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:	28/07/2026	**Time Survey completed:**	15:15
Survey address:	Ambleside LA22		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9950A Spectrum Analyser	US55240265	31/10/2025
Probe	Agos Aria-6000 Antenna	AGOS-6000-1022	08/07/2025
Cabling	1.7m cable	2072	18/02/2026

[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:	14:31
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00994
174-230 MHz	0.00915
470-694 MHz	0.00710
700 MHz	0.01597
800 MHz	0.00518
900 MHz	0.00055
1400 MHz	0.00033
1800 MHz	0.01145
1900 MHz	0.00013
2100 MHz	0.00493
2300 MHz	0.00041
2600 MHz TDD	0.00031
2600 MHz FDD	0.00016
3.4 GHz	0.00122
3.8 GHz	0.00298
Others	0.12204
Total	**0.19186**

Location 2

Measurement time:	14:41
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01040
174-230 MHz	0.00938
470-694 MHz	0.00731
700 MHz	0.03178
800 MHz	0.00560
900 MHz	0.00056
1400 MHz	0.00035
1800 MHz	0.00696
1900 MHz	0.00014
2100 MHz	0.00456
2300 MHz	0.00032
2600 MHz TDD	0.00033
2600 MHz FDD	0.00016
3.4 GHz	0.00130
3.8 GHz	0.00313
Others	0.12726
Total	**0.20954**

Location 3

Measurement time:	14:49
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01046
174-230 MHz	0.00955
470-694 MHz	0.00740
700 MHz	0.03208
800 MHz	0.00969
900 MHz	0.00057
1400 MHz	0.00176
1800 MHz	0.00578
1900 MHz	0.00014
2100 MHz	0.00097
2300 MHz	0.00033
2600 MHz TDD	0.00033
2600 MHz FDD	0.00016
3.4 GHz	0.00132
3.8 GHz	0.00318
Others	0.12819
Total	**0.21192**

Location 4

Measurement time:	14:57
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01051
174-230 MHz	0.00966
470-694 MHz	0.00751
700 MHz	0.02233
800 MHz	0.00751
900 MHz	0.00176
1400 MHz	0.00047
1800 MHz	0.00925
1900 MHz	0.00014
2100 MHz	0.00325
2300 MHz	0.00054
2600 MHz TDD	0.00034
2600 MHz FDD	0.00022
3.4 GHz	0.00139
3.8 GHz	0.00325
Others	0.13049
Total	**0.20861**

Location 5

Measurement time:	15:09
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01055
174-230 MHz	0.00967
470-694 MHz	0.00746
700 MHz	0.01248
800 MHz	0.00431
900 MHz	0.00056
1400 MHz	0.00035
1800 MHz	0.00559
1900 MHz	0.00014
2100 MHz	0.00547
2300 MHz	0.00052
2600 MHz TDD	0.00034
2600 MHz FDD	0.00017
3.4 GHz	0.00133
3.8 GHz	0.00324
Others	0.12945
Total	**0.19161**

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.