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:	31/07/2026	**Time Survey completed:**	14:32
Survey address:	Clitheroe BB7		

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:	13:48
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00826
174-230 MHz	0.00733
470-694 MHz	0.00581
700 MHz	0.00076
800 MHz	0.06974
900 MHz	0.00802
1400 MHz	0.00025
1800 MHz	0.00032
1900 MHz	0.00010
2100 MHz	0.00247
2300 MHz	0.00024
2600 MHz TDD	0.00024
2600 MHz FDD	0.00012
3.4 GHz	0.00092
3.8 GHz	0.00225
Others	0.09908
Total	**0.20591**

Location 2

Measurement time:	13:55
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00868
174-230 MHz	0.00777
470-694 MHz	0.00625
700 MHz	0.00080
800 MHz	0.02850
900 MHz	0.00529
1400 MHz	0.00026
1800 MHz	0.00031
1900 MHz	0.00011
2100 MHz	0.00381
2300 MHz	0.00026
2600 MHz TDD	0.00026
2600 MHz FDD	0.00013
3.4 GHz	0.00099
3.8 GHz	0.00241
Others	0.10364
Total	**0.16945**

Location 3

Measurement time:	14:03
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00915
174-230 MHz	0.00828
470-694 MHz	0.00664
700 MHz	0.00091
800 MHz	0.08386
900 MHz	0.00430
1400 MHz	0.00029
1800 MHz	0.00053
1900 MHz	0.00012
2100 MHz	0.00244
2300 MHz	0.00028
2600 MHz TDD	0.00028
2600 MHz FDD	0.00014
3.4 GHz	0.00107
3.8 GHz	0.00263
Others	0.11112
Total	**0.23204**

Location 4

Measurement time:	14:14
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00950
174-230 MHz	0.00867
470-694 MHz	0.00679
700 MHz	0.00095
800 MHz	0.01625
900 MHz	0.00292
1400 MHz	0.00029
1800 MHz	0.00048
1900 MHz	0.00012
2100 MHz	0.01221
2300 MHz	0.00029
2600 MHz TDD	0.00030
2600 MHz FDD	0.00015
3.4 GHz	0.00116
3.8 GHz	0.00282
Others	0.11610
Total	**0.17900**

Location 5

Measurement time:	14:26
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00971
174-230 MHz	0.00896
470-694 MHz	0.00702
700 MHz	0.00093
800 MHz	0.08709
900 MHz	0.00954
1400 MHz	0.00030
1800 MHz	0.00039
1900 MHz	0.00013
2100 MHz	0.00376
2300 MHz	0.00030
2600 MHz TDD	0.00031
2600 MHz FDD	0.00015
3.4 GHz	0.00122
3.8 GHz	0.00299
Others	0.11842
Total	**0.25119**

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.