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:	29/04/2025	**Time Survey completed:**	13:57
Survey address:	Slough SL2		

Measurement equipment		**Serial number**	**Calibration Date**
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY58311497	23/05/2024
Probe	Agos Aria-6000 Antenna	ARIA-6000-1023	22/01/2021
Cabling	1.7m cable	1407	23/11/2023

[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

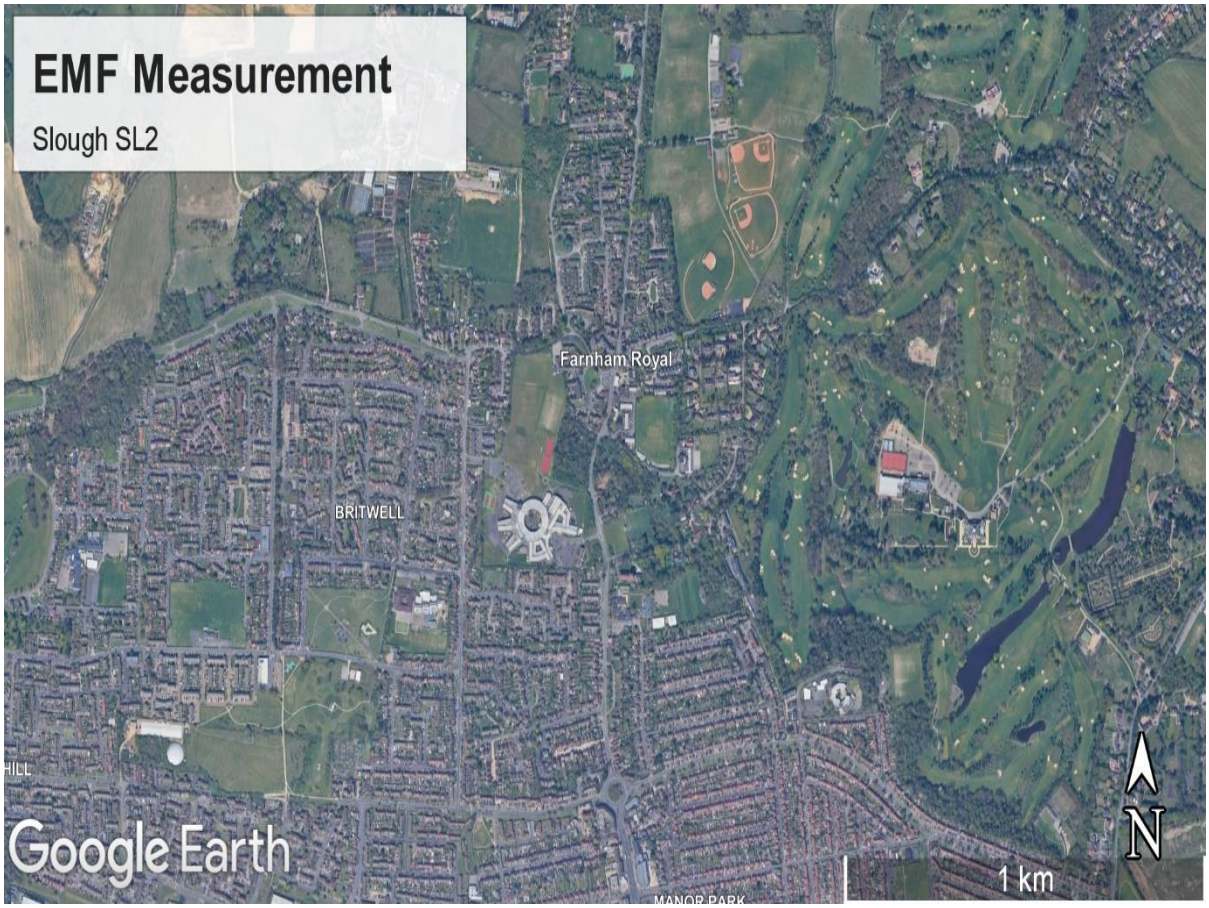
Mobile bands covered by this report

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:	13:23
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01004
174-230 MHz	0.01151
470-694 MHz	0.00883
700 MHz	0.01370
800 MHz	0.02090
900 MHz	0.01264
1400 MHz	0.01407
1800 MHz	0.00438
1900 MHz	0.00022
2100 MHz	0.00601
2300 MHz	0.00171
2600 MHz TDD	0.00043
2600 MHz FDD	0.00145
3.4 GHz	0.00742
3.8 GHz	0.00576
Others	0.15774
Total	**0.27681**

Location 2

Measurement time:	13:30
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01005
174-230 MHz	0.01140
470-694 MHz	0.00877
700 MHz	0.00623
800 MHz	0.01229
900 MHz	0.00843
1400 MHz	0.00433
1800 MHz	0.00148
1900 MHz	0.00022
2100 MHz	0.00461
2300 MHz	0.00143
2600 MHz TDD	0.00043
2600 MHz FDD	0.00141
3.4 GHz	0.00456
3.8 GHz	0.00565
Others	0.15585
Total	**0.23715**

Location 3

Measurement time:	13:37
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00985
174-230 MHz	0.01133
470-694 MHz	0.00864
700 MHz	0.00377
800 MHz	0.01933
900 MHz	0.01136
1400 MHz	0.00171
1800 MHz	0.00230
1900 MHz	0.00021
2100 MHz	0.00639
2300 MHz	0.00152
2600 MHz TDD	0.00042
2600 MHz FDD	0.00117
3.4 GHz	0.00268
3.8 GHz	0.00554
Others	0.15363
Total	**0.23985**

Location 4

Measurement time:	13:44
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00979
174-230 MHz	0.01132
470-694 MHz	0.00868
700 MHz	0.00876
800 MHz	0.03674
900 MHz	0.04282
1400 MHz	0.00373
1800 MHz	0.00233
1900 MHz	0.00021
2100 MHz	0.00546
2300 MHz	0.00145
2600 MHz TDD	0.00043
2600 MHz FDD	0.00157
3.4 GHz	0.00292
3.8 GHz	0.00553
Others	0.15396
Total	**0.29568**

Location 5

Measurement time:	13:51
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00988
174-230 MHz	0.01131
470-694 MHz	0.00865
700 MHz	0.01204
800 MHz	0.02596
900 MHz	0.01777
1400 MHz	0.00264
1800 MHz	0.00175
1900 MHz	0.00021
2100 MHz	0.00741
2300 MHz	0.00208
2600 MHz TDD	0.00042
2600 MHz FDD	0.00144
3.4 GHz	0.00392
3.8 GHz	0.00553
Others	0.15311
Total	**0.26413**

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.