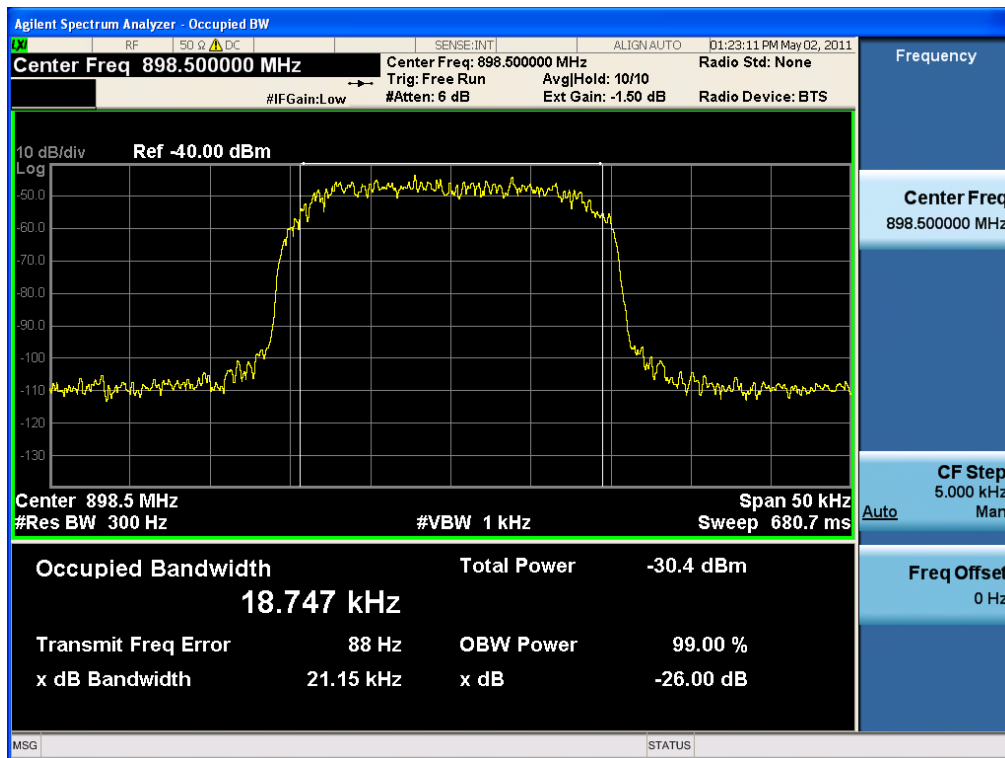
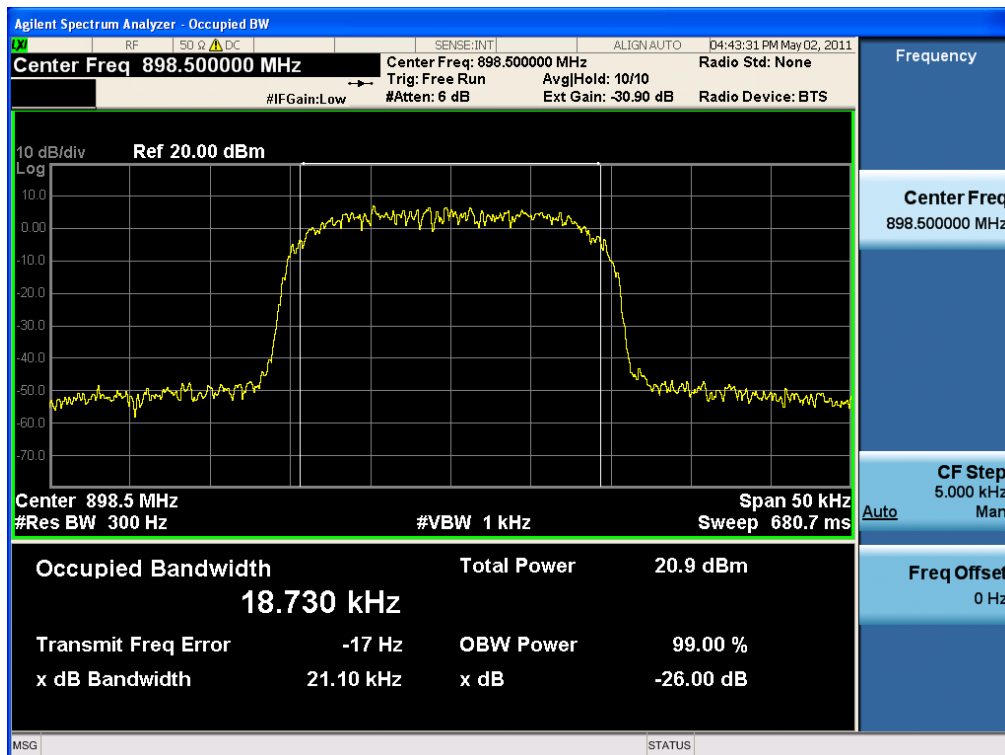
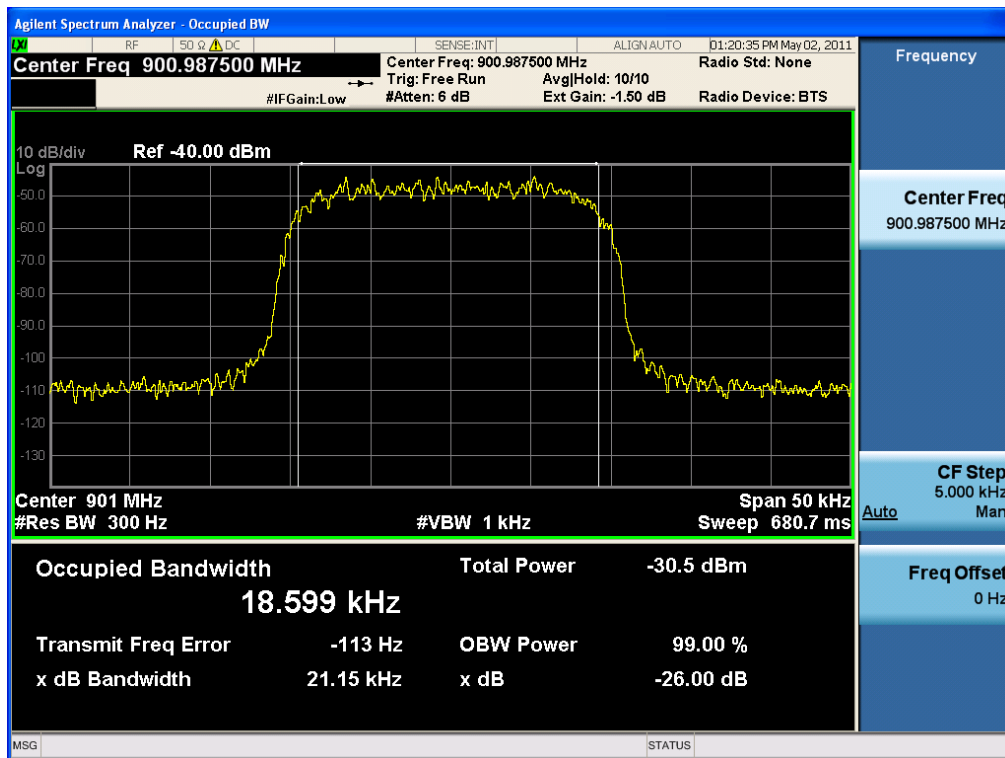




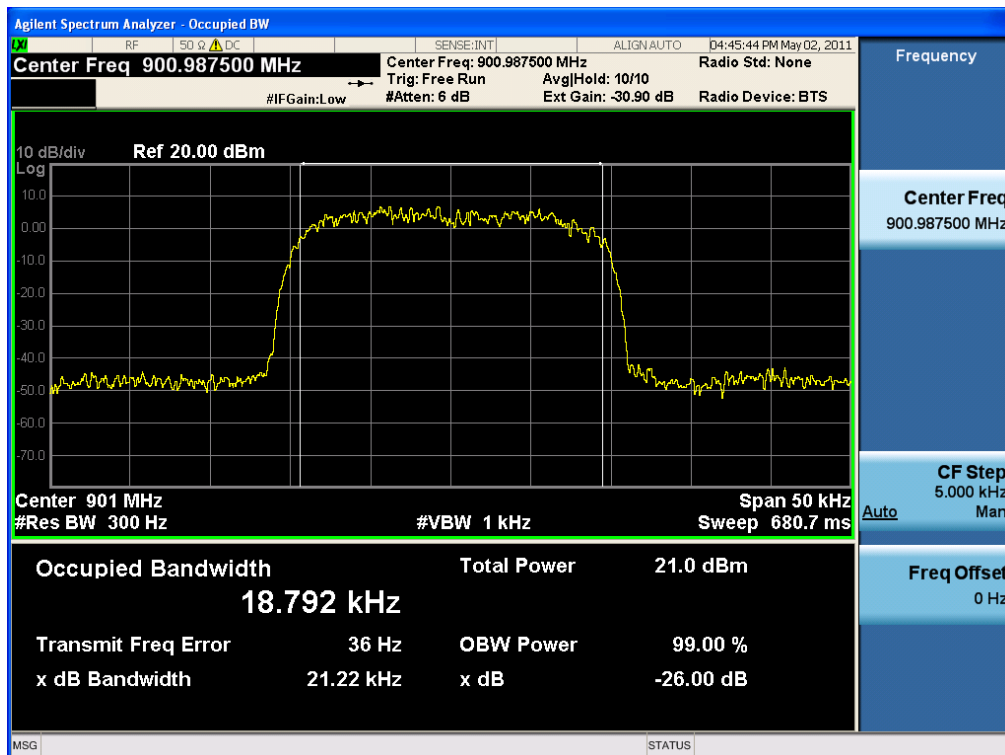
iDEN900 Uplink Mid CH Input



iDEN900 Uplink Mid CH Output

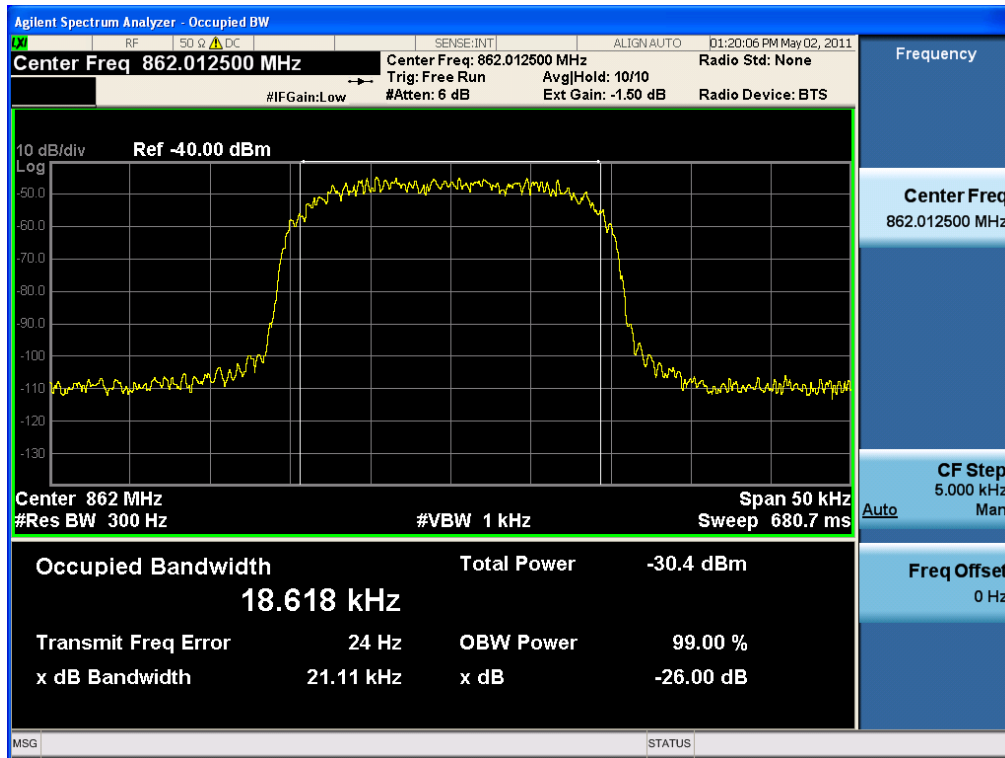


iDEN900 Uplink High CH Input

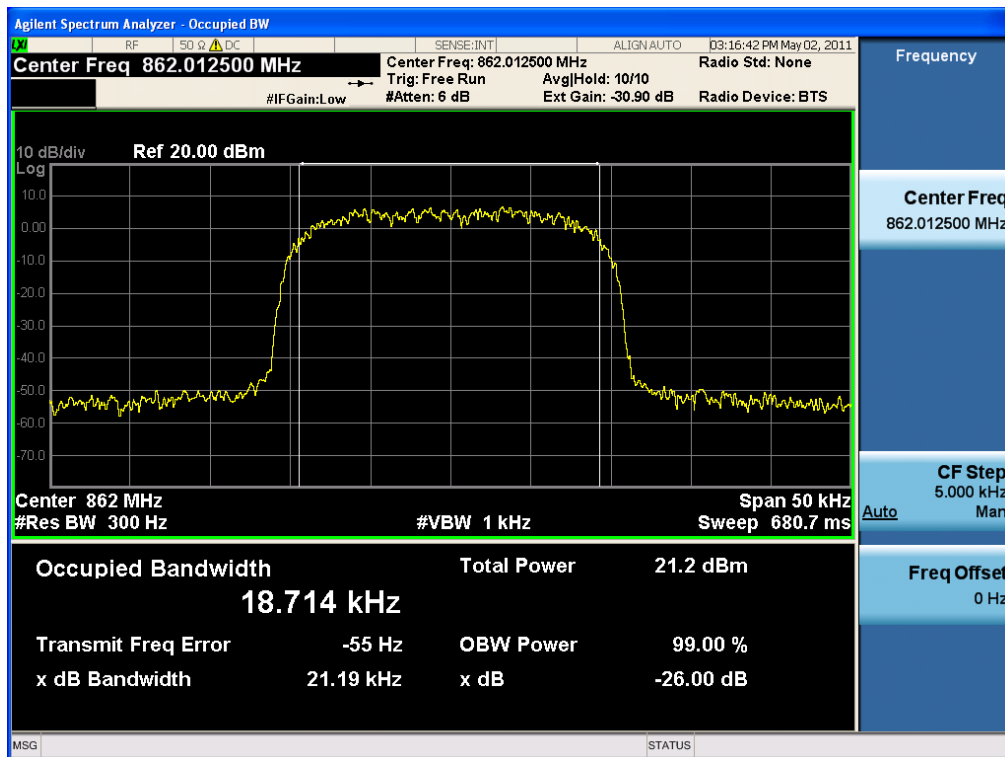


iDEN900 Uplink High CH Output

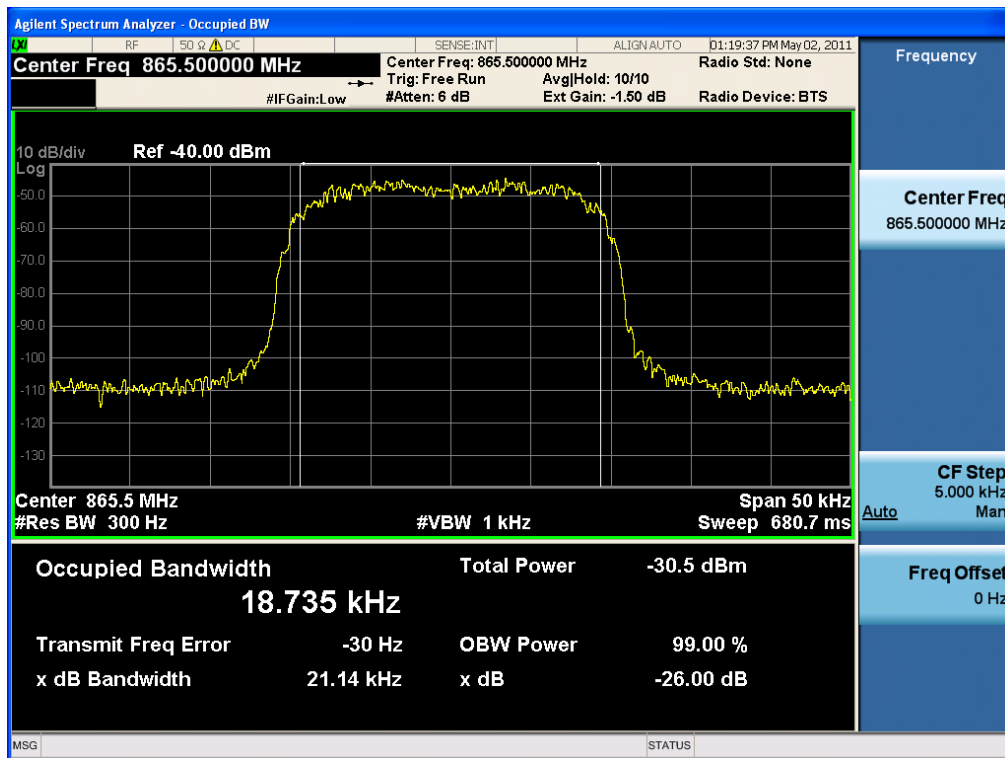
Plots of Occupied Bandwidth-7 MHz



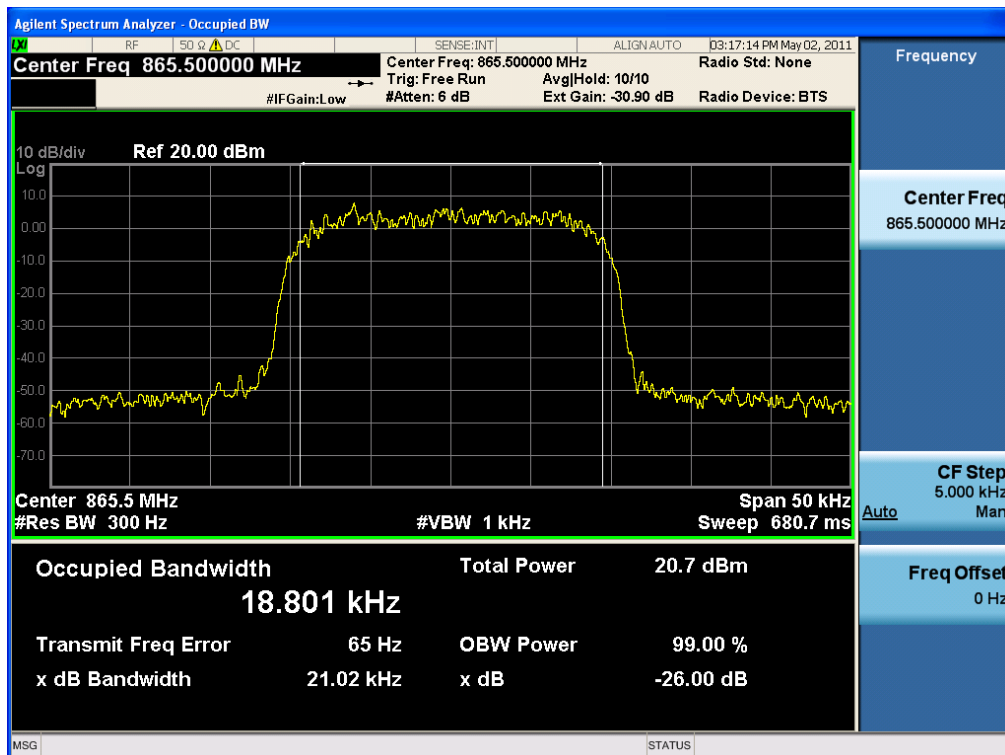
iDEN800 Downlink Low CH Input



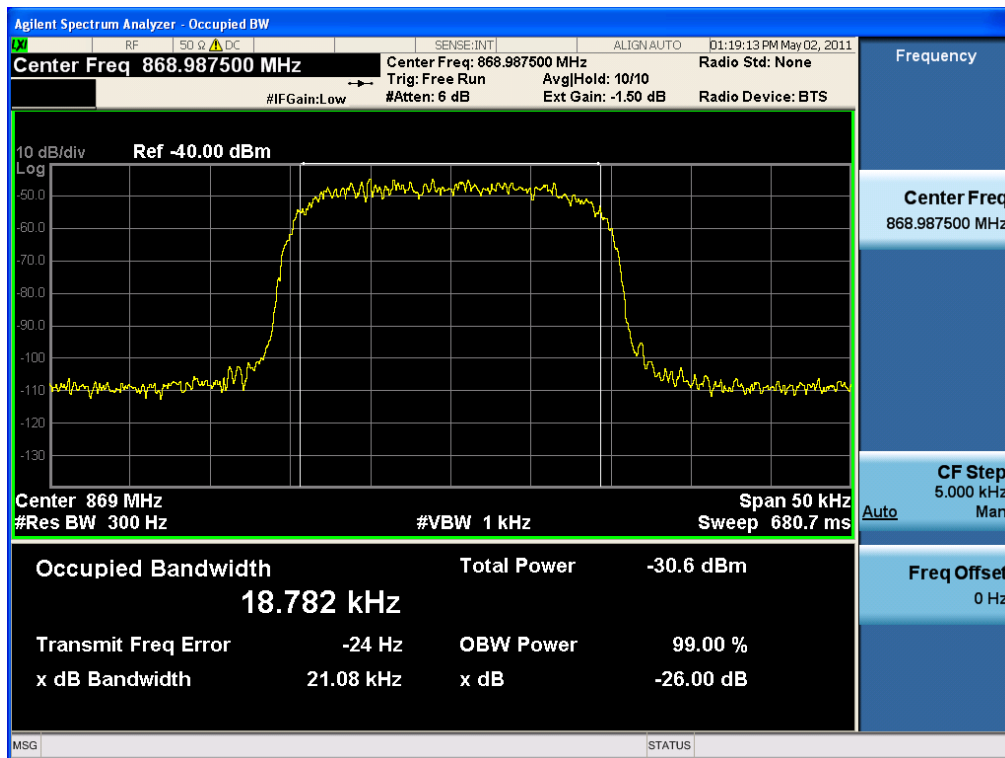
iDEN800 Downlink Low CH Output



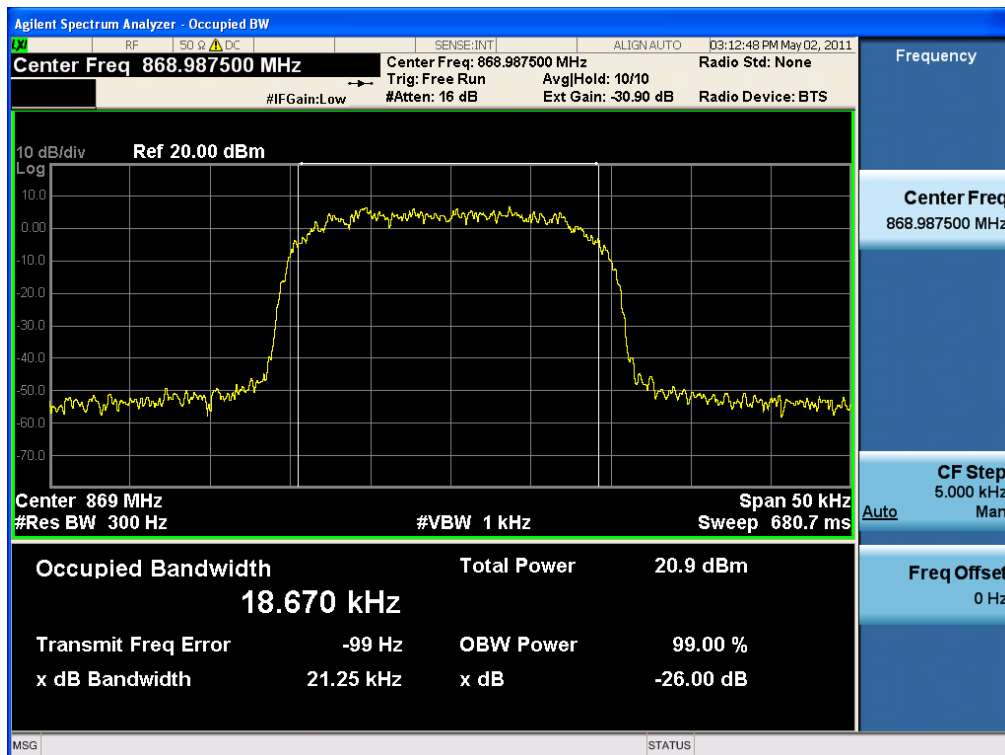
iDEN800 Downlink Mid CH Input



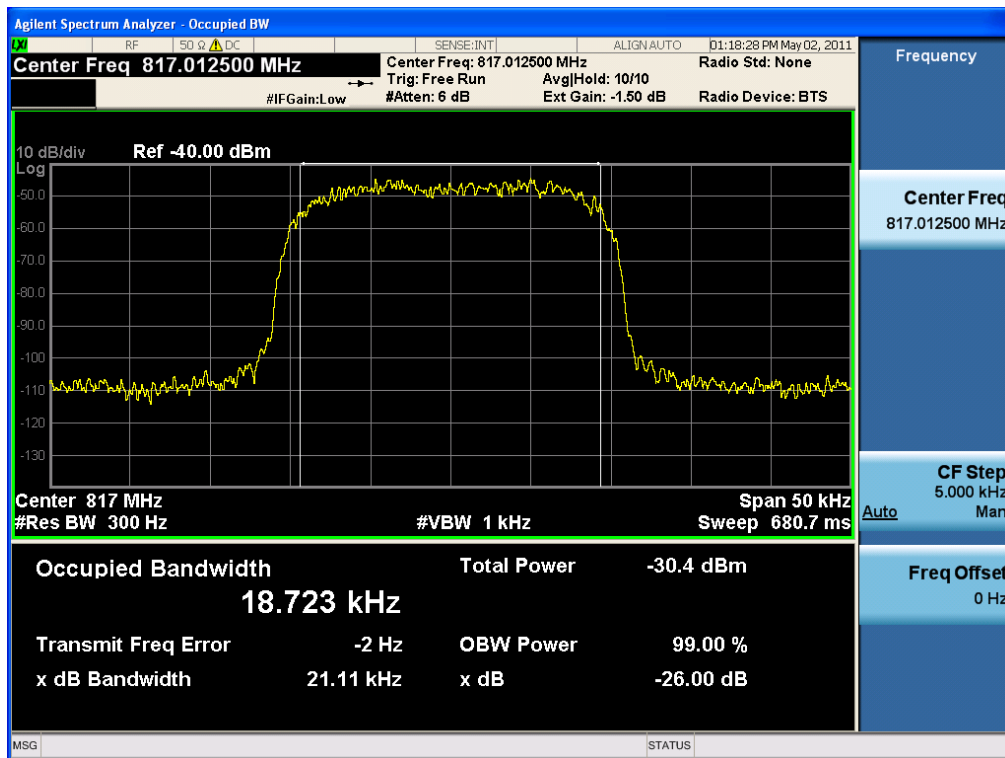
iDEN800 Downlink Mid CH Output



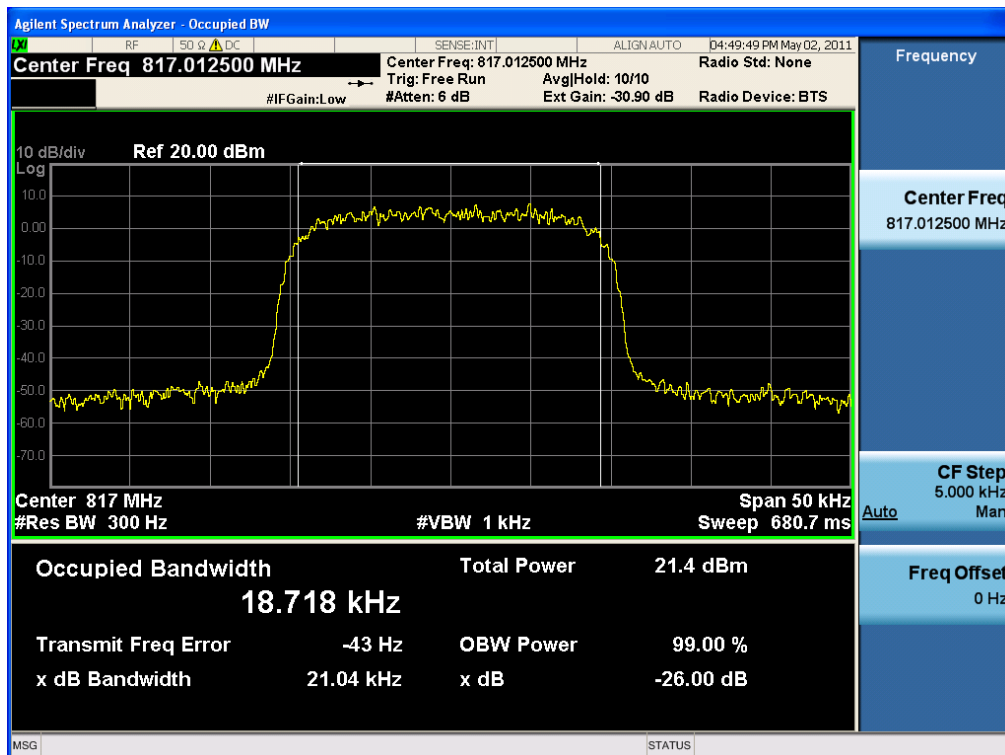
iDEN800 Downlink High CH Input



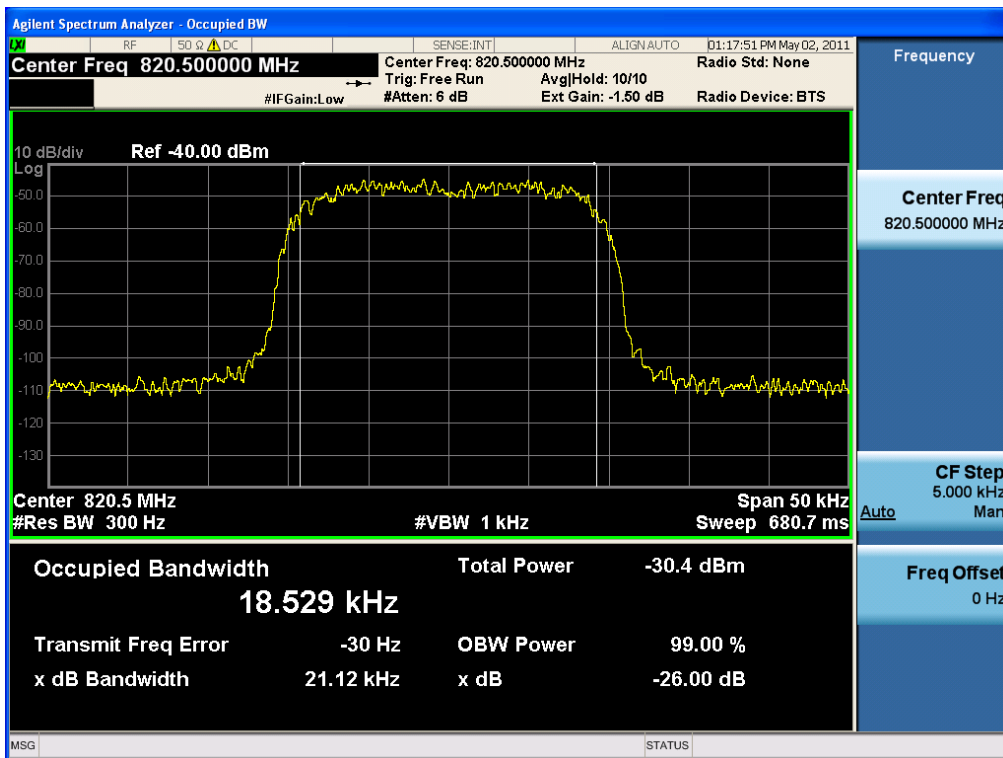
iDEN800 Downlink High CH Output



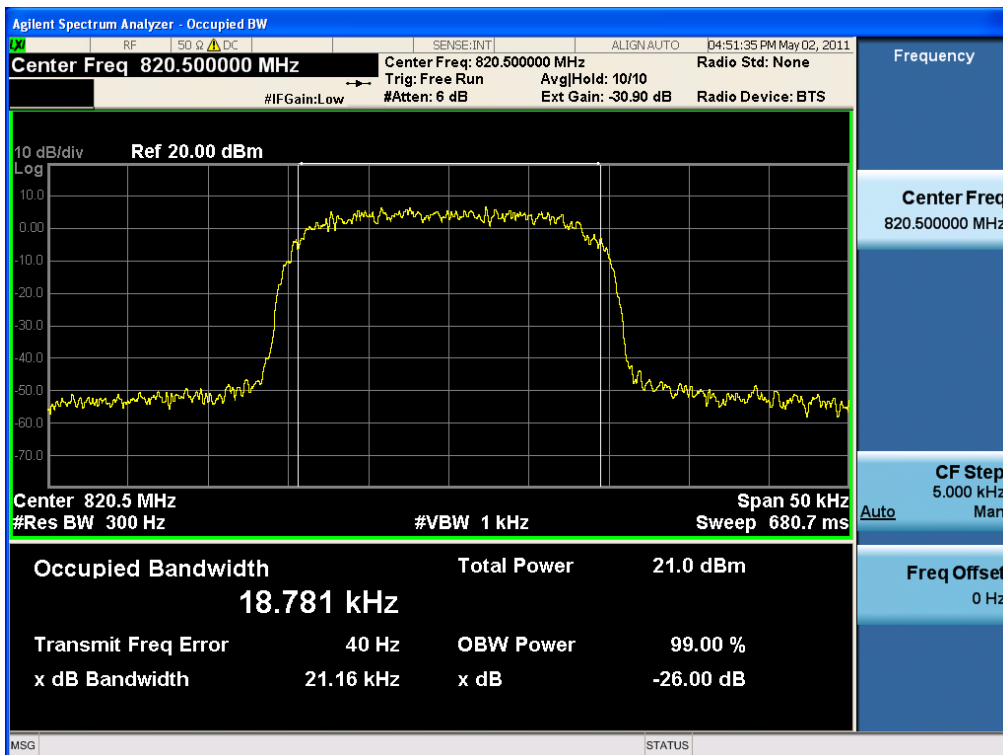
iDEN800 Uplink Low CH Input



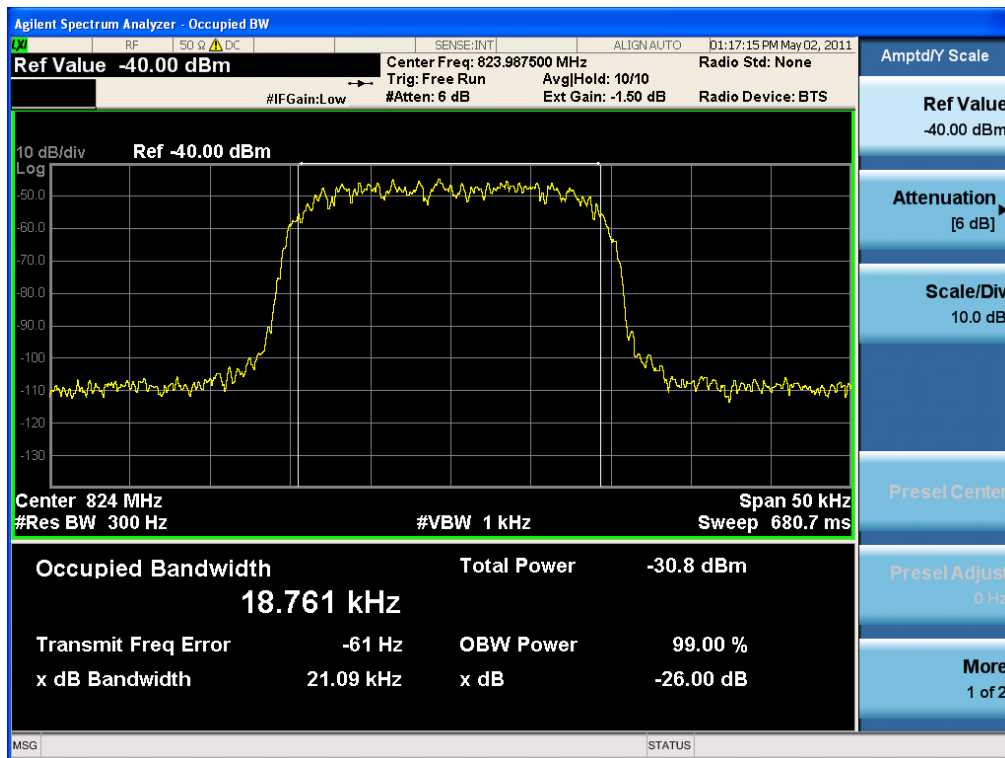
iDEN800 Uplink Low CH Output



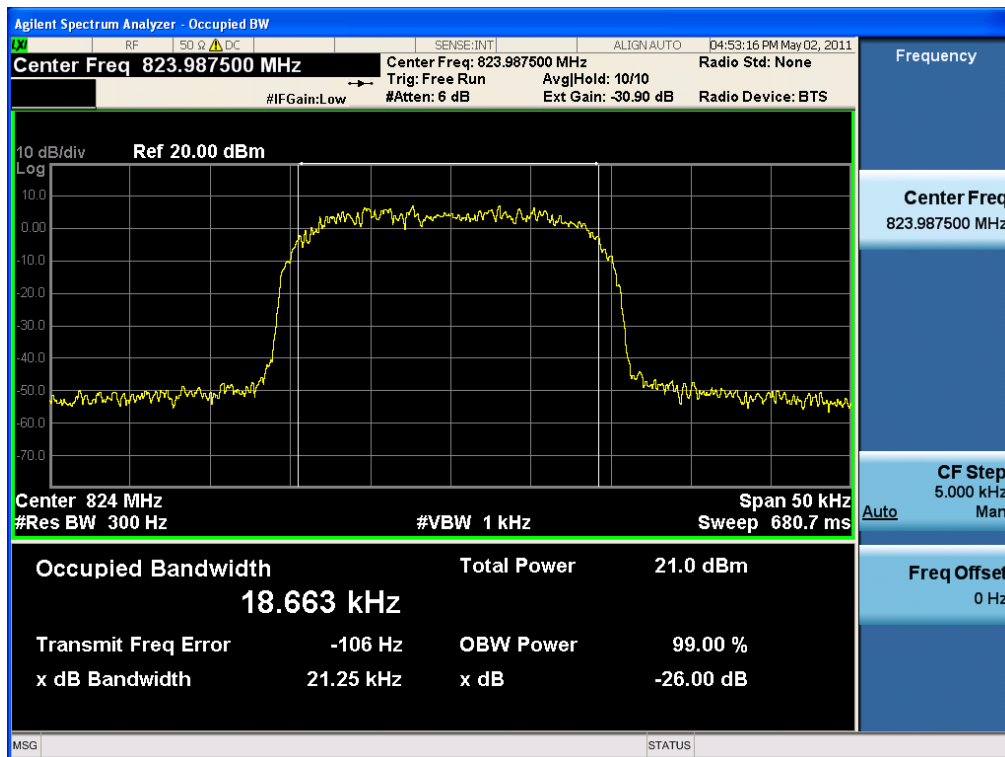
iDEN800 Uplink Mid CH Input



iDEN800 Uplink Mid CH Output



iDEN800 Uplink High CH Input



iDEN800 Uplink High CH Output

7. SPURIOUS AND HARMONIC EMISSION AT ANTENNA TERMINAL

Test Requirement(s): § 2.1051 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. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

§ 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.

§ 90.210 Emission limits: The rules in this section govern the spectral characteristics of emissions in the Radiotelephone Service. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ or 80 dB whichever is the lesser attenuation.

Test Procedures: A modulated carrier generated by the signal generator carrier was connected to either the Uplink or Downlink RF port at a maximum level as determined by the OEM. A spectrum analyzer was connected to either the Uplink or Downlink port depending on the circuitry being measured.

The spectrum analyzer was set to 1MHz RBW and 3MHz VBW. The spectrum was investigated from 30MHz to the 10th harmonic of the carrier.

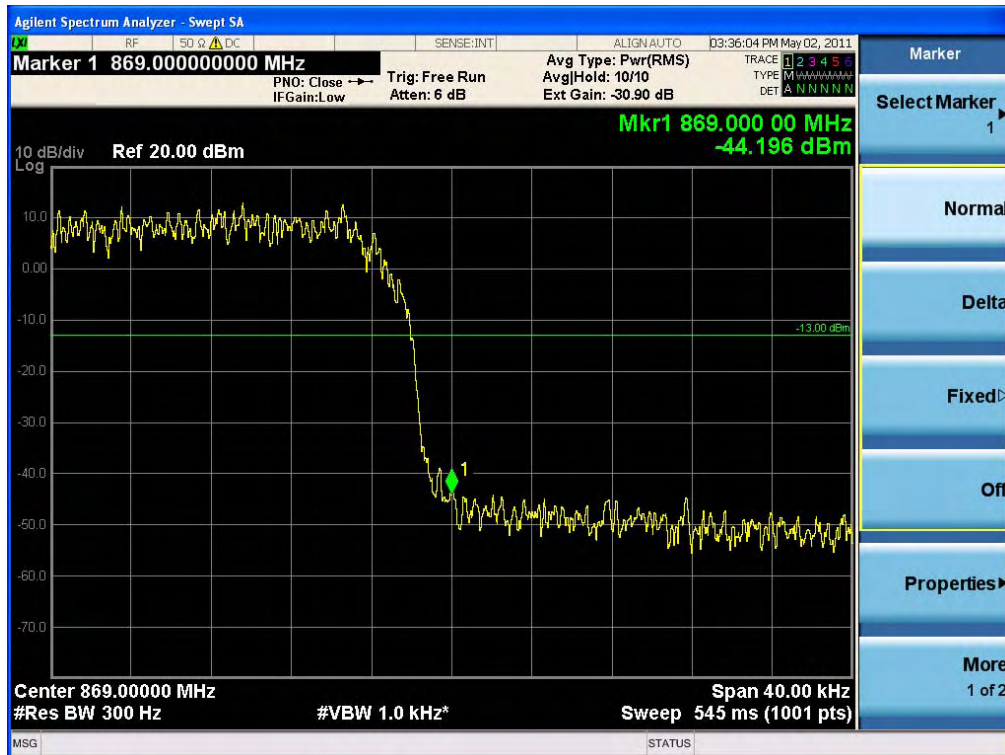
The inter-modulation requirements were performed in a similar manner as described above.

Test Results: The EUT complies with the requirements of this section. There were no detectable Spurious emissions for this EUT.

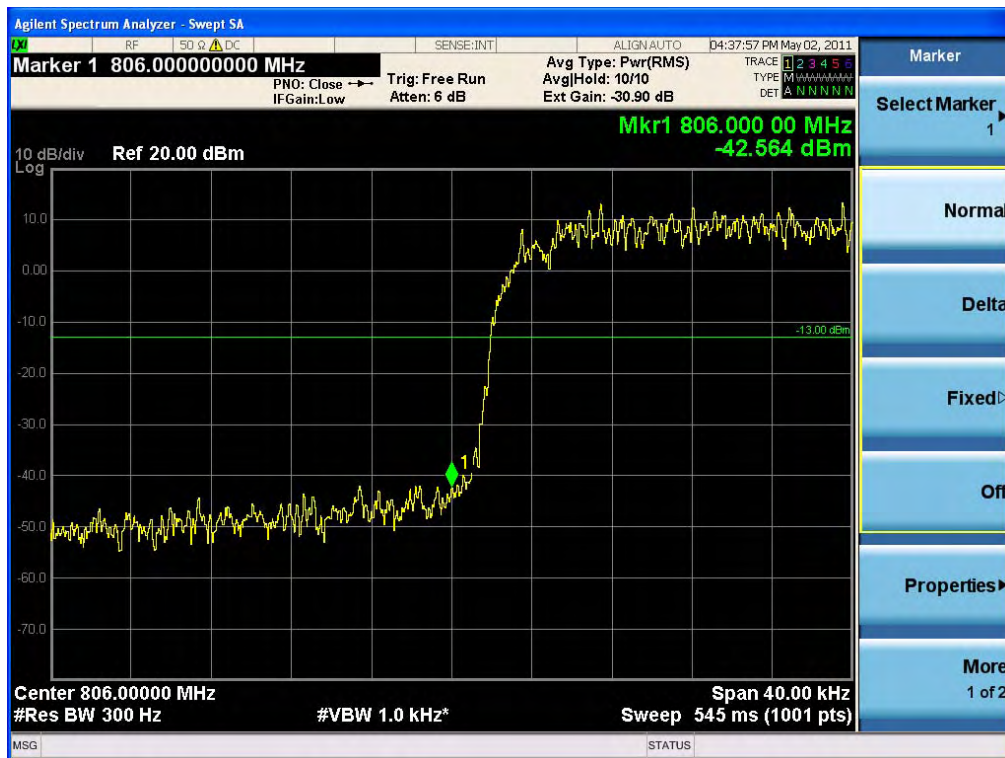
Plots of BAND EDGE



(iDEN800 Downlink Low CH) -18 MHz



(iDEN800 Downlink High CH) - 18 MHz



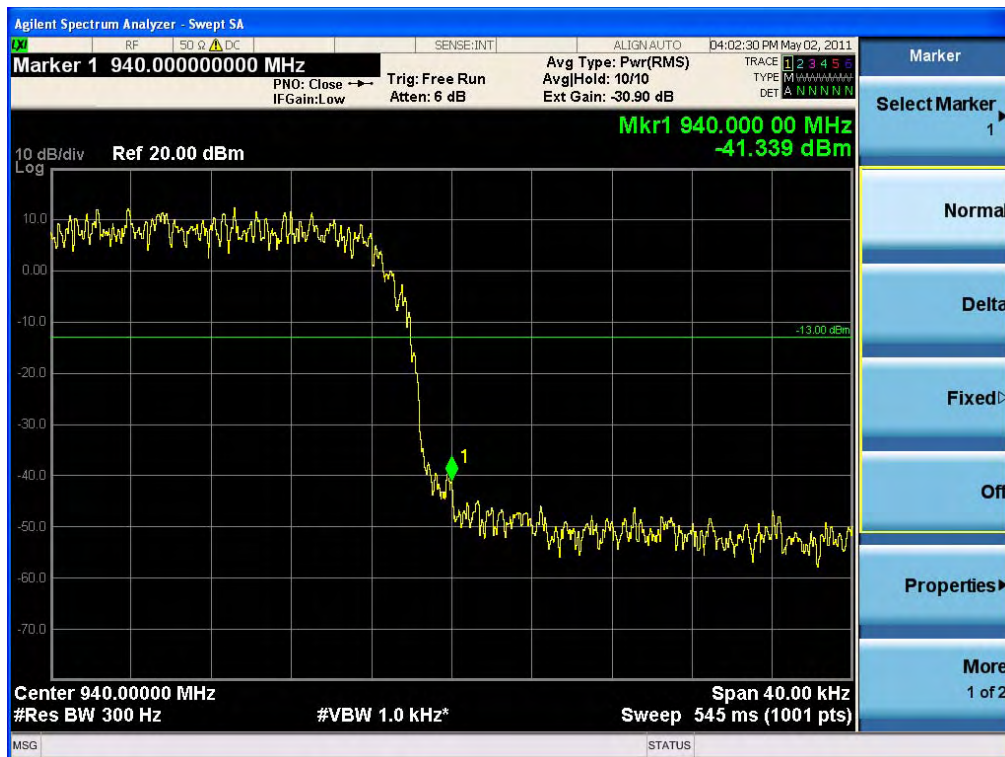
(iDEN800 Uplink Low CH) - 18 MHz



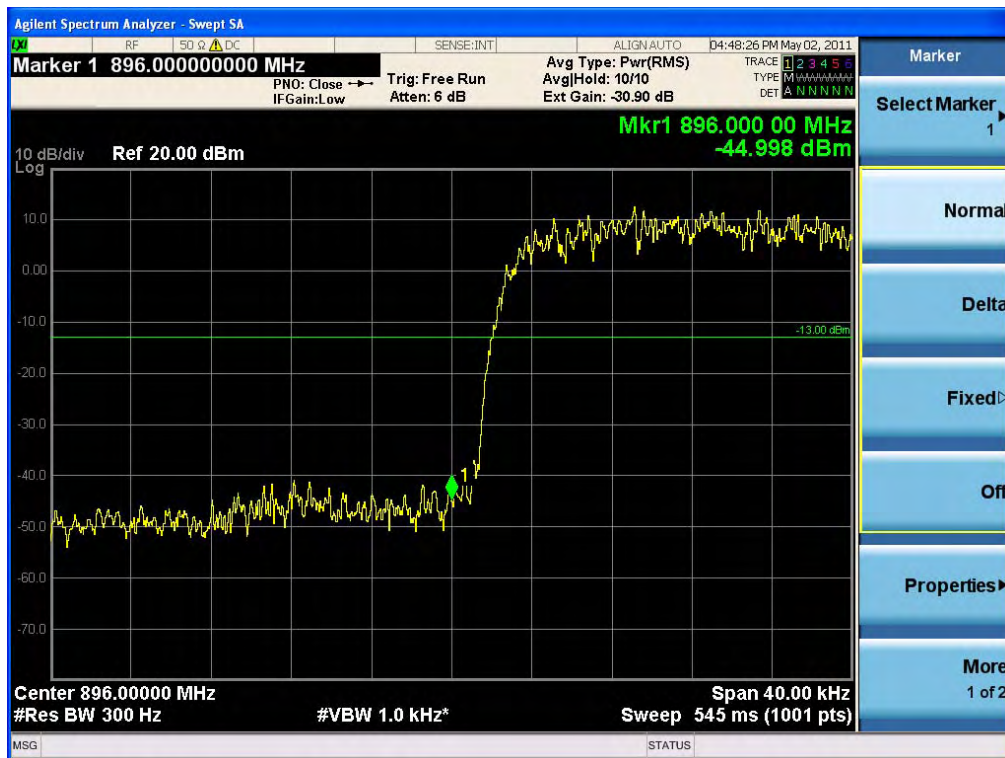
(iDEN800 Uplink High CH) - 18 MHz



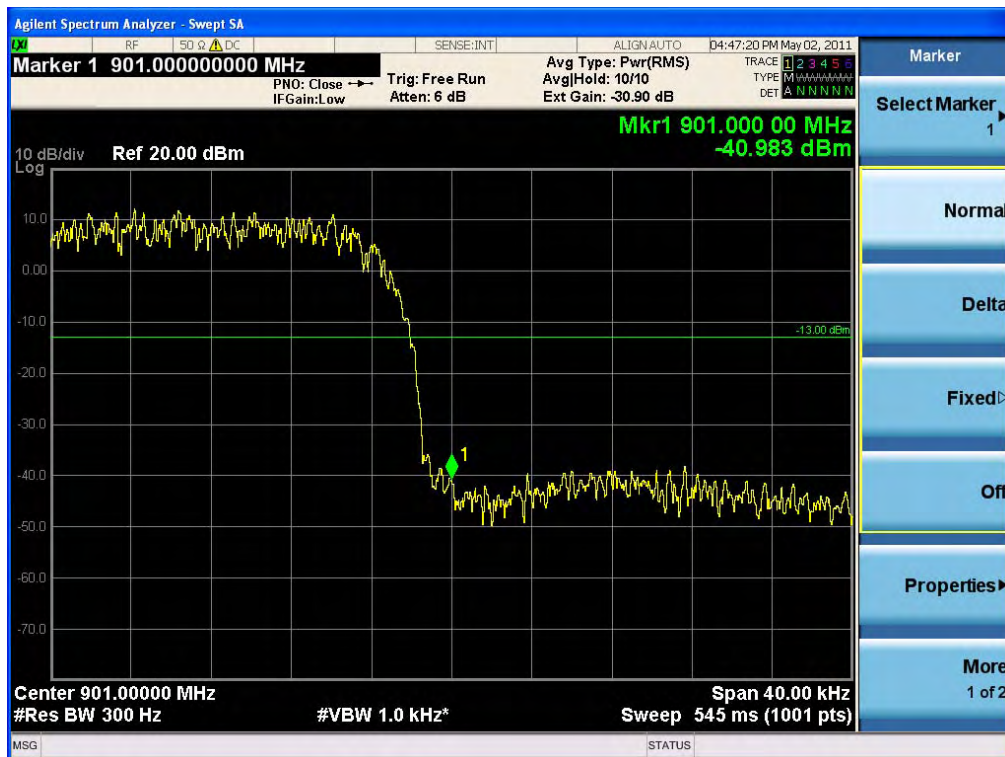
(iDEN900 Downlink Low CH)



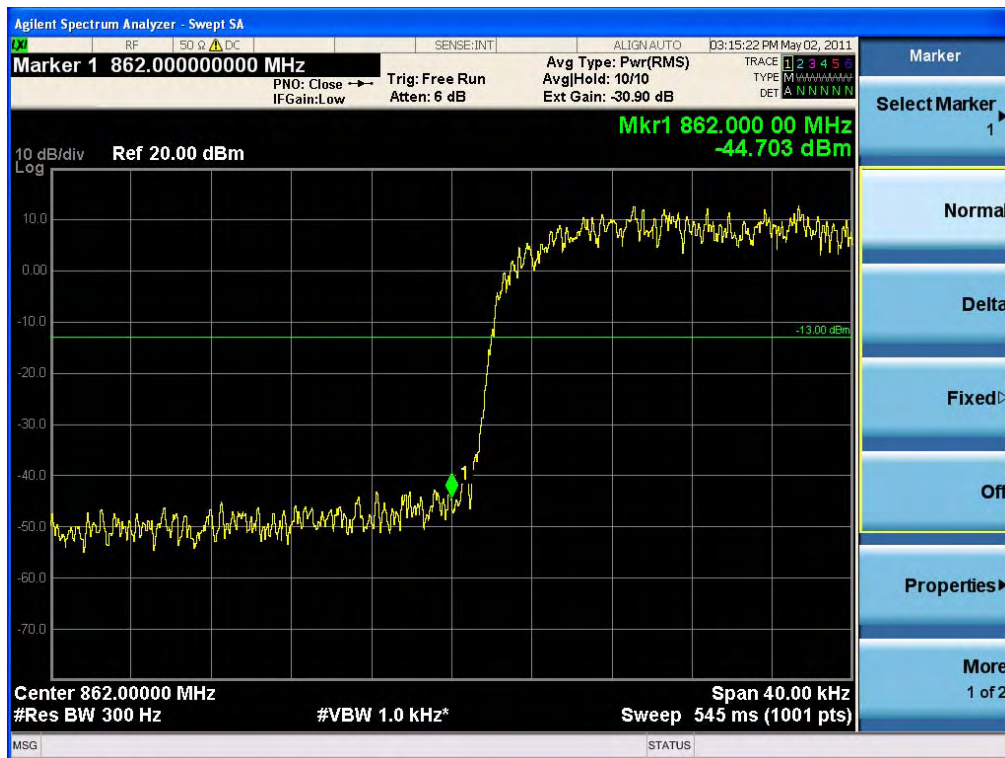
(iDEN900 Downlink High CH)



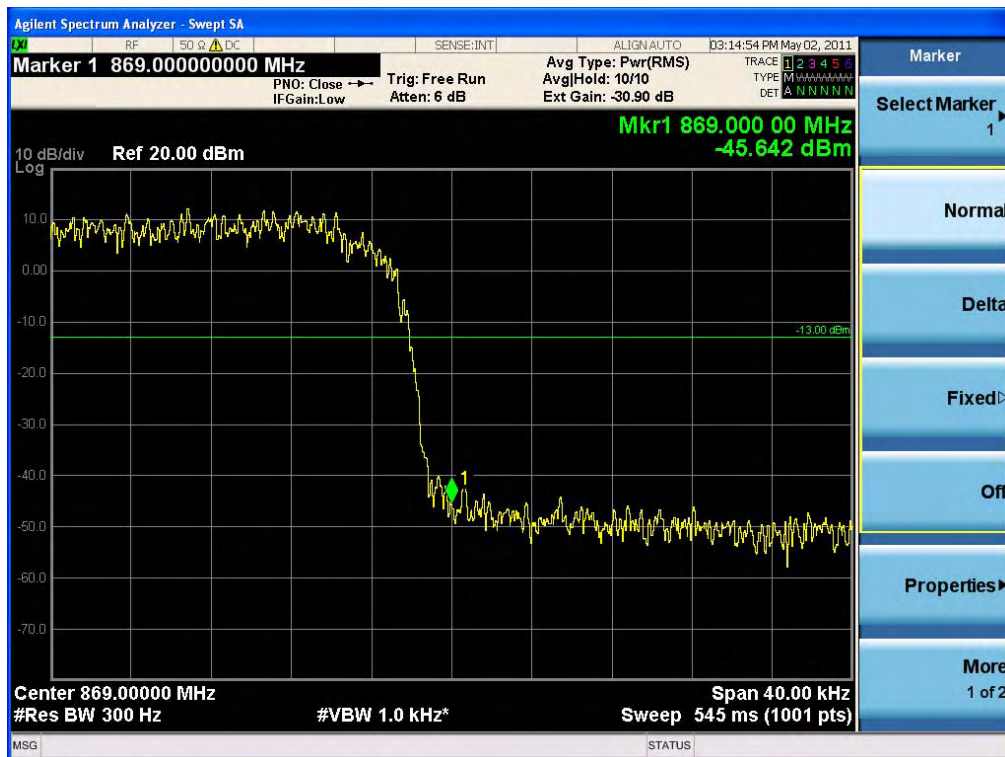
(iDEN900 Uplink Low CH)



(iDEN900 Uplink High CH)



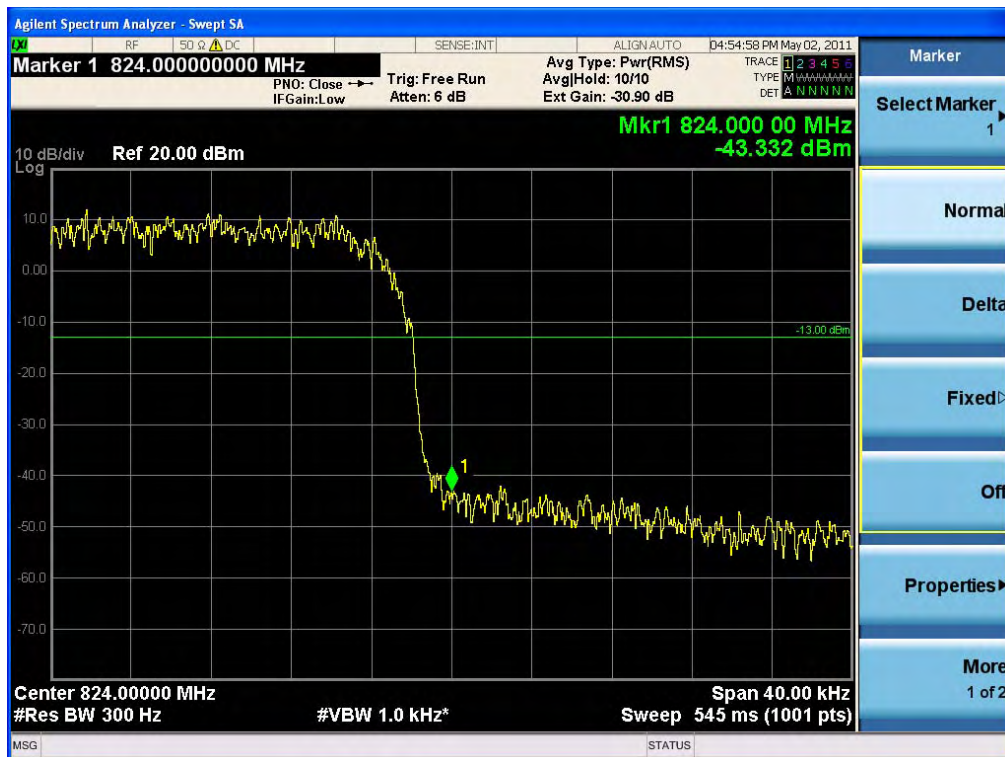
(iDEN800 Downlink Low CH) - 7 MHz



(iDEN800 Downlink High CH) - 7 MHz

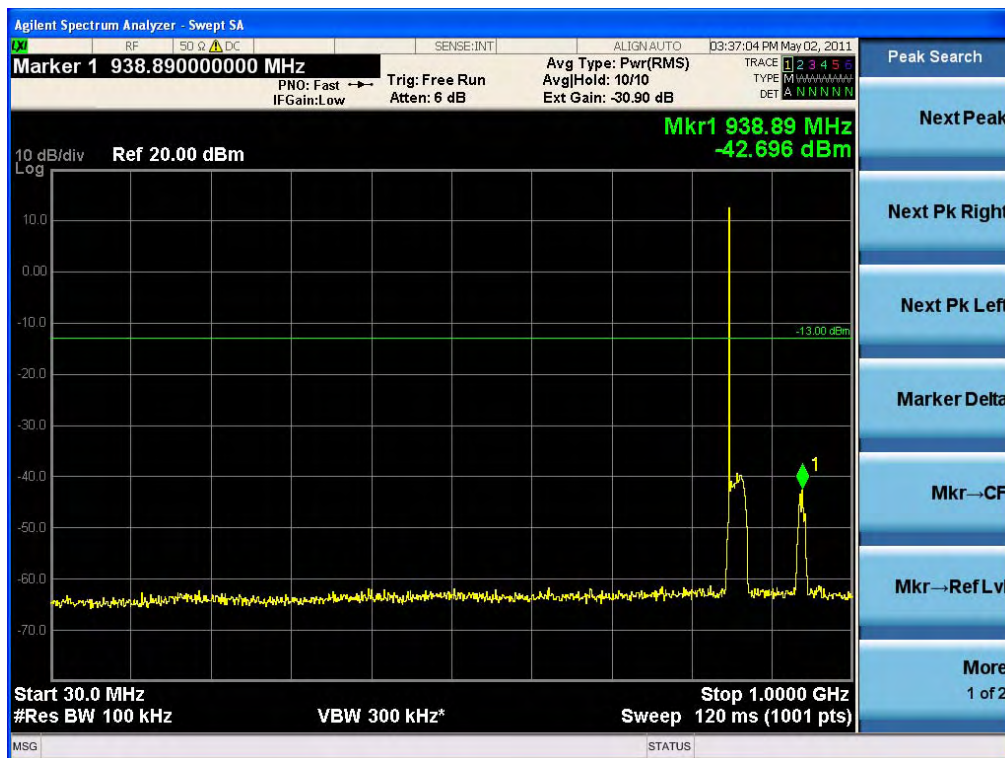


(iDEN800 Uplink Low CH) - 7 MHz



(iDEN800 Uplink High CH) - 7 MHz

Plots of Spurious Emission, iDEN800- 18 MHz



Conducted Spurious Emissions Downlink Low CH (30 MHz – 1 GHz)



Conducted Spurious Emissions Downlink Low CH (1 GHz – 26.5 GHz)

HCT Co., Ltd.

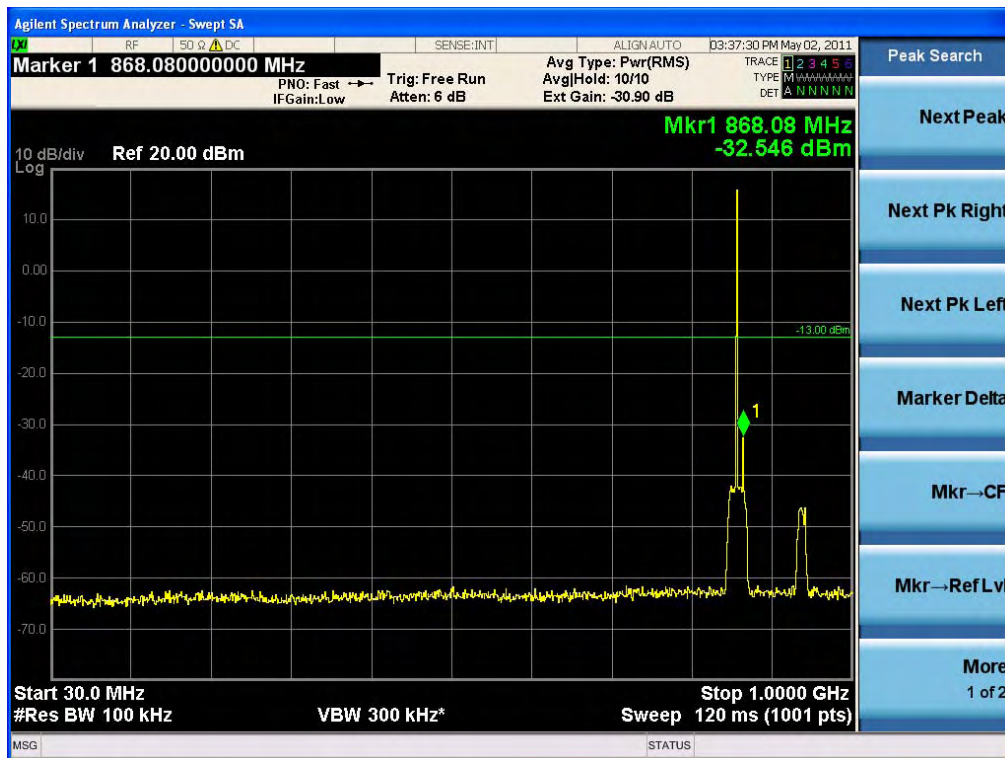
105-1, Jangam-ri, Majang-Myeon, Icheon-si, Kyunggi-Do, Korea

TEL : +82 31 645 6300

FAX : +82 31 645 6401

www.hct.co.kr

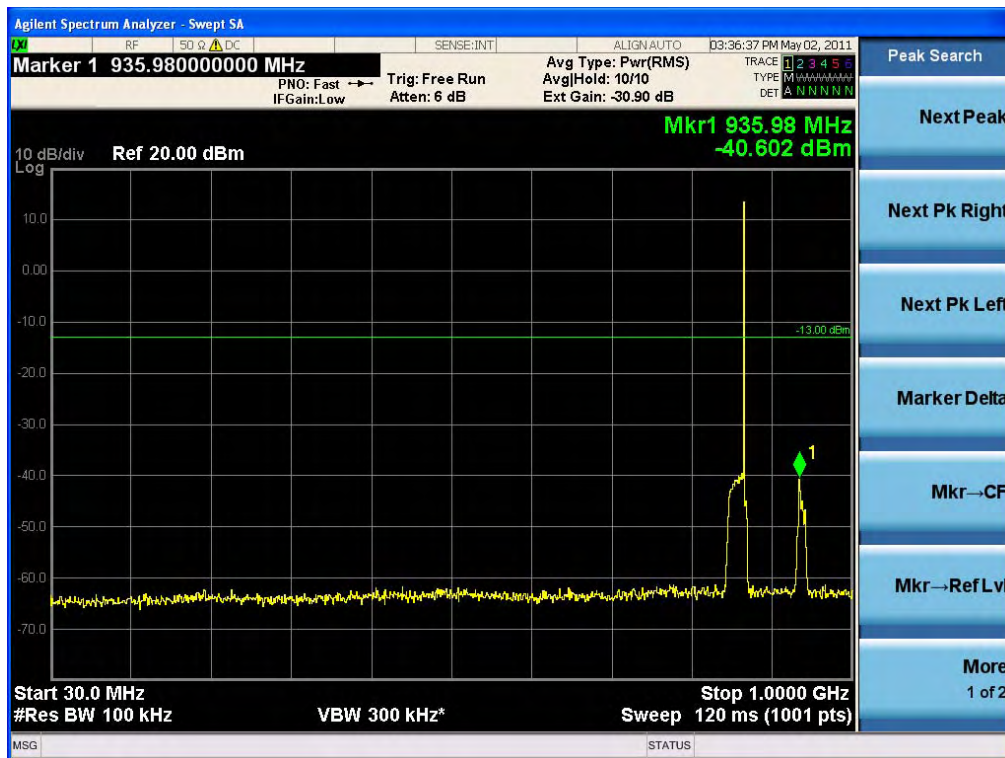
- 47 /92-



Conducted Spurious Emissions Downlink Mid CH (30 MHz – 1 GHz)



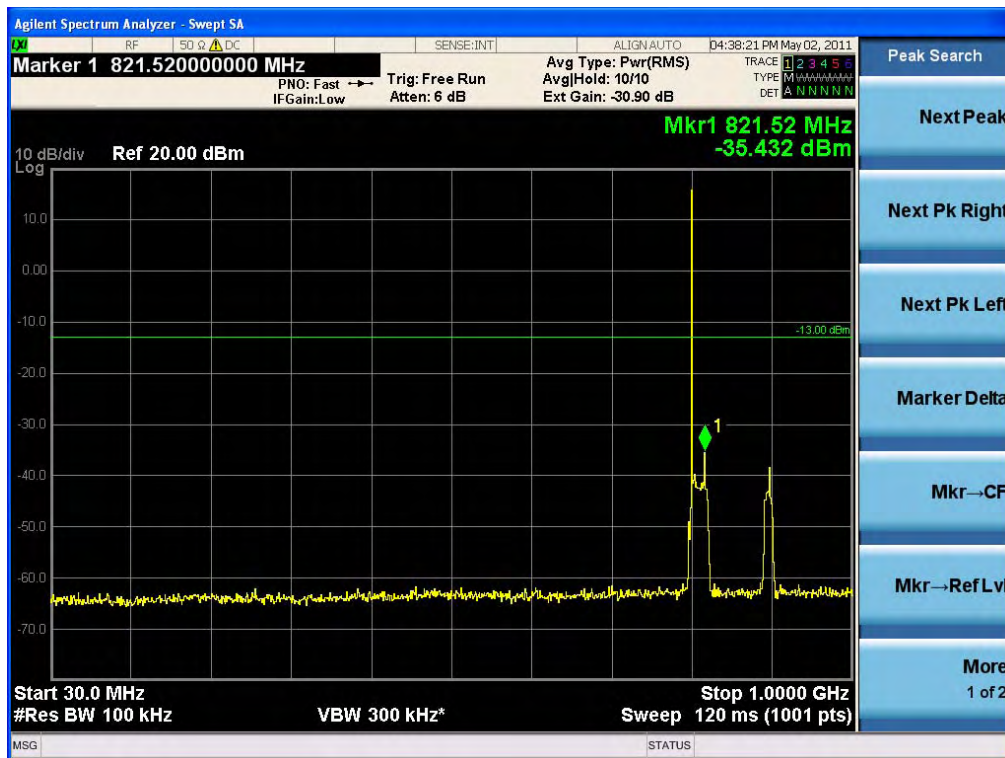
Conducted Spurious Emissions Downlink Mid CH (1 GHz – 26.5 GHz)



Conducted Spurious Emissions Downlink High CH (30 MHz – 1 GHz)



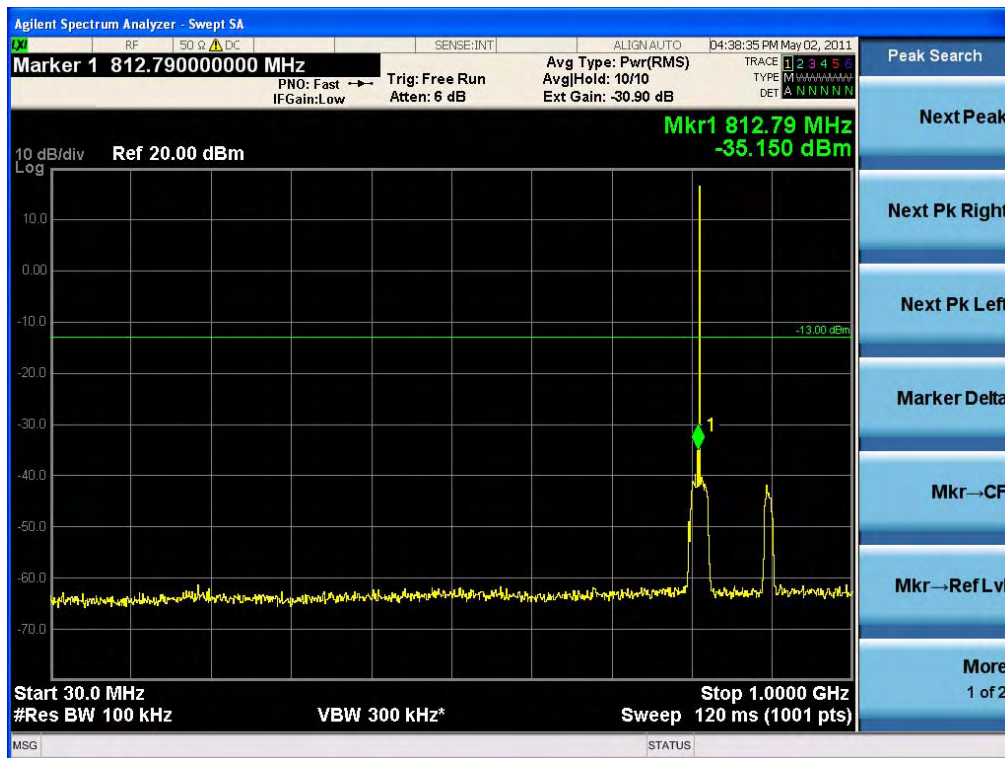
Conducted Spurious Emissions Downlink High CH (1 GHz – 26.5 GHz)



Conducted Spurious Emissions Uplink Low CH (30 MHz – 1 GHz)



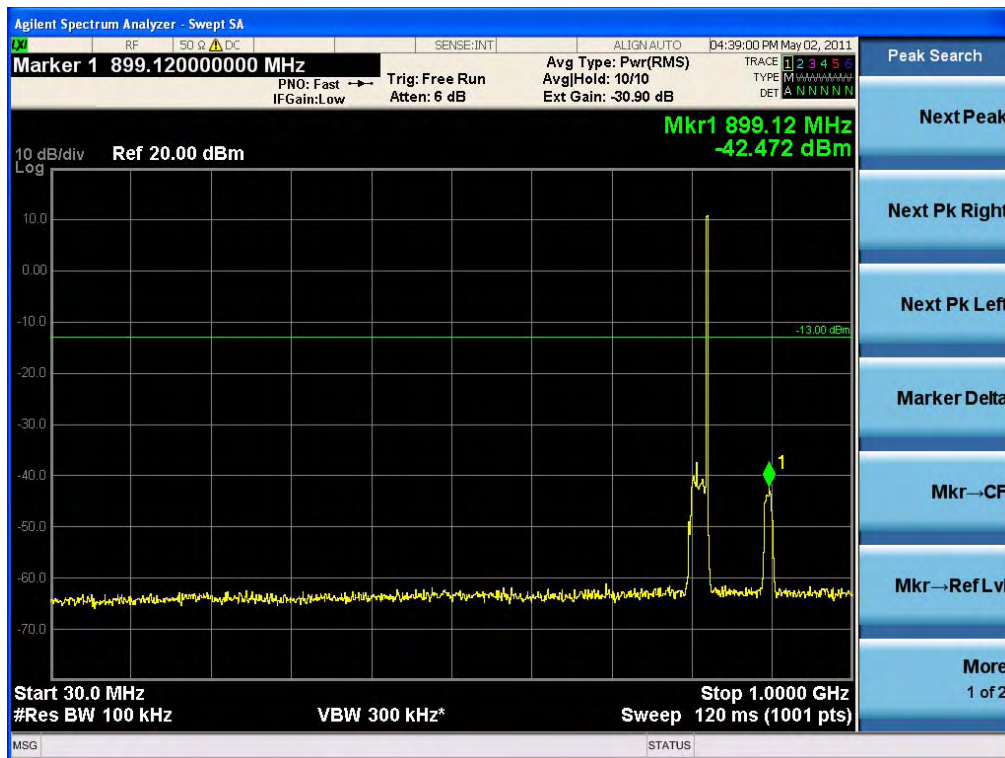
Conducted Spurious Emissions Uplink Low CH (1 GHz – 26.5 GHz)



Conducted Spurious Emissions Uplink Mid CH (30 MHz – 1 GHz)



Conducted Spurious Emissions Uplink Mid CH (1 GHz – 26.5 GHz)

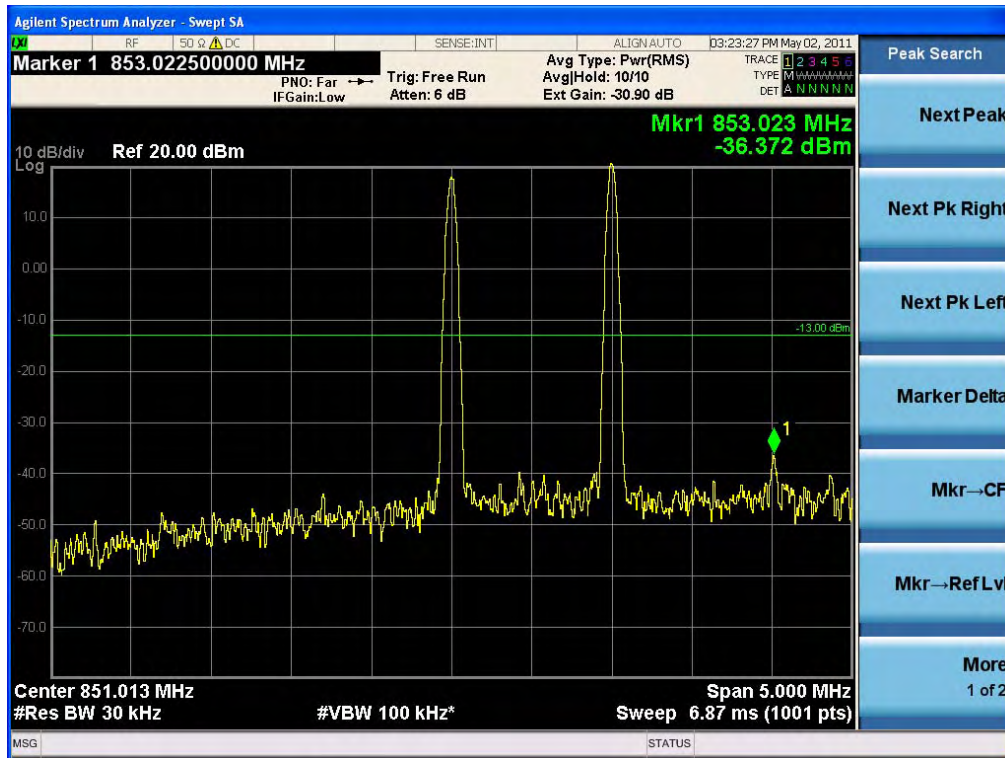


Conducted Spurious Emissions Uplink High CH (30 MHz – 1 GHz)

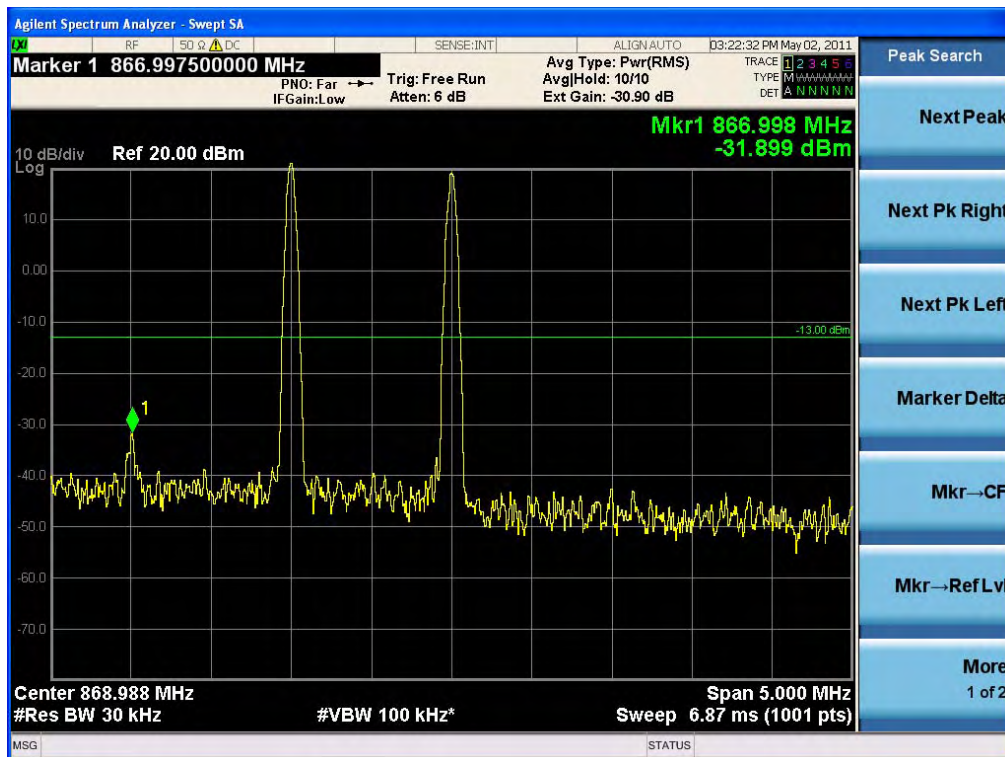


Conducted Spurious Emissions Uplink High CH (1 GHz – 26.5 GHz)

Plots of Two Tone Intermodulation, iDEN 800- 18 MHz



Two Tone Downlink Low End Intermodulation



Two Tone Downlink Hi End Intermodulation

HCT Co., Ltd.

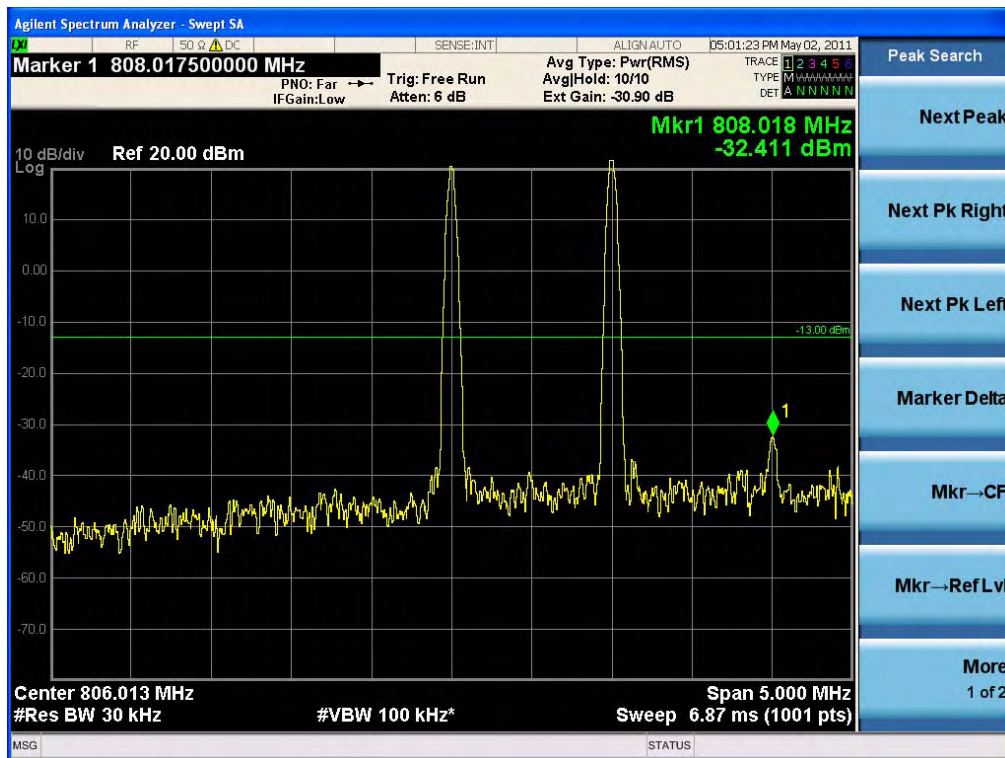
105-1, Jangam-ri, Majang-Myeon, Icheon-si, Kyunggi-Do, Korea

TEL : +82 31 645 6300

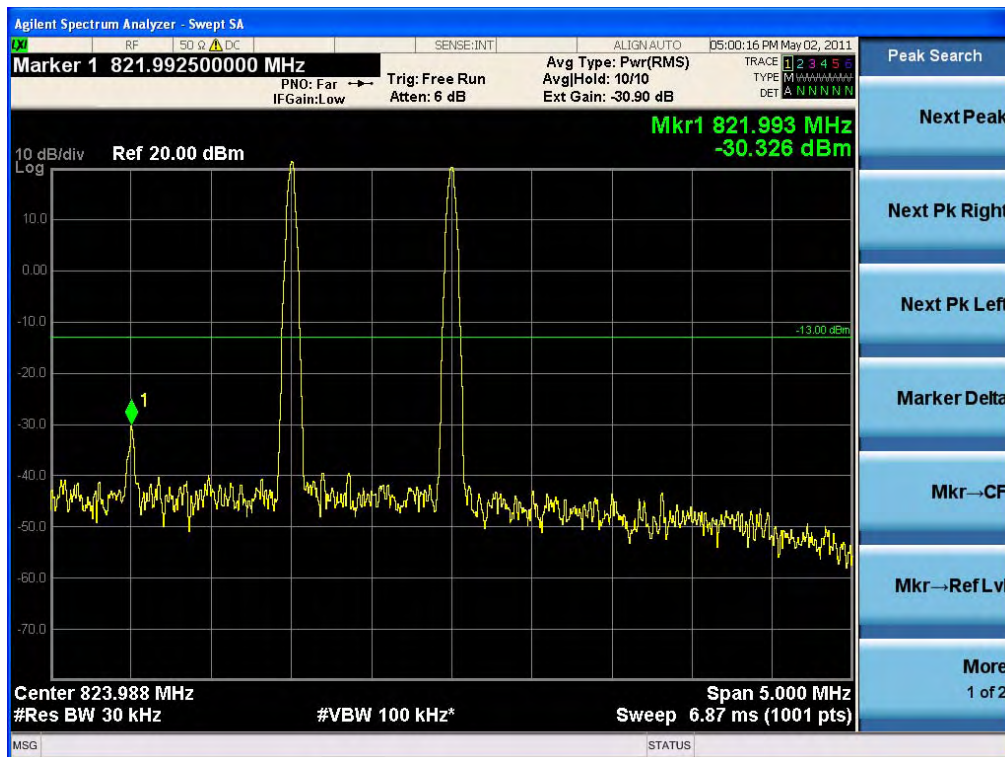
FAX : +82 31 645 6401

www.hct.co.kr

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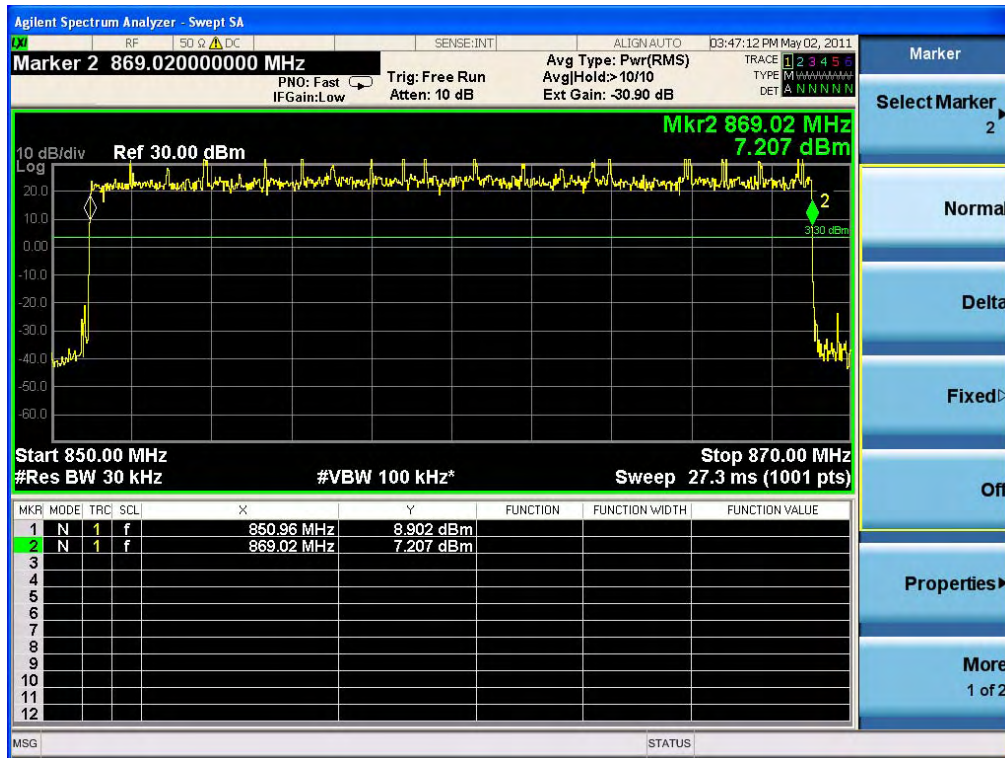


Two Tone Uplink Low End Intermodulation

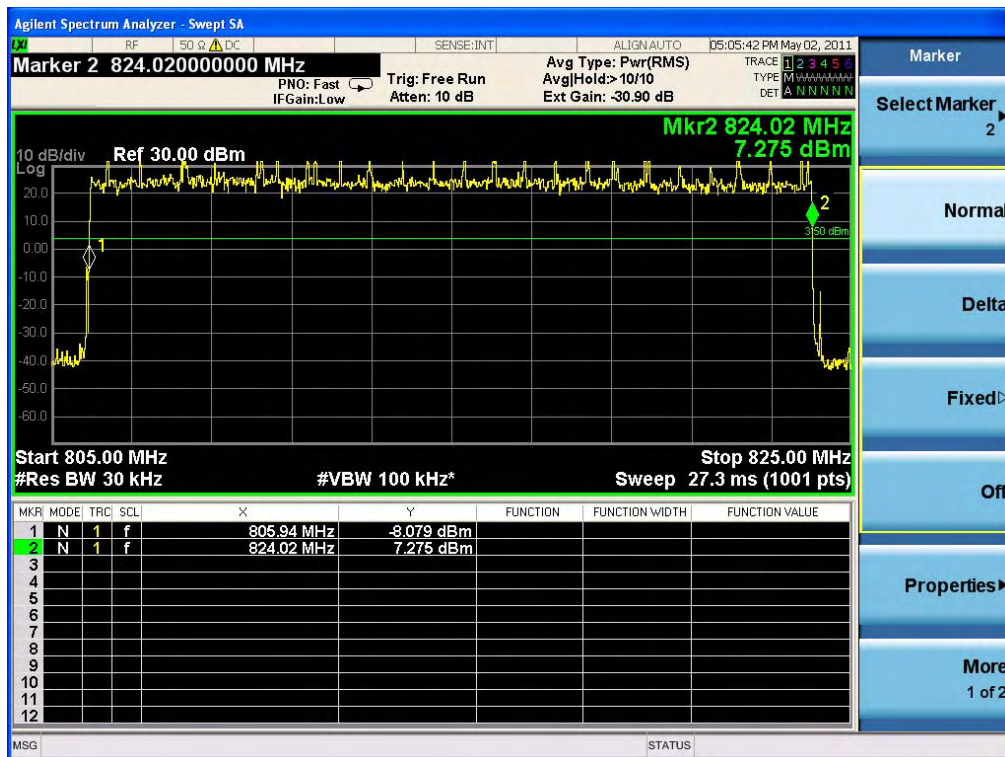


Two Tone Uplink Hi End Intermodulation

Plots of Band Reject iDEN800- 18 MHz



(iDEN800 Downlink Mid CH) -18 MHz



(iDEN800 Uplink Mid CH) - 18 MHz

Plots of Emission Mask iDEN800- 18 MHz

HCT Co., Ltd.

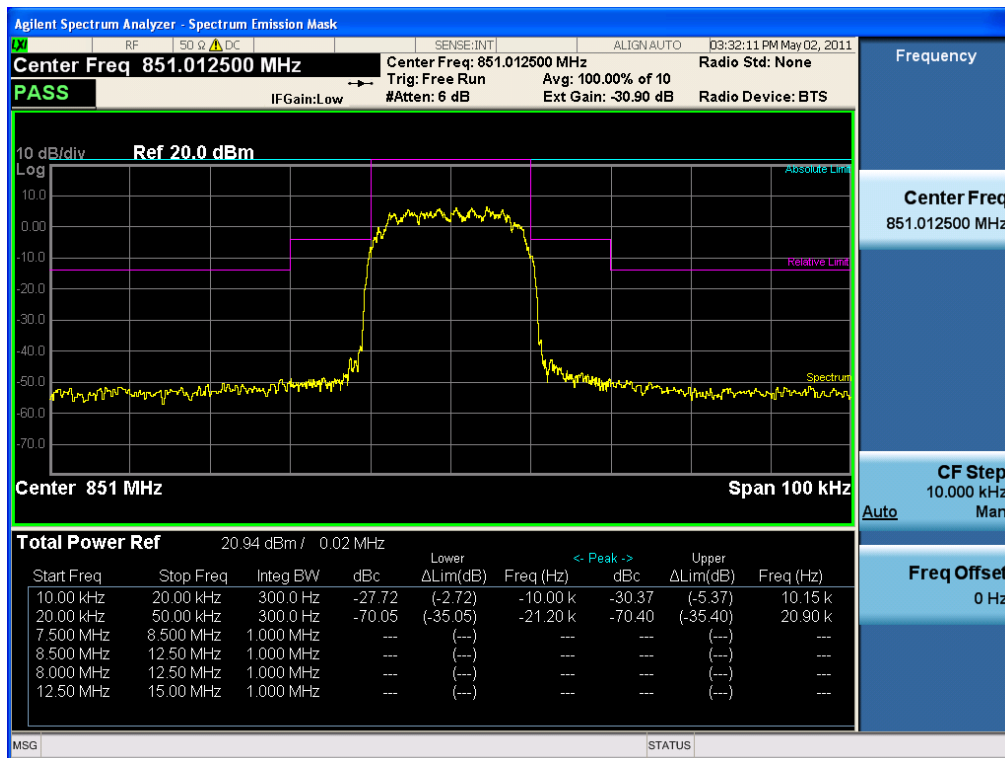
105-1, Jangam-ri, Majang-Myeon, Icheon-si, Kyunggi-Do, Korea

TEL : +82 31 645 6300

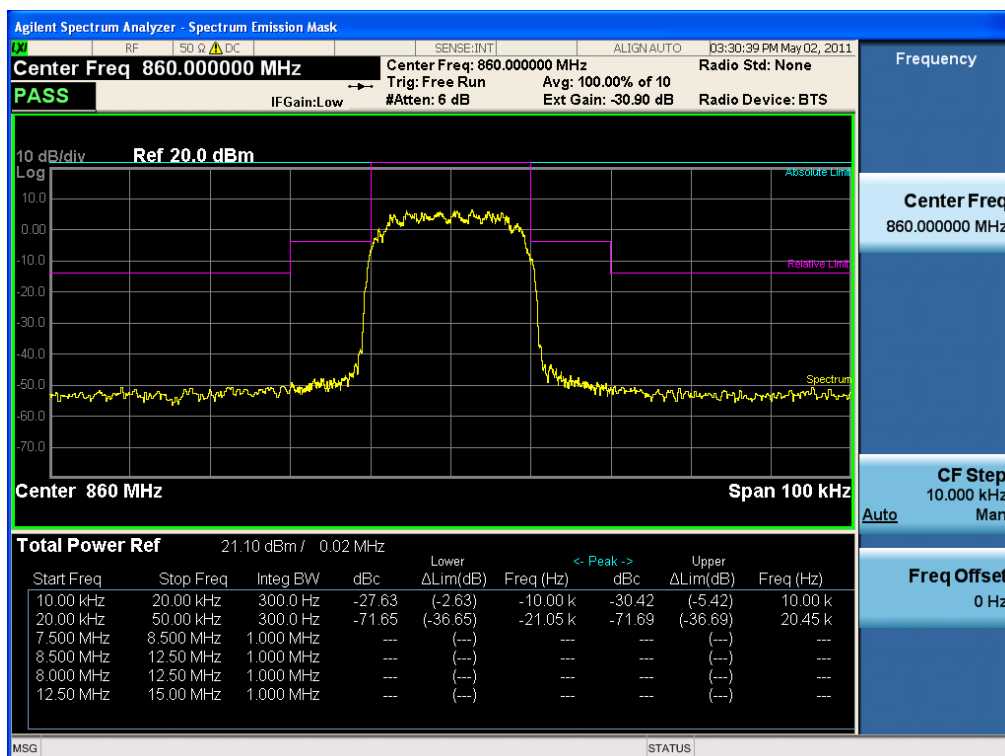
FAX : +82 31 645 6401

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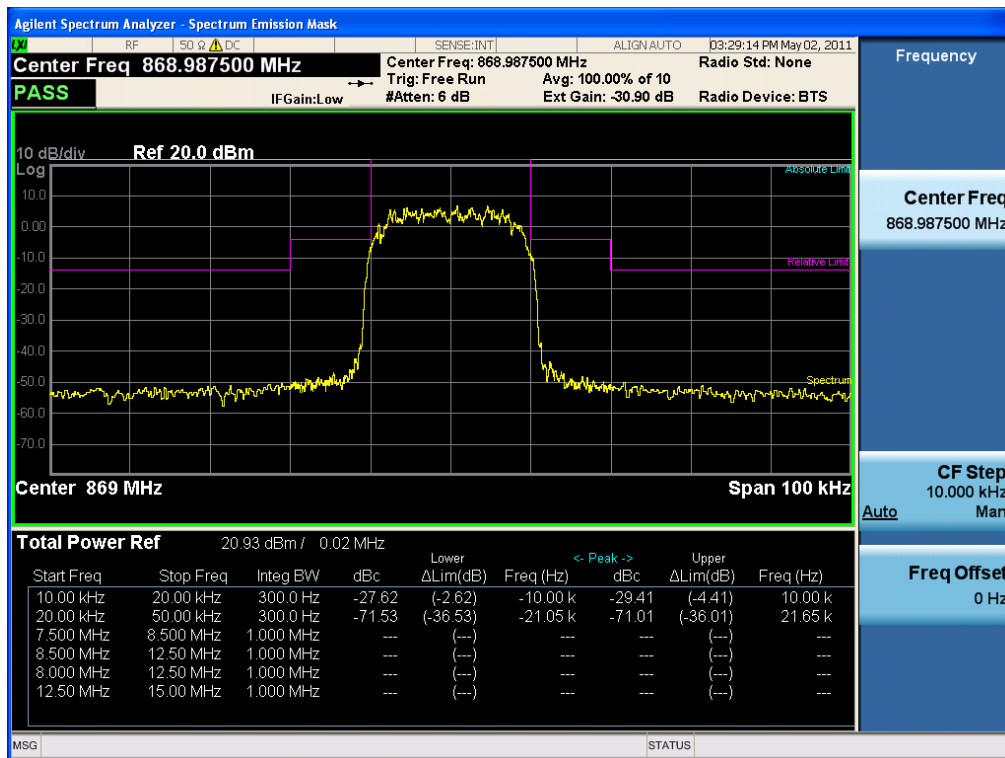
- 55 /92-



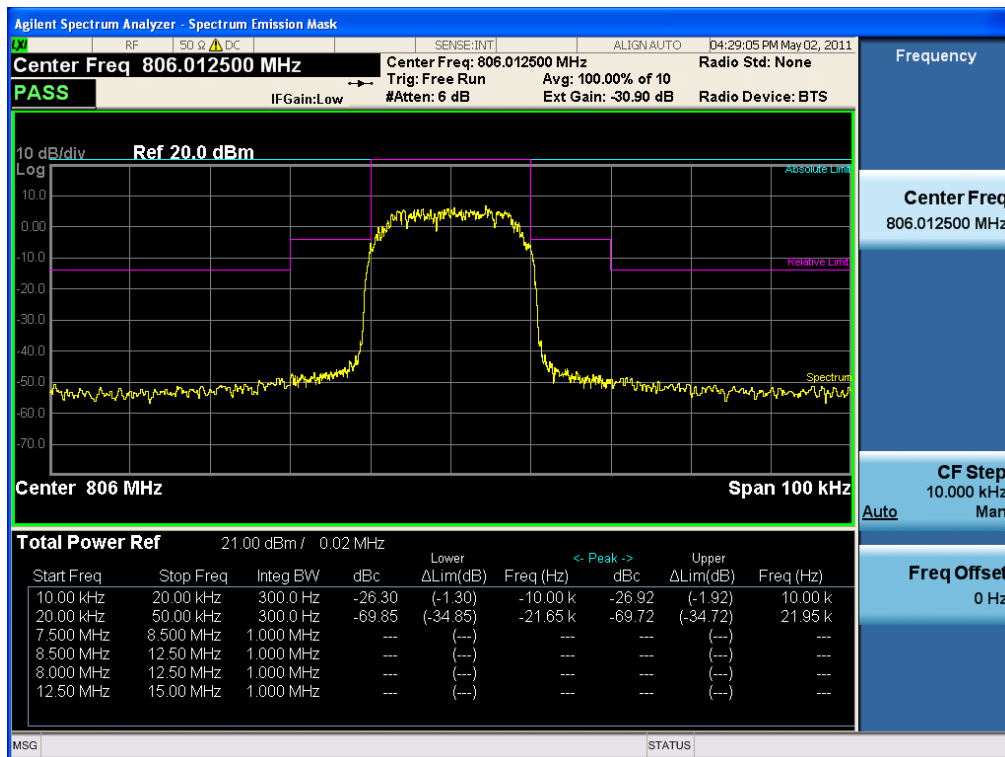
(iDEN800 Downlink Low CH) -18 MHz



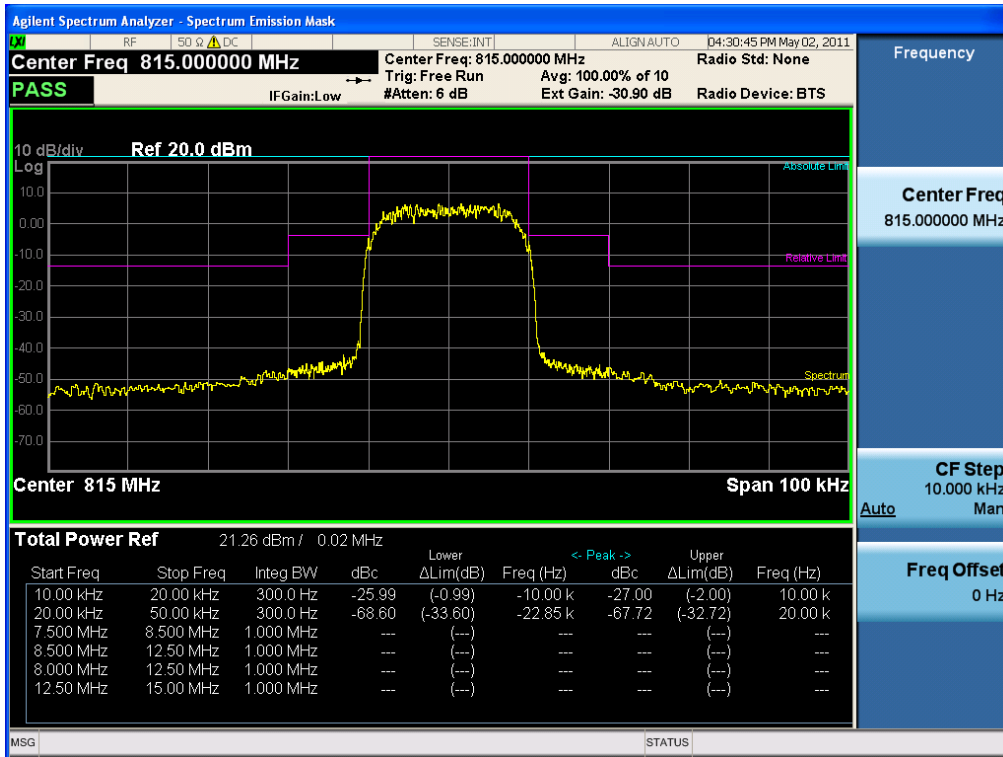
(iDEN800 Downlink Mid CH) -18 MHz



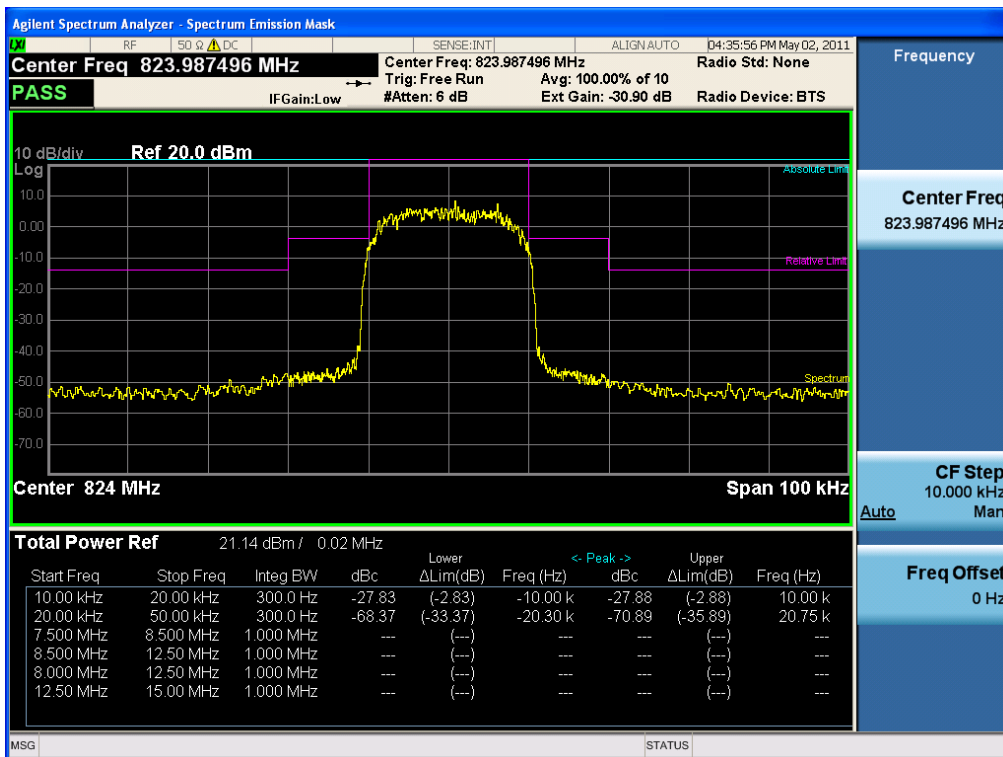
(iDEN800 Downlink High CH) -18 MHz



(iDEN800 Uplink Low CH) - 18 MHz

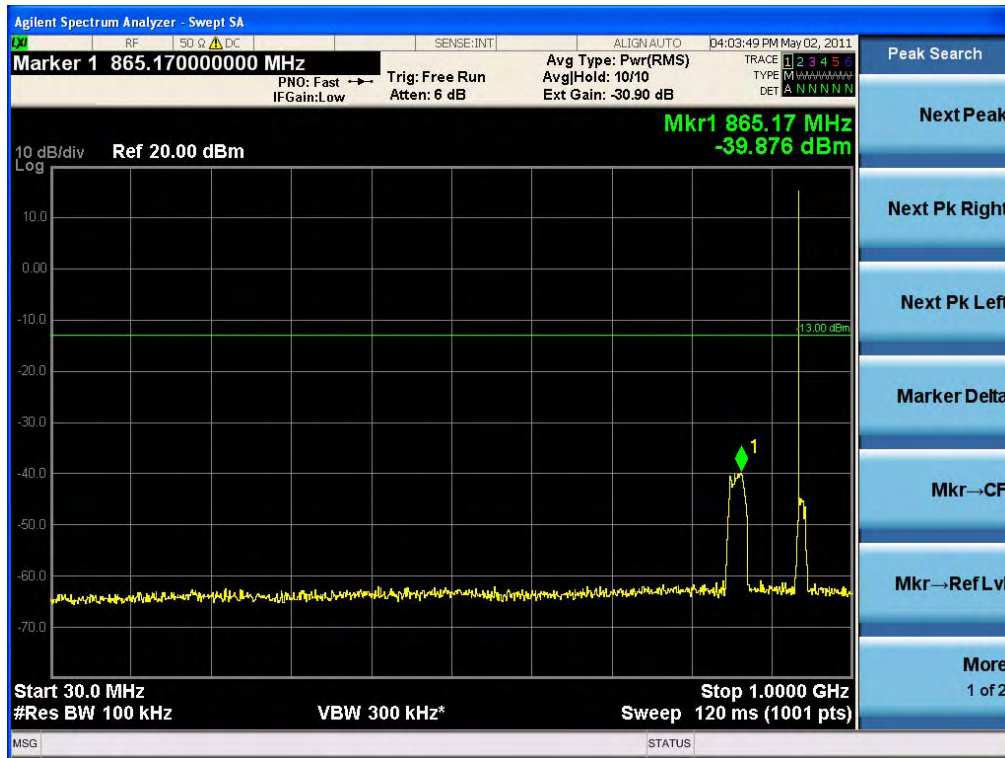


(iDEN800 Uplink Mid CH) - 18 MHz



(iDEN800 Uplink High CH) - 18 MHz

Plots of Spurious Emission, iDEN900



Conducted Spurious Emissions Downlink Low CH (30 MHz – 1 GHz)



Conducted Spurious Emissions Downlink Low CH (1 GHz – 26.5 GHz)

HCT Co., Ltd.

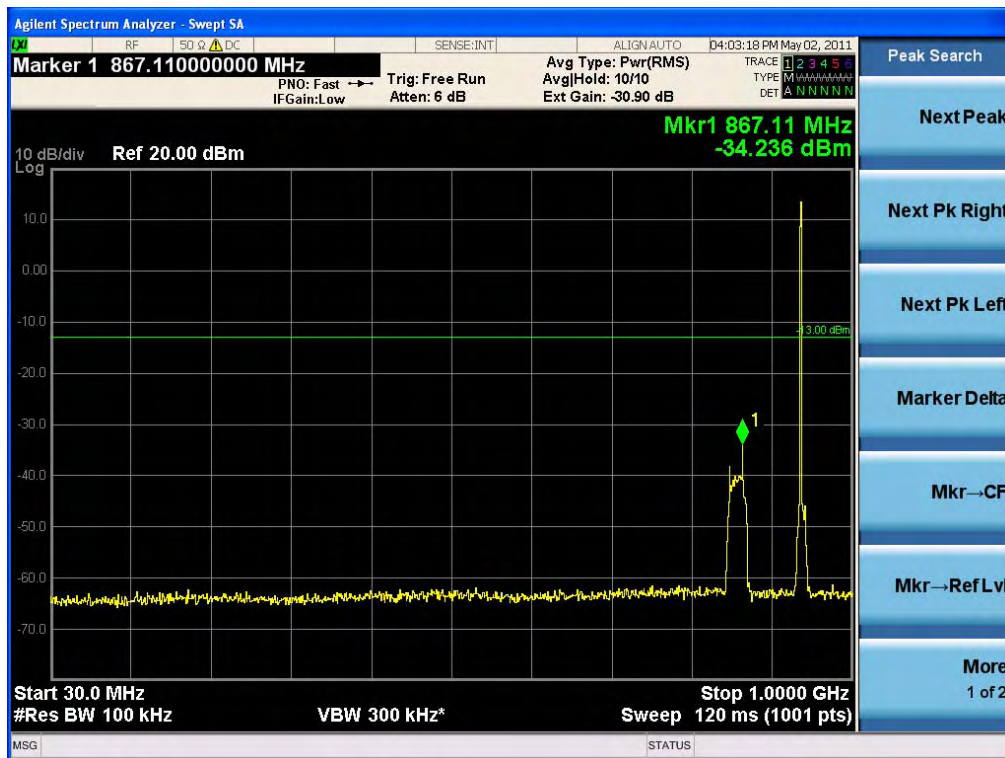
105-1, Jangam-ri, Majang-Myeon, Icheon-si, Kyunggi-Do, Korea

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FAX : +82 31 645 6401

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Conducted Spurious Emissions Downlink Mid CH (30 MHz – 1 GHz)



Conducted Spurious Emissions Downlink Mid CH (1 GHz – 26.5 GHz)