



TESTING

CERT #803.01, 803.02, 803.05, 803.06

CELLYNX GROUP, INC. TEST REPORT

FOR THE

MOBILE CELLULAR BOOSTER, MD015A

FCC PART 15 SUBPART B SECTIONS 15.107 AND 15.109 CLASS B

TESTING

DATE OF ISSUE: JULY 13, 2009

PREPARED FOR:

Cellynx Group, Inc.
5047 Robert J. Matthews
El Dorado Hills, CA 95762

W.O. No.: 89227

PREPARED BY:

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CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Date of test: July 8, 2009

Report No.: FC09-114

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ADMINISTRATIVE INFORMATION

DATE OF TEST: July 8, 2009

DATE OF RECEIPT: July 8, 2009

REPRESENTATIVE: Michael Cecil

MANUFACTURER:

Cellynx Group, Inc.
5047 Robert J. Matthews
El Dorado Hills, CA 95762

TEST LOCATION:

CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

TEST METHOD: ANSI C63.4 (2003)

PURPOSE OF TEST: To perform testing of the Mobile Cellular Booster, MD015A with the requirements for FCC Part 15 Subpart B Sections 15.107 and 15.109 Class B devices.

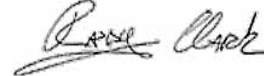
APPROVALS

QUALITY ASSURANCE:

A handwritten signature in black ink, appearing to read "Steve Behm".

Steve Behm, Director of Engineering Services

TEST PERSONNEL:

A handwritten signature in black ink, appearing to read "Randy Clark".

Randy Clark, EMC Engineer

SITE FILE REGISTRATION NUMBERS

Location	Japan	Canada	FCC
Mariposa A	R-563, C-578 & T-1492	3082A-2	90477

SUMMARY OF RESULTS

Test	Specification	Results
Conducted Emissions	FCC Part 15 Subpart B Section 15.107 Class B	Pass
Radiated Emissions	FCC Part 15 Subpart B Section 15.109 Class B	Pass

CONDITIONS DURING TESTING

No modifications to the EUT were necessary during testing.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

Mobile Cellular Booster

Manuf: Cellynx
Model: MD015A
Serial: 09262100003

Phone Dock External Antenna

Manuf: Cellynx
Model: MC016A
Serial: 09262100003

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Power Supply

Manuf: Sceptre Power
Model: S012BU1200100
Serial: NA

Cell Phone

Manuf: T-Mobile
Model: Black Berry 7100t
Serial: 354529001844620

Signal Generator

Manuf: Agilent
Model: E4437B
Serial: US39260159

DC Power Supply

Manuf: Zurich
Model: DS-304M
Serial: NA

MEASUREMENT UNCERTAINTIES

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

The reported measurement uncertainties are calculated based on the worst case of all laboratory environments from CKC Laboratories, Inc. test sites. Only those parameters which require estimation of measurement uncertainty are reported. The reported worst case measurement uncertainty is less than the maximum values derived in CISPR 16-4-2. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k=2$. Compliance is deemed to occur provided measurements are below the specified limits.

REPORT OF EMISSIONS MEASUREMENTS

TESTING PARAMETERS

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in $\text{dB}\mu\text{V}/\text{m}$, the spectrum analyzer reading in $\text{dB}\mu\text{V}$ was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS		
	Meter reading	(dB μ V)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dB μ V/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. The following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. When conducted emissions testing was performed, a 10 dB external attenuator was used with internal offset correction in the analyzer.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the highest readings, this is indicated as a "QP" or an "Ave" on the appropriate rows of the data sheets. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer/receiver readings recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the measuring device called "peak hold," the measuring device had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the quasi-peak detector.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer/receiver. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.

CONDUCTED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **Cellynx Group**
 Specification: **FCC 15.107(a) Class B - AVE**
 Work Order #: **89227**
 Test Type: **Conducted Emissions**
 Equipment: **Mobile Cellular Booster**
 Manufacturer: Cellynx
 Model: MD015A
 S/N: 09262100003

Date: 7/8/2009
 Time: 14:14:11
 Sequence#: 23
 Tested By: Randal Clark
 120V 60Hz

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A	US44300507	07/08/2008	07/08/2010	AN02660
Site A conducted cable set	na	05/10/2009	05/10/2011	MACOND
LISN Model 8028-50- TS-24-BNC	901235 & 903750	04/22/2009	04/22/2011	AN00374
TTE High Pass Filter	G7753	01/22/2008	01/22/2010	AN02609
10 dB Attn	N/A	01/22/2009	01/22/2011	ANP05624
Attenuator	CKC02229	05/20/2009	05/20/2011	P02229

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Mobile Cellular Booster*	Cellynx	MD015A	09262100003
Phone Dock External Antenna	Cellynx	MC016A	09262100003

Support Devices:

Function	Manufacturer	Model #	S/N
Cell Phone	T-Mobile	Black Berry 7100t	354529001844620
DC Power Supply	Zurich	DS-304M	NA
Signal Generator	Agilent	E4437B	US39260159

Test Conditions / Notes:

Equipment is a bidirectional mobile cellular booster amplifier operating on 824-849 paired with 869-894 MHz and 1850-1910 paired with 1930-1990 MHz. The equipment is connected directly to a signal generator source to the external antenna port. The signal generator is set to provide a CW signal at -20dBm output at 1960MHz. The signal generator is located below the floor. The equipment is powered via AC/DC power supply. The phone dock external antenna is connected to the phone dock port. DC power is delivered from the main enclosure to the phone dock. The cell phone is to provide a load for the USB charging port on the external phone dock. All user accessible ports are filled. The service port is not loaded because this is for maintenance only, not accessible to the end user in production units.

Bandwidths used: CISPR

Frequency Range Investigated: 150kHz to 30MHz

Temperature: 25°C

Rel Humidity: 40%

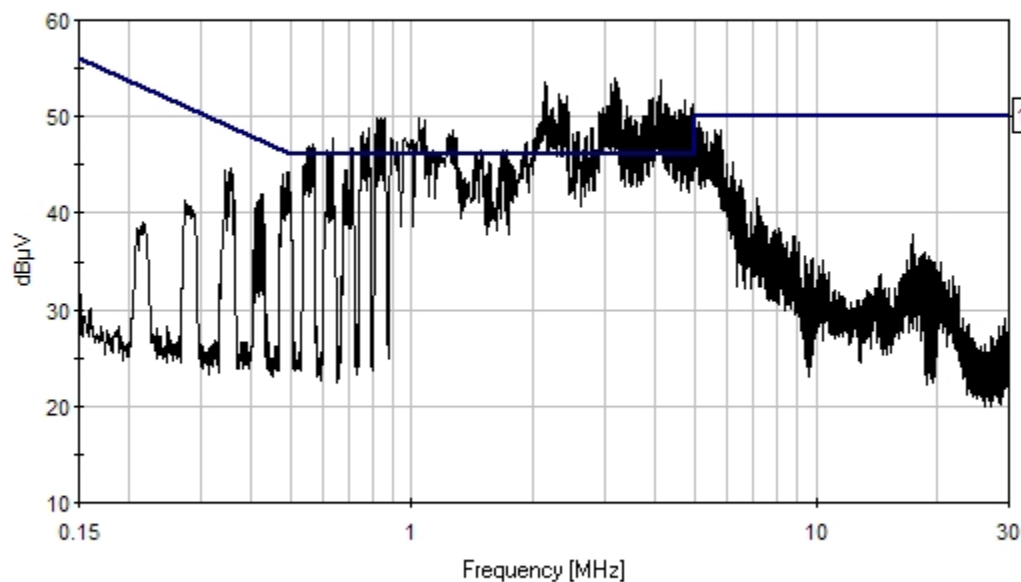
Transducer Legend:

T1=MACOND	T2=ATT-ANP02229-052009-10dB
T3=CDN-AN00374-042209-BK	T4=Filter 150kHz HP AN02609

Measurement Data:		Reading listed by margin.						Test Lead: Line			
#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	713.595k	17.3	+0.3	+9.9	+0.0	+0.3	+0.0	27.8	46.0	-18.2	Line
	Ave										
^	713.600k	39.2	+0.3	+9.9	+0.0	+0.3	+0.0	49.7	46.0	+3.7	Line
3	3.215M	16.5	+0.5	+9.9	+0.1	+0.1	+0.0	27.1	46.0	-18.9	Line
	Ave										
^	3.215M	39.7	+0.5	+9.9	+0.1	+0.1	+0.0	50.3	46.0	+4.3	Line
5	2.204M	16.3	+0.4	+9.9	+0.1	+0.2	+0.0	26.9	46.0	-19.1	Line
	Ave										
^	2.204M	40.4	+0.4	+9.9	+0.1	+0.2	+0.0	51.0	46.0	+5.0	Line
7	4.868M	15.3	+0.6	+9.9	+0.1	+0.1	+0.0	26.0	46.0	-20.0	Line
	Ave										
^	4.868M	40.7	+0.6	+9.9	+0.1	+0.1	+0.0	51.4	46.0	+5.4	Line
9	4.499M	15.2	+0.6	+9.9	+0.1	+0.1	+0.0	25.9	46.0	-20.1	Line
	Ave										
^	4.499M	42.5	+0.6	+9.9	+0.1	+0.1	+0.0	53.2	46.0	+7.2	Line
11	560.280k	15.6	+0.2	+9.8	+0.0	+0.3	+0.0	25.9	46.0	-20.1	Line
	Ave										
^	560.300k	37.6	+0.2	+9.8	+0.0	+0.3	+0.0	47.9	46.0	+1.9	Line
13	847.070k	15.2	+0.3	+9.9	+0.1	+0.3	+0.0	25.8	46.0	-20.2	Line
	Ave										
^	847.070k	41.0	+0.3	+9.9	+0.1	+0.3	+0.0	51.6	46.0	+5.6	Line
15	3.071M	15.1	+0.5	+9.9	+0.1	+0.1	+0.0	25.7	46.0	-20.3	Line
	Ave										
^	3.071M	43.4	+0.5	+9.9	+0.1	+0.1	+0.0	54.0	46.0	+8.0	Line
17	2.366M	14.5	+0.5	+9.9	+0.1	+0.2	+0.0	25.2	46.0	-20.8	Line
	Ave										
^	2.366M	41.9	+0.5	+9.9	+0.1	+0.2	+0.0	52.6	46.0	+6.6	Line
19	3.926M	14.2	+0.6	+9.9	+0.2	+0.1	+0.0	25.0	46.0	-21.0	Line
	Ave										
^	3.926M	42.7	+0.6	+9.9	+0.2	+0.1	+0.0	53.5	46.0	+7.5	Line
21	2.627M	14.3	+0.5	+9.9	+0.1	+0.1	+0.0	24.9	46.0	-21.1	Line
	Ave										
^	2.627M	40.0	+0.5	+9.9	+0.1	+0.1	+0.0	50.6	46.0	+4.6	Line

23	951.264k	14.3	+0.3	+9.9	+0.0	+0.2	+0.0	24.7	46.0	-21.3	Line
^	951.260k	38.0	+0.3	+9.9	+0.0	+0.2	+0.0	48.4	46.0	+2.4	Line
25	784.072k	13.6	+0.3	+9.9	+0.1	+0.3	+0.0	24.2	46.0	-21.8	Line
^	784.070k	39.1	+0.3	+9.9	+0.1	+0.3	+0.0	49.7	46.0	+3.7	Line
27	3.470M	13.4	+0.5	+9.9	+0.2	+0.1	+0.0	24.1	46.0	-21.9	Line
^	3.470M	39.4	+0.5	+9.9	+0.2	+0.1	+0.0	50.1	46.0	+4.1	Line
29	887.111k	12.8	+0.3	+9.9	+0.1	+0.2	+0.0	23.3	46.0	-22.7	Line
^	887.110k	38.8	+0.3	+9.9	+0.1	+0.2	+0.0	49.3	46.0	+3.3	Line
31	643.382k	11.1	+0.2	+9.8	+0.0	+0.3	+0.0	21.4	46.0	-24.6	Line
^	643.400k	38.3	+0.2	+9.8	+0.0	+0.3	+0.0	48.6	46.0	+2.6	Line
33	1.082M	10.4	+0.3	+9.9	+0.0	+0.2	+0.0	20.8	46.0	-25.2	Line
^	1.082M	38.3	+0.3	+9.9	+0.0	+0.2	+0.0	48.7	46.0	+2.7	Line

CKC Laboratories, Inc. Date: 7/8/2009 Time: 14:14:11 Cellynx Group WO#: 89227
FCC 15.107(a) Class B - AVE Test Lead: Line 120V 60Hz Sequence#: 23 Ext ATTN: 0 dB
Cellynx Model: MD015A



— Sweep Data — 1 - FCC 15.107(a) Class B - AVE

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **Cellynx Group**
 Specification: **FCC 15.107(a) Class B - AVE**
 Work Order #: **89227**
 Test Type: **Conducted Emissions**
 Equipment: **Mobile Cellular Booster**
 Manufacturer: Cellynx
 Model: MD015A
 S/N: 09262100003

Date: 7/8/2009
 Time: 14:44:31
 Sequence#: 24
 Tested By: Randal Clark
 120V 60Hz

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A	US44300507	07/08/2008	07/08/2010	AN02660
Site A conducted cable set	na	05/10/2009	05/10/2011	MACOND
LISN Model 8028-50- TS-24-BNC	901235 & 903750	04/22/2009	04/22/2011	AN00374
TTE High Pass Filter	G7753	01/22/2008	01/22/2010	AN02609
10 dB Attn	N/A	01/22/2009	01/22/2011	ANP05624

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Mobile Cellular Booster*	Cellynx	MD015A	09262100003
Phone Dock External Antenna	Cellynx	MC016A	09262100003

Support Devices:

Function	Manufacturer	Model #	S/N
Cell Phone	T-Mobile	Black Berry 7100t	354529001844620
DC Power Supply	Zurich	DS-304M	NA
Signal Generator	Agilent	E4437B	US39260159

Test Conditions / Notes:

Equipment is a bidirectional mobile cellular booster amplifier operating on 824-849 paired with 869-894 MHz and 1850-1910 paired with 1930-1990 MHz. The equipment is connected directly to a signal generator source to the external antenna port. The signal generator is set to provide a CW signal at -20dBm output at 1960MHz. The signal generator is located below the floor. The equipment is powered via AC/DC power supply. The phone dock external antenna is connected to the phone dock port. DC power is delivered from the main enclosure to the phone dock. The cell phone is to provide a load for the USB charging port on the external phone dock. All user accessible ports are filled. The service port is not loaded because this is for maintenance only, not accessible to the end user in production units.

Bandwidths used: CISPR

Frequency Range Investigated: 150kHz to 30MHz

Temperature: 25°C

Rel Humidity: 40%

Transducer Legend:

T1=MACOND	T2=ATT-ANP02229-052009-10dB
T3=CDN-AN00374-042209-WT	T4=Filter 150kHz HP AN02609

Measurement Data:

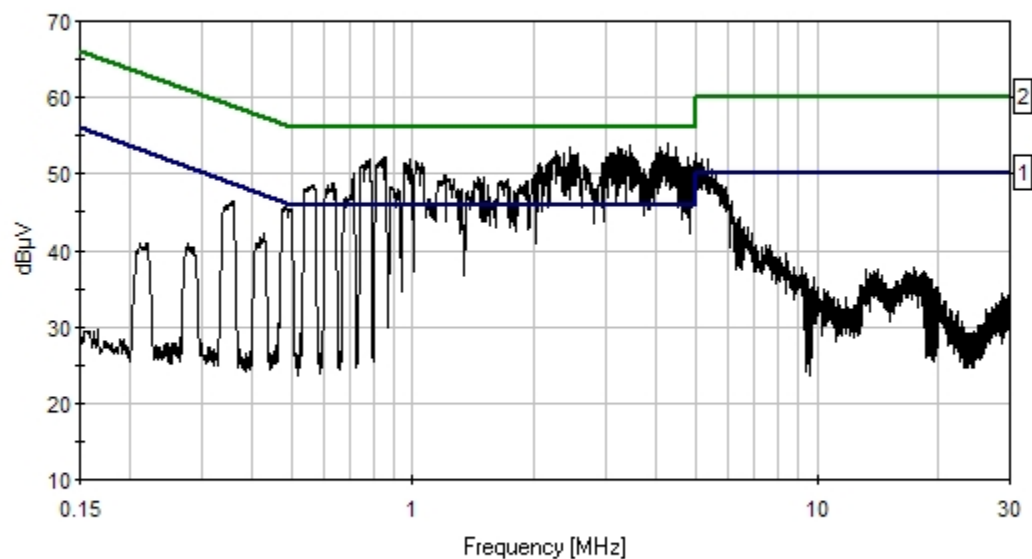
Reading listed by margin.

Test Lead: Neutral

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	713.700k	24.0	+0.3	+9.9	+0.5	+0.3	+0.0	35.0	46.0	-11.0	Neutr
	Ave										
^	713.700k	39.3	+0.3	+9.9	+0.5	+0.3	+0.0	50.3	46.0	+4.3	Neutr
3	4.784M	22.1	+0.6	+9.9	+0.7	+0.1	+0.0	33.4	46.0	-12.6	Neutr
	Ave										
^	4.784M	41.4	+0.6	+9.9	+0.7	+0.1	+0.0	52.7	46.0	+6.7	Neutr
5	4.464M	21.4	+0.6	+9.9	+0.6	+0.1	+0.0	32.6	46.0	-13.4	Neutr
	Ave										
^	4.464M	41.2	+0.6	+9.9	+0.6	+0.1	+0.0	52.4	46.0	+6.4	Neutr
7	4.120M	21.2	+0.6	+9.9	+0.6	+0.1	+0.0	32.4	46.0	-13.6	Neutr
	Ave										
^	4.120M	41.6	+0.6	+9.9	+0.6	+0.1	+0.0	52.8	46.0	+6.8	Neutr
9	2.568M	20.5	+0.5	+9.9	+0.6	+0.1	+0.0	31.6	46.0	-14.4	Neutr
	Ave										
^	2.568M	41.3	+0.5	+9.9	+0.6	+0.1	+0.0	52.4	46.0	+6.4	Neutr
11	3.144M	20.5	+0.5	+9.9	+0.6	+0.1	+0.0	31.6	46.0	-14.4	Neutr
	Ave										
^	3.144M	43.4	+0.5	+9.9	+0.6	+0.1	+0.0	54.5	46.0	+8.5	Neutr
13	779.400k	20.3	+0.3	+9.9	+0.6	+0.3	+0.0	31.4	46.0	-14.6	Neutr
	Ave										
^	779.400k	40.8	+0.3	+9.9	+0.6	+0.3	+0.0	51.9	46.0	+5.9	Neutr
15	852.800k	19.9	+0.3	+9.9	+0.5	+0.3	+0.0	30.9	46.0	-15.1	Neutr
	Ave										
^	852.800k	40.8	+0.3	+9.9	+0.5	+0.3	+0.0	51.8	46.0	+5.8	Neutr
17	3.640M	19.2	+0.5	+9.9	+0.6	+0.1	+0.0	30.3	46.0	-15.7	Neutr
	Ave										
^	3.640M	41.1	+0.5	+9.9	+0.6	+0.1	+0.0	52.2	46.0	+6.2	Neutr
19	1.066M	19.0	+0.3	+9.9	+0.5	+0.2	+0.0	29.9	46.0	-16.1	Neutr
	Ave										
^	1.066M	41.1	+0.3	+9.9	+0.5	+0.2	+0.0	52.0	46.0	+6.0	Neutr
21	2.460M	18.7	+0.5	+9.9	+0.6	+0.1	+0.0	29.8	46.0	-16.2	Neutr
	Ave										
^	2.460M	41.5	+0.5	+9.9	+0.6	+0.1	+0.0	52.6	46.0	+6.6	Neutr

23	641.800k	18.3	+0.2	+9.8	+0.5	+0.3	+0.0	29.1	46.0	-16.9	Neutr
^	641.800k	38.3	+0.2	+9.8	+0.5	+0.3	+0.0	49.1	46.0	+3.1	Neutr
25	906.300k	18.1	+0.3	+9.9	+0.5	+0.2	+0.0	29.0	46.0	-17.0	Neutr
^	906.300k	37.6	+0.3	+9.9	+0.5	+0.2	+0.0	48.5	46.0	+2.5	Neutr
27	5.140M	21.3	+0.6	+9.9	+0.7	+0.1	+0.0	32.6	50.0	-17.4	Neutr
^	5.140M	41.6	+0.6	+9.9	+0.7	+0.1	+0.0	52.9	50.0	+2.9	Neutr
29	570.800k	17.3	+0.2	+9.8	+0.5	+0.3	+0.0	28.1	46.0	-17.9	Neutr
^	570.800k	37.8	+0.2	+9.8	+0.5	+0.3	+0.0	48.6	46.0	+2.6	Neutr
31	999.200k	17.2	+0.3	+9.9	+0.5	+0.2	+0.0	28.1	46.0	-17.9	Neutr
^	999.200k	41.3	+0.3	+9.9	+0.5	+0.2	+0.0	52.2	46.0	+6.2	Neutr
33	5.568M	19.5	+0.7	+9.9	+0.6	+0.1	+0.0	30.8	50.0	-19.2	Neutr
^	5.568M	39.9	+0.7	+9.9	+0.6	+0.1	+0.0	51.2	50.0	+1.2	Neutr
35	1.149M	15.1	+0.3	+9.9	+0.5	+0.2	+0.0	26.0	46.0	-20.0	Neutr
^	1.149M	39.0	+0.3	+9.9	+0.5	+0.2	+0.0	49.9	46.0	+3.9	Neutr
37	5.880M	18.4	+0.7	+9.9	+0.6	+0.1	+0.0	29.7	50.0	-20.3	Neutr
^	5.880M	36.1	+0.7	+9.9	+0.6	+0.1	+0.0	47.4	50.0	-2.6	Neutr

CKC Laboratories, Inc. Date: 7/8/2009 Time: 14:44:31 Cellynx Group WO#: 89227
 FCC 15.107(a) Class B - AVE Test Lead: Neutral 120V 60Hz Sequence#: 24 Ext ATTN: 0 dB
 Cellynx Model: MD015A



— Sweep Data
 — 1 - FCC 15.107(a) Class B - AVE
 — 2 - FCC 15.107(a) Class B - QP

RADIATED EMISSIONS

Test Setup Photos



Test Data Sheets

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **Cellynx Group**

Specification: **15.109(b) CLASS B**

Work Order #: **89227**

Date: 7/8/2009

Test Type: **Maximized Emissions**

Time: 10:45:43

Equipment: **Mobile Cellular Booster**

Sequence#: 21

Manufacturer: Cellynx

Tested By: Randal Clark

Model: MD015A

S/N: 09262100003

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A	US44300507	07/08/2008	07/08/2010	AN02660
Site A 10 meter cable set		05/10/2009	05/10/2011	MA10M
6dB Attenuator	none	05/20/2009	05/20/2011	ANP05656
HP-8447D Preamp	2727A05444	06/20/2008	06/20/2010	AN00062
Antenna, Bilog	2455	12/22/2008	12/22/2010	AN01992

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Mobile Cellular Booster*	Cellynx	MD015A	09262100003
Phone Dock External Antenna	Cellynx	MC016A	09262100003

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply	Sceptre Power	S012BU1200100	NA
Cell Phone	T-Mobile	Black Berry 7100t	354529001844620
Signal Generator	Agilent	E4437B	US39260159

Test Conditions / Notes:

Equipment is a bidirectional mobile cellular booster amplifier operating on 824-849 paired with 869-894 MHz and 1850-1910 paired with 1930-1990 MHz. The equipment is connected directly to a signal generator source to the external antenna port. The signal generator is set to provide a CW signal at -20dBm output at 1960MHz. The signal generator is located below the floor. The equipment is powered via AC/DC power supply. The phone dock external antenna is connected to the phone dock port. DC power is delivered from the main enclosure to the phone dock. The cell phone is to provide a load for the USB charging port on the external phone dock. All user accessible ports are filled. The service port is not loaded because this is for maintenance only, not accessible to the end user in production units.

Bandwidths used: CISPR

Frequency Range Investigated: 30MHz to 1GHz

Temperature: 25°C

Rel Humidity: 40%

Emissions reported are ambient noise floor readings. No EUT emissions detected above the noise floor.

Transducer Legend:

T1=AMP-AN00062-062008	T2=ATT-ANP05656-052009-6dB
T3=MA10M	T4=ANT AN01992 25-1000MHz

Measurement Data: Reading listed by margin. Test Distance: 10 Meters

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	504.000M	26.7	-30.5	+5.9	+5.7	+18.7	+10.0	36.5	46.0	-9.5	Vert
2	504.000M	26.3	-30.5	+5.9	+5.7	+18.7	+10.0	36.1	46.0	-9.9	Horiz
3	48.000M	32.7	-30.7	+5.8	+1.6	+10.3	+10.0	29.7	40.0	-10.3	Vert
4	48.000M	29.1	-30.7	+5.8	+1.6	+10.3	+10.0	26.1	40.0	-13.9	Horiz
5	112.000M	28.3	-30.6	+5.8	+2.5	+10.7	+10.0	26.7	43.5	-16.8	Horiz
6	112.000M	26.8	-30.6	+5.8	+2.5	+10.7	+10.0	25.2	43.5	-18.3	Vert

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Work Order #: **89227**

Test Type: **Maximized Emissions**

Equipment: **Mobile Cellular Booster**

Manufacturer: Cellynx

Model: MD015A

S/N: 09262100003

Date: 7/8/2009

Time: 11:20:50

Sequence#: 22

Tested By: Randal Clark

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
E4446A	US44300507	07/08/2008	07/08/2010	AN02660
Site A 10 meter cable set		05/10/2009	05/10/2011	MA10M
6dB Attenuator	none	05/20/2009	05/20/2011	ANP05656
HP-8447D Preamp	2727A05444	06/20/2008	06/20/2010	AN00062
Antenna, Bilog	2455	12/22/2008	12/22/2010	AN01992

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Mobile Cellular Booster*	Cellynx	MD015A	09262100003
Phone Dock External Antenna	Cellynx	MC016A	09262100003

Support Devices:

Function	Manufacturer	Model #	S/N
Cell Phone	T-Mobile	Black Berry 7100t	354529001844620
DC Power Supply	Zurich	DS-304M	NA
Signal Generator	Agilent	E4437B	US39260159

Test Conditions / Notes:

Equipment is a bidirectional mobile cellular booster amplifier operating on 824-849 paired with 869-894 MHz and 1850-1910 paired with 1930-1990 MHz. The equipment is connected directly to a signal generator source to the external antenna port. The signal generator is set to provide a CW signal at -20dBm output at 1960MHz. The signal generator is located below the floor. The equipment is powered via DC power supply. The phone dock external antenna is connected to the phone dock port. DC power is delivered from the phone dock to the main enclosure. The cell phone is to provide a load for the USB charging port on the external phone dock. All user accessible ports are filled. The service port is not loaded because this is for maintenance only, not accessible to the end user in production units. The DC power input port on the EUT is not used in this configuration - the AC and DC powered options are mutually exclusive.

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