

FCC RF Exposure Report

FCC ID : K7T-RC3000A
Equipment : Cellular Modem
Model No. : RC3000A-E
Brand Name : Radicom
Applicant : Radicom Research, Inc.
Address : 2148 Bering Drive, San Jose, CA 95131 U.S.A
Standard : 47 CFR FCC Part 2.1091
Received Date : Jul. 04, 2014
Tested Date : Jul. 21 ~ Sep. 15, 2014

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:



Gary Chang / Manager



Table of Contents

1	MPE EVALUATION OF MOBILE DEVICES	4
1.1	LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE.....	4
1.2	MPE EVALUATION FORMULA	4
1.3	MPE EVALUATION RESULTS	5
2	TEST LABORATORY INFORMATION	6

Release Record

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FA470405	Rev. 01	Initial issue	Jun. 11, 2015

1 MPE EVALUATION OF MOBILE DEVICES

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

1.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm ²)	Averaging Time (minutes)
300~1500	F/1500	30
1500~100000	1.0	30

1.2 MPE EVALUATION FORMULA

$$Pd = \frac{Pt}{4 * Pi * R^2}$$

Where

Pd= Power density in mW/cm²

Pt= EIRP in mW

Pi= 3.1416

R= Measurement distance

1.3 MPE EVALUATION RESULTS

Mode	Maximum Conducted Power (dBm)	Duty factor (dB)	Source Based Time Averaging Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
GSM 850							
GSM	31.52	-9.03	22.49	1.5	20	0.050	0.549
GPRS 8 (GMSK, 1 slot)	31.21	-9.03	22.18	1.5	20	0.046	0.549
GPRS 10 (GMSK, 2 slots)	29.17	-6.02	23.15	1.5	20	0.058	0.549
GPRS 11 (GMSK, 3 slots)	28.11	-4.26	23.85	1.5	20	0.068	0.549
GPRS 12 (GMSK, 4 slots)	29.95	-3.01	26.94	1.5	20	0.139	0.549
EDGE 8 (8PSK, 1 slot)	25.69	-9.03	16.66	1.5	20	0.013	0.549
EDGE 10 (8PSK, 2 slots)	25.25	-6.02	19.23	1.5	20	0.024	0.549
EDGE 11 (8PSK, 3 slots)	24.25	-4.26	19.99	1.5	20	0.028	0.549
EDGE 12 (8PSK, 4 slots)	23.14	-3.01	20.13	1.5	20	0.029	0.549
DTM 11,GSM/GPRS (3 slots)	27.95	-9.03	23.68	1.5	20	0.066	0.549
	27.93	-6.02					
GSM 1900							
GSM	29.32	-9.03	20.29	1.5	20	0.030	1
GPRS 8 (GMSK, 1 slot)	29.03	-9.03	20.00	1.5	20	0.028	1
GPRS 10 (GMSK, 2 slots)	27.34	-6.02	21.32	1.5	20	0.038	1
GPRS 11 (GMSK, 3 slots)	25.31	-4.26	21.05	1.5	20	0.036	1
GPRS 12 (GMSK, 4 slots)	27.18	-3.01	24.17	1.5	20	0.073	1
EDGE 8 (8PSK, 1 slot)	24.39	-9.03	15.36	1.5	20	0.010	1
EDGE 10 (8PSK, 2 slots)	24.30	-6.02	18.28	1.5	20	0.019	1
EDGE 11 (8PSK, 3 slots)	23.36	-4.26	19.10	1.5	20	0.023	1
EDGE 12 (8PSK, 4 slots)	22.28	-3.01	19.27	1.5	20	0.024	1
DTM 5,GSM/GPRS (2 slots)	27.16	-9.03	21.10	1.5	20	0.036	1
	27.08	-9.03					

Note: Duty factor is calculated as $10 * \log(\text{uplink time slot(s)} / 8 \text{ time slots})$

Mode	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
WCDMA 850	23.35	1.5	20	0.061	0.551
WCDMA 1900	23.08	1.5	20	0.057	1

2 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

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Kwei Shan

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Kwei Shan Site II

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If you have any suggestion, please feel free to contact us as below information

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