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:	24/08/2026	**Time Survey completed:**	14:39
Survey address:	Leicester LE4		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072606	30/06/2026
Probe	Agos Aria-6000 Antenna	ARIA-6000-1158	08/07/2025
Cabling	1.7m cable	1458	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:	13:02
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.03717
174-230 MHz	0.02435
470-694 MHz	0.01494
700 MHz	0.00350
800 MHz	0.00361
900 MHz	0.00261
1400 MHz	0.00189
1800 MHz	0.00242
1900 MHz	0.00040
2100 MHz	0.00196
2300 MHz	0.00074
2600 MHz TDD	0.00068
2600 MHz FDD	0.00068
3.4 GHz	0.00340
3.8 GHz	0.00774
Others	0.37196
Total	**0.47806**

Location 2

Measurement time:	13:17
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.03584
174-230 MHz	0.02368
470-694 MHz	0.01453
700 MHz	0.00211
800 MHz	0.00305
900 MHz	0.00386
1400 MHz	0.00146
1800 MHz	0.00241
1900 MHz	0.00039
2100 MHz	0.00196
2300 MHz	0.00080
2600 MHz TDD	0.00066
2600 MHz FDD	0.00057
3.4 GHz	0.00345
3.8 GHz	0.00746
Others	0.35999
Total	**0.46221**

Location 3

Measurement time:	13:49
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.03697
174-230 MHz	0.02421
470-694 MHz	0.01482
700 MHz	0.00182
800 MHz	0.00138
900 MHz	0.00134
1400 MHz	0.00108
1800 MHz	0.00160
1900 MHz	0.00040
2100 MHz	0.00112
2300 MHz	0.00116
2600 MHz TDD	0.00068
2600 MHz FDD	0.00038
3.4 GHz	0.00353
3.8 GHz	0.00768
Others	0.36859
Total	**0.46677**

Location 4

Measurement time:	14:09
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.03616
174-230 MHz	0.02369
470-694 MHz	0.01456
700 MHz	0.00309
800 MHz	0.00388
900 MHz	0.00254
1400 MHz	0.00170
1800 MHz	0.00219
1900 MHz	0.00039
2100 MHz	0.00137
2300 MHz	0.00094
2600 MHz TDD	0.00067
2600 MHz FDD	0.00053
3.4 GHz	0.00345
3.8 GHz	0.00747
Others	0.36112
Total	**0.46375**

Location 5

Measurement time:	14:34
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.03475
174-230 MHz	0.02286
470-694 MHz	0.01408
700 MHz	0.00385
800 MHz	0.00304
900 MHz	0.00381
1400 MHz	0.00152
1800 MHz	0.00275
1900 MHz	0.00038
2100 MHz	0.00139
2300 MHz	0.00072
2600 MHz TDD	0.00064
2600 MHz FDD	0.00068
3.4 GHz	0.00312
3.8 GHz	0.00710
Others	0.34704
Total	**0.44771**

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.