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:	17/08/2026	**Time Survey completed:**	11:12
Survey address:	Bury BL9		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9950A Spectrum Analyser	US55240265	31/10/2025
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:	10:18
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00962
174-230 MHz	0.00828
470-694 MHz	0.00673
700 MHz	0.00224
800 MHz	0.00134
900 MHz	0.00738
1400 MHz	0.00824
1800 MHz	0.00928
1900 MHz	0.00012
2100 MHz	0.00792
2300 MHz	0.00204
2600 MHz TDD	0.00168
2600 MHz FDD	0.00278
3.4 GHz	0.00161
3.8 GHz	0.00294
Others	0.11388
Total	**0.18607**

Location 2

Measurement time:	10:28
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00992
174-230 MHz	0.00880
470-694 MHz	0.00766
700 MHz	0.00954
800 MHz	0.02274
900 MHz	0.11075
1400 MHz	0.02401
1800 MHz	0.01565
1900 MHz	0.00012
2100 MHz	0.01636
2300 MHz	0.00603
2600 MHz TDD	0.00429
2600 MHz FDD	0.00182
3.4 GHz	0.00159
3.8 GHz	0.00309
Others	0.11982
Total	**0.36219**

Location 3

Measurement time:	10:37
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01009
174-230 MHz	0.00888
470-694 MHz	0.00688
700 MHz	0.04453
800 MHz	0.06537
900 MHz	0.04762
1400 MHz	0.02063
1800 MHz	0.00943
1900 MHz	0.00013
2100 MHz	0.01502
2300 MHz	0.00594
2600 MHz TDD	0.00476
2600 MHz FDD	0.00575
3.4 GHz	0.00271
3.8 GHz	0.00408
Others	0.12222
Total	**0.37402**

Location 4

Measurement time:	10:45
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00989
174-230 MHz	0.00908
470-694 MHz	0.00704
700 MHz	0.09088
800 MHz	0.04520
900 MHz	0.11726
1400 MHz	0.04190
1800 MHz	0.01199
1900 MHz	0.00013
2100 MHz	0.02147
2300 MHz	0.00538
2600 MHz TDD	0.00724
2600 MHz FDD	0.00714
3.4 GHz	0.00394
3.8 GHz	0.00376
Others	0.12224
Total	**0.50453**

Location 5

Measurement time:	10:56
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01029
174-230 MHz	0.00966
470-694 MHz	0.00760
700 MHz	0.01561
800 MHz	0.02520
900 MHz	0.02563
1400 MHz	0.02382
1800 MHz	0.00508
1900 MHz	0.00013
2100 MHz	0.00510
2300 MHz	0.00230
2600 MHz TDD	0.00127
2600 MHz FDD	0.00172
3.4 GHz	0.00259
3.8 GHz	0.00332
Others	0.12092
Total	**0.26024**

Location 6

Measurement time:	11:06
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01046
174-230 MHz	0.00942
470-694 MHz	0.00778
700 MHz	0.00224
800 MHz	0.00247
900 MHz	0.01036
1400 MHz	0.00682
1800 MHz	0.00969
1900 MHz	0.00013
2100 MHz	0.01300
2300 MHz	0.00248
2600 MHz TDD	0.00204
2600 MHz FDD	0.00391
3.4 GHz	0.00210
3.8 GHz	0.00337
Others	0.12432
Total	**0.21057**

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.