FCC PART 22 & 90 TYPE APPROVAL
EMI MEASUREMENT AND TEST REPORT

For

Communication Components Inc.

89 Leuning Street 2nd Floor
South Hackensack, NJ 07606

FCC ID: NT3BDA-8087-80

2003-05-15

This Report Concerns:	**Equipment Type:**
☒ Original Report	Bi-Directional Amplifier

Test Engineer:	Benjamin Jing
Report No.:	R0210307
Test Date:	2003-03-01
Reviewed By:	Hans Mellberg
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Note: This test report is specially limited to the above client company and the product model only. It may not be duplicated without prior written consent of Bay Area Compliance Laboratory Corporation. This report **must not** be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

TABLE OF CONTENTS

1 - GENERAL INFORMATION 4
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) 4
1.2 OBJECTIVE 4
1.3 RELATED SUBMITTAL(S)/GRANT(S) 4
1.4 TEST METHODOLOGY 4
1.5 TEST FACILITY 4
1.6 TEST EQUIPMENT LIST AND DETAILS 5
1.7 LOCAL SUPPORT EQUIPMENT LIST AND DETAILS 5
1.8 EXTERNAL I/O CABLING LIST AND DETAILS 6

2 - SYSTEM TEST CONFIGURATION 7
2.1 JUSTIFICATION 7
2.2 SCHEMATICS/BLOCK DIAGRAM 7
2.3 TEST SETUP BLOCK DIAGRAM 7
2.4 EQUIPMENT MODIFICATIONS 7

3 - SUMMARY OF TEST RESULTS 8

4 – CONDUTED OUTPUT POWER 9
4.1 APPLICABLE STANDARD 9
4.2 TEST PROCEDURE 9
4.3 TEST EQUIPMENT 9
4.4 TEST RESULTS 10

5 - EMISSION BANDWIDTH 12
5.1 APPLICABLE STANDARDS 12
5.2 TEST PROCEDURE 12
5.3 TEST EQUIPMENT 12
5.4 PLOTS OF OCCUPIED BANDWIDTH 12

6 – SPURIOUS EMISSIONS AT ANTENNA TERMINALS 76
6.1 APPLICABLE STANDARDS 76
6.2 TEST PROCEDURE 76
6.3 TEST EQUIPMENT 76
6.4 TEST RESULTS 76
6.5 PLOTS OF OUT-OF-BAND EMISSIONS AT ANTENNA TERMINAL 76

7 - TWO-TONE TEST 89
7.1 APPLICABLE STANDARDS 89
7.2 TEST PROCEDURE 89
7.3 TEST EQUIPMENT 89
7.4 TEST RESULTS 89
7.5 PLOTS OF TWO-TONE TEST RESULT 89

8 – RADIATED SPURIOUS EMISSION 104
8.1 TEST PROCEDURE 104
8.2 TEST PROCEDURE 104
8.3 TEST EQUIPMENT 104
8.4 TEST RESULT 104

9 – BAND EDGE TEST 114
9.1 APPLICABLE STANDARDS 114
9.2 TEST PROCEDURE 114
9.3 TEST EQUIPMENT 114
9.4 PLOTS OF OUT-OF-BAND-EDGE EMISSIONS AT ANTENNA TERMINAL 114

10 – MODULATION CHARACTERISTICS 123

11 - FREQUENCY STABILITY 124

12 - CONDUCTED EMISSION.....125

1 - GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

The *Communication Components Inc.'s* product, model: *BDA-8087-80A+A', BDA-8087-80B+B', BDA-8087-80-SMR800 and BDA-8087-80-SMR900 or the* "EUT" as referred to in this report is a bi-directional amplifier. The EUT measures approximately 13"L x 10.5"W x 5.1"H.

EUTs with four different model numbers operate at different frequency ranges and are applied with different FCC rules:

Model	Frequency	FCC Rule
BDA-8087-80A+A'	824-835 MHz, 845-846.5 MHz 869-880 MHz, 890-891.5 MHz	Part22
BDA-8087-80B+B'	835-845 MHz, 846.5-849 MHz 880-890 MHz, 891.5-894 MHz	Part22
BDA-8087-80-SMR800	806-821 MHz, 851-866 MHz	Part90
BDA-8087-80-SMR900	896-902 MHz, 935-941 MHz	Part90

** The test data was only good for test sample. It may have deviation for other product samples.*

1.2 Objective

This type approval report is prepared on behalf of *Communication Components Inc.* in accordance with Part 2, Subpart J, Part 15, Subparts A and B, and Part 22 of the Federal Communication Commissions rules.

The objective of the manufacturer is to demonstrate compliance with FCC Part 2, Part 15, Part 22 and Part 90.

1.3 Related Submittal(s)/Grant(s)

No Related Submittals

1.4 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-1992 and TIA/EIA 603A, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed by Bay Area Compliance Laboratory, Corp. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

1.5 Test Facility

The Open Area Test site used by BACL to collect radiated and conducted emission measurement data is located in the back parking lot of the building at 230 Commercial Street, Sunnyvale, California, USA.

Test site at BACL has been fully described in reports submitted to the Federal Communication Commission (FCC) and Voluntary Control Council for Interference (VCCI). The details of these reports has been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February

11 and December 10, 1997 and Article 8 of the VCCI regulations on December 25, 1997. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-1992.

The Federal Communications Commission and Voluntary Control Council for Interference has the reports on file and is listed under FCC file 31040/SIT 1300F2 and VCCI Registration No.: C-1298 and R-1234. The test site has been approved by the FCC and VCCI for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, BACL is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200167-0). The scope of the accreditation covers the FCC Method – 47 CFR Part – Digital Devices, CISPER 22: 1997: Electromagnetic Interference – Limits and Methods of Measurement of Information Technology Equipment test methods.

1.6 Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Cal. Due Date
HP	Spectrum Analyzer	8568B	2517A01610	2003-10-30
HP	Spectrum Analyzer	8593A	29190A00242	2004-05-01
HP	Amplifier	8447E	1937A01054	2004-05-01
HP	Quasi-Peak Adapter	85650A	2521A00718	2004-05-01
Com-Power	Biconical Antenna	AB-100	14012	2004-05-01
Com-Power	LISN	LI-200	12005	2004-03-28
Com-Power	LISN	LI-200	12008	2004-03-28
Com-Power	Log Periodic Antenna	AL-100	16091	2004-05-01
Com-Power	Log Periodic Antenna	AB-900	15049	2004-05-01
Rohde & Schwarz	EMI Test Receiver	ESPI	1147 8007 07	2003-12-03
Agilent	Spectrum Analyzer (9KHz – 40GHz)	8564E	08303	2003-08-01
Agilent	Spectrum Analyzer (9KHz – 50GHz)	8565EC	06042	2004-05-03
HP	Amplifier (1-26.5GHz)	8449B	3147A00400	2004-03-14
A.H.System	Horn Antenna (700MHz-18GHz)	SAS-200/571	261	2003-05-31

Statement of Traceability: Bay Area Compliance Laboratory Corp. declares that all equipment has been performed calibration using suitable standard traceable to National Institute of Standard and Technology (NIST).

1.7 Local Support Equipment List and Details

Manufacturer	Description	Model	Serial Number	FCC ID
Rohde & Schwarz	Signal Generator	SMIQ03	1125.555.03	DoC
Rohde & Schwarz	I /Q Modulation	AMIQ02	1110.2003.02	DoC

1.8 External I/O Cabling List and Details

Cable Description	Length (M)	Port/From	To
BNC	1.0	RF Port/EUT	RF Port/SMIQ03

2 - SYSTEM TEST CONFIGURATION

2.1 Justification

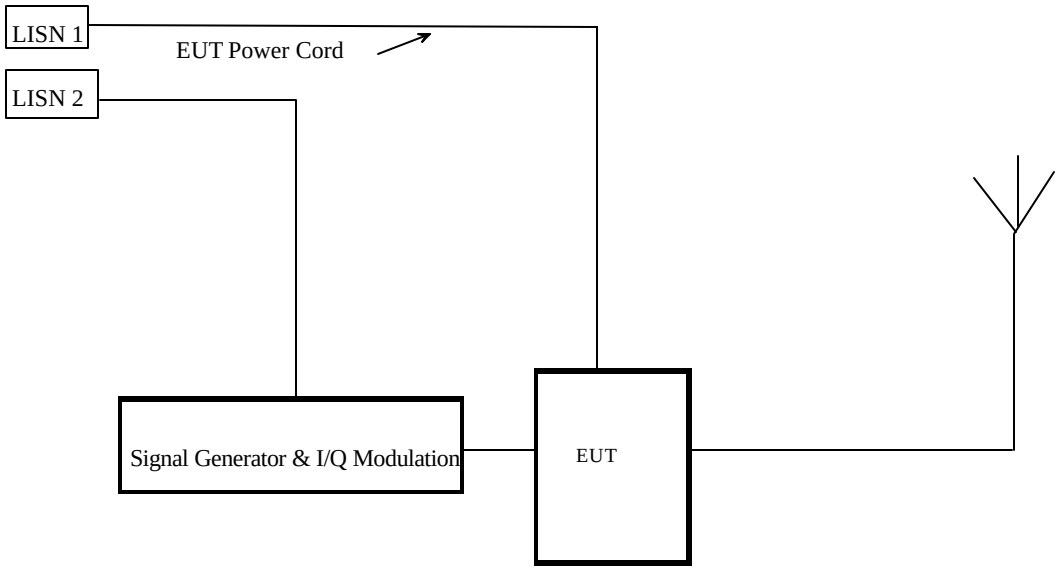
The EUT was configured for testing in a typical fashion (as normally used in a typical application).

The final qualification test was performed with the EUT operating at normal mode.

2.2 Schematics/Block Diagram

Please refer to Exhibit D.

2.3 Test Setup Block Diagram



2.4 Equipment Modifications

No modifications were necessary for the EUT to comply with the applicable standard and limit.

3 - SUMMARY OF TEST RESULTS

FCC RULE	DESCRIPTION OF TEST	Measured	Result
§2.1046 § 22.913(a)	Conducted Output Power	Section 4	Compliant
§ 2.1049 § 22.917(b)	Emission Bandwidth	Section 5	Compliant
§2.1051 § 22.917(a)	Spurious emissions at antenna terminals	Section 6	Compliant
§2.1051	Two-Tone Test (Spurious emissions at antenna terminals)	Section 7	Compliant
§2.1053 § 22.917 (a)	Radiated Spurious Emission	Section 8	Compliant
§2.1049 §22.917(b)	Band Edge	Section 9	Compliant
§ 2.1055 (a) § 2.1055 (d)	Frequency stability vs. temperature Frequency stability vs. voltage	N/A	Compliant
§ 2.1047	Modulation Characteristics	N/A	Compliant
§15.247(b)(4) §1.1307(b)(1)	RF Exposure	Section 13	Compliant

4 – CONDUTED OUTPUT POWER

4.1 Applicable Standard

According to FCC §2.1046 and §22.913 (a), the ERP of mobile transmitters must not exceed 7 Watts.

According to FCC §2.1046 and §90.205 (j), power depends upon station's antenna HAAT and required service area and may be from 1 to 500W.

4.2 Test Procedure

The antenna was removed and SMA connector was connected to the transmitter output. The transmitter output was connected to a calibrated coaxial attenuator (50 Ohm), the other end of which was connected to a spectrum analyzer. Transmitter output was read off the spectrum analyzer in dBm. The power output at the transmitter was determined by adding the value of the attenuator to the spectrum analyzer reading.

The test was performed at three frequencies (low, middle, and high channels) and on all power levels which can be setup on the transmitter.

4.3 Test equipment

Hewlett Packard HP8564E Spectrum Analyzer
Hewlett Packard HP 7470A Plotter
Rohde & Schwarz SMIQ03 Signal Generator
Rohde & Schwarz AMIQ I/Q Modulation Generator

4.4 Test Results

Uplink:

Model	Modulation	Channel	Frequency in MHz	RF Input Power in dBm	RF Output Power in dBm	RF Output Power in W	Limit
BDA-8087-80-CELL A+A’	CDMA	Low	825	-50	29.4	0.871	7W
		Mid	835	-50	29.7	0.933	
		High	845	-50	28.6	0.724	
	GSM	Low	825	-50	29.3	0.851	
		Mid	835	-50	29.5	0.891	
		High	845	-50	28.4	0.692	
	TDMA	Low	825	-50	29.1	0.813	
		Mid	835	-50	29.6	0.912	
		High	845	-50	28.5	0.708	
	ANALOG	Low	825	-50	29.2	0.832	
		Mid	835	-50	29.7	0.933	
		High	845	-50	29.1	0.813	
BDA-8087-80-CELL B + B’	CDMA	Low	835	-50	29.3	0.851	
		Mid	840	-50	29.6	0.912	
		High	845	-50	28.7	0.741	
	GSM	Low	835	-50	29.2	0.832	
		Mid	840	-50	29.5	0.891	
		High	845	-50	28.3	0.676	
	TDMA	Low	835	-50	29.2	0.832	
		Mid	840	-50	29.7	0.933	
		High	845	-50	28.9	0.776	
	ANALOG	Low	835	-50	29.5	0.891	
		Mid	840	-50	29.7	0.933	
		High	845	-50	29.2	0.832	
BDA-8087-80-SMR800	iDEN	Low	810	-50	29.1	0.813	
		Mid	815	-50	29.6	0.912	1-500W
		High	820	-50	28.8	0.759	
	ANALOG	Low	810	-50	29.3	0.851	
		Mid	815	-50	29.7	0.933	
		High	820	-50	29.6	0.912	
BDA-8087-80-SMR900	GSM	Low	897	-50	29.3	0.851	
		High	900	-50	29.4	0.871	
	ANALOG	Low	897	-50	29.6	0.912	
		High	900	-50	29.5	0.891	

Downlink:

Model	Modulation	Channel	Frequency in MHz	RF Input Power in dBm	RF Output Power in dBm	RF Output Power in W	Limit
BDA-8087-80-CELL A+A’	CDMA	Low	870	-50	29.1	0.813	7W
		Mid	880	-50	29.6	0.912	
		High	890	-50	28.5	0.708	
	GSM	Low	870	-50	29.2	0.832	
		Mid	880	-50	29.7	0.933	
		High	890	-50	28.6	0.724	
	TDMA	Low	870	-50	29.5	0.891	
		Mid	880	-50	29.6	0.912	
		High	890	-50	29.1	0.813	
	ANALOG	Low	870	-50	29.2	0.832	
		Mid	880	-50	29.7	0.933	
		High	890	-50	29.3	0.851	
BDA-8087-80-CELL B + B’	CDMA	Low	880	-50	28.9	0.776	
		Mid	885	-50	29.6	0.912	
		High	890	-50	29.1	0.813	
	GSM	Low	880	-50	29.2	0.832	
		Mid	885	-50	29.0	0.794	
		High	890	-50	28.7	0.741	
	TDMA	Low	880	-50	29.4	0.871	
		Mid	885	-50	29.6	0.912	
		High	890	-50	29.1	0.813	
	ANALOG	Low	880	-50	29.5	0.891	
		Mid	885	-50	29.7	0.933	
		High	890	-50	29.3	0.851	
BDA-8087-80-SMR800	iDEN	Low	855	-50	29.1	0.813	
		Mid	860	-50	29.5	0.891	1-500W
		High	865	-50	28.9	0.776	
	ANALOG	Low	855	-50	29.4	0.871	
		Mid	860	-50	29.7	0.933	
		High	865	-50	29.5	0.891	
BDA-8087-80-SMR900	GSM	Low	936	-50	29.1	0.813	
		High	939	-50	29.5	0.891	
	ANALOG	Low	936	-50	29.6	0.912	
		High	939	-50	29.6	0.912	

5 - EMISSION BANDWIDTH

5.1 Applicable Standards

According to FCC §2.1049 and §22.917 (b), the emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

According to FCC §2.1049 and §22.917 (b), emission masks depend upon frequency band and transmitter with or without audio low pass filter.

5.2 Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set at 30 KHz and the spectrum was recorded.

5.3 Test Equipment

Hewlett Packard HP8566B Spectrum Analyzer
Hewlett Packard HP 7470A Plotter
Rohde & Schwarz SMIQ03B Signal Generator
Rohde & Schwarz AMIQ I/Q Modulation Generator

5.4 Plots of Occupied Bandwidth

Please refer to tables and plots hereinafter.

Test Data Summary

BDA-8087-80-Cell A+A':

Modulation	Mode	Channel	Frequency in MHz	Emission Bandwidth in kHz
CDMA	Up-link	Low	825	1383
		Mid	835	1392
		High	845	1375
	Down-link	Low	870	1375
		Mid	880	1375
		High	890	1383
GSM	Up-link	Low	825	313
		Mid	835	320
		High	845	327
	Down-link	Low	870	320
		Mid	880	320
		High	890	320
TDMA	Up-link	Low	825	120
		Mid	835	113
		High	845	120
	Down-link	Low	870	113
		Mid	880	113
		High	890	113
ANALOG	Up-link	Low	825	7.08
		Mid	835	7.25
		High	845	7.25
	Down-link	Low	870	7.17
		Mid	880	7.33
		High	890	7.25

BDA-8087-80-Cell B+B':

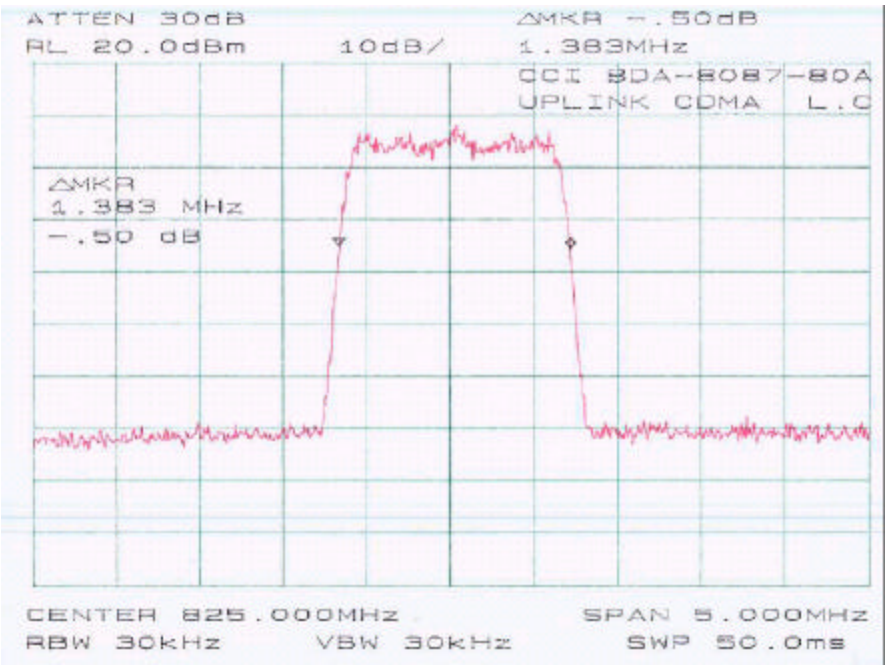
Modulation	Mode	Channel	Frequency in MHz	Emission Bandwidth in kHz
CDMA	Up-link	Low	835	1392
		Mid	840	1375
		High	845	1392
	Down-link	Low	880	1392
		Mid	885	1392
		High	890	1383
GSM	Up-link	Low	835	337
		Mid	840	337
		High	845	340
	Down-link	Low	880	330
		Mid	885	340
		High	890	337
TDMA	Up-link	Low	835	120
		Mid	840	120
		High	845	113
	Down-link	Low	880	117
		Mid	885	120
		High	890	113
ANALOG	Up-link	Low	835	7.17
		Mid	840	7.17
		High	845	7.25
	Down-link	Low	880	7.25
		Mid	885	7.25
		High	890	7.25

BDA-8087-80-SMR800:

Modulation	Mode	Channel	Frequency in MHz	Emission Bandwidth in kHz
iDEN	Up-link	Low	810	21.08
		Mid	815	20.42
		High	820	20.92
	Down-link	Low	855	20.17
		Mid	860	20.50
		High	865	20.17
ANALOG	Up-link	Low	810	7.25
		Mid	815	7.33
		High	820	7.42
	Down-link	Low	855	7.50
		Mid	860	7.50
		High	865	7.33

BDA-8087-80-SMR900:

Modulation	Mode	Channel	Frequency in MHz	Emission Bandwidth in kHz
GSM	Up-link	Low	897	313
		High	900	320
	Down-link	Low	936	317
		High	939	313
ANALOG	Up-link	Low	897	7.50
		High	900	7.58
	Down-link	Low	936	7.33
		High	939	7.50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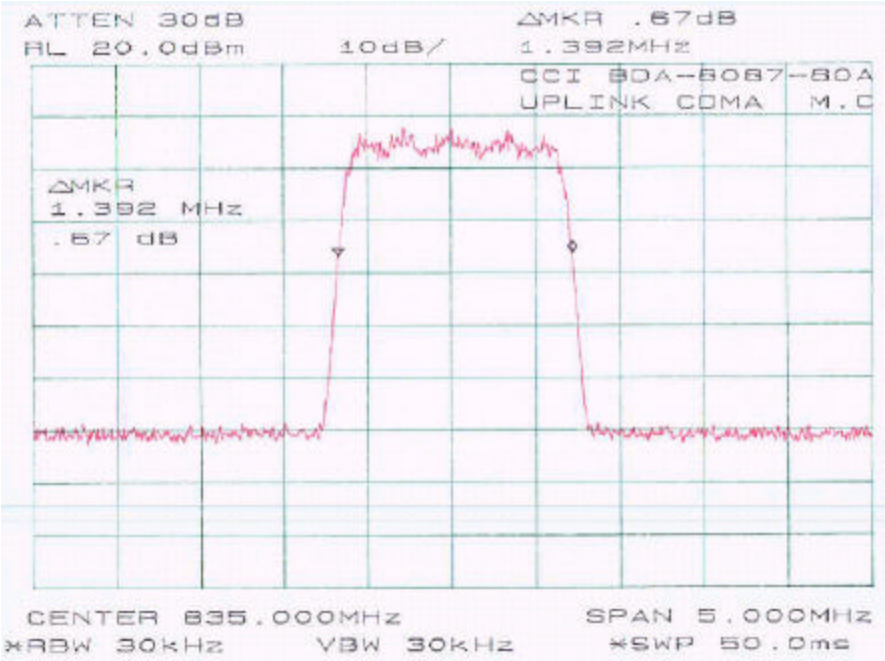
VBW 30kHz
SWP 50.0ms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UPLINK CDMA M.C
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.67 dB
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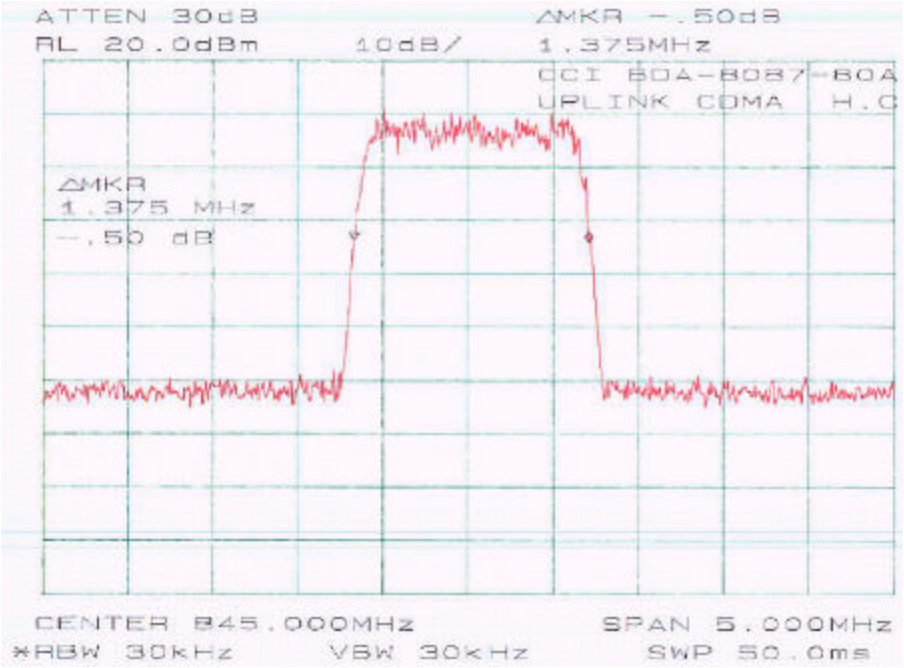
*RBW 30kHz
VBW 30kHz
*SWP 50.0ms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UPLINK CDMA H.C
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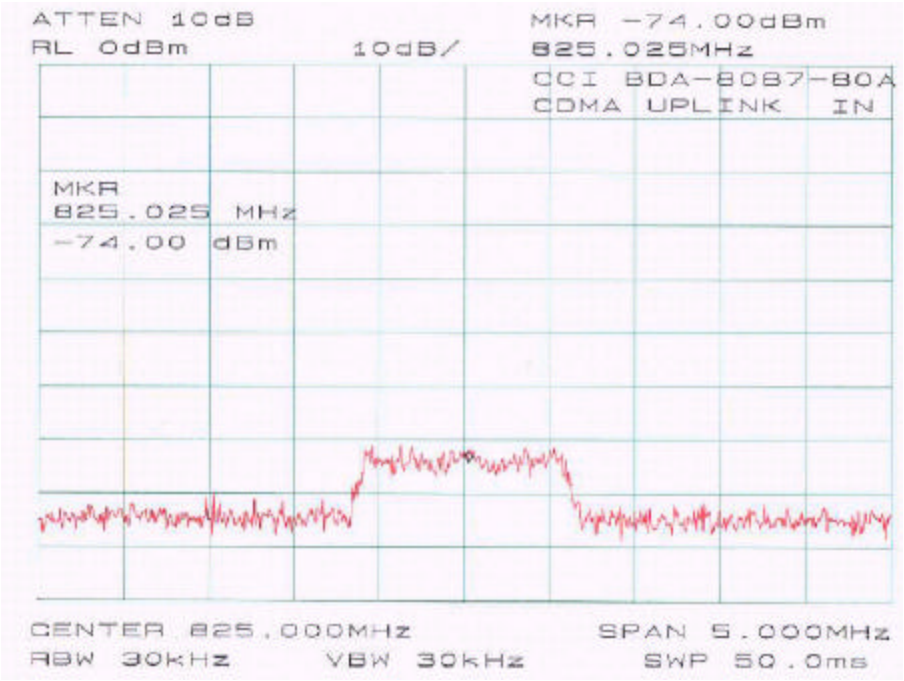
1.375 MHz
-.50 dB
CENTER 845.000MHz
SPAN 5.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms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MKR
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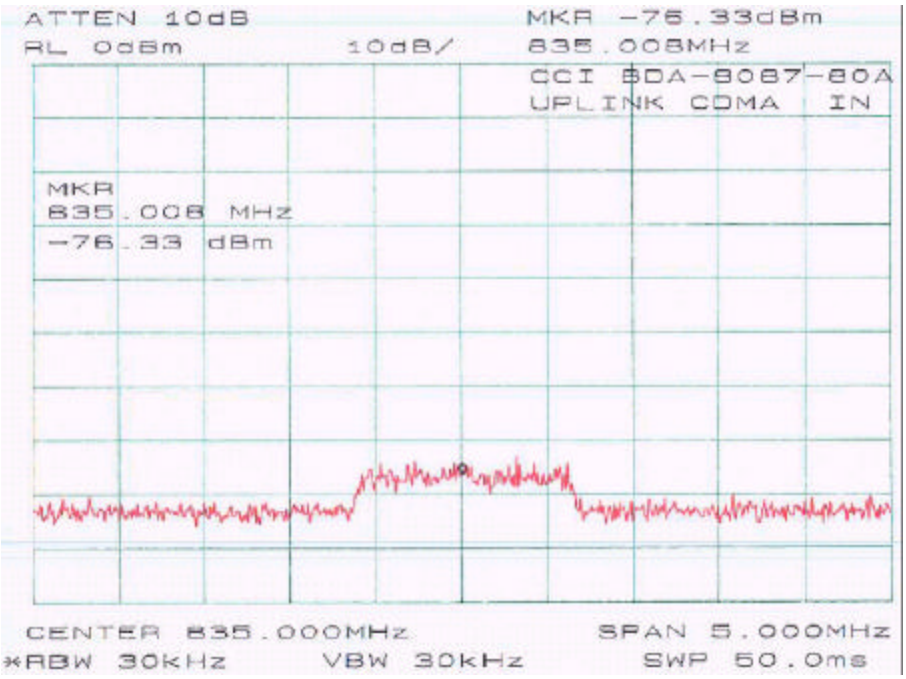
-74.00 dBm
CENTER 825.000MHz
SPAN 5.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms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MKR
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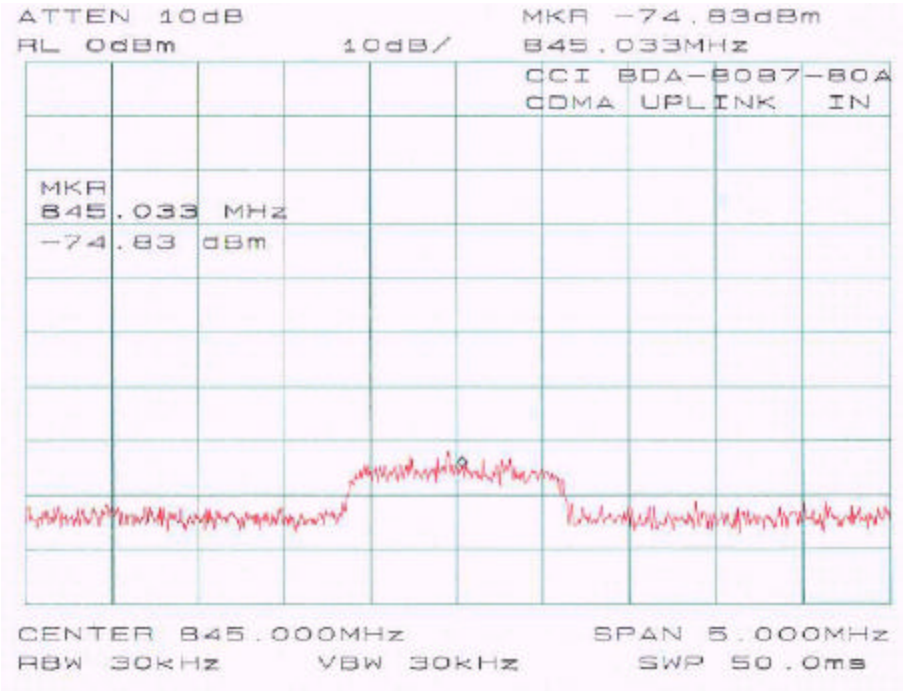
-76.33 dBm
CENTER 835.000MHz
SPAN 5.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms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MKR
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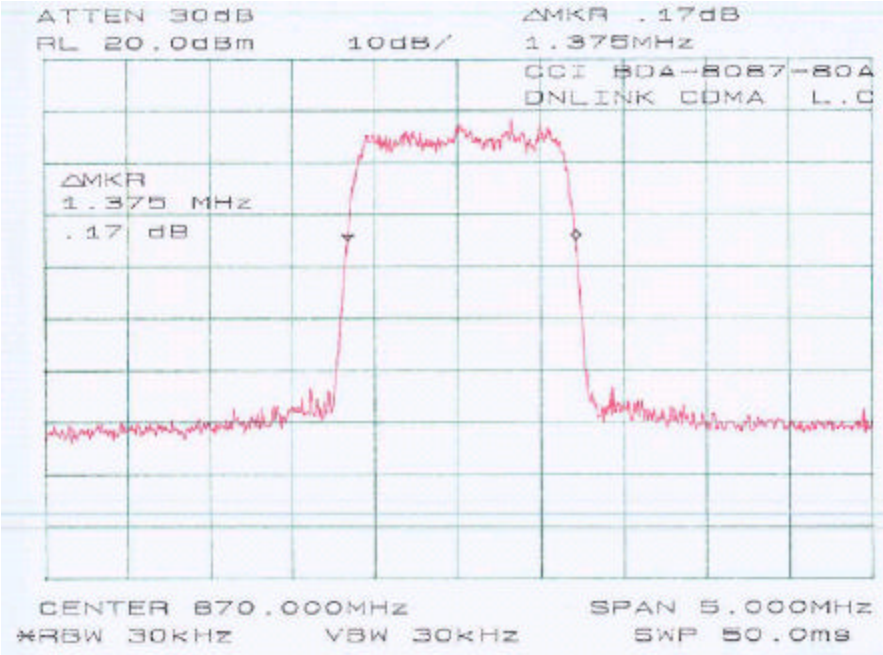
-74.83 dBm
CENTER 845.000MHz
SPAN 5.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms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10dB/
ΔMKR .17dB
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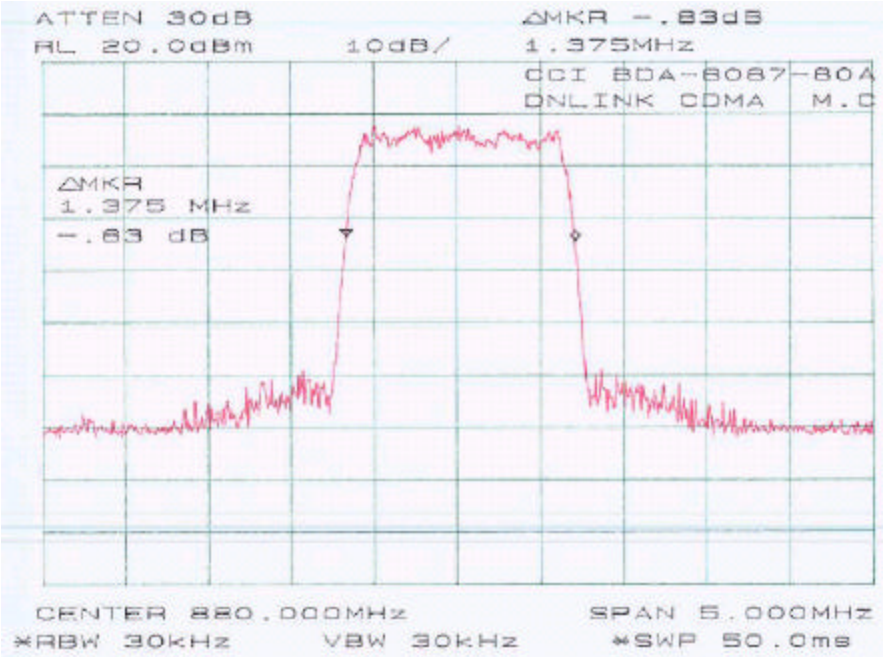
DNLINK CDMA L.C
ΔMKR
1.375 MHz
.17 dB
CENTER 870.000MHz
SPAN 5.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms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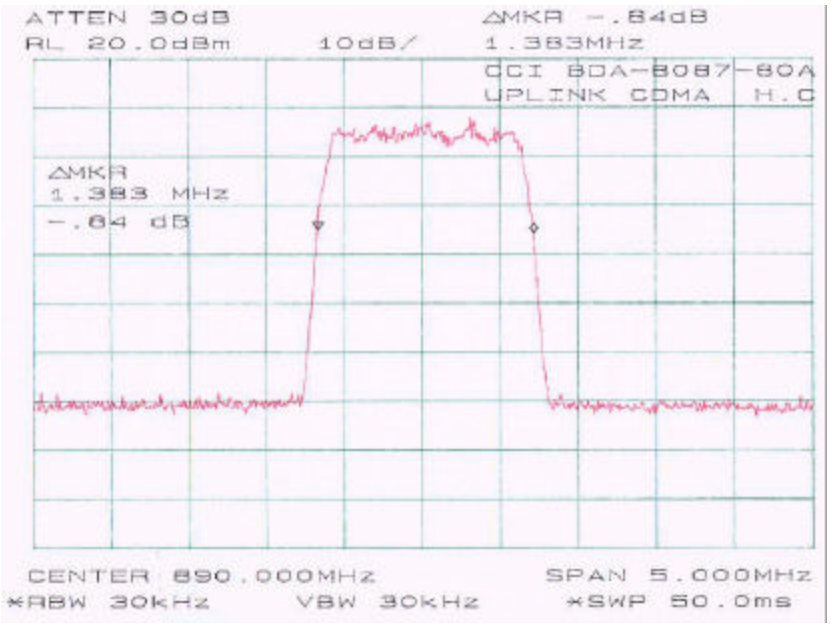
RL 20.0dBm
10dB/
ΔMKR -.83dB
1.375MHz
CCI BDA-8087-80A
DNLINK CDMA M.C
ΔMKR
1.375 MHz
-.83 dB
CENTER 880.000MHz
SPAN 5.000MHz
*RBW 30kHz
VBW 30kHz
*SWP 50.0ms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10dB/
ΔMKR -.84dB
1.383MHz
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UPLINK CDMA H.C
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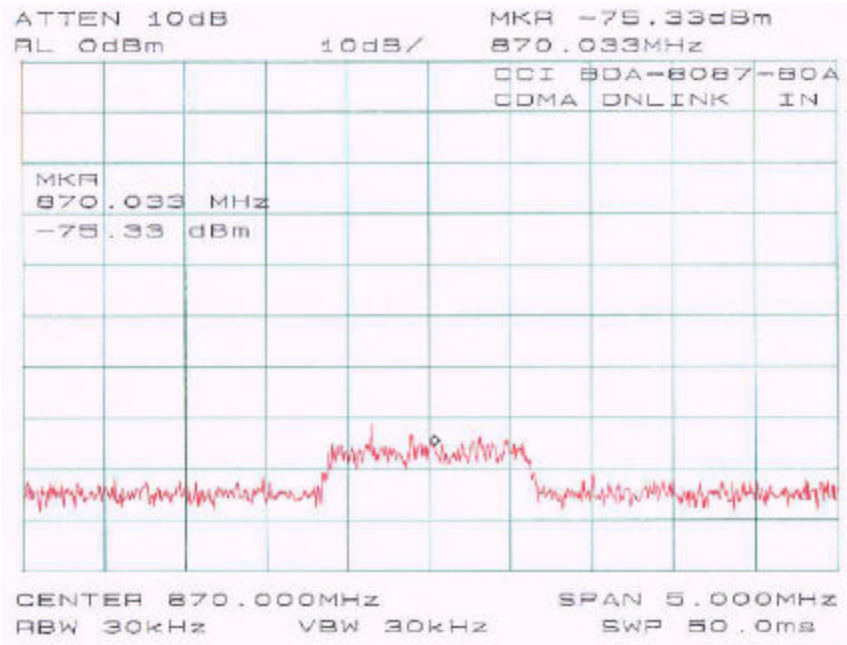
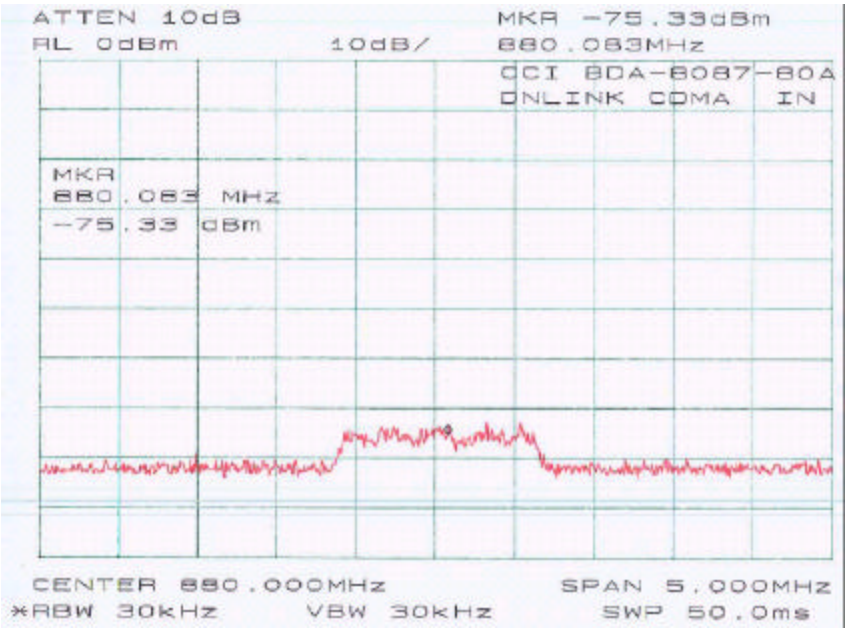
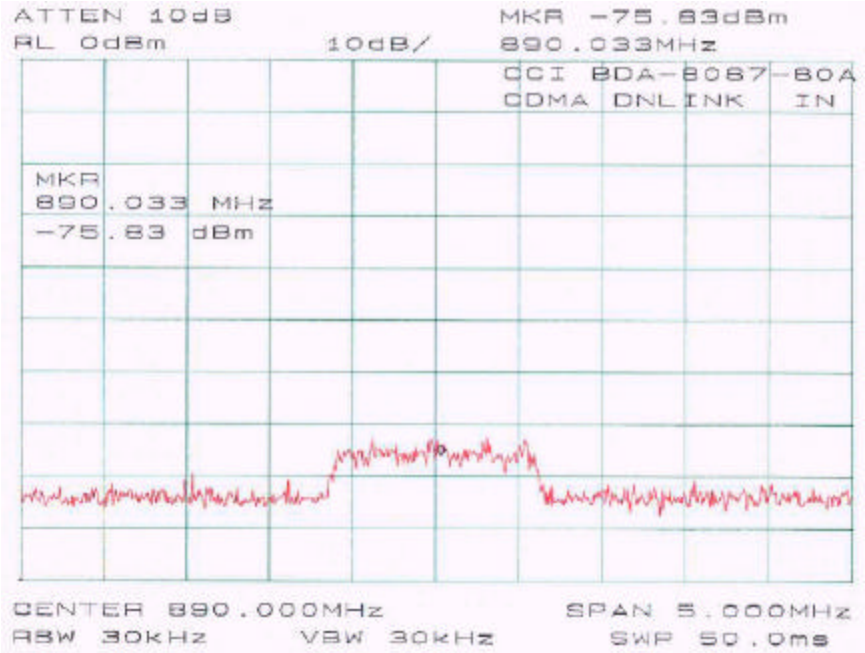
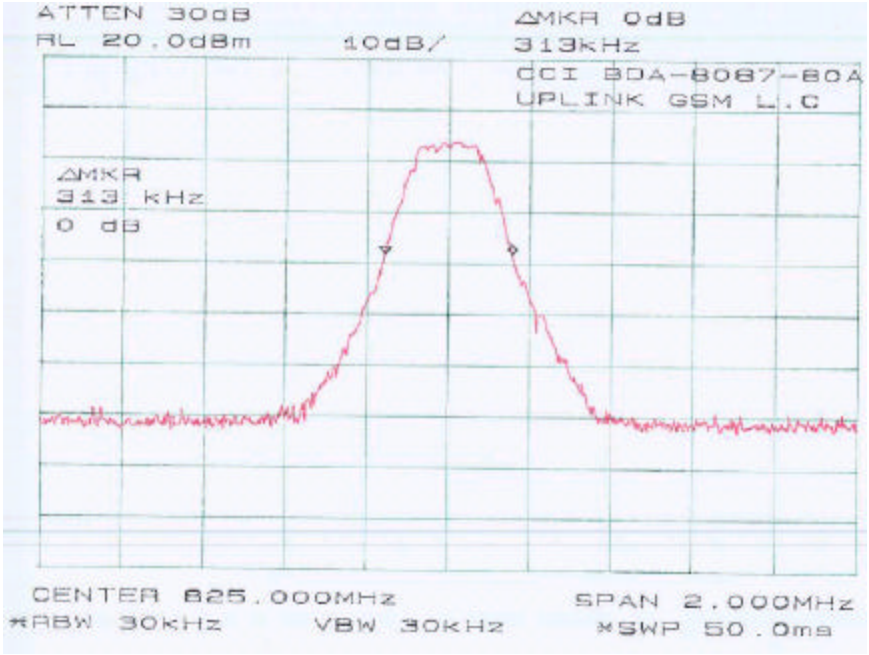
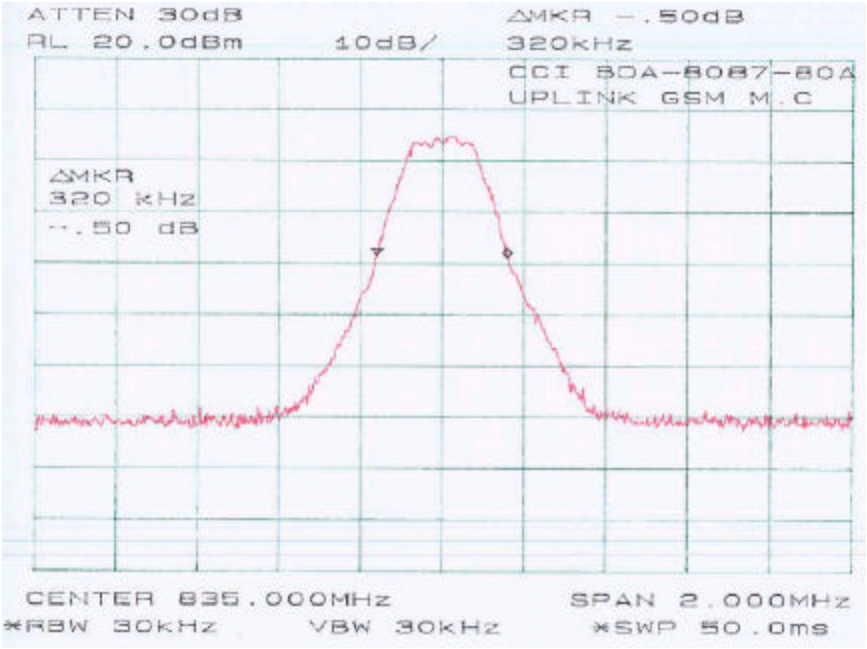
-.84 dB
CENTER 890.000MHz
SPAN 5.000MHz
*RBW 30kHz
VBW 30kHz
*SWP 50.0ms

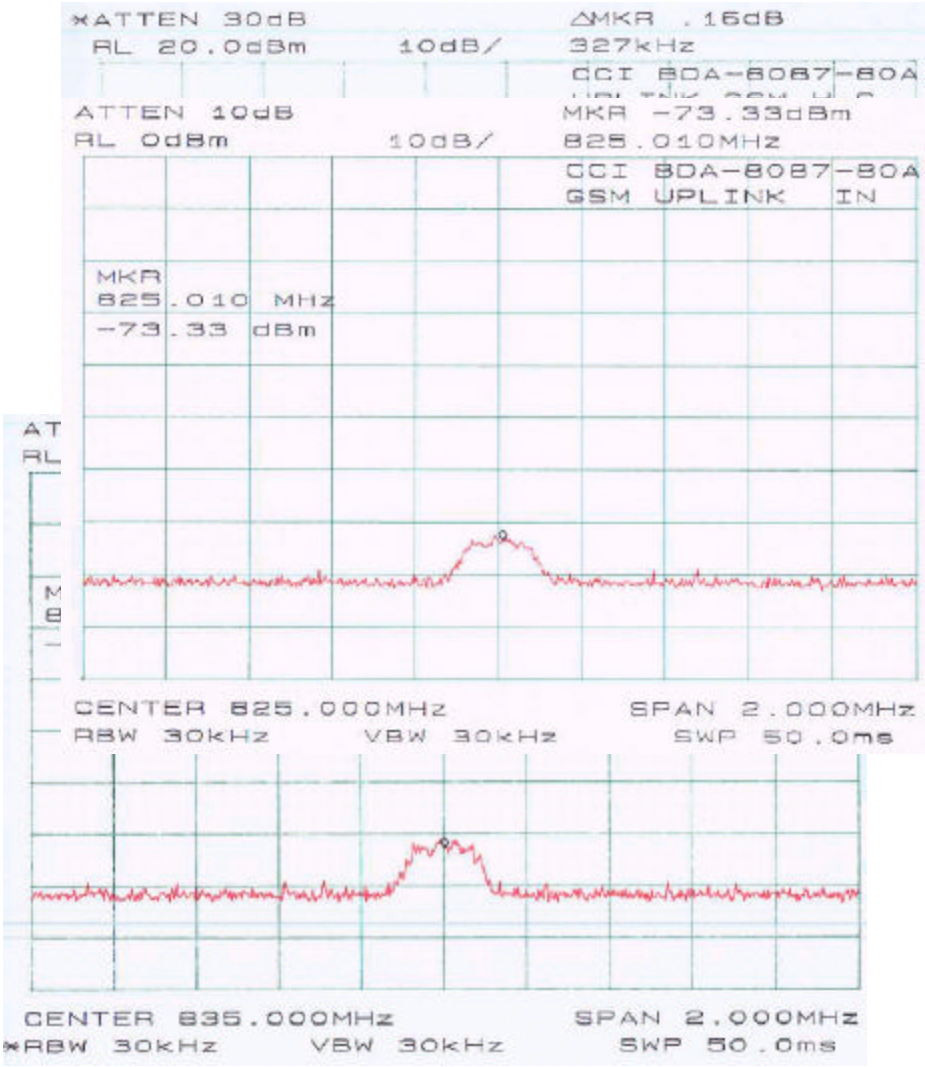

ATTEN 10dB
RL 0dBm
10dB/
MKR -75.33dBm
870.033MHz
CCI BDA-8087-80A
CDMA DNLINK IN
MKR
870.033 MHz
-75.33 dBm
CENTER 870.000MHz
SPAN 5.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms

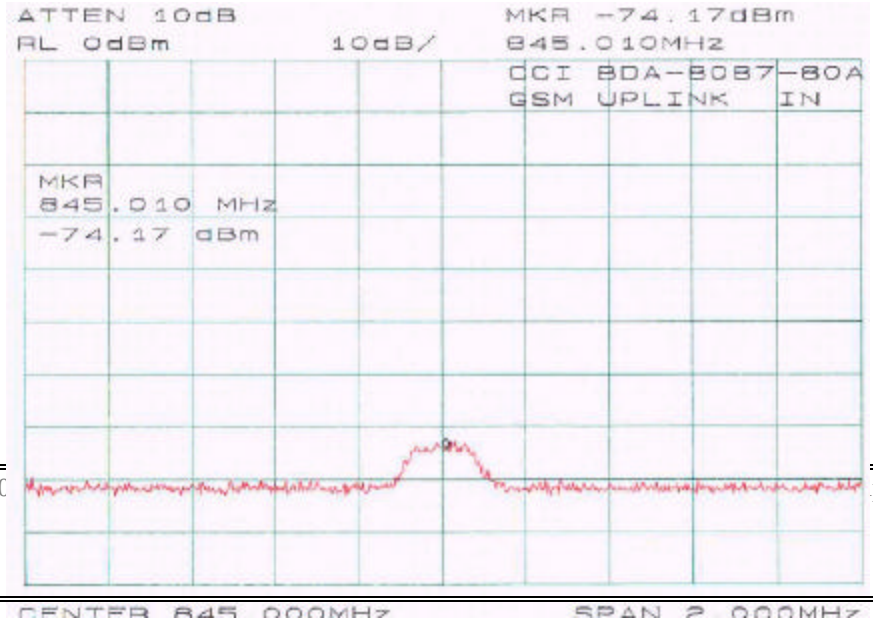

ATTEN 10dB
RL 0dBm
10dB/
MKR -75.33dBm
880.083MHz
CCI BDA-8087-80A
DNLINK CDMA IN
MKR
880.083 MHz
-75.33 dBm
CENTER 880.000MHz
SPAN 5.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

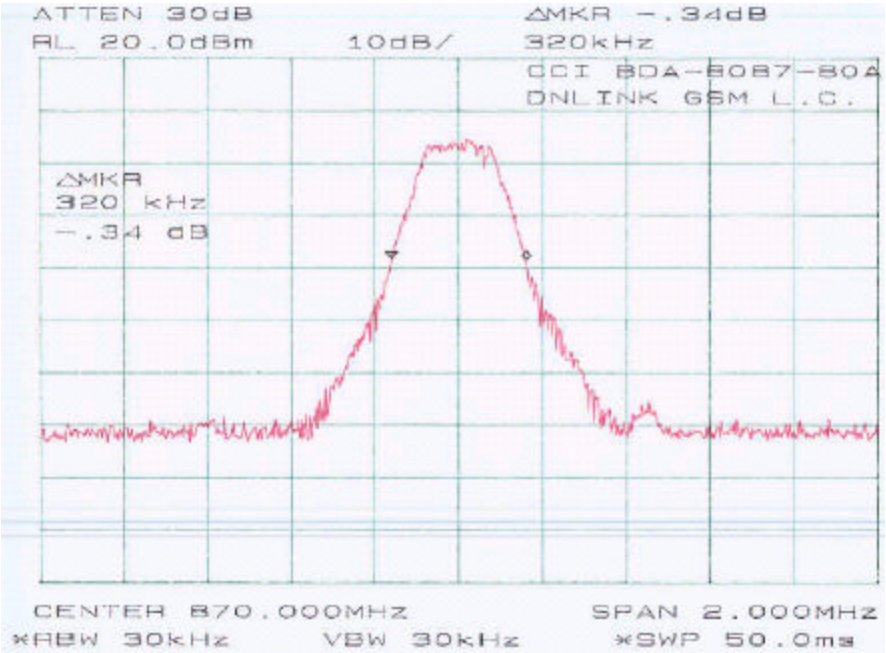

ATTEN 10dB
RL 0dBm
10dB/
MKR -75.83dBm
890.033MHz
CCI BDA-8087-80A
CDMA DNLINK IN
MKR
890.033 MHz
-75.83 dBm
CENTER 890.000MHz
SPAN 5.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms

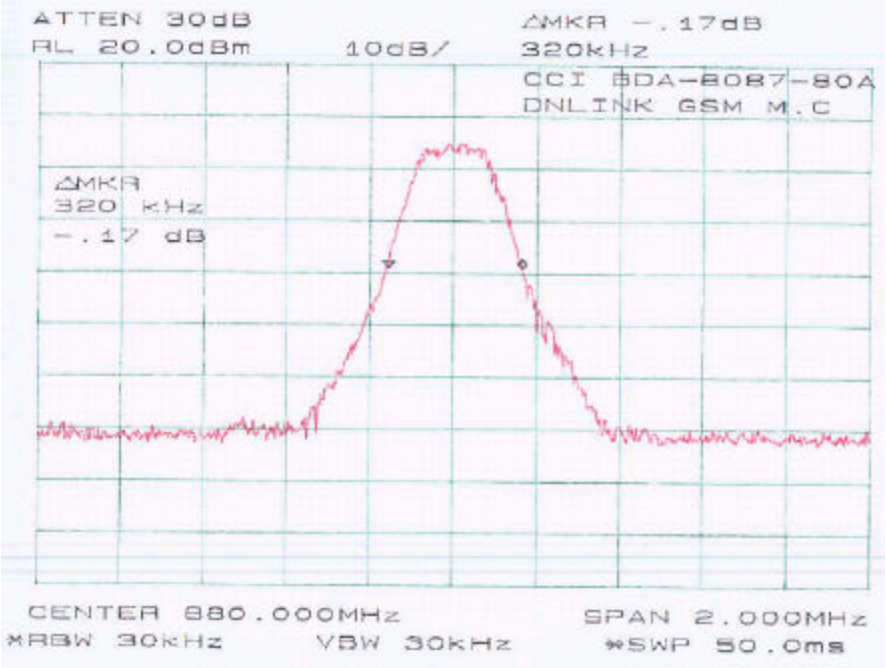

ATTEN 30dB
RL 20.0dBm
10dB/
ΔMKR 0dB
313kHz
CCI BDA-8087-80A
UPLINK GSM L.C
ΔMKR
313 kHz
0 dB
CENTER 825.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
*SWP 50.0ms

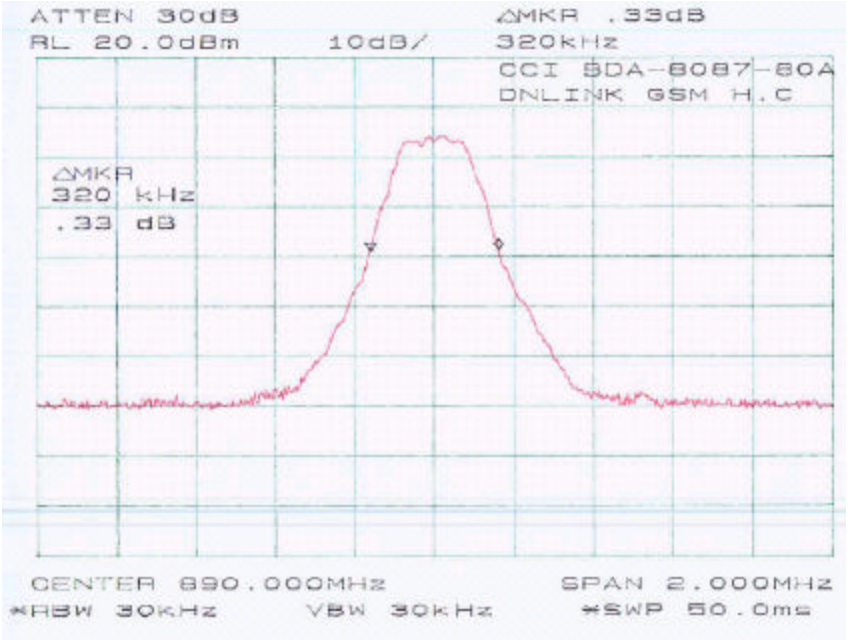

ATTEN 30dB
RL 20.0dBm
10dB/
ΔMKR -.50dB
320kHz
CCI BDA-8087-80A
UPLINK GSM M.C
ΔMKR
320 kHz
-.50 dB
CENTER 835.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
*SWP 50.0ms

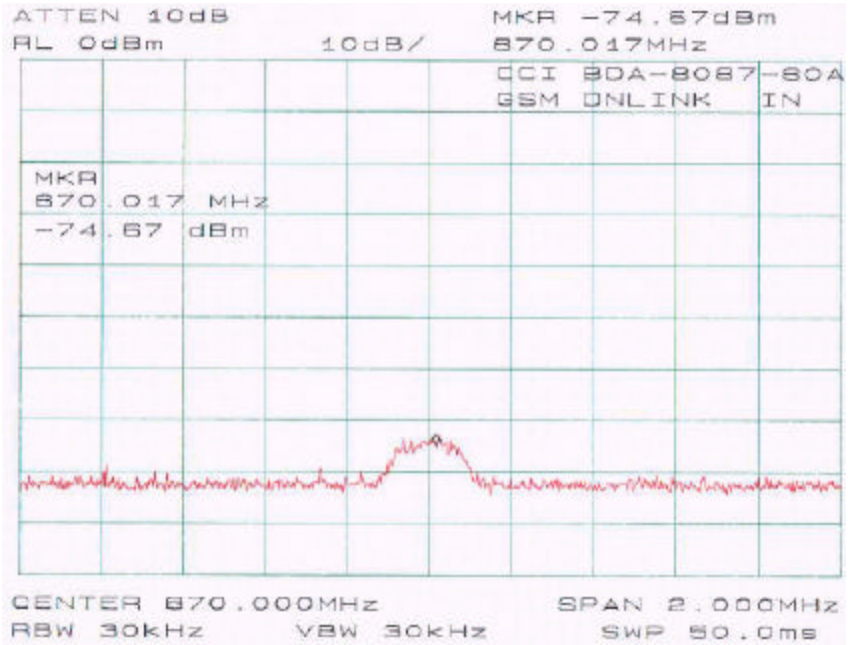

*ATTEN 30dB
RL 20.0dBm 10dB/
ΔMKR .16dB
327kHz
CCI BDA-8087-80A
ATTEN 10dB
RL 0dBm 10dB/
MKR -73.33dBm
825.010MHz
CCI BDA-8087-80A
GSM UPLINK IN
MKR
825.010 MHz
-73.33 dBm
CENTER 825.000MHz
SPAN 2.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms
CENTER 835.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

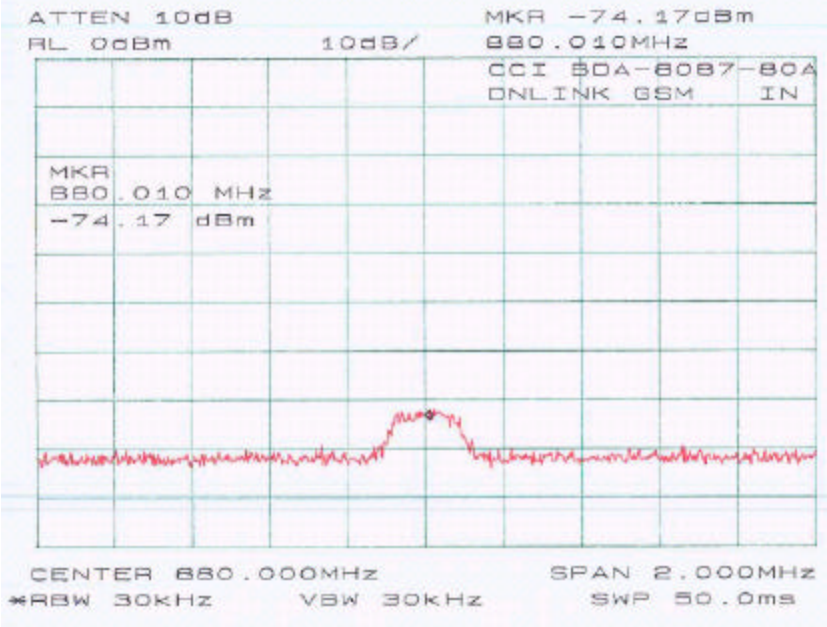

ATTEN 10dB
RL 0dBm 10dB/
MKR -74.17dBm
845.010MHz
CCI BDA-8087-80A
GSM UPLINK IN
MKR
845.010 MHz
-74.17 dBm

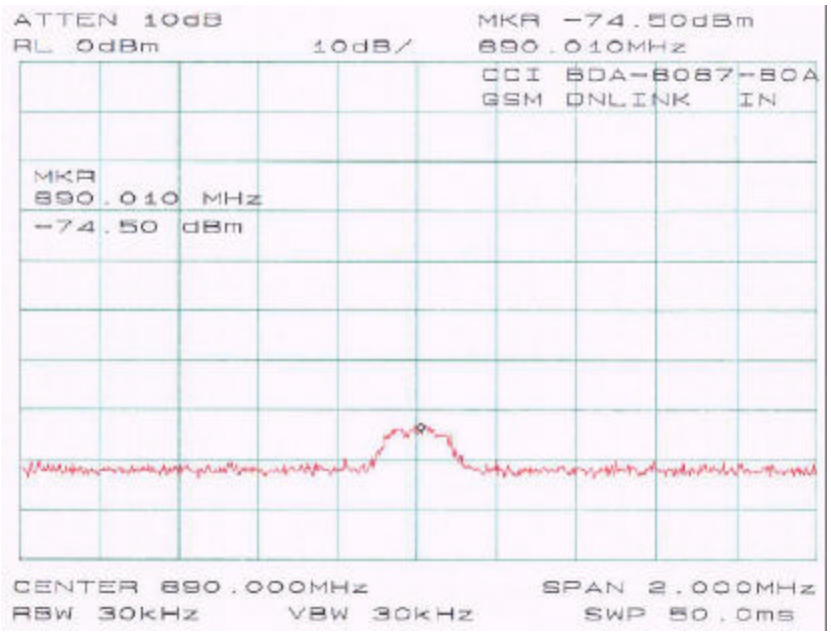

ATTEN 30dB
RL 20.0dBm
10dB/
ΔMKR -.34dB
320kHz
CCI BDA-8087-80A
DNLINK GSM L.C.
ΔMKR
320 kHz
-.34 dB
CENTER 870.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
*SWP 50.0ms

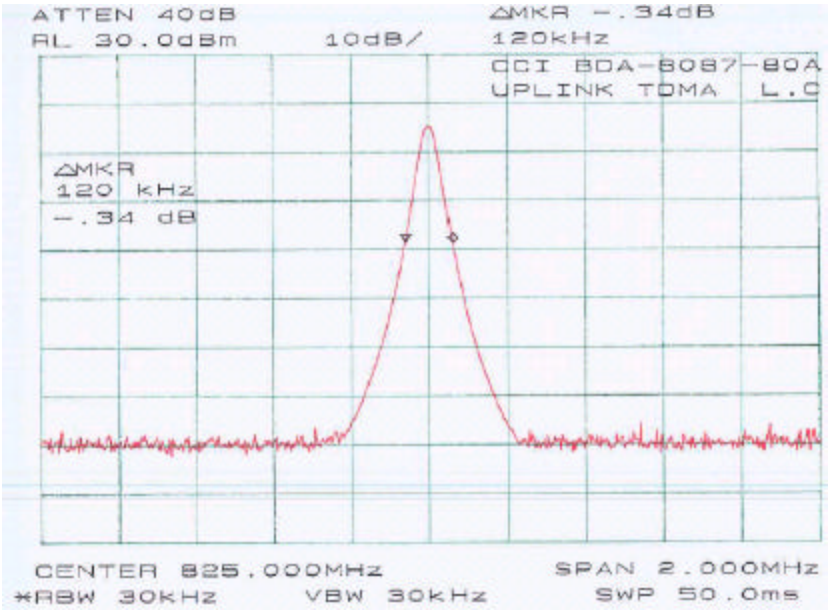

ATTEN 30dB
RL 20.0dBm
10dB/
ΔMKR -.17dB
320kHz
CCI BDA-8087-80A
DNLINK GSM M.C
ΔMKR
320 kHz
-.17 dB
CENTER 880.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
*SWP 50.0ms

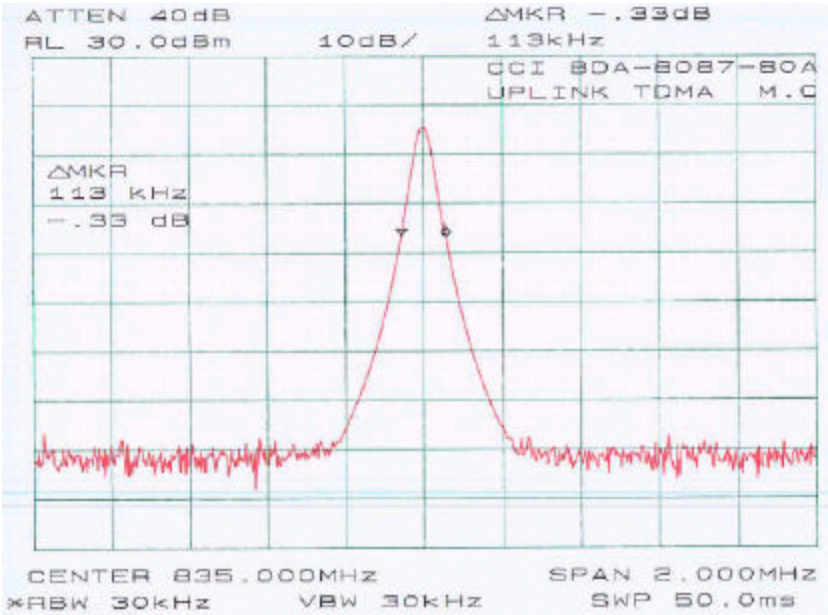

ATTEN 30dB
RL 20.0dBm
10dB/
ΔMKR .33dB
320kHz
CCI BDA-8087-80A
DNLINK GSM H.C
ΔMKR
320 kHz
.33 dB
CENTER 890.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
*SWP 50.0ms

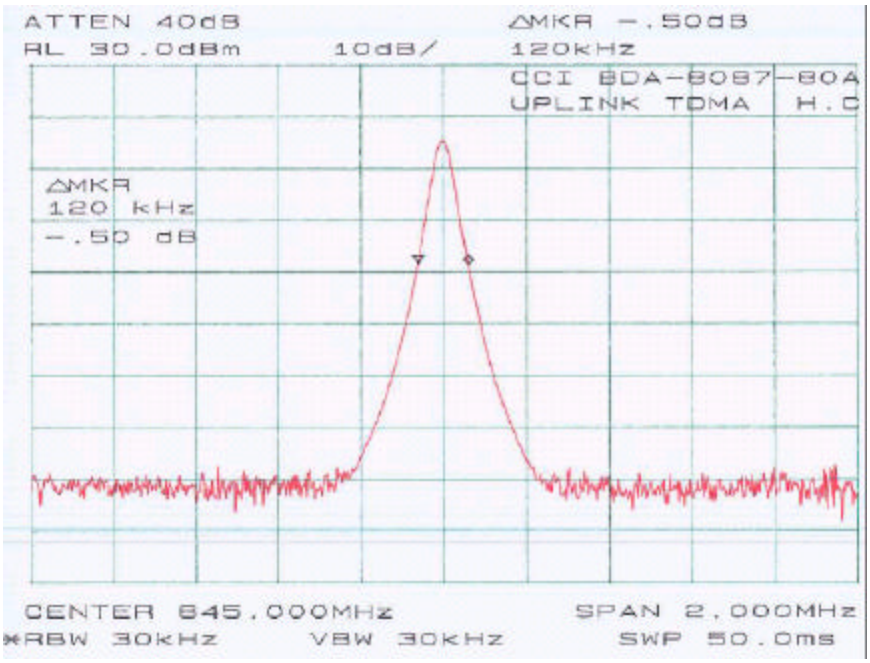

ATTEN 10dB
RL 0dBm
10dB/
MKR -74.67dBm
870.017MHz
CCI BDA-8087-80A
GSM DNLINK IN
MKR
870.017 MHz
-74.67 dBm
CENTER 870.000MHz
SPAN 2.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms

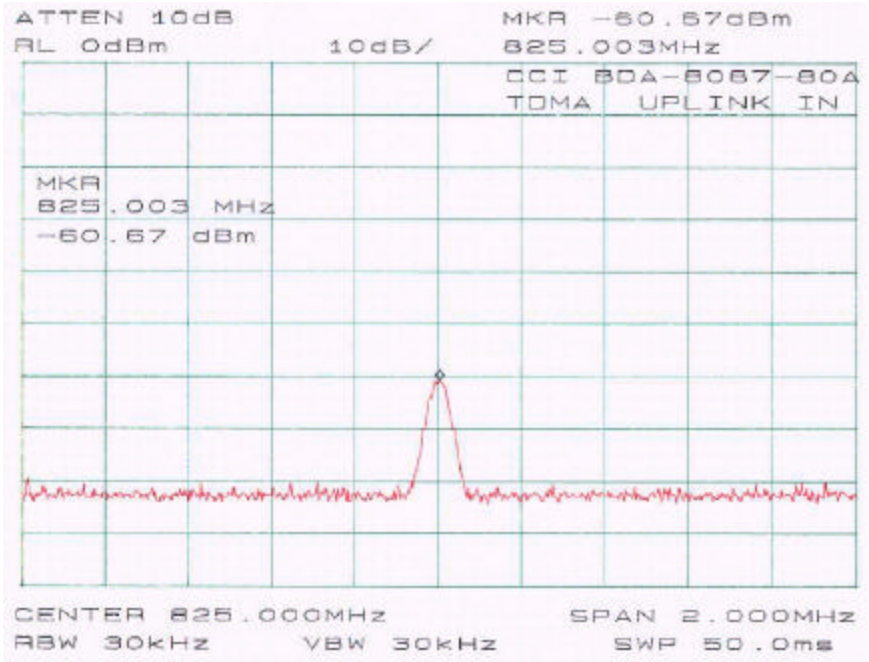

ATTEN 10dB
RL 0dBm
10dB/
MKR -74.17dBm
880.010MHz
CCI BDA-8087-80A
DNLINK GSM IN
MKR
880.010 MHz
-74.17 dBm
CENTER 880.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

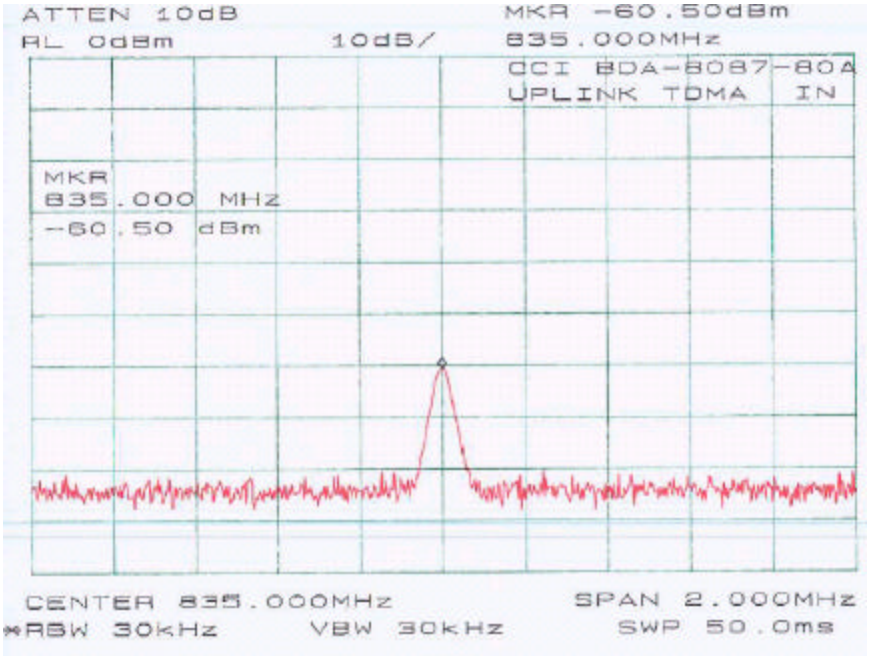

ATTEN 10dB
RL 0dBm
10dB/
MKR -74.50dBm
890.010MHz
CCI BDA-8087-80A
GSM DNLINK IN
MKR
890.010 MHz
-74.50 dBm
CENTER 890.000MHz
SPAN 2.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms

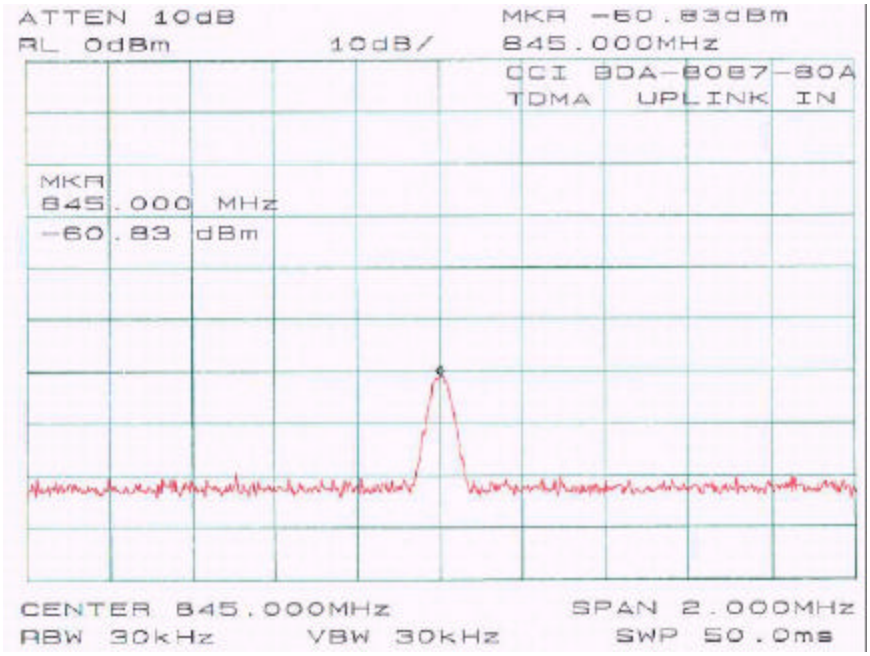

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.34dB
120kHz
CCI BDA-8087-80A
UPLINK TDMA L.C
ΔMKR
120 kHz
-.34 dB
CENTER 825.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

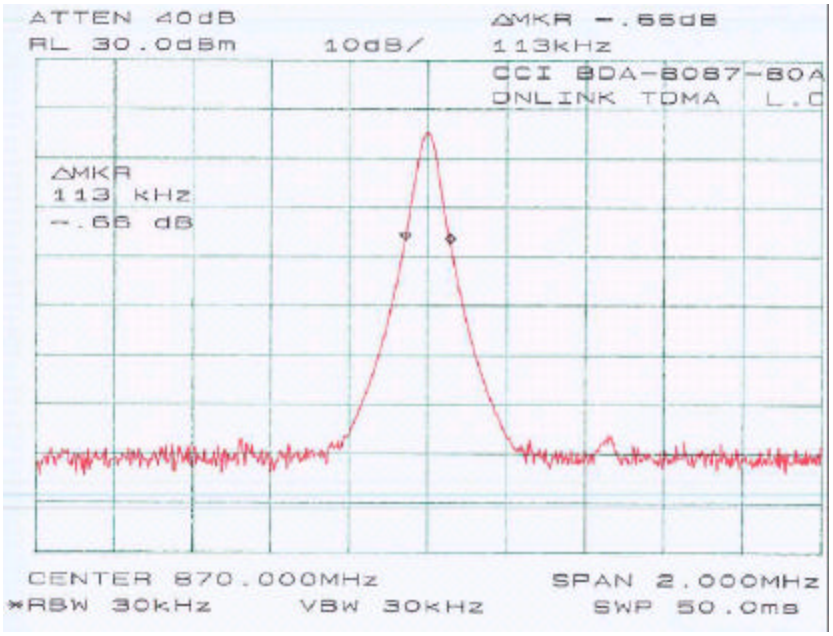

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.33dB
113kHz
CCI BDA-8087-80A
UPLINK TDMA M.C
ΔMKR
113 kHz
-.33 dB
CENTER 835.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

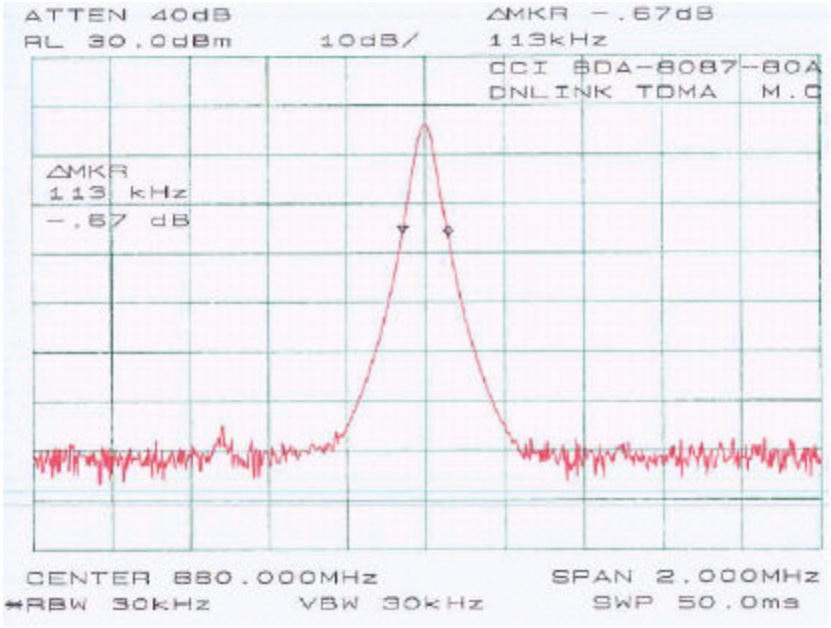

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.50dB
120kHz
CCI BDA-8087-80A
UPLINK TDMA H.C
ΔMKR
120 kHz
-.50 dB
CENTER 845.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

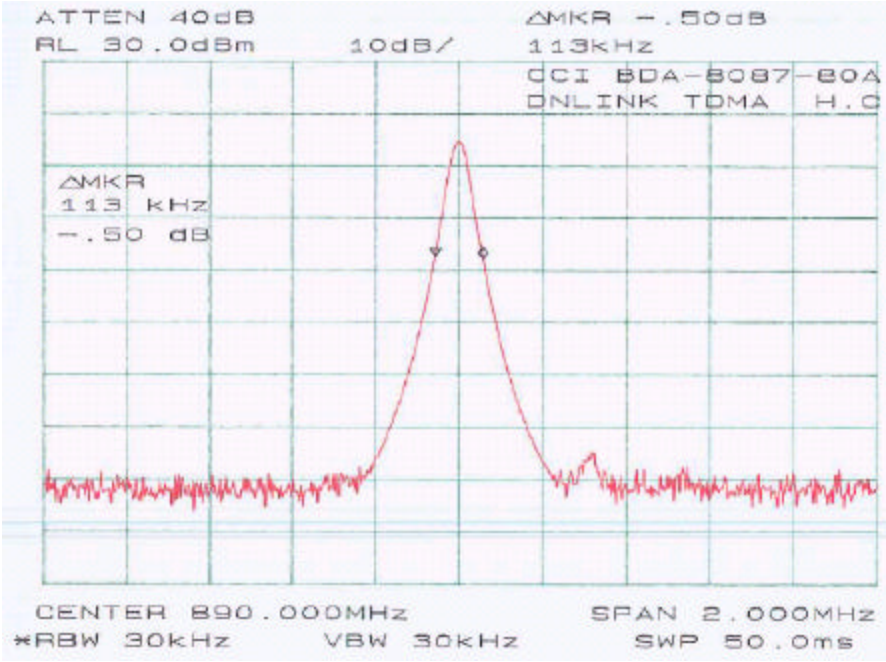

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.67dBm
825.003MHz
CCI BDA-8087-80A
TDMA UPLINK IN
MKR
825.003 MHz
-60.67 dBm
CENTER 825.000MHz
SPAN 2.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms

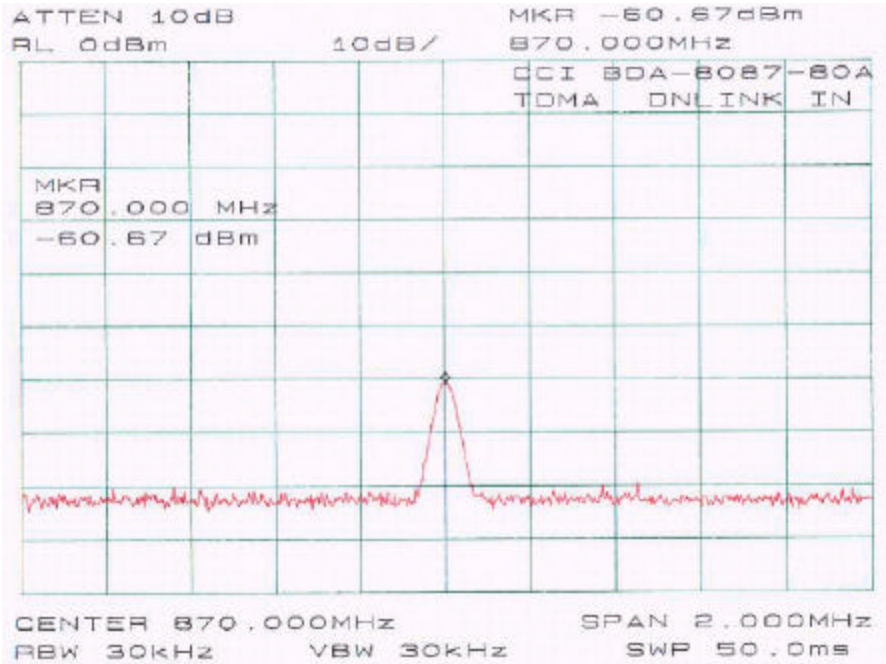

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.50dBm
835.000MHz
CCI BDA-8087-80A
UPLINK TDMA IN
MKR
835.000 MHz
-60.50 dBm
CENTER 835.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

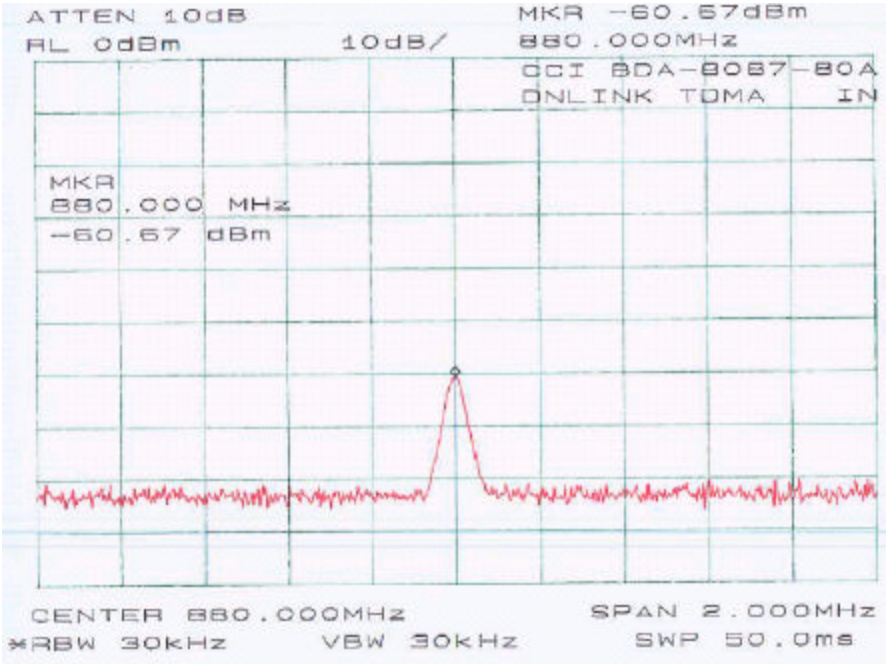

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.83dBm
845.000MHz
CCI BDA-8087-80A
TDMA UPLINK IN
MKR
845.000 MHz
-60.83 dBm
CENTER 845.000MHz
SPAN 2.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms

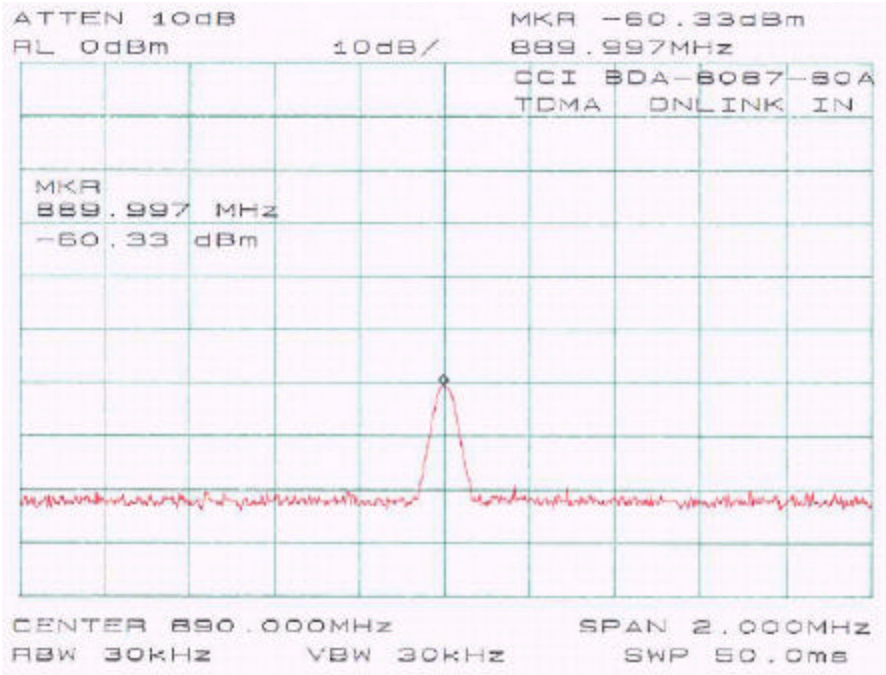

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.66dB
113kHz
CCI BDA-8087-80A
DNLINK TDMA L.C
ΔMKR
113 kHz
-.66 dB
CENTER 870.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

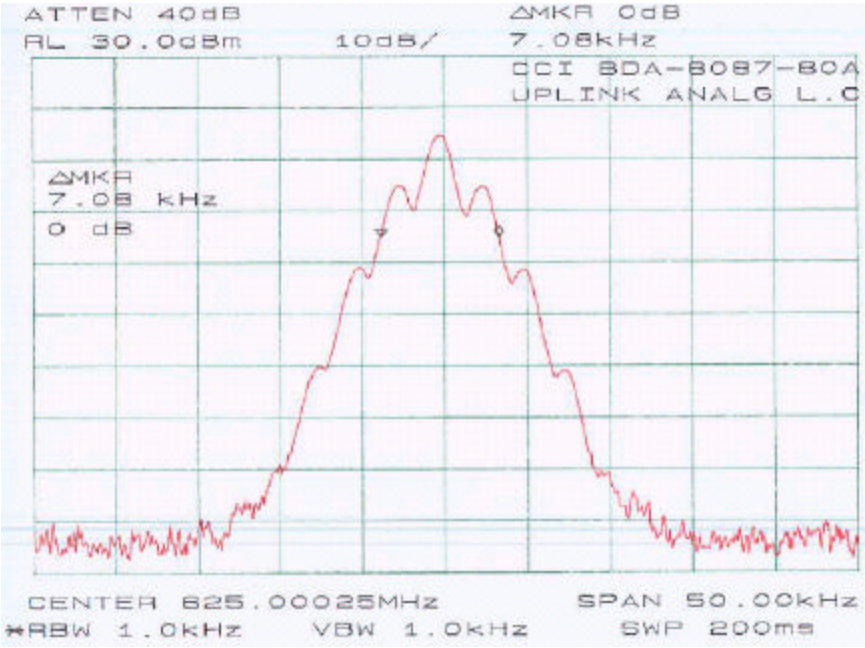

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.67dB
113kHz
CCI BDA-8087-80A
DNLINK TDMA M.C
ΔMKR
113 kHz
-.67 dB
CENTER 880.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

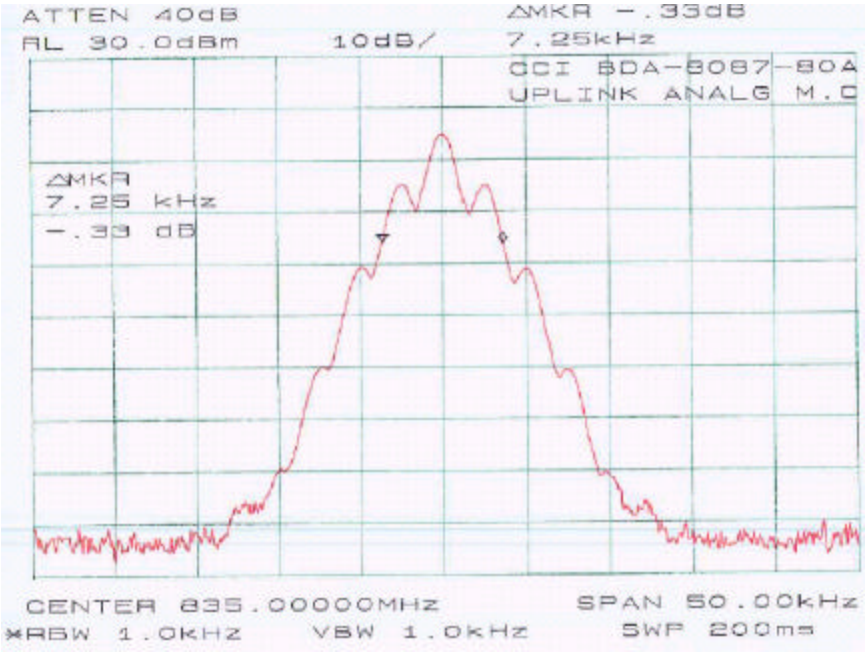

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.50dB
113kHz
CCI BDA-8087-80A
DNLINK TDMA H.C
ΔMKR
113 kHz
-.50 dB
CENTER 890.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

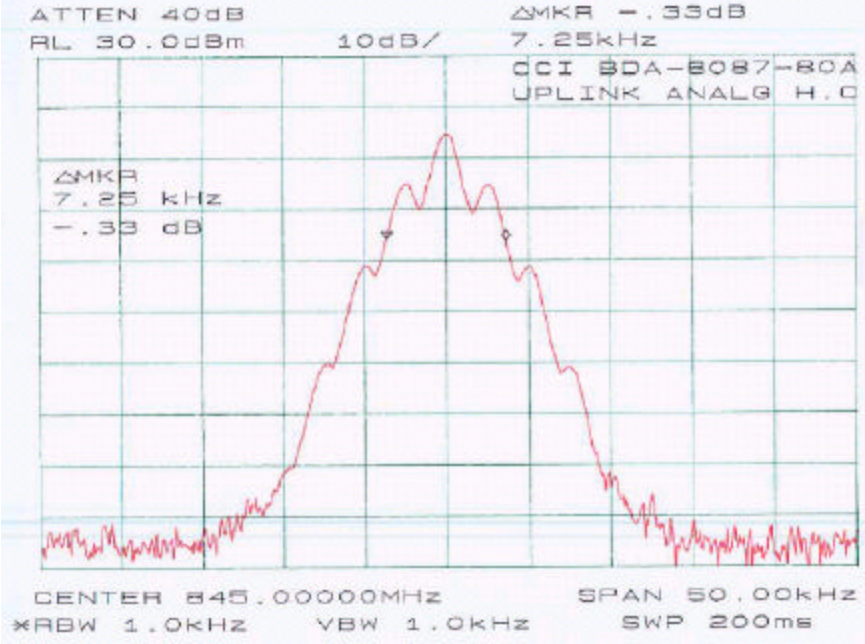

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.67dBm
870.000MHz
CCI BDA-8087-80A
TDMA DNLINK IN
MKR
870.000 MHz
-60.67 dBm
CENTER 870.000MHz
SPAN 2.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms

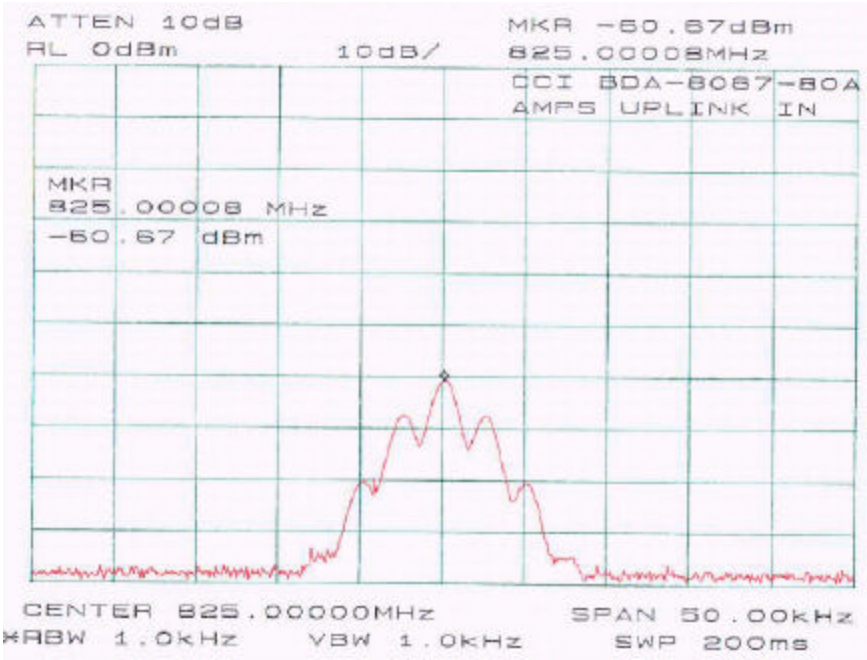

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.67dBm
880.000MHz
CCI BDA-8087-80A
DNLINK TDMA IN
MKR
880.000 MHz
-60.67 dBm
CENTER 880.000MHz
SPAN 2.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms

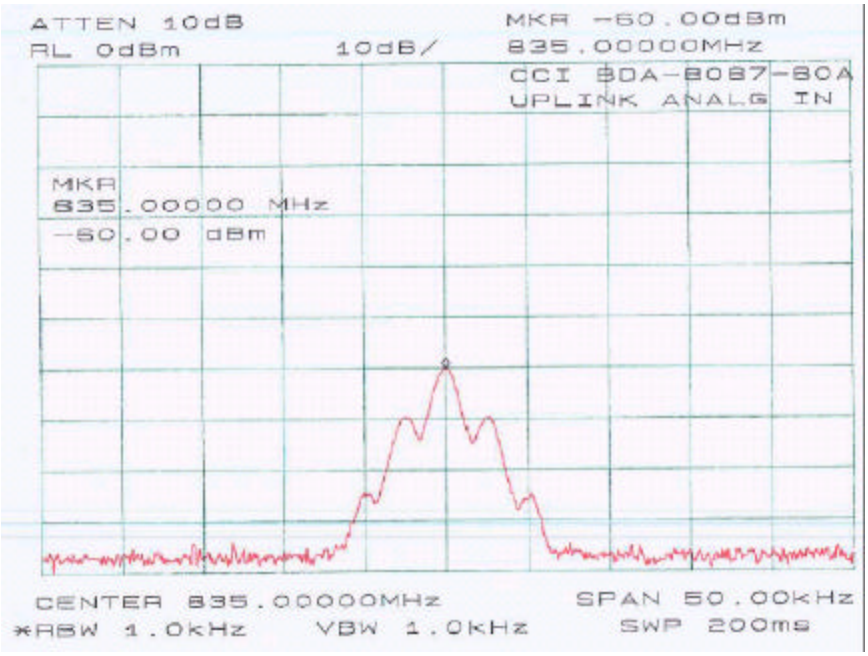

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.33dBm
889.997MHz
CCI BDA-8087-80A
TDMA DNLINK IN
MKR
889.997 MHz
-60.33 dBm
CENTER 890.000MHz
SPAN 2.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms

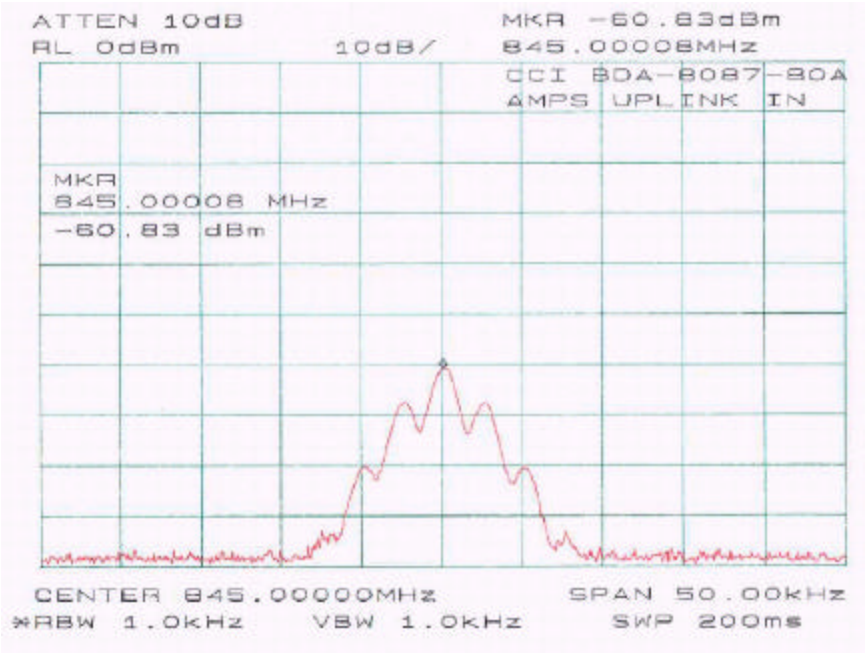

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR 0dB
7.08kHz
CCI BDA-8087-80A
UPLINK ANALG L.C
ΔMKR
7.08 kHz
0 dB
CENTER 825.00025MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

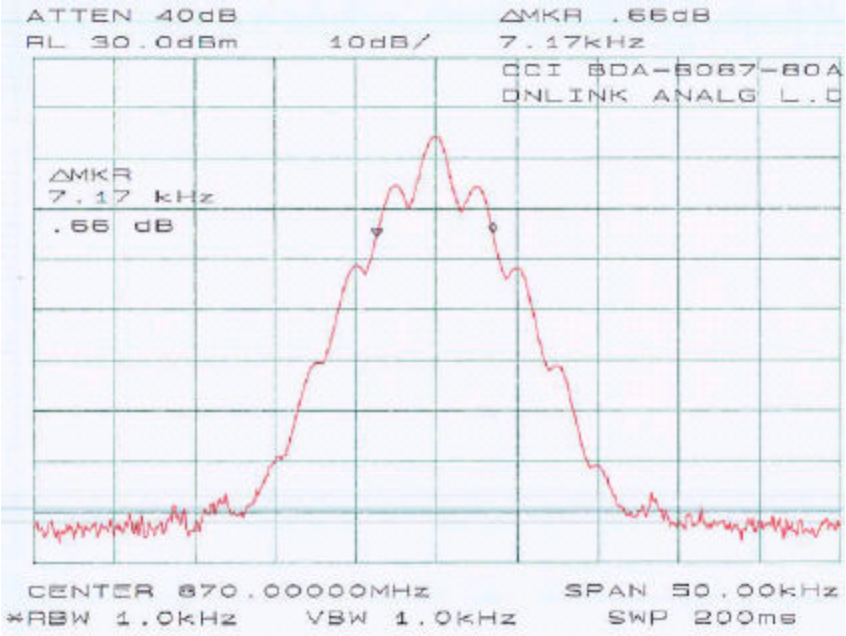

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.33dB
7.25kHz
CCI BDA-8087-80A
UPLINK ANALG M.C
ΔMKR
7.25 kHz
-.33 dB
CENTER 835.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

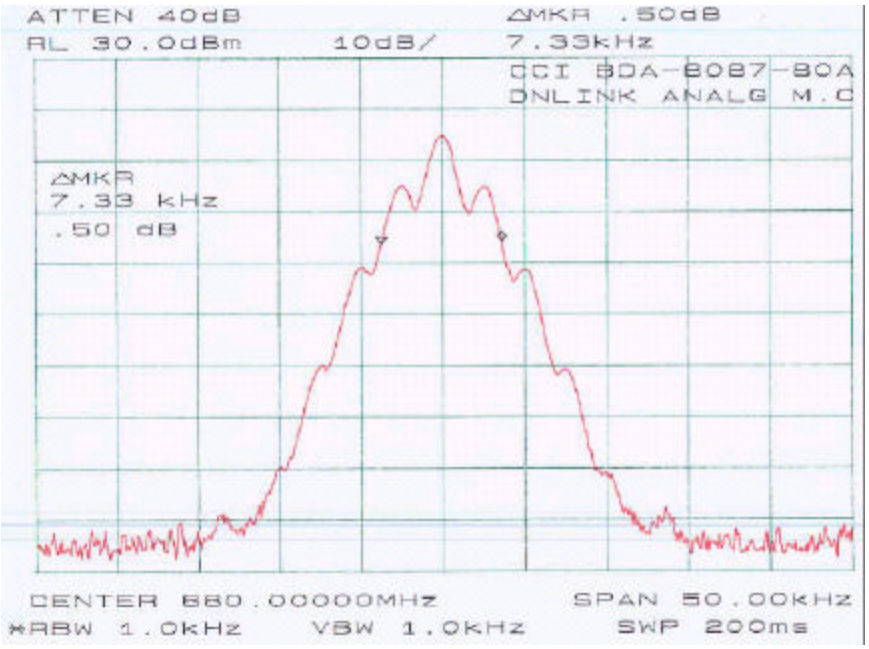

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.33dB
7.25kHz
CCI BDA-8087-80A
UPLINK ANALG H.C
ΔMKR
7.25 kHz
-.33 dB
CENTER 845.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

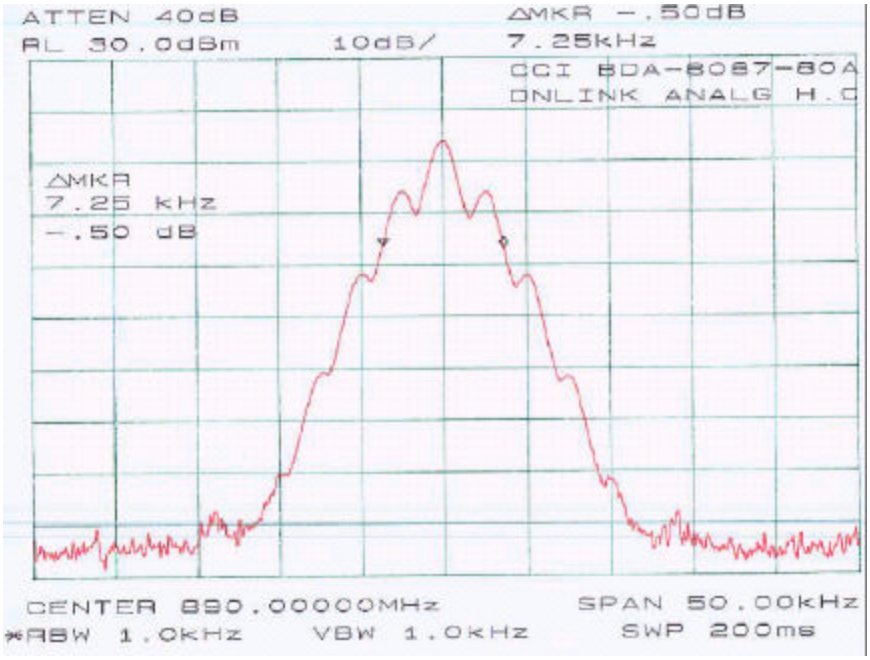

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.67dBm
825.00008MHz
CCI BDA-8087-80A
AMPS UPLINK IN
MKR
825.00008 MHz
-60.67 dBm
CENTER 825.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

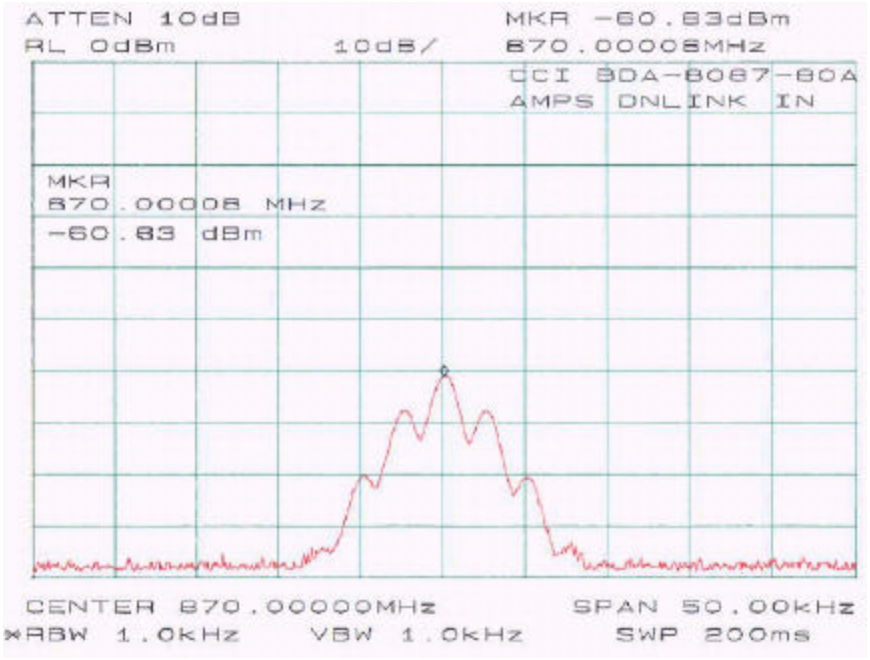

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.00dBm
835.00000MHz
CCI BDA-8087-80A
UPLINK ANALG IN
MKR
835.00000 MHz
-60.00 dBm
CENTER 835.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

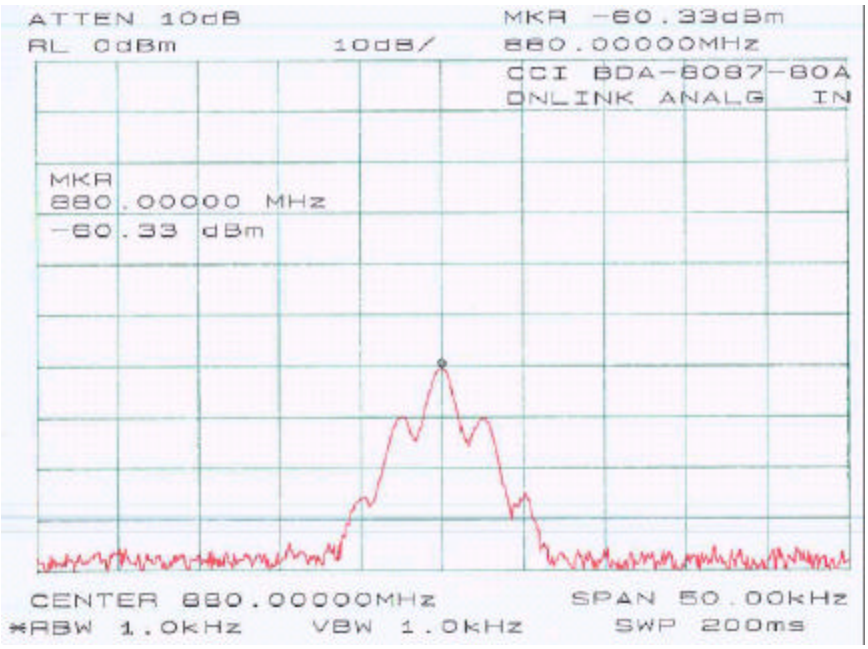

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.83dBm
845.00008MHz
CCI BDA-8087-80A
AMPS UPLINK IN
MKR
845.00008 MHz
-60.83 dBm
CENTER 845.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

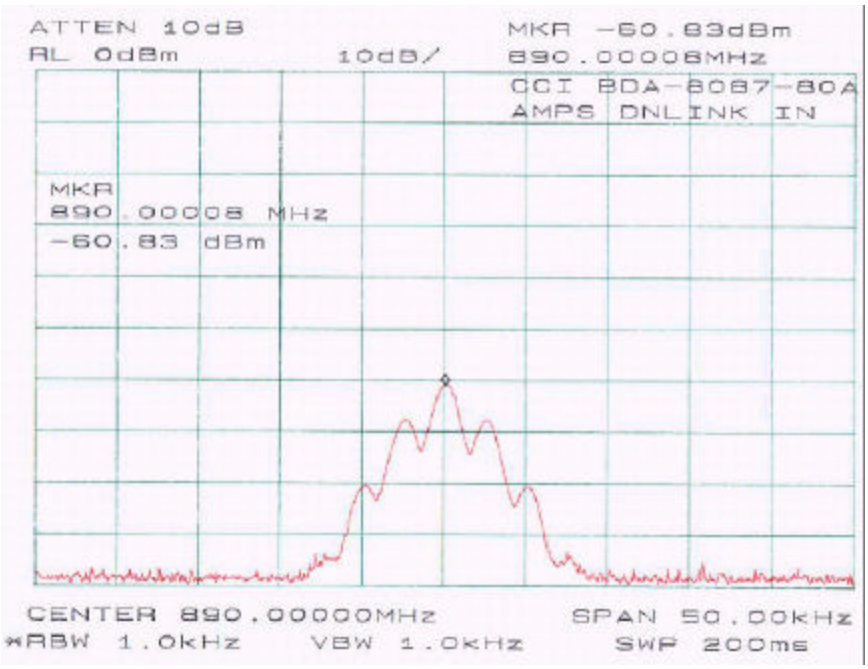

ATTEN 40dB
RL 30.0dBm 10dB/
ΔMKR .66dB
7.17kHz
CCI BDA-8087-80A
DNLINK ANALG L.C
ΔMKR
7.17 kHz
.66 dB
CENTER 870.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

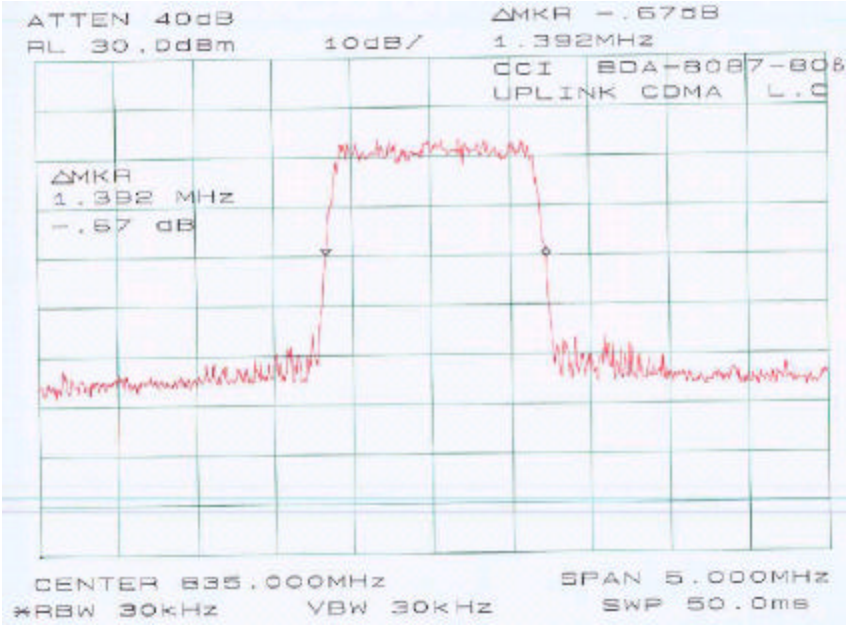

ATTEN 40dB
RL 30.0dBm 10dB/
ΔMKR .50dB
7.33kHz
CCI BDA-8087-80A
DNLINK ANALG M.C
ΔMKR
7.33 kHz
.50 dB
CENTER 880.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

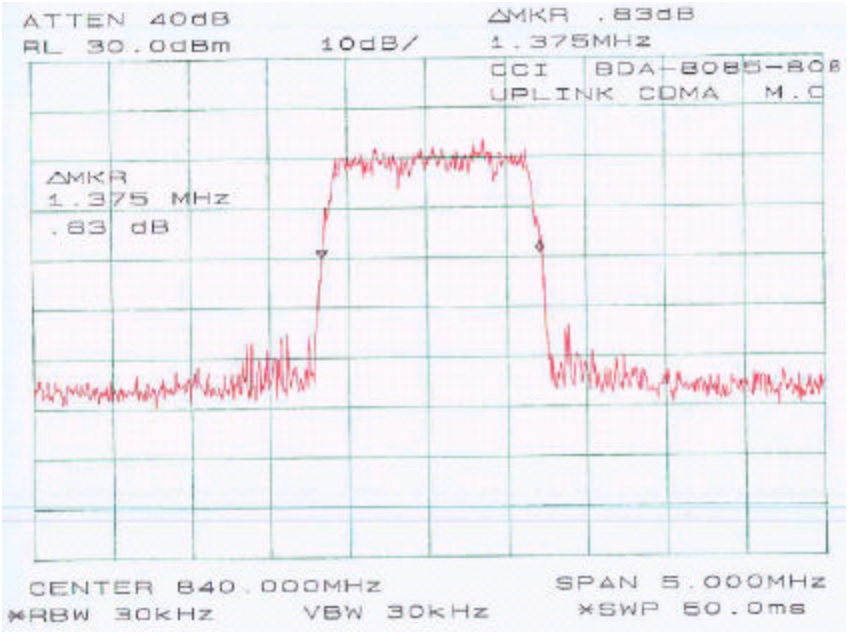

ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.50dB
7.25kHz
CCI BDA-8087-80A
DNLINK ANALG H.C
ΔMKR
7.25 kHz
-.50 dB
CENTER 890.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

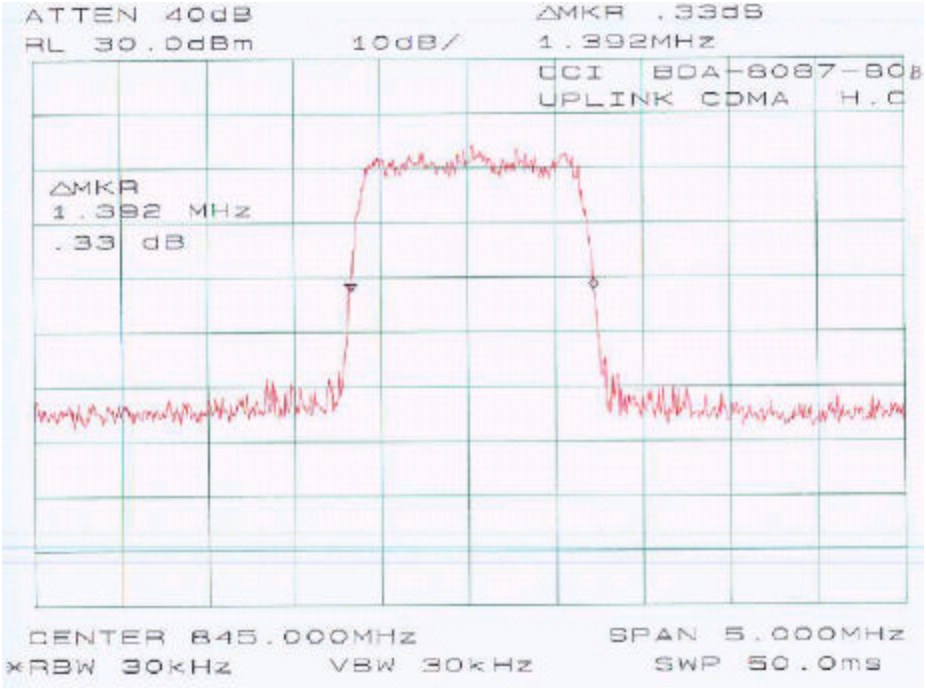

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.83dBm
870.00008MHz
CCI BDA-8087-80A
AMPS DNLINK IN
MKR
870.00008 MHz
-60.83 dBm
CENTER 870.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms

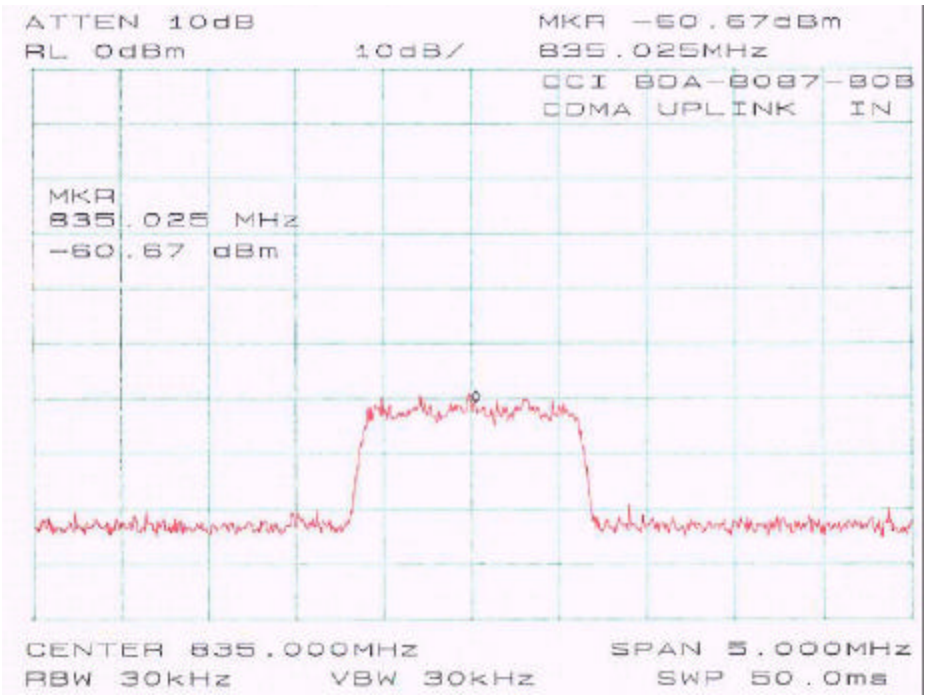

ATTEN 10dB
RL 0dBm
10dB/
MKR -60.33dBm
880.00000MHz
CCI BDA-8087-80A
DNLINK ANALG IN
MKR
880.00000 MHz
-60.33 dBm
CENTER 880.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms


ATTEN 10dB
RL 0dBm
10dB/
MKR -60.83dBm
890.00008MHz
CCI BDA-8087-80A
AMPS DNLINK IN
MKR
890.00008 MHz
-60.83 dBm
CENTER 890.00000MHz
SPAN 50.00kHz
*RBW 1.0kHz
VBW 1.0kHz
SWP 200ms


ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR -.67dB
1.392MHz
CCI BDA-8087-80
UPLINK CDMA L.C
ΔMKR
1.392 MHz
-.67 dB
CENTER 835.000MHz
SPAN 5.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms


ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR .83dB
1.375MHz
CCI BDA-8085-80
UPLINK CDMA M.C
ΔMKR
1.375 MHz
.83 dB
CENTER 840.000MHz
SPAN 5.000MHz
*RBW 30kHz
VBW 30kHz
*SWP 50.0ms


ATTEN 40dB
RL 30.0dBm
10dB/
ΔMKR .33dB
1.392MHz
CCI BDA-8087-80B
UPLINK CDMA H.C
ΔMKR
1.392 MHz
.33 dB
CENTER 845.000MHz
SPAN 5.000MHz
*RBW 30kHz
VBW 30kHz
SWP 50.0ms


ATTEN 10dB
RL 0dBm
10dB/
MKR -60.67dBm
835.025MHz
CCI BDA-8087-80B
CDMA UPLINK IN
MKR
835.025 MHz
-60.67 dBm
CENTER 835.000MHz
SPAN 5.000MHz
RBW 30kHz
VBW 30kHz
SWP 50.0ms