

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:	19/01/2026	Time Survey completed:	15:15
Survey address:	Market Deeping PE6		

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	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 five locations and are presented in the following pages of this report.



Location 1

Measurement time:	14:07
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01295
174-230 MHz	0.01456
470-694 MHz	0.01158
700 MHz	0.00235
800 MHz	0.00561
900 MHz	0.00086
1400 MHz	0.00060
1800 MHz	0.00347
1900 MHz	0.00029
2100 MHz	0.00117
2300 MHz	0.00058
2600 MHz TDD	0.00049
2600 MHz FDD	0.00021
3.4 GHz	0.00230
3.8 GHz	0.00535
Others	0.18349
Total	0.24585

Location 2

Measurement time:	14:21
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01340
174-230 MHz	0.01508
470-694 MHz	0.01196
700 MHz	0.00208
800 MHz	0.00310
900 MHz	0.00087
1400 MHz	0.00063
1800 MHz	0.00508
1900 MHz	0.00030
2100 MHz	0.00091
2300 MHz	0.00061
2600 MHz TDD	0.00052
2600 MHz FDD	0.00022
3.4 GHz	0.00241
3.8 GHz	0.00561
Others	0.19158
Total	0.25435

Location 3

Measurement time:	14:35
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01366
174-230 MHz	0.01547
470-694 MHz	0.01221
700 MHz	0.00542
800 MHz	0.01236
900 MHz	0.00099
1400 MHz	0.00063
1800 MHz	0.00301
1900 MHz	0.00030
2100 MHz	0.00100
2300 MHz	0.00063
2600 MHz TDD	0.00053
2600 MHz FDD	0.00022
3.4 GHz	0.00247
3.8 GHz	0.00576
Others	0.19453
Total	0.26921

Location 4

Measurement time:	14:55
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01409
174-230 MHz	0.01585
470-694 MHz	0.01254
700 MHz	0.00200
800 MHz	0.00247
900 MHz	0.00096
1400 MHz	0.00065
1800 MHz	0.00578
1900 MHz	0.00031
2100 MHz	0.00100
2300 MHz	0.00065
2600 MHz TDD	0.00055
2600 MHz FDD	0.00023
3.4 GHz	0.00256
3.8 GHz	0.00598
Others	0.20119
Total	0.26681

Location 5

Measurement time:	15:09
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01424
174-230 MHz	0.01607
470-694 MHz	0.01278
700 MHz	0.00314
800 MHz	0.00955
900 MHz	0.00091
1400 MHz	0.00066
1800 MHz	0.00492
1900 MHz	0.00032
2100 MHz	0.00141
2300 MHz	0.00065
2600 MHz TDD	0.00055
2600 MHz FDD	0.00024
3.4 GHz	0.00262
3.8 GHz	0.00610
Others	0.20514
Total	0.27930

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.