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:	20/10/2025	**Time Survey completed:**	14:31
Survey address:	Leeds LS7		

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 seven 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	0.00761
174-230 MHz	0.00906
470-694 MHz	0.00729
700 MHz	0.00437
800 MHz	0.01710
900 MHz	0.04194
1400 MHz	0.00170
1800 MHz	0.00116
1900 MHz	0.00016
2100 MHz	0.02550
2300 MHz	0.00508
2600 MHz TDD	0.00031
2600 MHz FDD	0.00024
3.4 GHz	0.00401
3.8 GHz	0.00725
Others	0.12002
Total	**0.25279**

Location 2

Measurement time:	13:44
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00818
174-230 MHz	0.00946
470-694 MHz	0.00774
700 MHz	0.01287
800 MHz	0.02234
900 MHz	0.02162
1400 MHz	0.00560
1800 MHz	0.00581
1900 MHz	0.00017
2100 MHz	0.00673
2300 MHz	0.00566
2600 MHz TDD	0.00032
2600 MHz FDD	0.00068
3.4 GHz	0.00419
3.8 GHz	0.00630
Others	0.12665
Total	**0.24431**

Location 3

Measurement time:	13:52
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00838
174-230 MHz	0.00978
470-694 MHz	0.00781
700 MHz	0.03573
800 MHz	0.06734
900 MHz	0.02465
1400 MHz	0.00789
1800 MHz	0.01026
1900 MHz	0.00018
2100 MHz	0.01121
2300 MHz	0.00223
2600 MHz TDD	0.00034
2600 MHz FDD	0.00086
3.4 GHz	0.00475
3.8 GHz	0.00603
Others	0.13224
Total	**0.32965**

Location 4

Measurement time:	13:59
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00862
174-230 MHz	0.01021
470-694 MHz	0.00808
700 MHz	0.02588
800 MHz	0.03476
900 MHz	0.01793
1400 MHz	0.01813
1800 MHz	0.02005
1900 MHz	0.00018
2100 MHz	0.01069
2300 MHz	0.00575
2600 MHz TDD	0.00035
2600 MHz FDD	0.00083
3.4 GHz	0.00714
3.8 GHz	0.01321
Others	0.13636
Total	**0.31818**

Location 5

Measurement time:	14:07
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00872
174-230 MHz	0.01042
470-694 MHz	0.00824
700 MHz	0.01685
800 MHz	0.06754
900 MHz	0.06252
1400 MHz	0.01584
1800 MHz	0.00964
1900 MHz	0.00019
2100 MHz	0.01566
2300 MHz	0.00451
2600 MHz TDD	0.00036
2600 MHz FDD	0.00103
3.4 GHz	0.00581
3.8 GHz	0.01053
Others	0.14003
Total	**0.37787**

Location 6

Measurement time:	14:16
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00896
174-230 MHz	0.01037
470-694 MHz	0.00821
700 MHz	0.01084
800 MHz	0.04783
900 MHz	0.04545
1400 MHz	0.01029
1800 MHz	0.00547
1900 MHz	0.00018
2100 MHz	0.00755
2300 MHz	0.00339
2600 MHz TDD	0.00036
2600 MHz FDD	0.00036
3.4 GHz	0.00464
3.8 GHz	0.00694
Others	0.13962
Total	**0.31048**

Location 7

Measurement time:	14:25
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00889
174-230 MHz	0.01064
470-694 MHz	0.00835
700 MHz	0.00394
800 MHz	0.01231
900 MHz	0.04008
1400 MHz	0.00137
1800 MHz	0.00121
1900 MHz	0.00019
2100 MHz	0.02639
2300 MHz	0.00504
2600 MHz TDD	0.00037
2600 MHz FDD	0.00027
3.4 GHz	0.00400
3.8 GHz	0.00677
Others	0.14357
Total	**0.27339**

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.