

Type Acceptance Test Report

**Multimode PCS Repeater
FCC Rule Parts: 2, 15 & 24**

ACS Report Number: 03-0089-24TA

Manufacturer: EMS Wireless
Model: Link2Cell

Band Edge Compliance

Band Edge Compliance

Uplink and downlink band edge plots are shown in plots 7 - 12 below. The test setup is shown in figure 2 below:



Figure 2: Setup Diagram

Diagram Number	Equipment Type	MFG	Model	Serial Number	Cal Date	Cal Due
1	RF Signal Generator	Agilent	E4432B	A55445-4	4/5/2003	4/5/2004
2	Spectrum Analyzer	Agilent	8593E	A55445-1	4/5/2003	4/5/2004

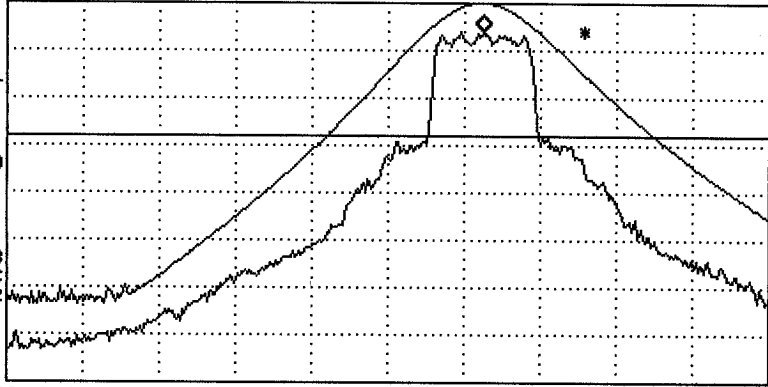
07:02:32 AUG 05, 2003

CDMA

REF 15.0 dBm AT 30 dB

MKR 1.85125 GHz
8.89 dBm

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

CENTER 1.85000 GHz
#RES BW 30 kHz
VBW 30 kHz
SPAN 10.00 MHz
SWP 33.3 msec

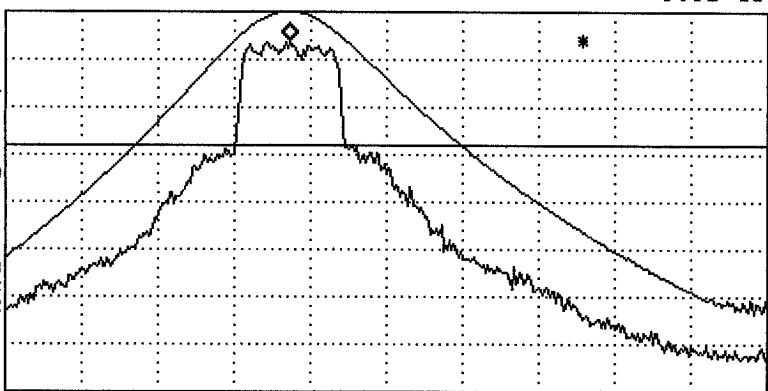
07:07:59 AUG 05, 2003

CDMA

MKR 1.86373 GHz
8.82 dBm

REF 15.0 dBm AT 30 dB

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm
MA VB
SC FC
CORR



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

CENTER 1.86500 GHz SPAN 10.00 MHz
#RES BW 30 kHz VBW 30 kHz SWP 33.3 msec

07:10:02 AUG 05, 2003

CDMA

REF 15.0 dBm AT 30 dB

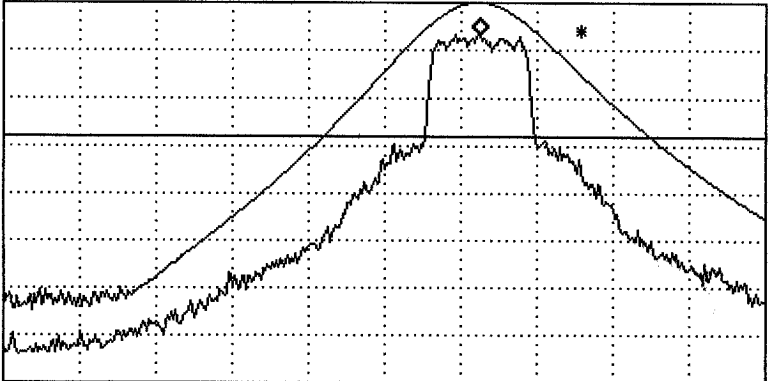
MKR 1.86625 GHz
8.35 dBm

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm

CLEAR
WRITE A
MAX
HOLD A

MA VB
SC FC
CORR

VIEW A
BLANK A
Trace
A B C
More
1 of 3



CENTER 1.86500 GHz SPAN 10.00 MHz
#RES BW 30 kHz VBW 30 kHz SWP 33.3 msec

07:18:29 AUG 05, 2003

Cdma

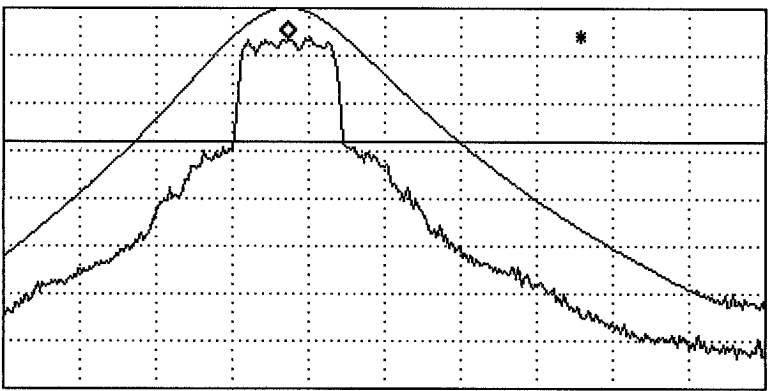
REF 15.0 dBm

AT 30 dB

MKR 1.86873 GHz

8.72 dBm

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm
MA VB
SC FC
CORR

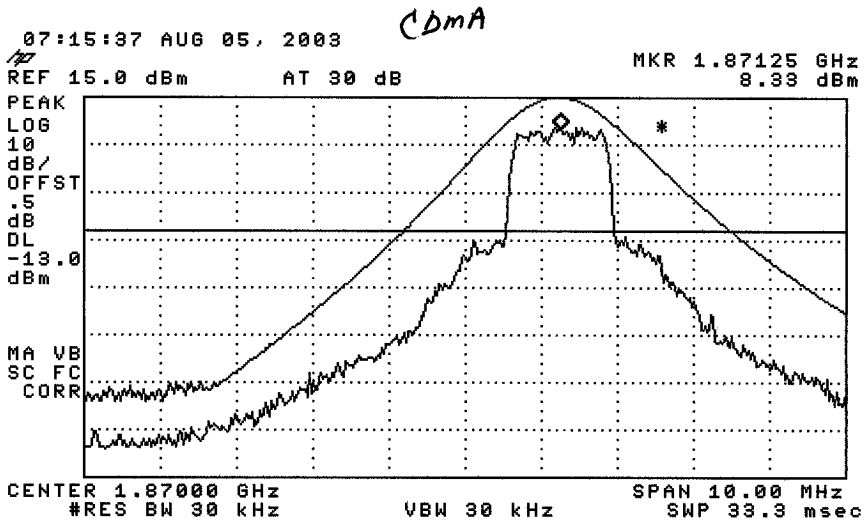


CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

CENTER 1.87000 GHz
#RES BW 30 kHz

VBW 30 kHz

SPAN 10.00 MHz
SWP 33.3 msec



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

CDMA

07:13:06 AUG 05, 2003

MKR 1.88373 GHz
8.53 dBm

REF 15.0 dBm AT 30 dB

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm
MA VB
SC FC
CORR

CLEAR
WRITE A

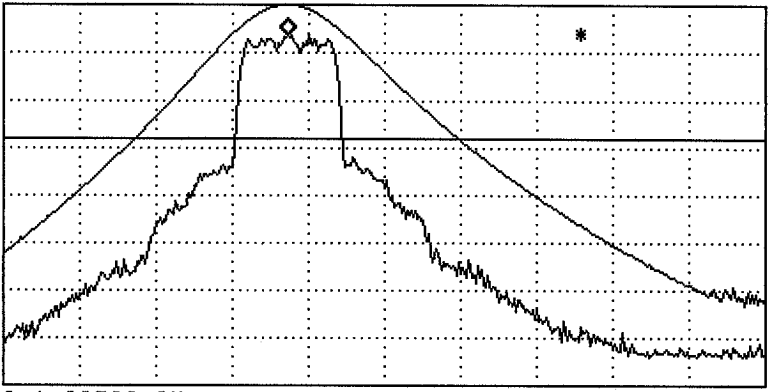
MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

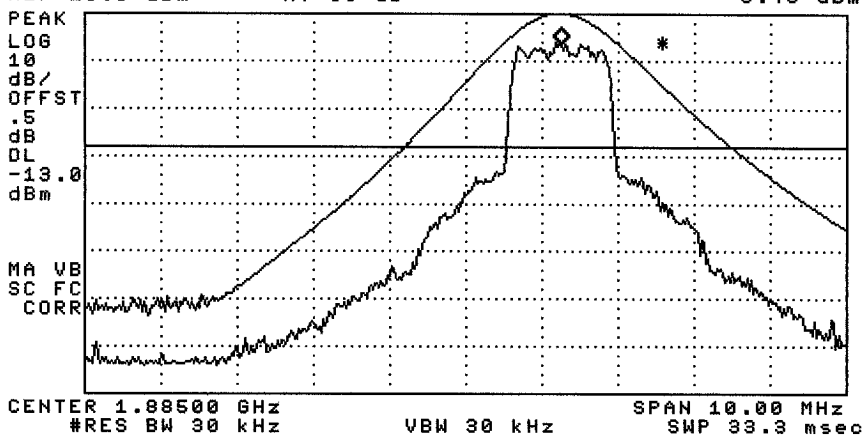
More
1 of 3



CENTER 1.88500 GHz
#RES BW 30 kHz
VBM 30 kHz
SPAN 10.00 MHz
SWP 33.3 msec

07:32:09 AUG 05, 2003 CDMA

REF 15.0 dBm AT 30 dB MKR 1.88625 GHz 8.46 dBm



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

07:34:51 AUG 05, 2003

CDMA

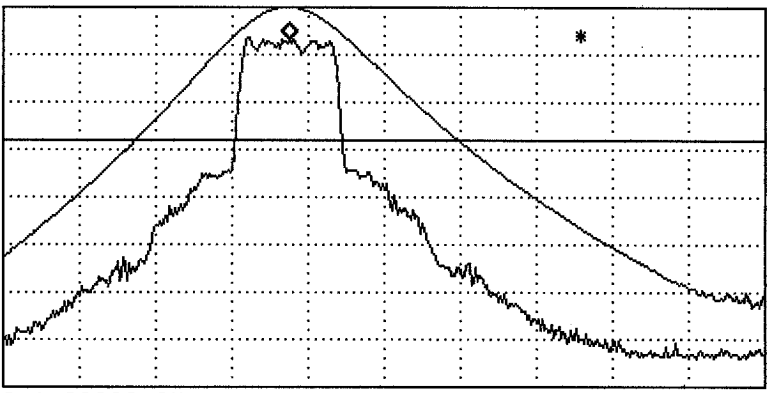
REF 15.0 dBm

AT 30 dB

MKR 1.88875 GHz
8.95 dBm

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm

MA VB
SC FC
CORR



CENTER 1.89000 GHz
#RES BW 30 kHz

VBW 30 kHz

SPAN 10.00 MHz
SWP 33.3 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

More
1 of 3

07:37:40 AUG 05, 2003

CDMA

MKR 1.89125 GHz
8.36 dBm

REF 15.0 dBm AT 30 dB

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm

CLEAR
WRITE A

MAX
HOLD A

VIEW A

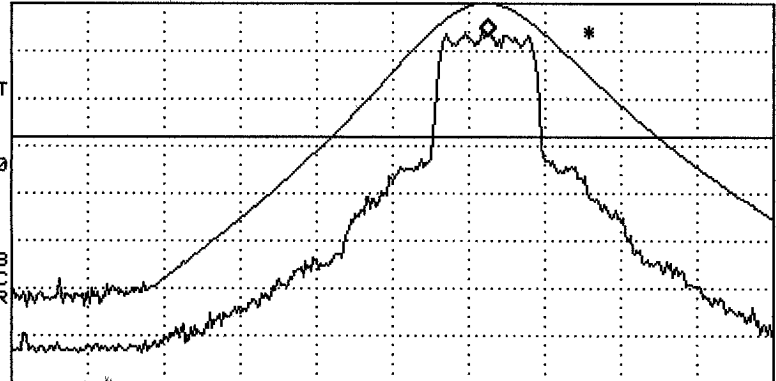
BLANK A

Trace
A B C

More
1 of 3

MA VB
SC FC
CORR

CENTER 1.89000 GHz SPAN 10.00 MHz
#RES BW 30 kHz VBW 30 kHz SWP 33.3 msec



07:40:17 AUG 05, 2003

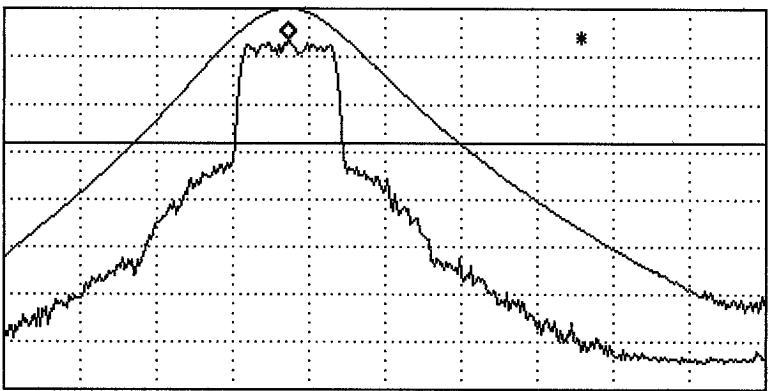
CDMA

REF 15.0 dBm AT 30 dB

MKR 1.89373 GHz
8.63 dBm

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm

MA VB
SC FC
CORR



CENTER 1.89500 GHz
#RES BW 30 kHz

VBW 30 kHz

SPAN 10.00 MHz
SWP 33.3 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

More
1 of 3

07:43:51 AUG 05, 2003

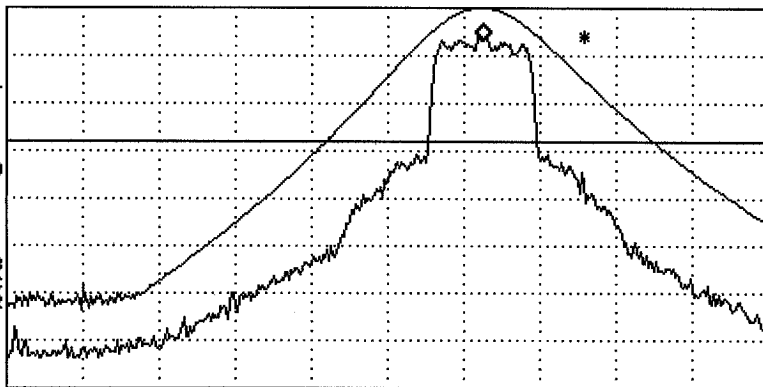
CDMA

REF 15.0 dBm AT 30 dB

MKR 1.89625 GHz
8.29 dBm

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm

MA VB
SC FC
CORR



CENTER 1.89500 GHz
#RES BW 30 kHz

VBW 30 kHz

SPAN 10.00 MHz
SWP 33.3 msec

CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

More
1 of 3

CDMA

08:29:58 AUG 05, 2003

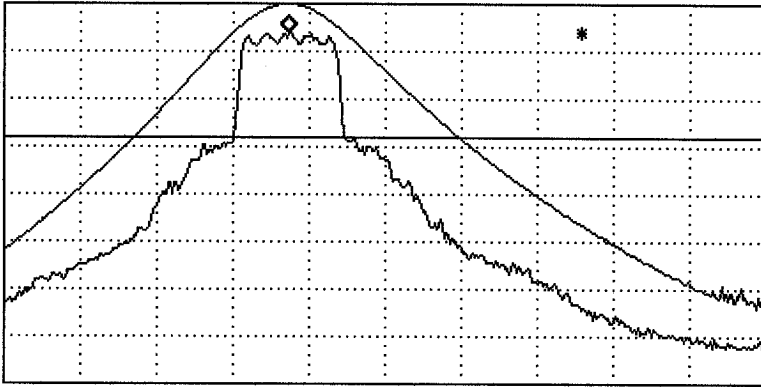
REF 15.0 dBm

AT 30 dB

MKR 1.90873 GHz

8.91 dBm

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm
MA VB
SC FC
CORR



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

CENTER 1.91000 GHz
#RES BW 30 kHz

VBW 30 kHz

SPAN 10.00 MHz
SWP 33.3 msec

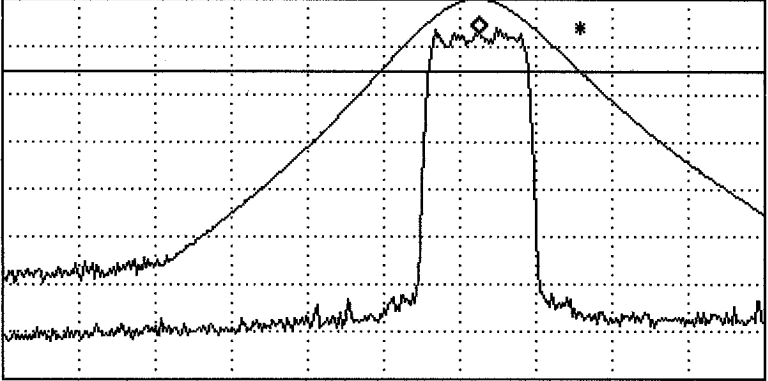
CDMA

09:10:09 AUG 05, 2003

MKR 1.93125 GHz
-5.19 dBm

REF 2.0 dBm AT 20 dB

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

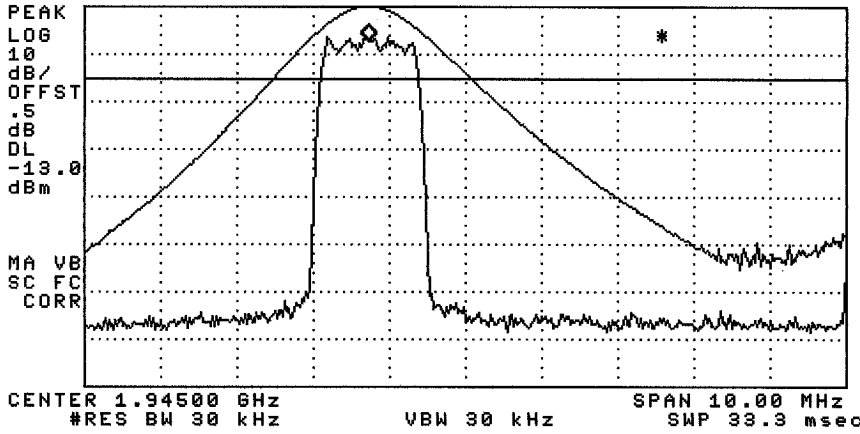
CENTER 1.93000 GHz
#RES BW 30 kHz
VBM 30 kHz
SPAN 10.00 MHz
SWP 33.3 msec

CDMA

10:55:35 AUG 05, 2003

MKR 1.94373 GHz
-5.04 dBm

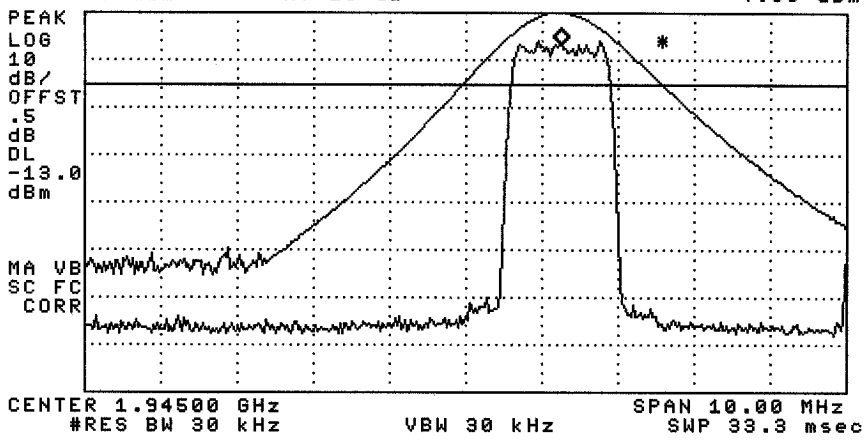
REF 2.0 dBm AT 20 dB



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

10:57:35 AUG 05, 2003 *CDMA*

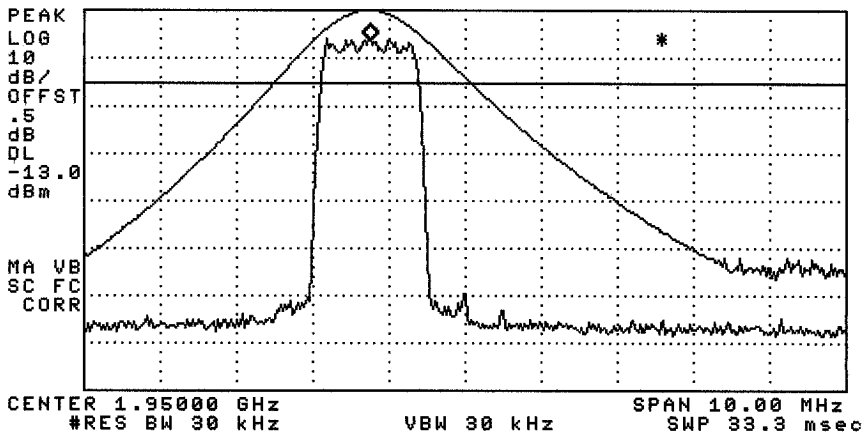
REF 2.0 dBm AT 20 dB MKR 1.94625 GHz -4.68 dBm



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

11:00:22 AUG 05, 2003 CDMA

REF 2.0 dBm AT 20 dB MKR 1.94875 GHz -4.44 dBm



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

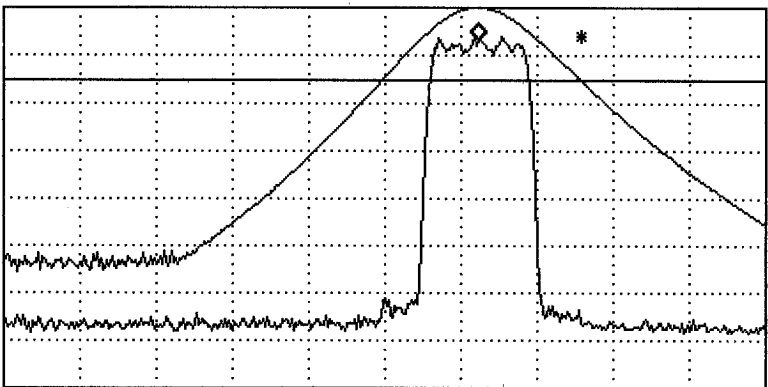
11:03:24 AUG 05, 2003

CDMA

REF 2.0 dBm AT 20 dB

MKR 1.95123 GHz
-4.89 dBm

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm



CLEAR
WRITE A

MAX
HOLD A

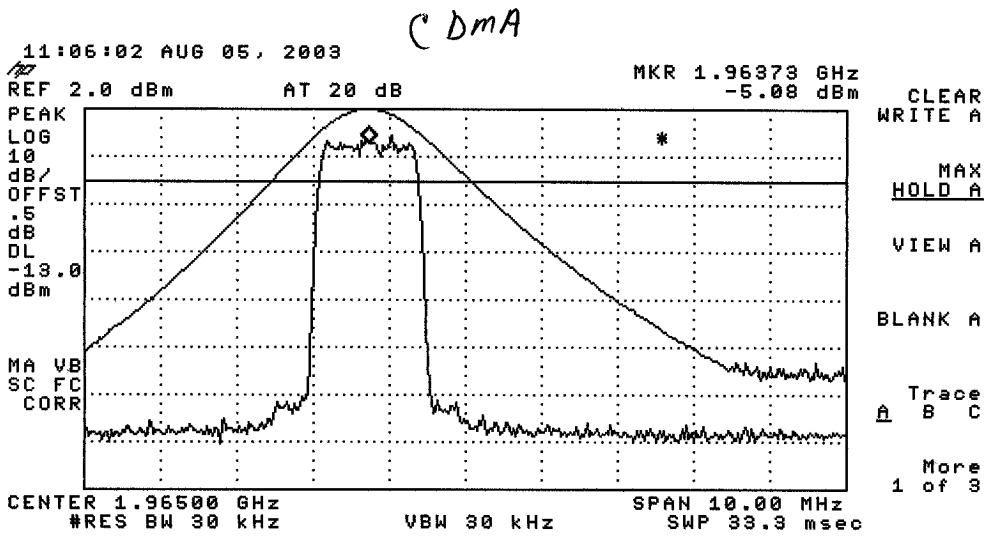
VIEW A

BLANK A

Trace
A B C

More
1 of 3

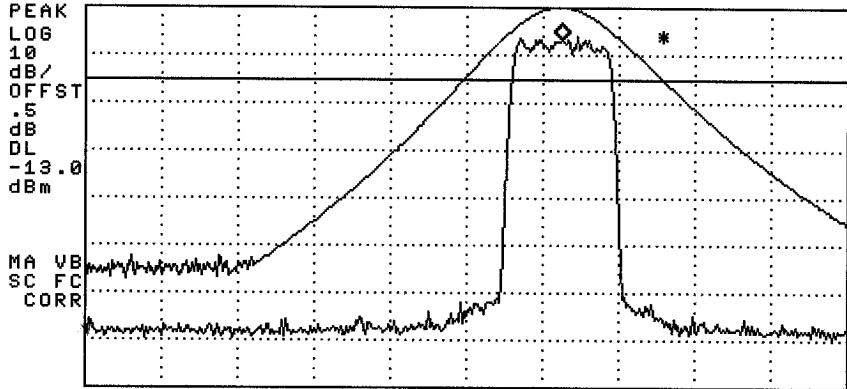
CENTER 1.95000 GHz
#RES BW 30 kHz
VBW 30 kHz
SPAN 10.00 MHz
SWP 33.3 msec



11:07:56 AUG 05, 2003

CDMA

REF 2.0 dBm AT 20 dB MKR 1.96625 GHz
-4.82 dBm



CENTER 1.96500 GHz SPAN 10.00 MHz
#RES BW 30 kHz VBW 30 kHz SWP 33.3 msec

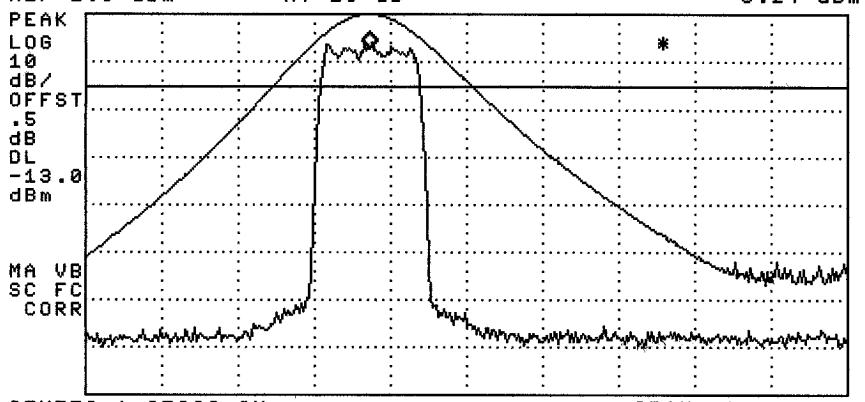
CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

CDMA

11:10:13 AUG 05, 2003

MKR 1.96873 GHz
-5.24 dBm

REF 2.0 dBm AT 20 dB



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

11:12:06 AUG 05, 2003

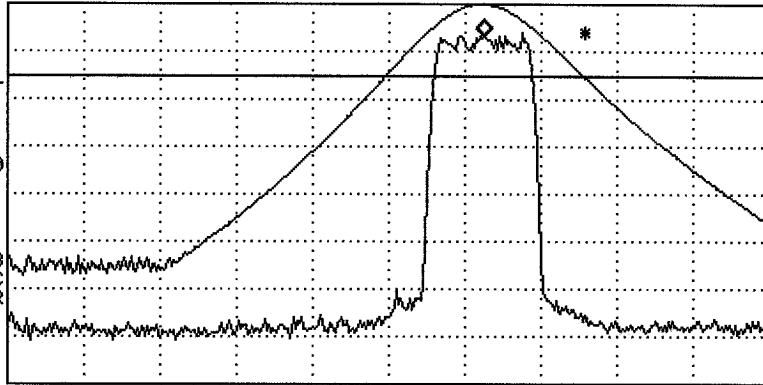
CDMA

MKR 1.97125 GHz
-4.59 dBm

REF 2.0 dBm

AT 20 dB

PEAK
LOG
10
dB/
OFFST
.5
dB
DL
-13.0
dBm
MA VB
SC FC
CORR



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

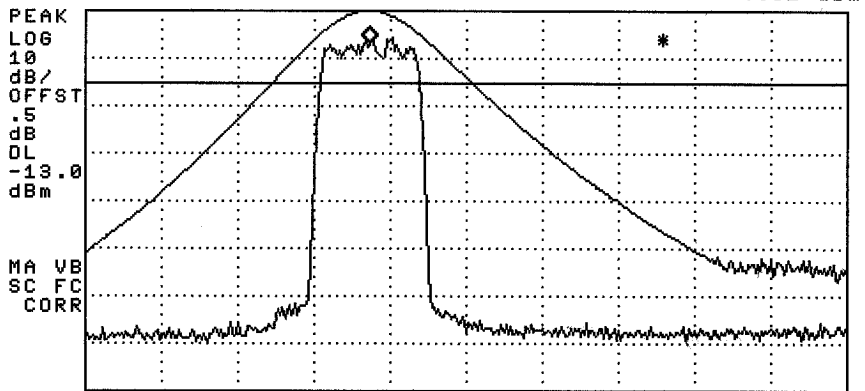
CENTER 1.97000 GHz
#RES BW 30 kHz

VBW 30 kHz

SPAN 10.00 MHz
SWP 33.3 msec

11:14:32 AUG 05, 2003 *CDMA*

REF 2.0 dBm AT 20 dB MKR 1.97373 GHz -4.81 dBm



CENTER 1.97500 GHz SPAN 10.00 MHz
#RES BW 30 kHz VBW 30 kHz SWP 33.3 msec

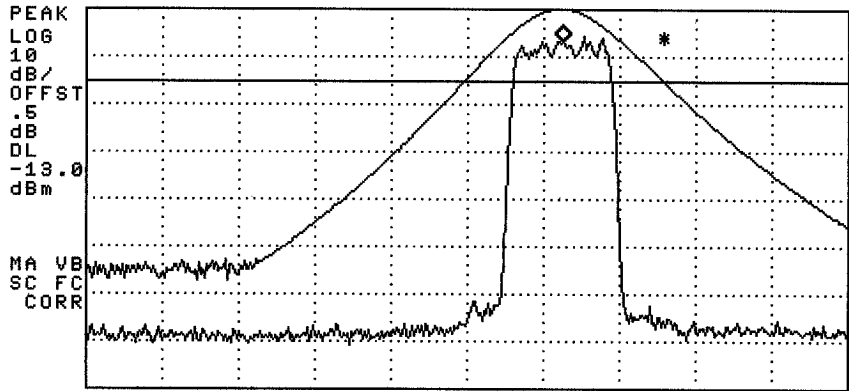
CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3

CDMA

11:16:36 AUG 05, 2003

REF 2.0 dBm AT 20 dB

MKR 1.97625 GHz
-4.62 dBm



CLEAR
WRITE A

MAX
HOLD A

VIEW A

BLANK A

Trace
A B C

More
1 of 3

CENTER 1.97500 GHz
#RES BW 30 kHz

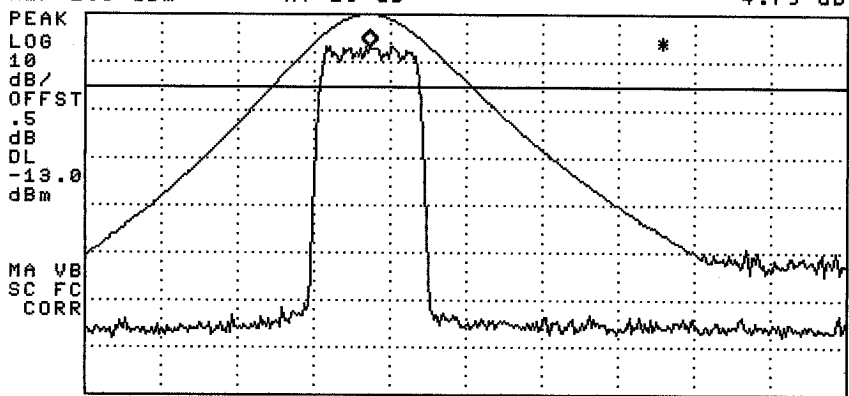
VBW 30 kHz

SPAN 10.00 MHz
SWP 33.3 msec

11:18:32 AUG 05, 2003

CDMA

REF 2.0 dBm AT 20 dB MKR 1.98873 GHz -4.79 dBm



CLEAR
WRITE A
MAX
HOLD A
VIEW A
BLANK A
Trace
A B C
More
1 of 3