

FCC Part 15 Subpart C

Frequency Spread Spectrum Transmitter

Class 2 Permissive Change Test Report

Appendix A

RF Exposure Information

Manufacturer: Proxim Corporation

Model: B11FNF

Variants: ♦ 153180-0001 Omni
♦ 153325-0001 Omni
♦ 155845-0411 Omni
♦ 155846-0001 Omni
♦ 480424-0411 Omni
♦ 460602-3020 Directional
♦ 480429-2703 Directional
♦ 480429-2712 Directional
♦ 480429-3508 Directional

FCC ID: HZB-B11FNF
Project No: 03-014

General Information:

Applicant: Proxim Corporation
FCC ID: HZB-B11FNF
Device Category: Mobile Device
Environment: General Population/Uncontrolled Exposure

Technical Information:

Model Numbers: **155846-0001 & 155845-0001 & 480424-0411 & 153180-0001
153325-0001 & 460602-3020 & 480429-2703 & 480429-2712
480429-3508**
Antenna Types: Omni (4), Directional (5) **(See below)**
Antenna Gains: 0dB (2), 3dB (1), 6dB (1), 7.5dB (1), 9dB (1), 12dB (1), 15dB (2)
Transmitter Conducted Power: 15.29dBm or 35mW
Maximum System EIRP: 30.29dBm or 1069.05mW

Operating Configuration: Mobile Device
Exposure Conditions: Greater than 20cm from the population

MPE Calculation

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d (mW/cm^2) = \frac{E^2}{3770}$$

MPE Distance

MPE Calculator for 2400MHz Mobile Equipment						
Limits for General Population/Uncontrolled Exposure*						
Transmit Freq. (MHz)	Radio Power (dBm)	Antenna Gain (dBi)	System EIRP (mW)	MPE Limit (mW/cm2)	MPE Distance (cm)	Antenna Type
2400	15.29	0	33.81	.006729	20	Omni
2400	15.29	0	33.81	.006729	20	Omni
2400	15.29	3	67.45	.01342	20	Omni
2400	15.29	6	134.59	.02678	20	Omni
2400	15.29	9	268.53	.05344	20	Omni
2400	15.29	12	535.8	.1066	20	Directional
2400	15.29	15	1069.45	.2128	20	Directional
2400	15.29	15	1069.05	.2128	20	Directional
2400	15.29	7.5	190.11	.03784	20	Directional

SAR test justification:

These antennas are intended to be mounted in a mobile device. The antennas will be installed such that a minimum distance of 20cm is maintained from them to the any part of the rest of the user's body. Due to the fact that the antennas will always be 20cm from the user's body, a SAR evaluation was not necessary.

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device and any body parts.