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:	18/06/2026	**Time Survey completed:**	12:17
Survey address:	Thirsk YO7		

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	2063	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 six locations and are presented in the following pages of this report.



Location 1

Measurement time:	11:23
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00905
174-230 MHz	0.01068
470-694 MHz	0.00837
700 MHz	0.00696
800 MHz	0.01579
900 MHz	0.00449
1400 MHz	0.00156
1800 MHz	0.00550
1900 MHz	0.00019
2100 MHz	0.00168
2300 MHz	0.00044
2600 MHz TDD	0.00037
2600 MHz FDD	0.00019
3.4 GHz	0.00227
3.8 GHz	0.00497
Others	0.14257
Total	**0.21509**

Location 2

Measurement time:	11:32
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00959
174-230 MHz	0.01127
470-694 MHz	0.00880
700 MHz	0.00382
800 MHz	0.00214
900 MHz	0.00211
1400 MHz	0.00246
1800 MHz	0.00124
1900 MHz	0.00020
2100 MHz	0.00094
2300 MHz	0.00047
2600 MHz TDD	0.00039
2600 MHz FDD	0.00020
3.4 GHz	0.00233
3.8 GHz	0.00534
Others	0.15164
Total	**0.20294**

Location 3

Measurement time:	11:40
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00988
174-230 MHz	0.01174
470-694 MHz	0.00913
700 MHz	0.01704
800 MHz	0.00621
900 MHz	0.00445
1400 MHz	0.00143
1800 MHz	0.00249
1900 MHz	0.00021
2100 MHz	0.00120
2300 MHz	0.00049
2600 MHz TDD	0.00041
2600 MHz FDD	0.00021
3.4 GHz	0.00246
3.8 GHz	0.00559
Others	0.15805
Total	**0.23099**

Location 4

Measurement time:	11:52
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01042
174-230 MHz	0.01226
470-694 MHz	0.00942
700 MHz	0.01762
800 MHz	0.01696
900 MHz	0.00682
1400 MHz	0.00137
1800 MHz	0.00633
1900 MHz	0.00022
2100 MHz	0.00230
2300 MHz	0.00051
2600 MHz TDD	0.00043
2600 MHz FDD	0.00022
3.4 GHz	0.00281
3.8 GHz	0.00587
Others	0.16526
Total	**0.25882**

Location 5

Measurement time:	12:02
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01073
174-230 MHz	0.01270
470-694 MHz	0.00975
700 MHz	0.02745
800 MHz	0.03026
900 MHz	0.00807
1400 MHz	0.00142
1800 MHz	0.00455
1900 MHz	0.00023
2100 MHz	0.00162
2300 MHz	0.00053
2600 MHz TDD	0.00045
2600 MHz FDD	0.00023
3.4 GHz	0.00286
3.8 GHz	0.00613
Others	0.17180
Total	**0.28879**

Location 6

Measurement time:	12:11
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.01123
174-230 MHz	0.01312
470-694 MHz	0.01010
700 MHz	0.00737
800 MHz	0.02936
900 MHz	0.00357
1400 MHz	0.00100
1800 MHz	0.00362
1900 MHz	0.00024
2100 MHz	0.00178
2300 MHz	0.00056
2600 MHz TDD	0.00047
2600 MHz FDD	0.00024
3.4 GHz	0.00288
3.8 GHz	0.00646
Others	0.18012
Total	**0.27211**

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.