Automatic Labs

TEST REPORT FOR

OBD-II to Bluetooth Bridge Device Model: Link2

Tested To The Following Standards:

FCC Part 15 Subpart C Section(s) 15.249

Report No.: 96788-5

Date of issue: March 10, 2015



This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR: REPORT PREPARED BY:

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San Francisco, CA 94110 5046 Sierra Pines Drive
Mariposa, CA 95338

REPRESENTATIVE: Nick Lambourne Project Number: 96788

Customer Reference Number: CKC10

DATE OF EQUIPMENT RECEIPT: February 26, 2015

DATE(S) OF TESTING: February 26- March 2, 2015

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.

Steve Behm

Director of Quality Assurance & Engineering Services CKC Laboratories, Inc.

Steve 2 Be



Test Facility Information



Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S): CKC Laboratories, Inc. 110 Olinda Place Brea, CA 92823

Software Versions

| CKC Laboratories Proprietary Software | Version |
|---------------------------------------|---------|
| EMITest Emissions | 5.00.14 |
| Immunity | 5.00.07 |

Site Registration & Accreditation Information

| Location | CB# | TAIWAN | CANADA | FCC | JAPAN |
|----------|--------|----------------|---------|--------|--------|
| Brea A | US0060 | SL2-IN-E-1146R | 3082D-1 | 90473 | A-0147 |
| Brea D | US0060 | SL2-IN-E-1146R | 3082D-2 | 100638 | A-0147 |



SUMMARY OF RESULTS

Standard / Specification: FCC Part 15 Subpart C

| Test Procedure | Description | Modifications* | Results |
|----------------|----------------------------------|----------------|---------|
| 15.31(e) | Voltage Variation | NA | Pass |
| | | | |
| 15.215(c) | Occupied Bandwidth | NA | Pass |
| | | | |
| 15.249(a) | Field Strength of Fundamental | NA | Pass |
| | | | |
| 15.249(a) | Field Strength of Harmonics | NA | Pass |
| | | | |
| 15.249(d) | Spurious Emissions and Band Edge | NA | Pass |
| | | | |

Modifications* During Testing

This list is a summary of the modifications made to the equipment during testing.

| Summary of | Conditions |
|-------------------|-------------------|
|-------------------|-------------------|

No modifications were made during testing.

Conditions During Testing

This list is a summary of the conditions noted to the equipment during testing.

| Summary of Conditions | | |
|-----------------------|--|--|
| None | | |
| | | |

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^{*}Modifications listed above must be incorporated into all production units.



EQUIPMENT UNDER TEST (EUT)

EQUIPMENT UNDER TEST

OBD-II to Bluetooth Bridge Device

Manuf: Automatic Labs

Model: Link2 Serial: NA

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

AC to 12VDC Power Supply DC Power Supply

Manuf:ZWManuf:TopwardModel:ZW12V3A25RDModel:6306D

Serial: NA Serial: 988614

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FCC PART 15 SUBPART C

15.31(e) Voltage Variations

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Pl. • Brea, CA 92823 • (714) 993-6112

Customer: Automatic Labs

Specification: 15.31(e) Voltage Variation on Power

Work Order #: 96788 Date: 3/2/2015

Test Type: **Maximized Emissions**

Equipment: **OBD-II to Bluetooth Bridge Device**

Manufacturer: Automatic Labs Tested By: S. Yamamoto

Model: Link2 S/N: NA

Test Equipment:

| Asset # | Description | Model | Calibration Date | Cal Due Date |
|----------|-------------------|---------------|------------------|--------------|
| AN02672 | Spectrum Analyzer | E4446A | 8/14/2013 | 8/14/2015 |
| ANP05421 | Cable | Sucoflex 104A | 1/8/2014 | 1/8/2016 |
| ANP06661 | Cable | LDF1-50 | 4/15/2014 | 4/15/2016 |
| AN00849 | Horn Antenna | 3115 | 3/18/2014 | 3/18/2016 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|------------------------------------|----------------|---------|--------|
| OBD-II to Bluetooth Bridge Device* | Automatic Labs | Link2 | (none) |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|--------|
| DC Power Supply | Topward | 6306D | 988614 |

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Test Conditions / Notes:

The equipment under test (EUT) is a standalone on the Styrofoam table top.

The EUT is connected to a DC power supply.

The DC power supply is providing the nominal voltage of 12.0VDC to the EUT.

The EUT low, middle and high channels are 2402MHz, 2442MHz, and 2480MHz.

Modulation types are GFSK 1Mbps, 4 DPSK 2Mbps, and 8 DPSK 3Mbps.

The EUT is transmitting continuously.

Temperature: 18°C Relative Humidity: 45% Pressure: 100kPa

Frequency range of data is 2400MHz to 2483.5MHz. RBW=1MHz, VBW=3MHz

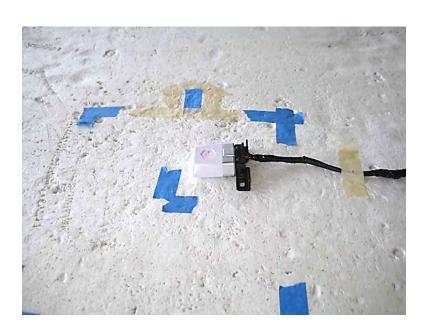
Rated EUT RF output power: +2dBm

Site D

Test method used ANSI C63.4 (2003)

15.31(e) Compliance: The supply voltage was varied between 85% and 115% of the manufacturer declared nominal rated voltage of 12.0VDC. No change in the fundamental signal level was observed.

Test Setup Photo





15.215(c) Occupied Bandwidth

Test Conditions / Setup

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Pl. • Brea, CA 92823 • (714) 993-6112

Customer: Automatic Labs

Specification: 15.215 Occupied Bandwidth (2400-2483.5 MHz Transmitter)
Work Order #: 96788 Date: 2/26/2015

Test Type: **Maximized Emissions**

Equipment: **OBD-II to Bluetooth Bridge Device**

Manufacturer: Automatic Labs Tested By: S. Yamamoto

Model: Link2 S/N: NA

Test Equipment:

| Asset # | Description | Model | Calibration Date | Cal Due Date |
|----------|-------------------|---------------|------------------|--------------|
| AN02672 | Spectrum Analyzer | E4446A | 8/14/2013 | 8/14/2015 |
| ANP05421 | Cable | Sucoflex 104A | 1/8/2014 | 1/8/2016 |
| ANP06661 | Cable | LDF1-50 | 4/15/2014 | 4/15/2016 |
| AN00849 | Horn Antenna | 3115 | 3/18/2014 | 3/18/2016 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|------------------------------------|----------------|---------|-----|
| OBD-II to Bluetooth Bridge Device* | Automatic Labs | Link2 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|--------------------------|--------------|-------------|-----|
| AC to 12VDC Power Supply | ZW | ZW12V3A25RD | NA |

Test Conditions / Notes:

The equipment under test (EUT) is a standalone on the Styrofoam table top.

The EUT is connected to a remotely located AC to 12VDC power adapter.

The EUT low, middle and high channels (and data sheet test frequencies) are 2402MHz, 2442MHz, and 2480MHz. Modulation types are GFSK 1Mbps, 4 DPSK 2Mbps, and 8 DPSK 3Mbps.

Data captures from the spectrum analyzer contain the measurement occupied bandwidth of the EUT.

The EUT is transmitting continuously.

Temperature: 19°C Relative Humidity: 44% Pressure: 100kPa

Frequency range of data is 2400MHz to 2483.5MHz. RBW=100kHz, VBW=300kHz.

Rated EUT RF output power: +2dBm

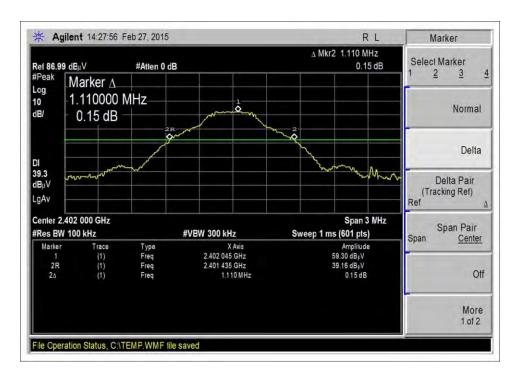
Site A.

Test method used ANSI C63.4 (2003)

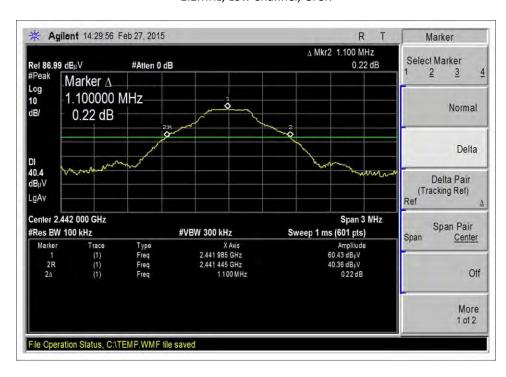
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Test Data

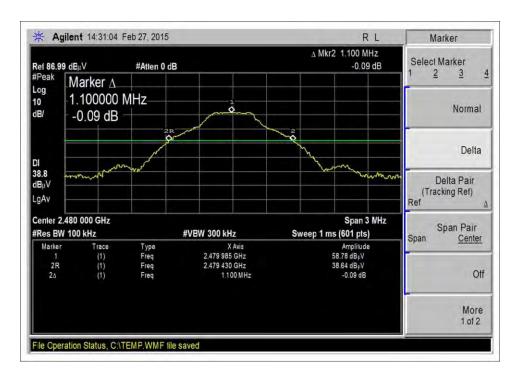


1.1MHz, Low Channel, GFSK

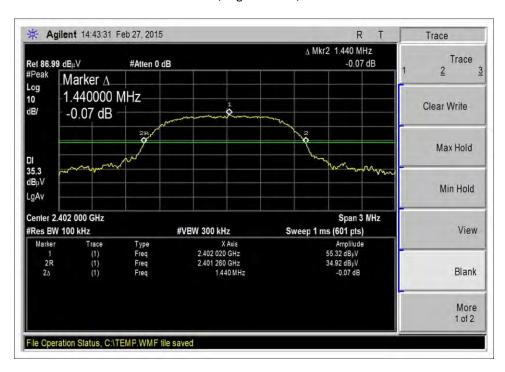


1.1MHz, Mid Channel, GFSK



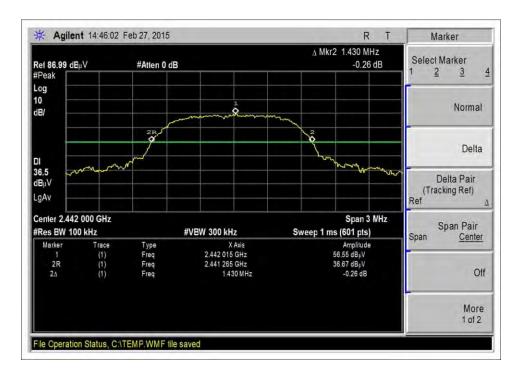


1.1MHz, High Channel, GFSK

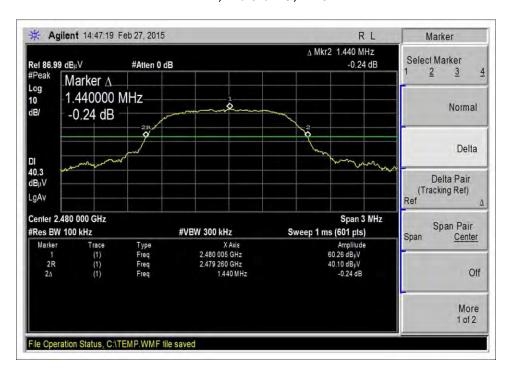


1.4MHz, Low Channel, 4DPSK



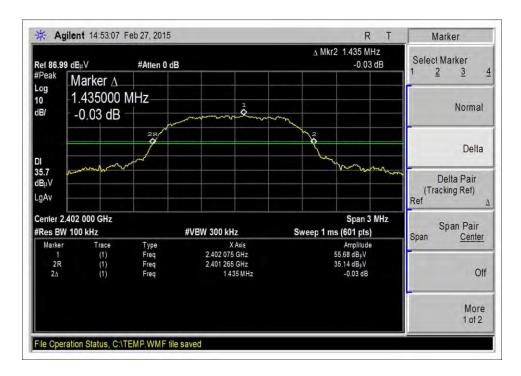


1.4MHz, Mid Channel, 4DPSK

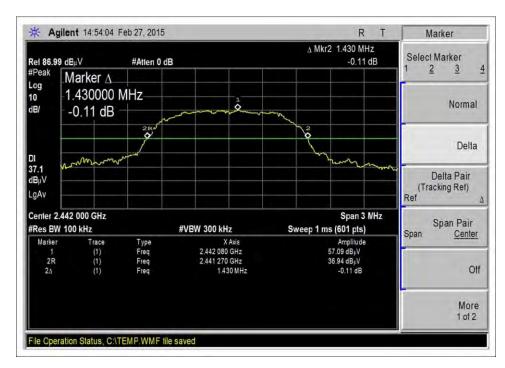


1.4MHz, High Channel, 4DPSK



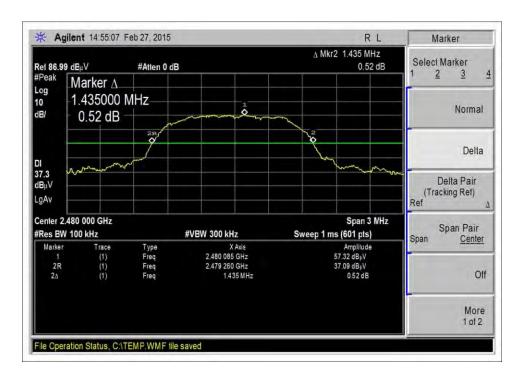


1.4MHz, Low Channel, 8DPSK



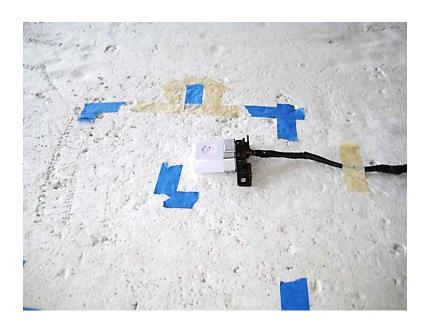
1.4MHz, Mid Channel, 8DPSK





1.4MHz, High Channel, 8DPSK

Test Setup Photo





15.249(a) Field Strength of Fundamental

Test Conditions / Setup / Data

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Pl. • Brea, CA 92823 • (714) 993-6112

Customer: Automatic Labs

Specification: 15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)
Work Order #: Date: 2/26/2015

Test Type: Maximized Emissions Time: 12:26:58

Equipment: **OBD-II to Bluetooth Bridge Device** Sequence#: 1

Manufacturer: Automatic Labs Tested By: S. Yamamoto

Model: Link2 S/N: NA

Test Equipment:

| 1 | I | | | | |
|----|----------|-------------------|---------------|------------------|--------------|
| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
| T1 | AN | Test Data | | 9/11/2014 | 9/11/2016 |
| | | Adjustment | | | |
| T2 | AN02672 | Spectrum Analyzer | E4446A | 8/14/2013 | 8/14/2015 |
| Т3 | ANP05421 | Cable | Sucoflex 104A | 1/8/2014 | 1/8/2016 |
| T4 | ANP06661 | Cable | LDF1-50 | 4/15/2014 | 4/15/2016 |
| T5 | AN00849 | Horn Antenna | 3115 | 3/18/2014 | 3/18/2016 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|------------------------------------|----------------|---------|-----|
| OBD-II to Bluetooth Bridge Device* | Automatic Labs | Link2 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|--------------------------|--------------|-------------|-----|
| AC to 12VDC Power Supply | ZW | ZW12V3A25RD | NA |

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Test Conditions / Notes:

The equipment under test (EUT) is a standalone on the Styrofoam table top.

The EUT is connected to a remotely located AC to 12VDC power adapter.

The power adapter is providing the nominal 12.0VDC to the EUT and is used in place of a battery which would be used in the actual installation.

The EUT low, middle and high channels (and data sheet test frequencies) are 2402MHz, 2442MHz, and 2480MHz. Modulation types are GFSK 1Mbps, 4 DPSK 2Mbps, and 8 DPSK 3Mbps.

Data sheet contains the measurement of the fundamental amplitude of the EUT.

The EUT is transmitting continuously.

The emission levels reported in this data are representative of worst case emissions.

Temperature: 19°C Relative Humidity: 44% Pressure: 100kPa

Frequency range of data sheet 2400MHz to 2483.5MHz. RBW=VBW=1MHz

Rated EUT RF output power: +2dBm

Data was maximized with EUT in each of three axis systems (X, Y, Z) and with each of the three modulation types.

Site A

Test method used ANSI C63.4 (2003)

Manufacturer maximum duty cycle declaration:

When transmitting at full throughput, generate a train of 350us transmission bursts spaced never less than 1.25ms apart, but more typically 12.4ms.

At most, only transmit up to 20 packets per 100ms.

In any given 100ms window captured, maximum duty cycle is 1/14.

Duty Cycle Correction Factor Calculation: DCCF (dB) = 20 Log (dwell time/100 ms) = 20 Log (0.007/0.1) = -23.1 dB

Ext Attn: 0 dB

| Measu | rement Data: | Re | eading lis | ted by ma | ırgin. | | Те | est Distanc | e: 3 Meters | | |
|-------|--------------|------|------------|-----------|--------|------|-------|-------------|-------------|----------|-------|
| # | Freq | Rdng | T1 | T2 | Т3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | | | T5 | | | | | | | | |
| | MHz | dΒμV | dB | dB | dB | dB | Table | $dB\mu V/m$ | $dB\mu V/m$ | dB | Ant |
| 1 | 2442.117M | 60.4 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 91.1 | 94.0 | -2.9 | Vert |
| | | | +25.4 | | | | | | Middle, 4 l | DPSK | |
| | | | | | | | | | 2Mbps, Y | axis | |
| 2 | 2442.127M | 60.1 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 90.8 | 94.0 | -3.2 | Vert |
| | | | +25.4 | | | | | | Middle, Gl | FSK | |
| | | | | | | | | | 1Mbps, Y | axis | |
| 3 | 2401.955M | 59.8 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 90.3 | 94.0 | -3.7 | Horiz |
| | | | +25.3 | | | | | | Low, GFS | K 1Mbps, | |
| | | | | | | | | | X axis | | |
| 4 | 2442.158M | 59.6 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 90.3 | 94.0 | -3.7 | Vert |
| | | | +25.4 | | | | | | Middle, Gl | FSK | |
| | | | | | | | | | 1Mbps, Z a | axis | |
| 5 | 2402.170M | 59.6 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 90.1 | 94.0 | -3.9 | Vert |
| | | | +25.3 | | | | | | Low, GFS | K 1Mbps, | |
| | | | | | | | | | Y axis | | |

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| 6 | 2402.003M | 59.4 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 89.9 | 94.0 -4.1 | Vert |
|-----|----------------|-------|-------|------|------|------|-------|------|------------------|-------|
| | | | +25.3 | | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, Y axis | |
| 7 | 2442.132M | 59.0 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 89.7 | 94.0 -4.3 | Vert |
| | | | +25.4 | | | | | | Middle, GFSK | |
| | | | | | | | | | 1Mbps, X axis | |
| 8 | 2402.165M | 59.1 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 89.6 | 94.0 -4.4 | Horiz |
| | | | +25.3 | | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | | Y axis | |
| 9 | 2402.153M | 59.0 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 89.5 | 94.0 -4.5 | Vert |
| | | | +25.3 | | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, Y axis | |
| 10 | 2402.018M | 58.9 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 89.4 | 94.0 -4.6 | Horiz |
| | | | +25.3 | | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| 11 | 2402.187M | 58.6 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 89.1 | 94.0 -4.9 | Horiz |
| | | | +25.3 | | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, Z axis | |
| 12 | 2401.953M | 58.3 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 88.8 | 94.0 -5.2 | Horiz |
| | | | +25.3 | | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| 13 | 2402.203M | 58.2 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 88.7 | 94.0 -5.3 | Horiz |
| | | | +25.3 | | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | | Z axis | |
| 14 | 2401.953M | 58.0 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 88.5 | 94.0 -5.5 | Vert |
| | | | +25.3 | | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| 15 | 2402.173M | 57.8 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 88.3 | 94.0 -5.7 | Vert |
| | | | +25.3 | | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | | X axis | |
| 16 | 2402.000M | 57.8 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 88.3 | 94.0 -5.7 | Vert |
| | | | +25.3 | | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| 17 | 2402.155M | 57.6 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 88.1 | 94.0 -5.9 | Vert |
| | | | +25.3 | | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, X axis | |
| 18 | 2401.902M | 57.6 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 88.1 | 94.0 -5.9 | Horiz |
| | | | +25.3 | | • | - | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, X axis | |
| 19 | 2402.127M | 57.3 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 87.8 | 94.0 -6.2 | Vert |
| | | - / | +25.3 | | | | . • • | - , | Low, 4 DPSK | • |
| | | | | | | | | | 2Mbps, Z axis | |
| 20 | 2401.977M | 57.3 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 87.8 | 94.0 -6.2 | Horiz |
| | | 2 | +25.3 | | | | | 20 | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, Y axis | |
| 21 | 2402.055M | 56.6 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 87.1 | 94.0 -6.9 | Vert |
| -1 | | - 0.0 | +25.3 | 3.0 | | | | - / | Low, GFSK 1Mbps, | |
| | | | | | | | | | Z axis | |
| 2.2 | 2480.138M | 63.3 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 71.2 | 94.0 -22.8 | Vert |
| | Ave | 00.0 | +25.4 | 3.0 | 1.5 | | 0.0 | , | High, GFSK | . 510 |
| | · · | | | | | | | | 1Mbps, Z axis | |
| | | | | | | | | | 11.10ро, 2 аль | |



| 22 | 2480.032M | 63.0 | -23.0 | +0.0 | +1.3 | +4.2 | +0.0 | 70.9 | 94.0 -23.1 | Horiz |
|-----|------------------|------|---------------|--------|-------|---------------------|--------|------|---------------------------------|--------|
| | Ave | 03.0 | +25.4 | 10.0 | 1.3 | 14.2 | 10.0 | 70.9 | High, GFSK | 110112 |
| | | | | | | | | | 1Mbps, Y axis | |
| 24 | 2480.000M | 62.5 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 70.4 | 94.0 -23.6 | Horiz |
| | Ave | | +25.4 | | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, Z axis | |
| 25 | 2480.020M | 62.5 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 70.4 | 94.0 -23.6 | Horiz |
| | Ave | | +25.4 | | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, X axis | |
| | 2480.115M | 61.2 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 69.1 | 94.0 -24.9 | Vert |
| | Ave | | +25.4 | | | | | | High, GFSK | |
| 27 | 2490 12214 | 60.7 | 100 | +0.0 | +1.3 | +4.2 | 100 | (0.6 | 1Mbps, Y axis 94.0 -25.4 | Mont |
| | 2480.132M Ave | 60.7 | +0.0 +25.4 | +0.0 | ⊤1.3 | +4.2 | +0.0 | 68.6 | 94.0 -25.4 High, GFSK | Vert |
| | Avc | | 123.4 | | | | | | 1Mbps, X axis | |
| 28 | 2442.133M | 60.5 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 68.2 | 94.0 -25.8 | Horiz |
| l l | Ave | 00.5 | +25.4 | . 0.0 | 1.2 | | . 0.0 | 00.2 | Middle, GFSK | HOHE |
| | | | | | | | | | 1Mbps, Z axis | |
| 29 | 2480.103M | 59.5 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 67.4 | 94.0 -26.6 | Horiz |
| | Ave | | +25.4 | | | | | | High, 4 DPSK | |
| | | | | | | | | | 2Mbps, Z axis | |
| | 2479.977M | 58.7 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 66.6 | 94.0 -27.4 | Horiz |
| | Ave | | +25.4 | | | | | | High, 8 DPSK | |
| 2.1 | 2400 1103 5 | 50.5 | . 0. 0 | . 0. 0 | . 1.2 | | . 0. 0 | 66.4 | 3Mbps, Z axis | T.T |
| | 2480.110M | 58.5 | +0.0 +25.4 | +0.0 | +1.3 | +4.2 | +0.0 | 66.4 | 94.0 -27.6 | Vert |
| | Ave | | ±23.4 | | | | | | High, 4 DPSK 2Mbps, Z axis | |
| 32 | 2479.988M | 58.3 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 66.2 | 94.0 -27.8 | Horiz |
| | Ave | 36.3 | +25.4 | 10.0 | 11.5 | 17.2 | 10.0 | 00.2 | High, 8 DPSK | 110112 |
| | | | -0 | | | | | | 3Mbps, Y axis | |
| 33 | 2479.920M | 58.1 | -23.0 | +0.0 | +1.3 | +4.2 | +0.0 | 66.0 | 94.0 -28.0 | Vert |
| | Ave | | +25.4 | | | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| | 2441.975M | 58.2 | -23.0 | +0.0 | +1.2 | +4.1 | +0.0 | 65.9 | 94.0 -28.1 | Vert |
| | Ave | | +25.4 | | | | | | Middle, 8 DPSK | |
| | 2441.0553.6 | 60.0 | . 0. 0 | . 0. 0 | . 1.0 | | . 0. 0 | 02.5 | 3Mbps, Z axis | T.T |
| | 2441.975M | 62.8 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 93.5 | 94.0 -0.5 | Vert |
| | | | +25.4 | | | | | | Middle, 8 DPSK 3Mbps, Z axis | |
| ٨ | 2441.923M | 61.2 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 91.9 | 94.0 -2.1 | Vert |
| | 2771.72JW | 01.4 | +25.4 | 10.0 | 11.4 | · - 1 .1 | 10.0 | 91.7 | Middle, 8 DPSK | V CI L |
| | | | . 23.⊤ | | | | | | 3Mbps, Y axis | |
| ^ | 2441.877M | 61.0 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 91.7 | 94.0 -2.3 | Vert |
| | | | +25.4 | | | | | | Middle, 4 DPSK | |
| | | | | | | | | | 2Mbps, Z axis | |
| ^ | 2442.023M | 60.1 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 90.8 | 94.0 -3.2 | Vert |
| | | | +25.4 | | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| ^ | 2442.038M | 59.7 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 90.4 | 94.0 -3.6 | Vert |
| | | | +25.4 | | | | | | Middle, 4 DPSK | |
| | | | | | | | | | 2Mbps, X axis | |



| 40. 2 | 1400 01214 | 57.0 | 100 | 100 | .1.2 | . 1.2 | | (7.0 | 04.0 20.2 | тт . |
|-------|---------------------------|--------------|---------------|-------|-------|-------------|--------|---------------|-----------------------------|--------|
| | 2480.013M | 57.9 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 65.8 | 94.0 -28.2 | Horiz |
| A | ve | | +25.4 | | | | | | High, 8 DPSK | |
| ^ 2 | 1400 00014 | (2.0 | 100 | 100 | +1.2 | +4.2 | 100 | 02.0 | 3Mbps, X axis | TT |
| ^ 2 | 2480.000M | 63.0 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 93.9 | 94.0 -0.1 | Horiz |
| | | | +25.4 | | | | | | High, GFSK | |
| ^ 2 | 170 0001 6 | (2.0 | . 0. 0 | | .1.2 | | . 0. 0 | 02.0 | 1Mbps, Z axis | |
| ^ 2 | 2479.988M | 62.9 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 93.8 | 94.0 -0.2 | Horiz |
| | | | +25.4 | | | | | | High, 8 DPSK | |
| 12 2 | 100 105M | 57.0 | 100 | 10.0 | +1.2 | +4.2 | 100 | (5.7 | 3Mbps, Y axis 94.0 -28.3 | TT |
| | 2480.105M | 57.8 | +0.0 +25.4 | +0.0 | +1.3 | +4.2 | +0.0 | 65.7 | | Horiz |
| A | ve | | +23.4 | | | | | | High, 4 DPSK | |
| | 100 10214 | (2.0 | 100 | 100 | +1.2 | +4.2 | 100 | 04.7 | 2Mbps, X axis | TT' |
| 1 1 2 | 2480.103M | 63.8 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 94.7 | 94.0 +0.7 | Horiz |
| | | | +25.4 | | | | | | High, 4 DPSK | |
| ^ 2 | 1400 02214 | (2.4 | 100 | 100 | +1.2 | +4.2 | 100 | 04.2 | 2Mbps, Z axis | TT'- |
| 1 1 2 | 2480.032M | 63.4 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 94.3 | 94.0 +0.3 | Horiz |
| | | | +25.4 | | | | | | High, GFSK | |
| ^ 2 | 1400 02014 | (2.0 | 100 | 100 | +1.2 | +4.2 | 100 | 02.0 | 1Mbps, Y axis | TT' |
| 1 1 2 | 2480.020M | 63.0 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 93.9 | 94.0 -0.1 | Horiz |
| | | | +25.4 | | | | | | High, GFSK | |
| ^ 2 | 1400 01214 | (2.5 | 100 | +0.0 | +1.2 | +4.2 | 100 | 02.4 | 1Mbps, X axis | Hamim |
| ^ 2 | 2480.013M | 62.5 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 93.4 | 94.0 -0.6 | Horiz |
| | | | +25.4 | | | | | | High, 8 DPSK | |
| | 100 105M | (2.2 | 100 | 100 | +1.2 | +4.2 | 100 | 02.1 | 3Mbps, X axis | TT |
| ^ 2 | 2480.105M | 62.2 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 93.1 | 94.0 -0.9 | Horiz |
| | | | +25.4 | | | | | | High, 4 DPSK | |
| 40. 2 | 1400 00014 | 577 | +0.0 | +0.0 | +1.3 | +4.2 | 100 | 65.6 | 2Mbps, X axis | Vant |
| | 2480.090M .ve | 57.7 | +0.0 +25.4 | +0.0 | +1.3 | +4.2 | +0.0 | 03.0 | 94.0 -28.4 High, 4 DPSK | Vert |
| A | ve | | ⊤ 23.4 | | | | | | | |
| 50. 2 | 2480.067M | 57.7 | -23.0 | +0.0 | +1.3 | +4.2 | +0.0 | 65.6 | 2Mbps, X axis 94.0 -28.4 | Vert |
| | ve | 31.1 | +25.4 | +0.0 | ⊤1.3 | ±4.∠ | +0.0 | 03.0 | 94.0 -28.4 High, 8 DPSK | vert |
| A | .ve | | 123.4 | | | | | | 3Mbps, X axis | |
| 51 2 | 2402.133M | 58.0 | +0.0 | +0.0 | +1.1 | +4.1 | +0.0 | 65.5 | 94.0 -28.5 | Horiz |
| 31 2 | 2402.133WI | 38.0 | +25.3 | ±0.0 | ⊤1.1 | ⊤4.1 | +0.0 | 03.3 | Low, 4 DPSK | попи |
| | | | 123.3 | | | | | | 2Mbps, Y axis | |
| 52 2 | 2479.997M | 57.5 | -23.0 | +0.0 | +1.3 | +4.2 | +0.0 | 65.4 | 94.0 -28.6 | Vert |
| | ve | 51.5 | +25.4 | 10.0 | 1.3 | 17.4 | 10.0 | 05.4 | High, 8 DPSK | v CI t |
| | .,. | | · 2J.T | | | | | | 3Mbps, Y axis | |
| ^ 2 | 2479.920M | 62.6 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 93.5 | 94.0 -0.5 | Vert |
| | - r / J . J & O IVI | 02.0 | +25.4 | .0.0 | 1.3 | 17.4 | 0.0 | 15.5 | High, 8 DPSK | V 01 t |
| | | | · 2J.T | | | | | | 3Mbps, Z axis | |
| ^ 2 | 2479.997M | 62.1 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 93.0 | 94.0 -1.0 | Vert |
| | - 1 / / . / / / / 1 1 1 1 | 02.1 | +25.4 | . 0.0 | . 1.5 | . 1.2 | . 0.0 | 75.0 | High, 8 DPSK | , O1 t |
| | | | - 23.1 | | | | | | 3Mbps, Y axis | |
| 55 2 | 2479.887M | 57.4 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 65.3 | 94.0 -28.7 | Horiz |
| | ve | <i>51.</i> ¬ | +25.4 | . 0.0 | . 1.5 | . 1.2 | . 0.0 | 05.5 | High, 4 DPSK | 110112 |
| 1 | | | - 23.1 | | | | | | 2Mbps, Y axis | |
| ^ 2 | 2479.977M | 63.3 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 94.2 | 94.0 +0.2 | Horiz |
| | | 05.5 | +25.4 | . 0.0 | . 1.3 | . 1,2 | . 0.0 | , I. <u>~</u> | High, 8 DPSK | 110112 |
| | | | - 23.1 | | | | | | 3Mbps, Z axis | |
| | | | | | | | | | 21.10ps, 2 unis | |

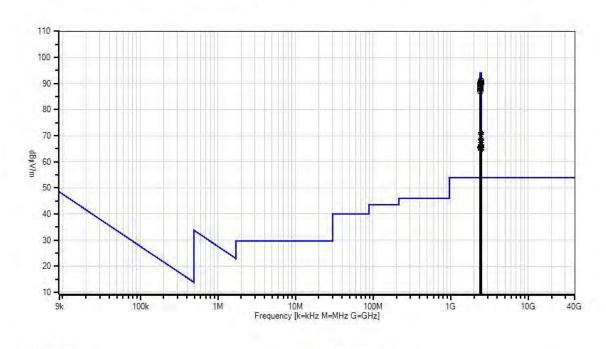


| ^ 2479.83 | 87M 61.7 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 92.6 | 94.0 -1.4 | Horiz |
|------------|------------|--------|-------|------|--------------|-------|------|----------------------------|-------------|
| 2175.00 | 01.7 | +25.4 | . 0.0 | 1.5 | | . 0.0 | 22.0 | High, 4 DPSK | 110112 |
| | | | | | | | | 2Mbps, Y axis | |
| 58 2442.13 | 33M 57.6 | | +0.0 | +1.2 | +4.1 | +0.0 | 65.3 | 94.0 -28.7 | Horiz |
| Ave | | +25.4 | | | | | | Middle, 4 DPSK | |
| | | | | | | | | 2Mbps, Z axis | |
| 59 2480.14 | 42M 57.4 | | +0.0 | +1.3 | +4.2 | +0.0 | 65.3 | 94.0 -28.7 | Vert |
| Ave | | +25.4 | | | | | | High, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| ^ 2480.13 | 38M 64.3 | | +0.0 | +1.3 | +4.2 | +0.0 | 95.2 | 94.0 +1.2 | Vert |
| | | +25.4 | | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, Z axis | |
| ^ 2480.1 | 10M 62.7 | | +0.0 | +1.3 | +4.2 | +0.0 | 93.6 | 94.0 -0.4 | Vert |
| | | +25.4 | | | | | | High, 4 DPSK | |
| A 2400 0 | | | 100 | .1.2 | . 4.2 | 10.0 | 02.5 | 2Mbps, Z axis | 17. |
| ^ 2480.00 | 67M 62.6 | | +0.0 | +1.3 | +4.2 | +0.0 | 93.5 | 94.0 -0.5 | Vert |
| | | +25.4 | | | | | | High, 8 DPSK | |
| A 2400 1 | 1514 (2.1 | 10.0 | 100 | .1.2 | +4.2 | 100 | 02.0 | 3Mbps, X axis | T 74 |
| ^ 2480.1 | 15M 62.1 | | +0.0 | +1.3 | +4.2 | +0.0 | 93.0 | 94.0 -1.0 | Vert |
| | | +25.4 | | | | | | High, GFSK | |
| ^ 2480.09 | 00M 62.0 | +0.0 | 10.0 | +1.3 | +4.2 | +0.0 | 92.9 | 1Mbps, Y axis 94.0 -1.1 | Vort |
| 2480.05 | 90M 62.0 | +25.4 | +0.0 | ⊤1.3 | +4. 2 | +0.0 | 92.9 | High, 4 DPSK | Vert |
| | | 123.4 | | | | | | 2Mbps, X axis | |
| ^ 2480.1 | 12M 62.0 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 92.9 | 94.0 -1.1 | Vert |
| 2460.1 | 12101 02.0 | +25.4 | 10.0 | 1.3 | 14.2 | 10.0 | 94.9 | High, GFSK | VCIT |
| | | . 23.1 | | | | | | 1Mbps, X axis | |
| ^ 2480.14 | 42M 61.9 | +0.0 | +0.0 | +1.3 | +4.2 | +0.0 | 92.8 | 94.0 -1.2 | Vert |
| 2.00.1 | | +25.4 | 0.0 | 1.0 | | 0.0 | , | High, 4 DPSK | , 610 |
| | | | | | | | | 2Mbps, Y axis | |
| 67 2442.0 | 10M 57.1 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 64.8 | 94.0 -29.2 | Horiz |
| Ave | | +25.4 | | | | | | Middle, 8 DPSK | - |
| | | | | | | | | 3Mbps, Z axis | |
| ^ 2442.0 | 10M 61.9 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 92.6 | 94.0 -1.4 | Horiz |
| | | +25.4 | | | | | | Middle, 8 DPSK | |
| | | | | | | | | 3Mbps, Z axis | |
| ^ 2442.0 | 18M 61.3 | | +0.0 | +1.2 | +4.1 | +0.0 | 92.0 | 94.0 -2.0 | Horiz |
| | | +25.4 | | | | | | Middle, 8 DPSK | |
| | | | | | | | | 3Mbps, Y axis | |
| ^ 2442.00 | 06M 61.0 | | +0.0 | +1.2 | +4.1 | +0.0 | 91.7 | 94.0 -2.3 | Horiz |
| | | +25.4 | | | | | | Middle, 8 DPSK | |
| | | | | | | | | 3Mbps, X axis | |
| 71 2442.12 | 27M 56.8 | | +0.0 | +1.2 | +4.1 | +0.0 | 64.5 | 94.0 -29.5 | Horiz |
| Ave | | +25.4 | | | | | | Middle, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |



| 62.0 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 92.7 | 94.0 | -1.3 | Horiz |
|------|----------------------|--|---|-------------|-------------|-------------|-------------|--|---------------|
| | +25.4 | | | | | | Middle, 4 D | PSK | |
| | | | | | | | 2Mbps, Z a | xis | |
| 61.9 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 92.6 | 94.0 | -1.4 | Horiz |
| | +25.4 | | | | | | Middle, 4 D | PSK | |
| | | | | | | | 2Mbps, Y a | ixis | |
| 61.5 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 92.2 | 94.0 | -1.8 | Horiz |
| | +25.4 | | | | | | Middle, 4 D | PSK | |
| | | | | | | | 2Mbps, X a | ixis | |
| 61.5 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 92.2 | 94.0 | -1.8 | Horiz |
| | +25.4 | | | | | | Middle, GF | SK | |
| | | | | | | | 1Mbps, Z a | xis | |
| 60.9 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 91.6 | 94.0 | -2.4 | Horiz |
| | +25.4 | | | | | | Middle, GF | SK | |
| | | | | | | | 1Mbps, Y a | ixis | |
| 60.2 | +0.0 | +0.0 | +1.2 | +4.1 | +0.0 | 90.9 | 94.0 | -3.1 | Horiz |
| | +25.4 | | | | | | Middle, GF | SK | |
| | | | | | | | 1Mbps, X a | ixis | |
| | 61.9 61.5 61.5 | +25.4 61.9 +0.0 +25.4 61.5 +0.0 +25.4 61.5 +0.0 +25.4 60.9 +0.0 +25.4 60.2 +0.0 | +25.4 61.9 +0.0 +0.0 +25.4 61.5 +0.0 +0.0 +25.4 61.5 +0.0 +0.0 +25.4 60.9 +0.0 +0.0 +25.4 60.2 +0.0 +0.0 | +25.4 61.9 | +25.4 61.9 | +25.4 61.9 | +25.4 61.9 | Height He | Heat Continue |

CKC Laboratories, Inc. Date: 2/26/2015 Time: 12:26:58 Automatic Labs WO#: 96788 Test Distance: 3 Meters. Sequence#: 1





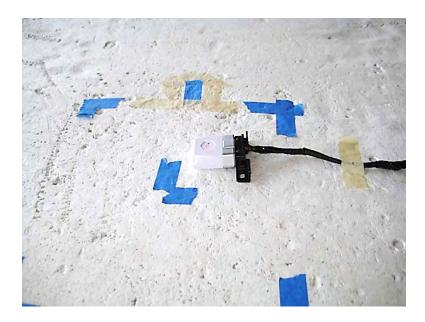
O Peak Readings

* Average Readings

1 - 15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)



Test Setup Photos

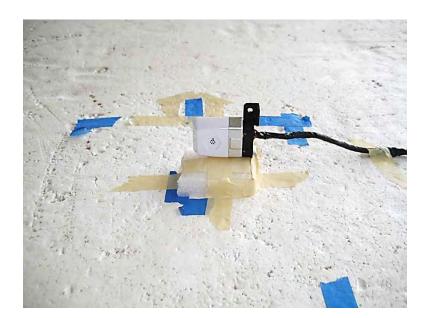


X Axis



Y Axis





Z Axis



15.249(a) Field Strength of Harmonics

Test Conditions / Setup / Data

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Pl. • Brea, CA 92823 • (714) 993-6112

Customer: Automatic Labs

Specification: 15.249 Carrier and Spurious Emissions (2400-2483.5 MHz Transmitter)

 Work Order #:
 96788
 Date:
 2/27/2015

 Test Type:
 Maximized Emissions
 Time:
 13:54:46

Equipment: **OBD-II to Bluetooth Bridge Device** Sequence#: 2

Manufacturer: Automatic Labs Tested By: S. Yamamoto

Model: Link2 S/N: NA

Test Equipment:

| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
|----|----------|-------------------|---------------|------------------|--------------|
| T1 | AN02672 | Spectrum Analyzer | E4446A | 8/14/2013 | 8/14/2015 |
| | ANP05421 | Cable | Sucoflex 104A | 1/8/2014 | 1/8/2016 |
| T2 | ANP06661 | Cable | LDF1-50 | 4/15/2014 | 4/15/2016 |
| T3 | AN00786 | Preamp | 83017A | 4/25/2014 | 4/25/2016 |
| T4 | ANP06544 | Cable | 32026-29094K- | 11/20/2013 | 11/20/2015 |
| | | | 29094K-36TC | | |
| T5 | AN03385 | High Pass Filter | 11SH10- | 6/5/2013 | 6/5/2015 |
| | | | 3000/T10000- | | |
| | | | O/O | | |
| T6 | AN00849 | Horn Antenna | 3115 | 3/18/2014 | 3/18/2016 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|------------------------------------|----------------|---------|-----|
| OBD-II to Bluetooth Bridge Device* | Automatic Labs | Link2 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N | |
|--------------------------|--------------|-------------|-----|--|
| AC to 12VDC Power Supply | ZW | ZW12V3A25RD | NA | |

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Test Conditions / Notes:

The equipment under test (EUT) is a standalone on the Styrofoam table top.

The EUT is connected to a remotely located AC to 12VDC power adapter.

The power adapter is providing the nominal 12.0VDC to the EUT and is used in place of a battery which would be used in the actual installation.

The EUT low, middle and high channels (and data sheet test frequencies) are 2402MHz, 2442MHz, and 2480MHz. Modulation types are GFSK 1Mbps, 4 DPSK 2Mbps, and 8 DPSK 3Mbps.

Data sheet contains the measurement of the harmonics amplitude of the EUT.

The EUT is transmitting continuously.

The emission levels reported in this data are representative of worst case emissions.

Temperature: 19°C Relative Humidity: 44% Pressure: 100kPa

Frequency range of data sheet 4800MHz to 18GHz. RBW=VBW=1MHz.

Rated EUT RF output power: +2dBm

Data was maximized with EUT in each of three axis systems (X, Y, Z) and with each of the three modulation types.

Site A

Test method used ANSI C63.4 (2003)

Ext Attn: 0 dB

| | rement Data: | Re | eading lis | ted by ma | ıroin | | T_{ϵ} | est Distanc | e: 3 Meters | | |
|---|--------------|--------|------------|-----------|-------|------|----------------|-------------|---------------|------------|--------|
| # | Freq | Rdng | T1 | T2 | T3 | T4 | Dist | Corr | Spec | Margin | Polar |
| " | rreq | realig | T5 | T6 | 13 | | Dist | Con | Брес | 1viui 5iii | 1 Olui |
| | MHz | dΒμV | dB | dB | dB | dB | Table | dBuV/m | $dB\mu V/m$ | dB | Ant |
| 1 | 14651.268 | 35.8 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 53.4 | 54.0 | -0.6 | Horiz |
| | M | | +0.2 | +39.3 | | | | | | | |
| | Ave | | | | | | | | Middle, 41 | DPSK | |
| | | | | | | | | | 2Mbps, Y | axis | |
| ^ | 14651.268 | 47.8 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 65.4 | 54.0 | +11.4 | Horiz |
| | M | | +0.2 | +39.3 | | | | | | | |
| | | | | | | | | | Middle, 41 | DPSK | |
| | | | | | | | | | 2Mbps, Y | axis | |
| 3 | 14411.617 | 35.7 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 53.2 | 54.0 | -0.8 | Vert |
| | M | | +0.2 | +39.4 | | | | | | | |
| | Ave | | | | | | | | Low, 8 DP | | |
| | | | | | | | | | 3Mbps, Z a | | |
| ^ | 14411.617 | 46.3 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 63.8 | 54.0 | +9.8 | Vert |
| | M | | +0.2 | +39.4 | | | | | | | |
| | | | | | | | | | Low, 8 DP | | |
| | | | | | | | | | 3Mbps, Z a | | |
| 5 | 14651.617 | 35.2 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 52.8 | 54.0 | -1.2 | Horiz |
| | . M | | +0.2 | +39.3 | | | | | | | |
| | Ave | | | | | | | | Middle, 8 1 | | |
| | 11655 015 | | | | | | | -1.0 | 3Mbps, Y | | |
| 6 | 14652.915 | 34.1 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 51.8 | 54.0 | -2.2 | Vert |
| | M | | +0.3 | +39.3 | | | | | N.C. 1.11 4.3 | DDCIZ | |
| | Ave | | | | | | | | Middle, 4 | | |
| | | | | | | | | | 2Mbps, Z a | axis | |



| 7 14411.117 M | 34.3 | +0.0 +0.2 | +11.5 +39.4 | -35.3 | +1.7 | +0.0 | 51.8 | 54.0 | -2.2 | Vert |
|------------------|------|--------------|----------------|-------|------|------|------|--------------|-------|-------|
| Ave | | .0.2 | | | | | | Low, 4 DPSI | K | |
| | | | | | | | | 2Mbps, Z ax | is | |
| 8 9768.333M | 41.6 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 51.6 | 54.0 | -2.4 | Horiz |
| | | +0.2 | +35.8 | | | | | Middle, 8 DI | PSK | |
| | | | | | | | | 3Mbps, Y ax | | |
| 9 12401.100 | 39.8 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 51.5 | 54.0 | -2.5 | Horiz |
| M | | +0.4 | +35.8 | | | | | | | |
| | | | | | | | | High, 4 DPS | K | |
| | | | | | | | | 2Mbps, Y ax | | |
| 10 14651.633 | 33.7 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 51.3 | 54.0 | -2.7 | Horiz |
| M | | +0.2 | +39.3 | | | | | | | |
| Ave | | | | | | | | Middle, 8 DI | PSK | |
| | | | | | | | | 3Mbps, Z ax | | |
| ^ 14651.617 | 46.6 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 64.2 | 54.0 | +10.2 | Horiz |
| M | | +0.2 | +39.3 | | | | | | | |
| | | | | | | | | Middle, 8 DI | PSK | |
| | | | | | | | | 3Mbps, Y ax | | |
| ^ 14651.633 | 45.1 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 62.7 | 54.0 | +8.7 | Horiz |
| M | | +0.2 | +39.3 | | | | | | | |
| | | | | | | | | Middle, 8 DI | PSK | |
| | | | | | | | | 3Mbps, Z ax | | |
| 13 14412.883 | 33.8 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 51.3 | 54.0 | -2.7 | Horiz |
| M | | +0.2 | +39.4 | | | | | | | |
| Ave | | | | | | | | Low, 4 DPSI | K | |
| | | | | | | | | 2Mbps, Y ax | | |
| 14 14652.680 | 33.5 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 51.2 | 54.0 | -2.8 | Horiz |
| M | | +0.3 | +39.3 | | | | | | | |
| Ave | | | | | | | | Middle, 4 DI | PSK | |
| | | | | | | | | 2Mbps, Z ax | | |
| ^ 14652.680 | 45.4 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 63.1 | 54.0 | +9.1 | Horiz |
| M | | +0.3 | +39.3 | | | | | | | |
| | | | | | | | | Middle, 4 DI | PSK | |
| | | | | | | | | 2Mbps, Z ax | | |
| 16 14411.133 | 33.7 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 51.2 | 54.0 | -2.8 | Horiz |
| M | | +0.2 | +39.4 | | | | | | | |
| Ave | | | | | | | | Low, 4 DPSI | K | |
| | | | | | | | | 2Mbps, Z ax | | |
| ^ 14411.133 | 45.1 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 62.6 | 54.0 | +8.6 | Horiz |
| M | | +0.2 | +39.4 | | | | | | | |
| | | | | | | | | Low, 4 DPSI | K | |
| | | | | | | | | 2Mbps, Z ax | | |
| 18 12399.533 | 39.4 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 51.1 | 54.0 | -2.9 | Horiz |
| M | | +0.4 | +35.8 | | | | | | | |
| | | | | | | | | High, 8 DPS | K | |
| | | | | | | | | 3Mbps, Y ax | | |
| 19 12399.736 | 39.4 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 51.1 | 54.0 | -2.9 | Vert |
| M | | +0.4 | +35.8 | | | | • | | | |
| | | | | | | | | High, GFSK | | |
| | | | | | | | | 1Mbps, Z ax | | |
| L | | | | | | | | - r ~, — w.r | | |



| 20 9608.283M | 41.1 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 51.0 | 54.0 -3.0 | Vert |
|-------------------|------|--------------|---------|-------|---------|--------|-------|------------------------------|-----------|
| | | +0.0 | +35.6 | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | X axis | |
| 21 12009.400 | 39.9 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 50.9 | 54.0 -3.1 | Vert |
| M | | +0.0 | +35.6 | | | | | | |
| | | | | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | X axis | |
| 22 12398.467 | 39.1 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 50.8 | 54.0 -3.2 | Vert |
| M | | +0.4 | +35.8 | | | | | | |
| | | | | | | | | High, 8 DPSK | |
| 22 12210 200 | 20.5 | . 0 0 | . 10. 1 | 26.6 | . 1 5 | . 0. 0 | | 3Mbps, Z axis | T7 . |
| 23 12210.200 | 39.5 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 50.7 | 54.0 -3.3 | Vert |
| M | | +0.2 | +35.7 | | | | | M. 111 CECK | |
| | | | | | | | | Middle, GFSK | |
| 24 12400 206 | 20.0 | . 0. 0 | . 10.5 | 26.5 | . 1 . 7 | . 0. 0 | 50.7 | 1Mbps, Z axis | T.7 |
| 24 12400.306 | 39.0 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 50.7 | 54.0 -3.3 | Vert |
| M | | +0.4 | +35.8 | | | | | II. 1 4 DDCIZ | |
| | | | | | | | | High, 4 DPSK | |
| 25 14410 750 | 22.2 | ΙΛ.Λ | +11.5 | 25.2 | +1.7 | ΙΛΛ | 50.7 | 2Mbps, Y axis | Hanin |
| 25 14410.750 | 33.2 | +0.0 +0.2 | +11.5 | -35.3 | +1.7 | +0.0 | 50.7 | 54.0 -3.3 | Horiz |
| M | | +0.2 | +39.4 | | | | | I am 0 DDCV | |
| Ave | | | | | | | | Low, 8 DPSK 3Mbps, Y axis | |
| 26 12399.836 | 38.9 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 50.6 | 54.0 -3.4 | Horiz |
| 20 12399.830 M | 38.9 | +0.0 | +35.8 | -30.3 | +1.3 | +0.0 | 30.0 | 34.0 -3.4 | поп |
| IVI | | +0.4 | ±33.6 | | | | | High, 8 DPSK | |
| | | | | | | | | 3Mbps, Z axis | |
| 27 12009.675 | 39.6 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 50.6 | 54.0 -3.4 | Horiz |
| M | 39.0 | +0.0 | +35.6 | -30.3 | 1.3 | 10.0 | 30.0 | 34.0 -3.4 | 110112 |
| 171 | | 10.0 | 133.0 | | | | | Low, 8 DPSK | |
| | | | | | | | | 3Mbps, Y axis | |
| 28 14412.844 | 33.1 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 50.6 | 54.0 -3.4 | Vert |
| M | 33.1 | +0.2 | +39.4 | 30.3 | 1.7 | . 0.0 | 20.0 | 51.0 | , 010 |
| Ave | | . 0.2 | . 57.1 | | | | | Low, GFSK 1Mbps, | |
| 1210 | | | | | | | | Z axis | |
| 29 14651.025 | 33.0 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 50.6 | 54.0 -3.4 | Vert |
| M | | +0.2 | +39.3 | | | | - 0.0 | 2 | . • • • • |
| Ave | | | | | | | | Middle, 4 DPSK | |
| • | | | | | | | | 2Mbps, X axis | |
| 30 12210.075 | 39.3 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 50.5 | 54.0 -3.5 | Vert |
| M | | +0.2 | +35.7 | | | | | - 1- | |
| | | | | | | | | Middle, 4 DPSK | |
| | | | | | | | | 2Mbps, X axis | |
| 31 4804.250M | 51.3 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 50.5 | 54.0 -3.5 | Vert |
| | | +0.1 | +29.9 | | | | | Low, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| 32 4804.292M | 51.3 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 50.5 | 54.0 -3.5 | Vert |
| | | +0.1 | +29.9 | | | | | Low, 8 DPSK | |
| | | | | | | | | 3Mbps, Y axis | |
| | | | | | | | | <u> </u> | |



| 33 | 12008.587 M | 39.5 | +0.0 | +10.4 +35.6 | -36.5 | +1.5 | +0.0 | 50.5 | 54.0 -3.5 | Vert |
|----|----------------|------|--------------|----------------|-------|------|---------|-------------|------------------|-------------|
| | 141 | | 10.0 | 133.0 | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, Y axis | |
| 34 | 12209.168 | 39.3 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 50.5 | 54.0 -3.5 | Vert |
| | M | 37.3 | +0.2 | +35.7 | 50.0 | 1.0 | . 0.0 | 20.2 | 21.0 3.3 | , 610 |
| | 1.1 | | ٠.ــ | 30., | | | | | Middle, GFSK | |
| | | | | | | | | | 1Mbps, X axis | |
| 35 | 14410.867 | 33.0 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 50.5 | 54.0 -3.5 | Horiz |
| | M | | +0.2 | +39.4 | | | | | | |
| | Ave | | | | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| 36 | | 39.3 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 50.5 | 54.0 -3.5 | Horiz |
| | M | | +0.2 | +35.7 | | | | | | |
| | | | | | | | | | Middle, GFSK | |
| | | | | | | | | | 1Mbps, Y axis | |
| 37 | 4804.283M | 51.2 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 50.4 | 54.0 -3.6 | Vert |
| | | | +0.1 | +29.9 | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| 38 | | 38.7 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 50.4 | 54.0 -3.6 | Vert |
| | M | | +0.4 | +35.8 | | | | | II' 1 4 DDGII | |
| | | | | | | | | | High, 4 DPSK | |
| 20 | 12200 050 | 20.7 | 100 | 110.5 | 26.5 | .1.5 | 100 | 50.4 | 2Mbps, X axis | T 74 |
| 39 | 12399.050 M | 38.7 | +0.0 +0.4 | +10.5 +35.8 | -36.5 | +1.5 | +0.0 | 50.4 | 54.0 -3.6 | Vert |
| | IVI | | ±0.4 | ±33.8 | | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, Y axis | |
| 40 | 12208.675 | 39.2 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 50.4 | 54.0 -3.6 | Horiz |
| 10 | M | 37.2 | +0.2 | +35.7 | 30.0 | 11.5 | 10.0 | 50.4 | 34.0 3.0 | HOHZ |
| | 1.1 | | ٠.ــ | 30., | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| 41 | 12009.194 | 39.4 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 50.4 | 54.0 -3.6 | Horiz |
| | M | | +0.0 | +35.6 | | | | | | |
| | | | | | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | | Z axis | |
| 42 | 4960.025M | 51.3 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 50.3 | 54.0 -3.7 | Vert |
| | | | +0.1 | +30.1 | | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| 43 | 12012.208 | 39.3 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 50.3 | 54.0 -3.7 | Vert |
| | M | | +0.0 | +35.6 | | | | | | |
| | | | | | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| 44 | 9608.950M | 40.4 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 50.3 | 54.0 -3.7 | Horiz |
| | | | +0.0 | +35.6 | | | | | Low, GFSK 1Mbps, | |
| | 1,1000,000 | 20.1 | | | 27.1 | | . 0 . 0 | 7 00 | Y axis | ** ' |
| 45 | | 33.1 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 50.3 | 54.0 -3.7 | Horiz |
| | M | | +0.3 | +38.8 | | | | | High CECK | |
| | Ave | | | | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, Y axis | |



| 46 | | 38.6 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 50.3 | 54.0 | -3.7 | Vert |
|-----|----------------|------|--------------|----------------|-------|-------|------|------|---------------------|------------------|--------|
| | M | | +0.4 | +35.8 | | | | | Histoppo | NZ | |
| | | | | | | | | | High, 8 DPS | | |
| 47 | 12208.981 | 39.0 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 50.2 | 3Mbps, X az 54.0 | -3.8 | Vert |
| 4/ | 12208.981 M | 39.0 | +0.0 | +35.7 | -30.0 | +1.3 | +0.0 | 30.2 | 34.0 | -3.8 | vert |
| | 1V1 | | 10.2 | 133.1 | | | | | Middle, 4 D | PSK | |
| | | | | | | | | | 2Mbps, Z ax | | |
| 48 | 12009.050 | 39.1 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 50.1 | 54.0 | -3.9 | Vert |
| | M | | +0.0 | +35.6 | | | | | | | |
| | | | | | | | | | Low, 8 DPS | K | |
| | | | | | | | | | 3Mbps, Z ax | | |
| 49 | 12010.442 | 39.1 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 50.1 | 54.0 | -3.9 | Horiz |
| | M | | +0.0 | +35.6 | | | | | | | |
| | | | | | | | | | Low, GFSK | 1Mbps, | |
| | 12210 550 | 20.0 | 100 | 110.4 | 26.6 | .1.7 | 100 | 50.0 | Y axis | 4.0 | TT' |
| 50 | 12210.558 M | 38.8 | +0.0 +0.2 | +10.4 +35.7 | -36.6 | +1.5 | +0.0 | 50.0 | 54.0 | -4.0 | Horiz |
| | IVI | | +0.∠ | +33.7 | | | | | Middle, 4 D | DCV | |
| | | | | | | | | | 2Mbps, Y as | | |
| 51 | 14411.892 | 32.5 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 50.0 | 54.0 | -4.0 | Vert |
| 31 | M | 32.3 | +0.2 | +39.4 | 33.3 | . 1.7 | 10.0 | 30.0 | 54.0 | 7.0 | VCIT |
| | Ave | | 0.2 | 57 | | | | | Low, 8 DPS | K | |
| | | | | | | | | | 3Mbps, X ax | | |
| ^ | 14411.892 | 43.7 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 61.2 | 54.0 | +7.2 | Vert |
| | M | | +0.2 | +39.4 | | | | | | | |
| | | | | | | | | | Low, 8 DPS | | |
| | | | | | | | | | 3Mbps, X ax | | |
| 53 | 12009.317 | 38.9 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 49.9 | 54.0 | -4.1 | Horiz |
| | M | | +0.0 | +35.6 | | | | | I 0 DDG | 17 | |
| | | | | | | | | | Low, 8 DPS | | |
| 5.1 | 14651.183 | 32.3 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 49.9 | 3Mbps, X az 54.0 | -4.1 | Vert |
| 34 | M | 32.3 | +0.2 | +39.3 | -33.2 | 11.7 | 10.0 | 47.7 | 34.0 | -4.1 | VEIL |
| | Ave | | 10.2 | 137.3 | | | | | Middle, 8 D | PSK | |
| | 11,0 | | | | | | | | 3Mbps, Z ax | | |
| ^ | 14651.183 | 44.5 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 62.1 | 54.0 | +8.1 | Vert |
| | M | | +0.2 | +39.3 | | | | - | • • | - | |
| | | | | | | | | | Middle, 8 D | | |
| | | | | | | | | | 3Mbps, Z ax | | |
| 56 | 12399.475 | 38.2 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 49.9 | 54.0 | -4.1 | Horiz |
| | M | | +0.4 | +35.8 | | | | | | | |
| | | | | | | | | | High, 4 DPS | | |
| | 40.60.2173.5 | 50.0 | 10.0 | 1.6.0 | 20.1 | 100 | .0.0 | 40.0 | 2Mbps, X av | | 3.7 |
| 57 | 4960.317M | 50.8 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 49.8 | 54.0 | -4.2 | Vert |
| | | | +0.1 | +30.1 | | | | | High, 4 DPS | | |
| 50 | 14651.283 | 32.2 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 49.8 | 2Mbps, X az 54.0 | -4.2 | Vert |
| 38 | 14031.283 M | 34.4 | +0.0 | +39.3 | -33.2 | 11./ | 10.0 | 47.0 | 54.0 | -4 .∠ | v ei i |
| 1 | Ave | | 0.2 | 137.3 | | | | | Middle, GFS | SK | |
| | | | | | | | | | 1Mbps, Z ax | | |
| L | | | | | | | | | -1.10 Pb, 2 un | | |



| ^ | 14651.283 | 42.4 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 60.0 | 54.0 | +6.0 | Vert |
|----|-----------------|--------|--------|--------|-------|-------|--------|--------------|----------------------------|----------|---------------|
| | M | | +0.2 | +39.3 | | | | | | | |
| | | | | | | | | | Middle, GFS | | |
| | | | | | | | | | 1Mbps, Z ax | | |
| 60 | 14412.873 | 32.3 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 49.8 | 54.0 | -4.2 | Vert |
| | M | | +0.2 | +39.4 | | | | | 1 4 B B G | | |
| | Ave | | | | | | | | Low, 4 DPSI | | |
| | 1 4 4 1 2 0 7 2 | 42.0 | . 0. 0 | . 11 7 | 252 | . 1 = | . 0. 0 | (1.2 | 2Mbps, X ax | | T.T |
| ^ | 14412.873 | 43.8 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 61.3 | 54.0 | +7.3 | Vert |
| | M | | +0.2 | +39.4 | | | | | Law 4 DDCI | 7 | |
| | | | | | | | | | Low, 4 DPSI 2Mbps, X ax | | |
| ^ | 14412.844 | 43.1 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 60.6 | 54.0 | +6.6 | Vert |
| | M | 43.1 | +0.2 | +39.4 | -33.3 | 11.7 | 10.0 | 00.0 | 34.0 | 10.0 | Vert |
| | 171 | | 10.2 | 137.4 | | | | | Low, GFSK | 1Mhns | |
| | | | | | | | | | Z axis | Tiviops, | |
| 63 | 12009.117 | 38.8 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 49.8 | 54.0 | -4.2 | Vert |
| | M | | +0.0 | +35.6 | | - 10 | | .,,,, | | | , , , , |
| | | | | | | | | | Low, 4 DPSI | X. | |
| | | | | | | | | | 2Mbps, Y ax | | |
| 64 | 12010.700 | 38.7 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 49.7 | 54.0 | -4.3 | Vert |
| | M | | +0.0 | +35.6 | | | | | | | |
| | | | | | | | | | Low, 4 DPSI | | |
| | | | | | | | | | 2Mbps, Z ax | | |
| 65 | 12400.043 | 38.0 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 49.7 | 54.0 | -4.3 | Vert |
| | M | | +0.4 | +35.8 | | | | | | | |
| | | | | | | | | | High, 4 DPS | | |
| | 12200 (10 | 20.5 | 10.0 | +10.4 | 26.6 | .1.5 | | 40.7 | 2Mbps, Z ax | | 3 7. 4 |
| 66 | | 38.5 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 49.7 | 54.0 | -4.3 | Vert |
| | M | | +0.2 | +35.7 | | | | | Middle, 4 DI | OCV | |
| | | | | | | | | | 2Mbps, Y ax | | |
| 67 | 4884.368M | 50.6 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 49.7 | 54.0 | -4.3 | Vert |
| 07 | 4004.500IVI | 30.0 | +0.2 | +30.0 | -30.0 | 10.7 | 10.0 | T J.1 | Middle, 4 DI | | VCIT |
| | | | . 0.2 | . 50.0 | | | | | 2Mbps, Y ax | | |
| 68 | 12008.767 | 38.7 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 49.7 | 54.0 | -4.3 | Horiz |
| | M | - 3.,, | +0.0 | +35.6 | | | - • • | | | | |
| | | | | | | | | | Low, 8 DPSI | ζ. | |
| | | | | | | | | | 3Mbps, Z ax | | |
| 69 | 12010.208 | 38.6 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 49.6 | 54.0 | -4.4 | Vert |
| | M | | +0.0 | +35.6 | | | | | | | |
| | | | | | | | | | Low, GFSK | 1Mbps, | |
| | | | | | | | | | Z axis | | |
| 70 | 14879.092 | 32.4 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 49.6 | 54.0 | -4.4 | Horiz |
| | M | | +0.3 | +38.8 | | | | | III 1 4 BBS | T.7 | |
| | Ave | | | | | | | | High, 4 DPS | | |
| 71 | 14652 102 | 21.0 | 100 | 1117 | 25.2 | . 1 7 | 10.0 | 40.6 | 2Mbps, Y ax | | 11. |
| 71 | 14652.183 | 31.9 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 49.6 | 54.0 | -4.4 | Horiz |
| | M | | +0.3 | +39.3 | | | | | Middle 9 DI | OCV | |
| | Ave | | | | | | | | Middle, 8 DI 3Mbps, X ax | | |
| | | | | | | | | | Diviops, A ax | 13 | |



| ^ 14652.183 M | 43.8 | +0.0 +0.3 | +11.6 +39.3 | -35.2 | +1.7 | +0.0 | 61.5 | 54.0 | +7.5 | Horiz |
|------------------|------|--------------|----------------|-------|-------|---------|------|--------------------------------|-------|--------|
| | | | | | | | | Middle, 8 DPS 3Mbps, X axis | | |
| 73 4884.010M | 50.4 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 49.5 | | -4.5 | Vert |
| | | +0.2 | +30.0 | | | | | Middle, 8 DPS | | |
| | | | | | | | | 3Mbps, X axis | | |
| 74 12208.817 | 38.3 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 49.5 | 54.0 | -4.5 | Vert |
| M | | +0.2 | +35.7 | | | | | | | |
| | | | | | | | | Middle, 8 DPS 3Mbps, Y axis | | |
| 75 14652.958 | 31.7 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 49.4 | | -4.6 | Horiz |
| M | | +0.3 | +39.3 | | | | | | | |
| Ave | | | | | | | | Middle, GFSK | | |
| | | | | | | | | 1Mbps, Y axis | | |
| ^ 14652.958 | 43.1 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 60.8 | 54.0 | +6.8 | Horiz |
| M | | +0.3 | +39.3 | | | | | | | |
| | | | | | | | | Middle, GFSK | | |
| | | | | | | | | 1Mbps, Y axis | | |
| 77 7206.557M | 44.0 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 49.4 | | -4.6 | Horiz |
| | | +0.2 | +33.1 | | | | | Low, GFSK 11 | Mbps, | |
| 70 12000 200 | 20.4 | | +10.4 | 26.5 | .1.7 | 10.0 | 10.1 | Y axis | 1.0 | |
| 78 12009.200 | 38.4 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 49.4 | 54.0 | -4.6 | Horiz |
| M | | +0.0 | +35.6 | | | | | Low, 4 DPSK | | |
| | | | | | | | | 2Mbps, Y axis | | |
| 79 14880.842 | 32.1 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 49.3 | | -4.7 | Horiz |
| M | 32.1 | +0.3 | +38.8 | 33.1 | . 1.7 | . 0.0 | 17.5 | 31.0 | 1., | HOHZ |
| Ave | | 0.5 | 20.0 | | | | | High, 4 DPSK | | |
| | | | | | | | | 2Mbps, Z axis | | |
| 80 12210.278 | 38.1 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 49.3 | | -4.7 | Vert |
| M | | +0.2 | +35.7 | | | | | | | |
| | | | | | | | | Middle, 8 DPS | SK | |
| | | | | | | | | 3Mbps, X axis | | |
| 81 9767.258M | 39.3 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 49.3 | | -4.7 | Horiz |
| | | +0.2 | +35.8 | | | | | Middle, GFSK | | |
| 00 40 50 5503 5 | | | | 26.1 | | . 0 . 0 | 40.0 | 1Mbps, Y axis | | |
| 82 4959.658M | 50.2 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 49.2 | | -4.8 | Horiz |
| | | +0.1 | +30.1 | | | | | High, 4 DPSK | | |
| 02 4002 (12) 4 | 50.1 | 100 | +ε.0 | 20.0 | 100 | +0.0 | 40.2 | 2Mbps, Z axis | | Vont |
| 83 4883.613M | 50.1 | +0.0 +0.2 | +6.0 +30.0 | -38.0 | +0.9 | +0.0 | 49.2 | | -4.8 | Vert |
| | | ±0.∠ | ±30.0 | | | | | Middle, 4 DPS 2Mbps, X axis | | |
| 84 12209.736 | 38.0 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 49.2 | | -4.8 | Horiz |
| M | 30.0 | +0.0 | +35.7 | -30.0 | 11.3 | +0.0 | 47.2 | J4.U | -4.0 | 11011Z |
| 171 | | 10.2 | . 55.1 | | | | | Middle, 4 DPS | K | |
| | | | | | | | | 2Mbps, Z axis | | |
| 85 12010.125 | 38.2 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 49.2 | | -4.8 | Horiz |
| M | | +0.0 | +35.6 | | | . • • | | | | |
| | | | | | | | | Low, 4 DPSK | | |
| | | | | | | | | 2Mbps, Z axis | | |
| | | | | | | | | | | |



| 86 | 12009.625 M | 38.2 | +0.0 | +10.4 +35.6 | -36.5 | +1.5 | +0.0 | 49.2 | 54.0 | -4.8 | Vert |
|-----|----------------|------|--------------|----------------|-------|------|--------|------|------------------------------|--------|------------|
| | 141 | | . 0.0 | . 33.0 | | | | | Low, 8 DPSK 3Mbps, X axis | | |
| 97 | 7205.687M | 41.2 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 49.0 | 54.0 | -5.0 | Horiz |
| 07 | /203.06/W | 41.2 | +0.0 | +33.1 | -30.9 | ⊤1.∠ | +0.0 | 49.0 | Low, GFSK 1 | | ПОПЕ |
| | | | 10.2 | 133.1 | | | | | X axis | wiops, | |
| 88 | 14411.375 | 31.5 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 49.0 | 54.0 | -5.0 | Horiz |
| 00 | M | 31.3 | +0.2 | +39.4 | -33.3 | 11.7 | 10.0 | ₹2.0 | 34.0 | -3.0 | 110112 |
| | Ave | | . 0.2 | . 37.1 | | | | | Low, 4 DPSK | | |
| | 11,0 | | | | | | | | 2Mbps, X axis | | |
| ^ | 14411.375 | 42.6 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 60.1 | 54.0 | +6.1 | Horiz |
| | M | | +0.2 | +39.4 | | | | | | | |
| | | | | | | | | | Low, 4 DPSK | | |
| | | | | | | | | | 2Mbps, X axis | S | |
| 90 | 14410.942 | 31.5 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 49.0 | 54.0 | -5.0 | Vert |
| | M | | +0.2 | +39.4 | | | | | | | |
| | Ave | | | | | | | | Low, 4 DPSK | - | |
| | | | | | | | | | 2Mbps, Y axis | | |
| 91 | 14879.093 | 31.7 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 48.9 | 54.0 | -5.1 | Vert |
| | . M | | +0.3 | +38.8 | | | | | | _ | |
| | Ave | | | | | | | | High, 4 DPSK | | |
| 0.2 | 10.100.000 | 27.0 | . 0. 0 | . 10.7 | 26.5 | | . 0. 0 | 40.0 | 2Mbps, Z axis | | |
| 92 | 12400.333 | 37.2 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 48.9 | 54.0 | -5.1 | Horiz |
| | M | | +0.4 | +35.8 | | | | | High, GFSK | | |
| | | | | | | | | | 1Mbps, X axis | c | |
| 93 | 14651.745 | 31.3 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 48.9 | 54.0 | -5.1 | Vert |
|)3 | M | 31.3 | +0.2 | +39.3 | -33.2 | 11.7 | 10.0 | 70.7 | 34.0 | -3.1 | VCIT |
| | Ave | | . 0.2 | . 57.5 | | | | | Middle, 8 DP | SK | |
| | | | | | | | | | 3Mbps, X axis | | |
| ^ | 14651.745 | 43.6 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 61.2 | 54.0 | +7.2 | Vert |
| | M | | +0.2 | +39.3 | | | | | | | |
| | | | | | | | | | Middle, 8 DP | SK | |
| | | | | | | | | | 3Mbps, X axis | S | |
| 95 | | 31.6 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 48.8 | 54.0 | -5.2 | Horiz |
| | M | | +0.3 | +38.8 | | | | | | | |
| | Ave | | | | | | | | High, 8 DPSK | | |
| | | | | | | | | | 3Mbps, Y axis | | |
| ^ | 14879.283 | 43.9 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 61.1 | 54.0 | +7.1 | Horiz |
| | M | | +0.3 | +38.8 | | | | | II' 1 OBBOT | - | |
| | | | | | | | | | High, 8 DPSK | | |
| 0.7 | 4002 (753 f | 40.6 | 10.0 | 160 | 20.0 | 100 | 100 | 40.7 | 3Mbps, Y axis | | X 7 |
| 9/ | 4883.675M | 49.6 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 48.7 | 54.0 | -5.3 | Vert |
| | | | +0.2 | +30.0 | | | | | Middle, 8 DPS | | |
| 00 | 14650.960 | 31.1 | ±0.0 | +11.6 | 25.2 | | +0.0 | 48.7 | 3Mbps, Y axis | -5.3 | Цожіт |
| 98 | 14630.960 M | 31.1 | +0.0 +0.2 | +39.3 | -35.2 | +1.7 | ±0.0 | 40./ | 54.0 | -3.3 | Horiz |
| | Ave | | 10.2 | 1 37.3 | | | | | Middle, GFSI | 7 | |
| | AVC | | | | | | | | 1Mbps, Z axis | | |
| L | | | | | | | | | iviops, L axis | , | |



| 99 9920.158M | 38.4 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 48.7 | 54.0 -5.3 | Horiz |
|----------------|------|--------|--------|-------|-------|--------|------|---------------------------------|--------|
| QP | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| | | | | | | | | 3Mbps, Y axis | |
| ^ 9920.158M | 43.5 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 53.8 | 54.0 -0.2 | Horiz |
| | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| | | | | | | | | 3Mbps, Y axis | |
| 101 12009.725 | 37.7 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 48.7 | 54.0 -5.3 | Horiz |
| M | | +0.0 | +35.6 | | | | | | |
| | | | | | | | | Low, 4 DPSK | |
| | | | | | | | | 2Mbps, X axis | |
| 102 14653.135 | 31.0 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 48.7 | 54.0 -5.3 | Vert |
| M | | +0.3 | +39.3 | | | | | | |
| Ave | | | | | | | | Middle, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| ^ 14653.135 | 43.3 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 61.0 | 54.0 +7.0 | Vert |
| M | | +0.3 | +39.3 | | | | | | |
| | | | | | | | | Middle, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| 104 4804.153M | 49.4 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 48.6 | 54.0 -5.4 | Vert |
| | | +0.1 | +29.9 | | | | | Low, 8 DPSK | |
| | | | | | | | | 3Mbps, X axis | |
| 105 12210.238 | 37.4 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 48.6 | 54.0 -5.4 | Horiz |
| M | | +0.2 | +35.7 | | | | | 1 C 1 H | |
| | | | | | | | | Middle, 4 DPSK | |
| 106 5226 20016 | 10.6 | . 0. 0 | | 25.4 | . 1 0 | . 0. 0 | 40.6 | 2Mbps, X axis | T7 . |
| 106 7326.300M | 43.6 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 48.6 | 54.0 -5.4 | Vert |
| | | +0.2 | +33.2 | | | | | Middle, GFSK | |
| 107 14652 060 | 20.6 | | +11.6 | 25.2 | . 1.7 | | 40.2 | 1Mbps, X axis | 3.7 |
| 107 14652.860 | 30.6 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 48.3 | 54.0 -5.7 | Vert |
| M | | +0.3 | +39.3 | | | | | Middle OFOR | |
| Ave | | | | | | | | Middle, GFSK | |
| ^ 14652 915 | 15.7 | ΙΛ.Λ | +11.6 | 25.2 | +1.7 | ΙΛ.Λ | (2.4 | 1Mbps, X axis 54.0 +9.4 | Mont |
| 14032.713 | 45.7 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 63.4 | 54.0 +9.4 | Vert |
| M | | +0.3 | +39.3 | | | | | Middle 4 DDCV | |
| | | | | | | | | Middle, 4 DPSK 2Mbps, Z axis | |
| ^ 14652.860 | 41.8 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 59.5 | | Vert |
| M | 41.8 | +0.0 | +39.3 | -33.2 | Ψ1./ | +0.0 | 39.3 | 54.0 +5.5 | vert |
| 1V1 | | 10.3 | 137.3 | | | | | Middle, GFSK | |
| | | | | | | | | 1Mbps, X axis | |
| 110 12209.883 | 37.1 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 48.3 | 54.0 -5.7 | Horiz |
| M | 31.1 | +0.0 | +35.7 | -50.0 | 1.3 | 10.0 | 70.5 | JT.U -J./ | 110112 |
| 141 | | 10.2 | . 55.1 | | | | | Middle, 8 DPSK | |
| | | | | | | | | 3Mbps, X axis | |
| 111 14412.883 | 30.8 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 48.3 | 54.0 -5.7 | Horiz |
| M | 20.0 | +0.2 | +39.4 | 55.5 | . 1./ | . 0.0 | 10.5 | 51.0 -5.7 | 110112 |
| Ave | | . 0.2 | . 57.4 | | | | | Low, GFSK 1Mbps, | |
| 1110 | | | | | | | | Y axis | |
| 112 14880.936 | 31.1 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 48.3 | 54.0 -5.7 | Horiz |
| M | J1.1 | +0.3 | +38.8 | 55.1 | . 1./ | . 0.0 | 10.5 | 51.0 -5.7 | 110112 |
| Ave | | 3.5 | 20.0 | | | | | High, 8 DPSK | |
| | | | | | | | | 3Mbps, Z axis | |
| | | | | | | | | 51110ps, 21 unis | |



| 113 | 4959.775M | 49.2 | +0.0 +0.1 | +6.0 +30.1 | -38.1 | +0.9 | +0.0 | 48.2 | 54.0 -5.8 High, 4 DPSK 2Mbps, Y axis | Vert |
|-----|----------------|------|--------------|----------------|-------|------|------|------|--|-------|
| 114 | 12209.758 M | 37.0 | +0.0 +0.2 | +10.4 +35.7 | -36.6 | +1.5 | +0.0 | 48.2 | 54.0 -5.8 | Horiz |
| | | | | | | | | | Middle, 8 DPSK 3Mbps, Y axis | |
| 115 | 4803.460M | 49.0 | +0.0 +0.1 | +6.1 +29.9 | -37.8 | +0.9 | +0.0 | 48.2 | 54.0 -5.8 Low, 4 DPSK 2Mbps, X axis | Vert |
| 116 | 4804.342M | 48.9 | +0.0 +0.1 | +6.1 +29.9 | -37.8 | +0.9 | +0.0 | 48.1 | 54.0 -5.9 Low, 4 DPSK 2Mbps, Z axis | Horiz |
| 117 | 4883.892M | 49.0 | +0.0 +0.2 | +6.0 +30.0 | -38.0 | +0.9 | +0.0 | 48.1 | 54.0 -5.9 Middle, 4 DPSK 2Mbps, Z axis | Horiz |
| 118 | 4960.031M | 49.1 | +0.0 +0.1 | +6.0 +30.1 | -38.1 | +0.9 | +0.0 | 48.1 | 54.0 -5.9 High, 8 DPSK 3Mbps, Z axis | Horiz |
| 119 | 7206.033M | 42.7 | +0.0 +0.2 | +7.8 +33.1 | -36.9 | +1.2 | +0.0 | 48.1 | 54.0 -5.9 Low, 8 DPSK 3Mbps, Y axis | Horiz |
| 120 | 7326.625M | 43.1 | +0.0 +0.2 | +7.8 +33.2 | -37.4 | +1.2 | +0.0 | 48.1 | 54.0 -5.9 Middle, GFSK 1Mbps, Y axis | Horiz |
| | 14880.067 M | 30.9 | +0.0 +0.3 | +11.5 +38.8 | -35.1 | +1.7 | +0.0 | 48.1 | 54.0 -5.9 | Vert |
| | Ave | | | | | | | | High, 8 DPSK 3Mbps, X axis | |
| ٨ | 14880.067 M | 43.1 | +0.0 +0.3 | +11.5 +38.8 | -35.1 | +1.7 | +0.0 | 60.3 | 54.0 +6.3 High, 8 DPSK | Vert |
| | | | | | | | | | 3Mbps, X axis | |
| 123 | 7206.080M | 42.5 | +0.0 +0.2 | +7.8 +33.1 | -36.9 | +1.2 | +0.0 | 47.9 | 54.0 -6.1 Low, GFSK 1Mbps, X axis | Vert |
| 124 | 7206.293M | 42.5 | +0.0 +0.2 | +7.8 +33.1 | -36.9 | +1.2 | +0.0 | 47.9 | 54.0 -6.1 Low, 4 DPSK 2Mbps, X axis | Vert |
| 125 | 7205.583M | 42.5 | +0.0 +0.2 | +7.8 +33.1 | -36.9 | +1.2 | +0.0 | 47.9 | 54.0 -6.1 Low, 4 DPSK 2Mbps, Y axis | Horiz |
| 126 | 4804.267M | 48.7 | +0.0 +0.1 | +6.1 +29.9 | -37.8 | +0.9 | +0.0 | 47.9 | 54.0 -6.1 Low, 4 DPSK 2Mbps, Z axis | Vert |
| | 14410.819 M | 30.3 | +0.0 +0.2 | +11.5 +39.4 | -35.3 | +1.7 | +0.0 | 47.8 | 54.0 -6.2 Low, GFSK 1Mbps, | Horiz |
| | Ave | | | | | | | | Z axis | |



| ^ 14410.867 | 46.4 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 63.9 | 54.0 | ⊦9.9 | Horiz |
|----------------|------|--------------|---------------|-------|------|-------|------|---------------------------------|--------------|--------|
| M | | +0.2 | +39.4 | | | | | I O DDGII | | |
| | | | | | | | | Low, 8 DPSK | | |
| ^ 14410.750 | 46.4 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 63.9 | 3Mbps, Z axis 54.0 | - 9.9 | Horiz |
| M | 40.4 | +0.2 | +39.4 | -33.3 | 11.7 | 10.0 | 03.9 | 34.0 | 7.7 | 110112 |
| 1,1 | | . 0.2 | . 57.1 | | | | | Low, 8 DPSK | | |
| | | | | | | | | 3Mbps, Y axis | | |
| ^ 14410.819 | 41.7 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 59.2 | 54.0 | - 5.2 | Horiz |
| M | | +0.2 | +39.4 | | | | | | | |
| | | | | | | | | Low, GFSK 1M | Ibps, | |
| 121 7226 04014 | 42.0 | 100 | 17.0 | 27.4 | +1.2 | 10.0 | 47.0 | Zaxis | () | TT |
| 131 7326.040M | 42.8 | +0.0 +0.2 | +7.8 +33.2 | -37.4 | +1.2 | +0.0 | 47.8 | 54.0 - Middle, GFSK | -6.2 | Horiz |
| | | 10.2 | 133.2 | | | | | 1Mbps, X axis | | |
| 132 14652.805 | 30.0 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 47.7 | | -6.3 | Horiz |
| M | | +0.3 | +39.3 | | | ••• | | | | |
| Ave | | | | | | | | Middle, 4 DPSI | K | |
| | | | | | | | | 2Mbps, X axis | | |
| ^ 14652.805 | 40.3 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 58.0 | 54.0 | -4.0 | Horiz |
| M | | +0.3 | +39.3 | | | | | Middle 4 DDC | 17 | |
| | | | | | | | | Middle, 4 DPSI 2Mbps, X axis | N. | |
| 134 14880.893 | 30.5 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 47.7 | | -6.3 | Horiz |
| M | 50.5 | +0.3 | +38.8 | 55.1 | 1., | . 0.0 | .,., | 21.0 | 0.5 | HOHE |
| Ave | | | | | | | | High, GFSK | | |
| | | | | | | | | 1Mbps, Z axis | | |
| ^ 14880.833 | 42.9 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 60.1 | 54.0 | -6.1 | Horiz |
| M | | +0.3 | +38.8 | | | | | High CECK | | |
| | | | | | | | | High, GFSK 1Mbps, Y axis | | |
| ^ 14880.842 | 42.4 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 59.6 | | +5.6 | Horiz |
| M | | +0.3 | +38.8 | 50.1 | | 0.0 | 67.0 | 2 | 0.0 | 110112 |
| | | | | | | | | High, 4 DPSK | | |
| | | | | | | | | 2Mbps, Z axis | | |
| 137 7325.933M | 42.5 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 47.5 | | -6.5 | Vert |
| | | +0.2 | +33.2 | | | | | Middle, 8 DPSI | K | |
| 120 4002 01714 | 10 1 | ΙΛ.Ο | 16.0 | 28.0 | +0.0 | +0.0 | 17.5 | 3Mbps, X axis | 6.5 | Horiz |
| 138 4883.917M | 48.4 | +0.0 +0.2 | +6.0 +30.0 | -38.0 | +0.9 | +0.0 | 47.5 | 54.0 - Middle, 8 DPSI | -6.5 K | Horiz |
| | | 10.2 | 1 30.0 | | | | | 3Mbps, Z axis | ıx. | |
| 139 14878.925 | 30.3 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 47.5 | | -6.5 | Vert |
| M | | +0.3 | +38.8 | • | | | | | | - |
| Ave | | | | | | | | High, 4 DPSK | | |
| 110 1000 | | | | | | | | 2Mbps, X axis | | |
| 140 4803.833M | 48.3 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 47.5 | | -6.5 | Horiz |
| | | +0.1 | +29.9 | | | | | Low, 4 DPSK | | |
| 141 14411.125 | 30.0 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 47.5 | 2Mbps, X axis 54.0 | -6.5 | Vert |
| M | 30.0 | +0.0 | +39.4 | -55.5 | 11./ | 10.0 | +1.3 | J4.U - | ·0. <i>5</i> | v CI l |
| Ave | | J. 2 | ٠, | | | | | Low, GFSK 1M | Ibps, | |
| | | | | | | | | X axis | | |
| | | | | | | | | | | |



| · | | | | | | | | | | | |
|------|-------------------|------|--------------|----------------|-------|-------|---------|------|-----------------------------|----------|-------|
| ^ | 14411.117 | 45.2 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 62.7 | 54.0 | +8.7 | Vert |
| | M | | +0.2 | +39.4 | | | | | Low 4 DDCI | 7 | |
| | | | | | | | | | Low, 4 DPSF 2Mbps, Z axi | | |
| ٨ | 14411.125 | 40.2 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 57.7 | 54.0 | +3.7 | Vert |
| | M | | +0.2 | +39.4 | | | | | | | |
| | | | | | | | | | Low, GFSK | 1Mbps, | |
| | | | | | | | | | X axis | | |
| 144 | 4804.042M | 48.3 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 47.5 | 54.0 | -6.5 | Horiz |
| | | | +0.1 | +29.9 | | | | | Low, 8 DPSF 3Mbps, Z axi | | |
| 145 | 4884.000M | 48.3 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 47.4 | 54.0 | -6.6 | Vert |
| 113 | 1001.00011 | 10.5 | +0.2 | +30.0 | 30.0 | . 0.5 | . 0.0 | 17.1 | Middle, 8 DF | | VOIT |
| | | | | | | | | | 3Mbps, Z axi | | |
| 146 | 7325.408M | 42.4 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 47.4 | 54.0 | -6.6 | Horiz |
| | | | +0.2 | +33.2 | | | | | Middle, 8 DF | | |
| 1 4- | 7005 (003.5 | 41.0 | | | 260 | , 1.2 | 100 | 47.0 | 3Mbps, Y ax | | тт ' |
| 147 | 7205.608M | 41.9 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 47.3 | 54.0 | -6.7 | Horiz |
| | | | +0.2 | +33.1 | | | | | Low, GFSK Z axis | i wiops, | |
| 148 | 14412.883 | 29.8 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 47.3 | 54.0 | -6.7 | Horiz |
| | M | | +0.2 | +39.4 | | | | | | | |
| | Ave | | | | | | | | Low, GFSK | 1Mbps, | |
| | | | | | | | | | X axis | | |
| ^ | 14412.883 | 45.4 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 62.9 | 54.0 | +8.9 | Horiz |
| | M | | +0.2 | +39.4 | | | | | Low, 4 DPSI | 7 | |
| | | | | | | | | | 2Mbps, Y ax | | |
| ٨ | 14412.883 | 41.6 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 59.1 | 54.0 | +5.1 | Horiz |
| | M | | +0.2 | +39.4 | | | | | | | |
| | | | | | | | | | Low, GFSK | 1Mbps, | |
| | 14412 002 | 20.0 | | .11.7 | 25.2 | .1.7 | +0.0 | 57.4 | Y axis | +2.4 | тт ' |
| ^ | 14412.883 M | 39.9 | +0.0 +0.2 | +11.5 +39.4 | -35.3 | +1.7 | +0.0 | 57.4 | 54.0 | +3.4 | Horiz |
| | IVI | | 10.2 | 137.4 | | | | | Low, GFSK | 1 Mhns | |
| | | | | | | | | | X axis | riviops, | |
| 152 | 4959.817M | 48.3 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 47.3 | 54.0 | -6.7 | Vert |
| | | | +0.1 | +30.1 | | | | | High, 8 DPS | | |
| | 5 440.0000 | 10.1 | | . = ^ | 25.5 | | . 0 . 0 | 4= - | 3Mbps, Y ax | | T |
| 153 | 7440.020M | 42.4 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 47.2 | 54.0 | -6.8 | Vert |
| | | | +0.1 | +33.2 | | | | | High, 4 DPS 2Mbps, X ax | | |
| 154 | 7439.742M | 42.4 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 47.2 | 54.0 | -6.8 | Vert |
| 134 | / 157./721VI | 1∠.⊤ | +0.1 | +33.2 | 51.5 | 1.4 | . 0.0 | Τ1.Δ | High, 8 DPS | | , 011 |
| | | | | | | | | | 3Mbps, X ax | | |
| 155 | 7439.183M | 42.4 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 47.2 | 54.0 | -6.8 | Horiz |
| | | | +0.1 | +33.2 | | | | | High, GFSK | | |
| 4 | 14001 1 12 | 20.0 | | | 22.1 | | | 45.5 | 1Mbps, Y ax | | T7 : |
| 156 | 14881.142 | 30.0 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 47.2 | 54.0 | -6.8 | Vert |
| | M Ave | | +0.3 | +38.8 | | | | | High, 8 DPS | K | |
| | 1110 | | | | | | | | 3Mbps, Z axi | | |
| | | | | | | | | | Jimps, L an | | |



| ^ | 14881.142 M | 43.0 | +0.0 +0.3 | +11.5 +38.8 | -35.1 | +1.7 | +0.0 | 60.2 | 54.0 + | -6.2 | Vert |
|-----|----------------|--------------|---------------|----------------|-------|-------|---------|------|-------------------------------|-------|---------|
| | IVI | | +0.3 | ±36.6 | | | | | High, 8 DPSK | | |
| | | | | | | | | | 3Mbps, Z axis | | |
| 158 | 14413.092 | 29.6 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 47.1 | | 6.9 | Horiz |
| | M | | +0.2 | +39.4 | | | | | | | |
| | Ave | | | | | | | | Low, 8 DPSK | | |
| ٨ | 14412.002 | 12.7 | 100 | +11.5 | 25.2 | +1.7 | 100 | (1.2 | 3Mbps, X axis | 7.2 | II amin |
| , , | 14413.092 M | 43.7 | +0.0 +0.2 | +11.5 +39.4 | -35.3 | +1.7 | +0.0 | 61.2 | 54.0 + | -7.2 | Horiz |
| | 171 | | 10.2 | 137.4 | | | | | Low, 8 DPSK | | |
| | | | | | | | | | 3Mbps, X axis | | |
| 160 | 7206.213M | 41.7 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 47.1 | | 6.9 | Vert |
| | | | +0.2 | +33.1 | | | | | Low, GFSK 1M | Ibps, | |
| 171 | 14650,000 | 20.4 | 100 | +11.6 | 25.2 | +1.7 | ١,0,0 | 47.0 | Y axis | 7.0 | TT' |
| 161 | 14650.980 M | 29.4 | +0.0 +0.2 | +11.6 +39.3 | -35.2 | +1.7 | +0.0 | 47.0 | 54.0 - | 7.0 | Horiz |
| | Ave | | 10.2 | 107.0 | | | | | Middle, GFSK | | |
| | | | | | | | | | 1Mbps, X axis | | |
| ^ | 14650.960 | 42.6 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 60.2 | 54.0 + | -6.2 | Horiz |
| | M | | +0.2 | +39.3 | | | | | ACTU OFFI | | |
| | | | | | | | | | Middle, GFSK 1Mbps, Z axis | | |
| ٨ | 14650.980 | 41.4 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 59.0 | | -5.0 | Horiz |
| | M | 11.1 | +0.2 | +39.3 | 33.2 | . 1.7 | . 0.0 | 37.0 | 31.0 | 5.0 | HOHE |
| | | | | | | | | | Middle, GFSK | | |
| | | | | | | | | | 1Mbps, X axis | | |
| 164 | 7205.833M | 41.6 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 47.0 | | 7.0 | Horiz |
| | | | +0.2 | +33.1 | | | | | Low, 8 DPSK 3Mbps, X axis | | |
| 165 | 4959.437M | 48.0 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 47.0 | | 7.0 | Horiz |
| 100 | .,,,,,,,,, | .0.0 | +0.1 | +30.1 | 50.1 | 0.5 | 0.0 | .,.0 | High, 4 DPSK | ,.0 | 110112 |
| | | | | | | | | | 2Mbps, Y axis | | |
| 166 | 7440.487M | 42.2 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 47.0 | | 7.0 | Vert |
| | | | +0.1 | +33.2 | | | | | High, GFSK | | |
| 167 | 4804.360M | 47.8 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 47.0 | 1Mbps, X axis 54.0 - | 7.0 | Horiz |
| 107 | 4004.300W | T 7.0 | +0.1 | +29.9 | -57.0 | 10.5 | 10.0 | 47.0 | Low, 8 DPSK | 7.0 | HOHZ |
| | | | | | | | | | 3Mbps, X axis | | |
| 168 | 7440.503M | 42.1 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 46.9 | | 7.1 | Horiz |
| | | | +0.1 | +33.2 | | | | | High, 4 DPSK | | |
| 160 | 7206 02514 | 11.5 | 10.0 | 17.0 | 26.0 | 11.2 | 100 | 46.0 | 2Mbps, Y axis | 7 1 | Vont |
| 109 | 7206.025M | 41.5 | +0.0 +0.2 | +7.8 +33.1 | -36.9 | +1.2 | +0.0 | 46.9 | 54.0 - Low, 8 DPSK | 7.1 | Vert |
| | | | 10.2 | . 55.1 | | | | | 3Mbps, Z axis | | |
| 170 | 7205.650M | 41.5 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 46.9 | 54.0 - | 7.1 | Vert |
| | | | +0.2 | +33.1 | | | | | Low, 8 DPSK | | |
| 151 | 14410 | 20.1 | | | 25.2 | | . 0 . 0 | 460 | 3Mbps, X axis | | T |
| 171 | 14412.556 M | 29.4 | +0.0 +0.2 | +11.5 +39.4 | -35.3 | +1.7 | +0.0 | 46.9 | 54.0 - | 7.1 | Vert |
| | Ave | | ⁻ U. ∠ | 1 37.4 | | | | | Low, GFSK 1M | Ibps | |
| | · - | | | | | | | | Y axis | P5, | |



| ^ 14412.556 | 40.4 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 57.9 | 54.0 +3.9 | Vert |
|-----------------|-------|--------------|---------------|---------------------|-------|--------|-------|-------------------------------|--------|
| M | | +0.2 | +39.4 | | | | | I OFOR IM | |
| | | | | | | | | Low, GFSK 1Mbps, Y axis | |
| 173 4803.525M | 47.6 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 46.8 | 54.0 -7.2 | Horiz |
| 175 4005.525141 | 47.0 | +0.1 | +29.9 | 37.0 | 10.5 | 10.0 | 40.0 | Low, 4 DPSK | HOHZ |
| | | 0.1 | _,,, | | | | | 2Mbps, Y axis | |
| 174 4804.230M | 47.6 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 46.8 | 54.0 -7.2 | Horiz |
| | | +0.1 | +29.9 | | | | | Low, 8 DPSK | |
| | | | | | | | | 3Mbps, Y axis | |
| 175 7439.550M | 42.0 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 46.8 | 54.0 -7.2 | Horiz |
| | | +0.1 | +33.2 | | | | | High, GFSK | |
| 176 7005 550) 6 | 41.4 | | .7.0 | 26.0 | .1.0 | | 46.0 | 1Mbps, X axis | TT ' |
| 176 7205.550M | 41.4 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 46.8 | 54.0 -7.2 | Horiz |
| | | +0.2 | +33.1 | | | | | Low, 4 DPSK | |
| 177 7326.025M | 41.8 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 46.8 | 2Mbps, Z axis 54.0 -7.2 | Horiz |
| 177 7320.023101 | 71.0 | +0.0 | +33.2 | -J / . 4 | 1.4 | 0.0 | +0.0 | Middle, 4 DPSK | 110112 |
| | | . 0.2 | . 33.2 | | | | | 2Mbps, Y axis | |
| 178 7206.775M | 41.4 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 46.8 | 54.0 -7.2 | Vert |
| | | +0.2 | +33.1 | | | | | Low, 4 DPSK | |
| | | | | | | | | 2Mbps, Z axis | |
| 179 9767.483M | 36.7 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 46.7 | 54.0 -7.3 | Horiz |
| Ave | | +0.2 | +35.8 | | | | | Middle, 4 DPSK | |
| 4 05 5 100 5 | 45.0 | | | 25. | | . 0. 0 | | 2Mbps, Z axis | |
| ^ 9767.483M | 45.0 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 55.0 | 54.0 +1.0 | Horiz |
| | | +0.2 | +35.8 | | | | | Middle, 4 DPSK | |
| 181 7439.050M | 41.9 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 46.7 | 2Mbps, Z axis 54.0 -7.3 | Vert |
| 181 /439.030101 | 41.9 | +0.0 | +33.2 | -37.3 | ⊤1.∠ | +0.0 | 40.7 | High, 8 DPSK | Vert |
| | | . 0.1 | . 33.2 | | | | | 3Mbps, Z axis | |
| 182 4803.667M | 47.5 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 46.7 | 54.0 -7.3 | Horiz |
| | | +0.1 | +29.9 | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | Z axis | |
| 183 7326.325M | 41.6 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 46.6 | 54.0 -7.4 | Vert |
| | | +0.2 | +33.2 | | | | | Middle, 8 DPSK | |
| | | | | | | | | 3Mbps, Z axis | |
| 184 7326.575M | 41.5 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 46.5 | 54.0 -7.5 | Vert |
| | | +0.2 | +33.2 | | | | | Middle, 4 DPSK | |
| 105 7004 90034 | / 1 1 | 100 | 17.0 | 260 | +1.2 | 100 | 165 | 2Mbps, X axis | 17 |
| 185 7204.892M | 41.1 | +0.0 +0.2 | +7.8 +33.1 | -36.9 | +1.2 | +0.0 | 46.5 | 54.0 -7.5 Low, GFSK 1Mbps, | Vert |
| | | FU.2 | 133.1 | | | | | Z axis | |
| 186 7439.660M | 41.6 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 46.4 | 54.0 -7.6 | Vert |
| 100 / 100.0001 | 11.0 | +0.1 | +33.2 | 57.5 | . 1.2 | . 0.0 | .0. 1 | High, GFSK | , 511 |
| | | | | | | | | 1Mbps, Y axis | |
| 187 7206.850M | 41.0 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 46.4 | 54.0 -7.6 | Vert |
| | | +0.2 | +33.1 | | | | | Low, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| 188 7325.663M | 41.4 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 46.4 | 54.0 -7.6 | Horiz |
| | | +0.2 | +33.2 | | | | | Middle, 8 DPSK | |
| | | | | | | | | 3Mbps, X axis | |
| | | | | | | | | | |



| 189 | 4959.783M | 47.4 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 46.4 | 54.0 -7.6 | Horiz |
|-----|----------------|------|--------------|----------------|-------|--------|------|------|------------------------------|-------------|
| | | | +0.1 | +30.1 | | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, Y axis | |
| 190 | 14410.860 | 28.9 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 46.4 | 54.0 -7.6 | Vert |
| | M | | +0.2 | +39.4 | | | | | I 0 DDCI/ | |
| | Ave | | | | | | | | Low, 8 DPSK 3Mbps, Y axis | |
| ^ | 14410.942 | 43.3 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 60.8 | 54.0 +6.8 | Vert |
| | M | 15.5 | +0.2 | +39.4 | 55.5 | . 1.7 | .0.0 | 00.0 | 21.0 | , 610 |
| | | | | | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, Y axis | |
| ^ | 14410.860 | 42.3 | +0.0 | +11.5 | -35.3 | +1.7 | +0.0 | 59.8 | 54.0 +5.8 | Vert |
| | M | | +0.2 | +39.4 | | | | | I O DDGII | |
| | | | | | | | | | Low, 8 DPSK | |
| 102 | 7438.867M | 41.6 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 46.4 | 3Mbps, Y axis 54.0 -7.6 | Horiz |
| 193 | /438.80/IVI | 41.0 | +0.0 +0.1 | +33.2 | -37.3 | +1.2 | +0.0 | 40.4 | High, 8 DPSK | попи |
| | | | .0.1 | 133.2 | | | | | 3Mbps, Y axis | |
| 194 | 4804.130M | 47.1 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 46.3 | 54.0 -7.7 | Vert |
| | | | +0.1 | +29.9 | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | | X axis | |
| 195 | 7326.203M | 41.3 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 46.3 | 54.0 -7.7 | Vert |
| | | | +0.2 | +33.2 | | | | | Middle, GFSK | |
| 106 | 4004 1073 6 | 47.0 | | 1.6.0 | 20.0 | . 0. 0 | | 46.2 | 1Mbps, Y axis | TT ' |
| 196 | 4884.107M | 47.2 | +0.0 +0.2 | +6.0 +30.0 | -38.0 | +0.9 | +0.0 | 46.3 | 54.0 -7.7 Middle, 8 DPSK | Horiz |
| | | | 10.2 | 130.0 | | | | | 3Mbps, X axis | |
| 197 | 14879.049 | 29.0 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 46.2 | 54.0 -7.8 | Vert |
| | M | | +0.3 | +38.8 | | | | | | |
| | Ave | | | | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, X axis | |
| ٨ | 14879.093 | 42.3 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 59.5 | 54.0 +5.5 | Vert |
| | M | | +0.3 | +38.8 | | | | | High, 4 DPSK | |
| | | | | | | | | | 2Mbps, Z axis | |
| ^ | 14879.049 | 40.6 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 57.8 | 54.0 +3.8 | Vert |
| | M | 10.0 | +0.3 | +38.8 | 55.1 | 1.7 | 0.0 | 27.0 | 20 | , 011 |
| | | | | | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, X axis | |
| 200 | 4884.558M | 47.1 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 46.2 | 54.0 -7.8 | Vert |
| | | | +0.2 | +30.0 | | | | | Middle, 4 DPSK | |
| 201 | 14070 055 | 20.0 | 100 | 1115 | 25.1 | 117 | 100 | 46.1 | 2Mbps, Z axis | 1 74 |
| 201 | 14878.855 M | 28.9 | +0.0 +0.3 | +11.5 +38.8 | -35.1 | +1.7 | +0.0 | 46.1 | 54.0 -7.9 | Vert |
| | Ave | | 10.3 | 1 30.0 | | | | | High, GFSK | |
| | · • | | | | | | | | 1Mbps, Z axis | |
| ٨ | 14878.925 | 41.7 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 58.9 | 54.0 +4.9 | Vert |
| | M | | +0.3 | +38.8 | | | | | | |
| | | | | | | | | | High, 4 DPSK | |
| | | | | | | | | | 2Mbps, X axis | |



| ^ 14878.855 | 40.2 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 57.4 | 54.0 +3.4 | Vert |
|------------------|------|--------------|----------------|-------|--------|--------|--------------|----------------------------|--------------|
| M | | +0.3 | +38.8 | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, Z axis | |
| 204 7205.100M | 40.7 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 46.1 | 54.0 -7.9 | Horiz |
| | | +0.2 | +33.1 | | | | | Low, 4 DPSK | |
| | | | | | | | | 2Mbps, X axis | |
| 205 7440.042M | 41.3 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 46.1 | 54.0 -7.9 | Horiz |
| | | +0.1 | +33.2 | | | | | High, 8 DPSK | |
| 206 4060 2150 6 | 45.0 | . 0. 0 | | 20.1 | . 0. 0 | . 0. 0 | 46.0 | 3Mbps, X axis | T.7. |
| 206 4960.317M | 47.0 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 46.0 | 54.0 -8.0 | Vert |
| | | +0.1 | +30.1 | | | | | High, 8 DPSK | |
| 207 4883.617M | 46.9 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 46.0 | 3Mbps, Z axis 54.0 -8.0 | Vert |
| 20/ 4883.01/M | 40.9 | +0.0 | +30.0 | -38.0 | +0.9 | +0.0 | 40.0 | Middle, GFSK | vert |
| | | 10.2 | 130.0 | | | | | 1Mbps, X axis | |
| 208 7205.025M | 40.6 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 46.0 | 54.0 -8.0 | Horiz |
| 200 /203.023141 | 40.0 | +0.2 | +33.1 | -30.7 | 1.2 | 10.0 | 40.0 | Low, 8 DPSK | 110112 |
| | | . 0.2 | . 55.1 | | | | | 3Mbps, Z axis | |
| 209 4884.158M | 46.8 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 45.9 | 54.0 -8.1 | Horiz |
| | | +0.2 | +30.0 | | | | | Middle, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| 210 14650.943 | 28.2 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 45.8 | 54.0 -8.2 | Vert |
| M | | +0.2 | +39.3 | | | | | | |
| Ave | | | | | | | | Middle, GFSK | |
| | | | | | | | | 1Mbps, Y axis | |
| ^ 14651.025 | 45.1 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 62.7 | 54.0 +8.7 | Vert |
| M | | +0.2 | +39.3 | | | | | ACTU A DROW | |
| | | | | | | | | Middle, 4 DPSK | |
| ^ 14650 943 | 40.6 | 100 | +11.6 | 25.2 | .1.7 | 100 | 50.2 | 2Mbps, X axis | 3 74 |
| ^ 14650.943 M | 40.6 | +0.0 +0.2 | +11.6 +39.3 | -35.2 | +1.7 | +0.0 | 58.2 | 54.0 +4.2 | Vert |
| IVI | | 10.2 | 139.3 | | | | | Middle, GFSK | |
| | | | | | | | | 1Mbps, Y axis | |
| 213 7326.680M | 40.8 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 45.8 | 54.0 -8.2 | Horiz |
| 215 /520.000111 | .0.0 | +0.2 | +33.2 | ٥, | | 0.0 | | Middle, 4 DPSK | 110112 |
| | | | | | | | | 2Mbps, X axis | |
| 214 7440.800M | 40.9 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 45.7 | 54.0 -8.3 | Horiz |
| | | +0.1 | +33.2 | | | | | High, 4 DPSK | |
| | | | | | | | | 2Mbps, X axis | |
| 215 9608.507M | 35.7 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 45.6 | 54.0 -8.4 | Vert |
| Ave | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| | | | | | | | | 2Mbps, X axis | |
| ^ 9608.507M | 45.9 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 55.8 | 54.0 +1.8 | Vert |
| | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| A 0.000 5053.5 | 41.2 | 100 | 10.0 | 261 | , 1 4 | 100 | <i>7</i> 1.2 | 2Mbps, X axis | T 7 . |
| ^ 9608.537M | 41.3 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 51.2 | 54.0 -2.8 | Vert |
| | | +0.0 | +35.6 | | | | | Low, GFSK 1Mbps, | |
| 218 4883.617M | 46.5 | ±0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 45.6 | Y axis 54.0 -8.4 | Horiz |
| 210 4003.01/M | 40.3 | +0.0 +0.2 | +30.0 | -38.0 | ±0.9 | ±0.0 | 43.0 | Middle, 8 DPSK | HOHZ |
| | | 10.2 | 1 30.0 | | | | | 3Mbps, Y axis | |
| | | | | | | | | Jiviops, I axis | |



| 219 | 9607.525M | 35.6 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 45.5 | 54.0 -8.5 | Horiz |
|-----|-------------|------|--------------|---------------|-------|--------------|--------|------|---------------------------|-------|
| | Ave | 35.0 | +0.0 | +35.6 | 50.1 | 1.1 | . 0.0 | 10.0 | Low, 8 DPSK | HOHE |
| | | | | | | | | | 3Mbps, X axis | |
| 220 | 14881.025 | 28.2 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 45.4 | 54.0 -8.6 | Horiz |
| | M | | +0.3 | +38.8 | | | | | | |
| | Ave | | | | | | | | High, 4 DPSK | |
| | | | | | | | | | 2Mbps, X axis | |
| 221 | 4959.220M | 46.3 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 45.3 | 54.0 -8.7 | Horiz |
| | | | +0.1 | +30.1 | | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| 222 | 14652.700 | 27.5 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 45.2 | 54.0 -8.8 | Vert |
| | M | | +0.3 | +39.3 | | | | | | |
| | Ave | | | | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, Y axis | |
| ^ | 14652.700 | 40.3 | +0.0 | +11.6 | -35.2 | +1.7 | +0.0 | 58.0 | 54.0 +4.0 | Vert |
| | M | | +0.3 | +39.3 | | | | | | |
| | | | | | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, Y axis | |
| 224 | 7325.317M | 40.2 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 45.2 | 54.0 -8.8 | Vert |
| | | | +0.2 | +33.2 | | | | | Middle, GFSK | |
| | | | | | | | | | 1Mbps, Z axis | |
| 225 | 9768.070M | 35.2 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 45.2 | 54.0 -8.8 | Vert |
| | Ave | | +0.2 | +35.8 | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| ^ | 9768.070M | 45.7 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 55.7 | 54.0 +1.7 | Vert |
| | | | +0.2 | +35.8 | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| 227 | 14879.289 | 27.7 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 44.9 | 54.0 -9.1 | Vert |
| | M | | +0.3 | +38.8 | | | | | | |
| | Ave | | | | | | | | High, 4 DPSK | |
| | | 20.7 | | | | | | | 2Mbps, Y axis | |
| ^ | 14879.289 | 38.5 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 55.7 | 54.0 +1.7 | Vert |
| | M | | +0.3 | +38.8 | | | | | II' 1 A DROW | |
| | | | | | | | | | High, 4 DPSK | |
| 220 | 4004 0001 6 | 45.0 | . 0. 0 | 1.6.0 | 20.0 | . 0. 0 | . 0. 0 | 44.0 | 2Mbps, Y axis | |
| 229 | 4884.000M | 45.8 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 44.9 | 54.0 -9.1 | Horiz |
| | | | +0.2 | +30.0 | | | | | Middle, 4 DPSK | |
| 220 | 4002 55034 | 42.7 | 100 | 16.1 | 27.0 | 100 | 10.0 | 440 | 2Mbps, X axis | II. |
| 230 | 4803.558M | 43.7 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 44.8 | 54.0 -9.2 | Horiz |
| | | | +0.1 | +29.9 | | | | | Low, GFSK 1Mbps, | |
| 221 | 0607.70214 | 240 | 100 | 100 | 26.1 | + 1 - 1 | +0.0 | 110 | X axis | Vant |
| | 9607.792M | 34.9 | +0.0 | +9.0 +25.6 | -36.1 | +1.4 | +0.0 | 44.8 | 54.0 -9.2 | Vert |
| | Ave | | +0.0 | +35.6 | | | | | Low, 8 DPSK | |
| ^ | 0607 70214 | 15.2 | ±0 0 | <u></u> μ0 0 | 26.1 | <u></u> ⊥1 1 | ±0.0 | 55.0 | 3Mbps, Z axis | Vart |
| | 9607.792M | 45.3 | +0.0 +0.0 | +9.0 +35.6 | -36.1 | +1.4 | +0.0 | 55.2 | 54.0 +1.2 Low, 8 DPSK | Vert |
| | | | ±0.0 | ⊤ 33.0 | | | | | 3Mbps, Z axis | |
| 222 | 4959.675M | 45.8 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 44.8 | 54.0 -9.2 | Horiz |
| 233 | 4737.0/3IVI | 43.8 | +0.0 +0.1 | +30.1 | -38.1 | ±0.9 | ±0.0 | 44.0 | 54.0 -9.2 High, 4 DPSK | Horiz |
| | | | ±0.1 | ⊤30.1 | | | | | 2Mbps, X axis | |
| | | | | | | | | | Ziviups, A axis | |



| 22.4 | 0769 40714 | 247 | ΙΛ.Λ | 100 | 26.4 | +1.4 | ΙΛ.Λ | 117 | 540 02 | TT' |
|------|-------------|------|-------|---------------|-------|-------|-------|------|----------------------------|-------------|
| | 9768.497M | 34.7 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 44.7 | 54.0 -9.3 | Horiz |
| F | Ave | | +0.2 | +35.8 | | | | | Middle, 4 DPSK | |
| 225 | 0769 45614 | 24.6 | 100 | 100 | 26.4 | 11.4 | ΙΛ.Λ | 11.0 | 2Mbps, X axis | 1 74 |
| | 9768.456M | 34.6 | +0.0 | +9.0 +35.8 | -36.4 | +1.4 | +0.0 | 44.6 | 54.0 -9.4 | Vert |
| F | Ave | | +0.2 | +33.8 | | | | | Middle, 4 DPSK | |
| 227 | 0.607.20014 | 247 | 100 | 100 | 26.1 | . 1 4 | ΙΟ Ο | 11. | 2Mbps, Z axis | 1 74 |
| | 9607.308M | 34.7 | +0.0 | +9.0 +35.6 | -36.1 | +1.4 | +0.0 | 44.6 | 54.0 -9.4 | Vert |
| F | Ave | | +0.0 | ±33.0 | | | | | Low, 8 DPSK | |
| 227 | 14879.054 | 27.2 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 44.4 | 3Mbps, X axis 54.0 -9.6 | Horiz |
| 231 | M | 21.2 | +0.0 | +38.8 | -33.1 | +1.7 | +0.0 | 44.4 | 34.0 -9.0 | поп |
| , | Ave | | +0.3 | ⊤36.6 | | | | | High, 8 DPSK | |
| Γ | AVC | | | | | | | | 3Mbps, X axis | |
| ^ | 14879.092 | 44.3 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 61.5 | 54.0 +7.5 | Horiz |
| | M | 44.3 | +0.3 | +38.8 | -33.1 | 11.7 | 10.0 | 01.5 | 34.0 17.3 | 110112 |
| | 1V1 | | 10.5 | 130.0 | | | | | High, 4 DPSK | |
| | | | | | | | | | 2Mbps, Y axis | |
| ^ | 14879.054 | 40.0 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 57.2 | 54.0 +3.2 | Horiz |
| | M | 10.0 | +0.3 | +38.8 | 33.1 | . 1.7 | . 0.0 | 37.2 | 31.0 13.2 | HOHE |
| | 111 | | . 0.5 | 20.0 | | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| 240 | 7207.050M | 39.0 | +0.0 | +7.8 | -36.9 | +1.2 | +0.0 | 44.4 | 54.0 -9.6 | Vert |
| | ,20,.0001.1 | 27.0 | +0.2 | +33.1 | 50.5 | | 0.0 | | Low, 8 DPSK | , 610 |
| | | | | | | | | | 3Mbps, Y axis | |
| 241 | 4960.090M | 45.4 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 44.4 | 54.0 -9.6 | Vert |
| | ., | | +0.1 | +30.1 | | | | | High, GFSK | , |
| | | | | | | | | | 1Mbps, X axis | |
| 242 | 9607.400M | 34.4 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 44.3 | 54.0 -9.7 | Vert |
| | Ave | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, Z axis | |
| ^ | 9607.308M | 46.0 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 55.9 | 54.0 +1.9 | Vert |
| | | | +0.0 | +35.6 | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| ^ | 9607.400M | 42.8 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 52.7 | 54.0 -1.3 | Vert |
| | | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, Z axis | |
| ^ | 9607.408M | 41.9 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 51.8 | 54.0 -2.2 | Vert |
| | | | +0.0 | +35.6 | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, Y axis | |
| ^ | 9607.483M | 40.9 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 50.8 | 54.0 -3.2 | Vert |
| | | | +0.0 | +35.6 | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | | Z axis | |
| | 9767.842M | 34.3 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 44.3 | 54.0 -9.7 | Horiz |
| A | Ave | | +0.2 | +35.8 | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| ^ | 9767.842M | 44.2 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 54.2 | 54.0 +0.2 | Horiz |
| | | | +0.2 | +35.8 | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| | 9768.300M | 34.3 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 44.3 | 54.0 -9.7 | Vert |
| / | Ave | | +0.2 | +35.8 | | | | | Middle, 8 DPSK | |
| Ι | | | | | | | | | 3Mbps, Z axis | |



| 250 4959.777M | 45.3 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 44.3 | 54.0 -9.7 | Horiz |
|---------------|------|------|-------|-------|------|------|------|------------------|-------|
| | | +0.1 | +30.1 | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, Z axis | |
| 251 4959.492M | 45.2 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 44.2 | 54.0 -9.8 | Vert |
| | | +0.1 | +30.1 | | | | | High, 4 DPSK | |
| | | | | | | | | 2Mbps, Z axis | |
| 252 9920.575M | 33.9 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 44.2 | 54.0 -9.8 | Horiz |
| Ave | | +0.1 | +36.0 | | | | | High, 4 DPSK | |
| | | | | | | | | 2Mbps, Z axis | |
| 253 4803.942M | 45.0 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 44.2 | 54.0 -9.8 | Horiz |
| | | +0.1 | +29.9 | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | Y axis | |
| 254 14880.549 | 27.0 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 44.2 | 54.0 -9.8 | Vert |
| M | | +0.3 | +38.8 | | | | | | |
| Ave | | | | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, Y axis | |
| ^ 14880.549 | 38.6 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 55.8 | 54.0 +1.8 | Vert |
| M | | +0.3 | +38.8 | | | | | | |
| | | | | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, Y axis | |
| 256 4884.400M | 45.0 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 44.1 | 54.0 -9.9 | Horiz |
| | | +0.2 | +30.0 | | | | | Middle, GFSK | |
| | | | | | | | | 1Mbps, Z axis | |
| 257 9920.225M | 33.8 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 44.1 | 54.0 -9.9 | Vert |
| Ave | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| | | | | | | | | 3Mbps, X axis | |
| ^ 9920.225M | 44.2 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 54.5 | 54.0 +0.5 | Vert |
| | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| | | | | | | | | 3Mbps, X axis | |
| 259 7325.733M | 39.1 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 44.1 | 54.0 -9.9 | Vert |
| | | +0.2 | +33.2 | | | | | Middle, 4 DPSK | |
| | | | | | | | | 2Mbps, Z axis | |
| 260 9920.656M | 33.7 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 44.0 | 54.0 -10.0 | Vert |
| Ave | | +0.1 | +36.0 | | | | | High, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| 261 4883.807M | 44.9 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 44.0 | 54.0 -10.0 | Vert |
| | | +0.2 | +30.0 | | | | | Middle, GFSK | |
| | | | | | | | | 1Mbps, Y axis | |
| 262 4804.053M | 44.7 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 43.9 | 54.0 -10.1 | Vert |
| | | +0.1 | +29.9 | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | Y axis | |
| 263 9608.092M | 34.0 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 43.9 | 54.0 -10.1 | Horiz |
| Ave | | +0.0 | +35.6 | | | | | Low, 8 DPSK | |
| | | | | | | | | 3Mbps, Y axis | |
| ^ 9608.092M | 43.7 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 53.6 | 54.0 -0.4 | Horiz |
| | | +0.0 | +35.6 | | | | | Low, 8 DPSK | |
| | | | | | | | | 3Mbps, Y axis | |
| 265 4960.063M | 44.9 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 43.9 | 54.0 -10.1 | Horiz |
| | | +0.1 | +30.1 | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, X axis | |
| - | | | | | | | | | |



| 266 | 0.605.4503.5 | 240 | . 0. 0 | . 0. 0 | 261 | | . 0. 0 | 42.0 | 540 101 | ** . |
|-----|----------------|------|--------|--------------|-------|-------|--------|------|----------------------------|--------|
| | 9607.458M | 34.0 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 43.9 | 54.0 -10.1 | Horiz |
| | Ave | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| 267 | 4060 41714 | 11.0 | | 1.6.0 | 20.1 | | | 12.0 | 2Mbps, X axis | 3.7 4 |
| 267 | 4960.417M | 44.9 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 43.9 | 54.0 -10.1 | Vert |
| | | | +0.1 | +30.1 | | | | | High, GFSK | |
| 260 | 1 4000 0 47 | 26.5 | . 0. 0 | . 11. 5 | 25.1 | . 1.7 | . 0. 0 | 12.7 | 1Mbps, Y axis | |
| 268 | | 26.5 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 43.7 | 54.0 -10.3 | Horiz |
| | M | | +0.3 | +38.8 | | | | | High CECK | |
| | Ave | | | | | | | | High, GFSK | |
| ^ | 14880.936 | 42.8 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 60.0 | 1Mbps, X axis 54.0 +6.0 | Horiz |
| | 14880.930 M | 42.8 | +0.0 | +38.8 | -33.1 | Ψ1./ | +0.0 | 00.0 | 34.0 +0.0 | попи |
| | IVI | | ±0.3 | ⊤36.6 | | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| ^ | 14880.893 | 39.5 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 56.7 | 54.0 +2.7 | Horiz |
| | M | 39.3 | +0.3 | +38.8 | -33.1 | 11.7 | 10.0 | 30.7 | 34.0 12.7 | 110112 |
| | IVI | | 10.5 | 130.0 | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, Z axis | |
| ^ | 14880.947 | 38.8 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 56.0 | 54.0 +2.0 | Horiz |
| | M | 30.0 | +0.3 | +38.8 | 33.1 | . 1.7 | 10.0 | 30.0 | 34.0 12.0 | HOHZ |
| | 171 | | . 0.5 | 20.0 | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, X axis | |
| ^ | 14881.025 | 38.3 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 55.5 | 54.0 +1.5 | Horiz |
| | M | 50.5 | +0.3 | +38.8 | 50.1 | | 0.0 | 00.0 | 2 | 110112 |
| | | | | | | | | | High, 4 DPSK | |
| | | | | | | | | | 2Mbps, X axis | |
| 273 | 7325.775M | 38.7 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 43.7 | 54.0 -10.3 | Horiz |
| | | | +0.2 | +33.2 | | | | | Middle, 4 DPSK | |
| | | | | | | | | | 2Mbps, Z axis | |
| 274 | 9607.517M | 33.6 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 43.5 | 54.0 -10.5 | Horiz |
| | Ave | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, Y axis | |
| ^ | 9607.525M | 46.0 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 55.9 | 54.0 +1.9 | Horiz |
| | | | +0.0 | +35.6 | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| ^ | 9607.458M | 44.4 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 54.3 | 54.0 +0.3 | Horiz |
| | | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, X axis | |
| ^ | 9607.517M | 43.9 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 53.8 | 54.0 -0.2 | Horiz |
| | | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, Y axis | |
| 278 | | 31.7 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 43.4 | 54.0 -10.6 | Vert |
| | M | | +0.4 | +35.8 | | | | | | |
| | Ave | | | | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, Y axis | |
| ^ | 12400.624 | 41.9 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 53.6 | 54.0 -0.4 | Vert |
| | M | | +0.4 | +35.8 | | | | | II' 1 CECH | |
| | | | | | | | | | High, GFSK | |
| 200 | 0.600.5153.5 | 22.4 | .00 | .00 | 261 | | | 42.2 | 1Mbps, Y axis | TT ' |
| | 9608.517M | 33.4 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 43.3 | 54.0 -10.7 | Horiz |
| | Ave | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| | | | | | | | | | 2Mbps, Z axis | |



| 281 | 14880.958 | 26.0 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 43.2 | 54.0 -10.8 | Vert |
|-----|--------------------------|------|--------------|---------------|-------|--------------|------|------|---------------------------------|-------|
| | M Ave | | +0.3 | +38.8 | | | | | High, 8 DPSK | |
| | 11,0 | | | | | | | | 3Mbps, Y axis | |
| ^ | 14880.958 | 39.0 | +0.0 | +11.5 | -35.1 | +1.7 | +0.0 | 56.2 | 54.0 +2.2 | Vert |
| | M | | +0.3 | +38.8 | | | | | H' 1 0 DDGH | |
| | | | | | | | | | High, 8 DPSK | |
| 283 | 7440.933M | 38.4 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 43.2 | 3Mbps, Y axis 54.0 -10.8 | Vert |
| 203 | /440./33IVI | 30.4 | +0.0 | +33.2 | -57.5 | 1.2 | 10.0 | 73.2 | High, 4 DPSK | VCIT |
| | | | | | | | | | 2Mbps, Z axis | |
| 284 | 7325.583M | 38.2 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 43.2 | 54.0 -10.8 | Horiz |
| | | | +0.2 | +33.2 | | | | | Middle, 8 DPSK | |
| 205 | 9919.542M | 32.8 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 43.1 | 3Mbps, Z axis 54.0 -10.9 | Vert |
| | Ave | 32.8 | +0.0 +0.1 | +36.0 | -30.3 | ±1. 4 | +0.0 | 43.1 | High, 4 DPSK | vert |
| | 1110 | | . 0.1 | 130.0 | | | | | 2Mbps, X axis | |
| ٨ | 9919.542M | 43.6 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 53.9 | 54.0 -0.1 | Vert |
| | | | +0.1 | +36.0 | | | | | High, 4 DPSK | |
| 207 | 4002 275) 5 | 44.0 | | 1.6.0 | 20.0 | . 0. 0 | | 42.1 | 2Mbps, X axis | |
| 287 | 4883.375M | 44.0 | +0.0 +0.2 | +6.0 +30.0 | -38.0 | +0.9 | +0.0 | 43.1 | 54.0 -10.9 Middle, GFSK | Horiz |
| | | | +0.∠ | ±30.0 | | | | | 1Mbps, Y axis | |
| 288 | 9768.692M | 33.0 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 43.0 | 54.0 -11.0 | Horiz |
| | Ave | | +0.2 | +35.8 | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| ^ | 9768.692M | 44.8 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 54.8 | 54.0 +0.8 | Horiz |
| | | | +0.2 | +35.8 | | | | | Middle, 8 DPSK 3Mbps, X axis | |
| 290 | 7438.925M | 38.2 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 43.0 | 54.0 -11.0 | Vert |
| | , 100.920111 | 20.2 | +0.1 | +33.2 | 57.0 | | 0.0 | | High, GFSK | , 520 |
| | | | | | | | | | 1Mbps, Z axis | |
| | 9919.284M | 32.6 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 42.9 | 54.0 -11.1 | Vert |
| | Ave | | +0.1 | +36.0 | | | | | High, 4 DPSK | |
| ^ | 9919.284M | 42.6 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 52.9 | 2Mbps, Z axis 54.0 -1.1 | Vert |
| |))1).20 -1 v1 | 72.0 | +0.0 | +36.0 | -30.3 | '1.4 | 10.0 | 32.7 | High, 4 DPSK | VCIT |
| | | | | | | | | | 2Mbps, Z axis | |
| 293 | 9768.442M | 32.9 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 42.9 | 54.0 -11.1 | Vert |
| | Ave | | +0.2 | +35.8 | | | | | Middle, 4 DPSK | |
| ^ | 0760 250NA | /1 1 | | ±0.0 | 26.4 | ±1 <i>1</i> | ±0.0 | 511 | 2Mbps, X axis | Vont |
| | 9768.358M | 41.1 | +0.0 +0.2 | +9.0 +35.8 | -36.4 | +1.4 | +0.0 | 51.1 | 54.0 -2.9 Middle, GFSK | Vert |
| | | | 10.2 | 133.0 | | | | | 1Mbps, Z axis | |
| 295 | 12210.660 | 31.7 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 42.9 | 54.0 -11.1 | Vert |
| | M | | +0.2 | +35.7 | | | | | | |
| | Ave | | | | | | | | Middle, GFSK | |
| ^ | 12210 660 | 12.5 | ±0.0 | ±10.4 | 26.6 | +1.5 | | 52.7 | 1Mbps, Y axis 54.0 -0.3 | Vert |
| | 12210.660 M | 42.5 | +0.0 +0.2 | +10.4 $+35.7$ | -36.6 | ±1.5 | +0.0 | 53.7 | 54.0 -0.3 | vert |
| | 111 | | . 0.2 | . 55.1 | | | | | Middle, GFSK | |
| | | | | | | | | | 1Mbps, Y axis | |



| ^ | 12210.625 | 38.8 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 50.0 | 54.0 -4.0 | Vert |
|------|------------------|------|--------------|---------------|-------------------|-------------------|--------|------|-----------------------------|--------|
| | M | | +0.2 | +35.7 | | | | | Middle, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| 298 | 4959.692M | 43.8 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 42.8 | 54.0 -11.2 | Horiz |
| | | | +0.1 | +30.1 | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, Y axis | |
| 299 | 9920.033M | 32.5 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 42.8 | 54.0 -11.2 | Vert |
| | Ave | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| | 0000 0001 5 | 10.6 | . 0 0 | . 0. 1 | 262 | . 4 . 4 | . 0. 0 | 52.0 | 3Mbps, Y axis | T.7 |
| | 9920.033M | 43.6 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 53.9 | 54.0 -0.1 | Vert |
| | | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| 301 | 7326.109M | 37.8 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 42.8 | 3Mbps, Y axis 54.0 -11.2 | Horiz |
| 301 | /320.109WI | 37.0 | +0.2 | +33.2 | -37. 4 | 1.2 | 10.0 | 42.0 | Middle, GFSK | 110112 |
| | | | . 0.2 | . 55.2 | | | | | 1Mbps, Z axis | |
| 302 | 9608.608M | 32.7 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 42.6 | 54.0 -11.4 | Horiz |
| | Ave | | +0.0 | +35.6 | | | | | Low, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| 303 | 9919.921M | 32.3 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 42.6 | 54.0 -11.4 | Horiz |
| | Ave | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| ^ | 9919.921M | 44.4 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 54.7 | 54.0 +0.7 | Horiz |
| | | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| 205 | 4004 (4014 | 12.4 | 100 | 160 | 20.0 | 100 | +0.0 | 42.5 | 3Mbps, X axis | TT |
| 305 | 4884.640M | 43.4 | +0.0 +0.2 | +6.0 +30.0 | -38.0 | +0.9 | +0.0 | 42.5 | 54.0 -11.5 Middle, GFSK | Horiz |
| | | | ⊤0.∠ | +30.0 | | | | | 1Mbps, X axis | |
| 306 | 4804.192M | 43.3 | +0.0 | +6.1 | -37.8 | +0.9 | +0.0 | 42.5 | 54.0 -11.5 | Vert |
| | | | +0.1 | +29.9 | 27.0 | 0.5 | 0.0 | | Low, GFSK 1Mbps, | , 510 |
| | | | | | | | | | Z axis | |
| 307 | 4959.875M | 43.5 | +0.0 | +6.0 | -38.1 | +0.9 | +0.0 | 42.5 | 54.0 -11.5 | Vert |
| | | | +0.1 | +30.1 | | | | | High, GFSK | |
| | | | | | | | | | 1Mbps, Z axis | |
| 308 | 9920.611M | 32.1 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 42.4 | 54.0 -11.6 | Horiz |
| | Ave | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| | 9920.575M | 43.9 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 54.2 | 3Mbps, Z axis 54.0 +0.2 | Horiz |
| | 9920.373WI | 43.9 | +0.0 | +36.0 | -30.3 | ⊤1. 4 | +0.0 | 34.2 | High, 4 DPSK | HOHZ |
| | | | 10.1 | 130.0 | | | | | 2Mbps, Z axis | |
| ^ | 9920.611M | 43.5 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 53.8 | 54.0 -0.2 | Horiz |
| | | | +0.1 | +36.0 | 2 2.00 | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, Z axis | |
| ^ | 9920.575M | 41.1 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 51.4 | 54.0 -2.6 | Horiz |
| | | | +0.1 | +36.0 | | | | | High, GFSK | |
| 0.15 | | 25.5 | | . = 0 | 25.5 | | . 0. 0 | 42.2 | 1Mbps, Z axis | |
| 312 | 7439.769M | 37.5 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 42.3 | 54.0 -11.7 | Horiz |
| | | | +0.1 | +33.2 | | | | | High, 8 DPSK | |
| 212 | 9920.758M | 31.9 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 42.2 | 3Mbps, Z axis 54.0 -11.8 | Horiz |
| | 9920.738M Ave | 31.7 | +0.0 +0.1 | +36.0 | -30.3 | · 1. 4 | 10.0 | 42.2 | High, 4 DPSK | 110112 |
| | 1110 | | . 0.1 | . 50.0 | | | | | 2Mbps, Y axis | |
| | | | | | | | | | ops, r unis | |



| △ 0020 759M | 43.1 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 53.4 | 54.0 -0.6 | Howin |
|-----------------|------|--------------|---------------|-------|-------------|-------|------|-----------------------------|--------|
| ^ 9920.758M | 43.1 | +0.0 | +36.0 | -30.3 | +1.4 | +0.0 | 33.4 | 54.0 -0.6 High, 4 DPSK | Horiz |
| | | 10.1 | 130.0 | | | | | 2Mbps, Y axis | |
| 315 7439.797M | 37.1 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 41.9 | 54.0 -12.1 | Horiz |
| 313 7437.777141 | 37.1 | +0.1 | +33.2 | 37.3 | 11.2 | 10.0 | 71.7 | High, GFSK | HOHZ |
| | | 0.1 | 55. 2 | | | | | 1Mbps, Z axis | |
| 316 4884.158M | 42.8 | +0.0 | +6.0 | -38.0 | +0.9 | +0.0 | 41.9 | 54.0 -12.1 | Vert |
| | | +0.2 | +30.0 | | | | | Middle, GFSK | |
| | | | | | | | | 1Mbps, Z axis | |
| 317 12399.178 | 30.1 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 41.8 | 54.0 -12.2 | Vert |
| M | | +0.4 | +35.8 | | | | | | |
| Ave | | | | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, X axis | |
| ^ 12399.178 | 41.1 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 52.8 | 54.0 -1.2 | Vert |
| M | | +0.4 | +35.8 | | | | | | |
| | | | | | | | | High, GFSK | |
| 210 12400 705 | 20.0 | . 0. 0 | . 10.7 | 26.5 | | . 0 0 | 41.5 | 1Mbps, X axis | |
| 319 12400.785 | 29.8 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 41.5 | 54.0 -12.5 | Horiz |
| M | | +0.4 | +35.8 | | | | | High CECV | |
| Ave | | | | | | | | High, GFSK 1Mbps, Z axis | |
| ^ 12400.785 | 41.6 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 53.3 | 54.0 -0.7 | Horiz |
| M | 41.0 | +0.4 | +35.8 | -30.3 | 11.3 | 10.0 | 33.3 | 34.0 -0.7 | 110112 |
| 171 | | 10.4 | 133.0 | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, Z axis | |
| ^ 12400.692 | 38.9 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 50.6 | 54.0 -3.4 | Horiz |
| M | | +0.4 | +35.8 | | | | | | |
| | | | | | | | | High, 4 DPSK | |
| | | | | | | | | 2Mbps, Z axis | |
| 322 9919.467M | 31.2 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 41.5 | 54.0 -12.5 | Horiz |
| Ave | | +0.1 | +36.0 | | | | | High, 4 DPSK | |
| | | | | | | | | 2Mbps, X axis | |
| 323 7326.033M | 36.5 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 41.5 | 54.0 -12.5 | Vert |
| | | +0.2 | +33.2 | | | | | Middle, 8 DPSK | |
| 224 0760 71075 | 21 - | | | 26. | | | 44 - | 3Mbps, Y axis | T.7 |
| 324 9768.718M | 31.5 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 41.5 | 54.0 -12.5 | Vert |
| Ave | | +0.2 | +35.8 | | | | | Middle, 4 DPSK | |
| ↑ 0760 710M | 42.2 | | +9.0 | 26.4 | ±1 <i>1</i> | | 52.2 | 2Mbps, Y axis | Vont |
| ^ 9768.718M | 42.2 | +0.0 +0.2 | +9.0 +35.8 | -36.4 | +1.4 | +0.0 | 52.2 | 54.0 -1.8 Middle, 4 DPSK | Vert |
| | | ±0.∠ | ⊤ 33.8 | | | | | 2Mbps, Y axis | |
| 326 12210.727 | 30.2 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 41.4 | 54.0 -12.6 | Horiz |
| M | 50.2 | +0.0 | +35.7 | -50.0 | 1.3 | 10.0 | 71.7 | JT.U -12.U | 110112 |
| Ave | | . 0.2 | . 55.1 | | | | | Middle, GFSK | |
| | | | | | | | | 1Mbps, Z axis | |
| ^ 12210.727 | 41.6 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 52.8 | 54.0 -1.2 | Horiz |
| M | | +0.2 | +35.7 | | | | | | |
| | | | | | | | | Middle, GFSK | |
| | | | | | | | | 1Mbps, Z axis | |
| | | | | | | | | | |



| ^ | 12210.788 | 37.5 | +0.0 | +10.4 | -36.6 | +1.5 | +0.0 | 48.7 | 54.0 -5.3 | Horiz |
|-------|----------------|------|--------------|----------------|-------|-------------------|-------|------|---------------------------------|---------------|
| | M | | +0.2 | +35.7 | | | | | Middle, GFSK | |
| | | | | | | | | | 1Mbps, X axis | |
| 329 | 7440.258M | 36.5 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 41.3 | 54.0 -12.7 | Horiz |
| | | | +0.1 | +33.2 | | | | | High, 4 DPSK | |
| | | | | | | | | | 2Mbps, Z axis | |
| 330 | 9920.667M | 30.7 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 41.0 | 54.0 -13.0 | Vert |
| | Ave | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| 221 | 12399.158 | 20.2 | 100 | +10.5 | 26.5 | +1.5 | +0.0 | 41.0 | 3Mbps, Z axis 54.0 -13.0 | Howin |
| 331 | 12399.138 M | 29.3 | +0.0 +0.4 | +35.8 | -36.5 | +1.5 | +0.0 | 41.0 | 54.0 -13.0 | Horiz |
| | Ave | | 10.4 | 133.6 | | | | | High, GFSK | |
| | 1110 | | | | | | | | 1Mbps, Y axis | |
| ^ | 12399.158 | 40.4 | +0.0 | +10.5 | -36.5 | +1.5 | +0.0 | 52.1 | 54.0 -1.9 | Horiz |
| | M | | +0.4 | +35.8 | | | | | | |
| | | | | | | | | | High, GFSK | |
| | 12200 246 | 20.6 | . 0. 0 | . 10.5 | 26.5 | .1.5 | | 50.2 | 1Mbps, Y axis | TT ' |
| ^ | 12399.246 M | 38.6 | +0.0 +0.4 | +10.5 +35.8 | -36.5 | +1.5 | +0.0 | 50.3 | 54.0 -3.7 | Horiz |
| | IVI | | ±0.4 | ±33.8 | | | | | High, 8 DPSK | |
| | | | | | | | | | 3Mbps, X axis | |
| 334 | 9768.582M | 30.9 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 40.9 | 54.0 -13.1 | Horiz |
| | Ave | | +0.2 | +35.8 | | | | | Middle, GFSK | |
| | | | | | | | | | 1Mbps, Z axis | |
| 335 | 9768.227M | 30.8 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 40.8 | 54.0 -13.2 | Vert |
| | Ave | | +0.2 | +35.8 | | | | | Middle, GFSK | |
| | 0760 20014 | 45.2 | 100 | 10.0 | 26.4 | +1.4 | 10.0 | 55.2 | 1Mbps, Y axis | X I =4 |
| / | 9768.300M | 45.3 | +0.0 +0.2 | +9.0 +35.8 | -36.4 | +1.4 | +0.0 | 55.3 | 54.0 +1.3 Middle, 8 DPSK | Vert |
| | | | 10.2 | 133.6 | | | | | 3Mbps, Z axis | |
| ^ | 9768.227M | 42.5 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 52.5 | 54.0 -1.5 | Vert |
| | | | +0.2 | +35.8 | | | | | Middle, GFSK | |
| | | | | | | | | | 1Mbps, Y axis | |
| 338 | 9767.275M | 30.7 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 40.7 | 54.0 -13.3 | Vert |
| | Ave | | +0.2 | +35.8 | | | | | Middle, 8 DPSK | |
| | 07(7.075) (| 10.0 | . 0. 0 | . 0. 0 | 26.4 | . 1 . 4 | | 50.0 | 3Mbps, Y axis | T.7 |
| | 9767.275M | 42.2 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 52.2 | 54.0 -1.8 | Vert |
| | | | +0.2 | +35.8 | | | | | Middle, 8 DPSK 3Mbps, Y axis | |
| 340 | 9607.658M | 30.7 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 40.6 | 54.0 -13.4 | Vert |
| | Ave | 20.1 | +0.0 | +35.6 | 20.1 | | 0.0 | | Low, 4 DPSK | . 010 |
| | | | | | | | | | 2Mbps, Y axis | |
| ^ | 9607.658M | 42.2 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 52.1 | 54.0 -1.9 | Vert |
| | | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| 2 : 5 | 07/0 1023 | 20.5 | | | 26: | . 4 . 4 | | 40.7 | 2Mbps, Y axis | T.7 |
| 342 | 9768.493M | 30.5 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 40.5 | 54.0 -13.5 | Vert |
| | Ave | | +0.2 | +35.8 | | | | | Middle, GFSK 1Mbps, X axis | |
| ^ | 9768.456M | 42.9 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 52.9 | 54.0 -1.1 | Vert |
| |) / 00.730IVI | 14.7 | +0.2 | +35.8 | JU.T | · 1. T | . 0.0 | 32.7 | Middle, 4 DPSK | V 011 |
| | | | ~· - | -2.0 | | | | | 2Mbps, Z axis | |
| | | | | | | | | | - F - 2 · · · · · · · · · · | |



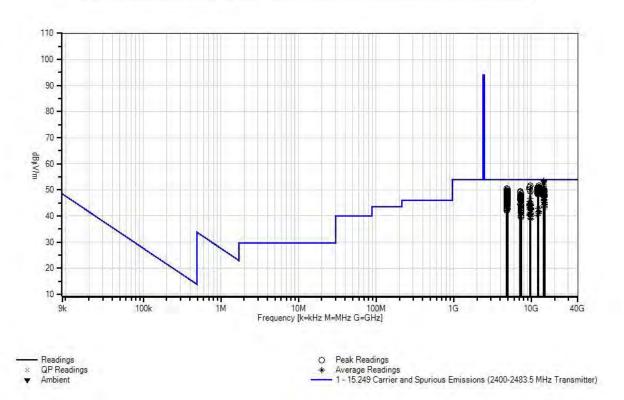
| ^ 9768.493M | 42.1 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 52.1 | 54.0 -1.9 | Vert |
|---------------|------|------|-------|-------|------|------|------|------------------|-------|
| | | +0.2 | +35.8 | | | | | Middle, GFSK | |
| | | | | | | | | 1Mbps, X axis | |
| ^ 9768.442M | 42.0 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 52.0 | 54.0 -2.0 | Vert |
| | | +0.2 | +35.8 | | | | | Middle, 4 DPSK | |
| | | | | | | | | 2Mbps, X axis | |
| 346 9919.743M | 30.2 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 40.5 | 54.0 -13.5 | Vert |
| Ave | | +0.1 | +36.0 | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, Y axis | |
| ^ 9919.743M | 42.3 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 52.6 | 54.0 -1.4 | Vert |
| | | +0.1 | +36.0 | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, Y axis | |
| 348 9608.583M | 27.6 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 40.2 | 54.0 -13.8 | Horiz |
| Ave | | +0.0 | +35.6 | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | X axis | |
| ^ 9608.517M | 43.6 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 53.5 | 54.0 -0.5 | Horiz |
| | | +0.0 | +35.6 | | | | | Low, 4 DPSK | |
| | | | | | | | | 2Mbps, Z axis | |
| ^ 9608.608M | 43.2 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 53.1 | 54.0 -0.9 | Horiz |
| | | +0.0 | +35.6 | | | | | Low, 8 DPSK | |
| | | | | | | | | 3Mbps, Z axis | |
| ^ 9608.583M | 38.6 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 51.2 | 54.0 -2.8 | Horiz |
| | | +0.0 | +35.6 | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | X axis | |
| ^ 9608.569M | 40.6 | +0.0 | +9.0 | -36.1 | +1.4 | +0.0 | 50.5 | 54.0 -3.5 | Horiz |
| | | +0.0 | +35.6 | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | Z axis | |
| 353 7326.409M | 35.1 | +0.0 | +7.8 | -37.4 | +1.2 | +0.0 | 40.1 | 54.0 -13.9 | Vert |
| | | +0.2 | +33.2 | | | | | Middle, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| 354 12010.031 | 29.0 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 40.0 | 54.0 -14.0 | Vert |
| M | | +0.0 | +35.6 | | | | | | |
| Ave | | | | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | Y axis | |
| ^ 12010.031 | 42.2 | +0.0 | +10.4 | -36.5 | +1.5 | +0.0 | 53.2 | 54.0 -0.8 | Vert |
| M | | +0.0 | +35.6 | | | | | | |
| | | | | | | | | Low, GFSK 1Mbps, | |
| | | | | | | | | Y axis | |
| 356 7439.762M | 35.2 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 40.0 | 54.0 -14.0 | Vert |
| | | +0.1 | +33.2 | | | | | High, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| 357 9920.586M | 29.6 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 39.9 | 54.0 -14.1 | Vert |
| Ave | | +0.1 | +36.0 | | | | | High, GFSK | |
| | | | | | | | | 1Mbps, X axis | |
| ^ 9920.656M | 45.5 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 55.8 | 54.0 +1.8 | Vert |
| | | +0.1 | +36.0 | | | | | High, 4 DPSK | |
| | | | | | | | | 2Mbps, Y axis | |
| ^ 9920.667M | 42.9 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 53.2 | 54.0 -0.8 | Vert |
| | | +0.1 | +36.0 | | | | | High, 8 DPSK | |
| | | | | | | | | 3Mbps, Z axis | |
| | | | | | | | | | |



| ^ 9920.586M | 41.8 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 52.1 | 54.0 | -1.9 | Vert |
|---|------|------|-------|-------|------|------|------|---------------|-------|-------|
| | | +0.1 | +36.0 | | | | | High, GFSK | | |
| | | | | | | | | 1Mbps, X axis | S | |
| ^ 9920.542M | 41.1 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 51.4 | 54.0 | -2.6 | Vert |
| | | +0.1 | +36.0 | | | | | High, GFSK | | |
| | | | | | | | | 1Mbps, Z axis | S | |
| 362 7441.592M | 34.7 | +0.0 | +7.8 | -37.5 | +1.2 | +0.0 | 39.5 | 54.0 | -14.5 | Vert |
| | | +0.1 | +33.2 | | | | | High, 8 DPSK | | |
| | | | | | | | | 3Mbps, Y axis | S | |
| 363 9768.513M | 29.1 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 39.1 | 54.0 | -14.9 | Horiz |
| Ave | | +0.2 | +35.8 | | | | | Middle, GFSI | ζ | |
| | | | | | | | | 1Mbps, X axis | S | |
| ^ 9768.497M | 44.0 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 54.0 | 54.0 | +0.0 | Horiz |
| | | +0.2 | +35.8 | | | | | Middle, 4 DP | SK | |
| | | | | | | | | 2Mbps, X axis | S | |
| ^ 9768.582M | 42.3 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 52.3 | 54.0 | -1.7 | Horiz |
| | | +0.2 | +35.8 | | | | | Middle, GFSI | ζ | |
| | | | | | | | | 1Mbps, Z axis | S | |
| ^ 9768.513M | 41.7 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 51.7 | 54.0 | -2.3 | Horiz |
| | | +0.2 | +35.8 | | | | | Middle, GFSI | ζ | |
| | | | | | | | | 1Mbps, X axis | S | |
| ^ 9768.550M | 41.4 | +0.0 | +9.0 | -36.4 | +1.4 | +0.0 | 51.4 | 54.0 | -2.6 | Horiz |
| | | +0.2 | +35.8 | | | | | Middle, 4 DP | SK | |
| | | | | | | | | 2Mbps, Y axis | | |
| 368 9919.517M | 28.4 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 38.7 | | -15.3 | Horiz |
| Ave | | +0.1 | +36.0 | | | | | High, GFSK | | |
| | | | | | | | | 1Mbps, X axis | S | |
| ^ 9919.467M | 42.1 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 52.4 | 54.0 | -1.6 | Horiz |
| | | +0.1 | +36.0 | | | | | High, 4 DPSK | | |
| | | | | | | | | 2Mbps, X axis | | |
| ^ 9919.517M | 40.1 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 50.4 | 54.0 | -3.6 | Horiz |
| | | +0.1 | +36.0 | | | | | High, GFSK | | |
| | | | | | | | | 1Mbps, X axis | S | |
| ^ 9919.533M | 39.5 | +0.0 | +9.1 | -36.3 | +1.4 | +0.0 | 49.8 | 54.0 | -4.2 | Horiz |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | +0.1 | +36.0 | | | | .,.0 | High, GFSK | | |
| | | | | | | | | 1Mbps, Y axis | S | |
| | | | | | | | | | _ | |

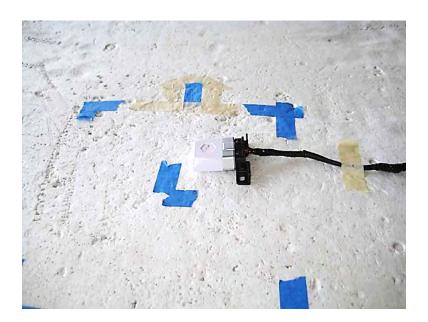


CKC Laboratories, Inc. Date: 2/27/2015 Time: 13:54:46 Automatic Labs WO#: 96788 Test Distance: 3 Meters. Sequence#: 2





Test Setup Photos

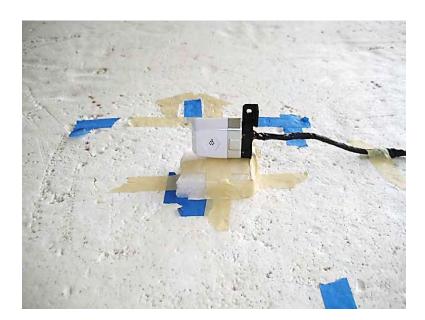


X Axis



Y Axis





Z Axis



15.249(d) Spurious Emissions and Band Edge

Test Conditions / Setup / Data

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Pl. • Brea, CA 92823 • (714) 993-6112

Customer: Automatic Labs

Specification: 15.249(d) / 15.209 Radiated Spurious Emissions

Work Order #: 96788 Date: 3/2/2015
Test Type: Maximized Emissions Time: 16:17:45

Equipment: **OBD-II to Bluetooth Bridge Device** Sequence#: 3

Manufacturer: Automatic Labs Tested By: S. Yamamoto

Model: Link2 S/N: NA

Test Equipment:

| ID | Asset # | Description | Model | Calibration Date | Cal Due Date |
|----|----------|--------------------|----------------|------------------|--------------|
| | AN02672 | Spectrum Analyzer | E4446A | 8/14/2013 | 8/14/2015 |
| | ANP06661 | Cable | LDF1-50 | 4/15/2014 | 4/15/2016 |
| | AN00786 | Preamp | 83017A | 4/25/2014 | 4/25/2016 |
| | ANP06544 | Cable | 32026-29094K- | 11/20/2013 | 11/20/2015 |
| | | | 29094K-36TC | | |
| | AN03385 | High Pass Filter | 11SH10- | 6/5/2013 | 6/5/2015 |
| | | | 3000/T10000- | | |
| | | | O/O | | |
| | AN00849 | Horn Antenna | 3115 | 3/18/2014 | 3/18/2016 |
| | AN00309 | Preamp | 8447D | 3/12/2014 | 3/12/2016 |
| | AN01995 | Biconilog Antenna | CBL6111C | 4/30/2014 | 4/30/2016 |
| | ANP05050 | Cable | RG223/U | 1/15/2015 | 1/15/2017 |
| | ANP05198 | Cable-Amplitude 15 | 8268 | 12/22/2014 | 12/22/2016 |
| | | to 45degC (dB) | | | |
| | AN00314 | Loop Antenna | 6502 | 7/2/2014 | 7/2/2016 |
| T1 | AN02869 | Spectrum Analyzer | E4440A | 7/10/2014 | 7/10/2015 |
| | AN01413 | Horn Antenna | 84125-80008 | 11/25/2014 | 11/25/2016 |
| | AN00787 | Preamp | 83017A | 5/31/2013 | 5/31/2015 |
| | AN02945 | Cable | 32022-2-2909K- | 10/30/2013 | 10/30/2015 |
| | | | 36TC | | |
| T2 | ANP05555 | Cable | RG223/U | 5/7/2014 | 5/7/2016 |
| Т3 | AN00010 | Preamp | 8447D | 3/12/2014 | 3/12/2016 |
| T4 | ANP04382 | Cable | LDF-50 | 7/30/2014 | 7/30/2016 |
| T5 | ANP05569 | Cable | RG-214/U | 5/7/2014 | 5/7/2016 |
| T6 | AN00851 | Biconilog Antenna | CBL6111C | 4/30/2014 | 4/30/2016 |

Equipment Under Test (* = EUT):

| Function | Manufacturer | Model # | S/N |
|------------------------------------|----------------|---------|-----|
| OBD-II to Bluetooth Bridge Device* | Automatic Labs | Link2 | NA |



Support Devices:

| Function | Manufacturer | Model # | S/N |
|-----------------|--------------|---------|--------|
| DC Power Supply | Topward | 6306D | 988614 |

Test Conditions / Notes:

The equipment under test (EUT) is a standalone on the Styrofoam table top.

The EUT is connected to a remotely located DC power supply.

The DC power supply is providing 12.0VDC to the EUT.

The DC power supply is providing the nominal 12.0VDC to the EUT and is used in place of a battery which would be used in the actual installation.

The EUT low, middle and high channels are 2402MHz, 2442MHz, and 2480MHz.

Modulation types are GFSK 1Mbps, 4 DPSK 2Mbps, and 8 DPSK 3Mbps.

Data sheet contains the measurement of the spurious emissions amplitude of the EUT.

The EUT is transmitting continuously.

The emission levels reported in this data are representative of worst case emissions.

Temperature: 18°C Relative Humidity: 45% Pressure: 100kPa

Frequency range of data sheet 9kHz to 25GHz.

9kHz to 150kHz RBW=VBW=200Hz. 150kHz to 30MHz RBW=VBW=9kHz. 30MHz to 1000MHz RBW=VBW=120kHz. 1000MHz to 25000MHz RBW=VBW=1MHz.

Rated EUT RF output power: +2dBm

Data was maximized with EUT in each of three axis systems (X, Y, Z) and with each of the three modulation types.

Site A and D

Test method used ANSI C63.4 (2003)

Ext Attn: 0 dB

| Measu | rement Data: | Re | eading lis | ted by ma | argin. | | Тє | est Distance | e: 3 Meters | | |
|-------|--------------|------|------------|-----------|--------|------|-------|--------------|-------------|--------|-------|
| # | Freq | Rdng | T1 | T2 | Т3 | T4 | Dist | Corr | Spec | Margin | Polar |
| | | | T5 | T6 | | | | | | | |
| | MHz | dΒμV | dB | dB | dB | dB | Table | dBμV/m | dBμV/m | dB | Ant |
| 1 | 472.506M | 28.6 | +0.0 | +0.4 | -27.7 | +2.4 | +0.0 | 23.4 | 46.0 | -22.6 | Horiz |
| | | | +2.3 | +17.4 | | | | | | | |
| 2 | 472.507M | 27.9 | +0.0 | +0.4 | -27.7 | +2.4 | +0.0 | 22.7 | 46.0 | -23.3 | Vert |
| | | | +2.3 | +17.4 | | | | | | | |
| 3 | 171.821M | 34.0 | +0.0 | +0.2 | -26.8 | +1.5 | +0.0 | 19.7 | 43.5 | -23.8 | Vert |
| | | | +1.3 | +9.5 | | | | | | | |
| 4 | 315.004M | 30.4 | +0.0 | +0.3 | -26.6 | +2.0 | +0.0 | 21.7 | 46.0 | -24.3 | Vert |
| | | | +1.8 | +13.8 | | | | | | | |
| 5 | 486.823M | 26.2 | +0.0 | +0.4 | -27.7 | +2.5 | +0.0 | 21.4 | 46.0 | -24.6 | Vert |
| | | | +2.4 | +17.6 | | | | | | | |
| 6 | 315.000M | 30.0 | +0.0 | +0.3 | -26.6 | +2.0 | +0.0 | 21.3 | 46.0 | -24.7 | Vert |
| | | | +1.8 | +13.8 | | | | | | | |
| 7 | 272.049M | 30.7 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 20.8 | 46.0 | -25.2 | Vert |
| | | | +1.7 | +12.9 | | | | | | | |
| 8 | 229.094M | 32.0 | +0.0 | +0.2 | -26.6 | +1.7 | +0.0 | 20.0 | 46.0 | -26.0 | Vert |
| | | | +1.5 | +11.2 | | | | | | | |

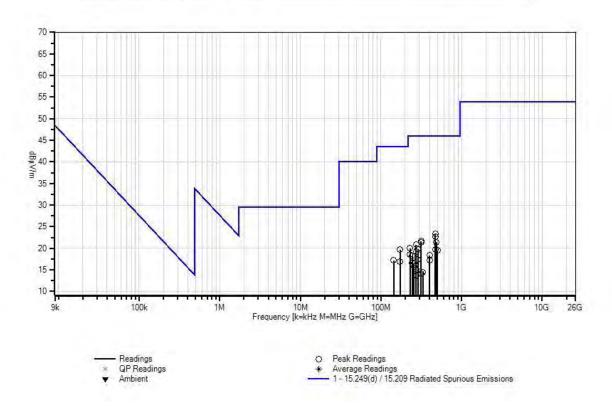
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| 9 | 286.367M | 29.5 | +0.0 | +0.3 | -26.5 | +1.8 | +0.0 | 19.9 | 46.0 | -26.1 | Horiz |
|-----|-------------|------|------|-------|-------|---------|--------|------|------|----------------|-------|
| 10 | 142 1023 6 | 20.0 | +1.7 | +13.1 | 26.0 | . 1.2 | . 0. 0 | 17.0 | 10.5 | 26.2 | T.7 |
| 10 | 143.182M | 30.0 | +0.0 | +0.2 | -26.9 | +1.3 | +0.0 | 17.2 | 43.5 | -26.3 | Vert |
| 1.1 | 170.506) (| 24.0 | +1.2 | +11.4 | 27.7 | . 2 . 4 | . 0. 0 | 10.7 | 46.0 | 26.2 | |
| 11 | 472.506M | 24.9 | +0.0 | +0.4 | -27.7 | +2.4 | +0.0 | 19.7 | 46.0 | -26.3 | Horiz |
| | | | +2.3 | +17.4 | | | 0.0 | 10.5 | 16.0 | | |
| 12 | 501.143M | 24.2 | +0.0 | +0.4 | -27.8 | +2.5 | +0.0 | 19.5 | 46.0 | -26.5 | Horiz |
| | | | +2.4 | +17.8 | | | | | | | |
| 13 | 171.820M | 31.2 | +0.0 | +0.2 | -26.8 | +1.5 | +0.0 | 16.9 | 43.5 | -26.6 | Horiz |
| | | | +1.3 | +9.5 | | | | | | | |
| 14 | 272.049M | 29.1 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 19.2 | 46.0 | -26.8 | Horiz |
| | | | +1.7 | +12.9 | | | | | | | |
| 15 | 229.094M | 30.6 | +0.0 | +0.2 | -26.6 | +1.7 | +0.0 | 18.6 | 46.0 | -27.4 | Vert |
| | | | +1.5 | +11.2 | | | | | | | |
| 16 | 243.412M | 29.0 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 18.3 | 46.0 | -27.7 | Vert |
| | | | +1.6 | +12.2 | | | | | | | |
| 17 | 400.916M | 24.8 | +0.0 | +0.3 | -27.2 | +2.2 | +0.0 | 18.3 | 46.0 | -27.7 | Vert |
| | | | +2.1 | +16.1 | | | | | | | |
| 18 | 286.368M | 27.0 | +0.0 | +0.3 | -26.5 | +1.8 | +0.0 | 17.4 | 46.0 | -28.6 | Horiz |
| | | | +1.7 | +13.1 | | | | | | | |
| 19 | 286.368M | 27.0 | +0.0 | +0.3 | -26.5 | +1.8 | +0.0 | 17.4 | 46.0 | -28.6 | Vert |
| | | | +1.7 | +13.1 | | | | | | | |
| 20 | 400.914M | 23.8 | +0.0 | +0.3 | -27.2 | +2.2 | +0.0 | 17.3 | 46.0 | -28.7 | Horiz |
| | | | +2.1 | +16.1 | | | | | | | |
| 21 | 243.413M | 27.4 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 16.7 | 46.0 | -29.3 | Horiz |
| | | | +1.6 | +12.2 | | | | | | | |
| 22 | 257.731M | 26.8 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 16.6 | 46.0 | -29.4 | Vert |
| | | | +1.6 | +12.7 | | | | | | | |
| 23 | 257.731M | 26.0 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 15.8 | 46.0 | -30.2 | Vert |
| | | | +1.6 | +12.7 | | | | | | | |
| 24 | 272.049M | 25.1 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 15.2 | 46.0 | -30.8 | Horiz |
| | | | +1.7 | +12.9 | | | | | | | |
| 25 | 272.048M | 25.0 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 15.1 | 46.0 | -30.9 | Vert |
| | | | +1.7 | +12.9 | | | | | | | |
| 26 | 329.323M | 22.8 | +0.0 | +0.3 | -26.7 | +2.0 | +0.0 | 14.5 | 46.0 | -31.5 | Horiz |
| | > | | +1.9 | +14.2 | | | | | | | |
| 27 | 315.004M | 22.8 | +0.0 | +0.3 | -26.6 | +2.0 | +0.0 | 14.1 | 46.0 | -31.9 | Horiz |
| - | J = 2 . J J | ==.0 | +1.8 | +13.8 | _ 0.0 | 0 | | | | | |
| 28 | 272.049M | 23.7 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 13.8 | 46.0 | -32.2 | Horiz |
| | -,, | | +1.7 | +12.9 | _ 0.0 | 1.0 | | 0 | | | |
| 29 | 272.049M | 23.5 | +0.0 | +0.2 | -26.5 | +1.8 | +0.0 | 13.6 | 46.0 | -32.4 | Vert |
| - | -,, | | +1.7 | +12.9 | _ 0.0 | 1.0 | | | | - - . · | |
| | | | 1., | | | | | | | | |



CKC Laboratories, Inc. Date: 3/2/2015 Time: 16:17:45 Automatic Labs WO#: 96788 Test Distance: 3 Meters. Sequence#: 3





Band Edge

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Pl. • Brea, CA 92823 • (714) 993-6112

Customer: Automatic Labs

Specification: Uru-R 55/1 Band Edge Compliance (2400-2483.5 MHz Transmitter)
Work Order #: Date: 2/27/2015

Test Type: **Maximized Emissions**

Equipment: **OBD-II to Bluetooth Bridge Device**

Manufacturer: Automatic Labs Tested By: S. Yamamoto

Model: Link2 S/N: NA

Test Equipment:

| Asset # | Description | Model | Calibration Date | Cal Due Date |
|----------|-------------------|---------------|------------------|--------------|
| AN02672 | Spectrum Analyzer | E4446A | 8/14/2013 | 8/14/2015 |
| ANP05421 | Cable | Sucoflex 104A | 1/8/2014 | 1/8/2016 |
| ANP06661 | Cable | LDF1-50 | 4/15/2014 | 4/15/2016 |
| AN00849 | Horn Antenna | 3115 | 3/18/2014 | 3/18/2016 |

Equipment Under Test (* = EUT):

| 1 1 | | | |
|------------------------------------|----------------|---------|-----|
| Function | Manufacturer | Model # | S/N |
| OBD-II to Bluetooth Bridge Device* | Automatic Labs | Link2 | NA |

Support Devices:

| Function | Manufacturer | Model # | S/N |
|--------------------------|--------------|-------------|-----|
| AC to 12VDC Power Supply | ZW | ZW12V3A25RD | NA |

Test Conditions / Notes:

The equipment under test (EUT) is a stand-alone on the Styrofoam table top.

The EUT is connected to a remotely located AC to 12VDC power adapter.

The EUT low and high channels (and data sheet test frequencies) are 2402MHz and 2480MHz.

Modulation types are GFSK 1Mbps, 4 DPSK 2Mbps, and 8 DPSK 3Mbps.

Data captures from the spectrum analyzer contain the Band Edge measurement of the EUT.

The EUT is transmitting continuously.

Temperature: 19°C Relative Humidity: 44%

Pressure: 100kPa

Frequency range of data is 2400MHz to 2483.5MHz.

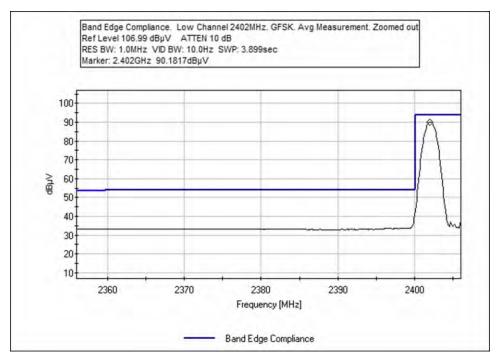
RBW=1MHz and VBW=3MHz for peak RBW=1MHz and VBW=10Hz for average Rated EUT RF output power: +2dBm

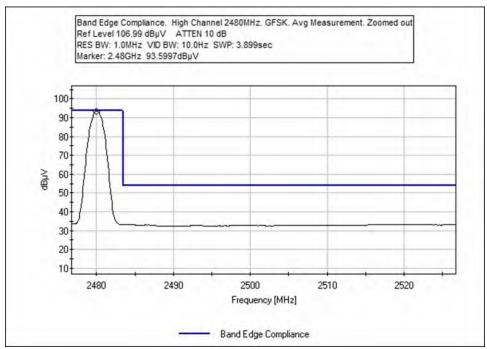
Site A

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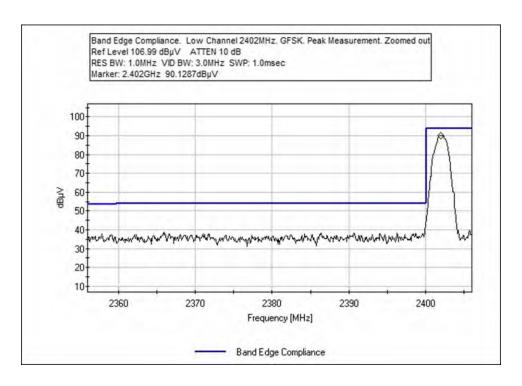


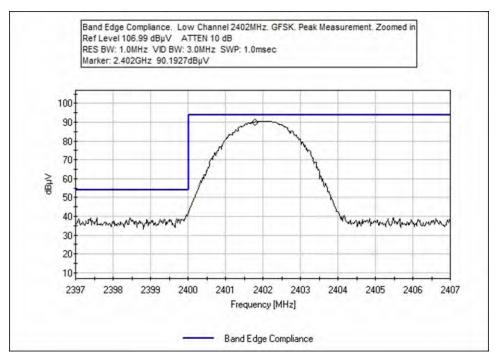
Test Data



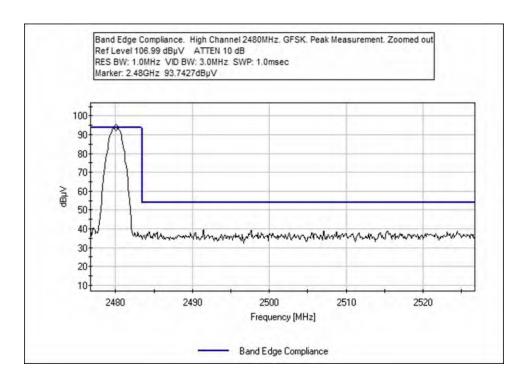


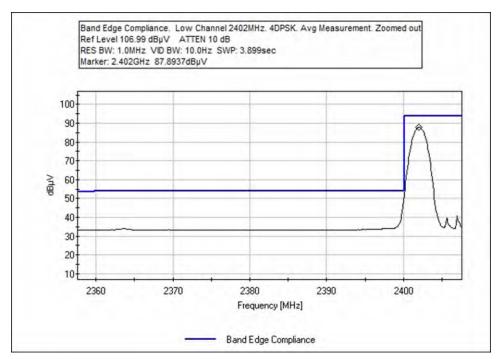




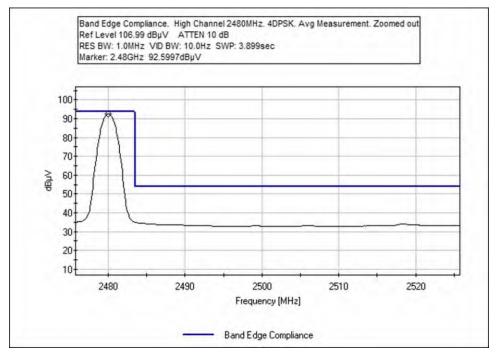


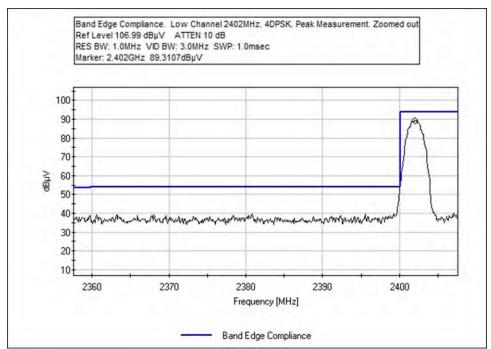




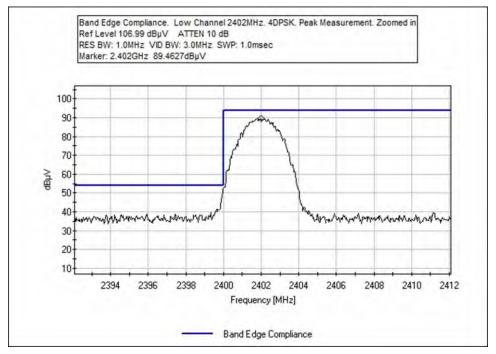


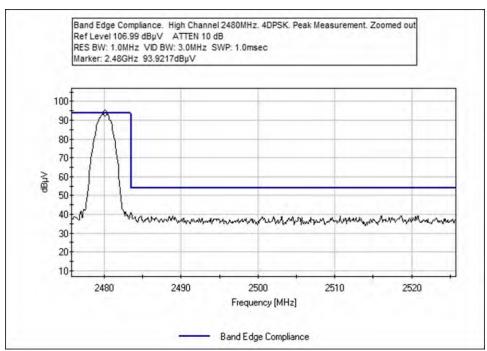




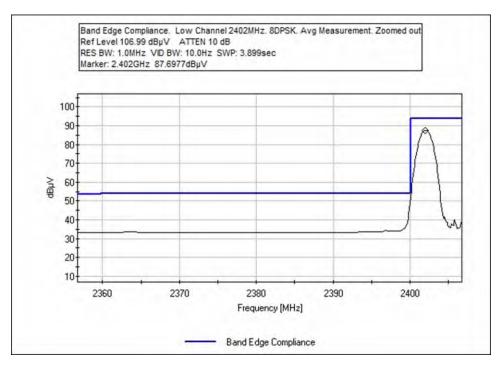


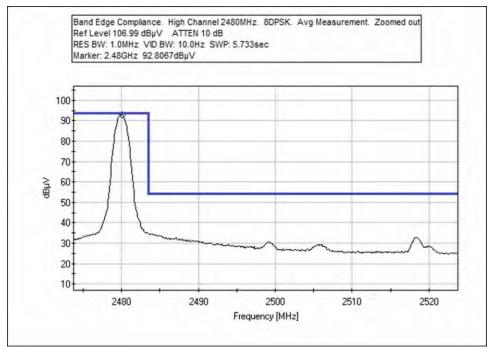




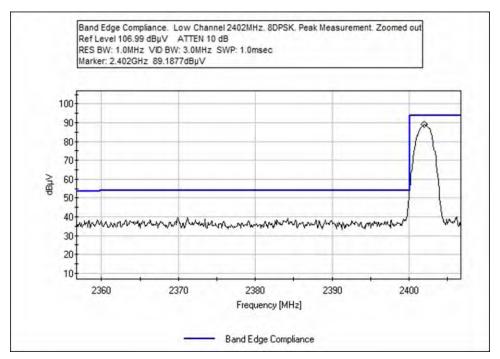


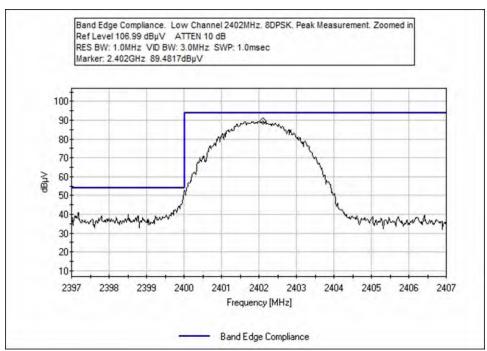




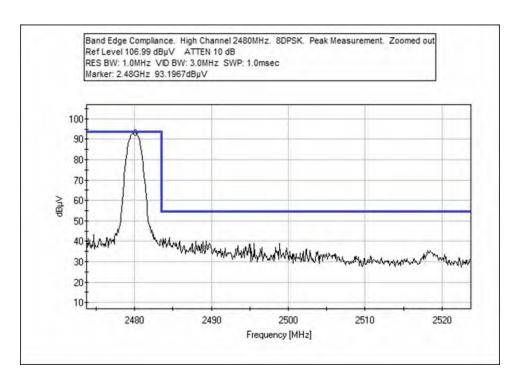




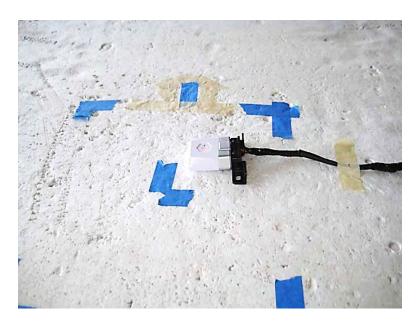








Test Setup Photos

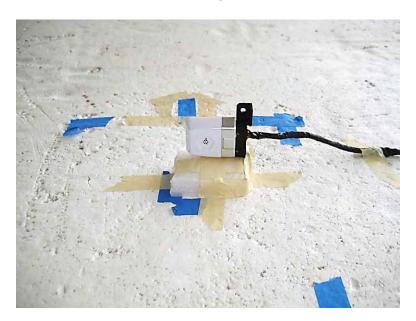


X Axis





Y Axis



Z Axis



SUPPLEMENTAL INFORMATION

Measurement Uncertainty

| Uncertainty Value | Parameter |
|-------------------|---------------------------|
| 4.73 dB | Radiated Emissions |
| 3.34 dB | Mains Conducted Emissions |
| 3.30 dB | Disturbance Power |

Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.

Emissions Test Details

TESTING PARAMETERS

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in $dB\mu V/m$, the spectrum analyzer reading in $dB\mu V$ was corrected by using the following formula. This reading was then compared to the applicable specification limit.

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| | SAMPLE CALCULATIONS | | | | | | |
|----------------------|---------------------|----------|--|--|--|--|--|
| Meter reading (dBμV) | | | | | | | |
| + | Antenna Factor | (dB) | | | | | |
| + | Cable Loss | (dB) | | | | | |
| - | Distance Correction | (dB) | | | | | |
| - | Preamplifier Gain | (dB) | | | | | |
| = | Corrected Reading | (dBμV/m) | | | | | |

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

| MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE | | | |
|--|---------------------|------------------|-------------------|
| TEST | BEGINNING FREQUENCY | ENDING FREQUENCY | BANDWIDTH SETTING |
| CONDUCTED EMISSIONS | 150 kHz | 30 MHz | 9 kHz |
| RADIATED EMISSIONS | 9 kHz | 150 kHz | 200 Hz |
| RADIATED EMISSIONS | 150 kHz | 30 MHz | 9 kHz |
| RADIATED EMISSIONS | 30 MHz | 1000 MHz | 120 kHz |
| RADIATED EMISSIONS | 1000 MHz | >1 GHz | 1 MHz |

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or carrot ("A") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. If the specification or test procedure requires trace averaging, then the averaging was performed using 100 samples or as required by the specification. All other average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.

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