

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:	12:51
Survey address:	Trumpington CB2		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072591	11/12/2025
Probe	Agos Aria-6000 Antenna	10561	08/07/2025
Cabling	1.7m cable	1407	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 six locations and are presented in the following pages of this report.



Location 1

Measurement time:	11:56
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01412
174-230 MHz	0.01561
470-694 MHz	0.01410
700 MHz	0.00229
800 MHz	0.00649
900 MHz	0.01333
1400 MHz	0.00126
1800 MHz	0.00261
1900 MHz	0.00037
2100 MHz	0.00250
2300 MHz	0.00074
2600 MHz TDD	0.00064
2600 MHz FDD	0.00028
3.4 GHz	0.00312
3.8 GHz	0.00707
Others	0.23451
Total	0.31905

Location 2

Measurement time:	12:07
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01318
174-230 MHz	0.01467
470-694 MHz	0.01328
700 MHz	0.00401
800 MHz	0.02968
900 MHz	0.01325
1400 MHz	0.01035
1800 MHz	0.00848
1900 MHz	0.00035
2100 MHz	0.00909
2300 MHz	0.00069
2600 MHz TDD	0.00060
2600 MHz FDD	0.00026
3.4 GHz	0.00365
3.8 GHz	0.00653
Others	0.21927
Total	0.34733

Location 3

Measurement time:	12:18
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01266
174-230 MHz	0.01417
470-694 MHz	0.01289
700 MHz	0.01990
800 MHz	0.02217
900 MHz	0.01651
1400 MHz	0.00921
1800 MHz	0.00585
1900 MHz	0.00033
2100 MHz	0.00657
2300 MHz	0.00067
2600 MHz TDD	0.00058
2600 MHz FDD	0.00026
3.4 GHz	0.00437
3.8 GHz	0.00629
Others	0.21168
Total	0.34412

Location 4

Measurement time:	12:27
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01239
174-230 MHz	0.01372
470-694 MHz	0.01254
700 MHz	0.00243
800 MHz	0.00669
900 MHz	0.04230
1400 MHz	0.00145
1800 MHz	0.00184
1900 MHz	0.00033
2100 MHz	0.00477
2300 MHz	0.00065
2600 MHz TDD	0.00056
2600 MHz FDD	0.00024
3.4 GHz	0.00276
3.8 GHz	0.00604
Others	0.20569
Total	0.31440

Location 5

Measurement time:	12:37
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01214
174-230 MHz	0.01362
470-694 MHz	0.01237
700 MHz	0.00180
800 MHz	0.00884
900 MHz	0.01466
1400 MHz	0.00081
1800 MHz	0.00163
1900 MHz	0.00032
2100 MHz	0.00210
2300 MHz	0.00064
2600 MHz TDD	0.00055
2600 MHz FDD	0.00023
3.4 GHz	0.00259
3.8 GHz	0.00595
Others	0.20111
Total	0.27936

Location 6

Measurement time:	12:45
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01224
174-230 MHz	0.01339
470-694 MHz	0.01225
700 MHz	0.00205
800 MHz	0.01296
900 MHz	0.01087
1400 MHz	0.00122
1800 MHz	0.00231
1900 MHz	0.00032
2100 MHz	0.00521
2300 MHz	0.00063
2600 MHz TDD	0.00055
2600 MHz FDD	0.00023
3.4 GHz	0.00260
3.8 GHz	0.00587
Others	0.19964
Total	0.28234

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.