

3 September, 1999

SUBJECT: FCC CONFIRMATION NUMBER **EA94035** (PART 22 AND 15 TESTING)

This letter is to verify that the following testing was performed;

Product: Merlin™
Serial number: 01.6D
FCC ID number: NBZNRM-6831
Standard tested to: CFR 47 Part 22, 15
Date performed: August 27-28, 1999
Lab: MPB Technologies' "Electronics Test Centre" (Airdrie)
Technologist: Ian Guldberg & Jeffery Taylor

The following is the ERP measurements

Frequency (MHz)	Polarity	Power into Dipole (dBm)	Azimuth (degrees)	Height of Rx antenna (cm)
824.04	Vertical	22.6	201	161
836.5195	Vertical	23.3	325	157
848.97	Vertical	26.4	207	156
824.04	Horizontal	16.8	187	167
836.5195	Horizontal	18.2	47	284
848.97	Horizontal	15.8	346	273

The following data was used for calculating the Part 22 limits

Frequency (MHz)	Polarity	Azimuth (degrees)	Height of Rx antenna (cm)	Level Measured at Spectrum Analyzer	C±45 kHz * limit
824.04	Vertical	201	161	-13.6 dBm	84.6
836.5195	Vertical	325	157	-14.1 dBm	83.4
848.97	Vertical	207	156	-13.4 dBm	80.8
824.04	Horizontal	187	167	-16.6 dBm	87.1
836.5195	Horizontal	47	284	-18.0 dBm	84.2
848.97	Horizontal	346	273	-16.9 dBm	87.6

*see attached sample calculation

Sincerely

Jeffery Taylor, T.T.
EMI/EMC Test Technologist

Sample Calculation of Part 22 Emissions Limit
(Vertical Polarization, 824.04MHz)

Calculation of Carrier Field strength at measuring antenna:

Carrier power measured at spectrum analyser = -13.6 dBm

Cable loss from measuring antenna to spectrum analyser = 3.8 dB

Carrier Power at measuring antenna port = -13.6 dBm + 3.8 dB = -9.8 dBm

Carrier Voltage at measuring antenna port = -9.8 dBm + 107dBuV/mW = 97.2 dBuV
(for 50 ohm load)

Antenna factor at 824 MHz = 23 dB/m

Carrier Field strength at measuring antenna = 97.2 dBuV + 23 dB/m = 120.2 dBuV/m

Calculation of Attenuation requirement for Part 22:

Measured ERP of Carrier = 22.6 dBm = 0.182 W

Required attenuation below carrier per Part 22 specification = $43 + 10\log(P) = 35.6$ dB

Emission Limit for Field Strength Measurements:

(Carrier Field strength at measuring antenna) – (required attenuation)
= 120.2 dBuV/m – 35.6 dB = 84.6 dBuV/m

**Radiated Emissions
Vertical Polarity
FCC PART 22**

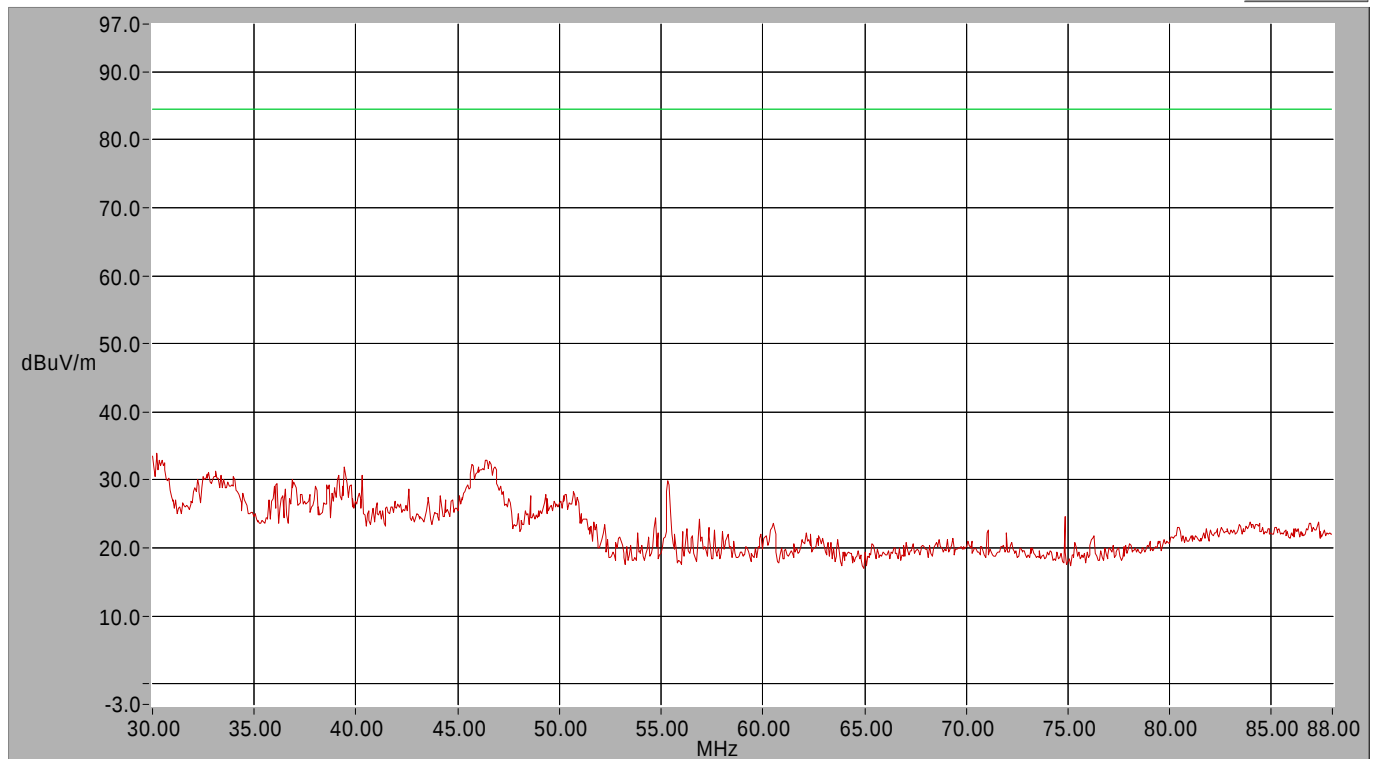
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991 (824.04 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:29 PM

Plot Number: 13

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: 50.00 ms	PR Atten: 0.00 dB
RBW 100.000 kHz	Ref. Lev: 77.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318v3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

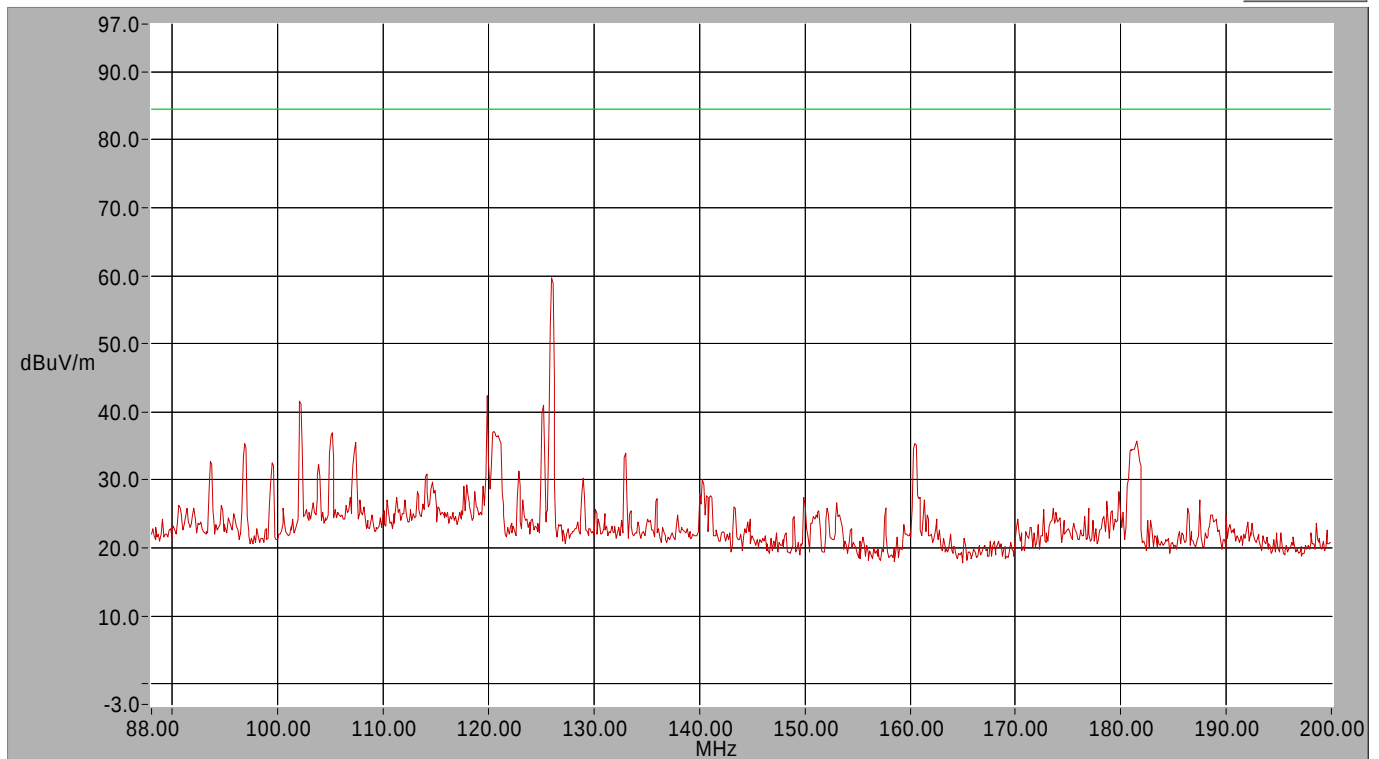
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991 (824.04 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:25 PM

Plot Number: 2

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: Auto	PR Atten: 0.00 dB
RBW: 100.000 kHz	Ref. Lev: 77.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318v3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

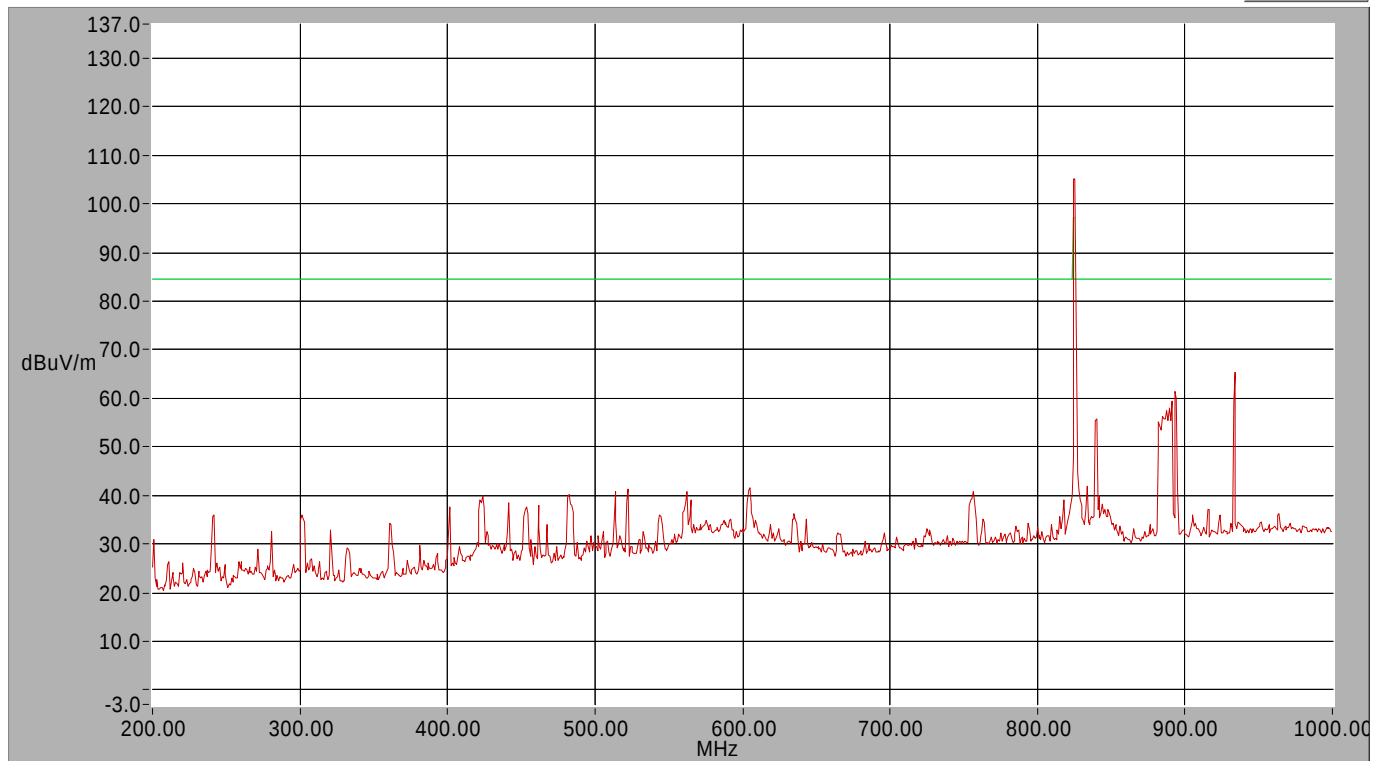
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991 (824.04 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:21 PM

Plot Number: 3

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: Auto	PR Atten: 0.00 dB
RBW: 100.000 kHz	Ref. Lev: 77.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318v3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

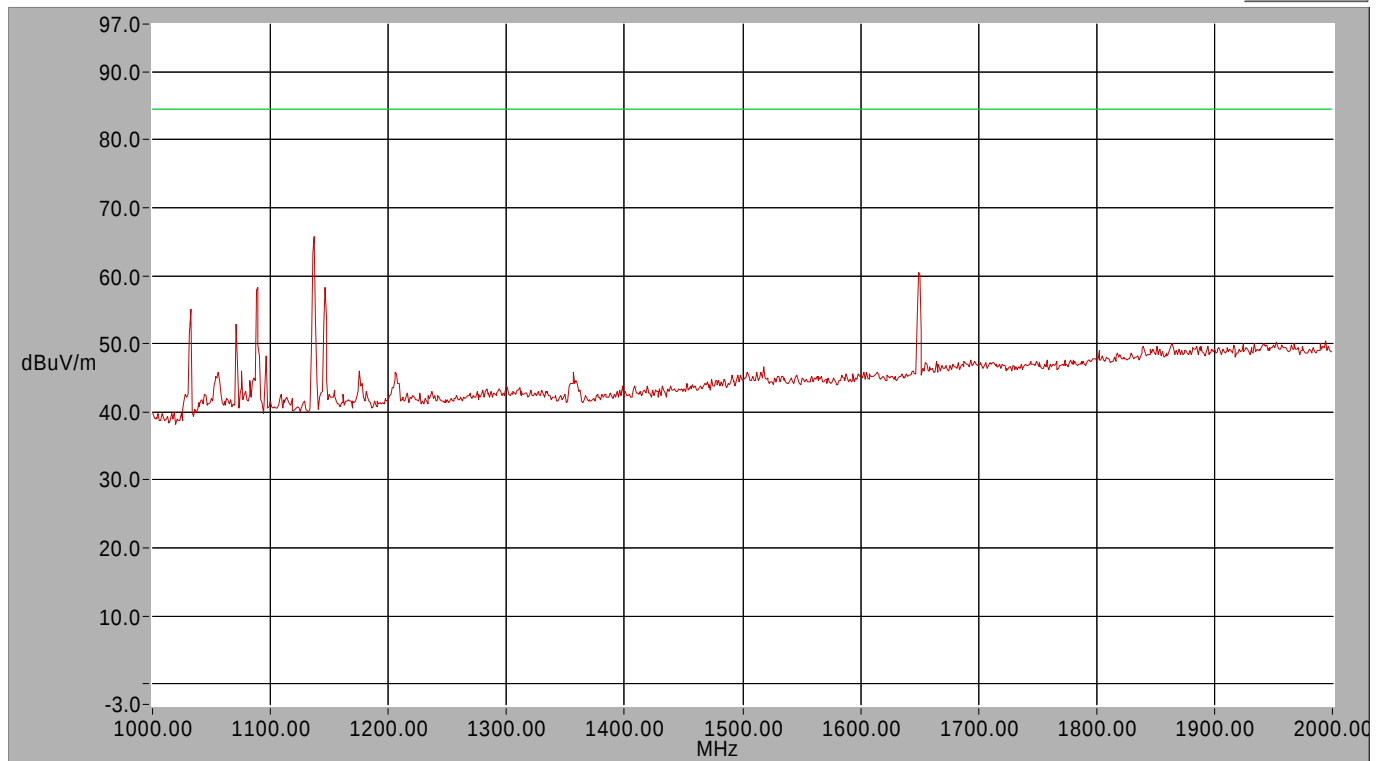
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991 (824.04 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:17 PM

Plot Number: 4

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: Auto	PR Atten: 0.00 dB
RBW 1.000 MHz	Ref. Lev: 97.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318v3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

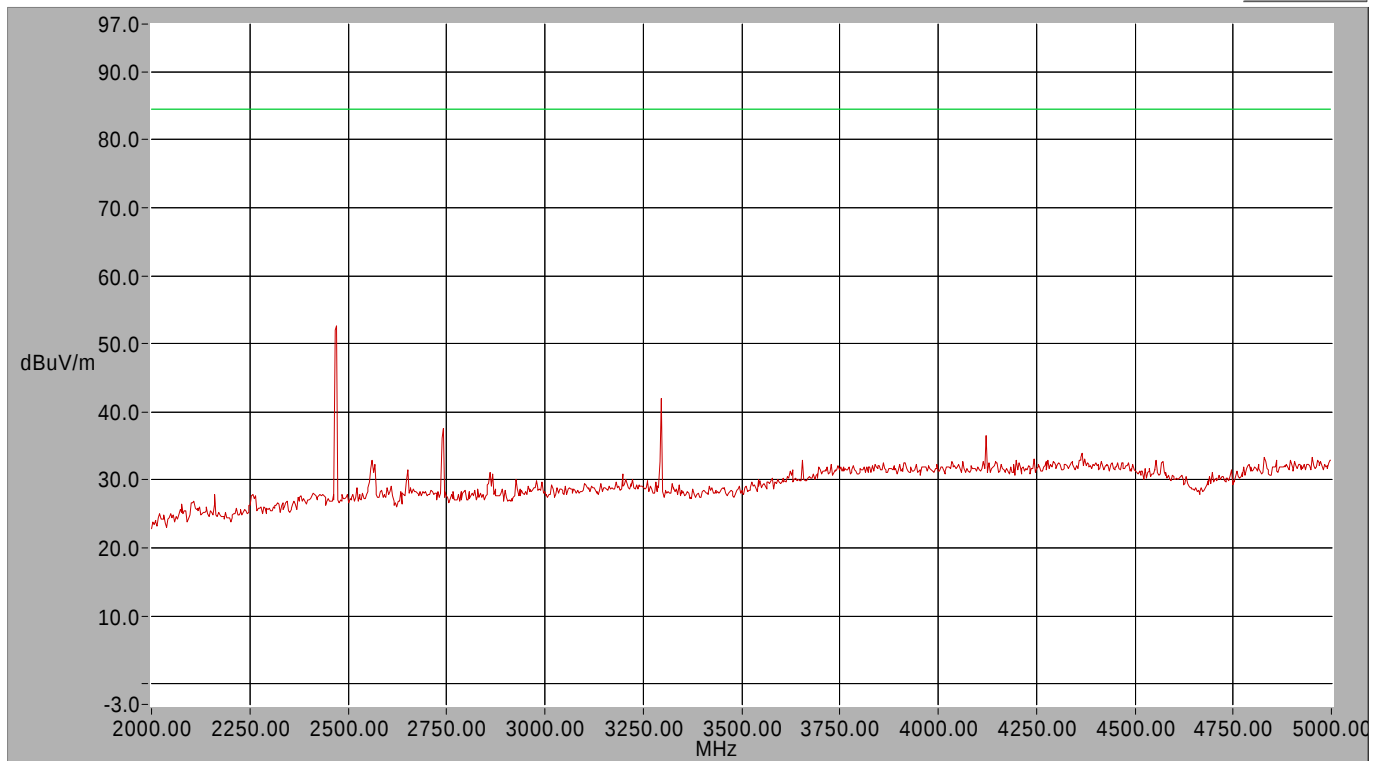
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:52 AM

EMI
AMB
LIM

Plot Number: 5



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588v3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Vertical Polarity
FCC PART 22**

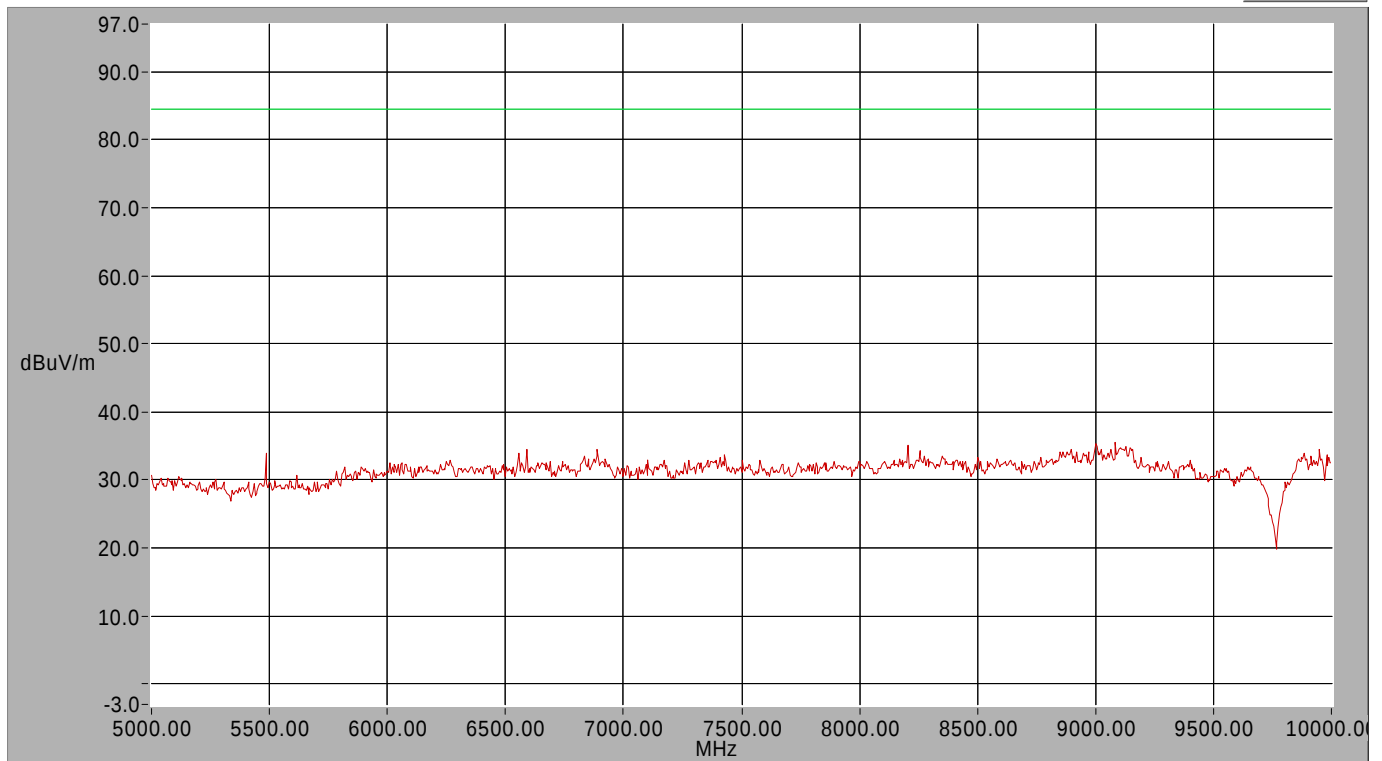
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:56 AM

Plot Number: 6

EMI 
AMB 
LIM 



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588v3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

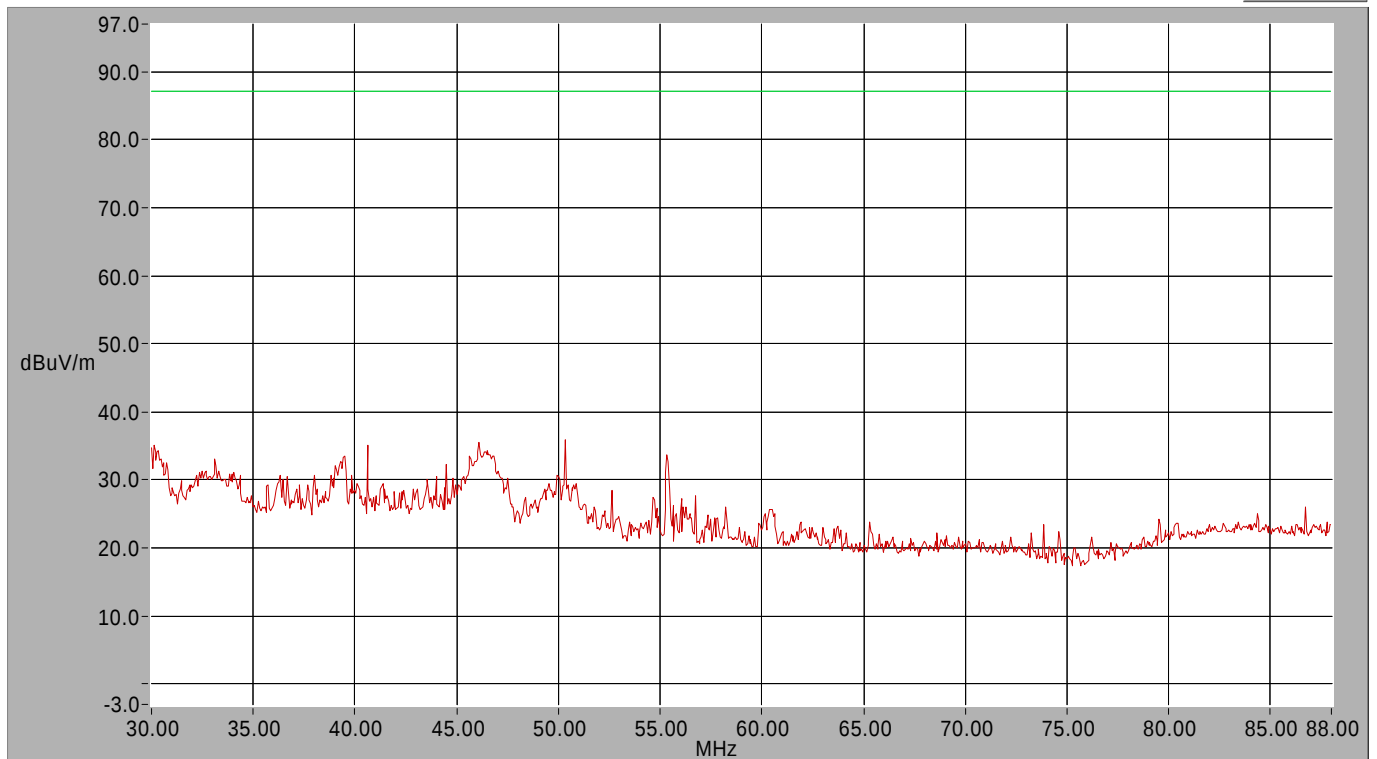
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991 (824.04 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:48 AM

Plot Number: 7

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: 50.00 ms	PR Atten: 0.00 dB
RBW 100.000 kHz	Ref. Lev: 77.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

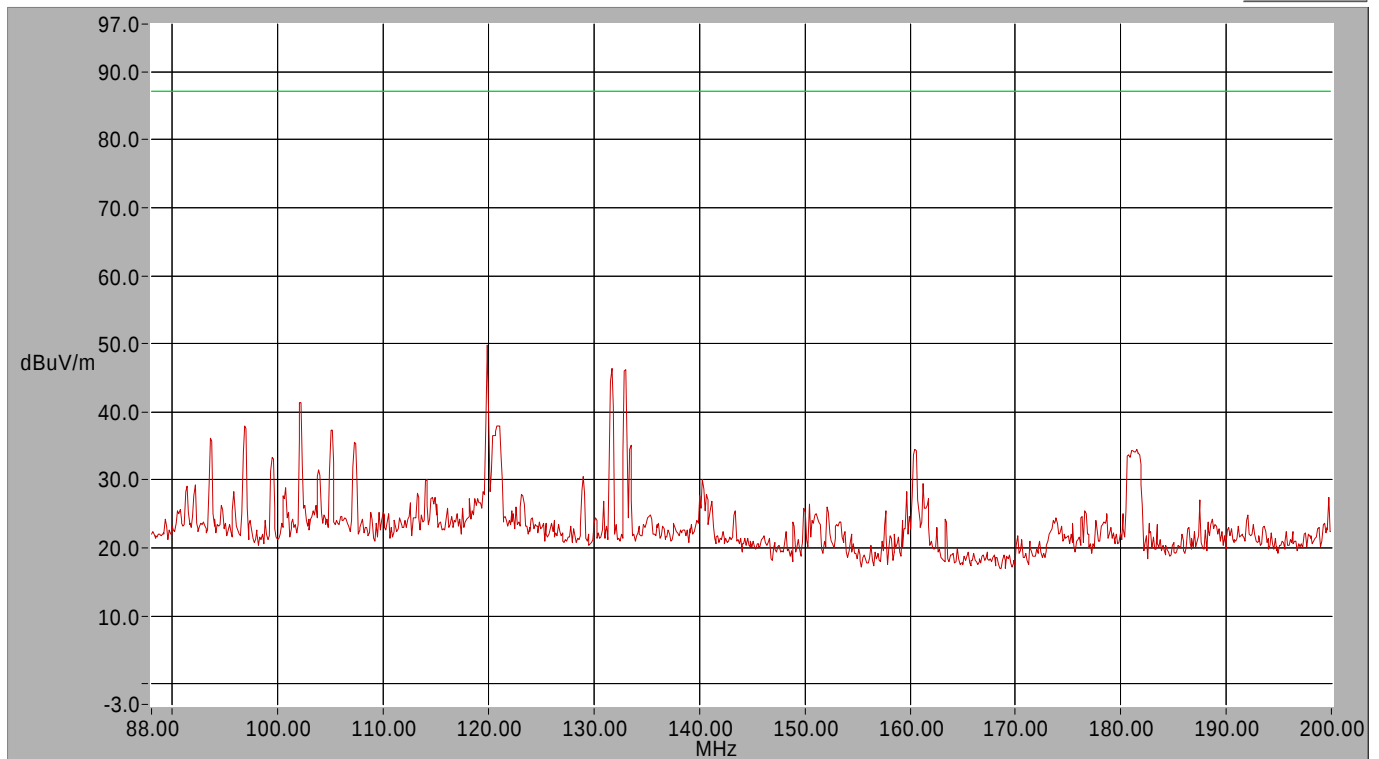
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991 (824.04 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:59 AM

EMI
AMB
LIM

Plot Number: 8



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

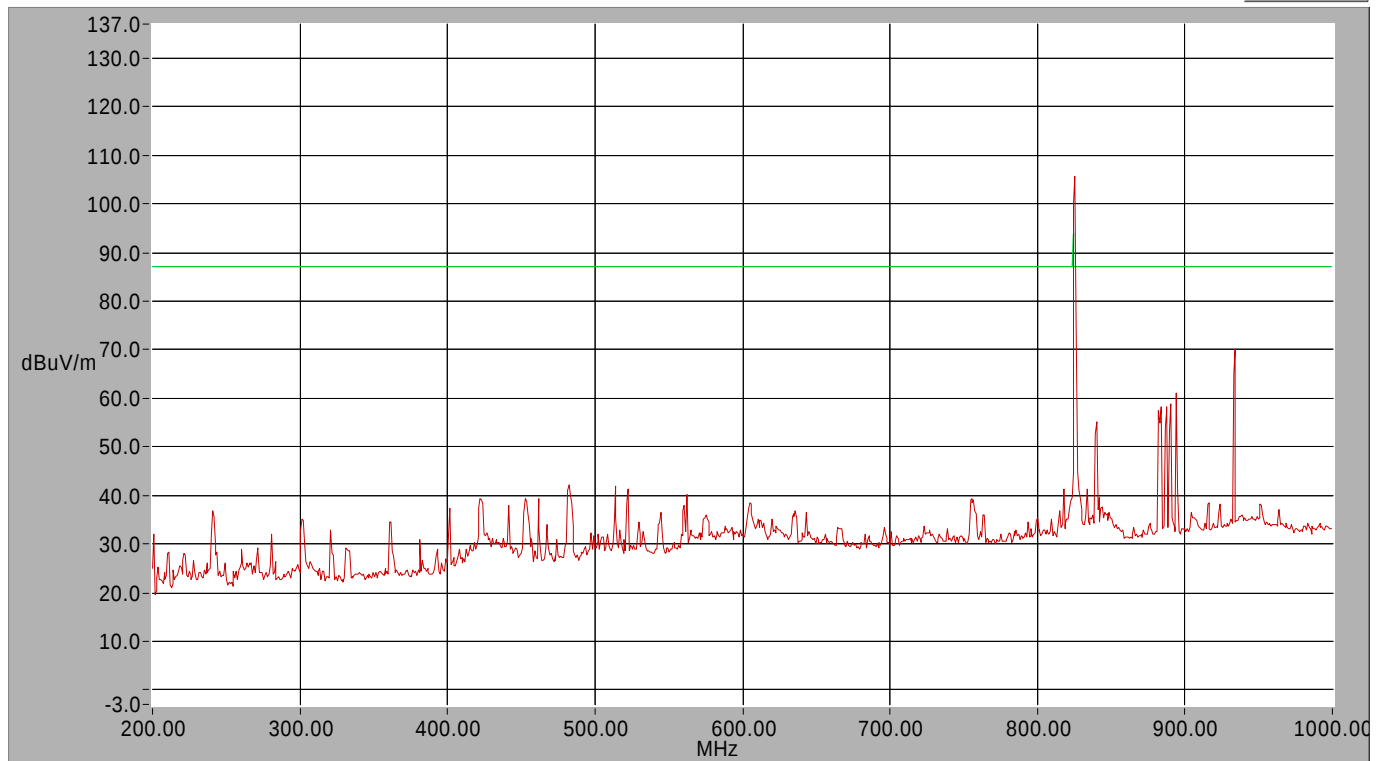
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991 (824.04 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:04 PM

Plot Number: 9

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: Auto	PR Atten: 0.00 dB
RBW 100.000 kHz	Ref. Lev: 77.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
limit.dat	2/9/1999

Radiated Emissions Horizontal Polarity FCC PART 22

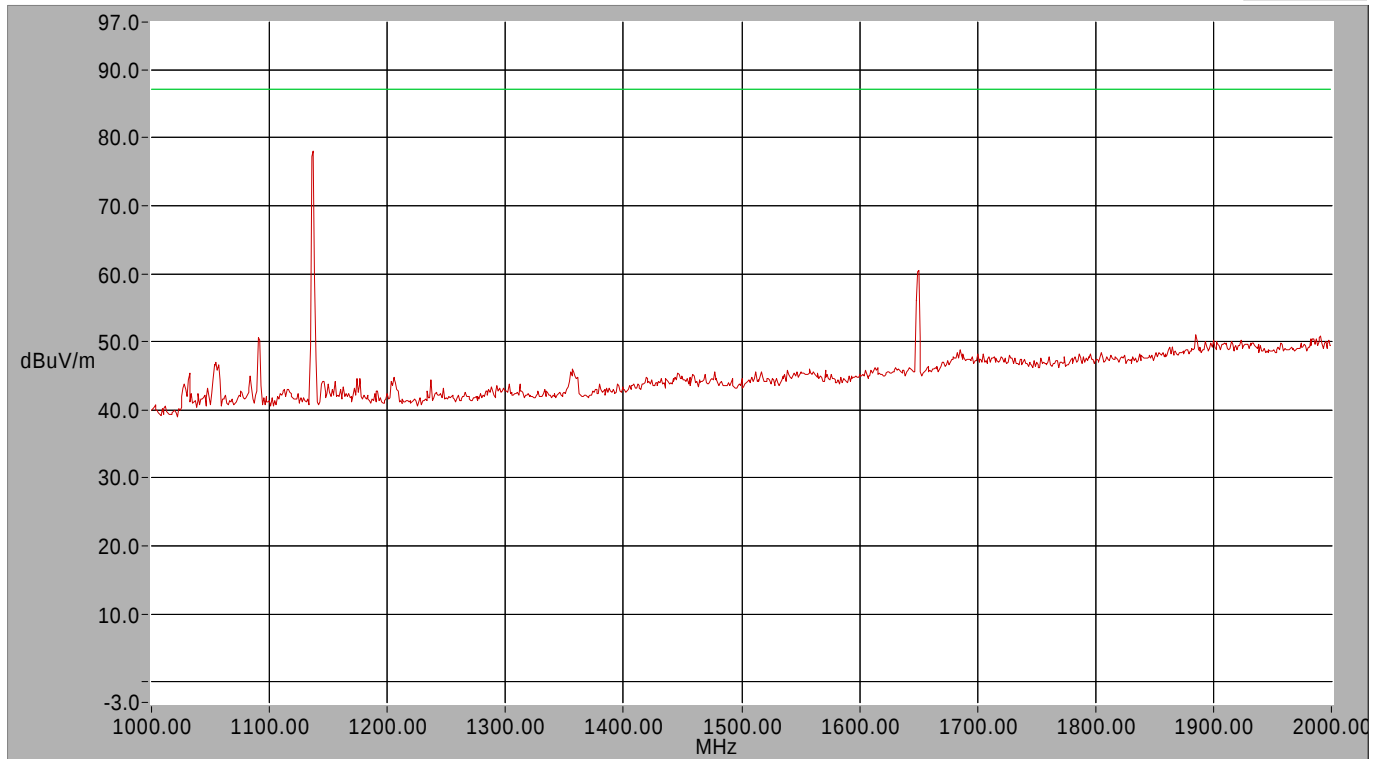
Title:
 Mode of Operation: Operational Tx
 Distance: 3 meters
 Technologist: Ian Guldberg
 Comments: Channel 991 (824.04 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:12 PM

Plot Number: 10

The graph displays three data series over 100 days. The Y-axis ranges from 0 to 100. EMI (red line) starts at 0, peaks at 100 around day 25, and ends at 50. AMB (blue line) starts at 0, peaks at 50 around day 25, and ends at 25. LIM (green line) starts at 0, peaks at 25 around day 25, and ends at 10.



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
limit.dat	2/9/1999

QUASI-PEAK DATA

[illegible]

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

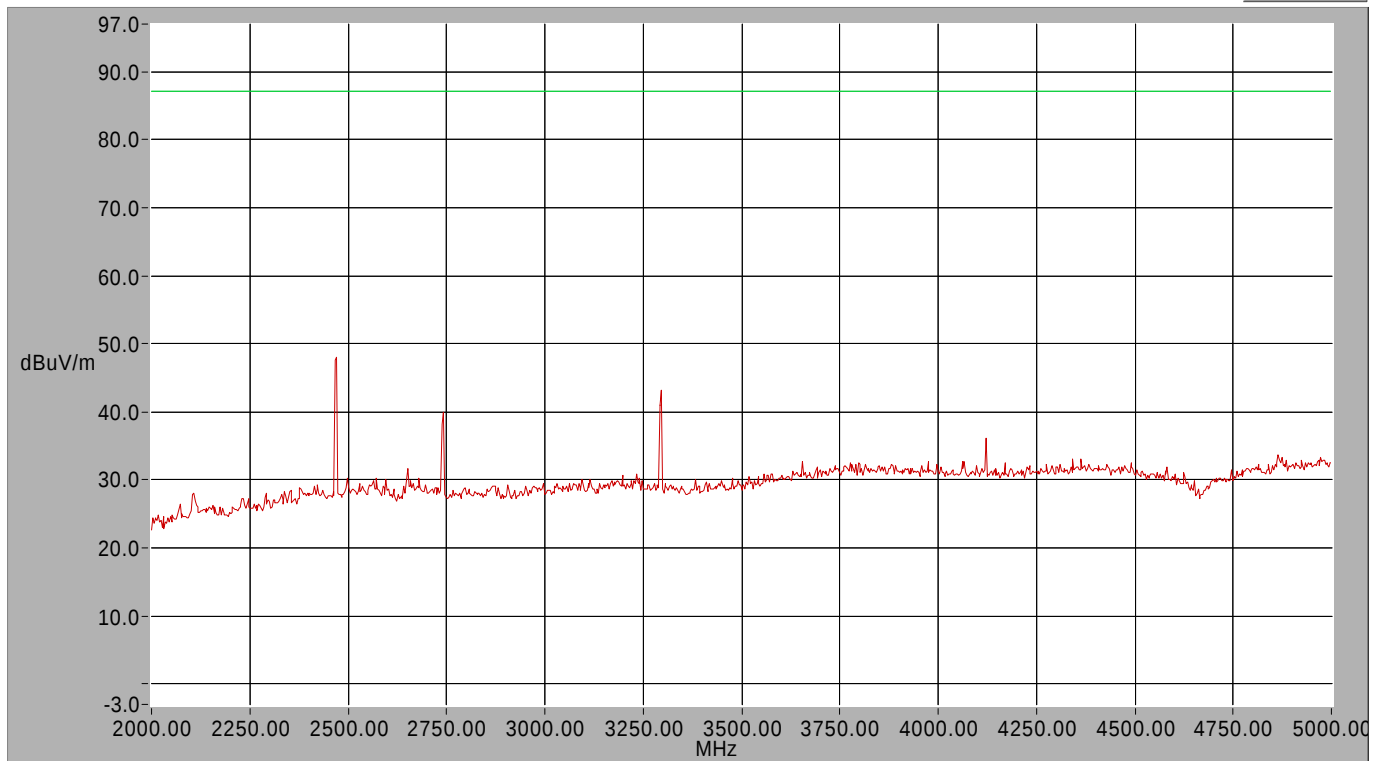
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:42 AM

EMI
AMB
LIM

Plot Number: 11



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588h3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

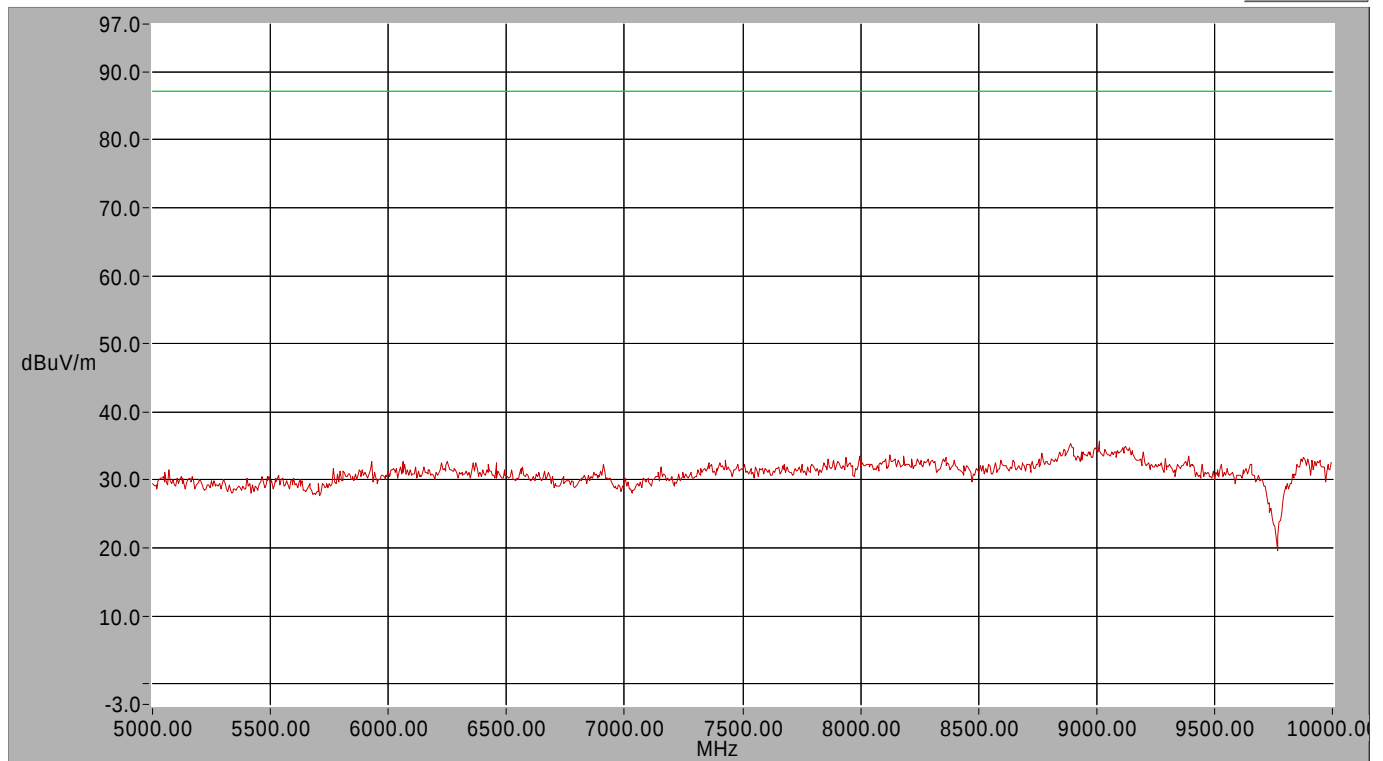
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 991

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:47 AM

Plot Number: 12

EMI	
AMB	
LIM	



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588h3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Vertical Polarity
FCC PART 22**

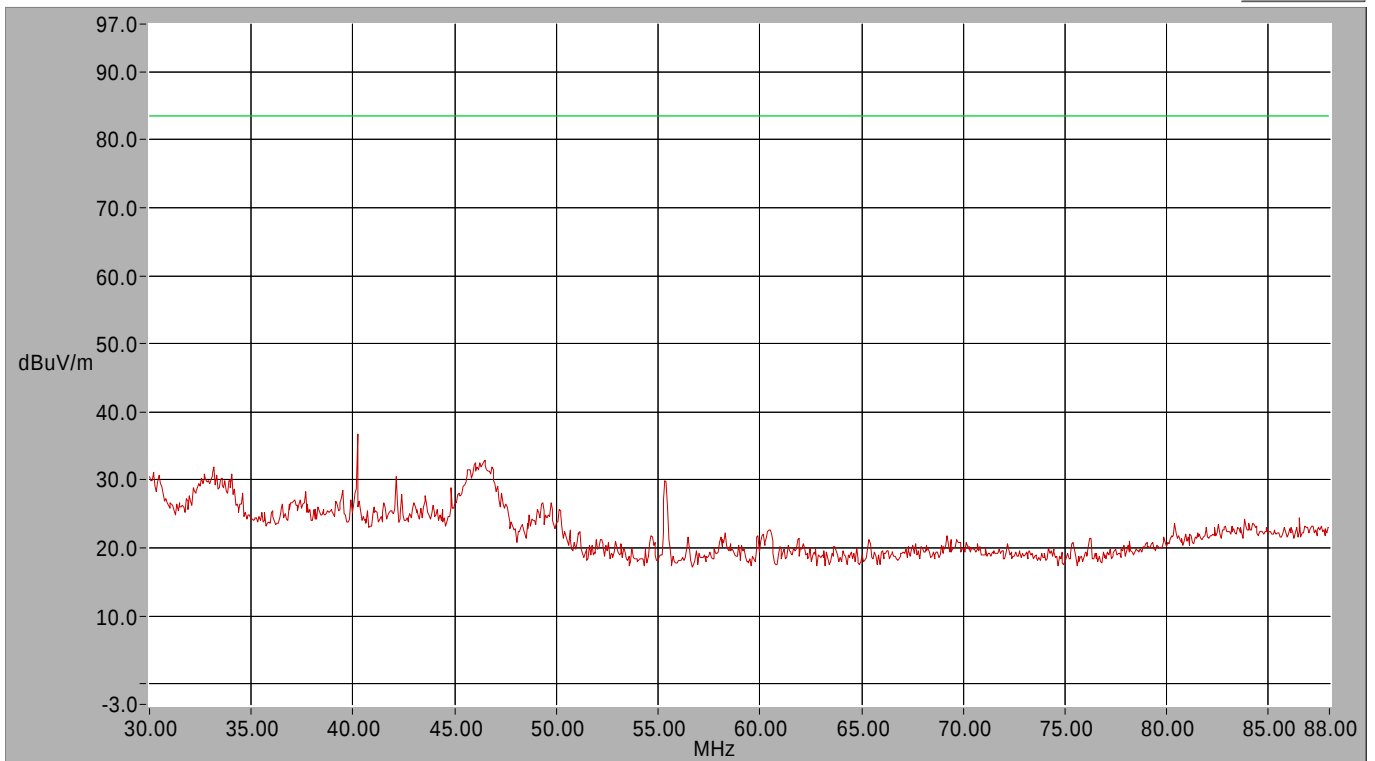
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:38 PM

Plot Number: 13

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

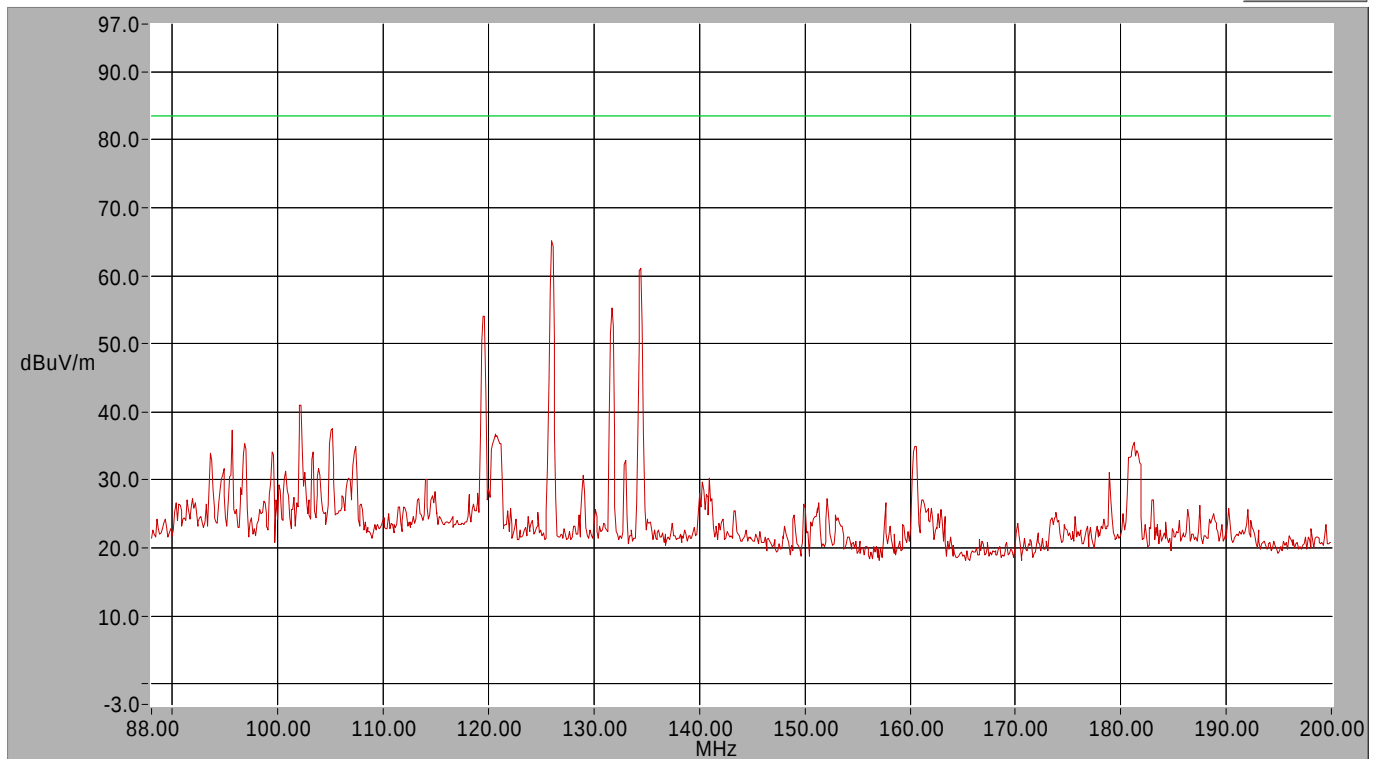
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:45 PM

EMI
AMB
LIM

Plot Number: 14



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

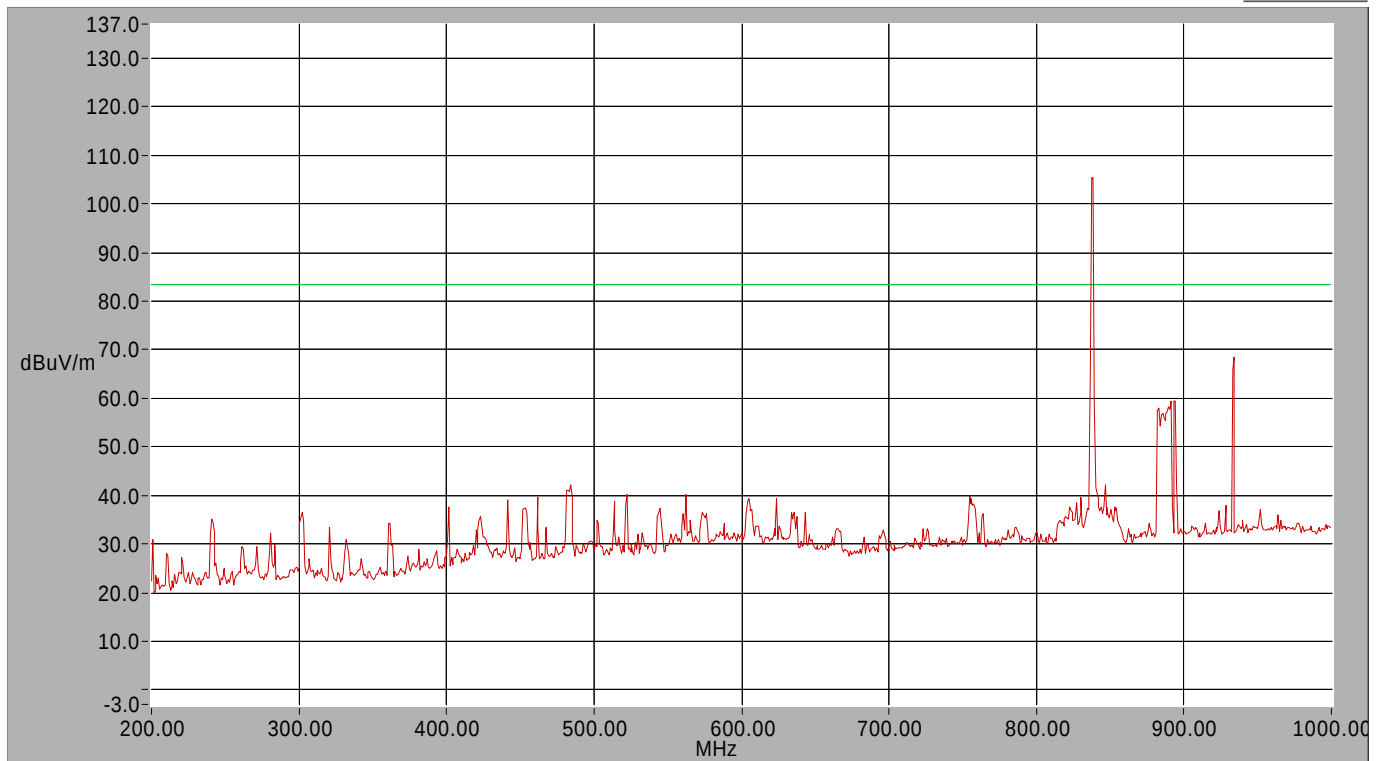
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:50 PM

Plot Number: 15

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

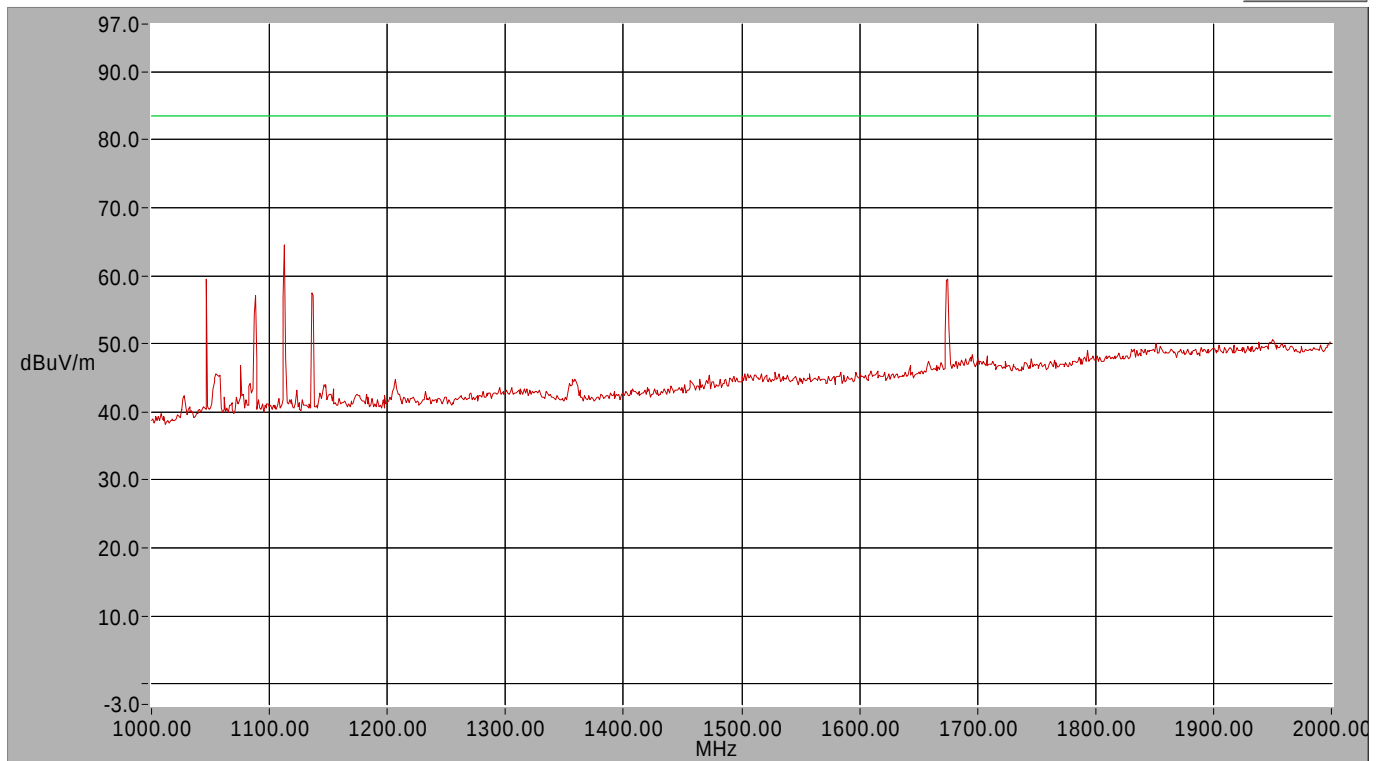
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

12:55 PM

Plot Number: 16

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: Auto	PR Atten: 0.00 dB
RBW 1.000 MHz	Ref. Lev: 97.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318v3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

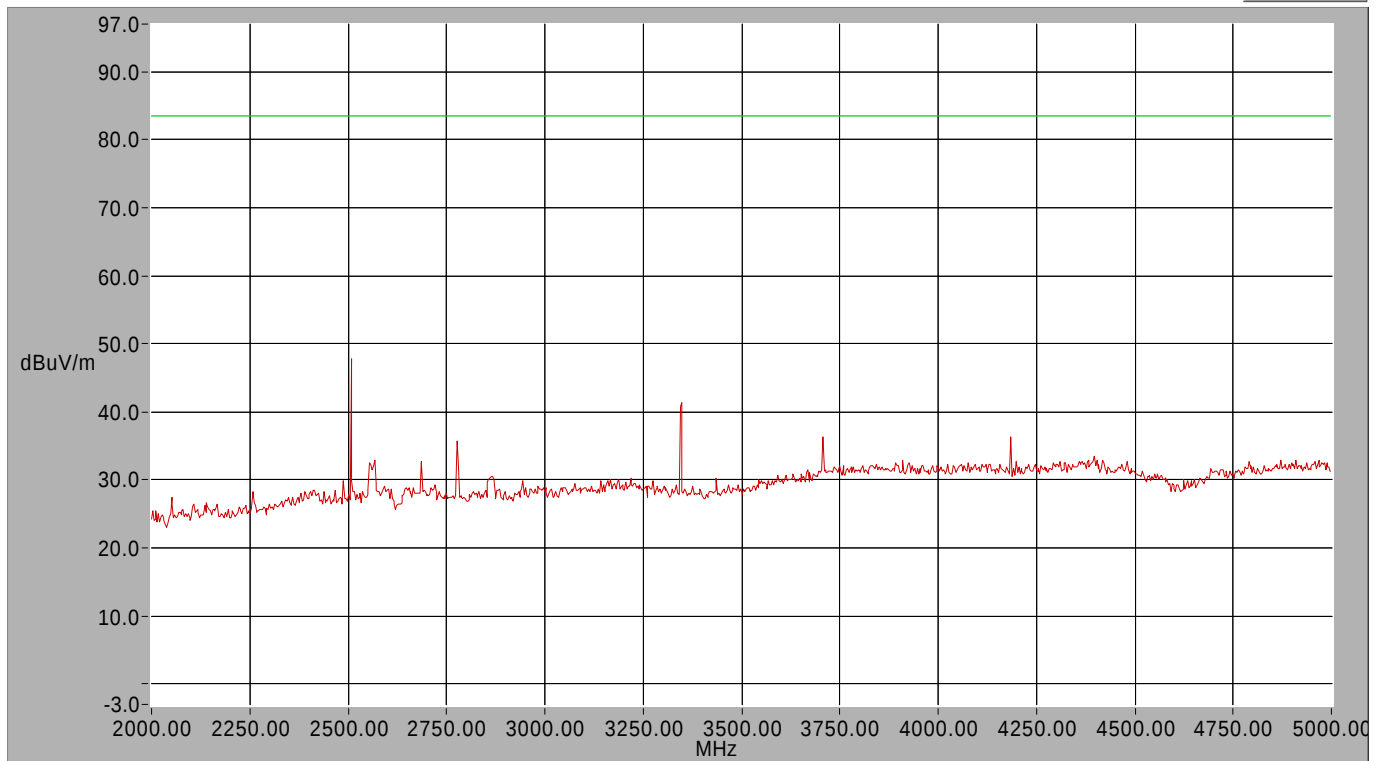
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:24 AM

EMI
AMB
LIM

Plot Number: 17



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588v3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Vertical Polarity
FCC PART 22**

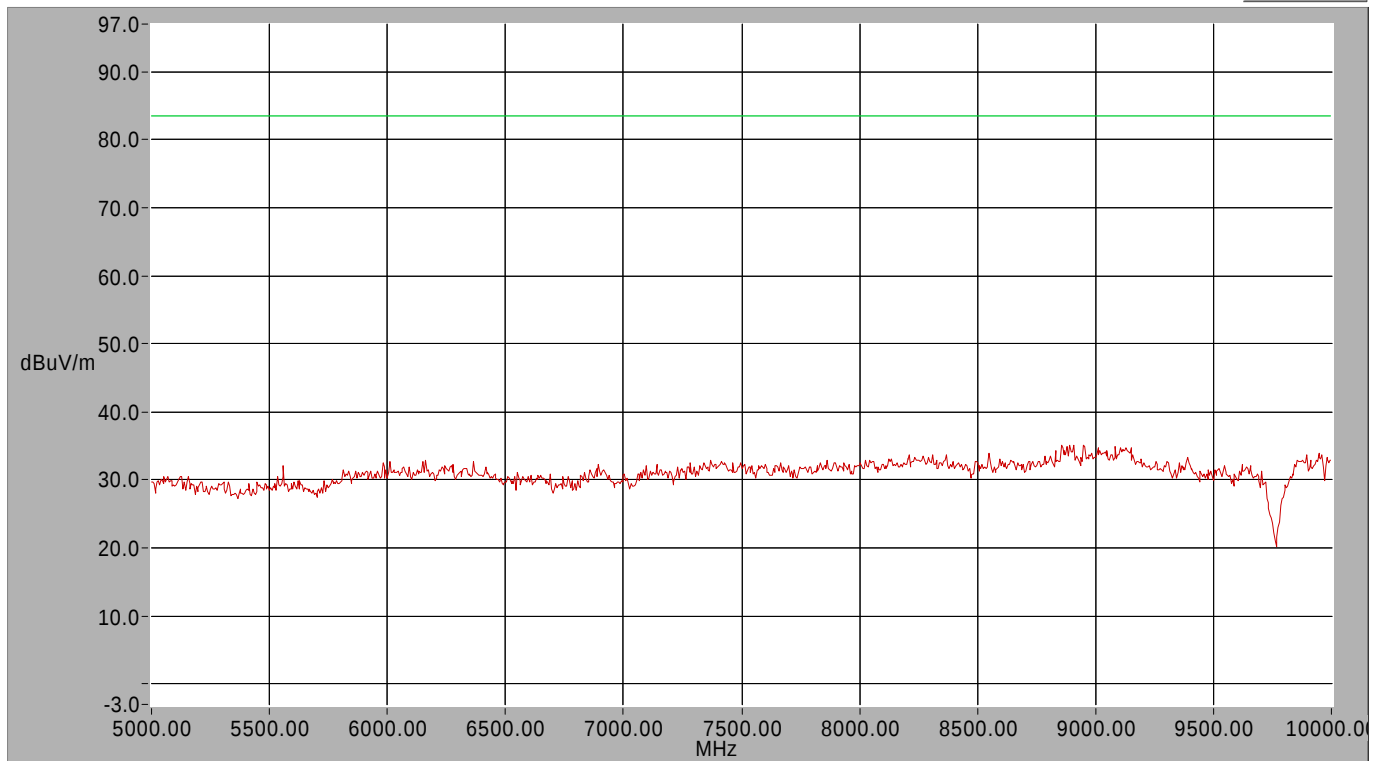
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:28 AM

EMI
AMB
LIM

Plot Number: 18



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588v3.dat 9/5/1997
limit.dat 2/9/1999
31/12/1903

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

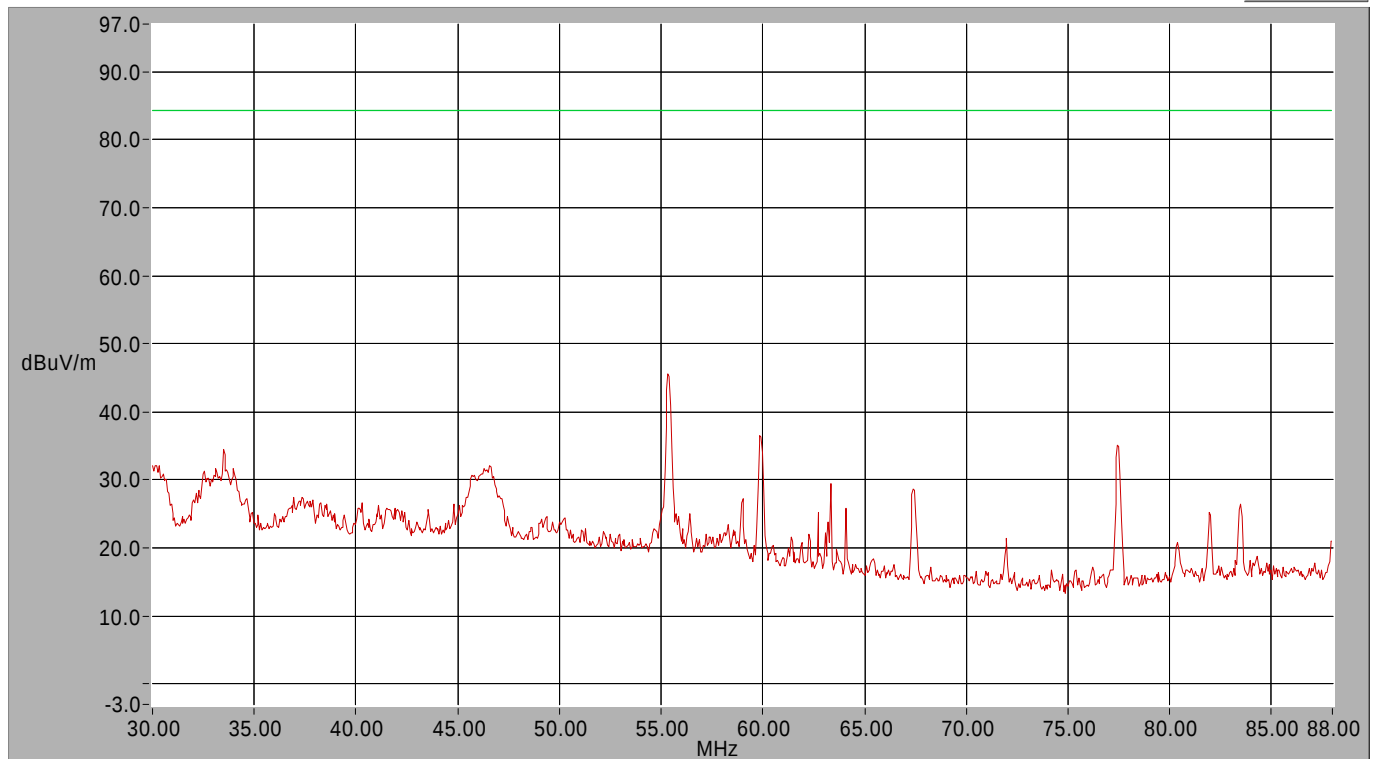
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

1:01 PM

Plot Number: 19

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: 50.00 ms	PR Atten: 0.00 dB
RBW: 100.000 kHz	Ref. Lev: 77.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

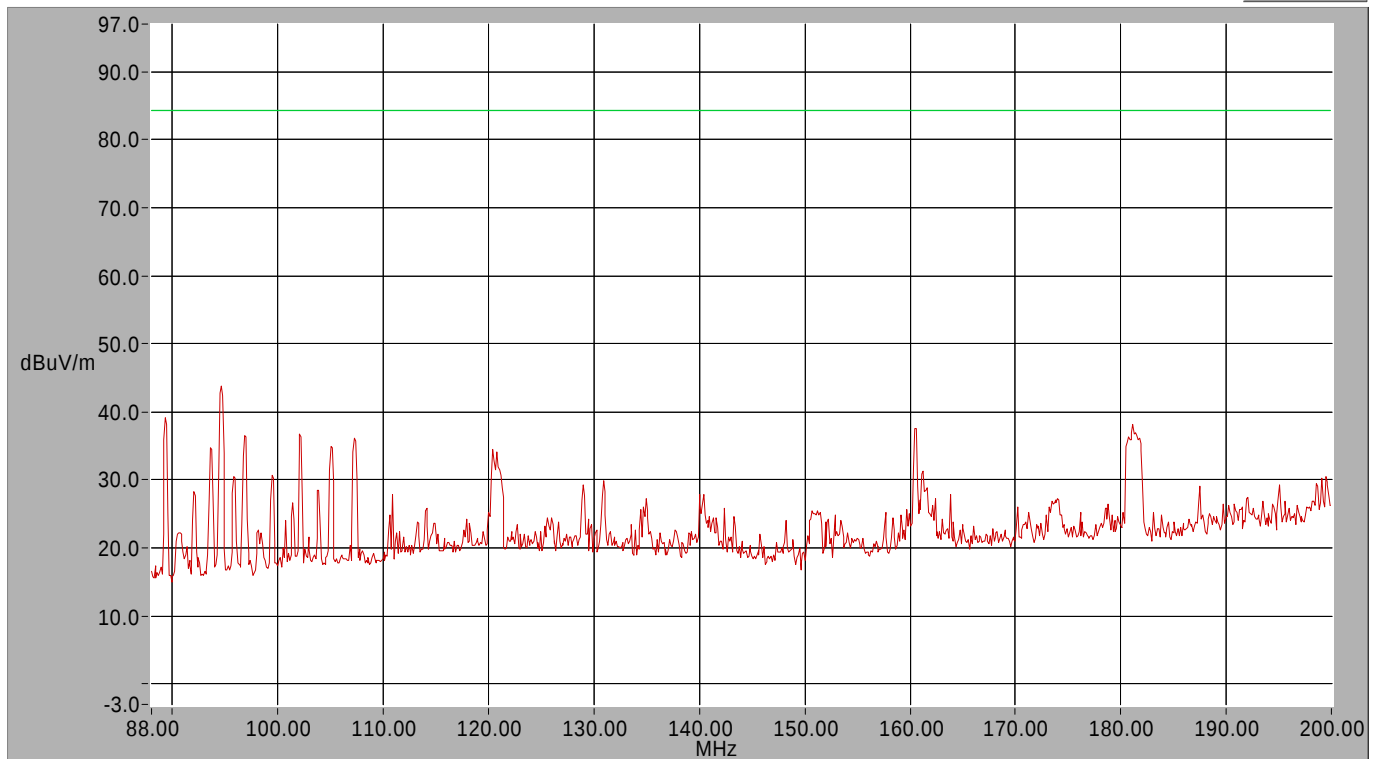
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

1:08 PM

EMI
AMB
LIM

Plot Number: 20



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

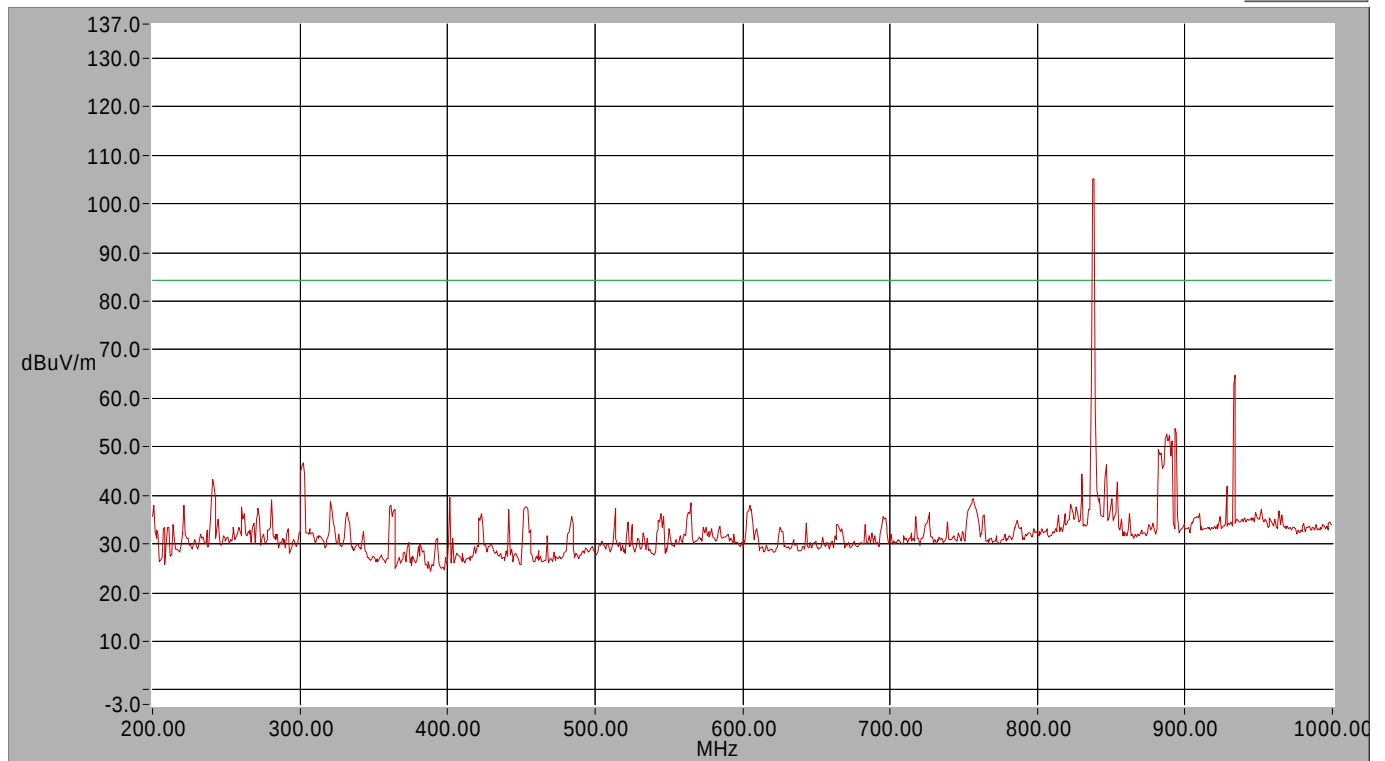
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

1:14 PM

Plot Number: 21

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: Auto	PR Atten: 0.00 dB
RBW: 100.000 kHz	Ref. Lev: 77.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

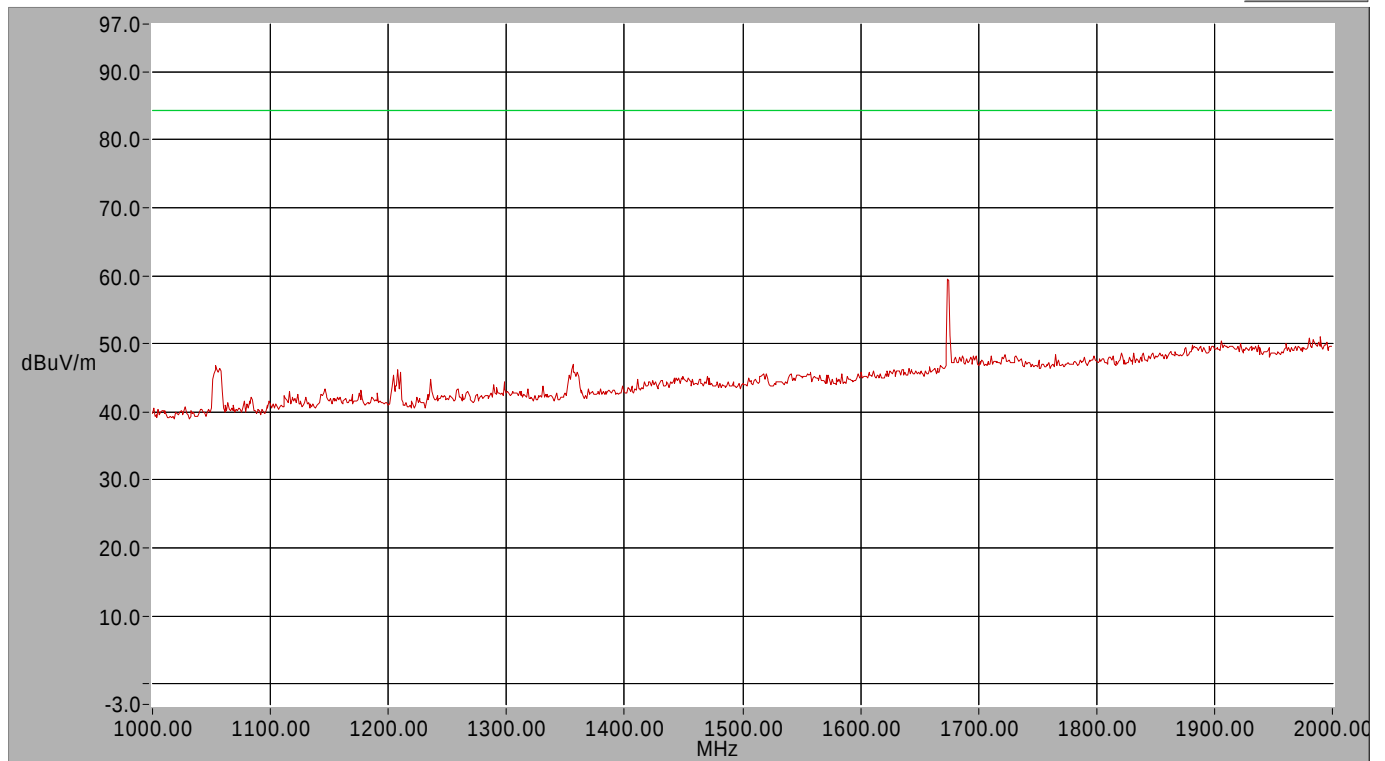
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

1:25 PM

Plot Number: 22

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: Auto	PR Atten: 0.00 dB
RBW 1.000 MHz	Ref. Lev: 97.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

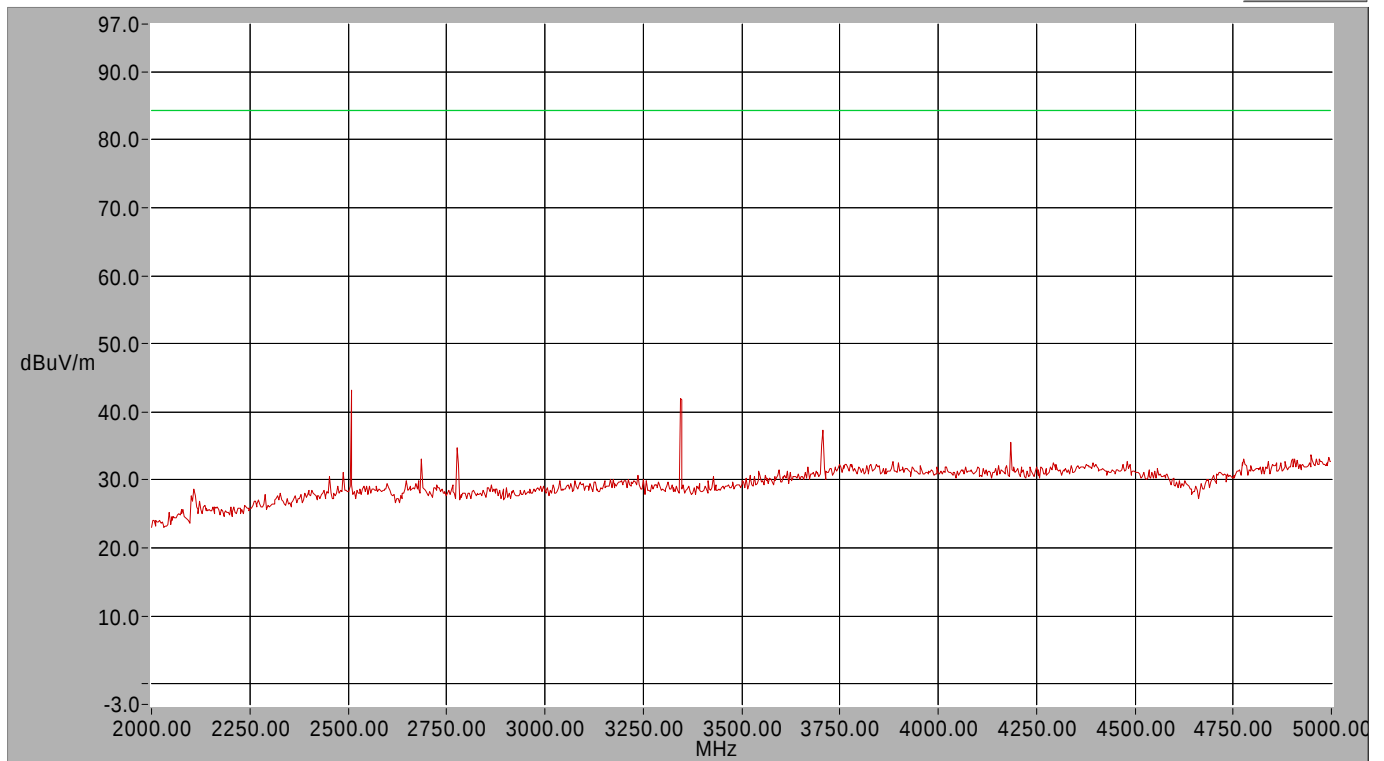
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:33 AM

EMI
AMB
LIM

Plot Number: 23



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588h3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

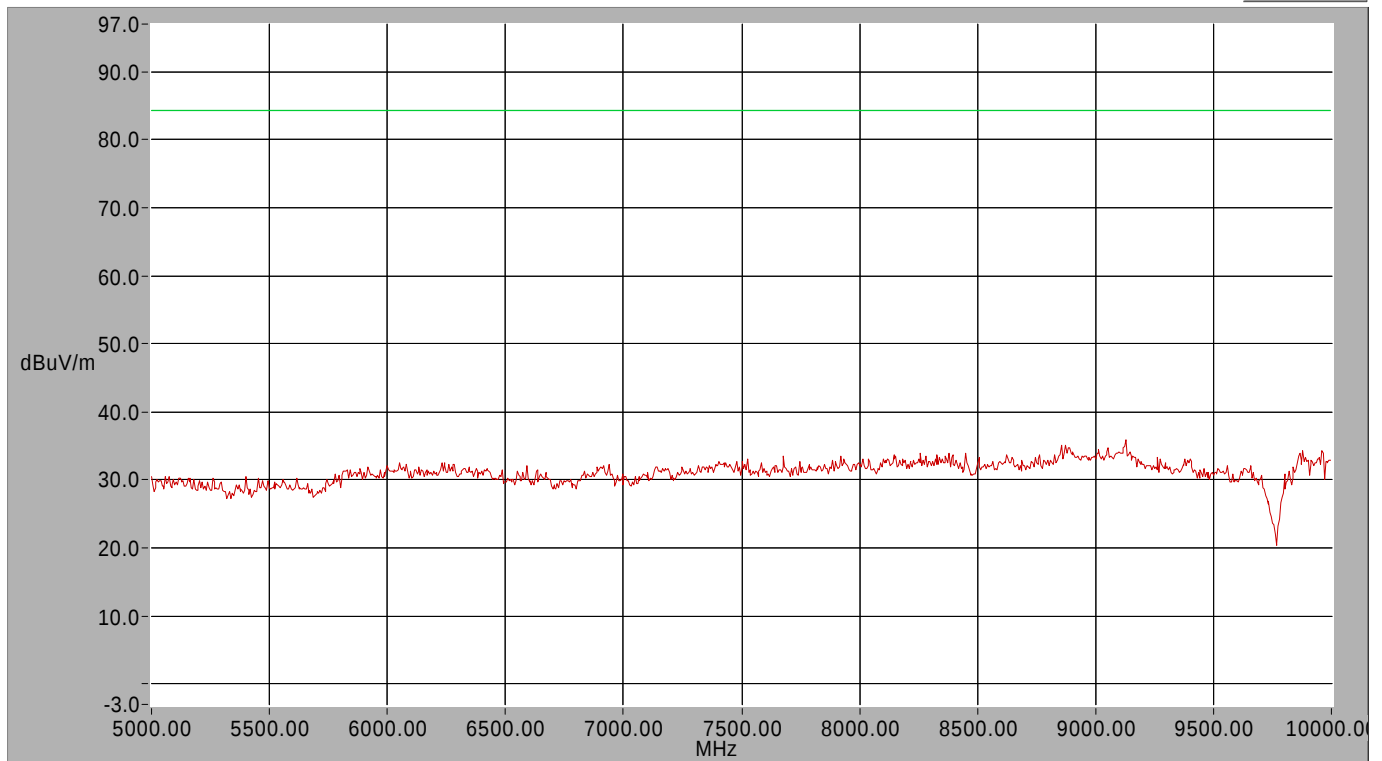
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384 (836.53 MHz TX)

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:38 AM

EMI
AMB
LIM

Plot Number: 24



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588v3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Vertical Polarity
FCC PART 22**

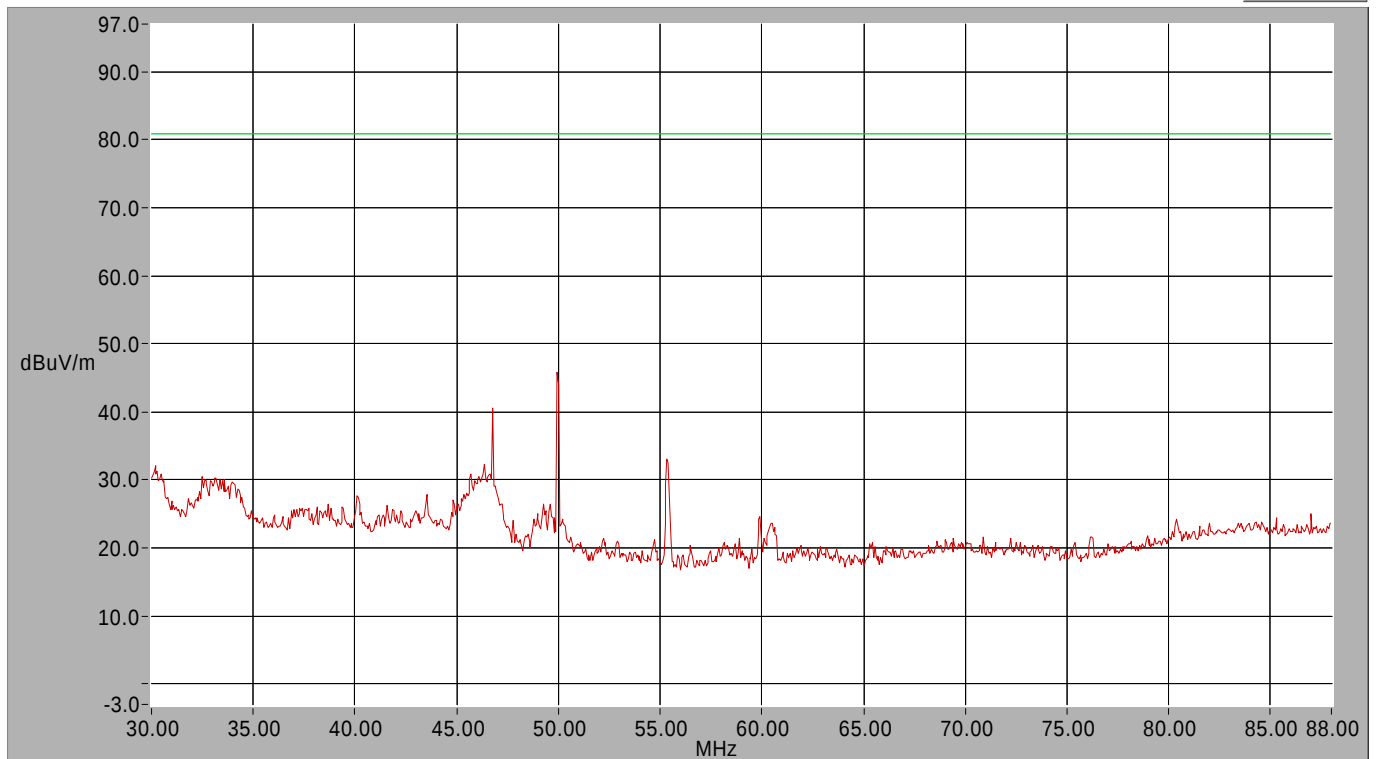
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

1:57 PM

EMI
AMB
LIM

Plot Number: 25



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

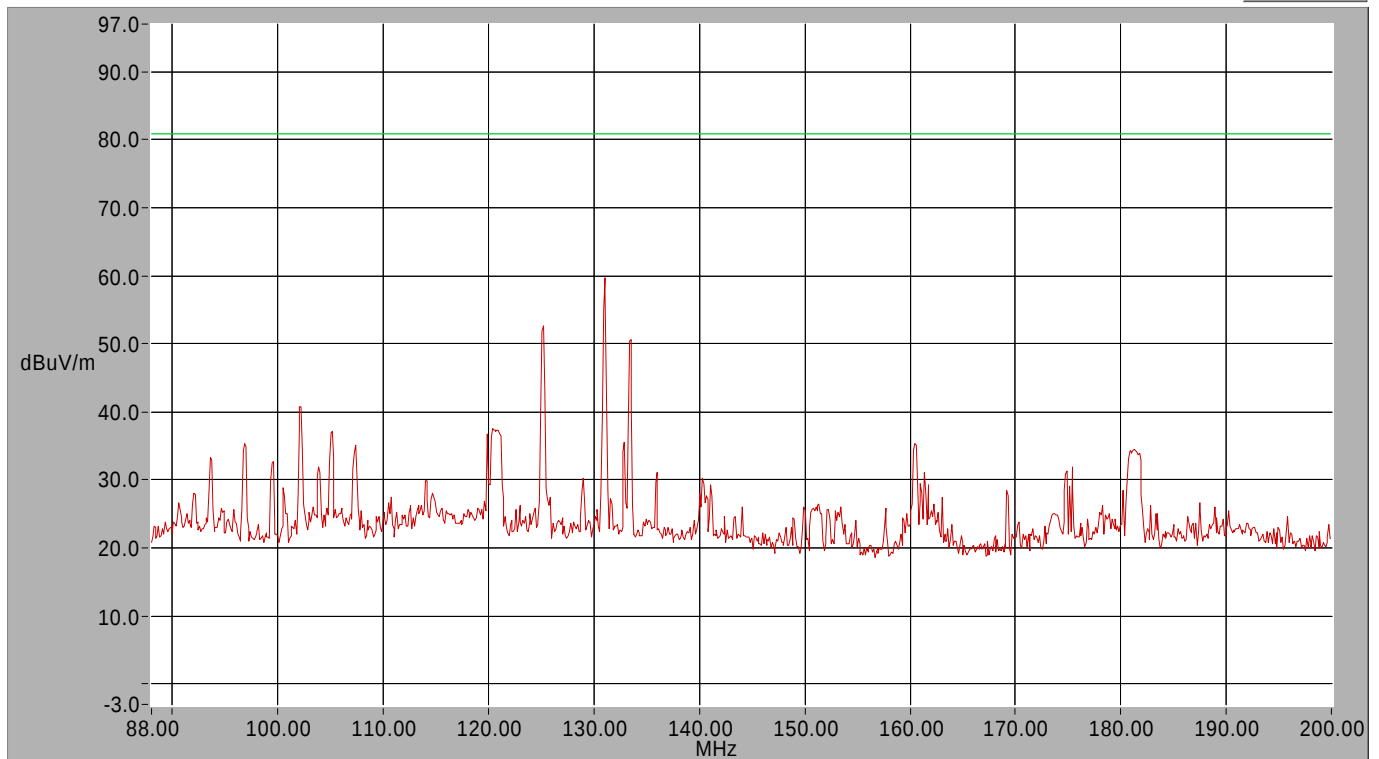
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

2:04 PM

EMI
AMB
LIM

Plot Number: 26



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

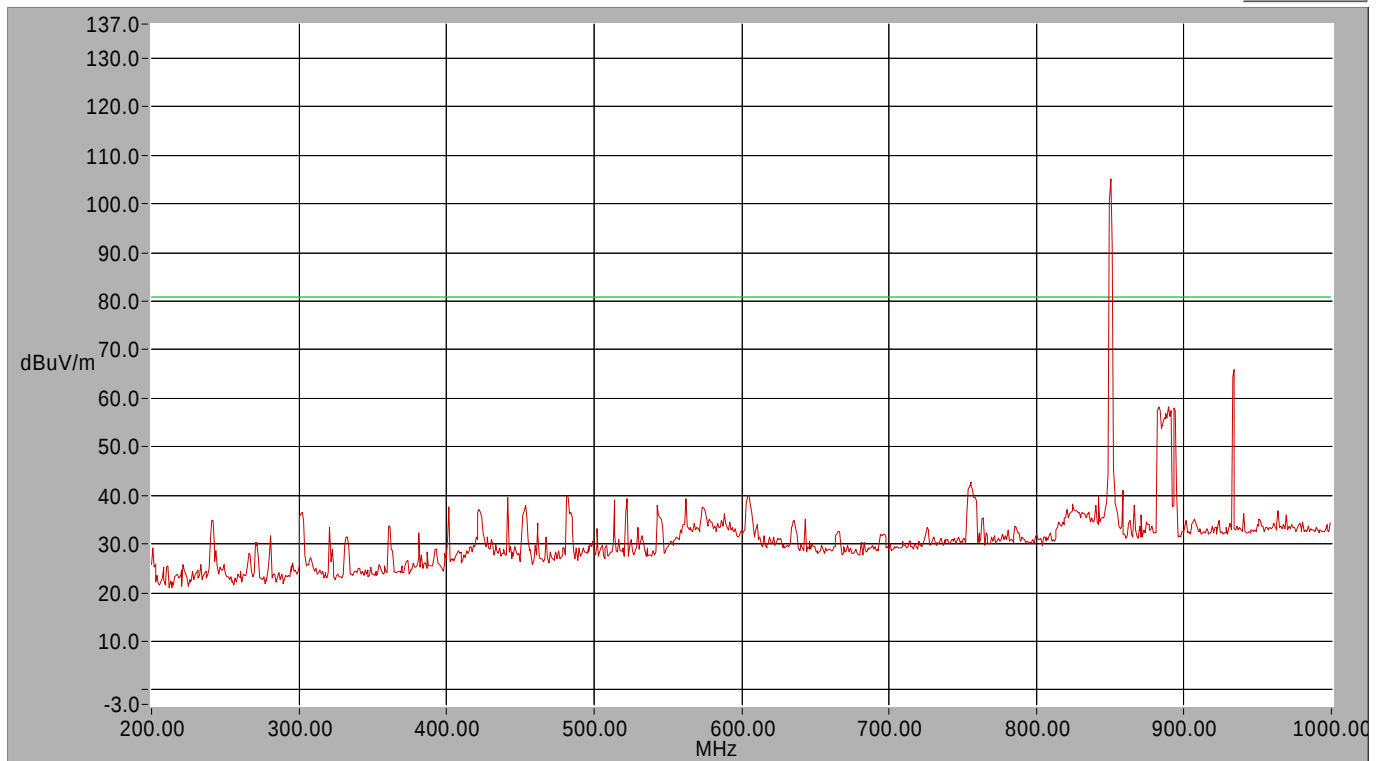
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

2:09 PM

Plot Number: 27

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
limit.dat 2/9/1999

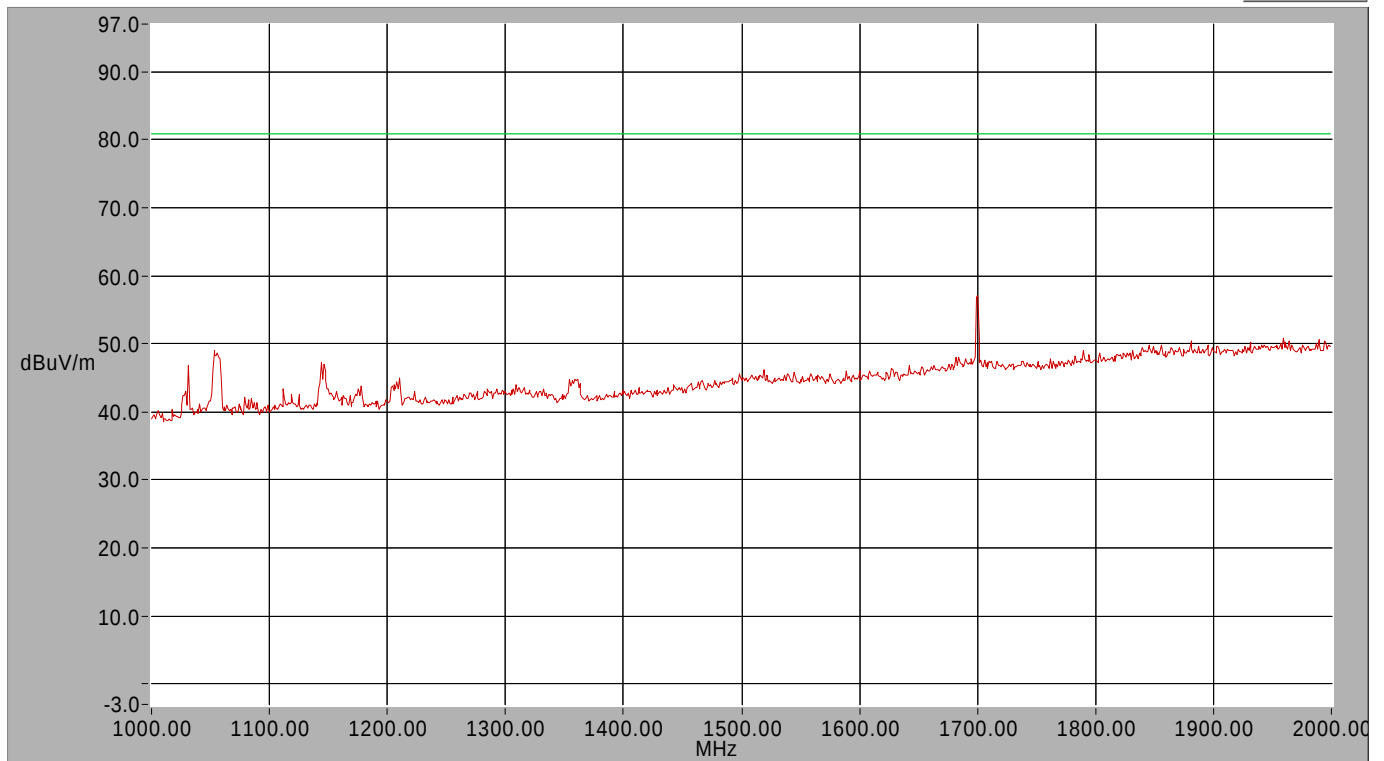
**Radiated Emissions
Vertical Polarity
FCC PART 22**

Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 27, 1999 2:14 PM
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

Plot Number: 28

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Vertical Polarity
FCC PART 22**

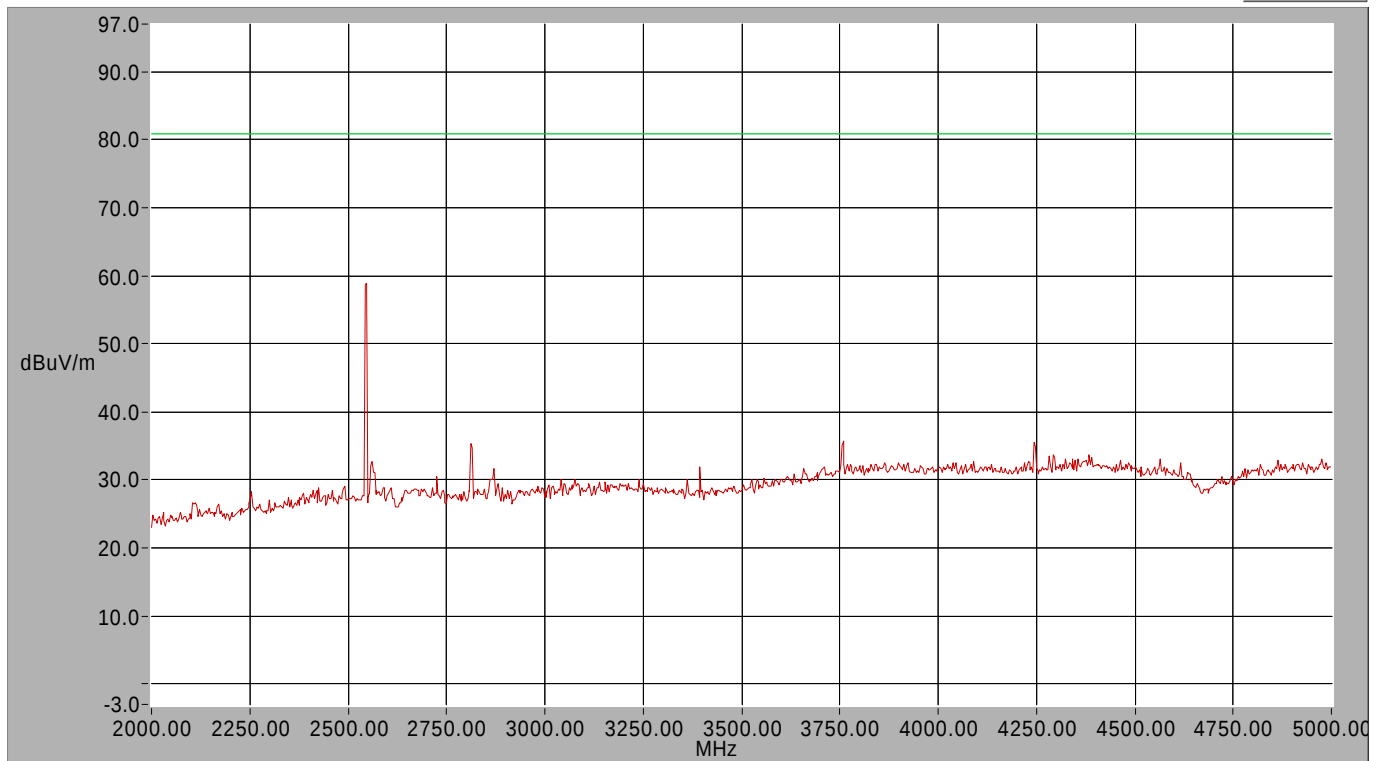
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:52 AM

EMI
AMB
LIM

Plot Number: 29



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588v3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Vertical Polarity
FCC PART 22**

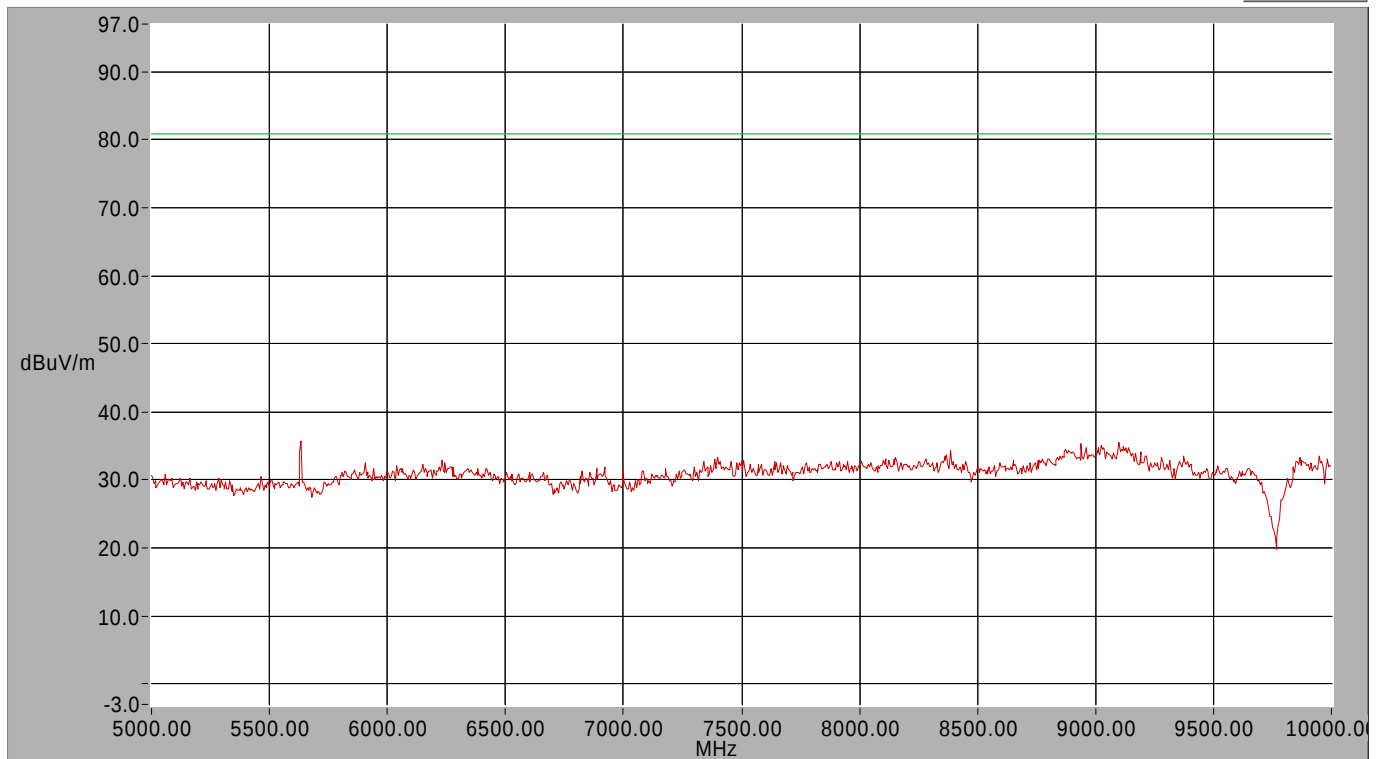
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:57 AM

EMI
AMB
LIM

Plot Number: 30



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588h3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

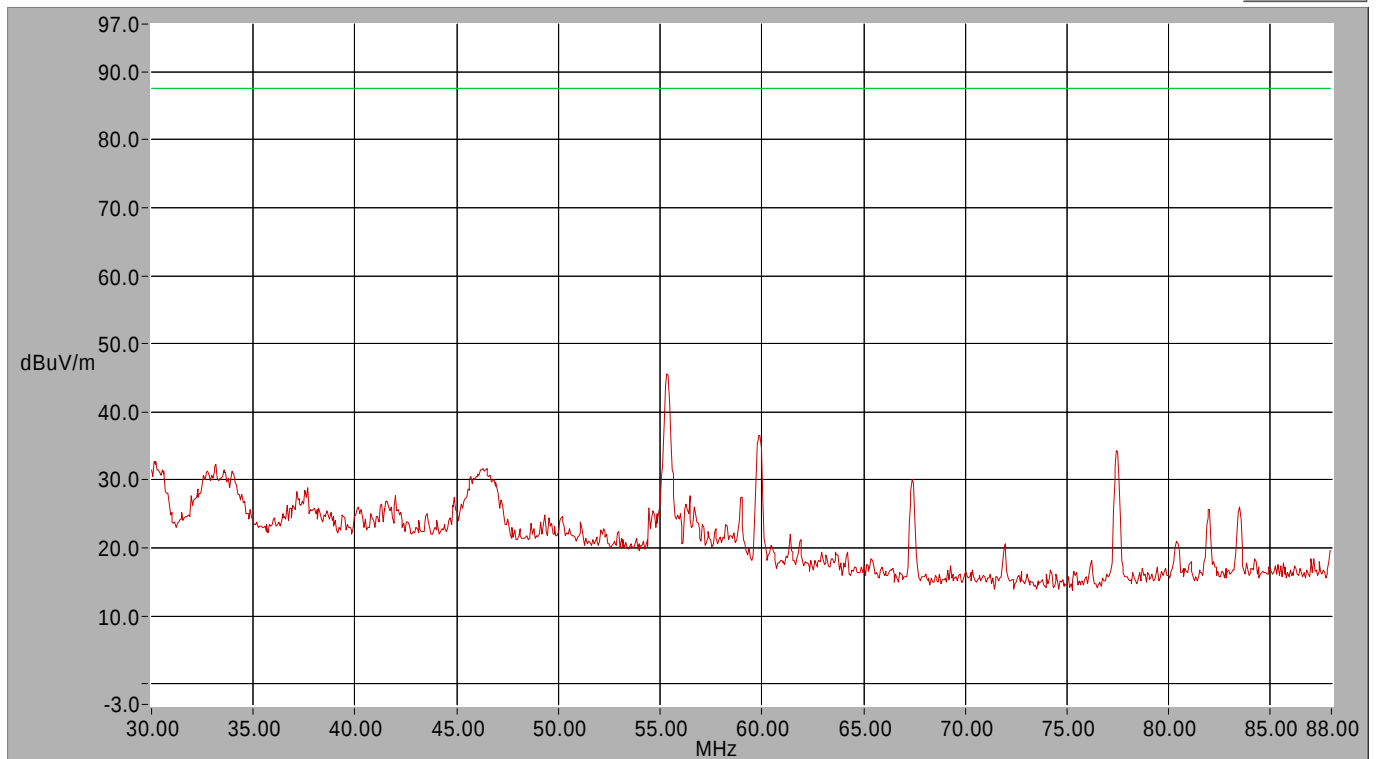
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

1:33 PM

Plot Number: 31

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

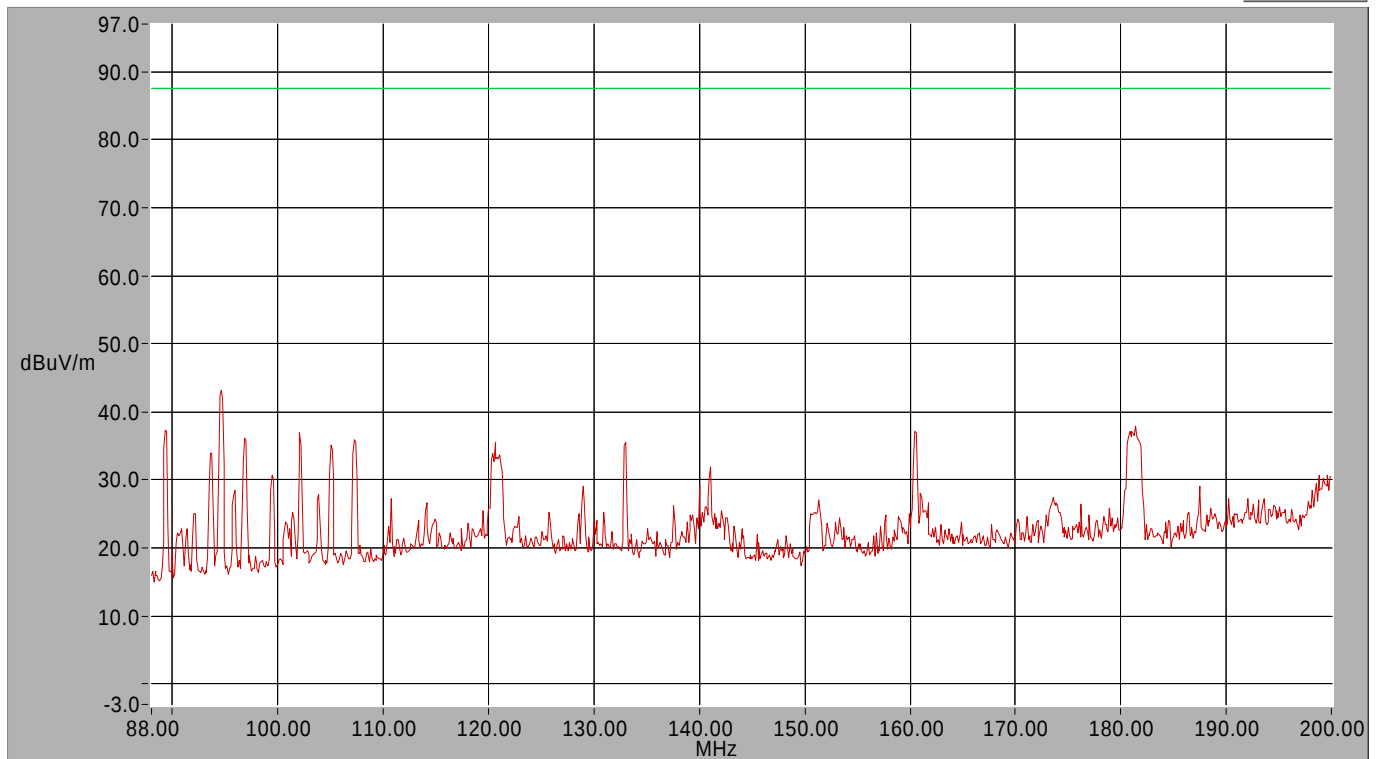
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

1:40 PM

EMI
AMB
LIM

Plot Number: 32



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

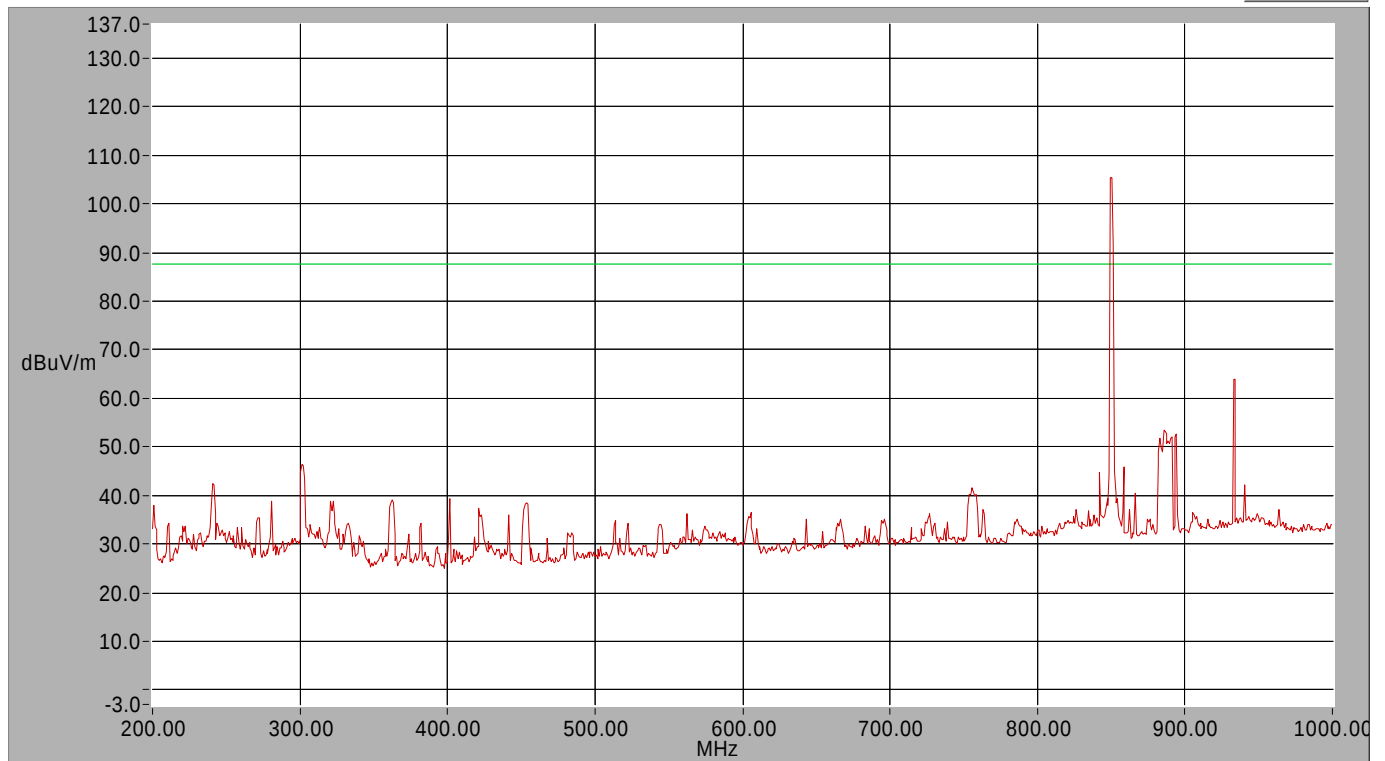
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

1:46 PM

Plot Number: 33

EMI	
AMB	
LIM	



VBW: 300.000 kHz	Sweep Time: Auto	PR Atten: 0.00 dB
RBW: 100.000 kHz	Ref. Lev: 77.00 dBuV/m	An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
limit.dat	2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

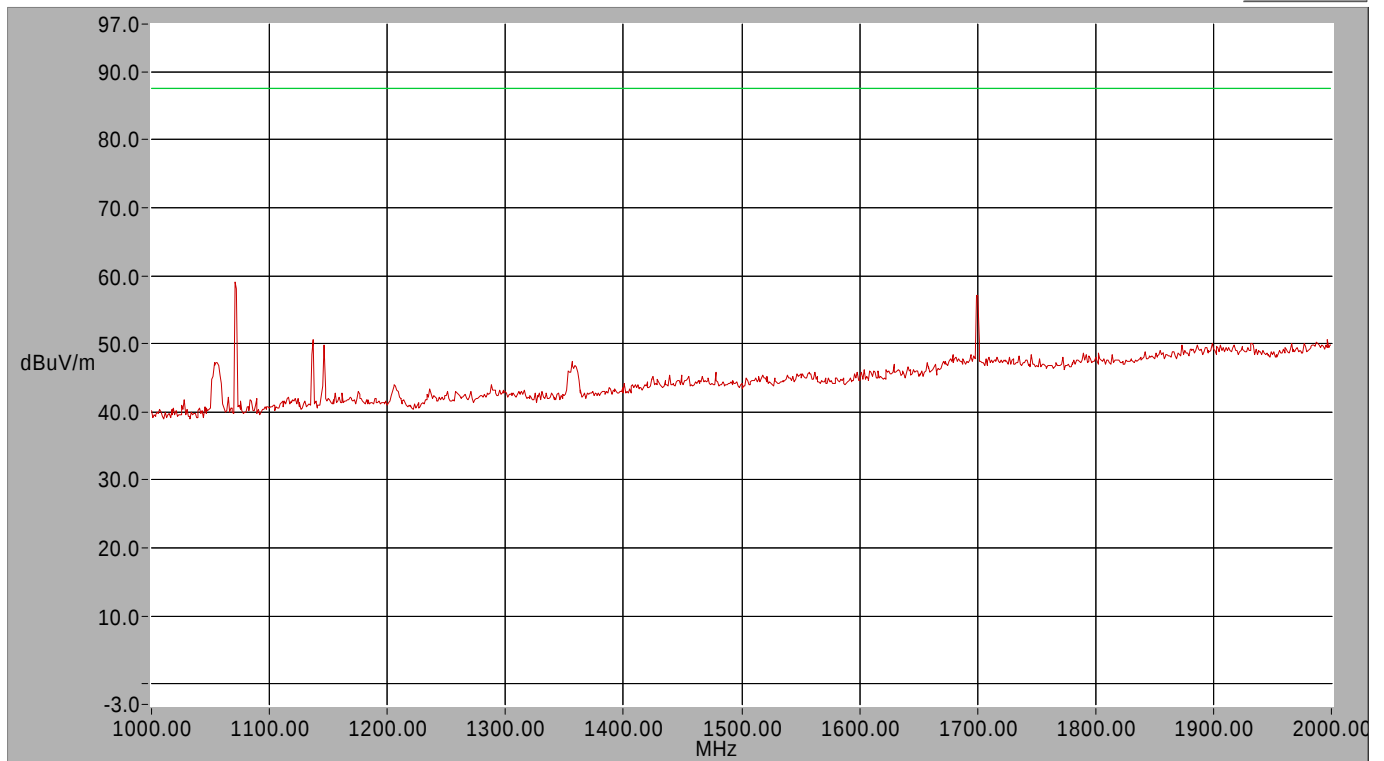
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

1:52 PM

EMI
AMB
LIM

Plot Number: 34



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
limit.dat 2/9/1999

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

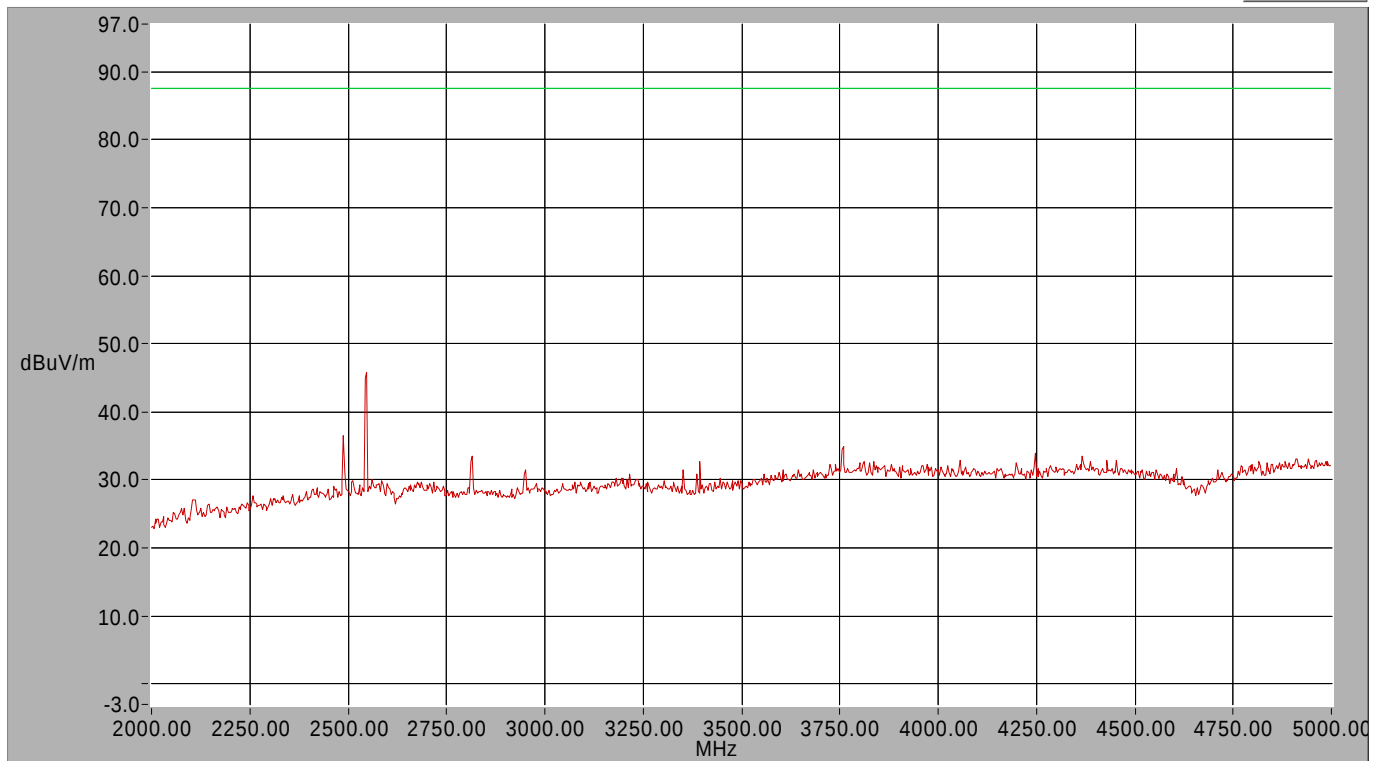
Title:
Mode of Operation: Operational Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:43 AM

EMI
AMB
LIM

Plot Number: 35



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588h3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Horizontal Polarity
FCC PART 22**

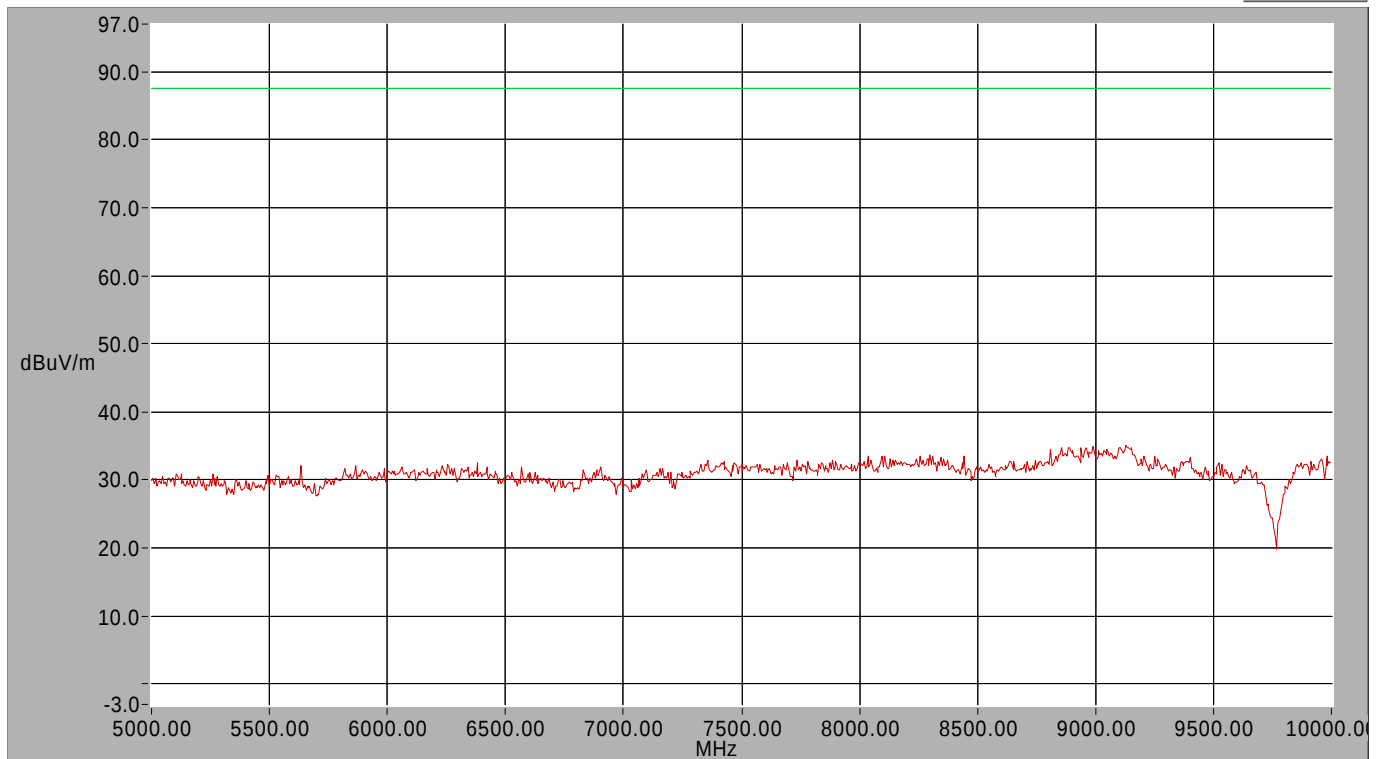
Title:
Mode of Operation: Operationa Tx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799 (848.97 MHz TX)

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

11:48 AM

EMI
AMB
LIM

Plot Number: 36



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588h3.dat	9/5/1997
limit.dat	2/9/1999
	31/12/1903

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

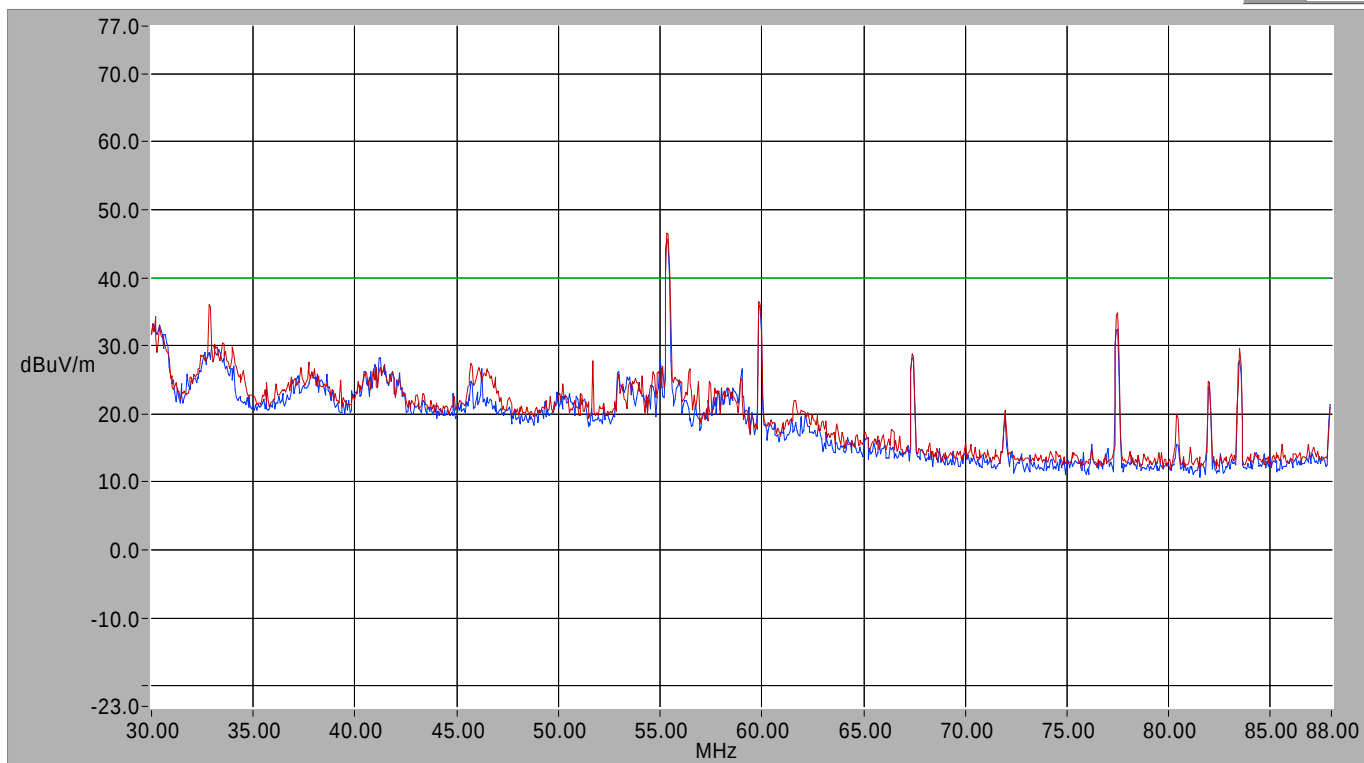
Title:
Mode of Operation: Operational RX
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991

Date & Time: September 2, 1999
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

11:10 PM

Plot Number: 4

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
FCC15B3.DAT	20/8/1998

QUASI-PEAK DATA

[illegible]

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

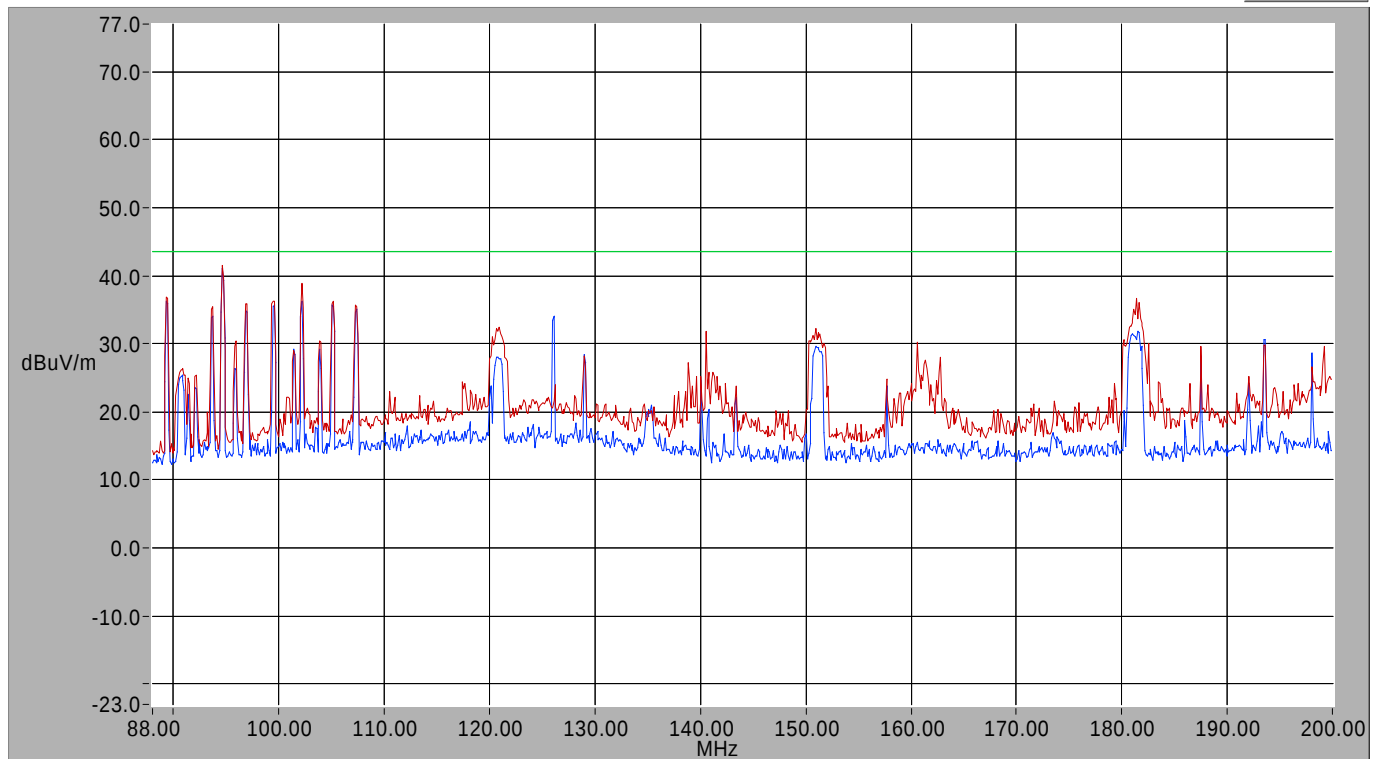
Title:
Mode of Operation: Operational RX
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991

Date & Time: September 2, 1999 11:14 PM
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

11:14 PM

EMI
AMB
LIM

Plot Number: 5



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

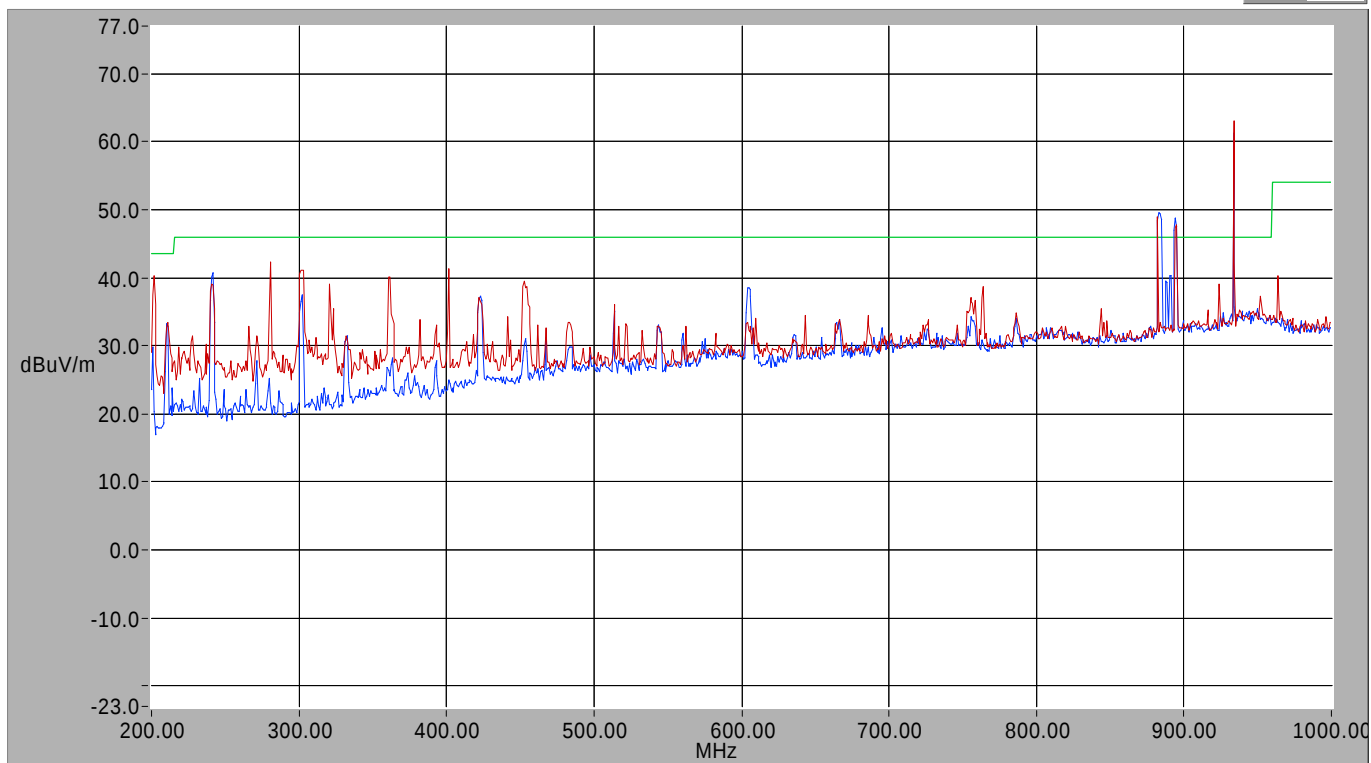
Title:
Mode of Operation: Operational RX
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991

Date & Time: September 2, 1999
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

11:31 PM

Plot Number: 6

EMI	
AMB	
LIM	



VBW: 300.000 kHz Sweep Time: 100.00 ms PR Atten: 0.00 dB
RBW 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
FCC15B3.DAT	20/8/1998

QUASI-PEAK DATA

[illegible]

Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m

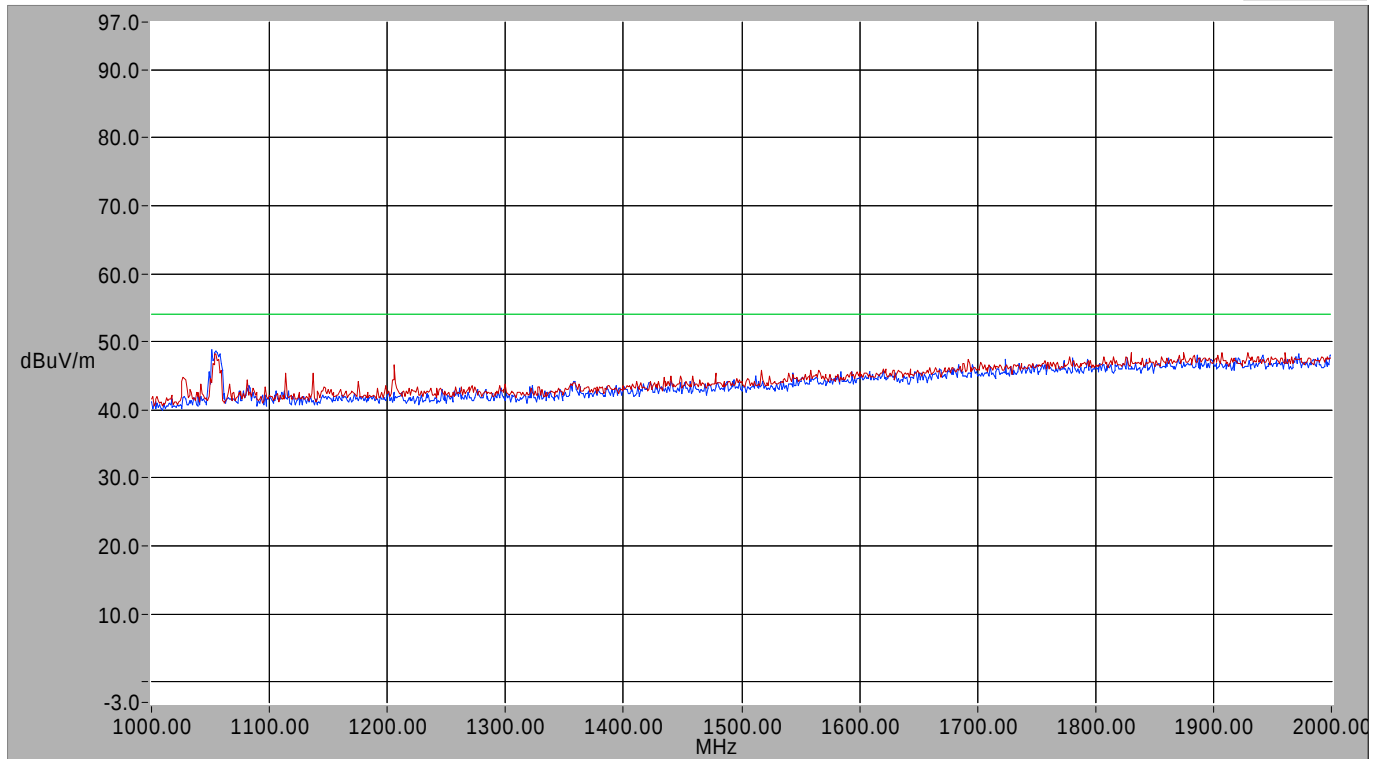
Title: 1 - 2 GHz
Mode of Operation: Receiver Mode
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991 (869.04 MHz RX)

Date & Time: 9:26 AM
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

August 24, 1999

Plot Number: 1

EMI 
AMB 
LIM 



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588h3.dat 9/5/1997
FCC15B3.DAT 20/8/1998

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
1828.080	46	134	5.80	27.97	5.74	0.00	39.52	53.98	Pass

Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m

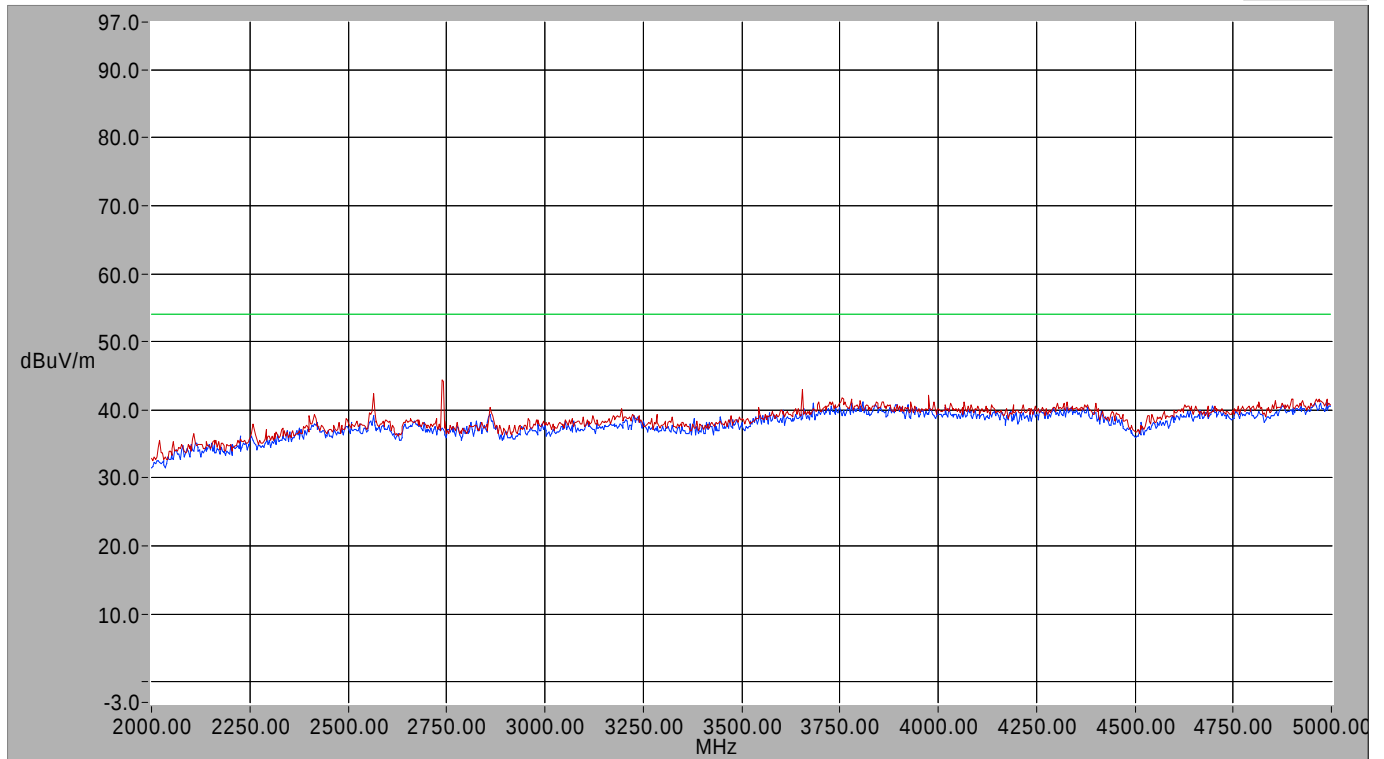
Title: 2 - 5 GHz
Mode of Operation: Receiver Mode
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991 (869.04 MHz RX)

Date & Time: August 24, 1999
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

10:37 AM

EMI 
AMB 
LIM 

Plot Number: 1



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588h3.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
2742.120	241	176	66.30	31.49	7.60	-62.88	42.51	53.98	Pass
3656.160	214	138	53.90	33.65	8.41	-63.01	32.95	53.98	Pass

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

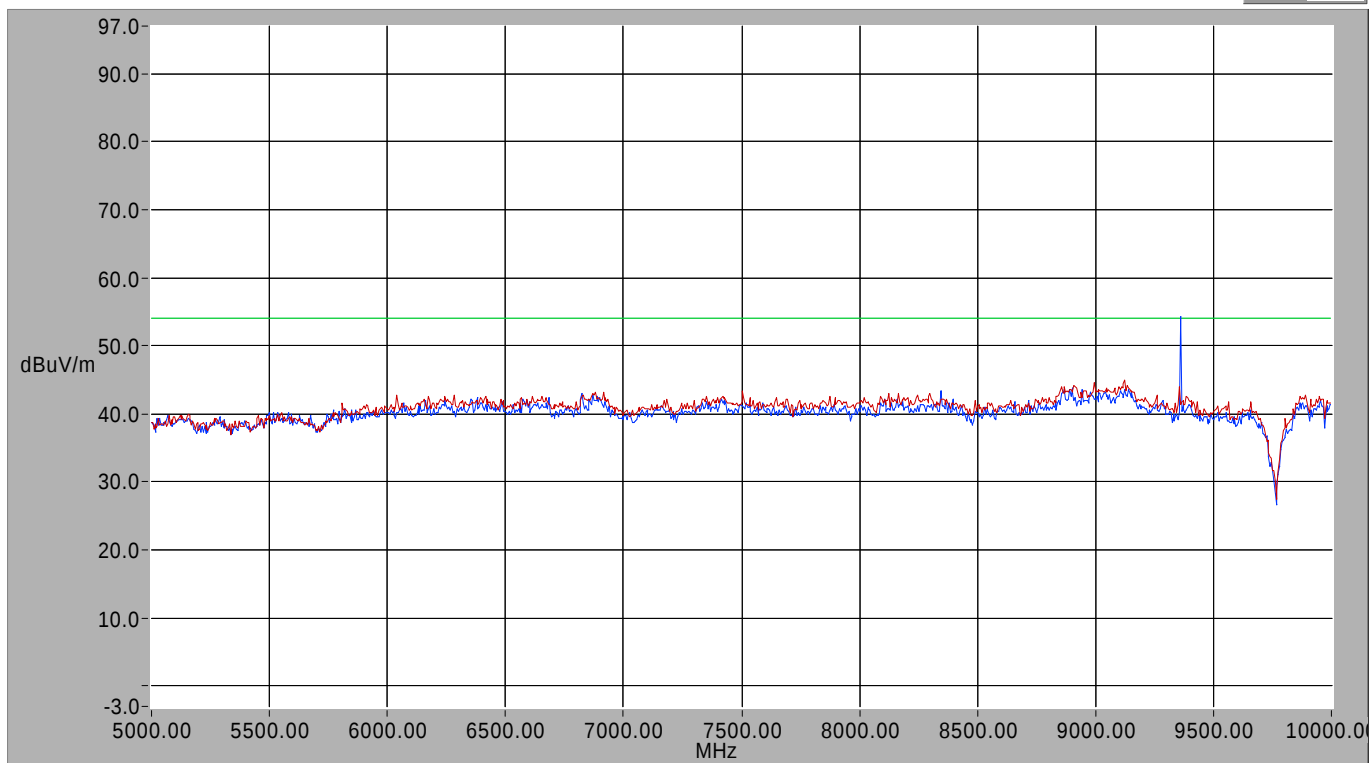
Title: 5 - 10 GHz
Mode of Operation: Reciever Mode
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991 (8

Date & Time: August 24, 1999
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

10:52 AM

Plot Number: 2

EMI	
AMB	
LIM	



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto

PR Atten: 0.00 dB

RBW 1.000 MHz

Ref. Lev: 97.00 dBuV/m

An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588h3.dat	9/5/1997
FCC15B3.DAT	20/8/1998
	31/12/1903

QUASI-PEAK DATA

[illegible]

**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

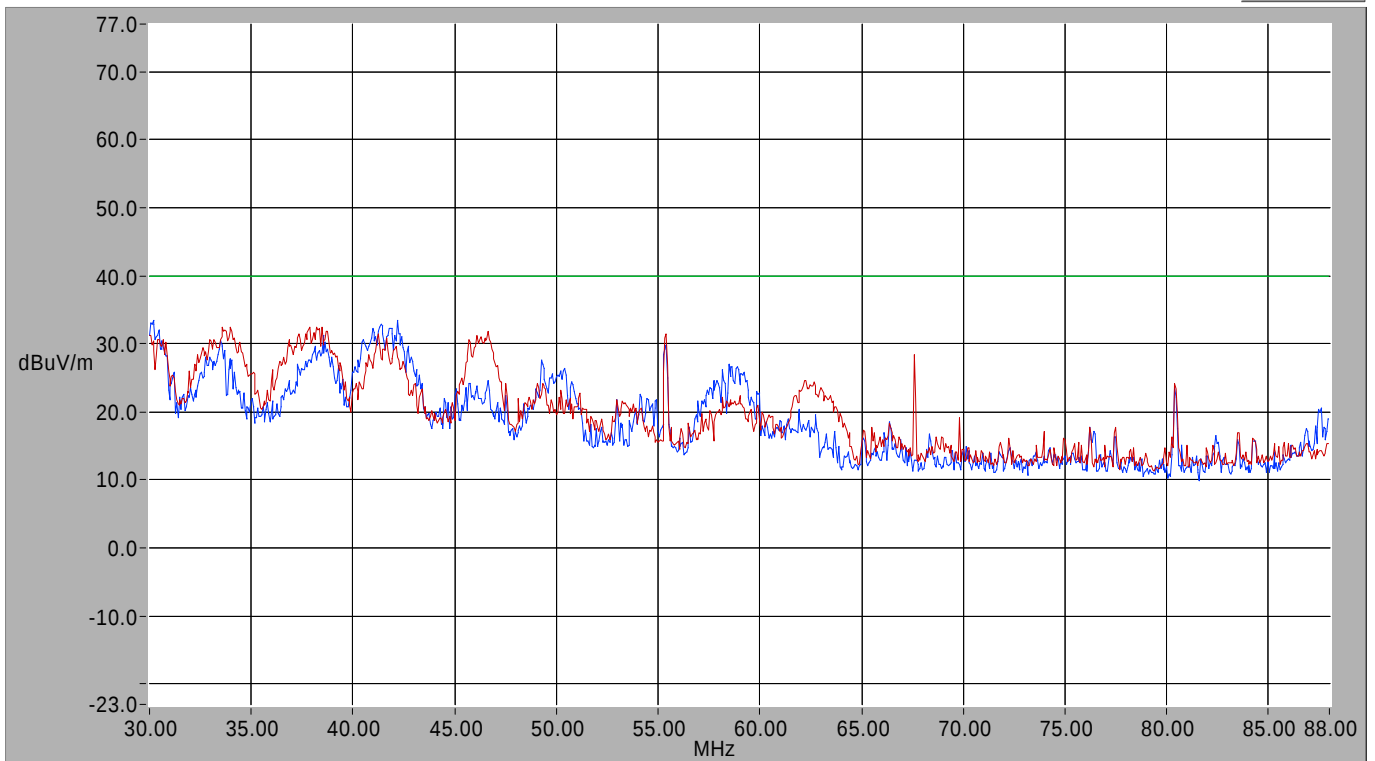
Title:
Mode of Operation: Operational RX
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991

Date & Time: September 2, 1999 10:45 PM
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

10:45 PM

Plot Number: 1

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

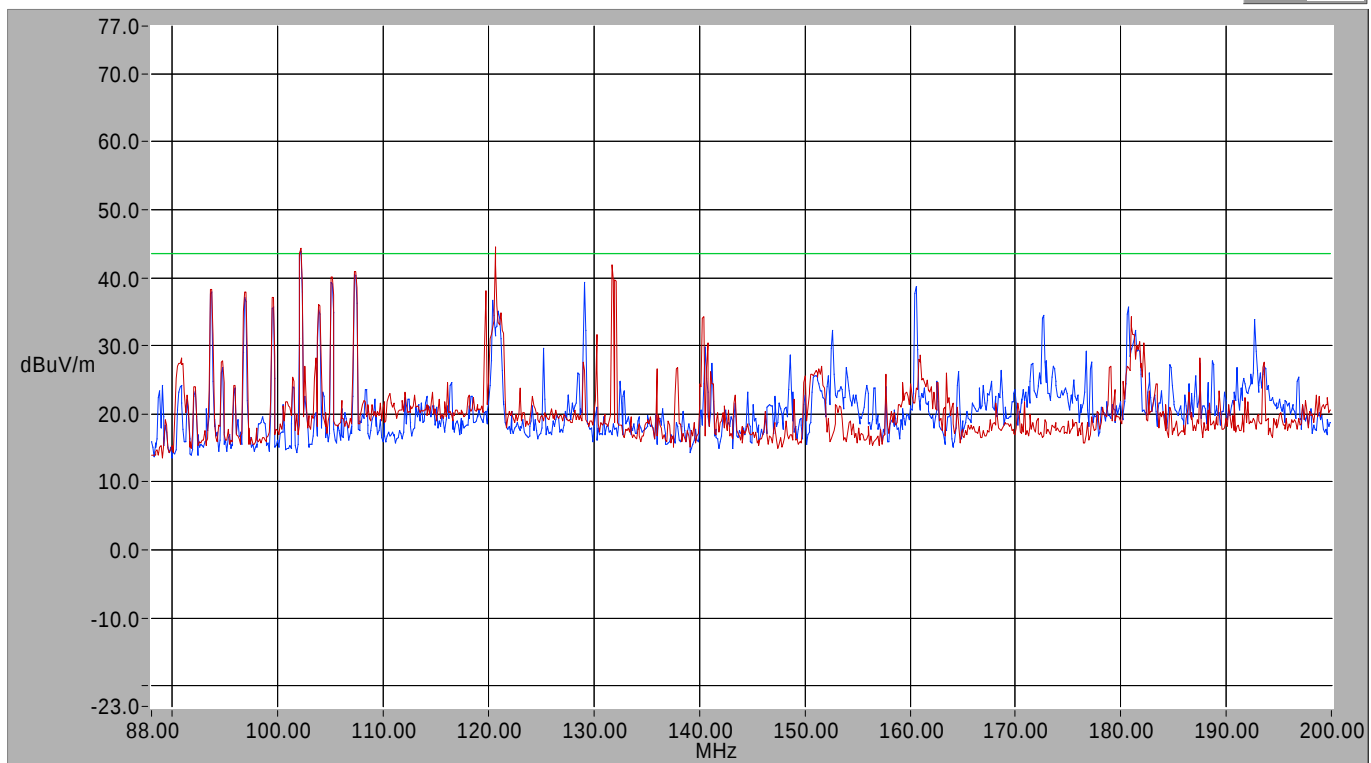
Title:
Mode of Operation: Operational RX
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991

Date & Time: September 2, 1999
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

10:56 PM

Plot Number: 2

EMI	
AMB	
LIM	



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318v3.dat	23/4/1998
FCC15B3.DAT	20/8/1998

QUASI-PEAK DATA

[illegible]

**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

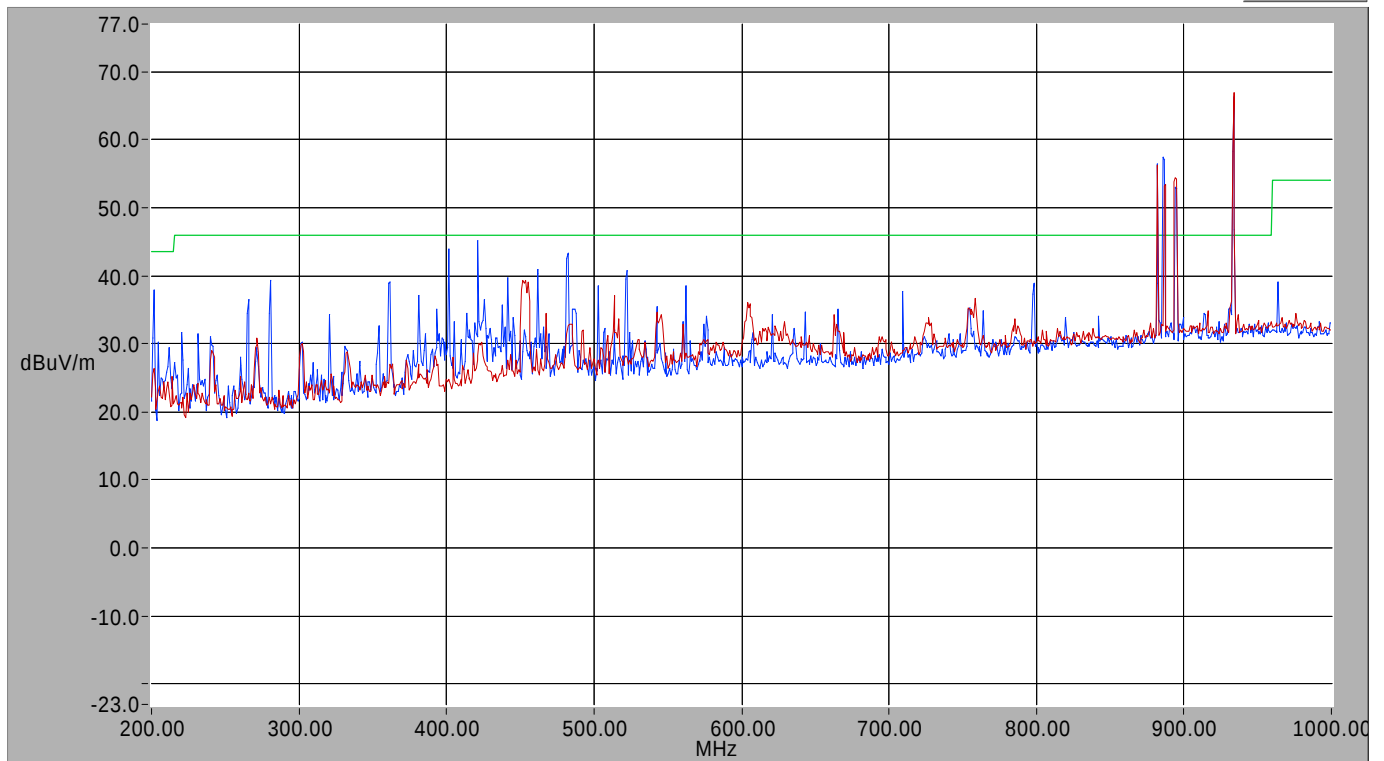
Title:
Mode of Operation: Operational RX
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991

Date & Time: September 2, 1999 11:03 PM
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

11:03 PM

Plot Number: 3

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: 100.00 ms PR Atten: 0.00 dB
RBW 1.000 MHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

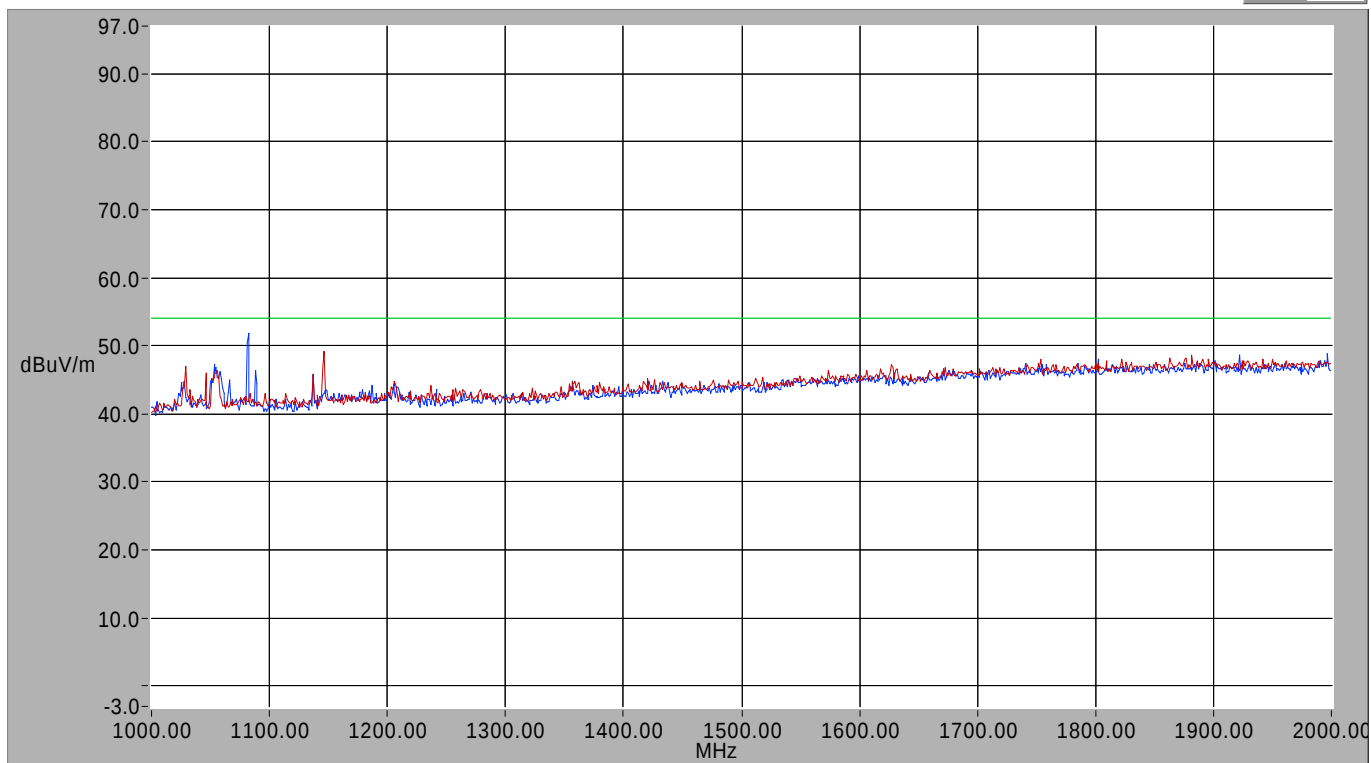
Title: 1 - 2 GHz
Mode of Operation: Receiver Mode
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991 (8)

Date & Time: 9:16 AM
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

August 24, 1999

Plot Number: 3

EMI	
AMB	
LIM	



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588v3.dat	9/5/1997
FCC15B3.DAT	20/8/1998

QUASI-PEAK DATA

[illegible]

Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m

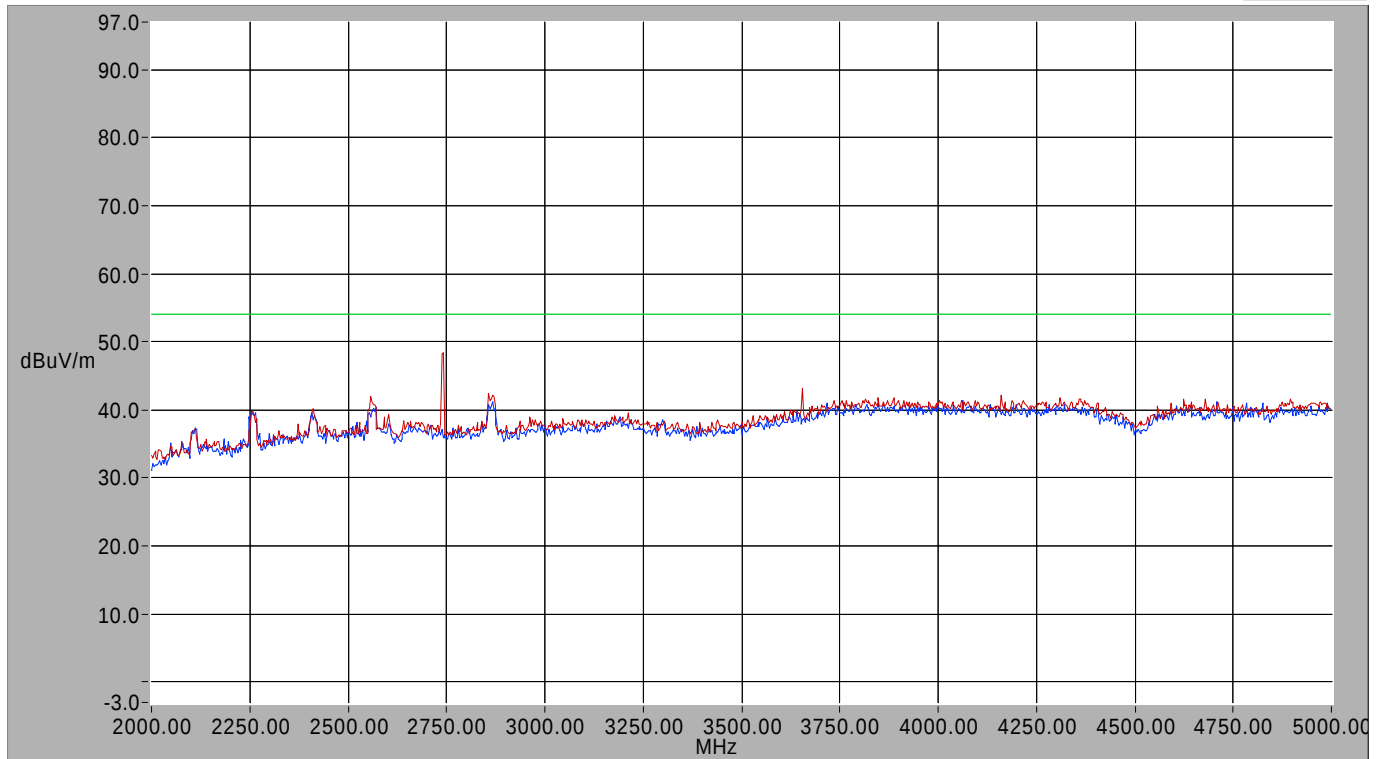
Title: 2 - 5 GHz
Mode of Operation: Receiver Mode
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991 (869.04 MHz RX)

Date & Time: 9:59 AM
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

August 24, 1999

EMI 
AMB 
LIM 

Plot Number: 4



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588v3.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
2742.120	66	181	73.20	30.93	7.60	-62.88	48.85	53.98	Pass
3656.160	294	162	62.90	33.36	8.41	-63.01	41.66	53.98	Pass
4570.200	245	256	54.10	34.43	9.94	-63.09	35.38	53.98	Pass

Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m

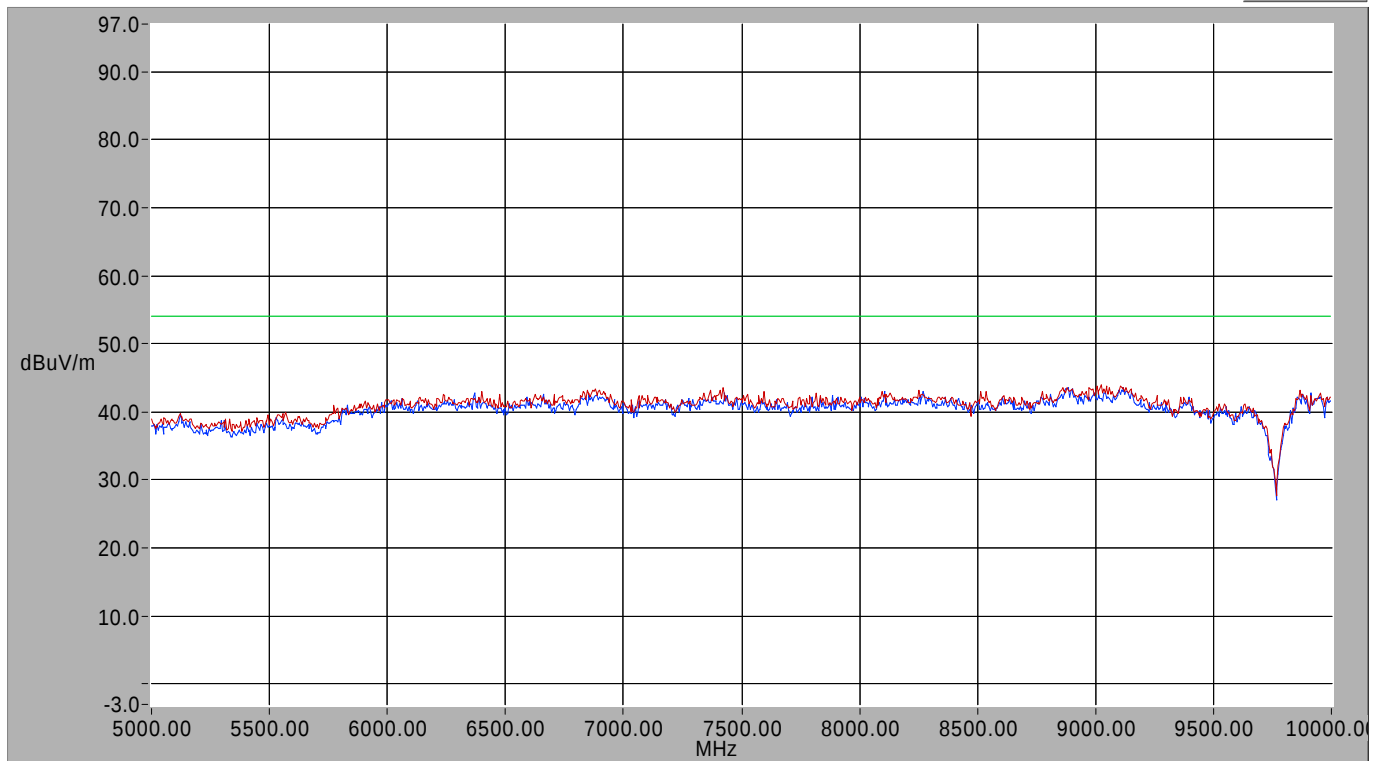
Title: 5 - 10 GHz
Mode of Operation: Receiver Mode
Distance: 3 meters
Technologist: Jeffery Taylor
Comments: Channel 991 (869.04 MHz RX)

Date & Time: August 24, 1999
Project #: 302A17
Company: Novatel Wireless
Product: Merlin
Serial #: 01.6D

10:32 AM

EMI 
AMB 
LIM 

Plot Number: 5



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588v3.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
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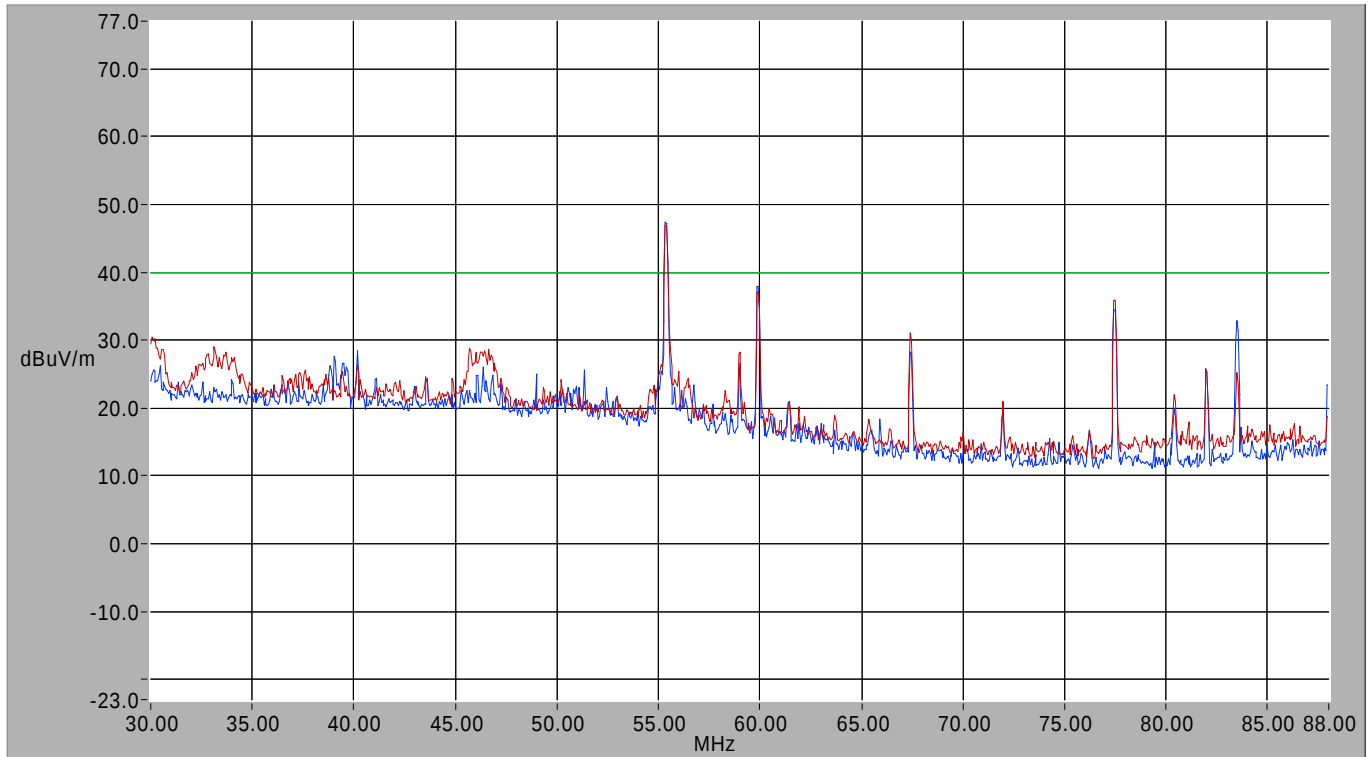
**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

Title:
Mode of Operation: Operational Rx
Distance 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

3:13 PM

Plot Number: 1



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
FCC15B3.DAT	20/8/1998

QUASI-PEAK DATA

[illegible]

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

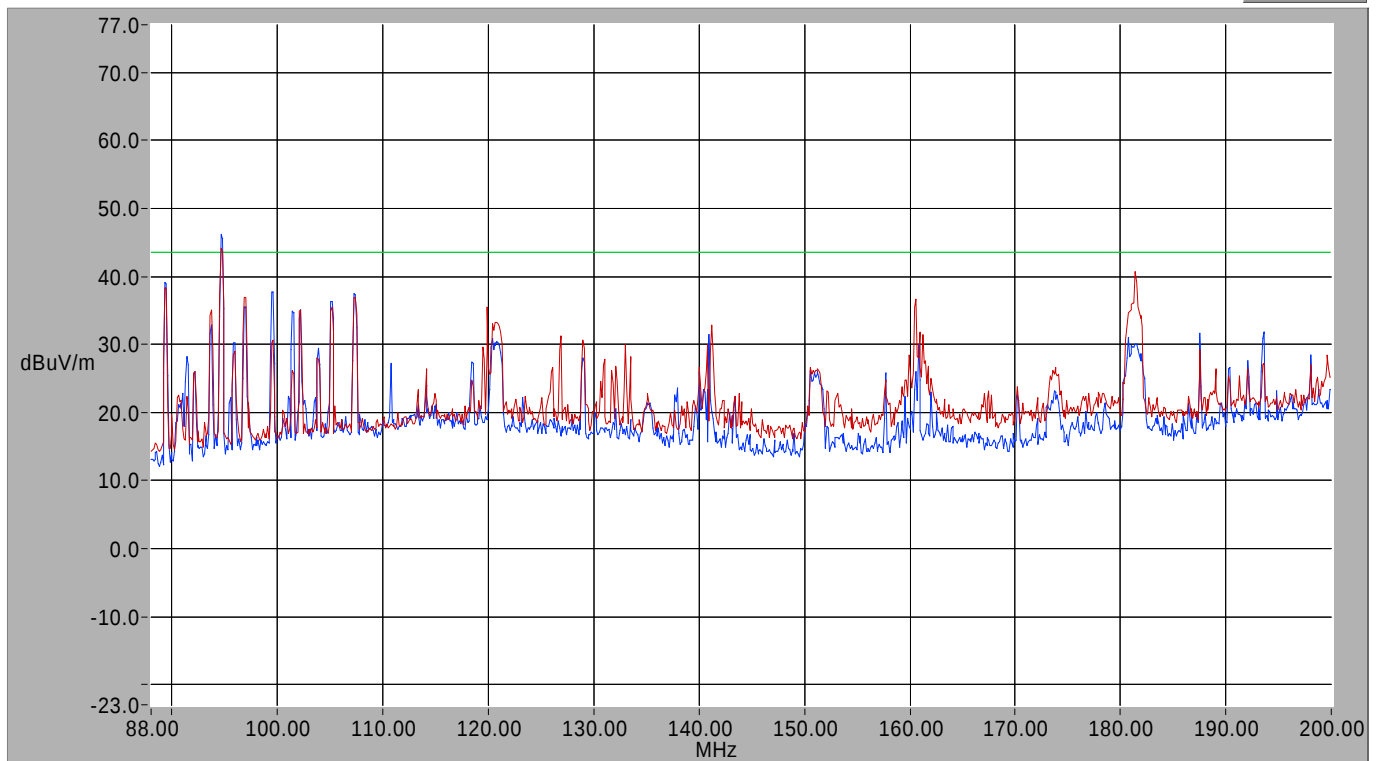
Title: Operational Rx
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

3:19 PM

Plot Number: 2

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

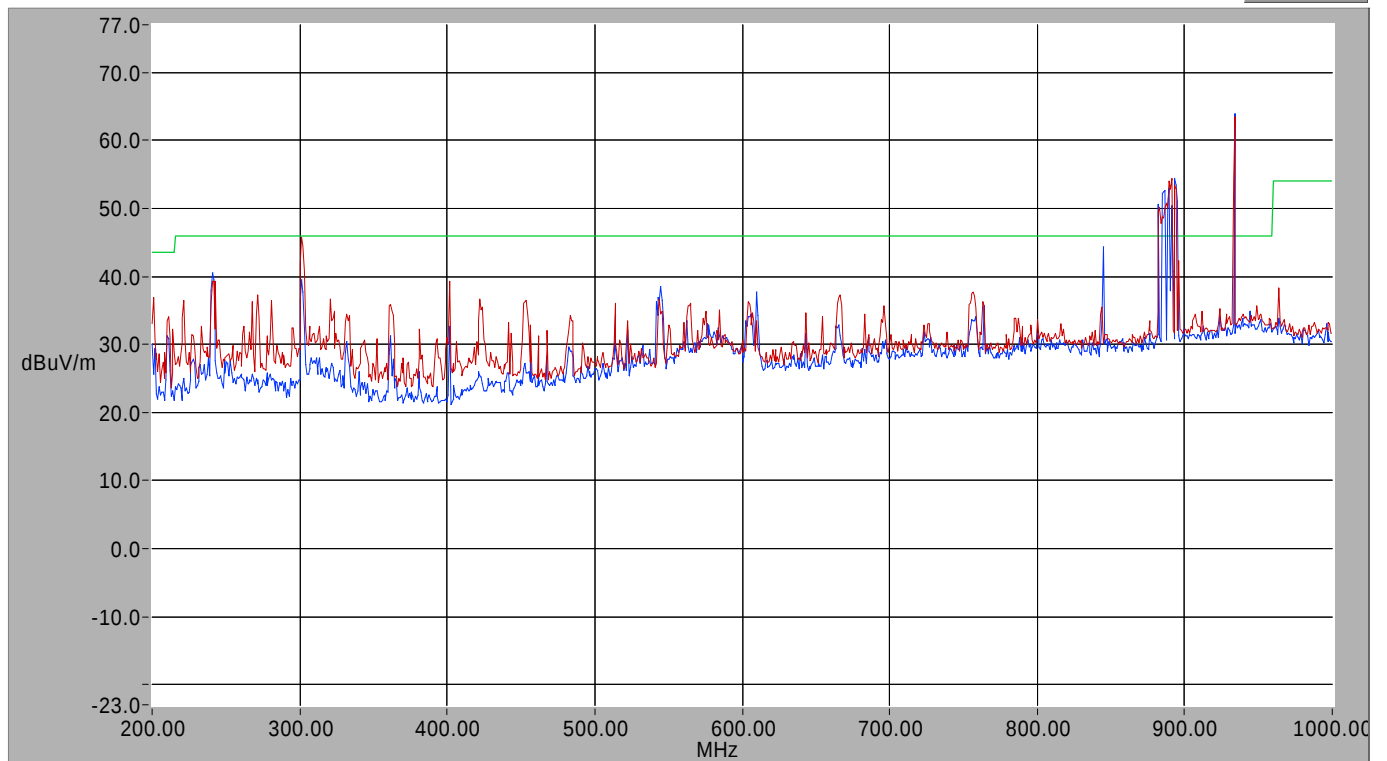
Title: Operational Rx
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

3:24 PM

Plot Number: 3

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

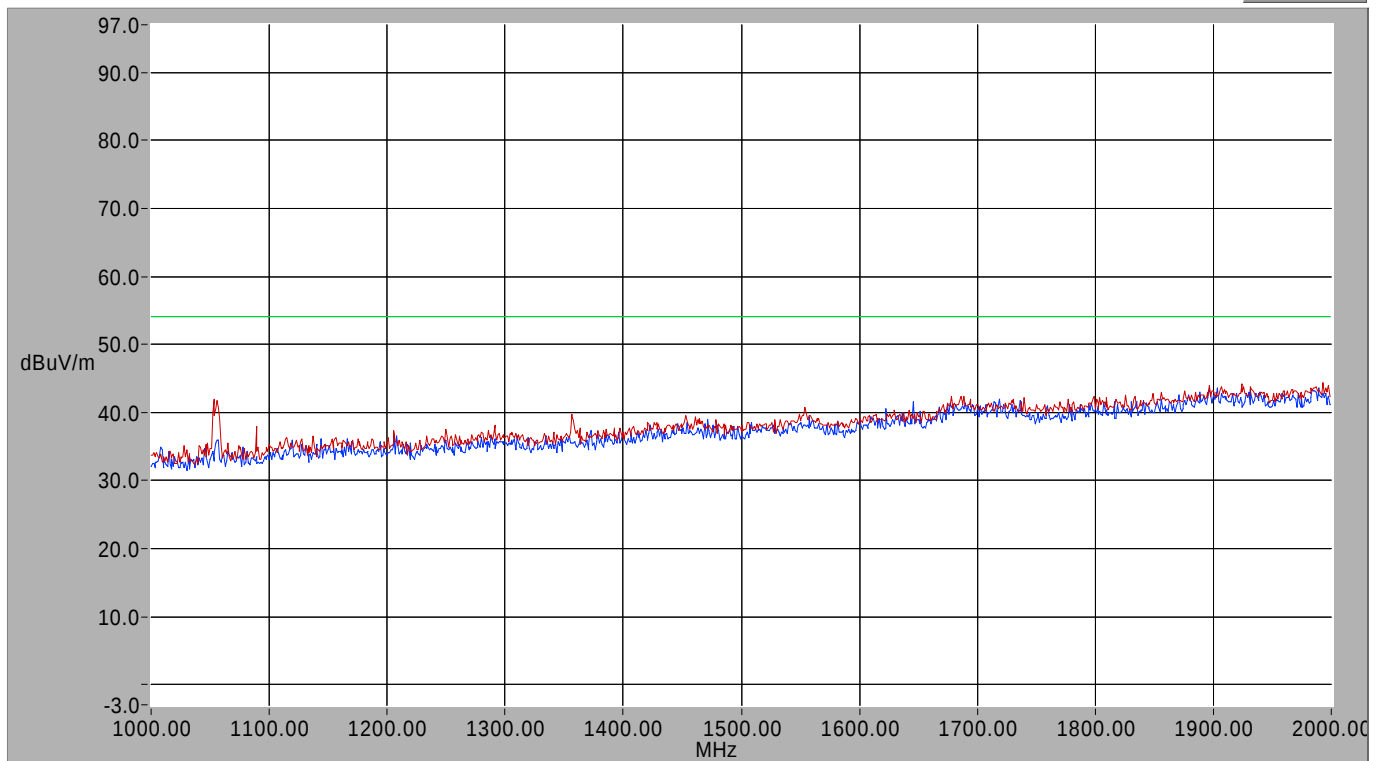
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

3:28 PM

Plot Number: 4

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW: 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

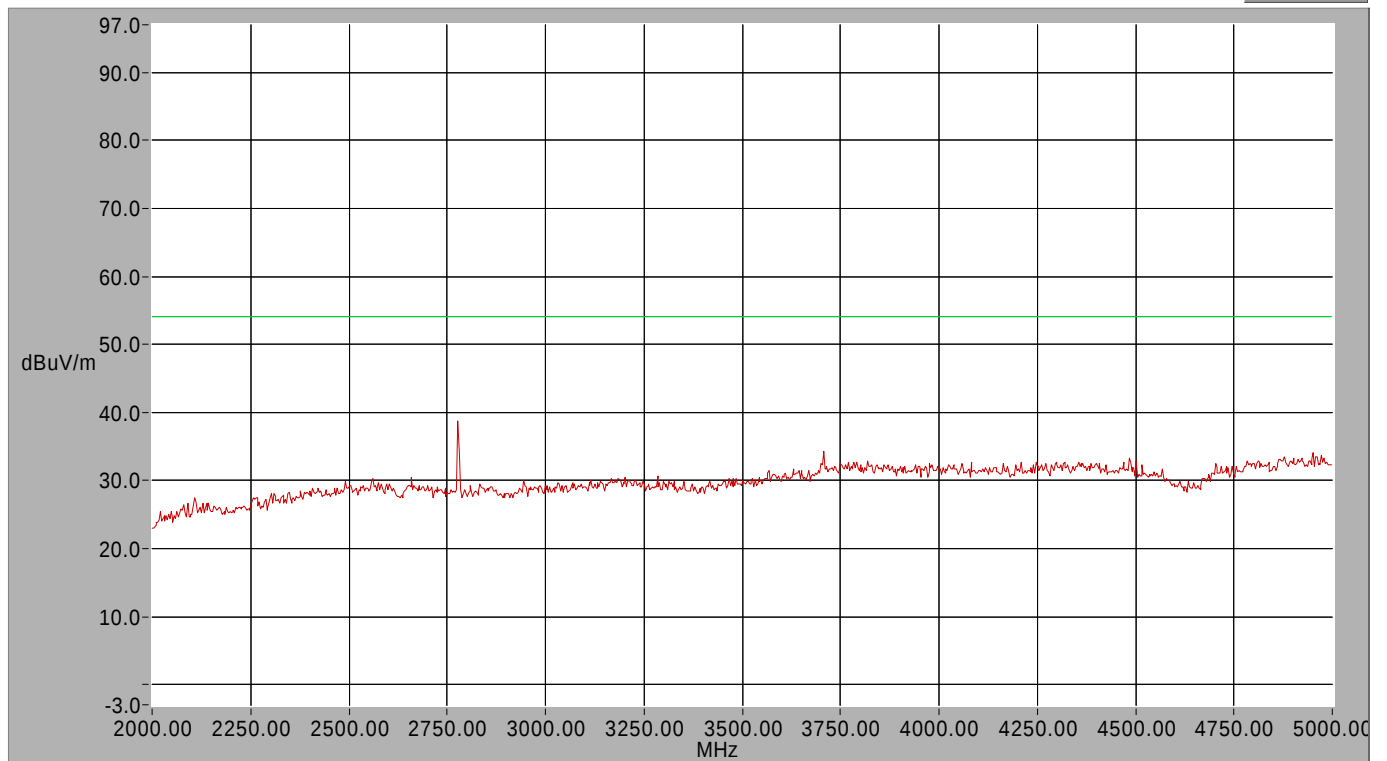
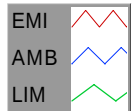
**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

9:41 AM

Plot Number: 5



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat	16/6/1999
09588h3.dat	9/5/1997
FCC15B3.DAT	20/8/1998
	31/12/1903

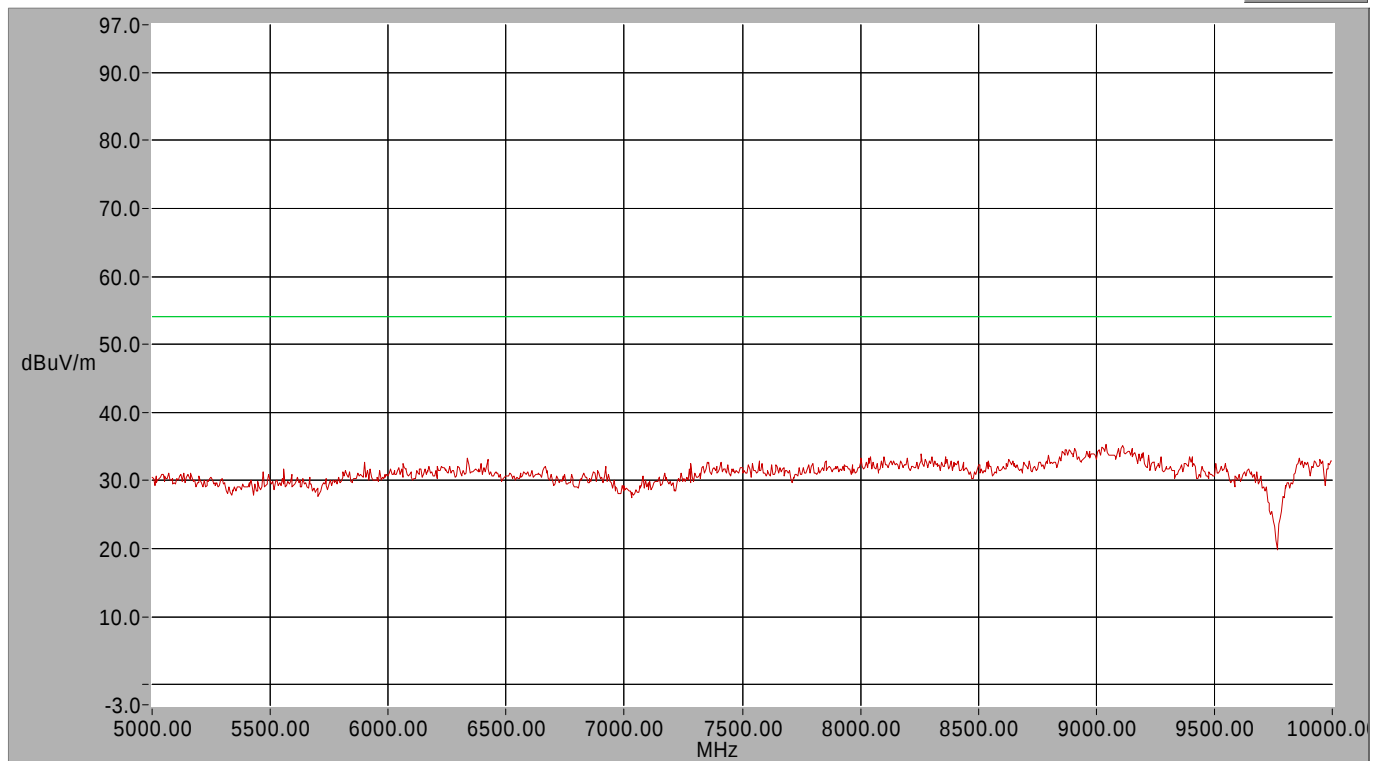
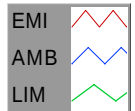
**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

Title: Operational Rx
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

9:46 AM

Plot Number: 6



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588h3.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

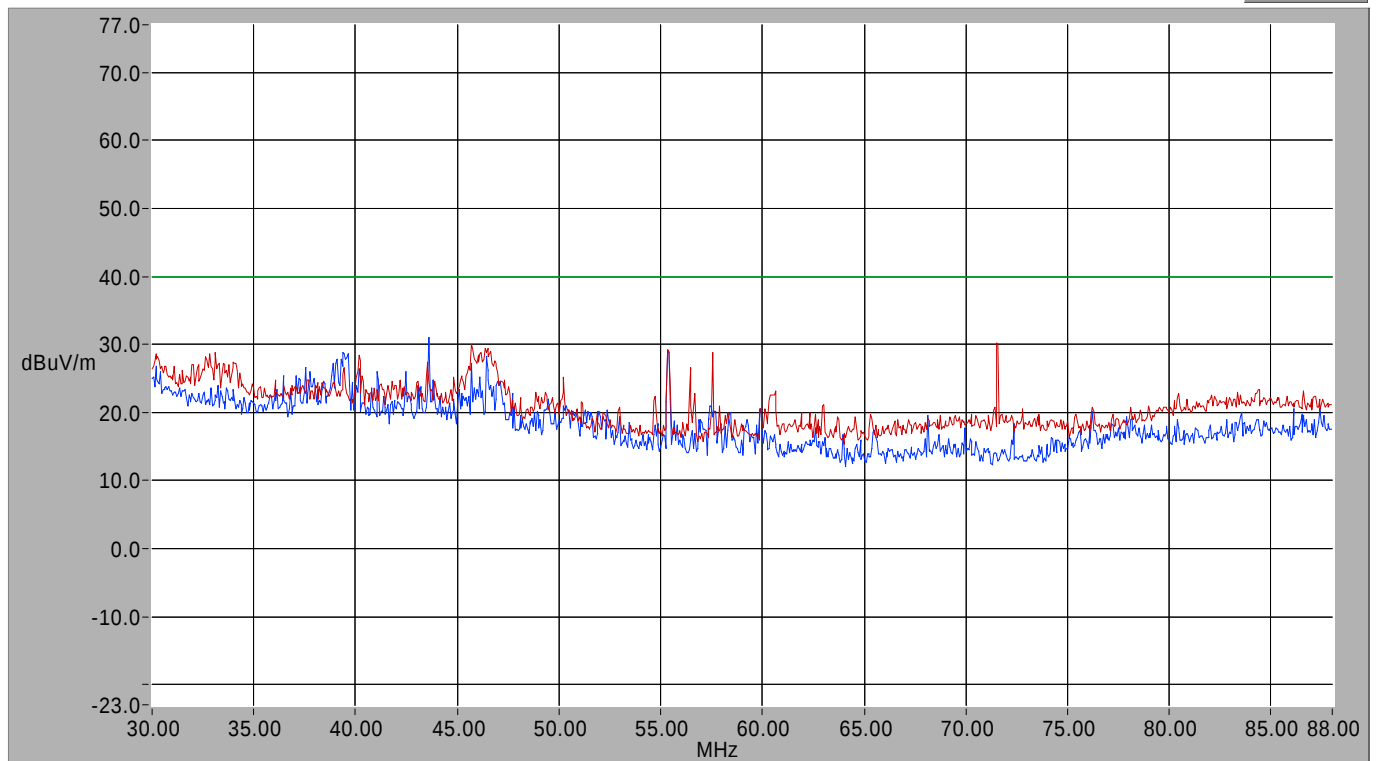
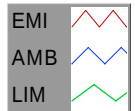
**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

3:32 PM

Plot Number: 7



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

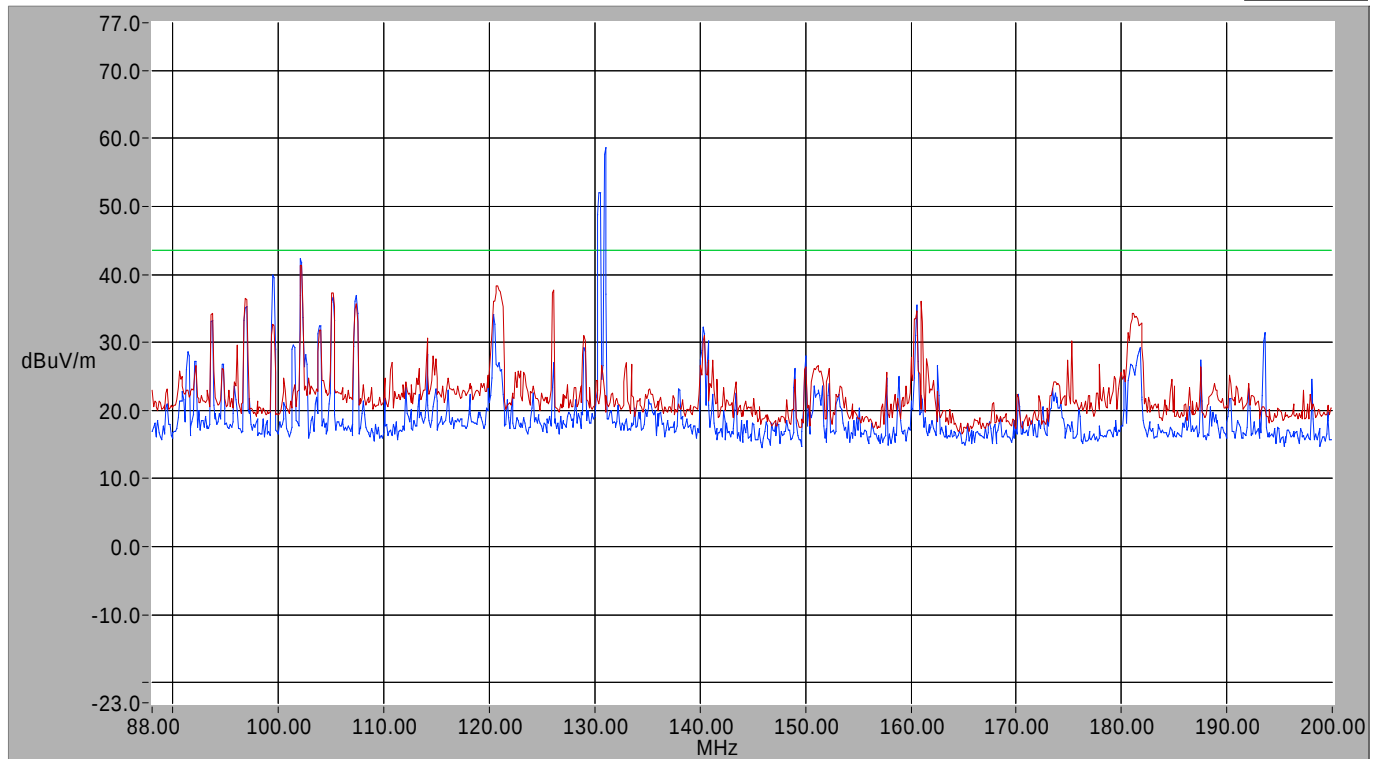
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

3:38 PM

Plot Number: 8

EMI 
AMB 
LIM 



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

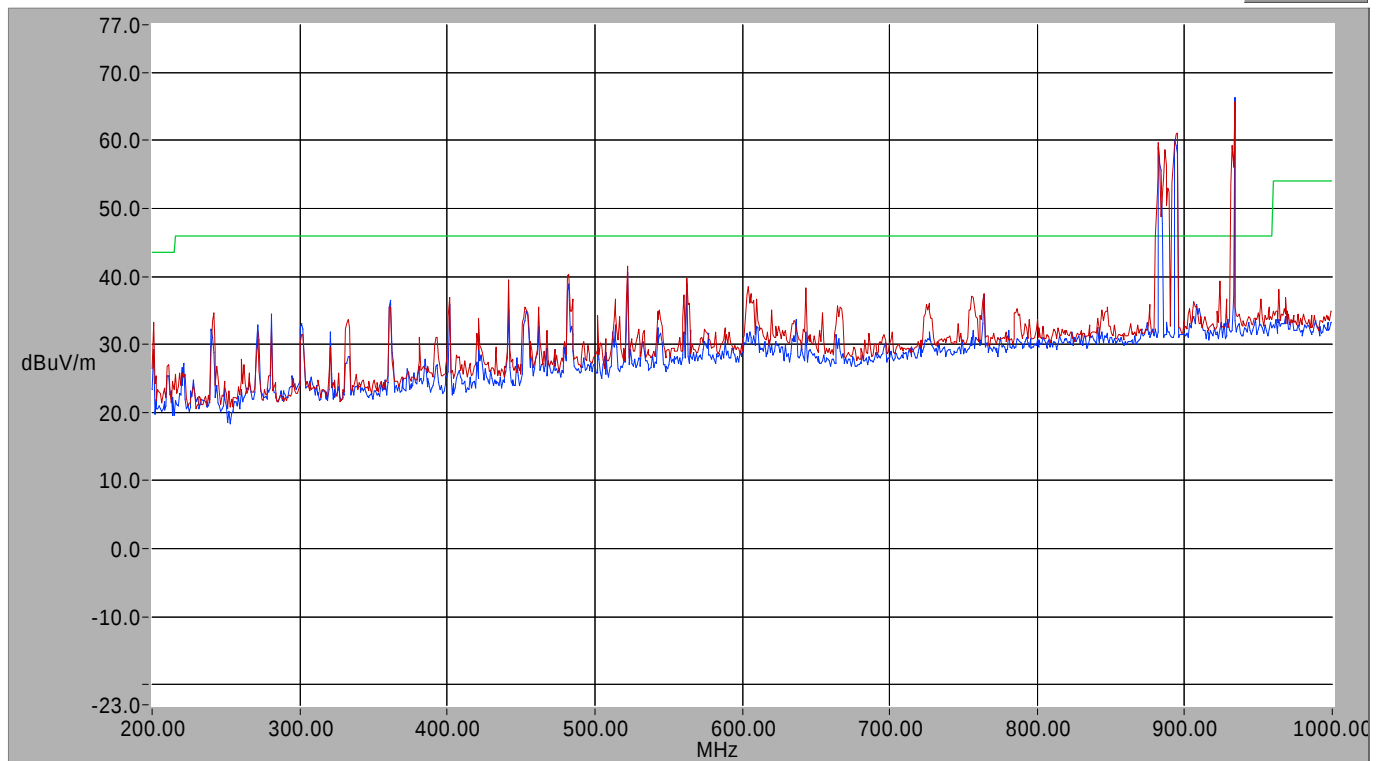
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

8:56 AM

Plot Number: 9

EMI 
AMB 
LIM 



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW: 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

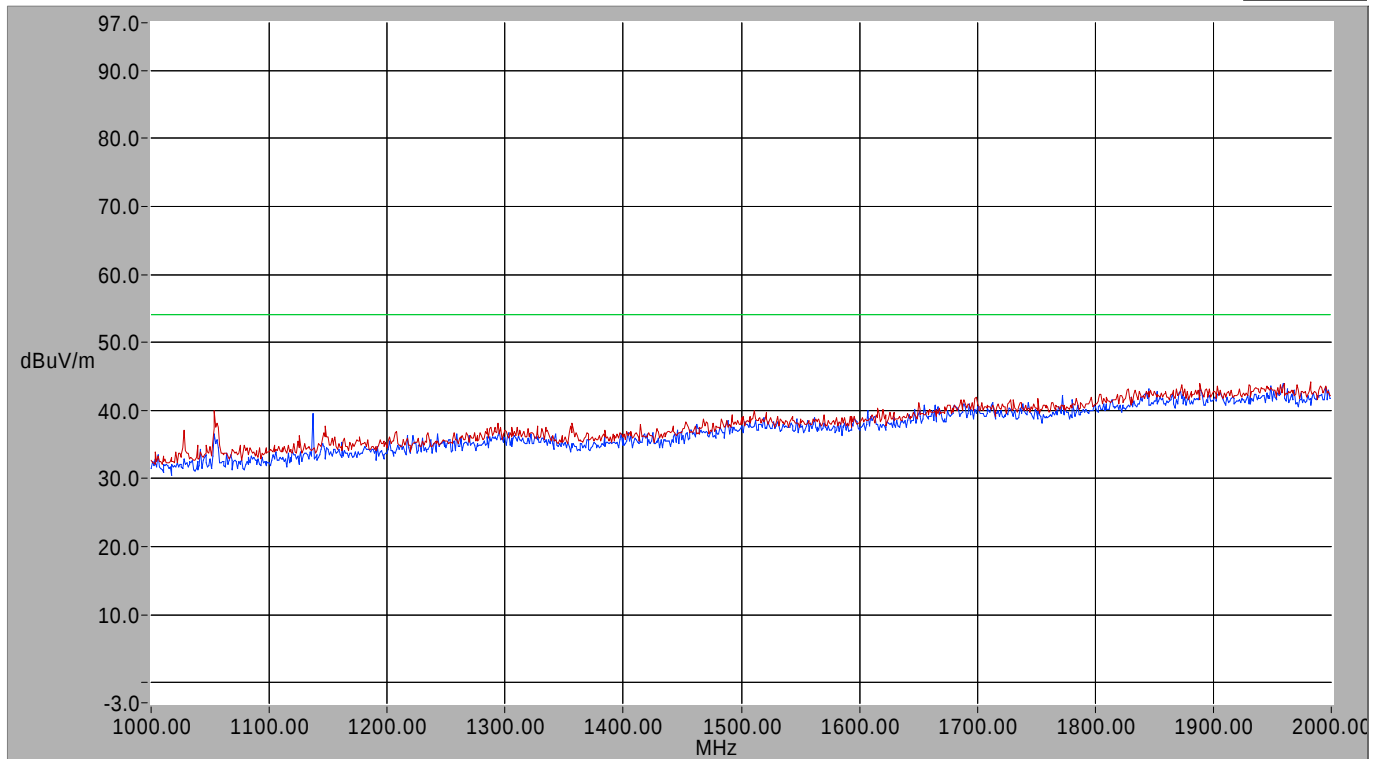
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

3:52 PM

Plot Number: 10

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW: 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

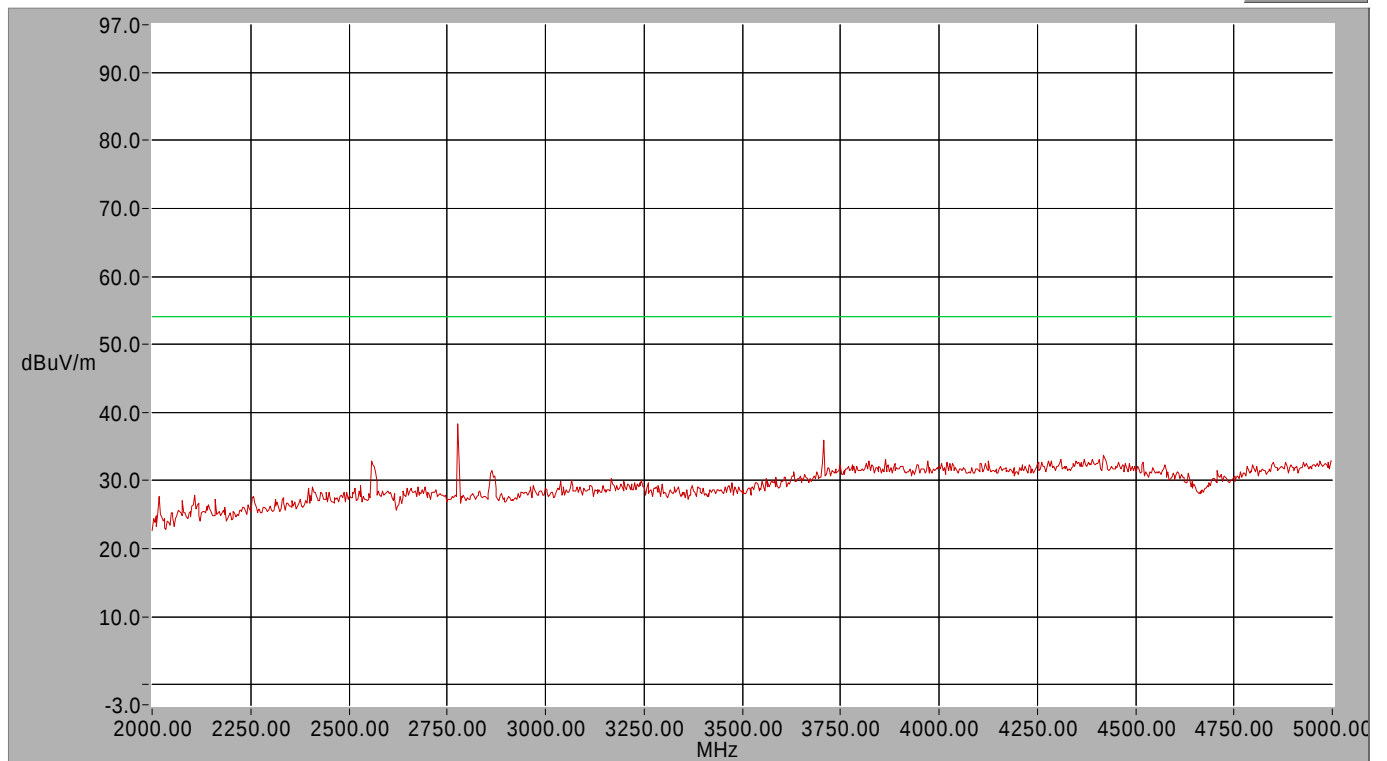
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:08 AM

Plot Number: 11

EMI 
AMB 
LIM 



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588v3.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

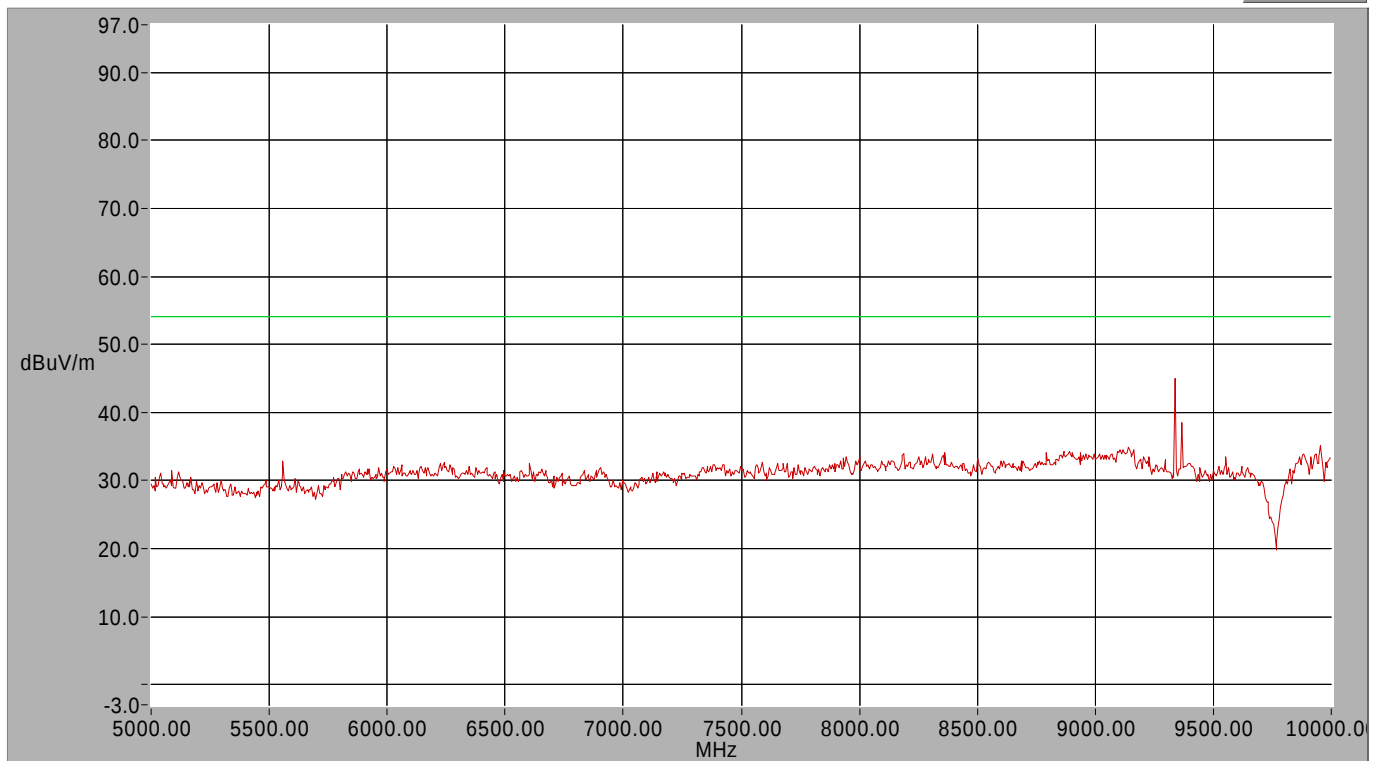
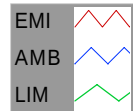
**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 384

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:14 AM

Plot Number: 12



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588v3.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

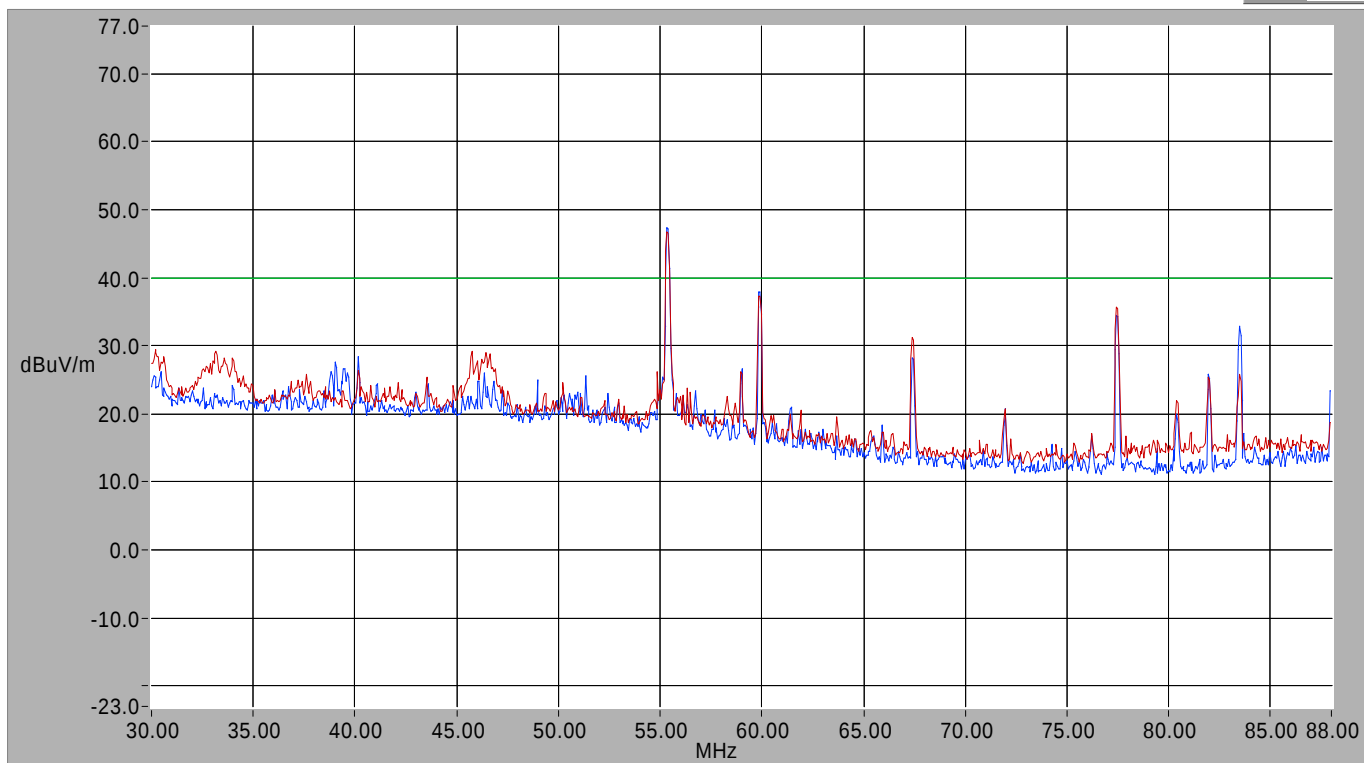
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

2:52 PM

Plot Number: 1

EMI
AMB
LIM



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
FCC15B3.DAT	20/8/1998

QUASI-PEAK DATA

[illegible]

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

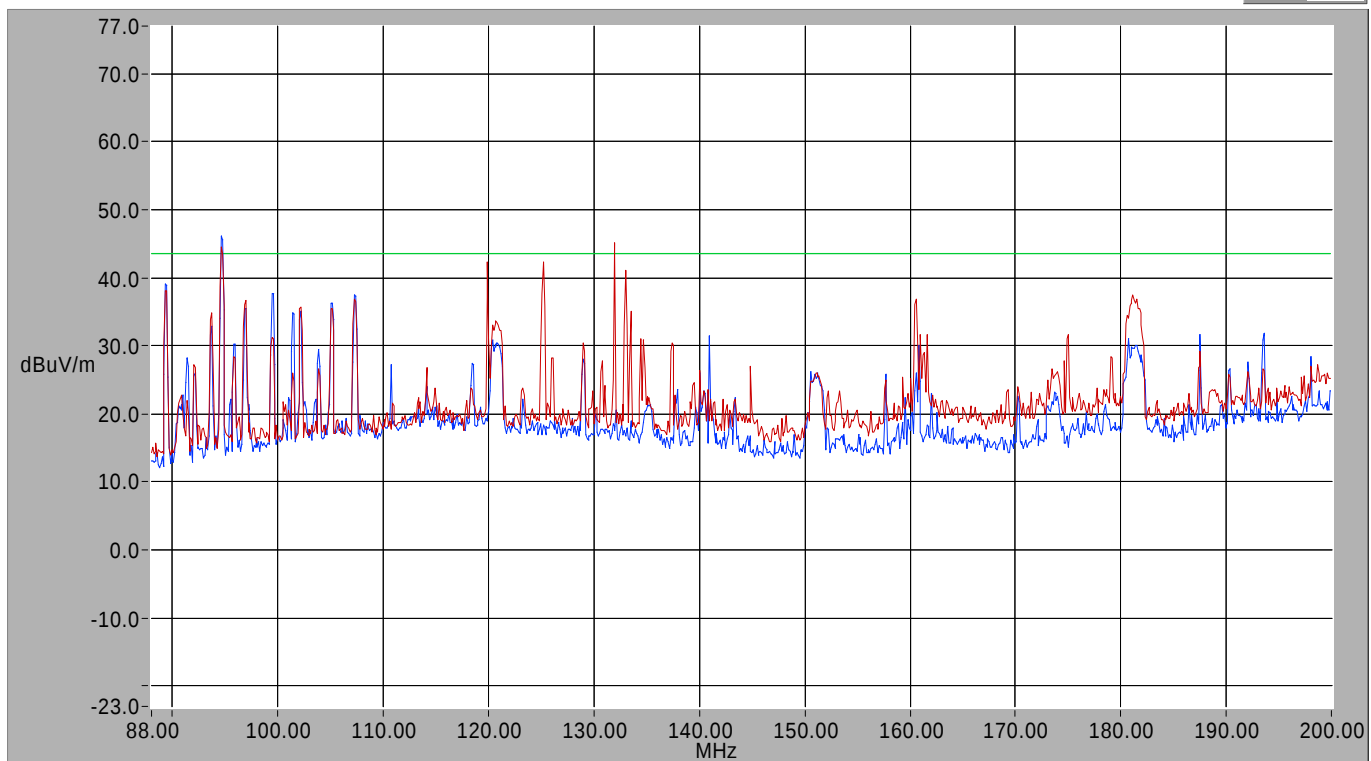
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

2:58 PM

Plot Number: 3

EMI	
AMB	
LIM	



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
FCC15B3.DAT	20/8/1998

QUASI-PEAK DATA

[illegible]

**Radiated Emissions
Horizontal Polarity
FCC Part 15 Class B 3m**

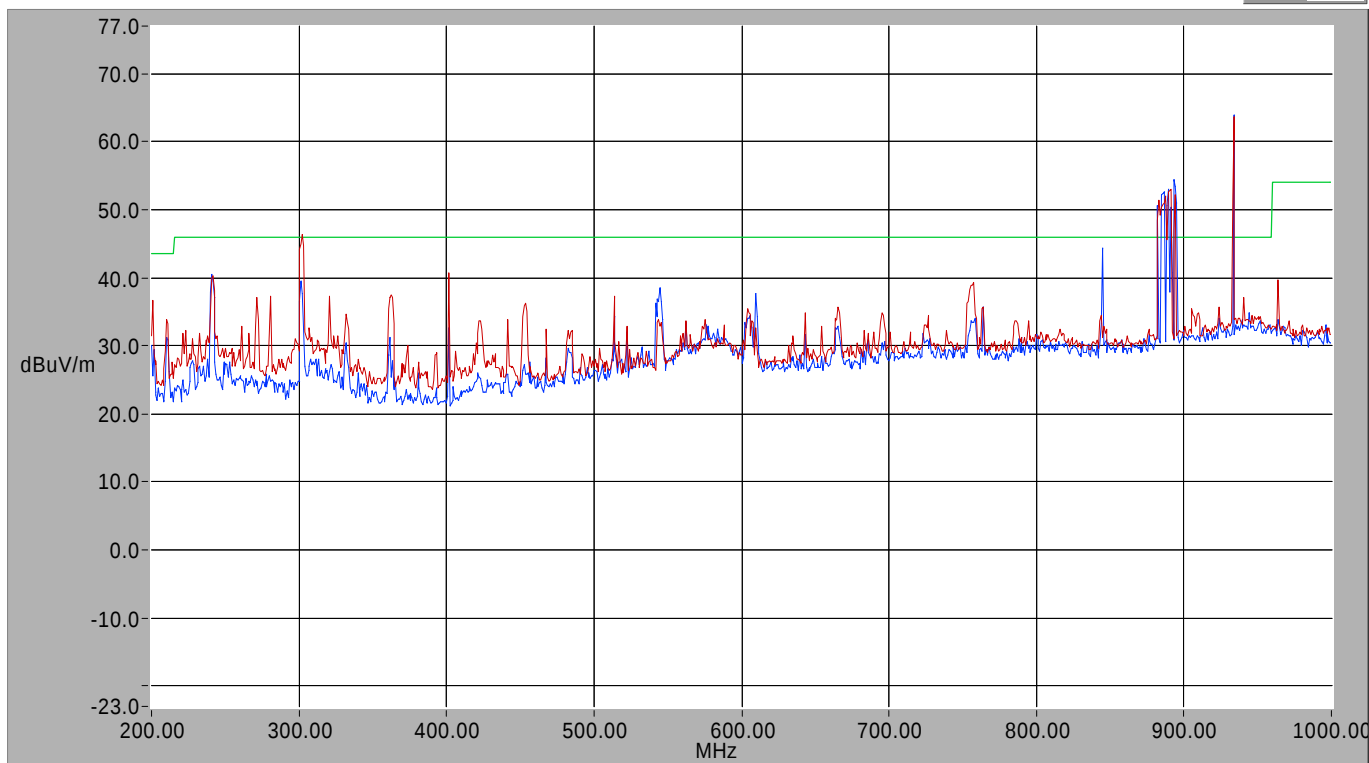
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

3:02 PM

Plot Number: 4

EMI	
AMB	
LIM	



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318h3.dat	23/4/1998
FCC15B3.DAT	20/8/1998

QUASI-PEAK DATA

[illegible]

Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m

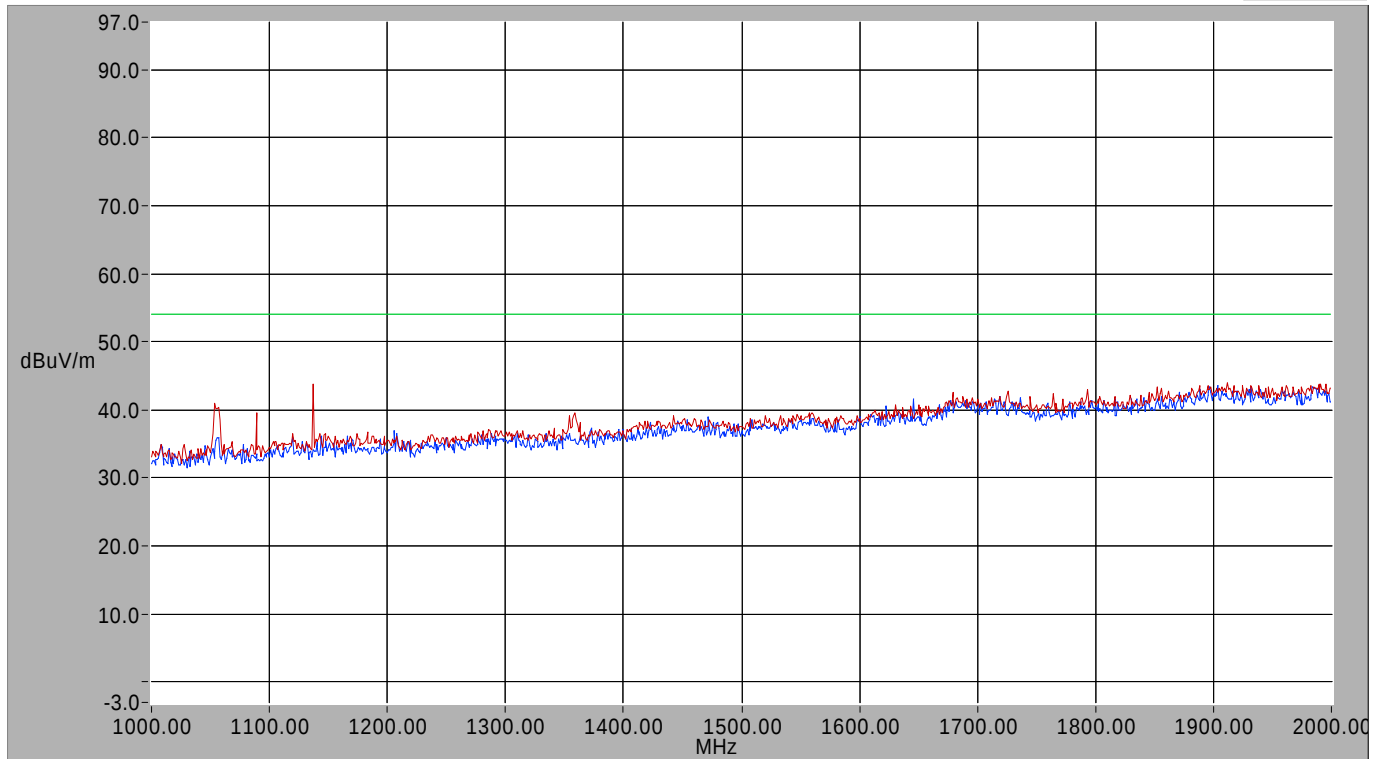
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

3:07 PM

EMI
AMB
LIM

Plot Number: 5



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318h3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
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Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m

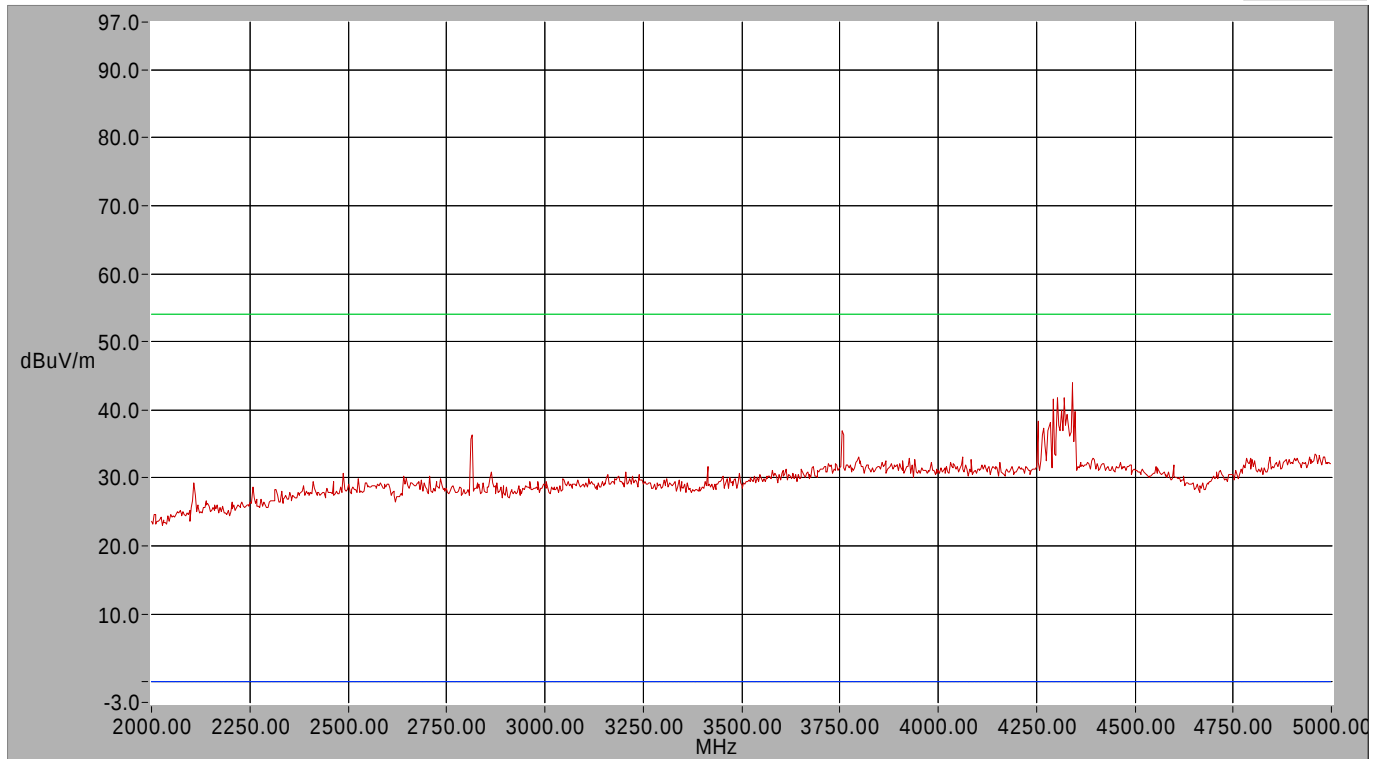
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:32 AM

EMI
AMB
LIM

Plot Number: 6



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588h3.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
------------	---------------	-------------	-----------------	---------	---------	---------	--------------	----------------	--------

Radiated Emissions Horizontal Polarity FCC Part 15 Class B 3m

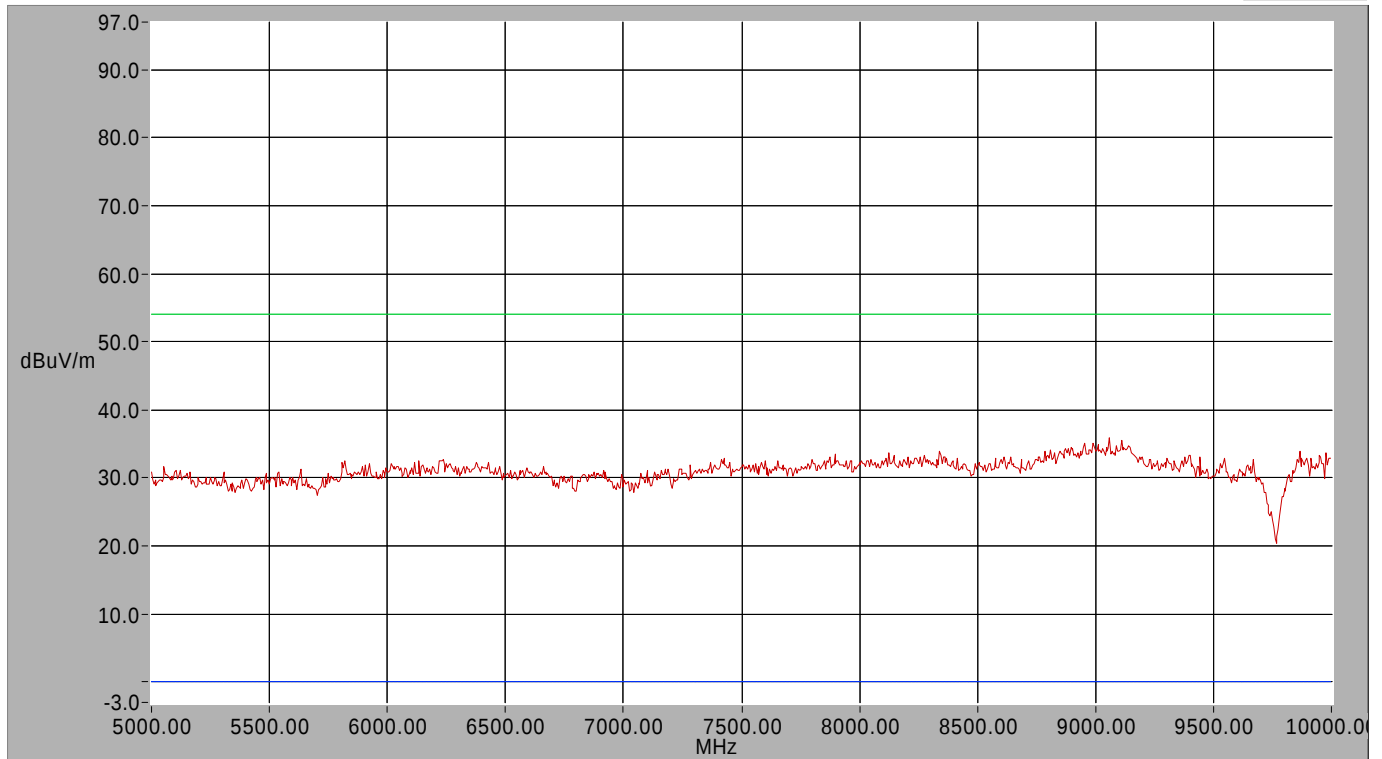
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:37 AM

Plot Number: 7

EMI 
AMB 
LIM 



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588h3.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
------------	---------------	-------------	-----------------	---------	---------	---------	--------------	----------------	--------

Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m

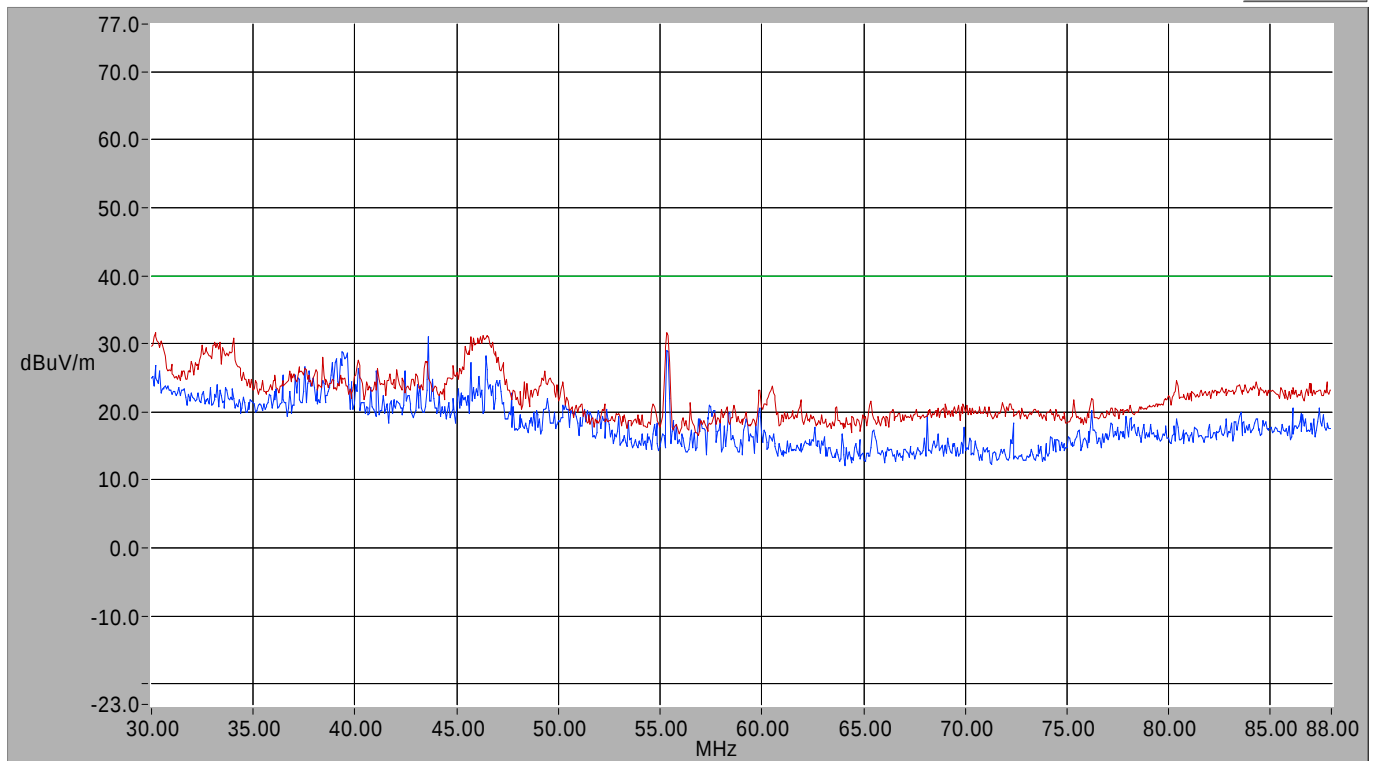
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

2:33 PM

EMI
AMB
LIM

Plot Number: 8



VBW: 300.000 kHz Sweep Time: 50.00 ms PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
------------	---------------	-------------	-----------------	---------	---------	---------	--------------	----------------	--------

Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m

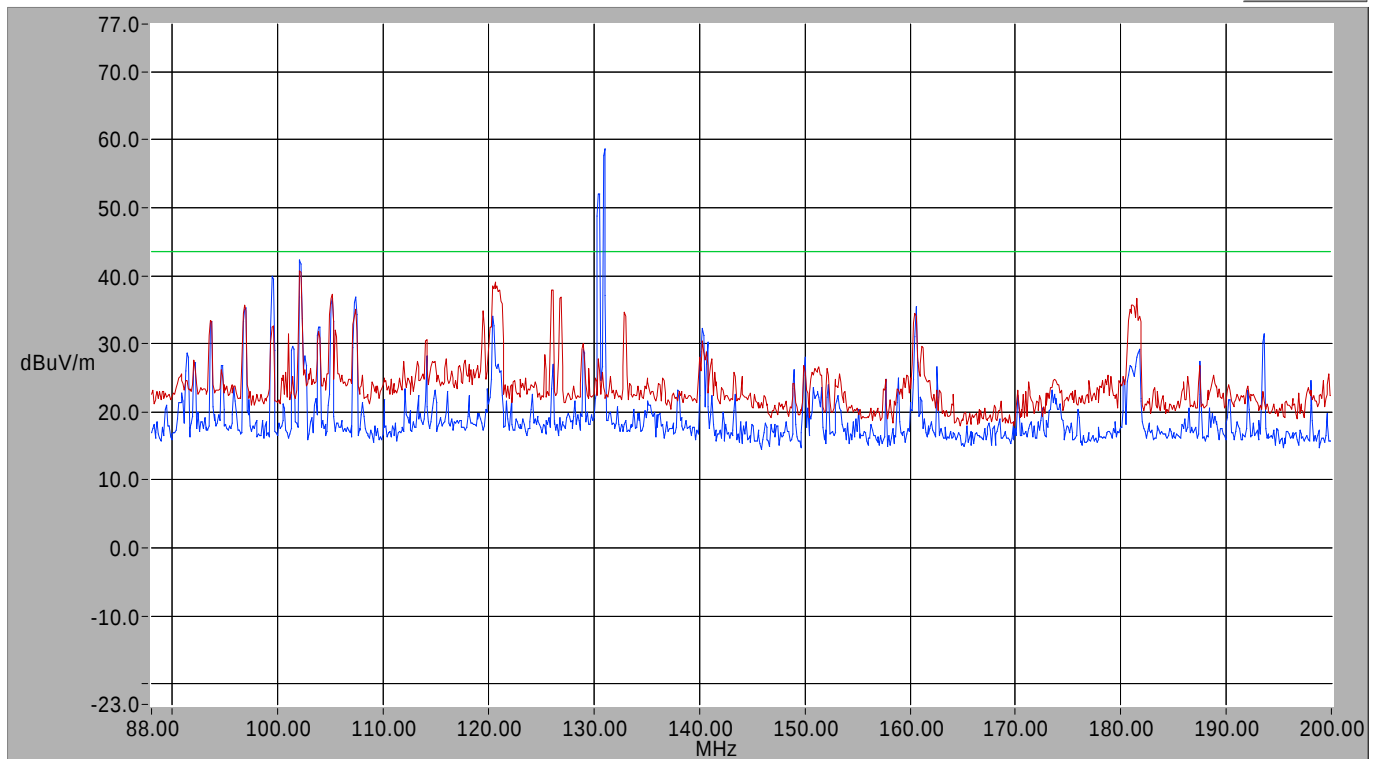
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

2:39 PM

EMI
AMB
LIM

Plot Number: 9



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
04318v3.dat 23/4/1998
FCC15B3.DAT 20/8/1998

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
------------	---------------	-------------	-----------------	---------	---------	---------	--------------	----------------	--------

**Radiated Emissions
Vertical Polarity
FCC Part 15 Class B 3m**

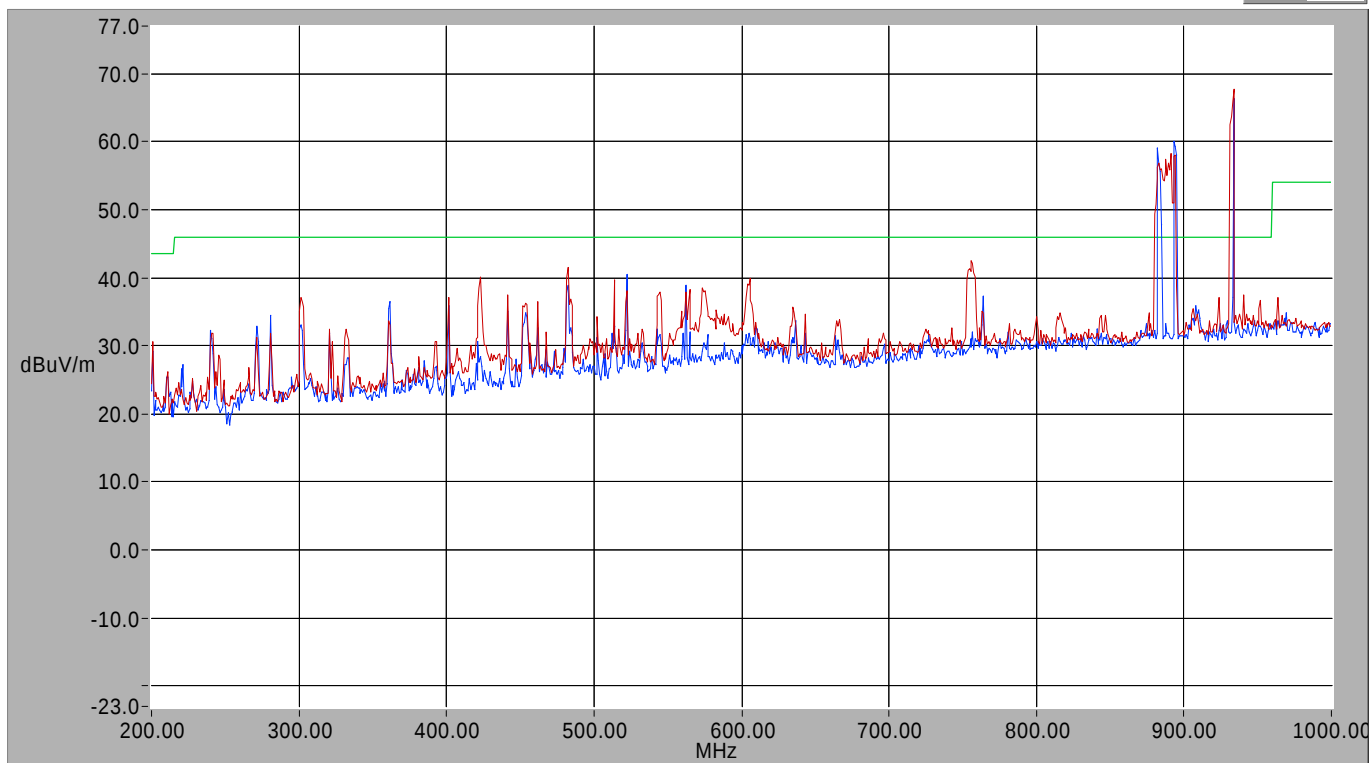
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 27, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

2:43 PM

Plot Number: 10

EMI	
AMB	
LIM	



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
RBW 100.000 kHz Ref. Lev: 77.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat	16/6/1999
04318v3.dat	23/4/1998
FCC15B3.DAT	20/8/1998

QUASI-PEAK DATA

[illegible]

Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m

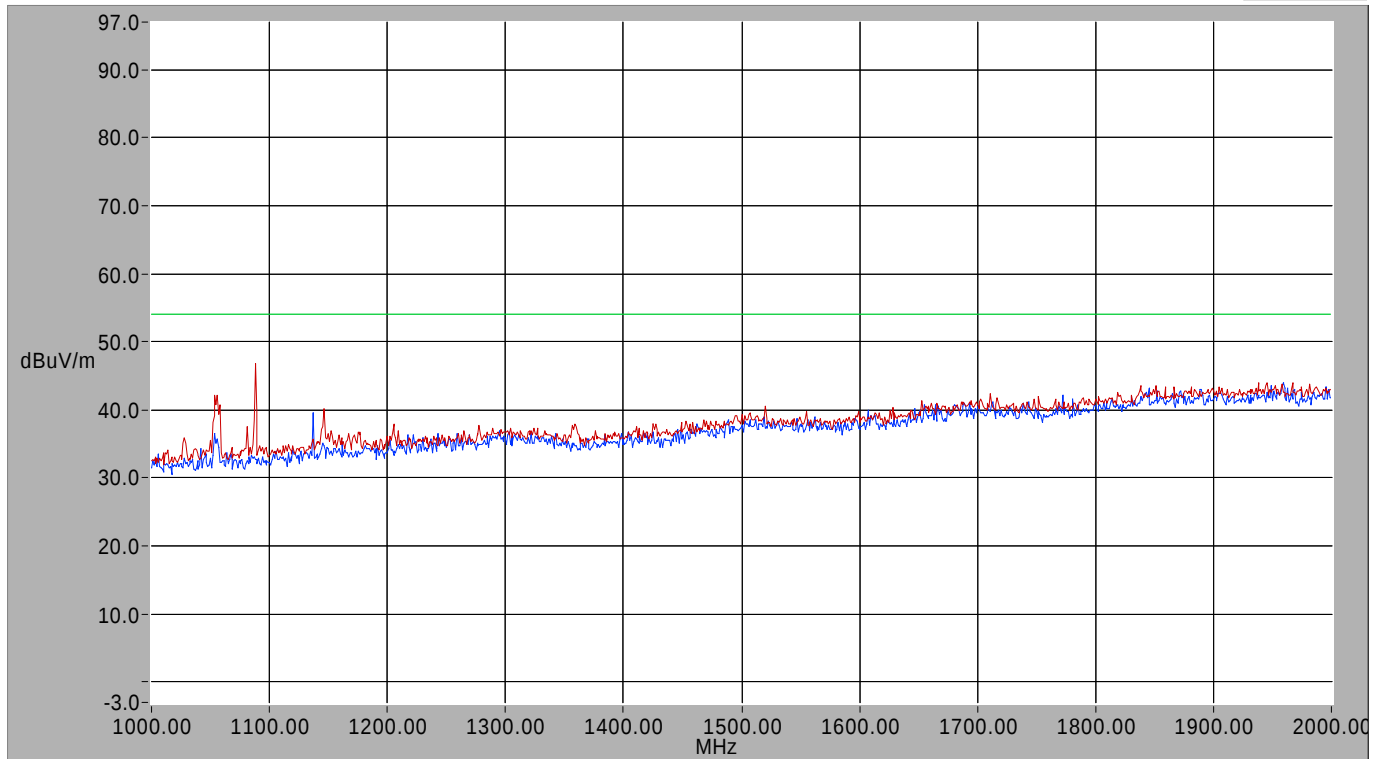
Title:
 Mode of Operation: Operational Rx
 Distance: 3 meters
 Technologist: Ian Guldberg
 Comments: Channel 799

Date & Time: August 27, 1999
 Project #: 302A17
 Company: Novatel
 Product: Merlin
 Serial #: 01.6d

2:48 PM

EMI 
 AMB 
 LIM 

Plot Number: 11



VBW: 300.000 kHz Sweep Time: Auto PR Atten: 0.00 dB
 RBW 1.000 MHz Ref. Lev: 97.00 dBuV/m An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
 04318v3.dat 23/4/1998
 FCC15B3.DAT 20/8/1998

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
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Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m

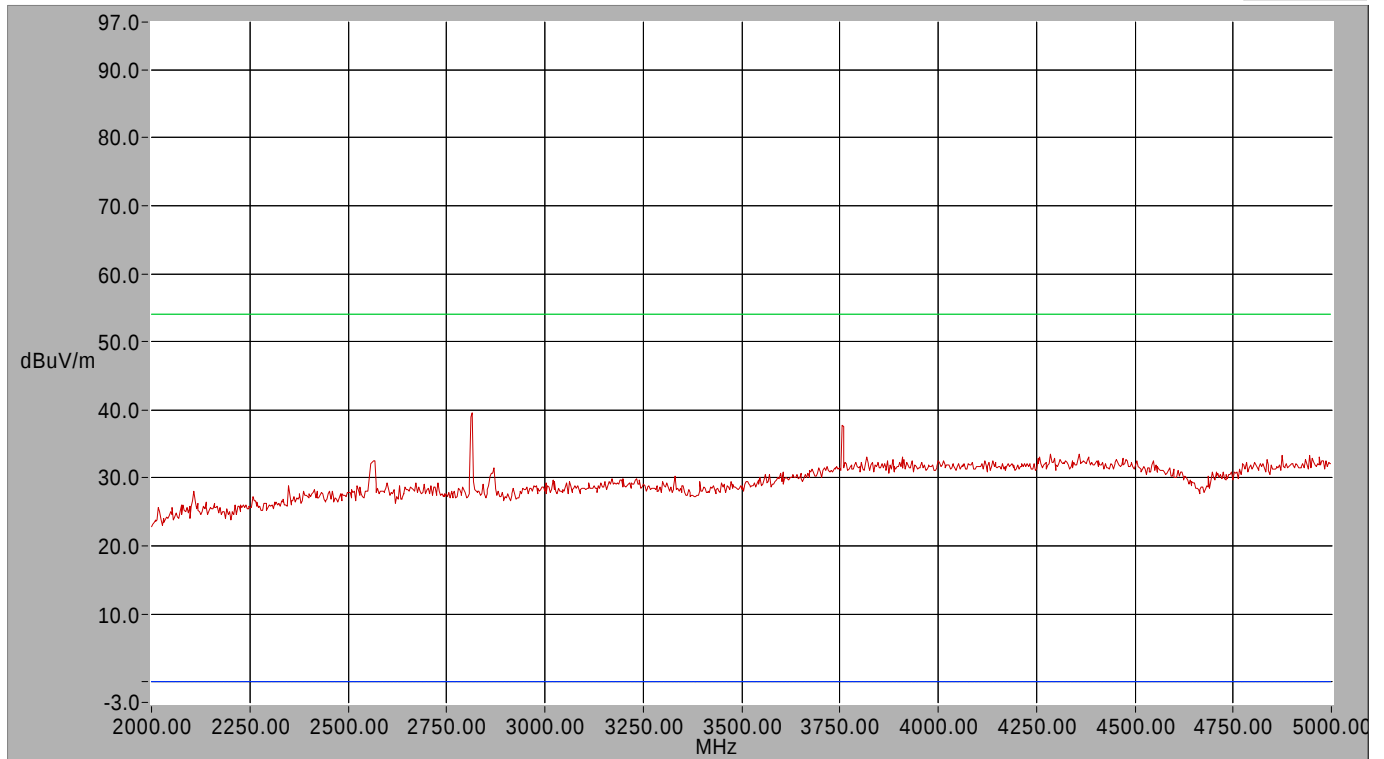
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:27 AM

EMI 
AMB 
LIM 

Plot Number: 12



VBW: 1.000 MHz
RBW: 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 20.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588v3.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
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Radiated Emissions Vertical Polarity FCC Part 15 Class B 3m

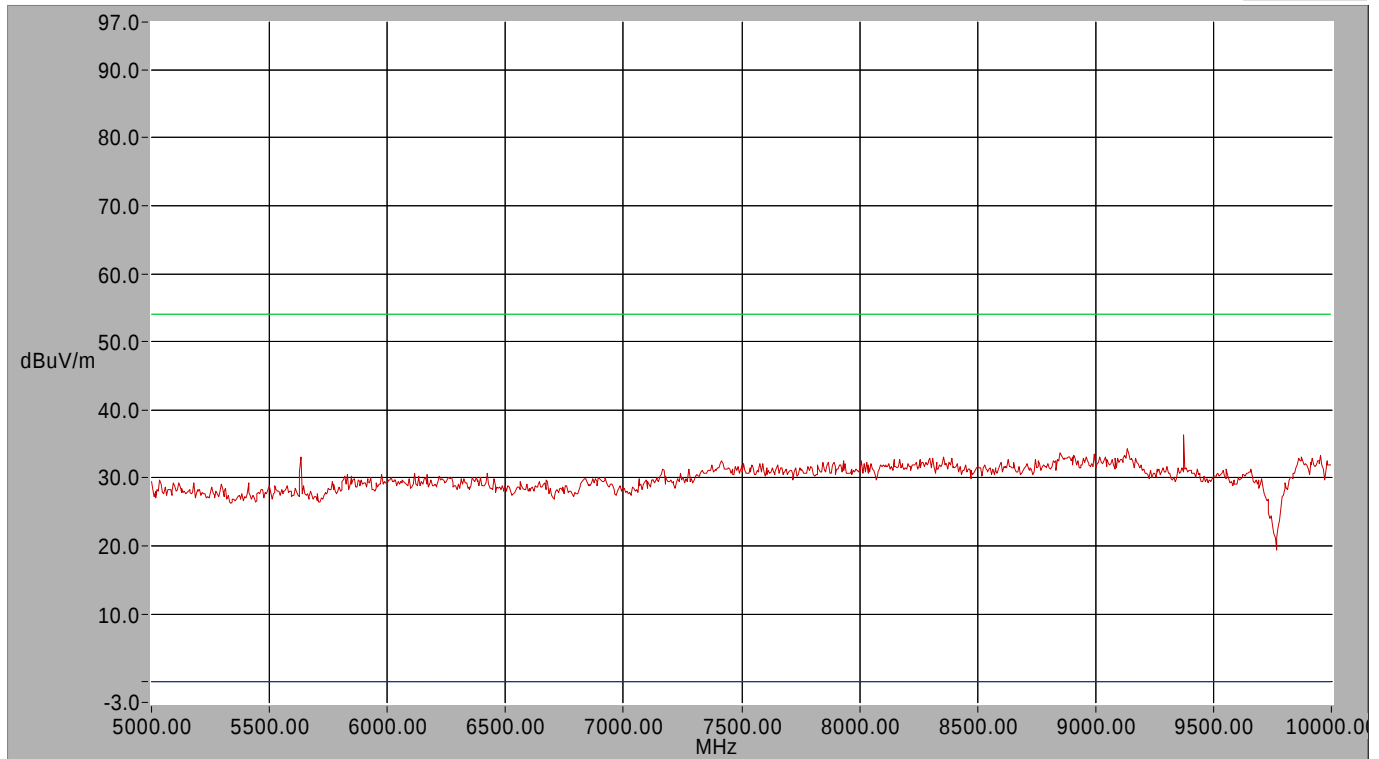
Title:
Mode of Operation: Operational Rx
Distance: 3 meters
Technologist: Ian Guldberg
Comments: Channel 799

Date & Time: August 28, 1999
Project #: 302A17
Company: Novatel
Product: Merlin
Serial #: 01.6d

10:23 AM

EMI 
AMB 
LIM 

Plot Number: 13



VBW: 1.000 MHz
RBW 1.000 MHz

Sweep Time: Auto
Ref. Lev: 97.00 dBuV/m

PR Atten: 0.00 dB
An Atten: 0.00 dB

Associated Files

ofts3m.dat 16/6/1999
09588v1.dat 9/5/1997
FCC15B3.DAT 20/8/1998
31/12/1903

QUASI-PEAK DATA

Freq (MHz)	Azimuth (deg)	Height (cm)	SA Lvl (dBuV/m)	AF (dB)	CF (dB)	OF (dB)	Lvl (dBuV/m)	Limit (dBuV/m)	RESULT
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