

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:	03/03/2026	Time Survey completed:	12:57
Survey address:	Chatteris PE16		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072591	11/12/2025
Probe	Agos Aria-6000 Antenna	AGOS-6000-1023	08/07/2025
Cabling	1.7m cable	1177	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:	11:42
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01465
174-230 MHz	0.01668
470-694 MHz	0.01299
700 MHz	0.00276
800 MHz	0.00770
900 MHz	0.00768
1400 MHz	0.00068
1800 MHz	0.00350
1900 MHz	0.00033
2100 MHz	0.00890
2300 MHz	0.00102
2600 MHz TDD	0.00057
2600 MHz FDD	0.00024
3.4 GHz	0.00270
3.8 GHz	0.00695
Others	0.21044
Total	0.29779

Location 2

Measurement time:	11:52
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01512
174-230 MHz	0.01714
470-694 MHz	0.01344
700 MHz	0.00471
800 MHz	0.01662
900 MHz	0.00755
1400 MHz	0.00071
1800 MHz	0.00460
1900 MHz	0.00034
2100 MHz	0.00142
2300 MHz	0.00116
2600 MHz TDD	0.00060
2600 MHz FDD	0.00025
3.4 GHz	0.00282
3.8 GHz	0.00793
Others	0.21899
Total	0.31340

Location 3

Measurement time:	12:10
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01617
174-230 MHz	0.01819
470-694 MHz	0.01415
700 MHz	0.00498
800 MHz	0.01876
900 MHz	0.01337
1400 MHz	0.00075
1800 MHz	0.00155
1900 MHz	0.00036
2100 MHz	0.00131
2300 MHz	0.00113
2600 MHz TDD	0.00063
2600 MHz FDD	0.00027
3.4 GHz	0.00303
3.8 GHz	0.00809
Others	0.23310
Total	0.33585

Location 4

Measurement time:	12:39
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01657
174-230 MHz	0.01883
470-694 MHz	0.01460
700 MHz	0.00347
800 MHz	0.01590
900 MHz	0.03457
1400 MHz	0.00077
1800 MHz	0.00220
1900 MHz	0.00037
2100 MHz	0.00200
2300 MHz	0.00119
2600 MHz TDD	0.00065
2600 MHz FDD	0.00028
3.4 GHz	0.00316
3.8 GHz	0.00808
Others	0.24257
Total	0.36520

Location 5

Measurement time:	12:51
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01674
174-230 MHz	0.01879
470-694 MHz	0.01462
700 MHz	0.00349
800 MHz	0.01252
900 MHz	0.01120
1400 MHz	0.00078
1800 MHz	0.00403
1900 MHz	0.00037
2100 MHz	0.01428
2300 MHz	0.00128
2600 MHz TDD	0.00066
2600 MHz FDD	0.00028
3.4 GHz	0.00316
3.8 GHz	0.00782
Others	0.24220
Total	0.35222

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.