

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:	28/01/2026	Time Survey completed:	12:40
Survey address:	London CRO		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY5271441	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:	11:44
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00756
174-230 MHz	0.00804
470-694 MHz	0.00722
700 MHz	0.01195
800 MHz	0.06252
900 MHz	0.19907
1400 MHz	0.00752
1800 MHz	0.01628
1900 MHz	0.00013
2100 MHz	0.04828
2300 MHz	0.01214
2600 MHz TDD	0.00059
2600 MHz FDD	0.02336
3.4 GHz	0.01000
3.8 GHz	0.01661
Others	0.10501
Total	0.53629

Location 2

Measurement time:	11:55
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00932
174-230 MHz	0.00908
470-694 MHz	0.01548
700 MHz	0.00171
800 MHz	0.05865
900 MHz	0.02580
1400 MHz	0.00203
1800 MHz	0.00190
1900 MHz	0.00014
2100 MHz	0.00675
2300 MHz	0.00080
2600 MHz TDD	0.00025
2600 MHz FDD	0.00061
3.4 GHz	0.00273
3.8 GHz	0.00384
Others	0.10741
Total	0.24650

Location 3

Measurement time:	12:04
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01083
174-230 MHz	0.00943
470-694 MHz	0.00961
700 MHz	0.00160
800 MHz	0.01327
900 MHz	0.01029
1400 MHz	0.00109
1800 MHz	0.00150
1900 MHz	0.00015
2100 MHz	0.02757
2300 MHz	0.00156
2600 MHz TDD	0.00033
2600 MHz FDD	0.00214
3.4 GHz	0.00483
3.8 GHz	0.00579
Others	0.11287
Total	0.21285

Location 4

Measurement time:	12:22
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01068
174-230 MHz	0.01012
470-694 MHz	0.00889
700 MHz	0.00120
800 MHz	0.00423
900 MHz	0.00310
1400 MHz	0.00041
1800 MHz	0.00184
1900 MHz	0.00016
2100 MHz	0.00272
2300 MHz	0.00106
2600 MHz TDD	0.00031
2600 MHz FDD	0.00389
3.4 GHz	0.00171
3.8 GHz	0.00423
Others	0.11947
Total	0.17401

Location 5

Measurement time:	12:34
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00904
174-230 MHz	0.00996
470-694 MHz	0.00841
700 MHz	0.00600
800 MHz	0.11254
900 MHz	0.07829
1400 MHz	0.00653
1800 MHz	0.01124
1900 MHz	0.00016
2100 MHz	0.09382
2300 MHz	0.01295
2600 MHz TDD	0.00075
2600 MHz FDD	0.01265
3.4 GHz	0.01176
3.8 GHz	0.01403
Others	0.12315
Total	0.51128

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.