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:	19/10/2026	**Time Survey completed:**	11:48
Survey address:	Titchfield PO14		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072613	17/07/2026
Probe	Agos Aria-6000 Antenna	1111	08/07/2025
Cabling	1.7m cable	1409	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:	10:36
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00747
174-230 MHz	0.00674
470-694 MHz	0.00539
700 MHz	0.00469
800 MHz	0.00513
900 MHz	0.00232
1400 MHz	0.00129
1800 MHz	0.00138
1900 MHz	0.00010
2100 MHz	0.00491
2300 MHz	0.00063
2600 MHz TDD	0.00061
2600 MHz FDD	0.00093
3.4 GHz	0.00138
3.8 GHz	0.00257
Others	0.08077
Total	**0.12631**

Location 2

Measurement time:	10:55
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00722
174-230 MHz	0.00768
470-694 MHz	0.00587
700 MHz	0.00081
800 MHz	0.00048
900 MHz	0.00045
1400 MHz	0.00026
1800 MHz	0.00037
1900 MHz	0.00012
2100 MHz	0.00032
2300 MHz	0.00025
2600 MHz TDD	0.00022
2600 MHz FDD	0.00012
3.4 GHz	0.00115
3.8 GHz	0.00263
Others	0.08909
Total	**0.11703**

Location 3

Measurement time:	11:04
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00718
174-230 MHz	0.00798
470-694 MHz	0.00612
700 MHz	0.00273
800 MHz	0.01156
900 MHz	0.01744
1400 MHz	0.00262
1800 MHz	0.00259
1900 MHz	0.00012
2100 MHz	0.00158
2300 MHz	0.00056
2600 MHz TDD	0.00038
2600 MHz FDD	0.00031
3.4 GHz	0.00160
3.8 GHz	0.00287
Others	0.09281
Total	**0.15843**

Location 4

Measurement time:	11:27
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00834
174-230 MHz	0.00859
470-694 MHz	0.00649
700 MHz	0.00792
800 MHz	0.01345
900 MHz	0.01896
1400 MHz	0.00336
1800 MHz	0.00187
1900 MHz	0.00013
2100 MHz	0.00181
2300 MHz	0.00106
2600 MHz TDD	0.00129
2600 MHz FDD	0.00238
3.4 GHz	0.00157
3.8 GHz	0.00316
Others	0.09986
Total	**0.18023**

Location 5

Measurement time:	11:42
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00884
174-230 MHz	0.00905
470-694 MHz	0.00675
700 MHz	0.00521
800 MHz	0.00547
900 MHz	0.00182
1400 MHz	0.00165
1800 MHz	0.00093
1900 MHz	0.00014
2100 MHz	0.00438
2300 MHz	0.00067
2600 MHz TDD	0.00081
2600 MHz FDD	0.00092
3.4 GHz	0.00176
3.8 GHz	0.00330
Others	0.10509
Total	**0.15680**

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.