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:	20/08/2026	**Time Survey completed:**	15:07
Survey address:	Maryport CA15		

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	2072	18/02/2026

[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:	14:18
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00796
174-230 MHz	0.00703
470-694 MHz	0.00545
700 MHz	0.02968
800 MHz	0.01234
900 MHz	0.00039
1400 MHz	0.00023
1800 MHz	0.00068
1900 MHz	0.00009
2100 MHz	0.00090
2300 MHz	0.00022
2600 MHz TDD	0.00023
2600 MHz FDD	0.00016
3.4 GHz	0.00085
3.8 GHz	0.00207
Others	0.09330
Total	**0.16159**

Location 2

Measurement time:	14:36
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00920
174-230 MHz	0.00824
470-694 MHz	0.00643
700 MHz	0.06914
800 MHz	0.04253
900 MHz	0.00047
1400 MHz	0.00028
1800 MHz	0.00308
1900 MHz	0.00012
2100 MHz	0.00328
2300 MHz	0.00027
2600 MHz TDD	0.00030
2600 MHz FDD	0.00084
3.4 GHz	0.00107
3.8 GHz	0.00261
Others	0.11051
Total	**0.25837**

Location 3

Measurement time:	14:44
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01091
174-230 MHz	0.00871
470-694 MHz	0.00679
700 MHz	0.01000
800 MHz	0.00272
900 MHz	0.00049
1400 MHz	0.00030
1800 MHz	0.00173
1900 MHz	0.00012
2100 MHz	0.00284
2300 MHz	0.00029
2600 MHz TDD	0.00030
2600 MHz FDD	0.00045
3.4 GHz	0.00114
3.8 GHz	0.00278
Others	0.12010
Total	**0.16966**

Location 4

Measurement time:	14:52
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00979
174-230 MHz	0.00887
470-694 MHz	0.00688
700 MHz	0.03205
800 MHz	0.01175
900 MHz	0.00050
1400 MHz	0.00030
1800 MHz	0.00179
1900 MHz	0.00013
2100 MHz	0.00125
2300 MHz	0.00029
2600 MHz TDD	0.00031
2600 MHz FDD	0.00033
3.4 GHz	0.00117
3.8 GHz	0.00286
Others	0.11807
Total	**0.19634**

Location 5

Measurement time:	15:01
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01017
174-230 MHz	0.00903
470-694 MHz	0.00702
700 MHz	0.07371
800 MHz	0.01762
900 MHz	0.00050
1400 MHz	0.00031
1800 MHz	0.00104
1900 MHz	0.00013
2100 MHz	0.00095
2300 MHz	0.00030
2600 MHz TDD	0.00031
2600 MHz FDD	0.00021
3.4 GHz	0.00120
3.8 GHz	0.00294
Others	0.12153
Total	**0.24696**

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.