



Canada

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/cm²

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.

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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