

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:	20/01/2026	Time Survey completed:	14:28
Survey address:	Leven HU17		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072594	25/11/2025
Probe	Agos Aria-6000 Antenna	ARIA-6000-1156	08/07/2025
Cabling	1.7m cable	1378	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 six locations and are presented in the following pages of this report.



Location 1

Measurement time:	13:36
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00657
174-230 MHz	0.00778
470-694 MHz	0.00646
700 MHz	0.00085
800 MHz	0.00046
900 MHz	0.00044
1400 MHz	0.00029
1800 MHz	0.00040
1900 MHz	0.00014
2100 MHz	0.00038
2300 MHz	0.00031
2600 MHz TDD	0.00026
2600 MHz FDD	0.00013
3.4 GHz	0.00142
3.8 GHz	0.00337
Others	0.10188
Total	0.13115

Location 2

Measurement time:	13:43
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00694
174-230 MHz	0.00821
470-694 MHz	0.00670
700 MHz	0.00090
800 MHz	0.00048
900 MHz	0.00045
1400 MHz	0.00031
1800 MHz	0.00042
1900 MHz	0.00015
2100 MHz	0.00040
2300 MHz	0.00034
2600 MHz TDD	0.00028
2600 MHz FDD	0.00014
3.4 GHz	0.00151
3.8 GHz	0.00358
Others	0.10732
Total	0.13810

Location 3

Measurement time:	13:50
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00706
174-230 MHz	0.00851
470-694 MHz	0.00690
700 MHz	0.00092
800 MHz	0.00049
900 MHz	0.00047
1400 MHz	0.00032
1800 MHz	0.00043
1900 MHz	0.00015
2100 MHz	0.00041
2300 MHz	0.00034
2600 MHz TDD	0.00029
2600 MHz FDD	0.00014
3.4 GHz	0.00159
3.8 GHz	0.00375
Others	0.11223
Total	0.14401

Location 4

Measurement time:	13:58
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00740
174-230 MHz	0.00873
470-694 MHz	0.00708
700 MHz	0.00094
800 MHz	0.00050
900 MHz	0.00048
1400 MHz	0.00033
1800 MHz	0.00045
1900 MHz	0.00015
2100 MHz	0.00043
2300 MHz	0.00036
2600 MHz TDD	0.00030
2600 MHz FDD	0.00015
3.4 GHz	0.00166
3.8 GHz	0.00389
Others	0.11570
Total	0.14853

Location 5

Measurement time:	14:08
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00758
174-230 MHz	0.00911
470-694 MHz	0.00731
700 MHz	0.00106
800 MHz	0.00180
900 MHz	0.00051
1400 MHz	0.00035
1800 MHz	0.00073
1900 MHz	0.00016
2100 MHz	0.00051
2300 MHz	0.00037
2600 MHz TDD	0.00031
2600 MHz FDD	0.00016
3.4 GHz	0.00174
3.8 GHz	0.00409
Others	0.12055
Total	0.15633

Location 6

Measurement time:	14:22
Frequency band	Percentage of the ICNIRP reference levels for general public exposure
87.5-108 MHz	0.00792
174-230 MHz	0.00941
470-694 MHz	0.00755
700 MHz	0.00158
800 MHz	0.00247
900 MHz	0.00051
1400 MHz	0.00035
1800 MHz	0.00169
1900 MHz	0.00017
2100 MHz	0.00076
2300 MHz	0.00039
2600 MHz TDD	0.00032
2600 MHz FDD	0.00016
3.4 GHz	0.00181
3.8 GHz	0.00426
Others	0.12507
Total	0.16442

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.