

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:	25/02/2026	Time Survey completed:	14:13
Survey address:	Cowplain PO8		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072613	07/07/2025
Probe	Agos Aria-6000 Antenna	AGOS-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:	13:26
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00912
174-230 MHz	0.01029
470-694 MHz	0.00780
700 MHz	0.02495
800 MHz	0.05145
900 MHz	0.06413
1400 MHz	0.00037
1800 MHz	0.00332
1900 MHz	0.00017
2100 MHz	0.02216
2300 MHz	0.00037
2600 MHz TDD	0.00038
2600 MHz FDD	0.00154
3.4 GHz	0.00213
3.8 GHz	0.00515
Others	0.14354
Total	0.34686

Location 2

Measurement time:	13:36
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01003
174-230 MHz	0.01105
470-694 MHz	0.00837
700 MHz	0.00278
800 MHz	0.05424
900 MHz	0.05752
1400 MHz	0.00040
1800 MHz	0.00068
1900 MHz	0.00019
2100 MHz	0.00413
2300 MHz	0.00040
2600 MHz TDD	0.00037
2600 MHz FDD	0.00047
3.4 GHz	0.00235
3.8 GHz	0.00569
Others	0.15672
Total	0.31542

Location 3

Measurement time:	13:45
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01047
174-230 MHz	0.01170
470-694 MHz	0.00877
700 MHz	0.00879
800 MHz	0.05737
900 MHz	0.01966
1400 MHz	0.00042
1800 MHz	0.00200
1900 MHz	0.00020
2100 MHz	0.00325
2300 MHz	0.00043
2600 MHz TDD	0.00040
2600 MHz FDD	0.00073
3.4 GHz	0.00250
3.8 GHz	0.00603
Others	0.16388
Total	0.29660

Location 4

Measurement time:	13:54
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01093
174-230 MHz	0.01210
470-694 MHz	0.00901
700 MHz	0.00286
800 MHz	0.00442
900 MHz	0.00134
1400 MHz	0.00044
1800 MHz	0.00582
1900 MHz	0.00021
2100 MHz	0.00241
2300 MHz	0.00044
2600 MHz TDD	0.00040
2600 MHz FDD	0.00028
3.4 GHz	0.00259
3.8 GHz	0.00629
Others	0.16972
Total	0.22928

Location 5

Measurement time:	14:07
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01144
174-230 MHz	0.01283
470-694 MHz	0.00955
700 MHz	0.06622
800 MHz	0.09284
900 MHz	0.07991
1400 MHz	0.00046
1800 MHz	0.00336
1900 MHz	0.00022
2100 MHz	0.01440
2300 MHz	0.00047
2600 MHz TDD	0.00046
2600 MHz FDD	0.00151
3.4 GHz	0.00281
3.8 GHz	0.00679
Others	0.18329
Total	0.48655

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.