

**EXHIBIT 6B
FCC PART 15
TEST REPORT**

Test Report Prepared By:
Electronics Test Centre
27 East Lake Hill
Airdrie, Alberta
Canada T2B 2B7
enquire@etc-mpbtech.com
phone: (403) 912-0037
fax: (403) 912-0083

MPBT Report No.: c05e2295-2 Rev: 0 Date: 3 May 2001

Report for Emissions Testing of: LoCate
FCC ID: NJILOCA01

In accordance with: FCC Part 15, Subpart C (2000)

Test Personnel: E. Hails

Prepared for: CSI Wireless
Suite 260
6815 8th St. NE
Calgary, AB
T2E 7H7

Client Acceptance
Authorized Signatory

David Raynes
Laboratory Supervisor
Electronics Test Centre (Airdrie)
Authorized Signatory

TABLE OF CONTENTS

1.0	INTRODUCTION
1.1	SCOPE
1.2	APPLICANT
1.3	APPLICABILITY
1.4	TEST SAMPLE DESCRIPTION
1.5	GENERAL TEST CONDITIONS AND ASSUMPTIONS
1.6	SCOPE OF TESTING
	1.6.1 VARIATIONS IN TEST METHODS
	1.6.2 MARGINAL EMISSIONS MEASUREMENTS
	1.6.3 TEST SAMPLE MODIFICATIONS
2.0	ABBREVIATIONS
3.0	MEASUREMENT UNCERTAINTY
4.0	TEST CONCLUSION
	4.1 CONDUCTED EMISSIONS AT AC LINES
	4.2 RADIATED EMISSIONS AND RESTRICTED BANDS OF OPERATION
5.0	TEST FACILITY
	5.1 LOCATION
	5.2 GROUNDING PLAN
	5.3 POWER
	5.4 EMISSIONS PROFILE
	5.5 TEST CONFIGURATION
	5.5.1 TABLETOP EQUIPMENT
	5.5.2 RACK MOUNT
6.0	TEST EQUIPMENT
	6.1 RADIATED EMISSIONS
	6.2 CONDUCTED EMISSIONS
	6.3 CALIBRATION

APPENDIX A: Test Sample Description: LoCate

1.0 INTRODUCTION

1.1 SCOPE

The purpose of this report is to present the findings and results of compliance testing performed in accordance with CFR Title 47 FCC Part 15, Subpart C, Intentional Radiators.

1.2 APPLICANT

This test report has been prepared for CSI Wireless, located in Calgary, Alberta, Canada.

1.3 APPLICABILITY

All test procedures, limits, and results defined in this document apply to the CSI Wireless LoCate unit, referred to herein as the Equipment Under Test (EUT).

The results contained in this report relate only to the item tested.

This report does not imply product endorsement by NVLAP or the Canadian or US governments.

1.4 TEST SAMPLE DESCRIPTION

The test sample provided for testing was a LoCate:

Product Type:	Telecommunications
Model Number:	TBA
Serial Number:	Rev 01 S/N 4 & 6
Cables:	power supply, data input/output, cellular antenna, GPS antenna
Power	12 VDC, 1 A
Requirements:	
Peripheral Equipment:	laptop computer, RS232 to CMOS level converter

More detailed information is provided by CSI Wireless in Appendix A.

1.5 GENERAL TEST CONDITIONS AND ASSUMPTIONS

The EUT was set up and exercised using the configurations, modes of operation and arrangements defined in this report only. All inputs and outputs to and from other equipment associated with the EUT were adequately simulated.

Where relevant, the EUT was only tested using the monitoring methods and test criteria defined in this report.

All testing, unless otherwise noted, was performed under the following environmental conditions:

Temperature:	17 to 23 °C
Humidity:	45 to 75 %
Barometric Pressure:	68 to 106 kPa

1.6 SCOPE OF TESTING

Testing was performed in accordance with FCC Part 15 Subpart C (2000), and ANSI C63.4 (1992).

1.6.1 VARIATIONS IN TEST METHODS

There were no variations from the test procedures outlined above.

1.6.2 MARGINAL EMISSIONS MEASUREMENTS

There were no emissions measured to be closer to the specified limits than -6 dB.

1.6.3 TEST SAMPLE MODIFICATIONS

There were no equipment modifications during test performance.

2.0 ABBREVIATIONS

CE	-Conducted Emissions
E	-Field - Electric Field
H	-Field - Magnetic Field
N/T	-Not Tested
N/A	-Not Applicable
RE	-Radiated Emissions

3.0 MEASUREMENT UNCERTAINTY

For Radiated E-Field Emissions and Conducted Emissions, the uncertainties in the measurements were calculated using the methods outlined in the NAMAS document, NIS81: May 1984.

Frequency	= ± 1 kHz
Amplitude (RE)	= ± 4.01 dB
Amplitude (CE)	= ± 3.25 dB

4.0 TEST CONCLUSION

The EUT was subjected to the following tests. Compliance status is indicated as **PASS**, **Marginal Pass**, or **FAIL**.

The following table summarizes the test results in terms of the specification and class or level applied, the unique test sample identification, the EUT modification state, and configuration as applicable.

TEST CASE	TEST TYPE	SPECIFICATION	TEST SAMPLE	MOD. STATE	CONFIGURATION	RESULT
§4.1	Conducted Emissions	FCC Part 15.207	LoCate	nil	Simulated Installation	PASS
§4.2	Radiated Emissions and Restricted Bands of Operation	FCC Part 15.209	LoCate	nil	Simulated Installation	PASS

STATEMENT OF COMPLIANCE

The client equipment referred to in this report was found to comply with the requirements as stated above.

[illegible]

4.2 RADIATED EMISSIONS AND RESTRICTED BANDS OF OPERATION

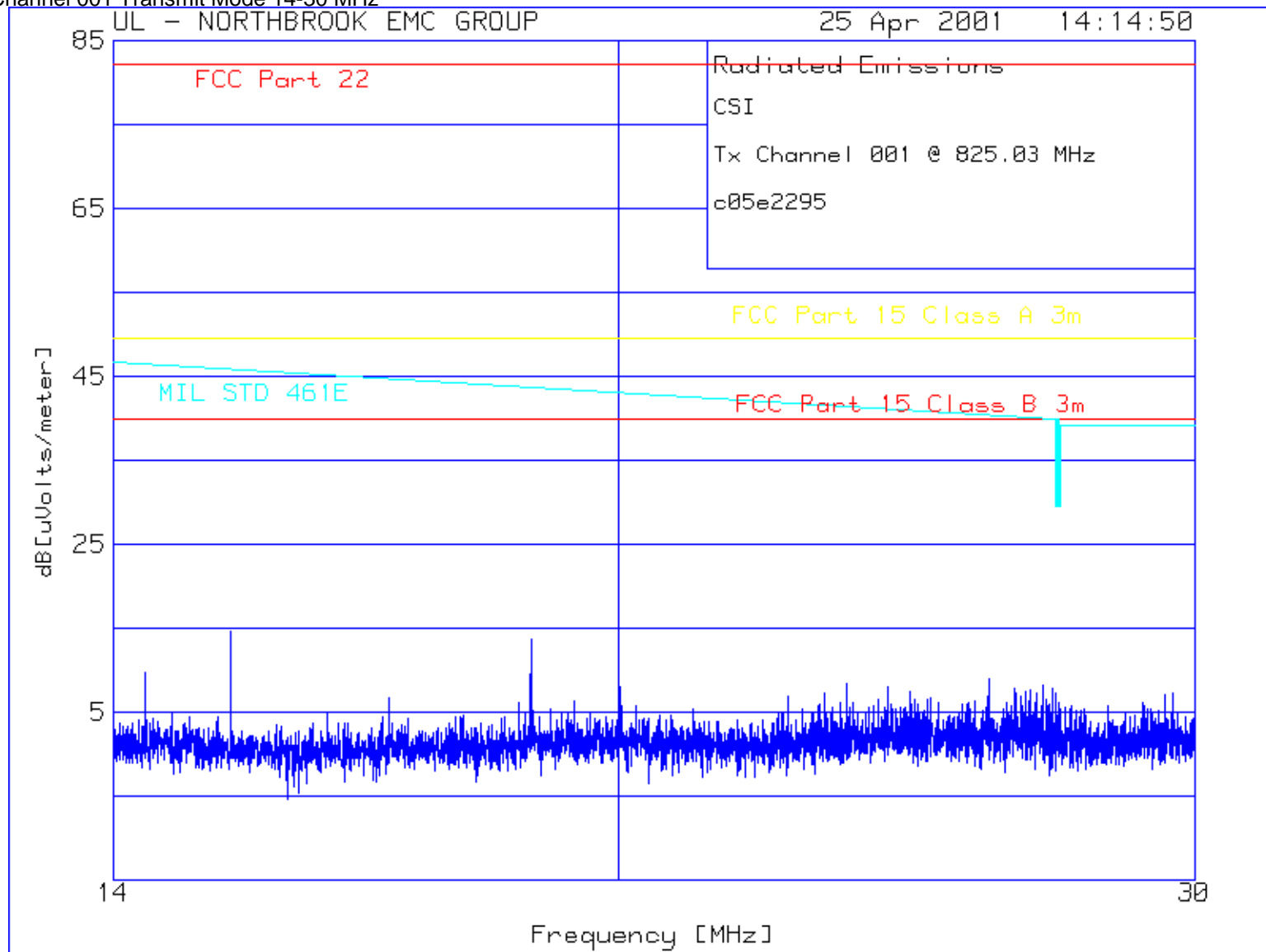
Test Lab: MPB Technologies Inc. Airdrie Test Personnel: E. Hails Test Date: 23-25 April, 2-3 May 2001	Product: LoCate										
Test Result, LoCate: PASS											
Objectives/Criteria	Specifications										
<p>If no other sections apply, the level of any unwanted emissions must be lower than the level of the fundamental.</p> <p>If the fundamental lies within one of the restricted bands shown on the next page, then it must be lower than the table given in 15.209</p> <p>Emission levels should meet the requirements with a margin of 6dB.</p>	<p>FCC Part 15.209</p> <table> <tr> <th>Frequency [MHz]</th><th>Limit (QP @ 3m) [dBμV/m]</th></tr> <tr> <td>30 - 88</td><td>40.00</td></tr> <tr> <td>88 - 216</td><td>43.52</td></tr> <tr> <td>216 - 960</td><td>46.02</td></tr> <tr> <td>above 960</td><td>53.98</td></tr> </table>	Frequency [MHz]	Limit (QP @ 3m) [dBμV/m]	30 - 88	40.00	88 - 216	43.52	216 - 960	46.02	above 960	53.98
Frequency [MHz]	Limit (QP @ 3m) [dBμV/m]										
30 - 88	40.00										
88 - 216	43.52										
216 - 960	46.02										
above 960	53.98										
<p>Comments: Since the fundamental for each channel lies outside the restricted bands, the limits given in the table do not apply. As seen in the plots, the levels of all the harmonics and other unwanted emissions are well below those of the fundamental frequencies.</p> <p>Refer to the test data plots for more detail. Note that the test plots include MIL-STD 461E limits, but these are strictly for the purpose of comparing results. MIL-STD tests were not performed.</p>											

Restricted Frequency Bands [MHz]					
Start	End	Start	End	Start	End
4.17725	4.17775	123	138	3345.8	3358
4.20725	4.20775	149.9	150.05	3600	4400
6.215	6.218	156.52	156.53	4500	5150
6.26775	6.26825	156.7	156.9	5350	5460
6.31175	6.31225	162.01	167.17	7250	7750
8.291	8.294	167.72	173.2	8025	8500
8.362	8.366	240	285	9000	9200
8.37625	8.38675	322	335.4	9300	9500
8.41425	8.41475	399.9	410	10600	12700
12.29	12.293	608	614	13250	13400
12.51975	12.52025	960	1240	14470	14500
12.57675	12.57725	1300	1427	15350	16200
13.36	13.41	1435	1626.5	17700	21400
16.42	16.423	1645.5	1646.5	22010	23120
16.69475	16.69525	1660	1710	23600	24000
16.80425	16.80475	1718.8	1722.2	31200	31800
25.5	25.67	2200	2300	36430	36500
37.5	38.25	2310	2390		

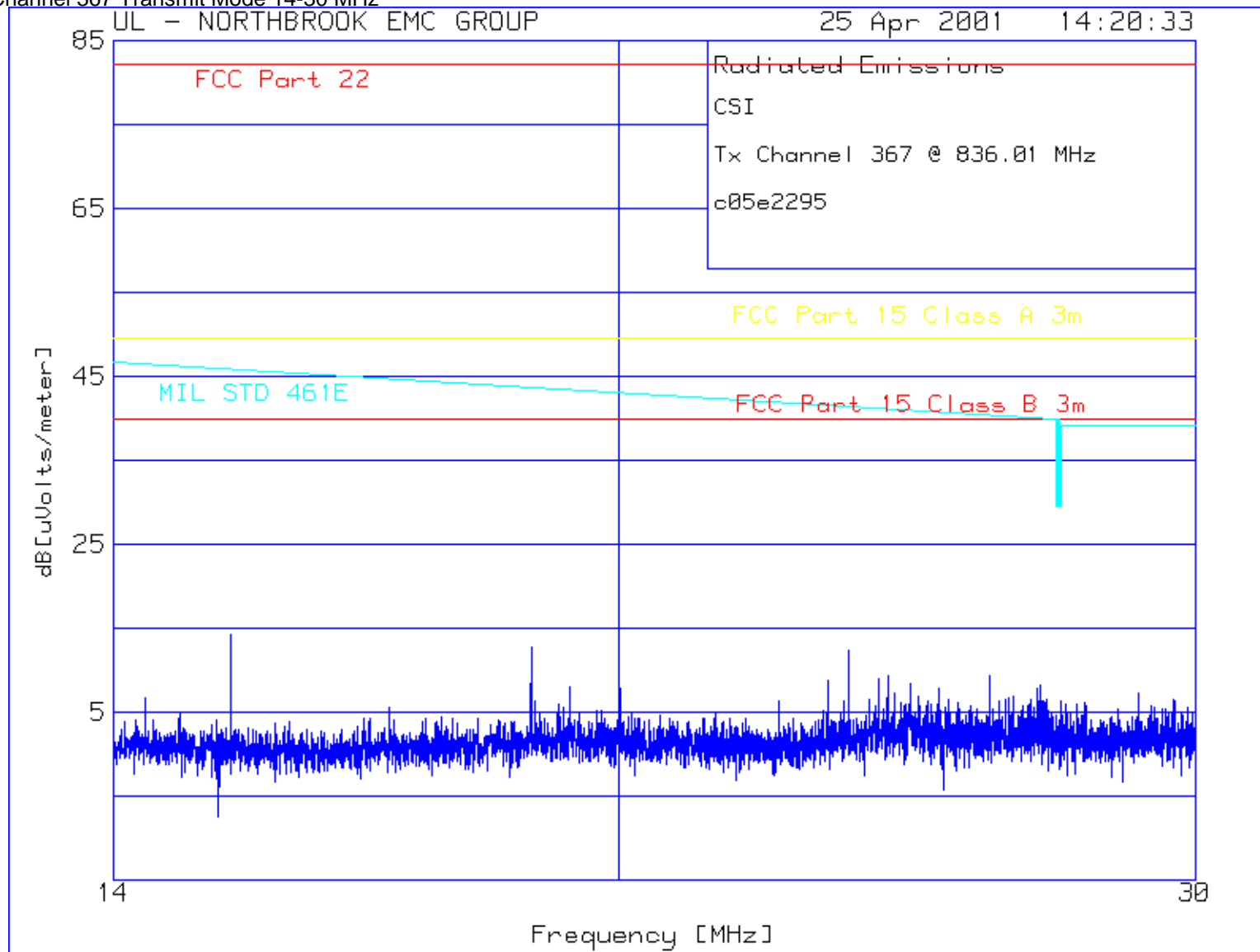
Test Equipment Setup



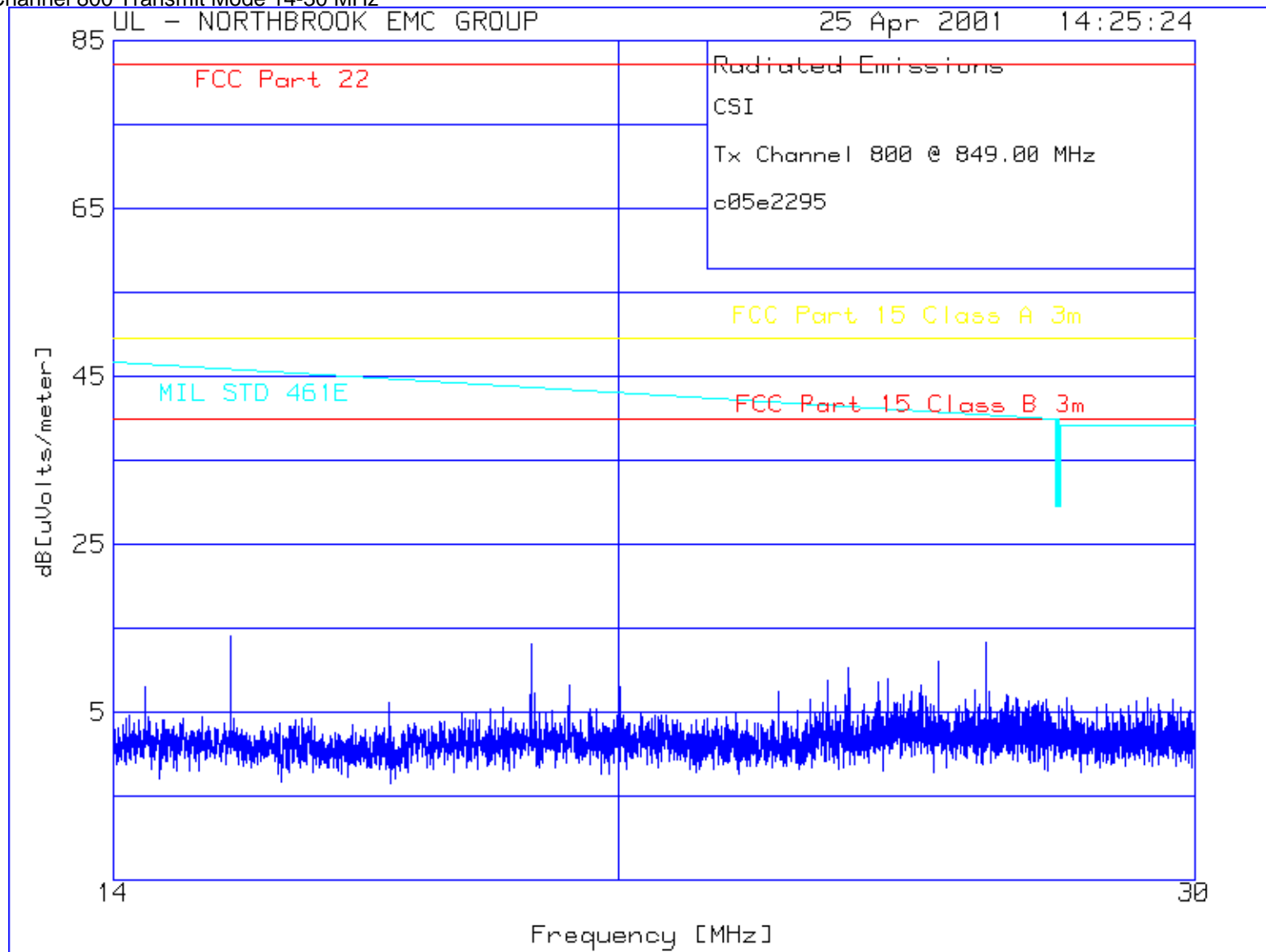
Radiated Emissions
Channel 001 Transmit Mode 14-30 MHz



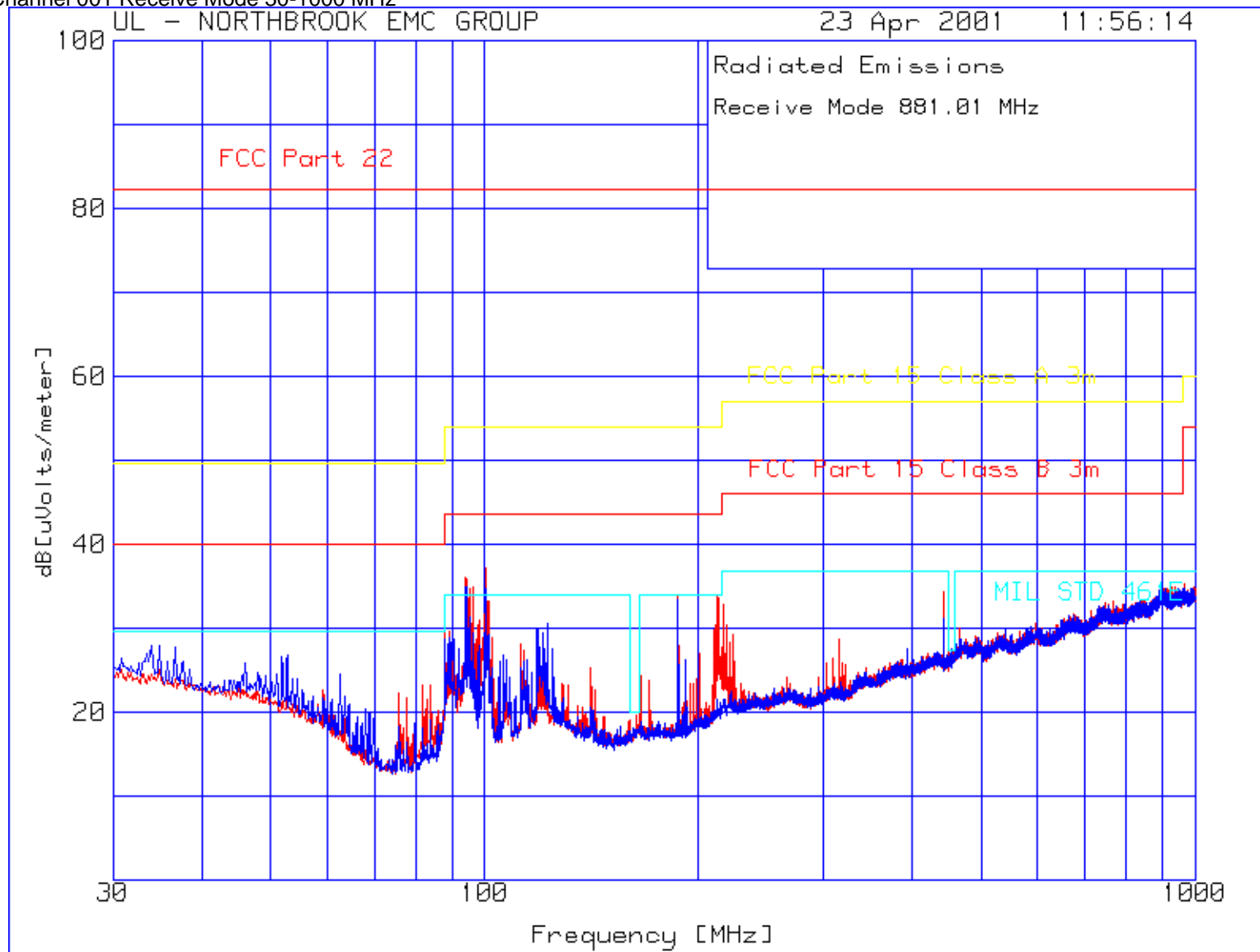
Radiated Emissions
Channel 367 Transmit Mode 14-30 MHz



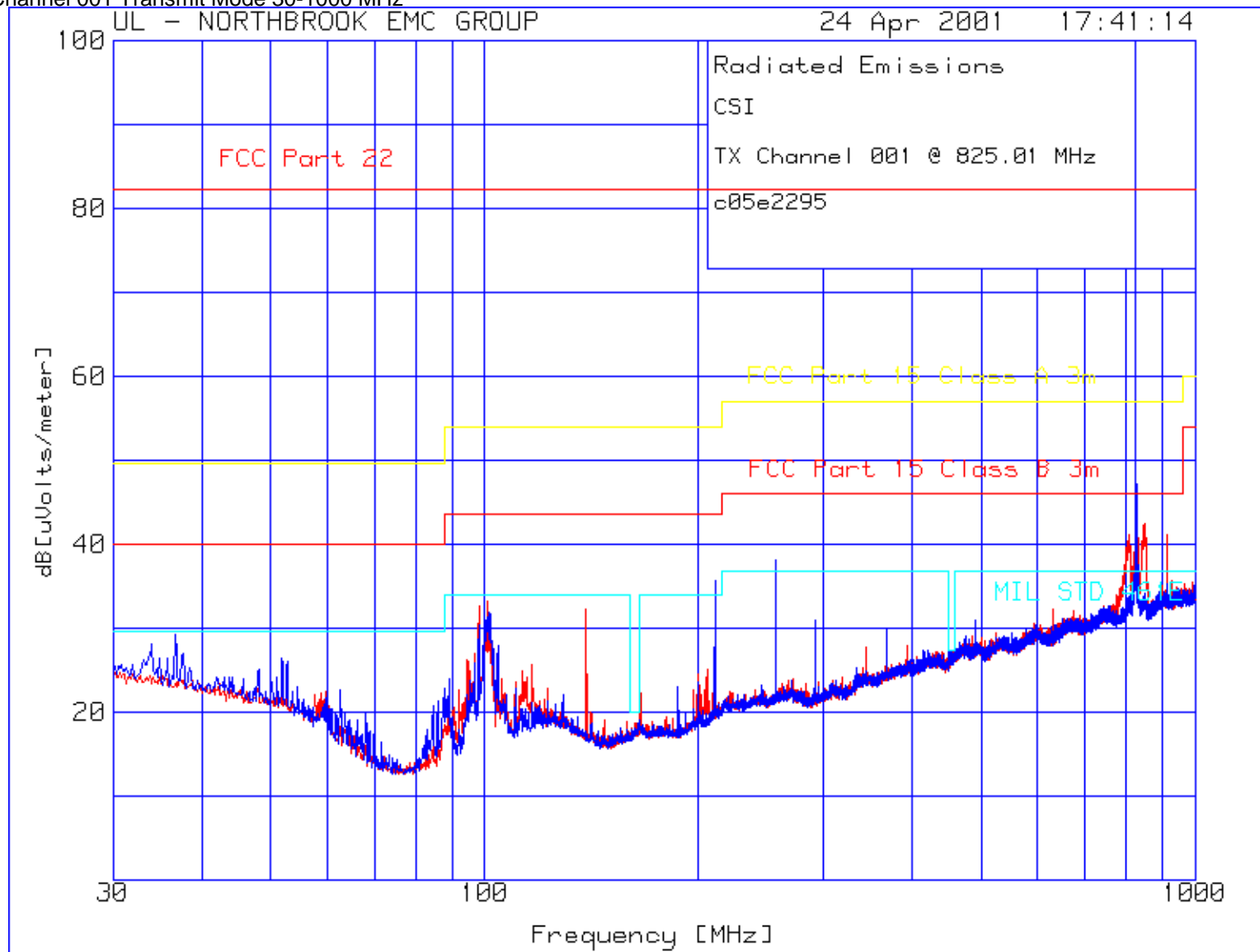
Radiated Emissions
Channel 800 Transmit Mode 14-30 MHz



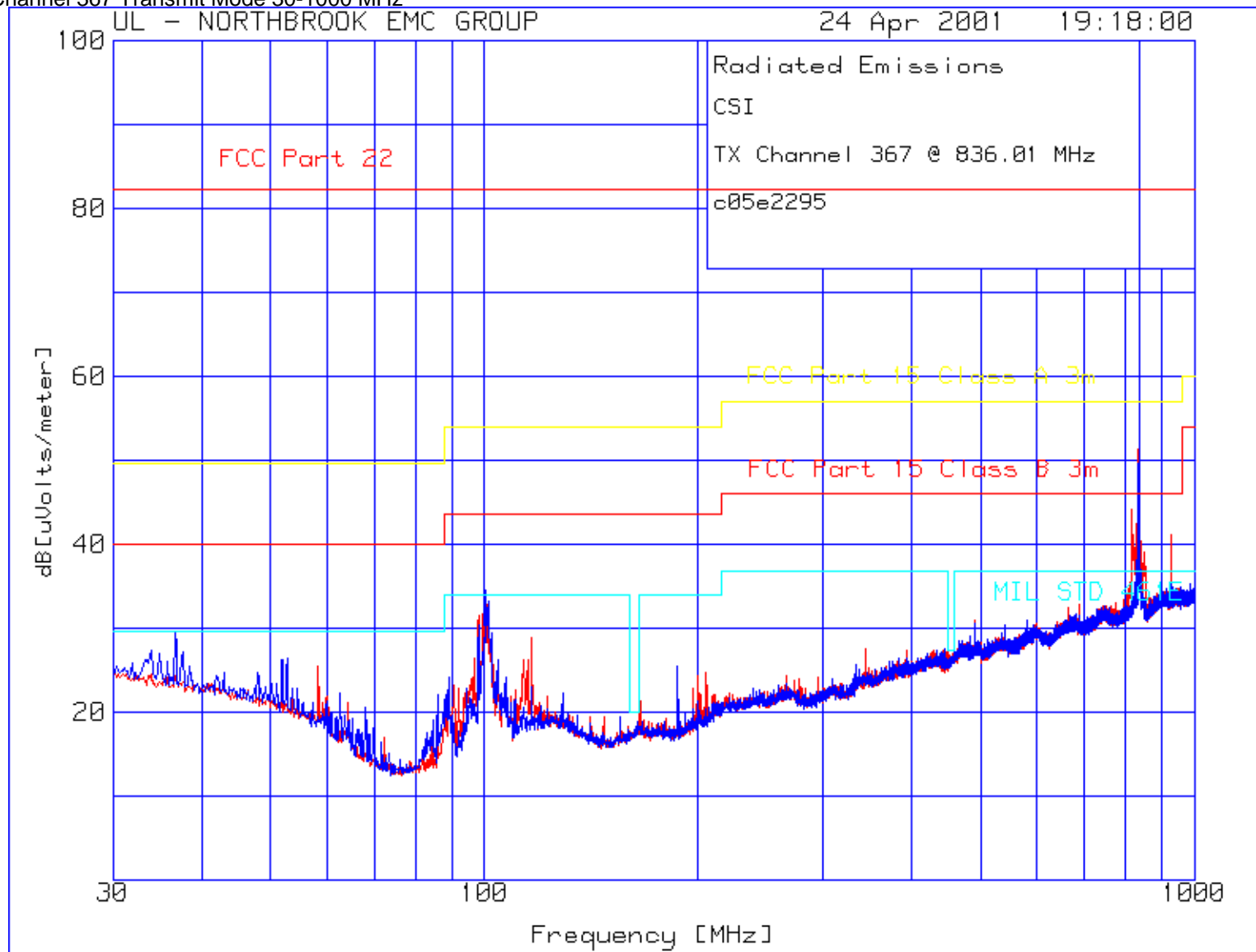
Radiated Emissions
Channel 001 Receive Mode 30-1000 MHz



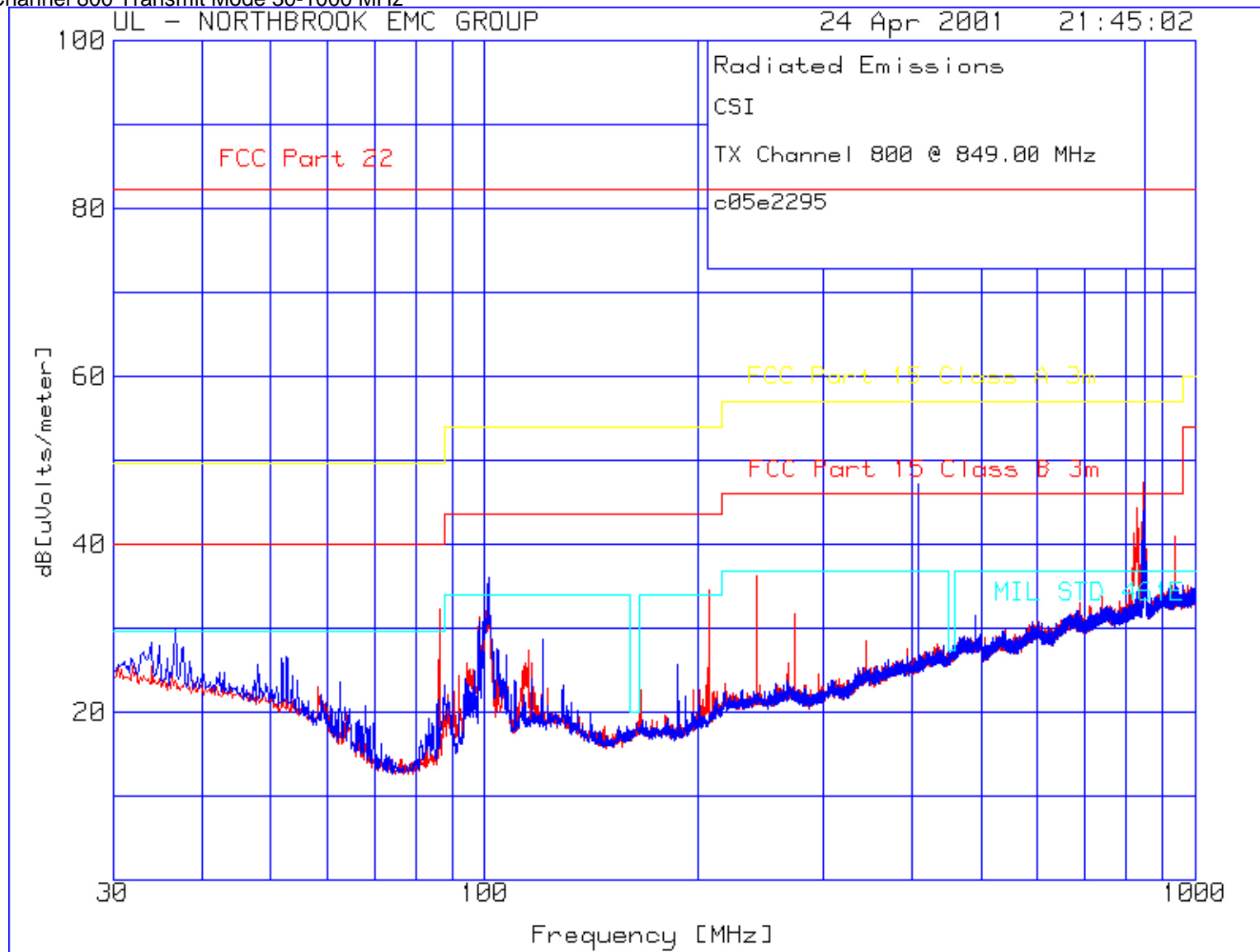
Radiated Emissions
Channel 001 Transmit Mode 30-1000 MHz



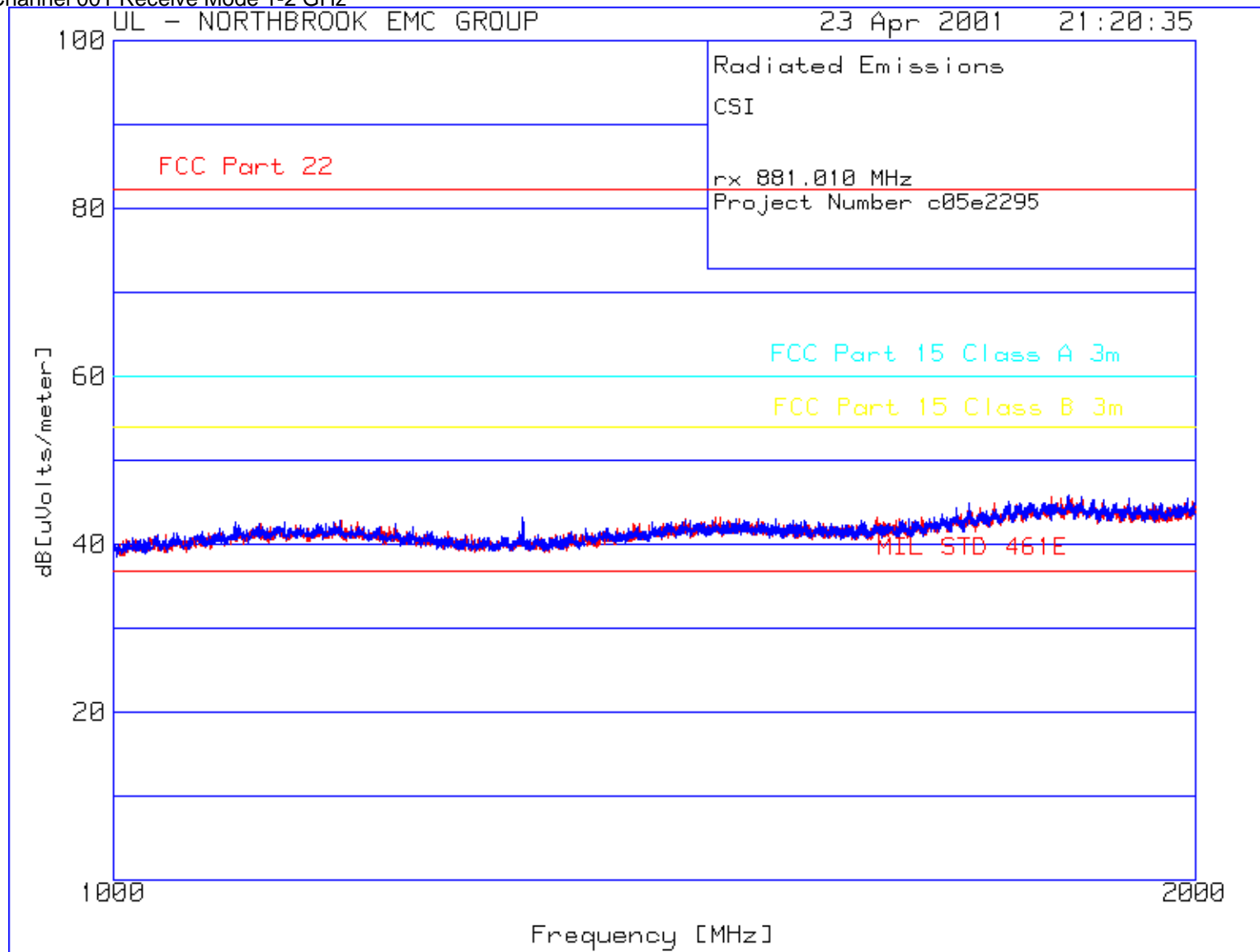
Radiated Emissions
Channel 367 Transmit Mode 30-1000 MHz



Radiated Emissions
Channel 800 Transmit Mode 30-1000 MHz

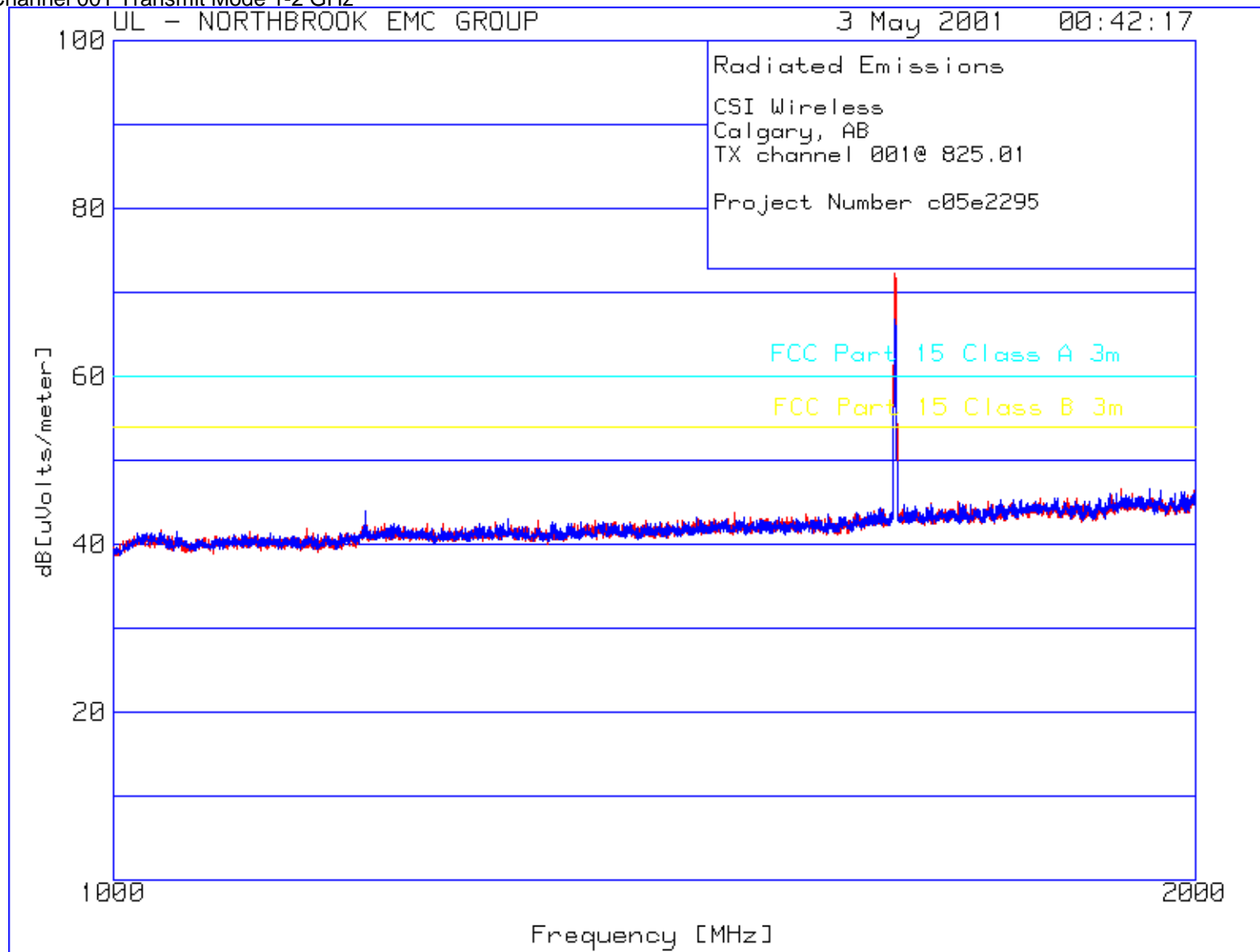


Radiated Emissions
Channel 001 Receive Mode 1-2 GHz



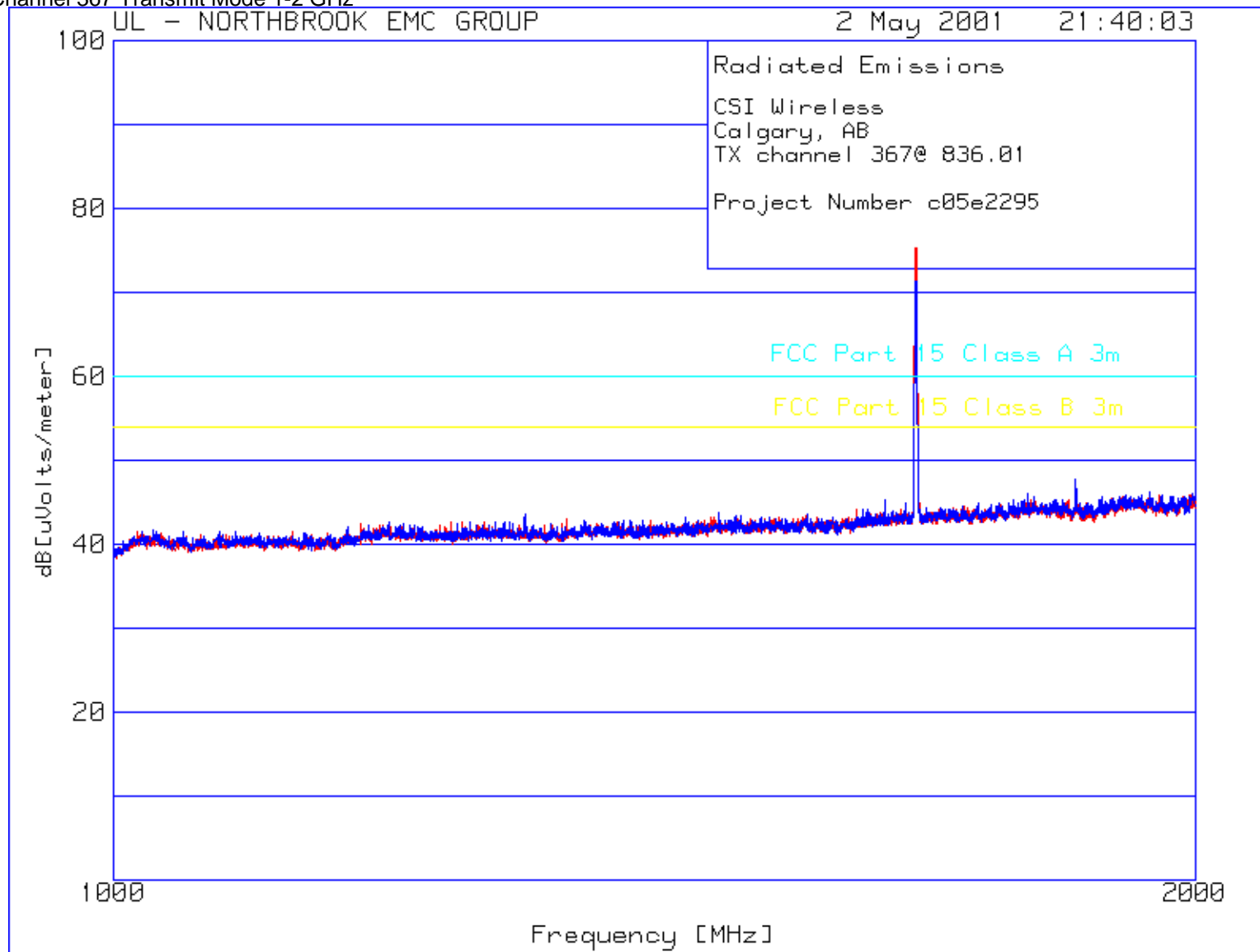
Radiated Emissions

Channel 001 Transmit Mode 1-2 GHz



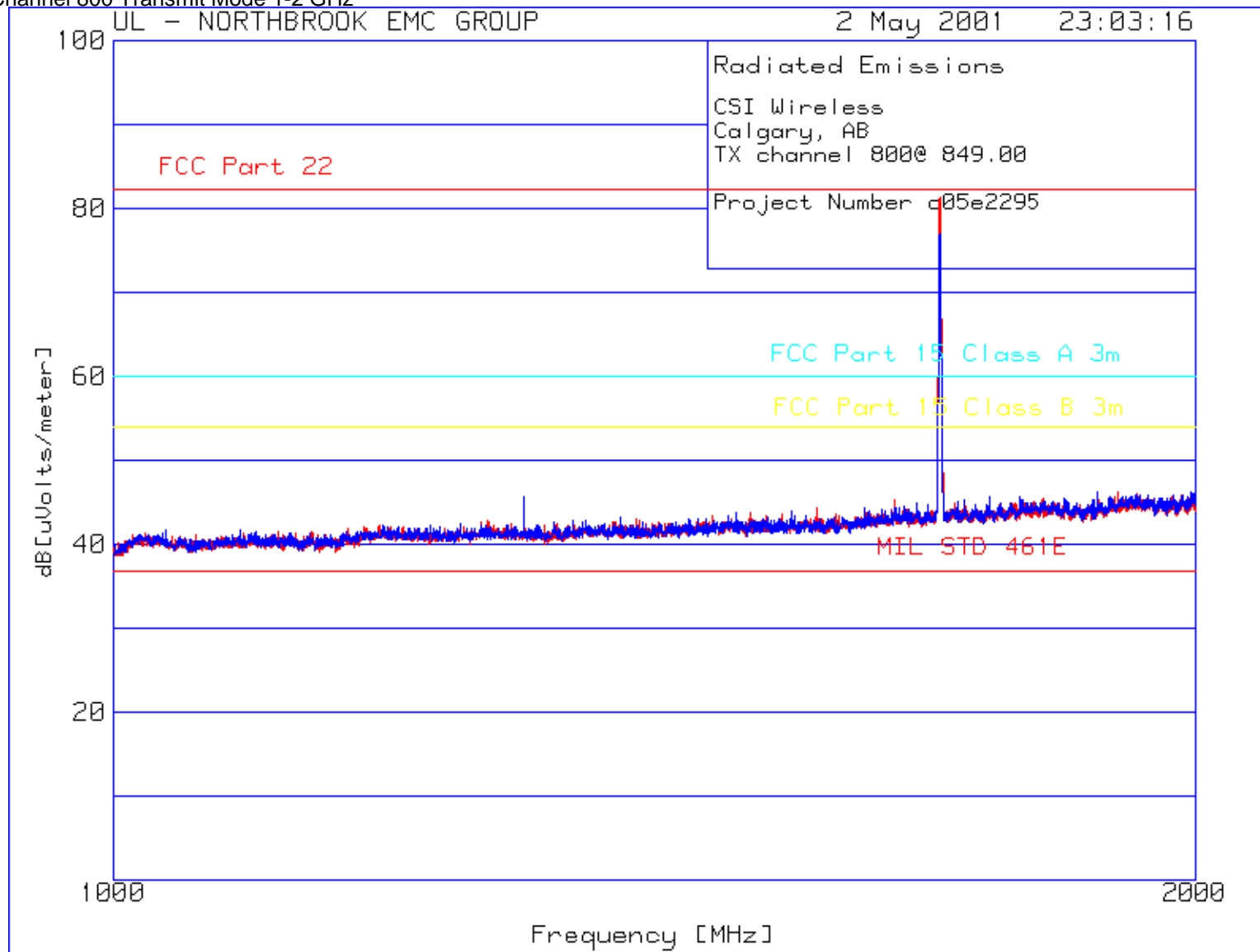
Radiated Emissions

Channel 367 Transmit Mode 1-2 GHz

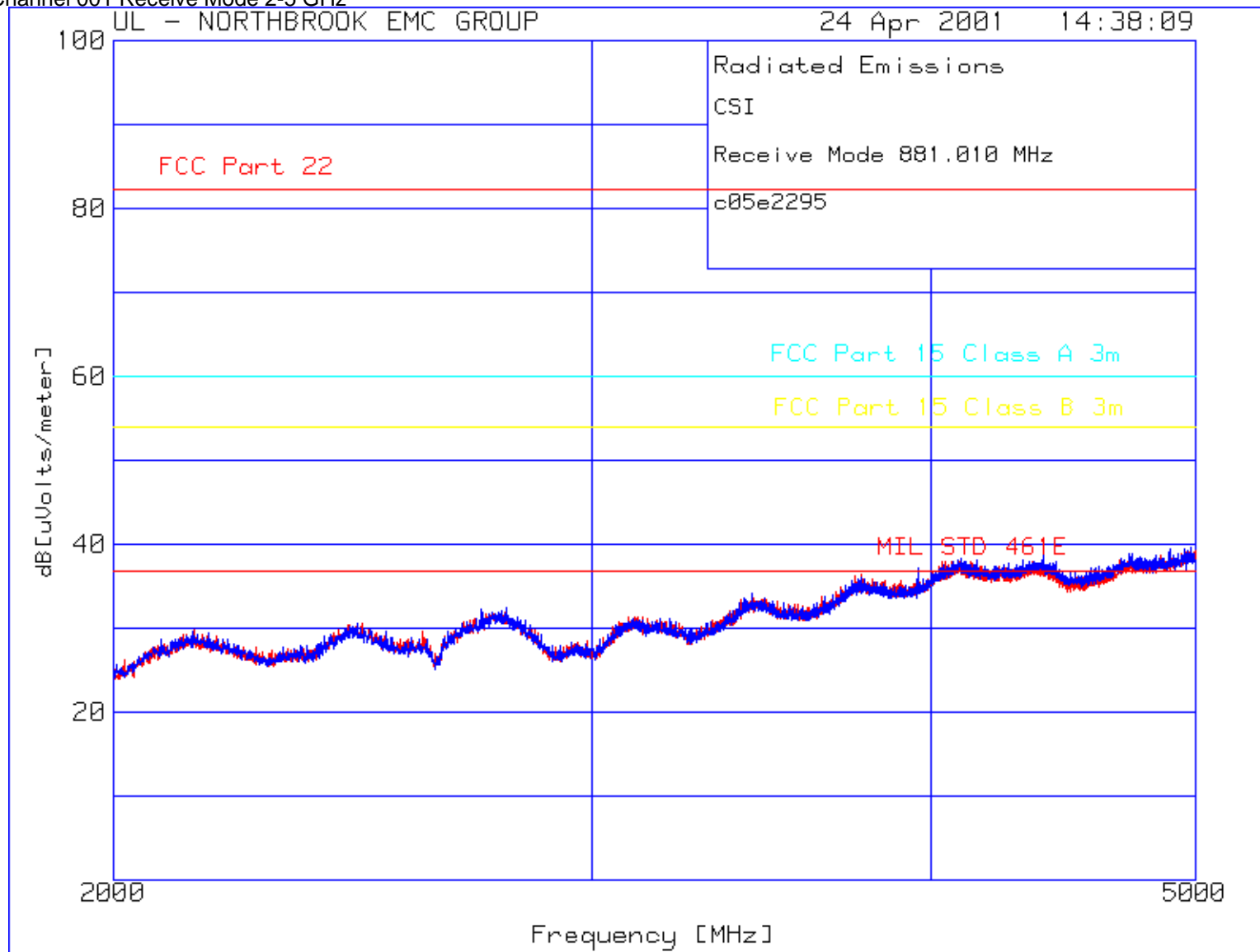


Radiated Emissions

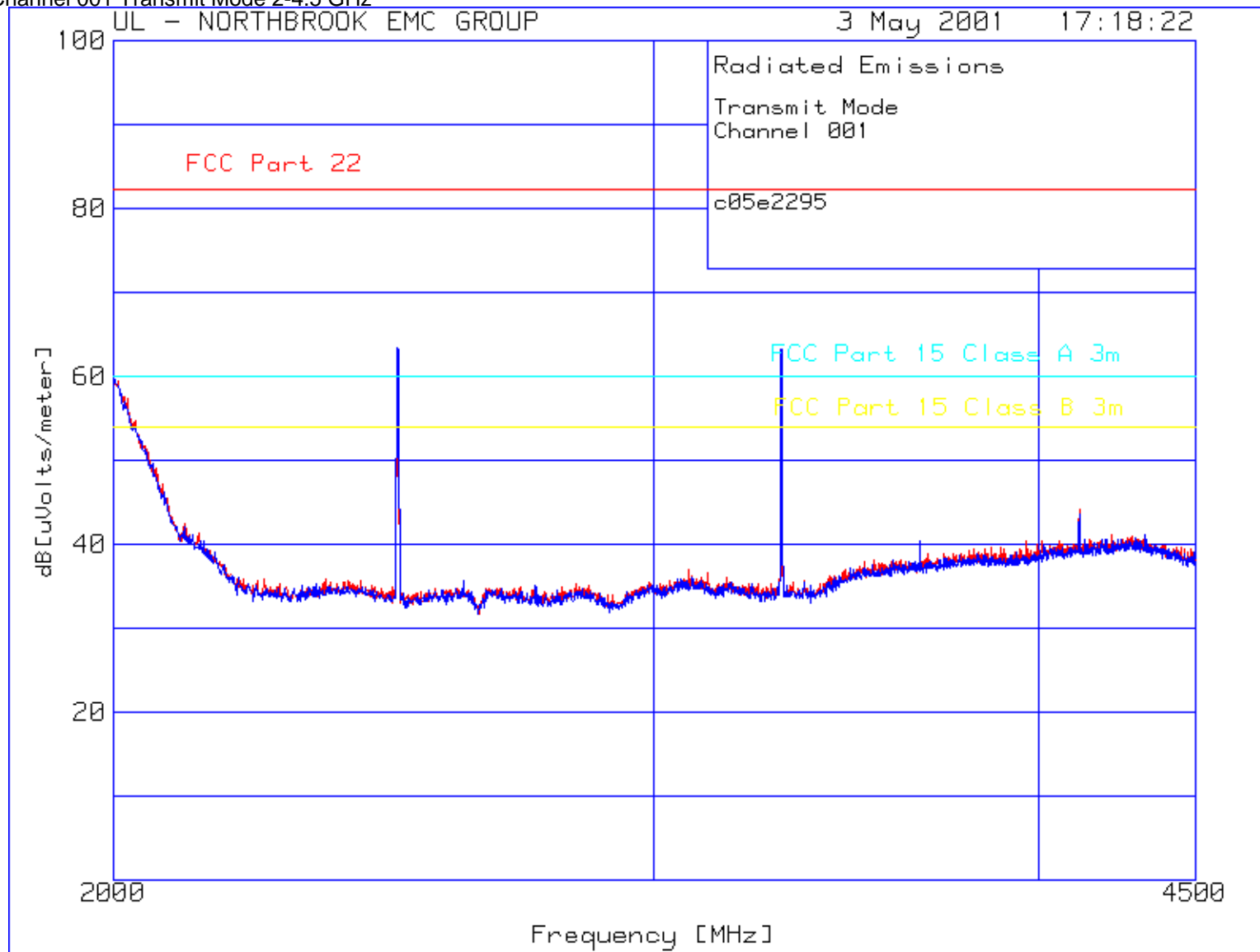
Channel 800 Transmit Mode 1-2 GHz



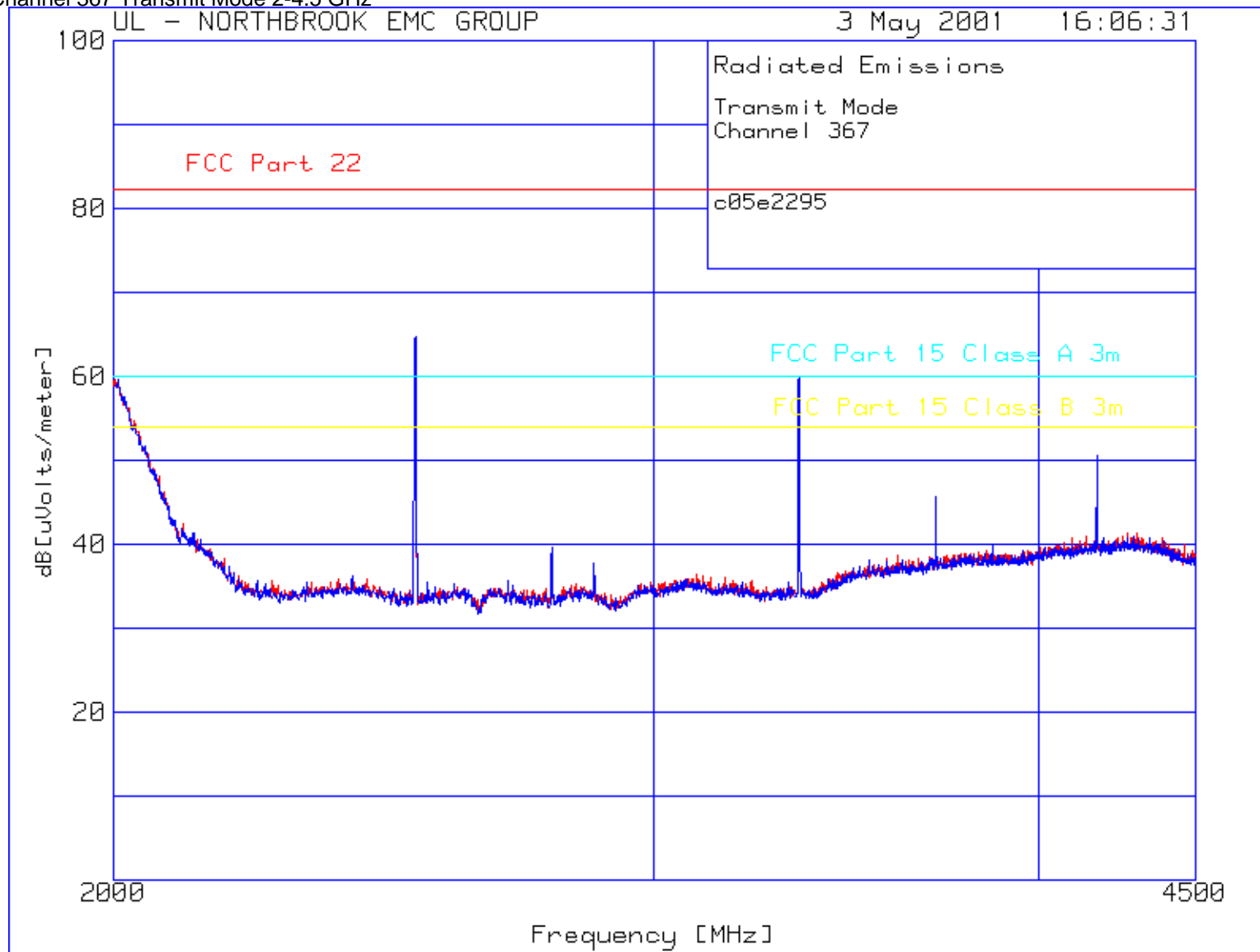
Radiated Emissions
Channel 001 Receive Mode 2-5 GHz



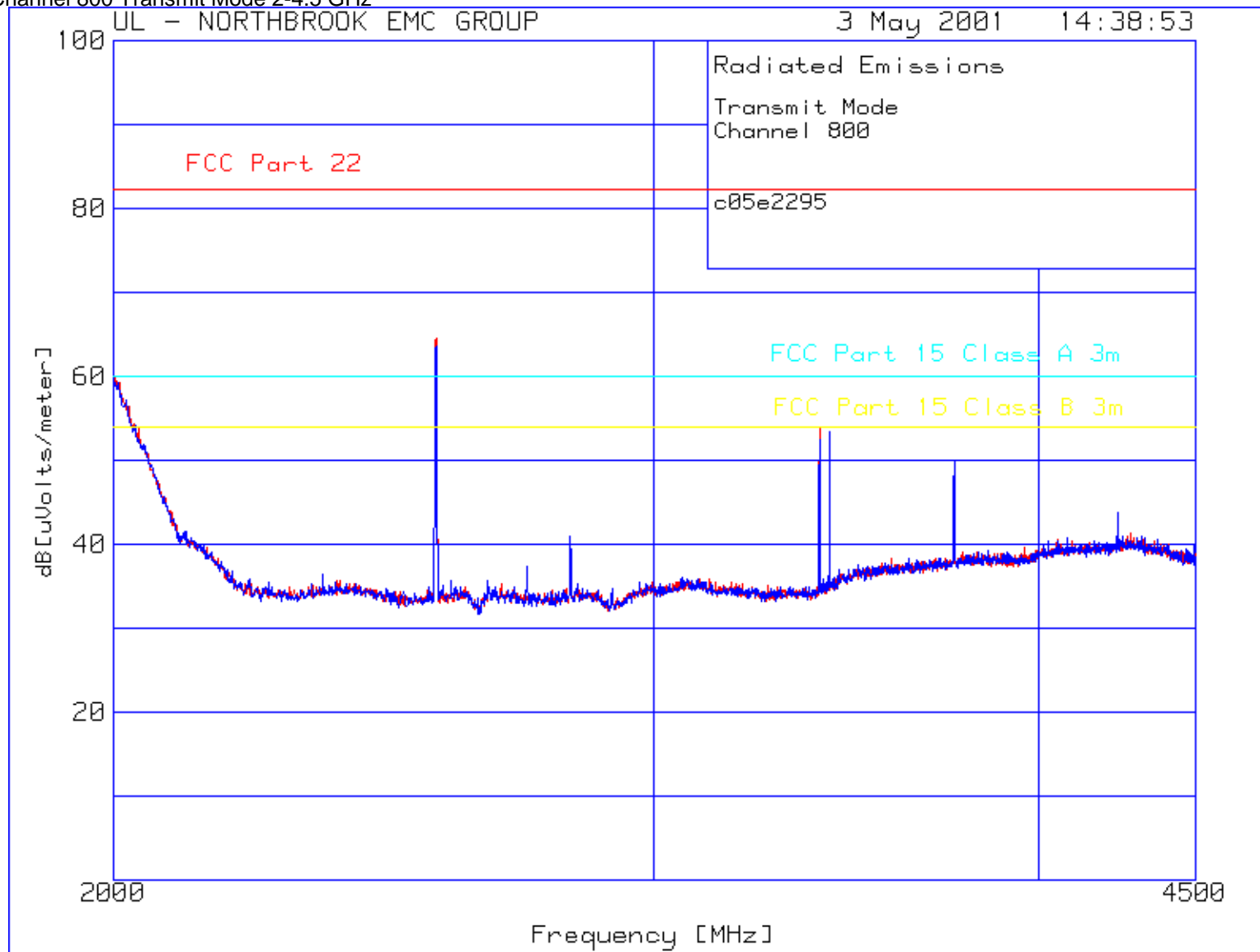
Radiated Emissions
Channel 001 Transmit Mode 2-4.5 GHz



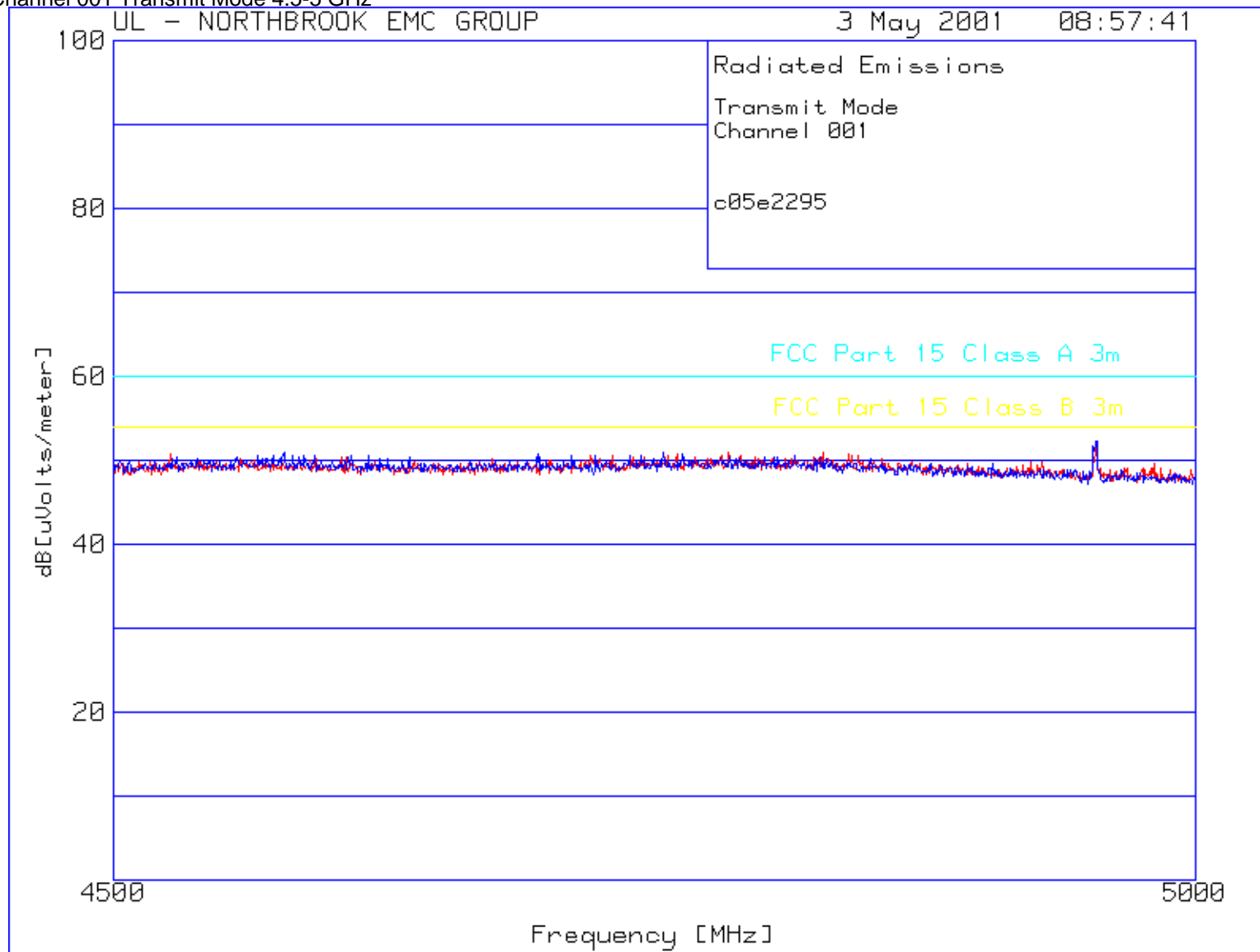
Radiated Emissions
Channel 367 Transmit Mode 2-4.5 GHz



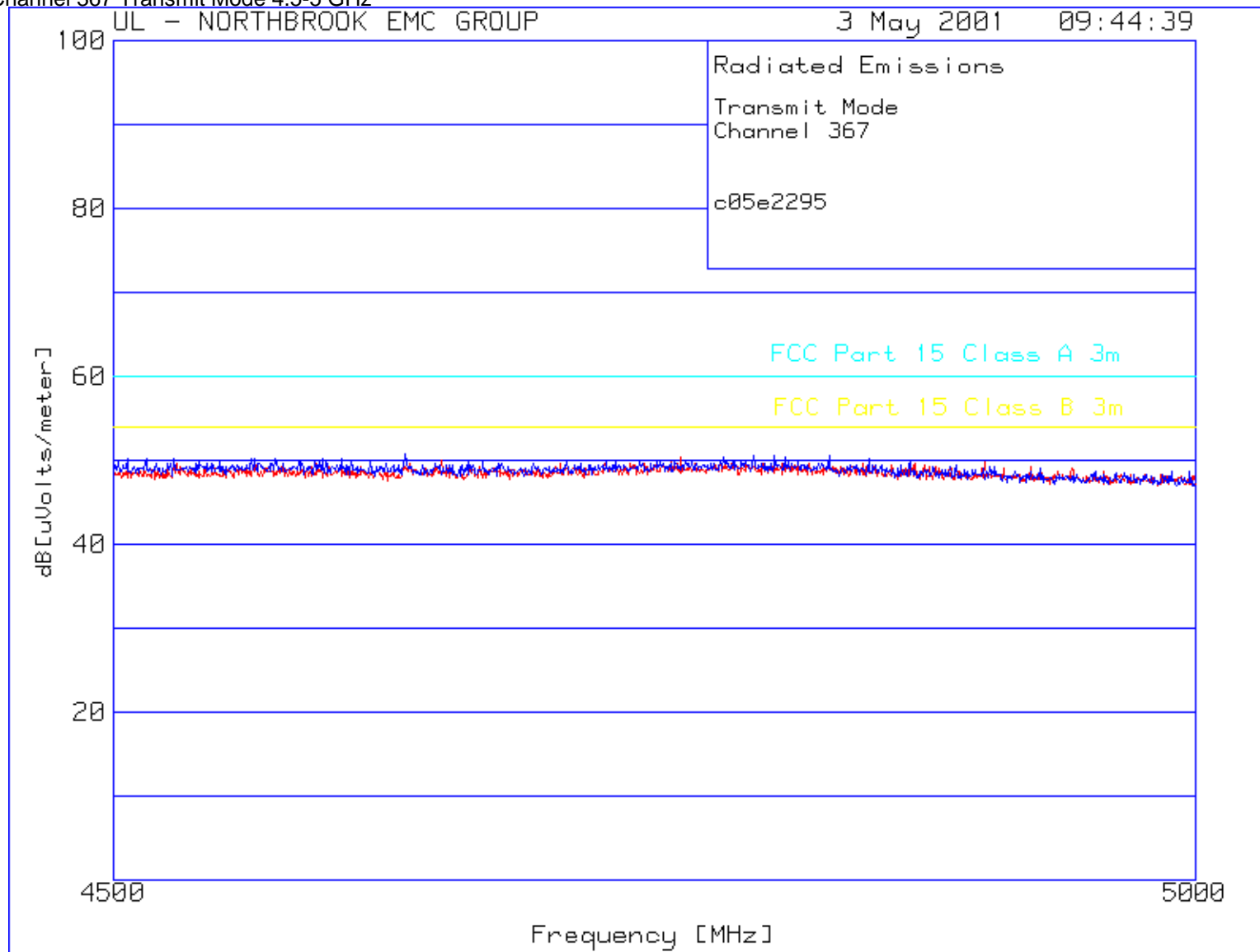
Radiated Emissions
Channel 800 Transmit Mode 2-4.5 GHz



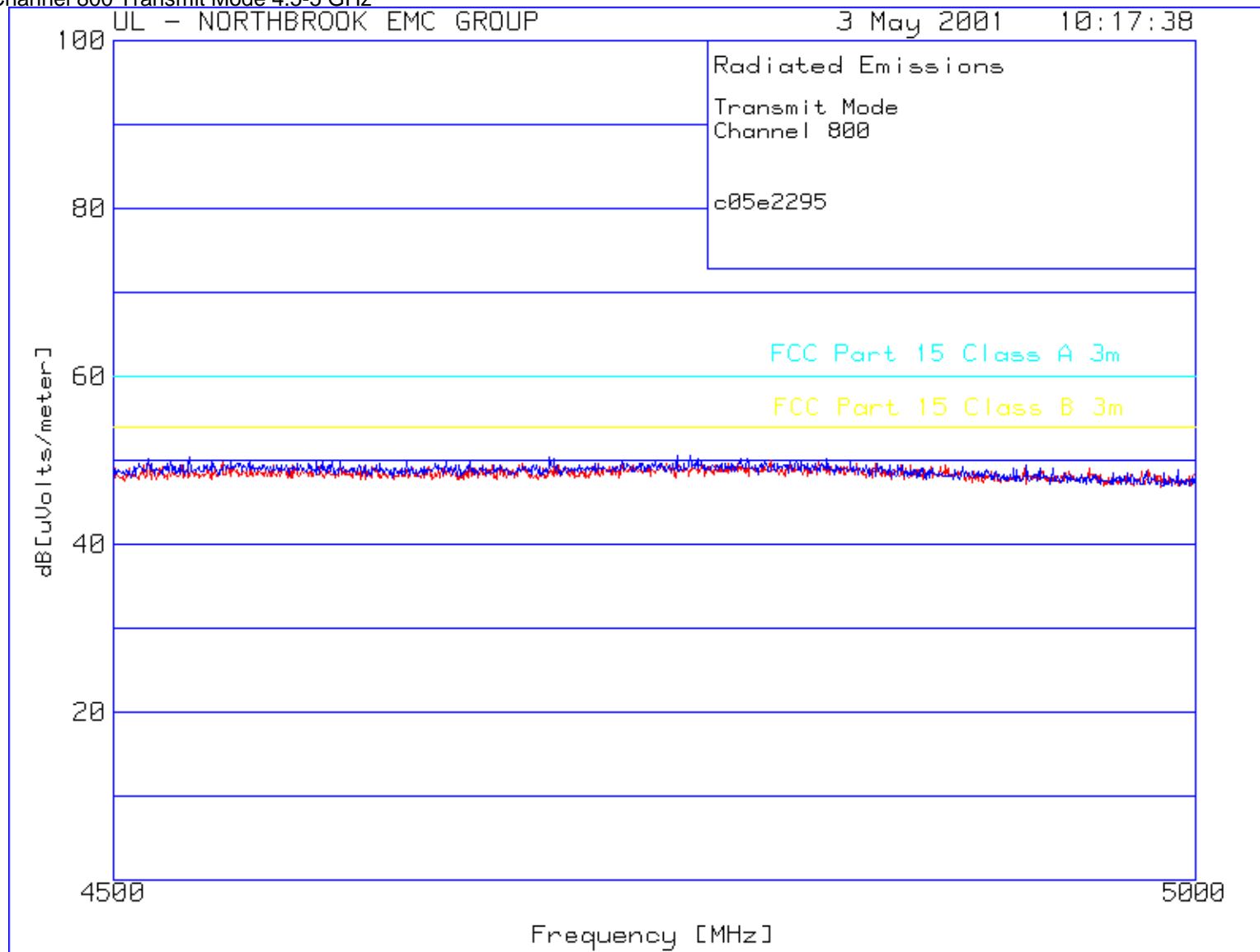
Radiated Emissions
Channel 001 Transmit Mode 4.5-5 GHz



Radiated Emissions
Channel 367 Transmit Mode 4.5-5 GHz

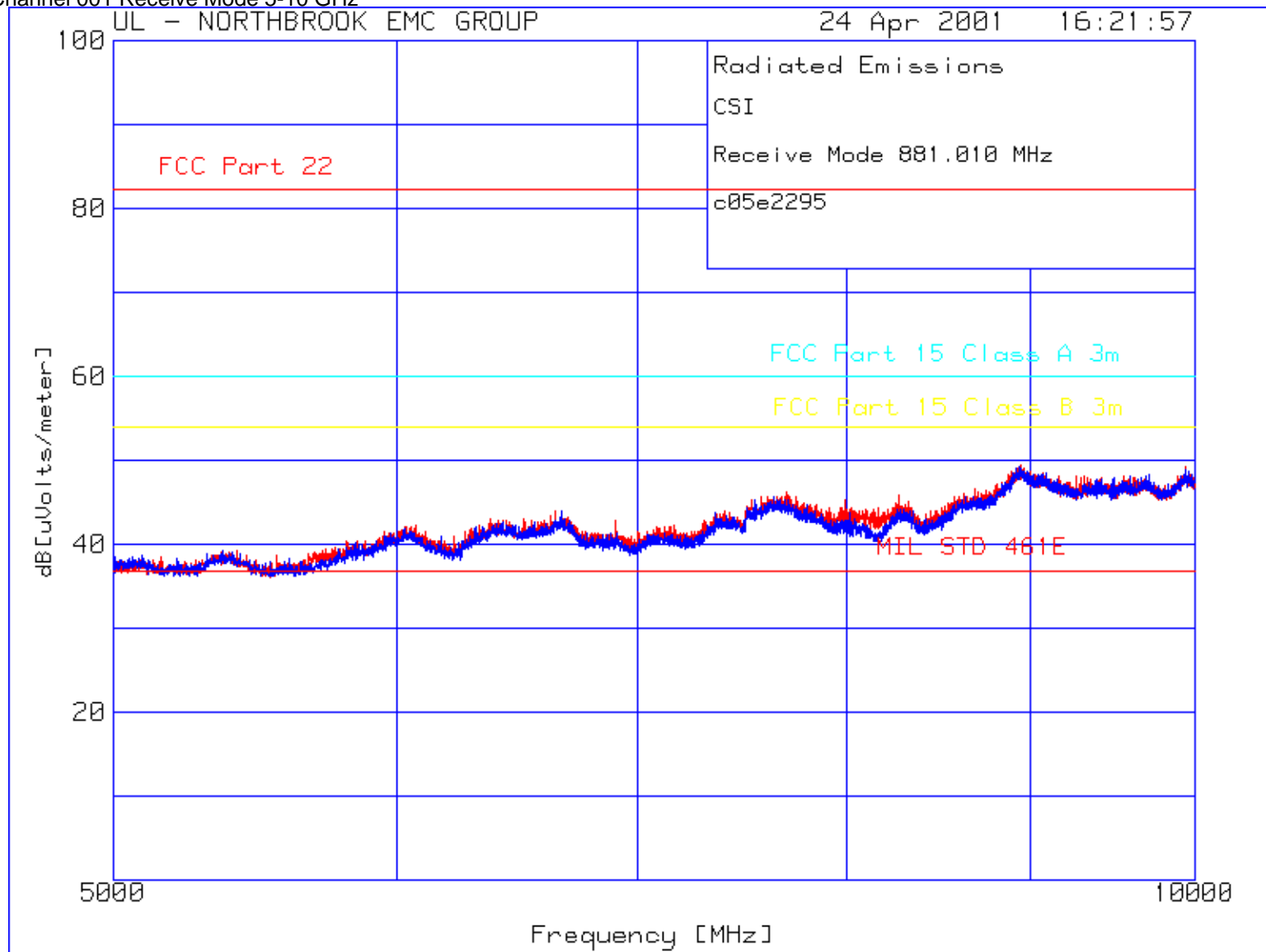


Radiated Emissions
Channel 800 Transmit Mode 4.5-5 GHz

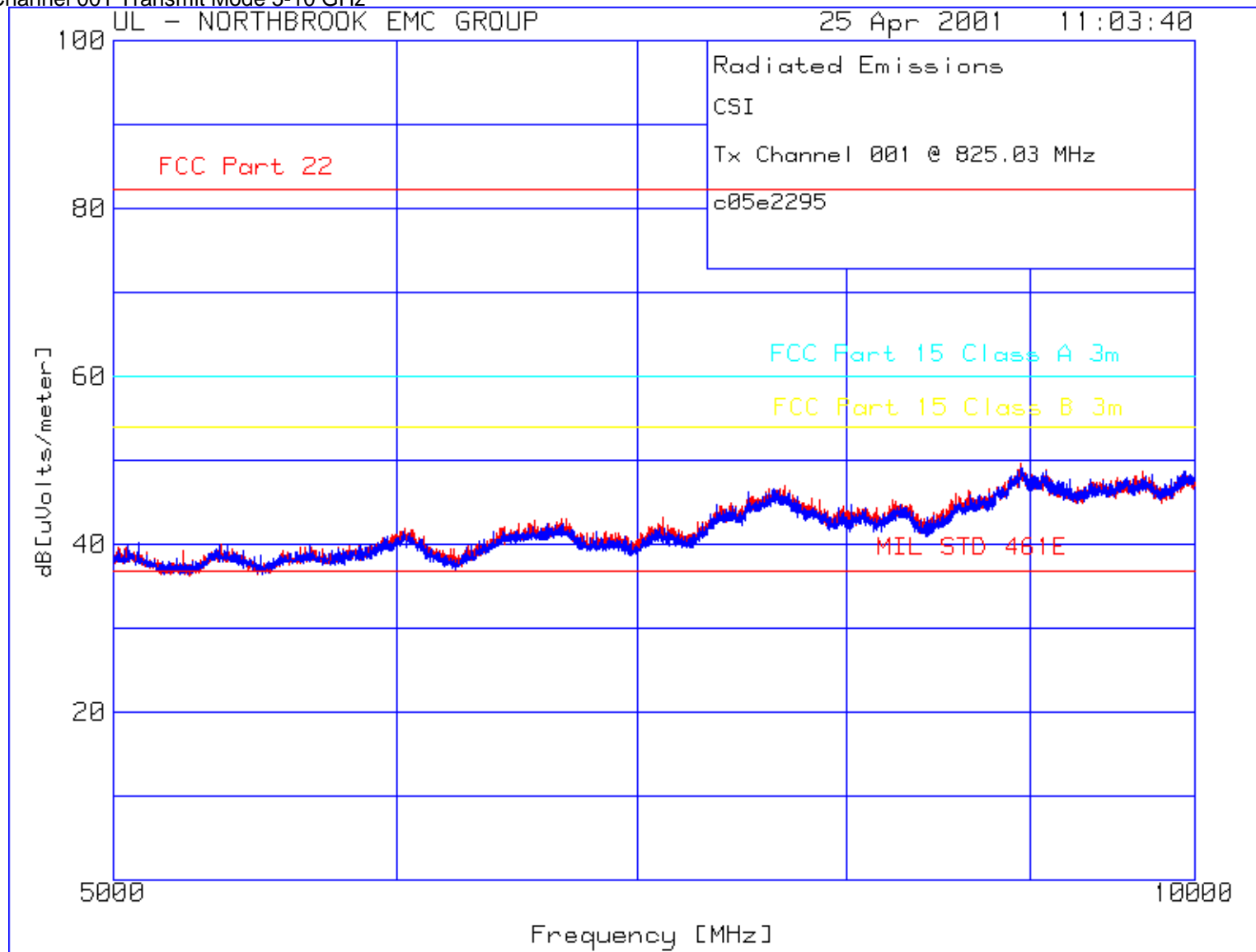


Radiated Emissions

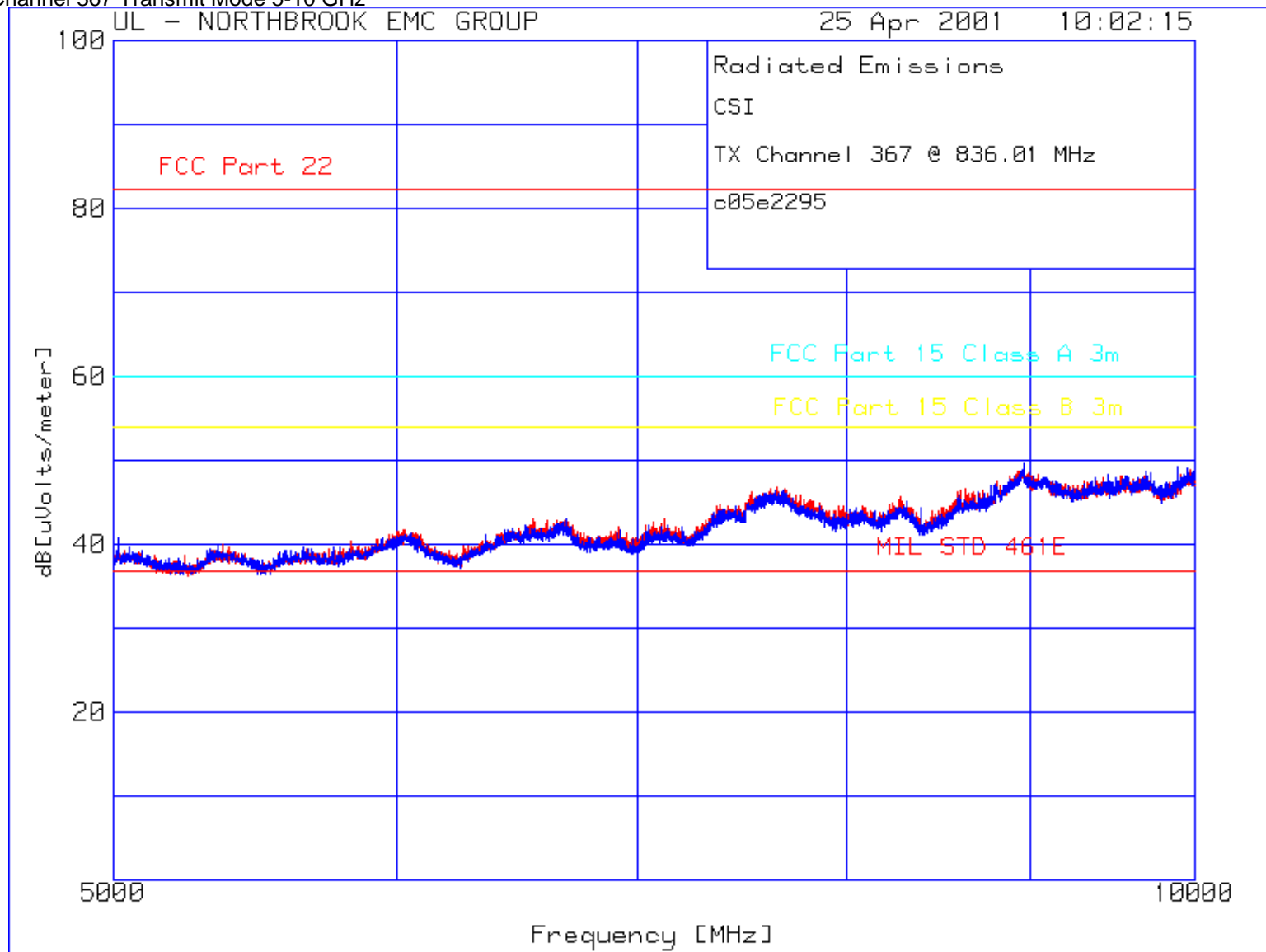
Channel 001 Receive Mode 5-10 GHz



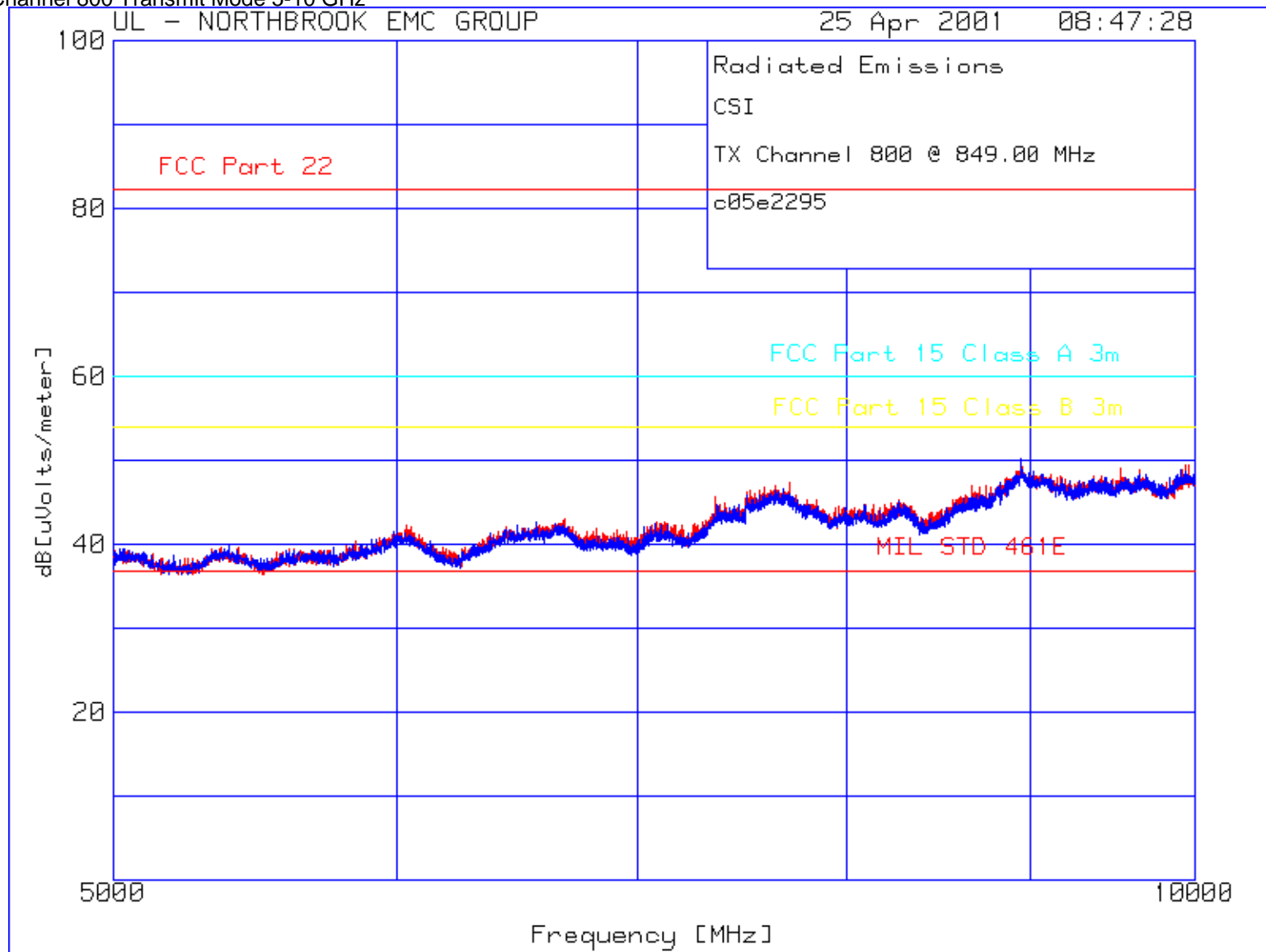
Radiated Emissions
Channel 001 Transmit Mode 5-10 GHz



Radiated Emissions
Channel 367 Transmit Mode 5-10 GHz



Radiated Emissions
Channel 800 Transmit Mode 5-10 GHz



5.0 TEST FACILITY

5.1 LOCATION

The EUT was tested for Electromagnetic Compatibility at the Electronics Test Centre, located in Airdrie, Alberta, Canada.

The RF Anechoic Chamber (RFAC) is identified as Chamber 1, located in the main building complex at the Electronics Test Centre. Its usable working space measures 10.6 m long x 7.3 m wide x 6.5 m high.

This test site is listed with the FCC under Registration Number 99541. Measurements taken at this site are accepted by Industry Canada per file number IC 2046-1.

The floor, walls and ceiling consist of annealed steel panels. The walls and ceiling are covered with ferrite tile, augmented by RF absorbant foam material on the end wall nearest the turntable, and on the adjacent walls and the ceiling. The chamber floor supports a 15 cm high internal floor, constructed of annealed steel panels, that forms the ground plane, and is bonded to the chamber walls.

The 3-m diameter turntable is flush-mounted with the floor. A sub-floor cable-way is provided to route cables between the turntable pit and EUT support equipment. Cables reach the EUT through an opening in the centre of the turntable.

Test instrumentation and EUT support equipment is located in two shielded vestibules located at the side of the main room. Cables are routed through bulkhead panels between the rooms as required. Power feeds are routed into the main room and vestibules through line filters providing at least 100 dB of attenuation between 10 kHz and 10 GHz.

5.2 GROUNDING PLAN

The EUT was located on a wooden table 80 cm above the ground plane. The EUT was grounded according to the client's specifications.

5.3 POWER

AC power was supplied via an Underwriter's Laboratories ULW100-69, 100 dB, 100 Ampere wall mounted filter. Bonding to ground is implemented at the chamber wall.

5.4 EMISSIONS PROFILE

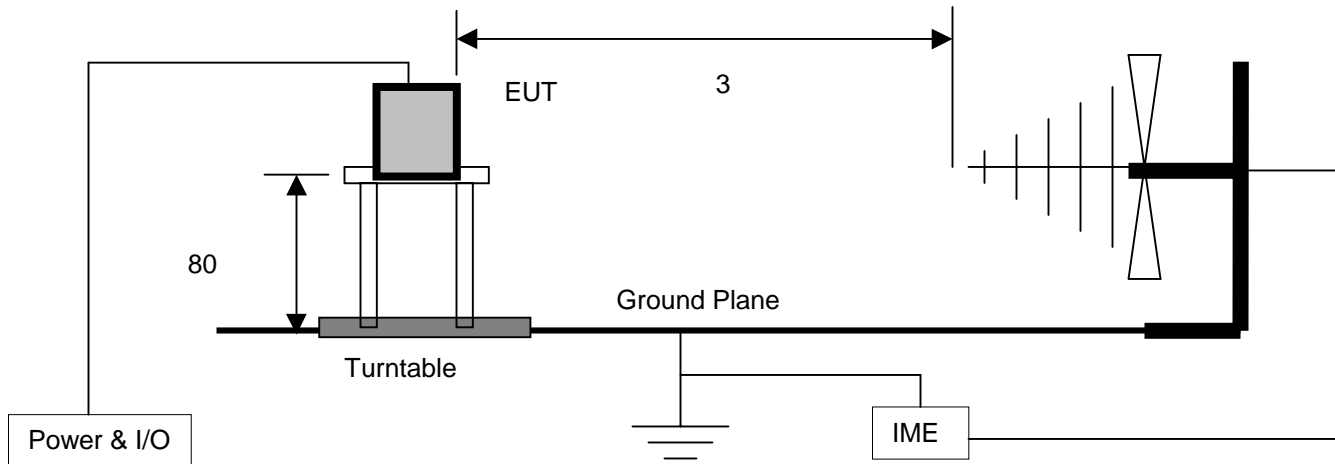
Ambient conducted and radiated electromagnetic emission profiles were generated throughout the tests and are included in the test data.

5.5 TEST CONFIGURATION

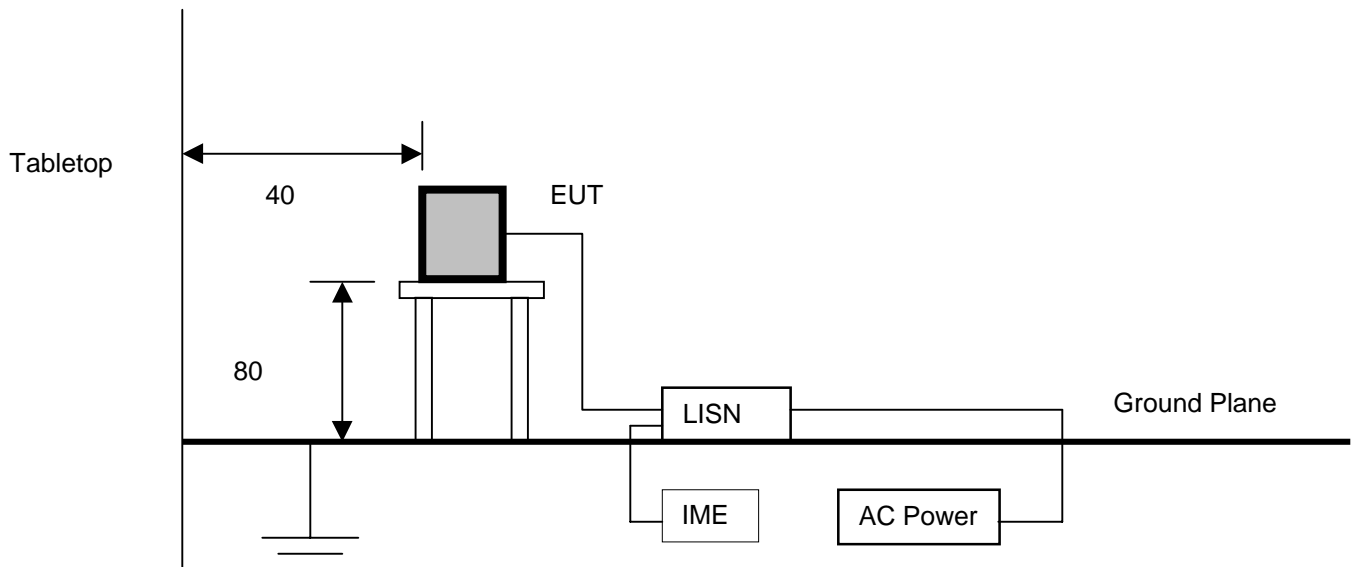
5.5.1 Tabletop Equipment

The following diagrams illustrate the configuration of the EUT test and measurement equipment for Radiated and Conducted Emissions Testing of tabletop equipment.

Tabletop



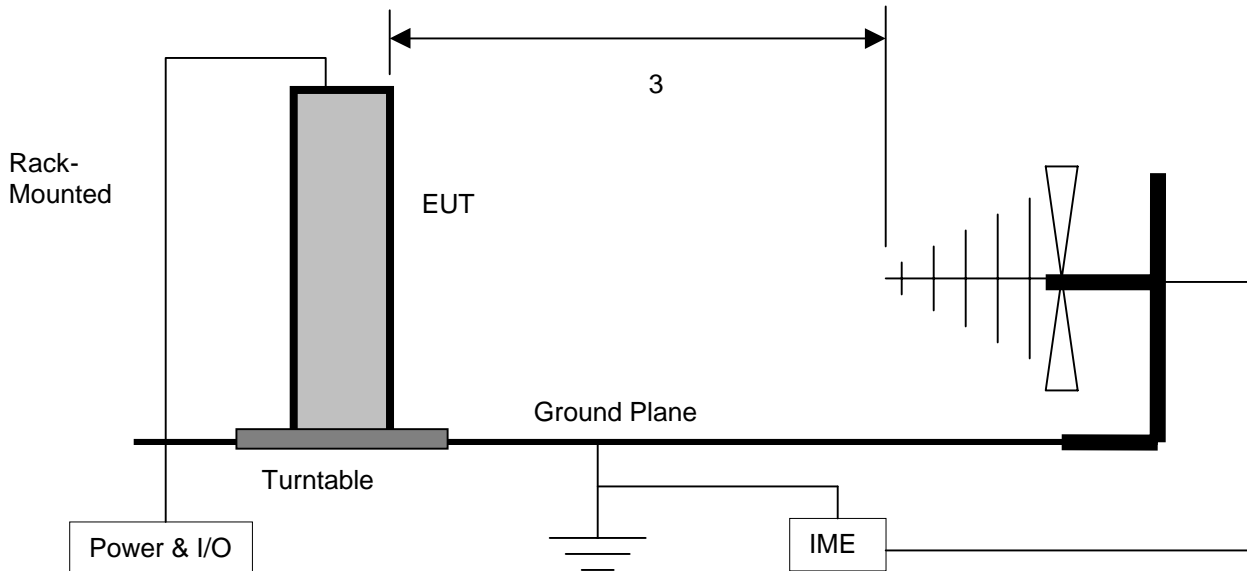
Conducted Emissions



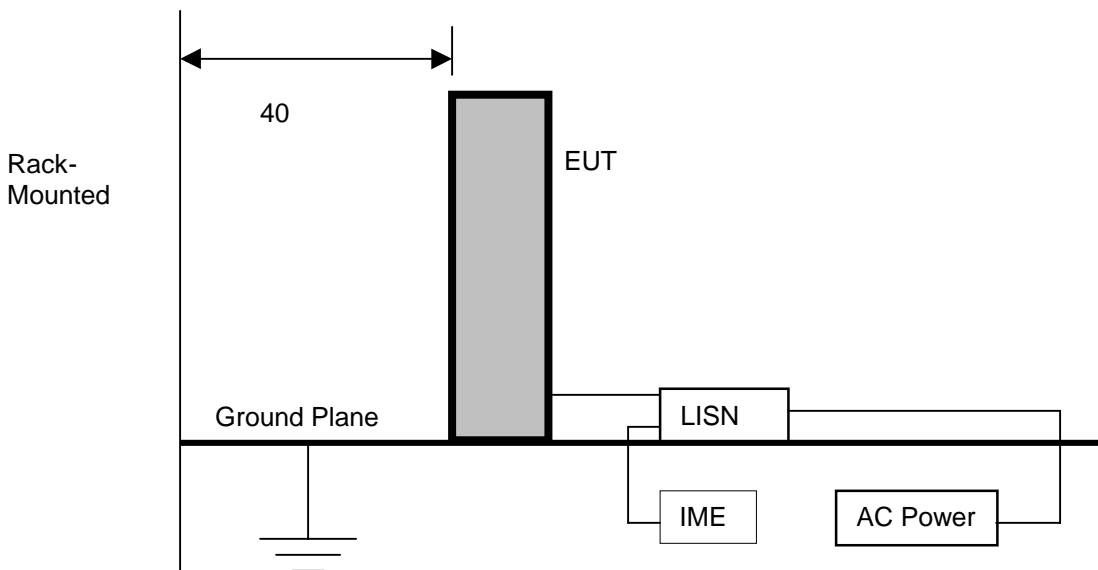
5.5.2 Rack Mount

The following diagrams illustrate the configuration of the EUT test and measurement equipment for Radiated and Conducted Emissions Testing of rack mounted equipment.

Radiated Emissions



Conducted Emissions



6.0 TEST EQUIPMENT

The following equipment was used for this procedure. All measurement devices are calibrated annually, traceable to NIST.

6.1 RADIATED EMISSIONS

- a) Spectrum Analyzer with RF Preselector
- b) CISPR Quasi-peak Adapter
- c) Power Isolation Transformers
- d) Biconilog antenna (20 MHz to 2 GHz)
- e) Antenna mast positioner, and controller
- f) Flush-mounted turntable, and controller
- g) Personal Computer and EMC software

6.2 CONDUCTED EMISSIONS

- a) Spectrum Analyzer with RF Preselector
- b) Line Impedance Stabilization Network, 50 μ H
- c) CISPR Quasi-peak Adapter
- d) Isolation Transformer
- e) Personal Computer and EMC software

6.3 CALIBRATION

All measurement instrumentation conforms to ANSI C63.2. Calibration is maintained in accordance with manufacturer recommendations. Each measurement device is labeled with its ETC asset number and calibration due date.

6.3.1 CALIBRATION ACCURACY

Test equipment used to provide quantitative measurements are calibrated with standards traceable to the National Research Council, National Institute of Standards and Technology or other national standards. Instrumentation systems for emissions measurements have the following accuracies:

Frequency = ± 1 kHz
Amplitude (RE) = ± 4.01 dB
Amplitude (CE) = ± 3.25 dB

6.3.2 TEST EQUIPMENT DESCRIPTION

The equipment used in the tests was selected from the following list.

Instrument	Manufacturer	Model No.	Asset No.	Calibration Due
Spectrum Analyzer	Hewlett Packard	8566B	9565	11 April 2002
Spectrum Analyzer	Hewlett Packard	8566B	9168	30 January 2002
RF Preselector	Hewlett Packard	85685A	9563	21 September 2001
RF Preselector	Hewlett Packard	85685A	9728	30 March 2002
Quasi-Peak Adapter	Hewlett Packard	85650A	9243	16 August 2001
Line Impedance Stabilization Network	EMCO	3825/2r	9331	2 November 2001
Line Impedance Stabilization Network	EMCO	3825/2r	9259	2 November 2001
Biconilog Antenna	ARA	Lpb-2520/A	4318	14 March 2001
Dual Ridged Guide Antenna	EMCO	3115	9588	6 August 2001
Low Noise Amplifier	MITEQ	JS43-01001800-21- 5P	4354	14 February 2002
Power Meter	Hewlett Packard	436A	9061	3 August 2001
Power Sensor	Hewlett Packard	8482A	9758	3 August 2001

Appendix A

LoCate

Test Sample Description (from data provided by CSI Wireless)

Product Application	Product Category
Commercial <input checked="" type="checkbox"/> Military <input type="checkbox"/>	Telecommunications <input checked="" type="checkbox"/> Aerospace <input type="checkbox"/> Information Technology <input type="checkbox"/> Test & Measurement <input type="checkbox"/> Surface Transportation <input type="checkbox"/> Other <input type="checkbox"/> _____
Product Name	LoCate
Part/Model No.	LOCA01
Serial Number	Rev 01 S/N 4 (&6)
Power Requirements: (Voltage, AC/DC, Hz, Current)	12 VDC 1 A
Typical Installation Instructions or Configuration	vehicle-mounted, asset tracking
Ground Connection (in addition to power cord)	chassis connected to ground
Internally Generated Frequencies	2.5 MHz, 14-88 MHz, 132 MHz, Transmit: 824-849 MHz, Receive: 869-894 MHz, 914-939 MHz (L.O.), GPS Receive: 1570 ± 10 MHz
Peripheral Support Equipment	Laptop computer, RS232 to CMOS level converter
Description and number of interconnecting Leads & Cables	Power supply, Data input/output, Cellular Antenna, GPS antenna
Brief Functional Description	GPS Receiver, Cellular Digital modem, I/O interface to vehicle for asset tracking and asset status.