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:	20/01/2026	**Time Survey completed:**	11:25
Survey address:	Hornsea HU18		

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

Location 1

Measurement time:	10:27
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00719
174-230 MHz	0.00849
470-694 MHz	0.00684
700 MHz	0.00903
800 MHz	0.07890
900 MHz	0.02240
1400 MHz	0.00197
1800 MHz	0.00949
1900 MHz	0.00015
2100 MHz	0.00277
2300 MHz	0.00126
2600 MHz TDD	0.00029
2600 MHz FDD	0.00014
3.4 GHz	0.00208
3.8 GHz	0.00412
Others	0.11219
Total	**0.26730**

Location 2

Measurement time:	10:34
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00727
174-230 MHz	0.00872
470-694 MHz	0.00701
700 MHz	0.00207
800 MHz	0.01040
900 MHz	0.00133
1400 MHz	0.00064
1800 MHz	0.00103
1900 MHz	0.00016
2100 MHz	0.00054
2300 MHz	0.00040
2600 MHz TDD	0.00030
2600 MHz FDD	0.00015
3.4 GHz	0.00165
3.8 GHz	0.00391
Others	0.11516
Total	**0.16074**

Location 3

Measurement time:	10:42
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00747
174-230 MHz	0.00894
470-694 MHz	0.00720
700 MHz	0.00390
800 MHz	0.02667
900 MHz	0.00529
1400 MHz	0.00125
1800 MHz	0.00252
1900 MHz	0.00016
2100 MHz	0.00128
2300 MHz	0.00052
2600 MHz TDD	0.00030
2600 MHz FDD	0.00015
3.4 GHz	0.00173
3.8 GHz	0.00403
Others	0.11826
Total	**0.18966**

Location 4

Measurement time:	10:51
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00759
174-230 MHz	0.00899
470-694 MHz	0.00716
700 MHz	0.00478
800 MHz	0.04230
900 MHz	0.00532
1400 MHz	0.00279
1800 MHz	0.00803
1900 MHz	0.00016
2100 MHz	0.00126
2300 MHz	0.00080
2600 MHz TDD	0.00030
2600 MHz FDD	0.00015
3.4 GHz	0.00174
3.8 GHz	0.00402
Others	0.11840
Total	**0.21378**

Location 5

Measurement time:	10:59
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00759
174-230 MHz	0.00907
470-694 MHz	0.00728
700 MHz	0.00344
800 MHz	0.02481
900 MHz	0.00599
1400 MHz	0.00282
1800 MHz	0.01431
1900 MHz	0.00016
2100 MHz	0.00175
2300 MHz	0.00099
2600 MHz TDD	0.00031
2600 MHz FDD	0.00016
3.4 GHz	0.00177
3.8 GHz	0.00412
Others	0.11981
Total	**0.20438**

Location 6

Measurement time:	11:09
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00769
174-230 MHz	0.00906
470-694 MHz	0.00734
700 MHz	0.00138
800 MHz	0.00375
900 MHz	0.00227
1400 MHz	0.00053
1800 MHz	0.00071
1900 MHz	0.00016
2100 MHz	0.00059
2300 MHz	0.00050
2600 MHz TDD	0.00032
2600 MHz FDD	0.00016
3.4 GHz	0.00175
3.8 GHz	0.00413
Others	0.12088
Total	**0.16121**

Location 7

Measurement time:	11:19
Frequency band	**Percentage of the ICNIRP reference levels for general public exposure**
87.5-108 MHz	0.00774
174-230 MHz	0.00916
470-694 MHz	0.00736
700 MHz	0.01443
800 MHz	0.07392
900 MHz	0.03962
1400 MHz	0.00434
1800 MHz	0.01408
1900 MHz	0.00016
2100 MHz	0.00261
2300 MHz	0.00142
2600 MHz TDD	0.00031
2600 MHz FDD	0.00016
3.4 GHz	0.00216
3.8 GHz	0.00457
Others	0.12374
Total	**0.30578**

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.