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:	01/10/2026	**Time Survey completed:**	13:54
Survey address:	New Alresford SO24		

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



Location 1

Measurement time:	12:56
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00613
174-230 MHz	0.00733
470-694 MHz	0.00558
700 MHz	0.00194
800 MHz	0.00295
900 MHz	0.00038
1400 MHz	0.00025
1800 MHz	0.01015
1900 MHz	0.00011
2100 MHz	0.00029
2300 MHz	0.00023
2600 MHz TDD	0.00019
2600 MHz FDD	0.00011
3.4 GHz	0.00108
3.8 GHz	0.00247
Others	0.08538
Total	**0.12458**

Location 2

Measurement time:	13:04
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00671
174-230 MHz	0.00788
470-694 MHz	0.00597
700 MHz	0.00362
800 MHz	0.00664
900 MHz	0.00041
1400 MHz	0.00026
1800 MHz	0.00213
1900 MHz	0.00012
2100 MHz	0.00032
2300 MHz	0.00025
2600 MHz TDD	0.00021
2600 MHz FDD	0.00012
3.4 GHz	0.00118
3.8 GHz	0.00269
Others	0.09304
Total	**0.13156**

Location 3

Measurement time:	13:13
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00705
174-230 MHz	0.00843
470-694 MHz	0.00622
700 MHz	0.00150
800 MHz	0.00207
900 MHz	0.00042
1400 MHz	0.00028
1800 MHz	0.00194
1900 MHz	0.00013
2100 MHz	0.00033
2300 MHz	0.00027
2600 MHz TDD	0.00022
2600 MHz FDD	0.00012
3.4 GHz	0.00127
3.8 GHz	0.00288
Others	0.09731
Total	**0.13044**

Location 4

Measurement time:	13:20
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00730
174-230 MHz	0.00861
470-694 MHz	0.00643
700 MHz	0.00120
800 MHz	0.00118
900 MHz	0.00043
1400 MHz	0.00029
1800 MHz	0.00270
1900 MHz	0.00013
2100 MHz	0.00034
2300 MHz	0.00027
2600 MHz TDD	0.00023
2600 MHz FDD	0.00013
3.4 GHz	0.00131
3.8 GHz	0.00298
Others	0.09999
Total	**0.13352**

Location 5

Measurement time:	13:31
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00757
174-230 MHz	0.00894
470-694 MHz	0.00661
700 MHz	0.00665
800 MHz	0.01326
900 MHz	0.00045
1400 MHz	0.00029
1800 MHz	0.02509
1900 MHz	0.00013
2100 MHz	0.00035
2300 MHz	0.00028
2600 MHz TDD	0.00024
2600 MHz FDD	0.00013
3.4 GHz	0.00136
3.8 GHz	0.00309
Others	0.10404
Total	**0.17850**

Location 6

Measurement time:	13:40
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00759
174-230 MHz	0.00901
470-694 MHz	0.00664
700 MHz	0.00273
800 MHz	0.00457
900 MHz	0.00045
1400 MHz	0.00037
1800 MHz	0.00084
1900 MHz	0.00014
2100 MHz	0.00036
2300 MHz	0.00028
2600 MHz TDD	0.00024
2600 MHz FDD	0.00013
3.4 GHz	0.00137
3.8 GHz	0.00311
Others	0.10407
Total	**0.14191**

Location 7

Measurement time:	13:48
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00770
174-230 MHz	0.00913
470-694 MHz	0.00674
700 MHz	0.00148
800 MHz	0.00165
900 MHz	0.00046
1400 MHz	0.00030
1800 MHz	0.00448
1900 MHz	0.00014
2100 MHz	0.00036
2300 MHz	0.00029
2600 MHz TDD	0.00024
2600 MHz FDD	0.00014
3.4 GHz	0.00139
3.8 GHz	0.00317
Others	0.10627
Total	**0.14394**

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.