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:	15/01/2026	**Time Survey completed:**	13:55
Survey address:	Poulton-le-Fylde FY6		

Measurement equipment		**Serial number**	**Calibration Date**
Meter	Keysight Fieldfox N9915A Spectrum Analyser	US55240265	31/10/2025
Probe	Agos Aria-6000 Antenna	AGOS-6000-1022	08/07/2025
Cabling	1.7m cable	1405	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:	12:57
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00708
174-230 MHz	0.00658
470-694 MHz	0.00516
700 MHz	0.02252
800 MHz	0.04464
900 MHz	0.00051
1400 MHz	0.00433
1800 MHz	0.01197
1900 MHz	0.00009
2100 MHz	0.01070
2300 MHz	0.00024
2600 MHz TDD	0.00021
2600 MHz FDD	0.00039
3.4 GHz	0.00185
3.8 GHz	0.00188
Others	0.08444
Total	**0.20256**

Location 2

Measurement time:	13:05
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00743
174-230 MHz	0.00676
470-694 MHz	0.00534
700 MHz	0.03039
800 MHz	0.08965
900 MHz	0.00054
1400 MHz	0.00470
1800 MHz	0.06654
1900 MHz	0.00009
2100 MHz	0.01247
2300 MHz	0.00024
2600 MHz TDD	0.00022
2600 MHz FDD	0.00037
3.4 GHz	0.00132
3.8 GHz	0.00197
Others	0.08666
Total	**0.31469**

Location 3

Measurement time:	13:14
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00763
174-230 MHz	0.00690
470-694 MHz	0.00542
700 MHz	0.03298
800 MHz	0.02285
900 MHz	0.00114
1400 MHz	0.00133
1800 MHz	0.00401
1900 MHz	0.00009
2100 MHz	0.00129
2300 MHz	0.00029
2600 MHz TDD	0.00022
2600 MHz FDD	0.00260
3.4 GHz	0.00127
3.8 GHz	0.00201
Others	0.08739
Total	**0.17743**

Location 4

Measurement time:	13:22
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00767
174-230 MHz	0.00711
470-694 MHz	0.00553
700 MHz	0.01797
800 MHz	0.01971
900 MHz	0.00322
1400 MHz	0.00284
1800 MHz	0.00928
1900 MHz	0.00010
2100 MHz	0.00512
2300 MHz	0.00048
2600 MHz TDD	0.00023
2600 MHz FDD	0.00074
3.4 GHz	0.00155
3.8 GHz	0.00211
Others	0.08937
Total	**0.17301**

Location 5

Measurement time:	13:33
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00792
174-230 MHz	0.00729
470-694 MHz	0.00570
700 MHz	0.01345
800 MHz	0.02133
900 MHz	0.04334
1400 MHz	0.01502
1800 MHz	0.02594
1900 MHz	0.00010
2100 MHz	0.01407
2300 MHz	0.00097
2600 MHz TDD	0.00026
2600 MHz FDD	0.00157
3.4 GHz	0.00153
3.8 GHz	0.00238
Others	0.09236
Total	**0.25322**

Location 6

Measurement time:	13:41
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00813
174-230 MHz	0.00736
470-694 MHz	0.00577
700 MHz	0.03847
800 MHz	0.01307
900 MHz	0.00109
1400 MHz	0.00561
1800 MHz	0.00643
1900 MHz	0.00010
2100 MHz	0.00280
2300 MHz	0.00030
2600 MHz TDD	0.00024
2600 MHz FDD	0.00074
3.4 GHz	0.00153
3.8 GHz	0.00218
Others	0.09324
Total	**0.18706**

Location 7

Measurement time:	13:49
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00790
174-230 MHz	0.00731
470-694 MHz	0.00580
700 MHz	0.04772
800 MHz	0.02541
900 MHz	0.00051
1400 MHz	0.00292
1800 MHz	0.00974
1900 MHz	0.00010
2100 MHz	0.00449
2300 MHz	0.00026
2600 MHz TDD	0.00024
2600 MHz FDD	0.00048
3.4 GHz	0.00185
3.8 GHz	0.00220
Others	0.09502
Total	**0.21196**

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.