

ICNIRP Measurement Report

This report presents the results of measurements of electromagnetic field emission levels in the vicinity of mobile base stations. Results are presented as percentages of the power density reference levels for general public exposure in the 1998 edition of the Guidelines published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP)¹, with figures provided for individual frequency bands used for base station (downlink) transmissions as well as an overall figure for all other frequency bands between 30 MHz to 6 GHz. The total percentage equals the sum of all individual percentages.

The power density reference levels in the ICNIRP Guidelines are the root mean square (rms) values averaged over six minutes. In this report, we have measured the average E-field strength over a six-minute period in each measurement location.

We have applied a measurement threshold of 3dB above the system noise floor² of the measurement equipment, below which any E-field strength levels measured are deemed not sufficiently above the system noise floor to be valid. In the results tables below, measurement results are shown to a precision of four decimal places. Results which are not sufficiently above the system noise floor to record as a valid measurement are shown as a dash (-). Results which are too small to register to four decimal places are shown as 0.0000%.

Date of Survey:	30/06/2026	Time Survey completed:	14:01
Survey address:	Borden GU35		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072589	24/11/2025
Probe	Agos Aria-6000 Antenna	AGOS-6000-1157	08/07/2025
Cabling	1.7m cable	2064	15/11/2024

¹ <https://www.icnirp.org/cms/upload/publications/ICNIRPemfgdl.pdf>

² The noise floor of the measurement equipment is the level of background noise that is present before detecting any external signals. In other words, it indicates the absolute minimum level of detectable signals.

Broadcast bands covered by this report

Frequency Band	Frequency Range	Technology*
	87.5-108 MHz	FM Radio
	174-230 MHz	DAB
	470-694 MHz	Digital TV

Mobile bands covered by this report

Frequency Band	Frequency Range	Technology*
700 MHz	738-788 MHz	4G, 5G
800 MHz	791-821 MHz	4G
900 MHz	925-960 MHz	2G, 3G, 4G
1400 MHz	1452-1492 MHz	4G (Supplementary downlink)
1800 MHz	1805-1880 MHz	2G, 4G
1900 MHz	1900-1920 MHz	4G
2100 MHz	2110-2170 MHz	3G, 4G
2300 MHz	2350-2390 MHz	4G
2600 MHz TDD	2570-2620 MHz	4G
2600 MHz FDD	2620-2690 MHz	4G
3.4 GHz	3410-3680 MHz	5G, 4G
3.8 GHz	3680-4200 MHz	Various
Others**		

** This is an indication of the type of technologies typically deployed in these bands; not all frequency bands and technologies may be in use at all locations. ** All other frequencies between 30 MHz and 6 GHz.*

Survey locations

The survey was conducted within the area shown in the map below. Measurements were taken at five locations and are presented in the following pages of this report.



Location 1

Measurement time:	13:17
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00982
174-230 MHz	0.01125
470-694 MHz	0.00877
700 MHz	0.00282
800 MHz	0.00371
900 MHz	0.00067
1400 MHz	0.00062
1800 MHz	0.00105
1900 MHz	0.00019
2100 MHz	0.00068
2300 MHz	0.00045
2600 MHz TDD	0.00037
2600 MHz FDD	0.00017
3.4 GHz	0.00197
3.8 GHz	0.00425
Others	0.14244
Total	0.18923

Location 2

Measurement time:	13:25
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01039
174-230 MHz	0.01194
470-694 MHz	0.00928
700 MHz	0.00333
800 MHz	0.00381
900 MHz	0.00273
1400 MHz	0.00431
1800 MHz	0.00185
1900 MHz	0.00021
2100 MHz	0.00281
2300 MHz	0.00100
2600 MHz TDD	0.00074
2600 MHz FDD	0.00080
3.4 GHz	0.00263
3.8 GHz	0.00460
Others	0.15241
Total	0.21284

Location 3

Measurement time:	13:34
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01104
174-230 MHz	0.01265
470-694 MHz	0.00970
700 MHz	0.00944
800 MHz	0.01361
900 MHz	0.00468
1400 MHz	0.00627
1800 MHz	0.00295
1900 MHz	0.00022
2100 MHz	0.00240
2300 MHz	0.00101
2600 MHz TDD	0.00083
2600 MHz FDD	0.00133
3.4 GHz	0.00337
3.8 GHz	0.00492
Others	0.16170
Total	0.24614

Location 4

Measurement time:	13:43
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01158
174-230 MHz	0.01306
470-694 MHz	0.01008
700 MHz	0.01297
800 MHz	0.00831
900 MHz	0.00098
1400 MHz	0.00636
1800 MHz	0.00748
1900 MHz	0.00023
2100 MHz	0.00156
2300 MHz	0.00057
2600 MHz TDD	0.00046
2600 MHz FDD	0.00021
3.4 GHz	0.00250
3.8 GHz	0.00511
Others	0.17474
Total	0.25620

Location 5

Measurement time:	13:55
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01192
174-230 MHz	0.01342
470-694 MHz	0.01035
700 MHz	0.00410
800 MHz	0.00210
900 MHz	0.00074
1400 MHz	0.00070
1800 MHz	0.00122
1900 MHz	0.00024
2100 MHz	0.00077
2300 MHz	0.00054
2600 MHz TDD	0.00045
2600 MHz FDD	0.00020
3.4 GHz	0.00233
3.8 GHz	0.00531
Others	0.17374
Total	0.22813

Disclaimer: The results detailed in this report apply only to the tests made at the reported time, using the test equipment detailed. They do not indicate that on another date an identical set of results would be achieved, due to changes in local environmental conditions or other factors which may or may not have an effect on the measurement results obtained at that future time.