




Exhibit: RF Exposure – FCC

FCC RF exposure evaluation of the
System in accordance with FCC 1.1310

COMMERCIAL-IN-CONFIDENCE

FCC ID: 2BHMSA1452201

TR-7169014294-MPE-001

Client	NEC Corporation	
Product	PF54A0-mb480-05 Radio Unit for wireless base station	
Standard(s)	FCC 1.1310	

RF Exposure

The EUT is or contains a transmitter as depicted in the table below.

Radiofrequency Radiation Exposure Evaluation: Mobile Devices

The power density can be calculate using the formula:

$$P_d = (P_{out} * G) / (4 * \pi * R^2)$$

where,

f = frequency in MHz


P_d = Power density in mW/cm^2

P_{out} = Conducted output power to antenna in mW

G = Numeric Antenna Gain

π = 3.1416

R = uncontrolled distance of 20 cm as per normal operation.

Client	NEC Corporation	 Canada
Product	PF54A0-mb480-05 Radio Unit for wireless base station	
Standard(s)	FCC 1.1310	

MPE Calculation (Band 48):

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

	power at antenna 1 terminal:	23.0	
	power at antenna 2 terminal:	23.1	
	Combined peak output power at antenna input terminal:	26.06	(dBm)
Note: Combined as per FCC KDB 662911 D01 (E)(1)			
Maximum peak output power at antenna input terminal:	403.700026	(mW)	
	Number of Ports	2	
	Antenna gain(typical):	10.8	
	Antenna gain(total):	10.8	(dBi)
	Maximum antenna gain:	12.02264435	(numeric)
	Time Averaging:	100	(%)
	Prediction distance:	20	(cm)
	Prediction frequency:	3625	(MHz)
FCC MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)	
	Power density at prediction frequency:	0.965581	(mW/cm^2)
	Margin of compliance:	-0.2	(dB)
	This equates to	9.655814681	W/m^2