

Retlif Testing Laboratories

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REPORT OF MEASUREMENTS for

CELLULAR SPECIALTIES, INC. CHANNELIZED SINGLE BAND DIGITAL REPEATER

MODEL: CS17-145-410

FCC ID: NVRCS17-145-410

| Company Name: | Cellular Specialties, Inc. |
|----------------------------|----------------------------|
| Date of Report: | March 11, 2011 |
| Test Report No: | R-5441N |
| Test Start Date: | February 24, 2011 |
| Test Finish Date: | February 28, 2011 |
| Test Technician: | M. Seamans |
| Laboratory Supervisor: | T. Hannemann |
| Report Prepared By: | J. Ramsey |

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Certification and Signatures

We certify that this report is a true report of the results obtained from the tests of the equipment stated and relates only to the equipment tested. We further certify that the measurements shown in this report were made in accordance with the procedures indicated and vouch for the qualifications of all Retlif Testing Laboratories personnel taking them.

Sato Wenter

Scott Wentworth Branch Manager NVLAP Approved Signatory

Todd Hannemann Laboratory Supervisor iNARTE Certified ATL-0255-T

Non-Warranty Provision

The testing services have been performed, findings obtained, and reports prepared in accordance with generally accepted testing laboratory principles and practices. This warranty is in lieu of all other warranties, either express or implied.

Non-Endorsement

This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It is not intended to constitute a recommendation, endorsement, or certification of the product or material tested. This report must not be used by the client to claim product endorsement by NVLAP, NIST or any agency of the U.S. Government.

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CERTIFICATION APPLICATION SUMMARY

| Applicant/Manufacturer: | Cellular Specialties 670 North Commercial Street Manchester, NH 03101 |
|--|---|
| Equipment under Test (EUT): | The EUT is a Channelized Digital Repeater System (Cellular Amplifier) operating in the LTE 700MHz Upper C Block. |
| Model: | CS17-145-410 |
| FCC ID Number: | FCC ID: NVRCS17-145-410 |
| Applicable Test Standard: | FCC Parts 2 & 27 |
| Measurement Procedure: | ANSI/TIA-603-C-2004 |
| Device Classification: | Mobile |
| EUT Frequency Range Band: | Uplink: 776 MHz to 787 MHz Downlink: 746 MHz to 757 MHz |
| Power Output Rating for Certification Grant | Uplink: +24.53dBm = 0.284W Downlink: +24.25dBm = 0.266W |
| Modulation Type: | LTE (F9W) |
| RF Exposure + Antenna Installation: | See Attached Installation/Users Manual and MPE Evaluation |
| Measurements Required by FCC: | See Report Section 1 (Summary of Test Program) and the following Test Report Data Attachments: |
| | -RF Power Output (27.50) -Occupied Bandwidth (2.1049) -Spurious Emissions at Antenna Terminals (27.53) -Effective Radiated Power of Spurious Radiation (27.53) -Frequency Stability (27.54) |
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Test Report No. R-5441N FCC ID: NVRCS17-145-410

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SECTION 1 SUMMARY OF TEST PROGRAM

RF POWER OUTPUT (Composite Power)

The RF Power Output test was performed using RMS channel power measurements of a single LTE channel. The measurements were taken with the AGC turned off at maximum output power with all spurious emissions below the -13dBm limit. The measured output power matched the manufacturer's rated output power. See attached test data.

OCCUPIED BANDWIDTH

Measurement Procedure:

For Occupied Bandwidth, measurements were made to compare the input signal to the output signal. The signal generator output was connected to the spectrum analyzer. A LTE modulated signal was then applied to the carrier. Waveforms were then noted on an X-Y plot. Next, the signal generator was connected to the EUT and the output of the EUT was connected to the spectrum analyzer. The output waveform after amplification was then compared to the original input signal to ensure that no significant differences occurred between the input signal and the amplified signal. Testing was performed at one frequency within each passband (uplink and downlink). See Occupied Bandwidth Data.

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Measurement Procedure:

The signal generator output was connected in turn to the uplink and downlink input ports of the EUT. The input power level was at the maximum level which was ascertained during the Power Output test. A spectrum analyzer was connected to the output of the EUT. The input test frequency used was one frequency (mid) within each passband (uplink and downlink). The level of any spurious emission was recorded. Testing was performed in the frequency range of 30MHz to 8GHz. Testing was performed with LTE modulation type. The spurious emissions limit is -13dBm as specified in FCC Part 27. All emissions were below the specified -13dBm limit. See attached test data.

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EFFECTIVE RADIATED POWER OF SPURIOUS RADIATION

Measurement Procedure:

The test sample was placed on an 80cm high wooden test stand which was located 3 meters from the test antenna on an FCC listed test site. A signal generator was connected to the input of the amplifier. The signal generator output was set to provide the input power level necessary to achieve maximum output power of the amplifier at 1 frequency (mid) within each passband (uplink and downlink). The effective radiated power of each out of band spurious emission was measured using the substitution method specified in ANSI/TIA-603-C-2004. The frequency range of the test was 30MHz – 8GHz. The limit for out of band spurious emissions is -13dBm as specified in Part 27. All emissions were below the specified -13dBm limit. See attached test data.

FREQUENCY STABILITY MEASUREMENTS

The test sample was placed into a temperature chamber with the DC input power supplied through a variable power source. A signal generator was used to provide the input signal and the output was measured with a frequency counter. With the test sample operating at maximum output power the test sample's output frequency was measured and recorded at the extremes of the temperature range and at 10 degree increments from -30 degrees C to +50 degrees C while the DC input voltage was varied from 85 to 115% of nominal. The output frequency for both the uplink and downlink stayed within the assigned frequency band. See attached test data.



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SECTION 2 EQUIPMENT LISTS

Occupied Bandwidth & RF Power Output

| EN | Manufacturer | Description | Range | Model No. | Cal Date | Due Date |
|--------------|--------------------------|-----------------------------------|------------------------------|-------------------|------------------------|------------------------|
| 1345 5070 | NARDA ROHDE & SCHWARZ | ATTENUATOR Z EMI TEST RECEIVER | DC - 18GHz 20 Hz - 40 GHz | 776B-30 ESIB40 | 8/10/2010 1/20/2011 | 8/10/2011 1/20/2012 |
| 5134 | NARDA | 10DB ATTENUATOR | DC - 12.4 GHz | 757C-10 | 8/10/2010 | 8/10/2011 |

Spurious Emissions at Antenna Terminals

| EN | Manufacturer | Description | Range | Model No. | Cal Date | Due Date |
|--------------|--------------------------|-----------------------------------|------------------------------|-------------------|------------------------|------------------------|
| 1345 5070 | NARDA ROHDE & SCHWARZ | ATTENUATOR Z EMI TEST RECEIVER | DC - 18GHz 20 Hz - 40 GHz | 776B-30 ESIB40 | 8/10/2010 1/20/2011 | 8/10/2011 1/20/2012 |
| 5134 | NARDA | 10DB ATTENUATOR | DC - 12.4 GHz | 757C-10 | 8/10/2010 | 8/10/2011 |

Effective Radiated Power of Spurious Radiation

| EN | Manufacturer | Description | Range | Model No. | Cal Date | Due Date |
|-------|-----------------|--------------------------------|-------------------|-----------|-----------|-----------|
| 1232 | AGILENT / HP | PRE-AMPLIFIER | 1 - 26.5GHz | 8449B | 4/22/2010 | 4/22/2011 |
| 1345 | NARDA | ATTENUATOR | DC - 18GHz | 776B-30 | 8/10/2010 | 8/10/2011 |
| 3258 | EMCO | DOUBLE RIDGED GUIDE ANTENNA | 1 GHZ - 18GHZ | 3115 | 1/12/2011 | 1/12/2012 |
| 4029 | RETLIF | OPEN AREA TEST SITE | 3 / 10 Meters | RNH | 8/21/2009 | 8/21/2012 |
| 4029B | RETLIF | TEST SITE ATTENUATION | 3 / 10 Meters | RNH | 6/25/2010 | 6/25/2011 |
| 5053 | EMCO | BICONILOG ANTENNA | 26 MHz - 3 GHz | 3142C | 4/21/2010 | 4/21/2011 |
| 5070 | ROHDE & SCHWARZ | E EMI TEST RECEIVER | 20 Hz - 40 GHz | ESIB40 | 1/20/2011 | 1/20/2012 |
| 5134 | NARDA | 10DB ATTENUATOR | DC - 12.4 GHz | 757C-10 | 8/10/2010 | 8/10/2011 |
| R425B | AGILENT / HP | SPECTRUM ANALYZER | 100 Hz - 26.5 GHz | E7405A;A | 5/28/2010 | 5/28/2011 |

Frequency Stability

| EN | Manufacturer | Description | Range | Model No. | Cal Date | Due Date |
|-------|-------------------------|---------------------|----------------------|-----------|-------------|--------------|
| 1345 | NARDA | ATTENUATOR | DC - 18GHz | 776B-30 | 8/10/2010 | 8/10/2011 |
| 4997 | OMEGA | DIGITAL THERMOMETER | | UNKNOWN | 8/11/2010 | 8/11/2011 |
| 5013 | POWERSTAT | VARIAC | 0-140 V, 10 A, 60 Hz | 116B | No Calibrat | ion Required |
| 5049B | FLUKE | DIGITAL MULTIMETER | True RMS Multimeter | 111 | 8/9/2010 | 8/9/2011 |
| 5077 | ASSOCIATED ENVIRONME | TEMPERATURE CHAMBER | -50 to 150 C | ZFD-531 | 8/11/2010 | 8/11/2011 |
| 5134 | NARDA | 10DB ATTENUATOR | DC - 12.4 GHz | 757C-10 | 8/10/2010 | 8/10/2011 |
| R425B | AGILENT / HP | SPECTRUM ANALYZER | 100 Hz - 26.5 GHz | E7405A;A | 5/28/2010 | 5/28/2011 |

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SETUP PHOTOGRAPH OCCUPIED BANDWIDTH & RF POWER OUTPUT



Test Setup



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SETUP PHOTOGRAPHS EFFECTIVE RADIATED POWER OF SPURIOUS RADIATION



Test Setup



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SETUP PHOTOGRAPHS EFFECTIVE RADIATED POWER OF SPURIOUS RADIATION



Horizontal Antenna Polarization, 30 to 1000 MHz



Vertical Antenna Polarization, 30 to 1000 MHz



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SETUP PHOTOGRAPHS EFFECTIVE RADIATED POWER OF SPURIOUS RADIATION



Horizontal Antenna Polarization, 1 to 8 GHz



Vertical Antenna Polarization, 1 to 8 GHz



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SETUP PHOTOGRAPH SPURIOUS EMISSIONS AT ANTENNA TERMINALS



Test Setup

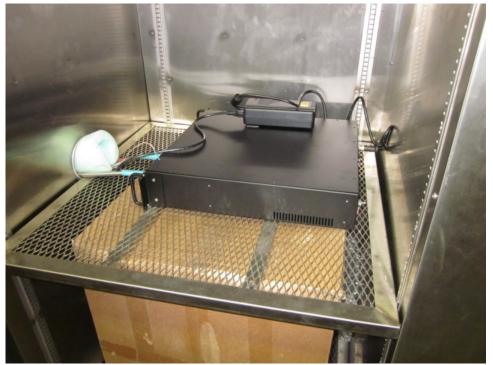


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SETUP PHOTOGRAPHS FREQUENCY STABILITY



Test Setup



Test Setup



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| | RETLIF TESTING LABORATORIES | | | | | | | | | | |
|---------------|-----------------------------|---------------|-------------------------------------|---------------|------------------------------------|--------------|---------------------------------|--------------------|------------------|--------------|--|
| | | | | TABUL | AR DATA | SHEET | | | | | |
| Test Method | : | RF Power O | utput | | | | | | | | |
| Customer: | | Cellular Spec | ialties, Inc. | | | Job No: | R-5441N | | | | |
| Test Sample | e | Single Band | Repeater | | | _ | | | | | |
| Model No: | | CS17-145-41 | 0 | | | Serial No: | L-1012000 | 2 | | | |
| Test Specific | cation: | FCC Part 2 | | | | 4 | | | | | |
| Operating M | ode [.] | Amplifying a | signal in the LT | E upper C blo | ck | Paragraph: 2 | 2.1046 | | | | |
| oporating in | | | | | | _ | | | | | |
| Technician: | | M.Seamans | | | | Date: | 2/24/2011 | | | | |
| Notes: | | | ency: 776 - 78 out Data - measur | | Downlink Free ower of a 9.5 MHz | | - 757 MHz d signal with ampl | ifier driven at ma | ximum input sing | gle channel. | |
| Test | Measured | | | | | | | | | | |
| Frequency | Level | Level | | | | | | | | | |
| MHz | dBm | mW | | | | | | | | | |
| Uplink | | | | | | | | | | | |
| 781.00 | 24.53 | 283.79 | | | | | | | | | |
| | | 200110 | | | | | | | | | |
| - | | | | | | | | | | | |
| Downlink | | | | | | | | | | | |
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| 751.00 | 24.25 | 266.1 | | | | | | | | | |
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| Data Shee | t 1 of 1 | | | | | | | | | R-5441N | |
| Data Shee | | | | | | | | | | r-344 i N | |

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|------------------------------------|-------------------------|--------------------------|---------|----------------|-------------------|--------|----|-------|-------------|----------------------|
| | | | | MISSIONS D | | | | | | |
| Test Method: | Occupied Bandwid | lth | | | | | | | | |
| Customer: | Cellular Specialties, | Inc. | | Test Sample: | Single Band Re | peater | | | Job No: | R-5441N |
| Model No: | CS17-145-410 | | | Serial No: | L-10120002 | | | | Technician: | M. Seamans |
| Test Specification: | FCC Part 2 | | | Paragraph: 2.1 | 049 | | | | Date: | 2/24/2011 |
| Operating Mode: | Amplifying a signal i | in the LTE upper C block | | | | | | | | |
| Notes: | Downlink Output | | | | | | | | | |
| 30 | Lvl dBm) dB Offs | et | | | RBW VBW SWT | ЗМ | ΗZ | 7 Att | 20 di di | Bm |
| 20 | | | | | | | | | | ~ |
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| -60 | | | | | | | | | | |
| Cent Date: Data Sheet 1 of 4 | | | 1:12:47 | 2 ME | IZ/ | | | Spa | n 20 MI | ≝≂ R-5441N |

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| | | | EMISSIONS D | ATA SHEET | Г | | | | | | | |
| Test Method: | Occupied Bandwi | dth | | | | | | | | | | |
| Customer: | Cellular Specialties | , Inc. | Test Sample: | Single Band Re | peater | | Job No: | R-5441N | | | | |
| Model No: | CS17-145-410 | | Serial No: | L-10120002 | | | Technician: | M. Seamans | | | | |
| Test Specification: | FCC Part 2 | | Paragraph: 2.1 | 1049 | | | Date: | 2/24/2011 | | | | |
| Operating Mode: | Amplifying a signal in the LTE upper C block | | | | | | | | | | | |
| Notes: | Downlink Input | | | | | | | | | | | |
| | | | | RBW | 100 kHz | RF Att | 10 de | 3 | | | | |
| A VEL | | | | VBW | 3 MHZ | | | | | | | |
| -20 -20 | dBm | | | SWT | 10 s | Unit | dI | 3m | | | | |
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| -50 | | | | | | | | INI | | | | |
| lVIE | 5.00 | | | | | | | 1RM | | | | |
| -60 | | | | | | | | _ | | | | |
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| -110 | | | | | | | | _ | | | | |
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| -120 | | | | | | | | | | | | |
| Service services of | er 751 N | /Hz | 2 MB | Iz/ | | Spa | in 20 MB | lz | | | | |
| Date: | 24.FE | B.2011 14:1 | 7:37 | | | | | | | | | |
| Data Sheet 2 of 4 | | | | | | | | R-5441N | | | | |

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|----------------------------|----------------------------|---------------------|--------|----------------|----------------|---------|---------------|-------|-------------|---------------|
| | | | | MISSIONS D | | | | | | |
| Test Method: | Occupied Bandwidth | | | | | | | | | |
| Customer: | Cellular Specialties, Inc. | | | Test Sample: | Single Band Re | epeater | | | Job No: | R-5441N |
| Model No: | CS17-145-410 | | | Serial No: | L-10120002 | | | | Technician: | M. Seamans |
| Test Specification: | FCC Part 2 | | | Paragraph: 2.1 | 049 | | | | Date: | 2/24/2011 |
| Operating Mode: | Amplifying a signal in the | e LTE upper C block | | | | | | | | |
| Notes: | Uplink Output | | | | | | | | | |
| | | | | | RBW | 100 k | HZ RJ | F Att | 20 di | в |
| Ref | LVl | | | | VBW | | HZ | | | |
| | dBm | | | | SWT | 10 | s Ui | nit | di | Bm |
| 30 30 |) dB Offset | 2 | | | | | | | | A |
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| -60 | | | | | | | | | | |
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| -70L Cent | cer 781 MH: | | | 2 ME | IZ/ | 1 | | Spa | .n 20 ME | Iz |
| | | | 09.01 | | | | | ~_100 | | |
| Date: Data Sheet 3 of 4 | 24.FEB. | 2011 14: | 09:01 | | | | | | | R-5441N |
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|---------------------------|--|-----------------------|-------|----------------|---|--------------|------------|---------|-------------|------------|
| act Mathad | Occupied Bandwidth | | EN | | ATA SHEE | | | | | |
| est Method: | | | | Teet Ormut | Cingle Devel D | an a char | | | | DEAAN |
| Customer: | Cellular Specialties, In CS17-145-410 | lG. | | Test Sample: | Single Band Re | spealer | | | | R-5441N |
| lodel No: | | | | Serial No: | | | | | Technician: | |
| est Specification: | FCC Part 2 | | | Paragraph: 2.1 | 049 | | | | Date: | 2/24/2011 |
| Operating Mode: lotes: | Amplifying a signal in t Uplink Input | the LTE upper C block | | | | | | | | |
| lotes: | | | | | 210200101010 | | 2253 | <u></u> | | 2421 |
| Ref | T.37] | | | | rbw Vbw | 100 k 3 M | EZ | RF Att | 10 d | в |
| ~ | dBm | | | | SWT | | s | Unit | d | Bm |
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| -110 | | | | | | | | | | |
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| -120 | | | | | 12 | | | | | |
| | ter 781 ME | Iz | | 2 ME | Iz/ | | | spa | in 20 M | ΗZ |
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| Data Sheet 4 of 4 | | | | | | | | | | R-5441N |

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|--------------|----------------------|------------------------------------|-----------------|-------------|--------------|--------------|---------------|---------|-------|--------------|--|
| | EMISSIONS DATA SHEET | | | | | | | | | | |
| Test Method | l: | Spurious En | nissions at t | he Antenna | Ferminals 30 | MHz to 8 GH | Z | | | | |
| Customer: | | Cellular Spec | ialties, Inc. | | | Job No: | R-5441N | | | | |
| Test Sample |): | Single Band | | | | | | | | | |
| | | | | | | | | | | | |
| Model No: | | CS17-145-410 Serial No: L-10120002 | | | | | | | | | |
| Test Specifi | cation: | FCC Part 2 | | | | - | | | | | |
| | | | | | | Paragraph: 2 | 2.1051 | | | | |
| Operating M | lode: | Amplifying a | signal in the l | LTE upper C | block | | | | | | |
| | | | | | | - | | | | | |
| Technician: | | M.Seamans | | | | Date: | 2/24/2011 | | | | |
| Notes: | | Uplink Freque | ency: 776 - 7 | '87 MHz | Downlink | Frequency: 7 | 746 - 757 MHz | | | | |
| Uplink | Test | | Reading | Limit | Downlink | Test | | Reading | Limit | | |
| Input Signal | Frequency | Frequencies | | | Input Signal | Frequency | Frequencies | | | | |
| dBm | MHz | MHz | dBm | dBm | dBm | MHz | MHz | dBm | dBm | | |
| -60.00 | 781.00 | | | | -60.40 | 751.00 | | | | | |
| I | | 1562.00 | -31.54 | -13.0 | Ι | I | 1502.00 | -14.15 | -13.0 | | |
| I | - | 2343.00 | -31.20 | I | I | I | 2253.00 | -31.21 | I | | |
| I | _ | 3124.00 | -29.04 | I | I | I | 3004.00 | -27.73 | | | |
| 1 | 1 | 3905.00 | -30.96 | I | I | I | 3755.00 | -29.64 | I | | |
| I | I | 4686.00 | -30.66 | I | I | I | 4506.00 | -30.98 | l | | |
| I | | 5467.00 | -26.50 | I | I | I | 5257.00 | -27.14 | | | |
| I | | 6248.00 | -28.23 | I | I | I | 6008.00 | -28.97 | I | | |
| I | I | 7029.00 | -26.51 | I | I | I | 6759.00 | -25.47 | I | | |
| -60.00 | 781.00 | 7810.00 | -27.55 | -13.0 | -60.40 | 751.00 | 7510.00 | -26.66 | -13.0 | | |
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| Data Shee | t 1 of 1 | | | | | | 1 | | l | R-5441N | |
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| RETLIF TESTING LABORATORIES | | | | | | | | | | | |
|------------------------------------|----------------|---|------------------|-------------------|----------------|-------------|----------------|-----------------|-----------|----------|--|
| | | | | EMISSIO | NS DATA | SHEET | • | | | | |
| Test Method: | : | Spurious Radi | ated Emissior | ns (ERP) 30 MH | Iz to 8 GHz | | | | | | |
| Customer: | | Cellular Specialties, Inc. | | | | Job No: | R-5441N | | | Ī | |
| Test Sample: | | Single Band Repeater | | | | | _ | | | i | |
| | | | | | | | 1 40400000 | | | | |
| Model No: | | CS17-145-410 | | | | Serial No: | L-10120002 | | | | |
| Test Specific | ation: | FCC Part 2.1053 | | | | | | | | | |
| | | TIA/EIA-603 Paragraph: 2.1053 Amplifying a signal in the LTE upper C block | | | | | | | | | |
| Operating Mo | ode: | Amplifying a s | ignal in the LI | E upper C bloc | Ж | | | | | | |
| Technician: | | M.Seamans | | | | Date: | 2/28/2011 | | | | |
| Notes: | | Uplink Frequency: 776 - 787 MHz 781 MHz Input frequency Peak Detector Modulation: CW | | | | | | | | | |
| Test | Antenna | Reference | Signal Gen | Reference Ant | | | | | Corrected | Spurious | |
| Frequency | Position | Reading | Level | Gain | | | | | Reading | Limit | |
| MHz | (H/V) - Height | dBuV | dBm | dBl | | | | | dBm | dBm | |
| 30.00 | - | - | - | - | | | | | - | -13.00 | |
| <u> </u> | - | - | - | - | | | | | - | | |
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| 8000.00 | - | - | - | - | | | | | - | -13.00 | |
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| | No emissions | observed abov | ve the noise flo | oor of the test e | equipment whic | h was a min | imum of 10dB b | elow the limit. | | | |
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| Data Sheet | t 1 of 2 | | | | | | | | | R-5441N | |

| RETLIF TESTING LABORATORIES | | | | | | | | | | | | |
|------------------------------------|----------------|---|------------------|-------------------|----------------|-------------|----------------|-----------------|-----------|----------|--|--|
| | | | | EMISSIC | NS DATA | SHEET | - | | | | | |
| Test Method: | : | Spurious Radiated Emissions (ERP) 30 MHz to 8 GHz | | | | | | | | | | |
| Customer: | | Cellular Specialties, Inc. | | | | Job No: | R-5441N | | | | | |
| Test Sample: | | Single Band Repeater | | | | | | | | | | |
| | | | | | | | | | | | | |
| Model No: | | CS17-145-410 | | | | Serial No: | L-10120002 | | | | | |
| Test Specific | ation: | FCC Part 2.1053 | | | | | | | | | | |
| | | TIA/EIA-603 Paragraph: 2.1053 | | | | | | | | | | |
| Operating Mode: | | Amplifying a signal in the LTE upper C block | | | | | | | | | | |
| Technician: | | M.Seamans Da | | | | | 2/28/2011 | | | | | |
| Notes: | | Downlink Frequency: 746 - 757 MHz 751 MHz Input frequency Peak Detector Modulation: CW | | | | | | | | | | |
| Test | Antenna | Reference | Signal Gen | Reference Ant | | | | | Corrected | Spurious | | |
| Frequency | Position | Reading | Level | Gain | | | | | Reading | Limit | | |
| MHz | (H/V) - Height | dBuV | dBm | dBl | | | | | dBm | dBm | | |
| 30.00 | - | - | - | - | | | | | - | -13.00 | | |
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| | No emissions | observed abov | ve the noise flo | oor of the test e | equipment whic | h was a min | imum of 10dB b | elow the limit. | | | | |
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| Data Oha in | | | | | | | | | | | | |
| Data Sheet | ∠ OT 2 | | | | | | | | | R-5441N | | |

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| Toot Matha | | Eroqueney Otabilit | | DAT CAL | A SHEE | | | | | | |
| Test Method: | | Frequency Stabilit | - | | - | | | | | | |
| Customer: | | Cellular Specialties, | Inc. | | Job No: | R-5441N | | | | | |
| Test Sample | : : | Single Band Repea | ter | | | | | | | | |
| Model No: | | CS17-145-410 | Serial No: | L-10120002 | | | | | | | |
| Tost Spacifi | cation: | FCC Part 2 | | | | | | | | | |
| Test Specification: | | Paragraph: 2.1055 | | | | | | | | | |
| Operating M | lode: | Amplifying a signal | in the LTE upper C t | olock | | | | | | | |
| Technician: | | M.Seamans | | | Date: 2/25/2011 | | | | | | |
| Notes: | | Liplink Frequency 7 | | ainal Voltago | _ | | | | | | |
| NOLES. | | Uplink Frequency 781 MHz Nominal Voltage = 120 VAC Downlink Frequency 751 MHz | | | | | | | | | |
| | Test | | Frequency @ | Frequency @ | | |
| Temp | Frequency | | 102 VAC | 108 VAC | 114 VAC | 120 VAC | 126 VAC | 132 VAC | 138 VAC | | |
| С | MHz | | MHz | MHz | MHz | MHz | MHz | MHz | MHz | | |
| | (Downlink) | | | | | | | | | | |
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| -10 | | | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | | |
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| 30 | | | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | | |
| 40 | | | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | | |
| 50 | 751.0000 | | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | 751.00000 | | |
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| | (Uplink) | | | | | | | | | | |
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| -20 | | | 781.00000 | 781.00000 | 781.00000 | 781.00000 | 781.00000 | 781.00000 | | | |
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