

Executive Summary

G2S Environmental Consulting Inc. (G2S) was retained by the Calgary Board of Education (CBE) to complete electromagnetic radiation (EMR) testing of twenty-five school buildings within the CBE.

Wi-Fi access points were installed at ceiling level at various locations throughout the schools. The objective of the testing was to assess the levels of radiofrequency (RF) emissions associated with the Wi-Fi equipment and compare the collected data to the exposure limits specified in the 2015 Health Canada Safety Code 6 document (Safety Code 6 (2015)). During the testing, the staff and students continued to use the network in a normal matter to provide realistic RF exposure levels during a typical school day.

A total of 361 different locations were measured at the twenty-five school buildings. All measurements were below the Safety Code 6 (2015) limits. On average, the RF measurements were higher when the Wi-Fi equipment was turned on compared to when it was turned off, which is expected.

Both the background RF levels (Wi-Fi network “off”) and the total RF levels (Wi-Fi network “on”) showed values typical for residential areas of relatively low population density. Note that higher population density usually relates to higher RF activity, especially when cell towers are present.

Based on the findings of this survey, the RF measurements in the areas tested are well within the limits set by Health Canada Safety Code 6 (2015). The need for further investigations has not been identified at this time.