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:	15/06/2026	**Time Survey completed:**	14:54
Survey address:	Huntingdon PE29		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072591	11/12/2025
Probe	Agos Aria-6000 Antenna	ARIA-6000-1023	08/07/2025
Cabling	1.7m cable	1188	02/02/2026

[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:	14:02
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.11833
174-230 MHz	0.02009
470-694 MHz	0.01572
700 MHz	0.00307
800 MHz	0.00338
900 MHz	0.00357
1400 MHz	0.00084
1800 MHz	0.00117
1900 MHz	0.00039
2100 MHz	0.00192
2300 MHz	0.00226
2600 MHz TDD	0.00069
2600 MHz FDD	0.00031
3.4 GHz	0.00339
3.8 GHz	0.00887
Others	0.25623
Total	**0.44023**

Location 2

Measurement time:	14:14
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01844
174-230 MHz	0.02007
470-694 MHz	0.01547
700 MHz	0.00402
800 MHz	0.00935
900 MHz	0.00572
1400 MHz	0.00082
1800 MHz	0.00113
1900 MHz	0.00039
2100 MHz	0.00842
2300 MHz	0.00736
2600 MHz TDD	0.00069
2600 MHz FDD	0.00030
3.4 GHz	0.00334
3.8 GHz	0.00941
Others	0.25529
Total	**0.36021**

Location 3

Measurement time:	14:26
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.02855
174-230 MHz	0.02005
470-694 MHz	0.01547
700 MHz	0.00486
800 MHz	0.00569
900 MHz	0.00465
1400 MHz	0.00082
1800 MHz	0.00115
1900 MHz	0.00039
2100 MHz	0.00175
2300 MHz	0.00400
2600 MHz TDD	0.00069
2600 MHz FDD	0.00031
3.4 GHz	0.00333
3.8 GHz	0.00980
Others	0.25543
Total	**0.35694**

Location 4

Measurement time:	14:36
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.06401
174-230 MHz	0.01958
470-694 MHz	0.01532
700 MHz	0.00253
800 MHz	0.00387
900 MHz	0.00786
1400 MHz	0.00081
1800 MHz	0.00112
1900 MHz	0.00039
2100 MHz	0.00413
2300 MHz	0.00185
2600 MHz TDD	0.00068
2600 MHz FDD	0.00030
3.4 GHz	0.00328
3.8 GHz	0.00868
Others	0.25341
Total	**0.38781**

Location 5

Measurement time:	14:48
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.11986
174-230 MHz	0.02002
470-694 MHz	0.01582
700 MHz	0.00309
800 MHz	0.00436
900 MHz	0.00372
1400 MHz	0.00084
1800 MHz	0.00118
1900 MHz	0.00039
2100 MHz	0.00242
2300 MHz	0.00255
2600 MHz TDD	0.00069
2600 MHz FDD	0.00032
3.4 GHz	0.00339
3.8 GHz	0.00930
Others	0.25654
Total	**0.44449**

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.