

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:	12/01/2026	Time Survey completed:	13:08
Survey address:	London CR2		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY57271441	10/06/2025
Probe	Agos Aria-6000 Antenna	ARIA-6000-1157	08/07/2025
Cabling	1.7m cable	1379	08/07/2025

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:	12:27
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00878
174-230 MHz	0.00982
470-694 MHz	0.00787
700 MHz	0.00177
800 MHz	0.00076
900 MHz	0.00055
1400 MHz	0.00279
1800 MHz	0.00204
1900 MHz	0.00016
2100 MHz	0.00310
2300 MHz	0.00034
2600 MHz TDD	0.00027
2600 MHz FDD	0.00014
3.4 GHz	0.00174
3.8 GHz	0.00353
Others	0.12044
Total	0.16408

Location 2

Measurement time:	12:36
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00879
174-230 MHz	0.01008
470-694 MHz	0.00800
700 MHz	0.02806
800 MHz	0.00767
900 MHz	0.00056
1400 MHz	0.00494
1800 MHz	0.00235
1900 MHz	0.00016
2100 MHz	0.00202
2300 MHz	0.00035
2600 MHz TDD	0.00028
2600 MHz FDD	0.00017
3.4 GHz	0.00222
3.8 GHz	0.00363
Others	0.12328
Total	0.20257

Location 3

Measurement time:	12:44
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00883
174-230 MHz	0.01015
470-694 MHz	0.00810
700 MHz	0.02018
800 MHz	0.00405
900 MHz	0.00056
1400 MHz	0.00995
1800 MHz	0.00380
1900 MHz	0.00016
2100 MHz	0.00237
2300 MHz	0.00035
2600 MHz TDD	0.00028
2600 MHz FDD	0.00014
3.4 GHz	0.00202
3.8 GHz	0.00368
Others	0.12485
Total	0.19947

Location 4

Measurement time:	12:52
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00891
174-230 MHz	0.01021
470-694 MHz	0.00824
700 MHz	0.02967
800 MHz	0.00476
900 MHz	0.00058
1400 MHz	0.00516
1800 MHz	0.00187
1900 MHz	0.00017
2100 MHz	0.00234
2300 MHz	0.00035
2600 MHz TDD	0.00029
2600 MHz FDD	0.00023
3.4 GHz	0.00213
3.8 GHz	0.00374
Others	0.12659
Total	0.20525

Location 5

Measurement time:	13:02
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00926
174-230 MHz	0.01028
470-694 MHz	0.00817
700 MHz	0.00208
800 MHz	0.00086
900 MHz	0.00057
1400 MHz	0.00247
1800 MHz	0.00237
1900 MHz	0.00016
2100 MHz	0.00159
2300 MHz	0.00035
2600 MHz TDD	0.00029
2600 MHz FDD	0.00015
3.4 GHz	0.00208
3.8 GHz	0.00374
Others	0.12635
Total	0.17076

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.