

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:	07/04/2025	Time Survey completed:	14:36
Survey address:	Well End SL8		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072607	29/10/2024
Probe	Agos Aria-6000 Antenna	ARIA-600-1023	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:	13:51
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00966
174-230 MHz	0.01084
470-694 MHz	0.00860
700 MHz	0.00191
800 MHz	0.00556
900 MHz	0.00203
1400 MHz	0.00042
1800 MHz	0.00173
1900 MHz	0.00020
2100 MHz	0.00161
2300 MHz	0.00041
2600 MHz TDD	0.00038
2600 MHz FDD	0.00019
3.4 GHz	0.00201
3.8 GHz	0.00456
Others	0.13943
Total	0.18955

Location 2

Measurement time:	14:06
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01031
174-230 MHz	0.01166
470-694 MHz	0.00925
700 MHz	0.00172
800 MHz	0.00457
900 MHz	0.01409
1400 MHz	0.00047
1800 MHz	0.00216
1900 MHz	0.00022
2100 MHz	0.00364
2300 MHz	0.00044
2600 MHz TDD	0.00041
2600 MHz FDD	0.00021
3.4 GHz	0.00222
3.8 GHz	0.00506
Others	0.15226
Total	0.21869

Location 3

Measurement time:	14:14
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01050
174-230 MHz	0.01180
470-694 MHz	0.00928
700 MHz	0.00157
800 MHz	0.00276
900 MHz	0.00749
1400 MHz	0.00047
1800 MHz	0.00200
1900 MHz	0.00022
2100 MHz	0.00608
2300 MHz	0.00045
2600 MHz TDD	0.00041
2600 MHz FDD	0.00021
3.4 GHz	0.00225
3.8 GHz	0.00507
Others	0.15308
Total	0.21365

Location 4

Measurement time:	14:23
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01049
174-230 MHz	0.01199
470-694 MHz	0.00941
700 MHz	0.00169
800 MHz	0.00252
900 MHz	0.00422
1400 MHz	0.00047
1800 MHz	0.00196
1900 MHz	0.00022
2100 MHz	0.00140
2300 MHz	0.00045
2600 MHz TDD	0.00041
2600 MHz FDD	0.00021
3.4 GHz	0.00229
3.8 GHz	0.00515
Others	0.15500
Total	0.20788

Location 5

Measurement time:	14:30
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.01068
174-230 MHz	0.01223
470-694 MHz	0.00957
700 MHz	0.00166
800 MHz	0.00421
900 MHz	0.00371
1400 MHz	0.00048
1800 MHz	0.00137
1900 MHz	0.00023
2100 MHz	0.00183
2300 MHz	0.00047
2600 MHz TDD	0.00042
2600 MHz FDD	0.00022
3.4 GHz	0.00234
3.8 GHz	0.00532
Others	0.15807
Total	0.21282

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.