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:	14/10/2025	**Time Survey completed:**	13:34
Survey address:	Flanborough YO15		

Measurement equipment			**Serial number**	**Calibration Date**
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY56072594	04/11/2024	
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 five locations and are presented in the following pages of this report.

Location 1

Measurement time:	12:58
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.02476
174-230 MHz	0.01725
470-694 MHz	0.01141
700 MHz	0.00168
800 MHz	0.00644
900 MHz	0.02598
1400 MHz	0.00053
1800 MHz	0.00085
1900 MHz	0.00028
2100 MHz	0.00748
2300 MHz	0.00241
2600 MHz TDD	0.00060
2600 MHz FDD	0.00145
3.4 GHz	0.00336
3.8 GHz	0.00774
Others	0.27029
Total	**0.38251**

Location 2

Measurement time:	13:07
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.02393
174-230 MHz	0.01666
470-694 MHz	0.01101
700 MHz	0.00155
800 MHz	0.00503
900 MHz	0.00903
1400 MHz	0.00051
1800 MHz	0.00094
1900 MHz	0.00027
2100 MHz	0.00164
2300 MHz	0.00354
2600 MHz TDD	0.00052
2600 MHz FDD	0.00035
3.4 GHz	0.00314
3.8 GHz	0.00746
Others	0.25674
Total	**0.34233**

Location 3

Measurement time:	13:14
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.02326
174-230 MHz	0.01617
470-694 MHz	0.01076
700 MHz	0.00161
800 MHz	0.00445
900 MHz	0.00819
1400 MHz	0.00050
1800 MHz	0.00093
1900 MHz	0.00026
2100 MHz	0.00351
2300 MHz	0.00279
2600 MHz TDD	0.00051
2600 MHz FDD	0.00037
3.4 GHz	0.00299
3.8 GHz	0.00702
Others	0.25033
Total	**0.33365**

Location 4

Measurement time:	13:21
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.02283
174-230 MHz	0.01581
470-694 MHz	0.01054
700 MHz	0.00178
800 MHz	0.00410
900 MHz	0.00337
1400 MHz	0.00049
1800 MHz	0.00081
1900 MHz	0.00025
2100 MHz	0.00403
2300 MHz	0.00269
2600 MHz TDD	0.00053
2600 MHz FDD	0.00091
3.4 GHz	0.00299
3.8 GHz	0.00755
Others	0.24362
Total	**0.32230**

Location 5

Measurement time:	13:28
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.02235
174-230 MHz	0.01528
470-694 MHz	0.01033
700 MHz	0.00153
800 MHz	0.00203
900 MHz	0.01865
1400 MHz	0.00047
1800 MHz	0.00077
1900 MHz	0.00025
2100 MHz	0.00325
2300 MHz	0.00153
2600 MHz TDD	0.00051
2600 MHz FDD	0.00068
3.4 GHz	0.00292
3.8 GHz	0.00781
Others	0.23908
Total	**0.32745**

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.