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:	20/10/2026	**Time Survey completed:**	14:02
Survey address:	Leiston, Sizewell IP16		

Measurement equipment		Serial number	Calibration Date
Meter	Keysight Fieldfox N9915A Spectrum Analyser	MY58311497	18/08/2026
Probe	Agos Aria-6000 Antenna	ARIA-6000-1157	08/07/2025
Cabling	1.7m cable	2068	15/11/2024

[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 eight locations and are presented in the following pages of this report.



Location 1

Measurement time:	12:33
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00617
174-230 MHz	0.00704
470-694 MHz	0.00575
700 MHz	0.00739
800 MHz	0.01697
900 MHz	0.00558
1400 MHz	0.00092
1800 MHz	0.00155
1900 MHz	0.00013
2100 MHz	0.00153
2300 MHz	0.00077
2600 MHz TDD	0.00029
2600 MHz FDD	0.00078
3.4 GHz	0.00151
3.8 GHz	0.00442
Others	0.09662
Total	**0.15742**

Location 2

Measurement time:	12:43
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00637
174-230 MHz	0.00744
470-694 MHz	0.00599
700 MHz	0.00227
800 MHz	0.00540
900 MHz	0.00348
1400 MHz	0.00195
1800 MHz	0.00502
1900 MHz	0.00014
2100 MHz	0.00384
2300 MHz	0.00119
2600 MHz TDD	0.00048
2600 MHz FDD	0.00193
3.4 GHz	0.00155
3.8 GHz	0.00464
Others	0.10039
Total	**0.15207**

Location 3

Measurement time:	12:53
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00666
174-230 MHz	0.00763
470-694 MHz	0.00616
700 MHz	0.00179
800 MHz	0.00369
900 MHz	0.00230
1400 MHz	0.00091
1800 MHz	0.00144
1900 MHz	0.00014
2100 MHz	0.00127
2300 MHz	0.00052
2600 MHz TDD	0.00029
2600 MHz FDD	0.00047
3.4 GHz	0.00156
3.8 GHz	0.00379
Others	0.10344
Total	**0.14207**

Location 4

Measurement time:	13:13
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00718
174-230 MHz	0.00825
470-694 MHz	0.00651
700 MHz	0.00115
800 MHz	0.00260
900 MHz	0.00636
1400 MHz	0.00146
1800 MHz	0.00754
1900 MHz	0.00015
2100 MHz	0.00271
2300 MHz	0.00138
2600 MHz TDD	0.00042
2600 MHz FDD	0.00096
3.4 GHz	0.00168
3.8 GHz	0.00410
Others	0.11146
Total	**0.16391**

Location 5

Measurement time:	13:21
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00725
174-230 MHz	0.00842
470-694 MHz	0.00665
700 MHz	0.00128
800 MHz	0.00181
900 MHz	0.00087
1400 MHz	0.00057
1800 MHz	0.00085
1900 MHz	0.00016
2100 MHz	0.00074
2300 MHz	0.00056
2600 MHz TDD	0.00031
2600 MHz FDD	0.00020
3.4 GHz	0.00164
3.8 GHz	0.00404
Others	0.11376
Total	**0.14912**

Location 6

Measurement time:	13:30
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00751
174-230 MHz	0.00864
470-694 MHz	0.00681
700 MHz	0.00123
800 MHz	0.00155
900 MHz	0.00123
1400 MHz	0.00082
1800 MHz	0.00078
1900 MHz	0.00016
2100 MHz	0.00141
2300 MHz	0.00088
2600 MHz TDD	0.00033
2600 MHz FDD	0.00034
3.4 GHz	0.00180
3.8 GHz	0.00431
Others	0.11725
Total	**0.15505**

Location 7

Measurement time:	13:37
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00768
174-230 MHz	0.00886
470-694 MHz	0.00695
700 MHz	0.00126
800 MHz	0.00084
900 MHz	0.00079
1400 MHz	0.00053
1800 MHz	0.00067
1900 MHz	0.00016
2100 MHz	0.00051
2300 MHz	0.00049
2600 MHz TDD	0.00031
2600 MHz FDD	0.00020
3.4 GHz	0.00175
3.8 GHz	0.00433
Others	0.12030
Total	**0.15564**

Location 8

Measurement time:	13:56
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00805
174-230 MHz	0.00913
470-694 MHz	0.00720
700 MHz	0.01109
800 MHz	0.02235
900 MHz	0.01623
1400 MHz	0.00140
1800 MHz	0.00206
1900 MHz	0.00017
2100 MHz	0.00233
2300 MHz	0.00104
2600 MHz TDD	0.00040
2600 MHz FDD	0.00203
3.4 GHz	0.00206
3.8 GHz	0.00572
Others	0.14203
Total	**0.23330**

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.