

*FCC PART 15, SUBPART B and C
TEST REPORT**for***SDABG1****MODEL: WL430220**

Prepared for

**DATAMAX / O'NEIL
8 MASON
IRVINE, CALIFORNIA 92618-2705**Prepared by: *Kyle Fujimoto***KYLE FUJIMOTO**Approved by: *James Ross***JAMES ROSS****COMPATIBLE ELECTRONICS INC.
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BREA, CALIFORNIA 92823
(714) 579-0500**

DATE: NOVEMBER 9, 2010

	REPORT BODY	APPENDICES					TOTAL
		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
PAGES	21	2	2	2	16	84	127

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1	Conducted Emissions Test Setup
2	Plot Map and Layout of 3 Meter Radiated Site

GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP, NIST, or any other agency of the U.S. Government.

Device Tested: SDABG1
Model: WL430220
S/N: N/A

Product Description: See Expository Statement.

Modifications: The EUT was not modified during the testing.

Manufacturer: Datamax / O'Neil
8 Mason
Irvine, California 92618-2705

Test Dates: August 17, 18, 19 and 23; November 8 and 9, 2010

Test Specifications: EMI requirements
Limits: CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.247

Test Procedure: ANSI C63.4

Test Deviations: The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	Complies with the Class B limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.207 Highest reading in relation to spec limit: 42.30 dBuV @ 3.401 MHz (*U = 1.00 dB)
2	Spurious Radiated RF Emissions, 10 kHz – 40 GHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.247(d) Highest reading in relation to spec limit: 41.72 dBuV @ 124.437 MHz (*U = 3.80 dB)
3	Fundamental and Emissions produced by the intentional radiator in non-restricted bands, 10 kHz – 40 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247(d)
4	Emissions produced by the intentional radiator in restricted bands, 10 kHz – 40 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209(a), and section 15.247 (d)
5	6 dB Bandwidth	This test was previously performed. Please see test report number: B00309A1 .
6	Peak Power Output	This test was previously performed. Please see test report number: B00309A1 .
7	RF Conducted Antenna Test	This test was previously performed. Please see test report number: B00309A1 .
8	Peak Power Spectral Density Conducted from the Intentional Radiator to the Antenna	This test was previously performed. Please see test report number: B00309A1 .

*U = Expanded Uncertainty with a coverage factor of k=2

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the SDABG1 Model: WL430220. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.247.

This test report is to add an additional printer (Denali) to the already existing limited modular approval under the FCC ID: LGYWL430220. The original test report that contains all of the direct measurement tests is covered under test report number **B00309A1**.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests of the testing described herein were performed at the test facility of Compatible Electronics at 114 Olinda Drive, Brea, California 92823.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Datamax / O'Neil

Jonathan Mack Electrical Design Engineer

Compatible Electronics, Inc.

Kyle Fujimoto Test Engineer
James Ross Test Engineer
Alex Benitez Test Technician

2.4 Date Test Sample was Received

The test sample was received prior to the first date of testing.

2.5 Disposition of the Test Sample

The sample was returned to Datamax / O'Neil on November 9, 2010.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
NCR	No Calibration Required
N/A	Not Available
Tx	Transmitter
Rx	Receive or Receiver

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
ANSI C63.4 2009	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - EMI

Setup and operation of the equipment under test.

Specifics of the EUT and Peripherals Tested

The EUT was installed inside the printer. The printer was also connected to an AC Adapter via its power port.

The EUT was controlled by a program on the laptop that locked one channel at a time so that the low, middle, and high channels could be tested. This program also allowed the EUT to either be in transmit or receive mode.

Note #1: A 2-meter unshielded cable was connected between the printer and laptop when the EUT was being programmed (i.e. to change channels). This cable was removed during the actual testing.

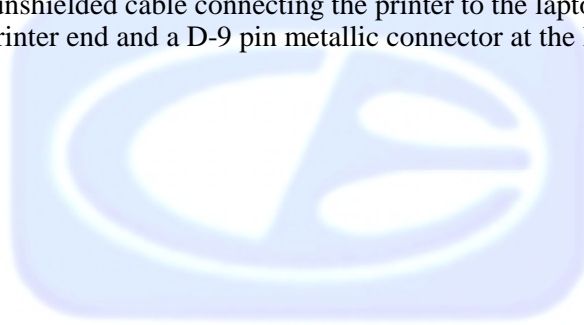
Note #2: The EUT was installed in the Denali printer.

The final radiated as well as the conducted data was taken in the mode. Please see Appendix E for the data sheets.

4.1.1 Cable Construction and Termination

Cable 1 This is a 2 meter unshielded cable connecting the Datamax / O'Neil Printer to the AC Adapter. The cable has a 1/8 inch power connector at the Datamax / O'Neil end and is hard wired into the AC Adapter. The cable was bundled to a length of 1 meter.

Cable 2 **(Only Connected when changing the channel on the EUT)**
This is a 2-meter unshielded cable connecting the printer to the laptop. The cable has an RJ-45 connector at the printer end and a D-9 pin metallic connector at the laptop end.



5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT**5.1 EUT and Accessory List**

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
SDABG1 (EUT)	DATAMAX / O'NEIL	WL430220	N/A	LGYWL430220
AC ADAPTER FOR EUT	FAIRWAY ELECTRONICS COMPANY LIMITED	VEG20C-120F	N/A	N/A
LAPTOP	DELL	PP11L	CN0D4571-48643- 589-0382	DoC
AC ADAPTER FOR LAPTOP	DELL	ADP-65JB B	CN-0F8834-48661- 56A-2ROA	N/A
ANTENNA FOR EUT	DATAMAX / O'NEIL	P/N: 261227-100	N/A	N/A
THERMAL PRINTER	DATAMAX / O'NEIL	DENALI	N/A	DoC

5.2 EMI Test Equipment for Brea Facility – Part 1

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS					
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
EMI Receiver	Rohde & Schwarz	ESIB40	100194	September 17, 2008	Sept. 17, 2010
EMI Receiver	Rohde & Schwarz	ESIB40	100218	April 9, 2009	April 9, 2011
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08768	September 16, 2009	Sept. 16, 2010
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22262	September 16, 2009	Sept. 16, 2010
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	September 17, 2009	Sept. 17, 2010
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
Biconical Antenna	Com Power	AB-900	15250	June 18, 2010	June 18, 2011
Log Antenna	Com Power	AL-100	16252	June 9, 2010	June 9, 2011
Preamplifier	Com Power	PA-103	1582	January 6, 2010	January 6, 2011
Loop Antenna	Com Power	AL-130	17089	September 29, 2008	Sept. 29, 2011
Horn Antenna	Com Power	AH-118	071175	March 18, 2010	March 18, 2012
Microwave Preamplifier	Com Power	PA-122	181921	March 10, 2010	March 10, 2011
Microwave Preamplifier	Com Power	PA-840	711013	March 11, 2010	March 11, 2011
Horn Antenna	Com Power	AH826	71957	NCR	NCR
Horn Antenna	Com Power	MWH-2640/B	1011	NCR	NCR
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A

5.3 EMI Test Equipment for Brea Facility – Part 2

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
RF CONDUCTED EMISSIONS TEST EQUIPMENT					
Emissions Program	Compatible Electronics	2.3 (SR19)	N/A	N/A	N/A
LISN	Com Power	LI-215	12076	June 14, 2010	June 14, 2011
LISN	Com Power	LI-215	12090	June 14, 2010	June 14, 2011
Transient Limiter	Seward	252A910	K39-220	September 28, 2009	Sept. 28, 2010
Transient Limiter	Seward	252A910	K39-220	November 2, 2010	Nov. 2, 2011

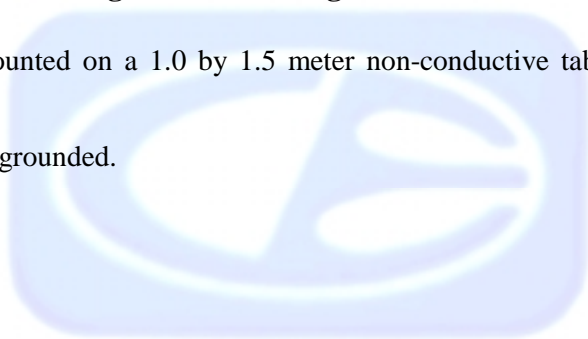
6. TEST SITE DESCRIPTION**6.1 Test Facility Description**

Please refer to section 2.1 and 7.1 of this report for EMI test location.

6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.



7. CHARACTERISTICS OF THE TRANSMITTER**7.1 Antenna Gain**

The antenna, P/N: 261227-100, has a gain of -2.8 dBi



8. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

8.1 RF Emissions

8.1.1 Conducted Emissions Test

The spectrum analyzer and EMI Receiver were used as a measuring meter. The data was collected with the spectrum analyzer and EMI Receiver in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer and EMI Receiver input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer and EMI Receiver. The output of the second LISN was terminated by a 50 ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Compatible Electronics conducted emissions software in several overlapping sweeps by running the spectrum analyzer and EMI Receiver at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Section 15.207 for conducted emissions.

8.1.2 Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer and EMI Receiver were used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifiers Model: PA-103 was used for frequencies from 30 MHz to 1 GHz, the Com-Power Microwave Preamplifier Model: PA-122 was used for frequencies from 1 GHz to 18 GHz, and the Com Power Microwave Preamplifier Model: PA-840 was used for frequencies from 18 GHz to 25 GHz. The spectrum analyzer and EMI Receiver were used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer and/or EMI Receiver records the highest measured reading over all the sweeps.

The quasi-peak adapter was used only for those readings which are marked accordingly on the data sheets.

The frequencies above 1 GHz were averaged manually by narrowing the video filter down to 10 Hz and putting the sweep time on AUTO on the spectrum analyzer to keep the amplitude reading calibrated.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 300 MHz	120 kHz	Biconical Antenna
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna
1 GHz to 40 GHz	1 MHz	Horn Antenna

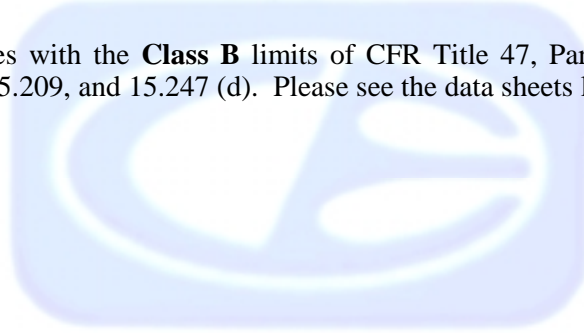
The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT by the Radiated Emission Manual Test software. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

Radiated Emissions (Spurious and Harmonics) Test (con't)

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 3 meter test distance to obtain the final data.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.247 (d). Please see the data sheets located in Appendix E.



8.2 6 dB Bandwidth

The 6 dB bandwidth was measured using the EMI Receiver. The bandwidth was measured using a direct connection from the RF out on the EUT. The resolution bandwidth was 100 kHz and the video bandwidth was 300 kHz.

Test Results:

This test was previously performed. Please see test report number: **B00309A1**.

8.3 Peak Output Power

The Peak Output Power was taken using the power meter and power sensor. The EUT was directly connected to the power sensor, which was directly connected to the power meter. The Peak Output Power was then taken.

Test Results:

This test was previously performed. Please see test report number: **B00309A1**.

8.4 RF Antenna Conducted Test

The RF antenna conducted test was taken using the EMI Receiver. The RF antenna conducted test was measured using a direct connection from the RF out on the EUT into the input of the analyzer. The resolution bandwidth was 100 kHz, and the video bandwidth 300 kHz. The spans were wide enough to include all the harmonics and emissions that were produced by the intentional radiator.

Test Results:

This test was previously performed. Please see test report number: **B00309A1**.

8.5 Spectral Density Output

The spectral density output was measured using the EMI Receiver. The spectral density output was measured using a direct connection from the RF out on the EUT into the input of the EMI Receiver. The resolution bandwidth was 3 kHz, and the video bandwidth was 10 kHz. The highest 1.5 MHz of the signal was used as the frequency span with the sweep rate being 1 second for every 3 kHz of span.

Test Results:

This test was previously performed. Please see test report number: **B00309A1**.

8.6 RF Band Edges

For the 2400 MHz to 2483.5 MHz band: The RF band edges were taken at the start of the restricted bands (2390 MHz and 2483.5 MHz). The readings taken were also averaged by the EMI Receiver. Data sheets are included in Appendix E, which compares the reading from the EMI Receiver to the spec limit.

For the 5725 MHz to 5850 MHz band: The RF band edges were taken at the edges of the ISM spectrum (5725 MHz when the EUT was on the low channel and 5850 MHz when the EUT was on the high channel) using the EMI Receiver. The RBW was set to 100 kHz and the VBW was set to 300 kHz. Plots of the fundamental were taken to ensure the amplitude at the band edges were at least 20 dB down from the peak of the fundamental emission.

Test Results:

For the 2400 MHz to 2483.5 MHz band: The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d). The RF power at the restricted bands closest to the band edges at 2390 MHz and 2483.5 MHz meet the limits of section 15.209. Please see the data sheets located in Appendix E.

For the 5725 MHz to 5850 MHz band: The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d). The RF power at the band edges at 5725 MHz and 5850 MHz meet the requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d). Please see the data sheets located in Appendix E.

9. CONCLUSIONS

The SDABG1 Model: WL430220 meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.247.





APPENDIX A

LABORATORY RECOGNITIONS

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

LABORATORY RECOGNITIONS

Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

Industry Canada



APPENDIX B

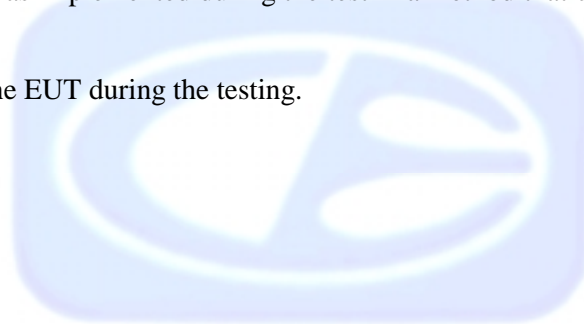
MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and Subpart C specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.





APPENDIX C

***ADDITIONAL MODELS COVERED
UNDER THIS REPORT***

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

SDABG1
Model: WL430220
S/N: N/A

There were no additional models covered under this report.





APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

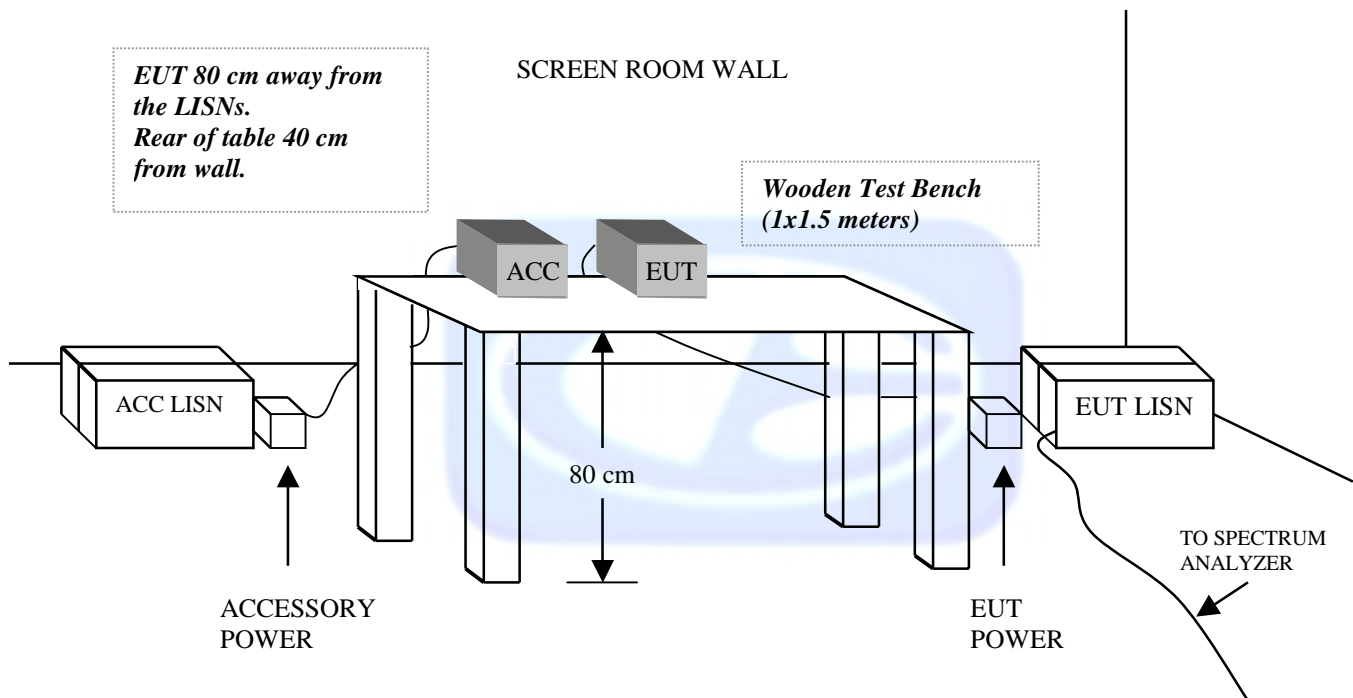
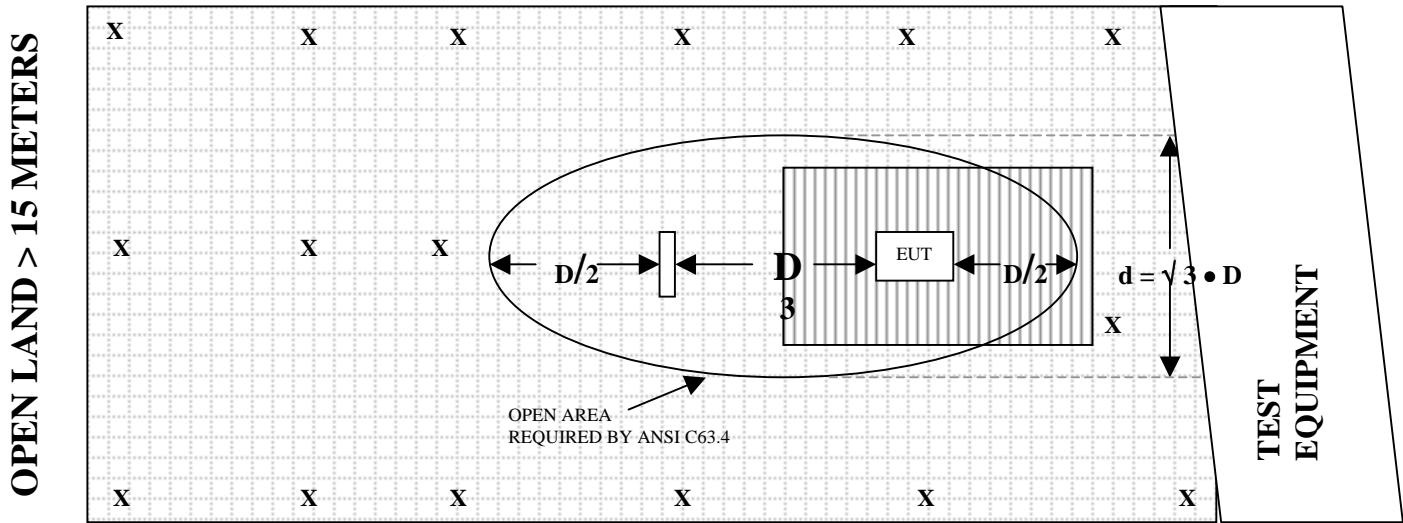




FIGURE 2: PLOT MAP AND LAYOUT OF 3 METER RADIATED SITE

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

- | | | | |
|----------|--------------------------|---|-----------------|
| X | = GROUND RODS |  | = GROUND SCREEN |
| D | = TEST DISTANCE (meters) |  | = WOOD COVER |



FRONT VIEW

DATAMAX / O'NEIL

SDABGI

MODEL: WL430220

FCC SUBPART B and C – RADIATED EMISSIONS – IN THE DENALI PRINTER

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400



REAR VIEW

DATAMAX / O'NEIL
SDABG1

MODEL: WL430220

FCC SUBPART B and C – RADIATED EMISSIONS – IN THE DENALI PRINTER

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
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19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400



FRONT VIEW

DATAMAX / O'NEIL

SDABG1

MODEL: WL430220

FCC SUBPART B and C – CONDUCTED EMISSIONS – IN THE DENALI PRINTER

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
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(949) 587-0400



REAR VIEW

DATAMAX / O'NEIL
SDABG1

MODEL: WL430220

FCC SUBPART B and C – CONDUCTED EMISSIONS – IN THE DENALI PRINTER

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

COM-POWER AB-900**BICONICAL ANTENNA**

S/N: 15250

CALIBRATION DATE: JUNE 18, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	12.8	100	11.5
35	11.3	120	13.6
40	10.8	140	12.5
45	10.1	160	13.2
50	11.0	180	15.5
60	11.1	200	16.9
70	7.3	250	16.4
80	7.5	275	18.7
90	8.3	300	19.5

COM-POWER AL-100**LOG PERIODIC ANTENNA**

S/N: 16252

CALIBRATION DATE: JUNE 9, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.7	700	19.5
400	16.1	800	20.9
500	16.9	900	20.8
600	20.1	1000	21.5

COM-POWER PA-103**PREAMPLIFIER**

S/N: 1582

CALIBRATION DATE: JANUARY 6, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	33.1	300	32.7
40	33.0	350	32.6
50	32.9	400	33.0
60	33.1	450	32.3
70	33.1	500	32.1
80	32.9	550	32.5
90	32.9	600	32.3
100	32.9	650	32.0
125	33.0	700	32.6
150	32.9	750	32.5
175	32.9	800	31.8
200	32.7	850	31.9
225	32.8	900	32.2
250	32.8	950	32.1
275	32.8	1000	32.1

COM POWER AH-118**HORN ANTENNA**

S/N: 071175

CALIBRATION DATE: MARCH 18, 2010

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	22.2	10.0	39.8
1.5	24.2	10.5	40.2
2.0	27.2	11.0	39.7
2.5	27.8	11.5	39.9
3.0	30.5	12.0	41.7
3.5	30.9	12.5	42.7
4.0	31.9	13.0	42.3
4.5	33.2	13.5	40.3
5.0	33.6	14.0	42.6
5.5	36.2	14.5	43.4
6.0	35.8	15.0	41.9
6.5	36.1	15.5	40.8
7.0	37.9	16.0	41.0
7.5	37.4	16.5	41.5
8.0	38.0	17.0	44.5
8.5	38.8	17.5	47.6
9.0	38.0	18.0	50.8
9.5	39.2		

COM-POWER PA-122**PREAMPLIFIER**

S/N: 181921

CALIBRATION DATE: MARCH 10, 2010

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	35.53	10.0	34.78
1.5	34.92	10.5	34.36
2.0	34.63	11.0	33.14
2.5	34.42	11.5	34.42
3.0	34.40	12.0	34.24
3.5	34.36	12.5	34.95
4.0	34.11	13.0	34.62
4.5	33.61	13.5	35.24
5.0	33.83	14.0	35.40
5.5	34.53	14.5	36.66
6.0	35.09	15.0	35.98
6.5	35.58	15.5	35.94
7.0	36.50	16.0	35.80
7.5	34.83	16.5	34.98
8.0	34.08	17.0	35.00
8.5	33.57	17.5	34.25
9.0	34.68	18.0	33.51
9.5	35.84	18.5	32.88

COM-POWER AL-130**LOOP ANTENNA**

S/N: 17089

CALIBRATION DATE: SEPTEMBER 29, 2008

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-41.57	9.93
0.01	-42.06	9.44
0.02	-42.43	9.07
0.05	-42.50	9.00
0.07	-42.10	9.40
0.1	-42.03	9.47
0.2	-44.50	7.00
0.3	-41.93	9.57
0.5	-41.90	9.60
0.7	-41.73	9.77
1	-41.23	10.27
2	-40.90	10.60
3	-41.20	10.30
4	-41.30	10.20
5	-40.70	10.80
10	-41.10	10.40
15	-42.17	9.33
20	-42.00	9.50
25	-42.20	9.30
30	-43.10	8.40

COM-POWER PA-840**PREAMPLIFIER****S/N: 711013****CALIBRATION DATE: MARCH 11, 2010**

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	24.36	29.0	24.83
18.5	24.54	29.5	23.52
19.0	24.06	30.0	21.73
19.5	23.71	30.5	22.34
20.0	23.42	31.0	20.06
20.5	22.87	31.5	20.02
21.0	22.60	32.0	18.11
21.5	21.08	32.5	19.35
22.0	22.13	33.0	17.50
22.5	22.42	33.5	17.49
23.0	22.85	34.0	17.48
23.5	22.85	34.5	18.57
24.0	23.82	35.0	18.64
24.5	22.33	35.5	18.82
25.0	24.09	36.0	19.14
25.5	23.20	36.5	18.58
26.0	23.18	37.0	15.07
26.5	23.50	37.5	17.29
27.0	24.25	38.0	20.82
27.5	23.58	38.5	19.96
28.0	23.81	39.0	20.06
28.5	23.76	39.5	21.41

COM-POWER AH826**HORN ANTENNA**

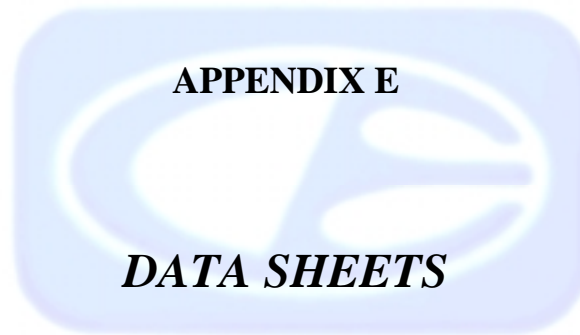
S/N: 71957

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	33.5	22.5	35.5
18.5	33.5	23.0	35.9
19.0	34.0	23.5	35.7
19.5	34.0	24.0	35.6
20.0	34.3	24.5	36.0
20.5	34.9	25.0	36.2
21.0	34.7	25.5	36.1
21.5	35.0	26.0	36.2
22.0	35.0	26.5	35.7

ANTENNA RESEARCH**HORN ANTENNA**

S/N: 1011

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
26.5	33.5	31.0	42.4
27.0	40.4	31.5	41.8
27.5	39.8	32.0	40.1
28.0	40.0	32.5	39.6
28.5	41.0	33.0	39.8
29.0	41.0	33.5	39.9
29.5	41.4	34.0	39.6
30.0	41.5	34.5	40.4
30.5	42.0	40.0	39.6



RADIATED EMISSIONS

DATA SHEETS

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 b Mode Power Level = 20
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4824	54.38	V	74	-19.62	Peak	1.35	165	
4824	44.95	V	54	-9.05	Avg	1.35	165	
7236	47.78	V	74	-26.22	Peak	1.25	155	
7236	36.83	V	54	-17.17	Avg	1.25	155	
9648	50.15	V	--	--	Peak	1.35	175	Not in Restricted Band
9648	37.41	V	--	--	Avg	1.35	175	Not in Restricted Band
12060								No Emission
12060								Detected
14472								No Emission
14472								Detected
16884								No Emission
16884								Detected
19296								No Emission
19296								Detected
21708								No Emission
21708								Detected
24120								No Emission
24120								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 b Mode Power Level = 20
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4824	54.42	V	74	-19.58	Peak	1.25	135	
4824	44.55	V	54	-9.45	Avg	1.25	135	
7236	49.24	V	74	-24.76	Peak	1.35	270	
7236	40.02	V	54	-13.98	Avg	1.35	270	
9648	49.68	V	--	--	Peak	1.75	225	Not in Restricted Band
9648	37.49	V	--	--	Avg	1.75	225	Not in Restricted Band
12060								No Emission
12060								Detected
14472								No Emission
14472								Detected
16884								No Emission
16884								Detected
19296								No Emission
19296								Detected
21708								No Emission
21708								Detected
24120								No Emission
24120								Detected

FCC 15.247

 Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

 Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 b Mode Power Level = 20
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4824	52.12	H	74	-21.88	Peak	1.25	135	
4824	40.82	H	54	-13.18	Avg	1.25	135	
7236	54.99	H	74	-19.01	Peak	1.25	135	
7236	47.63	H	54	-6.37	Avg	1.25	135	
9648	50.21	H	--	--	Peak	1.25	155	Not in Restricted Band
9648	41.26	H	--	--	Avg	1.25	155	Not in Restricted Band
12060								No Emission
12060								Detected
14472								No Emission
14472								Detected
16884								No Emission
16884								Detected
19296								No Emission
19296								Detected
21708								No Emission
21708								Detected
24120								No Emission
24120								Detected

FCC 15.247

 Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

 Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 b Mode Power Level = 20
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4824	55.17	H	74	-18.83	Peak	1.25	135	
4824	45.43	H	54	-8.57	Avg	1.25	135	
7236	50.21	H	74	-23.79	Peak	1.25	135	
7236	36.89	H	54	-17.11	Avg	1.25	135	
9648	50.59	H	--	--	Peak	1.35	165	Not in Restricted Band
9648	37.44	H	--	--	Avg	1.35	165	Not in Restricted Band
12060								No Emission
12060								Detected
14472								No Emission
14472								Detected
16884								No Emission
16884								Detected
19296								No Emission
19296								Detected
21708								No Emission
21708								Detected
24120								No Emission
24120								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 6 - 802.11 b Mode Power Level = 20
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4874	53.02	V	74	-20.98	Peak	1	180	
4874	41.09	V	54	-12.91	Avg	1	180	
7311	55.04	V	74	-18.96	Peak	1.25	135	
7311	42.63	V	54	-11.37	Avg	1.25	135	
9748	58.08	V	--	--	Peak	1.25	135	Not in Restricted Band
9748	45.67	V	--	--	Avg	1.25	135	Not in Restricted Band
12185								No Emission
12185								Detected
14622								No Emission
14622								Detected
17059								No Emission
17059								Detected
19496								No Emission
19496								Detected
21933								No Emission
21933								Detected
22001								No Emission
22001								Detected
24370								No Emission
24370								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 6 - 802.11 b Mode Power Level = 20
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4874	53.95	V	74	-20.05	Peak	1.25	135	
4874	44.14	V	54	-9.86	Avg	1.25	135	
7311	55.27	V	74	-18.73	Peak	1.25	135	
7311	42.76	V	54	-11.24	Avg	1.25	135	
9748	46.41	V	--	--	Peak	1.25	155	Not in Restricted Band
9748	34.15	V	--	--	Avg	1.25	155	Not in Restricted Band
12185								No Emission
12185								Detected
14622								No Emission
14622								Detected
17059								No Emission
17059								Detected
19496								No Emission
19496								Detected
21933								No Emission
21933								Detected
22001								No Emission
22001								Detected
24370								No Emission
24370								Detected

FCC 15.247

 Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

 Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 6 - 802.11 b Mode Power Level = 20
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4874	55.56	H	74	-18.44	Peak	1.25	155	
4874	47.02	H	54	-6.98	Avg	1.25	155	
7311	51.36	H	74	-22.64	Peak	1.25	155	
7311	43.71	H	54	-10.29	Avg	1.25	155	
9748	46.57	H	--	--	Peak	1.25	225	Not in Restricted Band
9748	33.94	H	--	--	Avg	1.25	225	Not in Restricted Band
12185								No Emission
12185								Detected
14622								No Emission
14622								Detected
17059								No Emission
17059								Detected
19496								No Emission
19496								Detected
21933								No Emission
21933								Detected
22001								No Emission
22001								Detected
24370								No Emission
24370								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 6 - 802.11 b Mode Power Level = 20
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4874	53.88	H	74	-20.12	Peak	1.25	315	
4874	44.52	H	54	-9.48	Avg	1.25	315	
7311	44.61	H	74	-29.39	Peak	1.35	225	
7311	31.87	H	54	-22.13	Avg	1.35	225	
9748	47.06	H	--	--	Peak	1.25	235	Not in Restricted Band
9748	35.35	H	--	--	Avg	1.25	235	Not in Restricted Band
12185								No Emission
12185								Detected
14622								No Emission
14622								Detected
17059								No Emission
17059								Detected
19496								No Emission
19496								Detected
21933								No Emission
21933								Detected
22001								No Emission
22001								Detected
24370								No Emission
24370								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/19/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 11 - 802.11 b Mode Power Level = 20
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4924	56.03	V	74	-17.97	Peak	1.25	135	
4924	45.82	V	54	-8.18	Avg	1.25	135	
7386	47.68	V	74	-26.32	Peak	1.35	155	
7386	36.78	V	54	-17.22	Avg	1.35	155	
9848	50.75	V	--	--	Peak	1.25	135	Not in Restricted Band
9848	38.24	V	--	--	Avg	1.25	135	Not in Restricted Band
12310								No Emission
12310								Detected
14772								No Emission
14772								Detected
17234								No Emission
17234								Detected
19696								No Emission
19696								Detected
22158								No Emission
22158								Detected
24620								No Emission
24620								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/19/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 11 - 802.11 b Mode Power Level = 20
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4924	53.92	V	74	-20.08	Peak	1.25	165	
4924	42.01	V	54	-11.99	Avg	1.25	165	
7386	53.61	V	74	-20.39	Peak	1.35	225	
7386	47.58	V	54	-6.42	Avg	1.35	225	
9848	49.92	V	--	--	Peak	1.25	135	Not in Restricted Band
9848	39.52	V	--	--	Avg	1.25	135	Not in Restricted Band
12310								No Emission
12310								Detected
14772								No Emission
14772								Detected
17234								No Emission
17234								Detected
19696								No Emission
19696								Detected
22158								No Emission
22158								Detected
24620								No Emission
24620								Detected

FCC 15.247

 Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

 Date: 08/19/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 11 - 802.11 b Mode Power Level = 20
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4924	49.06	H	74	-24.94	Peak	1.25	135	
4924	36.33	H	54	-17.67	Avg	1.25	135	
7386	50.22	H	74	-23.78	Peak	1.25	135	
7386	38.18	H	54	-15.82	Avg	1.25	135	
9848	49.91	H	--	--	Peak	1.25	135	Not in Restricted Band
9848	38.21	H	--	--	Avg	1.25	135	Not in Restricted Band
12310								No Emission
12310								Detected
14772								No Emission
14772								Detected
17234								No Emission
17234								Detected
19696								No Emission
19696								Detected
22158								No Emission
22158								Detected
24620								No Emission
24620								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/19/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 11 - 802.11 b Mode Power Level = 20
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4924	55.04	H	74	-18.96	Peak	1.25	165	
4924	45.01	H	54	-8.99	Avg	1.25	165	
7386	47.63	H	74	-26.37	Peak	1.25	135	
7386	36.29	H	54	-17.71	Avg	1.25	135	
9848	51.01	H	--	--	Peak	1.35	165	Not in Restricted Band
9848	38.21	H	--	--	Avg	1.35	165	Not in Restricted Band
12310								No Emission
12310								Detected
14772								No Emission
14772								Detected
17234								No Emission
17234								Detected
19696								No Emission
19696								Detected
22158								No Emission
22158								Detected
24620								No Emission
24620								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 g Mode Power Level = 14
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4824	49.65	V	74	-24.35	Peak	1.25	135	
4824	36.12	V	54	-17.88	Avg	1.25	135	
7236	47.21	V	74	-26.79	Peak	1.55	135	
7236	36.81	V	54	-17.19	Avg	1.55	135	
9648	49.28	V	--	--	Peak	1.25	165	Not in Restricted Band
9648	37.33	V	--	--	Avg	1.25	165	Not in Restricted Band
12060								No Emission
12060								Detected
14472								No Emission
14472								Detected
16884								No Emission
16884								Detected
19296								No Emission
19296								Detected
21708								No Emission
21708								Detected
24120								No Emission
24120								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 g Mode Power Level = 14
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4824	46.79	V	74	-27.21	Peak	1.25	45	
4824	33.47	V	54	-20.53	Avg	1.25	45	
7236	49.96	V	74	-24.04	Peak	1.35	135	
7236	37.73	V	54	-16.27	Avg	1.35	135	
9648	49.83	V	--	--	Peak	1.45	155	Not in Restricted Band
9648	37.33	V	--	--	Avg	1.45	155	Not in Restricted Band
12060								No Emission
12060								Detected
14472								No Emission
14472								Detected
16884								No Emission
16884								Detected
19296								No Emission
19296								Detected
21708								No Emission
21708								Detected
24120								No Emission
24120								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 g Mode Power Level = 14
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4824	54.45	H	74	-19.55	Peak	1.25	135	
4824	42.17	H	54	-11.83	Avg	1.25	135	
7236	56.51	H	74	-17.49	Peak	2.25	225	
7236	41.05	H	54	-12.95	Avg	2.25	225	
9648	50.06	H	--	--	Peak	1.25	135	Not in Restricted Band
9648	37.51	H	--	--	Avg	1.25	135	Not in Restricted Band
12060								No Emission
12060								Detected
14472								No Emission
14472								Detected
16884								No Emission
16884								Detected
19296								No Emission
19296								Detected
21708								No Emission
21708								Detected
24120								No Emission
24120								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/18/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 g Mode Power Level = 14
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4824	51.09	H	74	-22.91	Peak	1.25	155	
4824	38.97	H	54	-15.03	Avg	1.25	155	
7236	48.81	H	74	-25.19	Peak	1.25	315	
7236	36.95	H	54	-17.05	Avg	1.25	315	
9648	49.62	H	--	--	Peak	1.25	155	Not in Restricted Band
9648	37.34	H	--	--	Avg	1.25	155	Not in Restricted Band
12060								No Emission
12060								Detected
14472								No Emission
14472								Detected
16884								No Emission
16884								Detected
19296								No Emission
19296								Detected
21708								No Emission
21708								Detected
24120								No Emission
24120								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 6 - 802.11 g Mode Power Level = 14
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4874	51.18	V	74	-22.82	Peak	1.25	135	
4874	39.03	V	54	-14.97	Avg	1.25	135	
7311	48.78	V	74	-25.22	Peak	1.35	155	
7311	36.79	V	54	-17.21	Avg	1.35	155	
9748	49.39	V	--	--	Peak	1.25	165	Not in Restricted Band
9748	37.66	V	--	--	Avg	1.25	165	Not in Restricted Band
12185								No Emission
12185								Detected
14622								No Emission
14622								Detected
17059								No Emission
17059								Detected
19496								No Emission
19496								Detected
21933								No Emission
21933								Detected
22001								No Emission
22001								Detected
24370								No Emission
24370								Detected

FCC 15.247

 Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

 Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 6 - 802.11 g Mode Power Level = 14
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4874	53.18	V	74	-20.82	Peak	1.25	135	
4874	39.41	V	54	-14.59	Avg	1.25	135	
7311	49.59	V	74	-24.41	Peak	1.35	155	
7311	36.67	V	54	-17.33	Avg	1.35	155	
9748	49.33	V	--	--	Peak	1.25	165	Not in Restricted Band
9748	37.58	V	--	--	Avg	1.25	165	Not in Restricted Band
12185								No Emission
12185								Detected
14622								No Emission
14622								Detected
17059								No Emission
17059								Detected
19496								No Emission
19496								Detected
21933								No Emission
21933								Detected
22001								No Emission
22001								Detected
24370								No Emission
24370								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 6 - 802.11 g Mode Power Level = 14
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4874	55.14	H	74	-18.86	Peak	1.25	135	
4874	39.31	H	54	-14.69	Avg	1.25	135	
7311	44.43	H	74	-29.57	Peak	1.25	155	
7311	31.84	H	54	-22.16	Avg	1.25	155	
9748	47.37	H	--	--	Peak	1.35	165	Not in Restricted Band
9748	35.35	H	--	--	Avg	1.35	165	Not in Restricted Band
12185								No Emission
12185								Detected
14622								No Emission
14622								Detected
17059								No Emission
17059								Detected
19496								No Emission
19496								Detected
21933								No Emission
21933								Detected
22001								No Emission
22001								Detected
24370								No Emission
24370								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 6 - 802.11 g Mode Power Level = 14
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4874	51.32	H	74	-22.68	Peak	1.25	165	
4874	39.11	H	54	-14.89	Avg	1.25	165	
7311	49.38	H	74	-24.62	Peak	1.25	135	
7311	36.45	H	54	-17.55	Avg	1.25	135	
9748	49.27	H	--	--	Peak	1.35	165	Not in Restricted Band
9748	37.62	H	--	--	Avg	1.35	165	Not in Restricted Band
12185								No Emission
12185								Detected
14622								No Emission
14622								Detected
17059								No Emission
17059								Detected
19496								No Emission
19496								Detected
21933								No Emission
21933								Detected
22001								No Emission
22001								Detected
24370								No Emission
24370								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 11 - 802.11 g Mode Power Level = 14
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4924	52.58	V	74	-21.42	Peak	1.25	180	
4924	39.11	V	54	-14.89	Avg	1.25	180	
7386	48.42	V	74	-25.58	Peak	1.35	165	
7386	36.18	V	54	-17.82	Avg	1.35	165	
9848	49.31	V	--	--	Peak	1.25	175	Not in Restricted Band
9848	38.15	V	--	--	Avg	1.25	175	Not in Restricted Band
12310								No Emission
12310								Detected
14772								No Emission
14772								Detected
17234								No Emission
17234								Detected
19696								No Emission
19696								Detected
22158								No Emission
22158								Detected
24620								No Emission
24620								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 11 - 802.11 g Mode Power Level = 14
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4924	56.71	V	74	-17.29	Peak	1.25	315	
4924	43.64	V	54	-10.36	Avg	1.25	315	
7386	45.94	V	74	-28.06	Peak	1.25	135	
7386	34.57	V	54	-19.43	Avg	1.25	135	
9848	46.69	V	--	--	Peak	1.35	155	Not in Restricted Band
9848	35.31	V	--	--	Avg	1.35	155	Not in Restricted Band
12310								No Emission
12310								Detected
14772								No Emission
14772								Detected
17234								No Emission
17234								Detected
19696								No Emission
19696								Detected
22158								No Emission
22158								Detected
24620								No Emission
24620								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 11 - 802.11 g Mode Power Level = 14
Transmit Mode - Desktop Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4924	52.19	H	74	-21.81	Peak	1.25	135	
4924	39.14	H	54	-14.86	Avg	1.25	135	
7386	50.58	H	74	-23.42	Peak	1.25	135	
7386	37.18	H	54	-16.82	Avg	1.25	135	
9848	49.97	H	--	--	Peak	1.25	155	Not in Restricted Band
9848	38.15	H	--	--	Avg	1.25	155	Not in Restricted Band
12310								No Emission
12310								Detected
14772								No Emission
14772								Detected
17234								No Emission
17234								Detected
19696								No Emission
19696								Detected
22158								No Emission
22158								Detected
24620								No Emission
24620								Detected

FCC 15.247

Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 11 - 802.11 g Mode Power Level = 14
Transmit Mode - Belt Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
4924	51.57	H	74	-22.43	Peak	1.25	155	
4924	39.24	H	54	-14.76	Avg	1.25	155	
7386	49.07	H	74	-24.93	Peak	1.25	135	
7386	36.56	H	54	-17.44	Avg	1.25	135	
9848	49.76	H	--	--	Peak	1.35	175	Not in Restricted Band
9848	38.17	H	--	--	Avg	1.35	175	Not in Restricted Band
12310								No Emission
12310								Detected
14772								No Emission
14772								Detected
17234								No Emission
17234								Detected
19696								No Emission
19696								Detected
22158								No Emission
22158								Detected
24620								No Emission
24620								Detected

Test Location : Compatible Electronics
 Customer : Datamax / O'Neil
 Manufacturer : Datamax / O'Neil
 Eut name : Denali
 Model : RLP4
 Serial # : N/A
 Specification : FCC B
 Distance correction factor (20 * log(test/spec) : 0.00
 Test Mode : Scan Type: Radiated Emissions Qualification
 Scan Range: 30 MHz to 1 GHz (Vertical and Horizontal)
 Transmit Mode - In the Denali Printer
 Test Engineer: Kyle Fujimoto

Page : 1/1
 Date : 8/23/2010
 Time : 9:48:33
 Lab : A
 Test Distance : 3.0 Meters

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Li mi t = L dBuV/m	Delta R-L dB
1H	39.698	49.50	1.00	10.83	33.00	28.32	40.00	-11.68
2H	44.613	52.90	1.10	10.15	32.95	31.20	40.00	-8.80
3H	48.660	47.20	1.18	10.77	32.91	26.23	40.00	-13.77
4H	81.460	46.60	1.40	7.62	32.90	22.72	40.00	-17.28
5H	123.583	52.20	1.78	13.39	32.99	34.37	43.50	-9.13
6H	124.437Qp	59.59	1.79	13.34	33.00	41.72	43.50	-1.78
7H	124.440	60.10	1.79	13.34	33.00	42.23	43.50	-1.27
8H	125.020	57.90	1.80	13.31	33.00	40.01	43.50	-3.49
9H	131.692	48.70	1.83	12.94	32.97	30.49	43.50	-13.01
10H	133.220	52.90	1.83	12.85	32.97	34.62	43.50	-8.88
11V	168.060	41.00	2.05	14.16	32.90	24.31	43.50	-19.19
12V	182.678	35.60	2.16	15.70	32.84	20.62	43.50	-22.88
13H	182.678	39.00	2.16	15.70	32.84	24.02	43.50	-19.48
14H	297.620	38.90	2.79	19.43	32.71	28.41	46.00	-17.59
15H	299.800	44.60	2.80	19.49	32.70	34.19	46.00	-11.81
16H	394.400	50.20	3.37	15.93	32.96	36.54	46.00	-9.46
17V	396.660	44.80	3.38	16.00	32.97	31.21	46.00	-14.79
18H	430.700	33.10	3.46	16.37	32.56	20.37	46.00	-25.63
19V	470.460	41.80	3.63	16.68	32.22	29.89	46.00	-16.11
20H	480.071	49.20	3.68	16.75	32.18	37.46	46.00	-8.54
21H	525.302	47.90	4.01	17.77	32.31	37.37	46.00	-8.63
22H	525.942	52.50	4.01	17.79	32.31	41.99	46.00	-4.01
23H	538.897	50.20	4.11	18.21	32.41	40.11	46.00	-5.89
24H	571.979	42.30	4.25	19.26	32.41	33.40	46.00	-12.60
25H	580.954	42.30	4.26	19.53	32.37	33.72	46.00	-12.28
26V	630.420	38.50	4.42	19.91	32.11	30.72	46.00	-15.28
27H	664.702	44.40	4.62	19.70	32.18	36.54	46.00	-9.46

Test Location : Compatible Electronics
 Customer : Datamax / O'Neil
 Manufacturer : Datamax / O'Neil
 Eut name : Denali
 Model : RLP4
 Serial # : N/A
 Specification : FCC B
 Distance correction factor (20 * log(test/spec) : 0.00
 Test Mode : Scan Type: Radiated Emissions Qualification
 Scan Range: 30 MHz to 1 GHz (Vertical and Horizontal)
 Receive Mode - In the Denali Printer
 Test Engineer: Kyle Fujimoto

Page : 1/1
 Date : 8/23/2010
 Time : 13:32:25
 Lab : A
 Test Distance : 3.0 Meters

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Li mi t = L dBuV/m	Del ta R- L dB
1V	70.200	55.50	1.30	7.30	33.10	31.01	40.00	-8.99
2H	74.890	49.50	1.35	7.40	33.00	25.25	40.00	-14.75
3H	108.730	39.40	1.55	12.46	32.94	20.48	43.50	-23.02
4V	122.540	57.30	1.76	13.45	32.99	39.52	43.50	-3.98
5H	125.440	46.40	1.80	13.28	33.00	28.49	43.50	-15.01
6H	133.530	48.10	1.84	12.84	32.96	29.81	43.50	-13.69
7H	156.270	42.40	1.95	13.08	32.90	24.53	43.50	-18.97
8V	165.700	40.30	2.03	13.88	32.90	23.31	43.50	-20.19
9V	217.380	36.60	2.44	16.71	32.77	22.98	46.00	-23.02
10H	264.890	44.90	2.62	17.80	32.80	32.52	46.00	-13.48
11H	271.530	36.30	2.67	18.39	32.80	24.57	46.00	-21.43
12V	300.890	42.40	2.81	12.74	32.70	25.24	46.00	-20.76
13H	305.800	50.40	2.84	12.93	32.69	33.48	46.00	-12.52
14H	337.700	43.10	3.03	14.10	32.62	27.61	46.00	-18.39
15H	373.460	50.80	3.25	15.29	32.79	36.54	46.00	-9.46
16V	394.340	44.50	3.37	15.93	32.96	30.84	46.00	-15.16
17V	397.750	43.80	3.39	16.03	32.98	30.24	46.00	-15.76
18H	400.350	49.90	3.40	16.10	32.99	36.41	46.00	-9.59
19H	403.200	48.00	3.41	16.13	32.95	34.58	46.00	-11.42
20H	460.940	47.30	3.57	16.61	32.25	35.22	46.00	-10.78
21H	525.540	52.30	4.01	17.77	32.31	41.77	46.00	-4.23
22H	525.800	52.90	4.01	17.78	32.31	42.38	46.00	-3.62
23V	527.350	46.50	4.02	17.83	32.32	36.03	46.00	-9.97
24H	656.720	48.60	4.56	19.75	32.08	40.82	46.00	-5.18
25V	656.800	43.90	4.56	19.75	32.08	36.12	46.00	-9.88
26H	703.590	33.50	4.92	19.55	32.59	25.38	46.00	-20.62
27V	734.650	38.50	5.11	20.01	32.53	31.09	46.00	-14.91
28H	738.550	49.30	5.13	20.06	32.52	41.97	46.00	-4.03
29H	761.300	38.70	5.20	20.38	32.34	31.94	46.00	-14.06
30H	852.490	41.80	5.61	20.85	31.92	36.34	46.00	-9.66
31H	919.680	41.20	5.82	20.80	32.16	35.66	46.00	-10.34

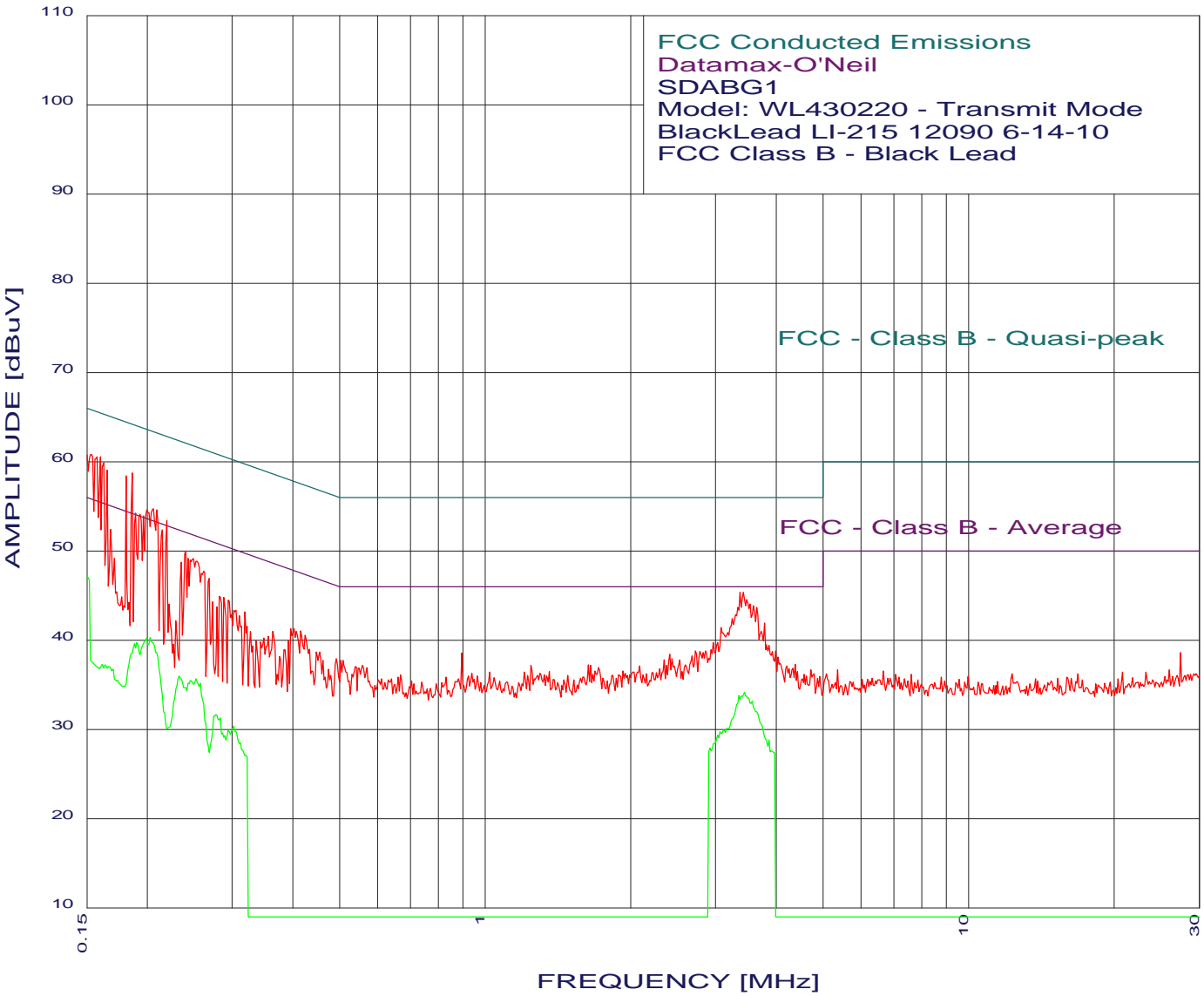
CONDUCTED EMISSIONS

DATA SHEETS



8/23/2010 9:03:31

EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Average



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Datamax-O'Neil
SDABG1
Model: WL430220 - Transmit Mode
FCC Class B - Black Lead
TEST ENGINEER : Kyle Fujimoto

47 highest peaks above -50.00 dB of FCC - Class B - Average limit line

Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.160	60.52	55.47	5.05*
2	0.153	60.81	55.82	4.99*
3	0.157	60.51	55.60	4.92*
4	0.186	58.72	54.19	4.52*
5	0.162	59.82	55.34	4.49*
6	0.181	58.43	54.46	3.97*
7	0.165	59.03	55.20	3.83*
8	0.210	54.61	53.23	1.39*
9	0.206	54.71	53.35	1.35*
10	0.200	54.60	53.62	0.98*
11	0.220	53.43	52.83	0.60*
12	0.194	54.11	53.88	0.23*
13	0.189	54.21	54.06	0.16*
14	0.197	53.90	53.75	0.15*
15	3.419	45.34	46.00	-0.66*
16	3.365	45.34	46.00	-0.66*
17	0.215	52.32	53.00	-0.68*
18	0.240	49.95	52.08	-2.13*
19	3.585	43.86	46.00	-2.14*
20	3.644	43.66	46.00	-2.34*
21	0.168	52.44	55.07	-2.64*
22	0.250	49.07	51.77	-2.70*
23	0.243	49.16	52.00	-2.84*
24	0.235	48.75	52.25	-3.51*
25	0.262	47.74	51.38	-3.64*
26	3.781	41.88	46.00	-4.12*
27	0.269	46.92	51.15	-4.24*
28	3.075	41.41	46.00	-4.59*
29	0.171	49.14	54.90	-5.76*
30	0.288	44.77	50.58	-5.82*
31	0.282	44.88	50.76	-5.88*
32	0.294	44.45	50.41	-5.96*
33	2.963	39.70	46.00	-6.30
34	0.415	41.06	47.55	-6.49
35	0.318	43.16	49.75	-6.59
36	0.396	41.28	47.95	-6.67
37	0.273	44.31	51.02	-6.72*
38	0.305	43.34	50.10	-6.76*
39	0.424	40.55	47.37	-6.82
40	0.279	43.69	50.85	-7.16*
41	2.722	38.80	46.00	-7.20
42	2.855	38.80	46.00	-7.20
43	3.987	38.80	46.00	-7.20
44	0.310	42.75	49.97	-7.22
45	0.895	38.56	46.00	-7.44
46	2.410	38.38	46.00	-7.62
47	0.363	40.96	48.65	-7.68

*Please See the Average Peaks on the Next Page and on the Plot

Datamax-O'Neil
SDABG1
Model: WL430220 - Transmit Mode
FCC Class B - Black Lead
TEST ENGINEER : Kyle Fujimoto

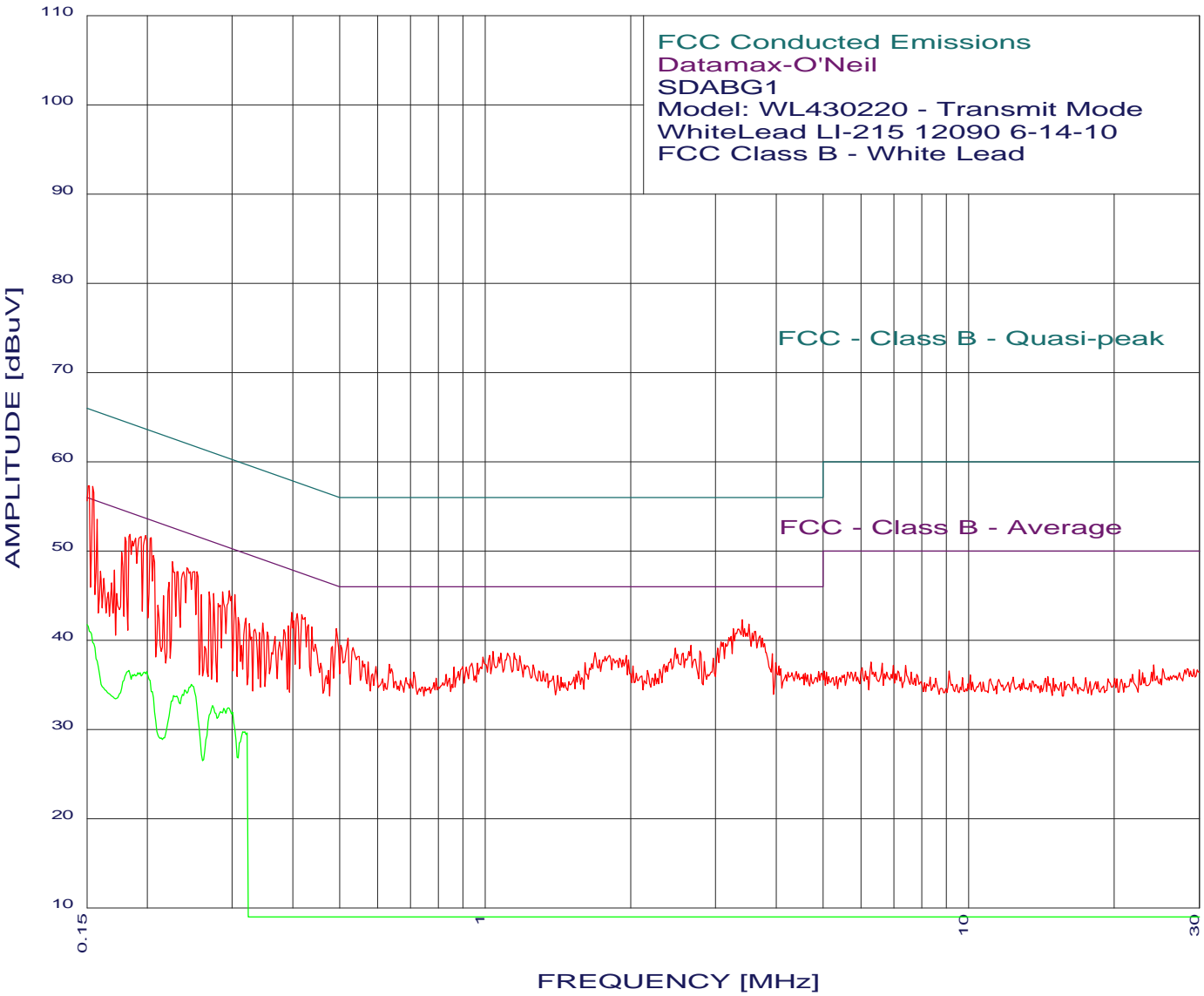
39 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 0.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	3.438	34.13	46.00	-11.87
2	3.346	33.78	46.00	-12.22
3	3.474	33.75	46.00	-12.25
4	3.383	33.70	46.00	-12.30
5	3.511	33.48	46.00	-12.52
6	3.565	33.18	46.00	-12.82
7	0.203	40.29	53.49	-13.19
8	0.200	40.23	53.62	-13.39
9	3.644	31.98	46.00	-14.02
10	0.190	39.73	54.01	-14.28
11	0.188	39.62	54.10	-14.49
12	3.175	30.10	46.00	-15.90
13	0.252	35.66	51.68	-16.02
14	3.107	29.91	46.00	-16.09
15	3.059	29.71	46.00	-16.29
16	0.258	35.16	51.51	-16.35
17	0.233	35.98	52.34	-16.36
18	0.246	35.47	51.90	-16.43
19	3.027	29.31	46.00	-16.69
20	0.243	35.13	52.00	-16.87
21	3.862	28.81	46.00	-17.19
22	0.240	34.64	52.08	-17.44
23	2.979	28.50	46.00	-17.50
24	0.163	37.22	55.29	-18.08
25	0.166	37.06	55.16	-18.10
26	2.916	27.90	46.00	-18.10
27	0.162	37.27	55.38	-18.11
28	0.170	36.73	54.98	-18.26
29	3.903	27.60	46.00	-18.40
30	0.277	31.64	50.89	-19.25
31	0.174	35.49	54.77	-19.27
32	0.283	31.29	50.72	-19.43
33	0.179	34.83	54.54	-19.71
34	0.302	30.37	50.19	-19.82
35	0.294	29.92	50.41	-20.49
36	0.286	29.57	50.63	-21.06
37	0.290	29.29	50.54	-21.25
38	0.312	28.46	49.92	-21.46
39	0.320	27.12	49.71	-22.59



8/23/2010 9:20:38

EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Average



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Datamax-O'Neil
 SDABG1
 Model: WL430220 - Transmit Mode
 FCC Class B - White Lead
 TEST ENGINEER : Kyle Fujimoto

 47 highest peaks above -50.00 dB of FCC - Class B - Average limit line

Peak criteria : 1.00 dB, Curve : Peak
 Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB)

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.158	60.32	55.56	4.76*
2	0.155	60.31	55.73	4.58*
3	0.162	59.52	55.34	4.19*
4	0.165	58.33	55.20	3.13*
5	0.208	54.59	53.27	1.33*
6	0.213	54.19	53.09	1.10*
7	0.200	54.30	53.62	0.68*
8	0.190	54.61	54.01	0.60*
9	0.193	54.31	53.93	0.38*
10	0.185	54.42	54.24	0.18*
11	0.181	53.93	54.46	-0.53*
12	0.217	52.29	52.91	-0.63*
13	3.383	44.70	46.00	-1.30*
14	0.222	50.59	52.74	-2.15*
15	3.328	43.80	46.00	-2.20*
16	3.547	43.80	46.00	-2.20*
17	3.474	43.60	46.00	-2.40*
18	0.238	49.67	52.17	-2.49*
19	0.242	49.37	52.04	-2.67*
20	0.244	49.17	51.95	-2.78*
21	0.234	49.28	52.30	-3.02*
22	0.258	48.38	51.51	-3.13*
23	0.251	48.57	51.73	-3.16*
24	0.265	47.59	51.29	-3.70*
25	0.169	51.14	55.03	-3.89*
26	0.269	47.19	51.15	-3.96*
27	0.178	50.53	54.59	-4.06*
28	0.275	46.20	50.98	-4.78*
29	0.282	44.81	50.76	-5.95*
30	0.433	41.14	47.19	-6.05
31	0.294	44.23	50.41	-6.18*
32	0.288	44.32	50.58	-6.26*
33	0.424	40.85	47.37	-6.52
34	0.310	43.41	49.97	-6.56
35	0.419	40.85	47.46	-6.61
36	0.398	41.27	47.90	-6.63
37	0.406	41.06	47.72	-6.66
38	0.228	45.78	52.52	-6.74*
39	0.389	41.17	48.08	-6.90
40	0.438	39.84	47.11	-7.26
41	2.322	38.70	46.00	-7.30
42	0.383	40.78	48.21	-7.43
43	2.900	38.48	46.00	-7.52
44	2.766	38.45	46.00	-7.55
45	2.679	38.34	46.00	-7.66
46	0.489	38.51	46.18	-7.68
47	0.375	40.68	48.38	-7.70

 *Please See the Average Readings on the Next Page and on the Plot

Datamax-O'Neil
SDABG1
Model: WL430220 - Transmit Mode
FCC Class B - White Lead
TEST ENGINEER : Kyle Fujimoto

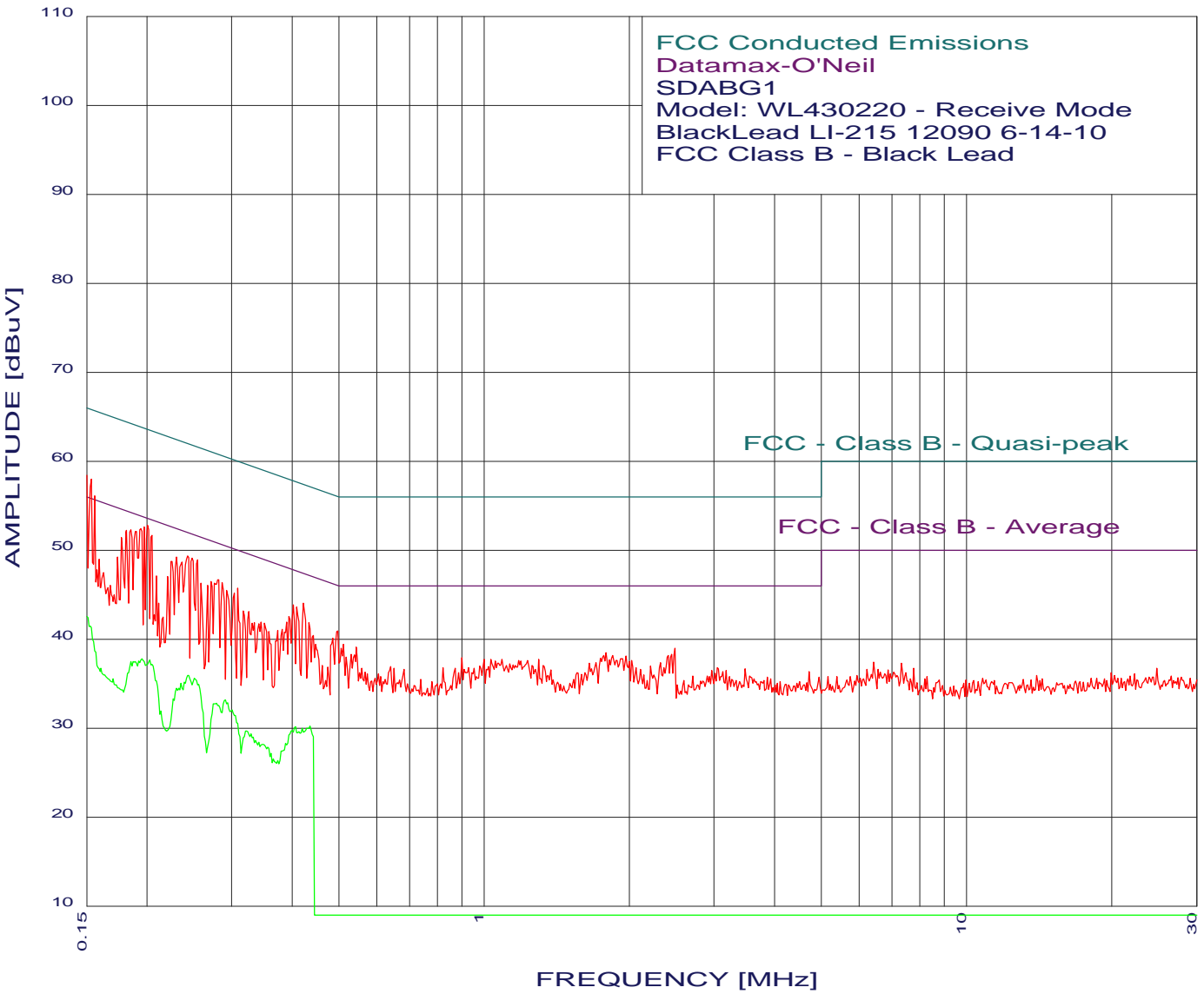
43 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 0.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.152	47.41	55.91	-8.50
2	0.153	47.23	55.82	-8.59
3	0.157	46.64	55.64	-9.00
4	0.161	43.79	55.43	-11.64
5	0.204	40.68	53.44	-12.77
6	0.202	40.54	53.53	-12.99
7	0.199	40.49	53.67	-13.17
8	0.208	39.77	53.27	-13.49
9	3.438	32.47	46.00	-13.53
10	0.190	40.26	54.01	-13.75
11	3.383	32.24	46.00	-13.76
12	0.187	40.21	54.15	-13.94
13	3.474	32.03	46.00	-13.97
14	3.511	32.00	46.00	-14.00
15	0.194	39.79	53.88	-14.09
16	3.311	31.90	46.00	-14.10
17	3.547	31.81	46.00	-14.19
18	3.644	31.03	46.00	-14.97
19	0.183	39.23	54.33	-15.09
20	3.226	30.39	46.00	-15.61
21	0.254	35.97	51.64	-15.67
22	0.256	35.72	51.55	-15.84
23	0.250	35.69	51.77	-16.08
24	0.247	35.71	51.86	-16.15
25	0.237	36.06	52.21	-16.16
26	0.234	35.89	52.30	-16.41
27	0.232	35.84	52.39	-16.55
28	0.182	37.66	54.41	-16.75
29	3.175	29.22	46.00	-16.78
30	0.272	33.85	51.07	-17.22
31	0.240	34.83	52.08	-17.25
32	0.267	33.64	51.20	-17.56
33	0.170	36.64	54.98	-18.35
34	0.172	36.06	54.86	-18.80
35	0.176	35.77	54.68	-18.90
36	0.300	30.76	50.23	-19.47
37	0.290	30.40	50.54	-20.14
38	0.286	30.33	50.63	-20.30
39	0.305	29.74	50.10	-20.36
40	0.312	28.58	49.92	-21.34
41	0.222	30.92	52.74	-21.82
42	0.315	27.93	49.84	-21.90
43	0.322	27.44	49.66	-22.23



8/23/2010 9:28:33

EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Average



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
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Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Datamax-O'Neil
 SDABG1
 Model: WL430220 - Receive Mode
 FCC Class B - Black Lead
 TEST ENGINEER : Kyle Fujimoto

 48 highest peaks above -50.00 dB of FCC - Class B - Average limit line

Peak criteria : 1.00 dB, Curve : Peak
 Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB)

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.153	57.99	55.82	2.17*
2	0.156	56.09	55.69	0.40*
3	0.201	52.77	53.58	-0.81*
4	0.198	52.58	53.71	-1.13*
5	0.195	52.39	53.84	-1.45*
6	0.205	51.64	53.40	-1.75*
7	0.185	52.31	54.24	-1.93*
8	0.189	52.10	54.06	-1.96*
9	0.182	52.22	54.41	-2.19*
10	0.243	49.35	52.00	-2.65*
11	0.248	49.12	51.82	-2.70*
12	0.255	48.88	51.60	-2.71*
13	0.177	51.43	54.63	-3.20*
14	0.230	49.21	52.43	-3.22*
15	0.421	44.01	47.42	-3.41*
16	0.237	48.68	52.21	-3.53*
17	0.224	48.74	52.65	-3.91*
18	0.402	43.81	47.81	-4.00*
19	0.409	43.58	47.68	-4.10*
20	0.280	46.65	50.81	-4.16*
21	0.309	45.70	50.01	-4.31*
22	0.286	46.32	50.63	-4.31*
23	0.272	46.50	51.07	-4.57*
24	0.293	45.49	50.45	-4.96*
25	0.304	45.13	50.14	-5.01*
26	0.497	40.92	46.05	-5.13*
27	0.267	46.02	51.20	-5.18*
28	0.259	46.26	51.47	-5.20*
29	0.433	41.85	47.19	-5.34*
30	0.393	42.56	47.99	-5.43*
31	0.174	49.24	54.77	-5.53*
32	0.221	47.06	52.78	-5.72*
33	0.210	47.12	53.23	-6.10*
34	0.486	40.07	46.23	-6.16
35	0.389	41.88	48.08	-6.20*
36	0.325	43.12	49.57	-6.46*
37	0.159	48.98	55.51	-6.54*
38	0.510	39.40	46.00	-6.60
39	0.442	40.40	47.02	-6.62
40	0.317	43.16	49.79	-6.63*
41	0.544	39.10	46.00	-6.90
42	2.488	38.97	46.00	-7.03
43	0.381	41.12	48.25	-7.13*
44	0.350	41.78	48.95	-7.17*
45	0.345	41.91	49.09	-7.18*
46	0.373	40.96	48.43	-7.46*
47	0.334	41.87	49.35	-7.48*

 *Please See the Average Readings on the Next Page and on the Plot

Datamax-O'Neil
SDABG1
Model: WL430220 - Receive Mode
FCC Class B - Black Lead
TEST ENGINEER : Kyle Fujimoto

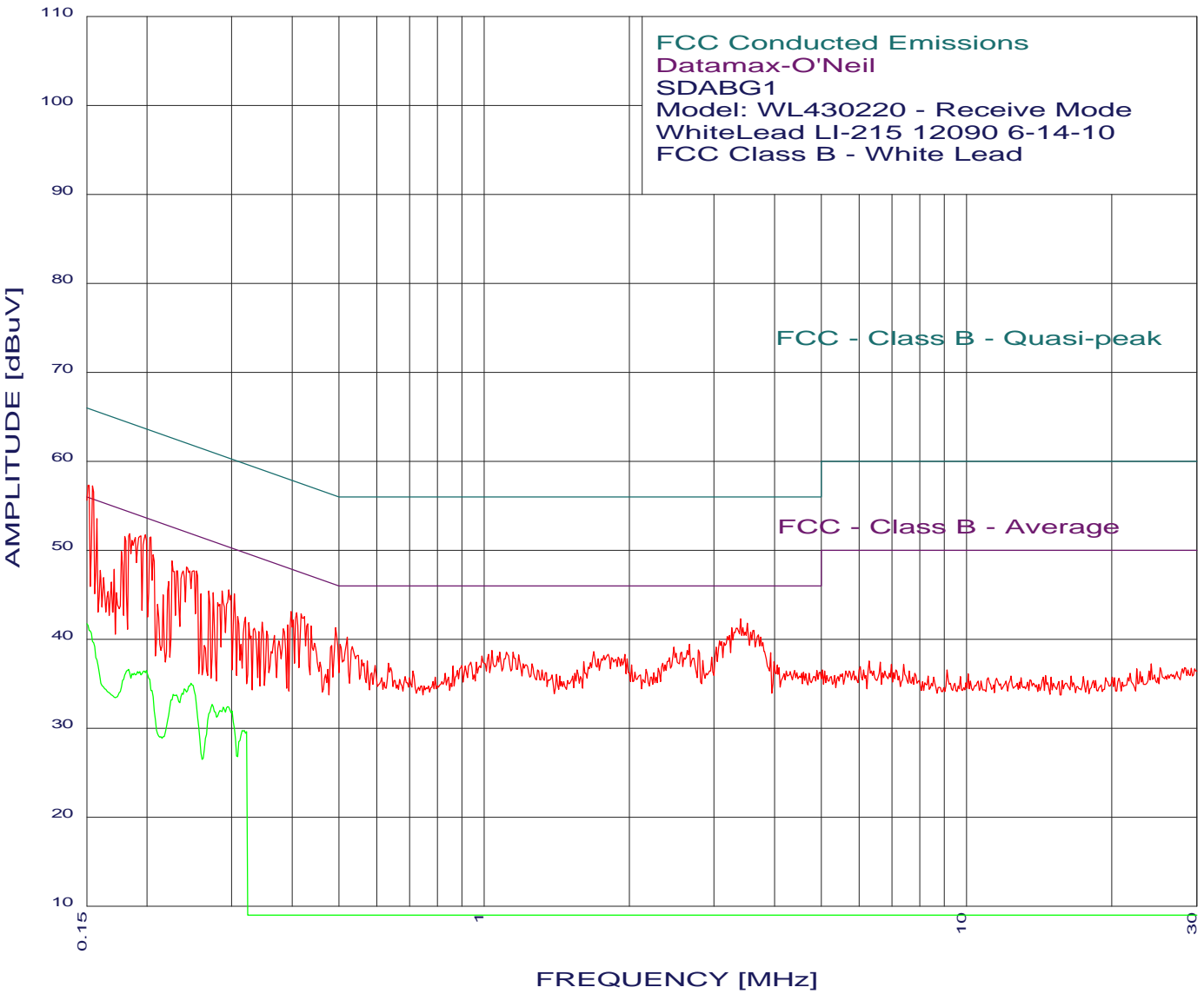
42 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 0.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.152	41.45	55.86	-14.41
2	0.203	37.69	53.49	-15.80
3	0.196	37.78	53.80	-16.01
4	0.244	35.91	51.95	-16.04
5	0.251	35.59	51.73	-16.13
6	0.205	37.16	53.40	-16.23
7	0.193	37.52	53.93	-16.41
8	0.189	37.48	54.06	-16.58
9	0.256	34.93	51.55	-16.63
10	0.187	37.48	54.15	-16.66
11	0.185	37.45	54.24	-16.79
12	0.239	35.18	52.12	-16.95
13	0.435	30.20	47.15	-16.95
14	0.235	35.04	52.25	-17.22
15	0.431	29.99	47.24	-17.25
16	0.291	33.18	50.49	-17.31
17	0.419	29.98	47.46	-17.48
18	0.406	30.16	47.72	-17.56
19	0.294	32.82	50.41	-17.59
20	0.233	34.45	52.34	-17.89
21	0.230	34.46	52.43	-17.97
22	0.413	29.59	47.59	-18.00
23	0.279	32.81	50.85	-18.04
24	0.400	29.69	47.86	-18.16
25	0.300	32.04	50.23	-18.20
26	0.275	32.74	50.98	-18.24
27	0.161	36.74	55.43	-18.69
28	0.305	31.41	50.10	-18.69
29	0.227	33.31	52.57	-19.26
30	0.170	35.53	54.94	-19.41
31	0.387	28.29	48.12	-19.83
32	0.320	29.66	49.71	-20.04
33	0.329	29.32	49.48	-20.17
34	0.332	28.99	49.39	-20.41
35	0.336	28.60	49.31	-20.71
36	0.341	28.38	49.18	-20.79
37	0.347	28.16	49.04	-20.88
38	0.356	27.86	48.82	-20.96
39	0.214	31.89	53.05	-21.16
40	0.362	27.15	48.69	-21.54
41	0.373	26.35	48.43	-22.07
42	0.365	26.52	48.61	-22.09



8/23/2010 9:20:38

EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Average



Brea Division
114 Olinda Drive
Brea, CA 92823
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Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
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19121 El Toro Road
Silverado, CA 92676
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Lake Forest Division
20621 Pascal Way
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Datamax-O'Neil
 SDABG1
 Model: WL430220 - Receive Mode
 FCC Class B - White Lead
 TEST ENGINEER : Kyle Fujimoto

 48 highest peaks above -50.00 dB of FCC - Class B - Average limit line

Peak criteria : 1.00 dB, Curve : Peak
 Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB)

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.154	57.21	55.78	1.43*
2	0.152	57.30	55.91	1.39*
3	0.204	51.50	53.44	-1.95*
4	0.199	51.70	53.67	-1.96*
5	0.157	53.51	55.60	-2.08*
6	0.195	51.61	53.84	-2.23*
7	0.184	51.82	54.28	-2.46*
8	0.189	51.41	54.06	-2.64*
9	0.180	51.53	54.50	-2.97*
10	3.401	42.30	46.00	-3.70
11	0.226	48.78	52.61	-3.83*
12	0.206	49.50	53.35	-3.86*
13	0.242	48.07	52.04	-3.97*
14	0.254	47.67	51.64	-3.97*
15	0.251	47.67	51.73	-4.06*
16	3.511	41.80	46.00	-4.20
17	0.238	47.67	52.17	-4.49*
18	0.417	42.86	47.50	-4.65
19	3.260	41.30	46.00	-4.70
20	0.409	42.96	47.68	-4.72
21	0.230	47.68	52.43	-4.75*
22	0.177	49.83	54.63	-4.80*
23	0.398	43.07	47.90	-4.83
24	0.492	41.31	46.14	-4.83
25	0.296	45.53	50.36	-4.84*
26	3.605	41.00	46.00	-5.00
27	0.304	45.12	50.14	-5.02*
28	0.286	45.42	50.63	-5.21*
29	0.431	41.75	47.24	-5.49
30	3.702	40.50	46.00	-5.50
31	3.226	40.40	46.00	-5.60
32	0.438	41.44	47.11	-5.66
33	0.269	45.39	51.15	-5.76*
34	0.521	40.23	46.00	-5.77
35	0.275	45.20	50.98	-5.78*
36	3.075	39.80	46.00	-6.20
37	0.222	46.49	52.74	-6.25
38	0.259	45.08	51.47	-6.39*
39	0.391	41.57	48.03	-6.46
40	2.665	39.43	46.00	-6.57
41	0.502	39.40	46.00	-6.60
42	0.280	44.11	50.81	-6.70*
43	0.532	39.15	46.00	-6.85
44	3.027	39.10	46.00	-6.90
45	2.475	39.10	46.00	-6.90
46	0.484	39.31	46.27	-6.96
47	0.383	41.18	48.21	-7.03

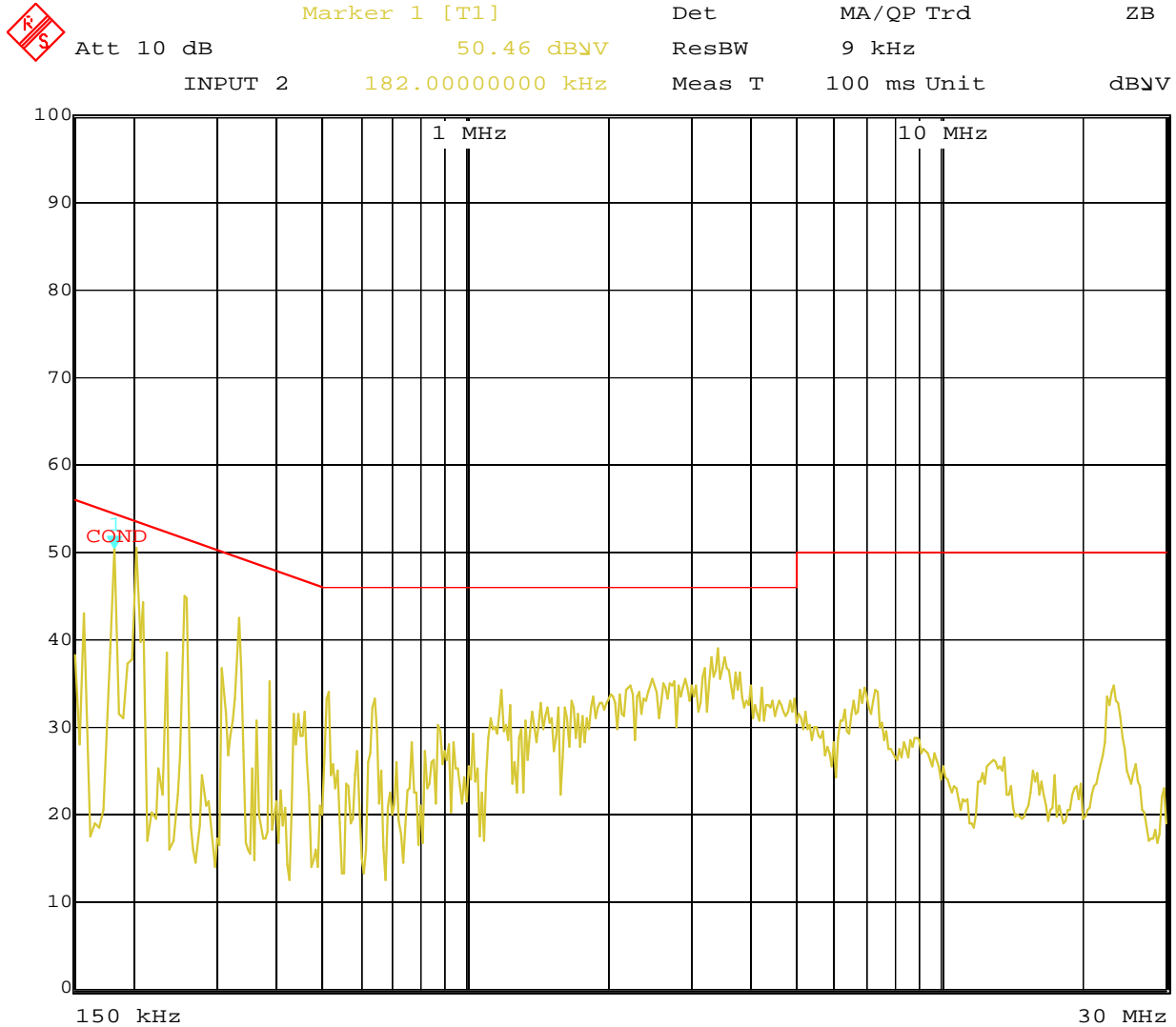
 *Please See the Average Readings on the Next Page and on the Plot

Datamax-O'Neil
SDABG1
Model: WL430220 - Receive Mode
FCC Class B - White Lead
TEST ENGINEER : Kyle Fujimoto

23 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 0.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.247	35.01	51.86	-16.85
2	0.200	36.46	53.62	-17.16
3	0.244	34.72	51.95	-17.23
4	0.198	36.40	53.71	-17.31
5	0.194	36.34	53.88	-17.54
6	0.192	36.34	53.97	-17.63
7	0.239	34.41	52.12	-17.71
8	0.183	36.60	54.33	-17.72
9	0.188	36.15	54.10	-17.96
10	0.294	32.43	50.41	-17.98
11	0.186	36.08	54.19	-18.12
12	0.288	32.36	50.58	-18.22
13	0.237	33.94	52.21	-18.28
14	0.300	31.91	50.23	-18.32
15	0.273	32.68	51.02	-18.35
16	0.230	33.73	52.43	-18.70
17	0.283	31.98	50.72	-18.73
18	0.227	33.80	52.57	-18.77
19	0.318	29.70	49.75	-20.05
20	0.322	29.58	49.66	-20.09
21	0.315	29.71	49.84	-20.12
22	0.216	29.03	52.96	-23.93
23	0.214	29.03	53.05	-24.02

FCC Class B Conducted Emissions
 Datamax / O'Neil
 SDABG1
 Model: WL430220 (802.11 a Mode)
 Black Lead
 Configuration: In the Denali Printer – Transmit Mode
 Tested By: Kyle Fujimoto



Date: 8.NOV.2010 09:25:28

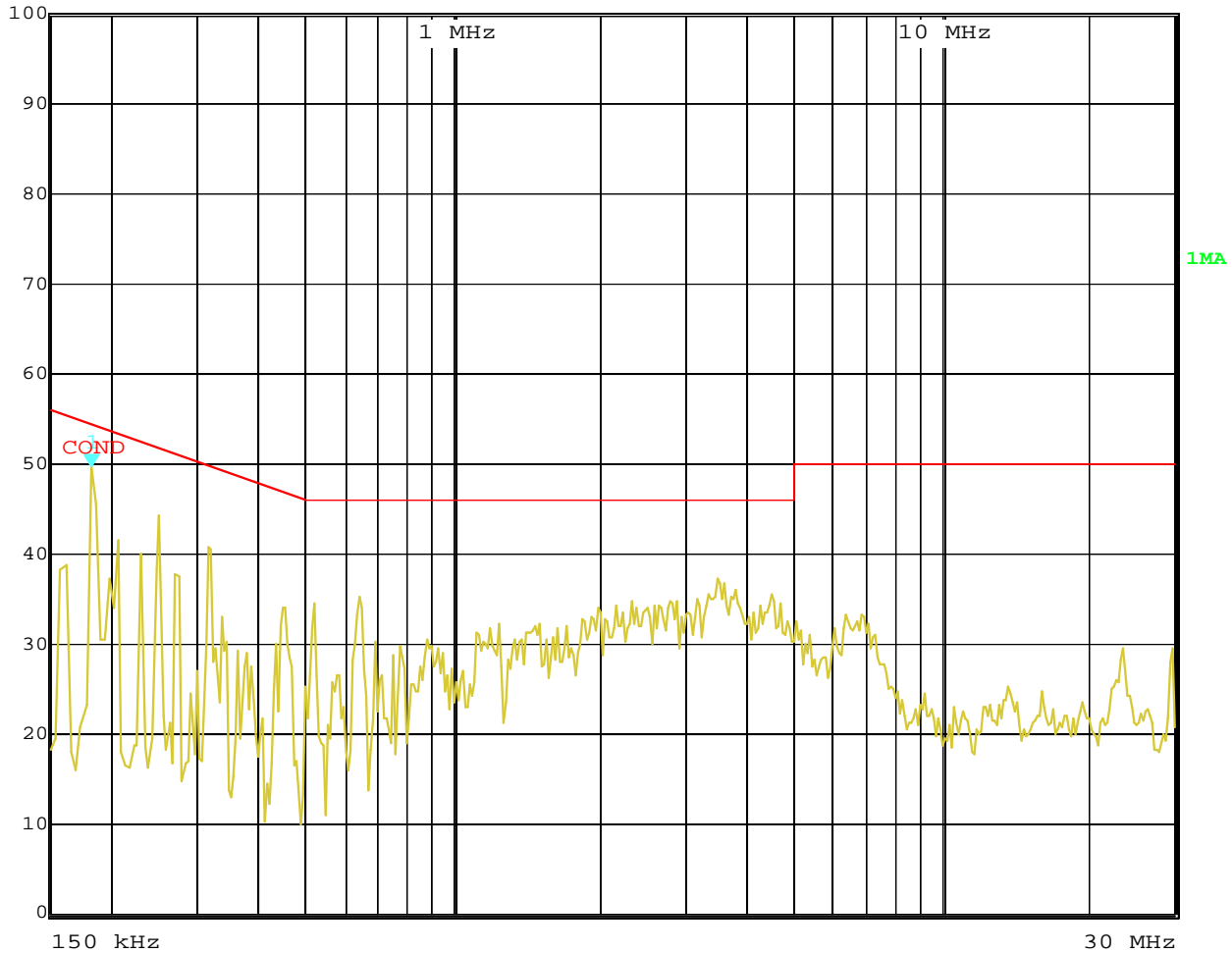
FCC Class B Conducted Emissions
 Datamax / O'Neil
 SDABG1
 Model: WL430220 (802.11 a Mode)
 Black Lead
 Configuration: In the Denali Printer – Transmit Mode
 Tested By: Kyle Fujimoto

EDIT PEAK LIST (Final Results)			
Trace1: COND		Trace2: ---	
Trace3: ---		Trace4: ---	
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Max Peak	202.0000 kHz	50.44	-3.08
1 Max Peak	182.0000 kHz	50.46	-3.93
1 Max Peak	254.0000 kHz	44.94	-6.68
1 Max Peak	330.0000 kHz	42.32	-7.12
1 Max Peak	3.4220 MHz	38.79	-7.20
1 Max Peak	3.5180 MHz	37.96	-8.03
1 Max Peak	3.2980 MHz	37.96	-8.04
1 Max Peak	3.5580 MHz	36.72	-9.27
1 Max Peak	3.2140 MHz	36.72	-9.27
1 Max Peak	3.4740 MHz	36.60	-9.39
1 Max Peak	3.5980 MHz	36.48	-9.51
1 Max Peak	3.3820 MHz	36.48	-9.51
1 Max Peak	3.2060 MHz	36.48	-9.51
1 Max Peak	3.3140 MHz	36.24	-9.75
1 Max Peak	3.7940 MHz	36.00	-9.99
1 Max Peak	3.7300 MHz	36.00	-9.99
1 Max Peak	3.1700 MHz	35.59	-10.40
1 Max Peak	2.9020 MHz	35.45	-10.54
1 Max Peak	2.4940 MHz	35.45	-10.54
1 Max Peak	3.1860 MHz	35.32	-10.67

Date: 8.NOV.2010 09:25:44

FCC Class B Conducted Emissions
 Datamax / O'Neil
 SDABG1
 Model: WL430220 (802.11 a Mode)
 White Lead
 Configuration: In the Denali Printer – Transmit Mode
 Tested By: Kyle Fujimoto

 Marker 1 [T1] Det MA/QP Trd ZW
 Att 10 dB 49.64 dBµV ResBW 9 kHz
 INPUT 2 182.0000000 kHz Meas T 100 ms Unit dBµV



Date: 8.NOV.2010 09:27:18

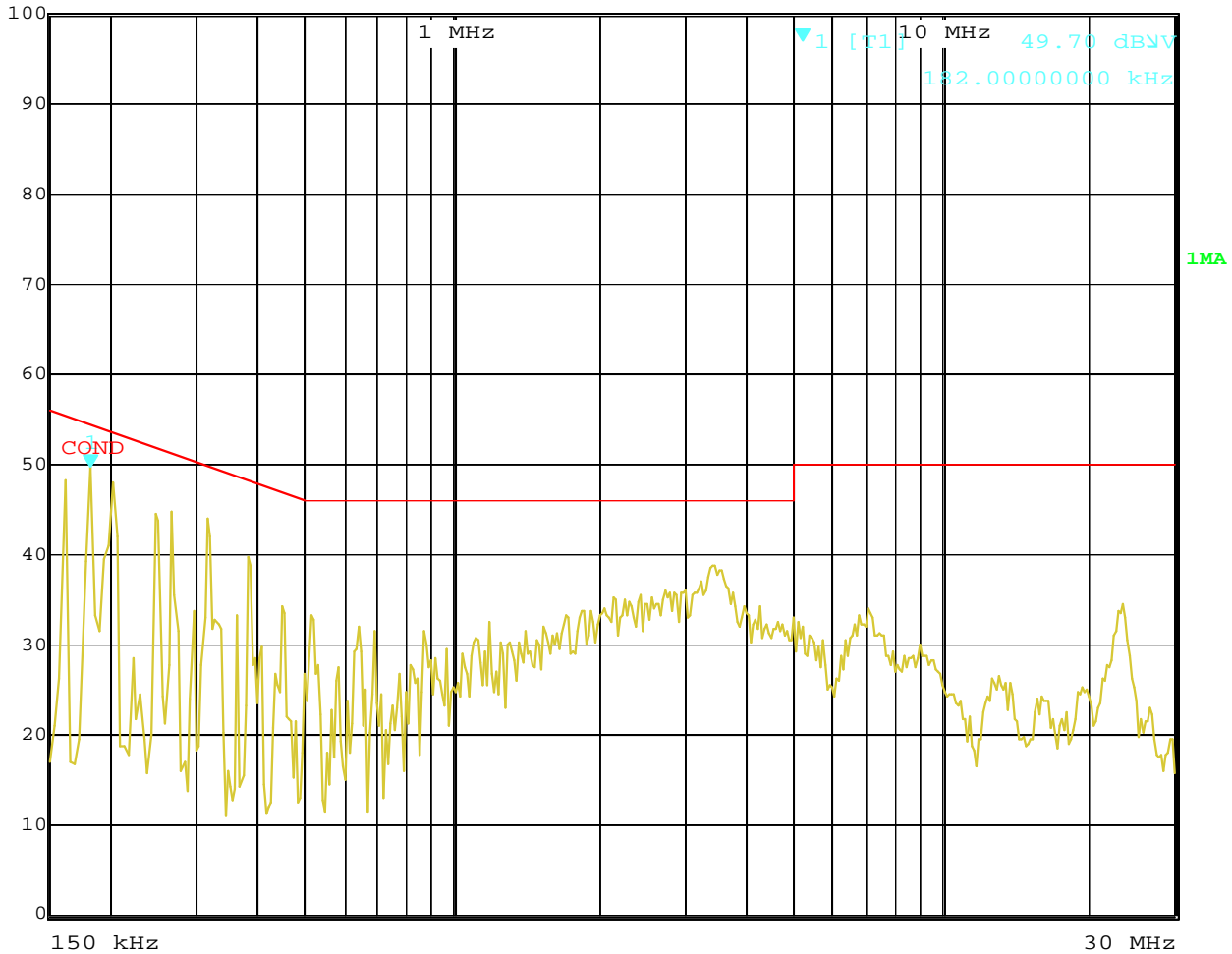
FCC Class B Conducted Emissions
 Datamax / O'Neil
 SDABG1
 Model: WL430220 (802.11 a Mode)
 White Lead
 Configuration: In the Denali Printer – Transmit Mode
 Tested By: Kyle Fujimoto

EDIT PEAK LIST (Final Results)			
Trace1: COND		Trace2: ---	
Trace3: ---		Trace4: ---	
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Max Peak	182.0000 kHz	49.64	-4.75
1 Max Peak	250.0000 kHz	44.15	-7.60
1 Max Peak	3.4860 MHz	37.22	-8.77
1 Max Peak	314.0000 kHz	40.73	-9.13
1 Max Peak	3.6100 MHz	36.74	-9.25
1 Max Peak	3.5300 MHz	36.62	-9.37
1 Max Peak	3.7900 MHz	35.87	-10.12
1 Max Peak	3.5860 MHz	35.60	-10.40
1 Max Peak	3.3340 MHz	35.46	-10.53
1 Max Peak	4.5020 MHz	35.33	-10.66
1 Max Peak	3.4380 MHz	35.19	-10.81
1 Max Peak	642.0000 kHz	35.17	-10.82
1 Max Peak	3.7020 MHz	35.05	-10.94
1 Max Peak	3.4220 MHz	34.92	-11.07
1 Max Peak	3.3940 MHz	34.92	-11.07
1 Max Peak	3.1740 MHz	34.92	-11.07
1 Max Peak	3.7620 MHz	34.79	-11.20
1 Max Peak	3.5740 MHz	34.79	-11.20
1 Max Peak	3.5220 MHz	34.79	-11.20
1 Max Peak	3.5940 MHz	34.66	-11.33

Date: 8.NOV.2010 09:27:36

FCC Class B Conducted Emissions
 Datamax / O'Neil
 SDABG1
 Model: WL430220 (802.11 a Mode)
 Black Lead
 Configuration: In the Denali Printer – Receive Mode
 Tested By: Kyle Fujimoto

 Marker 1 [T1] Det MA/QP Trd ZB
 Att 10 dB 49.70 dBµV ResBW 9 kHz
 INPUT 2 182.0000000 kHz Meas T 100 ms Unit dBµV



Date: 9.NOV.2010 10:22:27

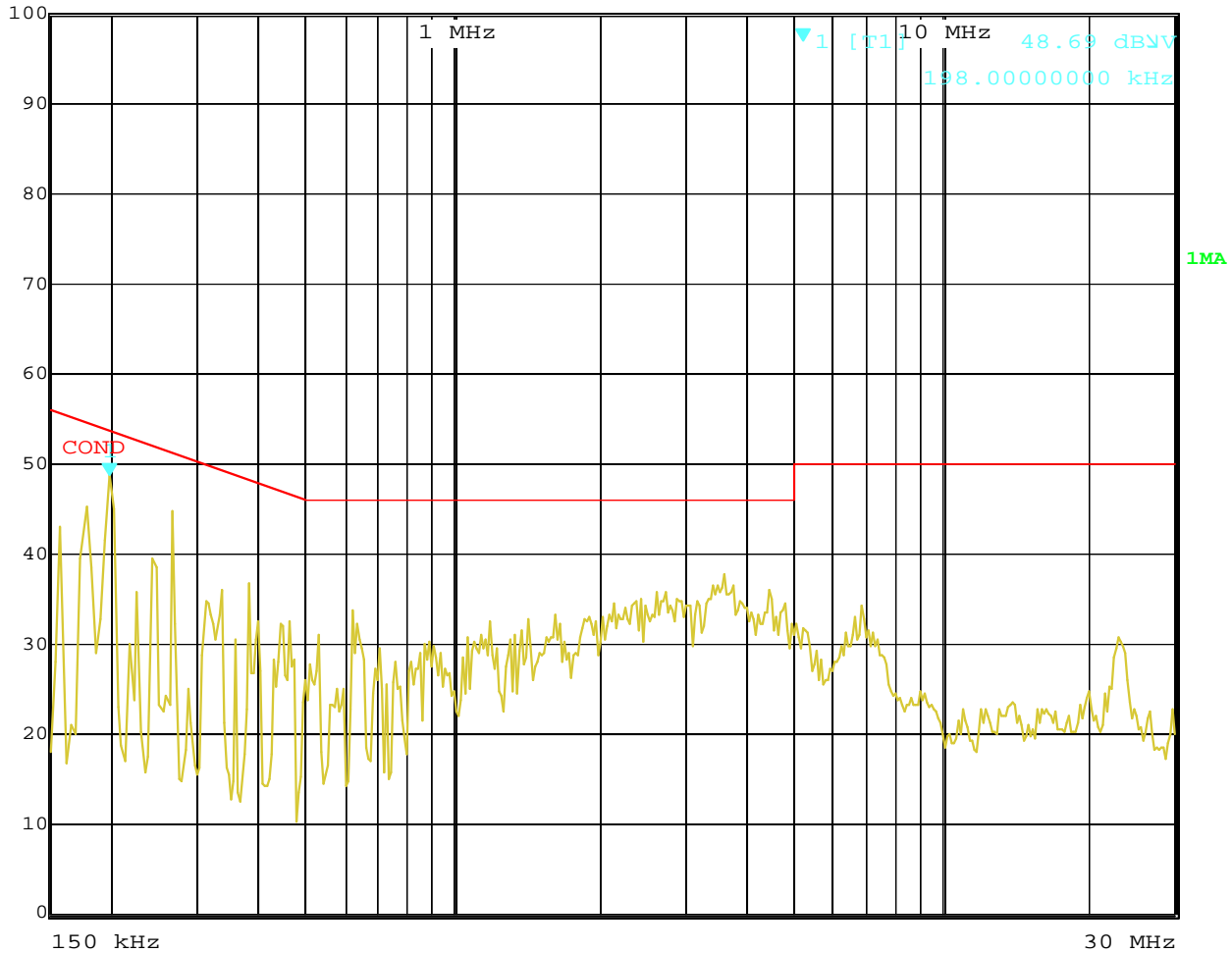
FCC Class B Conducted Emissions
 Datamax / O'Neil
 SDABG1
 Model: WL430220 (802.11 a Mode)
 Black Lead
 Configuration: In the Denali Printer – Receive Mode
 Tested By: Kyle Fujimoto

EDIT PEAK LIST (Final Results)			
Trace1: COND		Trace2: ---	
Trace3: ---		Trace4: ---	
TRACE	FREQUENCY	LEVEL dB μ V	DELTA LIMIT dB
1 Max Peak	182.0000 kHz	49.70	-4.69
1 Max Peak	202.0000 kHz	47.96	-5.55
1 Max Peak	314.0000 kHz	43.97	-5.88
1 Max Peak	266.0000 kHz	44.66	-6.57
1 Max Peak	162.0000 kHz	48.15	-7.20
1 Max Peak	3.4380 MHz	38.67	-7.32
1 Max Peak	3.4100 MHz	38.55	-7.44
1 Max Peak	246.0000 kHz	44.41	-7.47
1 Max Peak	3.3700 MHz	38.31	-7.68
1 Max Peak	3.5660 MHz	38.08	-7.91
1 Max Peak	3.5220 MHz	38.08	-7.91
1 Max Peak	3.5380 MHz	37.96	-8.03
1 Max Peak	3.4740 MHz	37.71	-8.28
1 Max Peak	378.0000 kHz	39.71	-8.60
1 Max Peak	3.3460 MHz	37.33	-8.66
1 Max Peak	3.5860 MHz	37.21	-8.78
1 Max Peak	3.2340 MHz	36.96	-9.03
1 Max Peak	3.6300 MHz	36.48	-9.51
1 Max Peak	3.6780 MHz	36.12	-9.87
1 Max Peak	3.3060 MHz	35.86	-10.13

Date: 9.NOV.2010 10:23:18

FCC Class B Conducted Emissions
 Datamax / O'Neil
 SDABG1
 Model: WL430220 (802.11 a Mode)
 White Lead
 Configuration: In the Denali Printer – Receive Mode
 Tested By: Kyle Fujimoto


 Marker 1 [T1] Det MA/QP Trd ZW
 Att 10 dB 48.69 dBµV ResBW 9 kHz
 INPUT 2 198.0000000 kHz Meas T 100 ms Unit dBµV

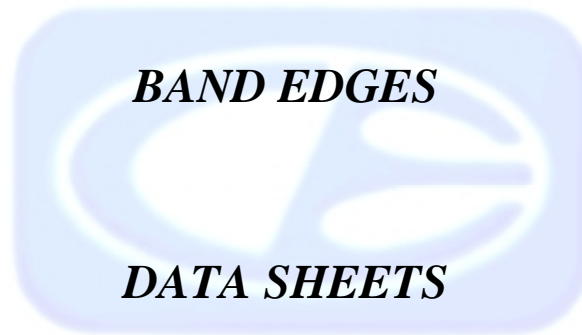


Date: 9.NOV.2010 10:25:27

FCC Class B Conducted Emissions
 Datamax / O'Neil
 SDABG1
 Model: WL430220 (802.11 a Mode)
 White Lead
 Configuration: In the Denali Printer – Receive Mode
 Tested By: Kyle Fujimoto

EDIT PEAK LIST (Final Results)			
Trace1: COND		Trace2: ---	
Trace3: ---		Trace4: ---	
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Max Peak	198.0000 kHz	48.68	-5.00
1 Max Peak	266.0000 kHz	44.54	-6.69
1 Max Peak	3.6020 MHz	37.60	-8.39
1 Max Peak	178.0000 kHz	45.21	-9.36
1 Max Peak	3.7740 MHz	36.26	-9.73
1 Max Peak	3.5020 MHz	36.26	-9.73
1 Max Peak	3.4820 MHz	36.26	-9.73
1 Max Peak	3.4060 MHz	36.26	-9.73
1 Max Peak	3.5660 MHz	36.14	-9.85
1 Max Peak	4.4740 MHz	35.87	-10.12
1 Max Peak	3.7340 MHz	35.60	-10.40
1 Max Peak	2.7340 MHz	35.59	-10.40
1 Max Peak	2.6100 MHz	35.59	-10.40
1 Max Peak	3.7140 MHz	35.46	-10.53
1 Max Peak	3.6540 MHz	35.46	-10.53
1 Max Peak	3.6980 MHz	35.32	-10.67
1 Max Peak	3.4580 MHz	35.32	-10.67
1 Max Peak	4.5180 MHz	34.93	-11.06
1 Max Peak	3.3660 MHz	34.92	-11.07
1 Max Peak	3.3300 MHz	34.92	-11.07

Date: 9.NOV.2010 10:25:44



FCC 15.247

 Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

 Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 b Mode Power Level = 20
Channel 6 - 802.11 b Mode Power Level = 20
Channel 11 - 802.11 b Mode Power Level = 20

Belt Axis (Worst Case)

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2412	105.02	V	--	--	Peak	1.25	45	Fundamental of Channel 1 @ 3 meters
2412	100.9	V	--	--	Avg	1.25	45	
2385.85	49.25	V	74	-24.75	Peak	1.25	45	No Marker Delta Method Method Used
2386.31	41.15	V	54	-12.85	Avg	1.25	45	
2437	105.54	V	--	--	Peak	1.25	45	Fundamental of Channel 6 @ 3 meters
2437	100.81	V	--	--	Avg	1.25	45	
2462	105.09	V	--	--	Peak	1.25	45	Fundamental of Channel 11 @ 3 meters
2462	100.69	V	--	--	Avg	1.25	45	
2487.81	48.94	V	74	-25.06	Peak	1.25	45	No Marker Delta Method Method Used
2487.81	38.32	V	54	-15.68	Avg	1.25	45	

FCC 15.247

 Datamax / O'Neil
 SDABG1
 Model: WL430220
 Configuration: In the Denali Printer

 Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

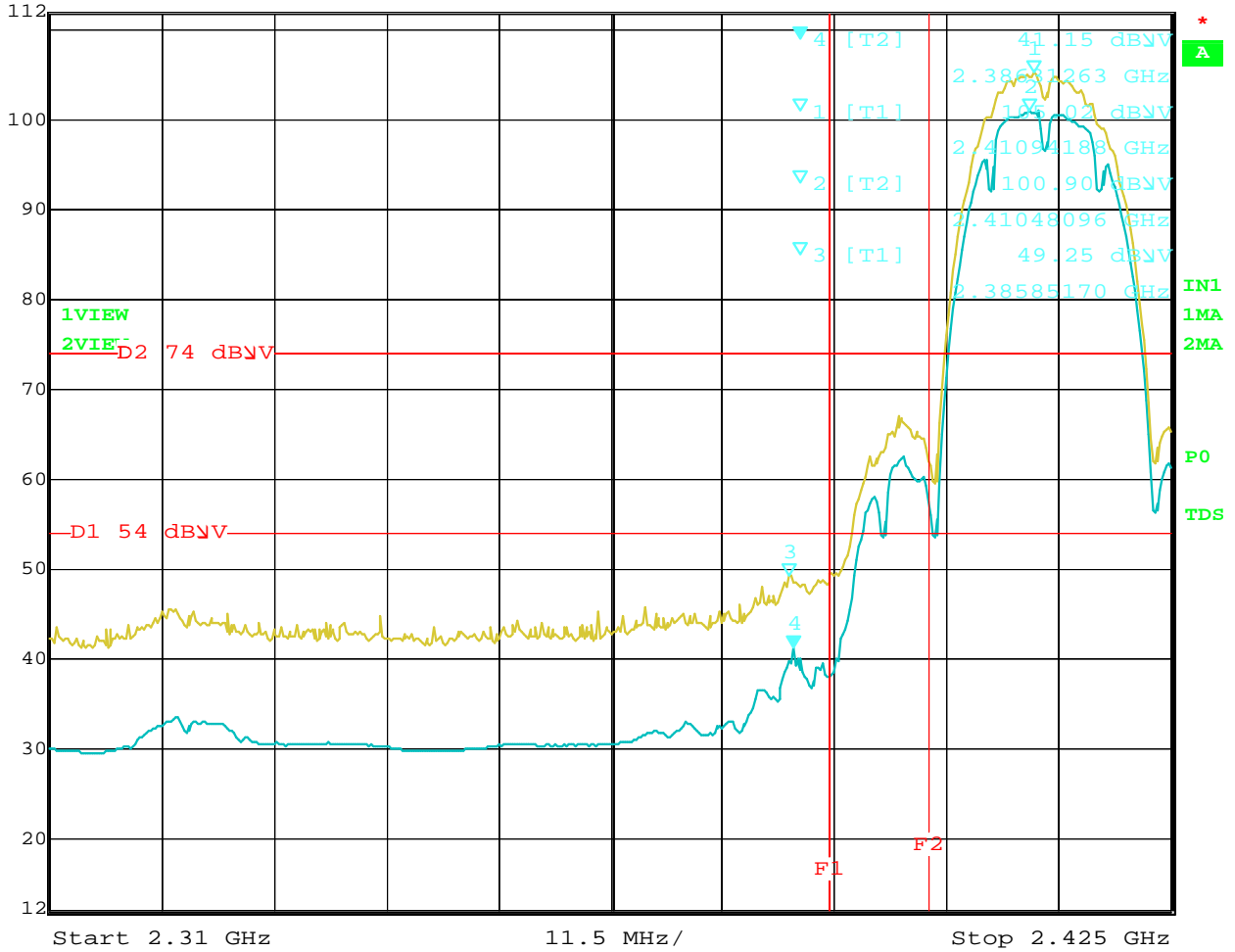
Channel 1 - 802.11 b Mode Power Level = 20
Channel 6 - 802.11 b Mode Power Level = 20
Channel 11 - 802.11 b Mode Power Level = 20

Desktop Axis (Worst Case)

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2412	101.48	H	--	--	Peak	2.25	270	Fundamental of Channel 1 @ 3 meters
2412	97.22	H	--	--	Avg	2.25	270	
2385.69	46.52	H	74	-27.48	Peak	2.25	270	No Marker Delta Method Method Used
2386.23	35.93	H	54	-18.07	Avg	2.25	270	
2437	101.47	H	--	--	Peak	2.25	270	Fundamental of Channel 6 @ 3 meters
2437	97.53	H	--	--	Avg	2.25	270	
2462	103.03	H	--	--	Peak	2.5	270	Fundamental of Channel 11 @ 3 meters
2462	99	H	--	--	Avg	2.5	270	
2487.27	47.85	H	74	-26.15	Peak	2.5	270	No Marker Delta Method Method Used
2487.47	36.83	H	54	-17.17	Peak	2.5	270	



Marker 4 [T2] RBW 1 MHz RF Att 20 dB
 Ref Lvl 41.15 dBμV VBW 10 Hz
 112 dBμV 2.38631263 GHz SWT 29 s Unit dBμV

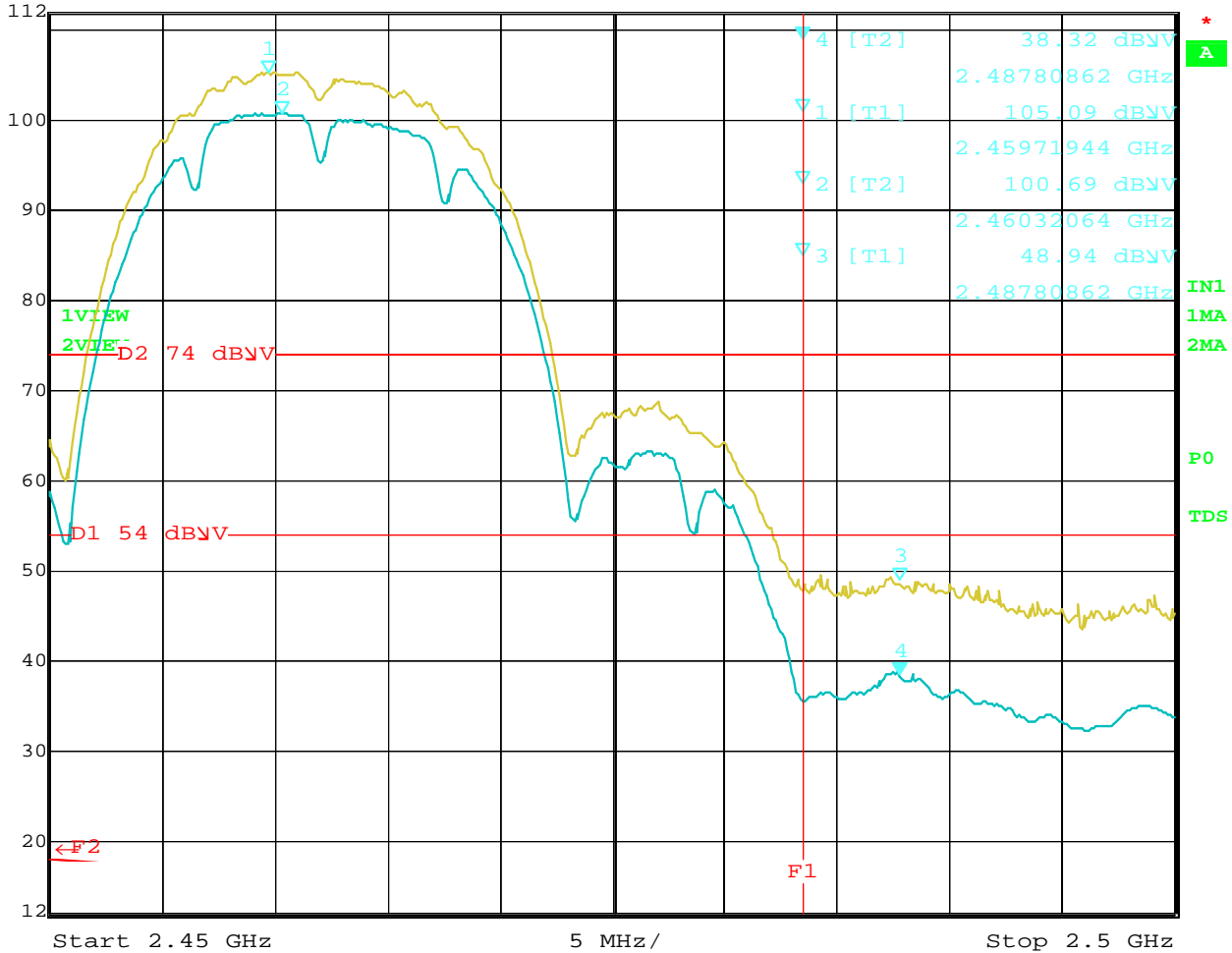


Date: 17.AUG.2010 10:00:46

Band Edge – Channel 1 – Vertical Polarization – 802.11 b Mode – Denali – Belt Axis (Worst Case)



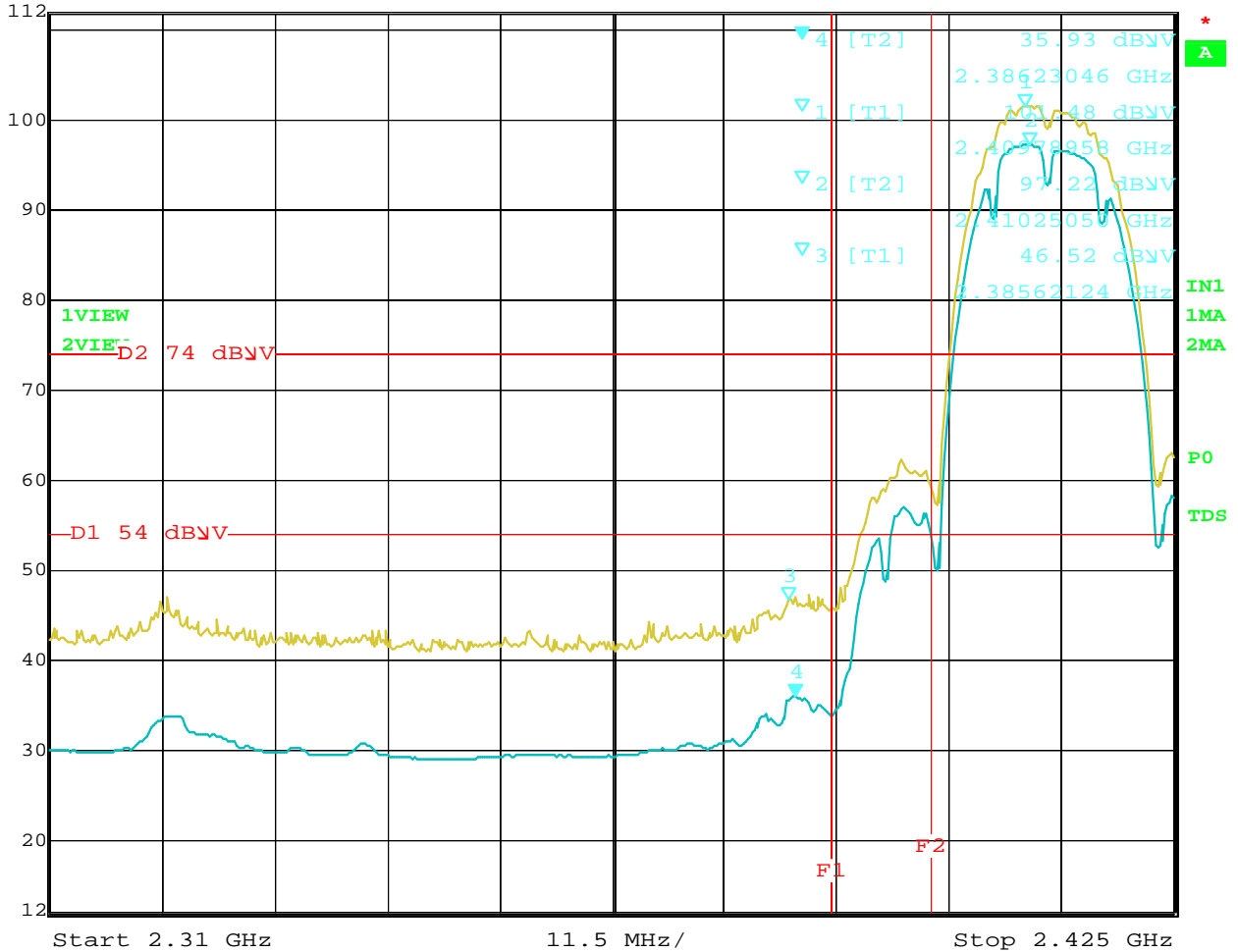
Marker 4 [T2] RBW 1 MHz RF Att 20 dB
 Ref Lvl 38.32 dBμV VBW 10 Hz
 112 dBμV 2.48780862 GHz SWT 12.5 s Unit dBμV



Date: 17.AUG.2010 10:26:52

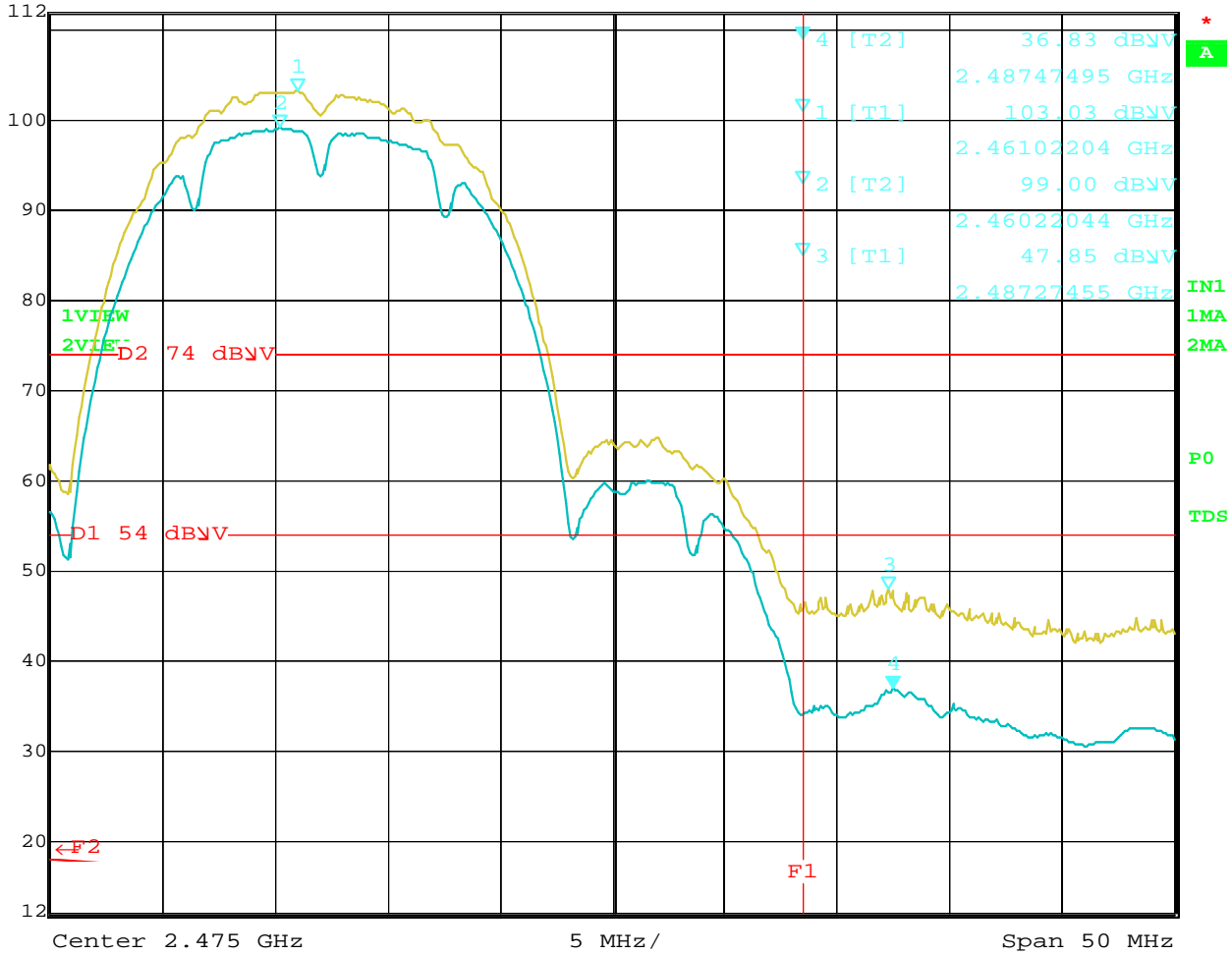
Band Edge – Channel 11 – Vertical Polarization – 802.11 b Mode – Denali – Belt Axis (Worst Case)

RS
Marker 4 [T2]
RBW 1 MHz
RF Att 20 dB
Ref Lvl 112 dBμV
35.93 dBμV
VBW 10 Hz
2.38623046 GHz
SWT 29 s
Unit dBμV



Band Edge – Channel 1 – Horizontal Polarization – 802.11 b Mode – Denali – Desktop Axis (Worst Case)

RS
 Marker 4 [T2] RBW 1 MHz RF Att 20 dB
 Ref Lvl 36.83 dBμV VBW 10 Hz
 112 dBμV 2.48747495 GHz SWT 12.5 s Unit dBμV



Date: 17.AUG.2010 10:53:46

Band Edge – Channel 11 – Horizontal Polarization – 802.11 b Mode – Denali – Desktop Axis (Worst Case)

FCC 15.247

Datamax / O'Neil
 DABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

Channel 1 - 802.11 g Mode Power Level = 14
Channel 6 - 802.11 g Mode Power Level = 14
Channel 11 - 802.11 g Mode Power Level = 14

Belt Axis (Worst Case)

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2412	102.6	V	--	--	Peak	1	225	Fundamental of Channel 1 @ 3 meters
2412	90.2	V	--	--	Avg	1	225	
2390	56.55	V	74	-17.45	Peak	1	225	No Marker Delta Method Method Used
2390	39.09	V	54	-14.91	Avg	1	225	
2437	101.75	V	--	--	Peak	1.75	225	Fundamental of Channel 6 @ 3 meters
2437	89.63	V	--	--	Avg	1.75	225	
2462	102.73	V	--	--	Peak	1.15	225	Fundamental of Channel 11 @ 3 meters
2462	90.48	V	--	--	Avg	1.15	225	
2483.5	55.27	V	74	-18.73	Peak	1.15	225	No Marker Delta Method Method Used
2483.5	40.22	V	54	-13.78	Avg	1.15	225	

FCC 15.247

Datamax / O'Neil
 DABG1
 Model: WL430220
 Configuration: In the Denali Printer

Date: 08/17/2010
 Lab: B
 Tested By: Kyle Fujimoto

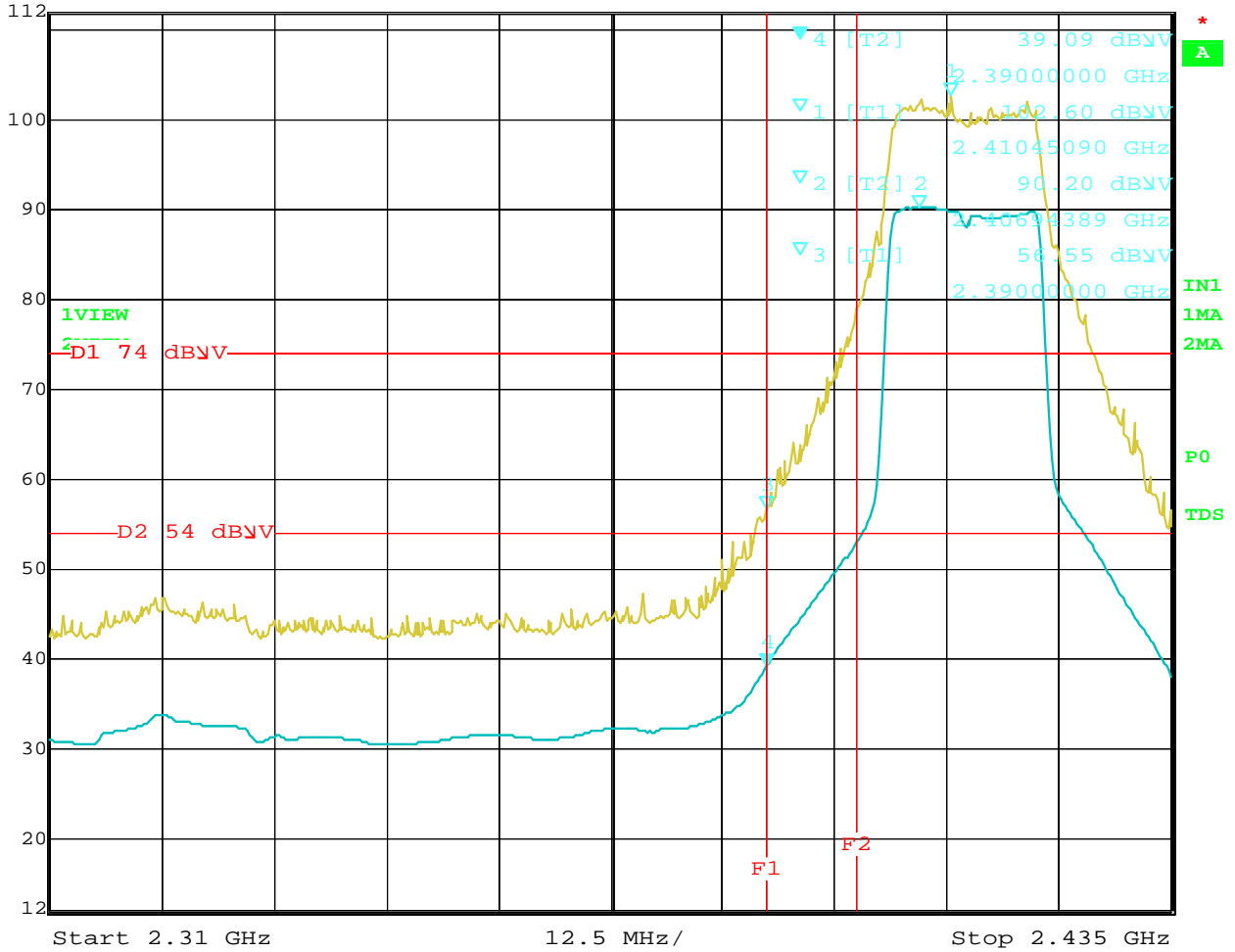
Channel 1 - 802.11 g Mode Power Level = 14
Channel 6 - 802.11 g Mode Power Level = 14
Channel 11 - 802.11 g Mode Power Level = 14

Desktop Axis (Worst Case)

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2412	101.77	H	--	--	Peak	2.5	270	Fundamental of Channel 1 @ 3 meters
2412	89.75	H	--	--	Avg	2.5	270	
2390	59.21	H	74	-14.79	Peak	2.5	270	No Marker Delta Method Method Used
2390	38.63	H	54	-15.37	Avg	2.5	270	
2437	101.54	H	--	--	Peak	2.5	270	Fundamental of Channel 6 @ 3 meters
2437	88.79	H	--	--	Avg	2.5	270	
2462	103.15	H	--	--	Peak	2.5	270	Fundamental of Channel 11 @ 3 meters
2462	90.7	H	--	--	Avg	2.5	270	
2483.5	57.09	H	74	-16.91	Peak	2.5	270	No Marker Delta Method Method Used
2483.5	40.78	H	54	-13.22	Peak	2.5	270	



Marker 4 [T2] RBW 1 MHz RF Att 20 dB
 Ref Lvl 39.09 dBμV VBW 10 Hz
 112 dBμV 2.39000000 GHz SWT 32 s Unit dBμV

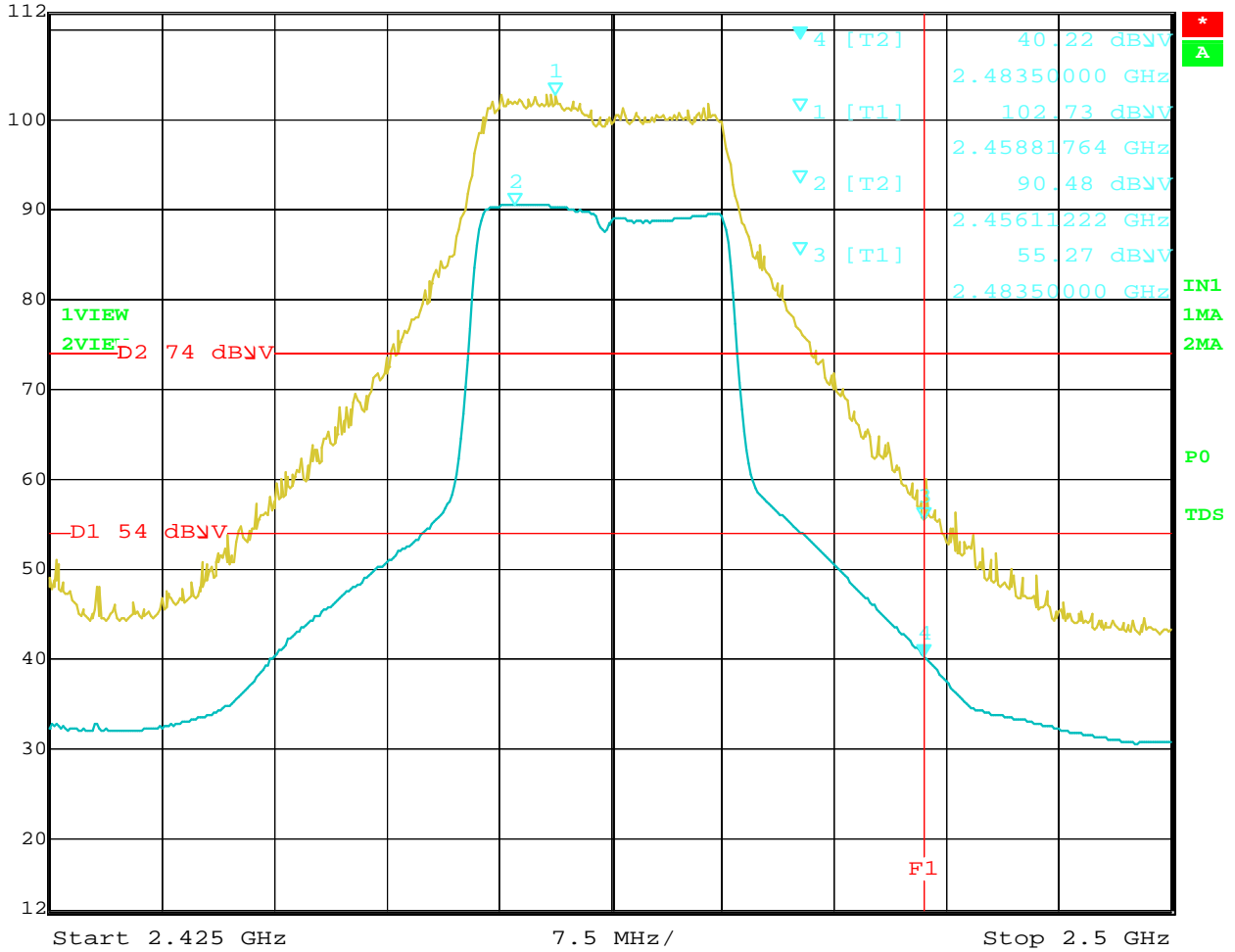


Date: 17.AUG.2010 13:46:15

Band Edge – Channel 1 – Vertical Polarization – 802.11 g Mode – Denali – Belt Axis (Worst Case)



Marker 4 [T2] RBW 1 MHz RF Att 20 dB
 Ref Lvl 40.22 dBμV VBW 10 Hz
 112 dBμV 2.48350000 GHz SWT 19 s Unit dBμV

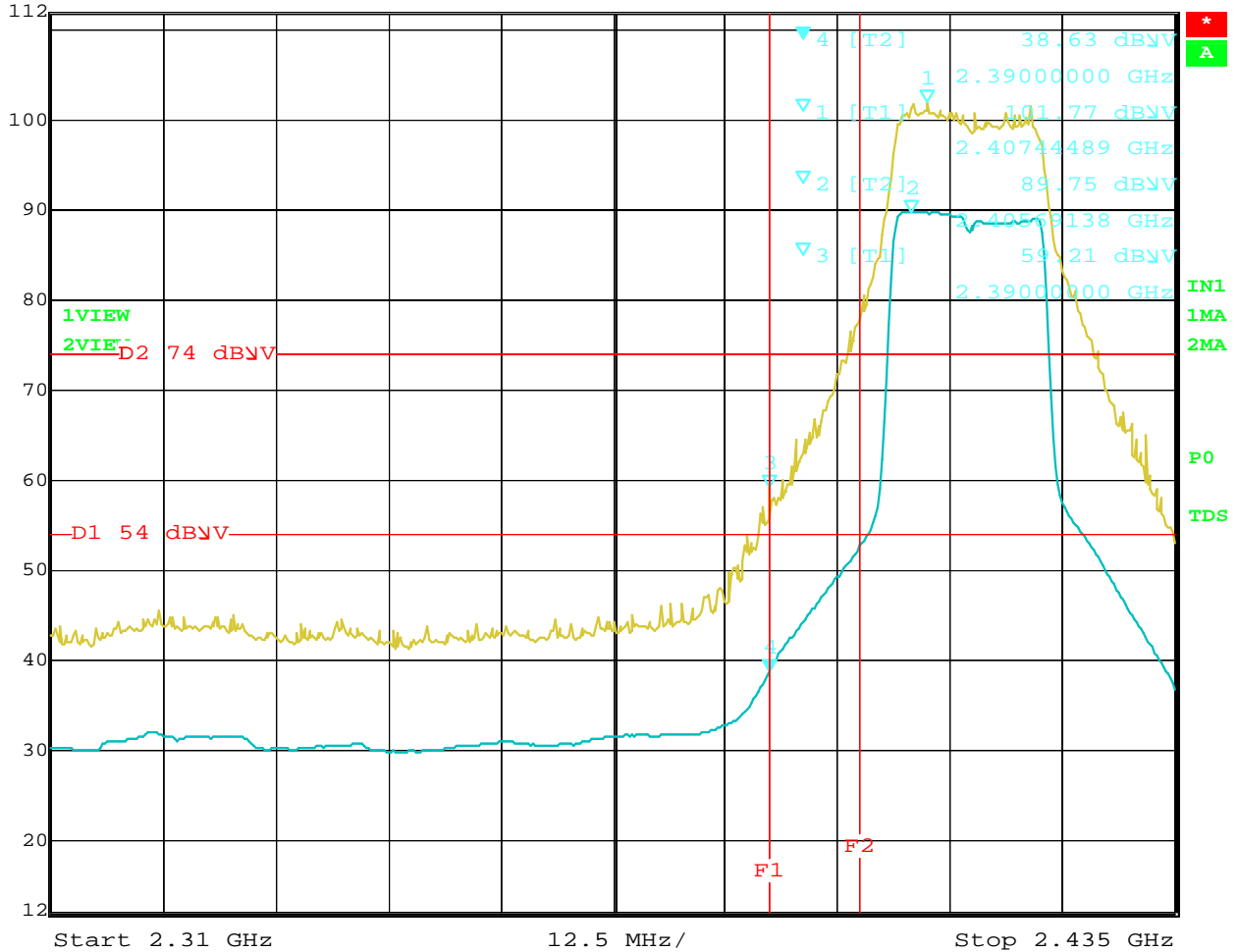


Date: 17.AUG.2010 14:02:10

Band Edge – Channel 11 – Vertical Polarization – 802.11 g Mode – Denali – Belt Axis (Worst Case)



Marker 4 [T2] RBW 1 MHz RF Att 20 dB
 Ref Lvl 38.63 dBμV VBW 10 Hz
 112 dBμV 2.39000000 GHz SWT 32 s Unit dBμV

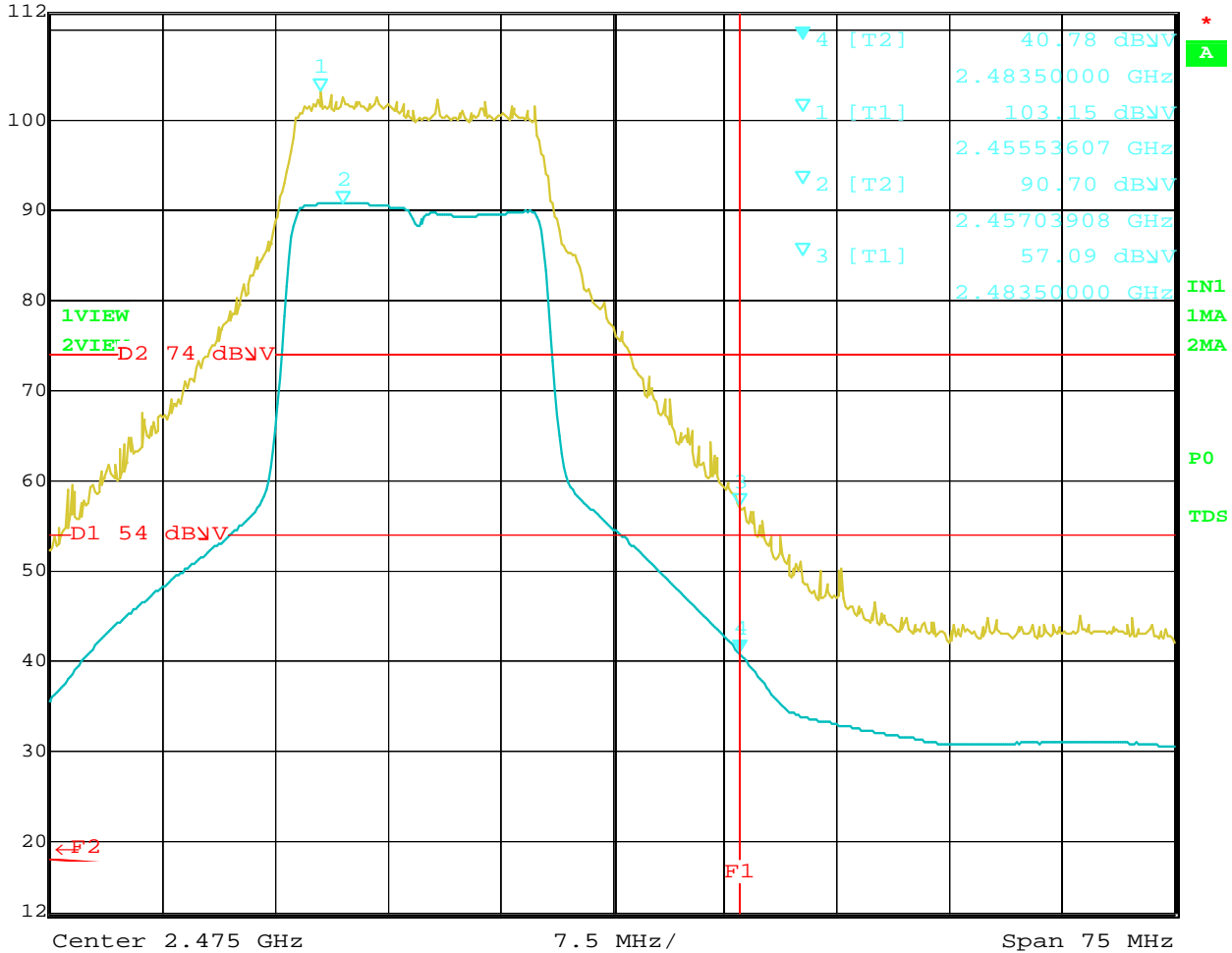


Date: 17.AUG.2010 11:16:42

Band Edge – Channel 1 – Horizontal Polarization – 802.11 g Mode – Denali – Desktop Axis (Worst Case)



Marker 4 [T2] RBW 1 MHz RF Att 20 dB
 Ref Lvl 40.78 dBV VBW 10 Hz
 112 dBV 2.48350000 GHz SWT 19 s Unit dBV

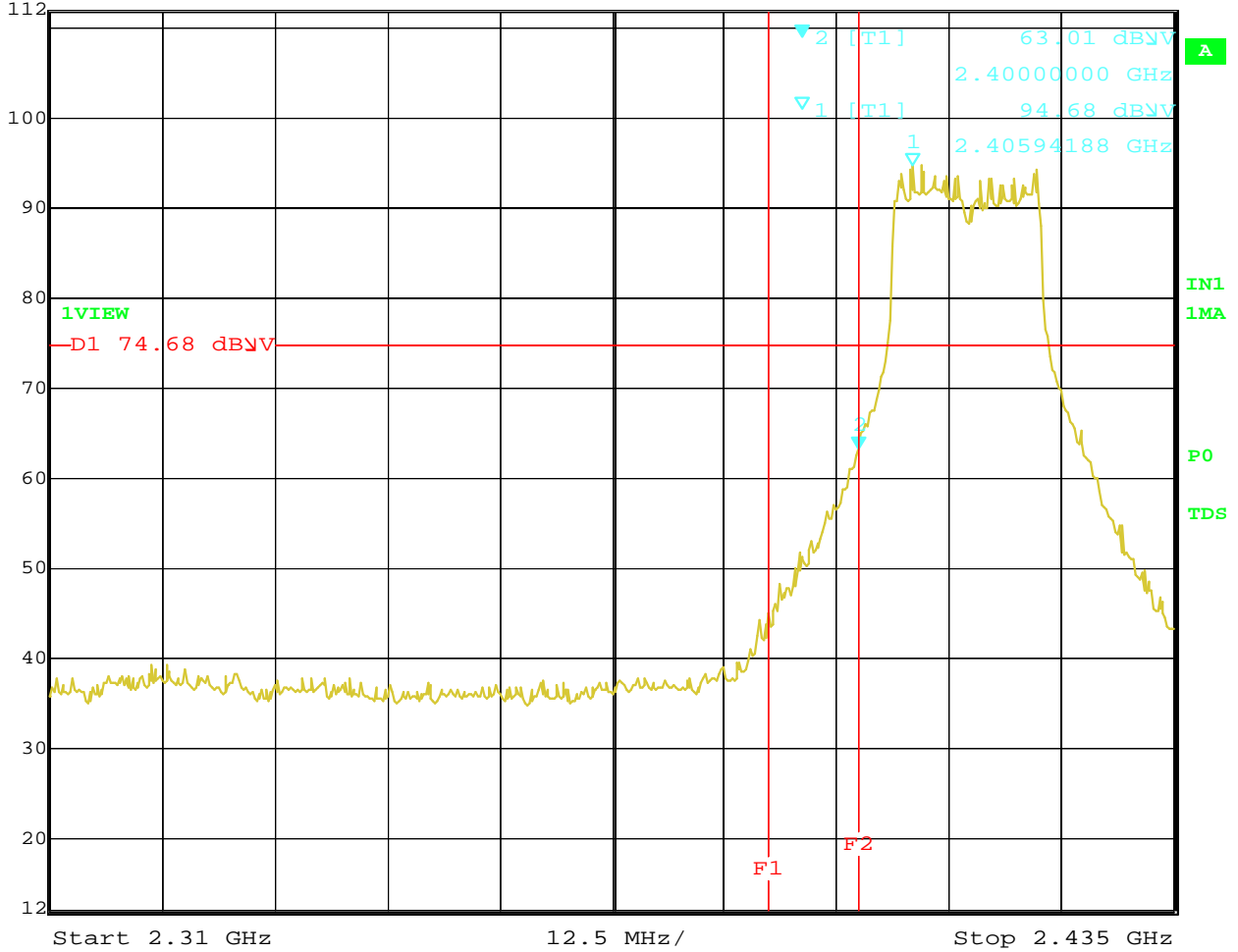


Date: 17.AUG.2010 11:03:02

Band Edge – Channel 11 – Horizontal Polarization – 802.11 g Mode – Denali – Desktop Axis (Worst Case)



Marker 2 [T1] RBW 100 kHz RF Att 20 dB
 Ref Lvl 63.01 dBV VBW 300 kHz
 112 dBV 2.40000000 GHz SWT 32 ms Unit dBV

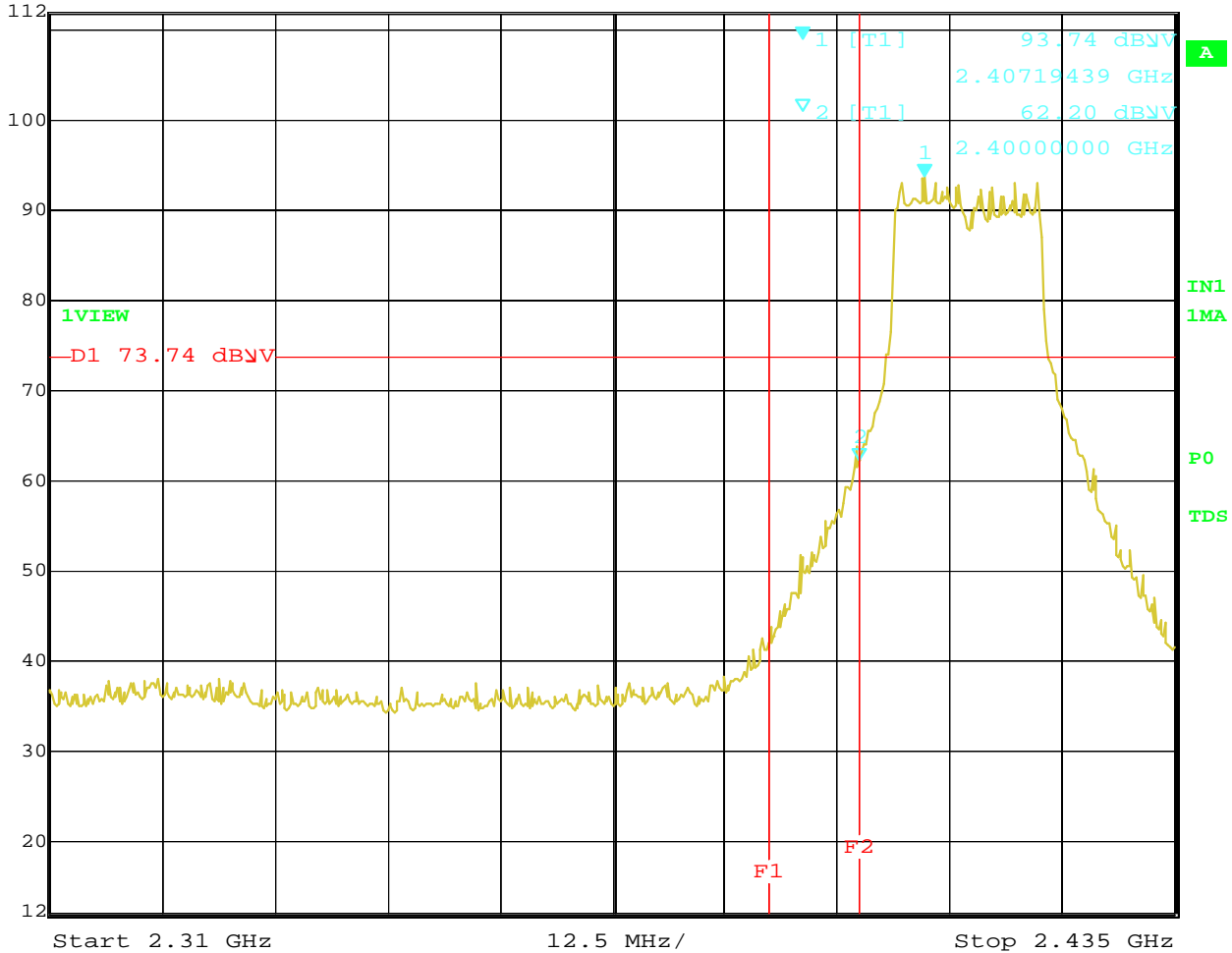


Date: 17.AUG.2010 13:47:25

Band Edge – Channel 1 – Vertical Polarization – 802.11 g Mode – Denali – Belt Axis (Worst Case)
 At 2400 MHz



Marker 1 [T1] RBW 100 kHz RF Att 20 dB
 Ref Lvl 93.74 dBμV VBW 300 kHz
 112 dBμV 2.40719439 GHz SWT 32 ms Unit dBμV

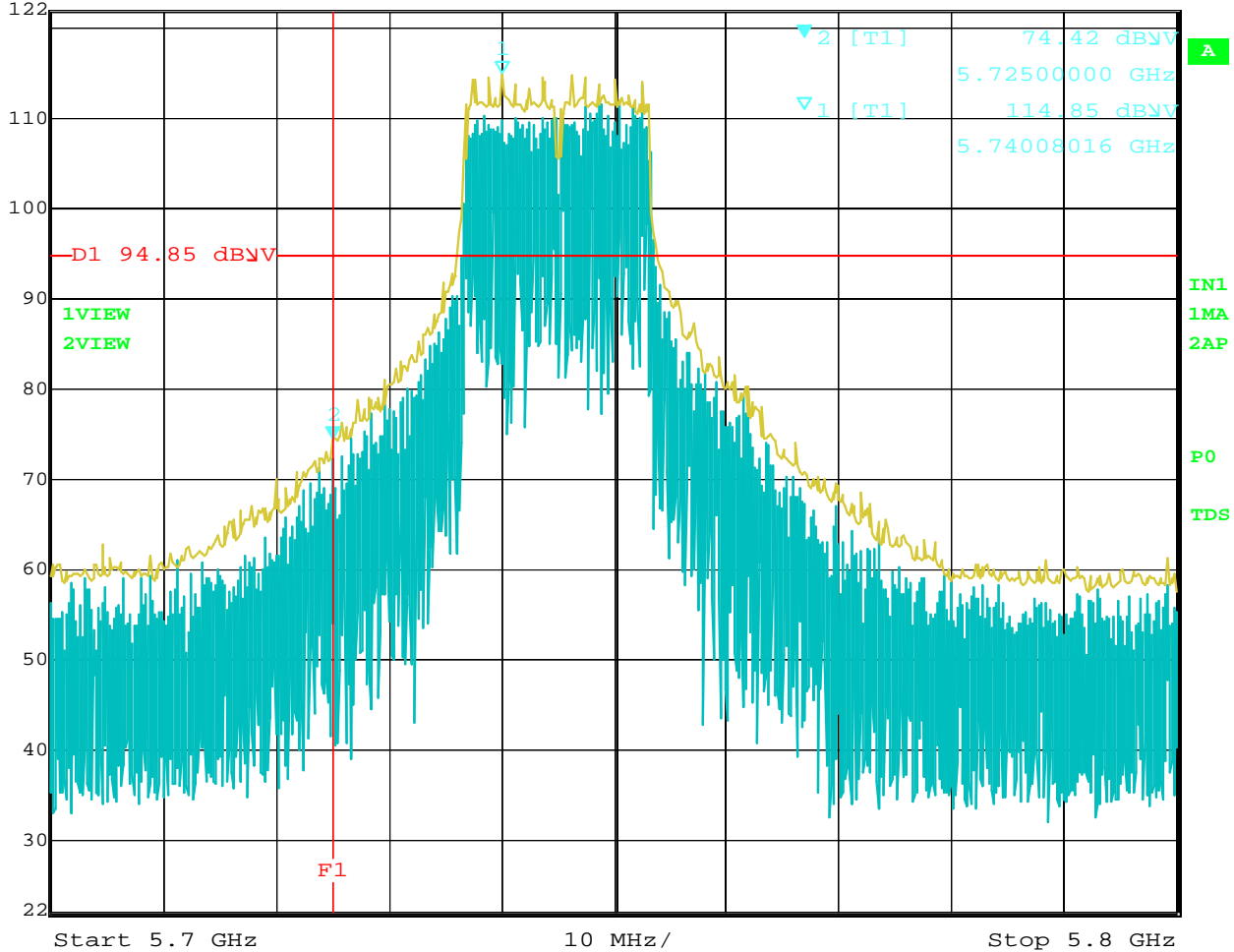


Date: 17.AUG.2010 11:19:07

Band Edge – Channel 1 – Horizontal Polarization – 802.11 g Mode – Denali – Belt Axis (Worst Case)
 At 2400 MHz



Marker 2 [T1] RBW 100 kHz RF Att 30 dB
 Ref Lvl 74.42 dBV VBW 300 kHz
 122 dBV 5.72500000 GHz SWT 25 ms Unit dBV

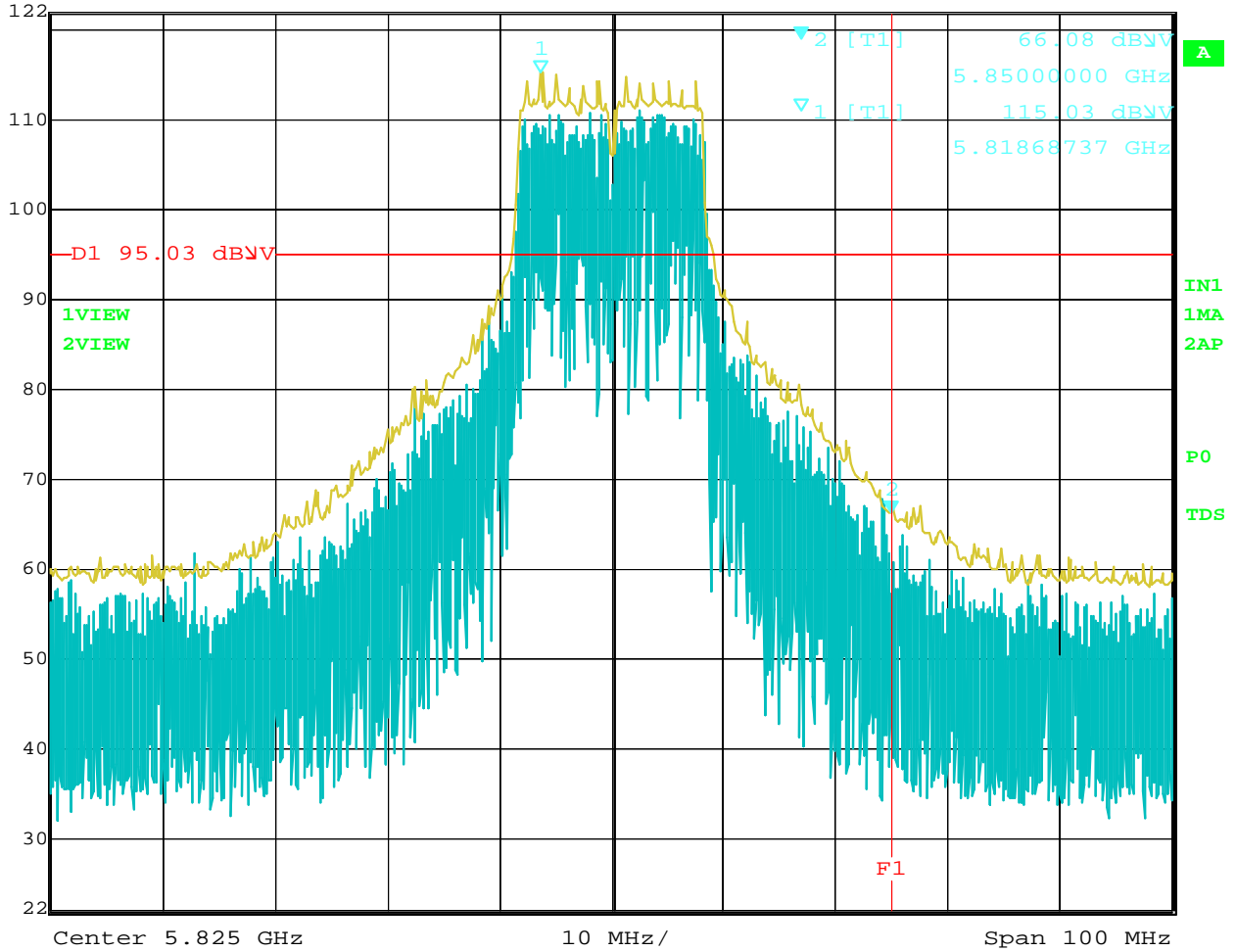


Date: 9.NOV.2010 08:54:28

Band Edge – Channel 149 – 802.11 a Mode – Denali Printer



Marker 2 [T1] RBW 100 kHz RF Att 30 dB
 Ref Lvl 122 dBmV 66.08 dBmV VBW 300 kHz
 5.85000000 GHz SWT 25 ms Unit dBmV



Date: 9.NOV.2010 08:55:35

Band Edge – Channel 165 – 802.11 a Mode – Denali Printer