

**Baldock Radio Station  
Royston Road, Baldock  
Herts SG7 6SH**



**Mobile Phone  
Base-Station Audit**

Audit Site: Area around Elizabeth House  
Waterloo Way  
Leicester  
LE2 0QN

Work Performed by		Distribution List	
James Loughlin Field Manager	3G measurements & Report	Lloyd Tailby	1
Mike Reynolds Field Officer	3G measurements & data plots	Stuart Winter	1
John Taylor T.I. Officer	2G measurements & 2G Report	John Taylor	1
Dick Gilbert T.I. Officer	2G measurements	Technical Manager	1
		Case/Year file	2

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## Report Summary

As the radio spectrum is continually changing, these measurements can only provide information on the radio frequency (RF) conditions for the specific locations at the time of the survey.

The Office of Communications (Ofcom) performed this survey of the RF emission environment in the vicinity of Elizabeth House, Waterloo Way, Leicester on the 26th July 2005. Both second generation (2G) and third generation (3G) base station emissions were measured separately and the signal levels combined to give the Total Band Exposure as detailed below.

The table, sorted in descending order of signal level, summarises the total results obtained at each measurement location.

Summary of results:

Location	NGR	3G Exposure Quotient	2G Exposure Quotient	TOTAL 3G + 2G Exp. Quot.	Related to ICNIRP limit
Junction of Campbell St. & Fox St.	SK 5933 0423	2.00E-06	9.29E-04	9.31E-04	1/1074
Bus stop railway station 4	SK 5928 0405	5.94E-06	1.45E-04	1.51E-04	1/6625
Junction of Granby St. & Waterloo Way	SK 5916 0419	2.76E-06	1.21E-04	1.24E-04	1/8080
East St. by NCP car park entrance	SK 5918 0411	4.11E-06	1.01E-04	1.05E-04	1/9514
15th floor Elizabeth House	SK 5920 0410	6.08E-07	1.34E-05	1.40E-05	1/71388
7th floor Elizabeth House	SK 5920 0410	0.00E+00	1.96E-06	1.96E-06	1/510204
Ground floor Elizabeth House	SK 5920 0410	0.00E+00	2.12E-07	2.12E-07	1/4716981

The Peterborough office carried out the 2G audit, while mobile team 2 from Baldock completed a concurrent 3G survey. The results from both have been combined to provide the summary of results on page 3.

Initially the base station was scanned to ascertain the extent of 3G activity.

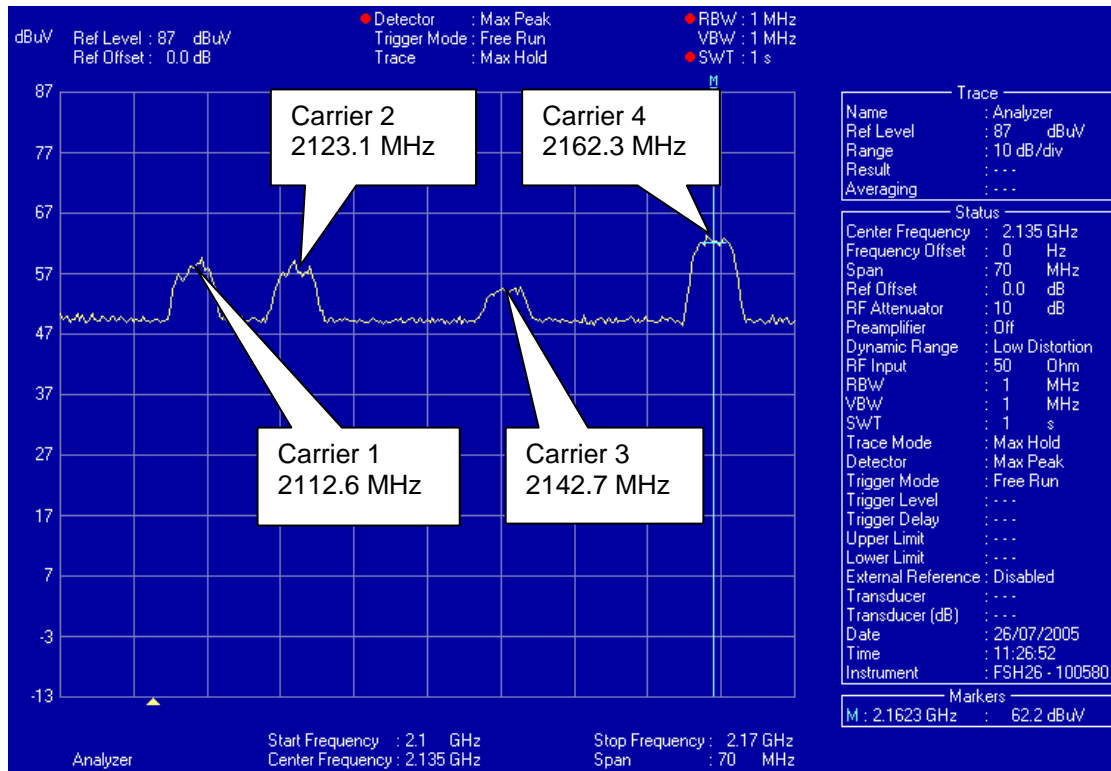


Figure 1

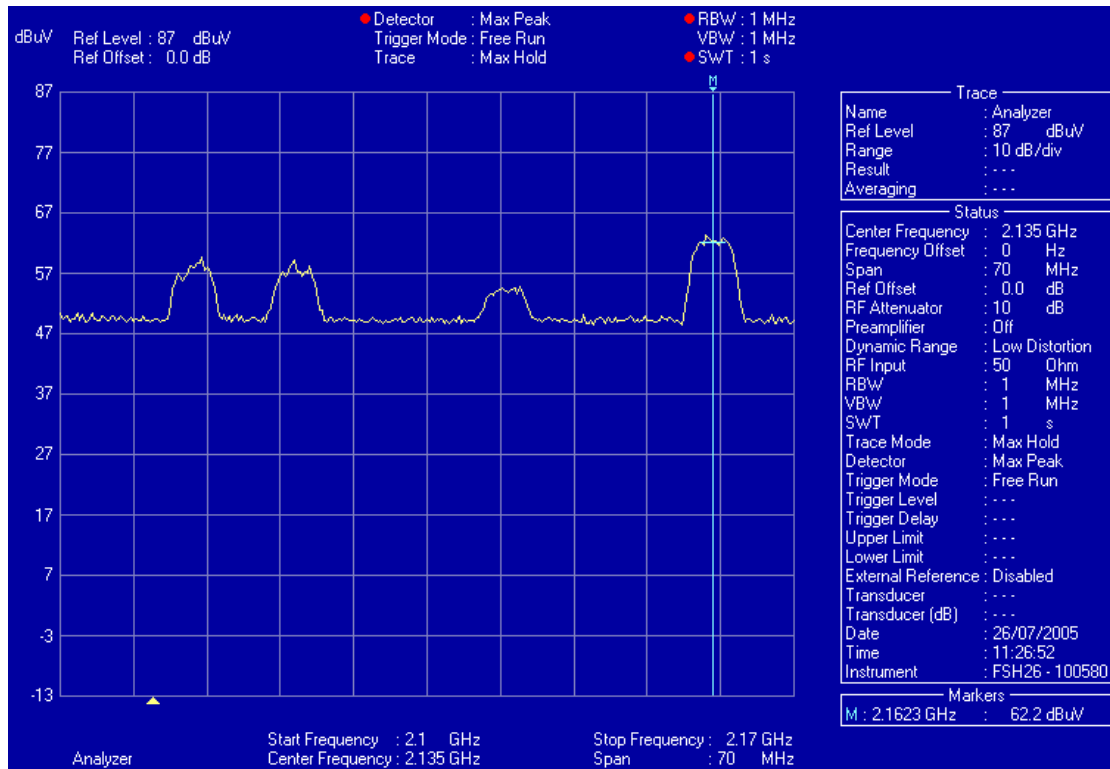
Figure 1 shows that four transmissions were active in this area. At each measurement location the measuring antenna was then set up on a tripod 1.5m above ground or floor level. In this position each of the carriers field strengths were recorded.

For each measurement location the 3G exposure quotient was then calculated for the individual carriers and then the total exposure quotient for all four carriers was calculated. This in turn was added to the 2G exposure quotient before calculating the Total Exposure Quotient for each survey site.

All the 3G measurement data is given on pages 5 to 11, while the 2G data is contained in the annex to this report.

Equipment:	serial number:	CEMS number
FSH6 Spectrum Analyser	100580	200103
EMCO DRG 3115 horn Antenna	2153	200005
Garmin GPS75 receiver	37524369	200011
Reynolds cable type 219-0088 0201 067		-

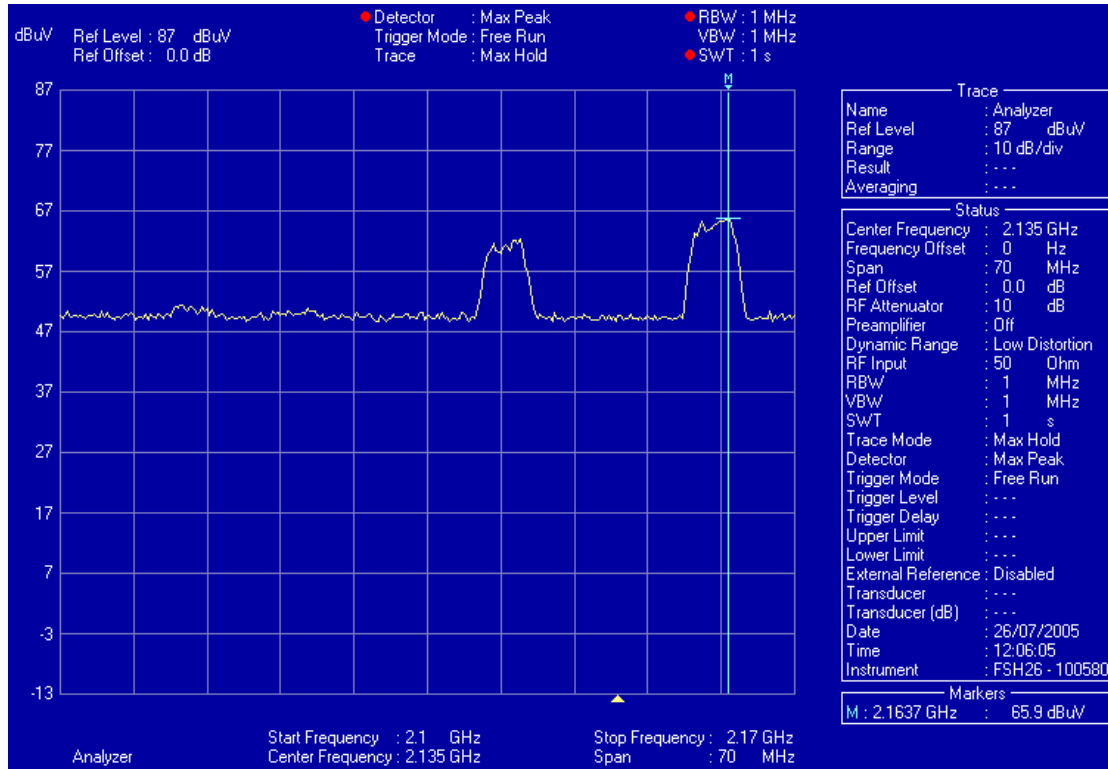
Location 1: Junction of Campbell Street & Fox Street



Location : Junction of Campbell Street & Fox Street

Channel	Frequency MHz	Fieldstrength dBuV/m	Fieldstrength uV/m	Fieldstrength V/m	Power W/m <sup>2</sup>	Power W/m <sup>2</sup>	ICNIRP W/m <sup>2</sup>	3G Exposure Quotient	3G Exposure Quotient	
1	2112.6	92.2	40,738.0	0.040738	0.0000044021	4.402E-06	10	0.000000440210	4.40E-07	
2	2123.1	91.7	38,459.2	0.038459	0.0000039233	3.923E-06	10	0.000000392330	3.92E-07	
3	2142.7	87.2	22,908.7	0.022909	0.0000013921	1.392E-06	10	0.000000139210	1.39E-07	
4	2162.3	95.9	62,373.5	0.062374	0.0000103197	1.032E-05	10	0.000001031970	1.03E-06	TOTAL
										2.00E-06

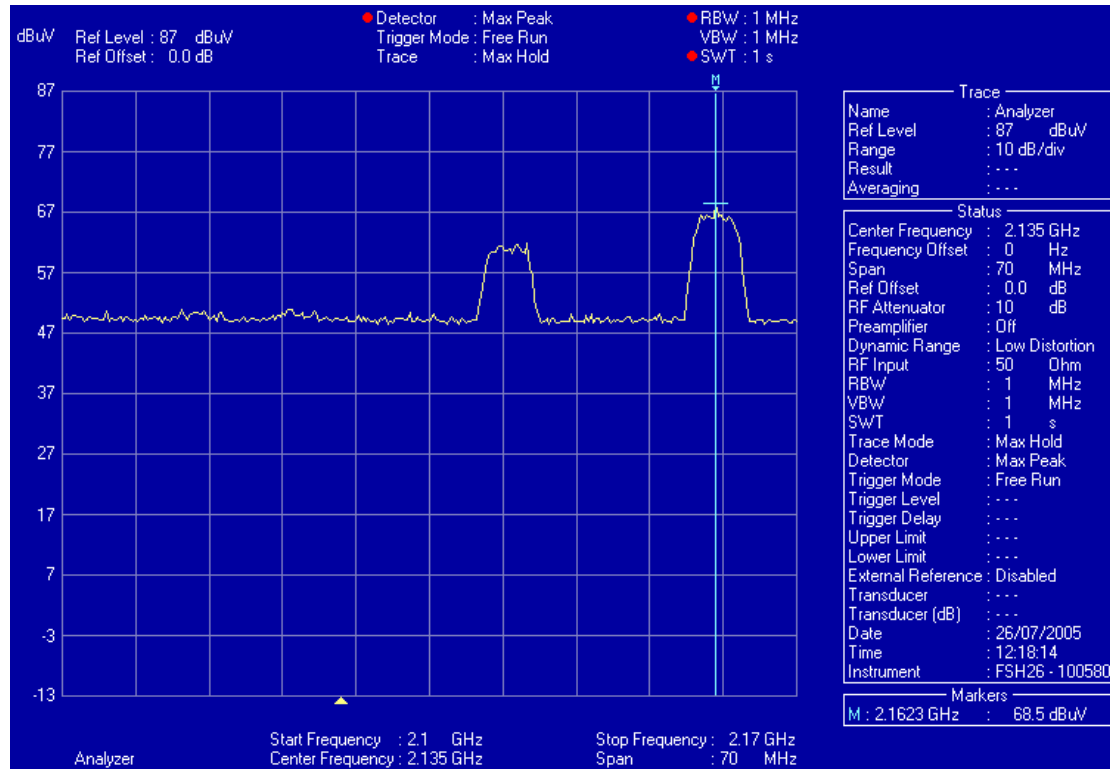
Location 2: Junction of Granby Street & Waterloo Way



Location : Junction of Granby Street & Waterloo Way

Channel	Frequency MHz	Fieldstrength dBuV/m	Fieldstrength uV/m	Fieldstrength V/m	Power W/m <sup>2</sup>	Power W/m <sup>2</sup>	ICNIRP W/m <sup>2</sup>	3G Exposure Quotient	3G Exposure Quotient
1	2112.6	83.9	15,667.5	0.015668	0.0000006512	6.512E-07	10	0.000000065120	6.51E-08
2	2123.1	83.5	14,962.4	0.014962	0.0000005938	5.938E-07	10	0.000000059380	5.94E-08
3	2142.7	94.8	54,954.1	0.054954	0.0000080105	8.011E-06	10	0.000000801050	8.01E-07
4	2162.3	98.4	83,176.4	0.083176	0.0000183508	1.835E-05	10	0.000001835080	1.84E-06
									TOTAL 2.76E-06

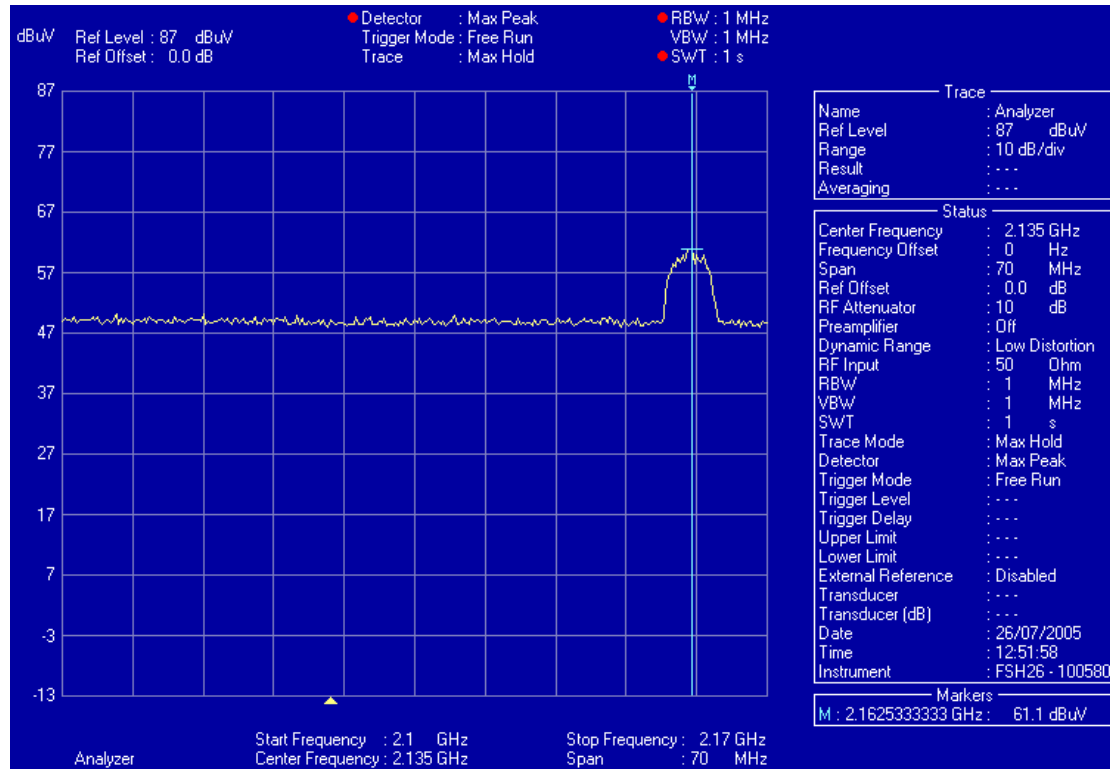
Location 3: East Street by NCP car park entrance



Location : East Street by NCP car park entrance

Channel	Frequency MHz	Fieldstrength dBuV/m	Fieldstrength uV/m	Fieldstrength V/m	Power W/m <sup>2</sup>	Power W/m <sup>2</sup>	ICNIRP W/m <sup>2</sup>	3G Exposure Quotient	3G Exposure Quotient
1	2112.6	83.6	15,135.6	0.015136	0.0000006077	6.077E-07	10	0.00000060770	6.08E-08
2	2123.1	82.5	13,335.2	0.013335	0.0000004717	4.717E-07	10	0.00000047170	4.72E-08
3	2142.7	94	50,118.7	0.050119	0.0000066629	6.663E-06	10	0.00000666290	6.66E-07
4	2162.3	101	112,201.8	0.112202	0.0000333933	3.339E-05	10	0.00003339330	3.34E-06
									TOTAL 4.11E-06

Location 4: 15<sup>th</sup> Floor Elizabeth House

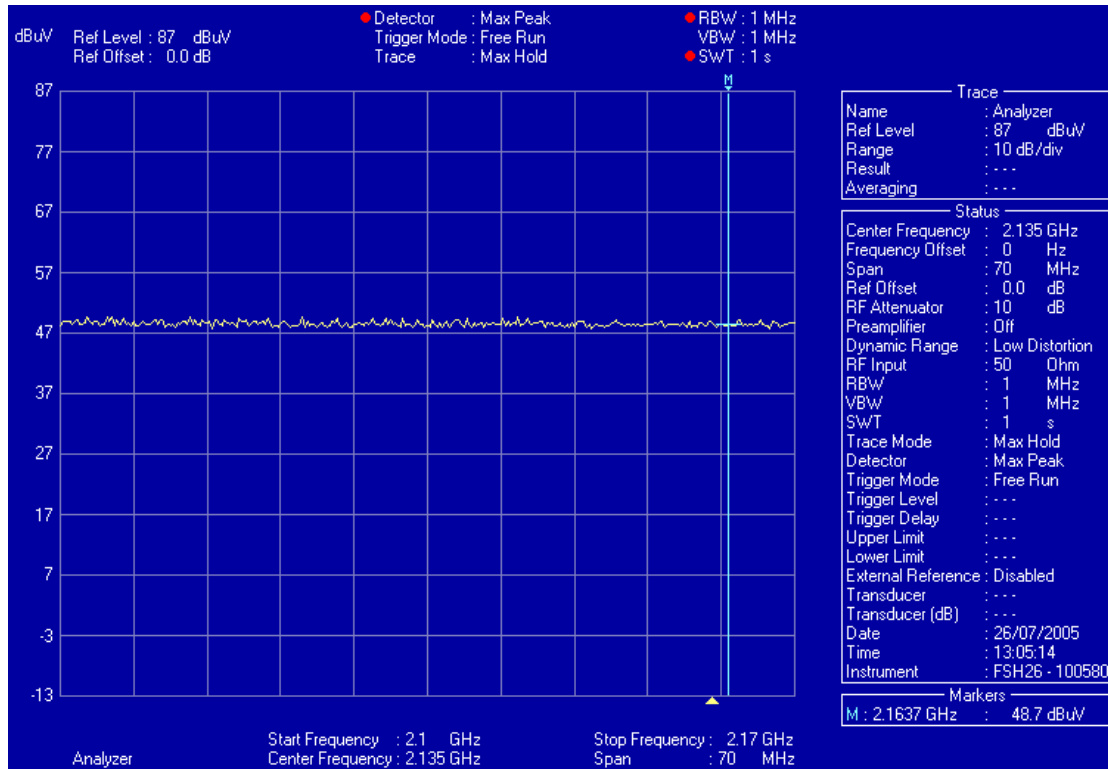


Location : 15th floor Elizabeth House

Channel	Frequency MHz	Fieldstrength dBuV/m	Fieldstrength uV/m	Fieldstrength V/m	Power W/m <sup>2</sup>	Power W/m <sup>2</sup>	ICNIRP W/m <sup>2</sup>	3G Exposure Quotient	3G Exposure Quotient
1	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
2	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
3	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
4	2162.3	93.6	47,863.0	0.047863	0.0000060766	6.077E-06	10	0.000000607660	6.08E-07
<b>TOTAL</b>									<b>6.08E-07</b>



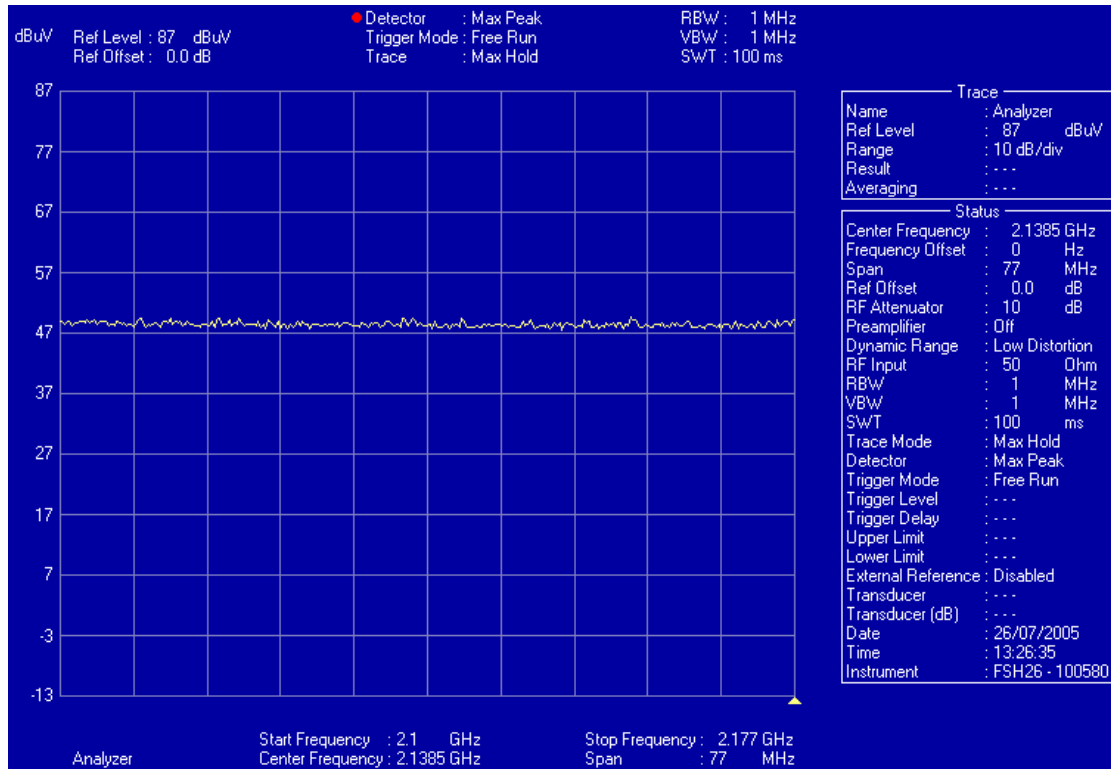
Location 5: 7<sup>th</sup> Floor Elizabeth House



Location : 7th floor Elizabeth House

Channel	Frequency MHz	Fieldstrength dBuV/m	Fieldstrength uV/m	Fieldstrength V/m	Power W/m <sup>2</sup>	Power W/m <sup>2</sup>	ICNIRP W/m <sup>2</sup>	3G Exposure Quotient	3G Exposure Quotient
1	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
2	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
3	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
4	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
									TOTAL 0.00E+00

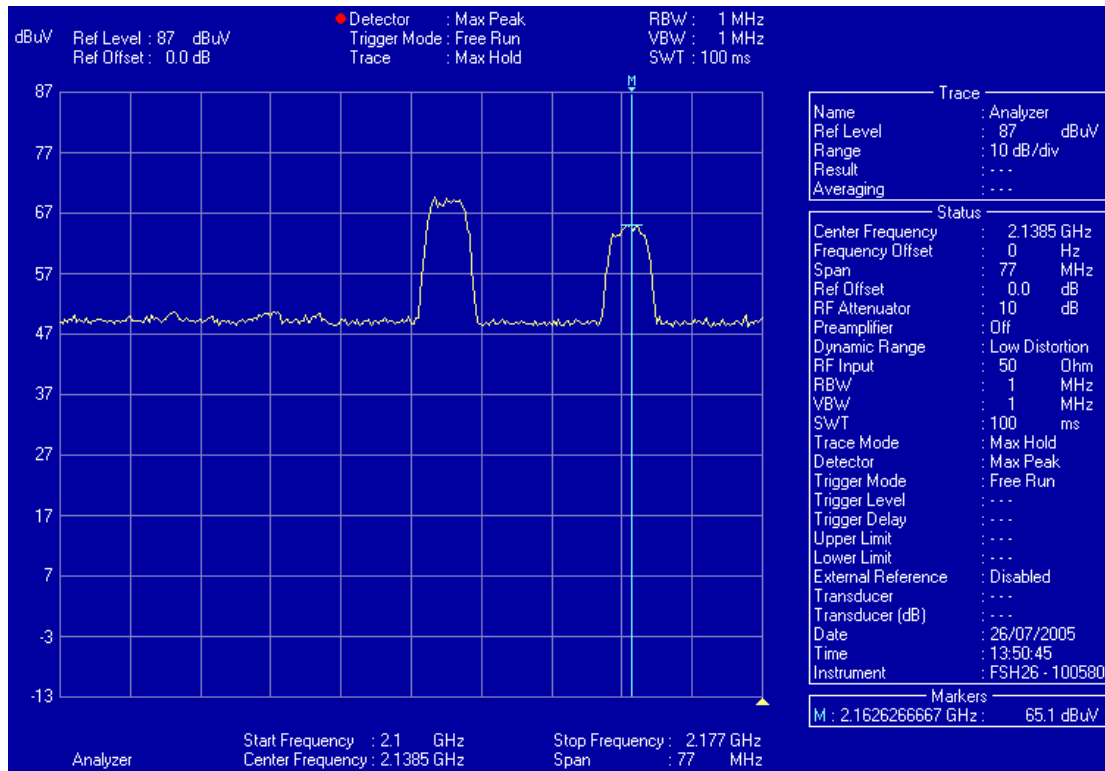
Location 6: Ground Floor Elizabeth House



Location : Ground floor Elizabeth House

Channel	Frequency MHz	Fieldstrength dBuV/m	Fieldstrength uV/m	Fieldstrength V/m	Power W/m <sup>2</sup>	Power W/m <sup>2</sup>	ICNIRP W/m <sup>2</sup>	3G Exposure Quotient	3G Exposure Quotient
1	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
2	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
3	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
4	not seen		1.0	0.000001	0.0000000000	0	10	0.000000000000	0.00E+00
									TOTAL 0.00E+00

Location 7: Bus Stop railway station 4



Location : Bus stop railway station 4

Channel	Frequency MHz	Fieldstrength dBuV/m	Fieldstrength uV/m	Fieldstrength V/m	Power W/m <sup>2</sup>	Power W/m <sup>2</sup>	ICNIRP W/m <sup>2</sup>	3G Exposure Quotient	3G Exposure Quotient
1	2112.6	82.9	13,963.7	0.013964	0.0000005172	5.172E-07	10	0.000000051720	5.17E-08
2	2123.1	83.2	14,454.4	0.014454	0.0000005542	5.542E-07	10	0.000000055420	5.54E-08
3	2142.7	102.1	127,350.3	0.127350	0.0000430186	4.302E-05	10	0.000004301860	4.30E-06
4	2162.3	97.6	75,857.8	0.075858	0.0000152638	1.526E-05	10	0.000001526380	1.53E-06
<b>TOTAL</b>									<b>5.94E-06</b>

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## **Annex**

### **2G Mobile Phone Base-Station Audit**

## **Mobile Phone Base-Station Audit**

**Audit site: Area around Elizabeth House  
Leicester  
LE2**

In 2000 the Government asked the Radiocommunications Agency to implement a national measurement programme to ensure that emissions from cellular base stations do not exceed the guidelines for public maximum exposure set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). Ofcom took over the functions of the Radiocommunications Agency, along with those of the Independent Television Commission, Radio Authority, Oftel and Broadcasting Standards Commission, on 29 December 2003.

Electric field strength measurements made in various bands are referenced to and presented alongside the relevant ICNIRP public maximum exposure levels. On the left hand side of the results page(s) is a graphical representation of the radio spectrum surveyed at each location on the site. The green line on each graph indicates the ICNIRP guideline exposure level for that frequency band. To the right hand side of each graph is a table showing the ten highest level emissions recorded within a band.

Further explanation of the results and their context within the ICNIRP guidelines can be provided by the Ofcom officers at the time of the audit or by contacting Ofcom on 0845 456 3000, or by email at [contact@Ofcom.org.uk](mailto:contact@Ofcom.org.uk). Results taken from all audit sites and further information on the audit programme can be found on the Ofcom website at [www.ofcom.org.uk](http://www.ofcom.org.uk).

## Report Summary

As the radio spectrum is continually changing, these measurements can only provide information on the radio frequency (RF) conditions for the specific locations at the time of the survey.

Ofcom performed this survey of the RF emission environment prevailing in the vicinity of Area around Elizabeth House on 26 July 2005.

The following table, sorted in descending order of signal level, summarises the results obtained at each measurement location.

Summary of results:		
Location	Total Band Exposure	Relationship to ICNIRP Limit
Junction of Campbell Street and Fox Street	9.29E-04	1/1076
Bus stop railway station 4	1.45E-04	1/6897
Junction of Granby Street and Waterloo Way	1.21E-04	1/8265
East Street by NCP car park entrance	1.01E-04	1/9889
15th floor Elizabeth House	1.34E-05	1/74739
7th floor Elizabeth House	1.96E-06	1/509672
Ground floor Elizabeth House	2.12E-07	1/4719181

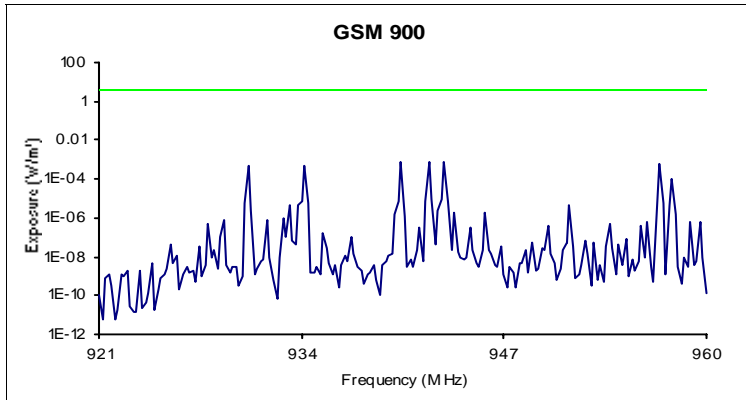
Issued on behalf of Ofcom.

Issued by:

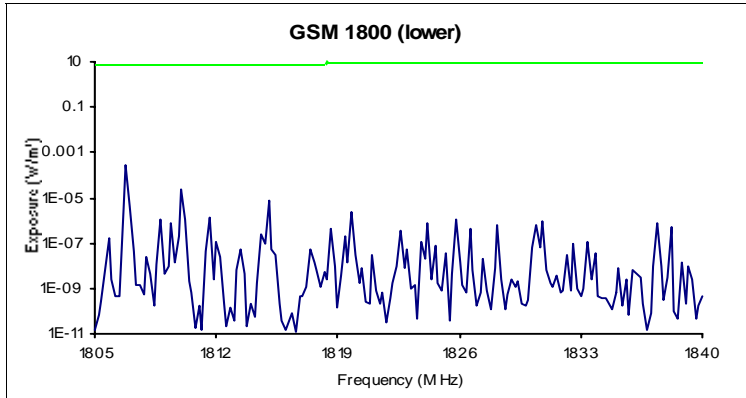
Received by:

John Taylor  
Technical Investigation Officer

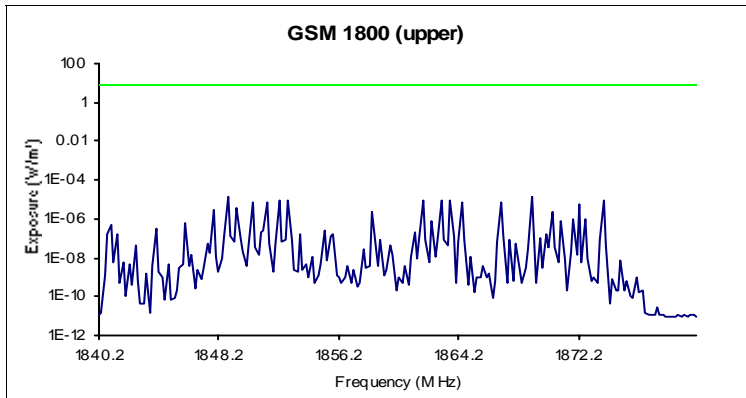
<b>Site:</b> Area around Elizabeth House	<b>Receiver:</b>
<b>Location:</b> Junction of Campbell Street and Fox Street	Manufacturer: ROHDE&SCHWARZ
	Model: EB200
	Serial Number: 837.752/003
<b>NGR:</b> SK 5933 0423 <b>Taken from GPS</b>	<b>Antenna:</b>
<b>Start Time:</b> 26 July 2005 11:22:57	Manufacturer: Rohde & Schwarz
<b>Officer:</b> John Taylor	Model: HE200
	Serial Number: 728264/025



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
940.400	8.40E-04	4.70	1.79E-04
943.200	7.71E-04	4.72	1.64E-04
942.200	7.18E-04	4.71	1.52E-04
957.000	5.51E-04	4.79	1.15E-04
934.200	5.23E-04	4.67	1.12E-04
930.600	5.18E-04	4.65	1.11E-04
957.800	1.05E-04	4.79	2.20E-05
943.000	9.48E-06	4.71	2.01E-06
942.400	8.44E-06	4.71	1.79E-06
943.400	7.90E-06	4.72	1.67E-06
<b>Band Exposure Quotient:</b>			<b>8.78E-04</b>



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,806.800	2.75E-04	9.03	3.04E-05
1,810.000	2.46E-05	9.05	2.72E-06
1,815.000	7.33E-06	9.07	8.08E-07
1,807.000	3.88E-06	9.04	4.30E-07
1,806.600	3.38E-06	9.03	3.74E-07
1,819.800	2.18E-06	9.10	2.40E-07
1,811.600	1.27E-06	9.06	1.40E-07
1,825.800	1.18E-06	9.13	1.30E-07
1,810.200	1.05E-06	9.05	1.16E-07
1,808.800	1.02E-06	9.04	1.13E-07
<b>Band Exposure Quotient:</b>			<b>3.65E-05</b>



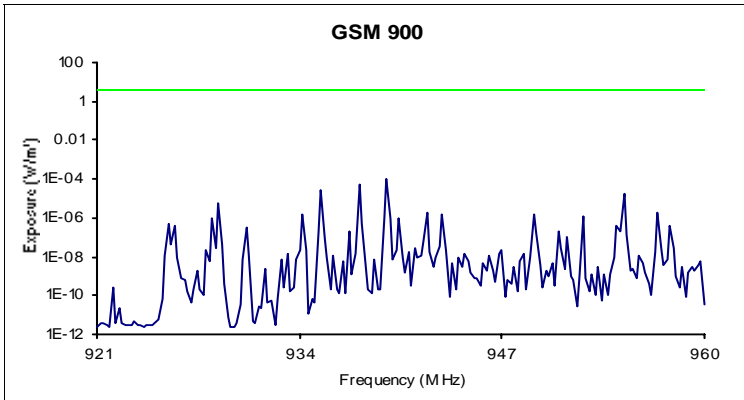
Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,869.000	1.37E-05	9.35	1.46E-06
1,848.800	1.35E-05	9.24	1.46E-06
1,863.600	9.81E-06	9.32	1.05E-06
1,873.800	9.32E-06	9.37	9.95E-07
1,852.800	8.78E-06	9.26	9.48E-07
1,863.000	8.73E-06	9.31	9.38E-07
1,852.200	8.19E-06	9.26	8.84E-07
1,861.800	8.13E-06	9.31	8.74E-07
1,850.400	7.62E-06	9.25	8.23E-07
1,867.000	7.66E-06	9.34	8.21E-07
<b>Band Exposure Quotient:</b>			<b>1.47E-05</b>

Total number of measurements: 572

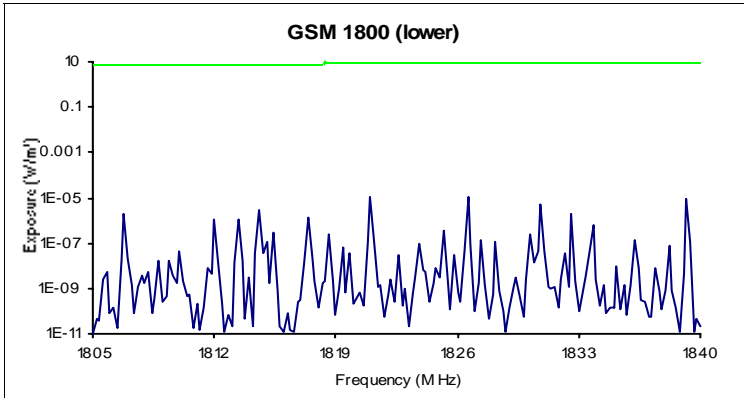
**Total Band Exposure Quotient:** **9.29E-04**



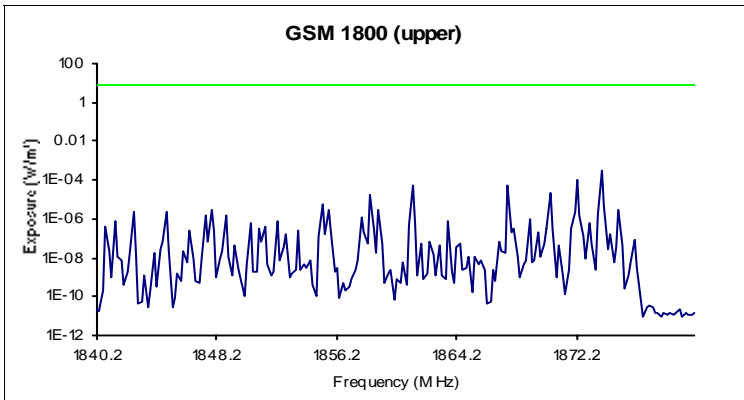
<b>Site:</b> Area around Elizabeth House	<b>Receiver:</b>
<b>Location:</b> Junction of Granby Street and Waterloo Way	Manufacturer: ROHDE&SCHWARZ
	Model: EB200
	Serial Number: 837.752/003
<b>NGR:</b> SK 5916 0419 <b>Taken from GPS</b>	<b>Antenna:</b>
<b>Start Time:</b> 26 July 2005 11:53:10	Manufacturer: Rohde & Schwarz
<b>Officer:</b> John Taylor	Model: HE200
	Serial Number: 728264/025



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
939.600	1.03E-04	4.70	2.20E-05
937.800	5.03E-05	4.69	1.07E-05
935.400	2.51E-05	4.68	5.36E-06
954.800	1.90E-05	4.77	3.98E-06
928.800	6.06E-06	4.64	1.31E-06
942.200	2.07E-06	4.71	4.40E-07
957.000	2.05E-06	4.79	4.28E-07
943.200	1.65E-06	4.72	3.50E-07
934.200	1.62E-06	4.67	3.46E-07
949.000	1.46E-06	4.75	3.07E-07
<b>Band Exposure Quotient:</b>			<b>4.73E-05</b>



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,821.000	1.07E-05	9.11	1.18E-06
1,826.600	1.01E-05	9.13	1.10E-06
1,839.200	8.38E-06	9.20	9.12E-07
1,830.800	5.33E-06	9.15	5.83E-07
1,814.600	2.66E-06	9.07	2.93E-07
1,806.800	1.99E-06	9.03	2.20E-07
1,832.600	1.99E-06	9.16	2.17E-07
1,817.400	1.40E-06	9.09	1.54E-07
1,812.000	1.16E-06	9.06	1.28E-07
1,813.400	1.08E-06	9.07	1.19E-07
<b>Band Exposure Quotient:</b>			<b>5.31E-06</b>



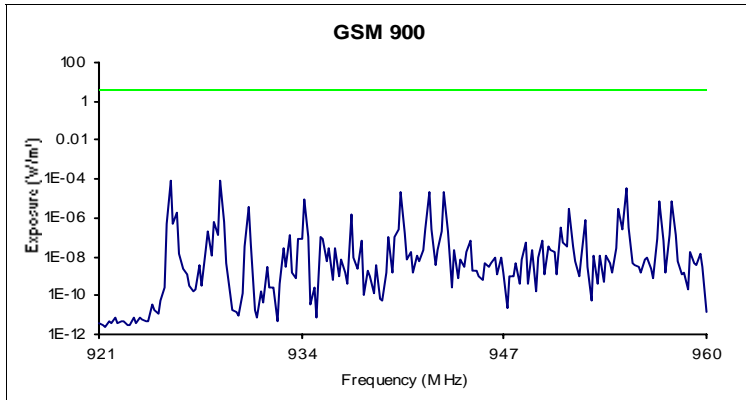
Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,873.800	3.38E-04	9.37	3.61E-05
1,872.200	1.14E-04	9.36	1.22E-05
1,861.200	5.01E-05	9.31	5.38E-06
1,867.600	4.84E-05	9.34	5.18E-06
1,870.400	2.38E-05	9.35	2.55E-06
1,858.400	1.61E-05	9.29	1.74E-06
1,855.200	6.39E-06	9.28	6.89E-07
1,874.000	4.16E-06	9.37	4.44E-07
1,859.000	3.22E-06	9.29	3.47E-07
1,855.600	2.92E-06	9.28	3.15E-07
<b>Band Exposure Quotient:</b>			<b>6.83E-05</b>

Total number of measurements: 572

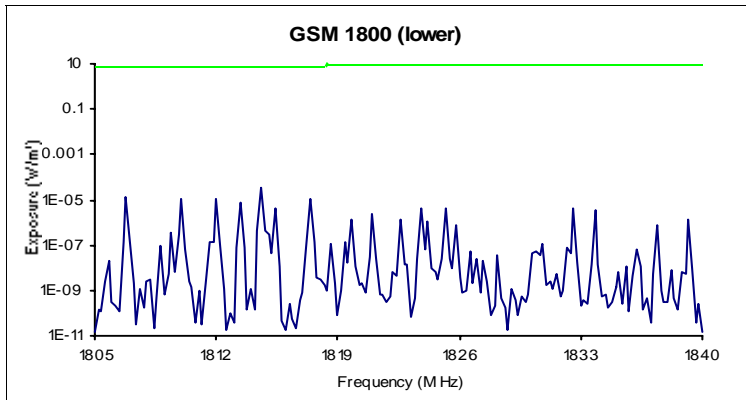
**Total Band Exposure Quotient:** 1.21E-04

**Site:** Area around Elizabeth House  
**Location:** East Street by NCP car park entrance  
**NGR:** SK 5918 0411 **Taken from GPS**  
**Start Time:** 26 July 2005 12:13:21  
**Officer:** John Taylor

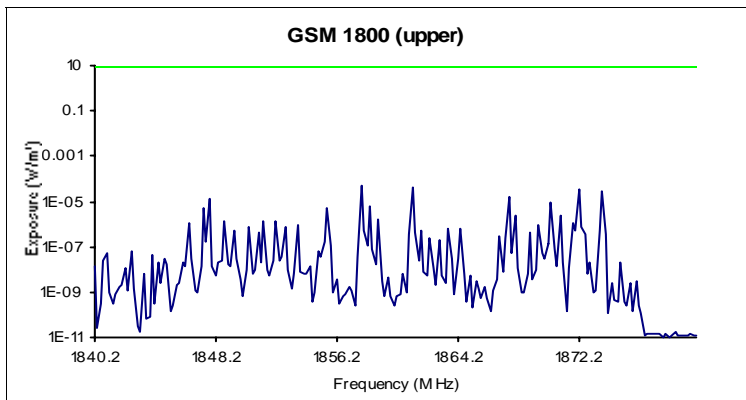
**Receiver:**  
 Manufacturer: ROHDE&SCHWARZ  
 Model: EB200  
 Serial Number: 837.752/003  
**Antenna:**  
 Manufacturer: Rohde & Schwarz  
 Model: HE200  
 Serial Number: 728264/025



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
925.600	7.76E-05	4.63	1.68E-05
928.800	7.46E-05	4.64	1.61E-05
954.800	3.30E-05	4.77	6.92E-06
942.200	2.17E-05	4.71	4.60E-06
940.400	2.02E-05	4.70	4.29E-06
943.200	1.98E-05	4.72	4.20E-06
934.200	8.88E-06	4.67	1.90E-06
957.800	7.62E-06	4.79	1.59E-06
957.000	6.47E-06	4.79	1.35E-06
930.600	3.42E-06	4.65	7.36E-07
<b>Band Exposure Quotient:</b>			<b>6.21E-05</b>



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,814.600	3.43E-05	9.07	3.78E-06
1,806.800	1.29E-05	9.03	1.42E-06
1,810.000	1.21E-05	9.05	1.33E-06
1,812.000	1.18E-05	9.06	1.31E-06
1,817.400	1.06E-05	9.09	1.17E-06
1,813.400	7.48E-06	9.07	8.25E-07
1,825.200	4.50E-06	9.13	4.93E-07
1,823.800	4.38E-06	9.12	4.81E-07
1,815.400	4.13E-06	9.08	4.55E-07
1,832.600	4.06E-06	9.16	4.43E-07
<b>Band Exposure Quotient:</b>			<b>1.35E-05</b>

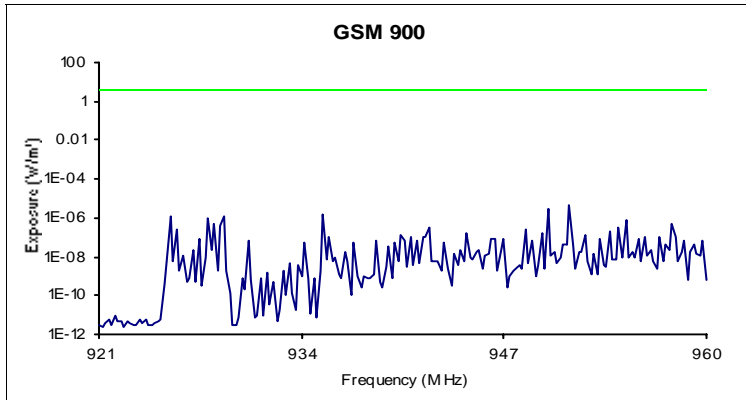


Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,857.800	5.22E-05	9.29	5.62E-06
1,861.200	4.07E-05	9.31	4.38E-06
1,872.200	3.70E-05	9.36	3.95E-06
1,873.800	2.69E-05	9.37	2.87E-06
1,867.600	1.53E-05	9.34	1.64E-06
1,847.800	1.26E-05	9.24	1.36E-06
1,870.400	9.48E-06	9.35	1.01E-06
1,858.400	6.28E-06	9.29	6.76E-07
1,847.400	5.62E-06	9.24	6.08E-07
1,855.600	4.96E-06	9.28	5.35E-07
<b>Band Exposure Quotient:</b>			<b>2.55E-05</b>

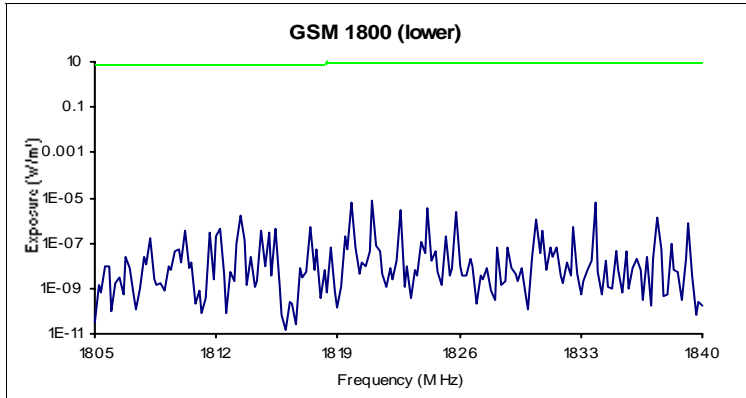
Total number of measurements: 572

**Total Band Exposure Quotient:** 1.01E-04

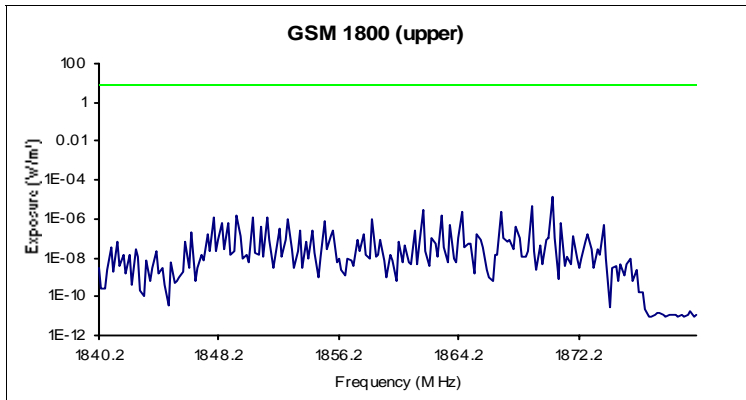
<b>Site:</b> Area around Elizabeth House	<b>Receiver:</b>
<b>Location:</b> 15th floor Elizabeth House	Manufacturer: ROHDE&SCHWARZ
<b>NGR:</b> ZU 0000 0000 <b>Taken from GPS</b>	Model: EB200
<b>Start Time:</b> 26 July 2005 12:44:27	Serial Number: 837.752/003
<b>Officer:</b> John Taylor	<b>Antenna:</b>
	Manufacturer: Rohde & Schwarz
	Model: HE200
	Serial Number: 728264/025



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
951.200	4.96E-06	4.76	1.04E-06
949.800	2.91E-06	4.75	6.13E-07
935.400	1.66E-06	4.68	3.54E-07
929.000	1.30E-06	4.64	2.79E-07
925.600	1.10E-06	4.63	2.37E-07
928.000	1.03E-06	4.64	2.22E-07
954.800	7.56E-07	4.77	1.58E-07
928.400	4.92E-07	4.64	1.06E-07
957.800	4.59E-07	4.79	9.58E-08
928.800	4.01E-07	4.64	8.63E-08
<b>Band Exposure Quotient:</b>			<b>4.21E-06</b>



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,821.000	6.91E-06	9.11	7.59E-07
1,819.800	6.44E-06	9.10	7.08E-07
1,833.800	5.88E-06	9.17	6.41E-07
1,824.200	3.57E-06	9.12	3.91E-07
1,822.600	3.03E-06	9.11	3.32E-07
1,825.800	2.42E-06	9.13	2.65E-07
1,813.400	1.64E-06	9.07	1.81E-07
1,837.400	1.29E-06	9.19	1.41E-07
1,830.400	1.22E-06	9.15	1.33E-07
1,839.200	7.47E-07	9.20	8.12E-08
<b>Band Exposure Quotient:</b>			<b>4.34E-06</b>

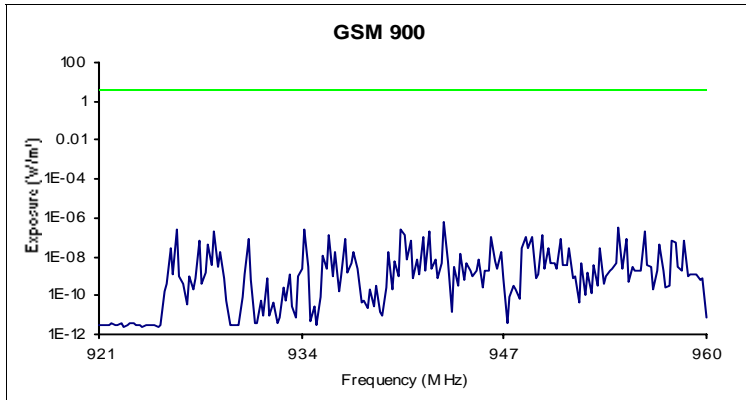


Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,870.400	1.37E-05	9.35	1.47E-06
1,869.000	4.63E-06	9.35	4.96E-07
1,861.800	2.76E-06	9.31	2.96E-07
1,867.000	2.54E-06	9.34	2.72E-07
1,864.400	2.47E-06	9.32	2.65E-07
1,863.000	1.63E-06	9.31	1.75E-07
1,849.400	1.52E-06	9.25	1.64E-07
1,851.400	1.30E-06	9.26	1.40E-07
1,850.400	1.29E-06	9.25	1.40E-07
1,847.800	1.12E-06	9.24	1.21E-07
<b>Band Exposure Quotient:</b>			<b>4.83E-06</b>

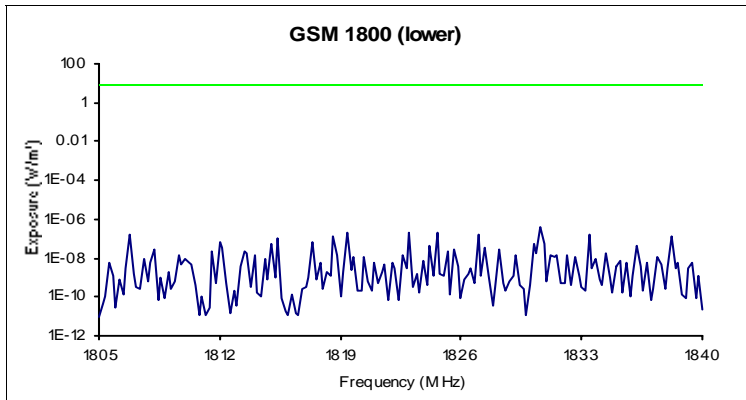
Total number of measurements: 572

**Total Band Exposure Quotient:** 1.34E-05

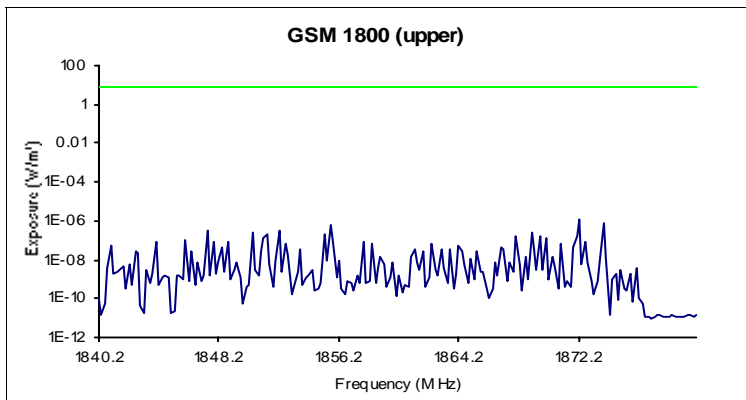
<b>Site:</b> Area around Elizabeth House	<b>Receiver:</b>
<b>Location:</b> 7th floor Elizabeth House	Manufacturer: ROHDE&SCHWARZ
<b>NGR:</b> ZU 0000 0000	Model: EB200
<b>Start Time:</b> 26 July 2005 13:03:11	Serial Number: 837.752/003
<b>Officer:</b> John Taylor	<b>Antenna:</b>
	Manufacturer: Rohde & Schwarz
	Model: HE200
	Serial Number: 728264/025



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
943.200	5.59E-07	4.72	1.18E-07
954.400	3.30E-07	4.77	6.91E-08
926.000	2.69E-07	4.63	5.81E-08
940.400	2.72E-07	4.70	5.78E-08
934.200	2.62E-07	4.67	5.61E-08
928.400	2.25E-07	4.64	4.85E-08
942.200	2.02E-07	4.71	4.30E-08
956.000	1.86E-07	4.78	3.90E-08
940.600	1.46E-07	4.70	3.11E-08
935.800	1.41E-07	4.68	3.02E-08
<b>Band Exposure Quotient:</b>			<b>9.21E-07</b>



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,830.600	3.86E-07	9.15	4.22E-08
1,823.000	2.14E-07	9.12	2.35E-08
1,819.400	1.90E-07	9.10	2.09E-08
1,824.600	1.83E-07	9.12	2.01E-08
1,833.400	1.73E-07	9.17	1.89E-08
1,806.800	1.58E-07	9.03	1.75E-08
1,827.000	1.56E-07	9.13	1.71E-08
1,838.200	1.45E-07	9.19	1.58E-08
1,818.600	1.28E-07	9.09	1.41E-08
1,815.400	1.11E-07	9.08	1.22E-08
<b>Band Exposure Quotient:</b>			<b>3.16E-07</b>

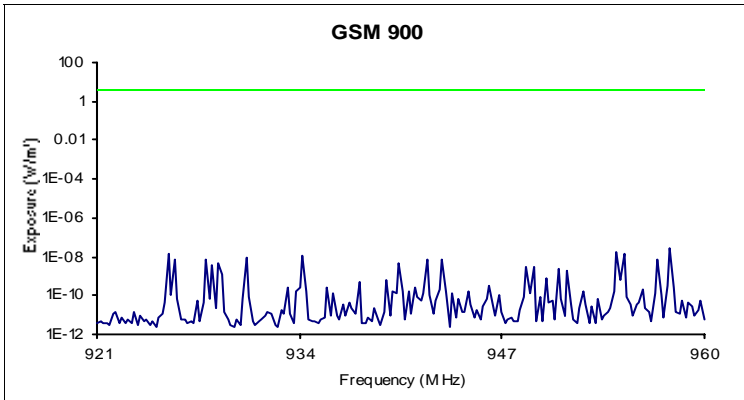


Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,872.200	1.12E-06	9.36	1.19E-07
1,873.800	7.93E-07	9.37	8.47E-08
1,855.600	6.39E-07	9.28	6.89E-08
1,852.200	3.49E-07	9.26	3.77E-08
1,847.400	2.88E-07	9.24	3.12E-08
1,869.000	2.49E-07	9.35	2.66E-08
1,850.400	2.35E-07	9.25	2.54E-08
1,855.200	2.22E-07	9.28	2.39E-08
1,851.400	2.05E-07	9.26	2.22E-08
1,872.000	1.81E-07	9.36	1.94E-08
<b>Band Exposure Quotient:</b>			<b>7.25E-07</b>

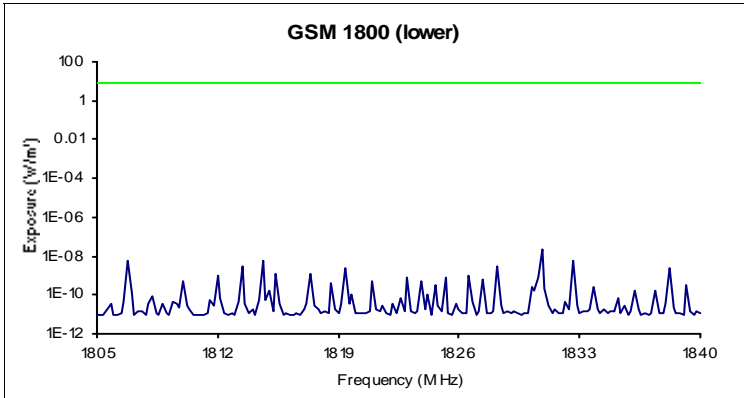
Total number of measurements: 572

**Total Band Exposure Quotient:** 1.96E-06

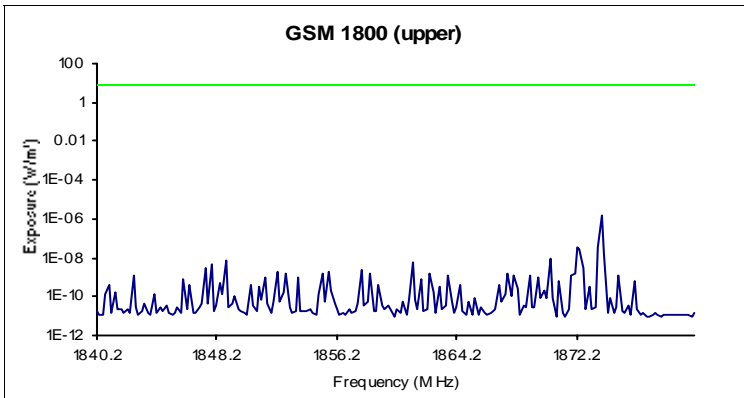
<b>Site:</b> Area around Elizabeth House	<b>Receiver:</b>
<b>Location:</b> Ground floor Elizabeth House	Manufacturer: ROHDE&SCHWARZ
<b>NGR:</b> ZU 0000 0000	Model: EB200
<b>Start Time:</b> 26 July 2005 13:18:28	Serial Number: 837.752/003
<b>Officer:</b> John Taylor	<b>Antenna:</b>
	Manufacturer: Rohde & Schwarz
	Model: HE200
	Serial Number: 728264/025



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
957.800	2.70E-08	4.79	5.64E-09
954.400	1.69E-08	4.77	3.55E-09
925.600	1.58E-08	4.63	3.42E-09
954.800	1.54E-08	4.77	3.24E-09
934.200	1.07E-08	4.67	2.28E-09
930.600	8.41E-09	4.65	1.81E-09
942.200	8.06E-09	4.71	1.71E-09
926.000	7.59E-09	4.63	1.64E-09
957.000	7.26E-09	4.79	1.52E-09
928.000	6.64E-09	4.64	1.43E-09
<b>Band Exposure Quotient:</b>			<b>3.52E-08</b>



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,830.800	2.22E-08	9.15	2.43E-09
1,814.600	5.69E-09	9.07	6.27E-10
1,806.800	5.24E-09	9.03	5.80E-10
1,832.600	5.23E-09	9.16	5.71E-10
1,828.200	3.13E-09	9.14	3.42E-10
1,813.400	2.84E-09	9.07	3.14E-10
1,838.200	2.53E-09	9.19	2.75E-10
1,819.400	2.45E-09	9.10	2.69E-10
1,817.400	1.37E-09	9.09	1.51E-10
1,815.400	1.30E-09	9.08	1.44E-10
<b>Band Exposure Quotient:</b>			<b>7.03E-09</b>

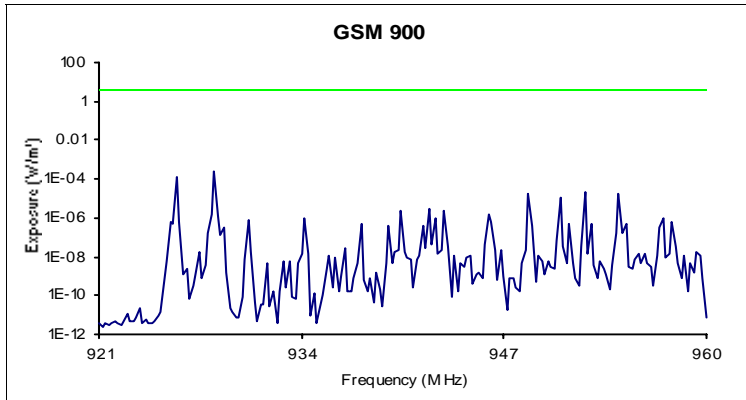


Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,873.800	1.41E-06	9.37	1.51E-07
1,872.200	3.53E-08	9.36	3.77E-09
1,873.600	3.16E-08	9.37	3.37E-09
1,872.400	2.50E-08	9.36	2.67E-09
1,874.000	1.70E-08	9.37	1.81E-09
1,870.400	8.45E-09	9.35	9.03E-10
1,848.800	7.09E-09	9.24	7.67E-10
1,861.200	5.37E-09	9.31	5.77E-10
1,847.800	4.57E-09	9.24	4.95E-10
1,872.600	3.30E-09	9.36	3.52E-10
<b>Band Exposure Quotient:</b>			<b>1.70E-07</b>

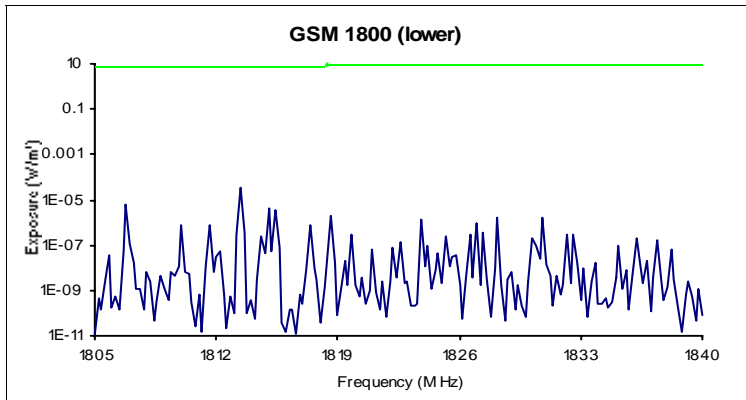
Total number of measurements: 572

**Total Band Exposure Quotient:** 2.12E-07

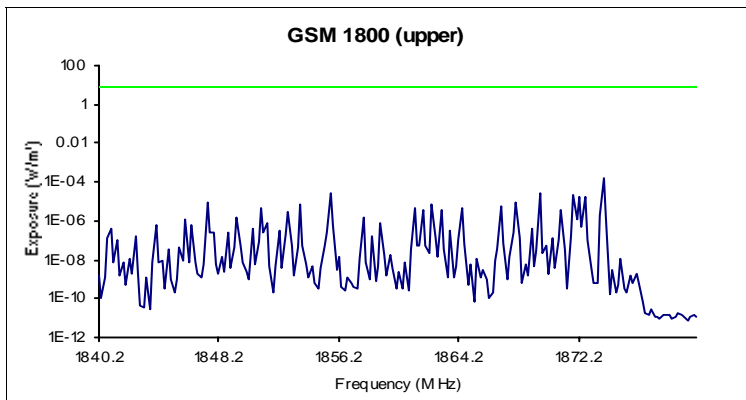
<b>Site:</b> Area around Elizabeth House	<b>Receiver:</b>
<b>Location:</b> Bus stop railway station 4	Manufacturer: ROHDE&SCHWARZ
<b>NGR:</b> SK 5928 0405 <b>Taken from GPS</b>	Model: EB200
<b>Start Time:</b> 26 July 2005 13:35:43	Serial Number: 837.752/003
<b>Officer:</b> John Taylor	<b>Antenna:</b>
	Manufacturer: Rohde & Schwarz
	Model: HE200
	Serial Number: 728264/025



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
928.400	2.58E-04	4.64	5.57E-05
926.000	1.23E-04	4.63	2.66E-05
952.200	1.98E-05	4.76	4.15E-06
954.400	1.81E-05	4.77	3.80E-06
948.600	1.67E-05	4.74	3.52E-06
950.600	1.13E-05	4.75	2.39E-06
942.200	2.79E-06	4.71	5.93E-07
943.200	2.33E-06	4.72	4.94E-07
940.400	2.31E-06	4.70	4.92E-07
928.200	1.39E-06	4.64	2.99E-07
<b>Band Exposure Quotient:</b>			<b>1.01E-04</b>



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,813.400	3.75E-05	9.07	4.14E-06
1,806.800	5.74E-06	9.03	6.36E-07
1,815.000	4.22E-06	9.07	4.65E-07
1,815.400	3.68E-06	9.08	4.05E-07
1,818.600	2.03E-06	9.09	2.23E-07
1,830.800	1.77E-06	9.15	1.93E-07
1,828.200	1.50E-06	9.14	1.64E-07
1,823.800	1.35E-06	9.12	1.49E-07
1,827.000	9.64E-07	9.13	1.06E-07
1,810.000	7.97E-07	9.05	8.81E-08
<b>Band Exposure Quotient:</b>			<b>7.26E-06</b>



Frequency (MHz)	Maximum Exposure (W/m²)	ICNIRP Limit (W/m²)	Frequency Exposure Quotient
1,873.800	1.44E-04	9.37	1.54E-05
1,855.600	2.86E-05	9.28	3.08E-06
1,869.600	2.55E-05	9.35	2.73E-06
1,871.800	2.18E-05	9.36	2.33E-06
1,872.200	1.81E-05	9.36	1.94E-06
1,872.600	1.73E-05	9.36	1.85E-06
1,847.400	9.99E-06	9.24	1.08E-06
1,868.000	8.04E-06	9.34	8.60E-07
1,862.400	7.78E-06	9.31	8.35E-07
1,853.600	7.66E-06	9.27	8.26E-07
<b>Band Exposure Quotient:</b>			<b>3.66E-05</b>

Total number of measurements: 572

**Total Band Exposure Quotient:** 1.45E-04

## Glossary

- Site:** The building or area around which sets of measurements are taken
- Location:** The position within a site at which a single set of measurements is taken. A set of measurements consists of multiple scans of many frequencies within a number of bands
- Band:** A portion of the electromagnetic spectrum reserved for specific radio services
- NGR:** The Ordnance Survey national grid reference coordinates of the location. In this survey NGRs are specified to 8-digit (10-metre) resolution. E.g. SJ 9755 9888
- GPS:** The Global Positioning System
- Start Time:** The date and time at which the receiver started taking its measurements at a location
- Officer:** The name of the RA representative who carried out the audit
- Receiver:** The receiver used to perform the measurements
- Antenna:** The antenna used to perform the measurements
- Exposure:** The maximum measured electric field strength (dB( $\mu$ V/m)) converted to an equivalent power density (W/m<sup>2</sup>)
- Power Density:** The electromagnetic energy flowing through a unit area normal to the direction of propagation in a unit time. Measured in Watts per square metre (W/m<sup>2</sup>)
- ICNIRP Limit:** The reference level given by the International Commission for Non-Ionizing Radiation Protection (ICNIRP) for general public exposure to electromagnetic fields

<i>Frequency</i>	<i>ICNIRP limit</i>
10MHz to 400 MHz	2 W/m <sup>2</sup>
400MHz to 2GHz	f / 200 W/m <sup>2</sup>
2GHz to 300GHz	10 W/m <sup>2</sup>

(where f is frequency in MHz)

**Frequency Exposure Quotient:**

The ratio of the measured maximum power density to the ICNIRP limit at a given frequency. A value close to 1 signifies that exposure levels could be near to the ICNIRP limit for that frequency

**Band Exposure Quotient:**

The sum of the frequency exposure quotients for a single band at a location

**Total Band Exposure Quotient:**

The sum of the frequency exposure quotients for all of the measured bands at a location

- GSM:** Global System for Mobile communication
- ETACS:** Extended Total Access Communications
- TETRA:** Terrestrial Trunked Radio
- 3G:** Third Generation mobile-phone services

- 1.00E-03:** Exponential (or 'scientific') number format. Equal to one thousandth
- 1.00E-06:** Equal to one millionth
- 1.00E-09:** Equal to one thousand-millionth
- 1.00E-12:** Equal to one million-millionth