FCC RF Exposure Report
(MPE Calculation)

Test Report no.:	EMC_BO_001849	**Date of Report:**	11-July-2013
Number of pages:	**Error! Bookmark not defined.**	**Project support engineer:**	Robert Müller

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Manufacturer:	novero GmbH		
EUT ident.:	Novero, HT-6g		
FCC ID:	WJLHT-6G	**IC ID:**	7847A-HT6G

Referred documents:	FCC rules Part 1 and IC standards RSS-102; FCC Test Reports with FCC ID / IC ID mentioned above			
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	FCC listing no.:	881111	IC recognition no.:	7847A-1
	Laboratory manager:	Jürgen Mitterer		

Test result	The EUT does comply with the requirements made in the referred test documents.

Signature:

11-July-2013, Jürgen Mitterer
Manager Validation Services
Approval

CONTENTS

1. Maximum Permissible Exposure

1.1. Calculation method and limit

1.1.1 §1.1310

Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure) are specified in Table 1B of 47 CFR 1.1310 and table chapter 4.2 of RSS-102 standard.

Frequency range [MHz]	Power Density[mW/cm²]
300 – 1500	f/1500
1500 – 100,000	1.0

Calculations can be made with the following equation according to OET bulletin 65:

$$S = \frac{EIRP}{4\pi R^2} = \frac{P * G}{4\pi R^2}$$

with G = 3dBi, R = 20cm

S = power density
P = power input of the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the centre of radiation of the antenna
EIRP = equivalent (or effective) isotropic radiated power

1.2. Results

1.2.1 Results for 850 MHz Operations (Part 22)

Band	Channel	Frequency [MHz]	Conducted Peak Power [dBm]	Duty Cycle [dB]	Average Power [dBm]	MPE [mW/cm²]	MPE Limit [mW/cm²] §1.1310	Result
GSM	128	824.2	32.20	-9.03	23.17	0.0824	0.5495	PASSED
	192	837.0	32.40	-9.03	23.37	0.0863	0.5580	PASSED
	251	848.8	32.24	-9.03	23.21	0.0831	0.5659	PASSED
GPRS	128	824.2	32.23	-3.01	29.22	0.3318	0.5495	PASSED
	192	837.0	32.43	-3.01	29.42	0.3475	0.5580	PASSED
	251	848.8	32.29	-3.01	29.28	0.3364	0.5659	PASSED
EGPRS	128	824.2	29.59	-3.01	26.58	0.1807	0.5495	PASSED
	192	837.0	29.78	-3.01	26.77	0.1888	0.5580	PASSED
	251	848.8	29.77	-3.01	26.76	0.1883	0.5659	PASSED
FDD V	4132	826.4	25.87	0.00	25.87	0.1534	0.5509	PASSED
	4175	835.0	25.94	0.00	25.94	0.1559	0.5567	PASSED
	4233	846.6	25.86	0.00	25.86	0.1531	0.5644	PASSED

For GPRS/EGPRS mode Multislot Class12 (maximal 4 Uplink time slots) is considered for duty cycle.

1.2.2 Results for 1900 MHz Operations (Part 24)

Band	Channel	Frequency [MHz]	Conducted Peak Power [dBm]	Duty Cycle [dB]	Average Power [dBm]	MPE [mW/cm²]	MPE Limit [mW/cm²] §1.1310	Result
GSM	512	1850.2	29.47	-9.03	20.44	0.0439	1.0	PASSED
	661	1880.0	29.32	-9.03	20.29	0.0424	1.0	PASSED
	810	1908.8	29.13	-9.03	20.10	0.0406	1.0	PASSED
GPRS	512	1850.2	29,49	-3.01	26.48	0.1766	1.0	PASSED
	661	1880.0	29.31	-3.01	26.30	0.1694	1.0	PASSED
	810	1908.8	29.12	-3.01	26.11	0.1622	1.0	PASSED
EGPRS	512	1850.2	27.07	-3.01	24.06	0.1011	1.0	PASSED
	661	1880.0	26.95	-3.01	23.94	0.0984	1.0	PASSED
	810	1908.8	26,60	-3.01	23.59	0.0908	1.0	PASSED
FDD II	4132	1852.4	25.24	0	25.24	0.1327	1.0	PASSED
	4175	1880.0	24.85	0	24.85	0.1213	1.0	PASSED
	4233	1907.6	25.84	0	25.84	0.1210	1.0	PASSED

For GPRS/EGPRS mode Multislot Class12 (maximal 4 Uplink time slots) is considered for duty cycle.

1.2.3 Results for 1700 MHz Operations (Part 27)

Band	Mode	Channel	Frequency [MHz]	Conducted Peak Power [dBm]	Average Power [dBm]	MPE [mW/cm²]	MPE Limit [mW/cm²] §1.1310	Result
FDD IV	RMC	1312	1712.4	26.13	26.13	0.1629	1.0	PASSED
		1412	1732.4	26.17	26.17	0.1644	1.0	PASSED
		1513	1752.5	26.09	26.09	0.1614	1.0	PASSED