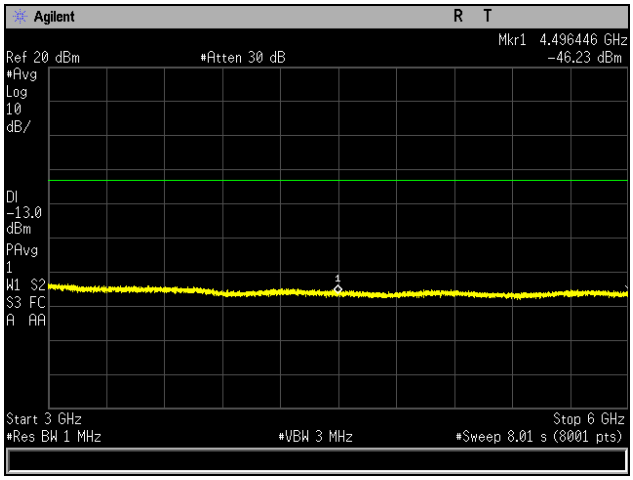
Plot 966. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 14 GHz – 18 GHz, 5 MHz



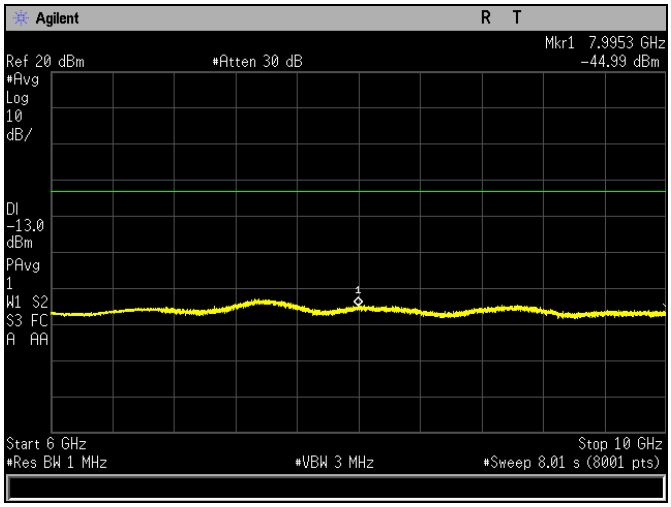
Plot 967. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 30 MHz – 1 GHz, 5 MHz



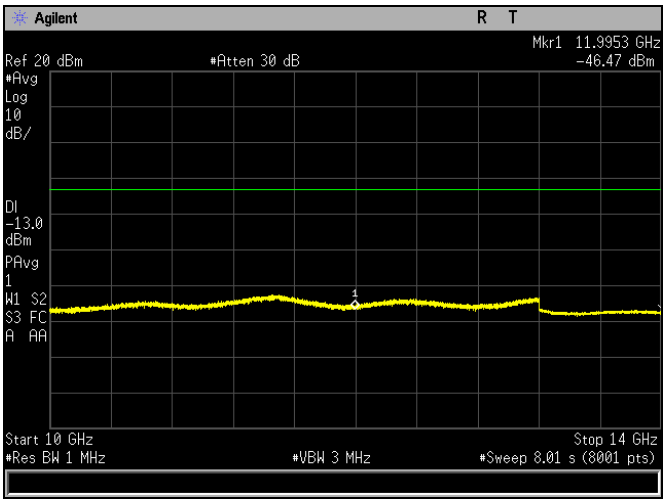
Plot 968. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 1 GHz – 3 GHz, 5 MHz



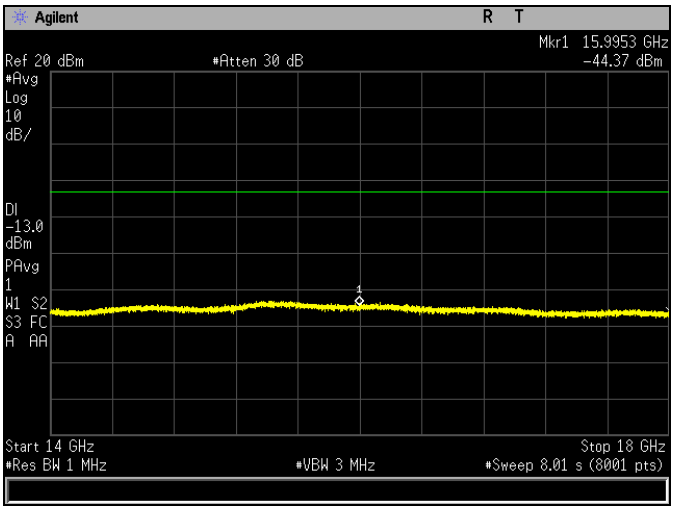
Plot 969. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 3 GHz – 6 GHz, 5 MHz



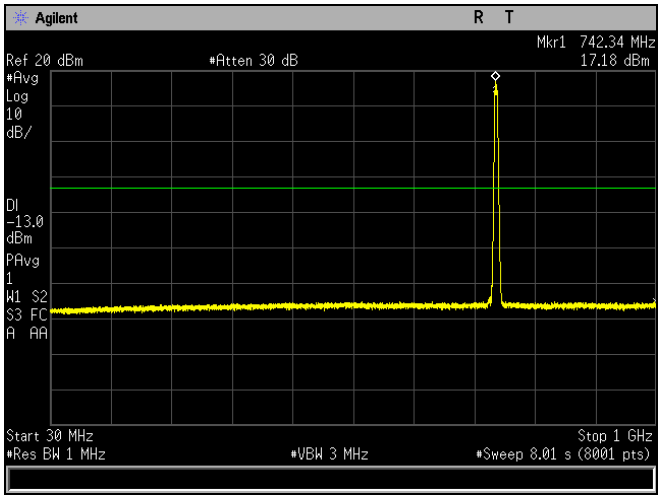
Plot 970. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 6 GHz – 10 GHz, 5 MHz



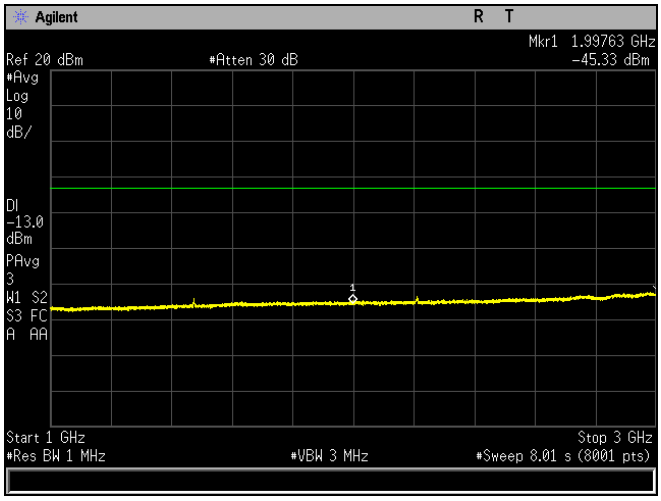
Plot 971. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 10 GHz – 14 GHz, 5 MHz



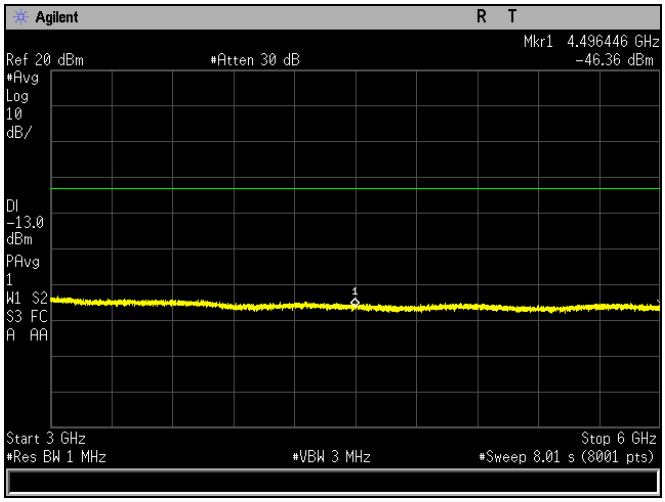
Plot 972. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 14 GHz – 18 GHz, 5 MHz



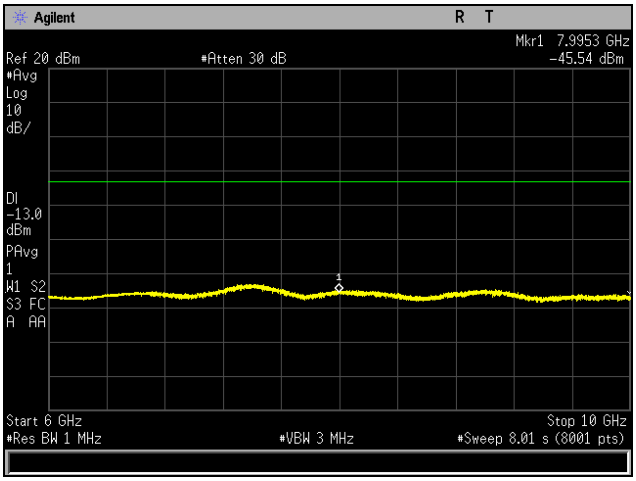
Plot 973. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 30 MHz – 1 GHz, 5 MHz



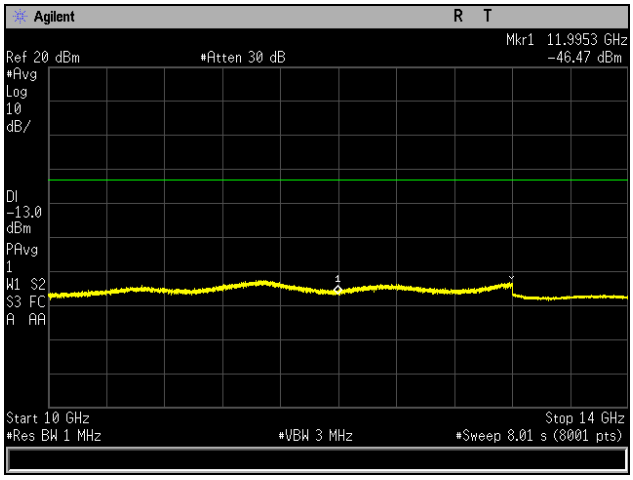
Plot 974. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 1 GHz – 3 GHz, 5 MHz



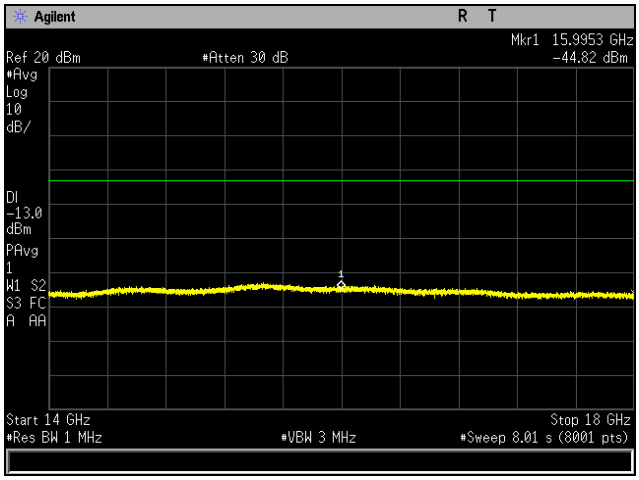
Plot 975. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 3 GHz – 6 GHz, 5 MHz



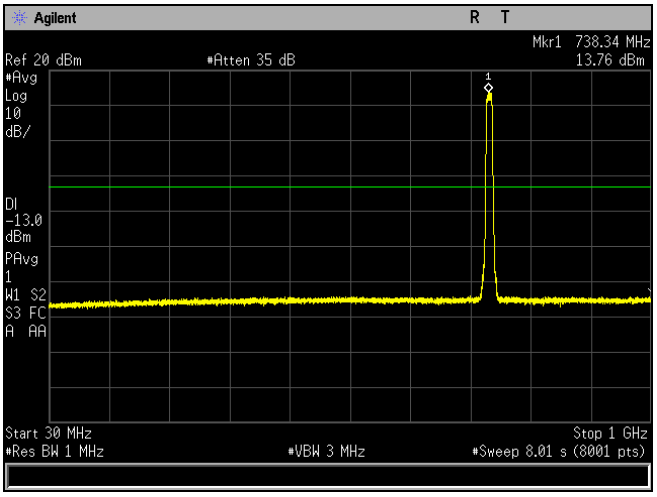
Plot 976. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 6 GHz – 10 GHz, 5 MHz



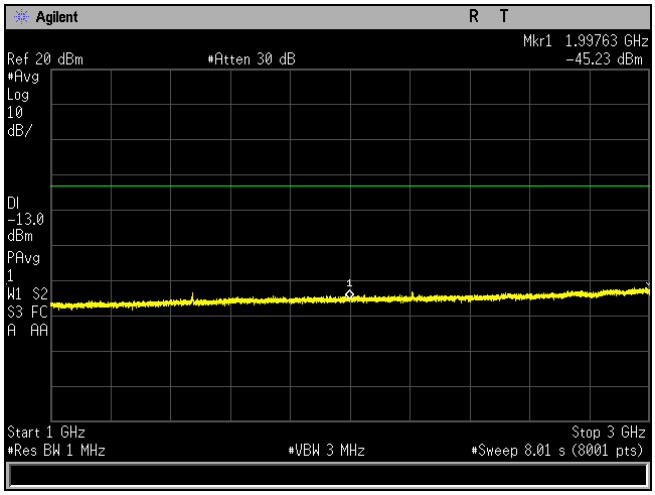
Plot 977. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 10 GHz – 14 GHz, 5 MHz



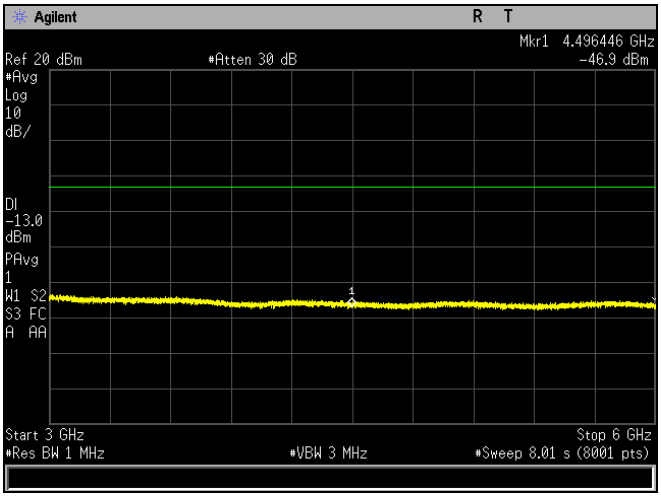
Plot 978. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 14 GHz – 18 GHz, 5 MHz



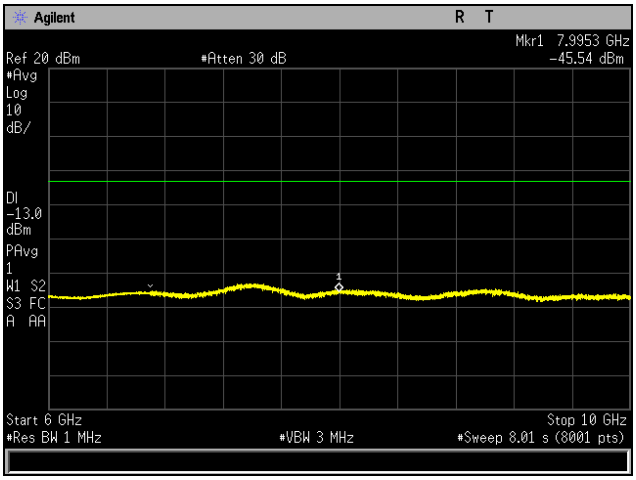
Plot 979. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 30 MHz – 1 GHz, 10 MHz



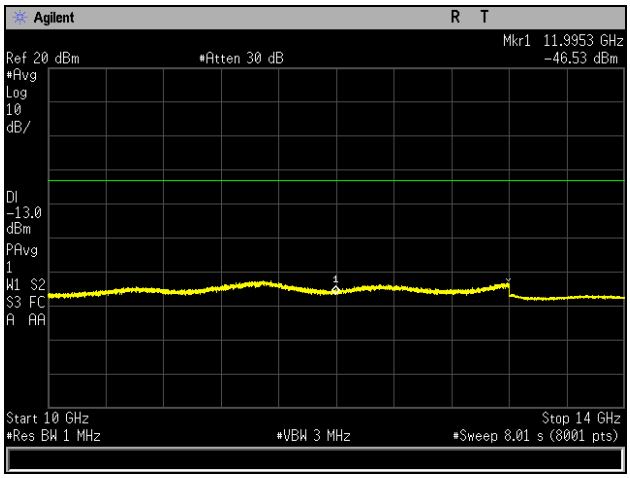
Plot 980. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 1 GHz – 3 GHz, 10 MHz



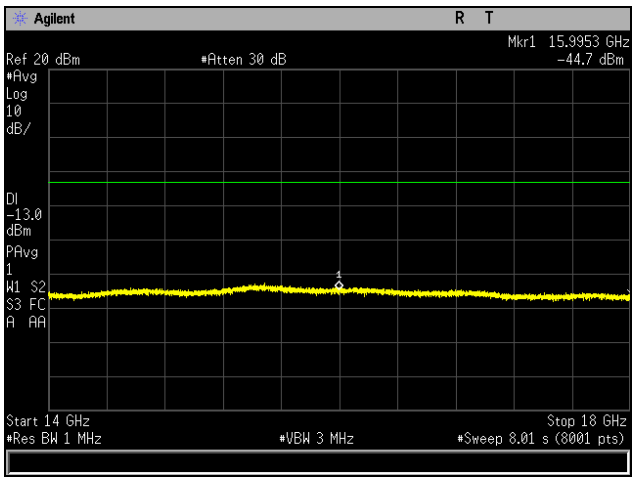
Plot 981. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 3 GHz – 6 GHz, 10 MHz



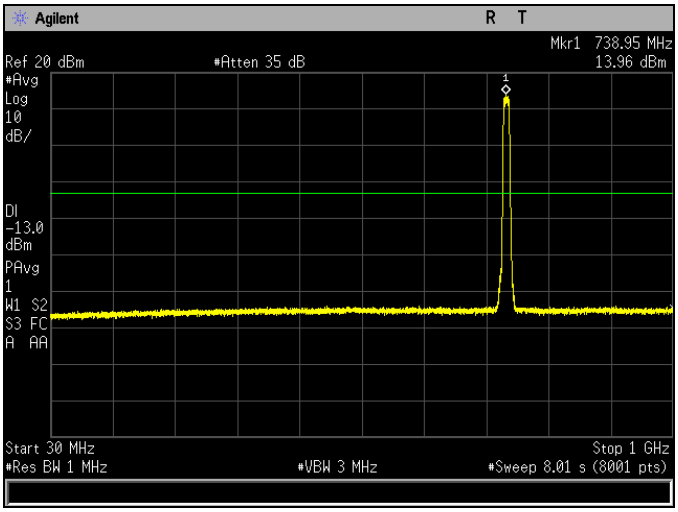
Plot 982. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 6 GHz – 10 GHz, 10 MHz



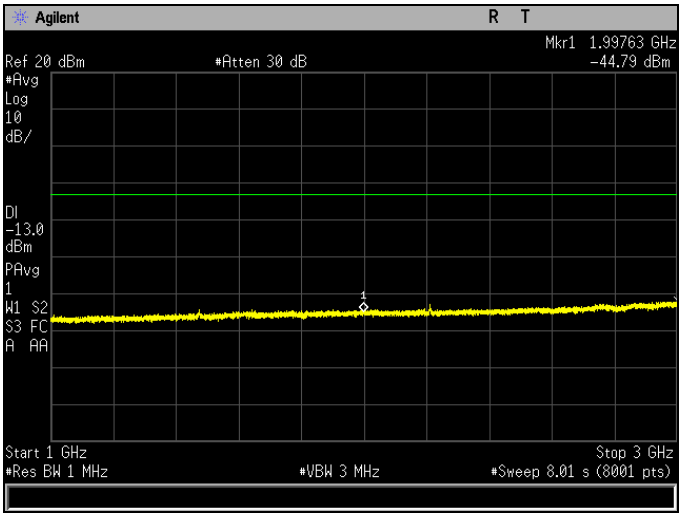
Plot 983. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 10 GHz – 14 GHz, 10 MHz



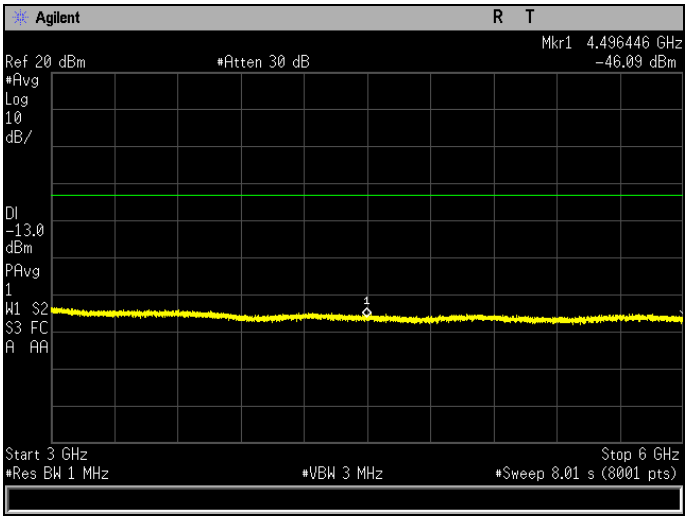
Plot 984. Spurious Emissions at Antenna Terminal, Low Channel, Band 17, Port 2, 14 GHz – 18 GHz, 10 MHz



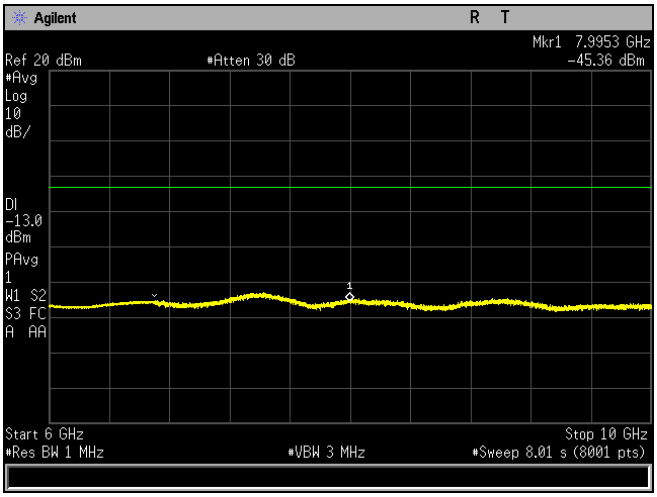
Plot 985. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 30 MHz – 1 GHz, 10 MHz



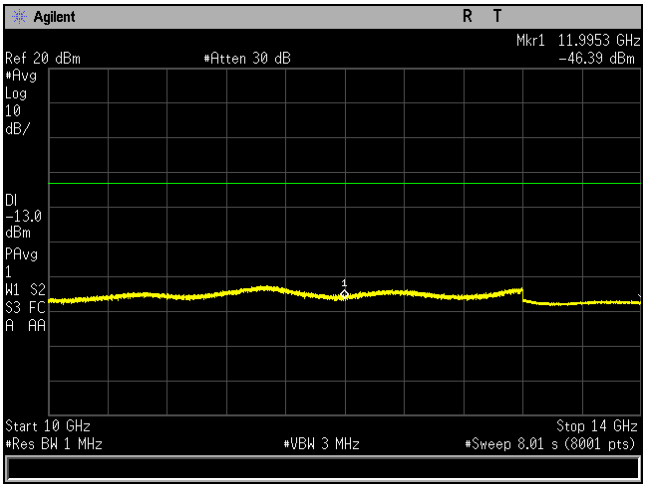
Plot 986. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 1 GHz – 3 GHz, 10 MHz



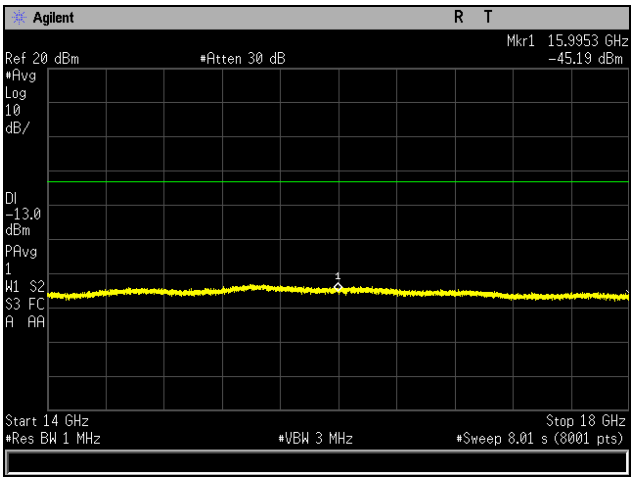
Plot 987. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 3 GHz – 6 GHz, 10 MHz



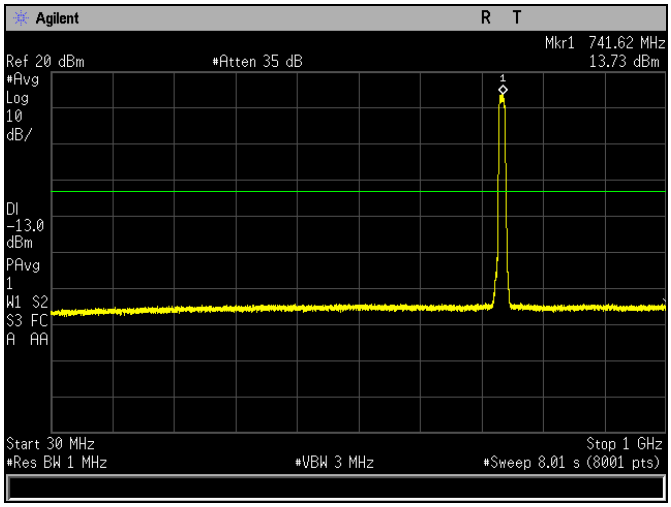
Plot 988. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 6 GHz – 10 GHz, 10 MHz



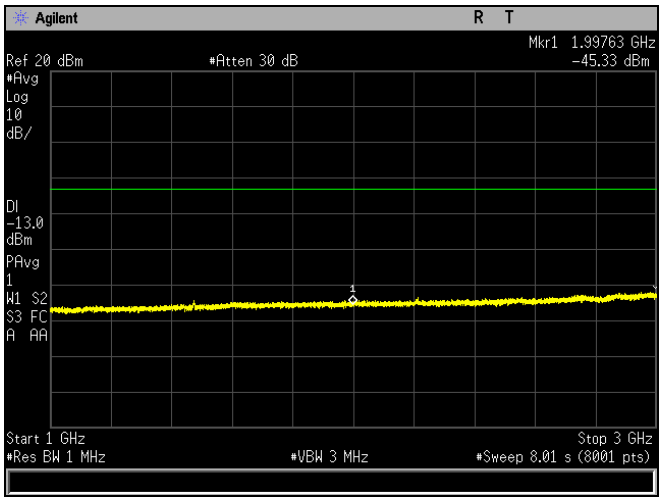
Plot 989. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 10 GHz – 14 GHz, 10 MHz



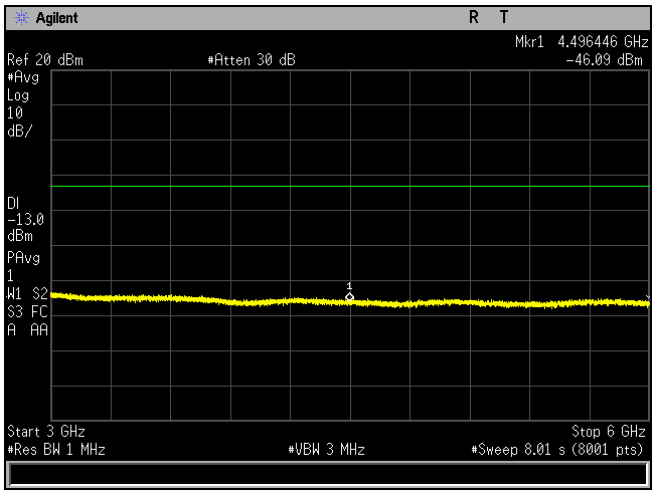
Plot 990. Spurious Emissions at Antenna Terminal, Mid Channel, Band 17, Port 2, 14 GHz – 18 GHz, 10 MHz



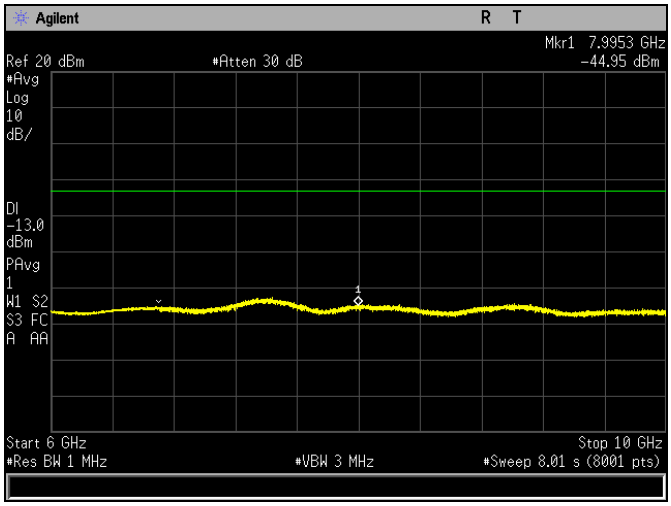
Plot 991. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 30 MHz – 1 GHz, 10 MHz



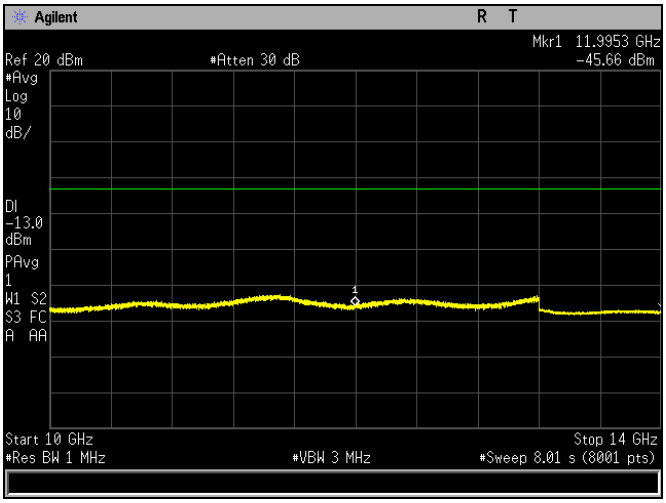
Plot 992. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 1 GHz – 3 GHz, 10 MHz



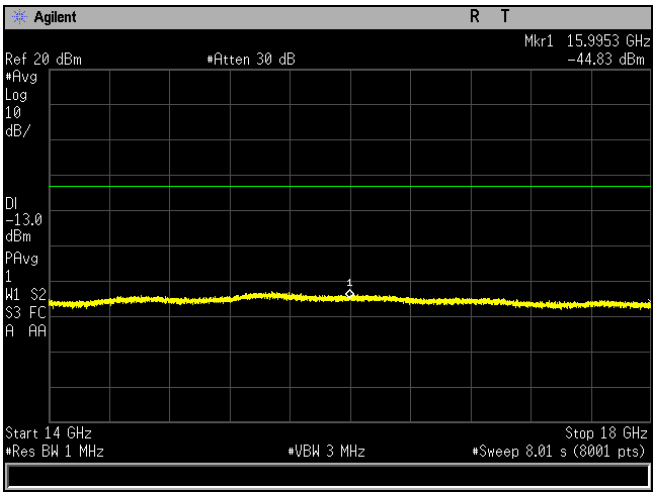
Plot 993. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 3 GHz – 6 GHz, 10 MHz



Plot 994. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 6 GHz – 10 GHz, 10 MHz



Plot 995. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 10 GHz – 14 GHz, 10 MHz

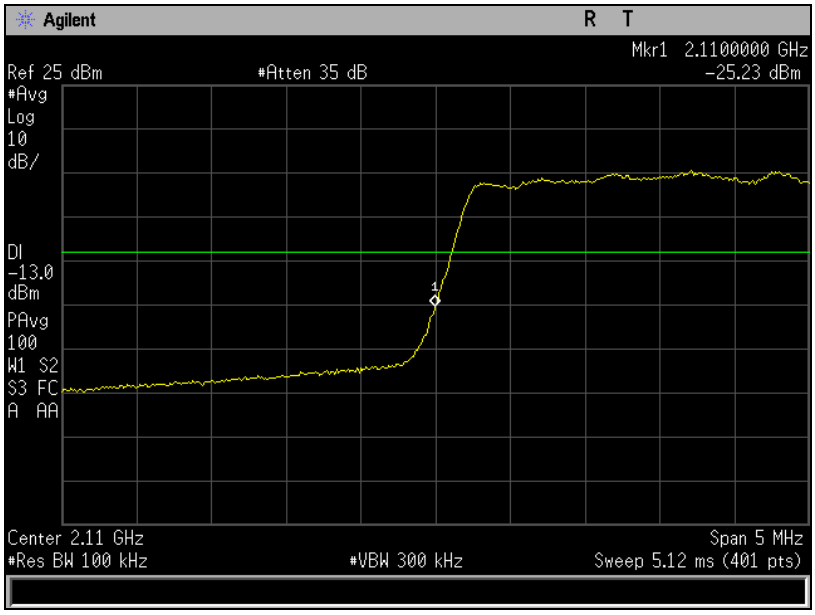


Plot 996. Spurious Emissions at Antenna Terminal, High Channel, Band 17, Port 2, 14 GHz – 18 GHz, 10 MHz

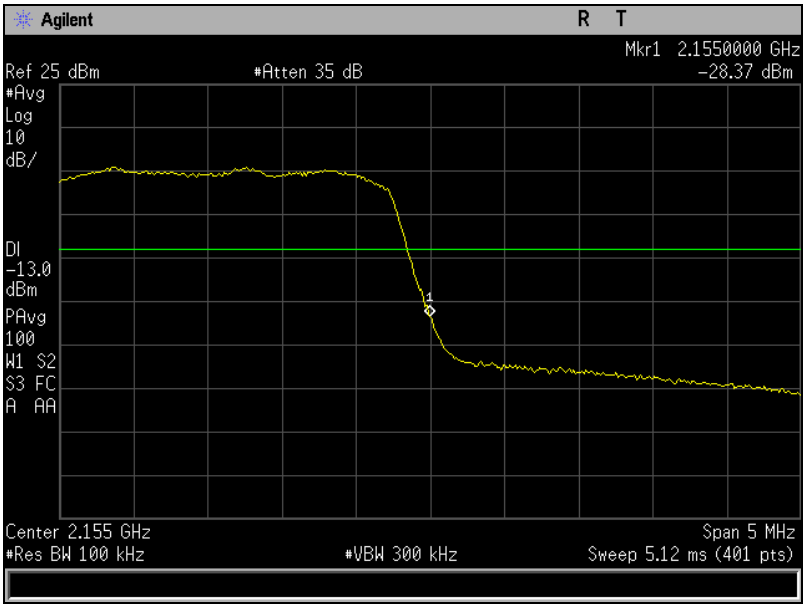
Band Edge Measurements

Test Procedures: The transmitter was turned on. Measurements were performed of the low and high Channels. The plots shown demonstrated that the EUT Emissions at the Band's Edges are below -13dBm.

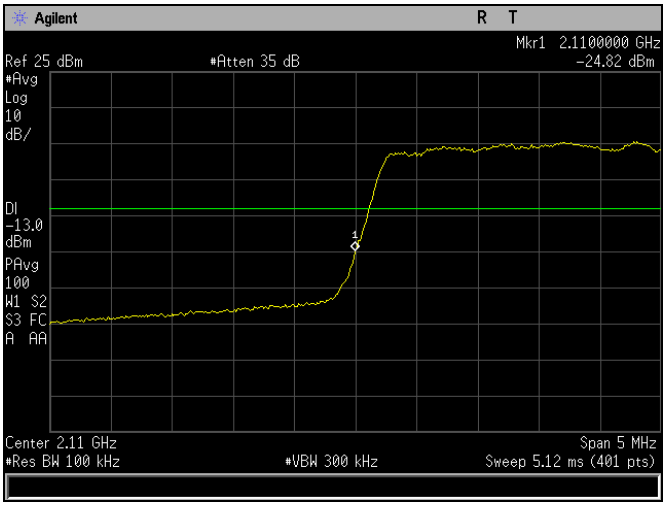
Band Edge, Band 4, Port 1, 5 MHz



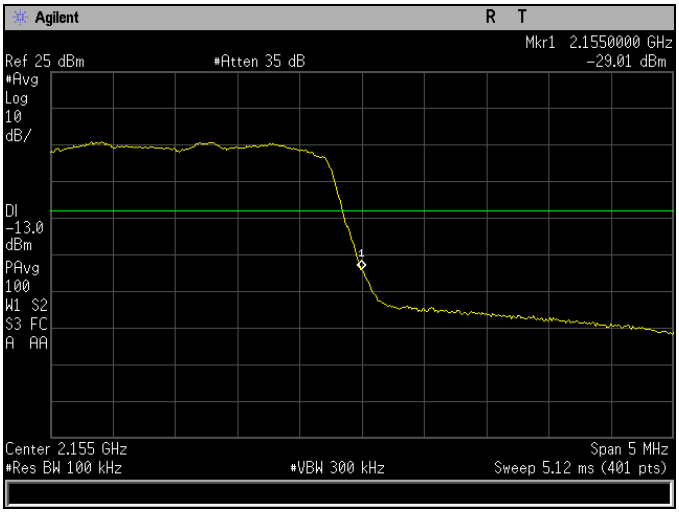
Plot 997. Conducted Band Edge, QAM-16, Low Channel, Band 4, Port 1, 5 MHz



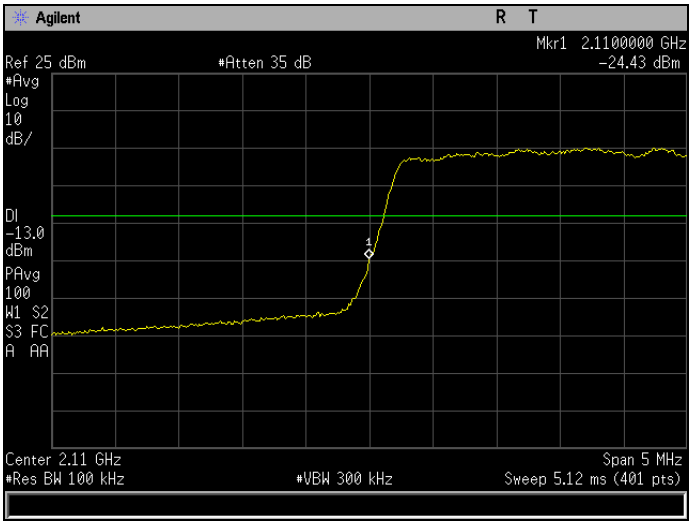
Plot 998. Conducted Band Edge, QAM-16, High Channel, Band 4, Port 1, 5 MHz



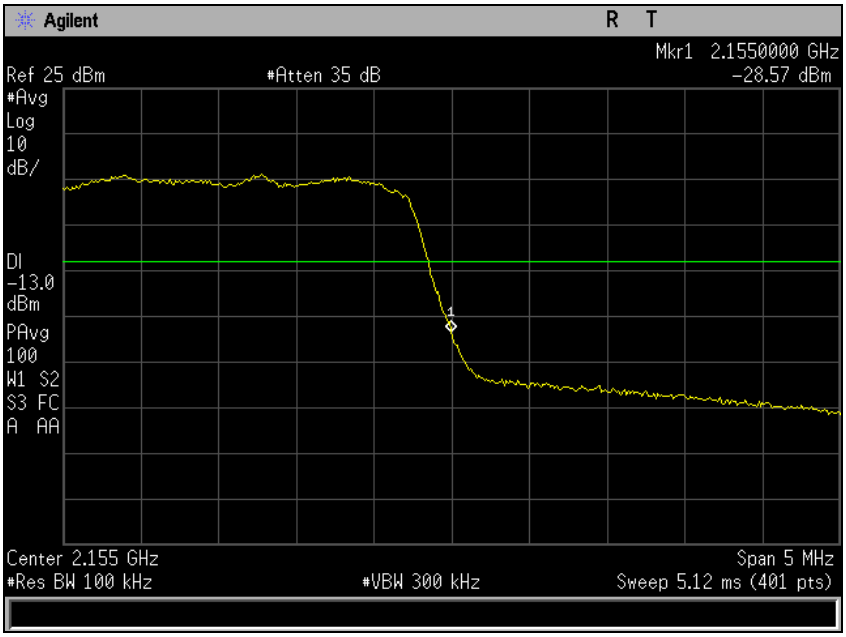
Plot 999. Conducted Band Edge, QAM-64, Low Channel, Band 4, Port 1, 5 MHz



Plot 1000. Conducted Band Edge, QAM-64, High Channel, Band 4, Port 1, 5 MHz

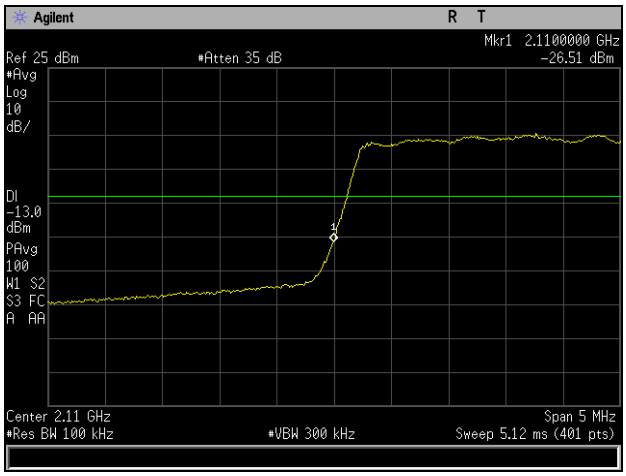


Plot 1001. Conducted Band Edge, QPSK, Low Channel, Band 4, Port 1, 5 MHz

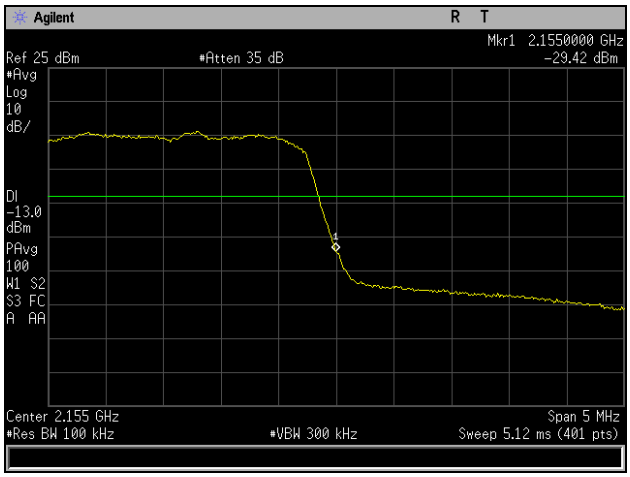


Plot 1002. Conducted Band Edge, QPSK, High Channel, Band 4, Port 1, 5 MHz

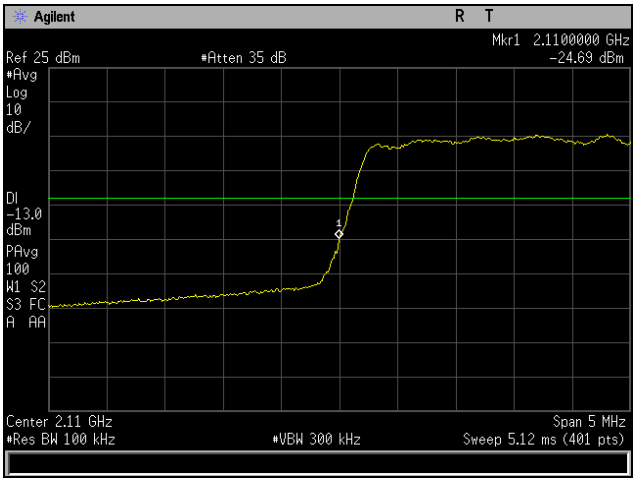
Band Edge, Band 4, Port 2, 5 MHz



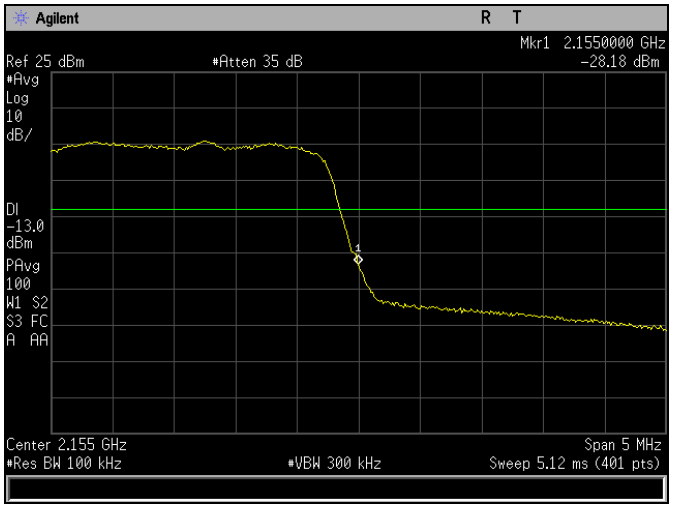
Plot 1003. Conducted Band Edge, QAM-16, Low Channel, Band 4, Port 2, 5 MHz



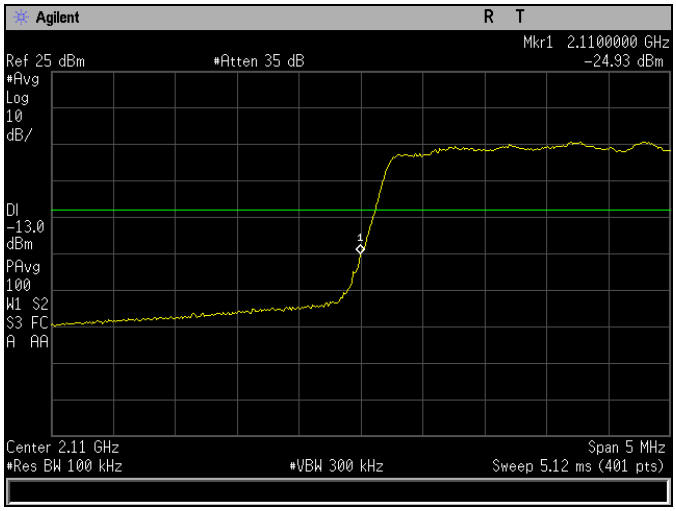
Plot 1004. Conducted Band Edge, QAM-16, High Channel, Band 4, Port 2, 5 MHz



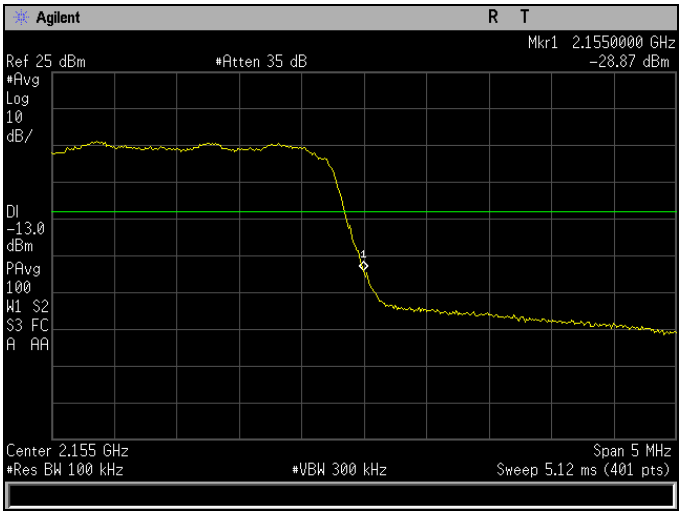
Plot 1005. Conducted Band Edge, QAM-64, Low Channel, Band 4, Port 2, 5 MHz



Plot 1006. Conducted Band Edge, QAM-64, High Channel, Band 4, Port 2, 5 MHz

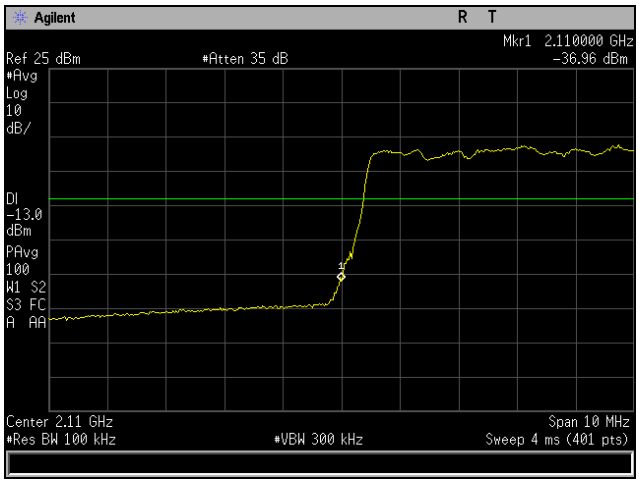


Plot 1007. Conducted Band Edge, QPSK, Low Channel, Band 4, Port 2, 5 MHz

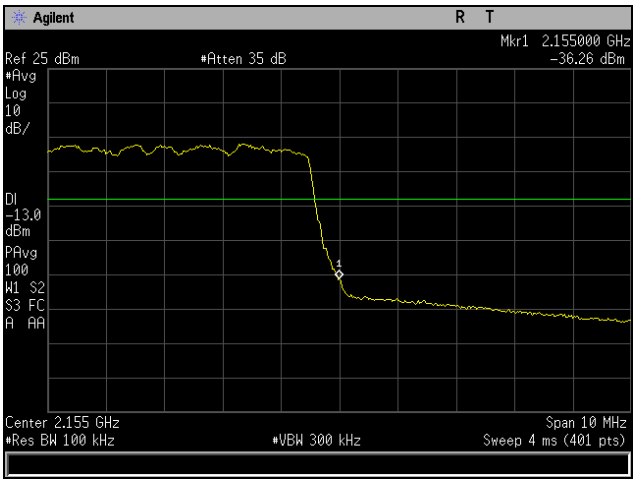


Plot 1008. Conducted Band Edge, QPSK, High Channel, Band 4, Port 2, 5 MHz

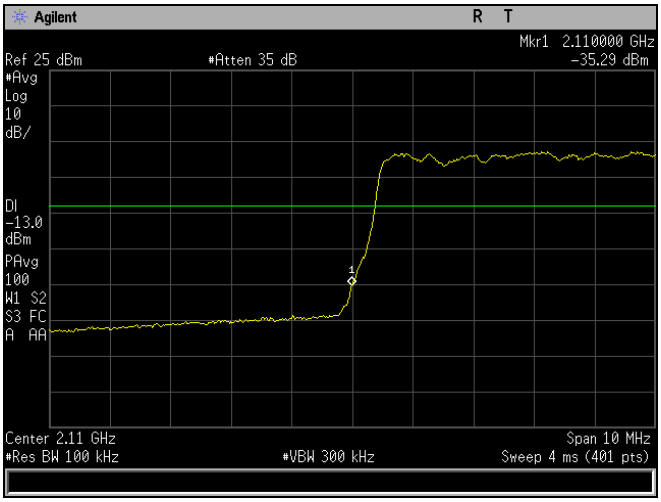
Band Edge, Band 4, Port 1, 10 MHz



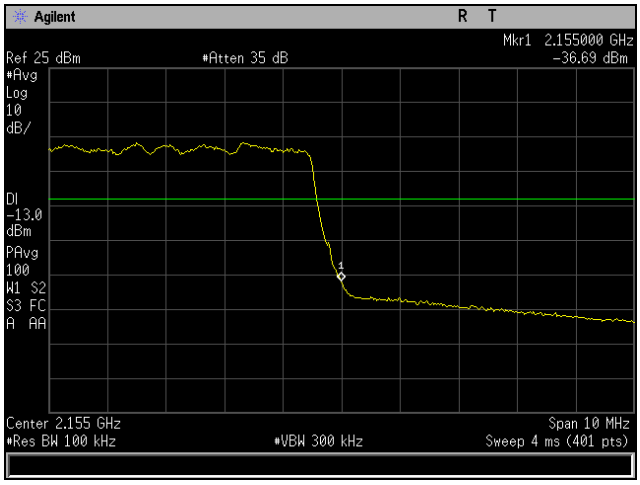
Plot 1009. Conducted Band Edge, QAM-16, Low Channel, Band 4, Port 1, 10 MHz



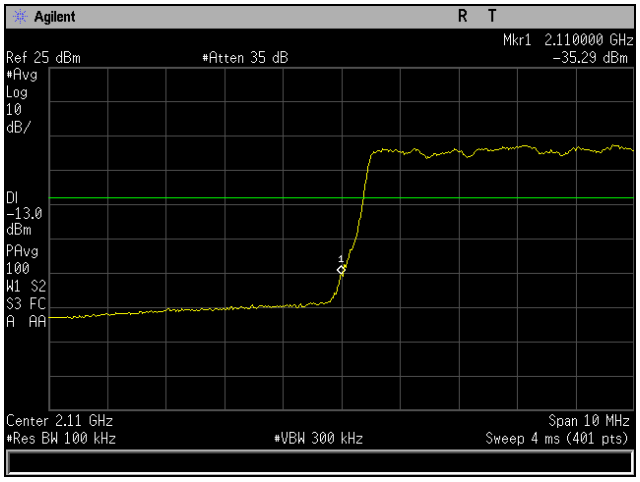
Plot 1010. Conducted Band Edge, QAM-16, High Channel, Band 4, Port 1, 10 MHz



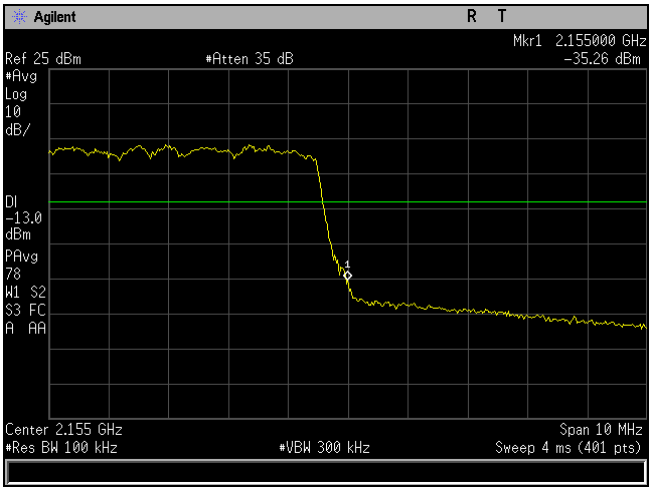
Plot 1011. Conducted Band Edge, QAM-64, Low Channel, Band 4, Port 1, 10 MHz



Plot 1012. Conducted Band Edge, QAM-64, High Channel, Band 4, Port 1, 10 MHz

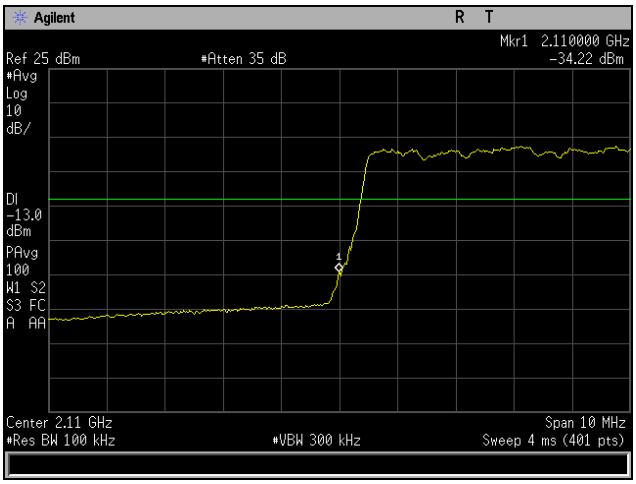


Plot 1013. Conducted Band Edge, QPSK, Low Channel, Band 4, Port 1, 10 MHz

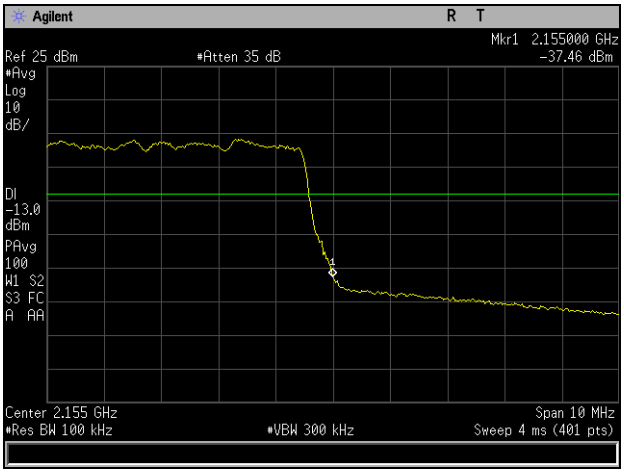


Plot 1014. Conducted Band Edge, QPSK, High Channel, Band 4, Port 1, 10 MHz

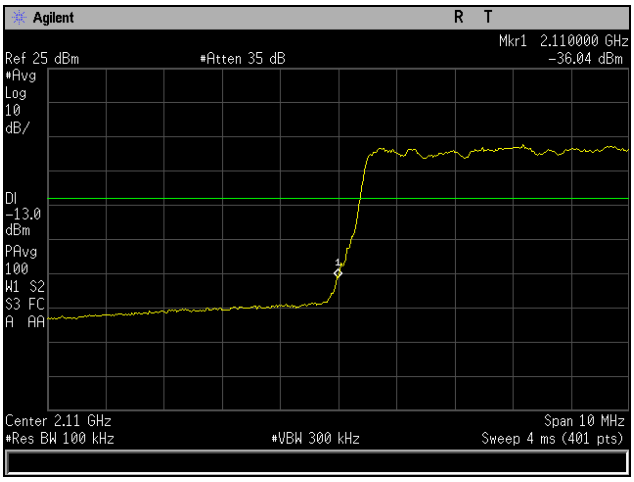
Band Edge, Band 4, Port 2, 10 MHz



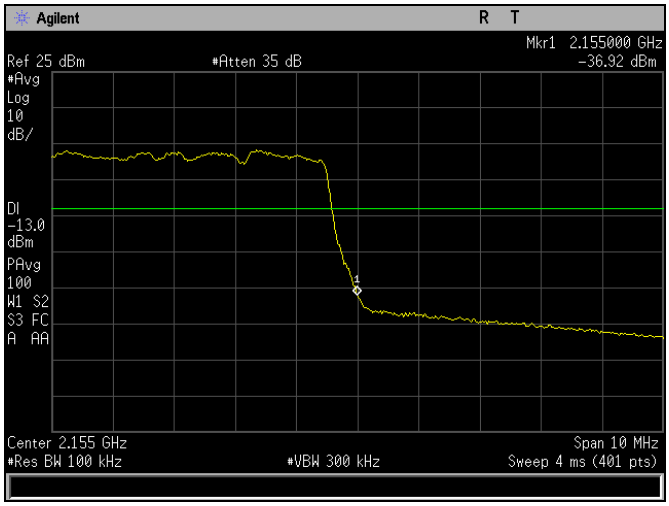
Plot 1015. Conducted Band Edge, QAM-16, Low Channel, Band 4, Port 2, 10 MHz



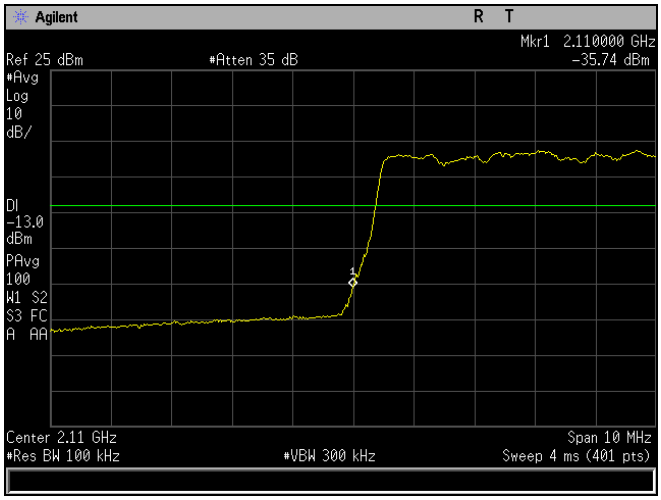
Plot 1016. Conducted Band Edge, QAM-16, High Channel, Band 4, Port 2, 10 MHz



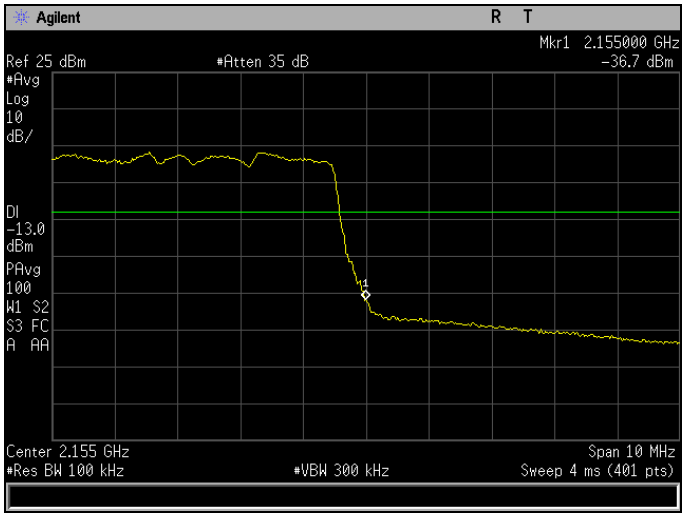
Plot 1017. Conducted Band Edge, QAM-64, Low Channel, Band 4, Port 2, 10 MHz



Plot 1018. Conducted Band Edge, QAM-64, High Channel, Band 4, Port 2, 10 MHz

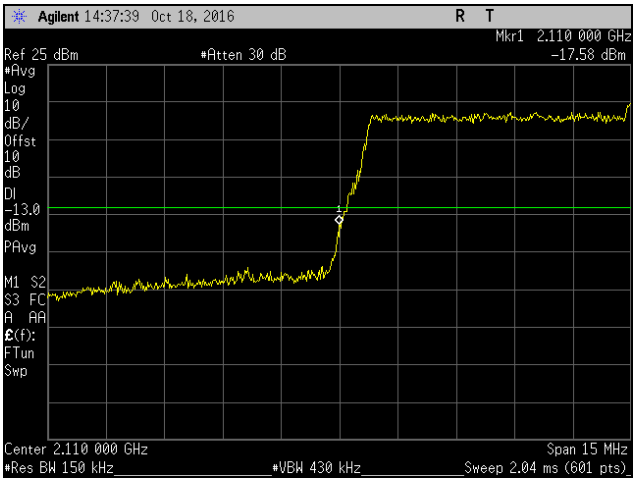


Plot 1019. Conducted Band Edge, QPSK, Low Channel, Band 4, Port 2, 10 MHz

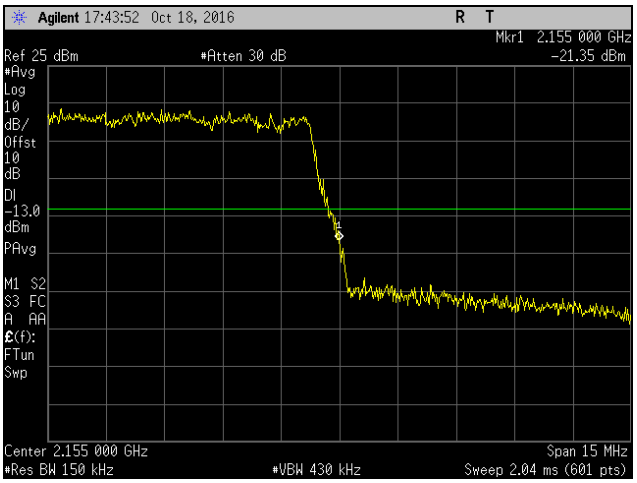


Plot 1020. Conducted Band Edge, QPSK, High Channel, Band 4, Port 2, 10 MHz

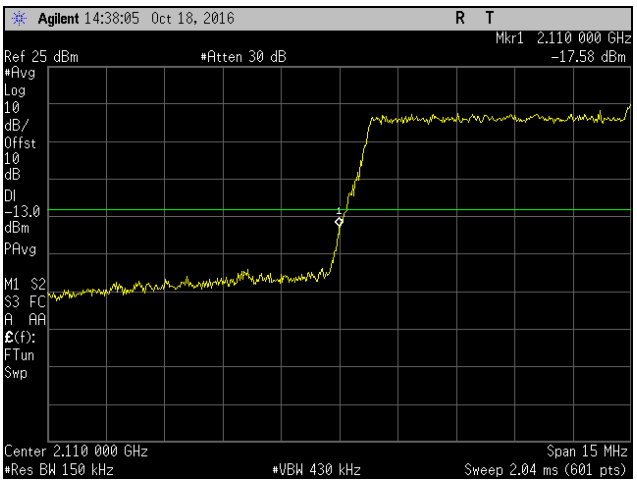
Band Edge, Band 4, Port 1, 15 MHz



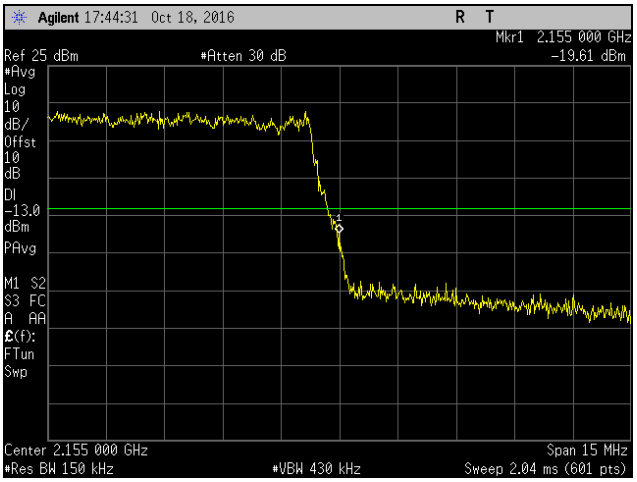
Plot 1021. Conducted Band Edge, QAM-16, Low Channel, Band 4, Port 1, 15 MHz



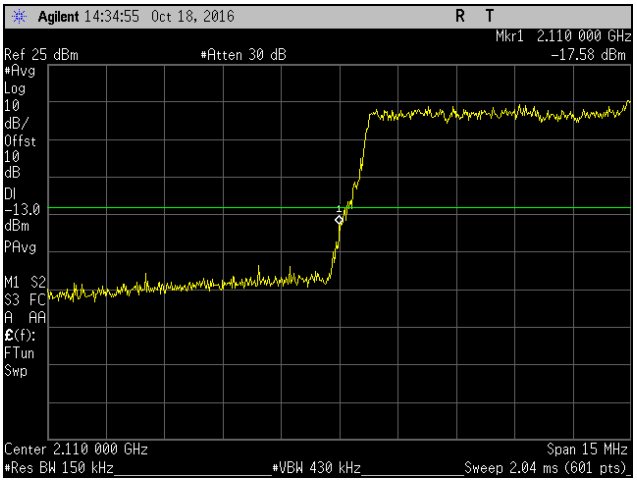
Plot 1022. Conducted Band Edge, QAM-16, High Channel, Band 4, Port 1, 15 MHz



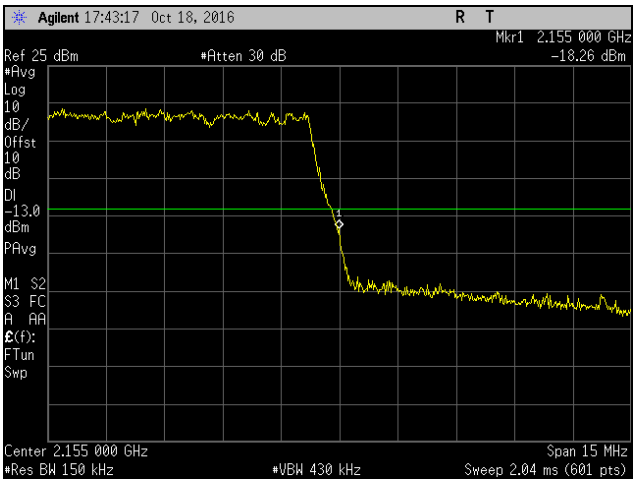
Plot 1023. Conducted Band Edge, QAM-64, Low Channel, Band 4, Port 1, 15 MHz



Plot 1024. Conducted Band Edge, QAM-64, High Channel, Band 4, Port 1, 15 MHz

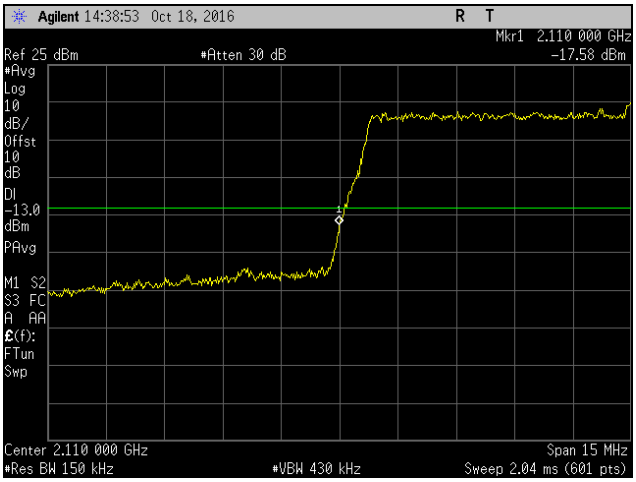


Plot 1025. Conducted Band Edge, QPSK, Low Channel, Band 4, Port 1, 15 MHz

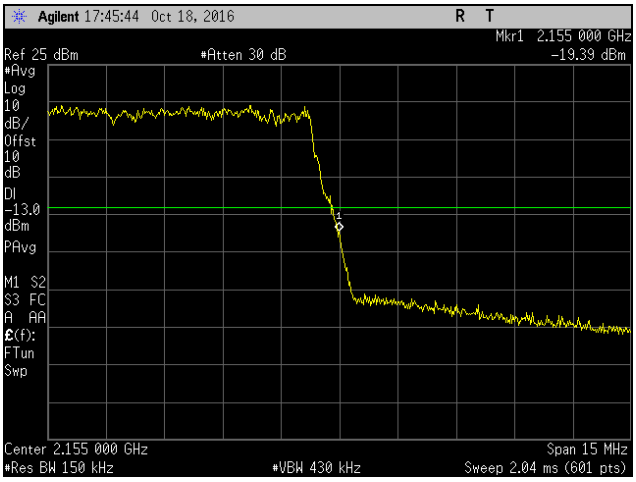


Plot 1026. Conducted Band Edge, QPSK, High Channel, Band 4, Port 1, 15 MHz

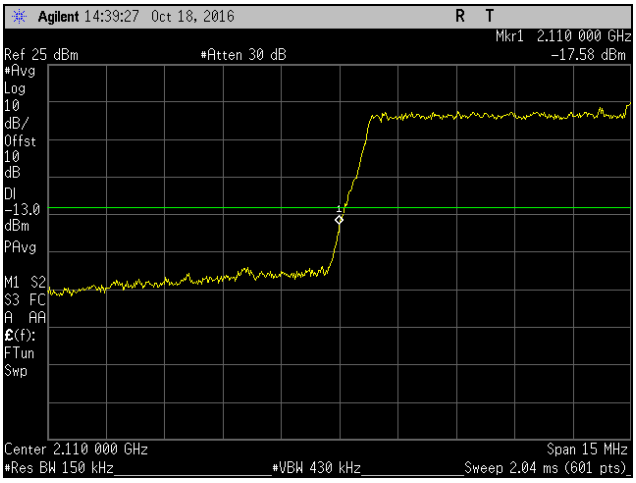
Band Edge, Band 4, Port 2, 15 MHz



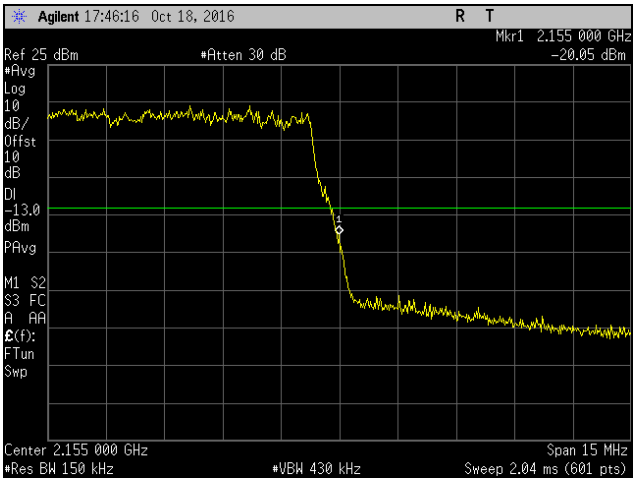
Plot 1027. Conducted Band Edge, QAM-16, Low Channel, Band 4, Port 2, 15 MHz



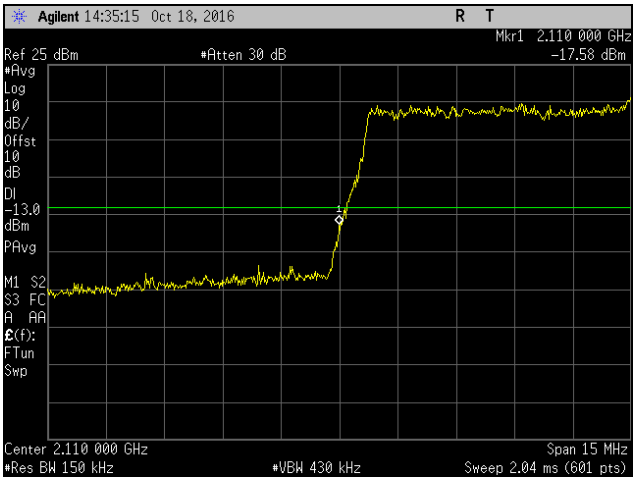
Plot 1028. Conducted Band Edge, QAM-16, High Channel, Band 4, Port 2, 15 MHz



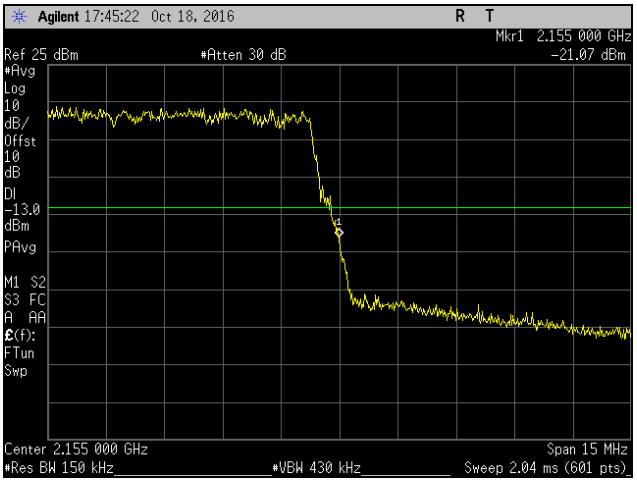
Plot 1029. Conducted Band Edge, QAM-64, Low Channel, Band 4, Port 2, 15 MHz



Plot 1030. Conducted Band Edge, QAM-64, High Channel, Band 4, Port 2, 15 MHz

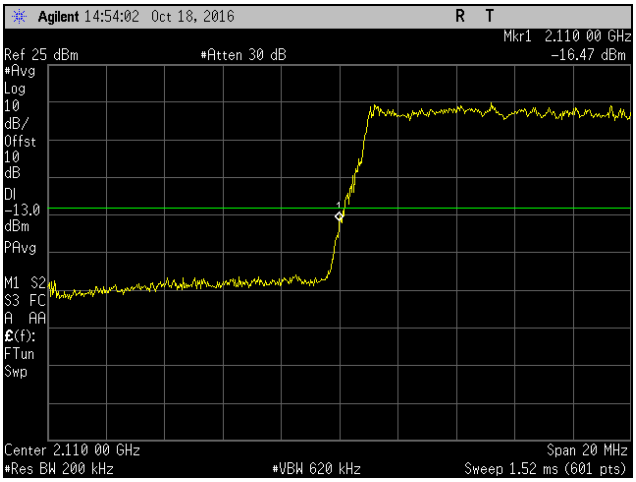


Plot 1031. Conducted Band Edge, QPSK, Low Channel, Band 4, Port 2, 15 MHz

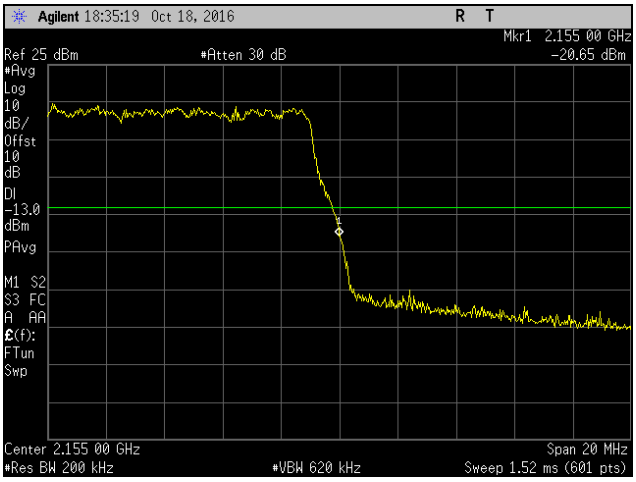


Plot 1032. Conducted Band Edge, QPSK, High Channel, Band 4, Port 2, 15 MHz

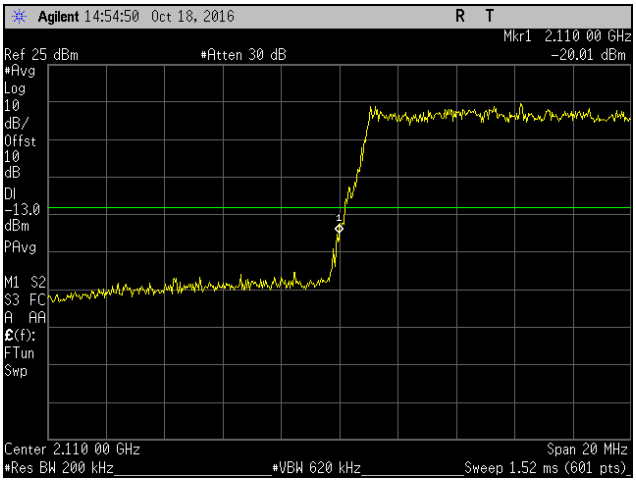
Band Edge, Band 4, Port 1, 20 MHz



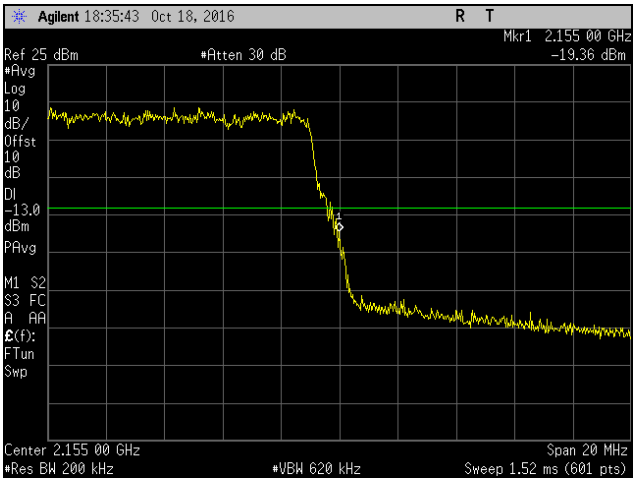
Plot 1033. Conducted Band Edge, QAM-16, Low Channel, Band 4, Port 1, 20 MHz



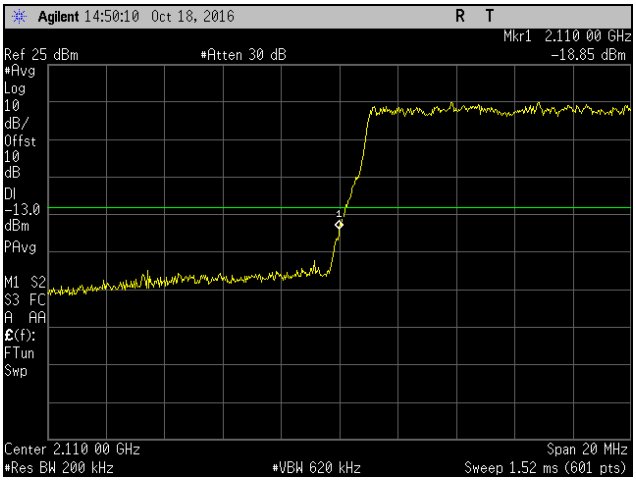
Plot 1034. Conducted Band Edge, QAM-16, High Channel, Band 4, Port 1, 20 MHz



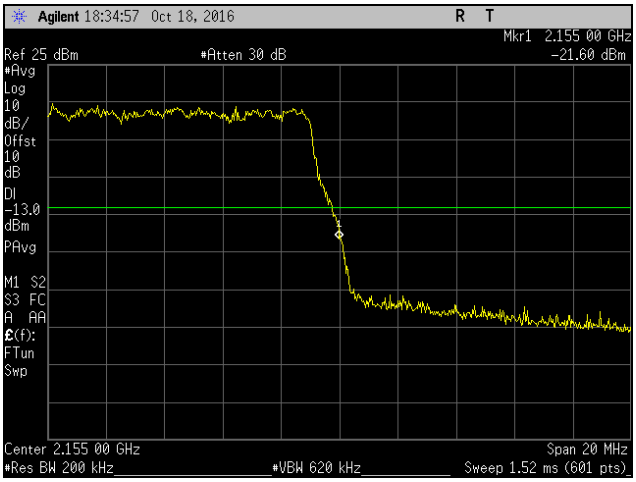
Plot 1035. Conducted Band Edge, QAM-64, Low Channel, Band 4, Port 1, 20 MHz



Plot 1036. Conducted Band Edge, QAM-64, High Channel, Band 4, Port 1, 20 MHz

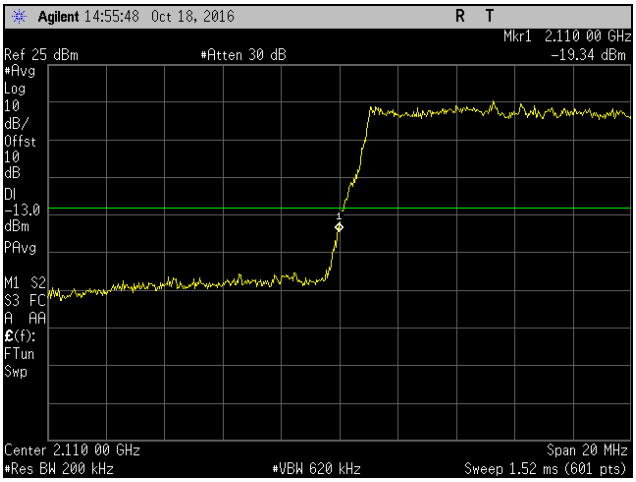


Plot 1037. Conducted Band Edge, QPSK, Low Channel, Band 4, Port 1, 20 MHz

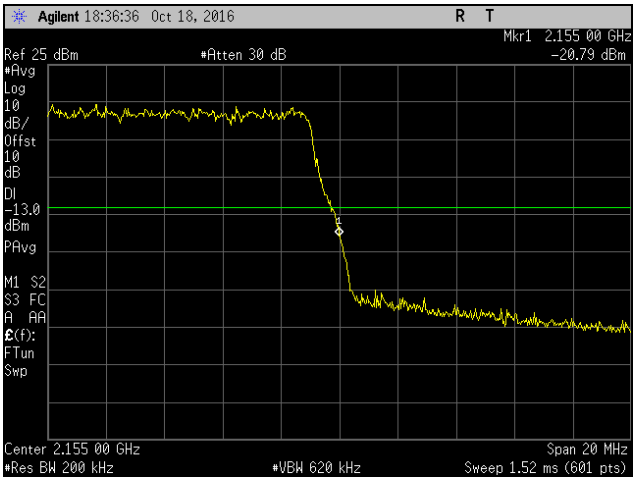


Plot 1038. Conducted Band Edge, QPSK, High Channel, Band 4, Port 1, 20 MHz

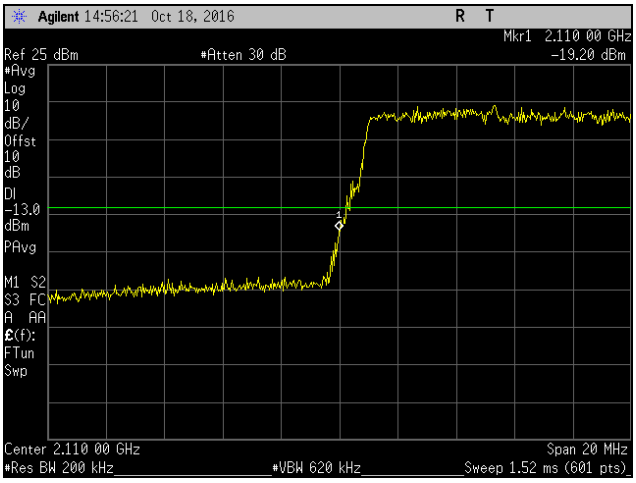
Band Edge, Band 4, Port 2, 20 MHz



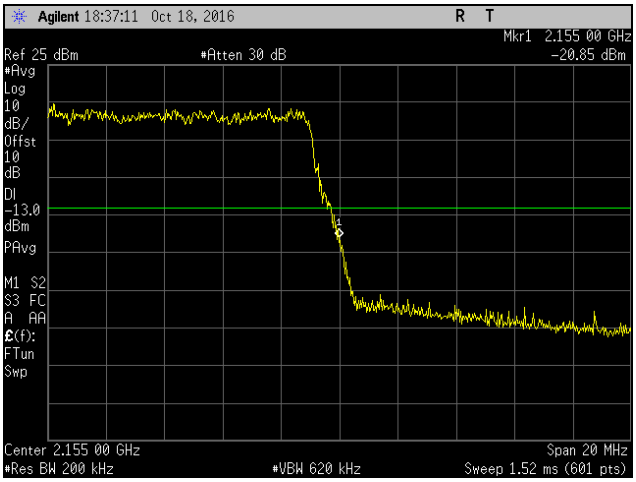
Plot 1039. Conducted Band Edge, QAM-16, Low Channel, Band 4, Port 2, 20 MHz



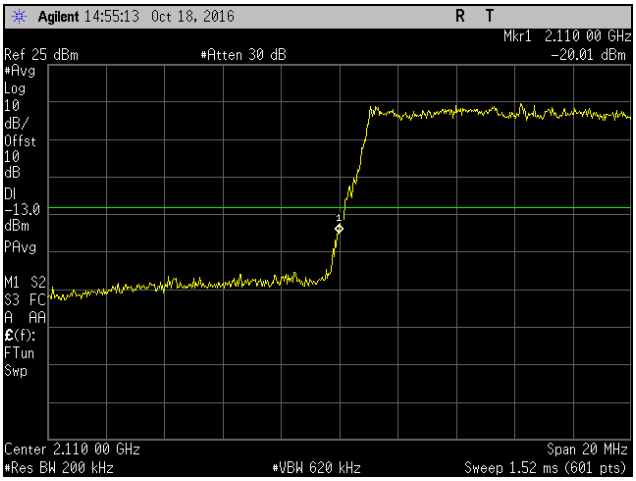
Plot 1040. Conducted Band Edge, QAM-16, High Channel, Band 4, Port 2, 20 MHz



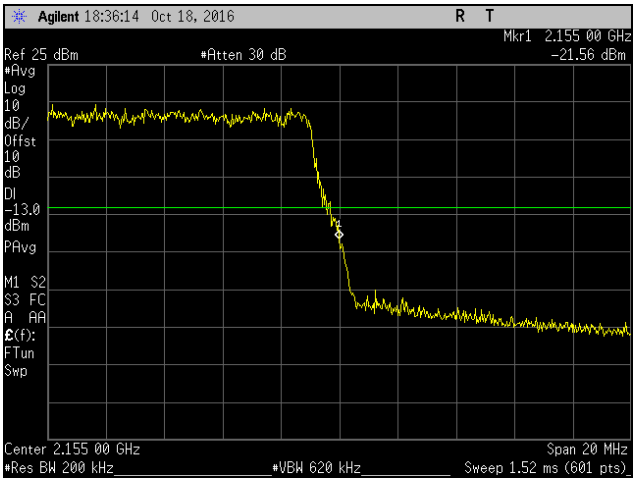
Plot 1041. Conducted Band Edge, QAM-64, Low Channel, Band 4, Port 2, 20 MHz



Plot 1042. Conducted Band Edge, QAM-64, High Channel, Band 4, Port 2, 20 MHz

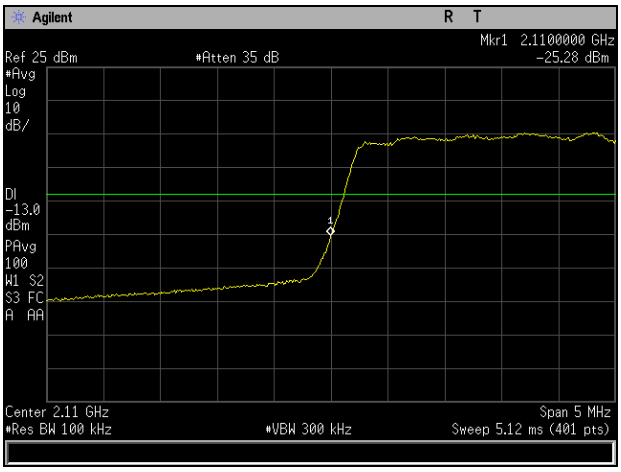


Plot 1043. Conducted Band Edge, QPSK, Low Channel, Band 4, Port 2, 20 MHz

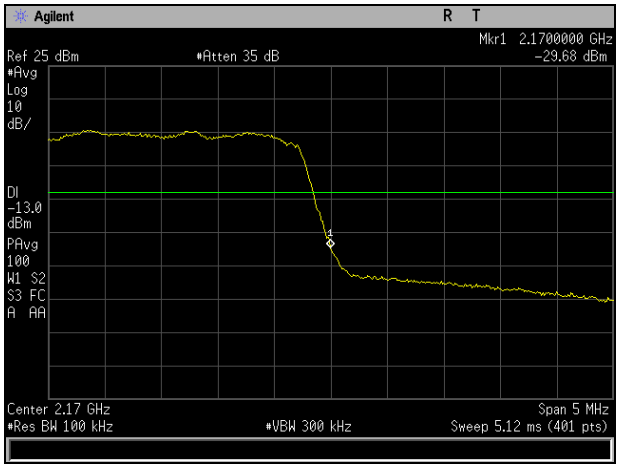


Plot 1044. Conducted Band Edge, QPSK, High Channel, Band 4, Port 2, 20 MHz

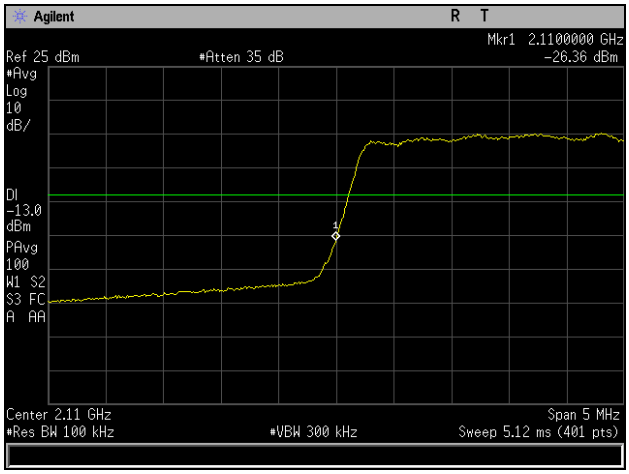
Band Edge, Band 10, Port 1, 5 MHz



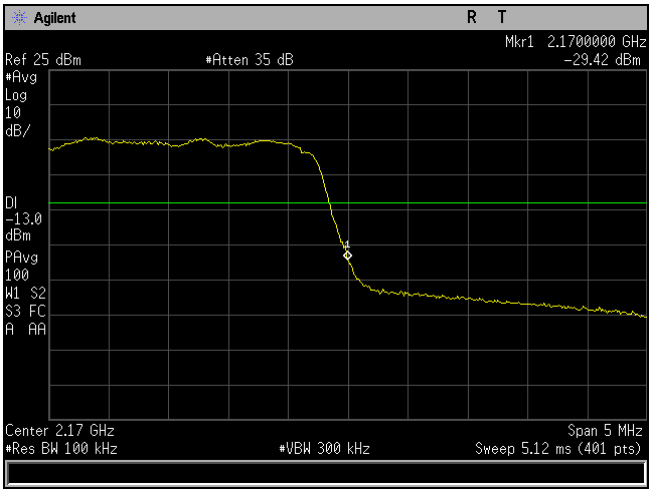
Plot 1045. Conducted Band Edge, QAM-16, Low Channel, Band 10, Port 1, 5 MHz



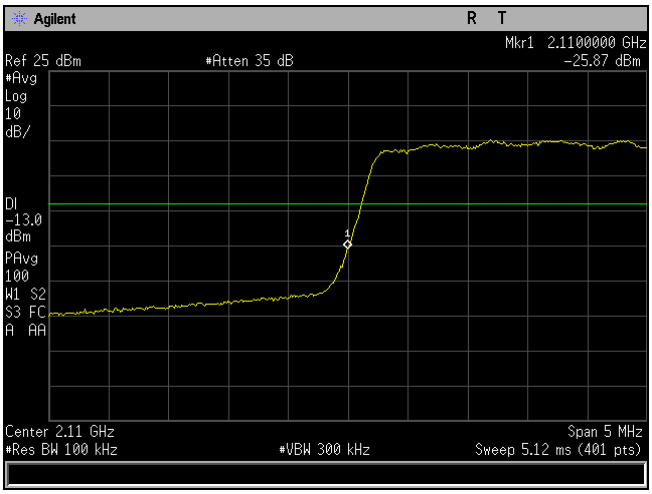
Plot 1046. Conducted Band Edge, QAM-16, High Channel, Band 10, Port 1, 5 MHz



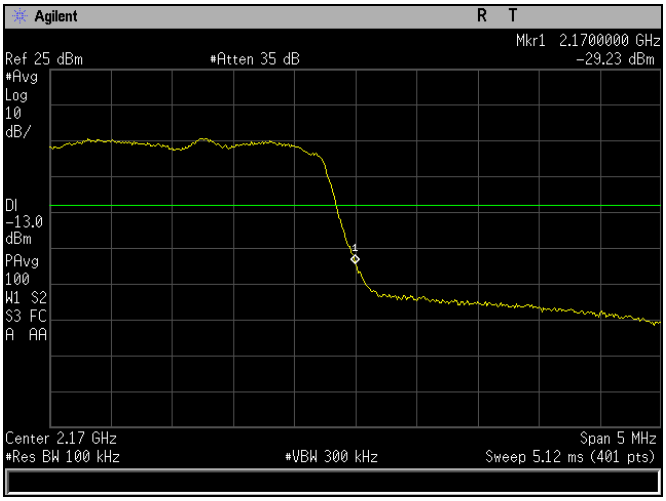
Plot 1047. Conducted Band Edge, QAM-64, Low Channel, Band 10, Port 1, 5 MHz



Plot 1048. Conducted Band Edge, QAM-64, High Channel, Band 10, Port 1, 5 MHz

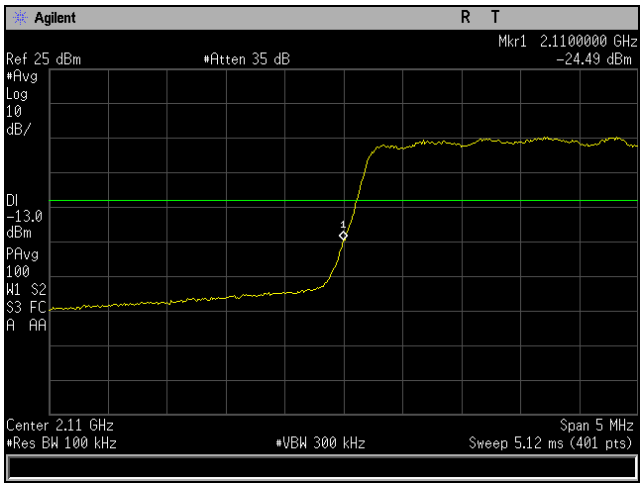


Plot 1049. Conducted Band Edge, QPSK, Low Channel, Band 10, Port 1, 5 MHz

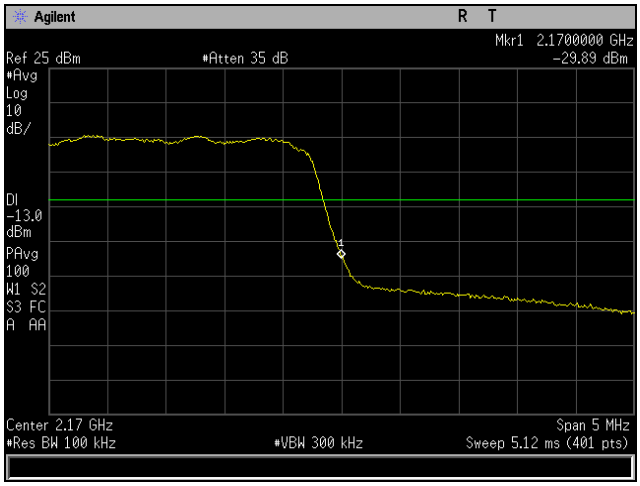


Plot 1050. Conducted Band Edge, QPSK, High Channel, Band 10, Port 1, 5 MHz

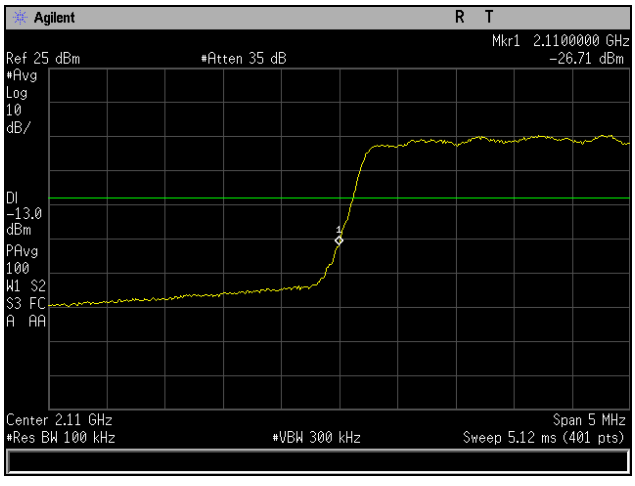
Band Edge, Band 10, Port 2, 5 MHz



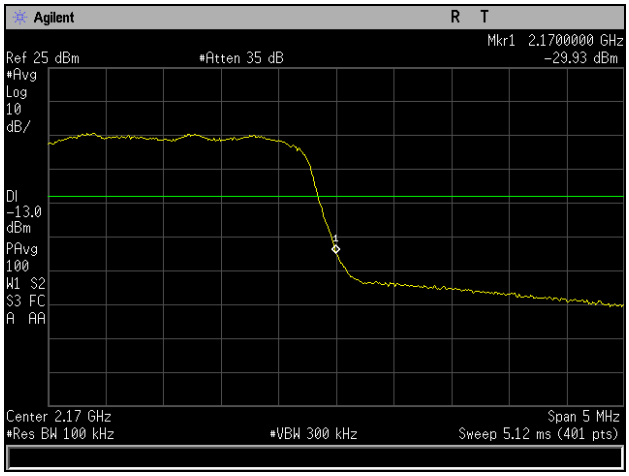
Plot 1051. Conducted Band Edge, QAM-16, Low Channel, Band 10, Port 2, 5 MHz



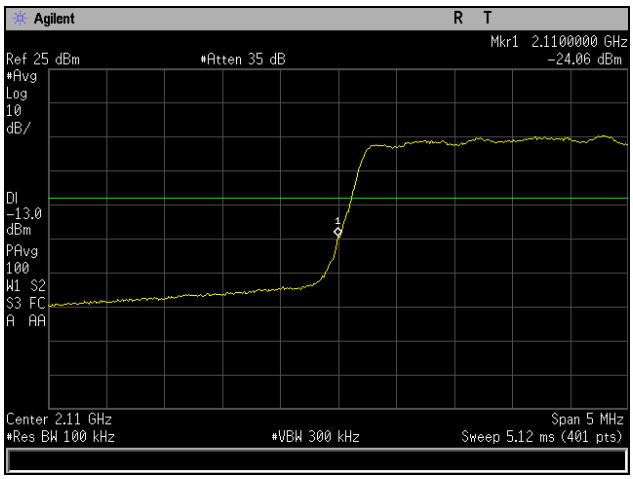
Plot 1052. Conducted Band Edge, QAM-16, High Channel, Band 10, Port 2, 5 MHz



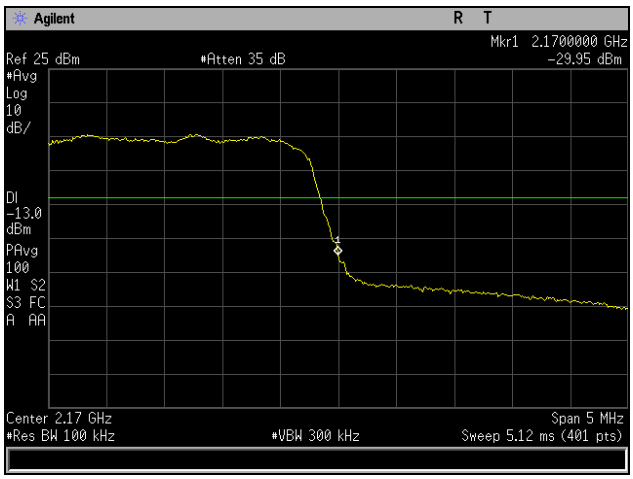
Plot 1053. Conducted Band Edge, QAM-64, Low Channel, Band 10, Port 2, 5 MHz



Plot 1054. Conducted Band Edge, QAM-64, High Channel, Band 10, Port 2, 5 MHz

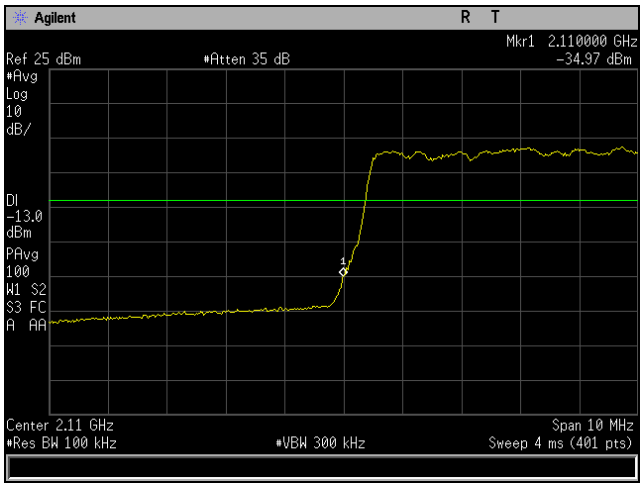


Plot 1055. Conducted Band Edge, QPSK, Low Channel, Band 10, Port 2, 5 MHz

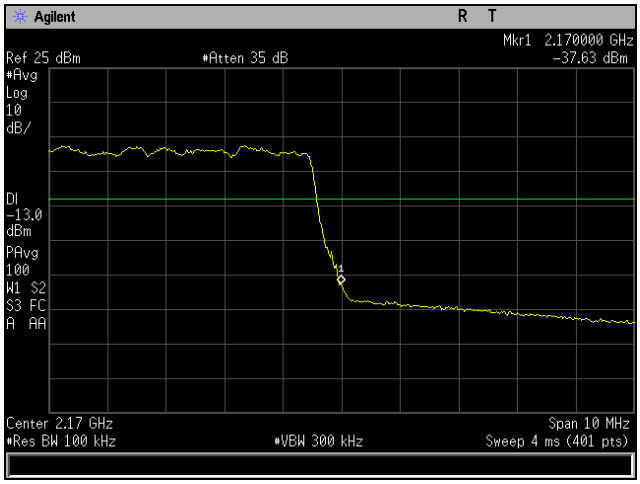


Plot 1056. Conducted Band Edge, QPSK, High Channel, Band 10, Port 2, 5 MHz

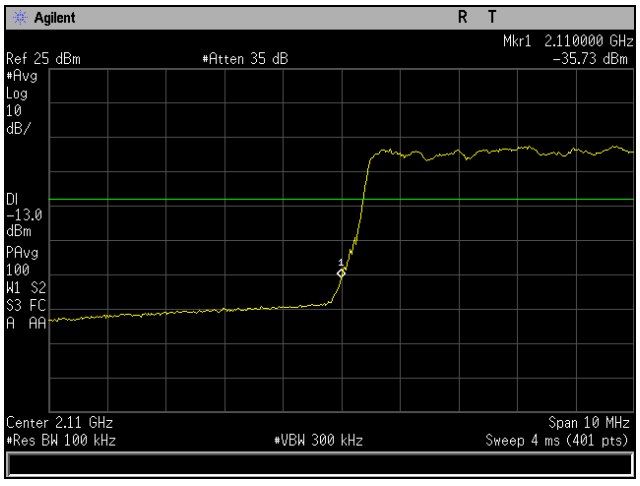
Band Edge, Band 10, Port 1, 10 MHz



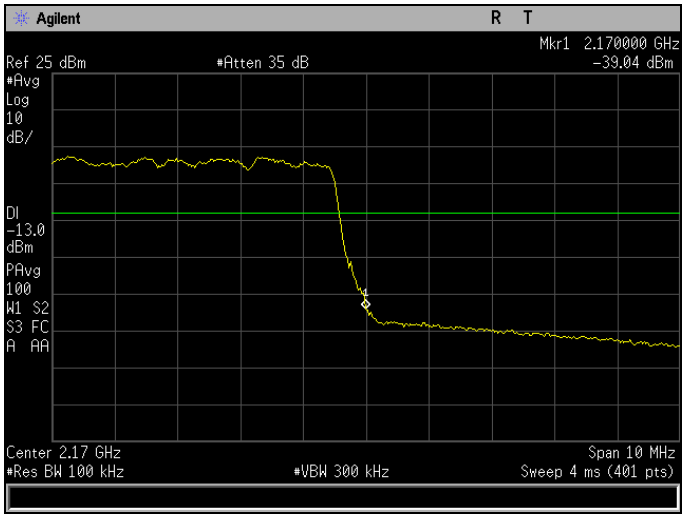
Plot 1057. Conducted Band Edge, QAM-16, Low Channel, Band 10, Port 1, 10 MHz



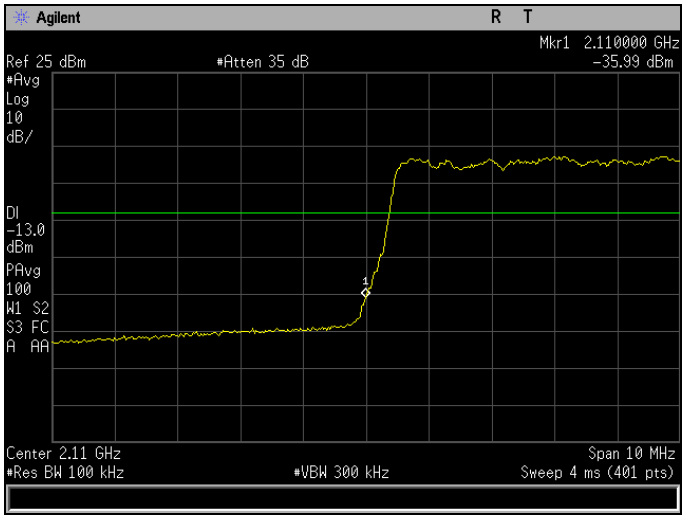
Plot 1058. Conducted Band Edge, QAM-16, High Channel, Band 10, Port 1, 10 MHz



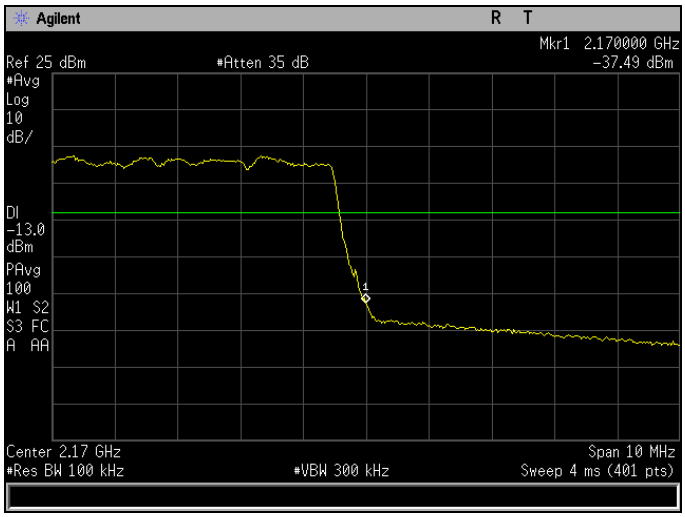
Plot 1059. Conducted Band Edge, QAM-64, Low Channel, Band 10, Port 1, 10 MHz



Plot 1060. Conducted Band Edge, QAM-64, High Channel, Band 10, Port 1, 10 MHz

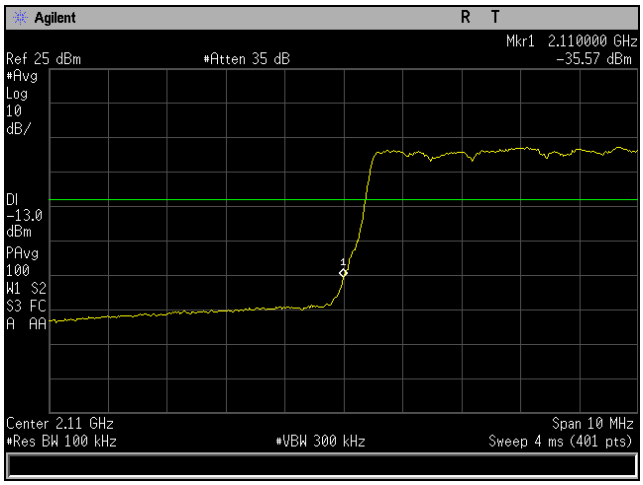


Plot 1061. Conducted Band Edge, QPSK, Low Channel, Band 10, Port 1, 10 MHz

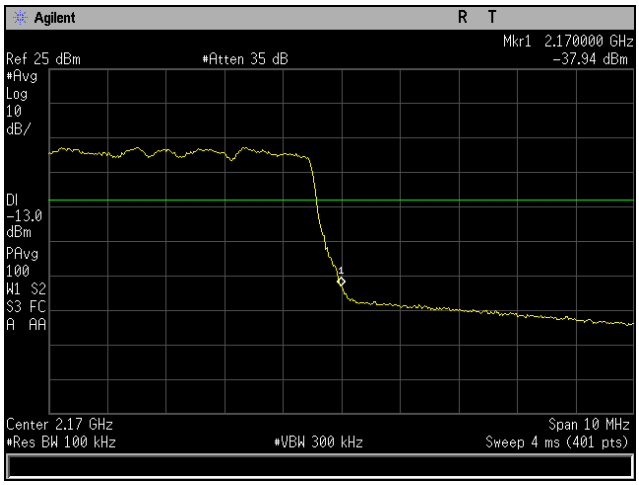


Plot 1062. Conducted Band Edge, QPSK, High Channel, Band 10, Port 1, 10 MHz

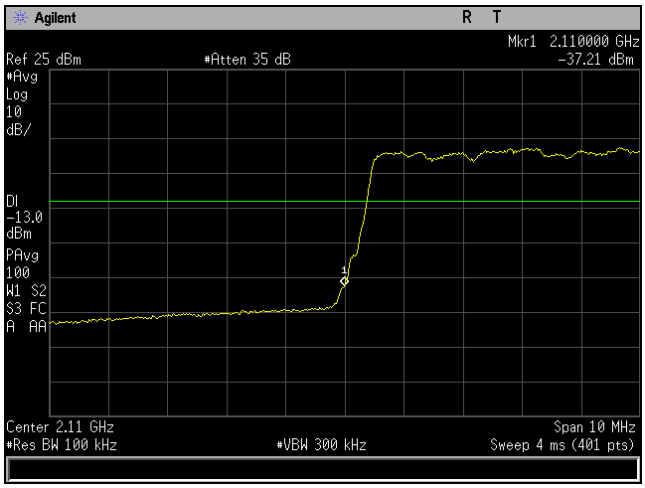
Band Edge, Band 10, Port 2, 10 MHz



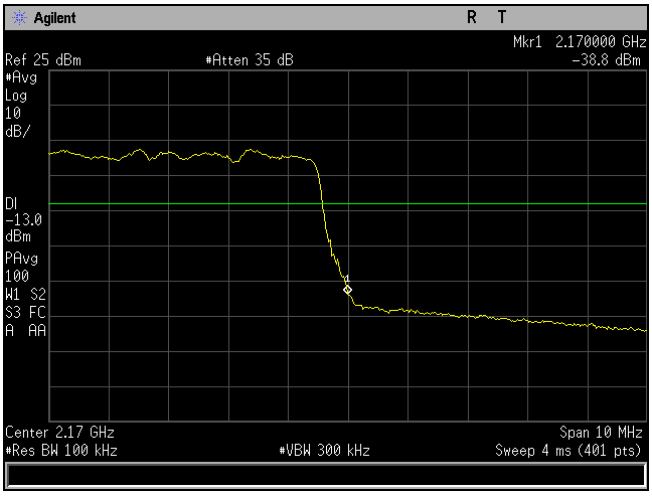
Plot 1063. Conducted Band Edge, QAM-16, Low Channel, Band 10, Port 2, 10 MHz



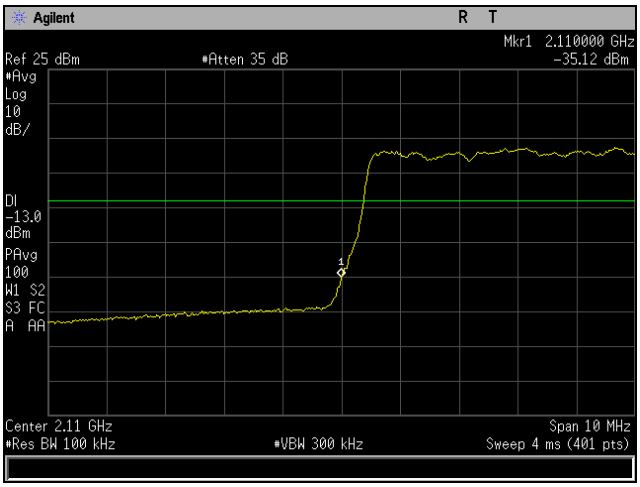
Plot 1064. Conducted Band Edge, QAM-16, High Channel, Band 10, Port 2, 10 MHz



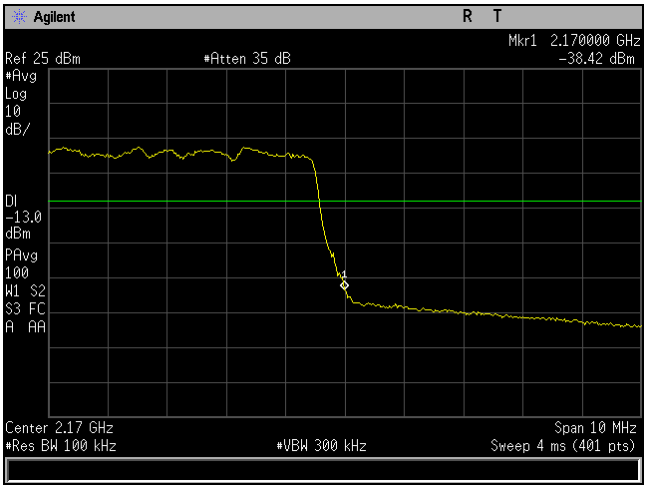
Plot 1065. Conducted Band Edge, QAM-64, Low Channel, Band 10, Port 2, 10 MHz



Plot 1066. Conducted Band Edge, QAM-64, High Channel, Band 10, Port 2, 10 MHz

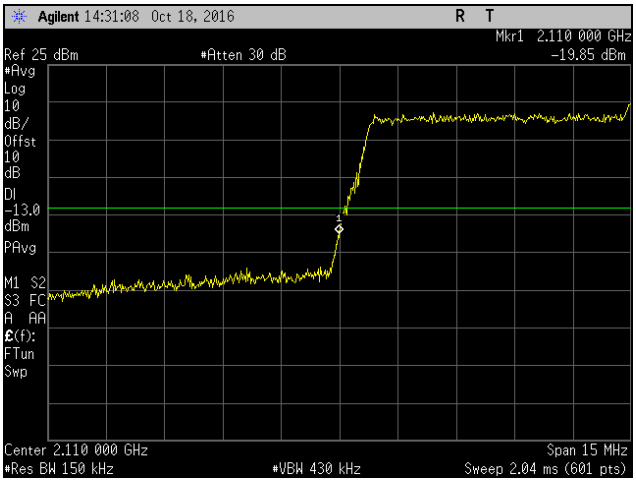


Plot 1067. Conducted Band Edge, QPSK, Low Channel, Band 10, Port 2, 10 MHz

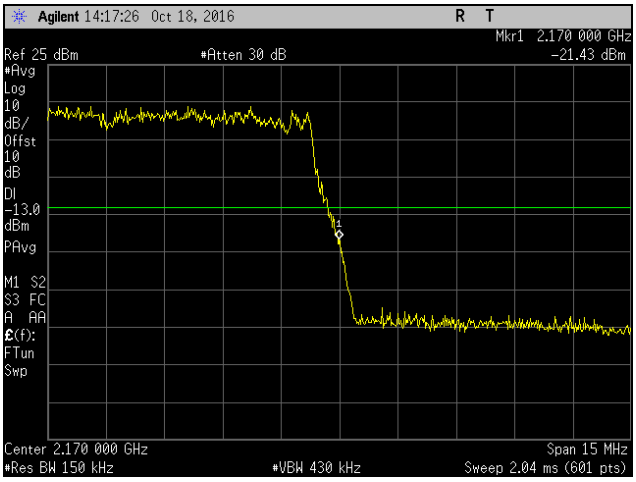


Plot 1068. Conducted Band Edge, QPSK, High Channel, Band 10, Port 2, 10 MHz

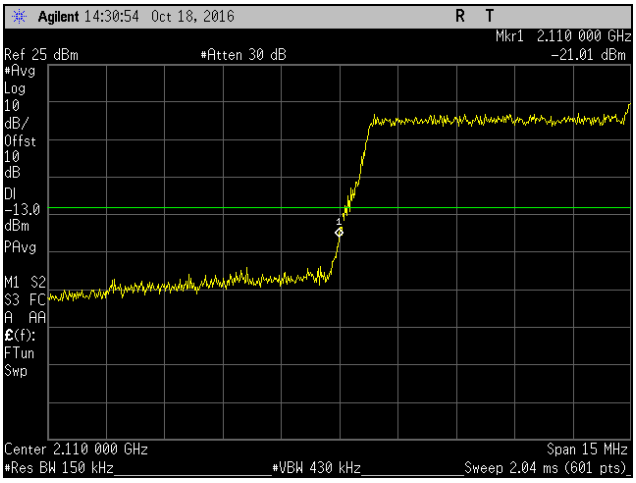
Band Edge, Band 10, Port 1, 15 MHz



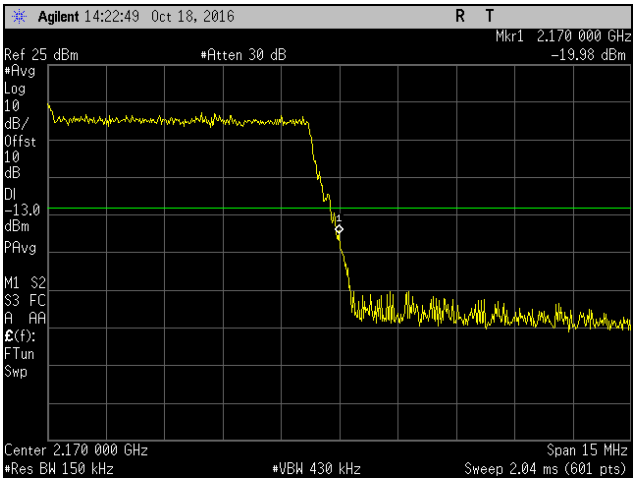
Plot 1069. Conducted Band Edge, QAM-16, Low Channel, Band 10, Port 1, 15 MHz



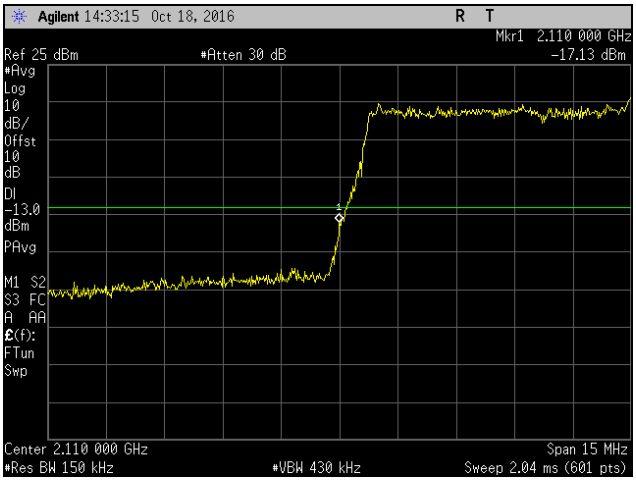
Plot 1070. Conducted Band Edge, QAM-16, High Channel, Band 10, Port 1, 15 MHz



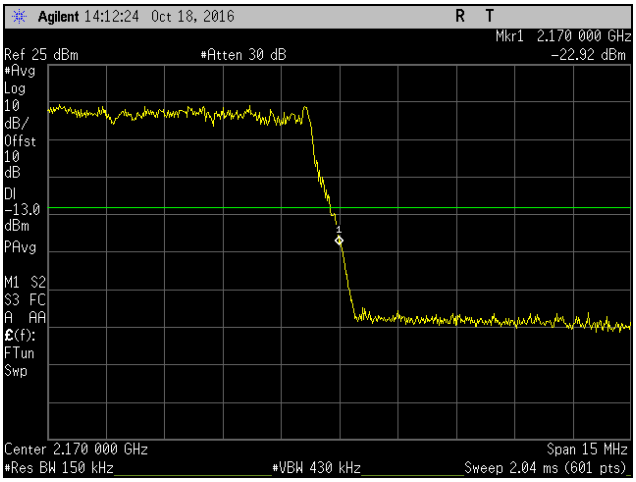
Plot 1071. Conducted Band Edge, QAM-64, Low Channel, Band 10, Port 1, 15 MHz



Plot 1072. Conducted Band Edge, QAM-64, High Channel, Band 10, Port 1, 15 MHz

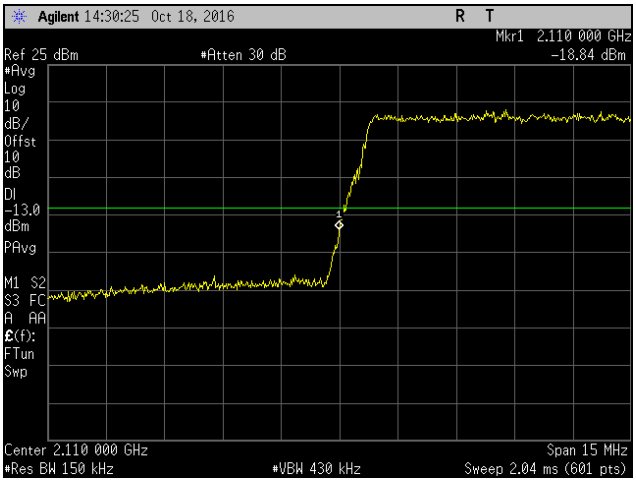


Plot 1073. Conducted Band Edge, QPSK, Low Channel, Band 10, Port 1, 15 MHz

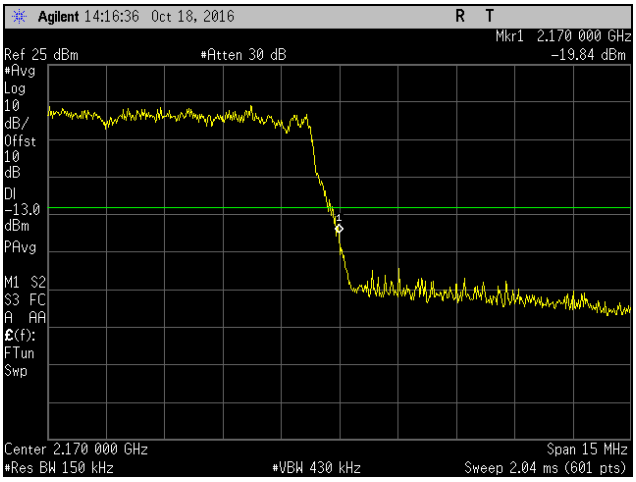


Plot 1074. Conducted Band Edge, QPSK, High Channel, Band 10, Port 1, 15 MHz

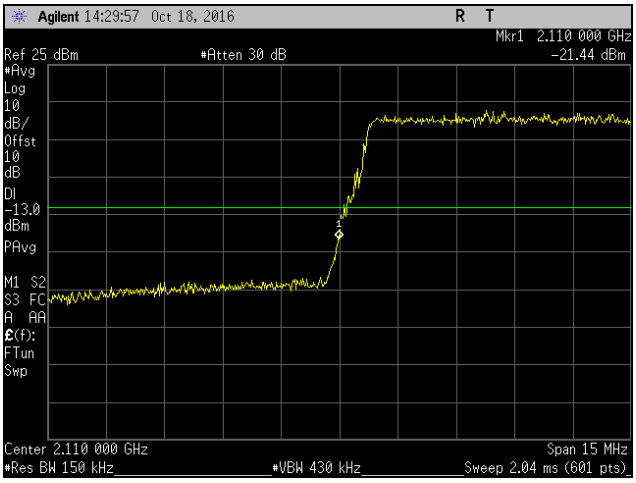
Band Edge, Band 10, Port 2, 15 MHz



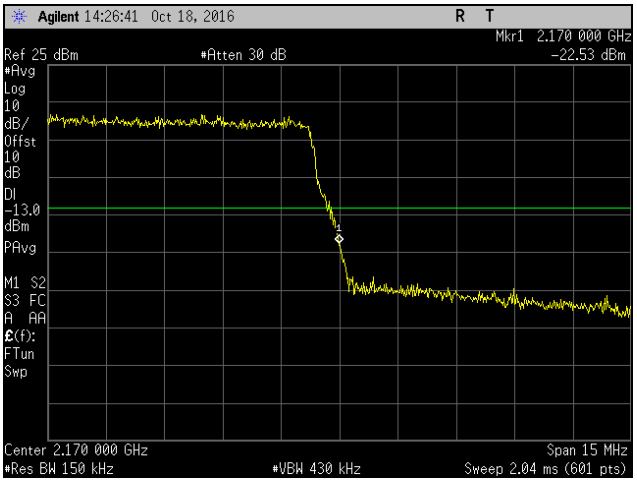
Plot 1075. Conducted Band Edge, QAM-16, Low Channel, Band 10, Port 2, 15 MHz



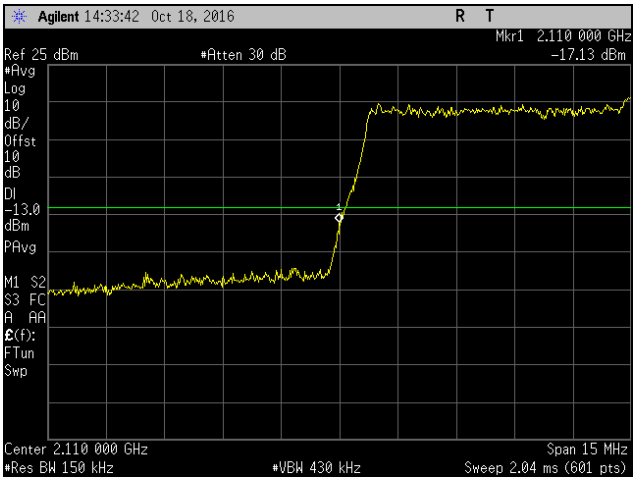
Plot 1076. Conducted Band Edge, QAM-16, High Channel, Band 10, Port 2, 15 MHz



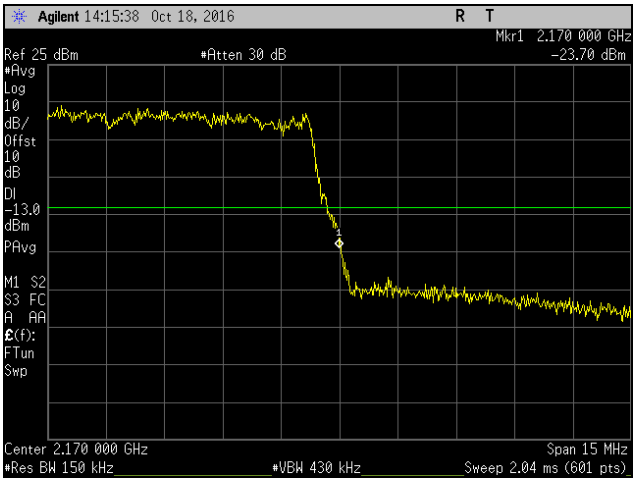
Plot 1077. Conducted Band Edge, QAM-64, Low Channel, Band 10, Port 2, 15 MHz



Plot 1078. Conducted Band Edge, QAM-64, High Channel, Band 10, Port 2, 15 MHz

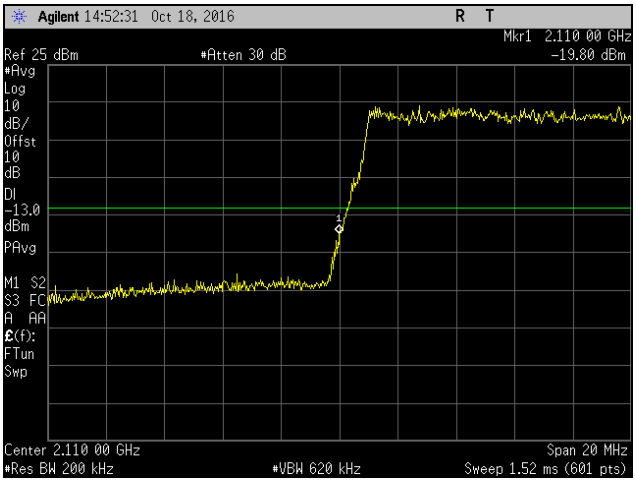


Plot 1079. Conducted Band Edge, QPSK, Low Channel, Band 10, Port 2, 15 MHz

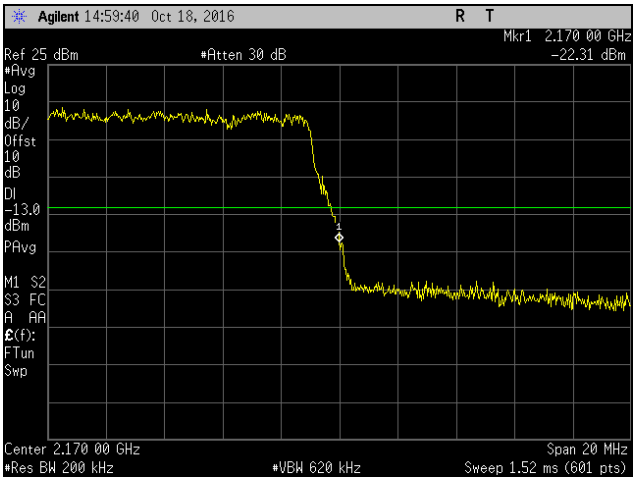


Plot 1080. Conducted Band Edge, QPSK, High Channel, Band 10, Port 2, 15 MHz

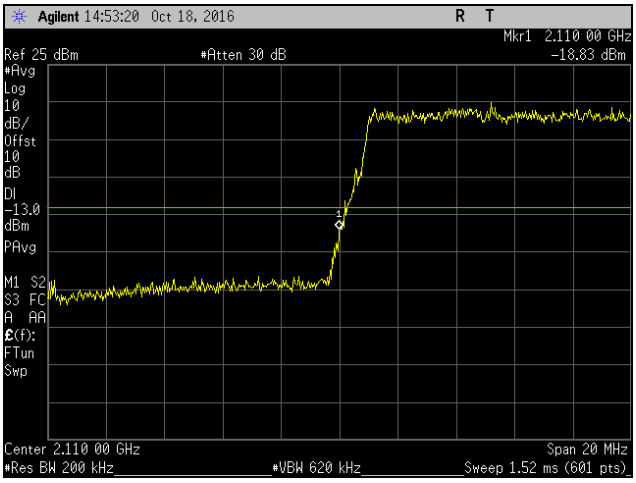
Band Edge, Band 10, Port 1, 20 MHz



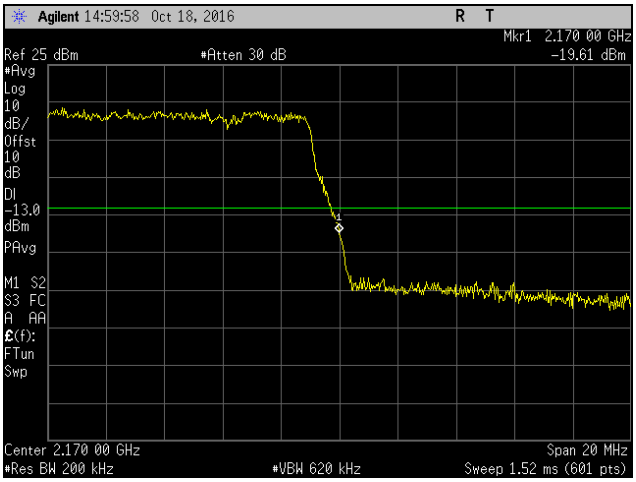
Plot 1081. Conducted Band Edge, QAM-16, Low Channel, Band 10, Port 1, 20 MHz



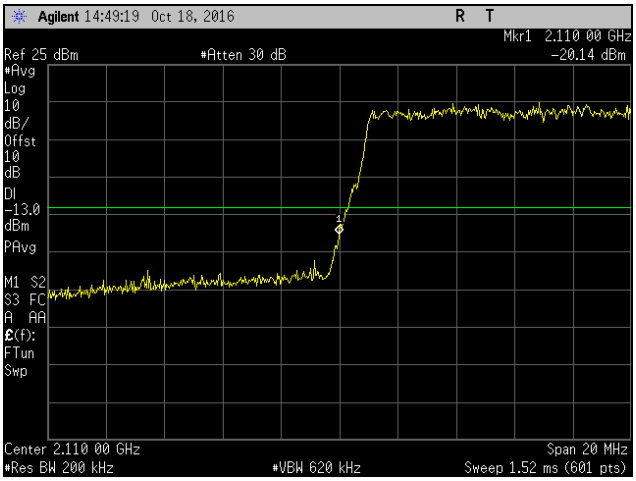
Plot 1082. Conducted Band Edge, QAM-16, High Channel, Band 10, Port 1, 20 MHz



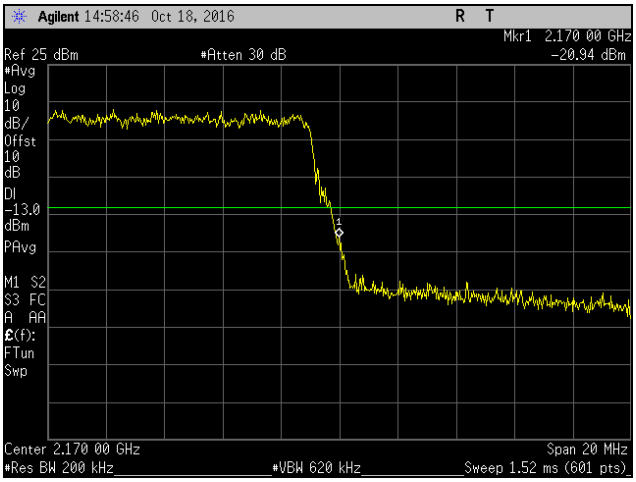
Plot 1083. Conducted Band Edge, QAM-64, Low Channel, Band 10, Port 1, 20 MHz



Plot 1084. Conducted Band Edge, QAM-64, High Channel, Band 10, Port 1, 20 MHz

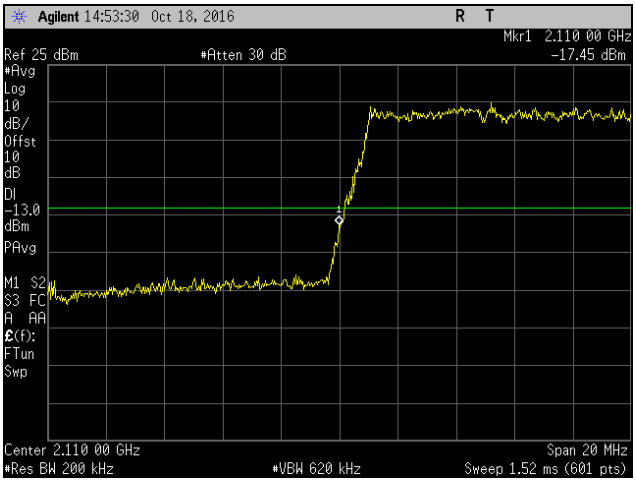


Plot 1085. Conducted Band Edge, QPSK, Low Channel, Band 10, Port 1, 20 MHz

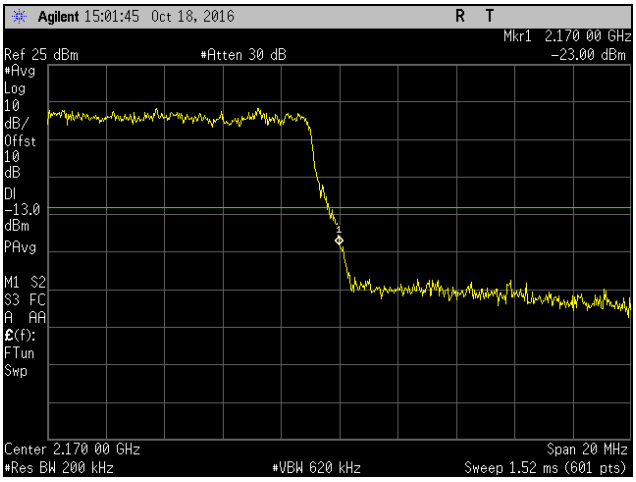


Plot 1086. Conducted Band Edge, QPSK, High Channel, Band 10, Port 1, 20 MHz

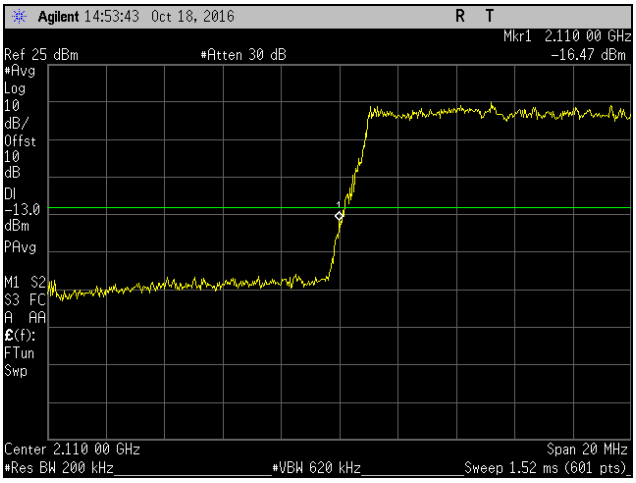
Band Edge, Band 10, Port 2, 20 MHz



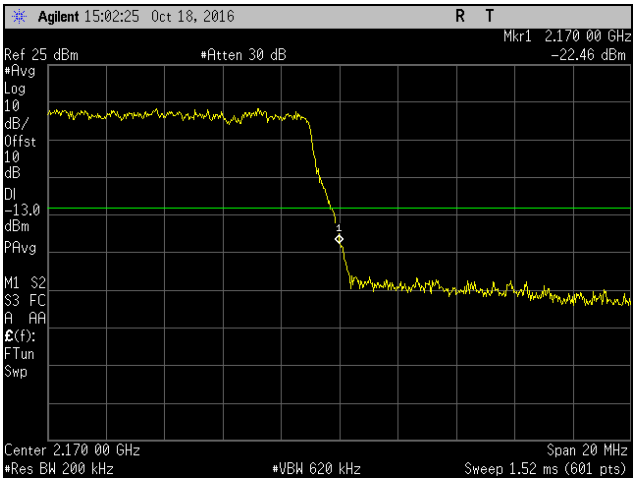
Plot 1087. Conducted Band Edge, QAM-16, Low Channel, Band 10, Port 2, 20 MHz



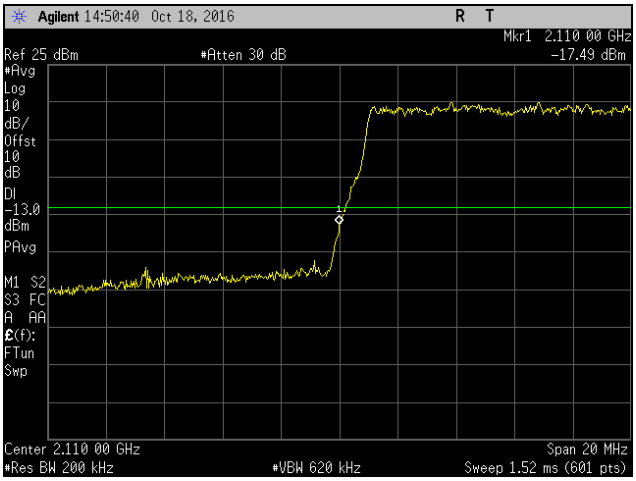
Plot 1088. Conducted Band Edge, QAM-16, High Channel, Band 10, Port 2, 20 MHz



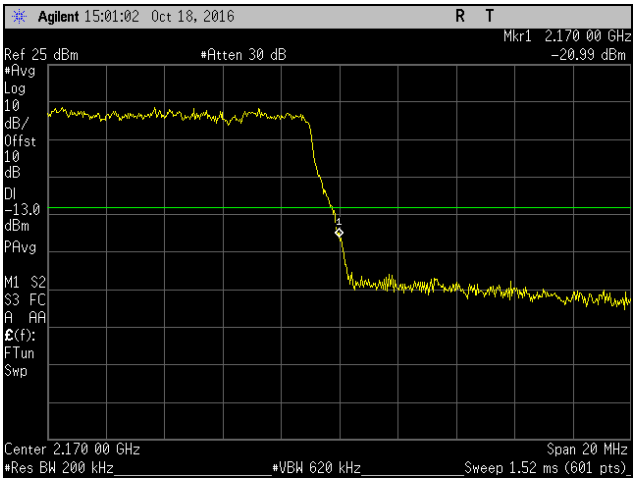
Plot 1089. Conducted Band Edge, QAM-64, Low Channel, Band 10, Port 2, 20 MHz



Plot 1090. Conducted Band Edge, QAM-64, High Channel, Band 10, Port 2, 20 MHz

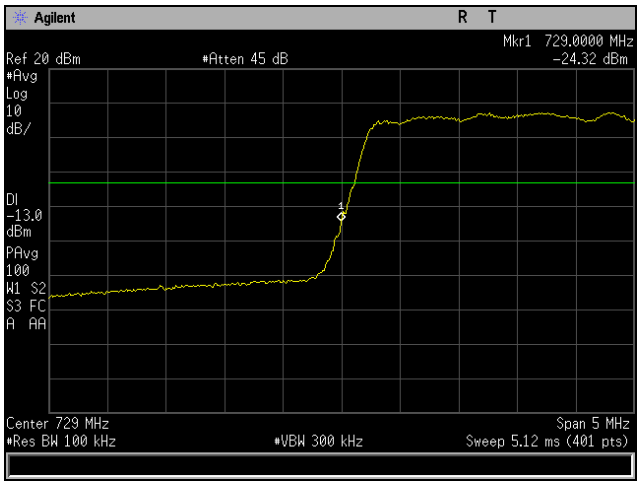


Plot 1091. Conducted Band Edge, QPSK, Low Channel, Band 10, Port 2, 20 MHz

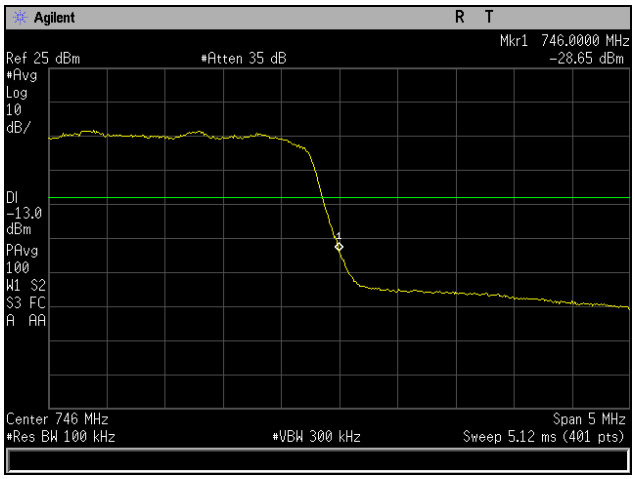


Plot 1092. Conducted Band Edge, QPSK, High Channel, Band 10, Port 2, 20 MHz

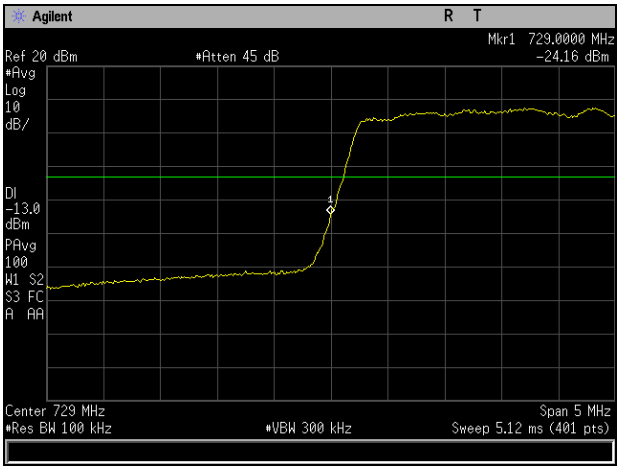
Band Edge, Band 12, Port 1, 5 MHz



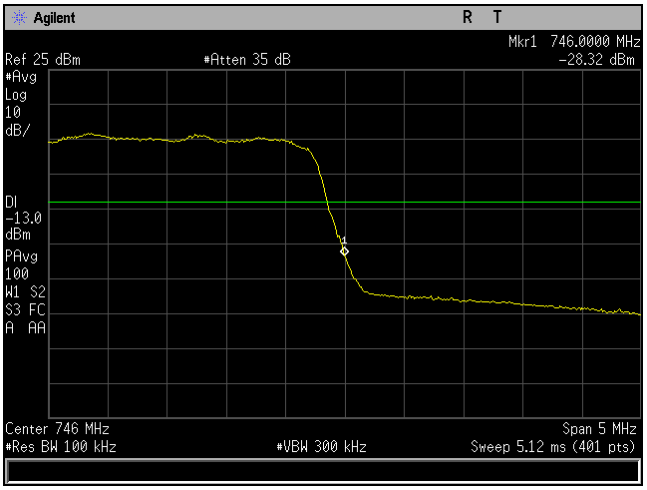
Plot 1093. Conducted Band Edge, QAM-16, Low Channel, Band 12, Port 1, 5 MHz



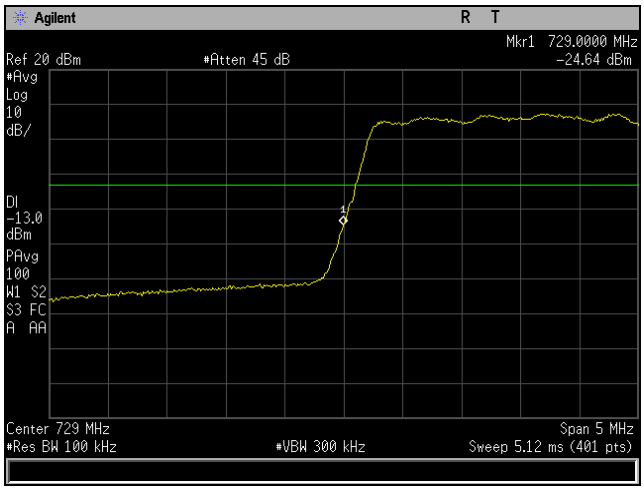
Plot 1094. Conducted Band Edge, QAM-16, High Channel, Band 12, Port 1, 5 MHz



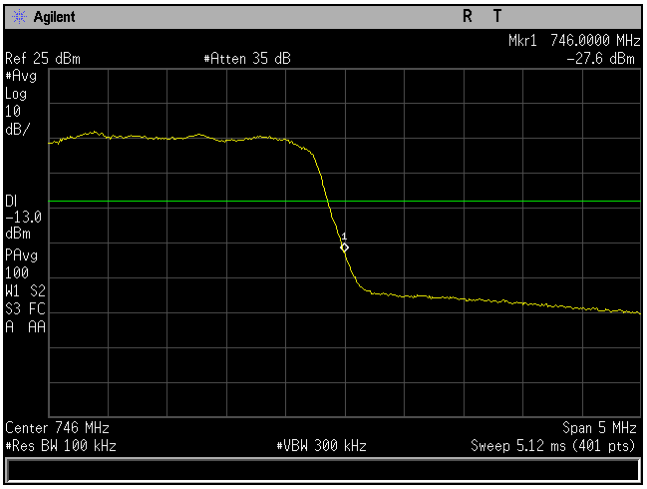
Plot 1095. Conducted Band Edge, QAM-64, Low Channel, Band 12, Port 1, 5 MHz



Plot 1096. Conducted Band Edge, QAM-64, High Channel, Band 12, Port 1, 5 MHz

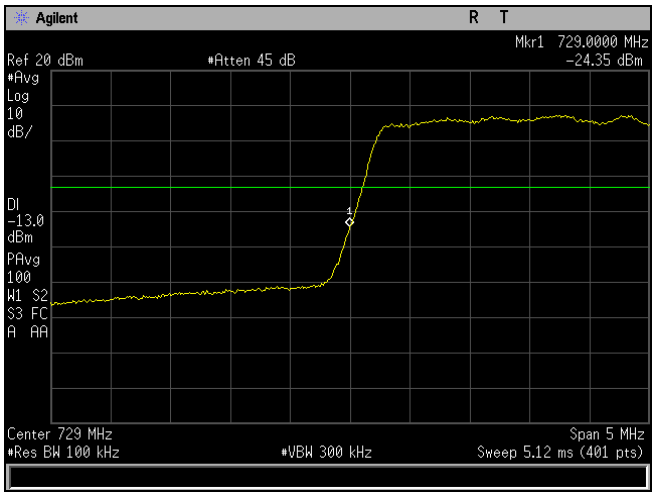


Plot 1097. Conducted Band Edge, QPSK, Low Channel, Band 12, Port 1, 5 MHz

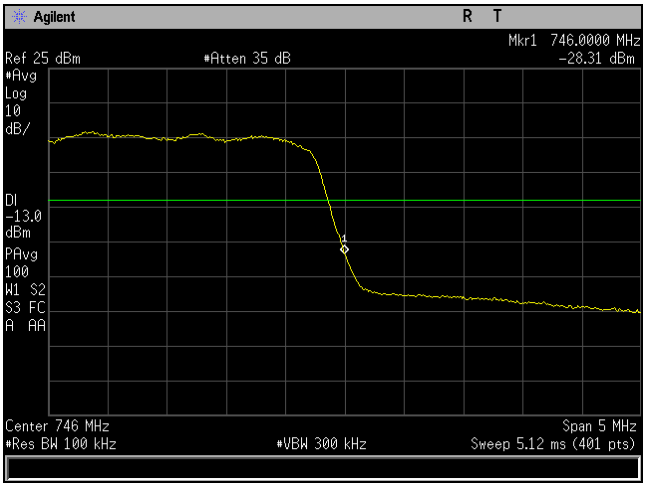


Plot 1098. Conducted Band Edge, QPSK, High Channel, Band 12, Port 1, 5 MHz

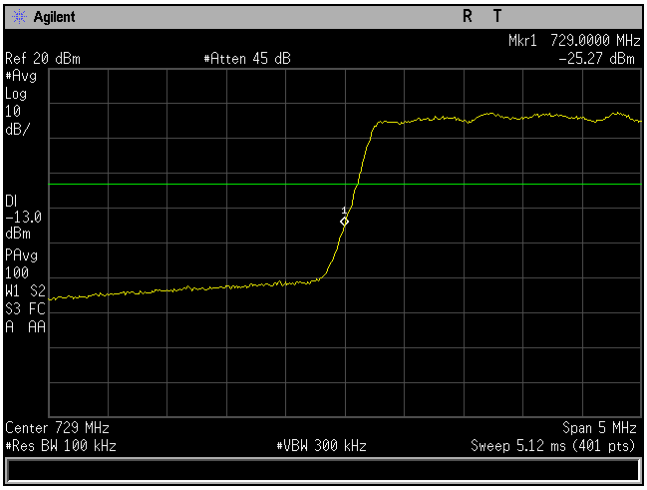
Band Edge, Band 12, Port 2, 5 MHz



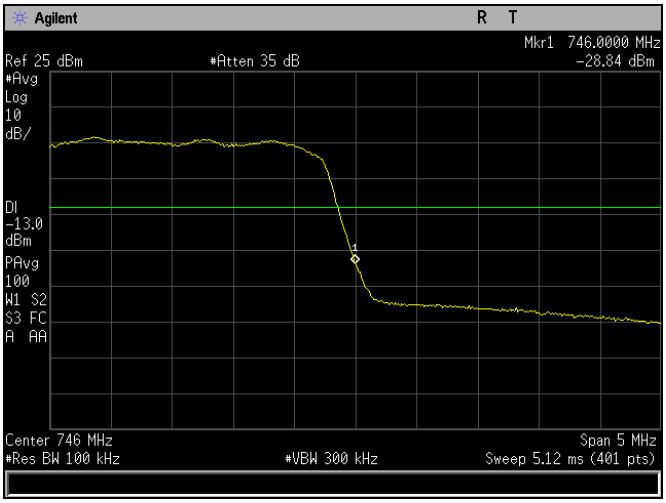
Plot 1099. Conducted Band Edge, QAM-16, Low Channel, Band 12, Port 2, 5 MHz



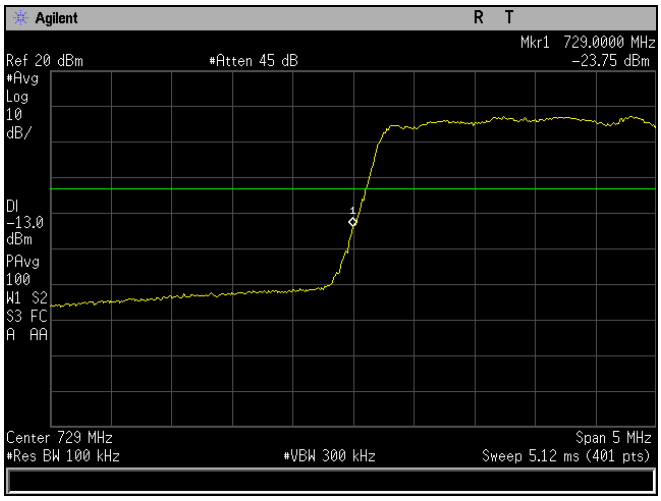
Plot 1100. Conducted Band Edge, QAM-16, High Channel, Band 12, Port 2, 5 MHz



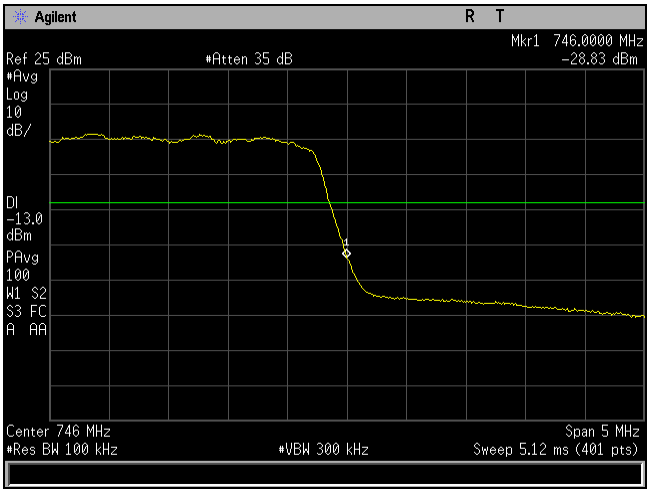
Plot 1101. Conducted Band Edge, QAM-64, Low Channel, Band 12, Port 2, 5 MHz



Plot 1102. Conducted Band Edge, QAM-64, High Channel, Band 12, Port 2, 5 MHz

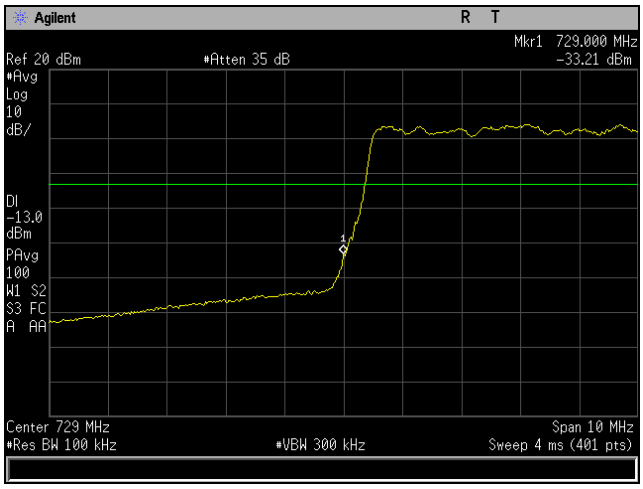


Plot 1103. Conducted Band Edge, QPSK, Low Channel, Band 12, Port 2, 5 MHz

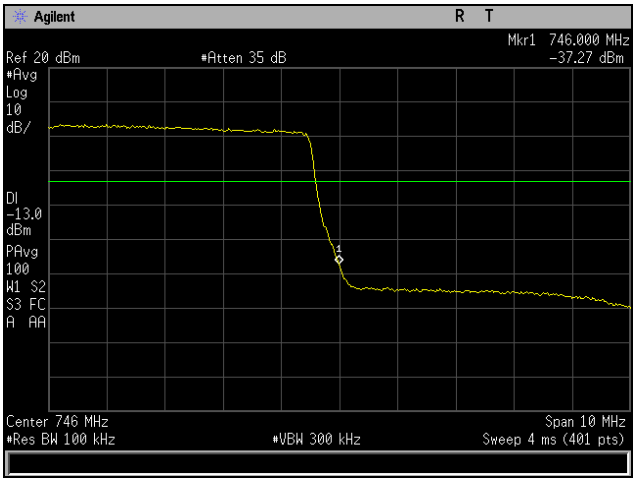


Plot 1104. Conducted Band Edge, QPSK, High Channel, Band 12, Port 2, 5 MHz

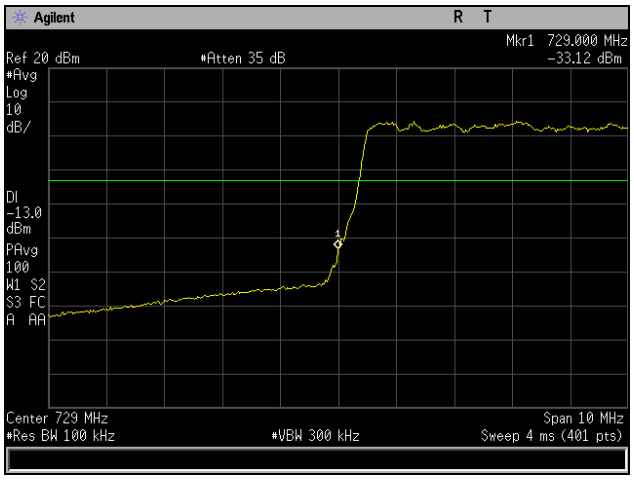
Band Edge, Band 12, Port 1, 10 MHz



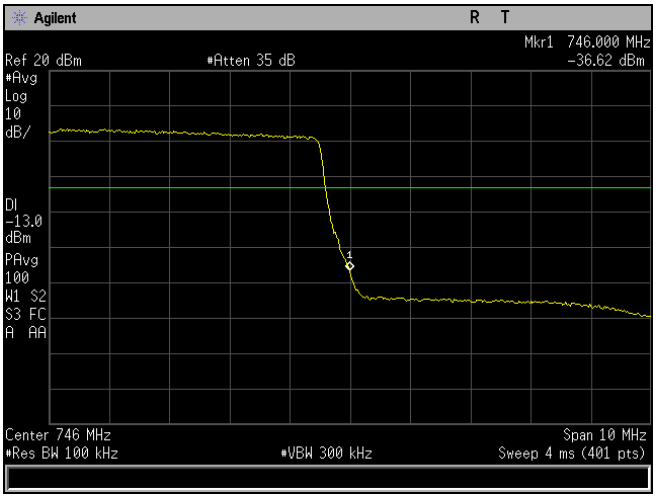
Plot 1105. Conducted Band Edge, QAM-16, Low Channel, Band 12, Port 1, 10 MHz



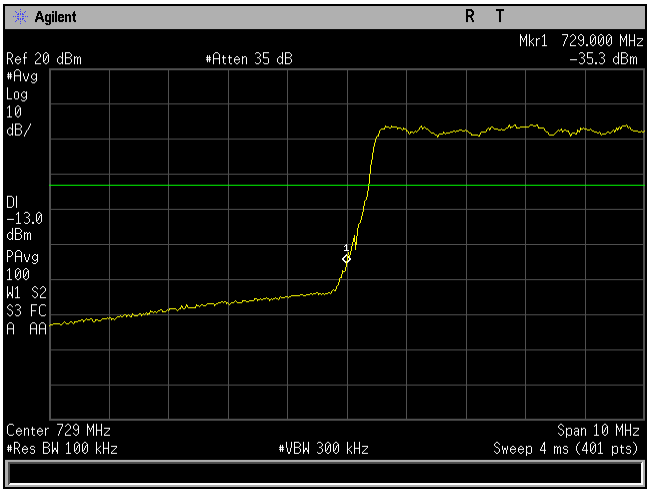
Plot 1106. Conducted Band Edge, QAM-16, High Channel, Band 12, Port 1, 10 MHz



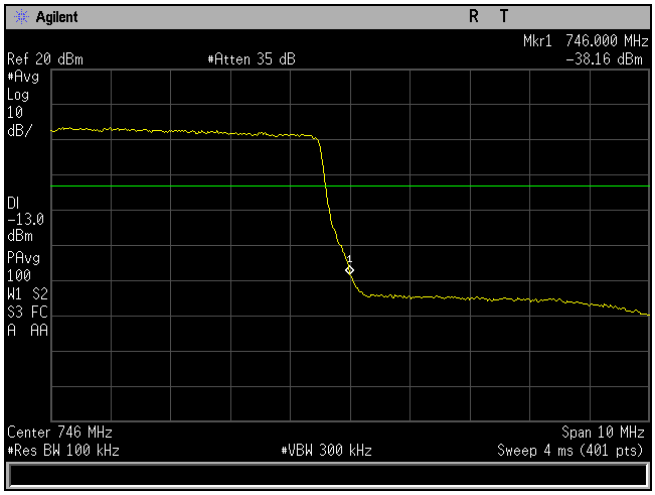
Plot 1107. Conducted Band Edge, QAM-64, Low Channel, Band 12, Port 1, 10 MHz



Plot 1108. Conducted Band Edge, QAM-64, High Channel, Band 12, Port 1, 10 MHz

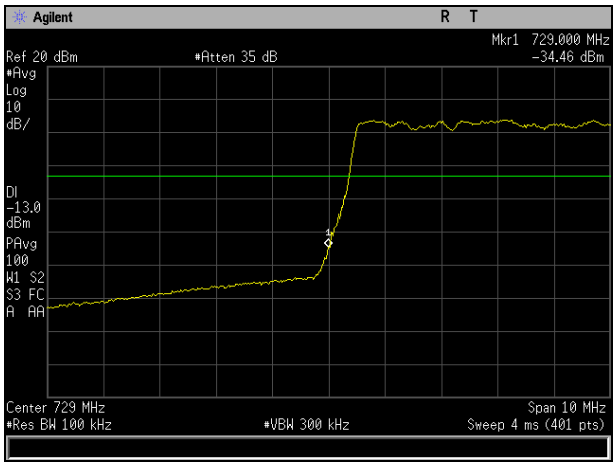


Plot 1109. Conducted Band Edge, QPSK, Low Channel, Band 12, Port 1, 10 MHz

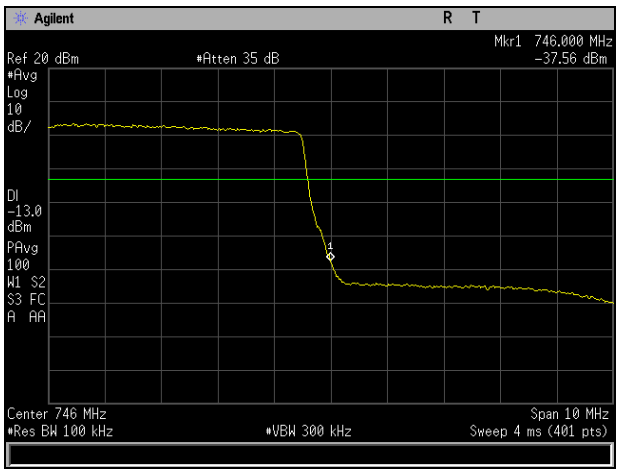


Plot 1110. Conducted Band Edge, QPSK, High Channel, Band 12, Port 1, 10 MHz

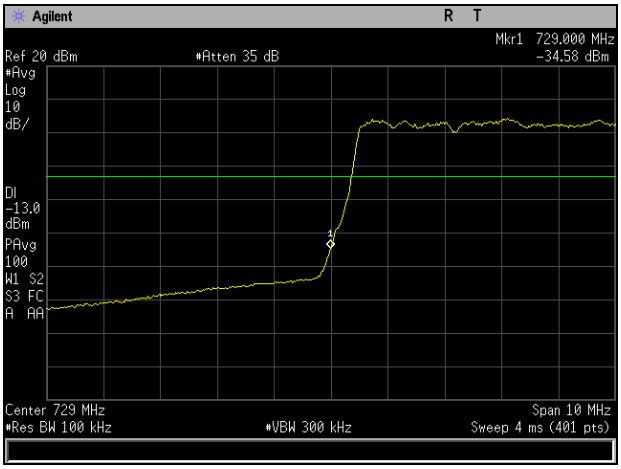
Band Edge, Band 12, Port 2, 10 MHz



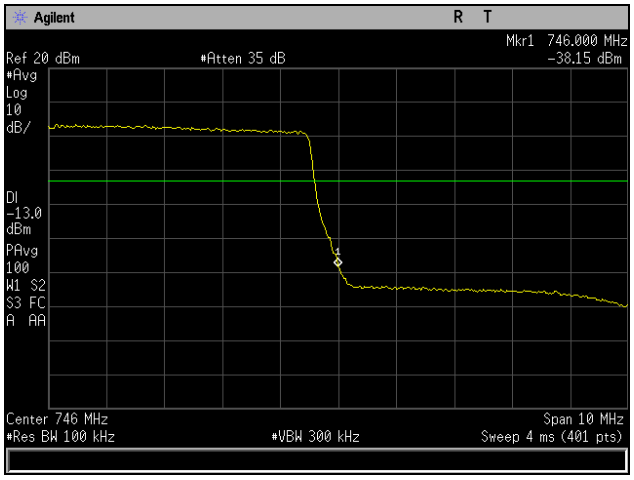
Plot 1111. Conducted Band Edge, QAM-16, Low Channel, Band 12, Port 2, 10 MHz



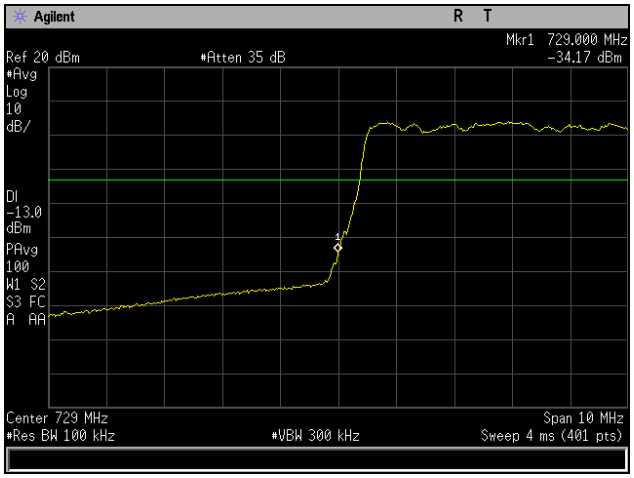
Plot 1112. Conducted Band Edge, QAM-16, High Channel, Band 12, Port 2, 10 MHz



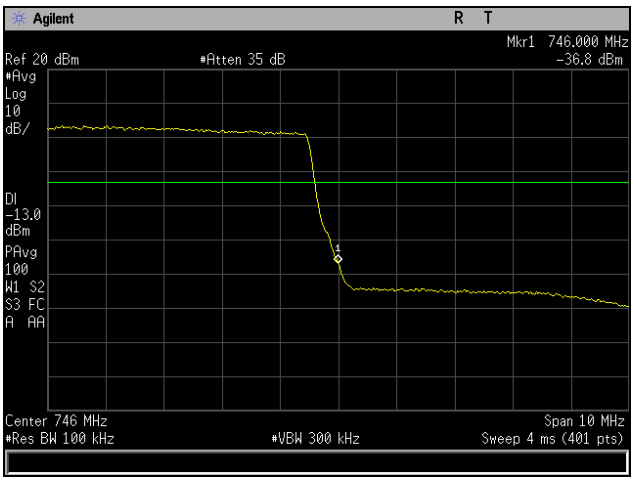
Plot 1113. Conducted Band Edge, QAM-64, Low Channel, Band 12, Port 2, 10 MHz



Plot 1114. Conducted Band Edge, QAM-64, High Channel, Band 12, Port 2, 10 MHz

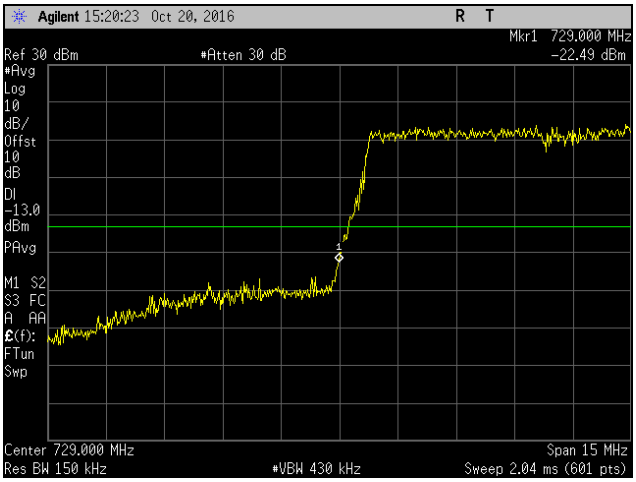


Plot 1115. Conducted Band Edge, QPSK, Low Channel, Band 12, Port 2, 10 MHz

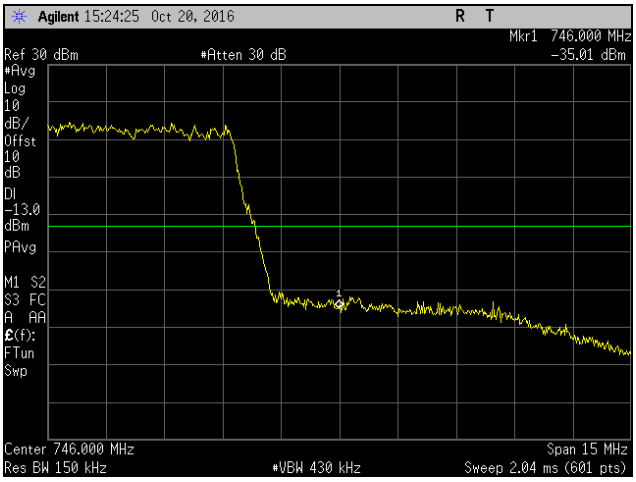


Plot 1116. Conducted Band Edge, QPSK, High Channel, Band 12, Port 2, 10 MHz

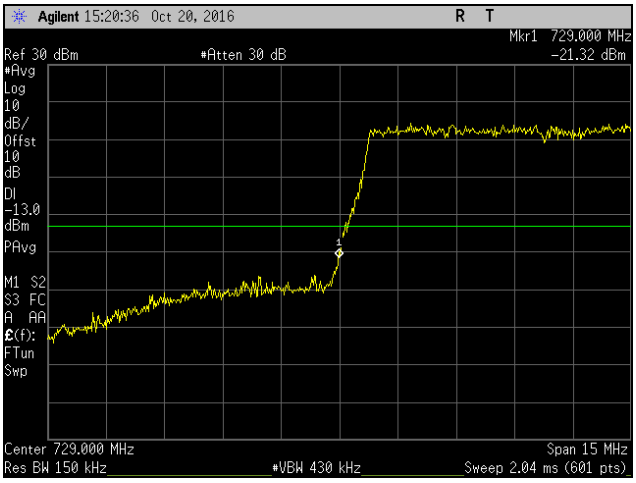
Band Edge, Band 12, Port 1, 15 MHz



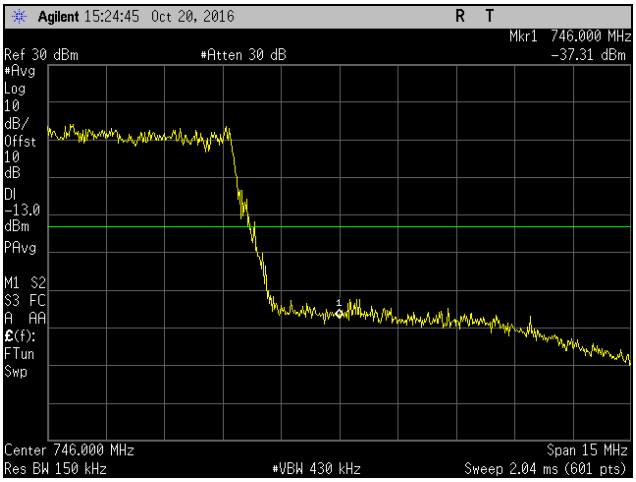
Plot 1117. Conducted Band Edge, QAM-16, Low Channel, Band 12, Port 1, 15 MHz



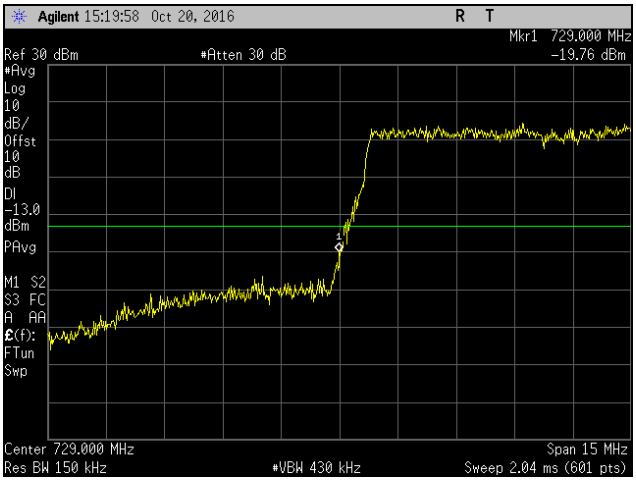
Plot 1118. Conducted Band Edge, QAM-16, High Channel, Band 12, Port 1, 15 MHz



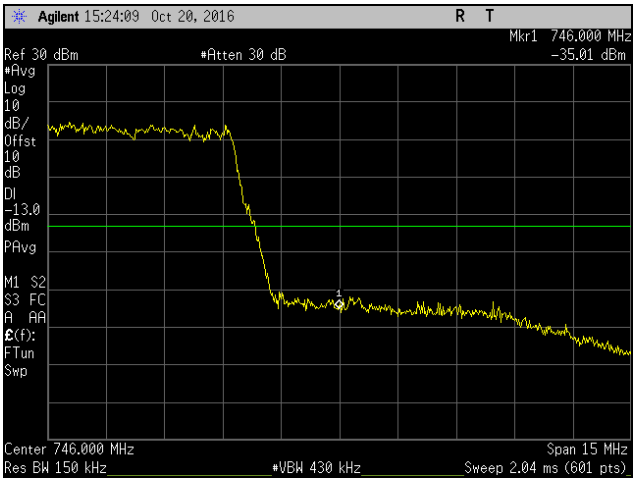
Plot 1119. Conducted Band Edge, QAM-64, Low Channel, Band 12, Port 1, 15 MHz



Plot 1120. Conducted Band Edge, QAM-64, High Channel, Band 12, Port 1, 15 MHz

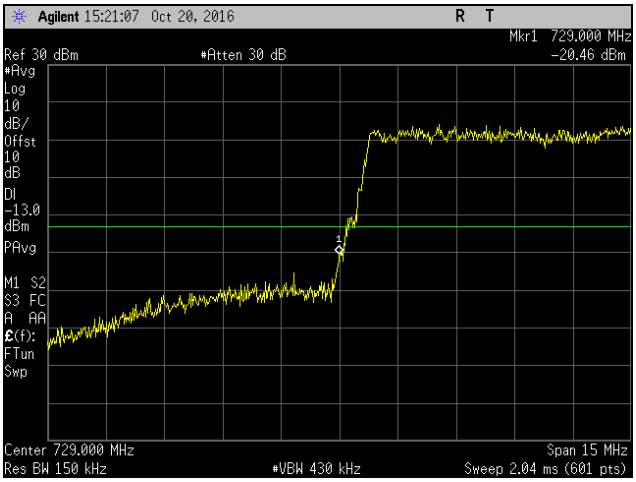


Plot 1121. Conducted Band Edge, QPSK, Low Channel, Band 12, Port 1, 15 MHz

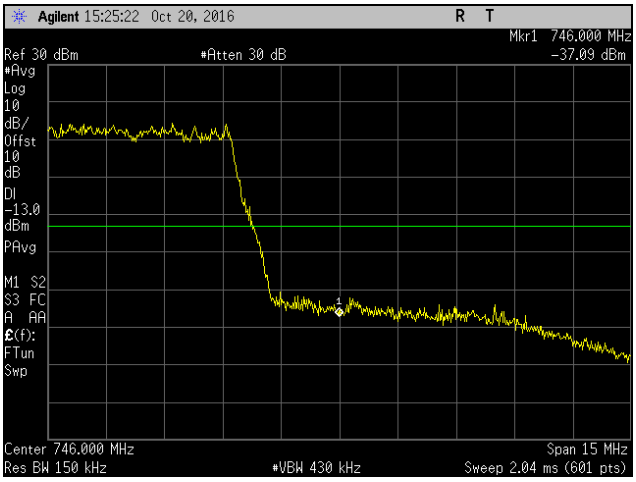


Plot 1122. Conducted Band Edge, QPSK, High Channel, Band 12, Port 1, 15 MHz

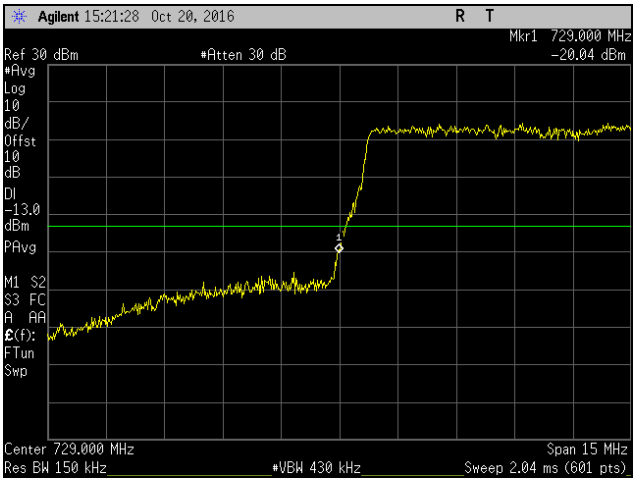
Band Edge, Band 12, Port 2, 15 MHz



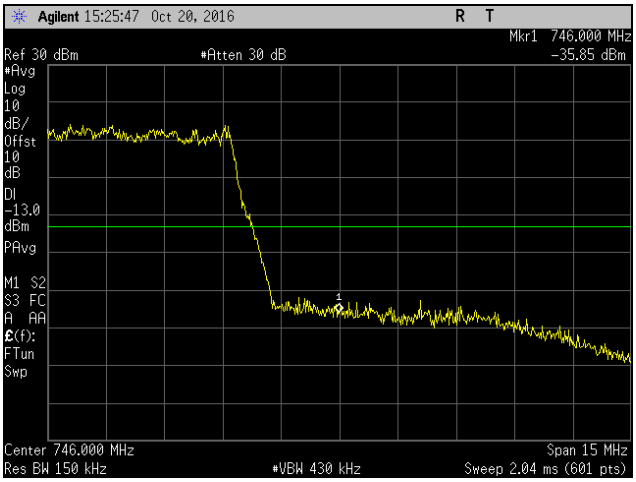
Plot 1123. Conducted Band Edge, QAM-16, Low Channel, Band 12, Port 2, 15 MHz



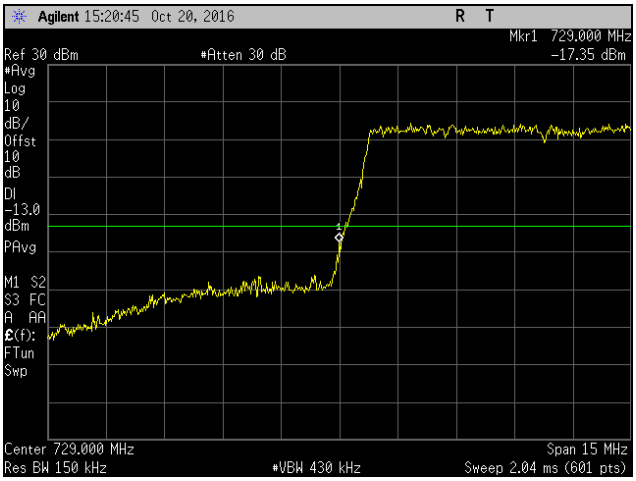
Plot 1124. Conducted Band Edge, QAM-16, High Channel, Band 12, Port 2, 15 MHz



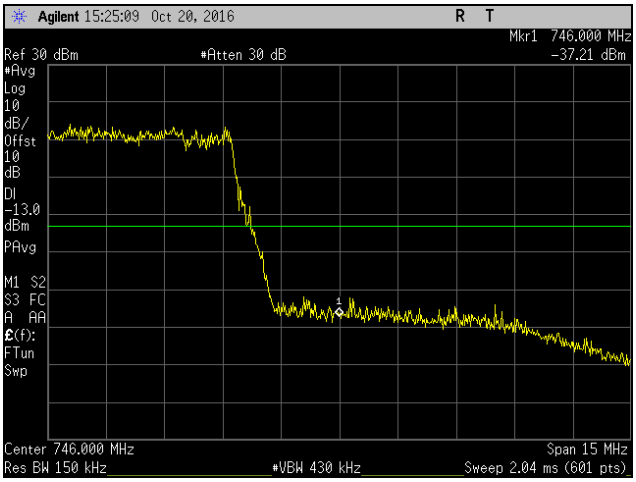
Plot 1125. Conducted Band Edge, QAM-64, Low Channel, Band 12, Port 2, 15 MHz



Plot 1126. Conducted Band Edge, QAM-64, High Channel, Band 12, Port 2, 15 MHz

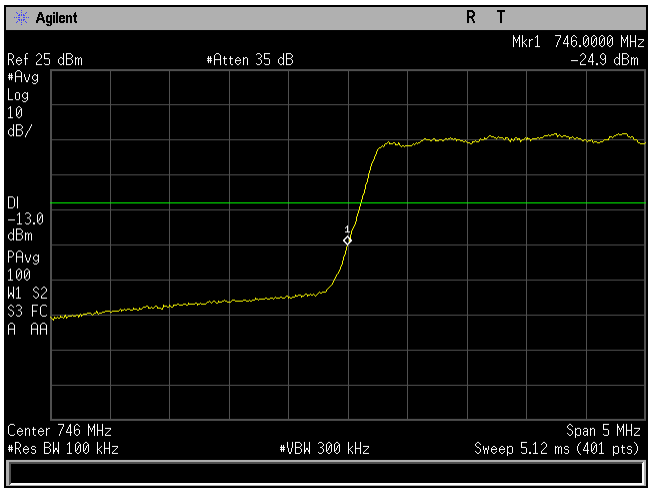


Plot 1127. Conducted Band Edge, QPSK, Low Channel, Band 12, Port 2, 15 MHz

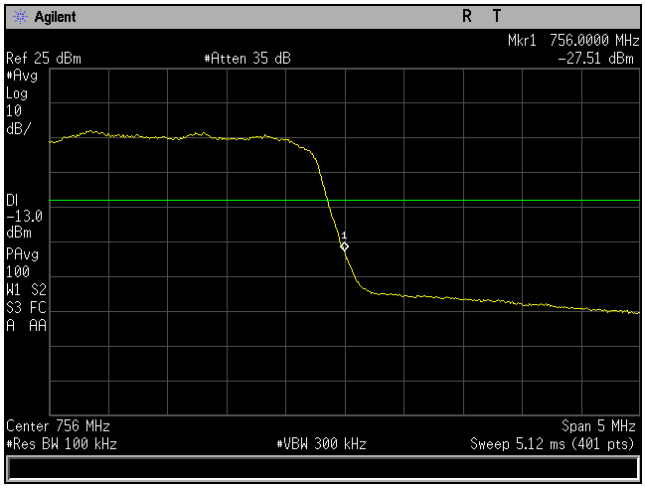


Plot 1128. Conducted Band Edge, QPSK, High Channel, Band 12, Port 2, 15 MHz

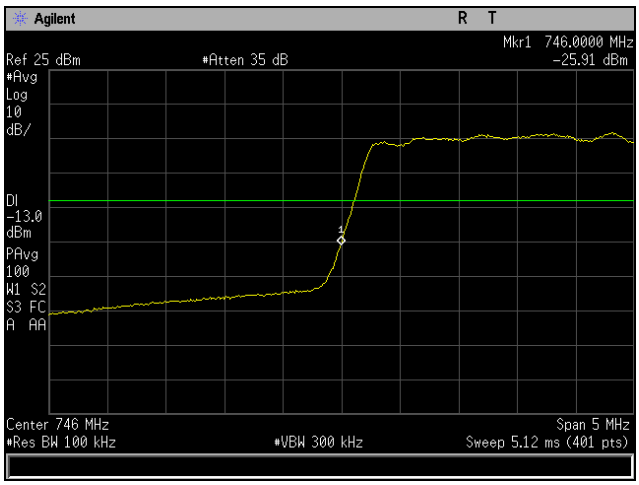
Band Edge, Band 13, Port 1, 5 MHz



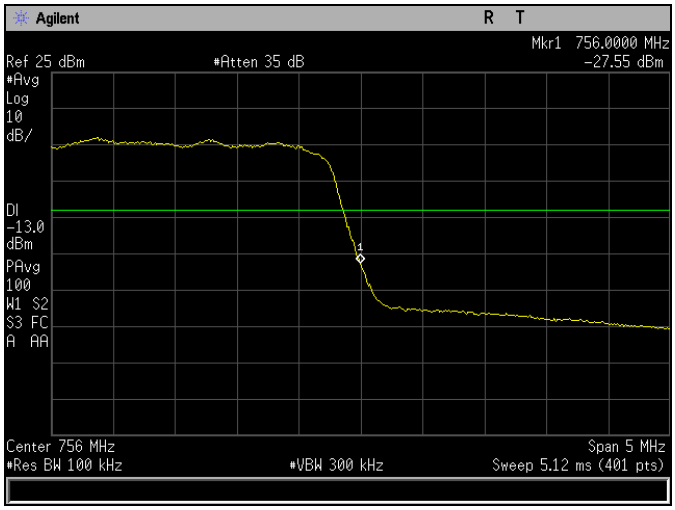
Plot 1129. Conducted Band Edge, QAM-16, Low Channel, Band 13, Port 1, 5 MHz



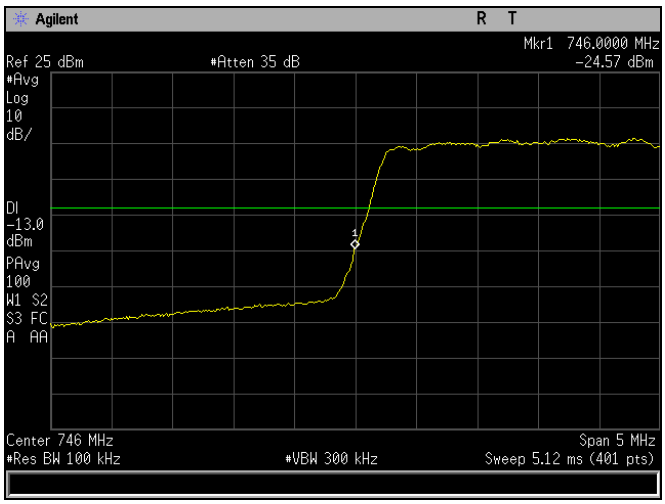
Plot 1130. Conducted Band Edge, QAM-16, High Channel, Band 13, Port 1, 5 MHz



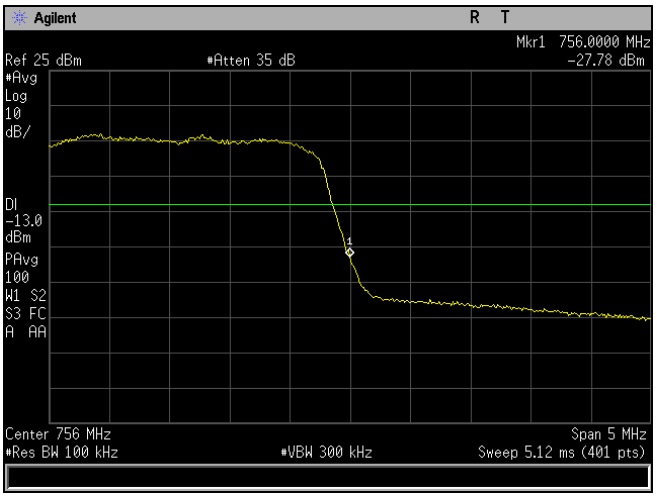
Plot 1131. Conducted Band Edge, QAM-64, Low Channel, Band 13, Port 1, 5 MHz



Plot 1132. Conducted Band Edge, QAM-64, High Channel, Band 13, Port 1, 5 MHz

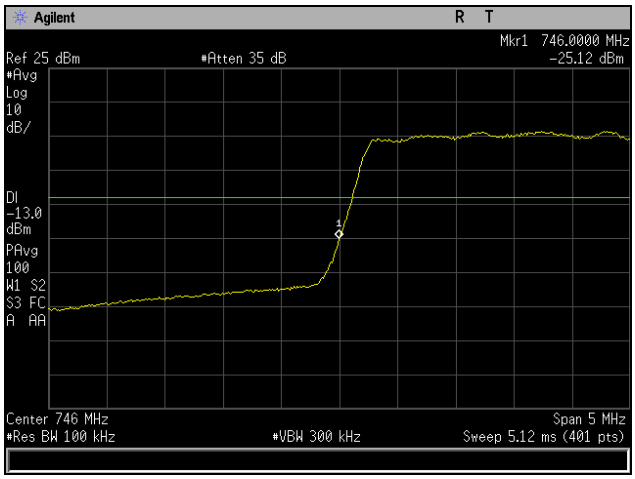


Plot 1133. Conducted Band Edge, QPSK, Low Channel, Band 13, Port 1, 5 MHz

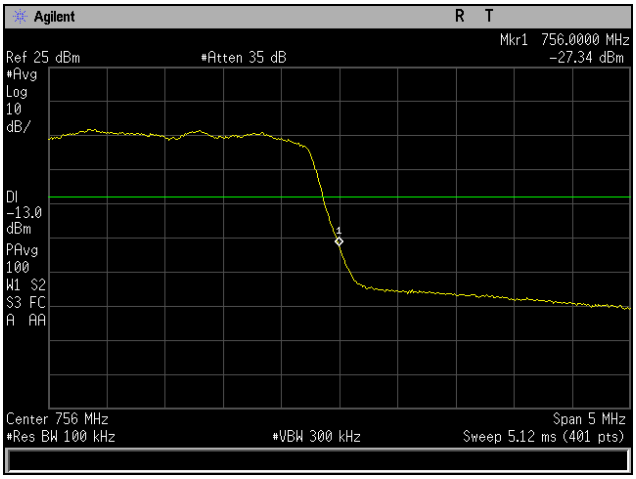


Plot 1134. Conducted Band Edge, QPSK, High Channel, Band 13, Port 1, 5 MHz

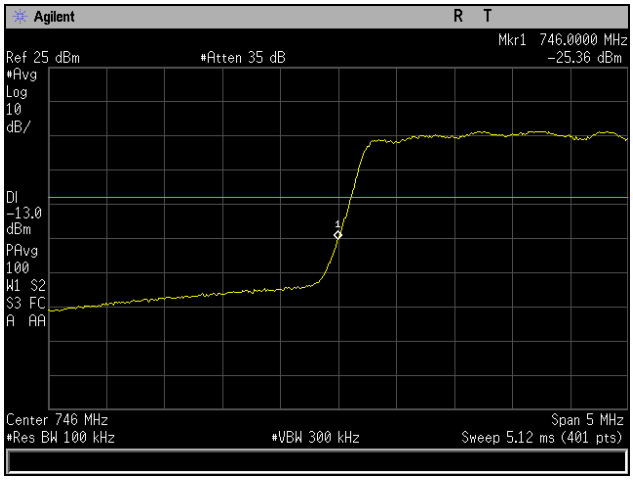
Band Edge, Band 13, Port 2, 5 MHz



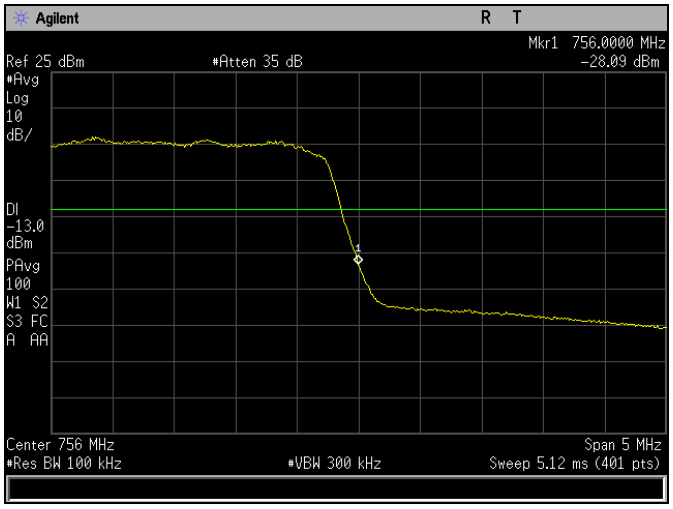
Plot 1135. Conducted Band Edge, QAM-16, Low Channel, Band 13, Port 2, 5 MHz



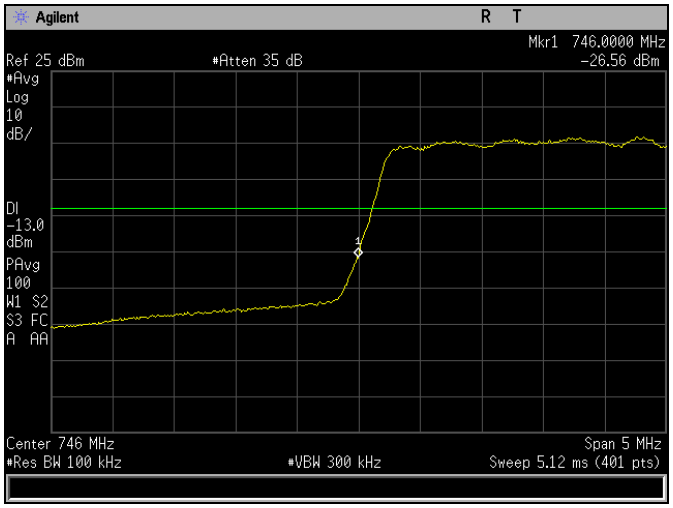
Plot 1136. Conducted Band Edge, QAM-16, High Channel, Band 13, Port 2, 5 MHz



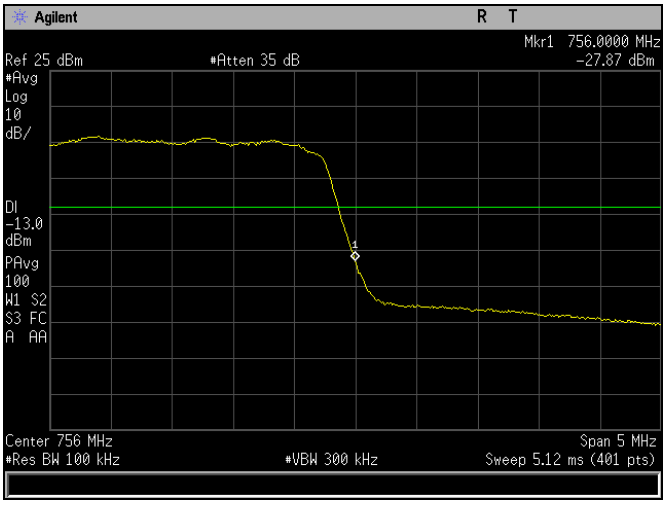
Plot 1137. Conducted Band Edge, QAM-64, Low Channel, Band 13, Port 2, 5 MHz



Plot 1138. Conducted Band Edge, QAM-64, High Channel, Band 13, Port 2, 5 MHz

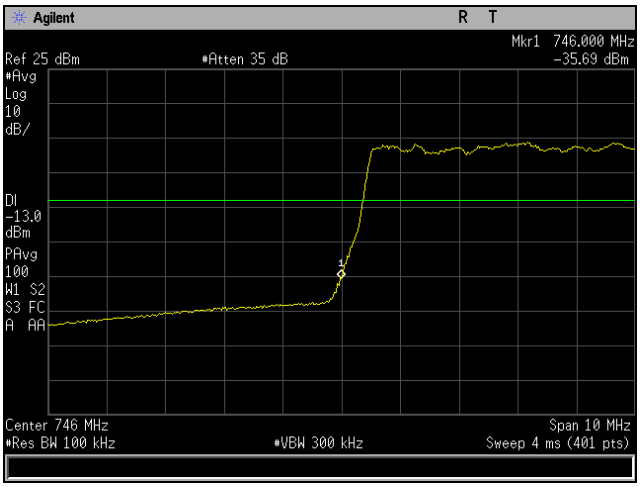


Plot 1139. Conducted Band Edge, QPSK, Low Channel, Band 13, Port 2, 5 MHz

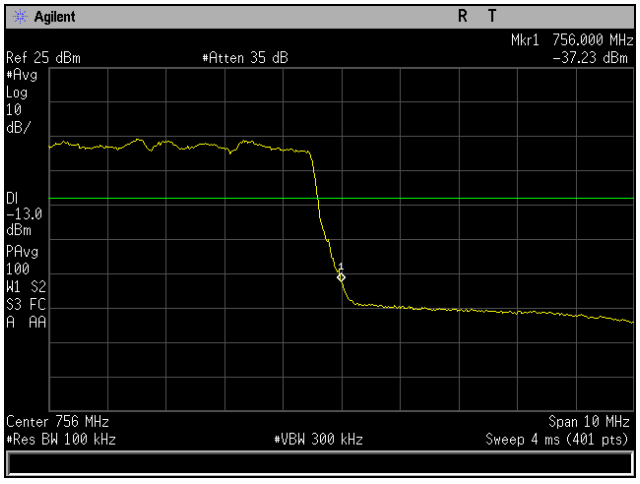


Plot 1140. Conducted Band Edge, QPSK, High Channel, Band 13, Port 2, 5 MHz

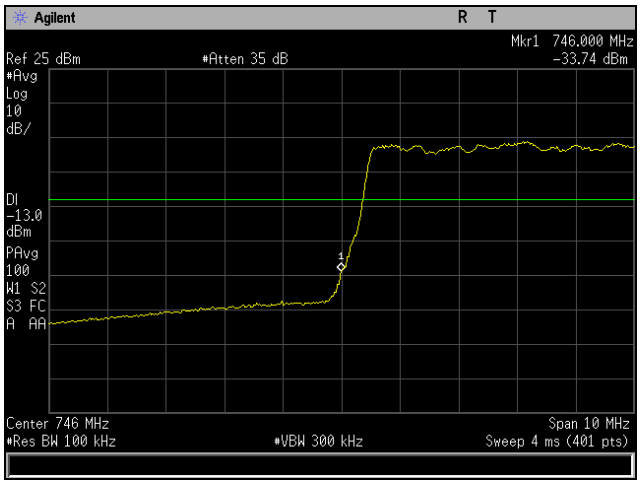
Band Edge, Band 13, Port 1, 10 MHz



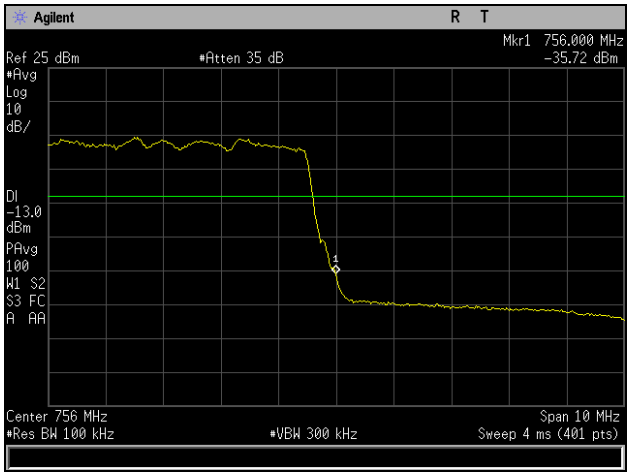
Plot 1141. Conducted Band Edge, QAM-16, Low Channel, Band 13, Port 1, 10 MHz



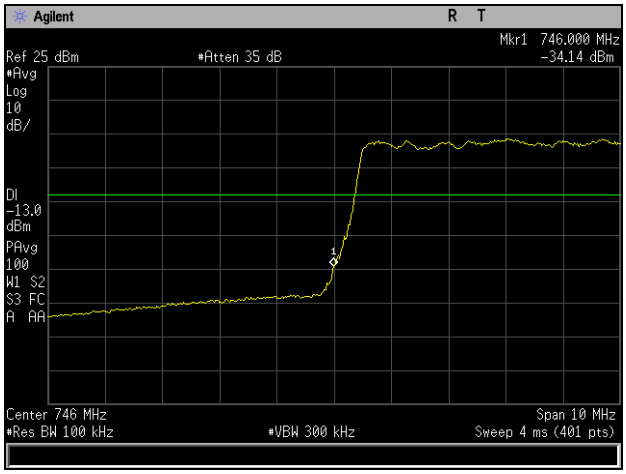
Plot 1142. Conducted Band Edge, QAM-16, High Channel, Band 13, Port 1, 10 MHz



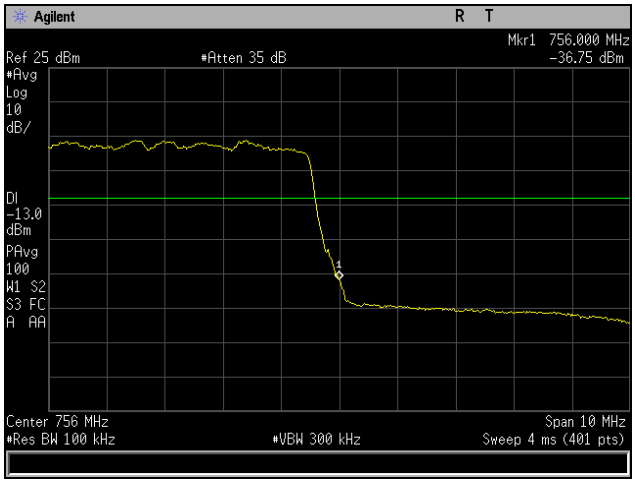
Plot 1143. Conducted Band Edge, QAM-64, Low Channel, Band 13, Port 1, 10 MHz



Plot 1144. Conducted Band Edge, QAM-64, High Channel, Band 13, Port 1, 10 MHz

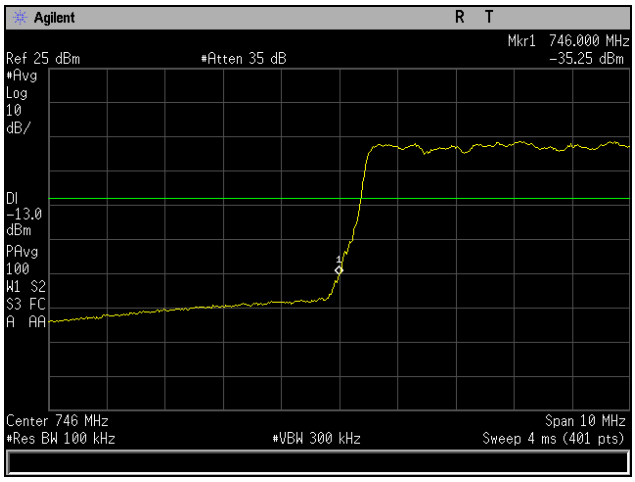


Plot 1145. Conducted Band Edge, QPSK, Low Channel, Band 13, Port 1, 10 MHz

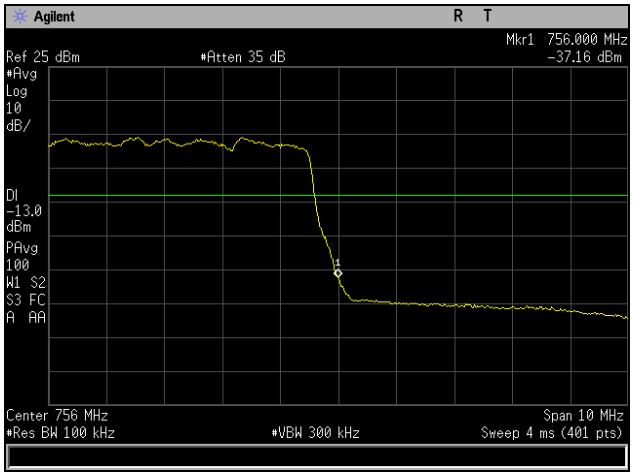


Plot 1146. Conducted Band Edge, QPSK, High Channel, Band 13, Port 1, 10 MHz

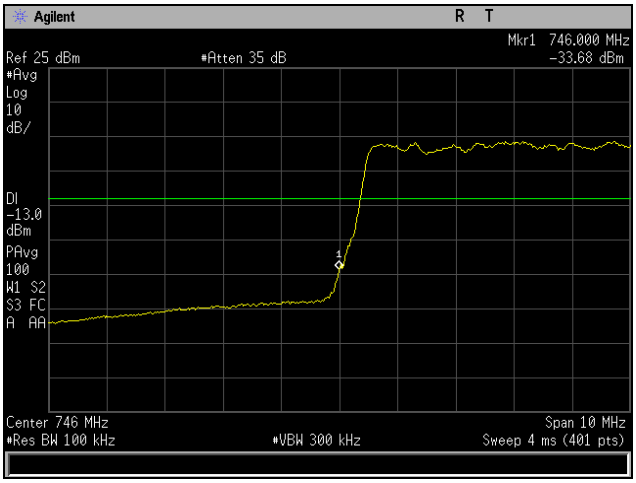
Band Edge, Band 13, Port 2, 10 MHz



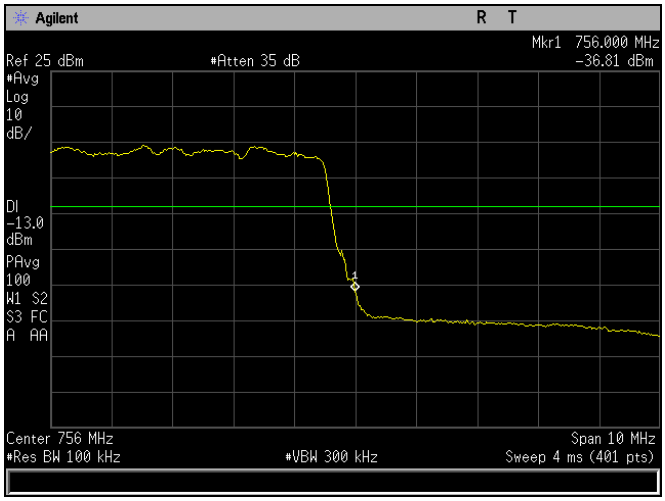
Plot 1147. Conducted Band Edge, QAM-16, Low Channel, Band 13, Port 2, 10 MHz



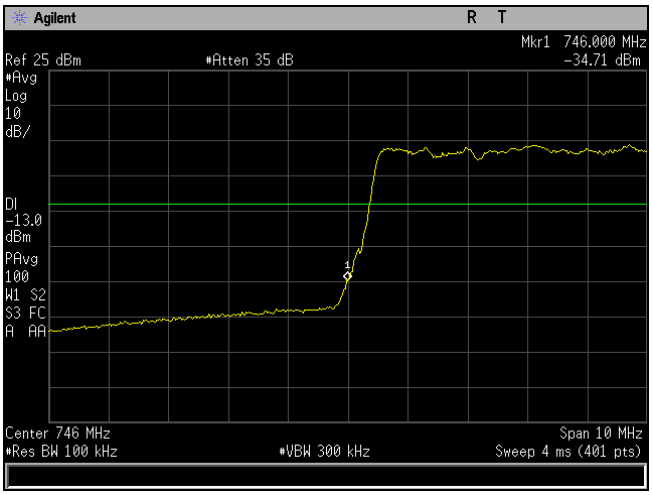
Plot 1148. Conducted Band Edge, QAM-16, High Channel, Band 13, Port 2, 10 MHz



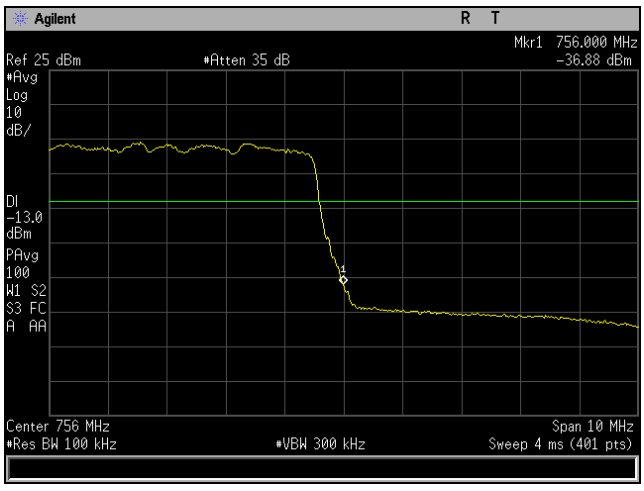
Plot 1149. Conducted Band Edge, QAM-64, Low Channel, Band 13, Port 2, 10 MHz



Plot 1150. Conducted Band Edge, QAM-64, High Channel, Band 13, Port 2, 10 MHz

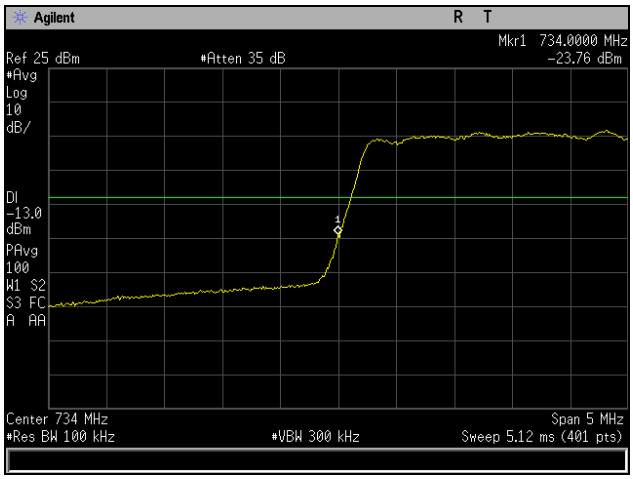


Plot 1151. Conducted Band Edge, QPSK, Low Channel, Band 13, Port 2, 10 MHz

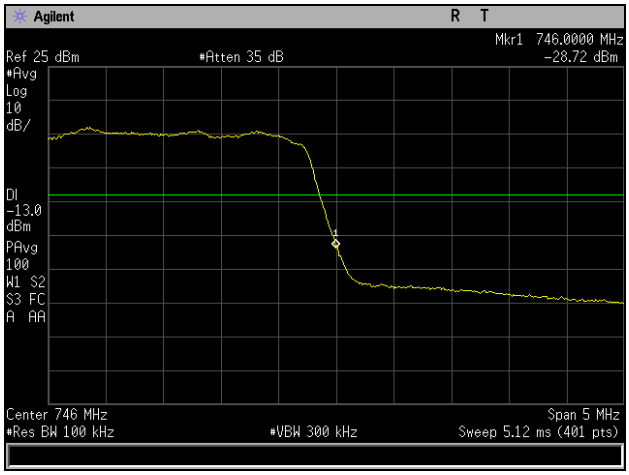


Plot 1152. Conducted Band Edge, QPSK, High Channel, Band 13, Port 2, 10 MHz

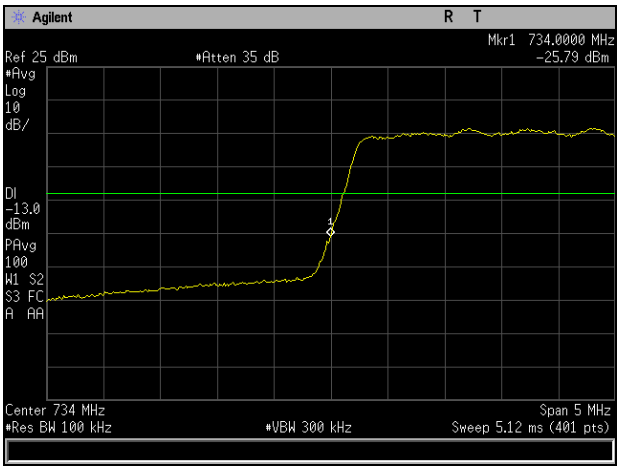
Band Edge, Band 17, Port 1, 5 MHz



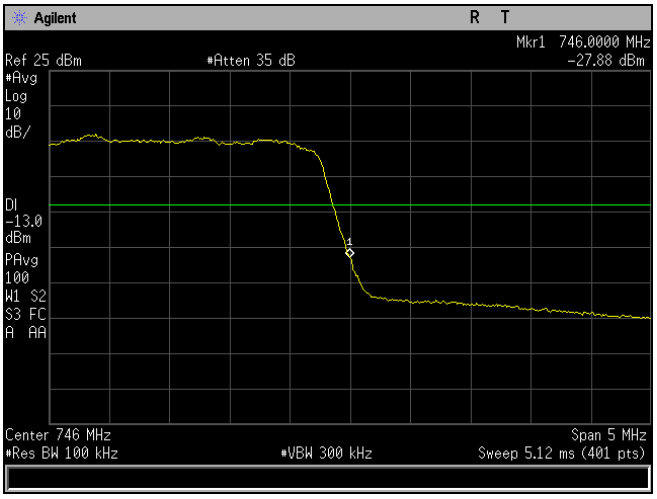
Plot 1153. Conducted Band Edge, QAM-16, Low Channel, Band 17, Port 1, 5 MHz



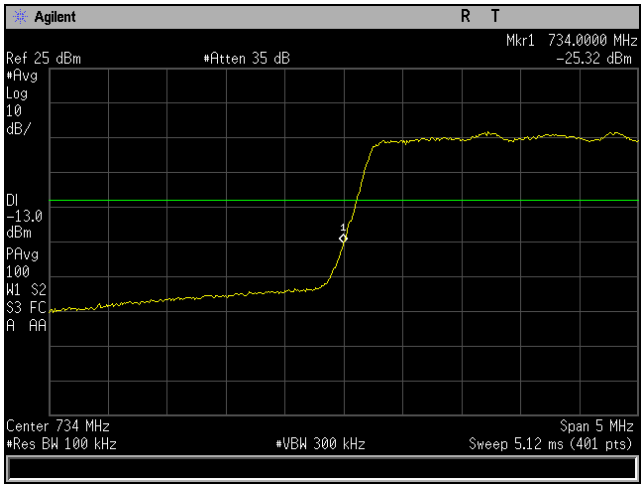
Plot 1154. Conducted Band Edge, QAM-16, High Channel, Band 17, Port 1, 5 MHz



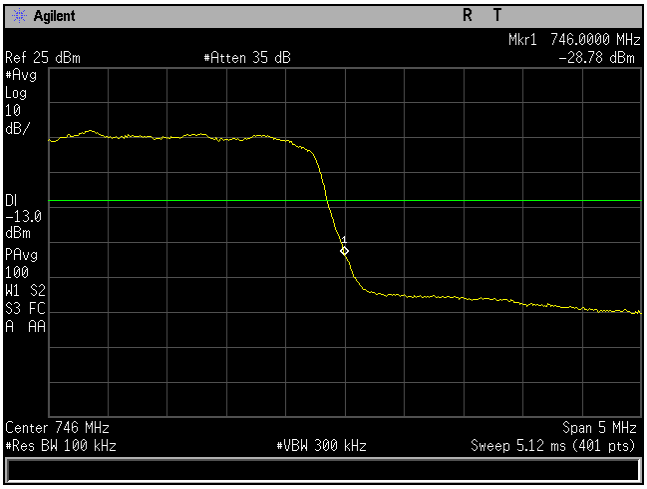
Plot 1155. Conducted Band Edge, QAM-64, Low Channel, Band 17, Port 1, 5 MHz



Plot 1156. Conducted Band Edge, QAM-64, High Channel, Band 17, Port 1, 5 MHz

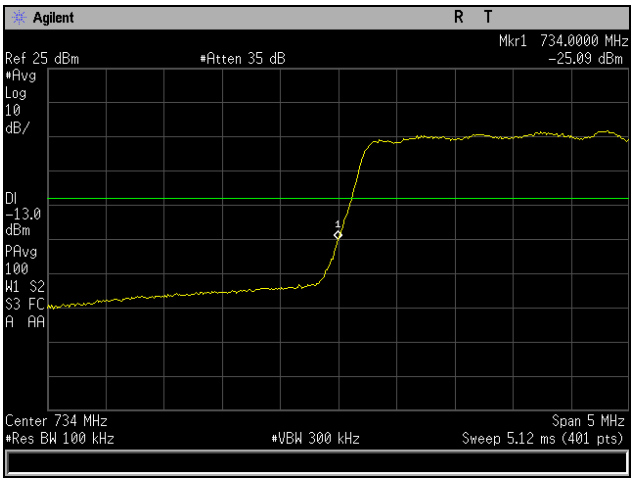


Plot 1157. Conducted Band Edge, QPSK, Low Channel, Band 17, Port 1, 5 MHz

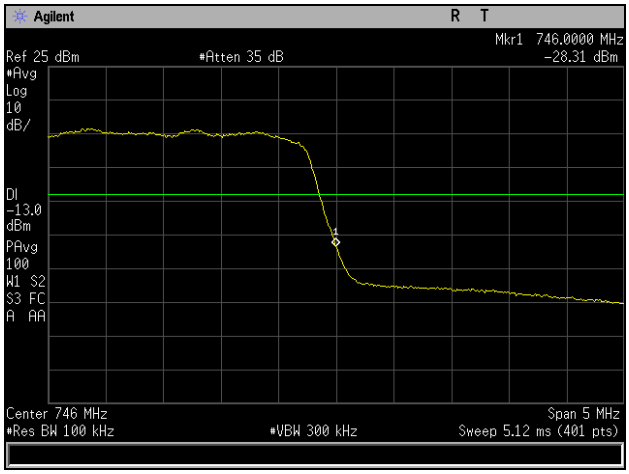


Plot 1158. Conducted Band Edge, QPSK, High Channel, Band 17, Port 1, 5 MHz

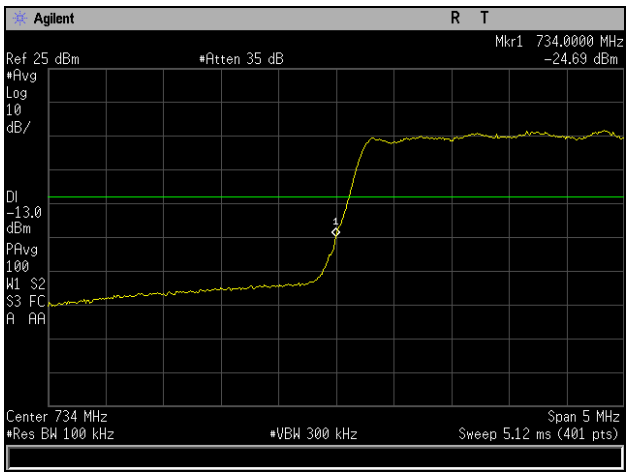
Band Edge, Band 17, Port 2, 5 MHz



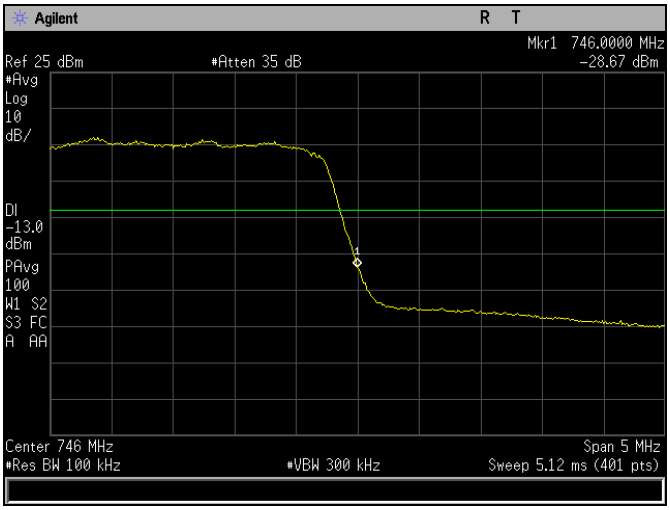
Plot 1159. Conducted Band Edge, QAM-16, Low Channel, Band 17, Port 2, 5 MHz



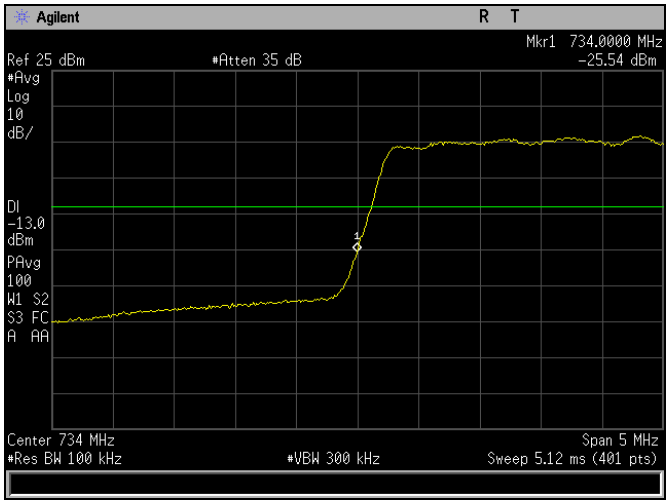
Plot 1160. Conducted Band Edge, QAM-16, High Channel, Band 17, Port 2, 5 MHz



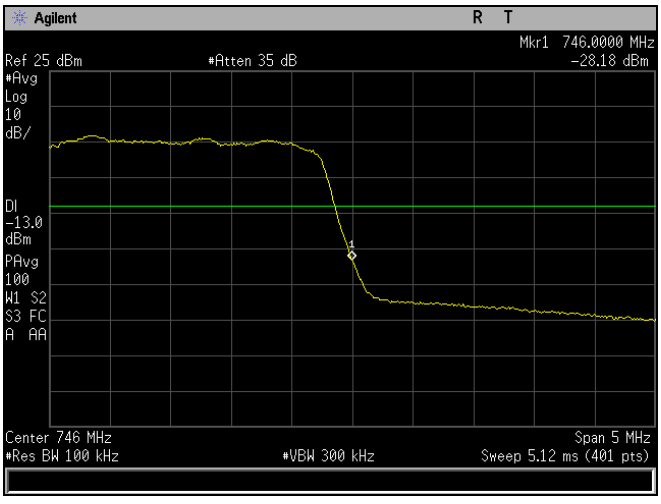
Plot 1161. Conducted Band Edge, QAM-64, Low Channel, Band 17, Port 2, 5 MHz



Plot 1162. Conducted Band Edge, QAM-64, High Channel, Band 17, Port 2, 5 MHz

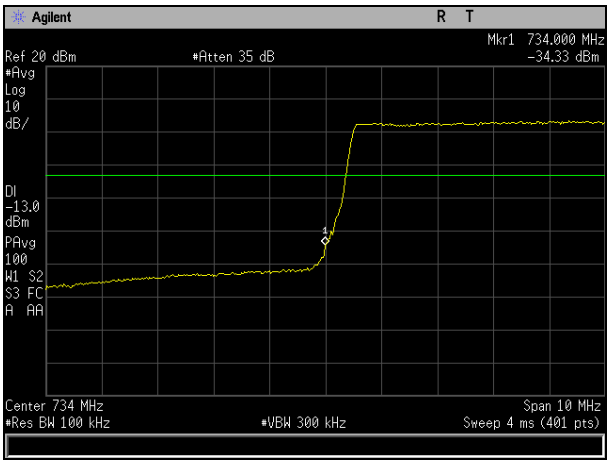


Plot 1163. Conducted Band Edge, QPSK, Low Channel, Band 17, Port 2, 5 MHz

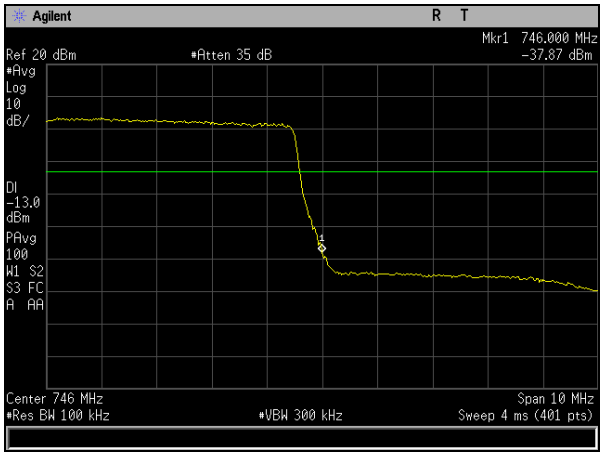


Plot 1164. Conducted Band Edge, QPSK, High Channel, Band 17, Port 2, 5 MHz

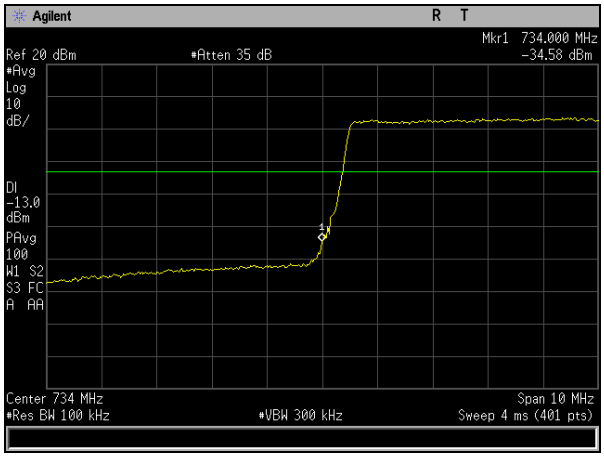
Band Edge, Band 17, Port 1, 10 MHz



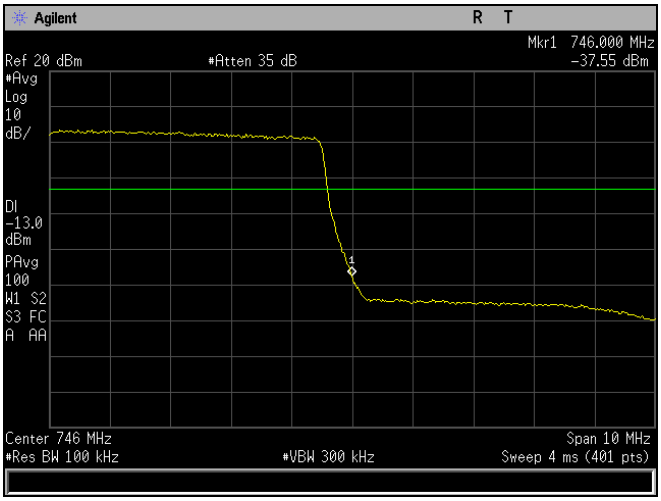
Plot 1165. Conducted Band Edge, QAM-16, Low Channel, Band 17, Port 1, 10 MHz



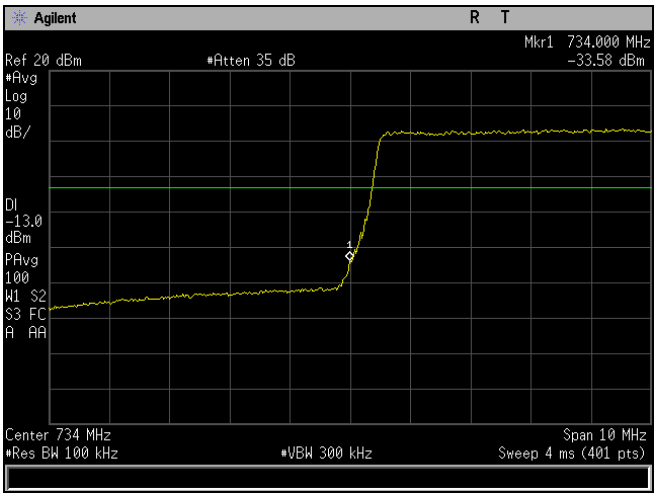
Plot 1166. Conducted Band Edge, QAM-16, High Channel, Band 17, Port 1, 10 MHz



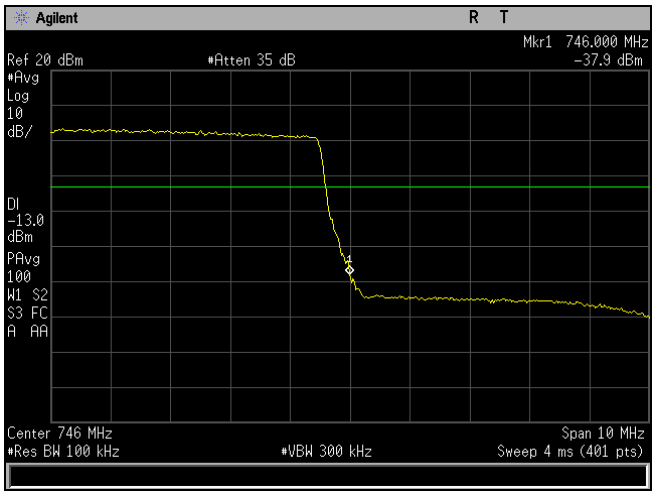
Plot 1167. Conducted Band Edge, QAM-64, Low Channel, Band 17, Port 1, 10 MHz



Plot 1168. Conducted Band Edge, QAM-64, High Channel, Band 17, Port 1, 10 MHz

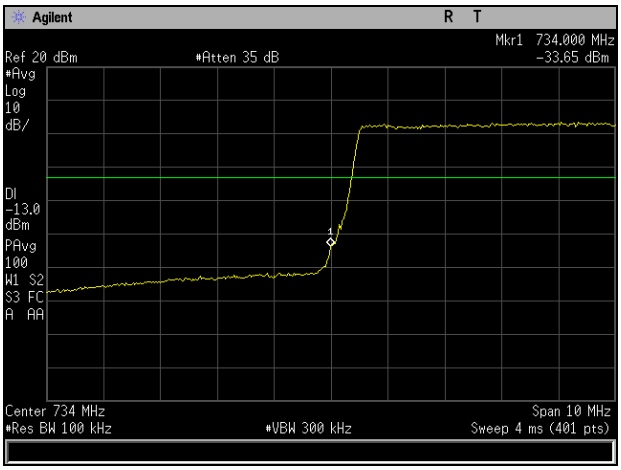


Plot 1169. Conducted Band Edge, QPSK, Low Channel, Band 17, Port 1, 10 MHz

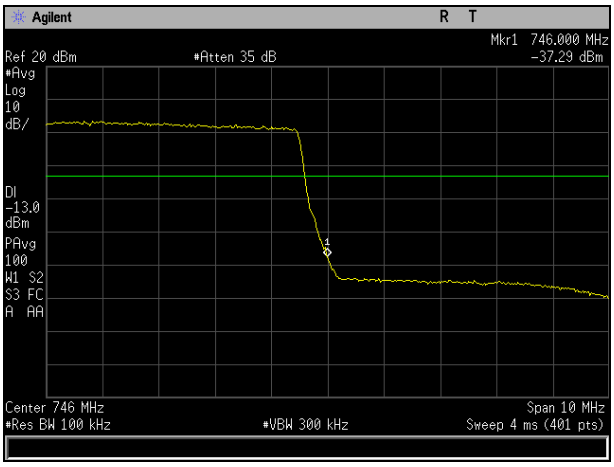


Plot 1170. Conducted Band Edge, QPSK, High Channel, Band 17, Port 1, 10 MHz

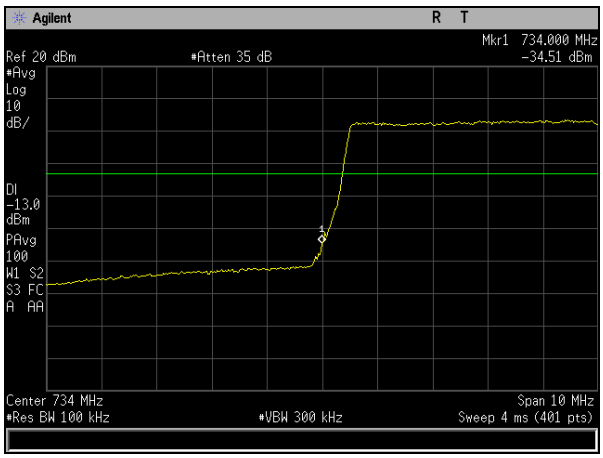
Band Edge, Band 17, Port 2, 10 MHz



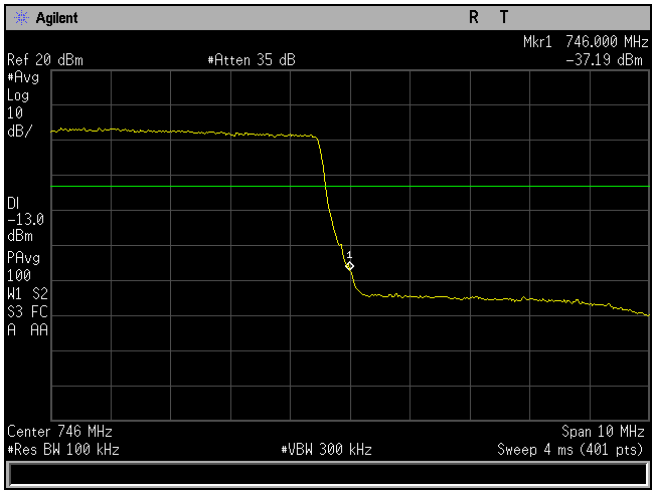
Plot 1171. Conducted Band Edge, QAM-16, Low Channel, Band 17, Port 2, 10 MHz



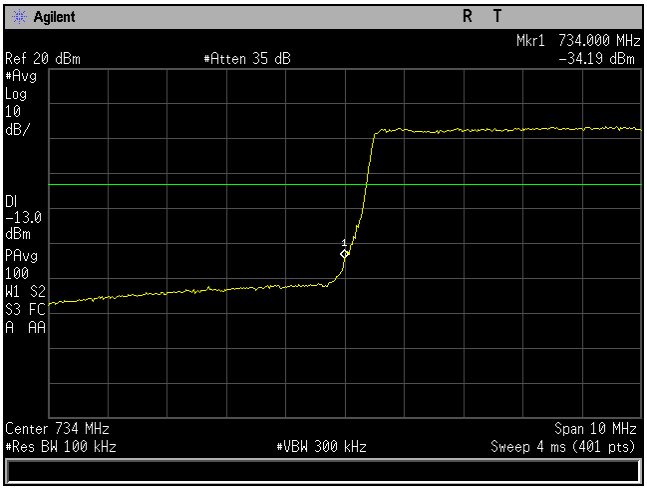
Plot 1172. Conducted Band Edge, QAM-16, High Channel, Band 17, Port 2, 10 MHz



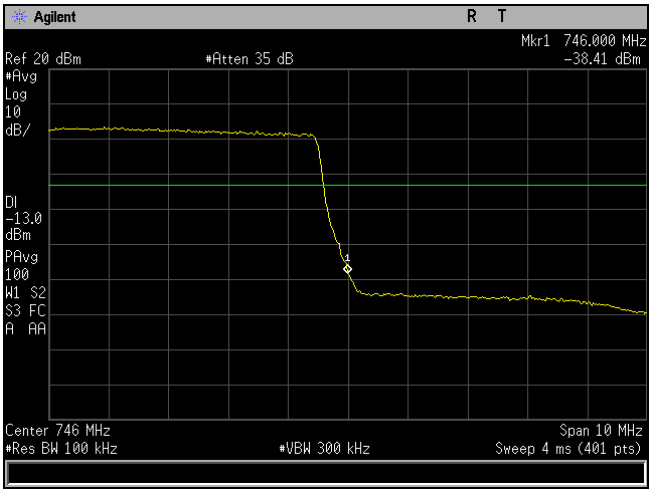
Plot 1173. Conducted Band Edge, QAM-64, Low Channel, Band 17, Port 2, 10 MHz



Plot 1174. Conducted Band Edge, QAM-64, High Channel, Band 17, Port 2, 10 MHz



Plot 1175. Conducted Band Edge, QPSK, Low Channel, Band 17, Port 2, 10 MHz



Plot 1176. Conducted Band Edge, QPSK, High Channel, Band 17, Port 2, 10 MHz

Electromagnetic Compatibility Criteria for Intentional Radiators

§2.1055 Frequency Stability

Test Requirement(s): **§2.1055**

Test Procedures: As required by 47 CFR 2.1055, *Frequency Stability measurements* were made at the RF output terminals using a Spectrum Analyzer.

The EUT was set up in an Environmental chamber with the support equipment outside the chamber. The EUT was set to transmit on the low channel. The out of band emissions were then compared to the -13dBm limit. The same procedure was repeated on the high channel. This procedure was done at a temperature range of -30C to +50C. At the ambient temperature, in addition to the measurements at the nominal voltage, the voltage was varied to +/- 15% and measurements were taken at those voltages.

Test Results: Equipment complies with this section. Refer to FCC ID: QHYRP-A2014.
Different antenna is used for this test to above FCC labeled EUT. For that matter, the equipment is compliant by similarity with the requirement of frequency stability over temperature and voltage variation.

Maximum Permissible Exposure

RF Exposure Requirements: **§1.1307(b)(1) and §1.1307(b)(2):** Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines.

RF Radiation Exposure Limit: **§1.1310:** As specified in this section, the Maximum Permissible Exposure (MPE) Limit shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in Sec. 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of Sec. 2.1093 of this chapter.

MPE Limit: EUT's operating frequencies @ 869-894 MHz and 1930-1990 MHz; **Limit for Uncontrolled exposure: 1 mW/cm^2 or 10 W/m^2**

Equation from page 18 of OET 65, Edition 97-01

$$S = PG / 4\pi R^2 \quad \text{or} \quad R = \sqrt{(PG / 4\pi S)}$$

where, S = Power Density (mW/cm^2)
P = Power Input to antenna (mW)
G = Antenna Gain (numeric value)
R = Distance (cm)

Test Results:

FCC									
Frequency (MHz)	**Con. Pwr. (dBm)**	**Con. Pwr. (mW)**	**Ant. Gain (dBi)**	**Ant. Gain numeric**	**Pwr. Density (mW/cm^2)**	**Limit (mW/cm^2)**	**Margin**	**Distance (cm)**	**Result**
2117.5	21.71	148.252	13.2	20.893	0.61621	1	0.38379	20	Pass

Table 23. MPE, Band 4

The safe distance where Power Density is less than the MPE Limit listed above was found to be 20 cm.

FCC									
Frequency (MHz)	Con. Pwr. (dBm)	Con. Pwr. (mW)	Ant. Gain (dBi)	Ant. Gain numeric	Pwr. Density (mW/cm^2)	Limit (mW/cm^2)	Margin	Distance (cm)	Result
2120	21.54	142.561	13.2	20.893	0.59256	1	0.40744	20	Pass

Table 24. MPE, Band 10

The safe distance where Power Density is less than the MPE Limit listed above was found to be 20 cm.

FCC									
Frequency (MHz)	Con. Pwr. (dBm)	Con. Pwr. (mW)	Ant. Gain (dBi)	Ant. Gain numeric	Pwr. Density (mW/cm^2)	Limit (mW/cm^2)	Margin	Distance (cm)	Result
736.5	21.85	153.109	12	15.849	0.48276	1	0.51724	20	Pass

Table 25. MPE, Band 12

The safe distance where Power Density is less than the MPE Limit listed above was found to be 20 cm.

FCC									
Frequency (MHz)	Con. Pwr. (dBm)	Con. Pwr. (mW)	Ant. Gain (dBi)	Ant. Gain numeric	Pwr. Density (mW/cm^2)	Limit (mW/cm^2)	Margin	Distance (cm)	Result
751	22.53	179.061	12	15.849	0.56459	1	0.43541	20	Pass

Table 26. MPE, Band 13

The safe distance where Power Density is less than the MPE Limit listed above was found to be 20 cm.

FCC									
Frequency (MHz)	Con. Pwr. (dBm)	Con. Pwr. (mW)	Ant. Gain (dBi)	Ant. Gain numeric	Pwr. Density (mW/cm^2)	Limit (mW/cm^2)	Margin	Distance (cm)	Result
740	22.79	190.108	12	15.849	0.59942	1	0.40058	20	Pass

Table 27. MPE, Band 17

The safe distance where Power Density is less than the MPE Limit listed above was found to be 20 cm.

IV. Test Equipment

Test Equipment

Calibrated test equipment utilized during testing was maintained in a current state of calibration per the requirements of ISO/IEC 17025:2005.

MET #	Equipment	Manufacturer	Model#	Cal Date	Cal Due
1T4442	PRE-AMPLIFIER, MICROWAVE	MITEQ	AFS42-01001800-30-10P	SEE NOTE	
1T4483	ANTENNA; HORN	ETS-LINDGREN	3117	10/08/2015	04/08/2017
1T4771	PSA SPECTRUM ANALYZER	AGILENT TECHNOLOGIES	E4446A	08/10/2016	02/10/2018
1T4149	HIGH-FREQUENCY ANECHOIC CHAMBER	RAY PROOF	81	NOT REQUIRED	
1T4300	SEMI-ANECHOIC CHAMBER # 1 (NSA)	EMC TEST SYSTEMS	NONE	02/06/2015	02/06/2018
1T4751	ANTENNA - BILOG	SUNOL SCIENCES	JB6	02/26/2016	08/26/2017
1T4409	EMI RECEIVER	ROHDE & SCHWARZ	ESIB7	12/7/2016	12/7/2018
1T4859	DIGITAL BAROMETER, HYGROMETER, THERMOMETER	CONTROL COMPANY	15-078-198, FB70423, 245CD	02/10/2016	02/10/2018
1T4505	TEMPERATURE CHAMBER	TESTEQUITY	115	2/11/2016	2/11/2017
1T4745	ANTENNA, HORN	ETS-LINDGREN	3116	1/21/2017	7/21/2018
1T4752	PRE-AMPLIFIER	MITEQ	JS44-18004000-35-8P	SEE NOTE	

Table 28. Test Equipment List

Note: Functionally tested equipment is verified using calibrated instrumentation at the time of testing.

V. Certification & User's Manual Information

Certification & User's Manual Information

A. Certification Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 2, Subpart I — Marketing of Radio frequency devices:

§ 2.801 Radio-frequency device defined.

As used in this part, a radio-frequency device is any device which in its operation is capable of Emitting radio-frequency energy by radiation, conduction, or other means. Radio- frequency devices include, but are not limited to:

(a) The various types of radio communication transmitting devices described throughout this chapter.

(b) The incidental, unintentional and intentional radiators defined in Part 15 of this chapter.

(c) The industrial, scientific, and medical equipment described in Part 18 of this chapter.

(d) Any part or component thereof which in use emits radio-frequency energy by radiation, conduction, or other means.

§ 2.803 Marketing of radio frequency devices prior to equipment authorization.

(a) Except as provided elsewhere in this chapter, no person shall sell or lease, or offer for sale or lease (including advertising for sale or lease), or import, ship or distribute for the purpose of selling or leasing or offering for sale or lease, any radio frequency device unless:

(1) In the case of a device subject to certification, such device has been authorized by the Commission in accordance with the rules in this chapter and is properly identified and labeled as required by §2.925 and other relevant sections in this chapter; or

(2) In the case of a device that is not required to have a grant of equipment authorization issued by the Commission, but which must comply with the specified technical standards prior to use, such device also complies with all applicable administrative (including verification of the equipment or authorization under a Declaration of Conformity, where required), technical, labeling and identification requirements specified in this chapter.

(d) Notwithstanding the provisions of paragraph (a) of this section, the offer for sale solely to business, commercial, industrial, scientific or medical users (but not an offer for sale to other parties or to end users located in a residential environment) of a radio frequency device that is in the conceptual, developmental, design or pre-production stage is permitted prior to equipment authorization or, for devices not subject to the equipment authorization requirements, prior to a determination of compliance with the applicable technical requirements *provided* that the prospective buyer is advised in writing at the time of the offer for sale that the equipment is subject to the FCC rules and that the equipment will comply with the appropriate rules before delivery to the buyer or to centers of distribution.

(e)(1) Notwithstanding the provisions of paragraph (a) of this section, prior to equipment authorization or determination of compliance with the applicable technical requirements any radio frequency device may be operated, but not marketed, for the following purposes and under the following conditions:

(i) Compliance testing;

(ii) Demonstrations at a trade show provided the notice contained in paragraph (c) of this section is displayed in a conspicuous location on, or immediately adjacent to, the device;

(iii) Demonstrations at an exhibition conducted at a business, commercial, industrial, scientific or medical location, but excluding locations in a residential environment, provided the notice contained in paragraphs (c) or (d) of this section, as appropriate, is displayed in a conspicuous location on, or immediately adjacent to, the device;

(iv) Evaluation of product performance and determination of customer acceptability, provided such operation takes place at the manufacturer's facilities during developmental, design or pre-production states; or

(v) Evaluation of product performance and determination of customer acceptability where customer acceptability of a radio frequency device cannot be determined at the manufacturer's facilities because of size or unique capability of the device, provided the device is operated at a business, commercial, industrial, scientific or medical user's site, but not at a residential site, during the development, design or pre-production stages.

(e)(2) For the purpose of paragraphs (e)(1)(iv) and (e)(1)(v) of this section, the term *manufacturer's facilities* includes the facilities of the party responsible for compliance with the regulations and the manufacturer's premises, as well as the facilities of other entities working under the authorization of the responsible party in connection with the development and manufacture, but not the marketing, of the equipment.

(f) For radio frequency devices subject to verification and sold solely to business, commercial, industrial, scientific and medical users (excluding products sold to other parties or for operation in a residential environment), parties responsible for verification of the devices shall have the option of ensuring compliance with the applicable technical specifications of this chapter at each end user's location after installation, provided that the purchase or lease agreement includes a proviso that such a determination of compliance be made and is the responsibility of the party responsible for verification of the equipment.

Certification & User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 2, Subpart J — Equipment Authorization Procedures:

§ 2.901 Basis and Purpose

(a) In order to carry out its responsibilities under the Communications Act and the various treaties and international regulations, and in order to promote efficient use of the radio spectrum, the Commission has developed technical standards for radio frequency equipment and parts or components thereof. The technical standards applicable to individual types of equipment are found in that part of the rules governing the service wherein the equipment is to be operated.[1] *In addition to the technical standards provided, the rules governing the service may require that such equipment be verified by the manufacturer or importer*, be authorized under a Declaration of Conformity, or receive an equipment authorization from the Commission by one of the following procedures: certification or registration.

(b) The following sections describe the verification procedure, the procedure for a Declaration of Conformity, and the procedures to be followed in obtaining certification from the Commission and the conditions attendant to such a grant.

§ 2.907 Certification.

(a) Certification is an equipment authorization issued by the Commission, based on representation and test data submitted by the applicant.

(b) Certification attaches to all units subsequently marketed by the grantee which are identical (see Section 2.908) to the sample tested except for permissive changes or other variations authorized by the Commission pursuant to Section 2.1043.

[1] In this case, the equipment is subject to the rules of Part 15. More specifically, the equipment falls under Subpart B (of Part 15), which deals with unintentional radiators.

Certification & User's Manual Information

§ 2.948 Description of measurement facilities.

(a) Each party making measurements of equipment that is subject to an equipment authorization under Part 15 or Part 18 of this chapter, regardless of whether the measurements are filed with the Commission or kept on file by the party responsible for compliance of equipment marketed within the U.S. or its possessions, shall compile a description of the measurement facilities employed.

(1) If the measured equipment is subject to the verification procedure, the description of the measurement facilities shall be retained by the party responsible for verification of the equipment.

(i) If the equipment is verified through measurements performed by an independent laboratory, it is acceptable for the party responsible for verification of the equipment to rely upon the description of the measurement facilities retained by or placed on file with the Commission by that laboratory. In this situation, the party responsible for the verification of the equipment is not required to retain a duplicate copy of the description of the measurement facilities.

(ii) If the equipment is verified based on measurements performed at the installation site of the equipment, no specific site calibration data is required. It is acceptable to retain the description of the measurement facilities at the site at which the measurements were performed.

(2) If the equipment is to be authorized by the Commission under the certification procedure, the description of the measurement facilities shall be filed with the Commission's Laboratory in Columbia, Maryland. The data describing the measurement facilities need only be filed once but must be updated as changes are made to the measurement facilities or as otherwise described in this section. At least every three years, the organization responsible for filing the data with the Commission shall certify that the data on file is current.

Certification & User's Manual Information

Label and User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 15, Subpart A — General:

§ 15.19 Labeling requirements.

(a) In addition to the requirements in Part 2 of this chapter, a device subject to certification or verification shall be labeled as follows:

(1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under Part 73 of this chapter, land mobile operation under Part 90, etc., shall bear the following statement in a conspicuous location on the device:

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

(2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:

This device is verified to comply with Part 15 of the FCC Rules for use with cable television service.

(3) All other devices shall bear the following statement in a conspicuous location on the device:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

(4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.

(5) When the device is so small or for such use that it is not practicable to place the statement specified under paragraph (a) of this section on it, the information required by this paragraph shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed. However, the FCC identifier or the unique identifier, as appropriate, must be displayed on the device.

§ 15.21 Information to user.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Verification & User's Manual Information

The following is extracted from Title 47 of the Code of Federal Regulations, Part 15, Subpart B — Unintentional Radiators:

§ 15.105 Information to the user.

(a) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

> Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
>
> – Reorient or relocate the receiving antenna.
>
> – Increase the separation between the equipment and receiver.
>
> – Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
>
> – Consult the dealer or an experienced radio/TV technician for help.

End of Report