

Test of: Raymarine Ltd.
 Pathfinder RL89CRC PLUS and RL811CRC PLUS
 FCC Part 80: 1998 and
 FCC Part 2: 1998

Appendix D Graphical Test Results

Graph No.	Software	Description
RE/555/1009/01	Schaffner CES9985	Radiated Emissions 450ns PW 9 kHz to 150kHz
RE/555/1009/02	Schaffner CES9985	Radiated Emissions 450ns PW 150kHz to 30 MHz
RE/555/1009/03	Rohde & Schwarz EsXs-k1	Radiated Emissions 450ns PW 30MHz to 300MHz
RE/555/1009/04	Rohde & Schwarz EsXs-k1	Radiated Emissions 450ns PW 300 MHz to 1000 MHz
RE/555/1009/05	Schaffner CES9985	Radiated Emissions 450ns PW 1 GHz to 2 GHz
RE/555/1009/06	Schaffner CES9985	Radiated Emissions 450ns PW 2 GHz to 6 GHz
RE/555/1009/07	P&HT Plottergeist	Radiated Emissions 450ns PW 6 GHz to 8.91 GHz
RE/555/1009/08	P&HT Plottergeist	Radiated Emissions 75ns PW 8.91 GHz to 9.92 GHz
RE/555/1009/09	P&HT Plottergeist	Radiated Emissions 450ns PW 8.91 GHz to 9.92 GHz
RE/555/1009/10	P&HT Plottergeist	Radiated Emissions 1050ns PW 8.91 GHz to 9.92 GHz
RE/555/1009/11	P&HT Plottergeist	Radiated Emissions 450ns PW 9.92 GHz to 14 GHz
RE/555/1009/12	P&HT Plottergeist	Radiated Emissions 450ns PW 14 GHz to 18 GHz
RE/555/1009/13	P&HT Plottergeist	Radiated Emissions 450ns PW 18 GHz to 22 GHz
RE/555/1009/14	P&HT Plottergeist	Radiated Emissions 450ns PW 22 GHz to 26.5GHz
RE/555/1009/15	P&HT Plottergeist	Radiated Emissions 450ns PW 26.5 GHz to 31 GHz
RE/555/1009/16	P&HT Plottergeist	Radiated Emissions 450ns PW 31 GHz to 35.5 GHz
RE/555/1009/17	P&HT Plottergeist	Radiated Emissions 450ns PW 35.5 GHz to 40 GHz
CE/555/1009/01	P&HT Plottergeist	Conducted Emissions 450ns PW 6 GHz to 8.91 GHz
CE/555/1009/02	P&HT Plottergeist	Conducted Emissions 75ns PW 8.91 GHz to 9.91 GHz
CE/555/1009/03	P&HT Plottergeist	Conducted Emissions 450ns PW 8.91 GHz to 9.91 GHz
CE/555/1009/04	P&HT Plottergeist	Conducted Emissions 1050ns PW 8.91 GHz to 9.91 GHz
CE/555/1009/05	P&HT Plottergeist	Conducted Emissions 450ns PW 9.90 GHz to 26.5 GHz
CE/555/1009/06	P&HT Plottergeist	Conducted Emissions 450ns PW 26.5 GHz to 33 GHz
CE/555/1009/07	P&HT Plottergeist	Conducted Emissions 450ns PW 33 GHz to 40 GHz
PW/555/1009/01	HP8991A Plot	Peak Power & Pulsewidth 75ns
PW/555/1009/02	HP8991A Plot	Peak Power & Pulsewidth 100ns
PW/555/1009/03	HP8991A Plot	Peak Power & Pulsewidth 150ns
PW/555/1009/04	HP8991A Plot	Peak Power & Pulsewidth 250ns
PW/555/1009/05	HP8991A Plot	Peak Power & Pulsewidth 350ns
PW/555/1009/06	HP8991A Plot	Peak Power & Pulsewidth 450ns
PW/555/1009/07	HP8991A Plot	Peak Power & Pulsewidth 600ns
PW/555/1009/08	HP8991A Plot	Peak Power & Pulsewidth 1050ns
PRF/555/1009/01	HP8991A Plot	740 Hz PRF
PRF/555/1009/02	HP8991A Plot	1200 Hz PRF
PRF/555/1009/03	HP8991A Plot	1600 Hz PRF
PRF/555/1009/04	HP8991A Plot	2000 Hz PRF
PRF/555/1009/05	HP8991A Plot	3000 Hz PRF

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OBW/555/1009/01 P&HT Plottergeist	Occupied Bandwidth Upper Edge 75ns Pulsewidth
OBW/555/1009/02 P&HT Plottergeist	Occupied Bandwidth Lower Edge 75ns Pulsewidth
OBW/555/1009/03 P&HT Plottergeist	Occupied Bandwidth Upper Edge 100ns Pulsewidth
OBW/555/1009/04 P&HT Plottergeist	Occupied Bandwidth Lower Edge 100ns Pulsewidth
OBW/555/1009/05 P&HT Plottergeist	Occupied Bandwidth Upper Edge 150ns Pulsewidth
OBW/555/1009/06 P&HT Plottergeist	Occupied Bandwidth Lower Edge 150ns Pulsewidth
OBW/555/1009/07 P&HT Plottergeist	Occupied Bandwidth Upper Edge 250ns Pulsewidth
OBW/555/1009/08 P&HT Plottergeist	Occupied Bandwidth Lower Edge 250ns Pulsewidth
OBW/555/1009/09 P&HT Plottergeist	Occupied Bandwidth Upper Edge 350ns Pulsewidth
OBW/555/1009/10 P&HT Plottergeist	Occupied Bandwidth Lower Edge 350ns Pulsewidth
OBW/555/1009/11 P&HT Plottergeist	Occupied Bandwidth Upper Edge 450ns Pulsewidth
OBW/555/1009/12 P&HT Plottergeist	Occupied Bandwidth Lower Edge 450ns Pulsewidth
OBW/555/1009/13 P&HT Plottergeist	Occupied Bandwidth Upper Edge 600ns Pulsewidth
OBW/555/1009/14 P&HT Plottergeist	Occupied Bandwidth Lower Edge 600ns Pulsewidth
OBW/555/1009/15 P&HT Plottergeist	Occupied Bandwidth Upper Edge 1050ns Pulsewidth
OBW/555/1009/16 P&HT Plottergeist	Occupied Bandwidth Lower Edge 1050ns Pulsewidth

RAYMARINE LTD.

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TP/555/1009

11 Feb 2003

Radiated Emissions @ 3m (Loop Antenna)

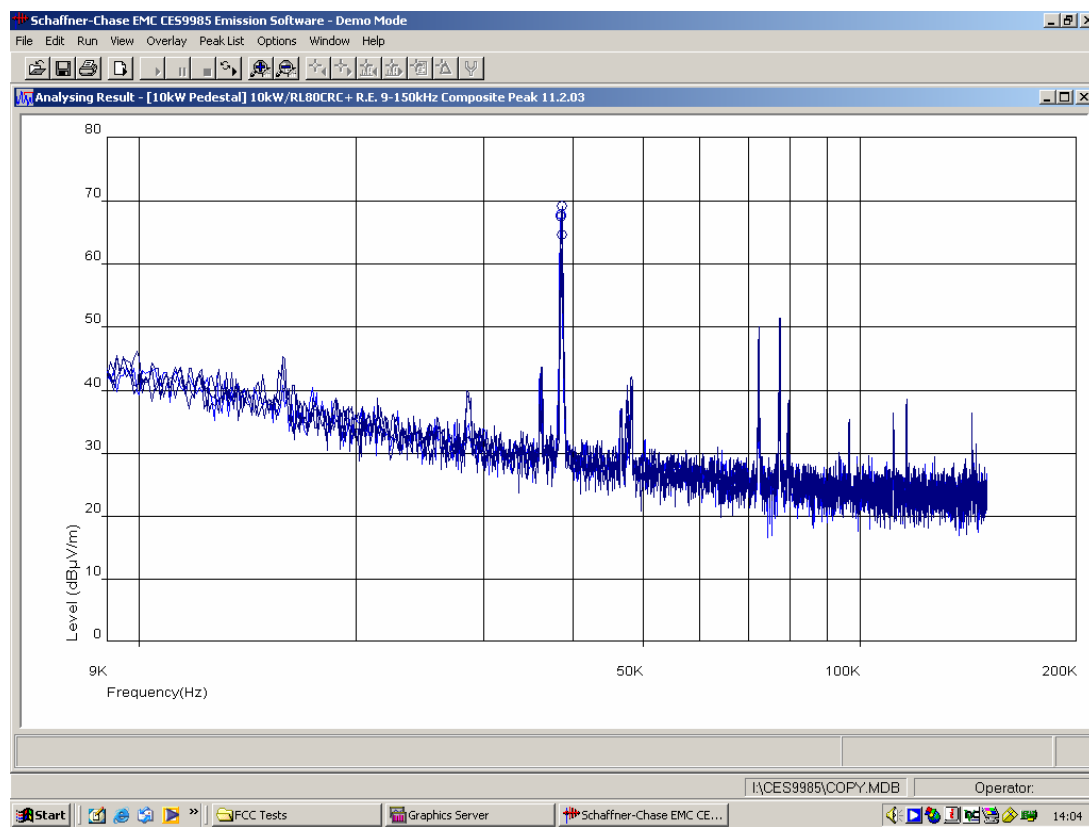
EUT: RL89CRC PLUS and RL811CRC PLUS

Mfr: Raymarine Ltd.

Op.Cond: 24V supply.

Operator: P.Bowen

Start F	Stop F	BW	Step	Det.	Dwell	Atten.	Preamp	OpRge
9kHz	150kHz	200Hz	100Hz	PK	20msec	Auto	OFF	80dB



Graph RE/555/1009/01

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TP/555/1009

11 Feb 2003

Radiated Emissions @ 3m (Loop Antenna)

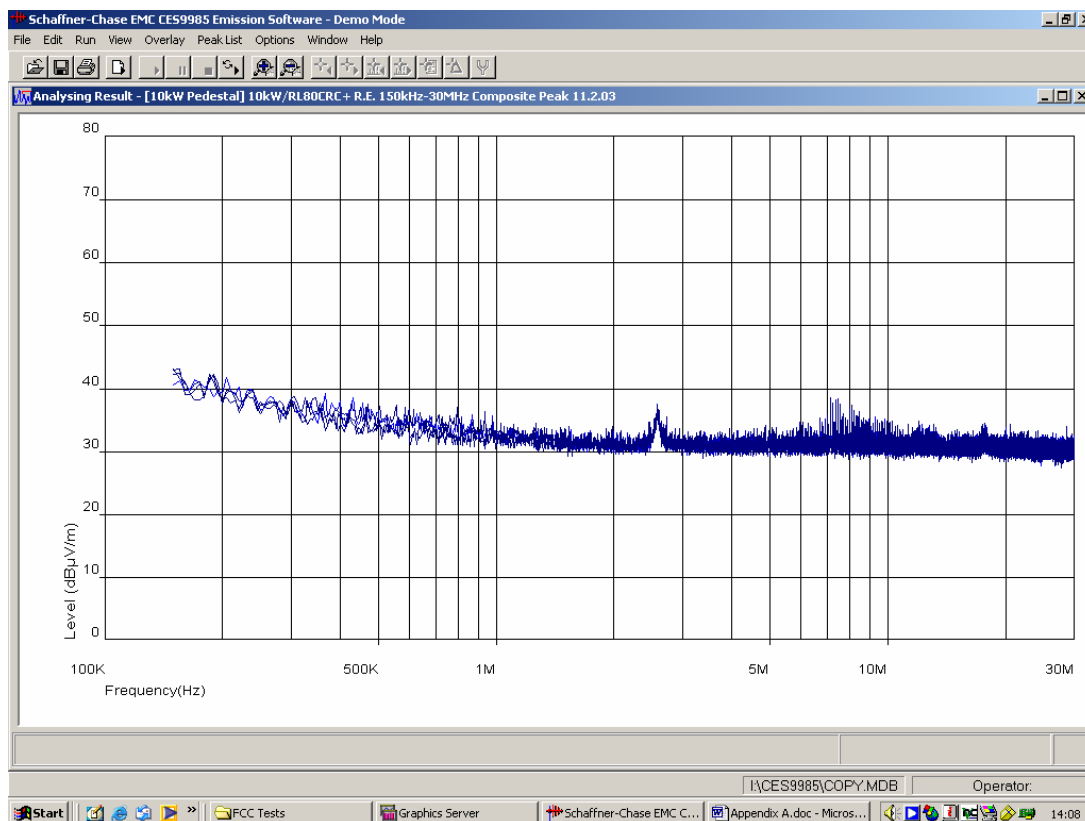
EUT: RL89CRC PLUS and RL811CRC PLUS

Mfr: Raymarine Ltd.

Op.Cond: 24V supply.

Operator: P.Bowen

Start F	Stop F	BW	Step	Det.	Dwell	Atten.	Preamp	OpRge
150kHz	30MHz	9kHz	4.5kHz	PK	20msec	Auto	OFF	80dB



Graph RE/555/1009/02

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FCC Part 2: 1998

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11 Feb 2003 17:56

Radiated Emissions @ 3m

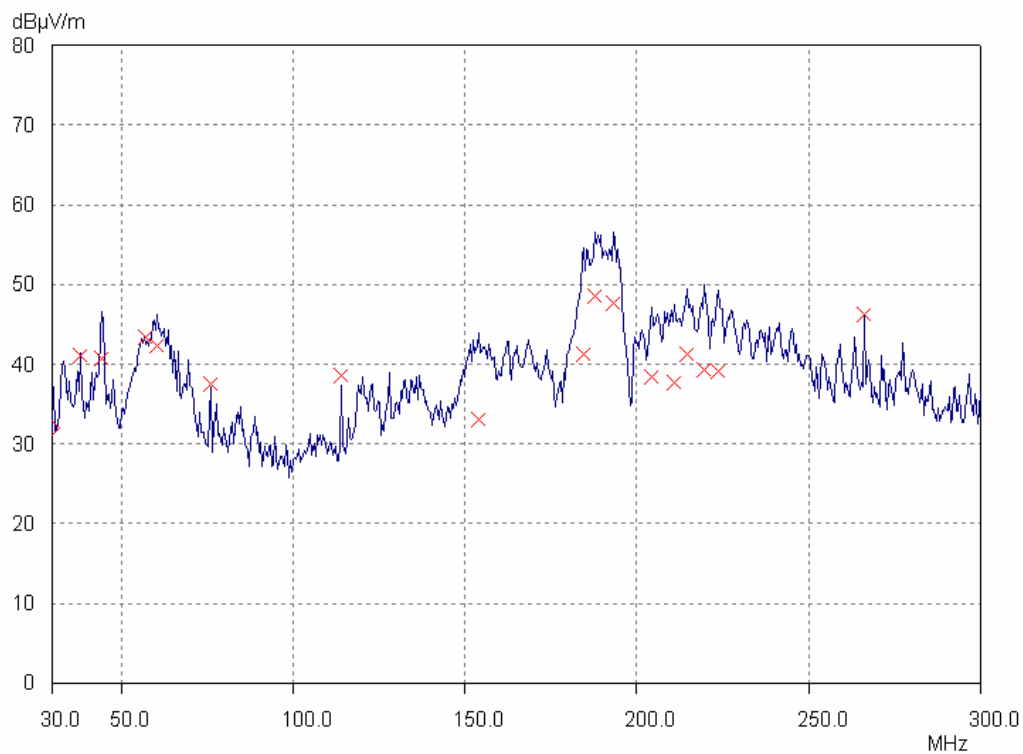
EUT: RL89CRC PLUS and RL811CRC PLUS

Mfr: Raymarine Ltd.

Op.Cond: 24V supply.

Operator: P.Bowen

Start F	Stop F	BW	Step	Det.	Dwell	Atten.	Preamp	OpRge
30MHz	300MHz	120kHz	60kHz	PK	10msec	10dB	ON	70dB



Graph RE/555/1009/03

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FCC Part 2: 1998

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11 Feb 2003 14:35

Radiated Emissions @ 3m

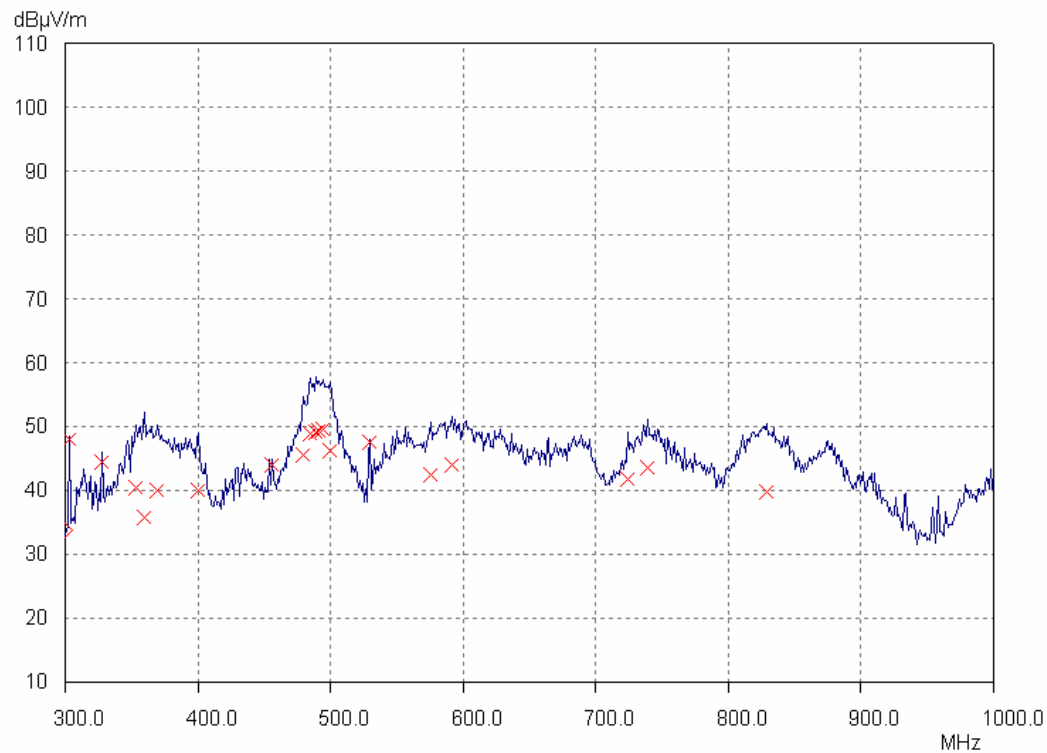
EUT: RL89CRC PLUS and RL811CRC PLUS

Mfr: Raymarine Ltd.

Op.Cond: 24V supply.

Operator: P.Bowen

Start F	Stop F	Step	BW	Det.	Dwell	Atten.	Preamp	OpRge
300MHz	1000MHz	60kHz	120kHz	PK	10msec	0 dB	ON	60dB



Graph RE/555/1009/04

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Radiated Emissions @ 3m

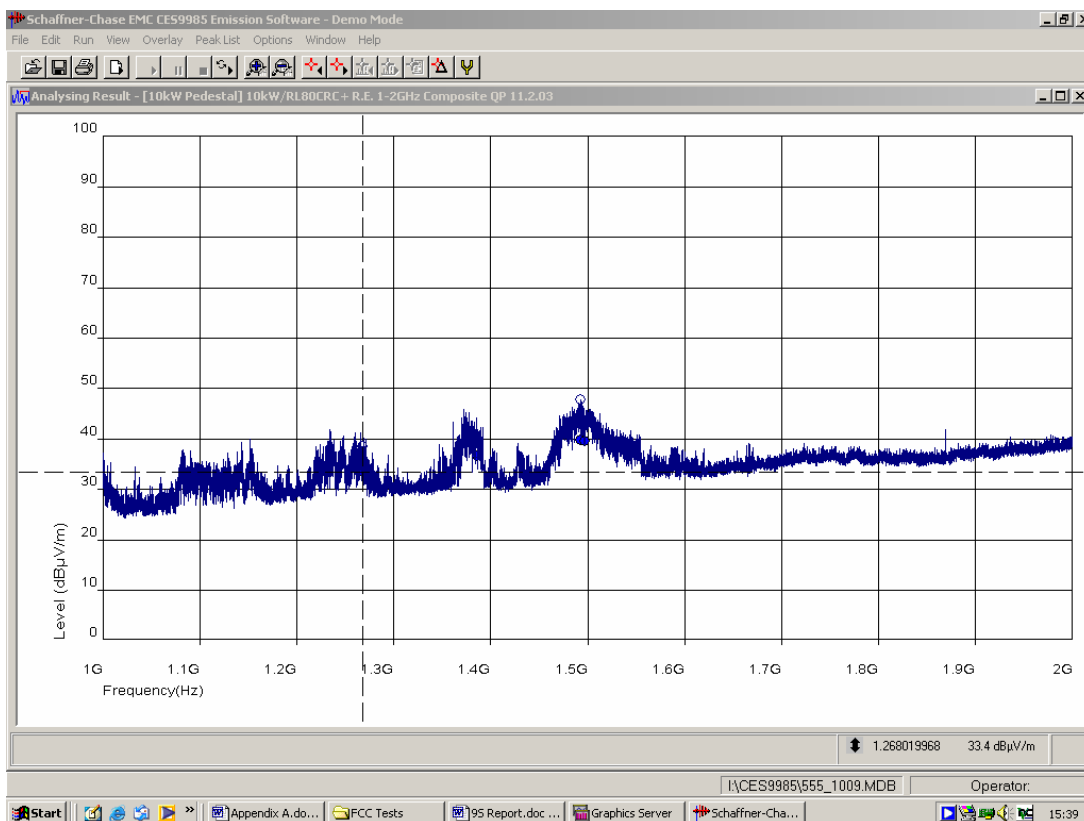
EUT: RL89CRC PLUS and RL811CRC PLUS

Mfr: Raymarine Ltd.

Op.Cond: 24V supply.

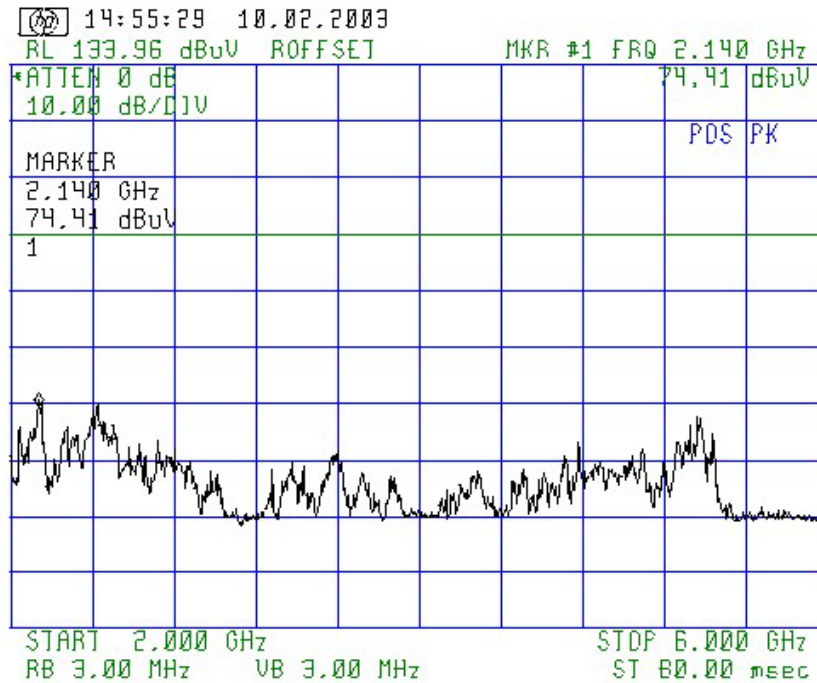
Operator: P.Bowen

Start F	Stop F	Step	BW	Det.	Dwell	Atten.	Preamp	OpRge
1000MHz	2000MHz	60kHz	120kHz	PK	10msec	0 dB	ON	80dB



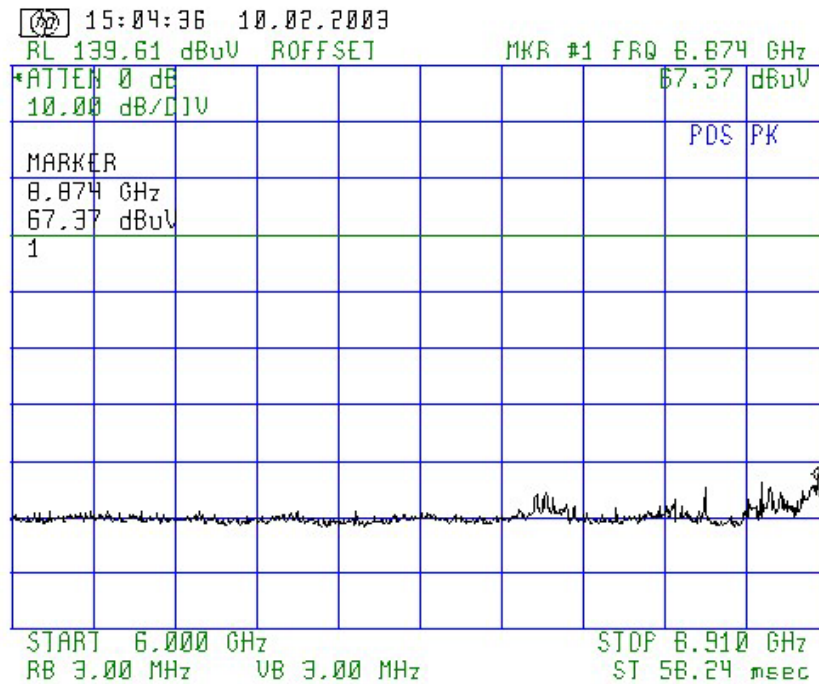
Graph RE/555/1009/05

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



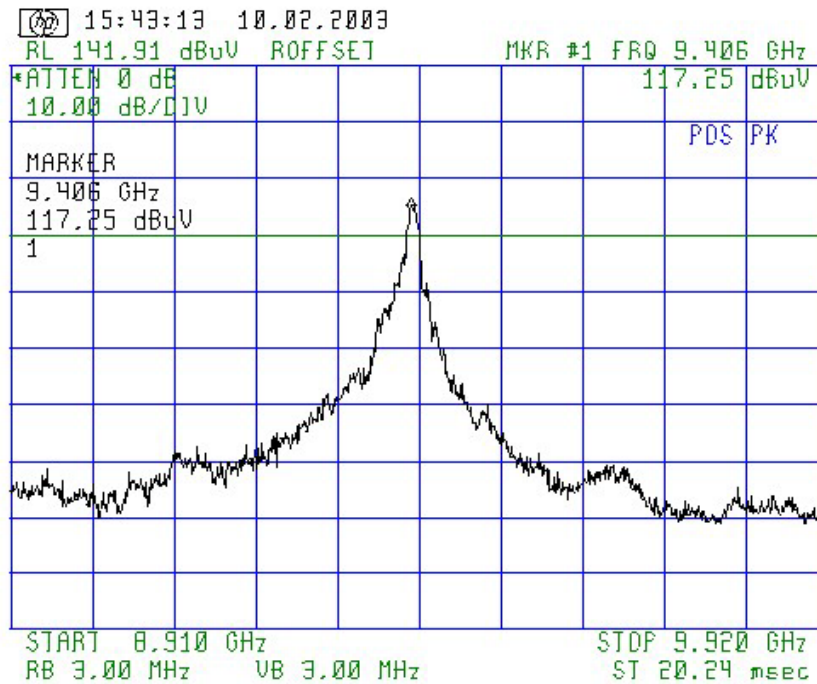
Graph RE/555/1009/06

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



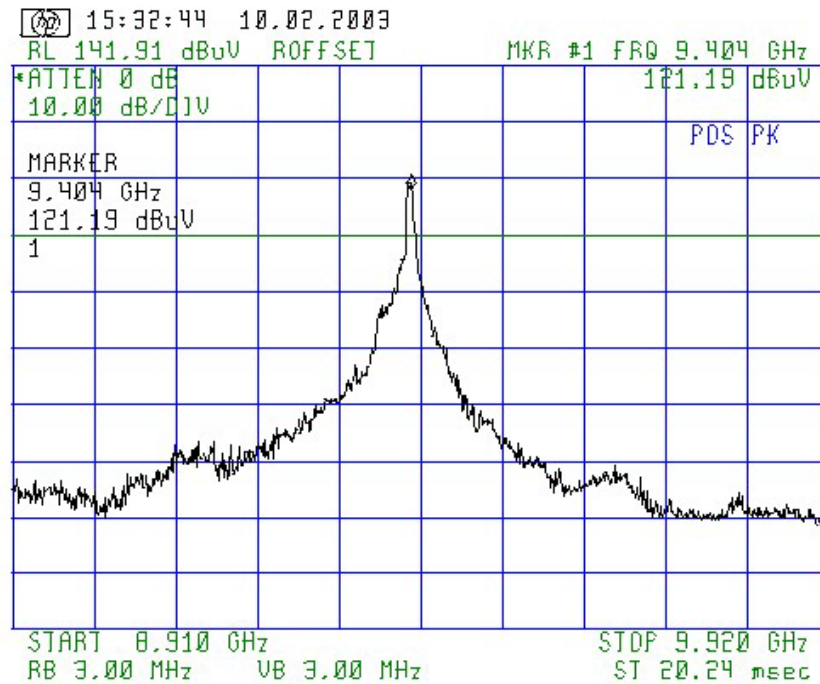
Graph RE/555/1009/07

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



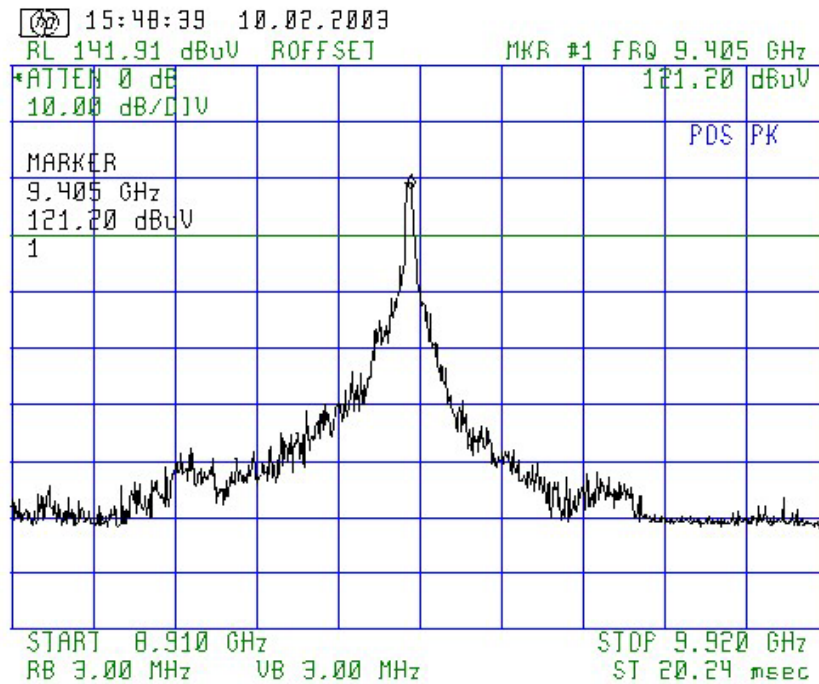
Graph RE/555/1009/08

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



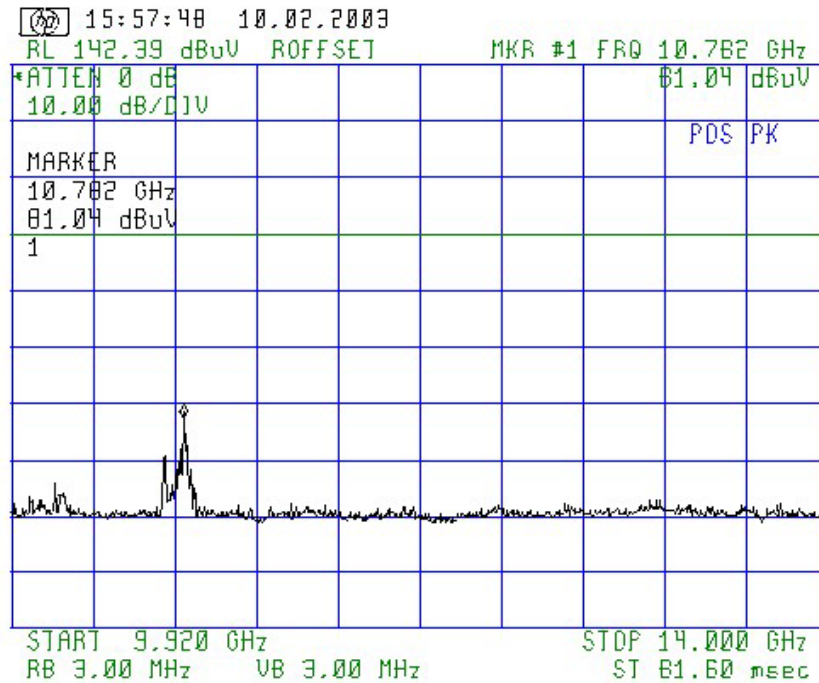
Graph RE/555/1009/09

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



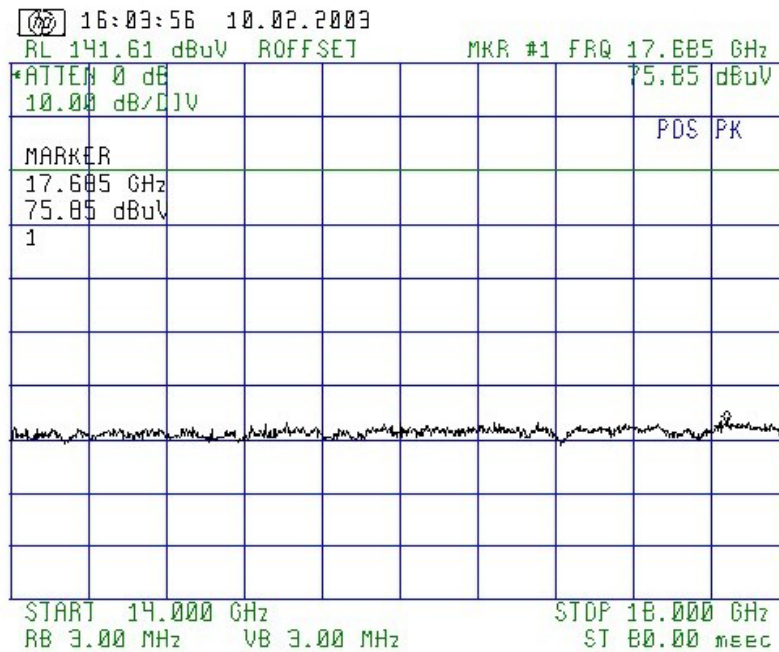
Graph RE/555/1009/10

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998

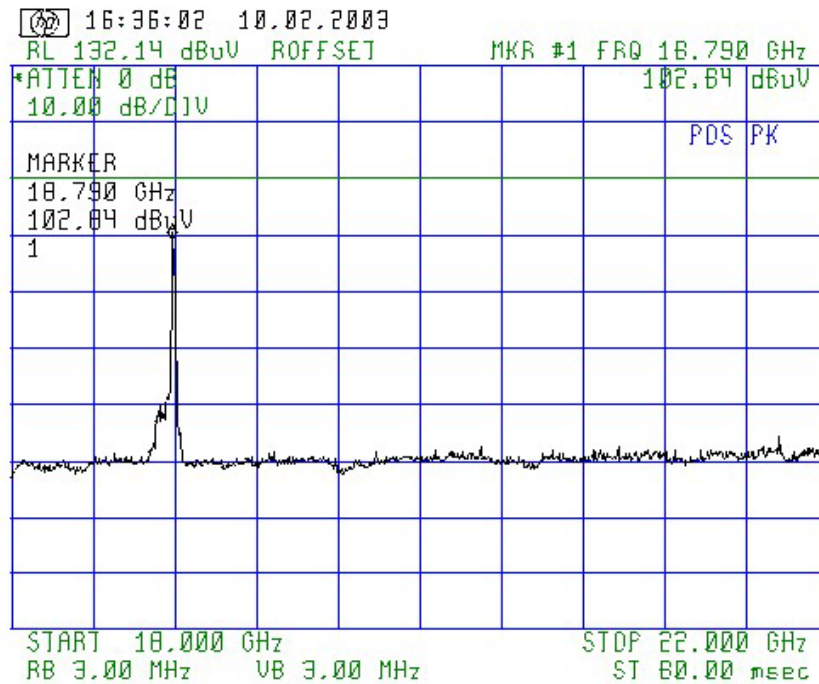


Graph RE/555/1009/11

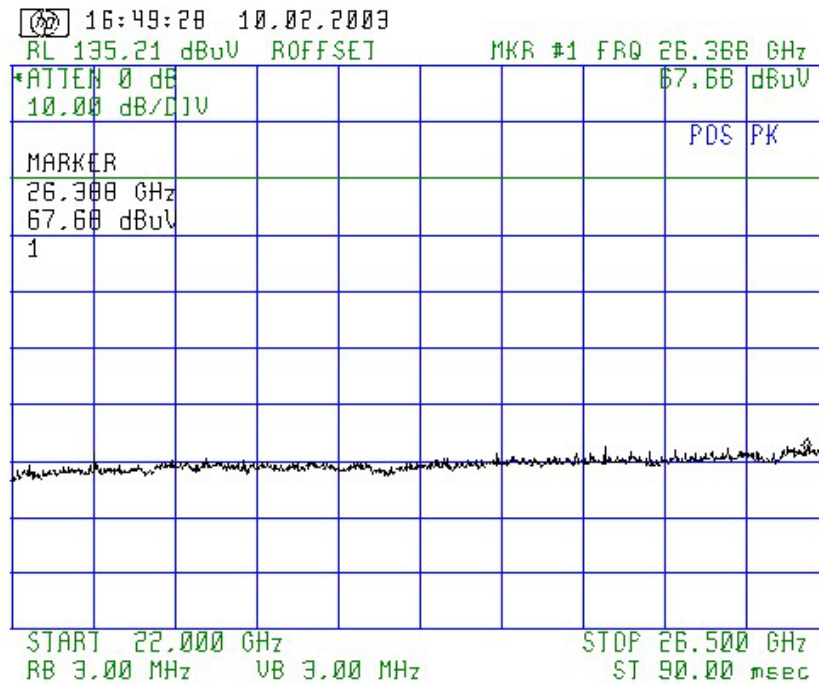
Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



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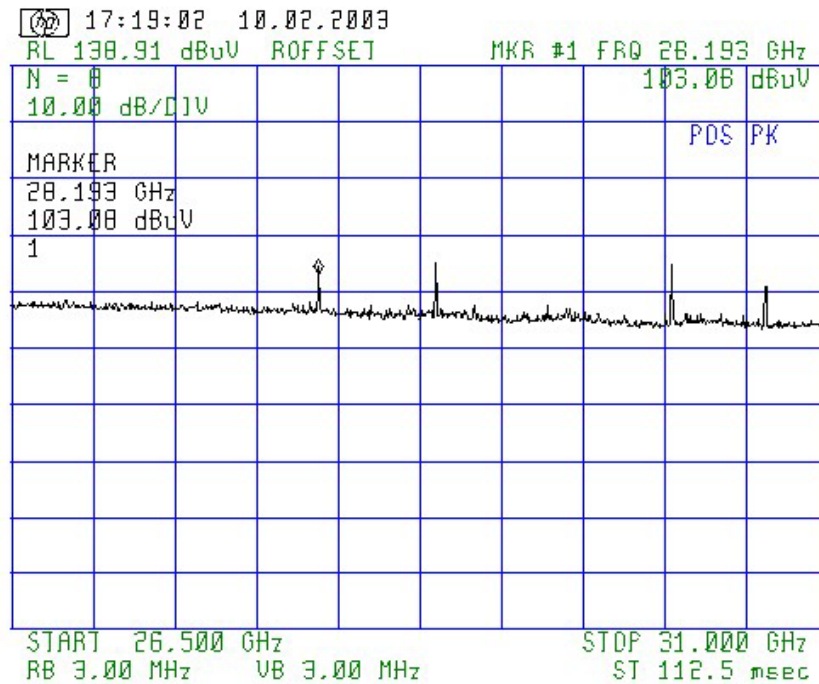
Test of: Raymarine Ltd.
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FCC Part 80: 1998 and
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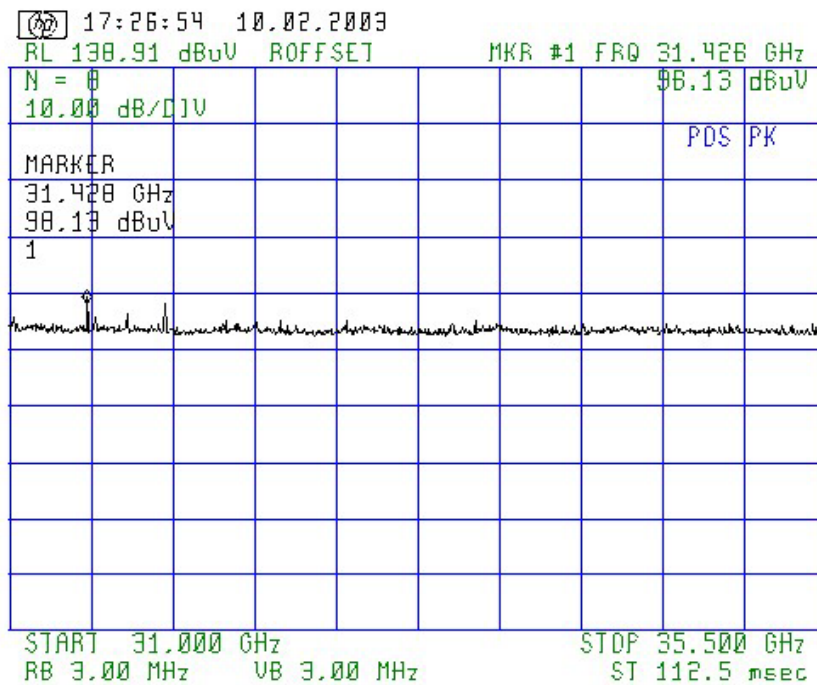
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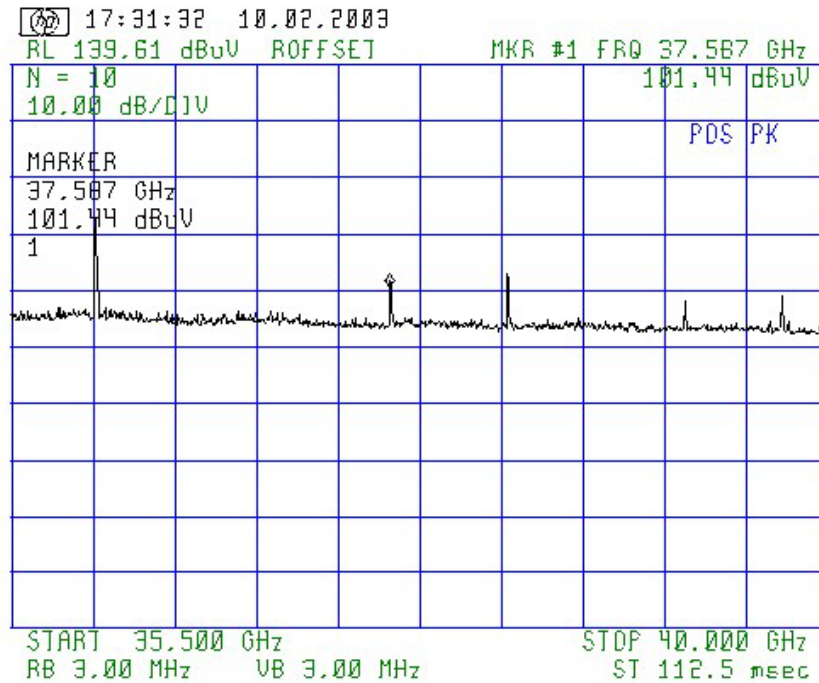
Graph RE/555/1009/15

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



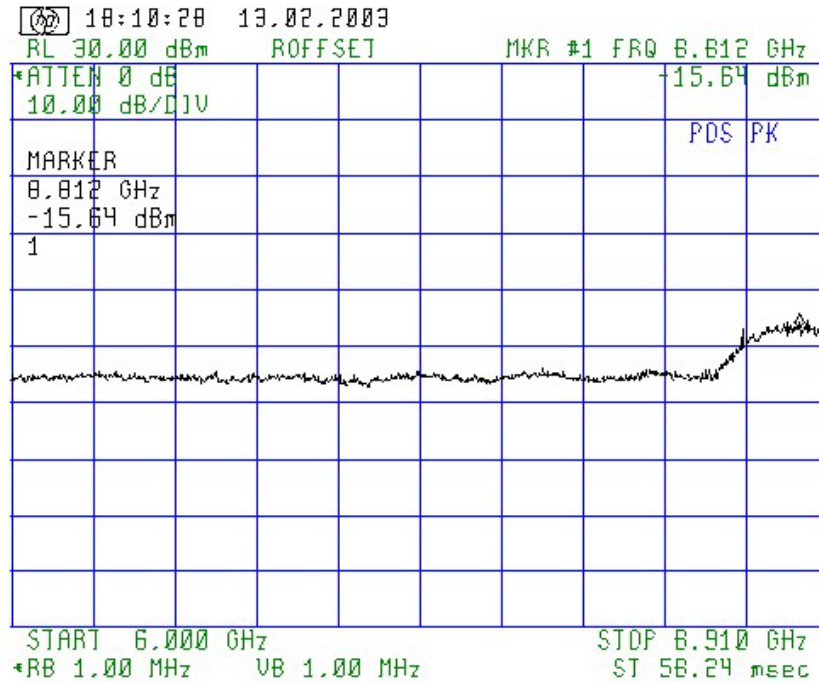
Graph RE/555/1009/16

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



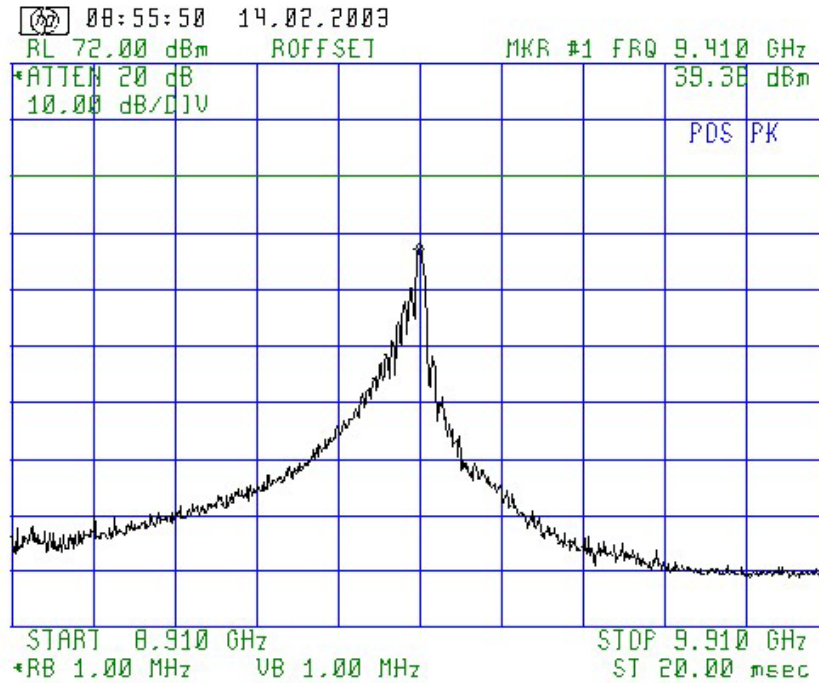
Graph RE/555/1009/17

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



Graph CE/555/1009/01

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



Graph CE/555/1009/02

RAYMARINE LTD.

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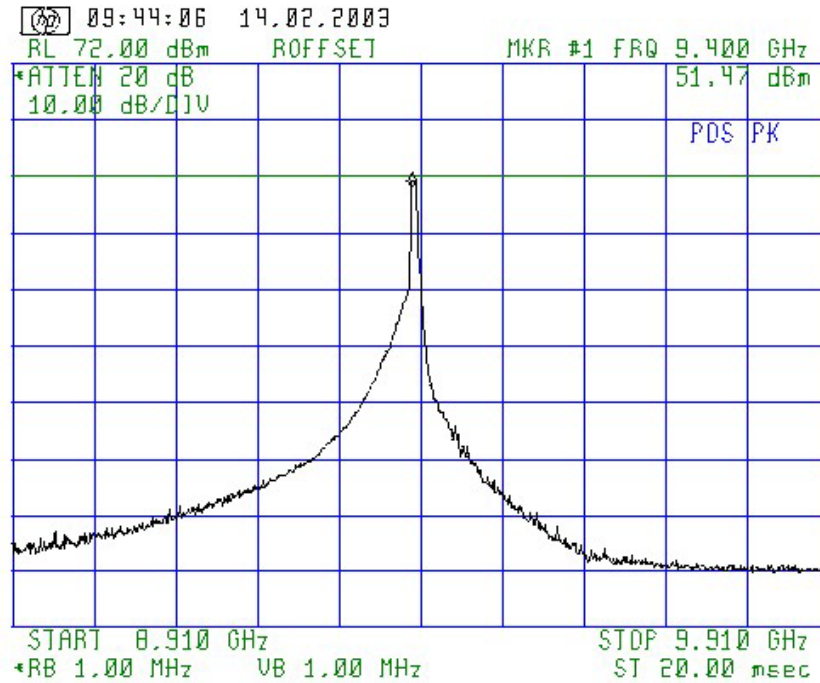
Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998

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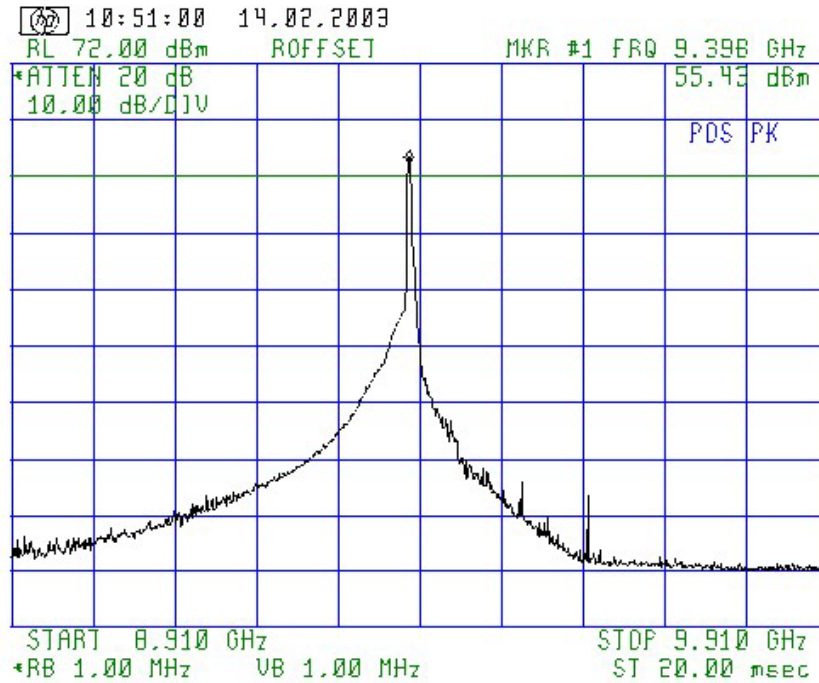
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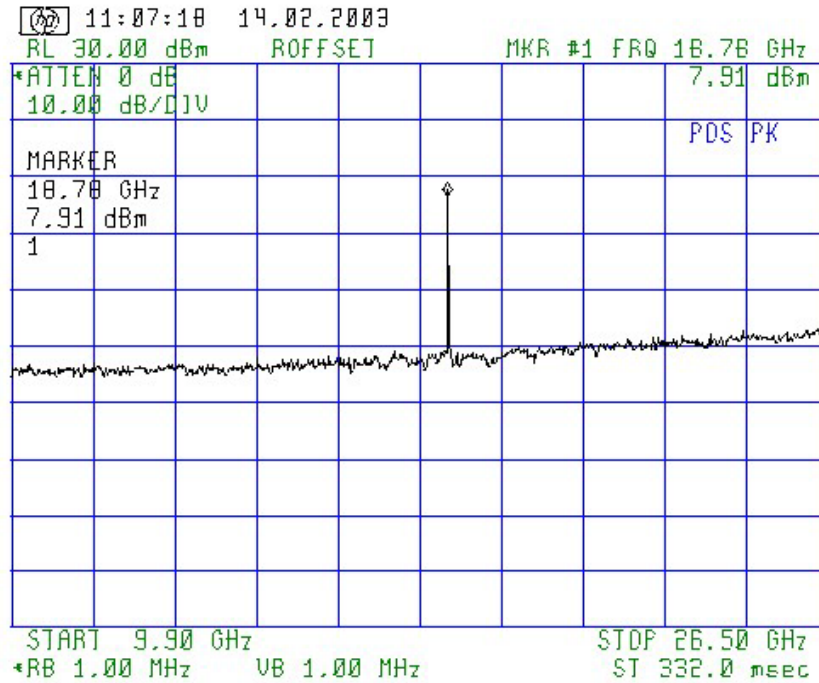
Graph CE/555/1009/03

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



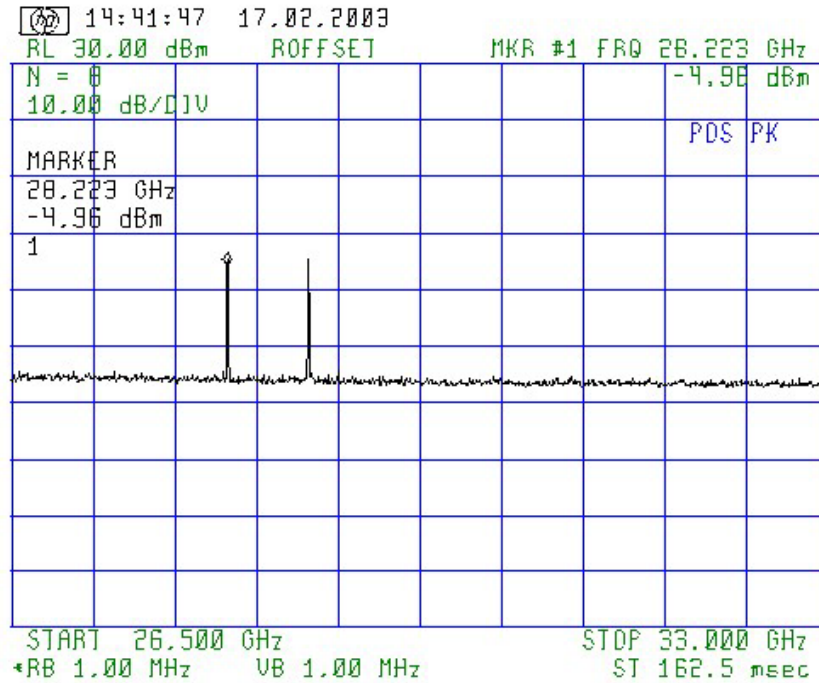
Graph CE/555/1009/04

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



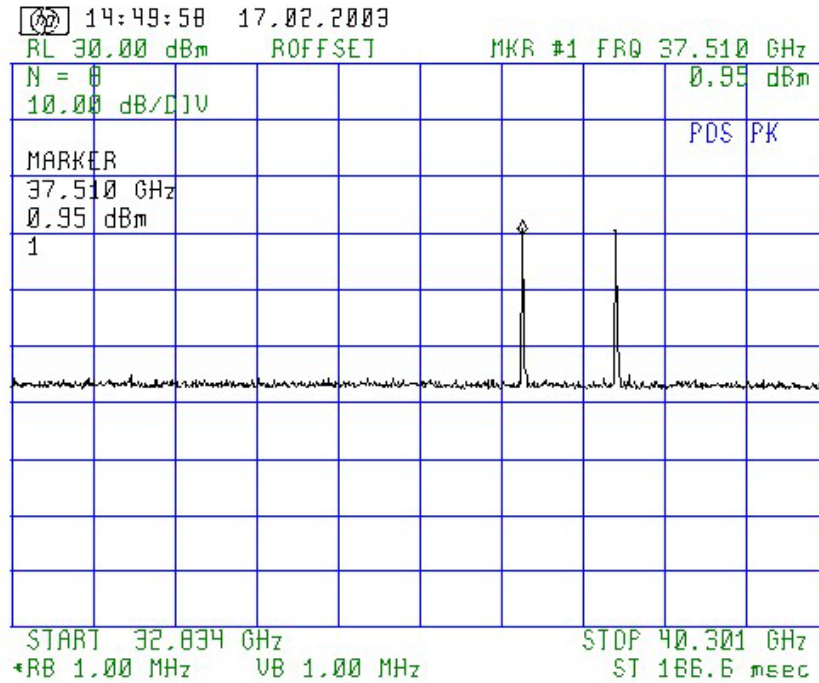
Graph CE/555/1009/05

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



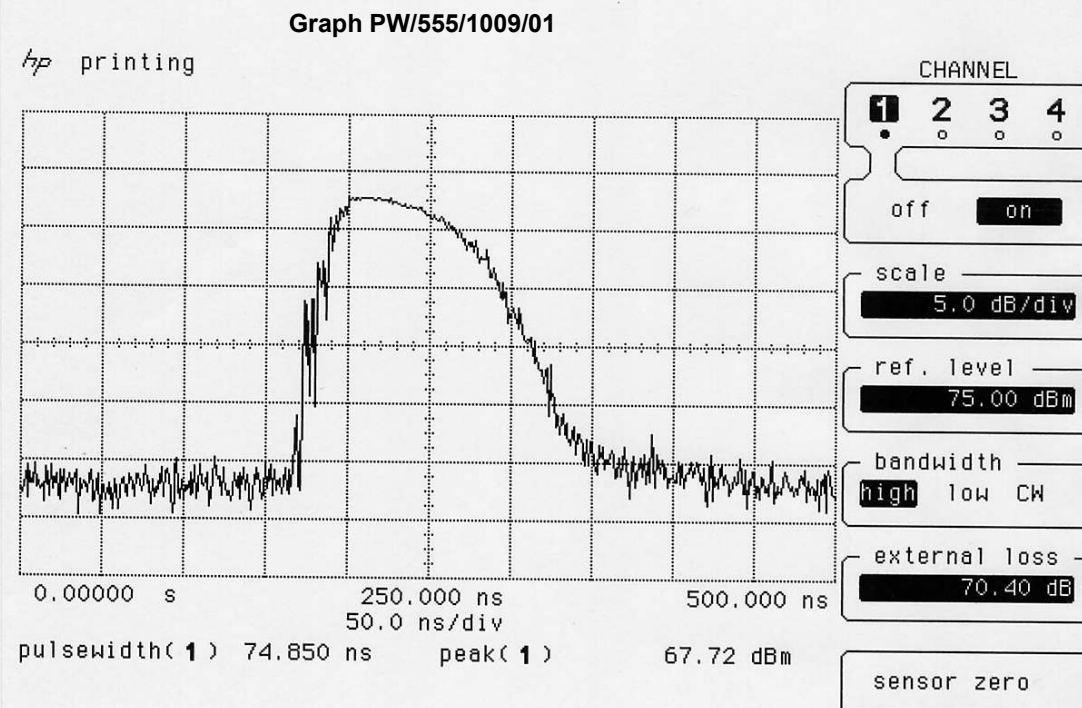
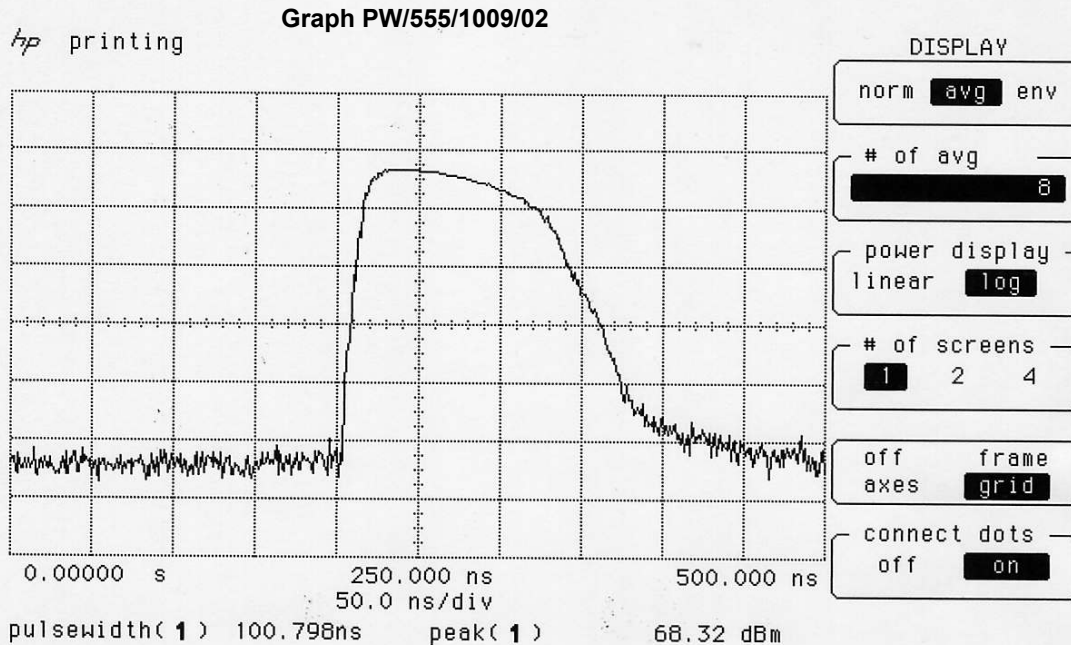
Graph CE/555/1009/06

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998



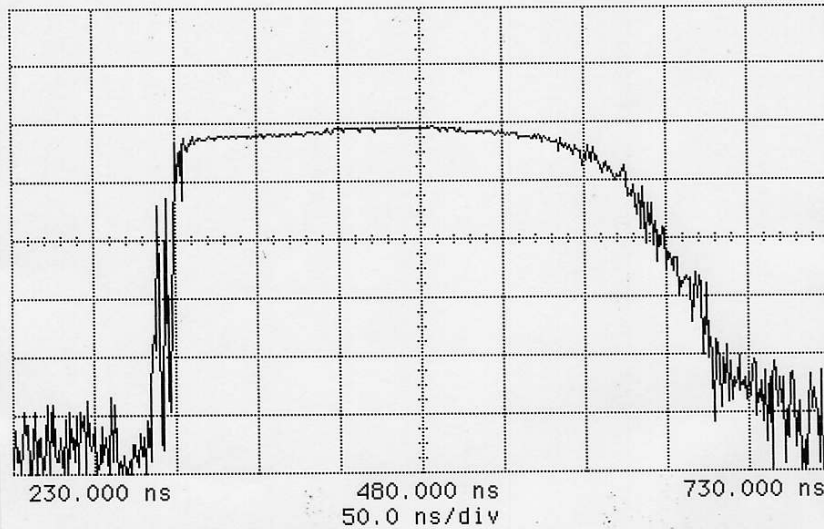
Graph CE/555/1009/07

Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
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FCC Part 2: 1998



Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
FCC Part 80: 1998 and
FCC Part 2: 1998

Graph PW/555/1000/04

hp running

pulsewidth(1) 249.501ns peak(1) 69.67 dBm

CHANNEL

1 2 3 4

off on

scale 5.0 dB/div

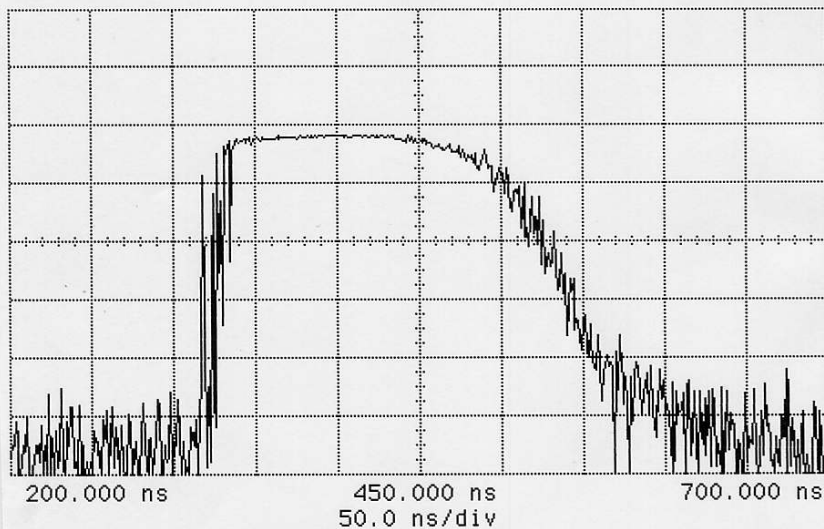
ref. level 80.00 dBm

bandwidth high low CW

external loss 70.40 dB

sensor zero

Graph PW/555/1009/03

hp printing

pulsewidth(1) 150.699ns peak(1) 69.11 dBm

CHANNEL

1 2 3 4

off on

scale 5.0 dB/div

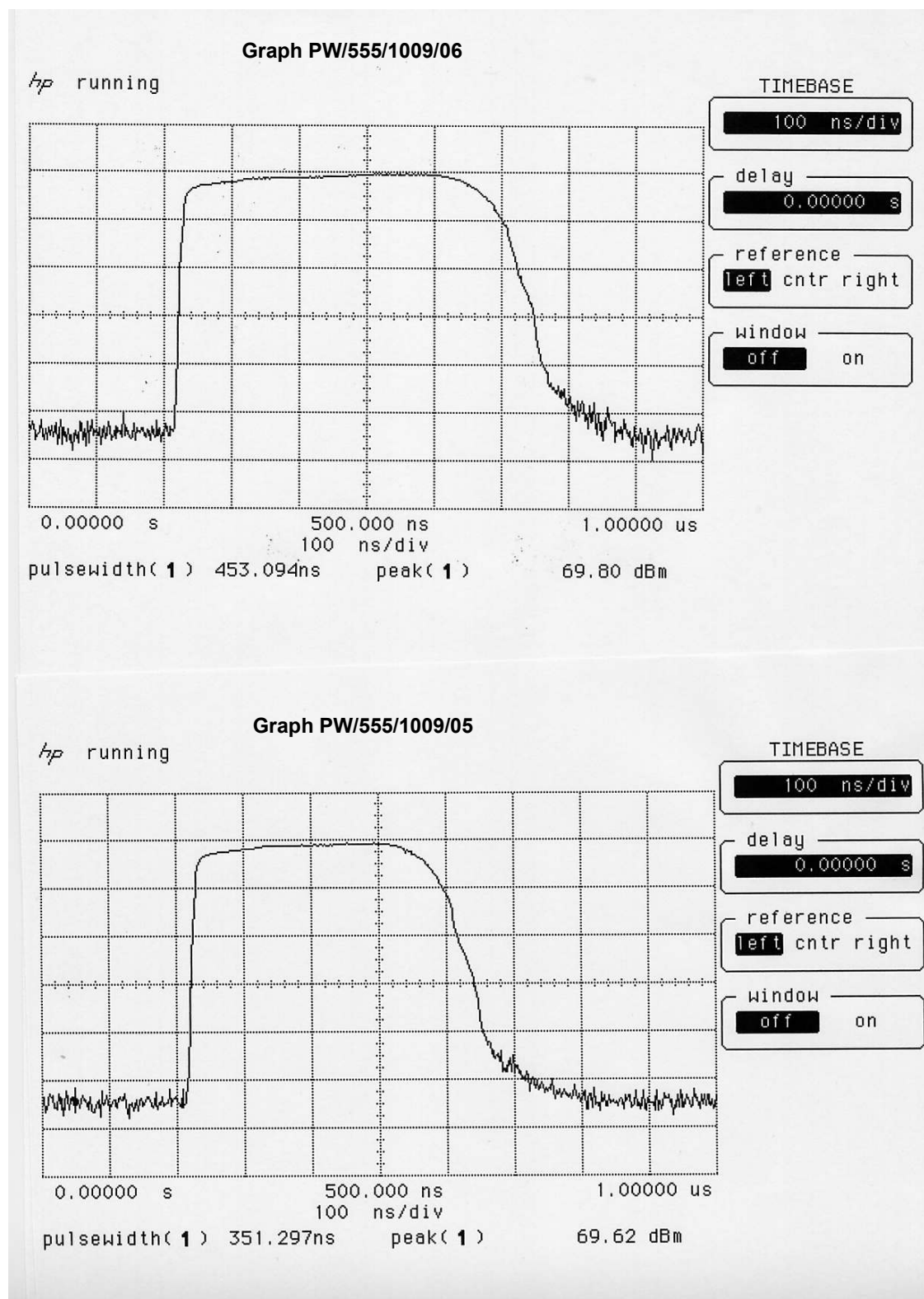
ref. level 80.00 dBm

bandwidth high low CW

external loss 70.40 dB

sensor zero

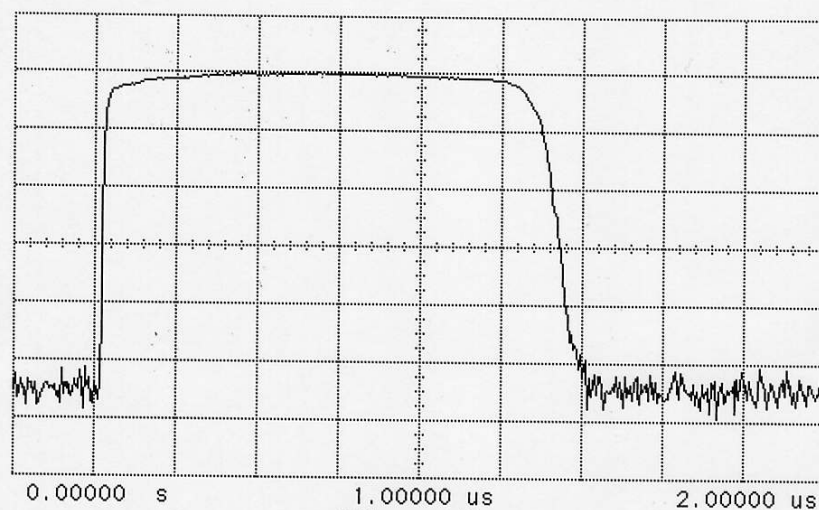
Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
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FCC Part 2: 1998



Test of: Raymarine Ltd.
Pathfinder RL89CRC PLUS and RL811CRC PLUS
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Graph PW/555/1000/08

hp running



pulsewidth(1) 1.04990us peak(1) 69.96 dBm

TIMEBASE

200 ns/div

delay

0.00000 s

reference

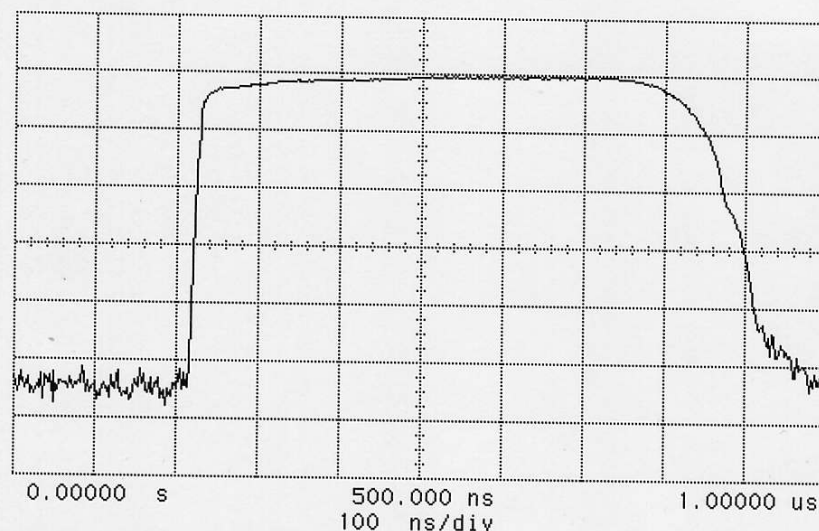
left cntr right

window

off on

Graph PW/555/1009/07

hp running



pulsewidth(1) 602.794ns peak(1) 69.85 dBm

TIMEBASE

100 ns/div

delay

0.00000 s

reference

left cntr right

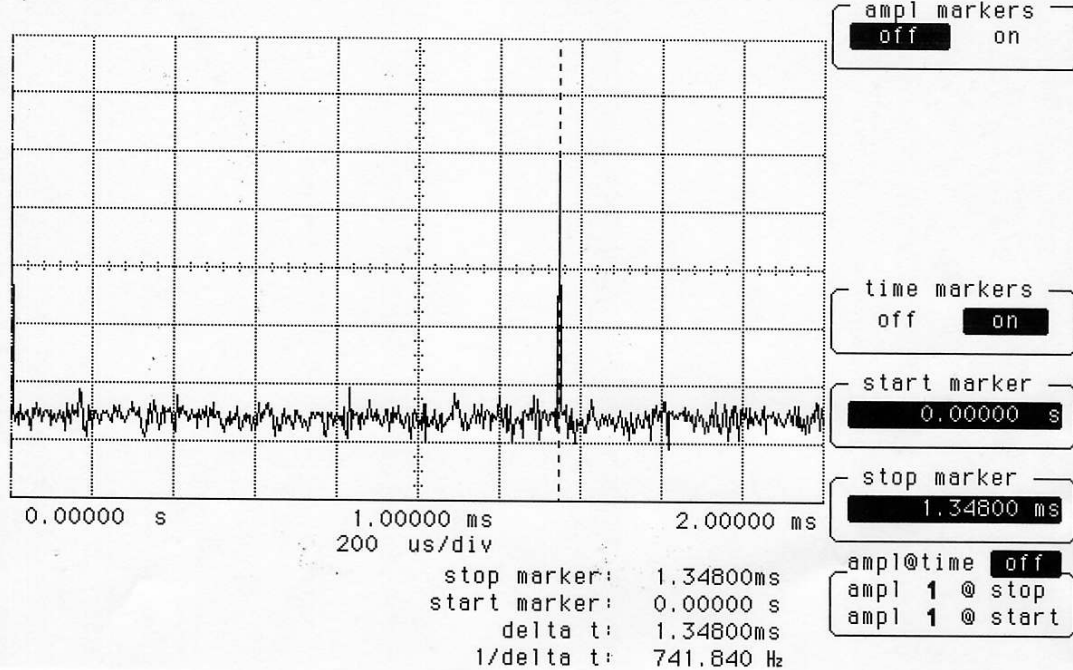
window

off on

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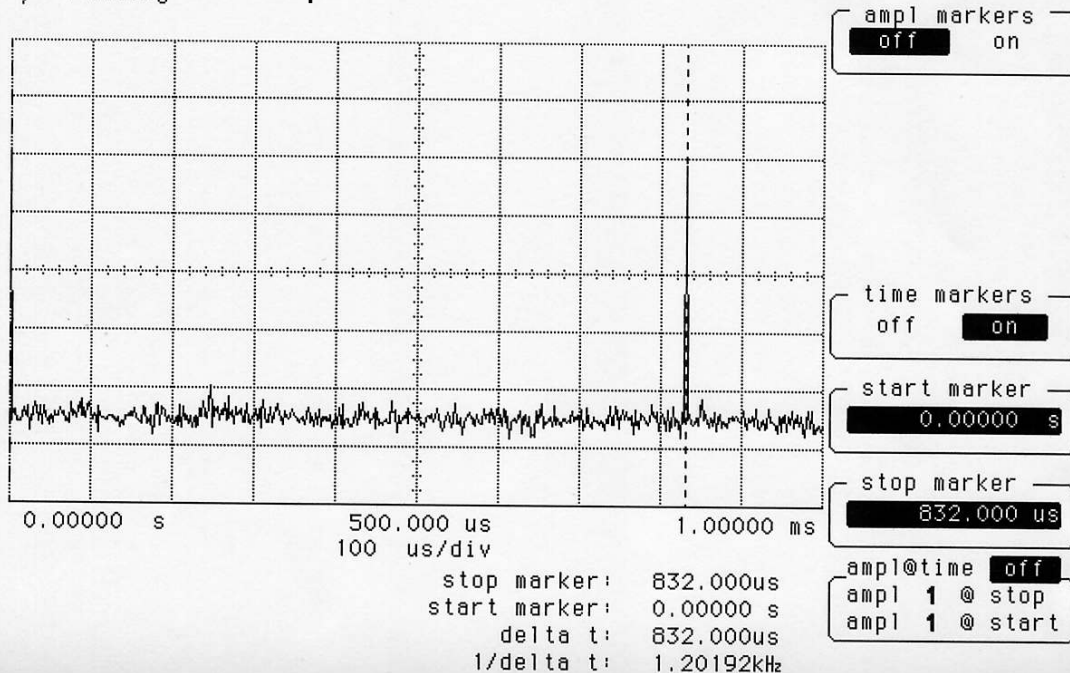
Graph PRF/555/1009/01

hp running



Graph PRF/555/1009/02

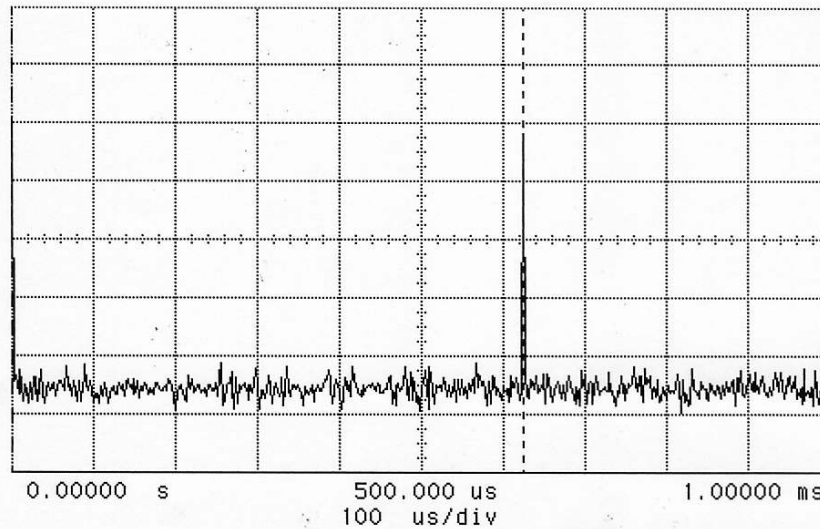
hp running



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hp running

Graph PRF/555/1009/03



stop marker: 624.000us
start marker: 0.00000 s
delta t: 624.000us
1/delta t: 1.60256kHz

ampl markers
off on

time markers
off on

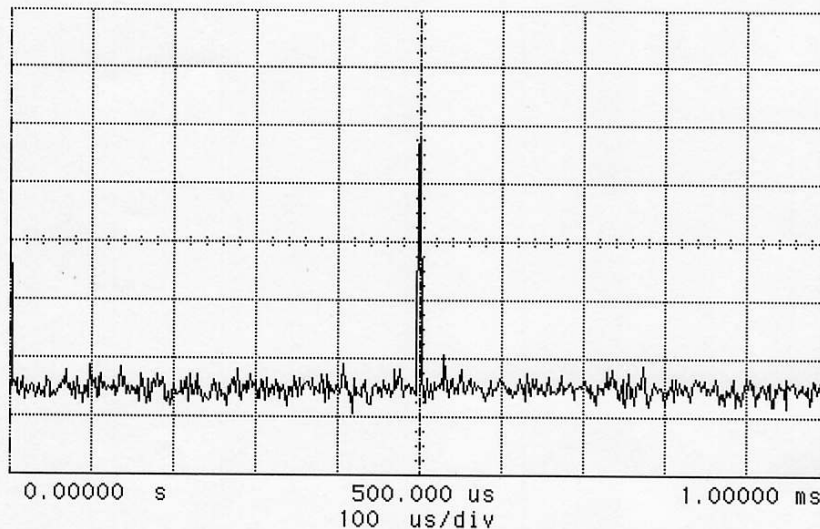
start marker
0.00000 s

stop marker
624.000 us

ampl@time off
ampl 1 @ stop
ampl 1 @ start

hp running

Graph PRF/555/1009/04



stop marker: 500.000us
start marker: 0.00000 s
delta t: 500.000us
1/delta t: 2.00000kHz

ampl markers
off on

time markers
off on

start marker
0.00000 s

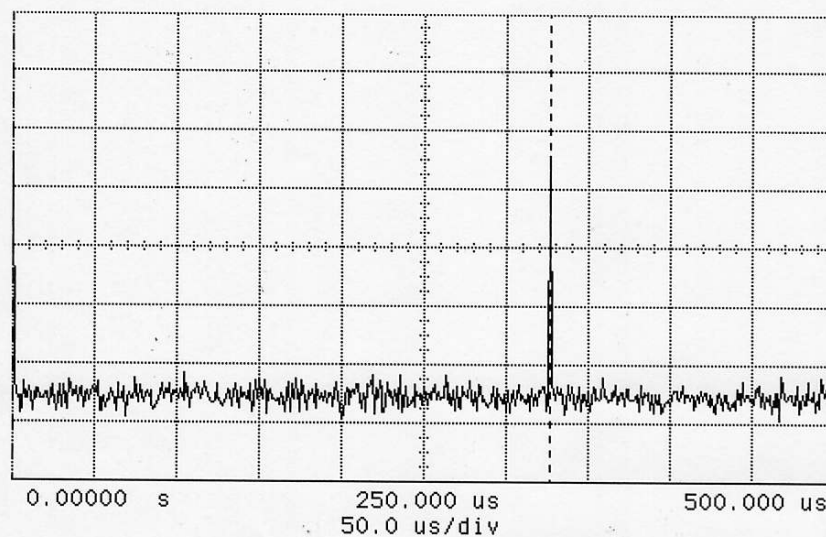
stop marker
500.000 us

ampl@time off
ampl 1 @ stop
ampl 1 @ start

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hp printing

Graph PRF/555/1009/05



stop marker: 327.000us
start marker: 0.00000 s
delta t: 327.000us
1/delta t: 3.05810kHz

ampl markers
off on

time markers
off on

start marker
0.00000 s

stop marker
327.000 us

ampl@time off
ampl 1 @ stop
ampl 1 @ start