

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 floor² 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:	12/02/2026	Time Survey completed:	14:12
Survey address:	Wecock PO8		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072613	07/07/2025
Probe	Agos Aria-6000 Antenna	ARIA-6000-1157	08/07/2025
Cabling	1.7m cable	1379	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 five locations and are presented in the following pages of this report.



Location 1

Measurement time:	13:30
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00921
174-230 MHz	0.01034
470-694 MHz	0.00787
700 MHz	0.00103
800 MHz	0.00225
900 MHz	0.00282
1400 MHz	0.00038
1800 MHz	0.00155
1900 MHz	0.00018
2100 MHz	0.00082
2300 MHz	0.00040
2600 MHz TDD	0.00033
2600 MHz FDD	0.00022
3.4 GHz	0.00219
3.8 GHz	0.00527
Others	0.14371
Total	0.18858

Location 2

Measurement time:	13:39
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01099
174-230 MHz	0.01100
470-694 MHz	0.00823
700 MHz	0.00109
800 MHz	0.01725
900 MHz	0.01025
1400 MHz	0.00039
1800 MHz	0.00296
1900 MHz	0.00018
2100 MHz	0.00380
2300 MHz	0.00115
2600 MHz TDD	0.00039
2600 MHz FDD	0.00161
3.4 GHz	0.00241
3.8 GHz	0.00564
Others	0.16319
Total	0.24054

Location 3

Measurement time:	13:48
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01065
174-230 MHz	0.01112
470-694 MHz	0.00840
700 MHz	0.00111
800 MHz	0.00975
900 MHz	0.01067
1400 MHz	0.00040
1800 MHz	0.00152
1900 MHz	0.00019
2100 MHz	0.00180
2300 MHz	0.00051
2600 MHz TDD	0.00037
2600 MHz FDD	0.00034
3.4 GHz	0.00243
3.8 GHz	0.00574
Others	0.16115
Total	0.22616

Location 4

Measurement time:	13:57
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01117
174-230 MHz	0.01124
470-694 MHz	0.00842
700 MHz	0.00112
800 MHz	0.00309
900 MHz	0.00288
1400 MHz	0.00040
1800 MHz	0.00116
1900 MHz	0.00019
2100 MHz	0.00106
2300 MHz	0.00047
2600 MHz TDD	0.00037
2600 MHz FDD	0.00028
3.4 GHz	0.00242
3.8 GHz	0.00576
Others	0.16741
Total	0.21744

Location 5

Measurement time:	14:06
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01208
174-230 MHz	0.01150
470-694 MHz	0.00853
700 MHz	0.00113
800 MHz	0.00268
900 MHz	0.00267
1400 MHz	0.00041
1800 MHz	0.00088
1900 MHz	0.00019
2100 MHz	0.00092
2300 MHz	0.00044
2600 MHz TDD	0.00037
2600 MHz FDD	0.00024
3.4 GHz	0.00255
3.8 GHz	0.00589
Others	0.17172
Total	0.22220

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.