

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:	13/04/2026	Time Survey completed:	15:03
Survey address:	Bury St Edmunds IP32		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072591	11/12/2025
Probe	Agos Aria-6000 Antenna	ARIA-6000-1023	08/07/2025
Cabling	1.7m cable	1188	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:	14:06
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01475
174-230 MHz	0.01637
470-694 MHz	0.01294
700 MHz	0.00341
800 MHz	0.00979
900 MHz	0.00543
1400 MHz	0.00069
1800 MHz	0.00977
1900 MHz	0.00032
2100 MHz	0.00147
2300 MHz	0.00175
2600 MHz TDD	0.00056
2600 MHz FDD	0.00024
3.4 GHz	0.00264
3.8 GHz	0.00657
Others	0.20761
Total	0.29432

Location 2

Measurement time:	14:20
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01608
174-230 MHz	0.01805
470-694 MHz	0.01404
700 MHz	0.00548
800 MHz	0.02540
900 MHz	0.02069
1400 MHz	0.00074
1800 MHz	0.01016
1900 MHz	0.00035
2100 MHz	0.00235
2300 MHz	0.00270
2600 MHz TDD	0.00062
2600 MHz FDD	0.00026
3.4 GHz	0.00296
3.8 GHz	0.00762
Others	0.22937
Total	0.35686

Location 3

Measurement time:	14:34
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01714
174-230 MHz	0.01944
470-694 MHz	0.01498
700 MHz	0.00860
800 MHz	0.02248
900 MHz	0.00761
1400 MHz	0.00079
1800 MHz	0.00878
1900 MHz	0.00038
2100 MHz	0.00172
2300 MHz	0.00133
2600 MHz TDD	0.00067
2600 MHz FDD	0.00029
3.4 GHz	0.00322
3.8 GHz	0.00790
Others	0.24696
Total	0.36228

Location 4

Measurement time:	14:46
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01792
174-230 MHz	0.01991
470-694 MHz	0.01545
700 MHz	0.00293
800 MHz	0.01400
900 MHz	0.00632
1400 MHz	0.00090
1800 MHz	0.01216
1900 MHz	0.00040
2100 MHz	0.00259
2300 MHz	0.00367
2600 MHz TDD	0.00069
2600 MHz FDD	0.00030
3.4 GHz	0.00335
3.8 GHz	0.00821
Others	0.25536
Total	0.36414

Location 5

Measurement time:	14:57
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01751
174-230 MHz	0.01971
470-694 MHz	0.01517
700 MHz	0.00276
800 MHz	0.00567
900 MHz	0.00458
1400 MHz	0.00081
1800 MHz	0.01186
1900 MHz	0.00039
2100 MHz	0.00136
2300 MHz	0.00295
2600 MHz TDD	0.00068
2600 MHz FDD	0.00029
3.4 GHz	0.00328
3.8 GHz	0.00811
Others	0.25096
Total	0.34608

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.