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:**	10:06
Survey address:	Colne BB8		

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



Location 1

Measurement time:	09:08
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00797
174-230 MHz	0.00664
470-694 MHz	0.00522
700 MHz	0.00333
800 MHz	0.02218
900 MHz	0.08580
1400 MHz	0.02564
1800 MHz	0.00729
1900 MHz	0.00009
2100 MHz	0.03061
2300 MHz	0.00269
2600 MHz TDD	0.00189
2600 MHz FDD	0.00149
3.4 GHz	0.00129
3.8 GHz	0.00209
Others	0.08517
Total	**0.28939**

Location 2

Measurement time:	09:20
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01057
174-230 MHz	0.00722
470-694 MHz	0.00566
700 MHz	0.04637
800 MHz	0.08047
900 MHz	0.16960
1400 MHz	0.02237
1800 MHz	0.00225
1900 MHz	0.00010
2100 MHz	0.00463
2300 MHz	0.00374
2600 MHz TDD	0.00193
2600 MHz FDD	0.00186
3.4 GHz	0.00199
3.8 GHz	0.00256
Others	0.09620
Total	**0.45751**

Location 3

Measurement time:	09:30
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01405
174-230 MHz	0.00798
470-694 MHz	0.00599
700 MHz	0.00415
800 MHz	0.01387
900 MHz	0.02477
1400 MHz	0.01421
1800 MHz	0.00658
1900 MHz	0.00010
2100 MHz	0.02557
2300 MHz	0.00637
2600 MHz TDD	0.00538
2600 MHz FDD	0.00157
3.4 GHz	0.00172
3.8 GHz	0.00259
Others	0.10145
Total	**0.23633**

Location 4

Measurement time:	09:41
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00983
174-230 MHz	0.00817
470-694 MHz	0.00615
700 MHz	0.00244
800 MHz	0.01846
900 MHz	0.02206
1400 MHz	0.00368
1800 MHz	0.00169
1900 MHz	0.00011
2100 MHz	0.00224
2300 MHz	0.00100
2600 MHz TDD	0.00051
2600 MHz FDD	0.00031
3.4 GHz	0.00145
3.8 GHz	0.00262
Others	0.10415
Total	**0.18485**

Location 5

Measurement time:	09:51
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01377
174-230 MHz	0.00918
470-694 MHz	0.00649
700 MHz	0.00693
800 MHz	0.01425
900 MHz	0.01138
1400 MHz	0.00418
1800 MHz	0.00211
1900 MHz	0.00012
2100 MHz	0.00235
2300 MHz	0.00110
2600 MHz TDD	0.00088
2600 MHz FDD	0.00074
3.4 GHz	0.00140
3.8 GHz	0.00276
Others	0.11078
Total	**0.18841**

Location 6

Measurement time:	10:00
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01047
174-230 MHz	0.00864
470-694 MHz	0.00670
700 MHz	0.00670
800 MHz	0.01017
900 MHz	0.03489
1400 MHz	0.00781
1800 MHz	0.02043
1900 MHz	0.00012
2100 MHz	0.01116
2300 MHz	0.00136
2600 MHz TDD	0.00138
2600 MHz FDD	0.00278
3.4 GHz	0.00144
3.8 GHz	0.00288
Others	0.11482
Total	**0.24173**

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.