



**ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
INTENTIONAL RADIATOR CERTIFICATION TO
FCC PART 15 SUBPART C REQUIREMENT**

TEST REPORT

FOR

900 MHz ANALOG PHONE - HANDSET

FCC ID: HOLCL906

MODEL NO: CL906

REPORT NO: 02U1137-1

ISSUE DATE: JUNE 11, 2002

Prepared for

**CIDCO COMMUNICATIONS CORPORATION.
105 COCHRANE CIRCLE
MORGAN HILL, CA 95035
U.S.A.**

Prepared by

**COMPLIANCE CERTIFICATION SERVICES
561F MONTEREY ROAD
MORGAN HILL, CA 95037 U.S.A.
TEL: (408) 463-0885
FAX: (408) 463-0888**

NVLAP®
LAB CODE:200065-0

TABLE OF CONTENTS	PAGE NO
1. VERIFICATION OF COMPLIANCE.....	3
2. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT).....	4
3. TEST LOCATION.....	4
4. EQUIPMENT MODIFICATIONS.....	4
5. TEST EQUIPMENT LIST.....	5
6. TEST RESULT SUMMARY	5
6. TEST RESULT SUMMARY	6
RADIATED EMISSIONS	6
<i>Test Requirement: 15.249(A)(B)(C)</i>	6
RADIATED EMISSIONS	10
<i>Test Requirement: 15.209</i>	10
AC LINE CONDUCTED EMISSIONS	13
<i>Test Requirement: 15.207</i>	13

1. VERIFICATION OF COMPLIANCE

COMPANY NAME: CIDCO COMMUNICATIONS CORPORATION
105 COCHRANE CIRCLE
MORGAN HILL, CA 95035 U.S.A.

CONTACT PERSON: RON ANGLIKOWSKI

TELEPHONE NUMBER: (408) 782 - 8200

EUT DESCRIPTION: 900 MH ANALOG PHONE - HANDSET

MODEL NAME: CL906

DATE TESTED: 6/4/2002, 6/5/2002

LIMITS APPLY TO: FCC PART 15 SECTION 15.249

TECHNICAL LIMITS	TEST RESULT
Radiated Emission of Fundamental Frequency	No non-compliance found
Radiated Emission of Harmonic Frequencies	No non-compliance found
Radiated Emission Outside the Band	No non-compliance found

LIMITS APPLY TO: FCC PART 15 SECTION 15.209

Radiated Emission Digital Device No non-compliance found

LIMITS APPLY TO: FCC PART 15 SECTION 15.207

AC Line Conducted Emission Not Applicable

The above equipment was tested by Compliance Certification Services Inc. for compliance with the requirements set forth in CFR 47 PART 15 SUBPART C. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

	
Tested by: Frank Ibrahim / EMC Engineer Compliance Certification Services	Approved & Reviewed by: Thu Chan / EMC Senior Engineer Compliance Certification Services
Warning : This document reports conditions under which testing was conducted and results of tests performed. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document.	

2. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)

This is a Wireless Battery Pack.

CHASSIS TYPE	PLASTIC
Frequency Range	925.3 – 927.3 MHz
Number of Channels	40
Type of Emission	CONTINUOUS
Antenna Requirement	PERMANENTLY ATTACHED
Antenna Gain	0 dbi
No of External Connectors and Types	NONE
Power requirement	3.6 VDC 600mAh Battery

3. TEST LOCATION

All emissions tests were performed at:

Compliance Certification Services
561F Monterey Road
Morgan Hill, CA 95037

CCS has site descriptions on file with the FCC for 10 and 3 meter site configurations.
CCS is a NVLAP accredited facility.

4. EQUIPMENT MODIFICATIONS

To achieve compliance Levels, the following change(s) were made during compliance testing:

No changes were required in order to achieve compliance to class B levels.

5. TEST EQUIPMENT LIST

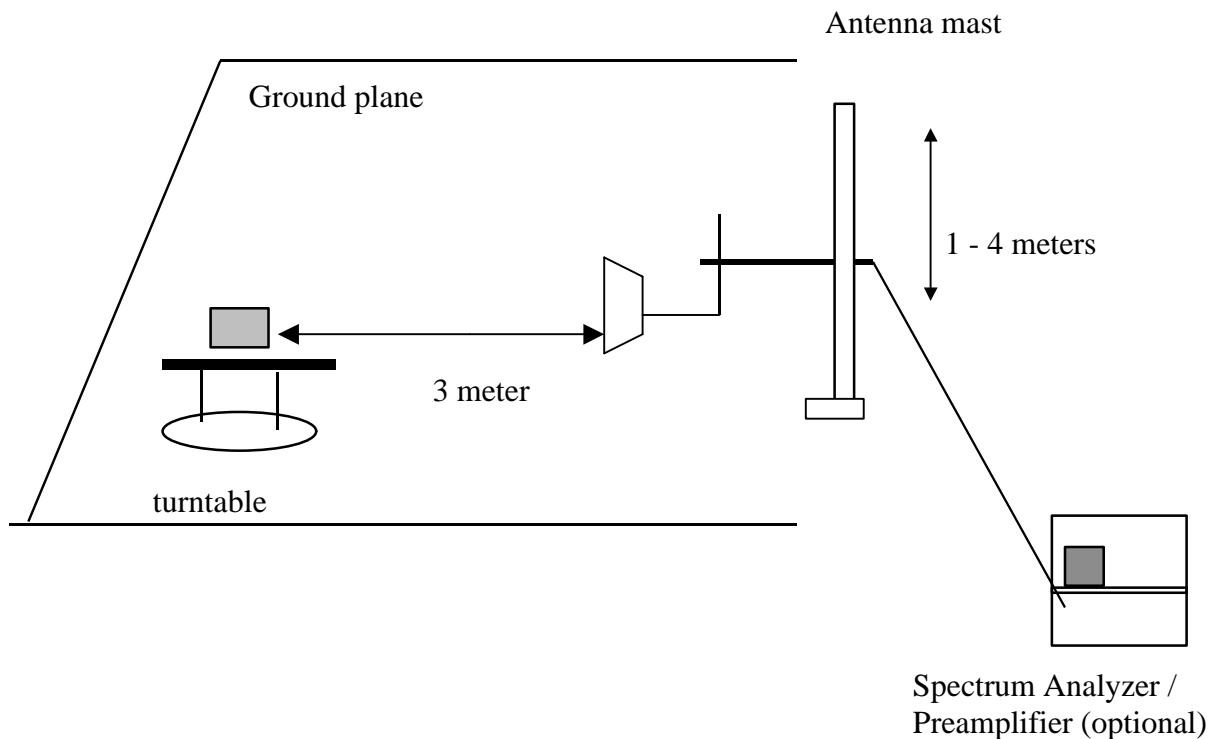
TEST EQUIPMENTS LIST				
Name of Equipment	Manufacturer	Model No.	Serial No.	Due Date
Spectrum Analyzer	HP 0.1K - 1.5GHz	8568B	2732A03661	5/16/03
Spectrum Display	HP	85662A	2816A16696	5/16/03
Quasi Peak Adapter	HP9K - 1GHz	85650A	2811A01155	5/16/03
Pre-Amplifier, 25 dB	HP 0.1 - 1300MHz	8447D (P_1M)	2944A06833	8/21/02
Antenna, Bicon	Eaton30 - 200MHz	94455-1	1197	3/30/03
Antenna, LP	EMCO200 - 2000MHz	3146	9107-3163	3/30/03
Spectrum Analyzer	HP100Hz - 22GHz	8566B	2140A01296	5/23/03
Quasi-Peak Detector	HP9K - 1GHz	85650A	2811A01335	5/23/03
Spectrum Display	HP	85662A	3026A19146	5/23/03
Pre-Amplifier 35.5 Db	HP	8449B	3008A00369	5/30/03
Horn Antenna(1 - 18GHz)	EMCO	3115	2238	6/20/02
Horn Antenna(1 - 18GHz)	EMCO	3115	6739	6/20/02
EMI Receiver	Rohde & Schwarz	ESHS 20	827129/006	4/17/03
LISN	Fischer	FCC-LISN-50/250-25-2	114	4/22/03
LISN	Solar Elec	8012-50-R-24-BNC	837990	4/23/03
Line Filter	Lindgren	LMF-3489	497	N.C.R
AC Power Source	Advanced Central System	AFC-10K-AFC2	J1568	N.C.R

6. TEST RESULT SUMMARY

Radiated Emissions

Test Requirement: 15.249(A)(B)(C)

TEST SETUP FOR MEASUREMENT OF FUNDAMENTAL FREQUENCY & HARMONIC



Test Procedures

- 1) Place the EUT on the turntable as shown. The EUT was placed as close as possible to the center of the turntable with the axis of rotation going through the EUT antenna when in vertical or horizontal polarization. Activated Eut to transmit.
- 2) The Horn search antenna was place at a distance of 3 meters. The antenna was raised and lowered and the EUT rotated on the turntable to produce maximum emission levels on the spectrum analyzer.

Setup Photo & Test Results:

High Frequency Data: (CH1)

6-Jun-02 FCC Measurement
Compliance Certification Services, Morgan Hill Open Field Site

Equipment for 1-22 GHz
HP8566B Analyzer
HP8449B Amplifier
EMCO 3115 Antenna, S/N: 6717
Cable 15.0 feet

Average Measurements:
1 MHz Resolution Bandwidth
10Hz Video Bandwidth

Peak Measurements:
1MHz Resolution Bandwidth
1MHz Video Bandwidth

Client: Cidco
02U1137-1
EUT: 900MHz analog phone
Model: CL906, Unit # 5 (4/24/02)
Tester: Frank Ibrahim

Handset , CH1															
f GHz	Dist feet	Read Peak dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Peak Lim dBuV/m	Avg Lim dBuV/m	Peak Mar dB	Avg Mar dB	Notes
1.850710	9.84	51.4	47.6	28.1	3.4	-35.5	0.0	1.0	48.4	44.6	74.0	54.0	-25.6	-9.4	V
2.776050	9.84	54.5	51.4	31.1	4.1	-35.5	0.0	1.0	55.2	52.1	74.0	54.0	-18.8	-1.9	V
3.701410	9.84	48.0	44.3	32.8	4.8	-35.5	0.0	1.0	51.1	47.4	74.0	54.0	-22.9	-6.6	V
4.626760	9.84	43.3	32.5	34.6	5.6	-35.5	0.0	1.0	49.0	38.2	74.0	54.0	-25.0	-15.8	V
5.552120	9.84	33.3	22.2	36.3	6.3	-35.5	0.0	1.0	41.4	30.3	74.0	54.0	-32.6	-23.7	V, Noise Floor
6.477470	9.84	37.6	25.8	37.2	6.9	-35.5	0.0	1.0	47.2	35.4	74.0	54.0	-26.8	-18.6	V, Noise Floor
7.402830	9.84	37.6	25.8	38.5	7.3	-35.5	0.0	1.0	48.9	37.1	74.0	54.0	-25.1	-16.9	V, Noise Floor
8.328180	9.84	38.1	26.2	39.3	7.8	-35.5	0.0	1.0	50.7	38.8	74.0	54.0	-23.3	-15.2	V, Noise Floor
9.253540	9.84	39.1	27.0	39.9	8.3	-35.5	0.0	1.0	52.8	40.7	74.0	54.0	-21.2	-13.3	V, Noise Floor

f Measurement Frequency
Dist Distance to Antenna
Read Analyzer Reading
AF Antenna Factor
CL Cable Loss

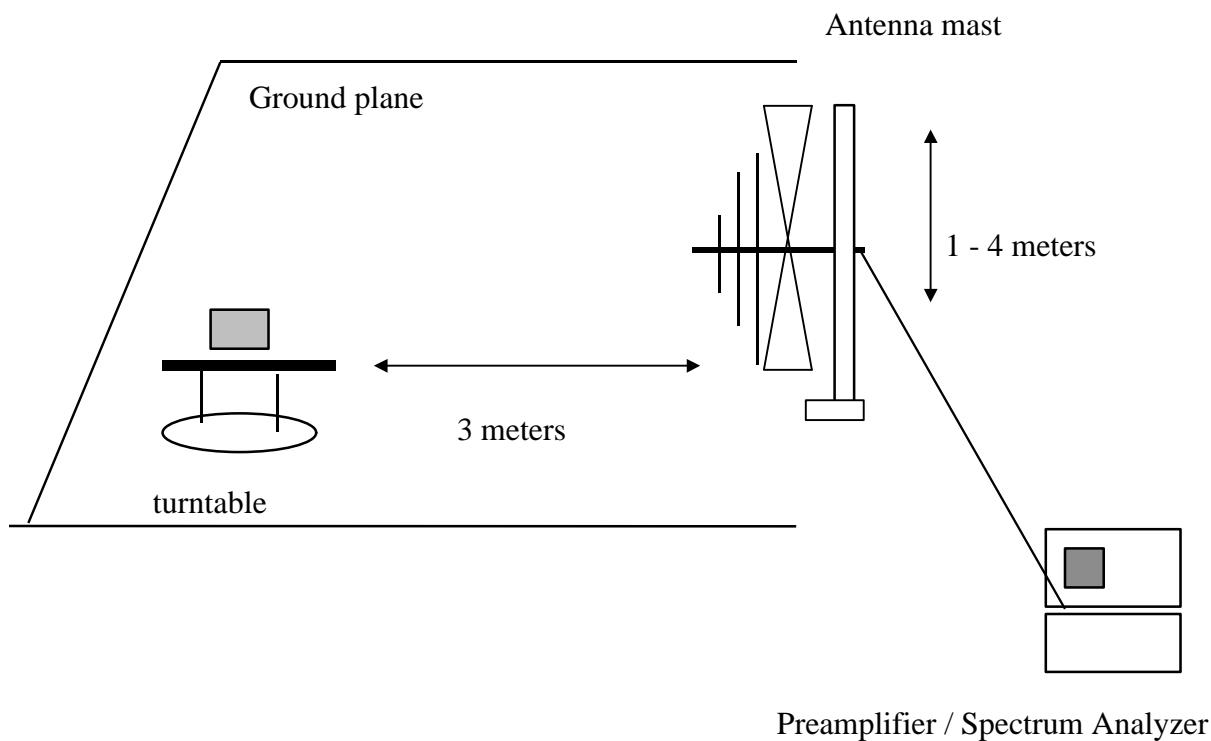
Amp Preamp Gain
D Corr Distance Correct to 3 meters
Avg Average Field Strength @ 3 m
Peak Calculated Peak Field Strength
HPF High Pass Filter

Avg Lim Average Field Strength Limit
Pk Lim Peak Field Strength Limit
Avg Mar Margin vs. Average Limit
Pk Mar Margin vs. Peak Limit

Handset , CH1															
f GHz	Dist feet	Read Peak dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Peak Lim dBuV/m	Avg Lim dBuV/m	Peak Mar dB	Avg Mar dB	Notes
1.850710	9.84	48.7	43.3	28.1	3.4	-35.5	0.0	1.0	45.7	40.3	74.0	54.0	-28.3	-13.7	H
2.776050	9.84	52.8	51.0	31.1	4.1	-35.5	0.0	1.0	53.5	51.7	74.0	54.0	-20.5	-2.3	H
3.701410	9.84	51.2	50.1	32.8	4.8	-35.5	0.0	1.0	54.3	53.2	74.0	54.0	-19.7	-0.8	H
4.626760	9.84	34.4	25.9	34.6	5.6	-35.5	0.0	1.0	40.1	31.6	74.0	54.0	-33.9	-22.4	H, Noise Floor
5.552120	9.84	33.6	22.4	36.3	6.3	-35.5	0.0	1.0	41.7	30.5	74.0	54.0	-32.3	-23.5	H, Noise Floor
6.477470	9.84	37.1	26.0	37.2	6.9	-35.5	0.0	1.0	46.7	35.6	74.0	54.0	-27.3	-18.4	H, Noise Floor
7.402830	9.84	37.3	25.9	38.5	7.3	-35.5	0.0	1.0	48.6	37.2	74.0	54.0	-25.4	-16.8	H, Noise Floor
8.328180	9.84	39.7	26.2	39.3	7.8	-35.5	0.0	1.0	52.3	38.8	74.0	54.0	-21.7	-15.2	H, Noise Floor
9.253540	9.84	38.0	27.0	39.9	8.3	-35.5	0.0	1.0	51.7	40.7	74.0	54.0	-22.3	-13.3	H, Noise Floor

High Frequency Data: (CH40)

6-Jun-02	FCC Measurement																							
Compliance Certification Services, Morgan Hill Open Field Site																								
Equipment for 1-22 GHz																								
HP8566B Analyzer																								
HP8449B Amplifier																								
EMCO 3115 Antenna, S/N: 6717																								
Cable	15.0	feet																						
Average Measurements:			Peak Measurements:																					
1 MHz Resolution Bandwidth			1MHz Resolution Bandwidth																					
10Hz Video Bandwidth			1MHz Video Bandwidth																					
Client: Cidco																								
02U1137-1																								
EUT: 900MHz analog phone																								
Model: CL906, Unit # 5 (4/24/02)																								
Tester: Frank Ibrahim																								
Handset , CH40																								
f	Dist	Read Peak	Read Avg.	AF	CL	Amp	D Corr	HPF	Peak	Avg	Peak Lim	Avg Lim	Peak Mar	Avg Mar	Notes									
GHz	feet	dBuV	dBuV	dB/m	dB	dB		dB	dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dB										
1.855000	9.84	51.6	48.9	28.1	3.4	-35.5	0.0	1.0	48.6	45.9	74.0	54.0	-25.4	-8.1	V									
2.782000	9.84	47.2	46.5	31.1	4.1	-35.5	0.0	1.0	47.9	47.2	74.0	54.0	-26.1	-6.8	V									
3.709000	9.84	46.4	41.8	32.8	4.8	-35.5	0.0	1.0	49.5	44.9	74.0	54.0	-24.5	-9.1	V									
4.636000	9.84	35.7	24.0	34.6	5.6	-35.5	0.0	1.0	41.4	29.7	74.0	54.0	-32.6	-24.3	V, Noise Floor									
5.564000	9.84	33.4	22.5	36.3	6.3	-35.5	0.0	1.0	41.5	30.6	74.0	54.0	-32.5	-23.4	V, Noise Floor									
6.491000	9.84	37.5	25.9	37.2	6.9	-35.5	0.0	1.0	47.1	35.5	74.0	54.0	-26.9	-18.5	V, Noise Floor									
7.418000	9.84	37.1	25.8	38.5	7.3	-35.5	0.0	1.0	48.4	37.1	74.0	54.0	-25.6	-16.9	V, Noise Floor									
8.346000	9.84	37.3	26.4	39.3	7.8	-35.5	0.0	1.0	49.9	39.0	74.0	54.0	-24.1	-15.0	V, Noise Floor									
9.273000	9.84	37.5	27.0	39.9	8.3	-35.5	0.0	1.0	51.2	40.7	74.0	54.0	-22.8	-13.3	V, Noise Floor									
f	Measurement Frequency		Amp	Preamp Gain					Avg Lim	Average Field Strength Limit														
Dist	Distance to Antenna		D Corr	Distance Correct to 3 meters					Pk Lim	Peak Field Strength Limit														
Read	Analyzer Reading		Avg	Average Field Strength @ 3 m					Avg Mar	Margin vs. Average Limit														
AF	Antenna Factor								Pk Mar	Margin vs. Peak Limit														
CL	Cable Loss		Peak	Calculated Peak Field Strength																				
Handset , CH40																								
f	Dist	Read Peak	Read Avg.	AF	CL	Amp	D Corr	HPF	Peak	Avg	Peak Lim	Avg Lim	Peak Mar	Avg Mar	Notes									
GHz	feet	dBuV	dBuV	dB/m	dB	dB		dB	dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dB										
1.855000	9.84	49.8	46.8	28.1	3.4	-35.5	0.0	1.0	46.8	43.8	74.0	54.0	-27.2	-10.2	H									
2.782000	9.84	51.6	48.7	31.1	4.1	-35.5	0.0	1.0	52.3	49.4	74.0	54.0	-21.7	-4.6	H									
3.709000	9.84	50.7	49.2	32.8	4.8	-35.5	0.0	1.0	53.8	52.3	74.0	54.0	-20.2	-1.7	H									
4.636000	9.84	35.1	23.8	34.6	5.6	-35.5	0.0	1.0	40.8	29.5	74.0	54.0	-33.2	-24.5	H, Noise Floor									
5.564000	9.84	35.6	23.4	36.3	6.3	-35.5	0.0	1.0	43.7	31.5	74.0	54.0	-30.3	-22.5	H, Noise Floor									
6.491000	9.84	37.8	26.0	37.2	6.9	-35.5	0.0	1.0	47.4	35.6	74.0	54.0	-26.6	-18.4	H, Noise Floor									
7.418000	9.84	37.7	25.8	38.5	7.3	-35.5	0.0	1.0	49.0	37.1	74.0	54.0	-25.0	-16.9	H, Noise Floor									
8.346000	9.84	37.7	26.3	39.3	7.8	-35.5	0.0	1.0	50.3	38.9	74.0	54.0	-23.7	-15.1	H, Noise Floor									
9.273000	9.84	38.6	27.7	39.9	8.3	-35.5	0.0	1.0	52.3	41.4	74.0	54.0	-21.7	-12.6	H, Noise Floor									

Radiated Emissions**Test Requirement: 15.209**TEST SETUP FOR MEASUREMENT OF DIGITAL DEVICE**Test Procedures**

- 1) Place the EUT on the turntable as shown. The EUT was placed as close as possible to the center of the turntable with the axis of rotation going through the EUT antenna when in vertical or horizontal polarization. Activated Eut to transmit.
- 2) The Bilog search antenna was place at a distance of 3 meters. The antenna was raised and lowered and the EUT rotated on the turntable to produce maximum emission levels on the spectrum analyzer.

Test Setup Photos & Results:



FCC, VCCI, CISPR, CE, AUSTEL, NZ
UL, CSA, TUV, BSMI, DHHS, NVLAP

561F MONTEREY ROAD, SAN JOSE, CA 95037-9001
PHONE: (408) 463-0885 FAX: (408) 463-0888

Project #: 02U1137-1
Report #: 020607A01
Date& Time: 06/07/02 8:58 AM
Test Engr: Frank Ibrahim

Company: Cidco Communications

EUT Description: 900 MHz Analog Phone, Model: CL906

Test Configuration : Stand alone EUT (Handset)

Type of Test: FCC 15.249

Mode of Operation: EUT transmitting at CH40

[<< Main Sheet](#)

Freq. (MHz)	Reading (dBuV)	AF (dB)	Closs (dB)	Pre-amp (dB)	Level (dBuV/m)	Limit FCC B	Margin (dB)	Pol (H/V)	Az (Deg)	Height (Meter)	Mark (P/Q/A)
915.50	45.90	22.71	5.09	28.40	45.30	46.00	-0.70	3mV	0.00	1.00	QP
915.50	45.00	22.71	5.09	28.40	44.40	46.00	-1.60	3mH	0.00	1.00	P
33.45	41.60	12.72	0.91	27.65	27.57	40.00	-12.43	3mV	0.00	1.00	P
33.45	37.80	12.72	0.91	27.65	23.77	40.00	-16.23	3mH	0.00	1.00	P
178.40	36.50	15.11	2.10	27.32	26.39	43.50	-17.11	3mV	0.00	1.00	P
927.30	75.70	22.87	5.13	28.37	75.34	94.00	-18.66	3mV	0.00	1.00	P
927.30	72.50	22.87	5.13	28.37	72.13	94.00	-21.87	3mH	0.00	1.00	P



FCC, VCCI, CISPR, CE, AUSTEL, NZ
UL, CSA, TUV, BSMI, DHHS, NVLAP

561F MONTEREY ROAD, SAN JOSE, CA 95037-9001
PHONE: (408) 463-0885 FAX: (408) 463-0888

Project #: 02U1137-1
Report #: 020606A01
Date& Time: 06/06/02 3:52 PM
Test Engr: Frank Ibrahim

Company: Cidco Communications

EUT Description: 900 MHz Analog Phone, Model: CL906

Test Configuration : Stand alone EUT (Handset)

Type of Test: FCC 15.249

Mode of Operation: EUT transmitting at CH1

[<< Main Sheet](#)

Freq. (MHz)	Reading (dBuV)	AF (dB)	Closs (dB)	Pre-amp (dB)	Level (dBuV/m)	Limit FCC B	Margin (dB)	Pol (H/V)	Az (Deg)	Height (Meter)	Mark (P/Q/A)
913.57	44.90	22.68	5.08	28.40	44.26	46.00	-1.74	3mV	0.00	1.00	QP
913.57	42.30	22.68	5.08	28.40	41.66	46.00	-4.34	3mH	0.00	1.00	QP
33.45	40.90	12.72	0.91	27.65	26.87	40.00	-13.13	3mV	0.00	1.00	P
139.50	39.90	14.60	1.82	27.46	28.85	43.50	-14.65	3mV	0.00	1.00	P
33.45	38.90	12.72	0.91	27.65	24.87	40.00	-15.13	3mH	0.00	1.00	P
129.50	40.50	12.17	1.76	27.50	26.93	43.50	-16.57	3mH	0.00	1.00	P
925.36	73.70	22.84	5.13	28.37	73.30	94.00	-20.70	3mV	0.00	1.00	P
925.36	67.60	22.84	5.13	28.37	67.20	94.00	-26.80	3mH	0.00	2.00	P

AC Line Conducted Emissions**Test Requirement: 15.207**

Not Applicable as the Handset is only powered by internal battery.

END OF REPORT