# Exhibit 10 – Test Report

**Table of Contents**:



**Summary**

This test report presents the measurement data required by the Department for certifying the Alcatel-Lucent BTS, subject of this application, under FCC ID: AS5 ONEBTS-24. All the testing was performed during the period 15 April 2009 to 30 June 2009.

The AS5ONEBTS-24 transmit path includes the Alcatel-Lucent Multi-carrier radio (MCR), highly efficient power amplifier, dual duplex filters and revolutionary Bell Laboratories software for simultaneously shared 3G and 4G technologies at a variety of bandwidths and frequencies. The AS5ONEBTS-24 transceiver utilizes I (in phase) and Q (quadrature) baseband data for advanced modulation schemes including QPSK (Quadrature Phase Shift Keying) and QAM (Quadrature Amplitude Modulation) in high capacity voice and data transmission.

The AS5ONEBTS-24 provides 120 Watts per port / 240 Watts per sector power (up to 10 carriers) in both simplex transmit and diversity transmit including 2x2 MIMO (Multiple Input Multiple Output) and 4x4 MIMO configurations for single carrier (60W maximum)and multi-carrier applications.

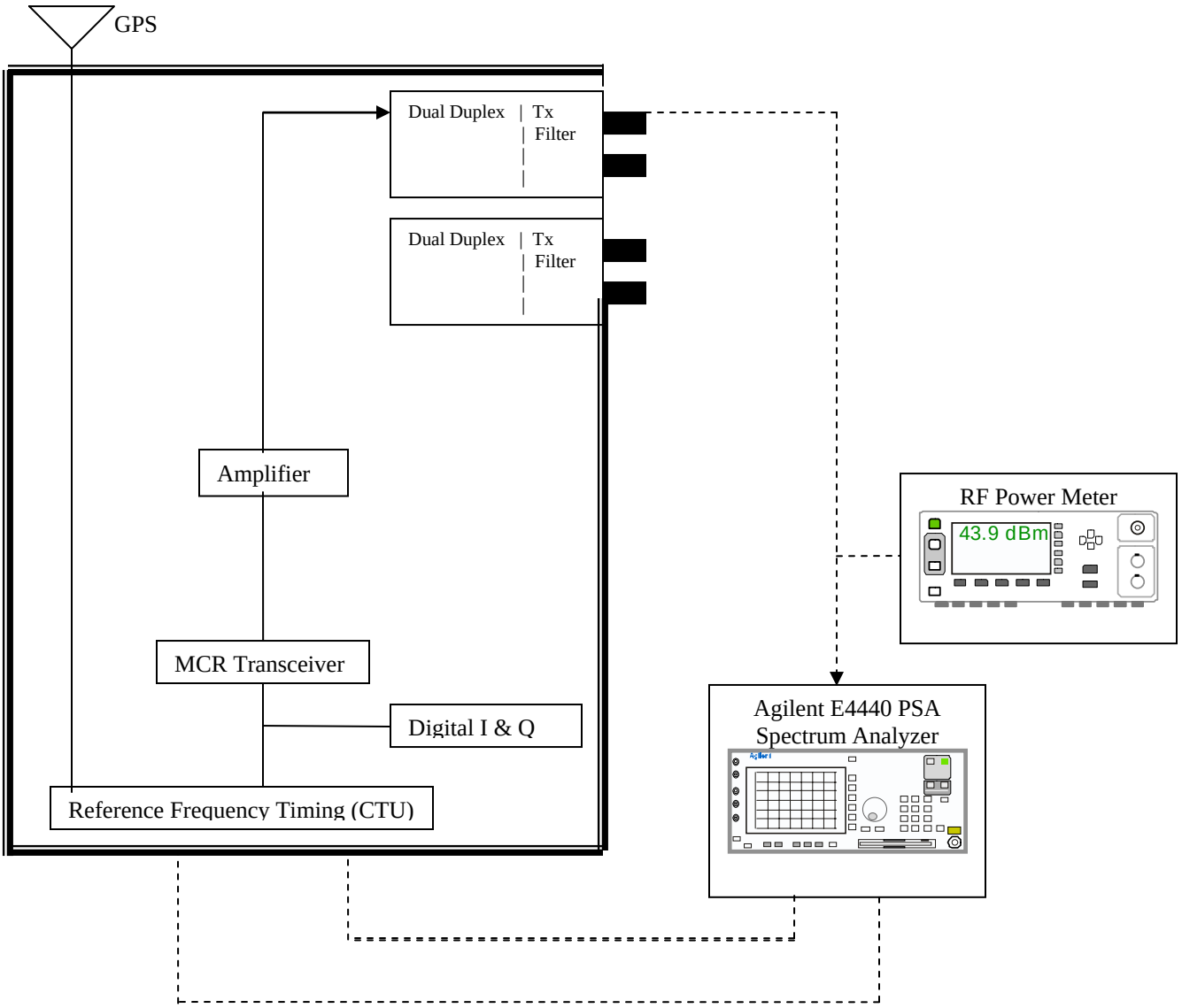
The measurement results have demonstrated the Alcatel Lucent AS5ONEBTS-24 transceiver is in full compliance with the rules of the commission.

For some of the required measurements, where FCC did not provide specific requirements, TIA/EIA and 3GPP/3GPP2 requirements were used.

**Section 2.1033 (c)(14) REQUIRED MEASUREMENT DATA**

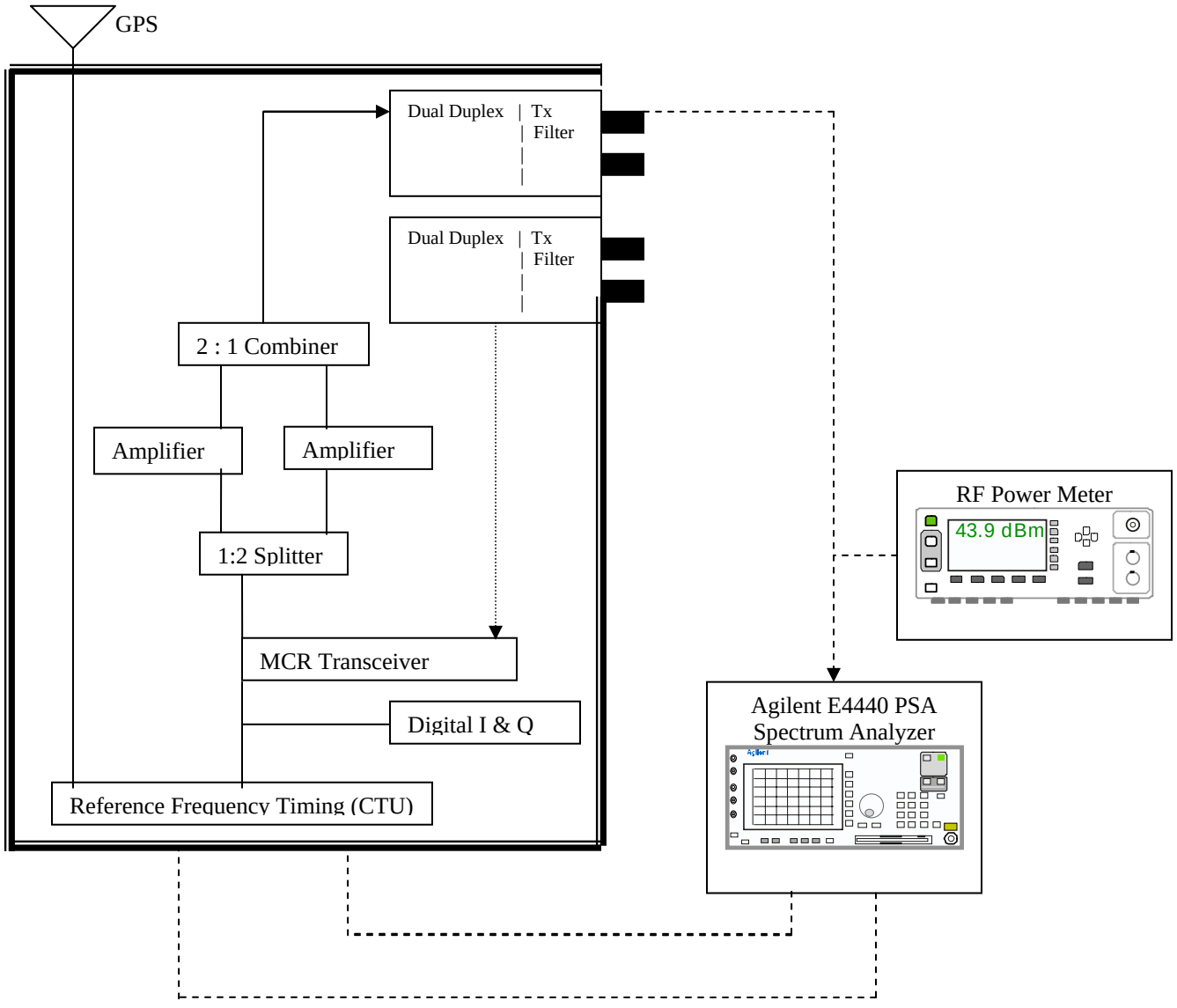
| | | |
|---|---|---|
| 2.1046 | : RF Power<br>: | :PASS |
| 2.1047 | Modulation Characteristics | PASS |
| 2.1049 | Occupied Bandwidth | PASS |
| 2.1051 | Spurious Emissions at Antenna Terminals | PASS |
| 2.1053 | Field Strength of Spurious Radiation | PASS |
| 2.1055 | Frequency Stability | PASS |

# Test Setup – Simplex Transmit 1,2 & 3 carriers



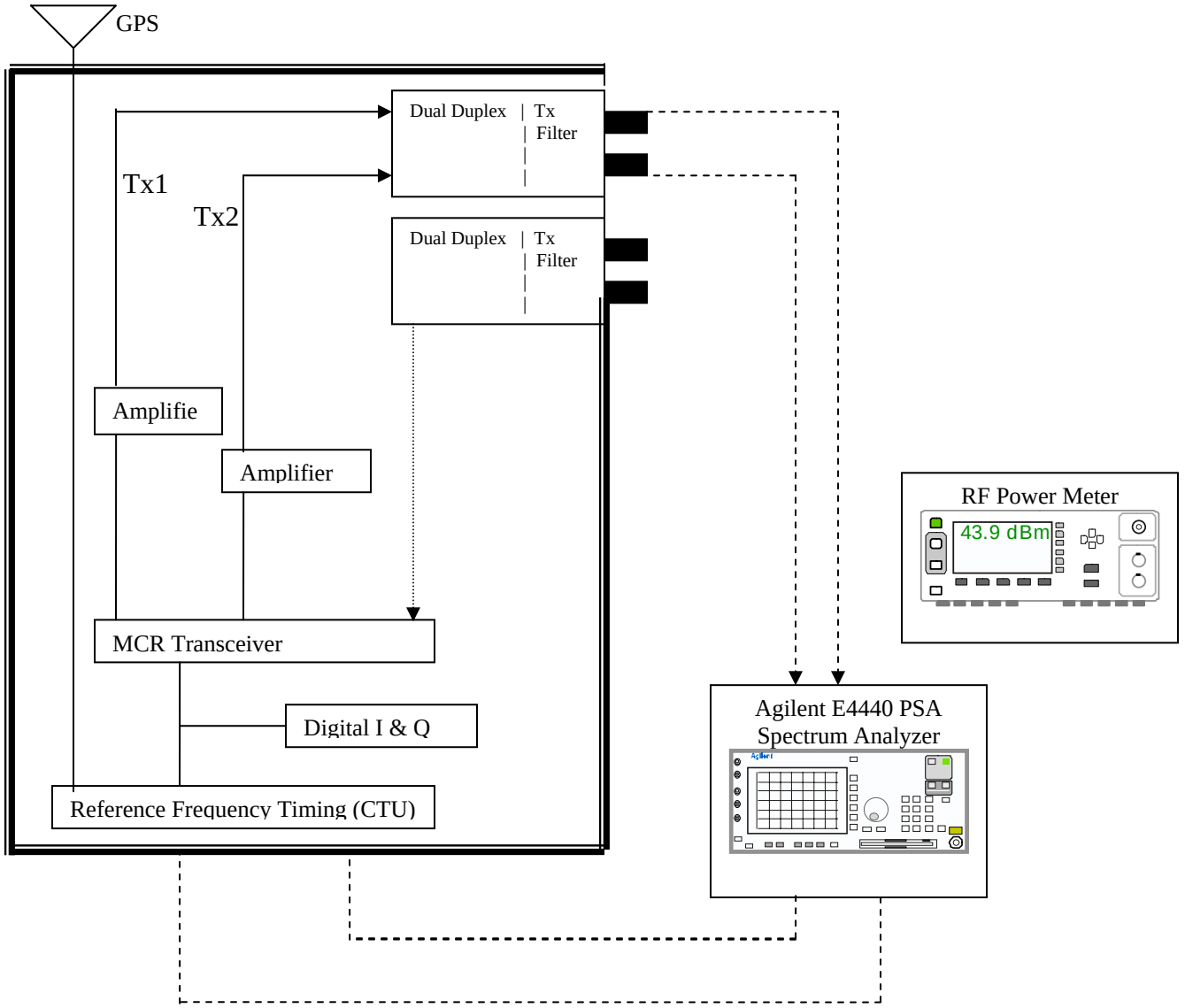

i Trigger Pulse & 19.668 MHz Reference

# Test Setup – Simplex Transmit 4 & 5 carriers



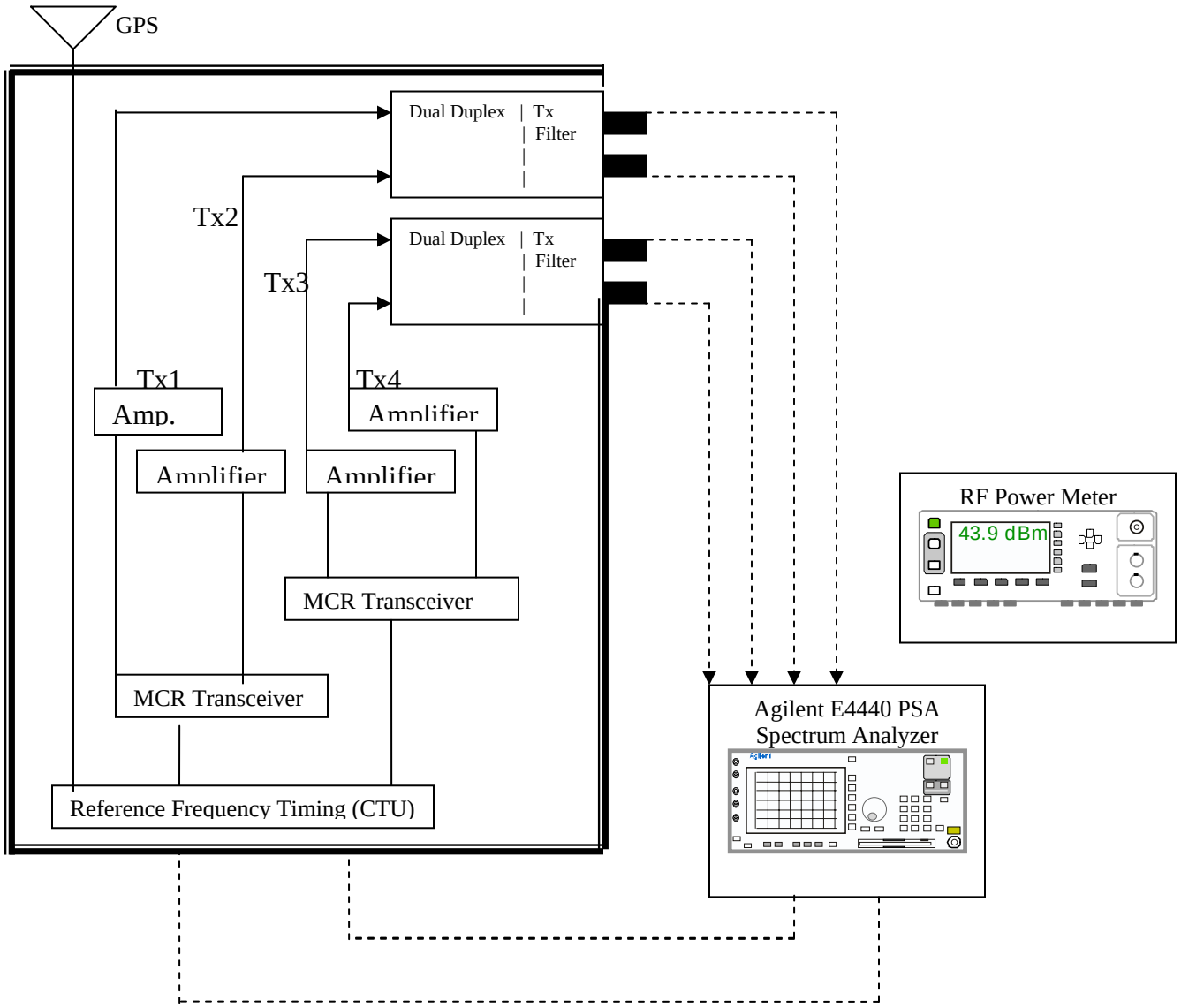

P Trigger Pulse & 19.668 MHz Reference

# Test Setup – Diversity Transmit 2 carrier (2x2 MIMO)




Trigger Pulse & 19.668 MHz Reference

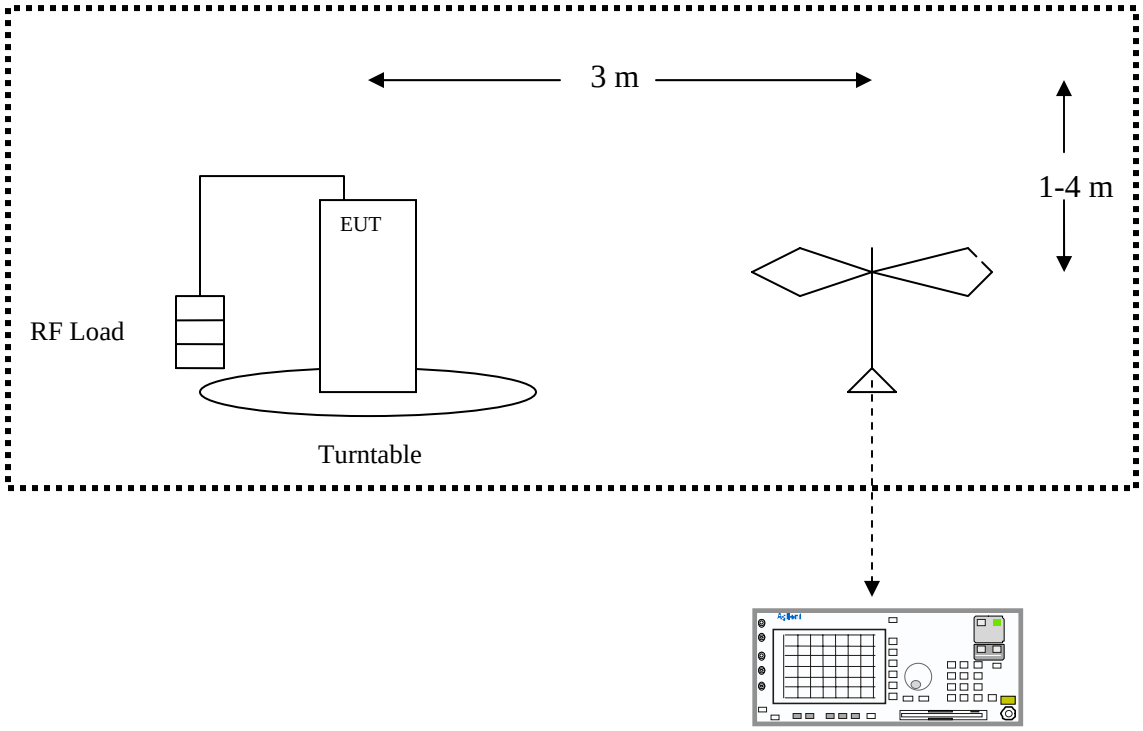
## Test Setup – Diversity Transmit 4 carrier (4x4 MIMO)



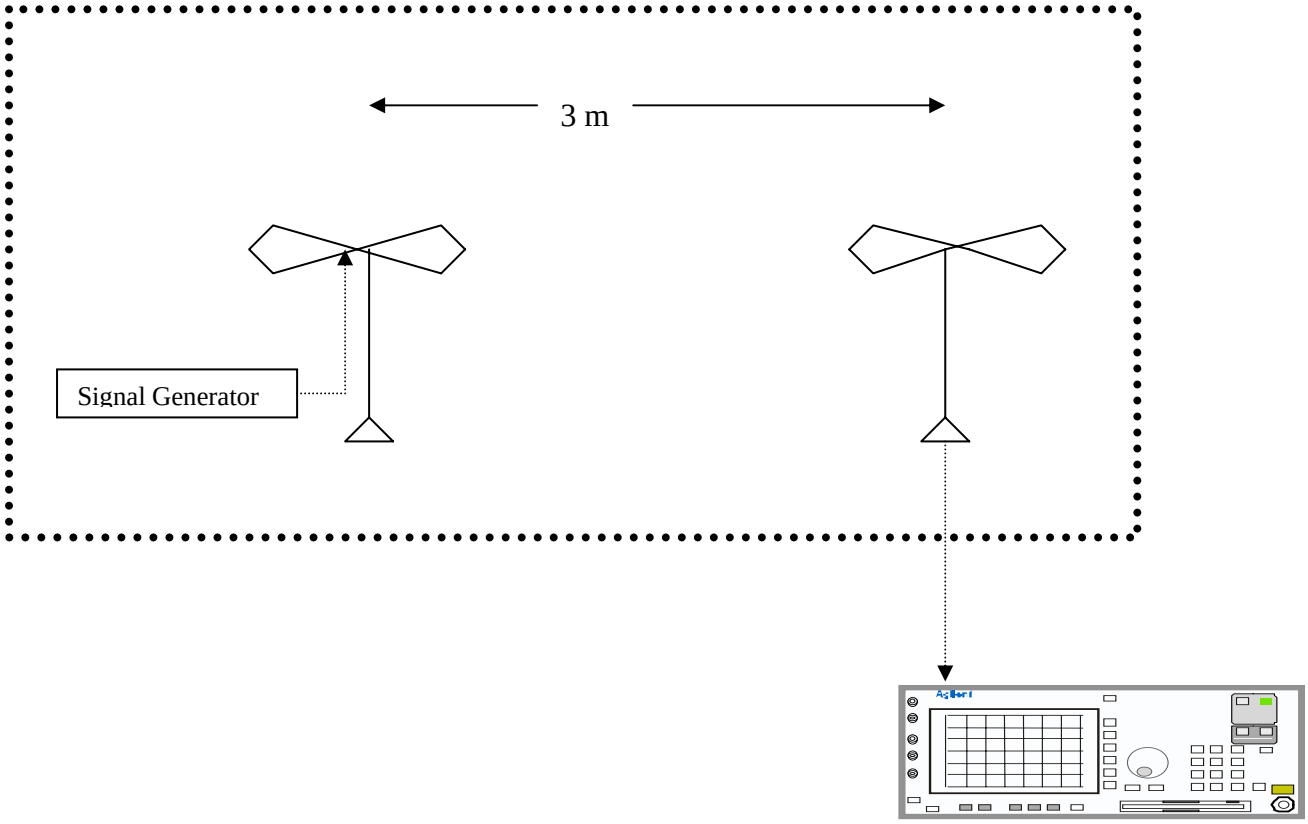

Trigger Pulse & 19.668 MHz Reference

# Test Setup – Radiated Spurious Emissions

## Pre-Test



# Test Setup – Radiated Spurious Emission
# Final Test – Substitution Method



**Section 2.947 LISTING OF TEST EQUIPMENT USED**

| Equipment | Manufacturer | Model | Serial No. | Calibrated Date | Due Cal. Date |
|---|---|---|---|---|---|
| 1.5 GHz Filter | Agilent | | 84300-80037 | N/A | N/A |
| 3.5 GHz Filter | Agilent | | 84300-80038 | N/A | N/A |
| 8.2 GHz Filter | Agilent | | 84300-80039 | N/A | N/A |
| Spectrum Analyzer | Agilent | E4440A | US42221614 | 10/20/08 | 10/20/09 |
| Coaxial Resistor | Bird | 8201 | 4252 | N/A | N/A |
| Coaxial Resistor | Bird | 8329 | 204506 | N/A | N/A |
| Coaxial Resistor | Bird | 8890-300 | 2289 | N/A | N/A |
| Antenna Positioning System | EMCO | 1051 | 1321 | N/A | N/A |
| Bore Sight Antenna Mast | EMCO | 2071-2 | 2239 | N/A | N/A |
| Antenna Mast | EMCO | 2075-2 | 2388 | N/A | N/A |
| Biconical Antenna | EMCO | 3110B | 3127 | 3/16/09 | 4/16/10 |
| Biconical Antenna | EMCO | 3110B | 3128 | 3/16/09 | 4/16/10 |
| Horn Antenna | EMCO | 3115 | 3324 | 4/20/09 | 5/20/10 |
| Horn Antenna | EMCO | 3115 | 5638 | 3/8/09 | 4/8/10 |
| Log Periodic Antenna | EMCO | 3148 | 1030 | 3/12/09 | 4/12/10 |
| Log Periodic Antenna | EMCO | 3148 | 1029 | 3/12/09 | 4/12/10 |
| Active Rod Antenna | EMCO | 3301B | 9312-3477 | 9/21/08 | 9/21/09 |
| Active Loop Antenna | EMCO | 6502 | 3441 | 9/15/09 | 9/16/10 |
| Active Loop Antenna | EMCO | 6502 | 3442 | 9/20/09 | 9/20/10 |
| Near Filed Probe Set | EMCO | 7405 | 1385 | N/A | N/A |
| Multi-Device Controller | ETS | 2090 | 9804-1319 | N/A | N/A |
| Multi-Device Controller | ETS | 2090 | 9912-1477 | N/A | N/A |
| Current Probe | Fisher Comm Co | F-2000 | 68 | 11/11/08 | 11/11/09 |
| Current Probe | Fisher Comm Co | F-2000 | 67 | 11/11/08 | 11/11/09 |
| Current Probe | Fisher Comm Co | F-51 | 283 | 11/11/08 | 11/11/09 |
| Current Probe | Fisher Comm Co | F-51 | 284 | 11/11/08 | 11/11/09 |
| Balance Voltage Probe | Fisher Comm Co | FCC-BCP-1 | 62 | 11/11/08 | 11/11/09 |
| Multimeter | Fluke | 23 | 49330331 | 1/13/09 | 1/13/10 |
| AC/DC Current Multimeter | FWB | C-600 | 94040227 | 1/13/09 | 1/13/10 |
| Microwave Synthesizer | Giga-tronics | 12520A | 0032007 | 4/15/09 | 4/15/10 |
| Microwave Synthesizer | Giga-tronics | 12520A | 0214004 | 4/15/09 | 4/15/10 |
| Power Sensor | Giga-tronics | 80421A | 1830056 | 9/15/09 | 9/15/10 |
| Power Sensor | Giga-tronics | 80621A | 1950053 | 10/11/08 | 10/11/09 |
| High Power Sensor | Giga-tronics | 80621A | 1950054 | 1/17/09 | 1/17/10 |
| Power Meter | Giga-tronics | 8542C | 1834318 | 1/17/09 | 1/17/10 |
| Power Meter | Giga-tronics | 8542C | 1834280 | 10/11/08 | 10/11/09 |
| Power Meter | Hewlett-Packard | 437B | 312SU11066 | 1/05/09 | 1/05/10 |
| Power Sensor | Hewlett-Packard | 8482A | 2652A22587 | 1/05/09 | 1/05/10 |
| Power Supply 0-36 V,0-25A | HL | 520A | 1754 | NA | NA |
| Power Supply 0-36 V,0-25A | HL | 520A | 1755 | NA | NA |
| Power Supply 0-36 V,0-25A | HL | 520A | 4L1919 | NA | NA |
| Power Supply 0-36 V,100A | HL | 6456B | 5H0646 | NA | NA |
| Power Supply 0-36 V,100A | HL | 6456B | 5H0232 | NA | NA |
| Power Supply 0-36 V,100A | HL | 6472A | 5M0107 | NA | NA |
| Power Supply 0-36 V,100A | HL | 6472A | | NA | NA |

| | | | | | |
|---|---|---|---|---|---|
| RF Limiter | HP | 11693A | 03532 | NA | NA |
| Spectrum Analyzer | Agilent | E4440A | US41421393 | 9/27/08 | 9/27/09 |
| Spectrum analyzer, RF Sec | Hewlett-Packard | 8566B | 3026A19151 | 4/6/09 | 4/6/10 |
| Spectrum analyzer, Disp Sec | Hewlett-Packard | 8566B | 3014A06682 | 4/6/09 | 4/6/10 |
| EMI Test Receiver, Disp Sec | Rohde & Schwarz | ESA1-D | DE25102 | 12/06/08 | 12/06/09 |
| EMI Test Receiver, RF Sec | Rohde & Schwarz | EMS1-RF | DE25102 | 12/06/08 | 12/06/09 |
| Attenuator | Weinschel | 6dB | AV9010 | N/A | N/A |
| RF Limiter | Hewlett-Packard | 11867A | 03533 | N/A | N/A |
| Loop Antenna | EMCO | 6502 | 3441 | 9/15/2008 | 9/15/09 |
| Biconical Antenna | EMCO | 3110B | 9807-3128 | 2/2/2009 | 2/2/10 |
| Log-periodic Antenna | EMCO | 3148 | 9707-1029 | 1/31/09 | 1/31/10 |
| Double Ridged Horn Ant. | EMCO | 3115 | 9812-5638 | 1/27/09 | 1/27/10 |
| Pre-amplifier | Hewlett-Packard | 8449B | 3008A01355 | 1/18/09 | 1/18/10 |
| Pre-amplifier | Sonoma - HP | 310 | 185704 | 1/18/09 | 1/18/10 |
| Multi-device Controller | EMCO | 2090 | 9912-147-7 | N/A | N/A |
| Thermal Coupler | Omega | T | N/A | N/A | N/A |
| Directional Coupler | MECA | 715-40-3.5 | N/A | N/A | N/A |
| 50Ω Resistive Load | Bird Electronic | 8166 | 9349 | N/A | N/A |
| 50Ω Resistive Load | Bird Electronic | 8166 | 8283 | N/A | N/A |
| 50Ω Resistive Load | Bird Electronic | 8166 | 8276 | N/A | N/A |
| 28V Power Supply | Hewlett-Packard | 6684A | US36410429 | N/A | N/A |
| 28V Power Supply | Hewlett-Packard | 6684A | US36410433 | N/A | N/A |
| DC Power Supply | Hewlett-Packard | 6683A | 36420289 | N/A | N/A |
| DC Power Supply | Hewlett-Packard | 6038A | 3025A-09939 | N/A | N/A |
| Multi-meter | Fluke | 23 | 49330331 | 1/13/09 | 1/13/10 |
| RF Switch | Hewlett-Packard | 11713A | 2223A01767 | N/A | N/A |
| RF Switch | Hewlett-Packard | 44477A | MY42000146 | N/A | N/A |
| RF Switch | Hewlett-Packard | 44477A | MY42000147 | N/A | N/A |
| RF Switch | Hewlett-Packard | 8764C | 3241A00605 | N/A | N/A |
| RF Switch | Hewlett-Packard | 8764C | 3241A00622 | N/A | N/A |
| RF Switch | Agilent | 8761B | 74304 | N/A | N/A |
| RF Switch | Agilent | 8761B | 74261 | N/A | N/A |
| RF Switch | Agilent | 8761B | 74305 | N/A | N/A |
| RF Switch | Agilent | 8761B | 74263 | N/A | N/A |
| Switch Control Unit | Hewlett-Packard | 3488A | 204925 | N/A | N/A |
| Switch Control Unit | Hewlett-Packard | 3488A | 14202 | N/A | N/A |
| Tunable Bandreject Filter | K&L | 3TNF-500/1000-N/N | 1 | N/A | N/A |
| Low Pass Filter | Trilithic | 10LC800-3-AA | 200201001 | N/A | N/A |
| High Pass Filter | Hewlett-Packard | 84300-80037 | 015 | N/A | N/A |
| E4440A PSA | Agilent | E4440A | US42221740 | 10/13/08 | 10/13/09 |
| Switch | SRFI | 184 | 150 | NA | NA |
| Power Divider | Weinschel | 1506A | | NA | NA |
| Attenuator | Weinschel | 48-20-33 | | NA | NA |
| Universal Counter | Hp | 5335A | 2934A14399 | 9/12/08 | 9/13/09 |
| Rectifier | TDI | AC-DC | 128981-12 | NA | NA |
| GPS Receiver | Symmetricon | 58503B | KR93200773 | NA | NA |
| EPM Series Power Meter | HP | E4418B | MY45101724 | 4/15/09 | 11/14/10 |
| E-Series Avg Power Sensor | Agilent | E9300A | US39211661 | 11/22/08 | 11/23/09 |
| Frequency Counter | HP | 53181A | 3418A00309 | 1/6/08 | 1/7/10 |
| VSA Series Transmitter Tester | Agilent | E4406A | US40061191 | 4/2/08 | 7/3/10 |

# Transmitter Measuremennts

## Section 2.1046 MEASUREMENT REQUIRED: RF POWER

This test is a measurement of the transmit RF power level transmitted at the antenna transmitting terminal (End Antenna Connector). According to the requirements, since the antenna is detachable, the transmitter output power may be measured by replacing the antenna with a spectrum analyzer. The AS5ONEBTS-24 was first tuned to a channel which is the approximate mid channel of the Frequency Band. The power level of the base station was calibrated to allow the base station to operate at the manufacturer's maximum rated mean power level at the antenna transmitting terminal. Then the carrier was tuned to other channels in the frequency band without adjusting the power level and recalibrating. The corresponding mean RF output power level was measured.

Power measurements were made with a Giga-tronics 8542C Universal Power Meter with 80621A Power Sensor (0.01 – 18 GHz) in the average mode. Before the testing was started, the Base Station was given a sufficient "warm-up" period as required.

In accordance with guidelines from the Commission regarding 47 CFR 2.1046, the following requirements are to be used to select test frequencies for licensed devices; frequency range over which device operates=10-100 MHz, Number of Frequencies=3 1 near top, 1 near middle, 1 near bottom .

The AS5ONEBTS-24 meets requirements with transmit power output (TPO) of 60W single carrier configuration and 120W multi-carrier configuration.

**Single and Multiple Carrier Channel List**

| Cellular Channel No. | Frequency (MHz) | Cellular 850 Frequency Band |
|---|---|---|
| 1019 | 869.88 | A" |
| 37 | 871.11 | A3 |
| 78 | 872.34 | A2 |
| 119 | 873.57 | |
| 160 | 874.80 | |
| 201 | 876.03 | A1 |
| 242 | 877.26 | |
| 283 | 878.49 | |
| 384 | 881.52 | B1 |
| 425 | 882.75 | |
| 466 | 883.98 | |
| 507 | 885.21 | B2 |
| 548 | 886.44 | |
| 589 | 887.67 | |
| 630 | 888.90 | B3 |
| 691 | 890.73 | A' |
| 732 | 891.96 | |
| 777 | 893.31 | B' |

**Section 2.1047 MEASUREMENT REQUIRED: MODULATION CHARACTERISTICS**

The AS5ONEBTS-24 utilizes digital baseband schemes including Quadrature Phase Shift Key (QPSK) modulation and Quadrature Amplitude Modulation (QAM). The modulation accuracy measures the ability of the transmitter to generate the ideal signal which is defined by the waveform quality. The waveform quality is measured by determining the normalized correlated power between the actual waveform and the ideal waveform, where the Agilent E4440A PSA Spectrum Analyzer used the external signals from the base station as its trigger source and time reference

The measurements were performed with an Agilent E4440A PSA Spectrum Analyzer which was calibrated in accordance with ISO 9001 process.

| Carrier Type | Notes |
|---|---|
| Quadrature Phase Shift Key (QPSK) | See Appendix A |
| Quadrature Amplitude Modulation (QAM) | See Appendix A |

Reference Appendix A for complete test data.

**Section 2.1049 MEASUREMENT REQUIRED: OCCUPIED BANDWIDTH**

The AS5ONEBTS-24 base station was first tuned to a channel which is the approximate mid channel of the Frequency Band. The base station was calibrated to allow the base station to operate at the manufacturer's maximum rated mean power level at the antenna transmitting terminal.

The minimum emission requirements and the setting of measurement equipment for the occupied bandwidth measurement of a carrier are specified in FCC rules tabulated in the following table.

**Table 11.4.1 FCC Transmitter Unwanted Emission Limits**

| Frequency | Required Minimum Attenuation below the Mean Carrier Power *P* | Minimum Resolution Bandwidth of Spectrum Analyzer |
|---|---|---|
| 1MHz Bands Immediately Outside the Transmitting Frequency Band | (43 + P dBW) dBc | 12.5 kHz |
| Out-of-Band (other than above) | (43 + P dBW) dBc | 100 kHz |

The requirements specified in 3GPP2 Transmitter Spurious Limits for single carrier configurations are tabulated in the following table

| Displacement from the Carrier Center Frequency $f_c$ | Required Minimum Attenuation | Resolution Bandwidth of Spectrum Analyzer |
|---|---|---|
| 885 kHz < $\|f - f_c\| \leq$ 1.25 MHz | -45 dBc | 30 kHz |
| 1.25 MHz < $\|f - f_c\| \leq$ 1.98 MHz | Min (-45 dBc, -9 dBm) | 30 kHz |
| 1.98 MHz < $\|f - f_c\| \leq$ 2.25 MHz | -50 dBc | 30 kHz |
| 2.25 MHz < $\|f - f_c\| \leq$ 4.0 MHz | - 13 dBm | 1 MHz |

The requirements specified in 3GPP2 Transmitter Spurious Limit for multiple carrier configurations are tabulated in the following table:
:

**Table 11.5.2 TIA/EIA and 3GPP2 Spurious Emission Limits**

| Displacement from the Carrier Center Frequency $f_c$ | Required Minimum Attenuation | Resolution Bandwidth of Spectrum Analyzer |
|---|---|---|
| 750 kHz < $\|f - f_c\| \leq$ 1.98 MHz | 45 dBc | 30 kHz |
| 1.98 MHz < $\|f - f_c\| \leq$ 4.0 MHz | 55 dBc | 1 MHz |

A combined criteria of FCC requirements and TIA/EIA-3GPP2 requirements were used as the required emissions limit mask in the measurement. The measurements were performed with an Agilent PSA Spectrum Analyzer which was calibrated in accordance with ISO 9001 process.

The spectrum analyzer was set with a 30 kHz resolution bandwidth and 8 MHz span. The emissions outside the 8MHz span were evaluated in 2.1051 Measurement Required: Out-of-block Spurious Conducted Emissions. The top of the carrier measured with a 30 kHz resolution bandwidth, thus, was 16.1 dB below the carrier power measured with a resolution bandwidth greater than the carrier bandwidth 1.23 MHz. This 16.1dB offset was due to the fact that 10 log (1230kHz/30kHz) = 16.1 dB.

In accordance with guidelines of the Commission for 47 CFR 2.1049, the following requirements are to be used to select test frequencies for licensed devices; frequency range over which device operates=10-100 MHz, Number of Frequencies=3 1 near top, 1 near middle, 1 near bottom . Single carrier and multiple carrier configurations are reported.

| Carrier Type | Notes |
|---|---|
| Single Carrier | See Appendix B |
| Multi-Carrier – simplex transmit | See Appendix B |
| Multi-Carrier – diversity transmit | See Appendix B |

Reference Appendix B for complete test data.

**Section 2.1051 MEASUREMENT REQUIRED: SPURIOUS EMISSIONS AT THE ANTENNA TERMINALS**

The spurious emissions at the end antenna connector (EAC) of the AS5ONEBTS-24 transceiver were investigated from 10 MHz to the 10th harmonic of the carrier, per Section 2.1057(a)(1).

The spurious emission measurements were made at the end antenna connector (EAC) of the AS5ONEBTS-24 transceiver.

**Table 11.5.1 FCC 22.917g Transmitter Unwanted Emission Limits**

| Frequency | Required Minimum Attenuation below the Mean Carrier Power *P* | Minimum Resolution Bandwidth of Spectrum Analyzer |
|---|---|---|
| 1MHz Bands Immediately Outside the Transmitting Frequency Band | (43 + P dBW) dBc | 12.5 kHz |
| Out-of-Band (other than above) | (43 + P dBW) dBc | 100 kHz |

The requirements specified in 3GPP2 Transmitter Spurious Limits for single carrier configurations are tabulated in the following table

| Displacement from the Carrier Center Frequency $f_c$ | Required Minimum Attenuation | Resolution Bandwidth of Spectrum Analyzer |
|---|---|---|
| 885 kHz < $\|f - f_c\| \leq$ 1.25 MHz | -45 dBc | 30 kHz |
| 1.25 MHz < $\|f - f_c\| \leq$ 1.98 MHz | Min (-45 dBc, -9 dBm) | 30 kHz |
| 1.98 MHz < $\|f - f_c\| \leq$ 2.25 MHz | -50 dBc | 30 kHz |
| 2.25 MHz < $\|f - f_c\| \leq$ 4.0 MHz | - 13 dBm | 1 MHz |

The requirements specified in 3GPP2 Transmitter Spurious Limit for multiple carrier configurations are tabulated in the following table:
:

**Table 11.5.2 TIA/EIA and 3GPP2 Spurious Emission Limits**

| Displacement from the Carrier Center Frequency $f_c$ | Required Minimum Attenuation | Resolution Bandwidth of Spectrum Analyzer |
|---|---|---|
| 750 kHz < $\|f - f_c\| \leq$ 1.98 MHz | 45 dBc | 30 kHz |
| 1.98 MHz < $\|f - f_c\| \leq$ 4.0 MHz | 55 dBc | 1 MHz |

The spectrum analyzer was set to a 1 MHz resolution bandwidth. The maximum mean output power of the carrier, measured with a 3 MHz resolution bandwidth, aligns with the top of the spectrum analyzer display.

Sections 2.1051 and 2.1057(c) specify that the spurious emissions attenuated more than 20 dB below the permissible value need not be reported.

The measurements were performed with Spectrum Analyzer which was calibrated in accordance with ISO 9001 process. The test set-up diagram is given in the following.

In accordance with guidelines from the Commission for 47 CFR 2.1051, the following requirements are to be used to select test frequencies for licensed devices; frequency range over which device operates=10-100 MHz, Number of Frequencies=3 1 near top, 1 near middle, 1 near bottom . Single carrier and multiple carrier configurations are reported.

| Carrier Type | Criteria 22.917 | Notes |
|---|---|---|
| Single Carrier | (43 + P dBW) dBc | See Appendix C |
| Multi-Carrier – simplex transmit | (43 + P dBW)dBc | See Appendix C |
| Multi-Carrier – diversity transmit | (43 + P dBW) dBc | See Appendix C |

Reference Appendix C for complete test data.

**Section 2.1053 MEASUREMENT REQUIRED: FIELD STREGTH OF SPURIOUS RADIATION**

The field strength measurements were made in the FCC registered three-meter semi-anechoic chamber which is maintained by Alcatel-Lucent Bell Laboratories in Columbus, Ohio, USA (FCC # 92731).

The AS5ONEBTS-24 transceiver was investigated from 10 MHz to the 10th harmonic of the carrier, per Section 21057(a)(1) using substitution method. The equipment under test (EUT) was configured in the normal mode of installation and operation. The recommendations of ANSI C63.4 were followed for EUT testing setup and cabling. Field strength was measured in both horizontal and vertical antenna orientations. The EUT was configured in simplex and diversity transmit configuration.

The emission levels were found by:

$E$(dBuV/m) = $V$meas(dBuV) + Amplifier Gain / Cable Loss (dB) + Antenna Factor

Per FCC Part 2.1053 and FCC Part 22.917 the power of any emission outside a licensee's frequency block shall be attenuated below the transmit power by at least 43 + 10 log P (dB) = -13 dBm. Per FCC Part 2.1057, the amplitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be reported.

Compliance margin is calculated by the following

Radiated Spurious Emissions = Signal Generator Level + Amplifier Gain / Cable Loss (dB) - Antenna gain

Margin = Limit – Radiated Spurious Emissions

| Test Type | Criteria | Results |
|---|---|---|
| Radiated Spurious Emissions | (43 + P dBW) dBc | Minimum margin of 46.5 dB at 10.1 MHz |

Reference Appendix D for complete test results.

**Section 2.1055 MEASUREMENT REQUIRED: FREQUENCY STABILITY**

The output frequency of the AS5ONEBTS-24 transceiver is determined by the internal transmit synthesizer and the external OM. The 15 MHz output frequency of OM is disciplined by the CTU using Bell Laboratories proprietary phase lock loop (PLL) software and GPS reference.

The stability of the AS5ONEBTS-24 transceiver output frequency was measured at the transmit port end antenna connector (EAC) from –40 °C to +50 °C in 10 °C steps and with a variation of primary supply voltage from 85% to 115% of the nominal value per Section 2.1055. The nominal supply voltage is +24 VDC. The 85% of 24 VDC is 20.4 V and 115% is 27.6 V. The frequency was measured at the radio output every 30 seconds at each temperature and each supply voltage. Seven data were collected at each temperature and each supply voltage.

At each temperature and each supply voltage, the AS5ONEBTS-24 transceiver was given sufficient time for its thermal stabilization. The primary OM was used for providing 15MHz reference frequency to the CTU. The temperature was recorded during the testing to ensure that the thermal stability was achieved at each temperature prior to frequency measurement.

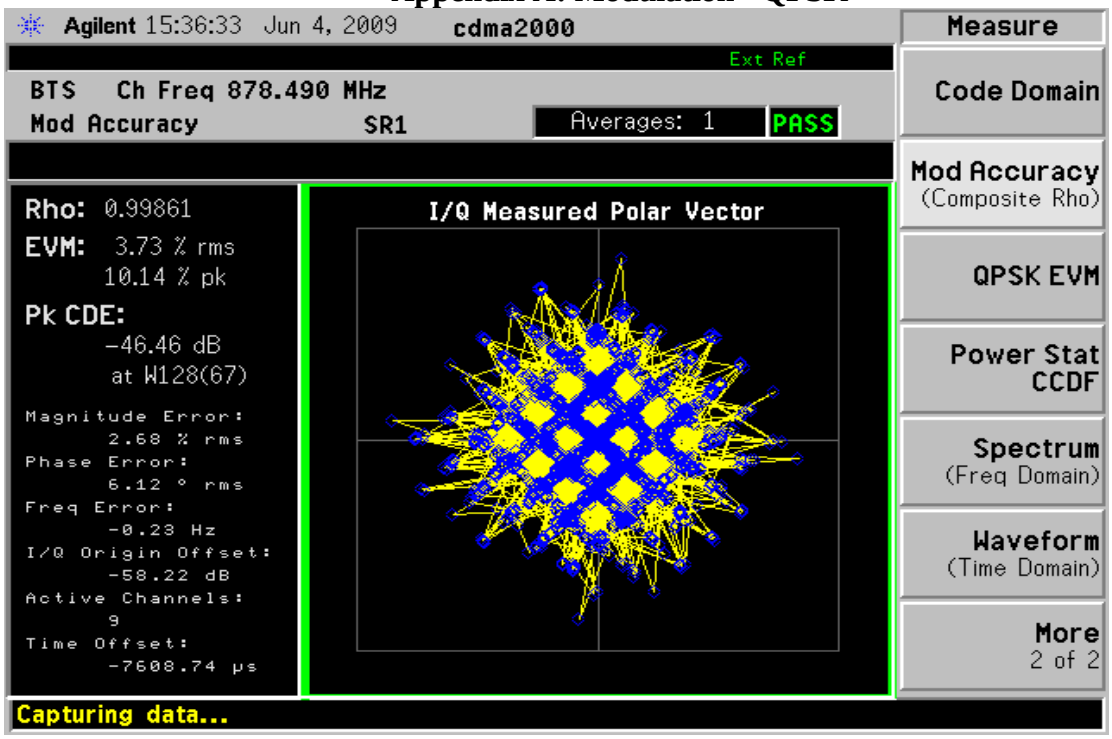
FCC Section 22.235 specifies that the freaquency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation (i.e. 1.5 ppm). 3GPP2 C.S0032 and 3GPP2 C.S0010-C specify the minimum requirement is ±0.050 ppm (i.e. maximum frequency error of 44 Hz).

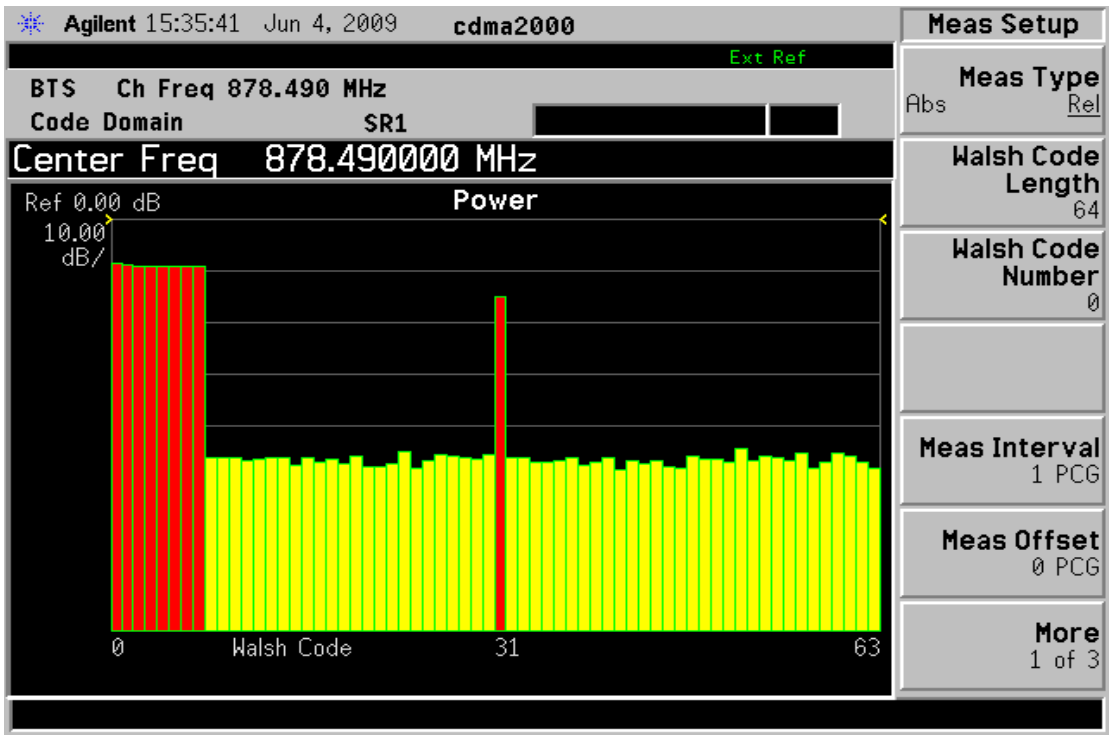
| Test Type | Criteria | Results |
|---|---|---|
| Frequncy Stability | 44 Hz (.05 ppm) | maximum frequency error of 3.39 Hz |

Reference Appendix E for complete test data

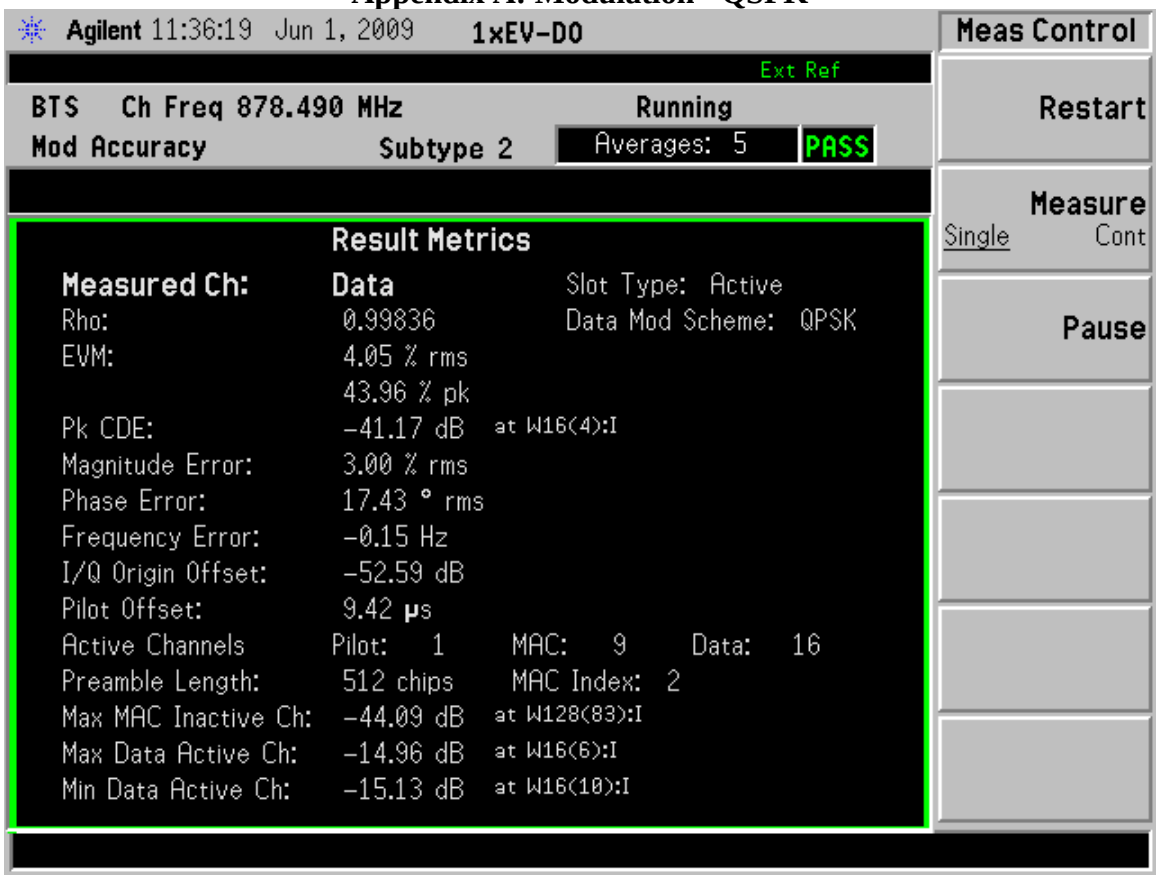
# APPENDIX A : Section 2.1047 Modulation

## Appendix A: Modulation - QPSK

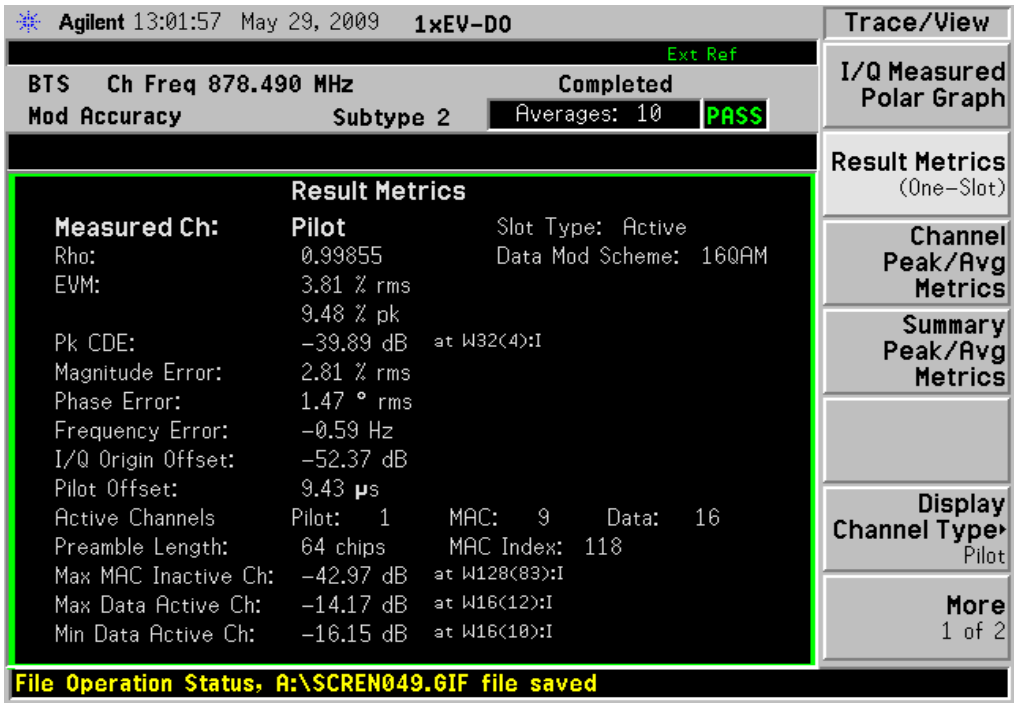


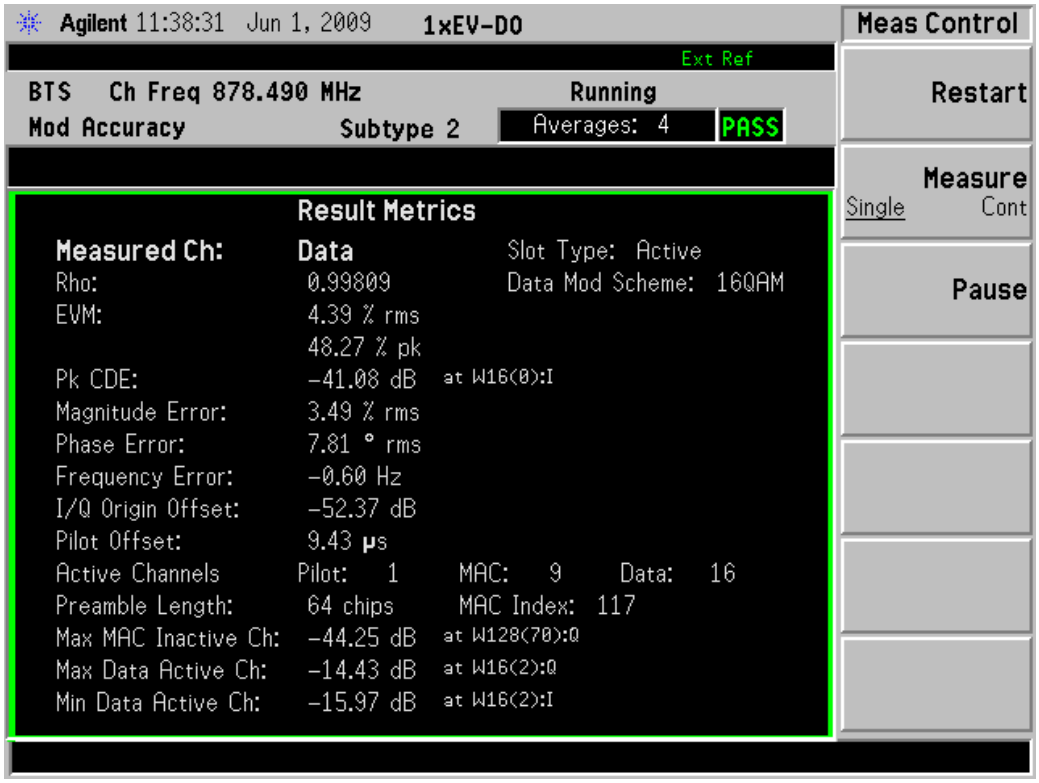



# Appendix A: Modulation - QSPK

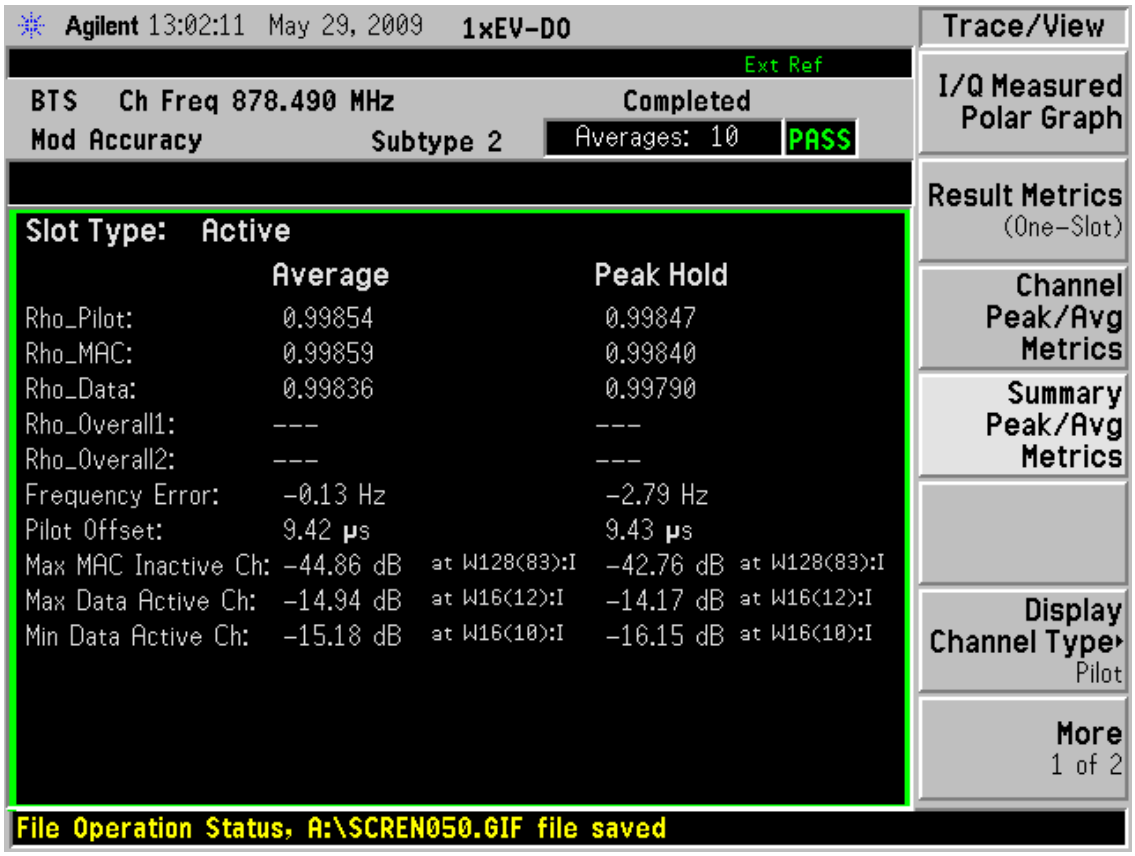


# Appendix A: Modulation - QAM Results



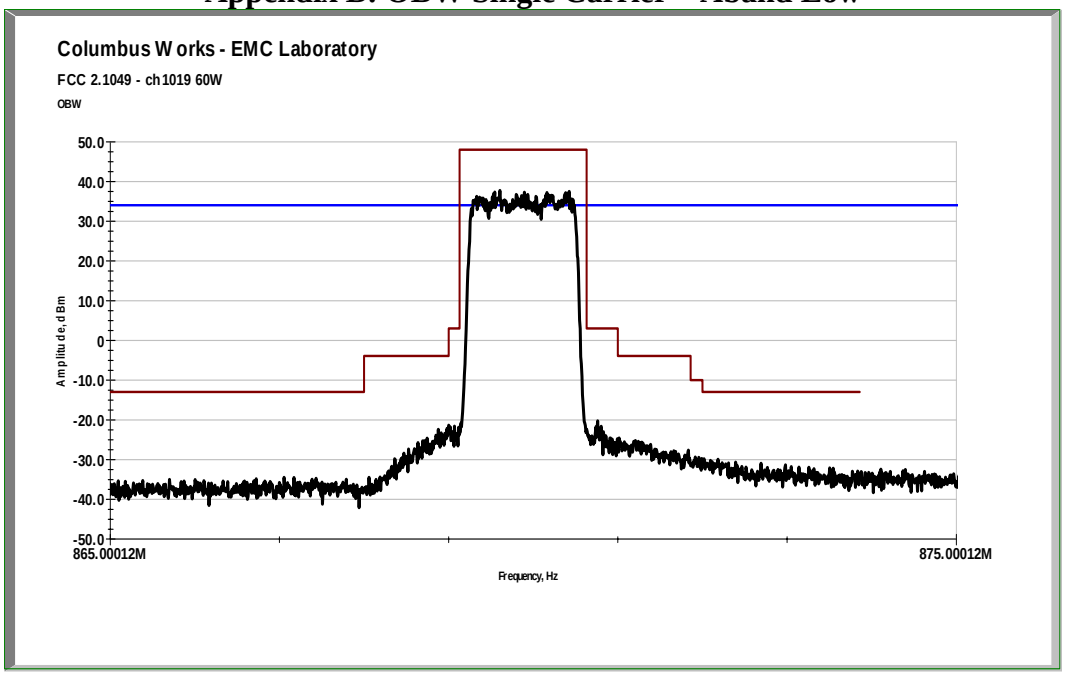



# Appendix A : Modulation - QAM Results

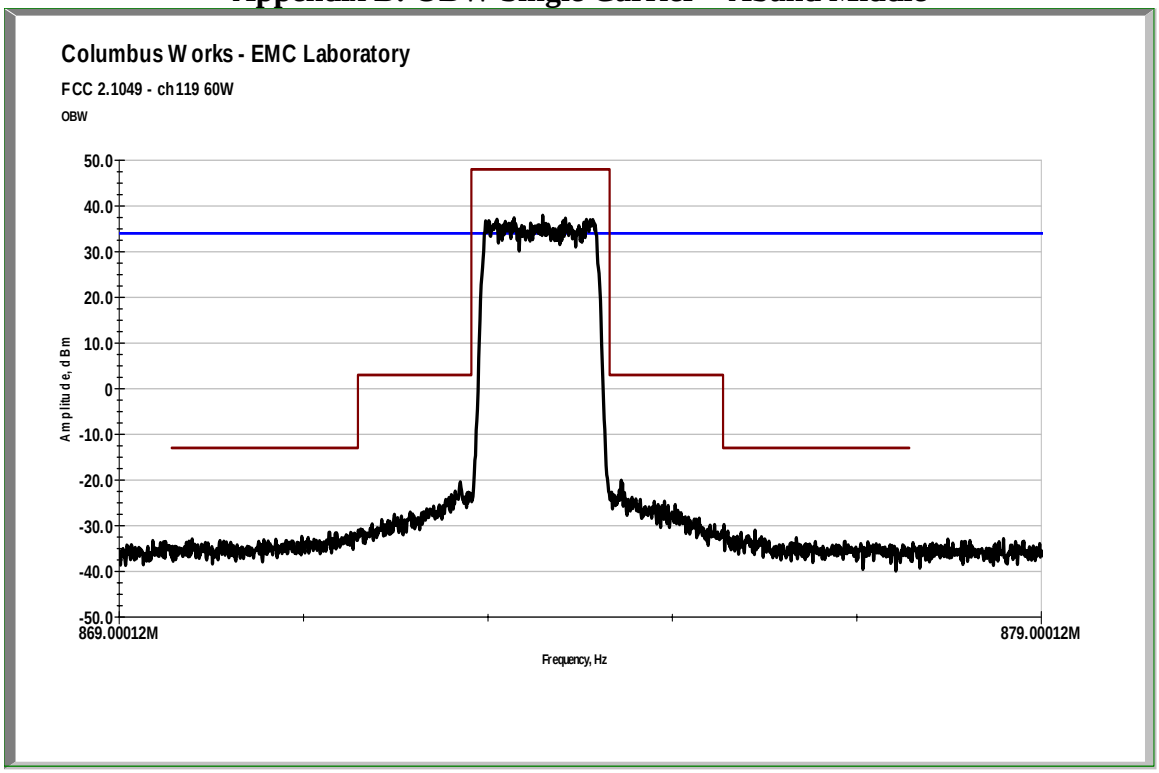


# APPENDIX B : Section 2.1047 OBW

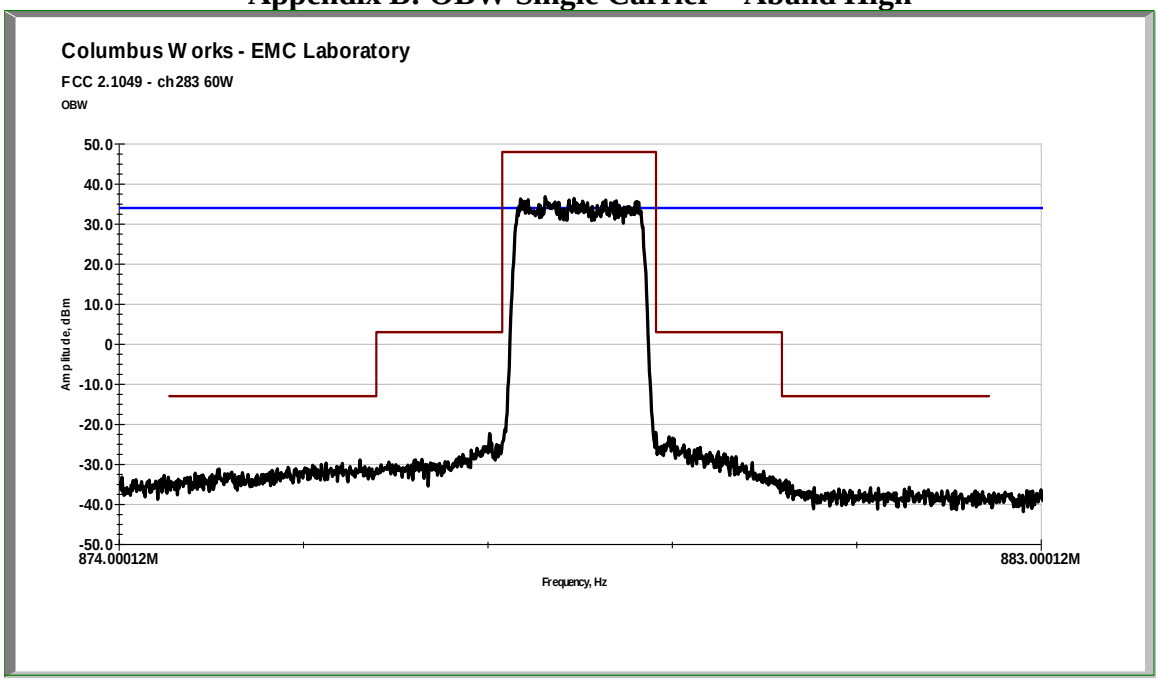
## Appendix B: OBW Single Carrier – Aband Low



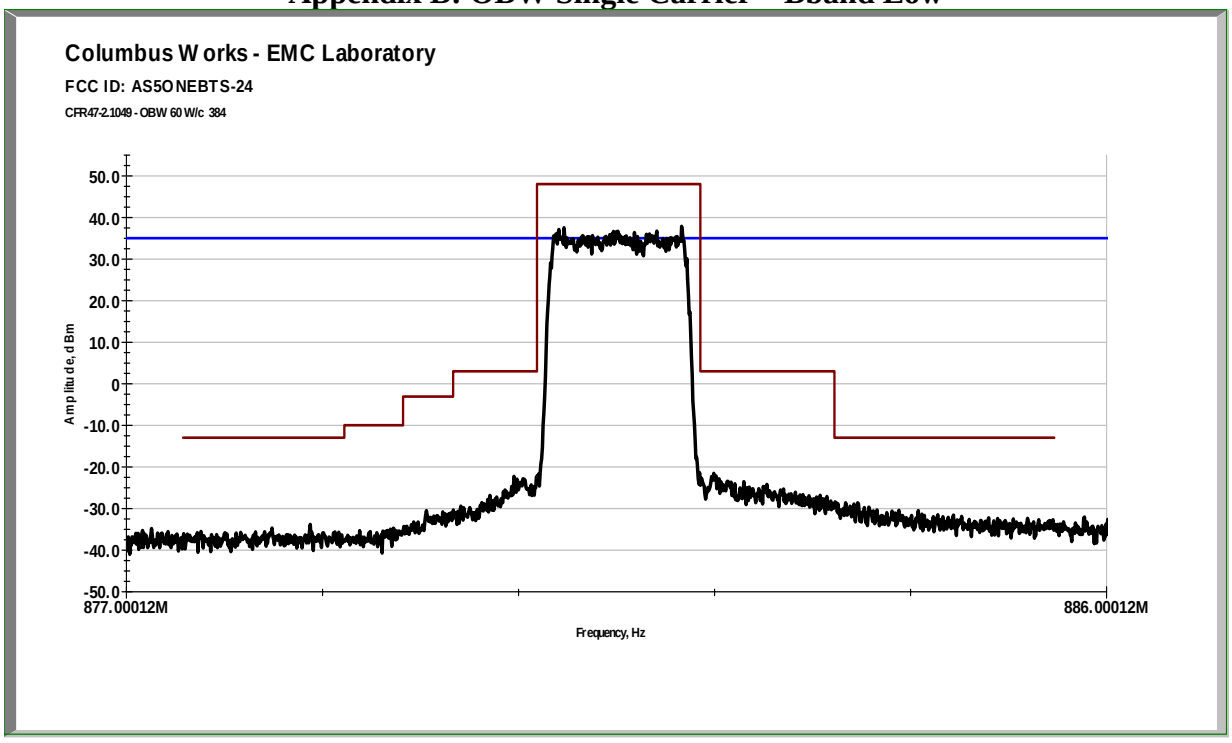

## Appendix B: OBW Single Carrier – Aband Middle



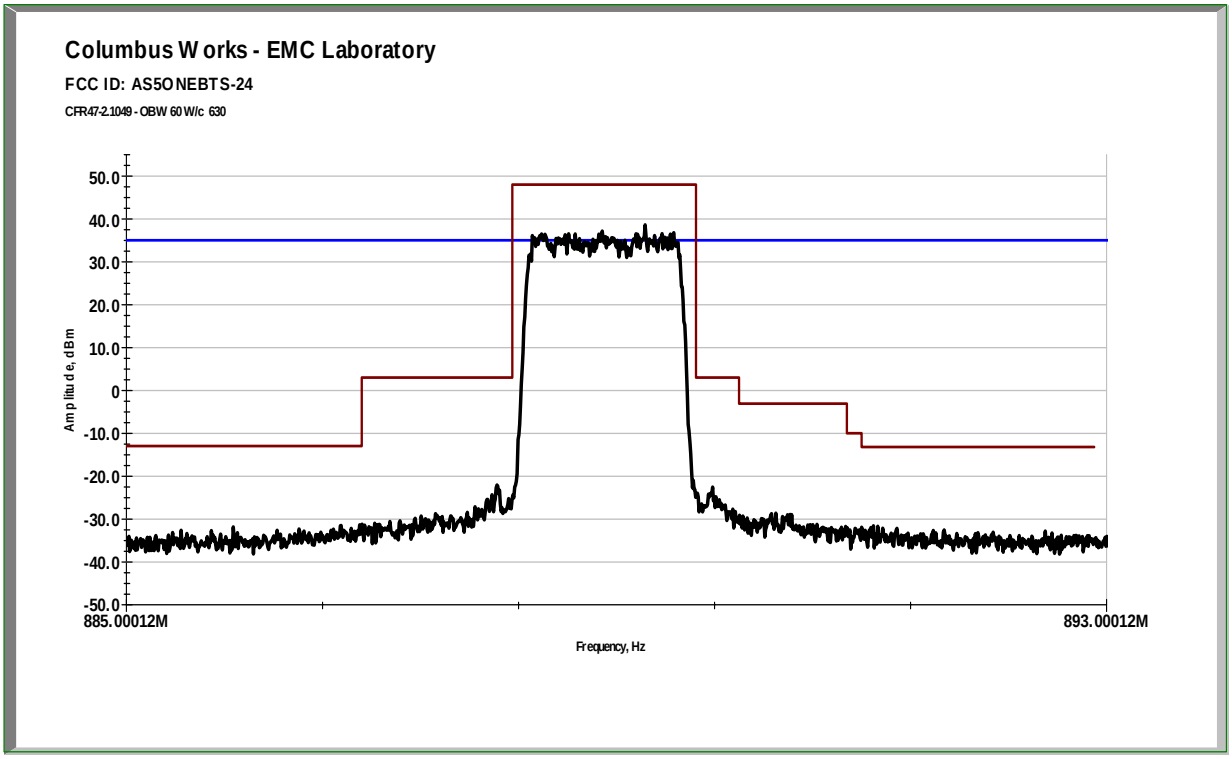
## Appendix B: OBW Single Carrier – Aband High



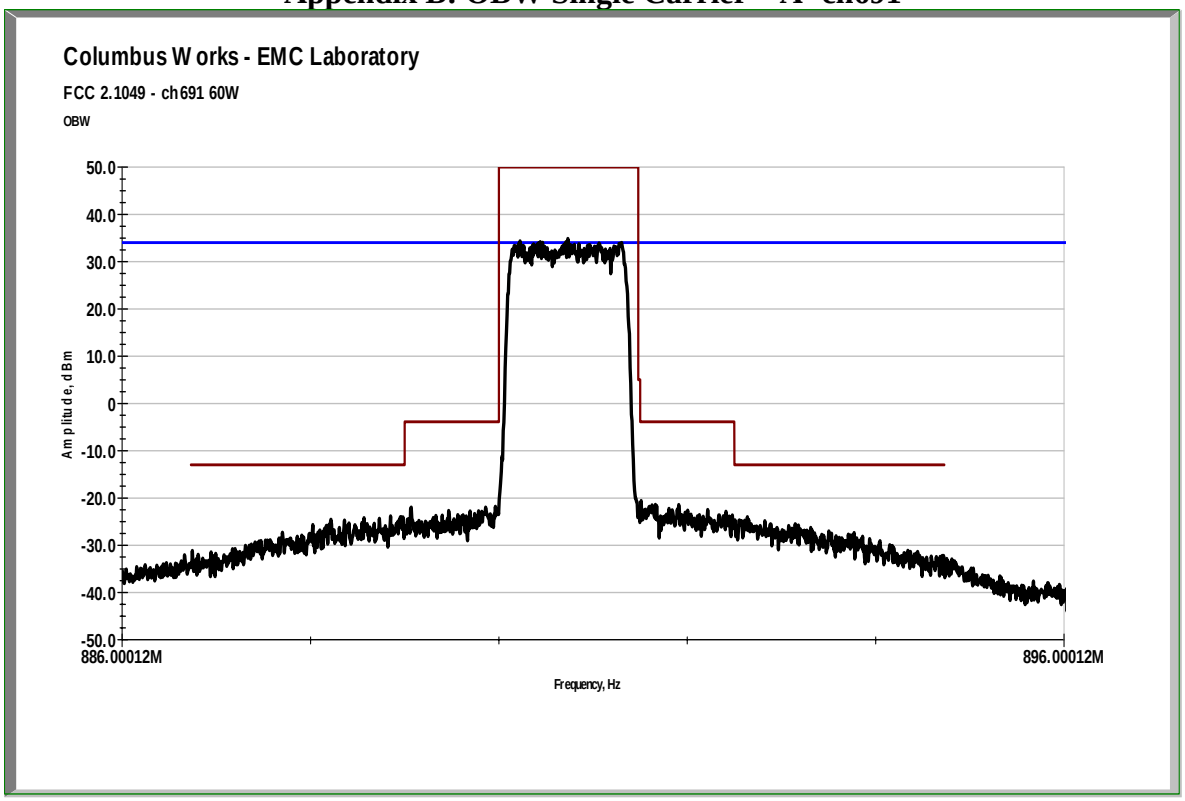

## Appendix B: OBW Single Carrier – Bband Low



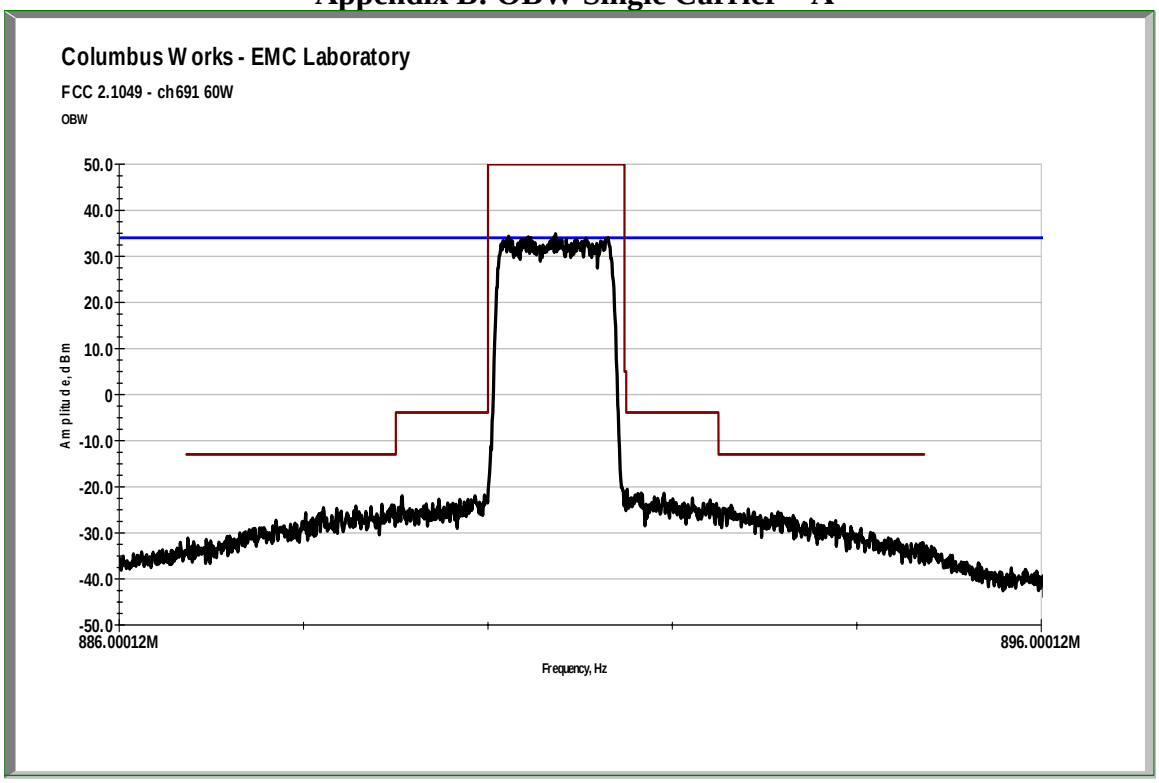
## Appendix B: OBW Single Carrier – Bband High



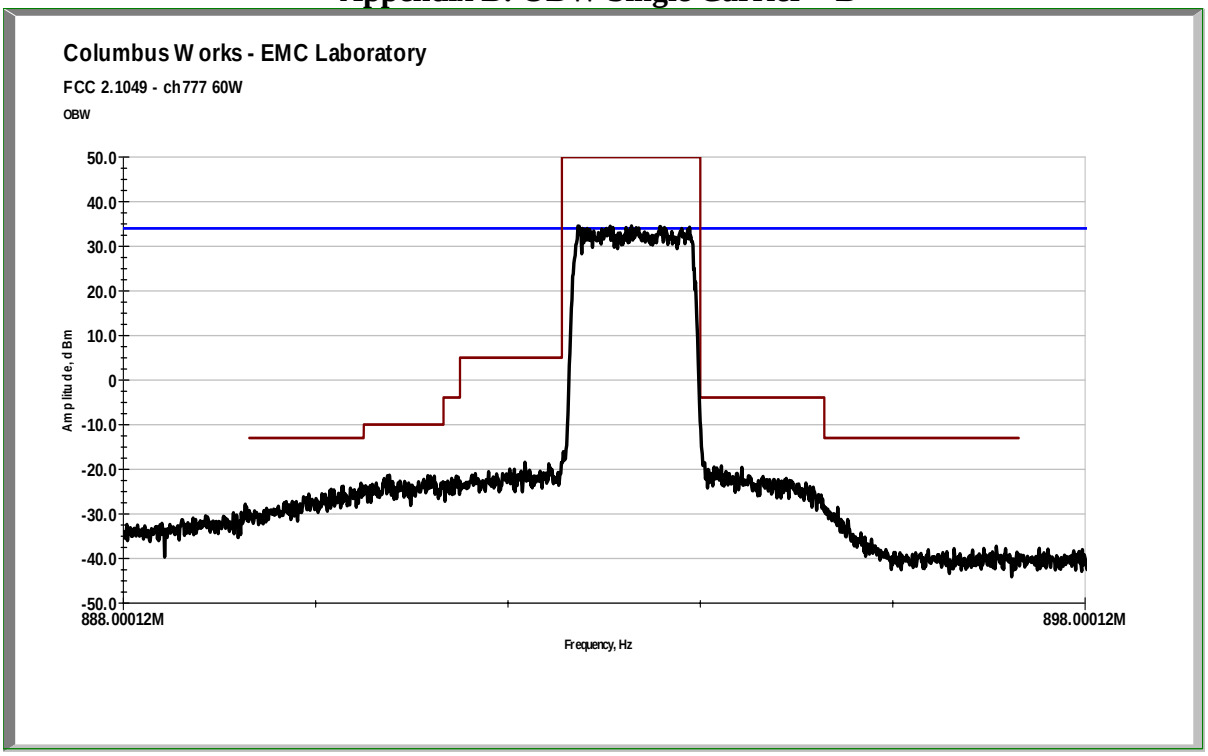

## Appendix B: OBW Single Carrier – A' ch691



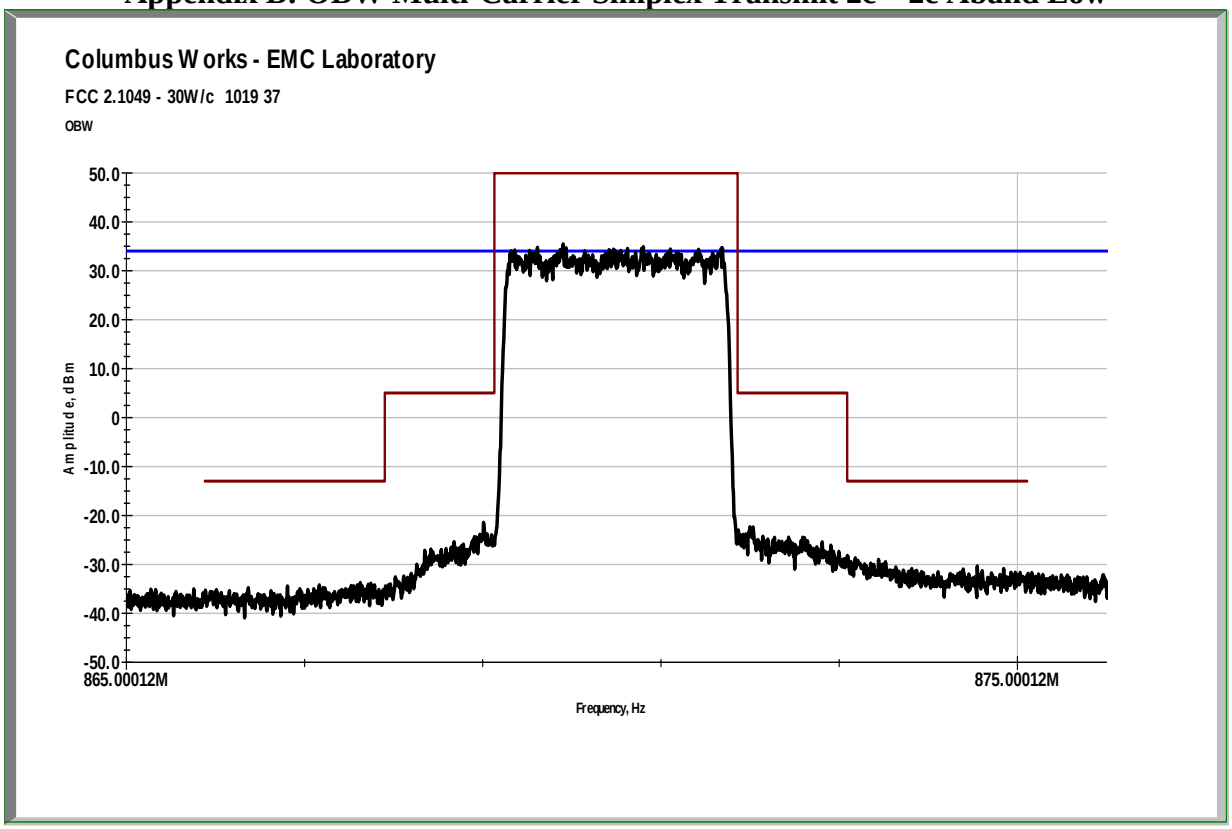
## Appendix B: OBW Single Carrier – A'



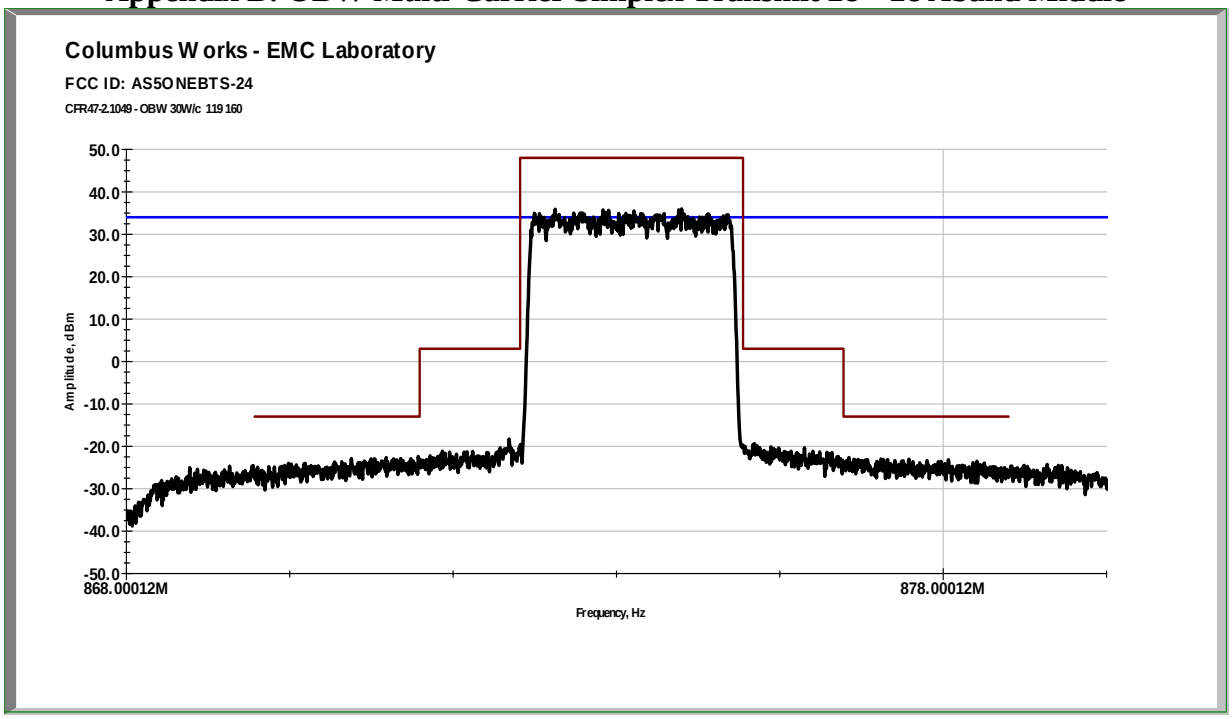

## Appendix B: OBW Single Carrier – B'



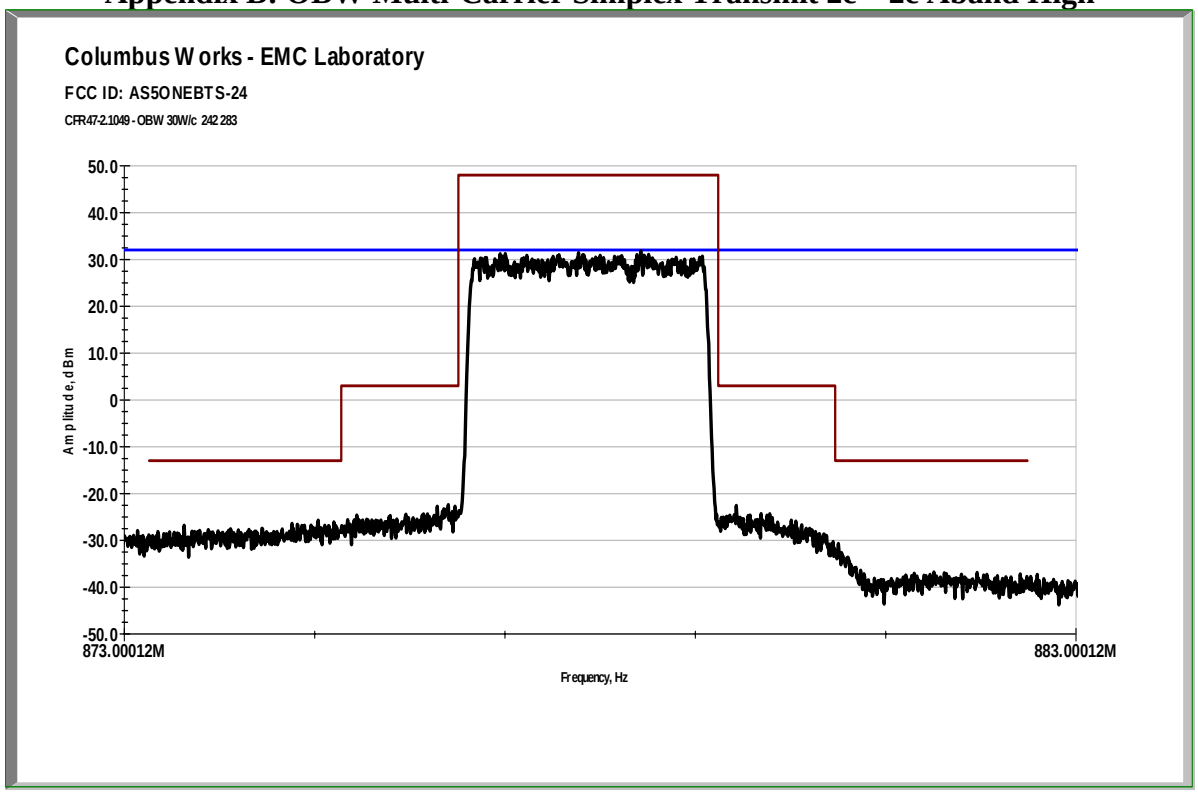
## Appendix B: OBW Multi-Carrier Simplex Transmit 2c – 2c Aband Low



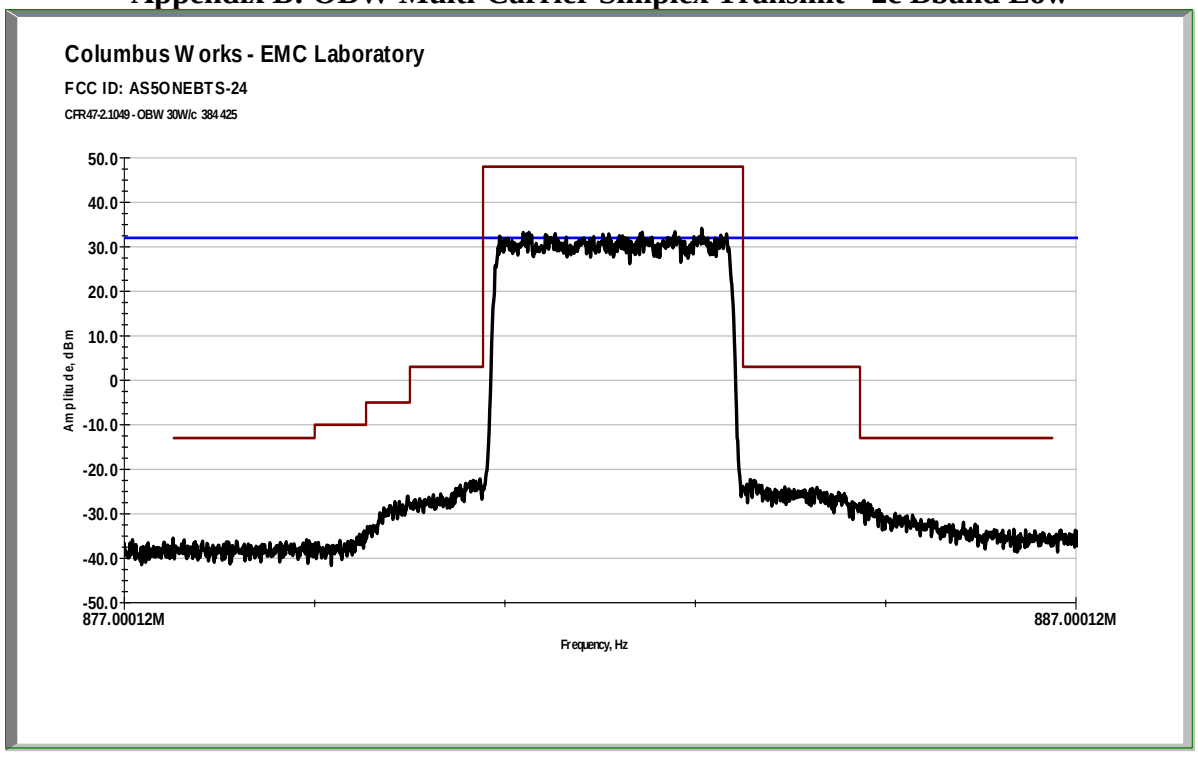

## Appendix B: OBW Multi-Carrier Simplex Transmit 2c – 2c Aband Middle



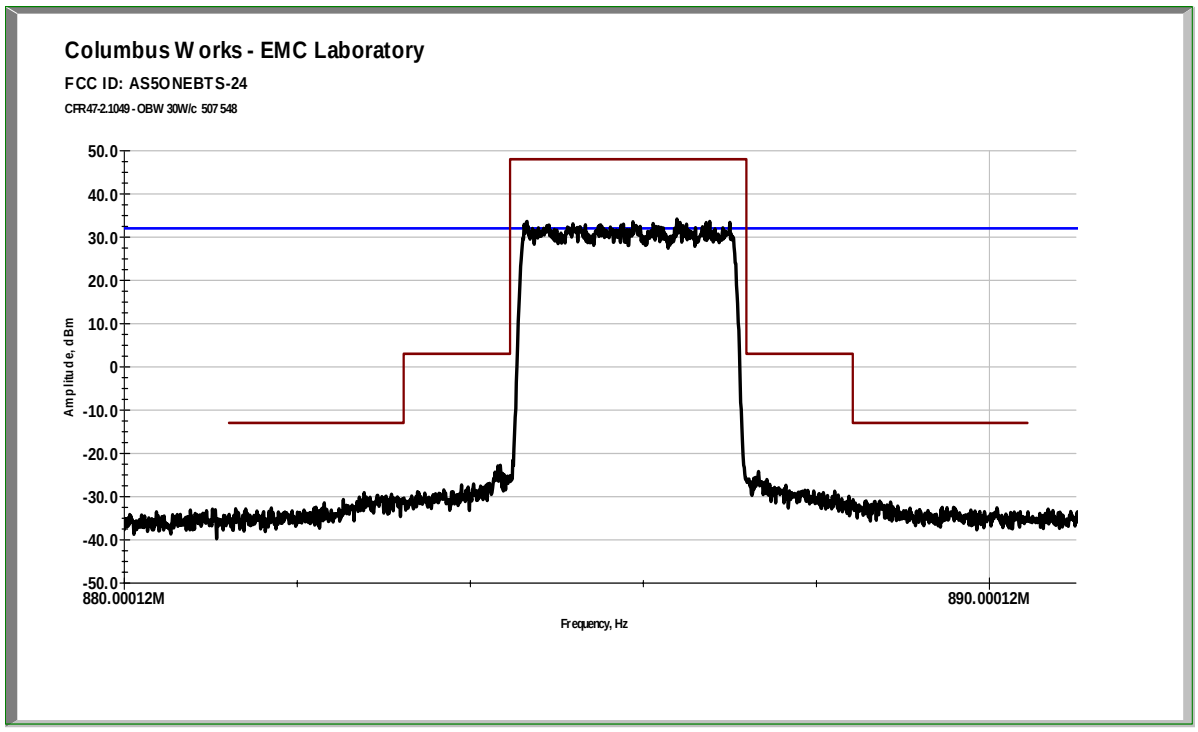
## Appendix B: OBW Multi-Carrier Simplex Transmit 2c – 2c Aband High



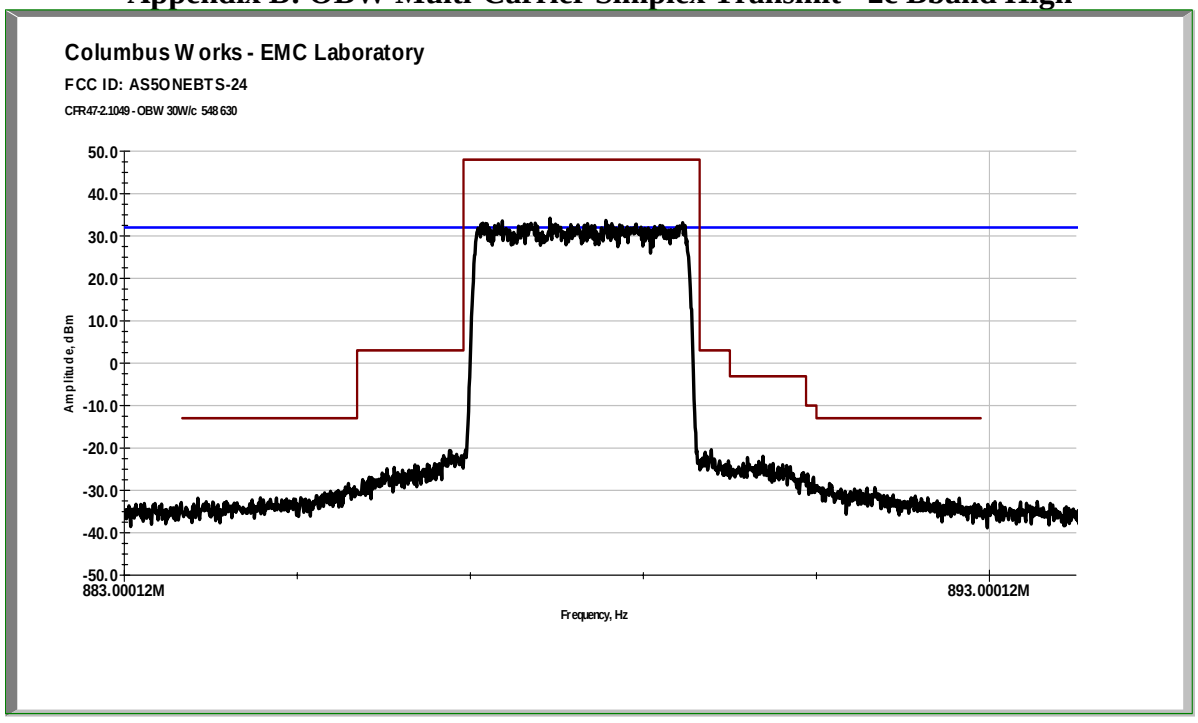

## Appendix B: OBW Multi-Carrier Simplex Transmit - 2c Bband Low



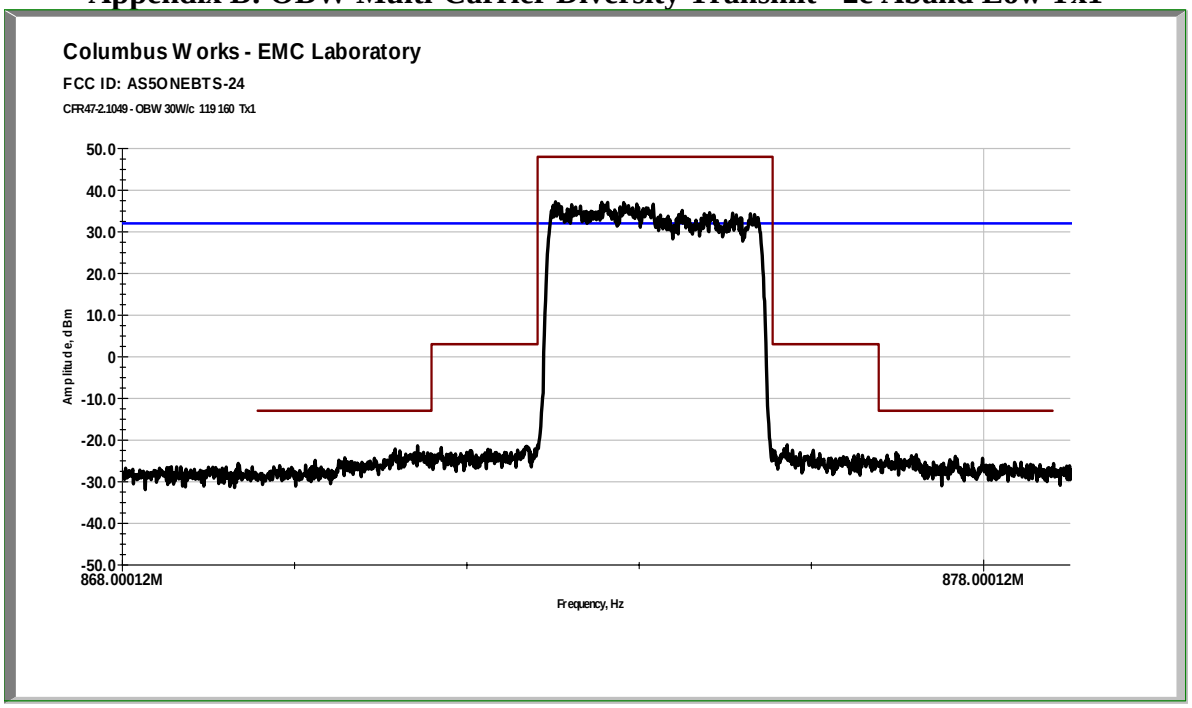
## Appendix B: OBW Multi-Carrier Simplex Transmit - 2c Bband Middle



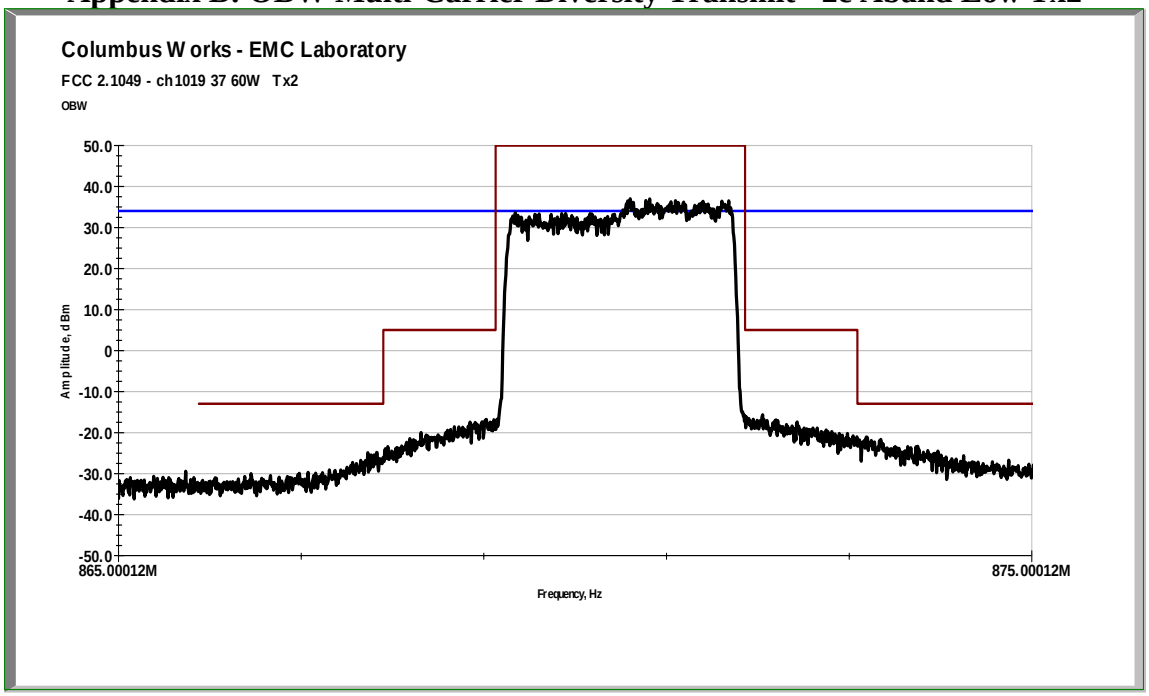

## Appendix B: OBW Multi-Carrier Simplex Transmit - 2c Bband High



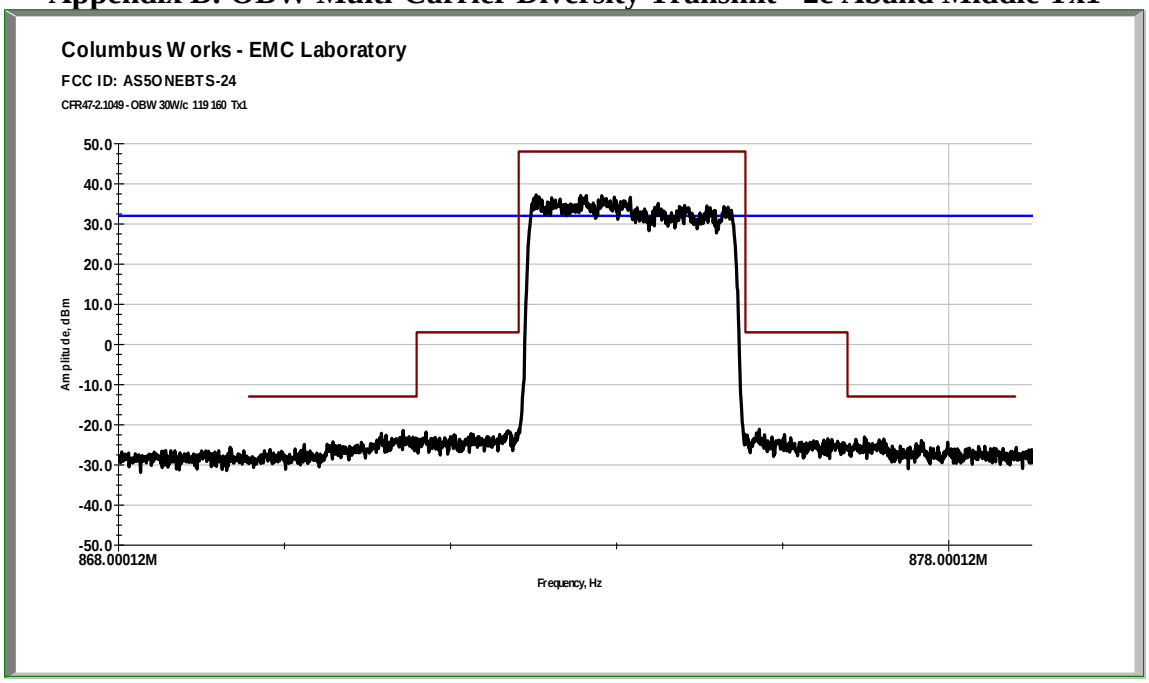
## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Aband Low Tx1



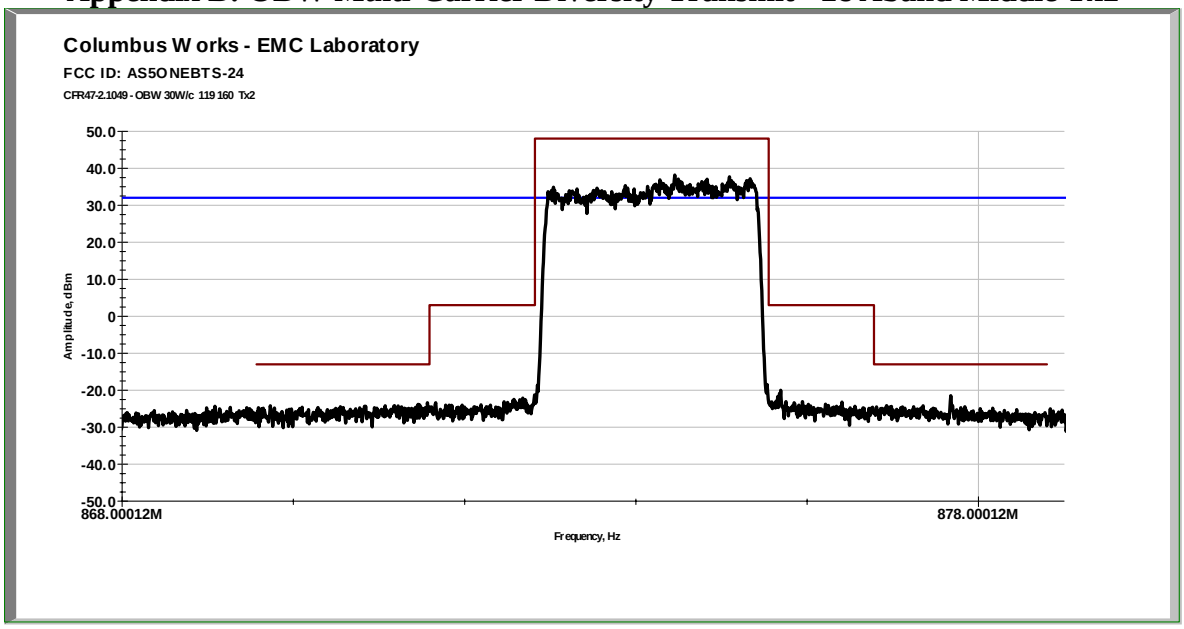

## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Aband Low Tx2



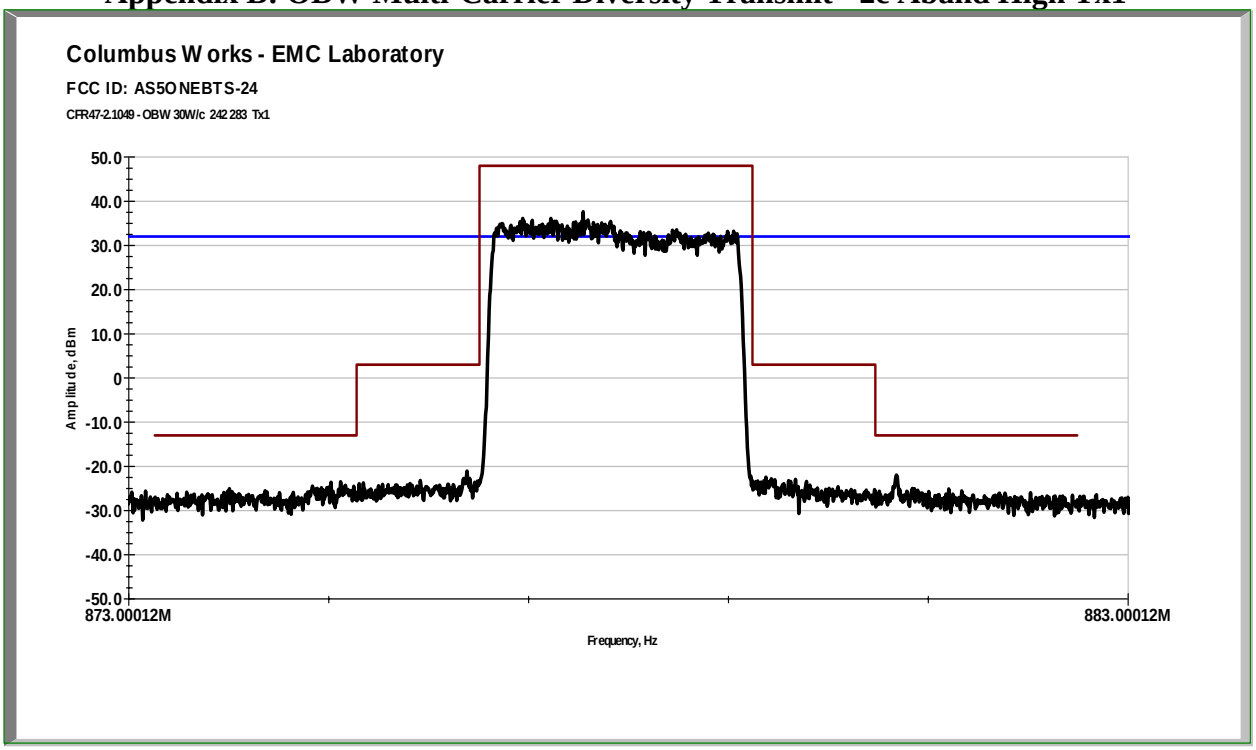
## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Aband Middle Tx1



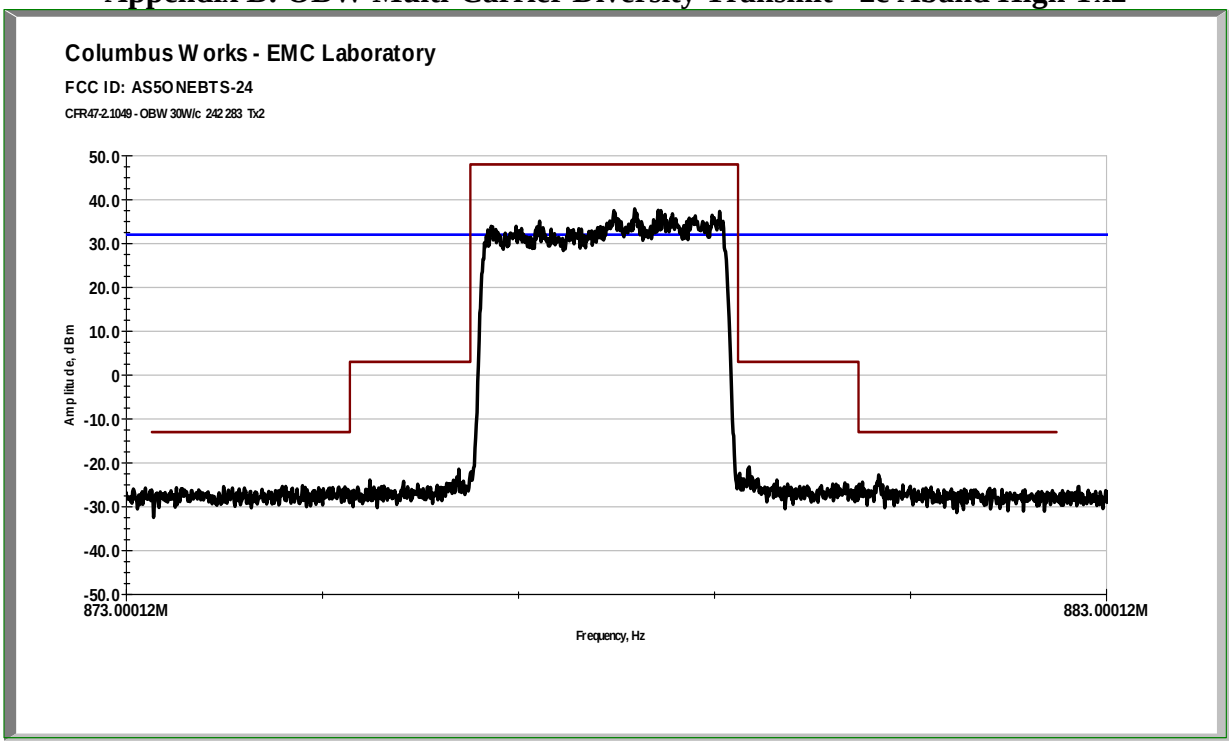

## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Aband Middle Tx2



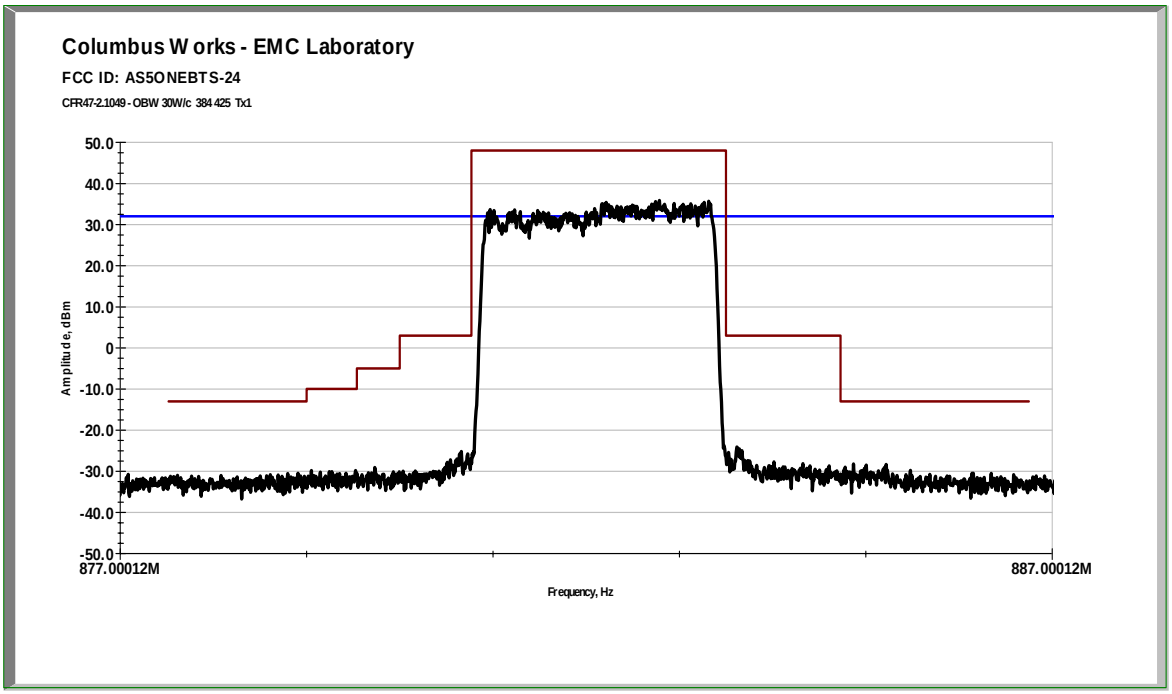
## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Aband High Tx1



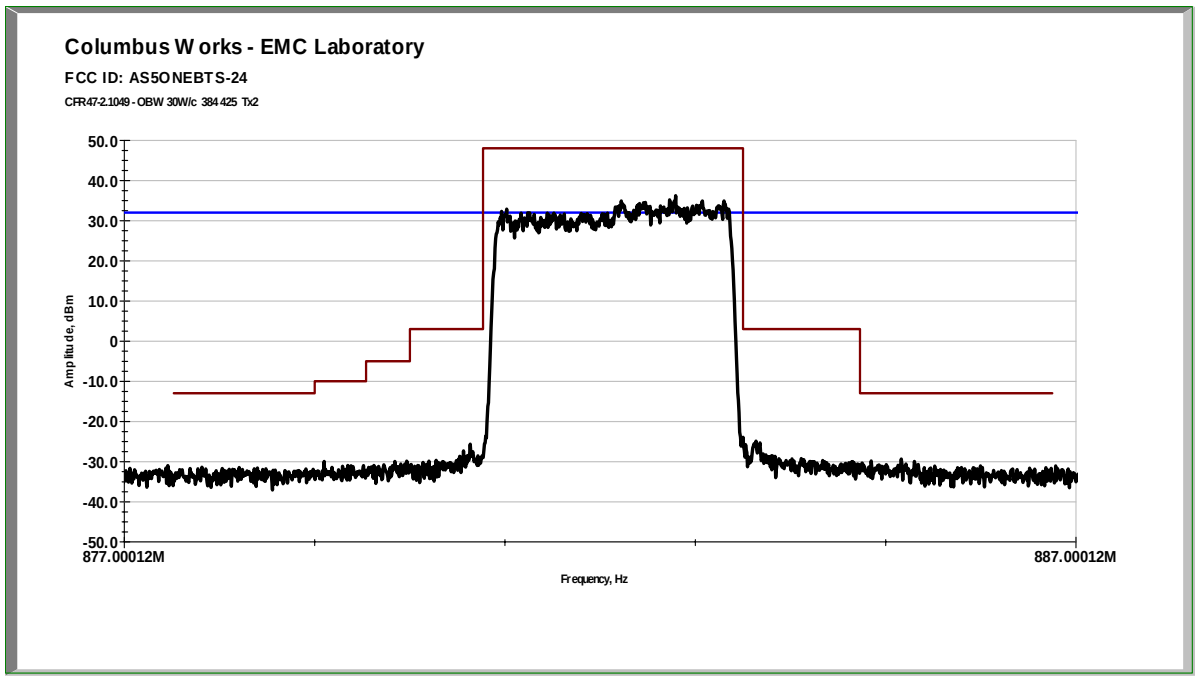

## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Aband High Tx2



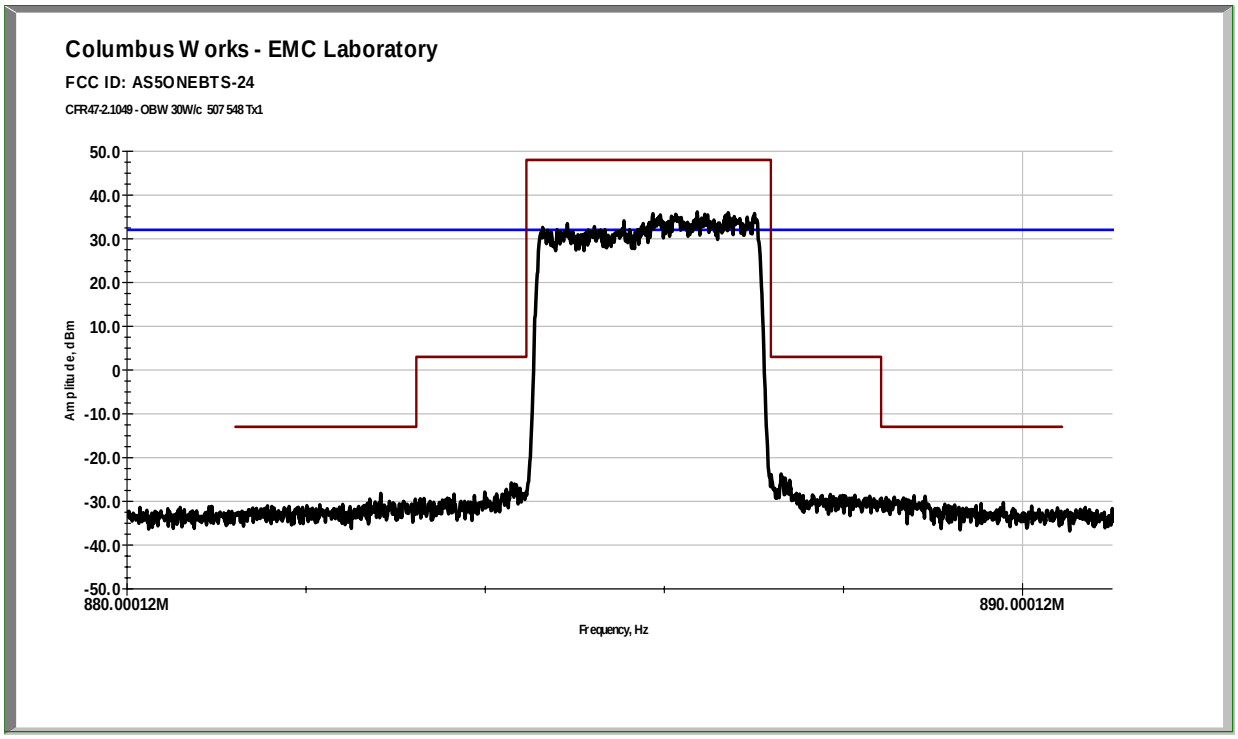
## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Bband Low Tx1



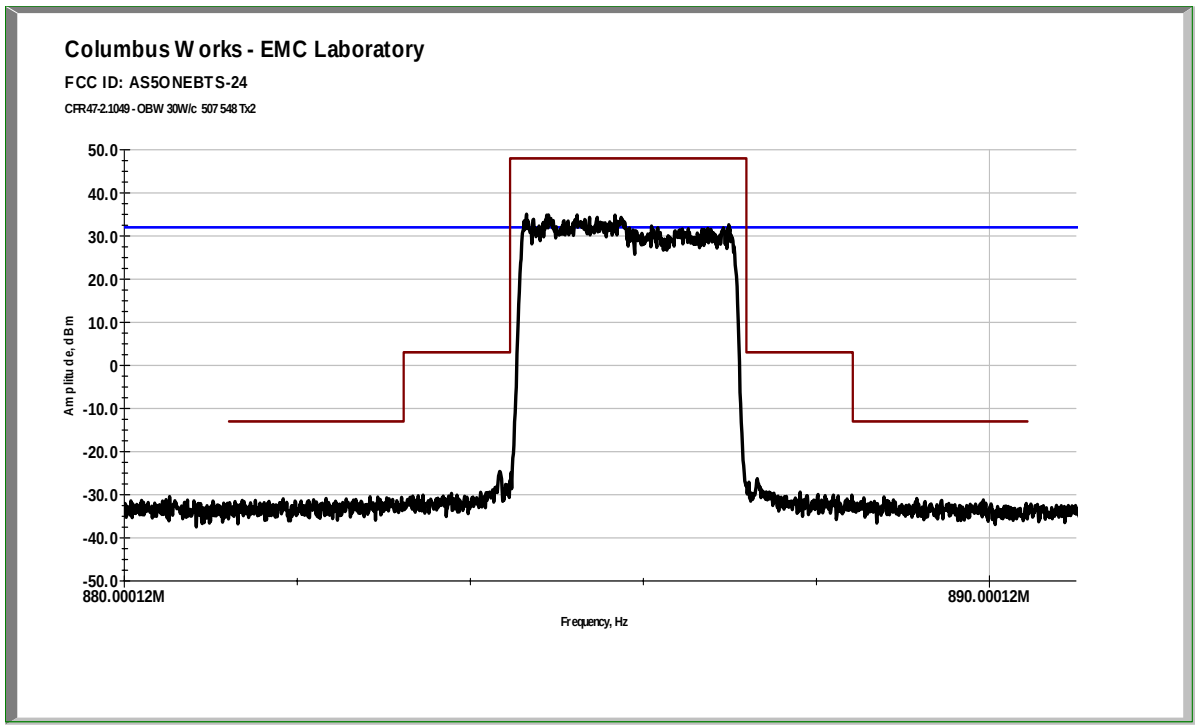

## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Bband Low Tx2



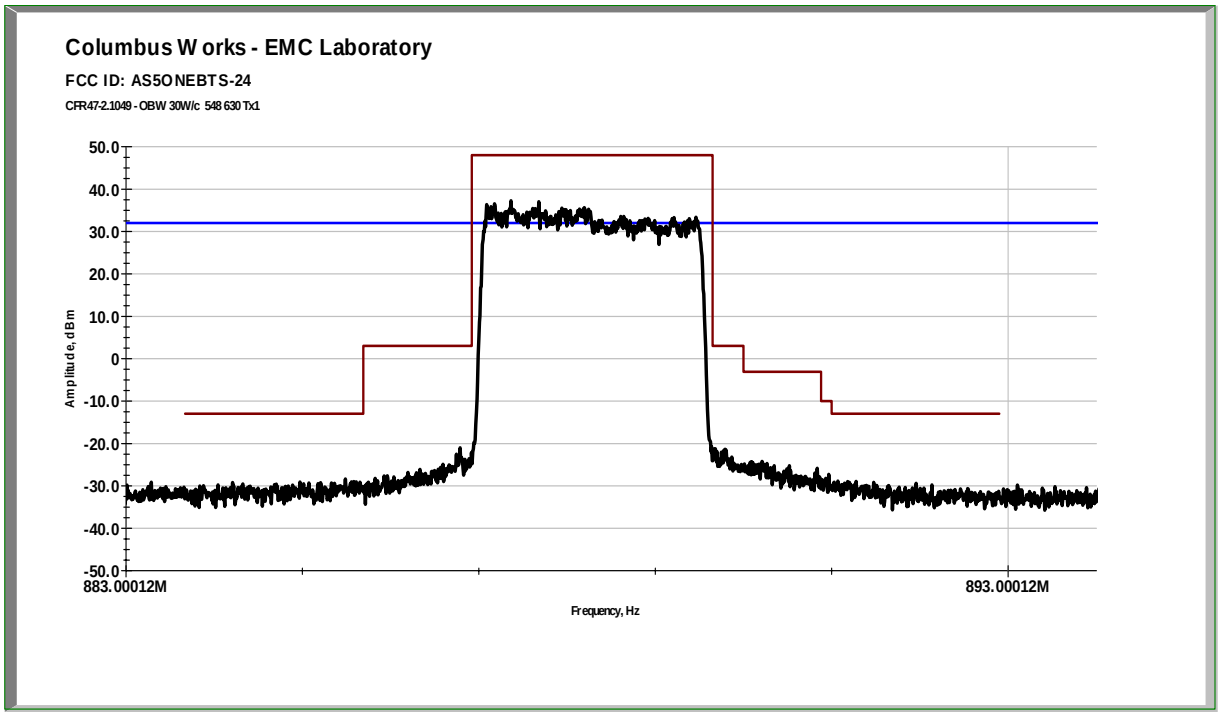
## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Bband Middle Tx1



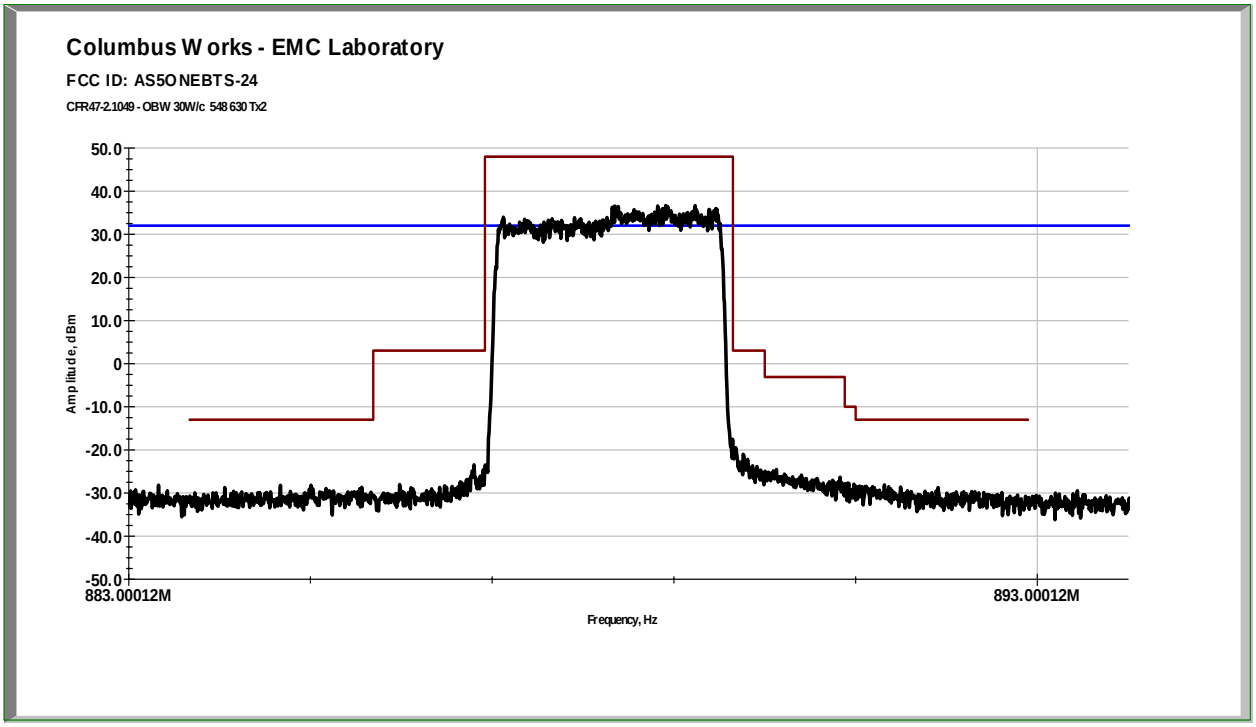

## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Bband Middle Tx2



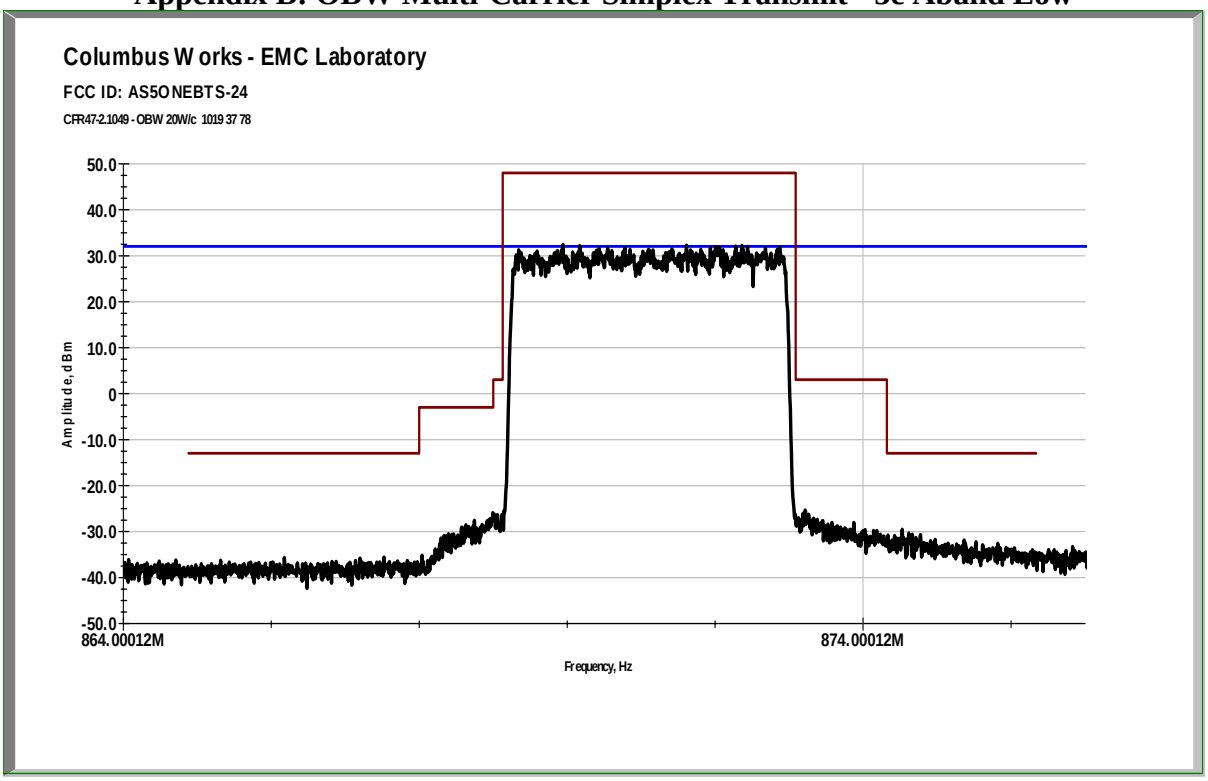
## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Bband High Tx1



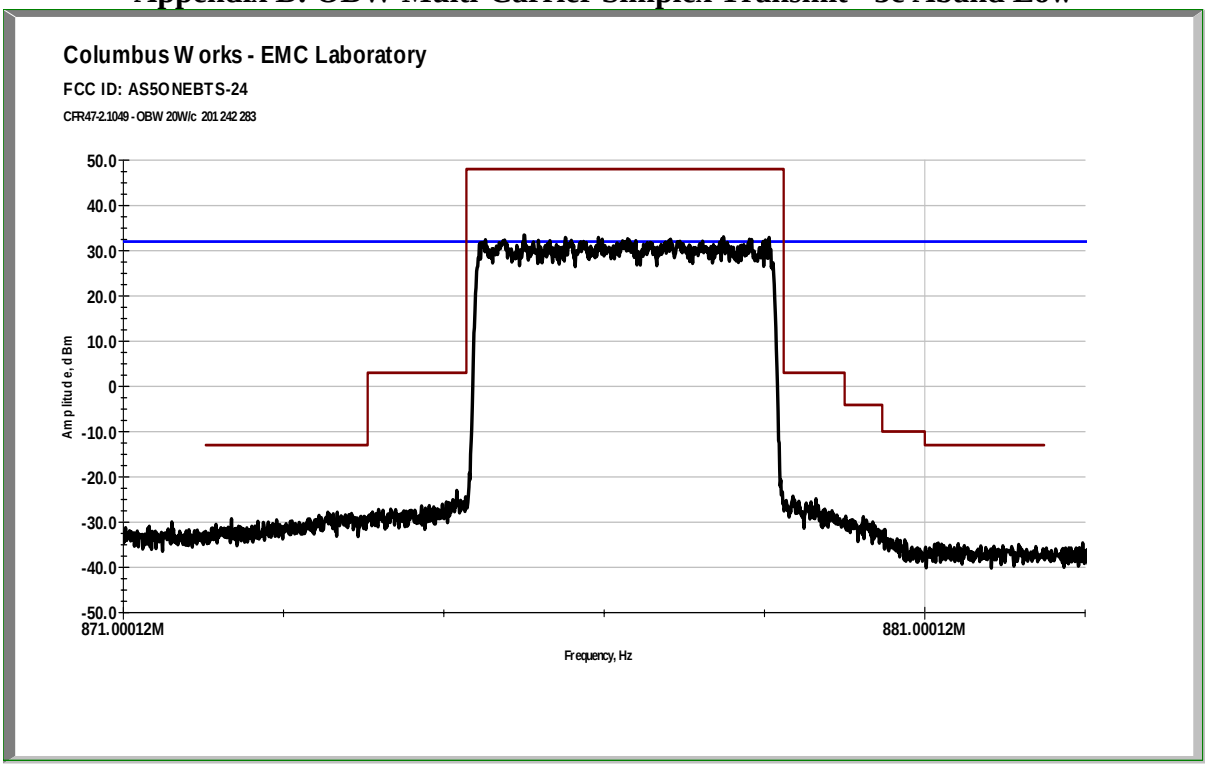

## Appendix B: OBW Multi-Carrier Diversity Transmit - 2c Bband High Tx2



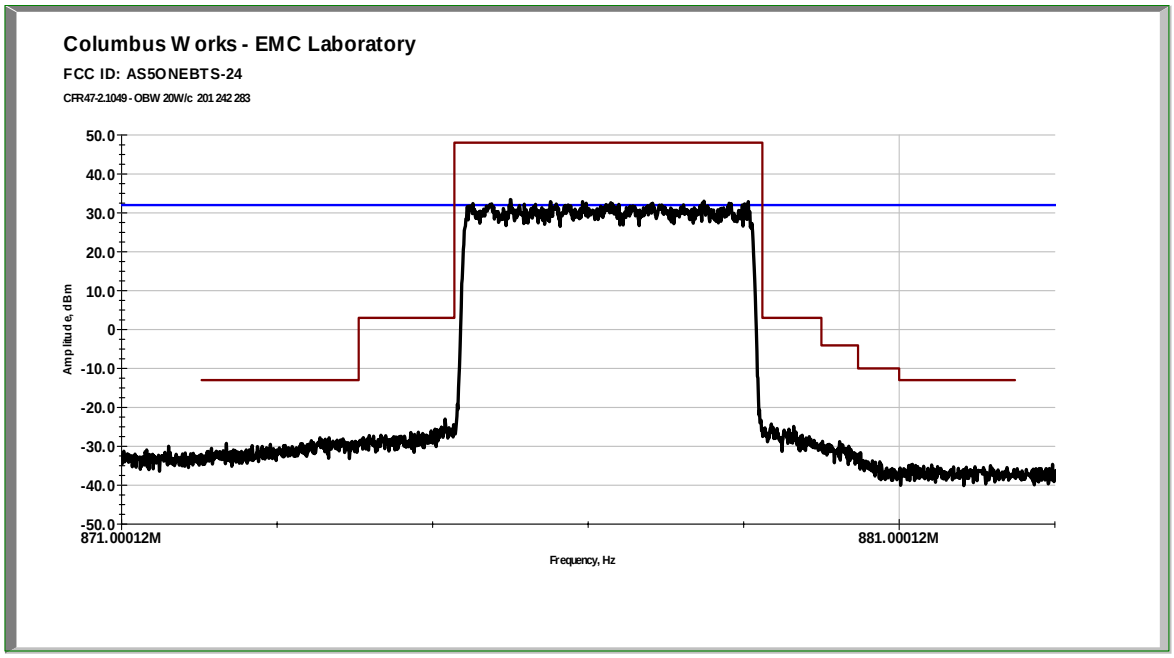
## Appendix B: OBW Multi-Carrier Simplex Transmit - 3c Aband Low



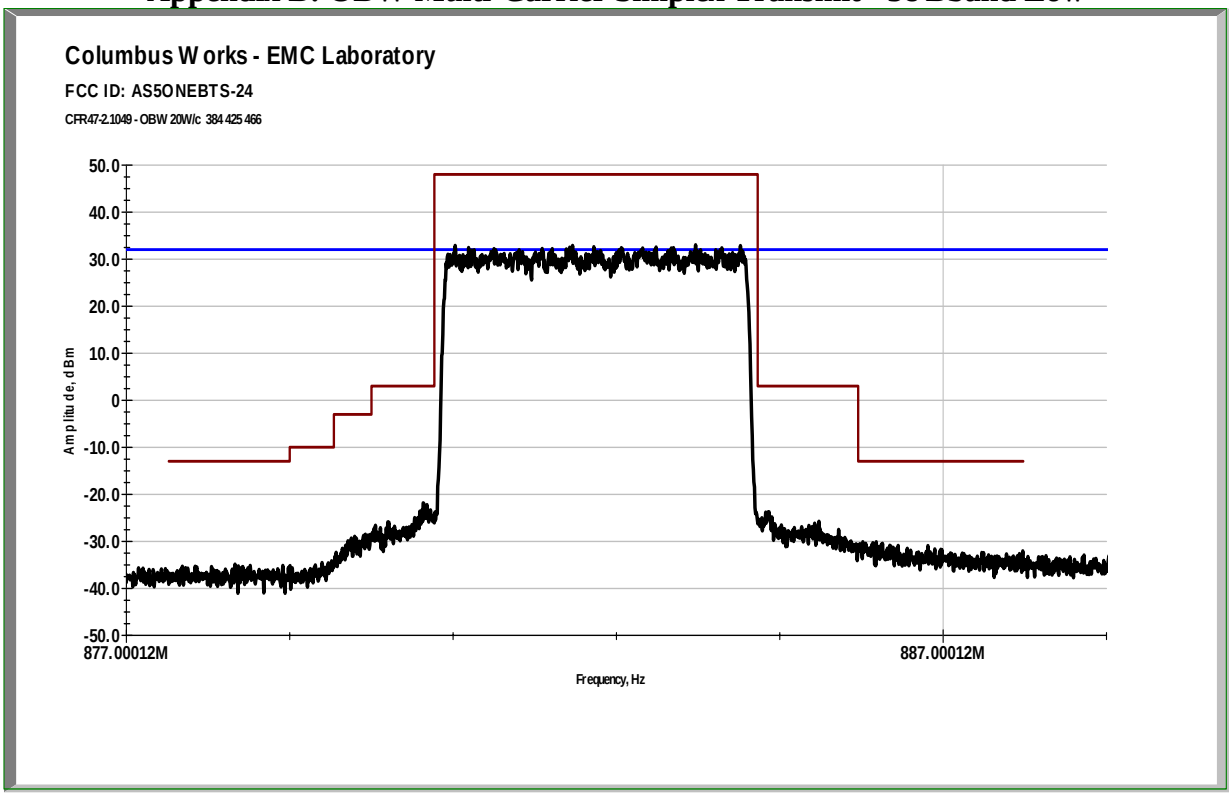

## Appendix B: OBW Multi-Carrier Simplex Transmit - 3c Aband Low



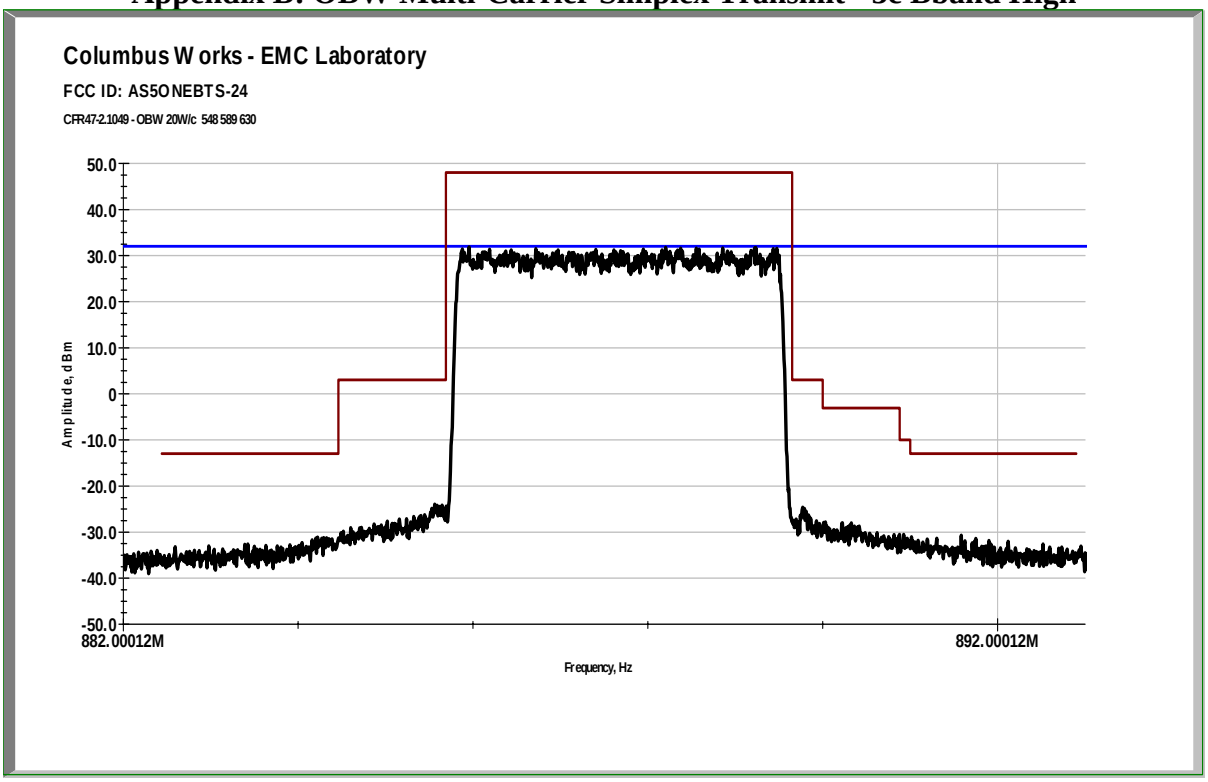
## Appendix B: OBW Multi-Carrier Simplex Transmit - 3c Aband High



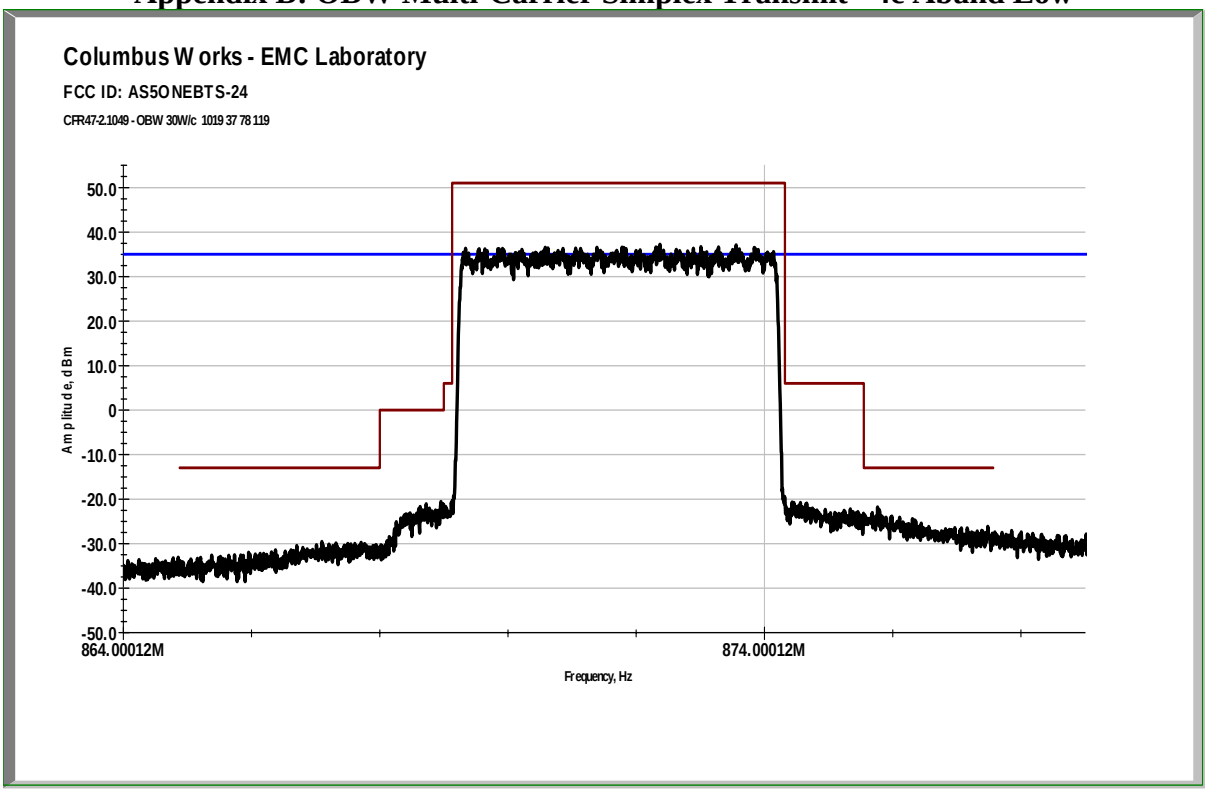

## Appendix B: OBW Multi-Carrier Simplex Transmit - 3c Bband Low



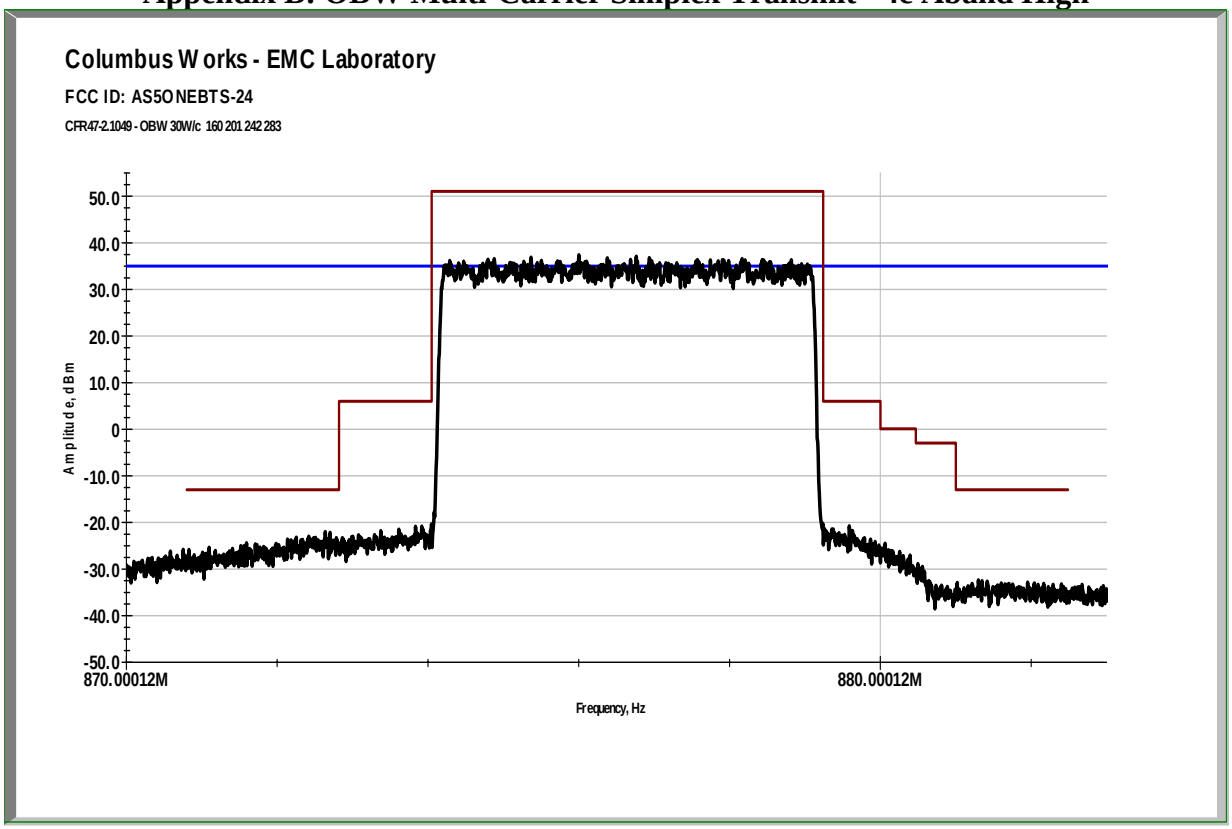
## Appendix B: OBW Multi-Carrier Simplex Transmit - 3c Bband High



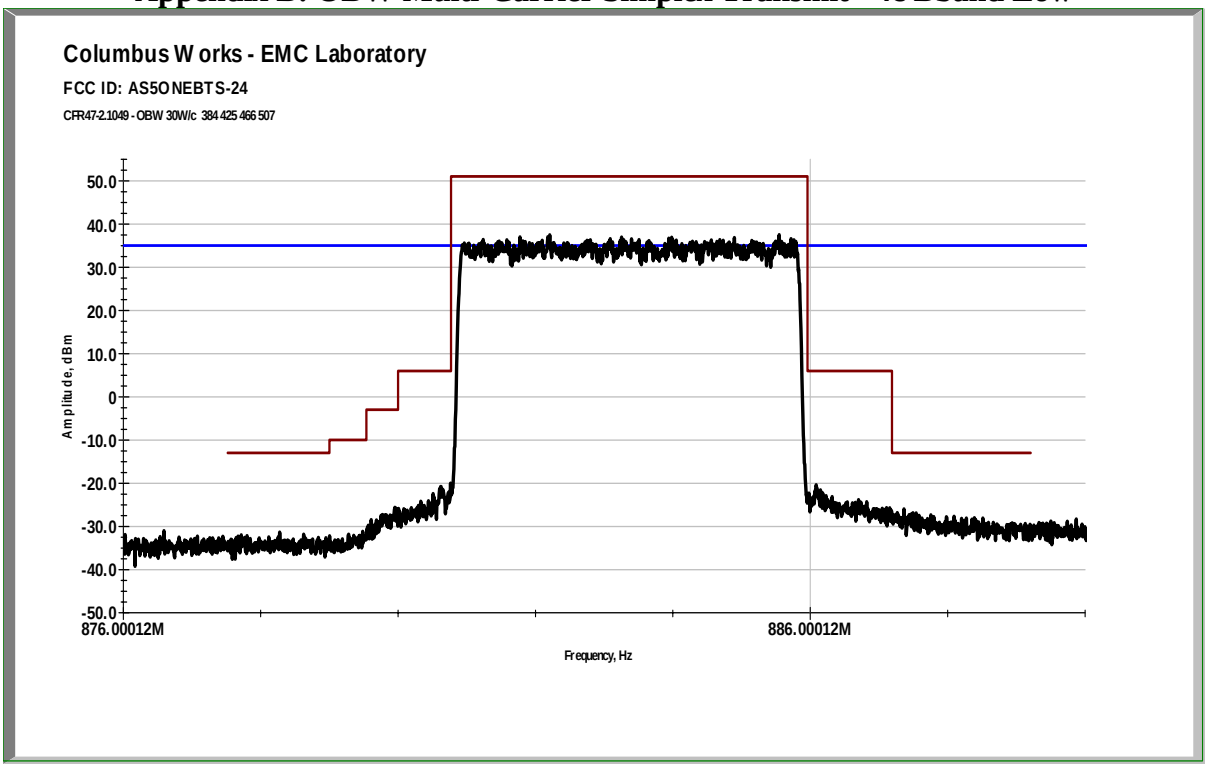

## Appendix B: OBW Multi-Carrier Simplex Transmit - 4c Aband Low



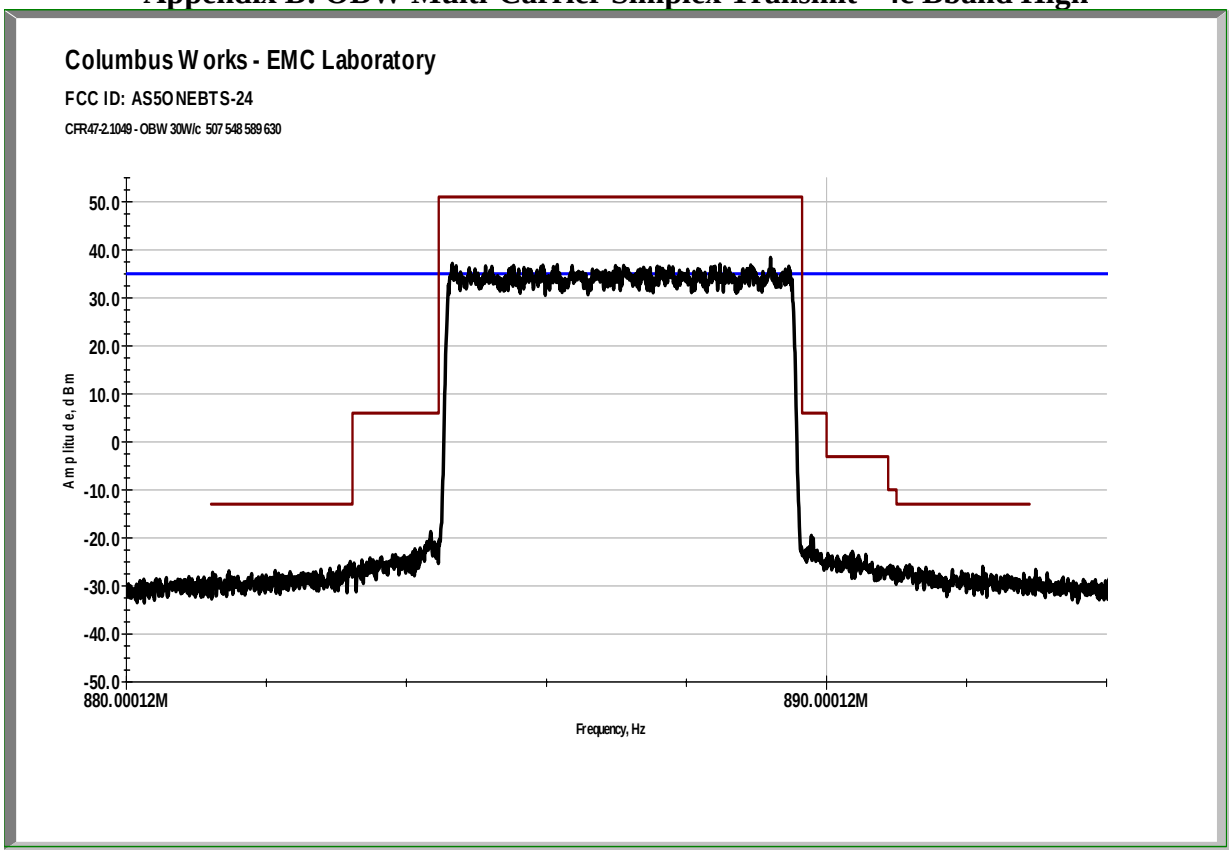
## Appendix B: OBW Multi-Carrier Simplex Transmit - 4c Aband High



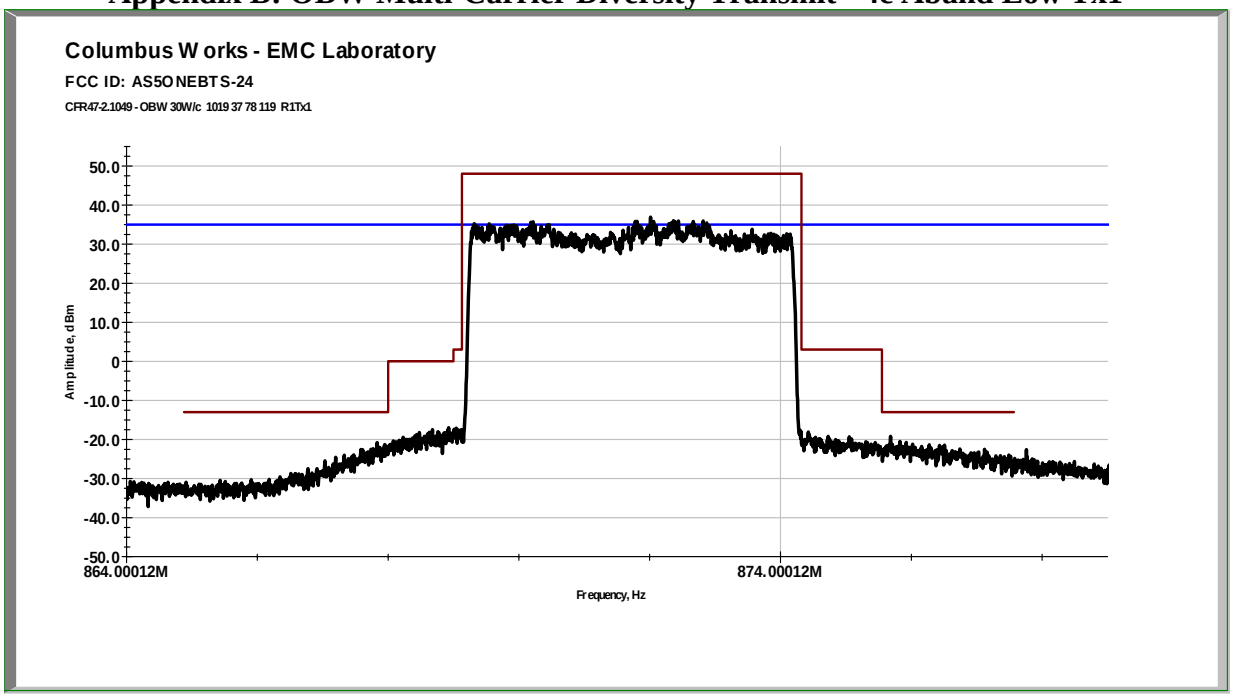

## Appendix B: OBW Multi-Carrier Simplex Transmit - 4c Bband Low



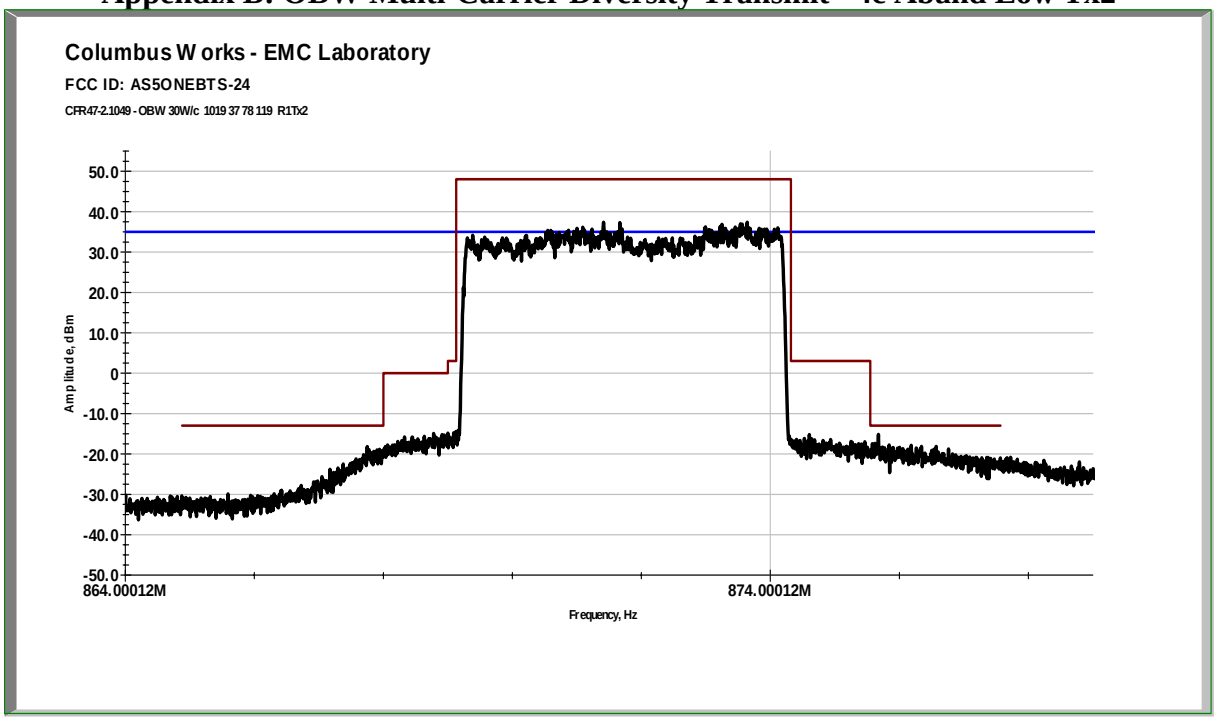
## Appendix B: OBW Multi-Carrier Simplex Transmit - 4c Bband High



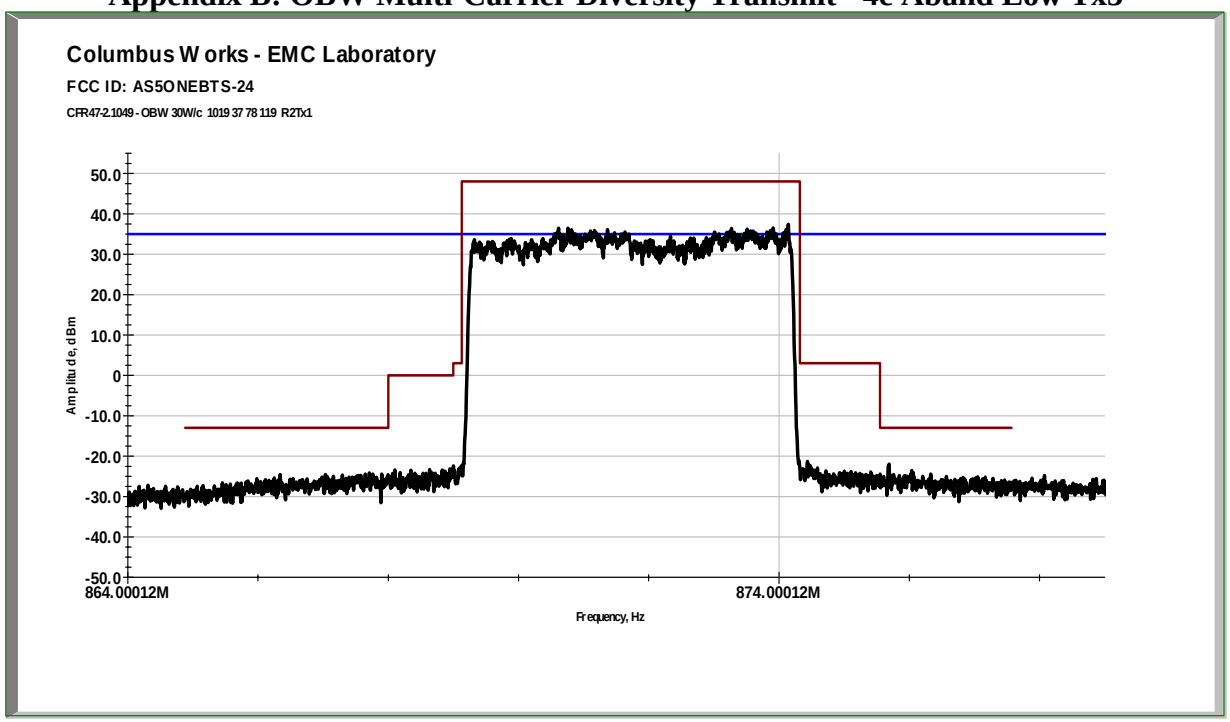

## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Aband Low Tx1



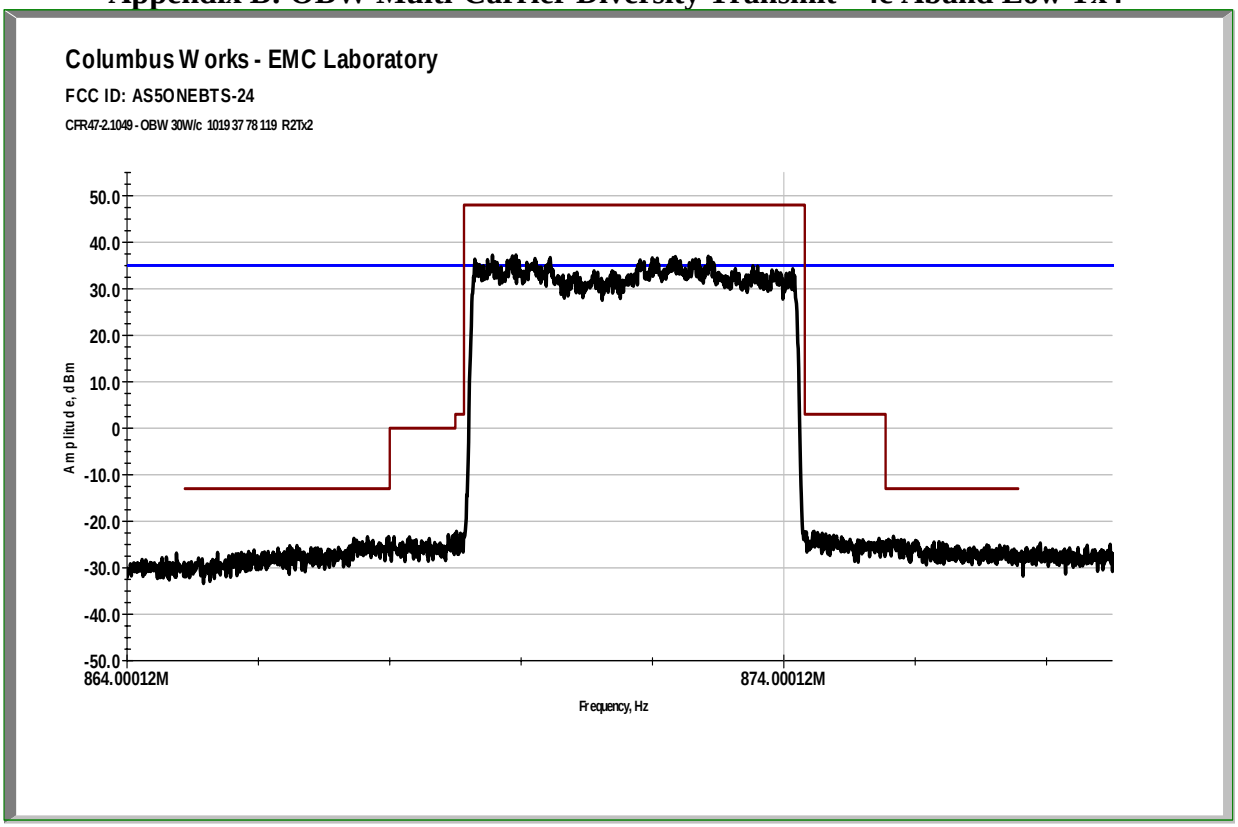
## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Aband Low Tx2



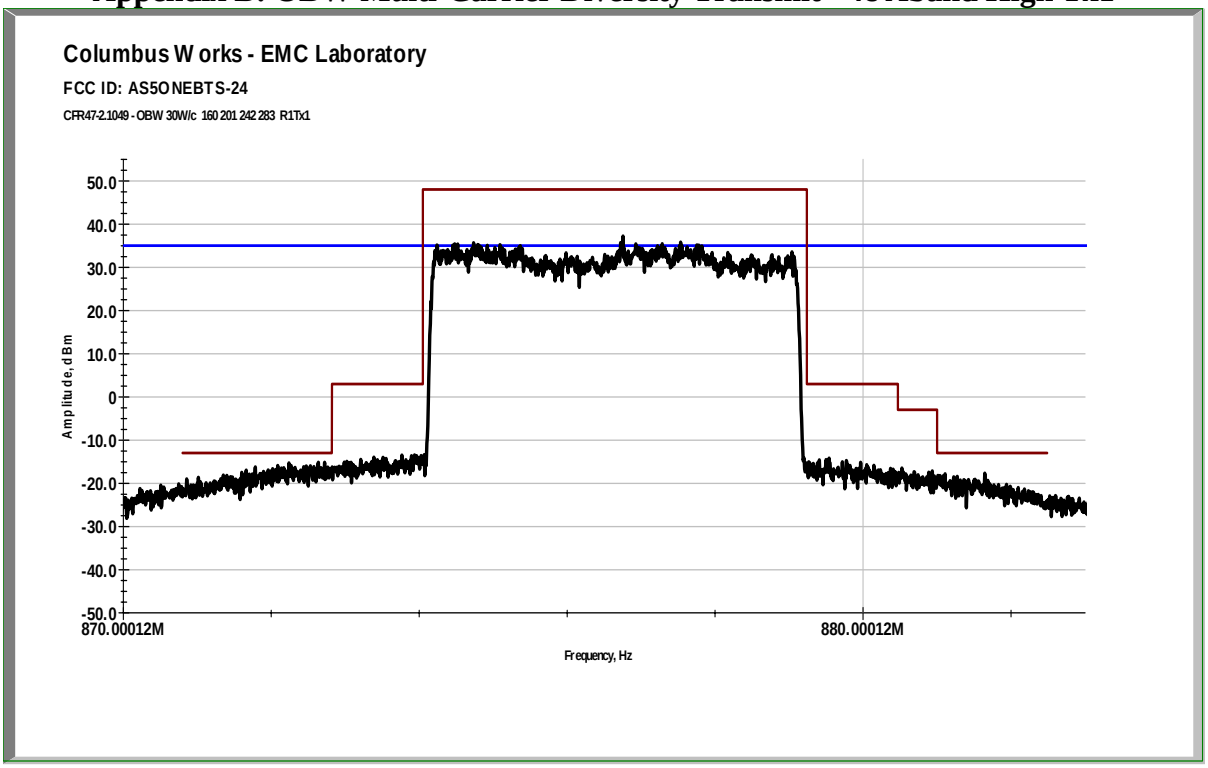

## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Aband Low Tx3



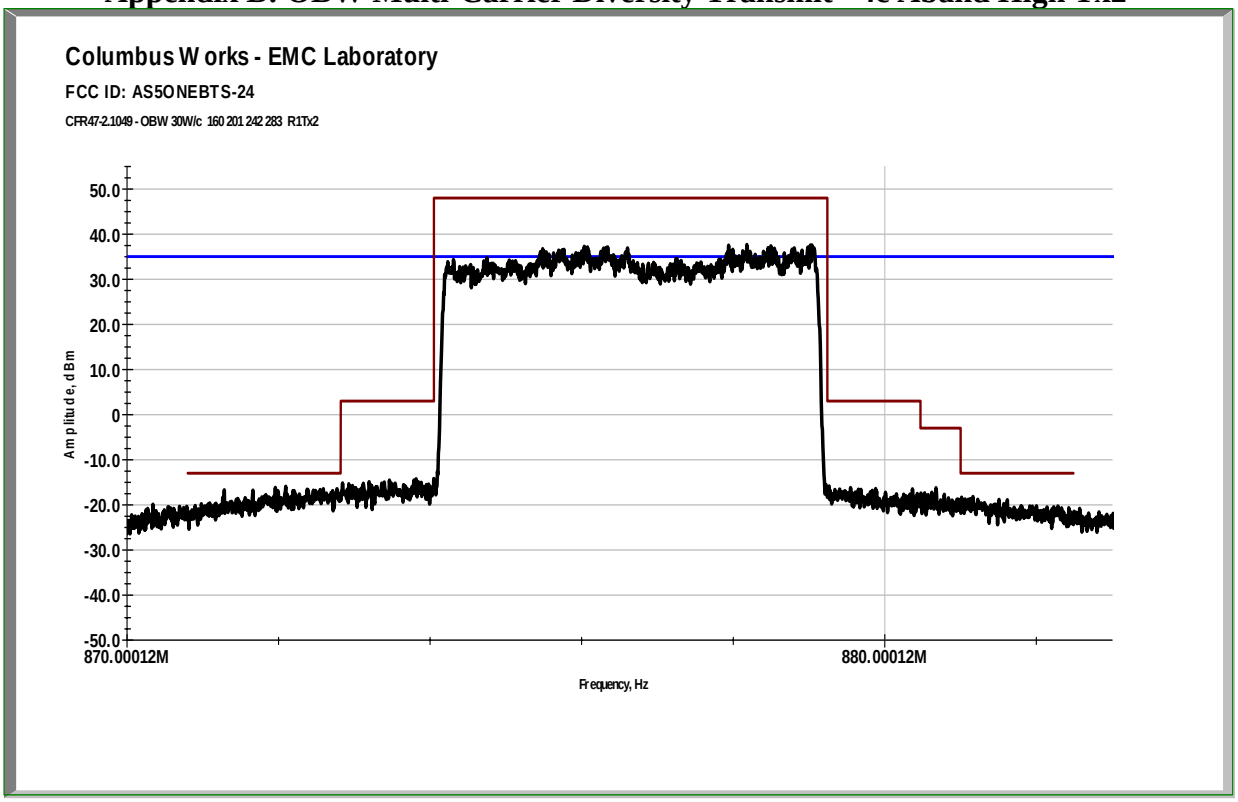
## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Aband Low Tx4



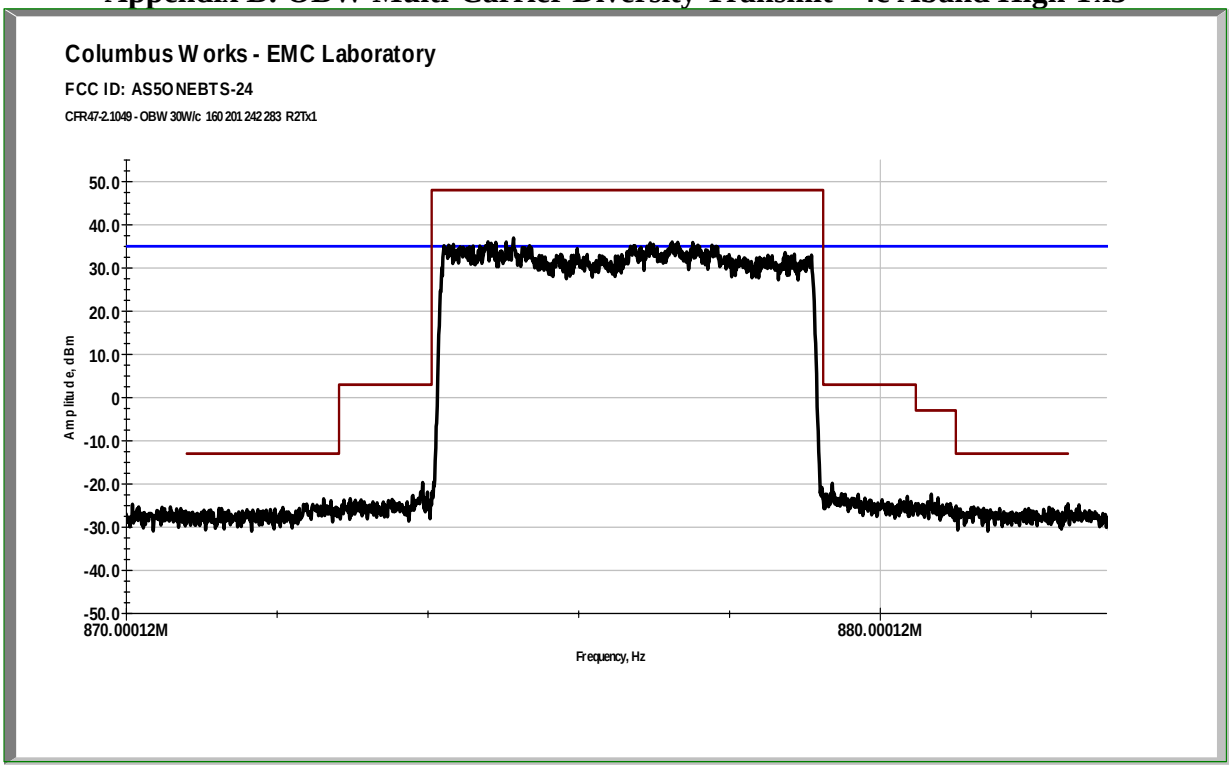

## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Aband High Tx1



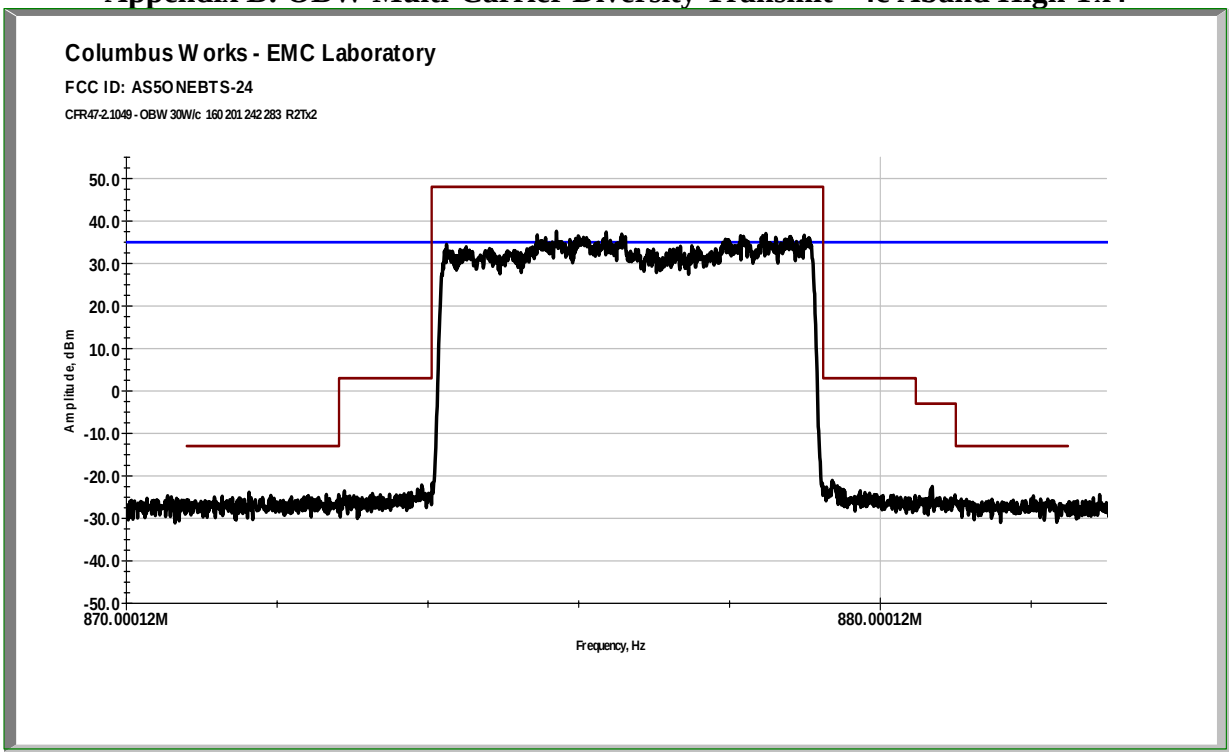
## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Aband High Tx2



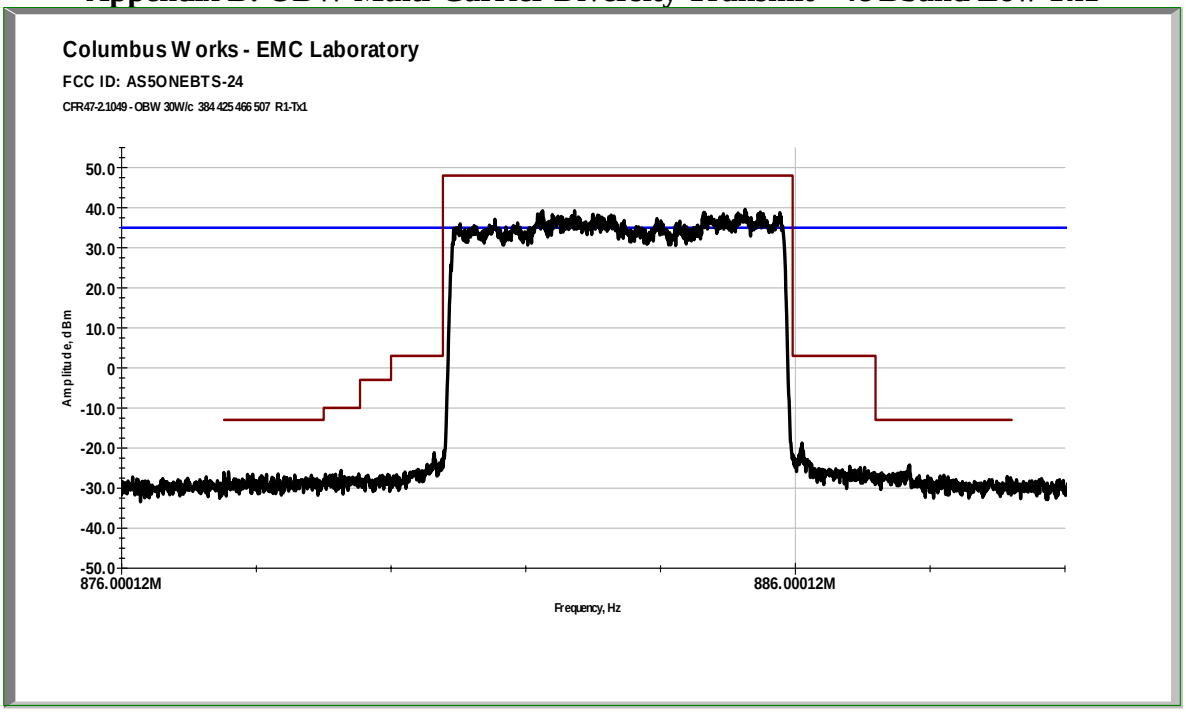

## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Aband High Tx3



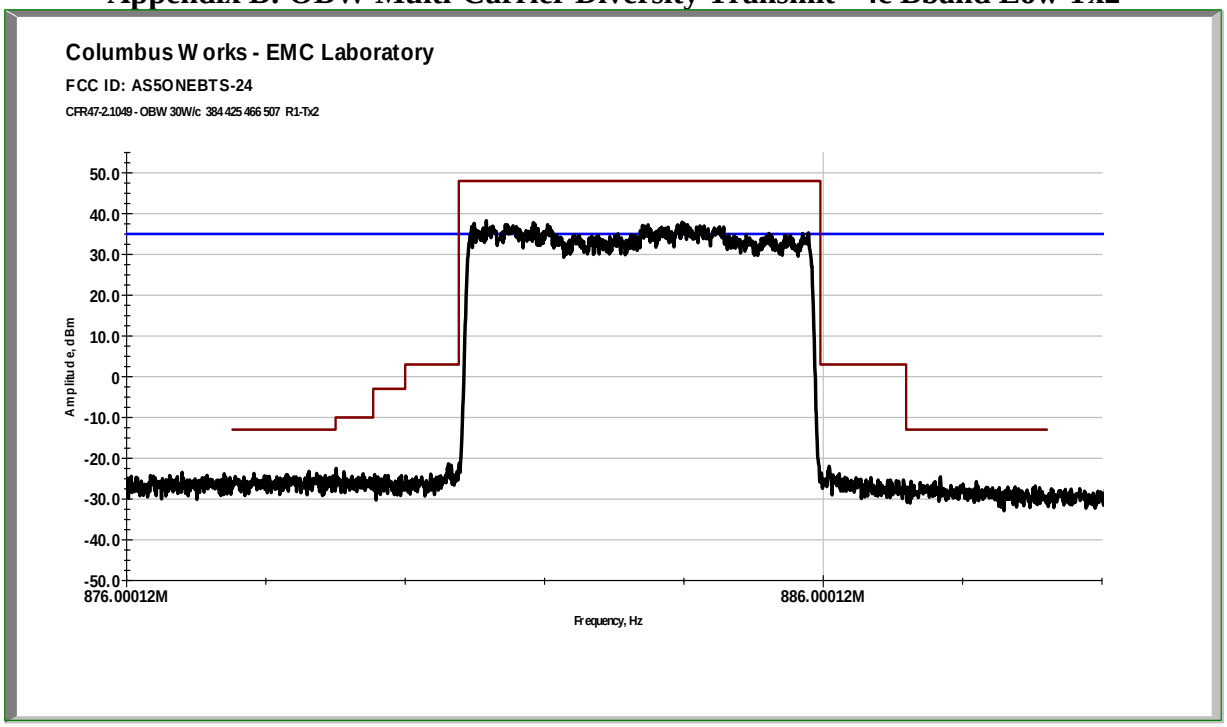
## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Aband High Tx4



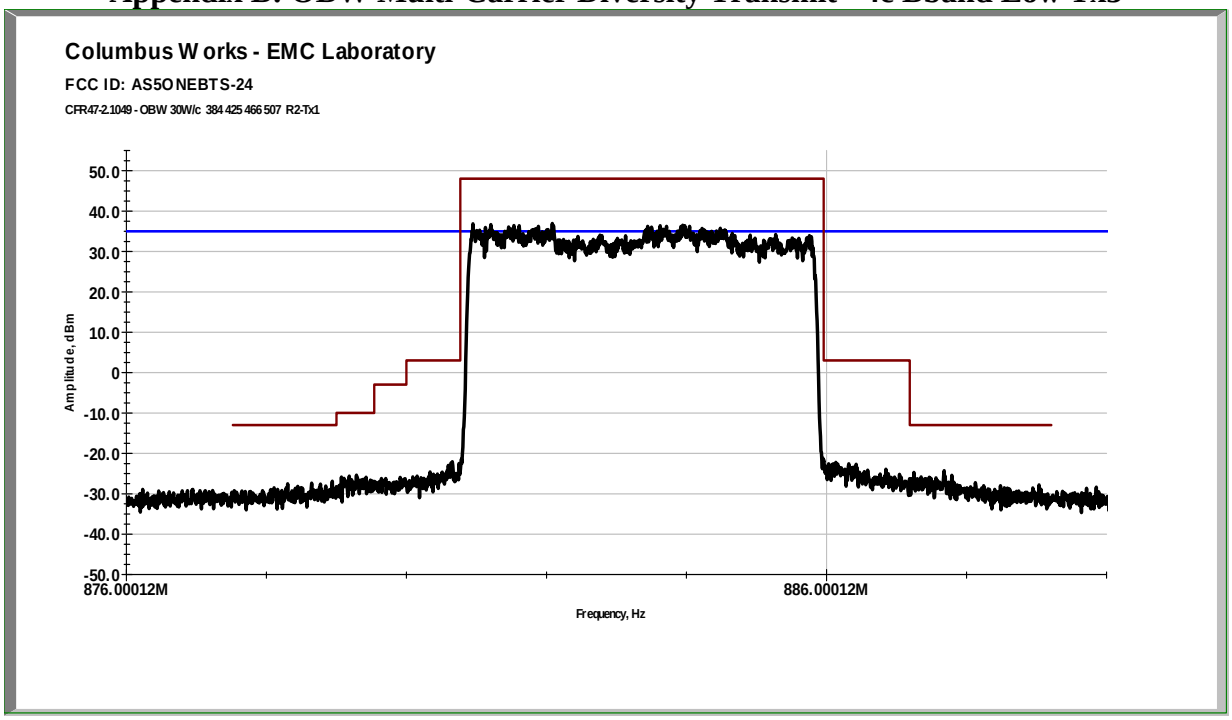

## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Bband Low Tx1



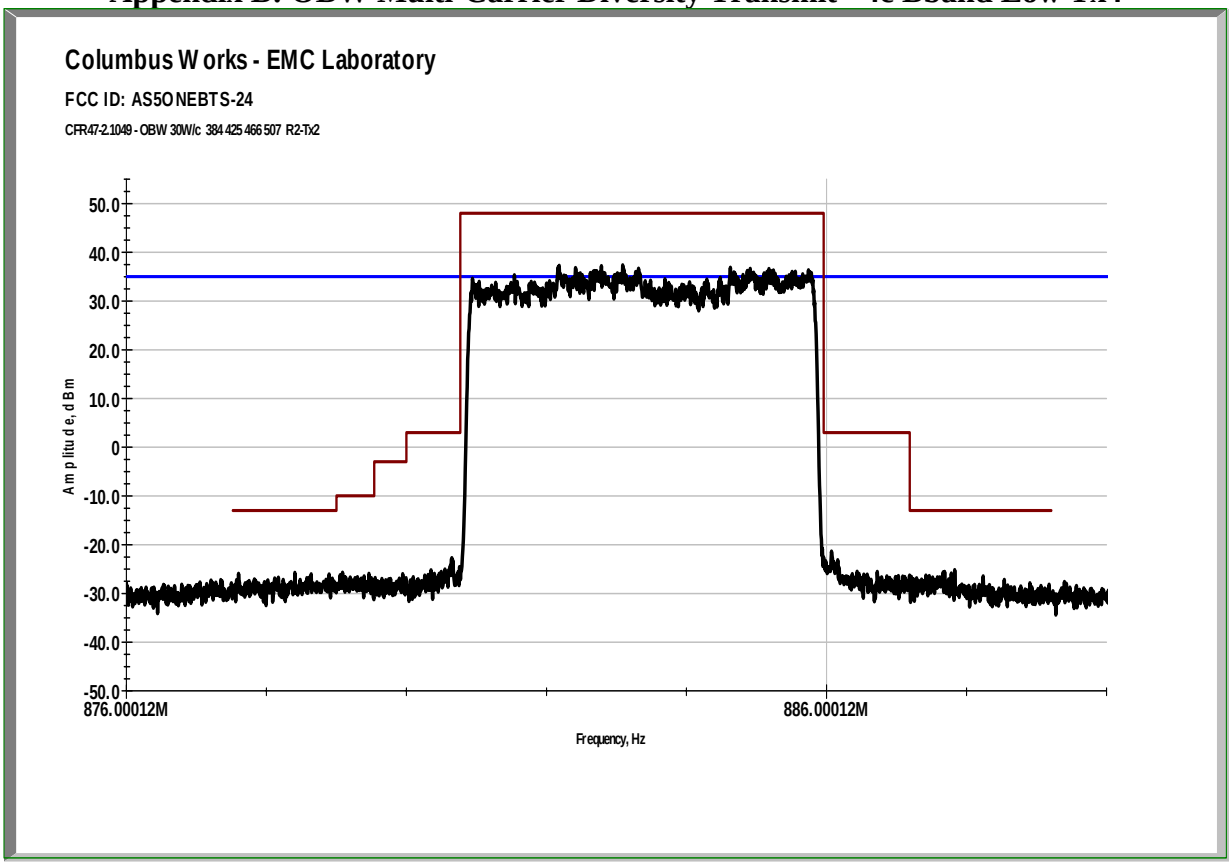
## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Bband Low Tx2



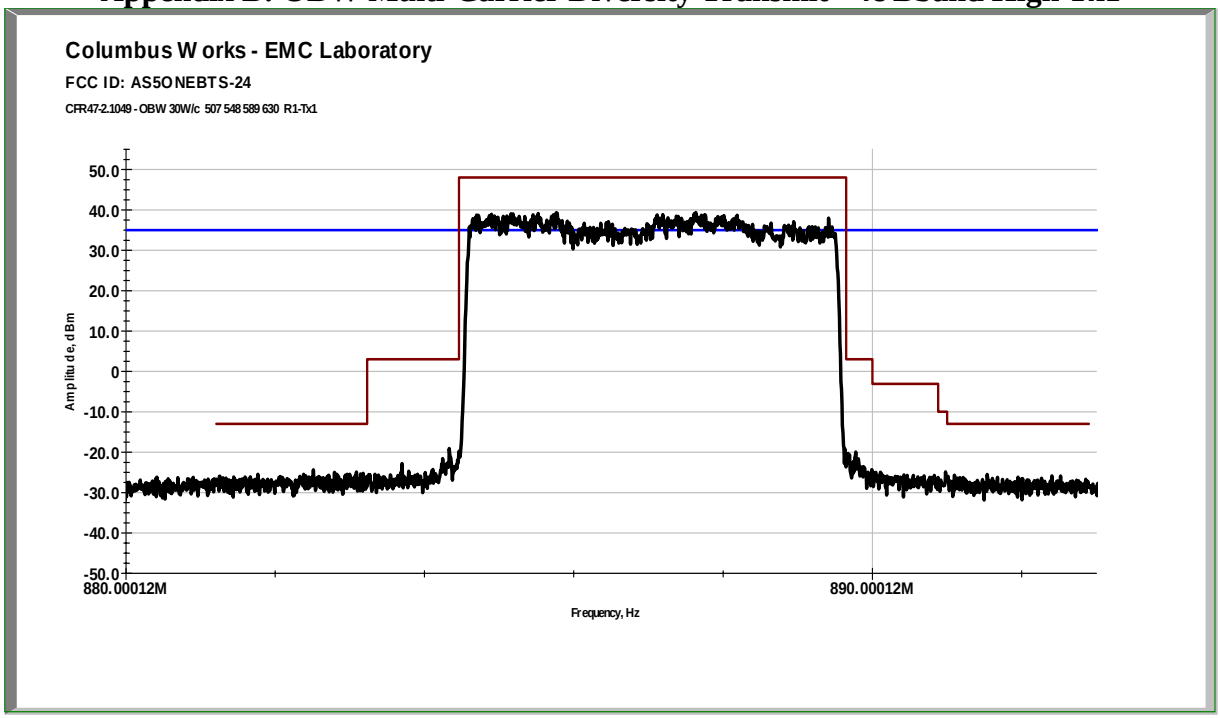

## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Bband Low Tx3



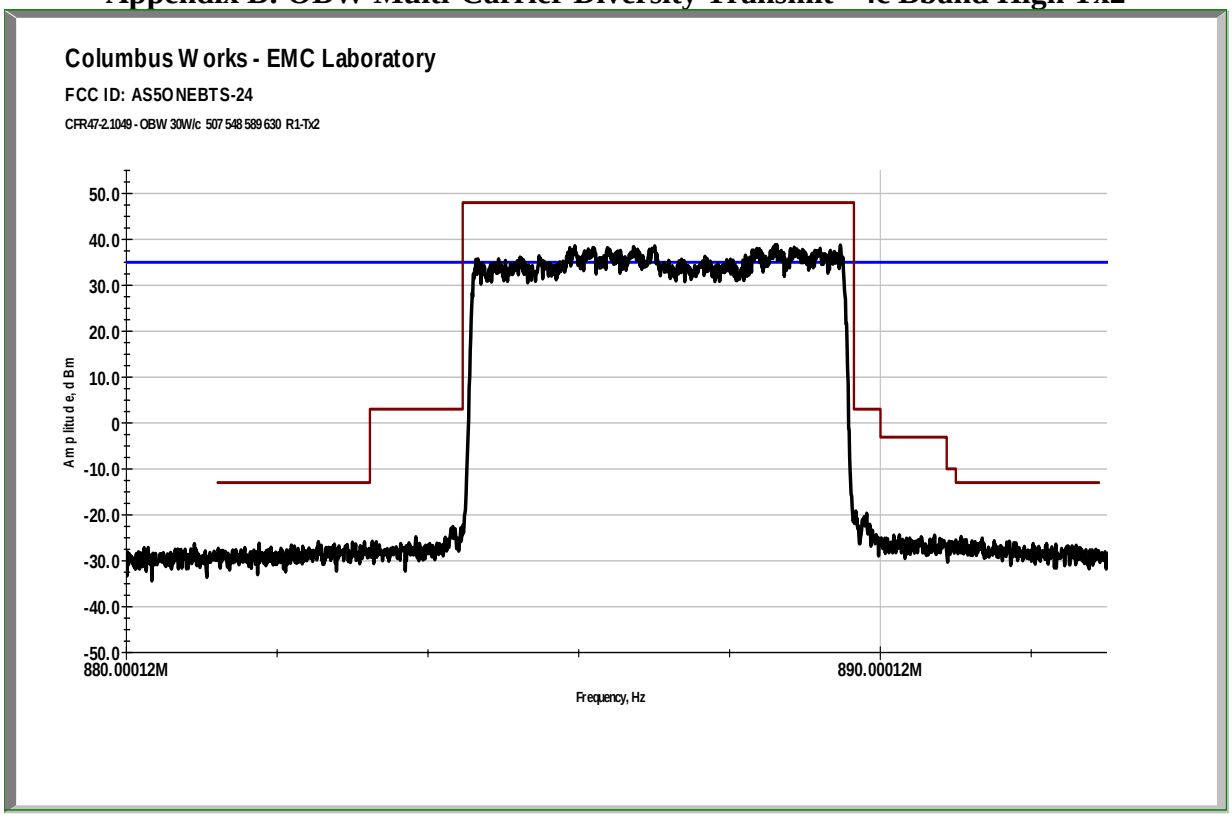
## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Bband Low Tx4



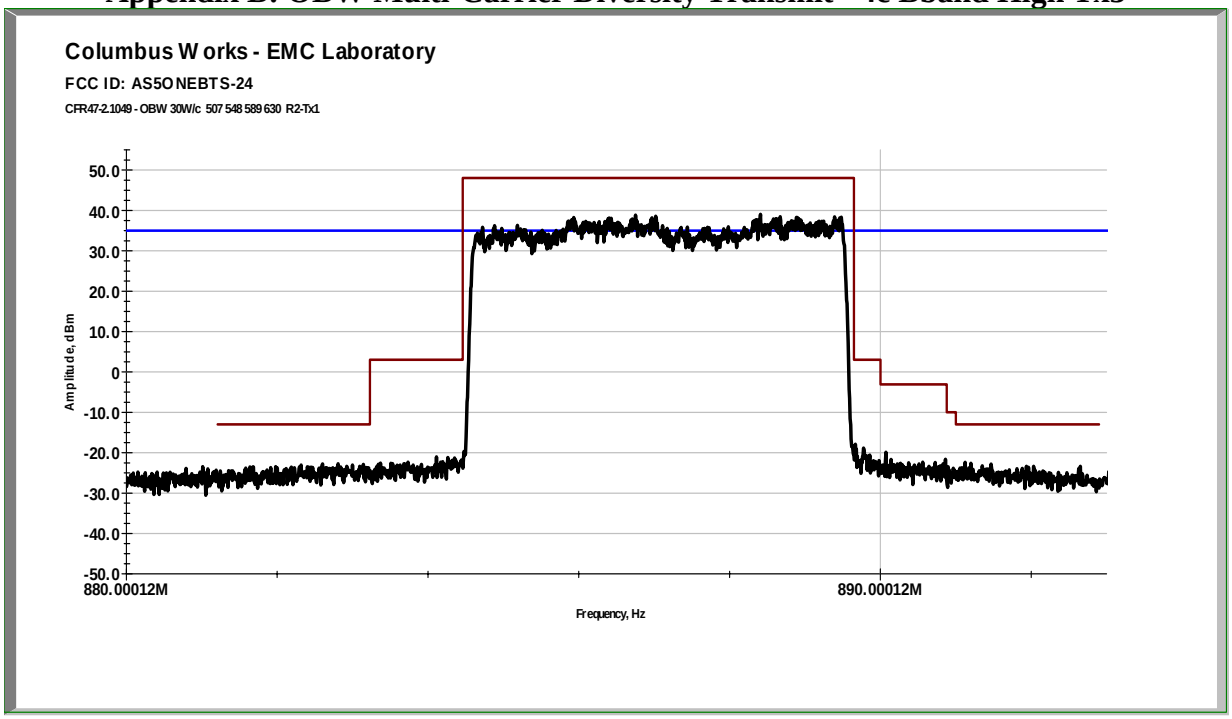

## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Bband High Tx1



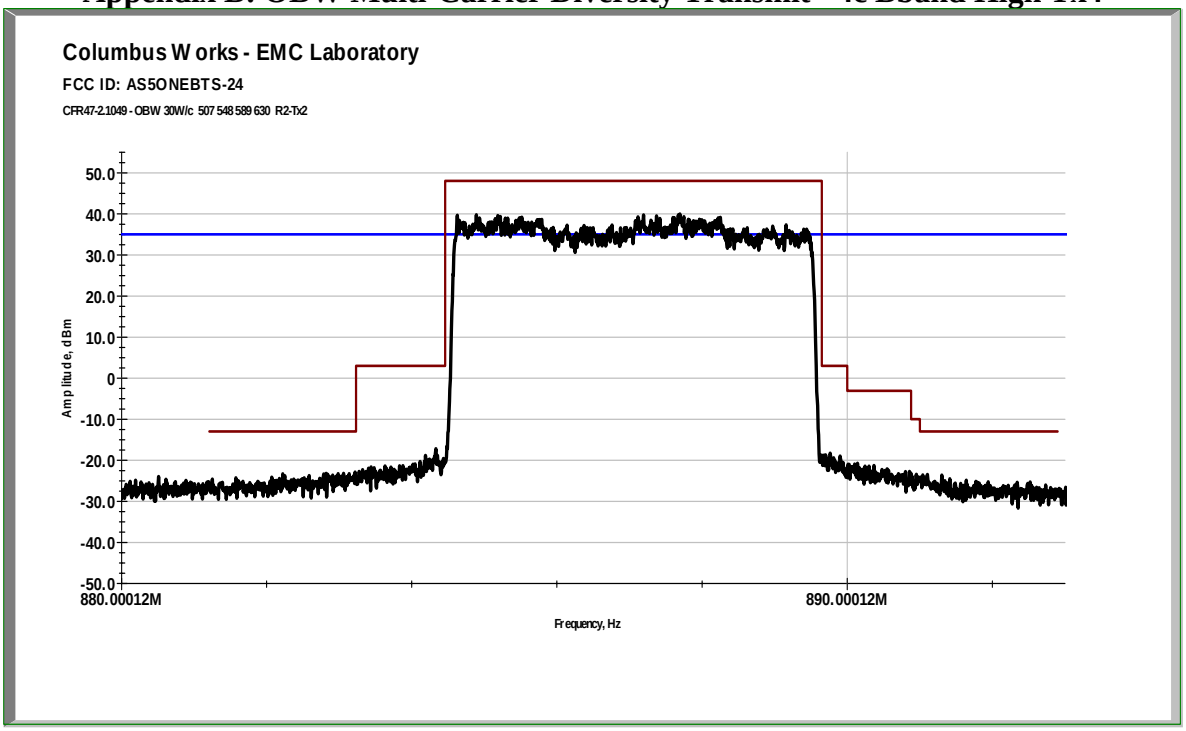
## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Bband High Tx2



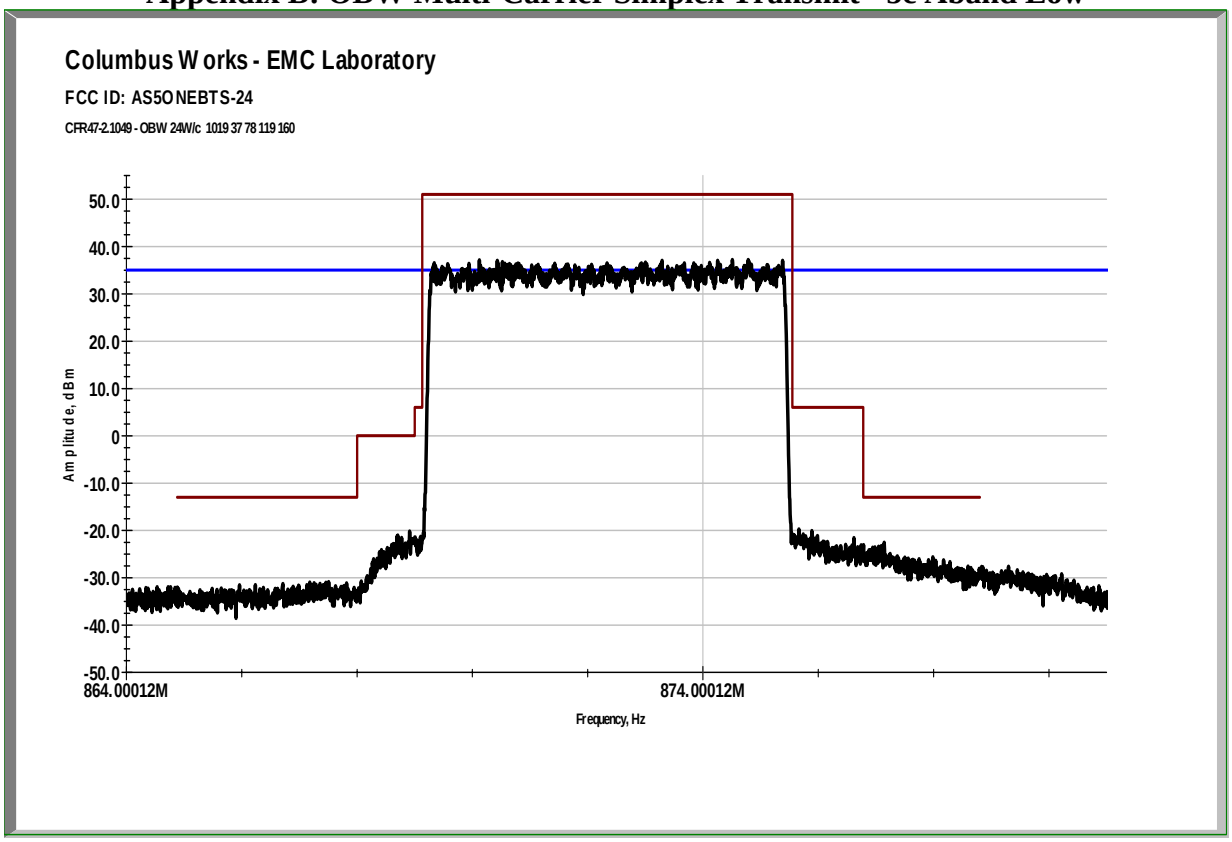

## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Bband High Tx3



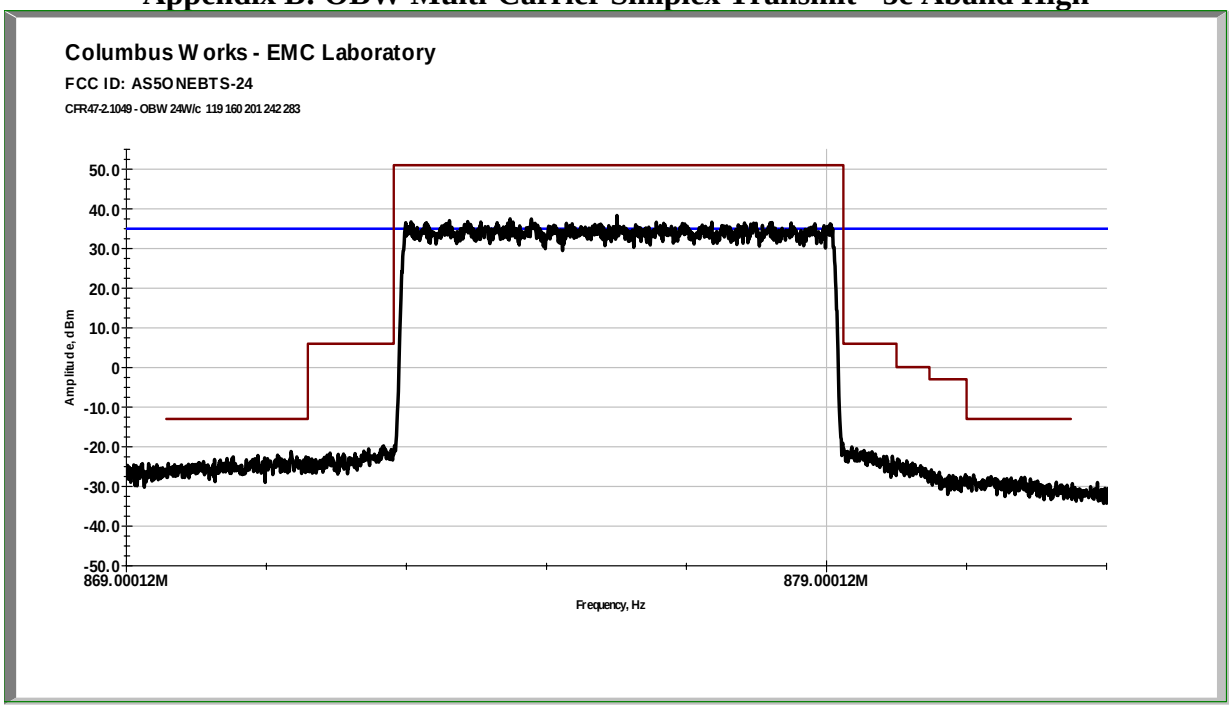
## Appendix B: OBW Multi-Carrier Diversity Transmit - 4c Bband High Tx4



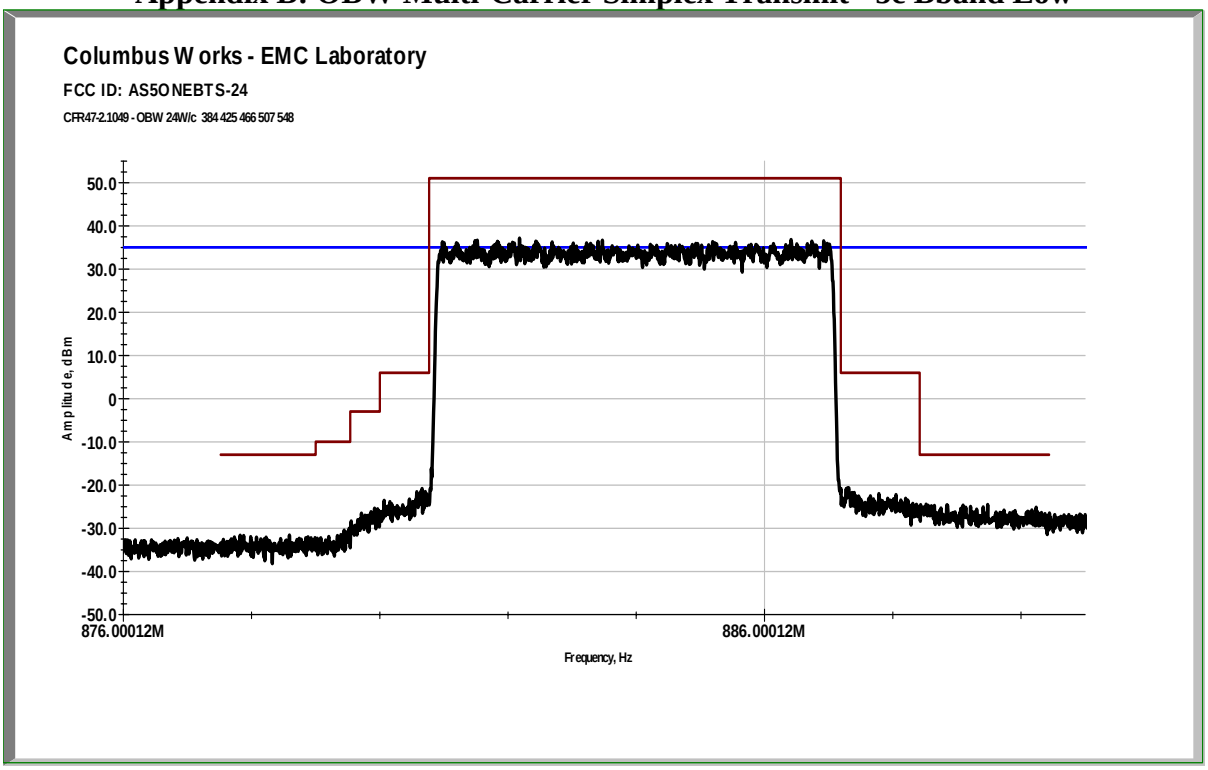

## Appendix B: OBW Multi-Carrier Simplex Transmit - 5c Aband Low



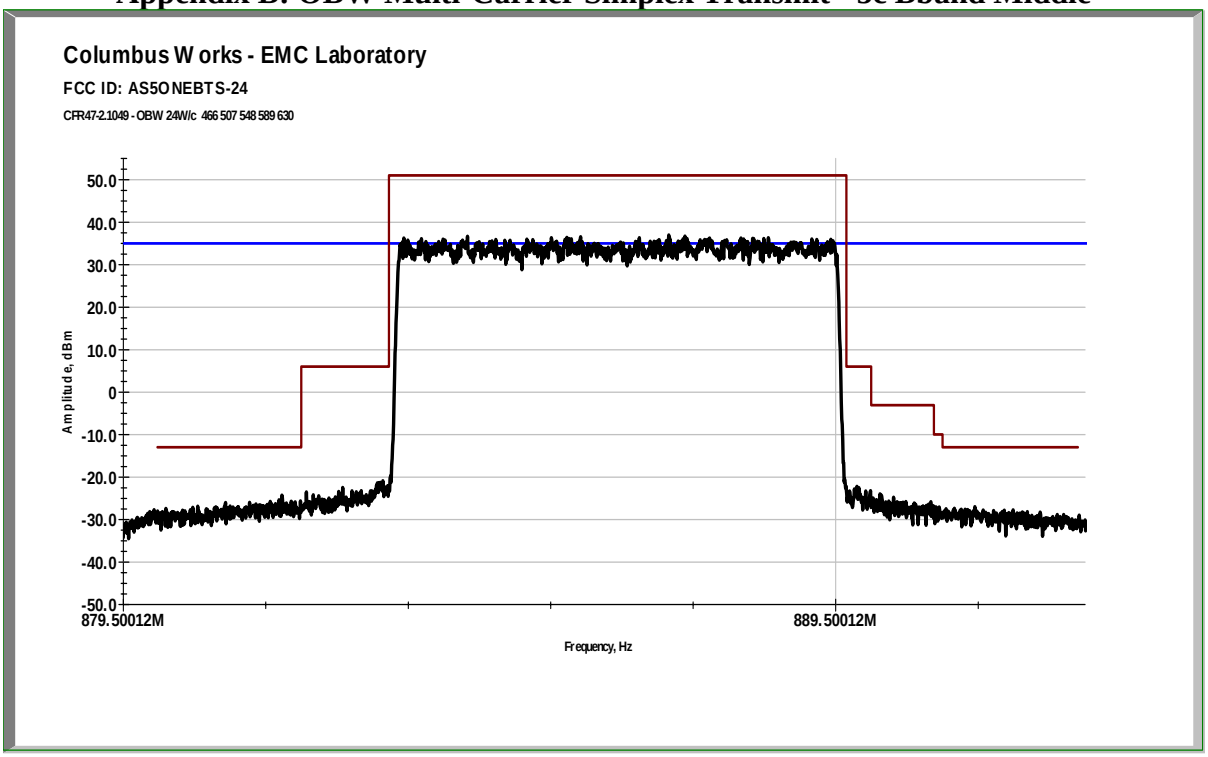
## Appendix B: OBW Multi-Carrier Simplex Transmit - 5c Aband High



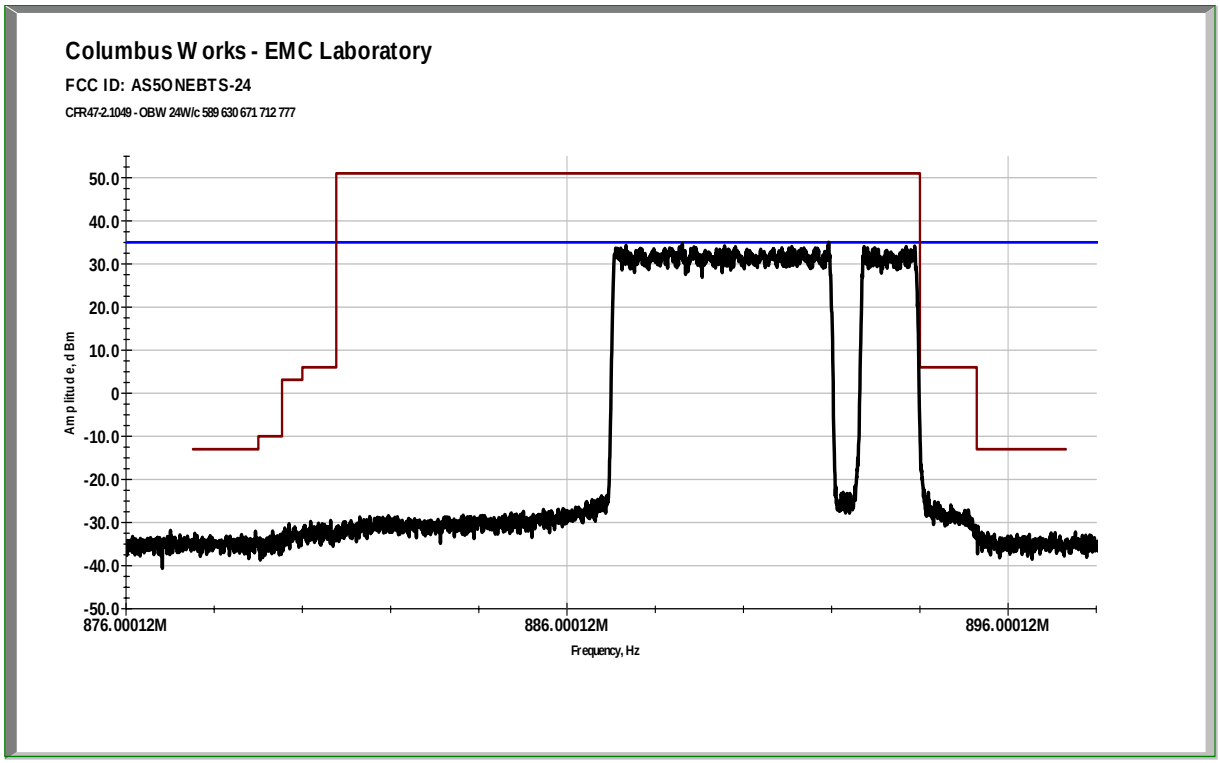

## Appendix B: OBW Multi-Carrier Simplex Transmit - 5c Bband Low



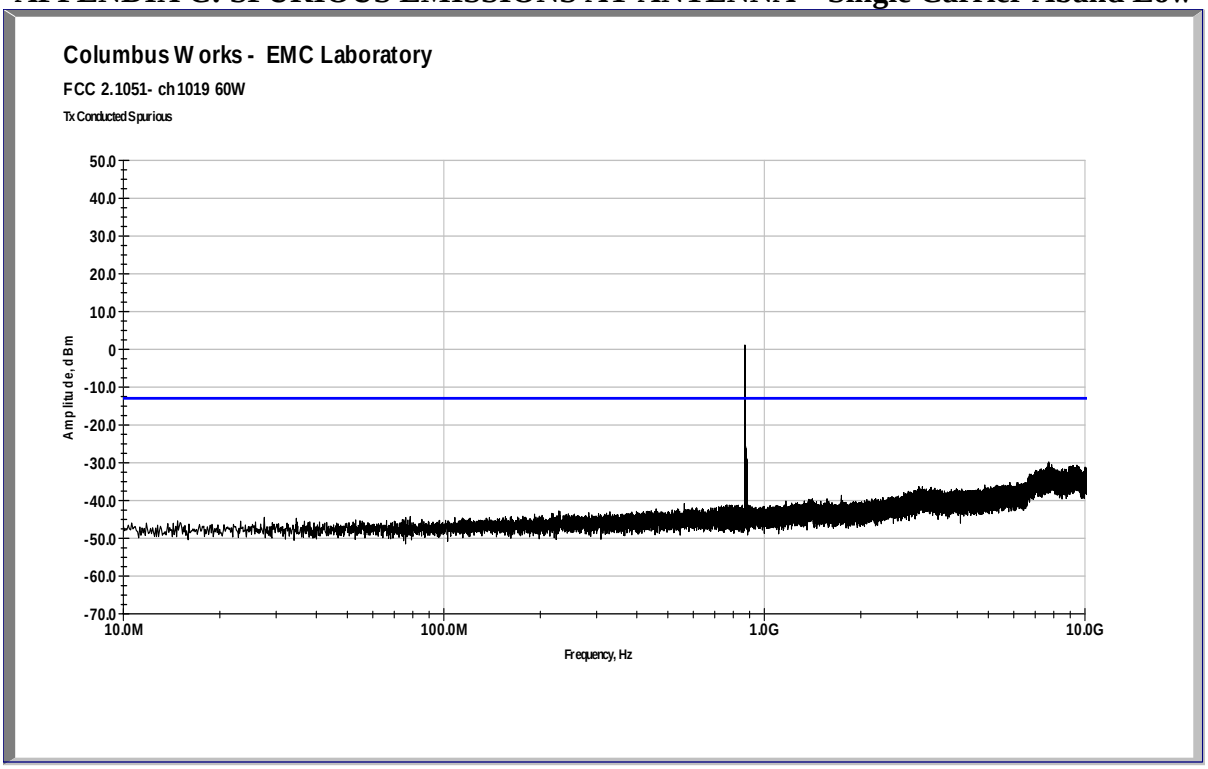
## Appendix B: OBW Multi-Carrier Simplex Transmit - 5c Bband Middle



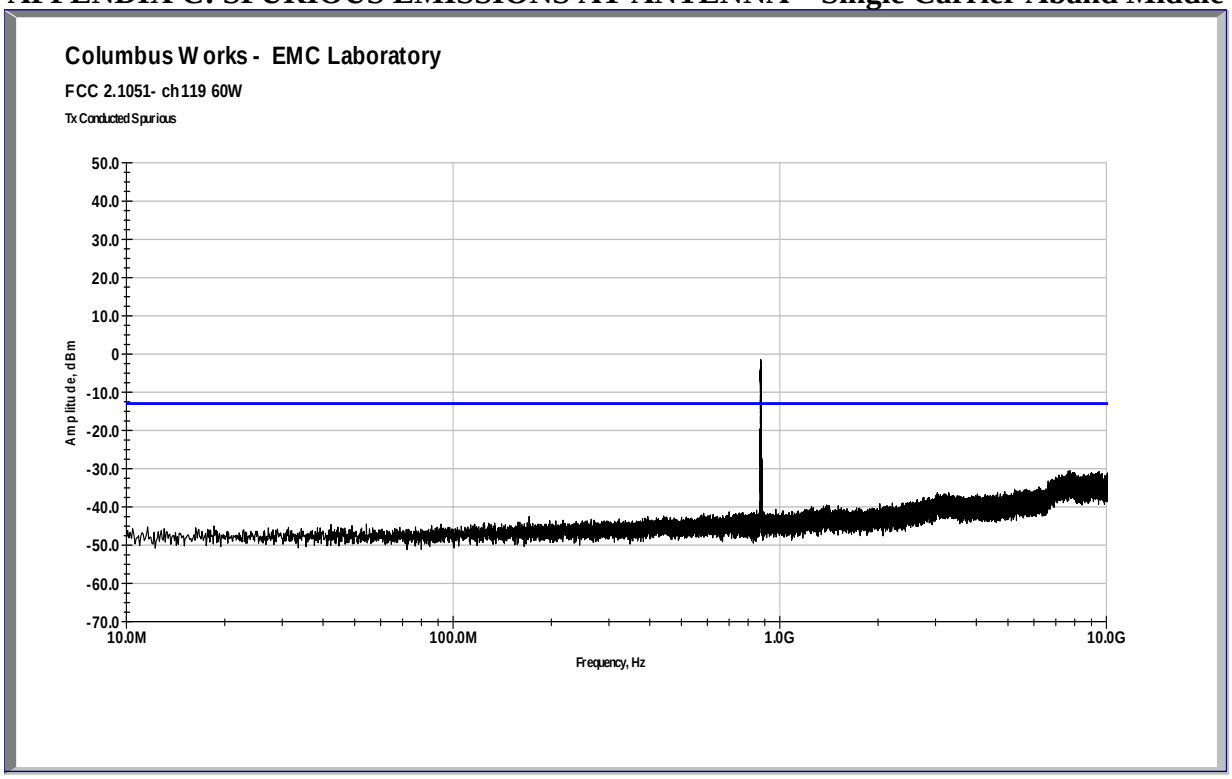

## Appendix B: OBW Multi-Carrier Simplex Transmit - 5c Bband High



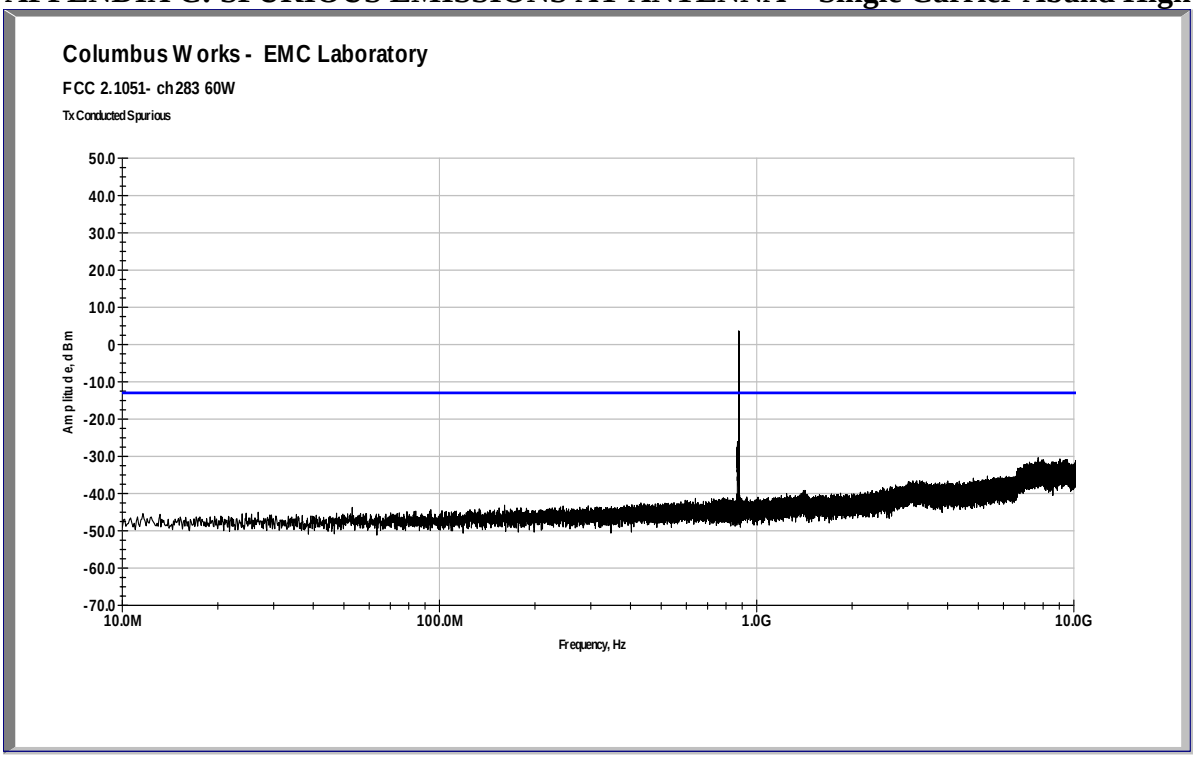
## APPENDIX C: SPURIOUS EMISSIONS AT ANTENNA – Single Carrier Aband Low



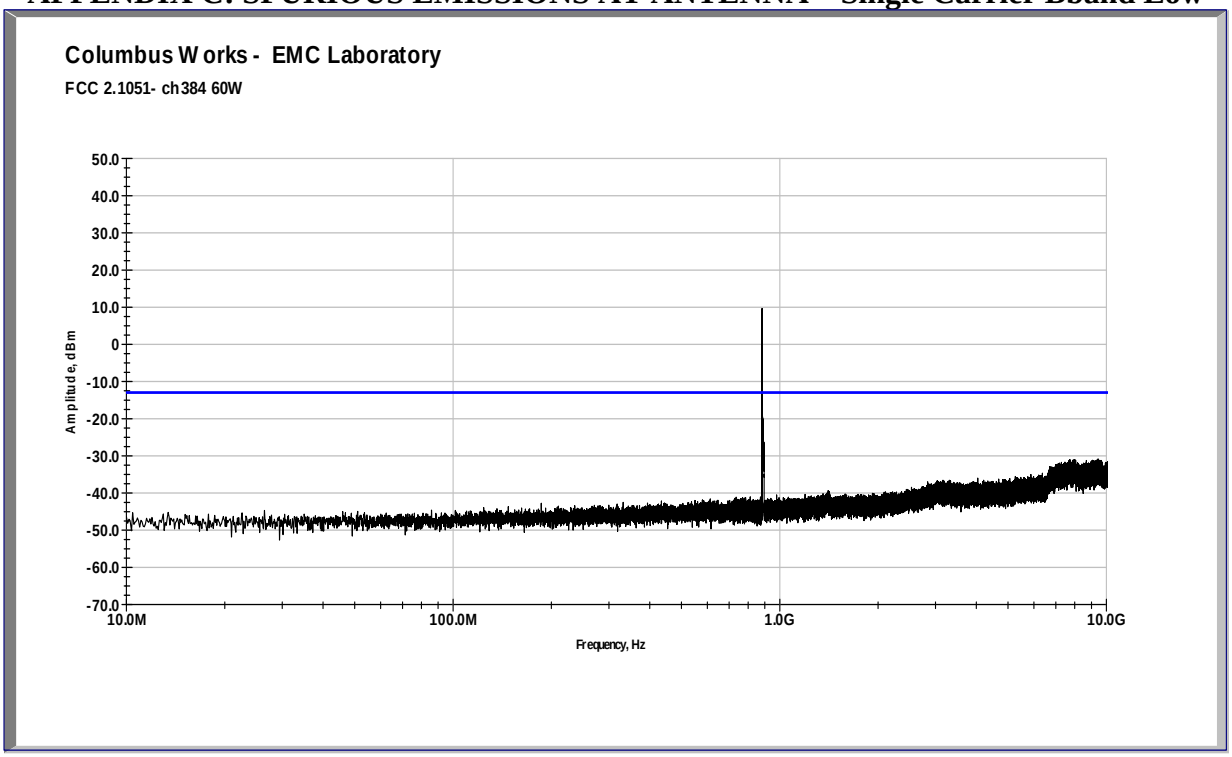
## APPENDIX C: SPURIOUS EMISSIONS AT ANTENNA – Single Carrier Aband Middle



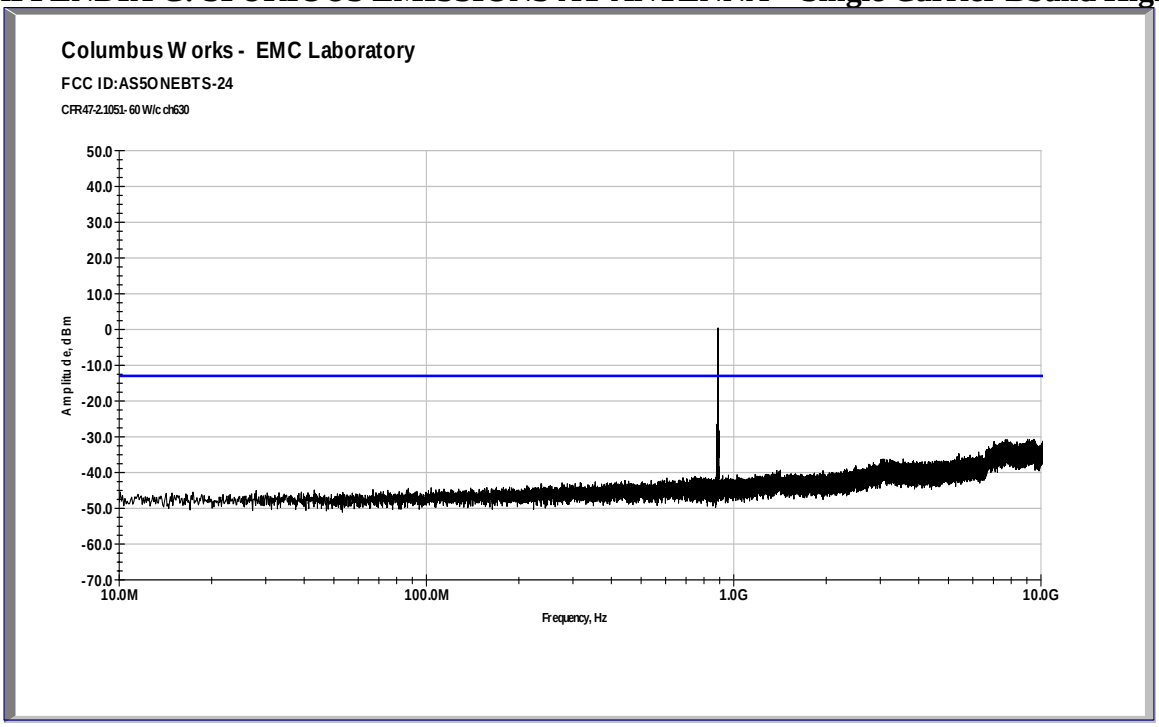

## APPENDIX C: SPURIOUS EMISSIONS AT ANTENNA – Single Carrier Aband High



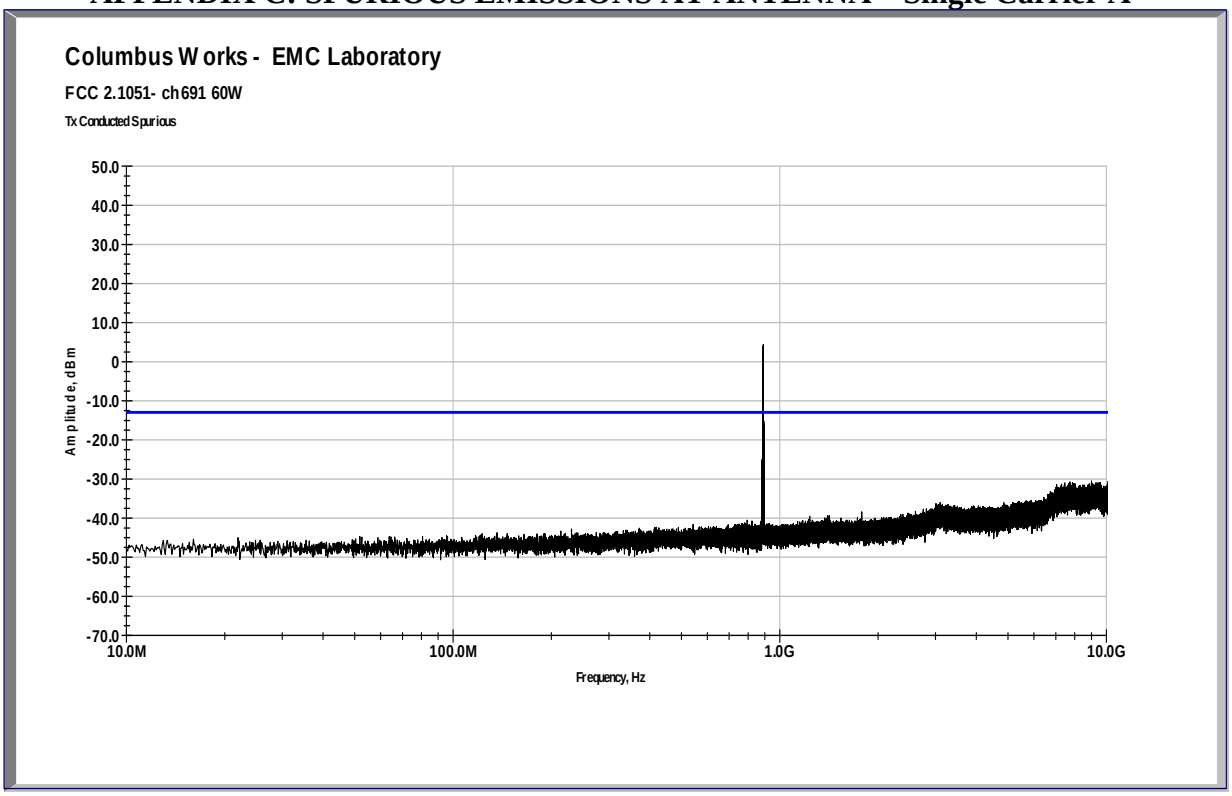
## APPENDIX C: SPURIOUS EMISSIONS AT ANTENNA – Single Carrier Bband Low




## APPENDIX C: SPURIOUS EMISSIONS AT ANTENNA – Single Carrier Bband High



## APPENDIX C: SPURIOUS EMISSIONS AT ANTENNA – Single Carrier A'




## APPENDIX C: SPURIOUS EMISSIONS AT ANTENNA – Single Carrier B'