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 floor[2] 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:	09/09/2026	**Time Survey completed:**	14:37
Survey address:	Halifax HX1		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY59221931	28/07/2026
Probe	Agos Aria-6000 Antenna	AGOS-6000-1022	08/07/2025
Cabling	1.7m cable	2072	18/02/2026

[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 six locations and are presented in the following pages of this report.



Location 1

Measurement time:	13:49
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00566
174-230 MHz	0.00373
470-694 MHz	0.00249
700 MHz	0.04258
800 MHz	0.05281
900 MHz	0.03401
1400 MHz	0.06798
1800 MHz	0.03555
1900 MHz	0.00006
2100 MHz	0.01154
2300 MHz	0.00017
2600 MHz TDD	0.00041
2600 MHz FDD	0.00765
3.4 GHz	0.00301
3.8 GHz	0.00175
Others	0.04562
Total	**0.31503**

Location 2

Measurement time:	13:57
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00313
174-230 MHz	0.00239
470-694 MHz	0.00234
700 MHz	0.00366
800 MHz	0.00872
900 MHz	0.02613
1400 MHz	0.04560
1800 MHz	0.02283
1900 MHz	0.00005
2100 MHz	0.00695
2300 MHz	0.00011
2600 MHz TDD	0.00020
2600 MHz FDD	0.00385
3.4 GHz	0.00167
3.8 GHz	0.00153
Others	0.04079
Total	**0.16996**

Location 3

Measurement time:	14:05
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00397
174-230 MHz	0.00244
470-694 MHz	0.00253
700 MHz	0.01503
800 MHz	0.04662
900 MHz	0.02592
1400 MHz	0.05251
1800 MHz	0.00661
1900 MHz	0.00005
2100 MHz	0.00475
2300 MHz	0.00012
2600 MHz TDD	0.00017
2600 MHz FDD	0.00212
3.4 GHz	0.00186
3.8 GHz	0.00144
Others	0.03884
Total	**0.20497**

Location 4

Measurement time:	14:14
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00434
174-230 MHz	0.00271
470-694 MHz	0.00213
700 MHz	0.02260
800 MHz	0.04642
900 MHz	0.02629
1400 MHz	0.01723
1800 MHz	0.00214
1900 MHz	0.00005
2100 MHz	0.00155
2300 MHz	0.00015
2600 MHz TDD	0.00012
2600 MHz FDD	0.00126
3.4 GHz	0.00106
3.8 GHz	0.00140
Others	0.03803
Total	**0.16749**

Location 5

Measurement time:	14:23
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00438
174-230 MHz	0.00270
470-694 MHz	0.00204
700 MHz	0.00184
800 MHz	0.00295
900 MHz	0.00077
1400 MHz	0.01340
1800 MHz	0.00517
1900 MHz	0.00005
2100 MHz	0.00162
2300 MHz	0.00011
2600 MHz TDD	0.00015
2600 MHz FDD	0.00136
3.4 GHz	0.00113
3.8 GHz	0.00138
Others	0.03696
Total	**0.07602**

Location 6

Measurement time:	14:31
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00477
174-230 MHz	0.00388
470-694 MHz	0.00207
700 MHz	0.01882
800 MHz	0.05902
900 MHz	0.02673
1400 MHz	0.07126
1800 MHz	0.03377
1900 MHz	0.00005
2100 MHz	0.01261
2300 MHz	0.00017
2600 MHz TDD	0.00043
2600 MHz FDD	0.01034
3.4 GHz	0.00306
3.8 GHz	0.00137
Others	0.03726
Total	**0.28562**

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.