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:	04/02/2026	**Time Survey completed:**	13:08
Survey address:	Annan DG12		

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:	12:05
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01208
174-230 MHz	0.00875
470-694 MHz	0.00686
700 MHz	0.00469
800 MHz	0.25866
900 MHz	0.02019
1400 MHz	0.00029
1800 MHz	0.00695
1900 MHz	0.00012
2100 MHz	0.00161
2300 MHz	0.00029
2600 MHz TDD	0.00029
2600 MHz FDD	0.00014
3.4 GHz	0.00112
3.8 GHz	0.00274
Others	0.11297
Total	**0.43775**

Location 2

Measurement time:	12:15
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00963
174-230 MHz	0.00818
470-694 MHz	0.00646
700 MHz	0.00184
800 MHz	0.01372
900 MHz	0.00185
1400 MHz	0.00027
1800 MHz	0.00670
1900 MHz	0.00011
2100 MHz	0.00076
2300 MHz	0.00027
2600 MHz TDD	0.00028
2600 MHz FDD	0.00013
3.4 GHz	0.00104
3.8 GHz	0.00253
Others	0.10567
Total	**0.15943**

Location 3

Measurement time:	12:25
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01729
174-230 MHz	0.00796
470-694 MHz	0.00704
700 MHz	0.00164
800 MHz	0.03497
900 MHz	0.00135
1400 MHz	0.00026
1800 MHz	0.00320
1900 MHz	0.00011
2100 MHz	0.00046
2300 MHz	0.00025
2600 MHz TDD	0.00026
2600 MHz FDD	0.00013
3.4 GHz	0.00098
3.8 GHz	0.00238
Others	0.10117
Total	**0.17944**

Location 4

Measurement time:	12:35
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01496
174-230 MHz	0.00749
470-694 MHz	0.00622
700 MHz	0.00155
800 MHz	0.04197
900 MHz	0.00573
1400 MHz	0.00024
1800 MHz	0.01378
1900 MHz	0.00010
2100 MHz	0.00034
2300 MHz	0.00024
2600 MHz TDD	0.00024
2600 MHz FDD	0.00012
3.4 GHz	0.00091
3.8 GHz	0.00221
Others	0.09549
Total	**0.19161**

Location 5

Measurement time:	12:44
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01059
174-230 MHz	0.00745
470-694 MHz	0.00615
700 MHz	0.00244
800 MHz	0.03873
900 MHz	0.00433
1400 MHz	0.00024
1800 MHz	0.01411
1900 MHz	0.00010
2100 MHz	0.00036
2300 MHz	0.00024
2600 MHz TDD	0.00024
2600 MHz FDD	0.00011
3.4 GHz	0.00089
3.8 GHz	0.00216
Others	0.09409
Total	**0.18223**

Location 6

Measurement time:	12:53
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01021
174-230 MHz	0.00736
470-694 MHz	0.00585
700 MHz	0.00286
800 MHz	0.02654
900 MHz	0.00280
1400 MHz	0.00024
1800 MHz	0.00404
1900 MHz	0.00010
2100 MHz	0.00037
2300 MHz	0.00023
2600 MHz TDD	0.00024
2600 MHz FDD	0.00011
3.4 GHz	0.00088
3.8 GHz	0.00215
Others	0.09375
Total	**0.15772**

Location 7

Measurement time:	13:02
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00989
174-230 MHz	0.00723
470-694 MHz	0.00571
700 MHz	0.00306
800 MHz	0.23212
900 MHz	0.02915
1400 MHz	0.00023
1800 MHz	0.00386
1900 MHz	0.00010
2100 MHz	0.00032
2300 MHz	0.00023
2600 MHz TDD	0.00023
2600 MHz FDD	0.00011
3.4 GHz	0.00087
3.8 GHz	0.00212
Others	0.09265
Total	**0.38788**

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.