

Applicant:  
Ericsson Inc.

FCC ID no.  
AXATR-414-A2

Technical Information and Intended use

Per 2.1033 and Part 15 of the Federal Communications Rules and Regulations, the following is submitted to substantiate adherence to those specifications.

- 1) Name of Manufacturer: Ericsson Inc.
- 2) Model number of Transceiver: FCC ID: AXATR-414-A2
- 3) Description of Transceiver: This portable transceiver is designed for use in the GSM 1900 cellular telephone system.
  - a) Transmitter range: 1850 MHz to 1910 MHz
  - b) Receiver range: 1930MHz to 1990MHz
  - c) IF Frequencies: 1<sup>st</sup> IF- 188MHz 2<sup>nd</sup> IF- 6MHz
- 4) Measurement procedure: reference Part 15, Subpart B as applicable to this unit and measurement standard as outlined in part 15.31. The unit was tested using ANSI C63.4 1992. The site where the measurements were performed is on file with the FCC.
  - a) Site location: Underwriters Laboratory Inc., 12 Laboratory Drive, Research Triangle Park, NC 27709
- 5) Date of measurement: August 31, 2000
- 6) Summary of measurements: No radiation was found to exceed the limit set forth in Part 15. Test results are plotted and attached.
- 7) On the basis of these requirements, this transceiver is certified as capable of complying with the radiation requirements of Part 15 under normal operation and with the usual maintenance.

Jim Sponsler  
Regulatory Manager  
9-29-00



12 Laboratory Drive  
P.O. Box 13995  
Research Triangle Park  
North Carolina 27709-3995  
(919) 549-1400  
FAX No. (919) 549-1842

7 September, 2000



To: Mr. Jim Sponsler  
Ericsson

From: Jim Marley  
Underwriters Laboratories Inc.

Subject: Completion of R380 with Todd cable FCC Part 15 Class B on August 31, 2000

Dear Mr. Sponsler,

We have completed radiated emissions testing of the R380 with Todd cable and found the unit to meet FCC Part 15 Class B limits. One frequency measured and recorded on the data plots, at 1947.96 MHz (peak) and 1947.821 MHz (average), was investigated and found to be emitted from the cell station simulator hardware located in the test area during the measurements. Because the cell station simulator is necessary to operate the R380, measurements could not be performed with the cell station hardware powered off. Please disregard this frequency on the data plots and frequency list that we provided to you. Please give me a call if you have any questions.

Regards,

Jim Marley  
(919) 549-1408  
[james.r.marley@us.ul.com](mailto:james.r.marley@us.ul.com)

UL EMC LABORATORIES-RTP, NC

31 Aug 2000 16:00:10

FCC PART 15, SUBPART B

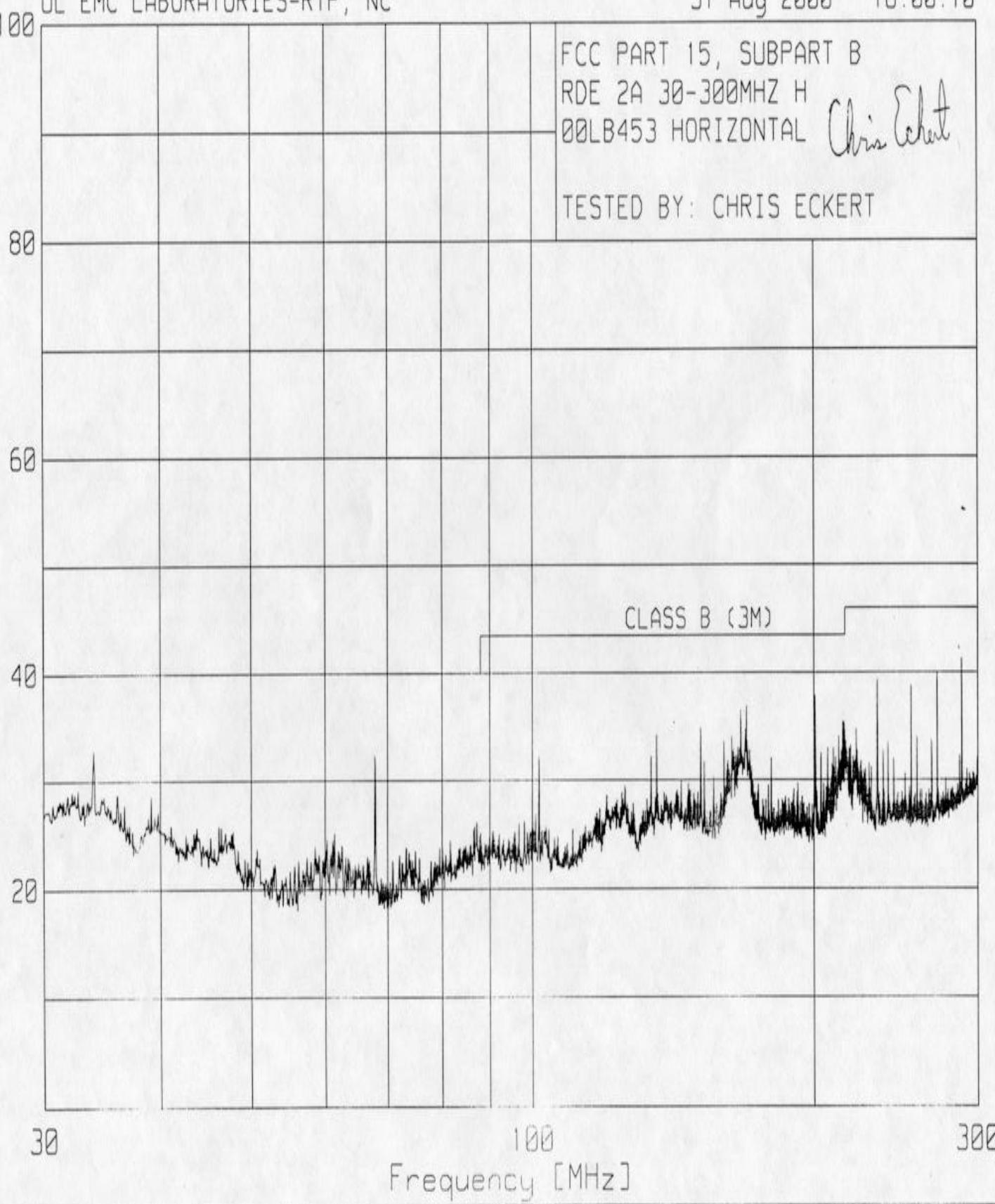
RDE 2A 30-300MHZ H

00LB453 HORIZONTAL

Chris Eckert

TESTED BY: CHRIS ECKERT

dB [microvolts/meter]



AXATR-414-A2 with RS232 cable

UL EMC LABORATORIES-RTP, NC

31 Aug 2000 16:30:56

FCC PART 15, SUBPART B

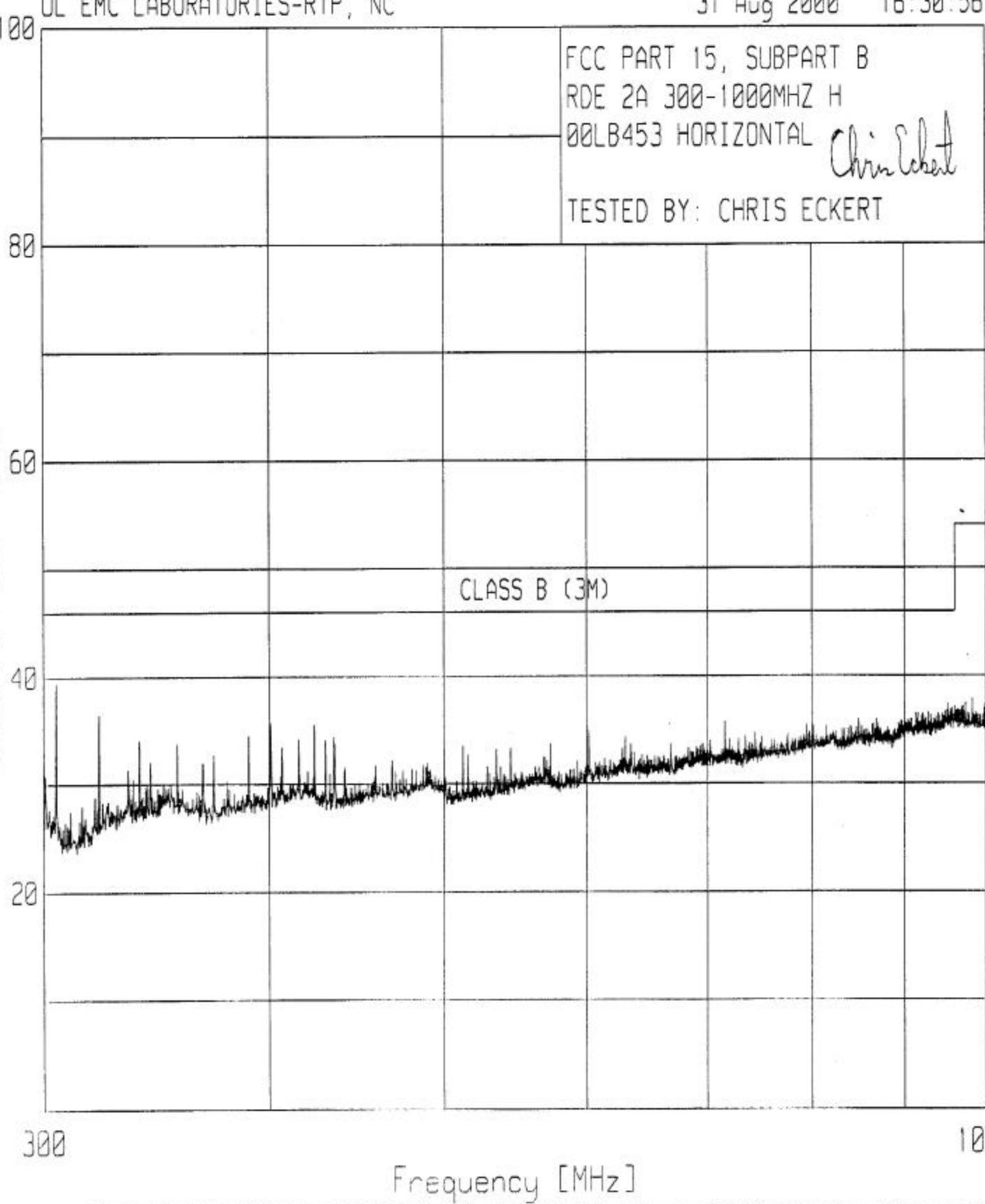
RDE 2A 300-1000MHZ H

00LB453 HORIZONTAL

*Chris Eckert*

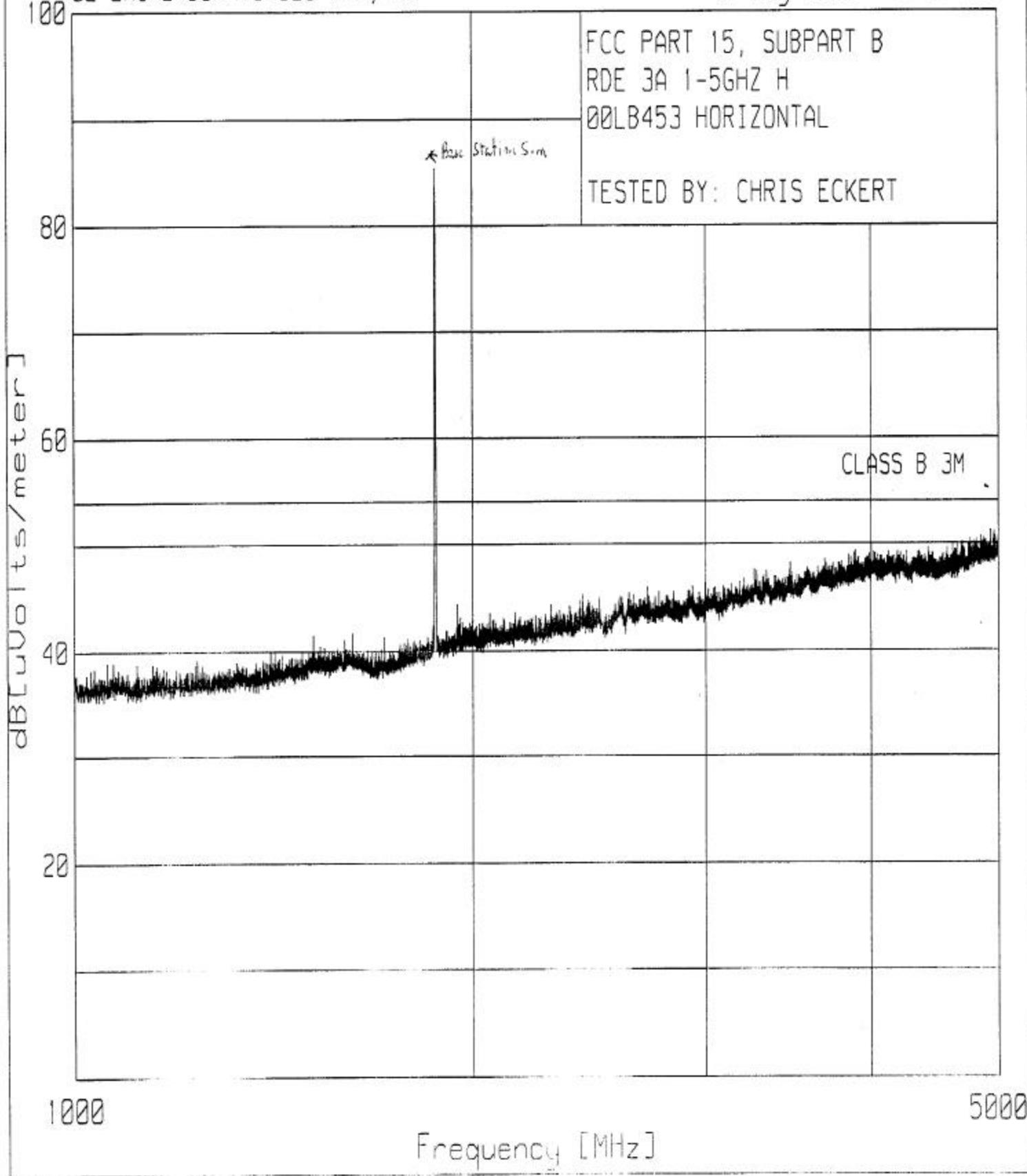
TESTED BY: CHRIS ECKERT

dB (volts/meter)



UL EMC LABORATORIES-RTP, NC

31 Aug 2000 11:34:38



UL EMC LABORATORIES-RTP, NC

31 Aug 2000 13:14:15

100

FCC PART 15, SUBPART B

RDE 3A 5-10GHZ H

00LB453 HORIZONTAL

*Chris Eckert*

TESTED BY: CHRIS ECKERT

80

CLASS B 1M (ABOVE 1 GHz)

60

dBEuVolts/meter

40

20

5000

10000

Frequency [MHz]

Chris Eckert

UL EMC LABORATORIES-RTP, NC

Date Tested: 31 Aug 20  
15:32:43

2 CG-E  
RDE 3A 30-300MHZ V  
00LB453 VERTICAL  
TESTED BY: CHRIS ECKERT

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB [uVolts/meter]	Limit 1:1	2	3	4
31.8924	13.64	qp .9	16.9	31.44	40	N/A	N/A	N/A
Azimuth: 136	Height:102	Vert	Margin [dB]	-8.56	N/A	N/A	N/A	N/A
33.9198	21.6	qp 1	15.9	38.5	40	N/A	N/A	N/A
Azimuth: 4	Height:101	Vert	Margin [dB]	-1.5	N/A	N/A	N/A	N/A
35.9665	15.27	qp 1	15	31.27	40	N/A	N/A	N/A
Azimuth: 136	Height:100	Vert	Margin [dB]	-8.73	N/A	N/A	N/A	N/A

LIMIT 1: CLASS B (3M)

LIMIT 2: NONE

LIMIT 3: NONE

LIMIT 4: NONE

pk - Peak detector

qp - Quasi-Peak detector

av - Average detector

UL EMC LABORATORIES-RTP, NC

31 Aug 2000 15:32:43

100

FCC PART 15, SUBPART B

RDE 2A 30-300MHz V

00LB453 VERTICAL

Chris Eckert

TESTED BY: CHRIS ECKERT

80

60

40

20

dB [Volts/meter]

CLASS B (3M)

30

100

300

Frequency [MHz]

UL EMC LABORATORIES-RTP, NC

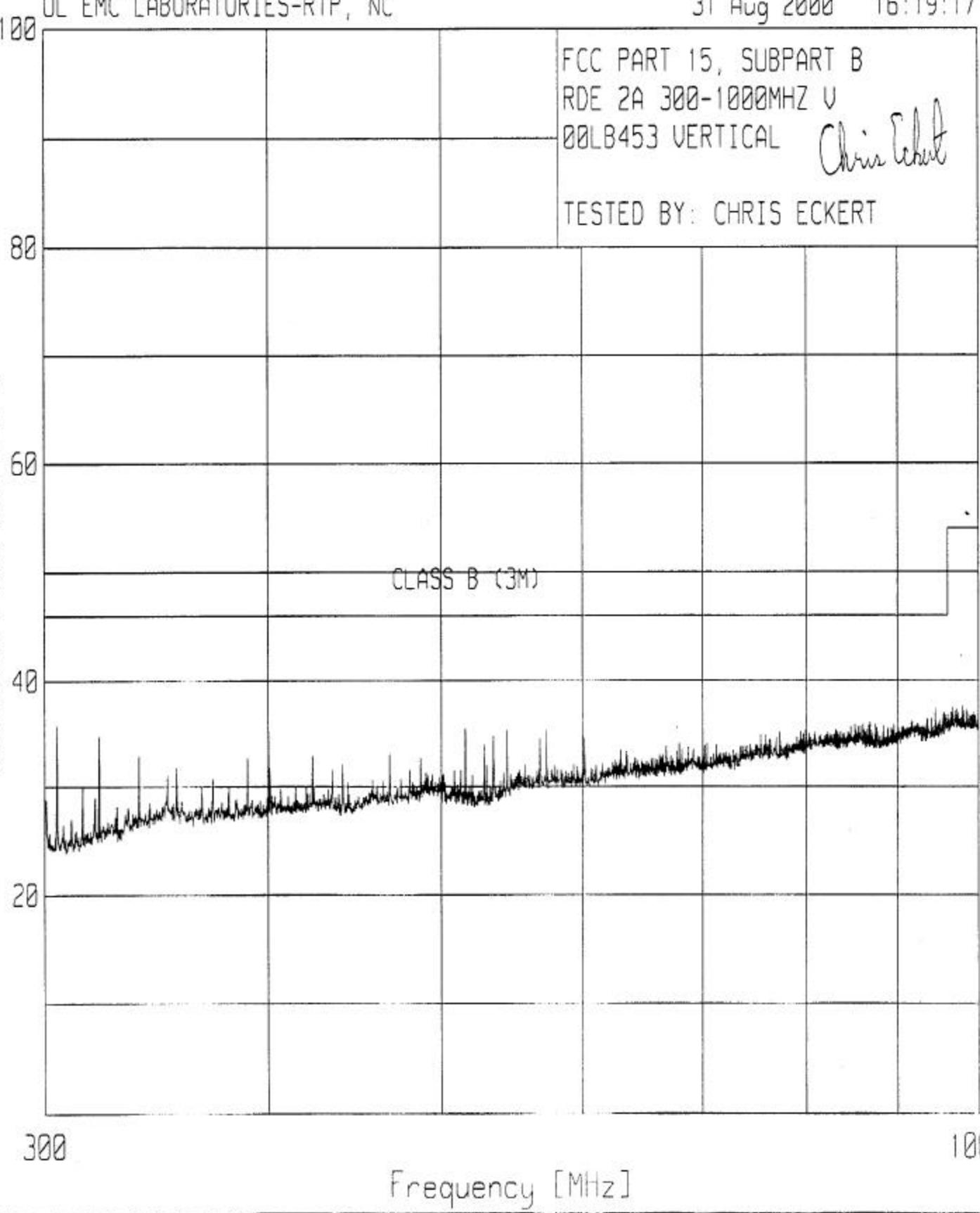
31 Aug 2000 16:19:17

FCC PART 15, SUBPART B  
RDE 2A 300-1000MHZ V  
00LB453 VERTICAL

*Chris Eckert*

TESTED BY: CHRIS ECKERT

dB coulombs/meter



UL EMC LABORATORIES-RTP, NC

31 Aug 2000 11:04:42

100 FCC PART 15, SUBPART B

RDE 3A 1-5GHZ U

00LB453 VERTICAL

Chris Eckert

TESTED BY: CHRIS ECKERT

dBc [volts/meter]

80

60

40

20

1000

5000

Frequency [MHz]

AXATR-414-A2 with RS232 cable

UL EMC LABORATORIES-RTP, NC

31 Aug 2000 12:47:35

100

FCC PART 15, SUBPART B

RDE 3A 5-10GHZ U

00LB453 VERTICAL

Chris Eckert

TESTED BY: CHRIS ECKERT

80

CLASS B 1M (ABOVE 1 GHz)

60

dBELV (volts/meter)

40

20

5000

10000

Frequency [MHz]