



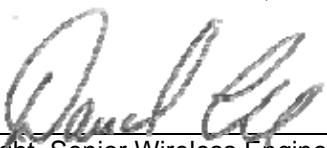
Nemko Test Report: 4132RUS1rev1

Applicant: RF Monolithics, Inc.
4441 Sigma Road
Dallas, TX 7524
USA

Equipment Under Test: CM2200
(E.U.T.)

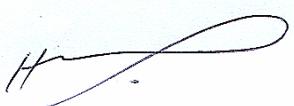
In Accordance With: **FCC Part 15, Subpart C, 15.249**
Operation within the bands 902-928 MHz,
2400-2483.5 MHz, 5725-5875 MHz, and
24.0-24.25 GHz.

Tested By: Nemko USA Inc.
802 N. Kealy
Lewisville, Texas 75057-3136

TESTED BY: 

David Light, Senior Wireless Engineer

DATE: 17 May 2007

APPROVED BY: 

Harry Ward, Verificator

DATE: 17th May 2007

Total Number of Pages: 12

Nemko USA, Inc.

CFR 47, PART 15, SUBPART C, Paragraph 15.249

Operation within the bands 902-928 MHz,
2400-2483.5 MHz, 5725-5875 MHz,
and 24.0-24.25 GHz.

EQUIPMENT: CM2200

PROJECT NO.: 4132RUS1rev1

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Section 1. Summary Of Test Results

Manufacturer: RF Monolithics, Inc.

Model No.: CM2200

Serial No.: 000003dc

General: **All measurements are traceable to national standards.**

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 15.249. All tests were conducted using measurement procedure ANSI C63.4-2003. Radiated Emissions were made on an open area test site.

New Submission

Production Unit

Class II Permissive Change

Pre-Production Unit

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.**THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE.**

See "Summary of Test Data".



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CFR 47, PART 15, SUBPART C, Paragraph 15.249

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Summary Of Test Data

NAME OF TEST	PARA. NO.	RESULT
Conducted Emissions	15.207	NA
Radiated Emissions	15.249	Complies

Footnotes For N/A's:

The device is battery powered.

Section 2. General Equipment Specification**Frequency Range:** Single**Operating Frequency(ies) of Sample:** 916.5**Tunable Bands:** None**Number of Channels:** One**Channel Spacing:** NA**User Frequency Adjustment:** None**Integral Antenna** **Yes**
 No

Section 3. Radiated Emissions

NAME OF TEST: Radiated Emissions	PARA. NO.: 15.249
TESTED BY: David Light	DATE: 17 May 2007

Minimum Standard: Para no. 15.249

(a) The field strengths shall not exceed the following:

Carrier (MHz)	Field Strength (mV/m)	Field Strength (dB μ V)	Harmonic (μ V/m)	Harmonic (dB μ V)
902-928	50	94	500	54
2400-2483.5	50	94	500	54
5725-5875	50	94	500	54
24000-24250	250	108	2500	68

(b) Field strength limits are specified at a distance of 3 metres.

(c) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated limits of 15.209 whichever is the less attenuation.

(d) ...for frequencies above 1000 MHz, the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

Test Results: Complies**Measurement Data:** See attached table.**Equipment Used:** 1464-1484-1485-1016-993-759-760-1514-1554**Temperature:** 22 °C**Relative Humidity:** 45 % For battery powered equipment, the device was tested with a fresh battery per 15.31(e).

Test Data - Radiated Emissions**Carrier Power**

Meas. Freq. (MHz)	Ant. Pol. (H/V)	Atten. (dB)	Meter Reading (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	RF Gain (dB)	Corrected Reading (dBuV/m)	Spec. limit (dBuV/m)	CR/SL Diff. (dB)	Pass Fail Unc.	Comment
916.5	V	0	76	23.2	9.2	25.1	83.3	94.0	-10.7	Pass	
916.5	H	0	66.9	23.2	9.2	25.1	74.2	94.0	-19.8	Pass	
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Spurious Emissions and Harmonics

Freq MHz	Reading dB μ V	Horn Pre-Amp dB	Cable dB	Cable dB	Corrected Reading dB μ V/m	Spec dB μ V/m	Margin dB	Polarity Ant
1833.0	50.7	+27.2 -32.1	+0.7	+2.1	48.6	54.0	-5.4	Vert
2749.5	49.3	+29.4 -32.7	+0.8	+2.9	49.7	54.0	-4.3	Vert
3666.0	45.5	+30.5 -32.3	+0.8	+2.8	47.3	54.0	-6.7	Vert
4582.0	45.0	+32.3 -31.8	+1.0	+3.1	49.6	54.0	-4.4	Vert
1833.0	48.2	+28.3 -32.1	+0.7	+2.2	47.3	54.0	-6.7	Horiz

The spectrum was searched from 30 MHz to 10 GHz. All emissions within 20 dB of the specification limit are reported.

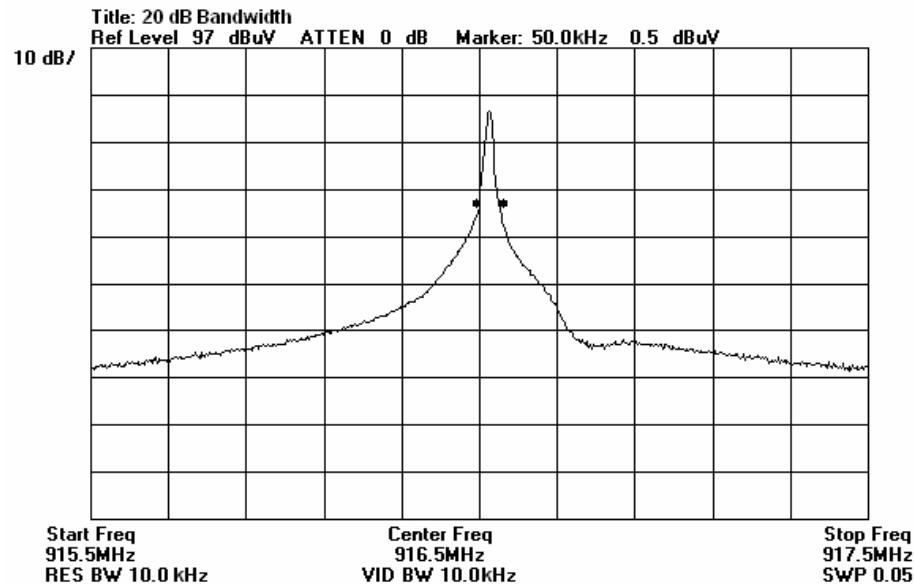
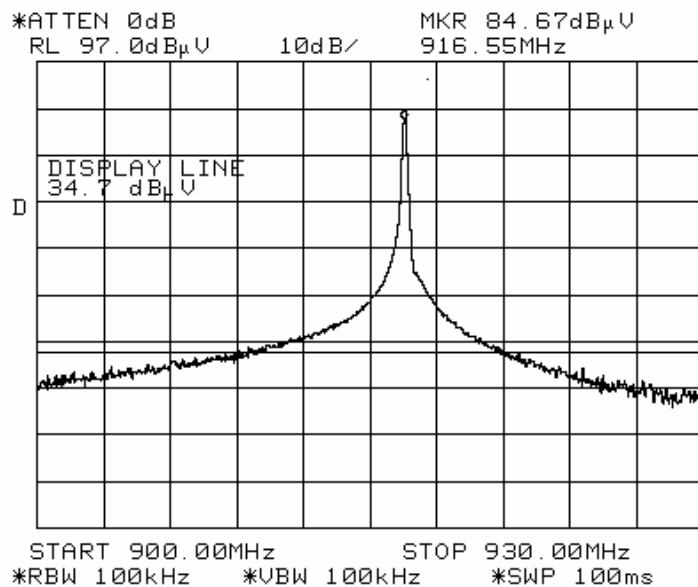
All readings are PEAK unless otherwise stated.

The device was tested on three orthogonal axis'.

Analyzer settings:

Below 1000 MHz, RBW=VBW=100 kHz

Above 1000 MHz, RBW=VBW=1 MHz

20 dB Bandwidth**Bandedge Measurement**

Section 4. Test Equipment List

Nemko ID	Description	Manufacturer Model Number	Serial Number	Calibration Date	Calibration Due
1464	Spectrum analyzer	Hewlett Packard 8563E	3551A04428	01/24/07	01/24/09
1484	Cable	Storm PR90-010-072	N/A	05/02/07	05/01/08
1485	Cable	Storm PR90-010-216	N/A	05/02/07	05/01/08
1016	Pre-Amp	HEWLETT PACKARD 8449A	2749A00159	05/01/07	04/30/08
791	PREAMP, 25dB	Nemko USA, Inc. LNA25	398	05/01/07	04/30/08
993	Horn antenna	A.H. Systems SAS-200/571	XXX	08/01/05	08/02/07
759	ANTENNA, LOG PERIODIC	A.H. SYSTEMS SAS-200/510	556	03/30/07	03/29/08
760	Antenna biconical	Electro Metrics MFC-25	477	01/19/07	01/19/08
1514	CABLE ASSY, LAB 2- B OATS	Nemko USA, Inc. SITE B OATS	N/A	06/08/06	06/08/07
1554	Amplifier, RF	RF Consultants LNA-25	0	09/29/06	09/29/07

Nemko USA, Inc.

CFR 47, PART 15, SUBPART C, Paragraph 15.249

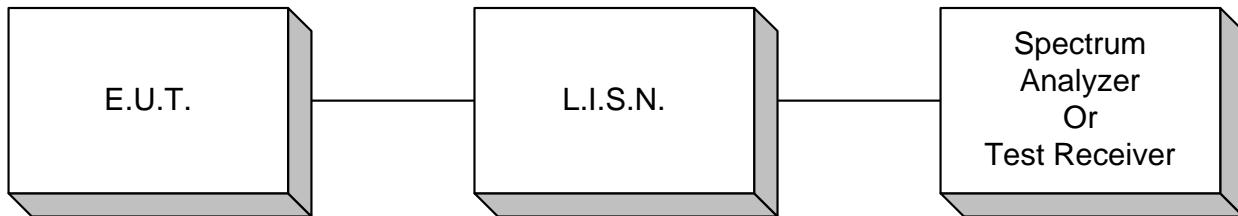
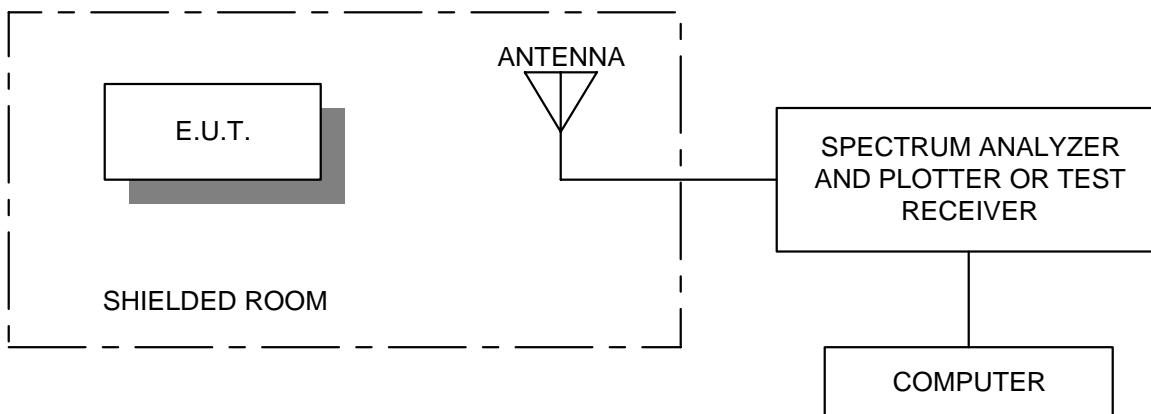
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ANNEX A

TEST DIAGRAMS

Conducted Emissions**Radiated Prescan**

Test Site For Radiated Emissions

