

Cellular Mast Emissions Survey:

Jersey Airport



DOCUMENT DETAILS

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Executive Summary

CICRA regularly monitors radiowave emissions from the cellular masts in the Bailiwicks of Guernsey and Jersey to ensure the mobile network operators who operate their services from those masts comply with their license obligations in terms of power levels and that the emissions from the sites comply with internationally recognised standards and guidelines regarding Health & Safety limits for the public.

In 2017, CICRA commissioned iWireless Solutions to conduct the emission surveys at all sites within the two Bailiwicks. This report is for the Jersey Airport site.

The Jersey Airport site was used by all three operators at the time of the survey: Airtel J, JT J and Sure J. Surveys were conducted at all cellular frequency bands (800, 900, 1800, 2100 and 2600MHz) for all mobile cellular technologies (GSM, 3G and 4G) and for all three cellular operators as a routine procedure. The surveys were conducted in all the areas accessible to the public, including the Airside Departures Gates, Landside Departures Hall, Airside Departures Hall, Airside Arrivals Hall, Baggage Reclaim Hall and Upstairs Atrium.

The survey established that the emissions recorded in all the above areas were very low and well below the safety limits for the public advised by internationally recognised standards.

The values shown hereafter are the maximum levels that were recorded around the Upstairs Atrium following a peak search. In all other locations, the levels were lower. The recorded values are only true at the time of testing and can go up or down depending on the level of user activity on the cell.

The Total Exposure Quotient for the Upstairs Atrium recorded across all detected cellular frequency bands is given at the bottom of the summary table below. A total Site EQ close to 1 (one) would mean that emissions at the site approach the limit advised by ICNIRP in their guidelines.

Site Name	Band [MHz]	Max E-field in band [V/m]	Operator at Max E-field	ICNIRP Limit Relative Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Upstairs Atrium	800	0.03907	Airtel J	995	1.49627E-05	1/ 66833
	900	0.2076	Airtel J	199	4.69954E-05	1/ 21279
	1800	0.05003	Airtel J	1166	1.65683E-05	1/ 60356
	2100	0.2296	Sure J	266	0.000233619	1/ 4280
	2600	0.002279	JT J	26766	1.22981E-07	1/ 8131330
Total Site EQ					0.000312268	1/ 3202

Table 1 - Cumulative Exposure Quotient

The results show that the cumulative EQ was measured at 1/3202 and therefore remains well below the ICNIRP guidelines.

The graphs which follow show the activity in all the surveyed locations and at all the frequency bands surveyed. The plots are colour-coded for easy identification of the three main operators: Airtel J in red, Sure J in dark blue, and Jersey Telecom J in light blue.

The graphs are also supported by the equivalent statistical figures derived from the measured levels at the site for added clarity.

1. Site Details

1.1 Site Location

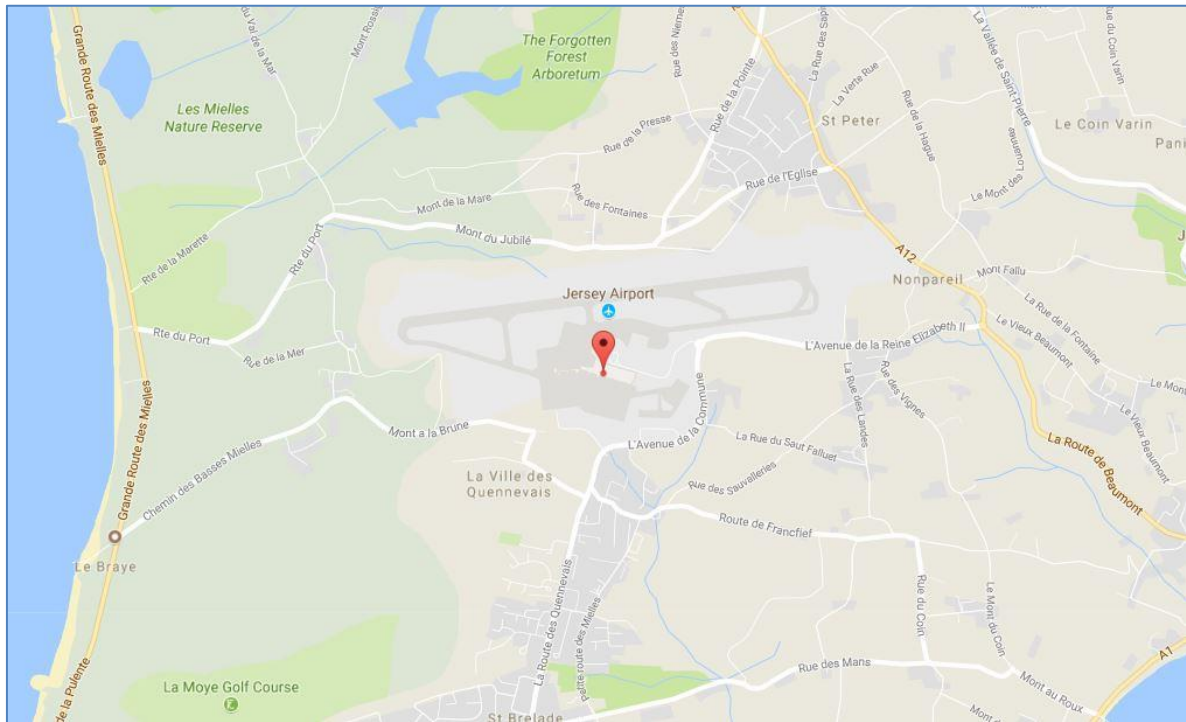


Figure 1 - Map of the Site Area

Site name	Jersey Airport
Site address	L'Avenue de la Commune, St Peter
Site Latitude	49.20566
Site Longitude	-2.19549

1.2 Site Description

Operators	Airtel J, JT J and Sure J
Antenna types	Omni directional and directional
Approximate height	2.5m and above
Site type	Indoor Ceiling and Wall Mounted
Description	The antennas at Jersey Airport are indoors, mounted on the wall & ceilings of the terminal building

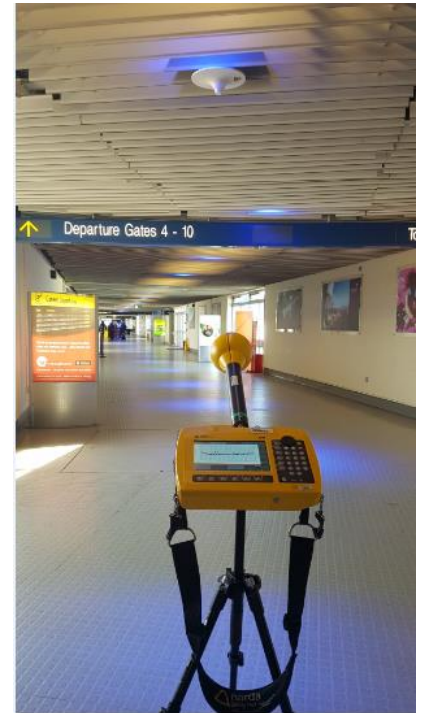
1.3 Site Photo



Landside Arrivals



Baggage Reclaim



Departure Gates



Departures Airside



Departures Landside



Upstairs Atrium

2. Survey Results – Upstairs Atrium

2.1 800 MHz Band

The graph for the 800 MHz activity is shown below with the E-field strength levels measured at the site plotted on a logarithmic scale.

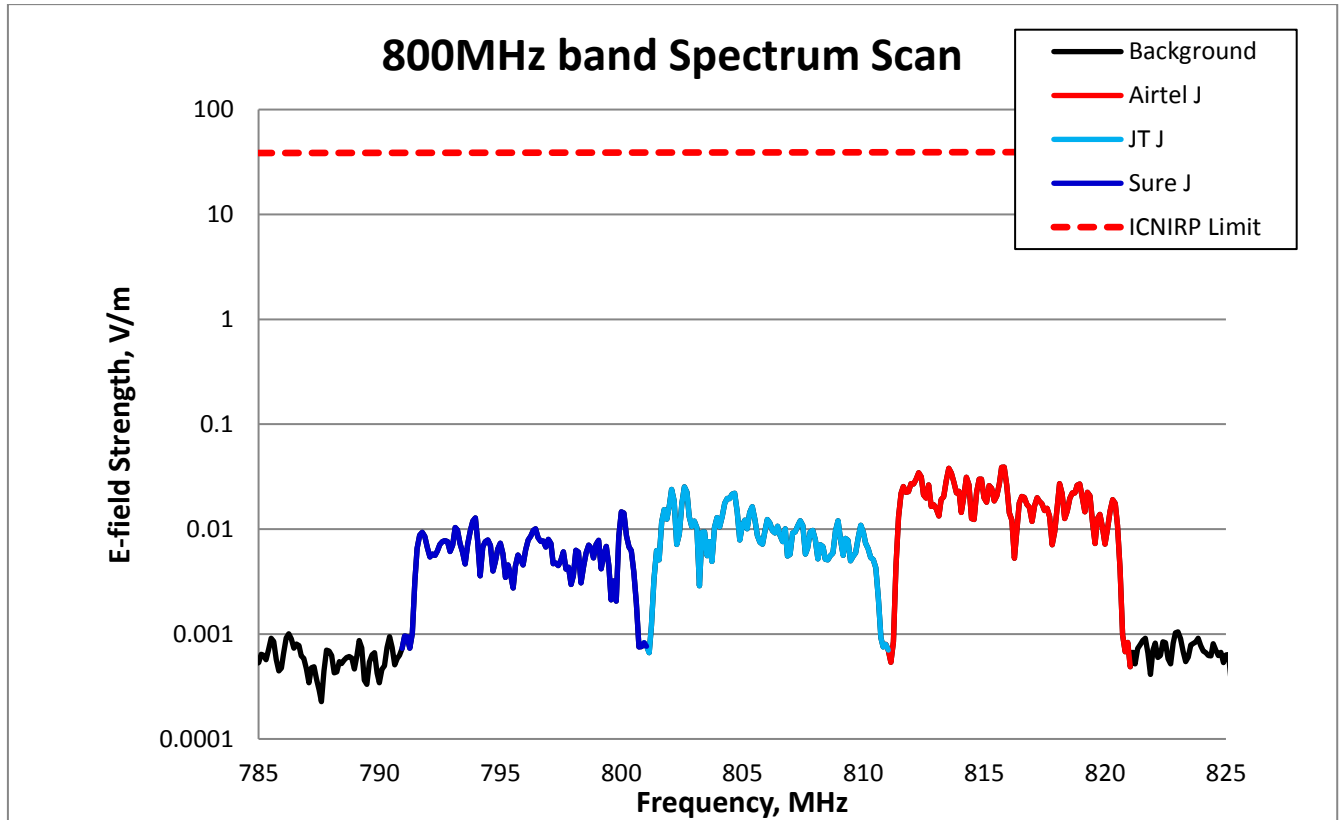


Figure 2 - 800MHz band Spectrum Scan

The red line on the scan represents the Airtel activity, the light blue is JT and the dark blue is Sure. ICNIRP's Reference Level for the General Public is also shown as the straight dashed line at the top of the graph. For clarity, each step on the vertical axis represents a 10-fold increase. The same scaling and colour scheme will be used throughout this report.

No field level recorded across the band was higher than 0.03907 V/m (Airtel J), which is 995 times smaller than the ICNIRP Reference level. The Exposure Quotient results for the 800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Upstairs Atrium	Airtel J	800	0.03907	995	1.0773E-05	1/ 92825
	JT J		0.02528	1538	3.04846E-06	1/ 328035
	Sure J		0.01462	2660	1.14128E-06	1/ 876205
total band EQ					1.49627E-05	1/ 66833

Table 2– 900MHz band Exposure Quotient at Jersey Airport – Upstairs Atrium

2.2 900 MHz Band

The graph for the 900 MHz activity is shown below:

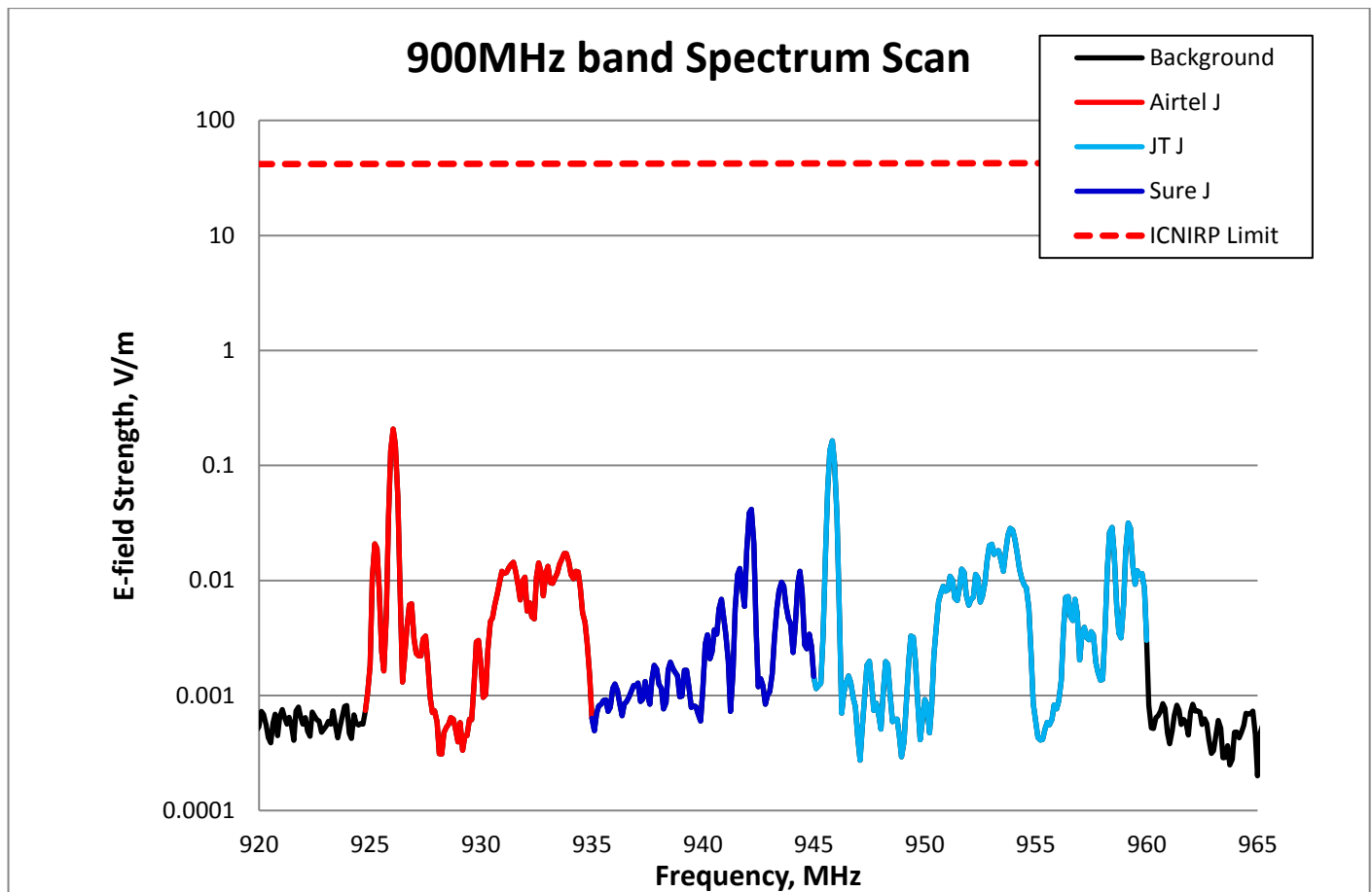


Figure 3 - 900MHz band Spectrum Scan

No field level recorded across the band was higher than 0.2076 V/m (Airtel J), which is 199 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 900MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Upstairs Atrium	Airtel J	900	0.2076	199	2.54479E-05	1/ 39296
	JT J		0.1636	252	2.0099E-05	1/ 49754
	Sure J		0.04154	993	1.4484E-06	1/ 690417
total band EQ					4.69954E-05	1/ 21279

Table 2– 900MHz band Exposure Quotient at Jersey Airport – Upstairs Atrium

2.3 1800 MHz Band

The graph for the 1800 MHz activity around the site is shown below:

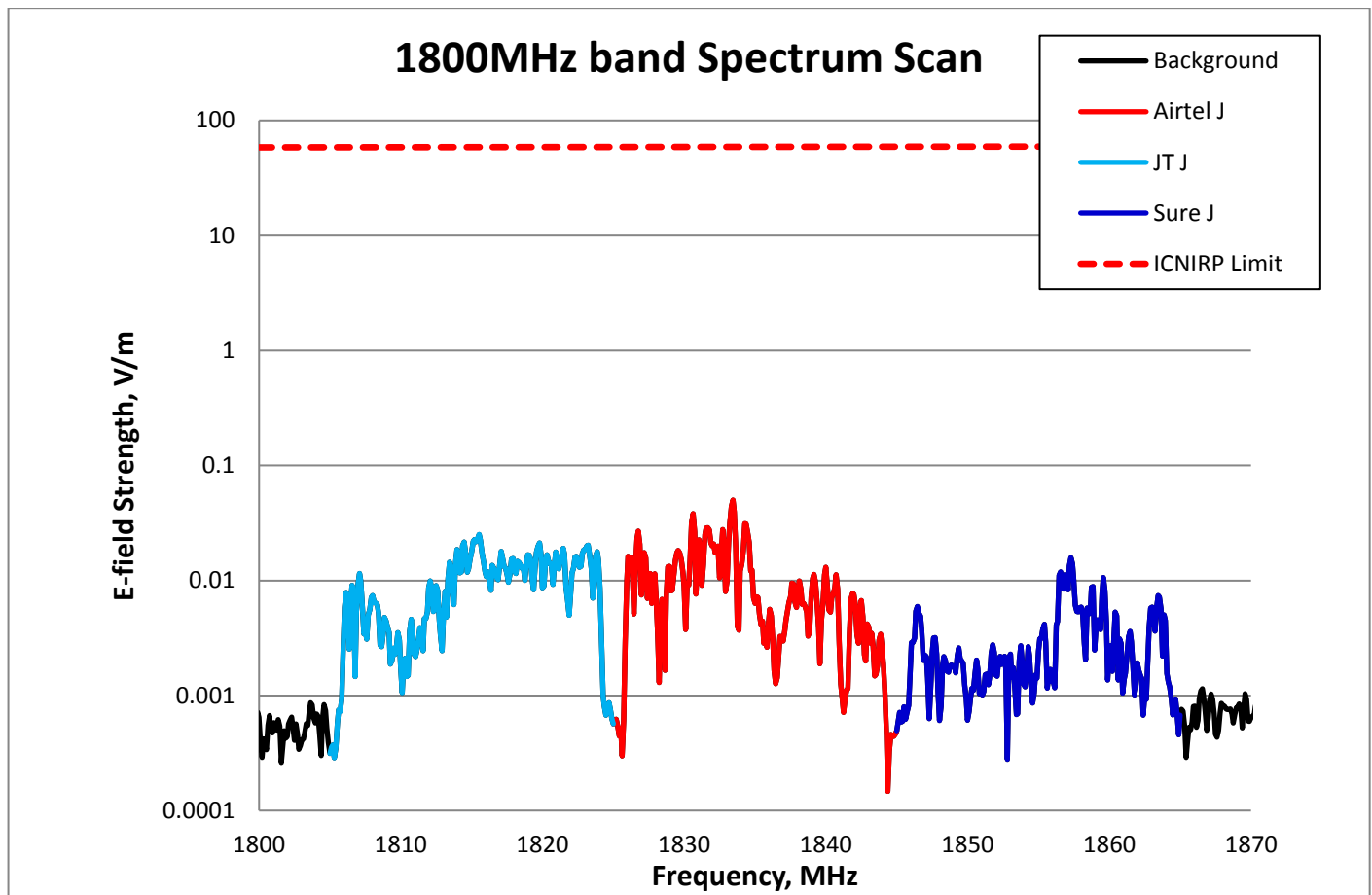


Figure 4 - 1800MHz Spectrum Scan

No field level recorded across the band was higher than 0.05003 V/m (Airtel J), which is 1166 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 1800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Upstairs Atrium	Airtel J	1800	0.05003	1166	9.03172E-06	1/ 110721
	JT J		0.02517	2318	6.66474E-06	1/ 150043
	Sure J		0.01578	3697	8.71883E-07	1/ 1146942
total band EQ					1.65683E-05	1/ 60356

Table 3 – 1800MHz band Exposure Quotient at Jersey Airport– Upstairs Atrium

2.4 2100MHz Band

The graph for the UMTS activity around the site is shown below:

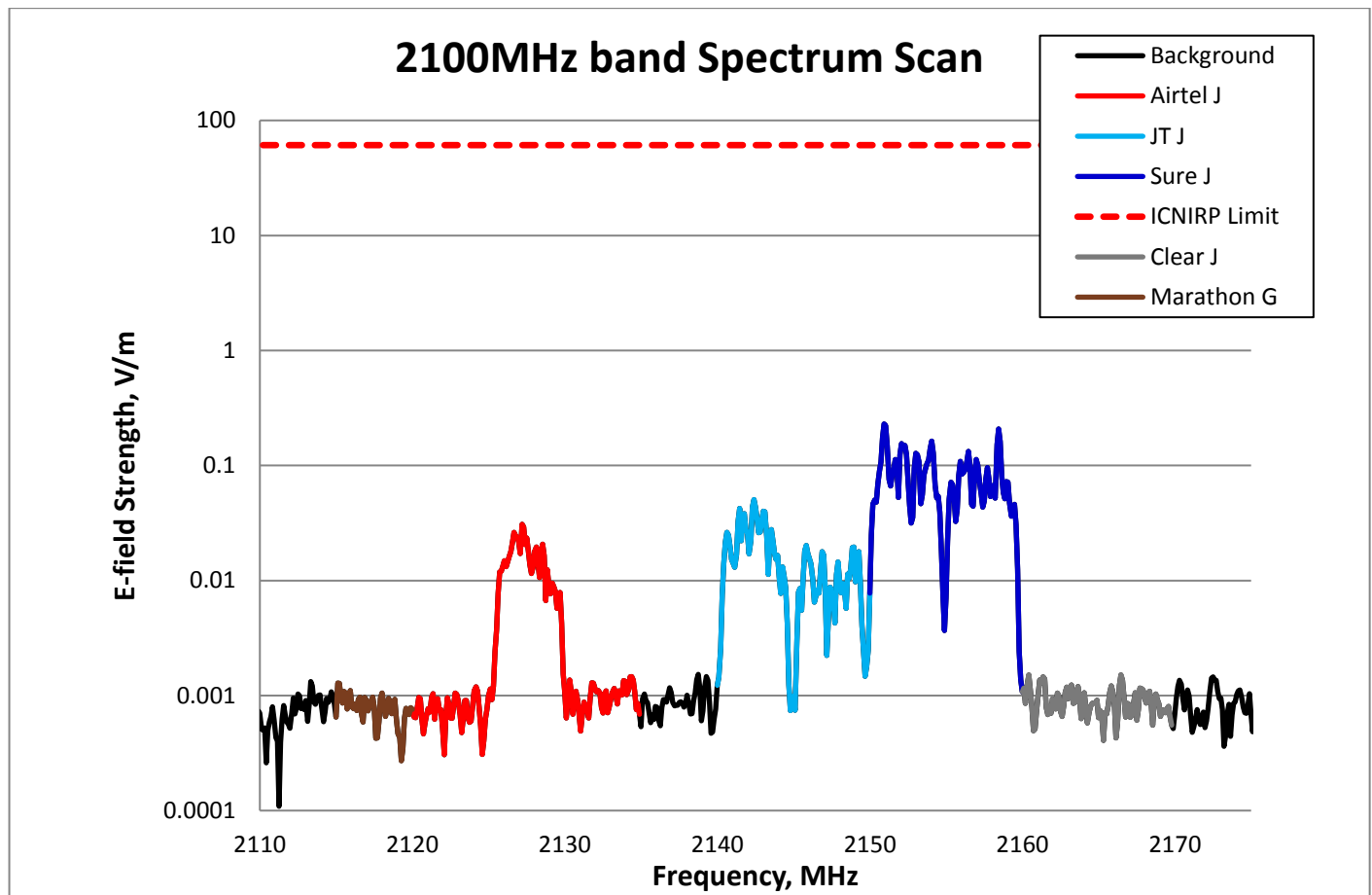


Figure 5 – 2100MHz band Spectrum Scan

No field level recorded across the band was higher than 0.2296 V/m (Sure J), which is 266 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 2100MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Upstairs Atrium	Airtel J	2100	0.0308	1981	3.02726E-06	1/ 330332
	Clear J		0.001512	40344	2.20439E-08	1/ 45364046
	JT J		0.0506	1206	9.28785E-06	1/ 107668
	Marathon J		0.001284	47508	8.88788E-09	1/ 112512821
	Sure J		0.2296	266	0.000221273	1/ 4519
total band EQ					0.000233619	1/ 4280

Table 4 – 2100MHz band Exposure Quotient at Jersey Airport– Upstairs Atrium

2.5 2600MHz band

The graph for the 2600MHz band activity around the site is shown below:

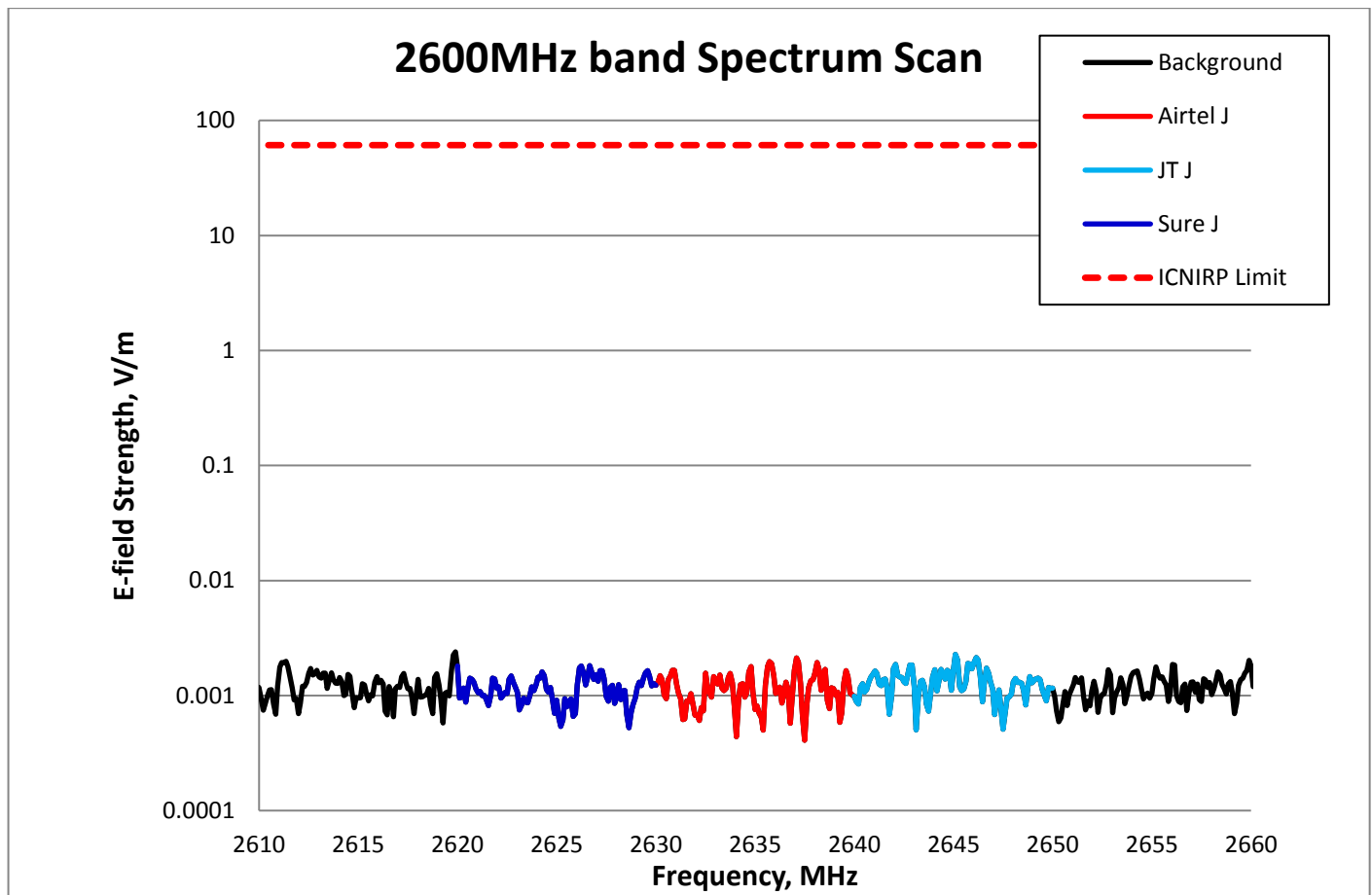


Figure 6 – 2600MHz band Spectrum Scan

No activity was recorded in the 2600MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 2600MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Upstairs Atrium	Airtel J	2600	0.002123	28733	3.88449E-08	1/ 25743427
	JT J		0.002279	26766	4.75524E-08	1/ 21029431
	Sure J		0.001819	33535	3.65838E-08	1/ 27334470
total band EQ					1.22981E-07	1/ 8131330

Table 5 – 2600MHz band Exposure Quotient at Jersey Airport– Upstairs Atrium

3. Survey Results – Baggage Reclaim

3.1 800 MHz Band

The graph for the 800 MHz activity is shown below with the E-field strength levels measured at the site plotted on a logarithmic scale.

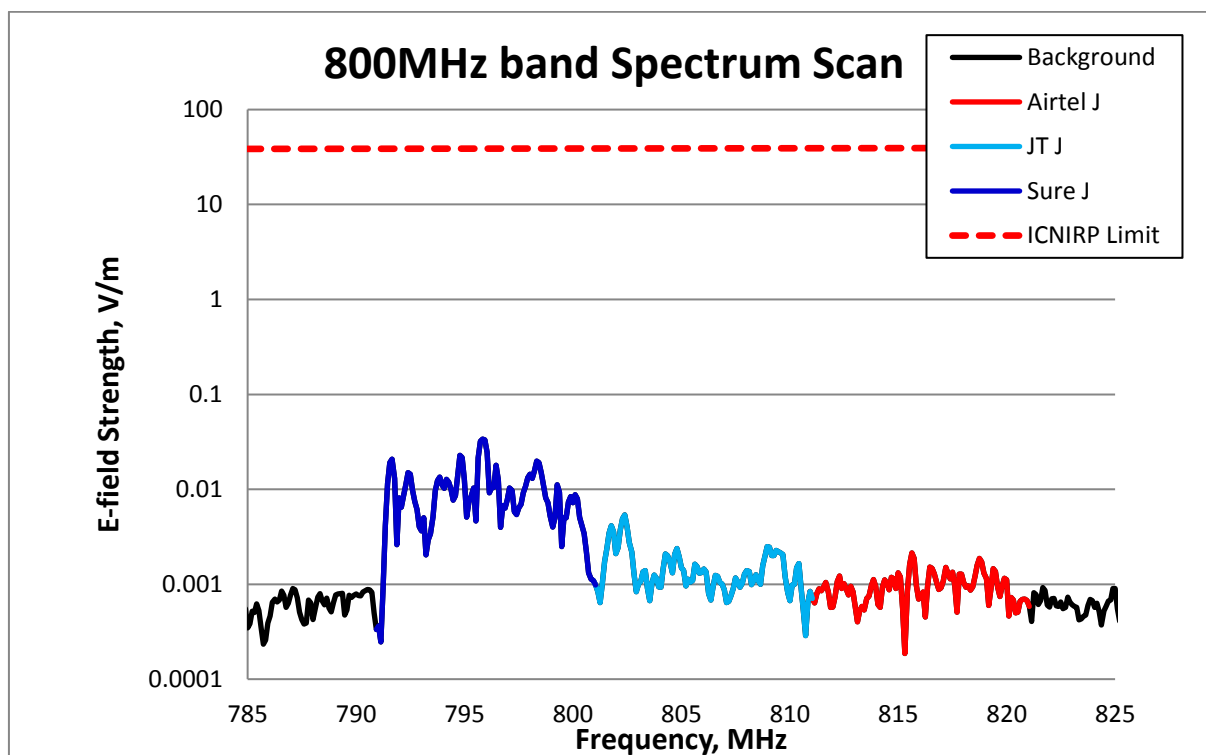


Figure 7 - 800MHz band Spectrum Scan

The red line on the scan represents the Airtel activity, the light blue is JT and the dark blue is Sure. ICNIRP's Reference Level for the General Public is also shown as the straight dashed line at the top of the graph. For clarity, each step on the vertical axis represents a 10-fold increase. The same scaling and colour scheme will be used throughout this report.

No field level recorded across the band was higher than 0.03378 V/m (Sure J), which is 1151 times smaller than the ICNIRP Reference level. The Exposure Quotient results for the 800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Baggage Reclaim	Airtel J	800	0.002134	18224	2.70883E-08	1/ 36916368
	JT J		0.00536	7256	8.2963E-08	1/ 12053566
	Sure J		0.03378	1151	3.62842E-06	1/ 275602
total band EQ					3.73847E-06	1/ 267489

Table 6– 800MHz band Exposure Quotient at Jersey Airport– Baggage Reclaim

3.2 900 MHz Band

The graph for the 900 MHz activity is shown below:

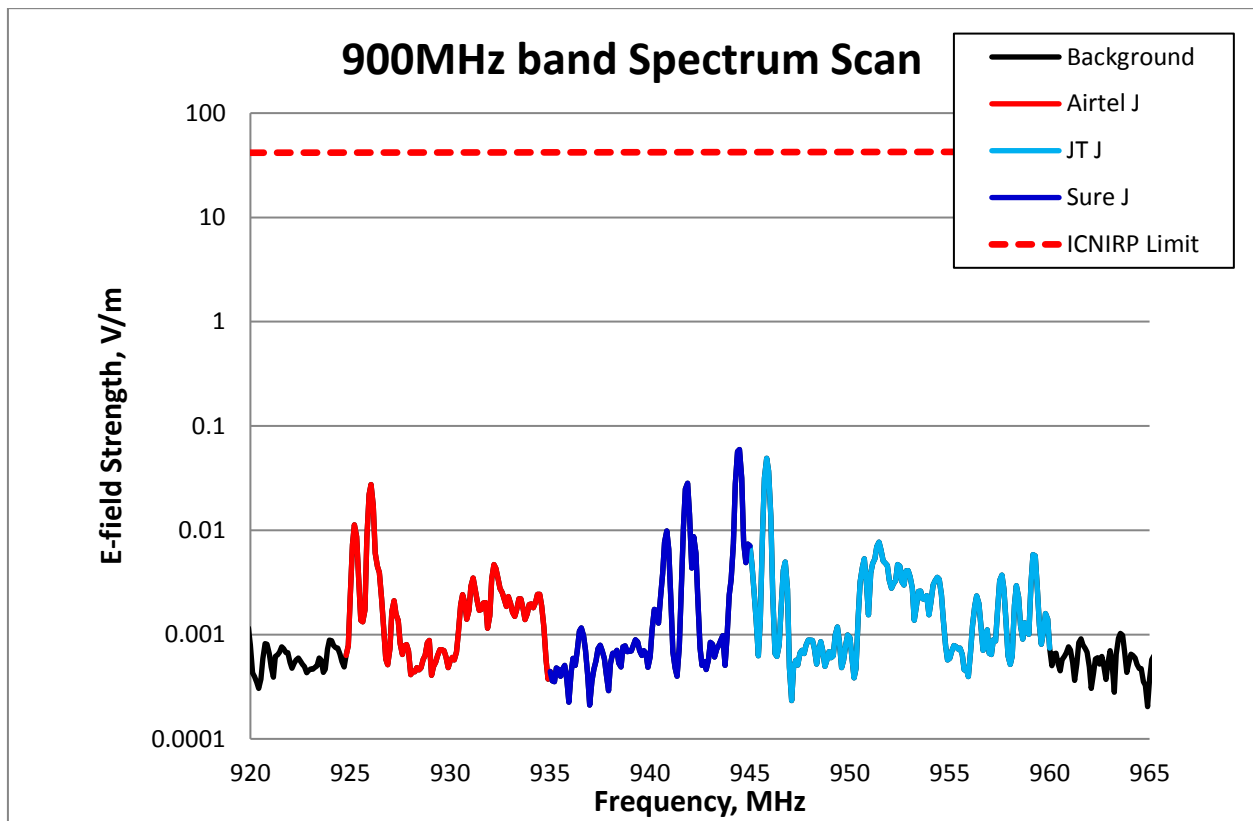


Figure 8 - 900MHz band Spectrum Scan

No field level recorded across the band was higher than 0.0595 V/m (Sure J), which is 693 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 900MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Baggage Reclaim	Airtel J	900	0.02742	1504	5.93498E-07	1/ 1684925
	JT J		0.049	842	1.60658E-06	1/ 622440
	Sure J		0.0595	693	2.94862E-06	1/ 339142
total band EQ					5.1487E-06	1/ 194224

Table 7– 900MHz band Exposure Quotient at Jersey Airport– Baggage Reclaim

3.3 1800 MHz Band

The graph for the 1800 MHz activity around the site is shown below:

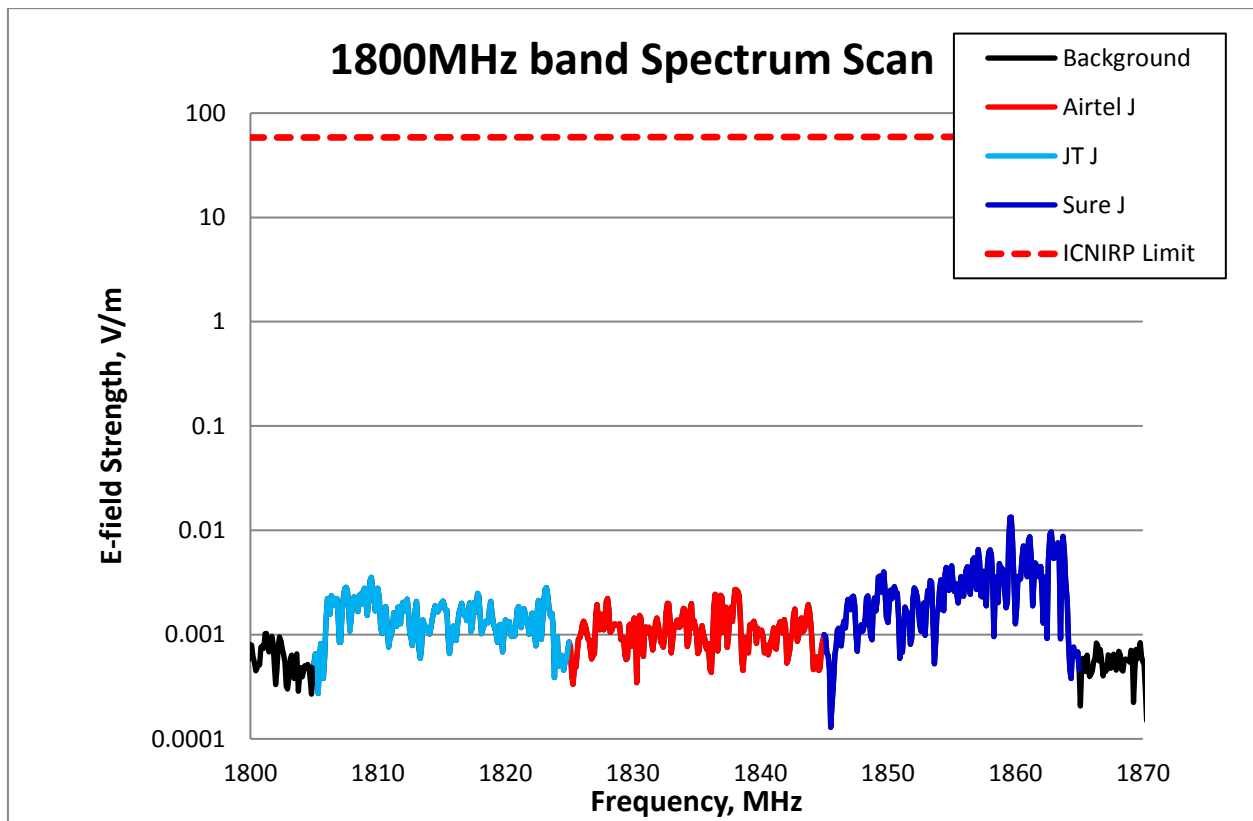


Figure 9 - 1800MHz Spectrum Scan

Marginal activity was recorded in the 1800MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 1800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Baggage Reclaim	Airtel J	1800	0.002708	21542	7.82489E-08	1/ 12779725
	JT J		0.003541	16475	1.33563E-07	1/ 7487081
	Sure J		0.01338	4360	7.03967E-07	1/ 1420520
total band EQ					9.1578E-07	1/ 1091966

Table 8 – 1800MHz band Exposure Quotient at Jersey Airport– Baggage Reclaim

3.4 2100MHz Band

The graph for the UMTS activity around the site is shown below:

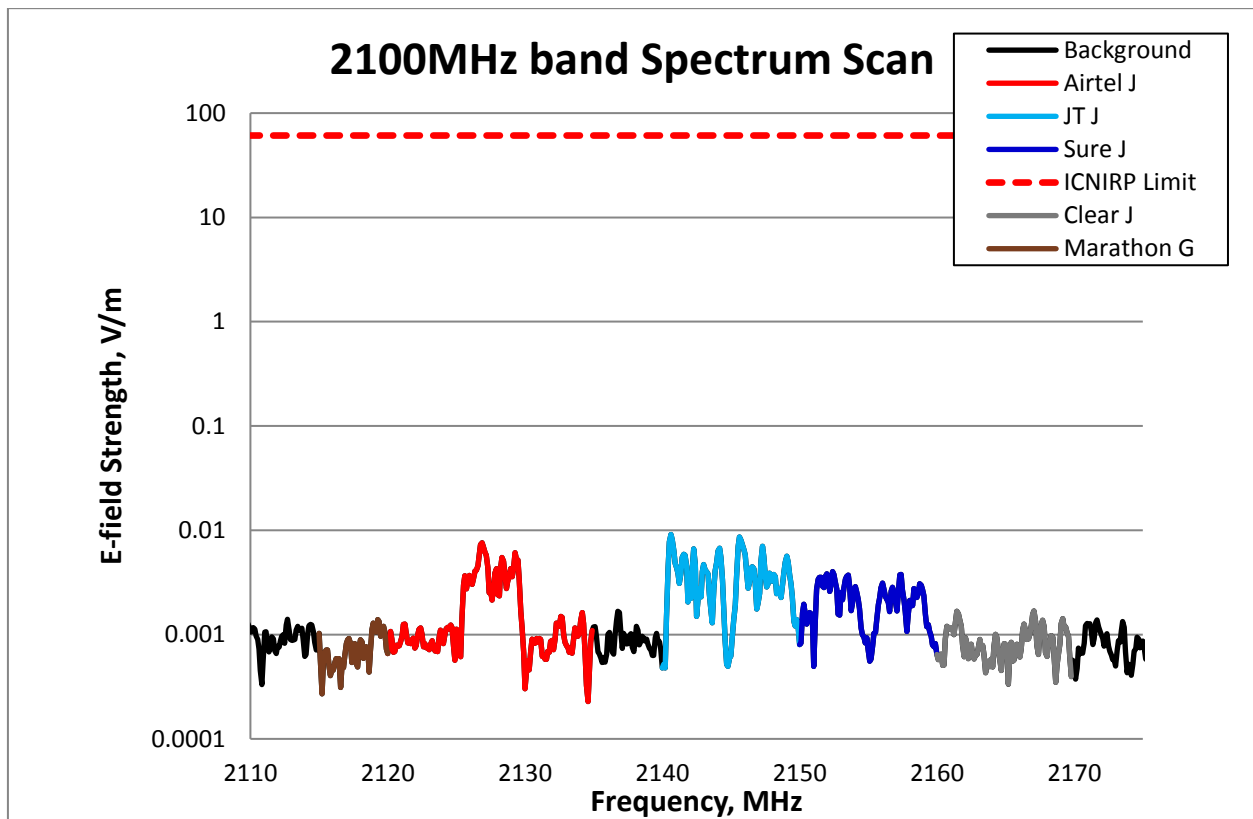


Figure 10 – 2100MHz band Spectrum Scan

Marginal activity was recorded in the 2100MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 2100MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Baggage Reclaim	Airtel J	2100	0.007567	8061	2.29815E-07	1/ 4351318
	Clear J		0.001682	36266	2.11676E-08	1/ 47242102
	JT J		0.009108	6697	4.53783E-07	1/ 2203697
	Marathon J		0.001391	43853	8.14295E-09	1/ 122805656
	Sure J		0.004012	15204	1.38954E-07	1/ 7196601
total band EQ					8.51863E-07	1/ 1173897

Table 9 – 2100MHz band Exposure Quotient at Jersey Airport– Baggage Reclaim

3.5 2600MHz band

The graph for the 2600MHz band activity around the site is shown below:

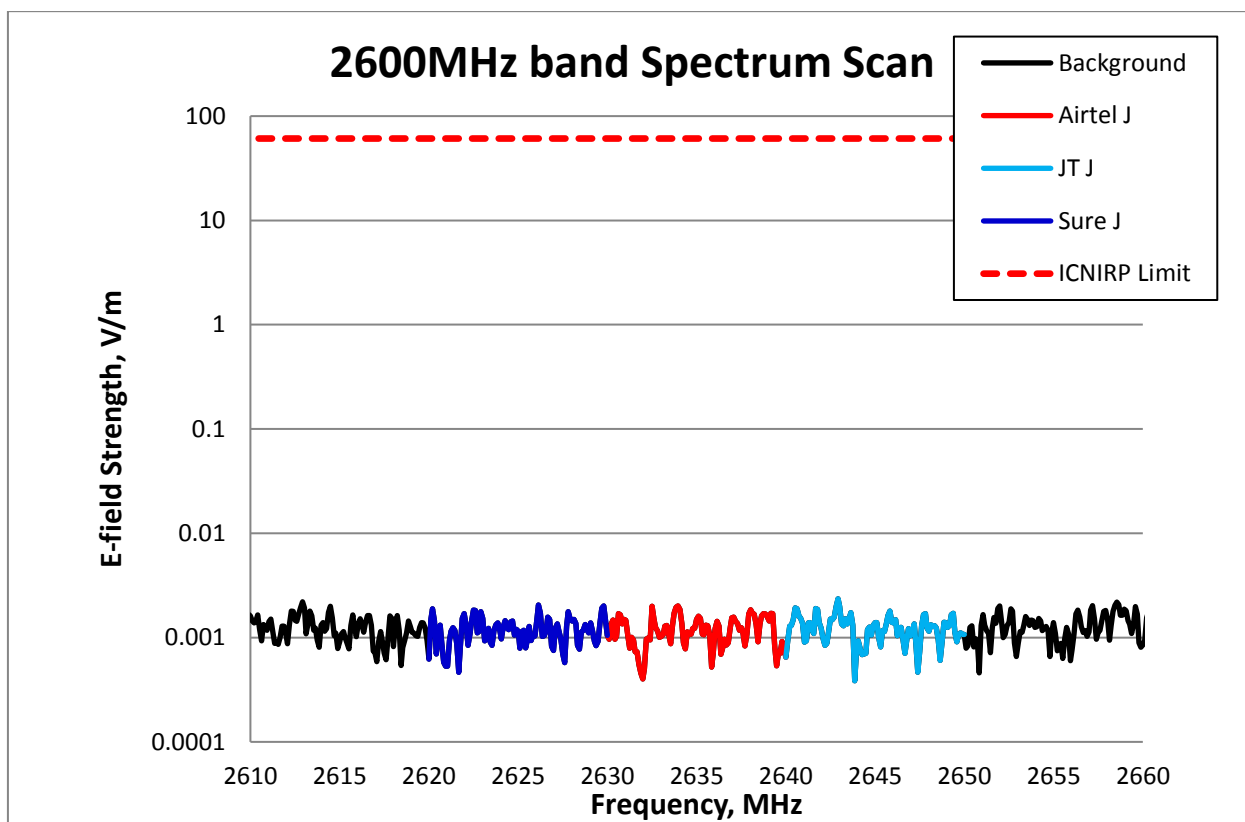


Figure 11 – 2600MHz band Spectrum Scan

No activity was recorded in the 2600MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 2600MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Baggage Reclaim	Airtel J	2600	0.00201	30348	4.04337E-08	1/ 24731858
	JT J		0.002353	25924	4.34942E-08	1/ 22991567
	Sure J		0.002051	29742	3.96389E-08	1/ 25227734
total band EQ					1.23567E-07	1/ 8092789

Table 10 – 2600MHz band Exposure Quotient at Jersey Airport– Baggage Reclaim

4. Survey Results - Departure Gates

4.1 800 MHz Band

The graph for the 800 MHz activity is shown below with the E-field strength levels measured at the site plotted on a logarithmic scale.

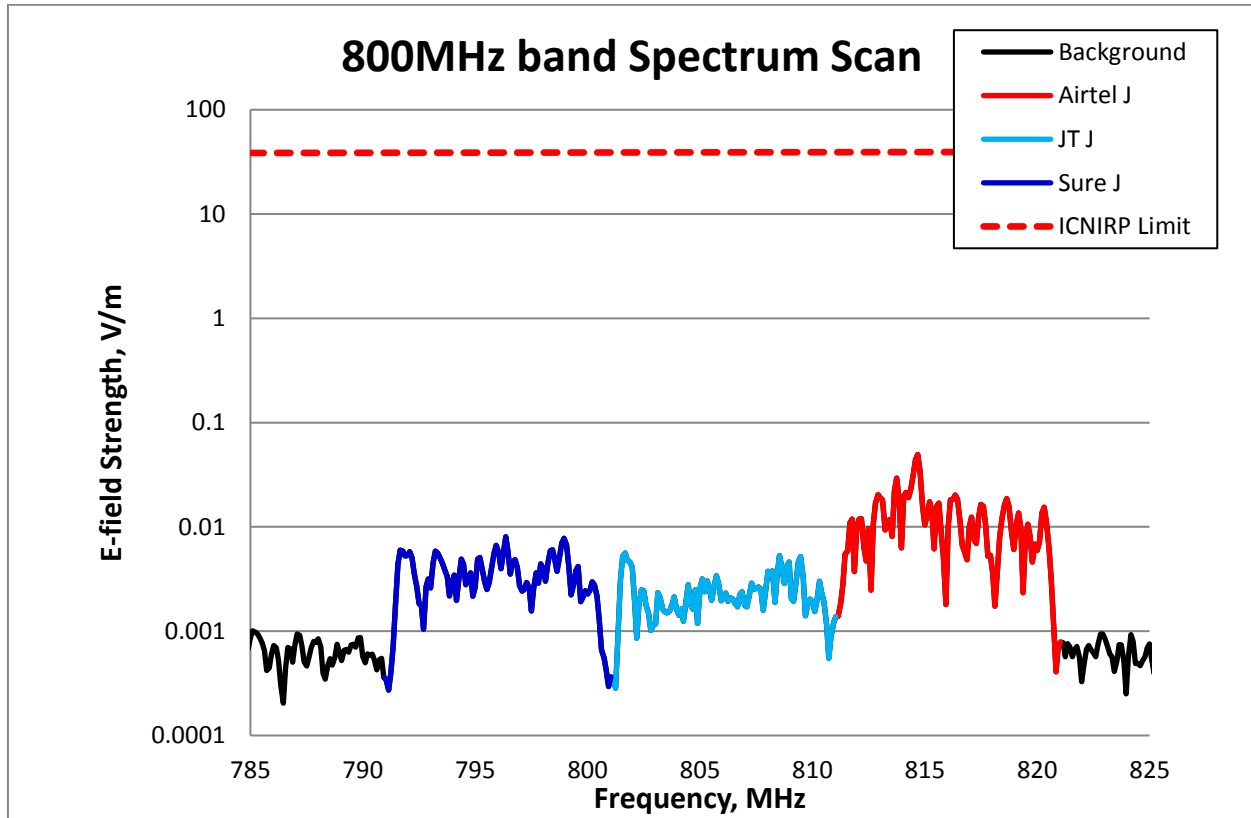


Figure 12 - 800MHz band Spectrum Scan

The red line on the scan represents the Airtel activity, the light blue is JT and the dark blue is Sure. ICNIRP's Reference Level for the General Public is also shown as the straight dashed line at the top of the graph. For clarity, each step on the vertical axis represents a 10-fold increase. The same scaling and colour scheme will be used throughout this report.

No field level recorded across the band was higher than 0.04944 V/m (Airtel J), which is 787 times smaller than the ICNIRP Reference level. The Exposure Quotient results for the 800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departure Gates	Airtel J	800	0.04944	787	5.39385E-06	1/ 185396
	JT J		0.005633	6904	1.75997E-07	1/ 5681900
	Sure J		0.008035	4840	4.04349E-07	1/ 2473111
	total band EQ			5.97419E-06	1/ 167387	

Table 11– 800MHz band Exposure Quotient at Jersey Airport– Departure Gates

4.2 900 MHz Band

The graph for the 900 MHz activity is shown below:

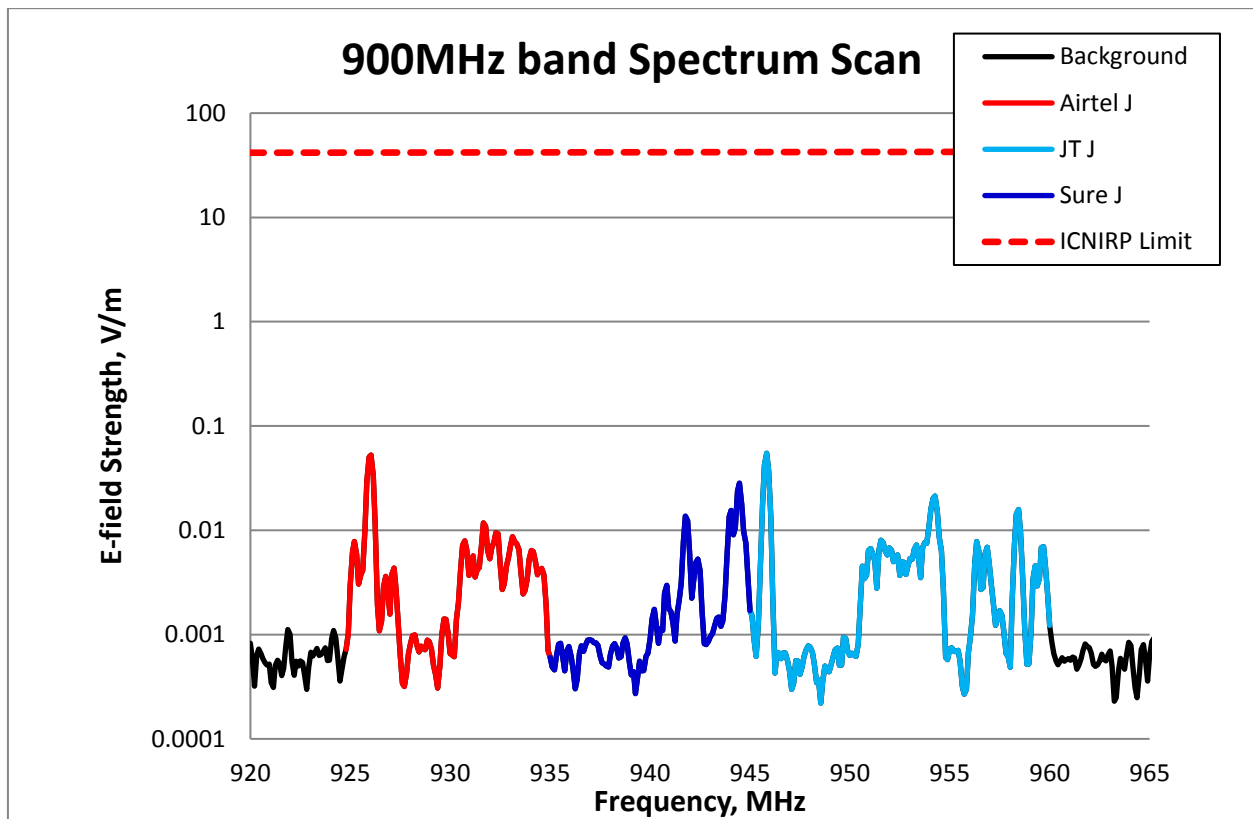


Figure 13 - 900MHz band Spectrum Scan

No field level recorded across the band was higher than 0.05479 V/m (JT J), which is 753 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 900MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departure Gates	Airtel J	900	0.05256	785	2.51679E-06	1/ 397331
	JT J		0.05479	753	2.81161E-06	1/ 355669
	Sure J		0.02831	1457	8.37977E-07	1/ 1193350
total band EQ					6.16638E-06	1/ 162170

Table 12– 900MHz band Exposure Quotient at Jersey Airport– Departure Gates

4.3 1800 MHz Band

The graph for the 1800 MHz activity around the site is shown below:

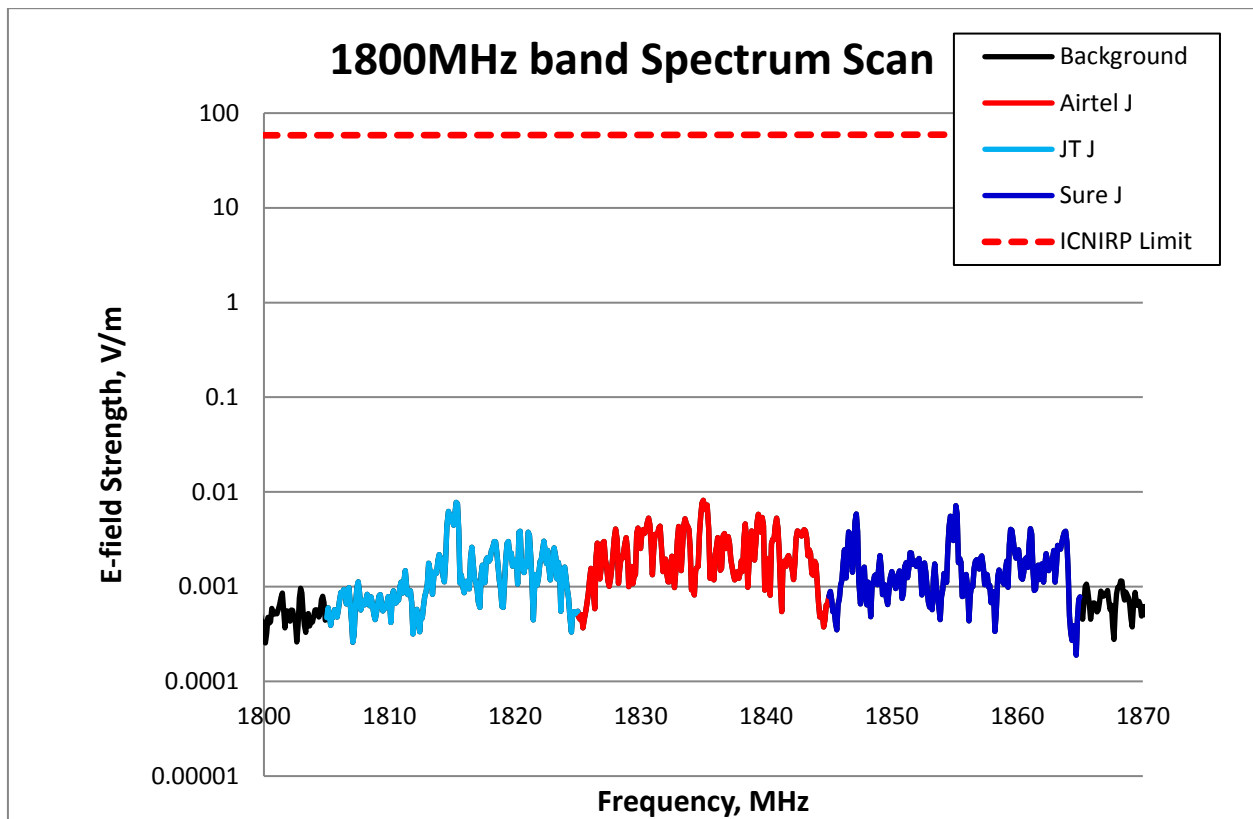


Figure 14 - 1800MHz Spectrum Scan

Marginal activity was recorded in the 1800MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 1800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departure Gates	Airtel J	1800	0.00817	7140	4.29984E-07	1/ 2325670
	JT J		0.00777	7508	1.87989E-07	1/ 5319473
	Sure J		0.007169	8137	2.06917E-07	1/ 4832853
total band EQ					8.24889E-07	1/ 1212284

Table 13 – 1800MHz band Exposure Quotient at Jersey Airport– Departure Gates

4.4 2100MHz Band

The graph for the UMTS activity around the site is shown below:

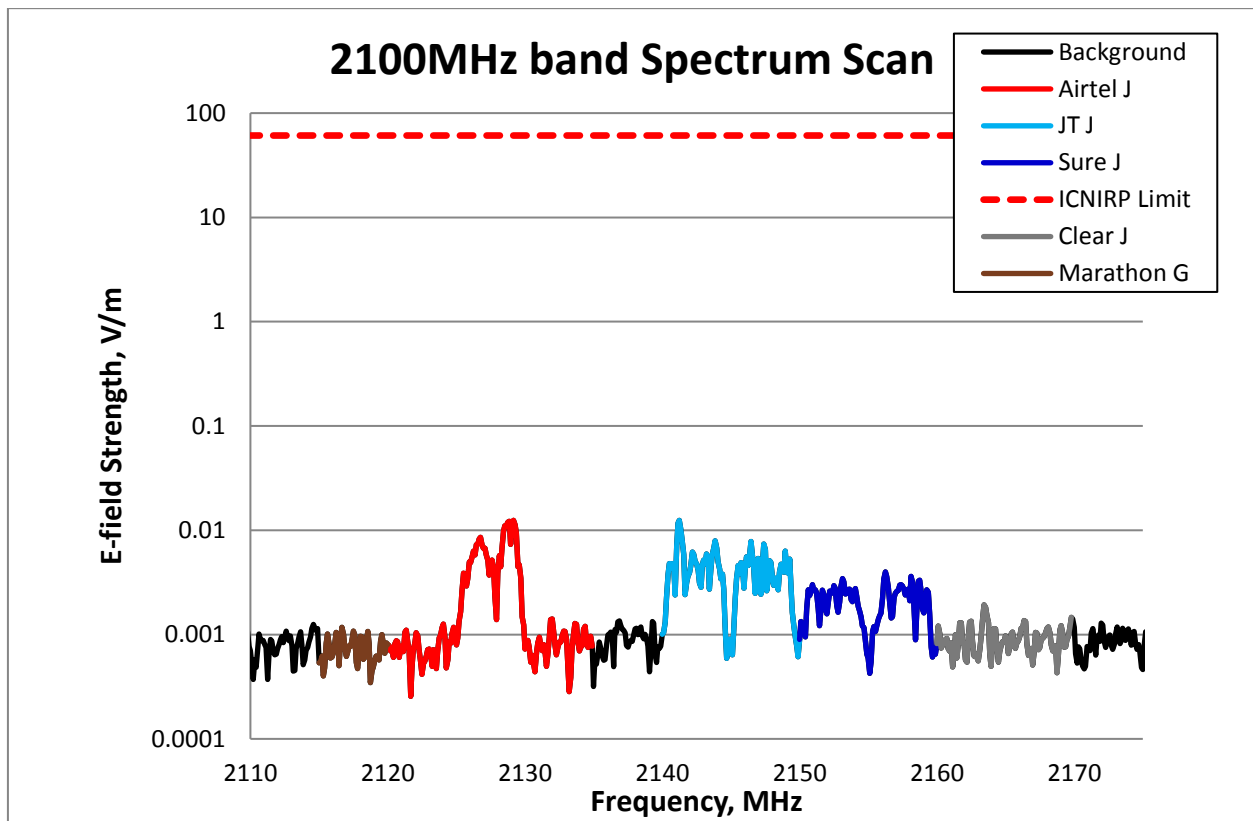


Figure 15 – 2100MHz band Spectrum Scan

No field level recorded across the band was higher than 0.01246 V/m (Airtel J), which is 4896 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 2100MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departure Gates	Airtel J	2100	0.01246	4896	5.78285E-07	1/ 1729251
	Clear J		0.00193	31606	2.32477E-08	1/ 43015085
	JT J		0.01243	4907	5.72016E-07	1/ 1748203
	Marathon J		0.001171	52092	7.72554E-09	1/ 129440835
	Sure J		0.00398	15327	1.28803E-07	1/ 7763798
total band EQ					1.31008E-06	1/ 763314

Table 14 – 2100MHz band Exposure Quotient at Jersey Airport– Departure Gates

4.5 2600MHz band

The graph for the 2600MHz band activity around the site is shown below:

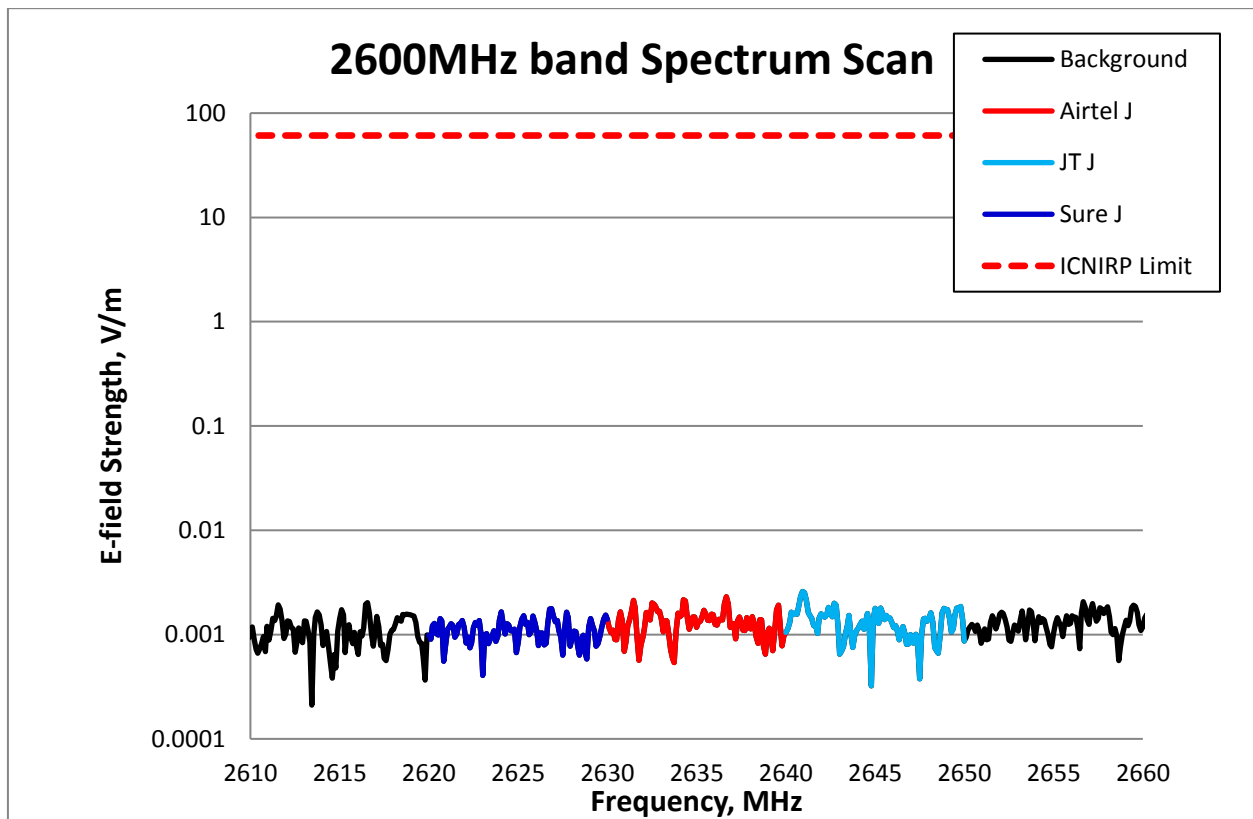


Figure 16 – 2600MHz band Spectrum Scan

No activity was recorded in the 2600MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 2600MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departure Gates	Airtel J	2600	0.002307	26441	4.83989E-08	1/ 20661622
	JT J		0.00259	23552	5.04259E-08	1/ 19831091
	Sure J		0.001769	34483	3.34641E-08	1/ 29882760
total band EQ					1.32289E-07	1/ 7559214

Table 15 – 2600MHz band Exposure Quotient at Jersey Airport– Departure Gates

5. Survey Results – Departure Airside

5.1 800 MHz Band

The graph for the 800 MHz activity is shown below with the E-field strength levels measured at the site plotted on a logarithmic scale.

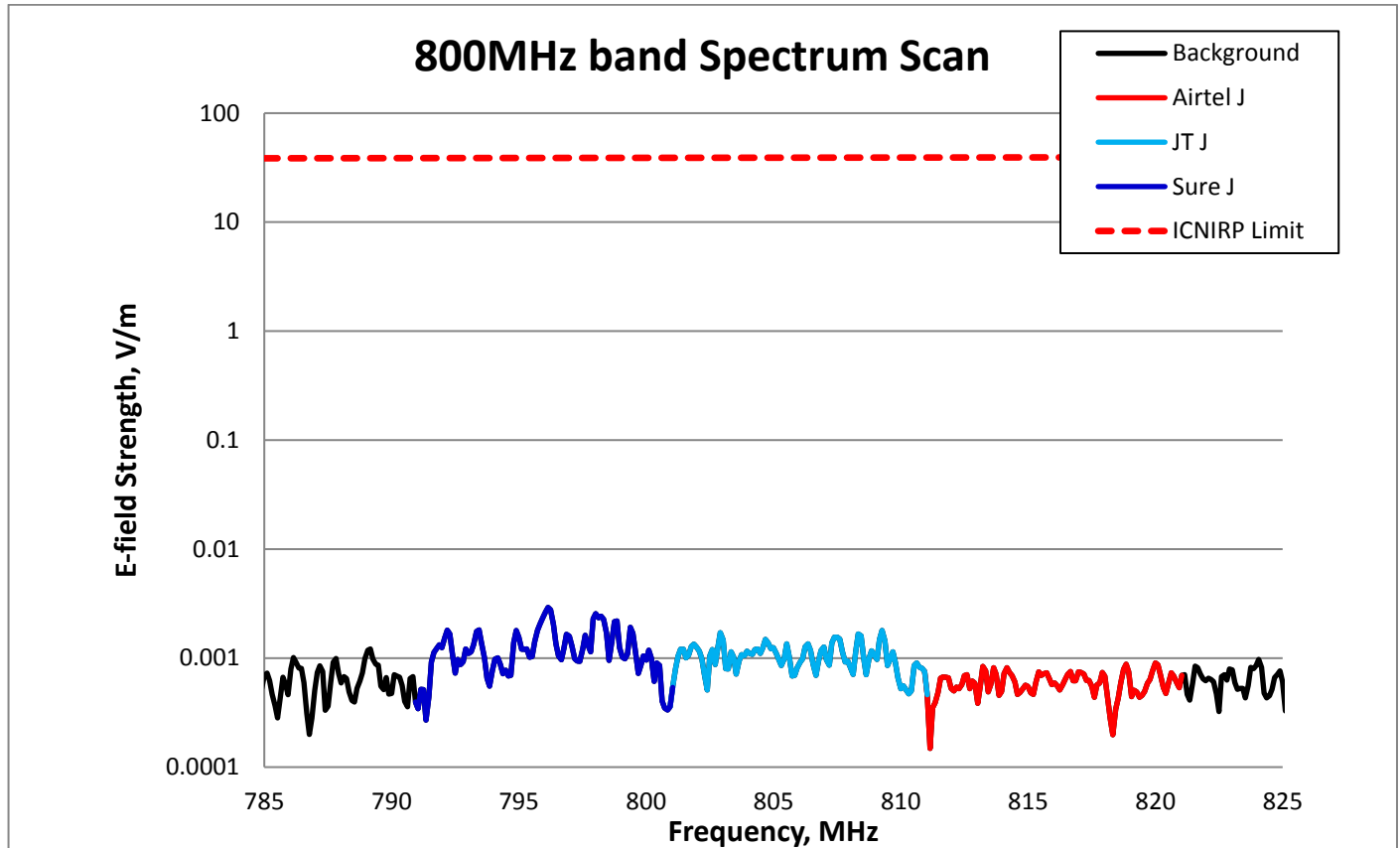


Figure 17 - 800MHz band Spectrum Scan

The red line on the scan represents the Airtel activity, the light blue is JT and the dark blue is Sure. ICNIRP's Reference Level for the General Public is also shown as the straight dashed line at the top of the graph. For clarity, each step on the vertical axis represents a 10-fold increase. The same scaling and colour scheme will be used throughout this report.

Marginal activity was recorded in the 800MHz as no operator appears to transmit in this band at this location. The Exposure Quotient results for the 800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Airside	Airtel J	800	0.0009039	43026	9.85777E-09	1/ 101442837
	JT J		0.001792	21702	3.04906E-08	1/ 32797046
	Sure J		0.002918	13328	4.96447E-08	1/ 20143136
total band EQ					8.9993E-08	1/ 11111973

Table 16– 800MHz band Exposure Quotient at Jersey Airport– Departures Airside

5.2 900 MHz Band

The graph for the 900 MHz activity is shown below:

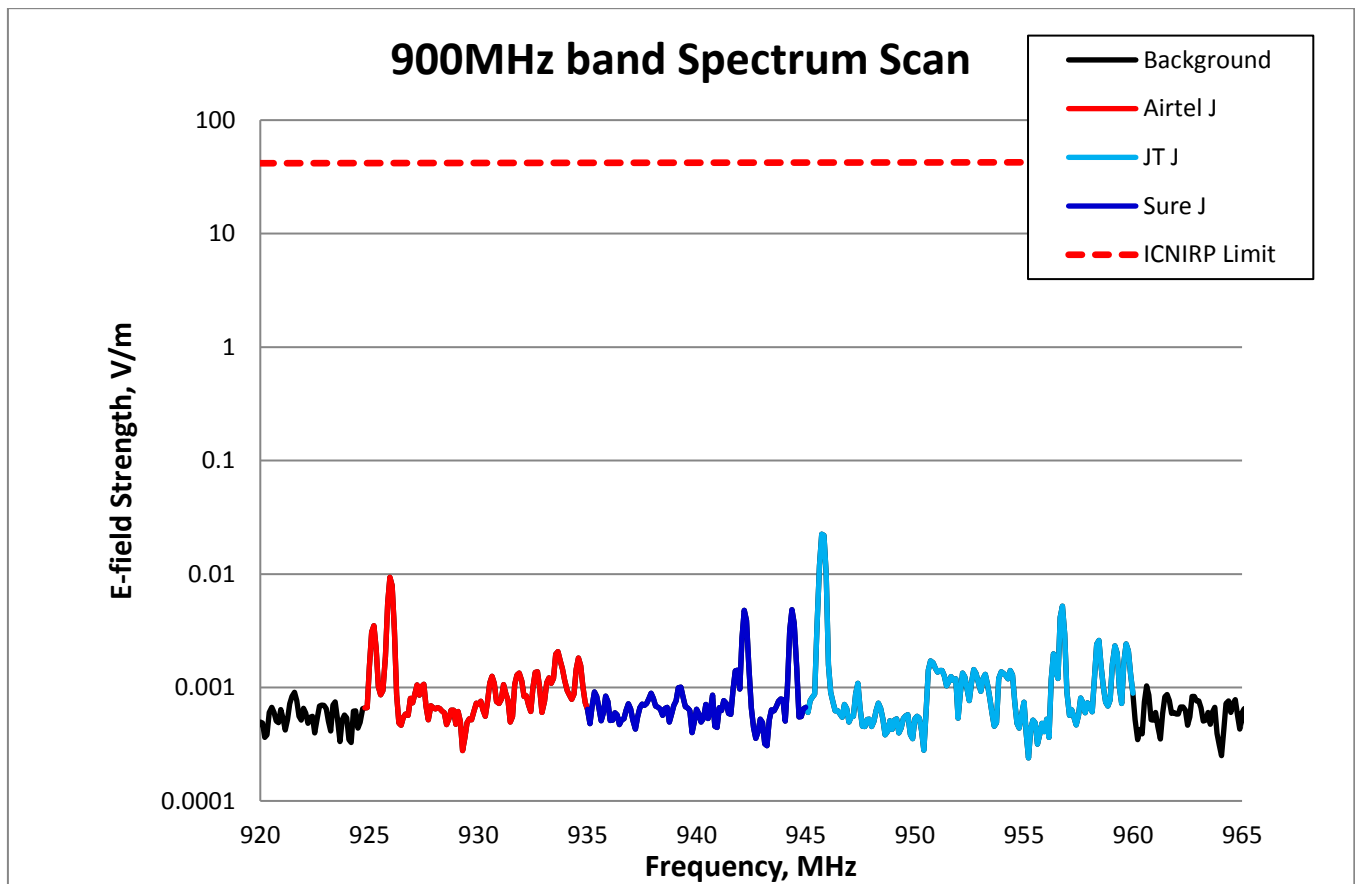


Figure 18 - 900MHz band Spectrum Scan

No field level recorded across the band was higher than 0.0224 V/m (JT J), which is 1838 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 900MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Airside	Airtel J	900	0.009359	4408	8.06914E-08	1/ 12392895
	JT J		0.02244	1838	3.83168E-07	1/ 2609820
	Sure J		0.004842	8519	3.72431E-08	1/ 26850596
total band EQ					5.01103E-07	1/ 1995599

Table 17– 900MHz band Exposure Quotient at Jersey Airport– Departures Airside

5.3 1800 MHz Band

The graph for the 1800 MHz activity around the site is shown below:

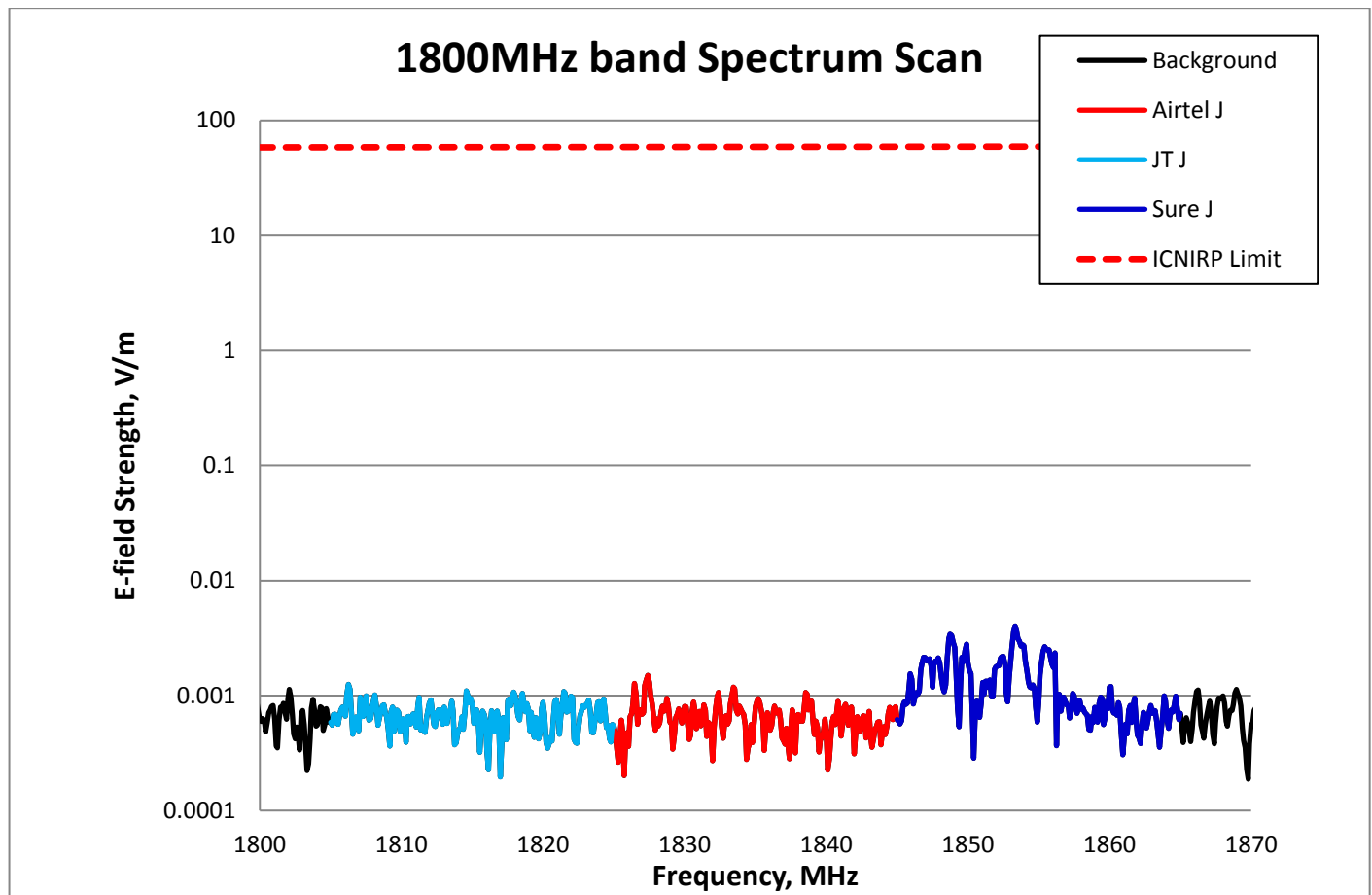


Figure 19 - 1800MHz Spectrum Scan

Marginal activity was recorded in the 1800MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 1800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Airside	Airtel J	1800	0.001495	39021	2.35615E-08	1/ 42442144
	JT J		0.001248	46744	2.55628E-08	1/ 39119414
	Sure J		0.00403	14476	1.13915E-07	1/ 8778456
total band EQ					1.63039E-07	1/ 6133483

Table 18 – 1800MHz band Exposure Quotient at Jersey Airport– Departures Airside

5.4 2100MHz Band

The graph for the UMTS activity around the site is shown below:

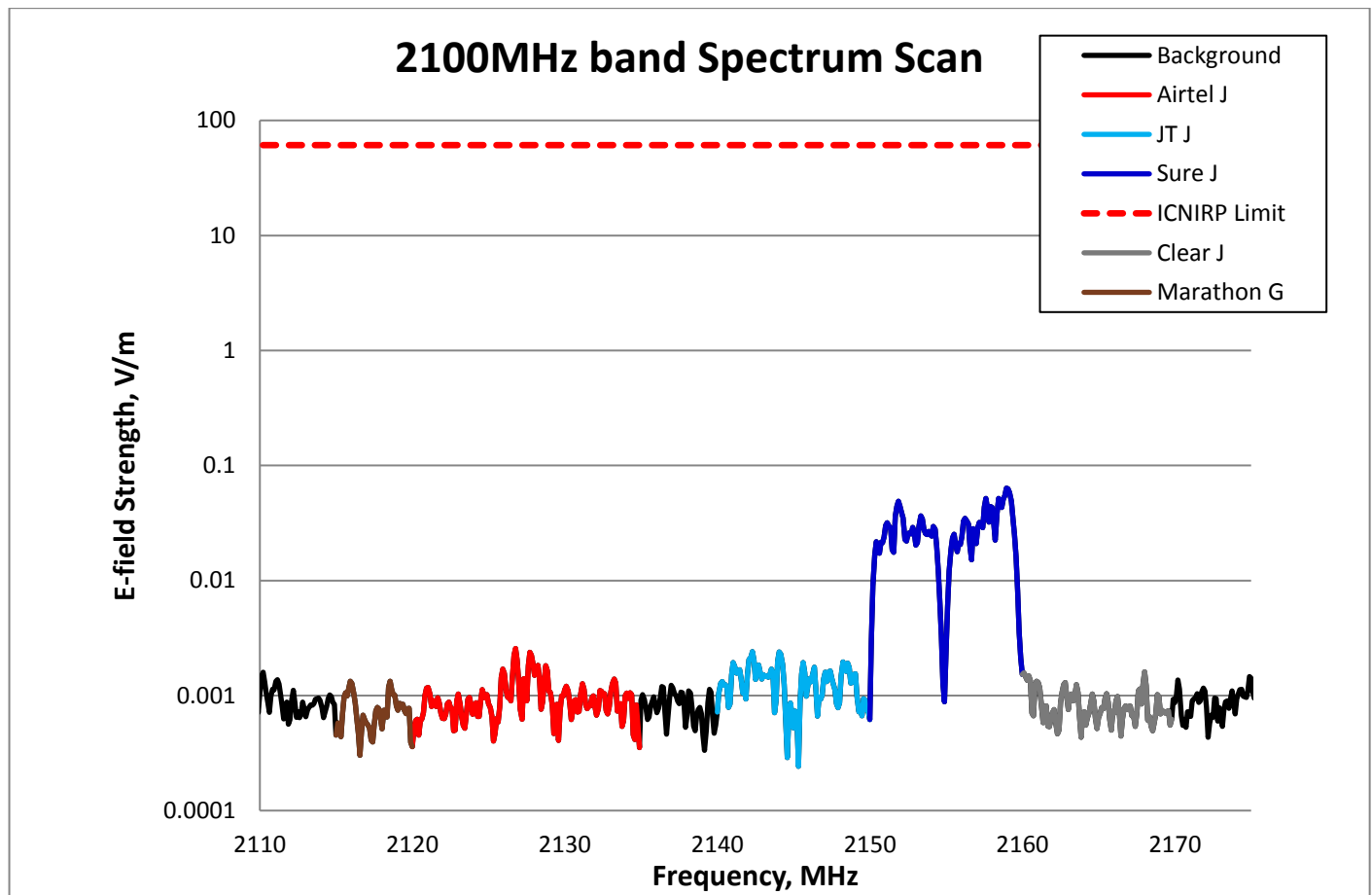


Figure 20 – 2100MHz band Spectrum Scan

No field level recorded across the band was higher than 0.06355 V/m (Sure J), which is 960 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 2100MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Airside	Airtel J	2100	0.002569	23745	4.17215E-08	1/ 23968459
	Clear J		0.00161	37888	2.03393E-08	1/ 49165946
	JT J		0.002408	25332	4.9313E-08	1/ 20278644
	Marathon J		0.001333	45761	8.20823E-09	1/ 121828872
	Sure J		0.06355	960	2.40895E-05	1/ 41512
total band EQ					2.42091E-05	1/ 41307

Table 19 – 2100MHz band Exposure Quotient at Jersey Airport– Departures Airside

5.5 2600MHz band

The graph for the 2600MHz band activity around the site is shown below:

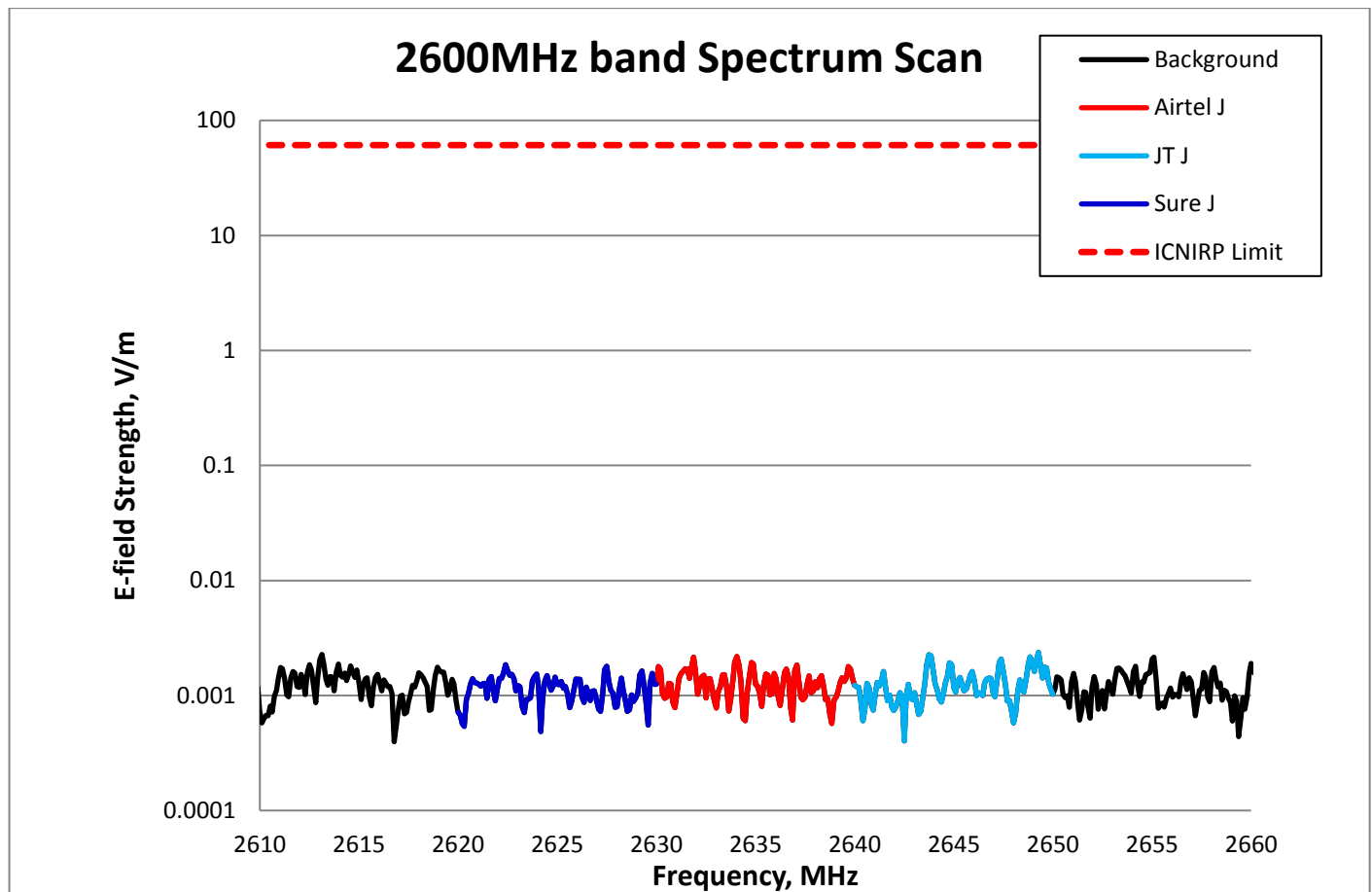


Figure 21 – 2600MHz band Spectrum Scan

No activity was recorded in the 2600MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 2600MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Airside	Airtel J	2600	0.002186	27905	4.54971E-08	1/ 21979402
	JT J		0.002369	25749	4.47925E-08	1/ 22325151
	Sure J		0.001853	32920	3.62311E-08	1/ 27600576
	total band EQ			1.26521E-07	1/ 7903839	

Table 20 – 2600MHz band Exposure Quotient at Jersey Airport– Departures Airside

6. Survey Results – Departures Landside

6.1 800 MHz Band

The graph for the 800 MHz activity is shown below with the E-field strength levels measured at the site plotted on a logarithmic scale.

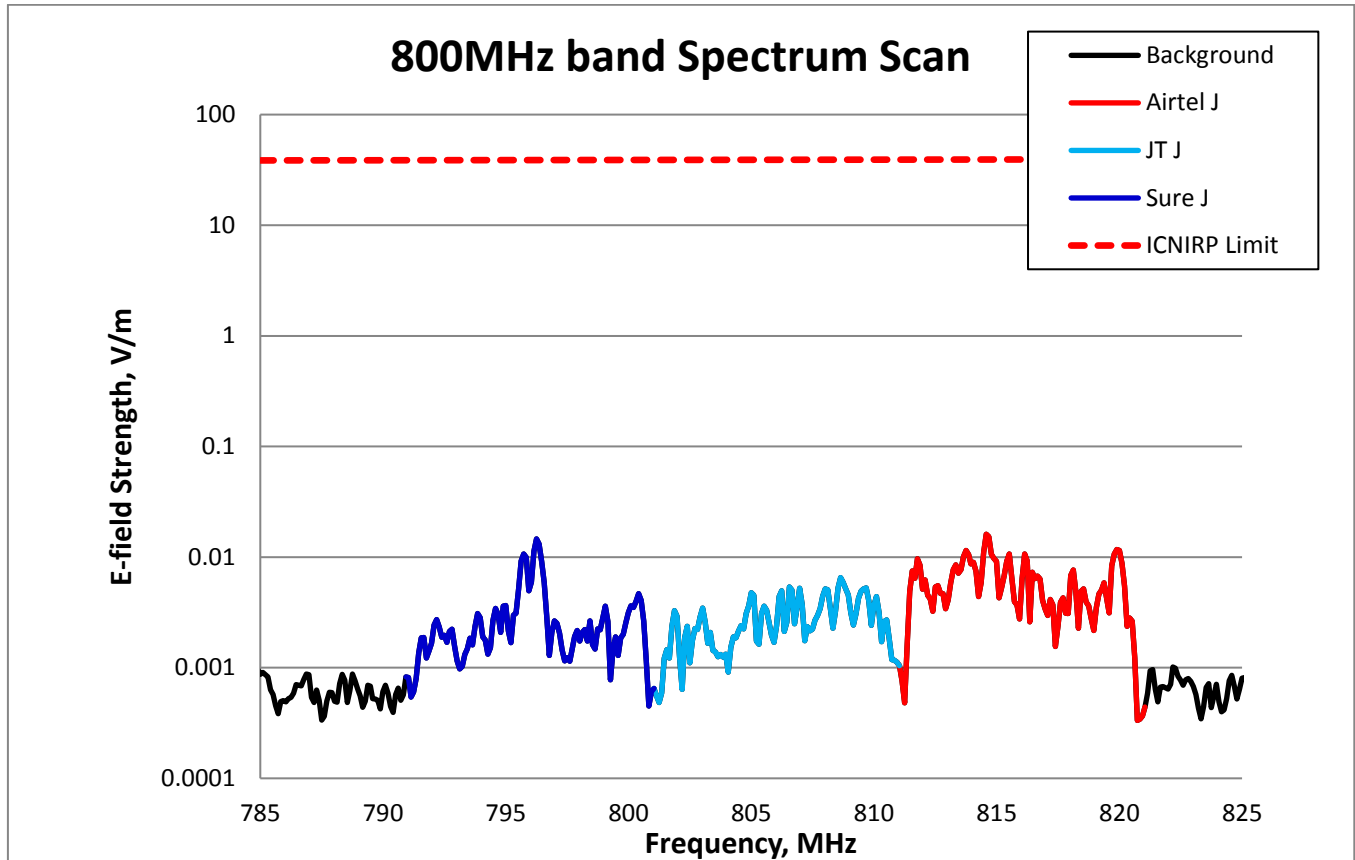


Figure 22 - 800MHz band Spectrum Scan

The red line on the scan represents the Airtel activity, the light blue is JT and the dark blue is Sure. ICNIRP's Reference Level for the General Public is also shown as the straight dashed line at the top of the graph. For clarity, each step on the vertical axis represents a 10-fold increase. The same scaling and colour scheme will be used throughout this report.

No field level recorded across the band was higher than 0.01609 V/m (Airtel J), which is 2417 times smaller than the ICNIRP Reference level. The Exposure Quotient results for the 800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Landside	Airtel J	800	0.01609	2417	1.12311E-06	1/ 890388
	JT J		0.00652	5965	2.49623E-07	1/ 4006036
	Sure J		0.0146	2664	3.86658E-07	1/ 2586267
total band EQ					1.75939E-06	1/ 568380

Table 21– 800MHz band Exposure Quotient at Jersey Airport– Departures Landside

6.2 900 MHz Band

The graph for the 900 MHz activity is shown below:

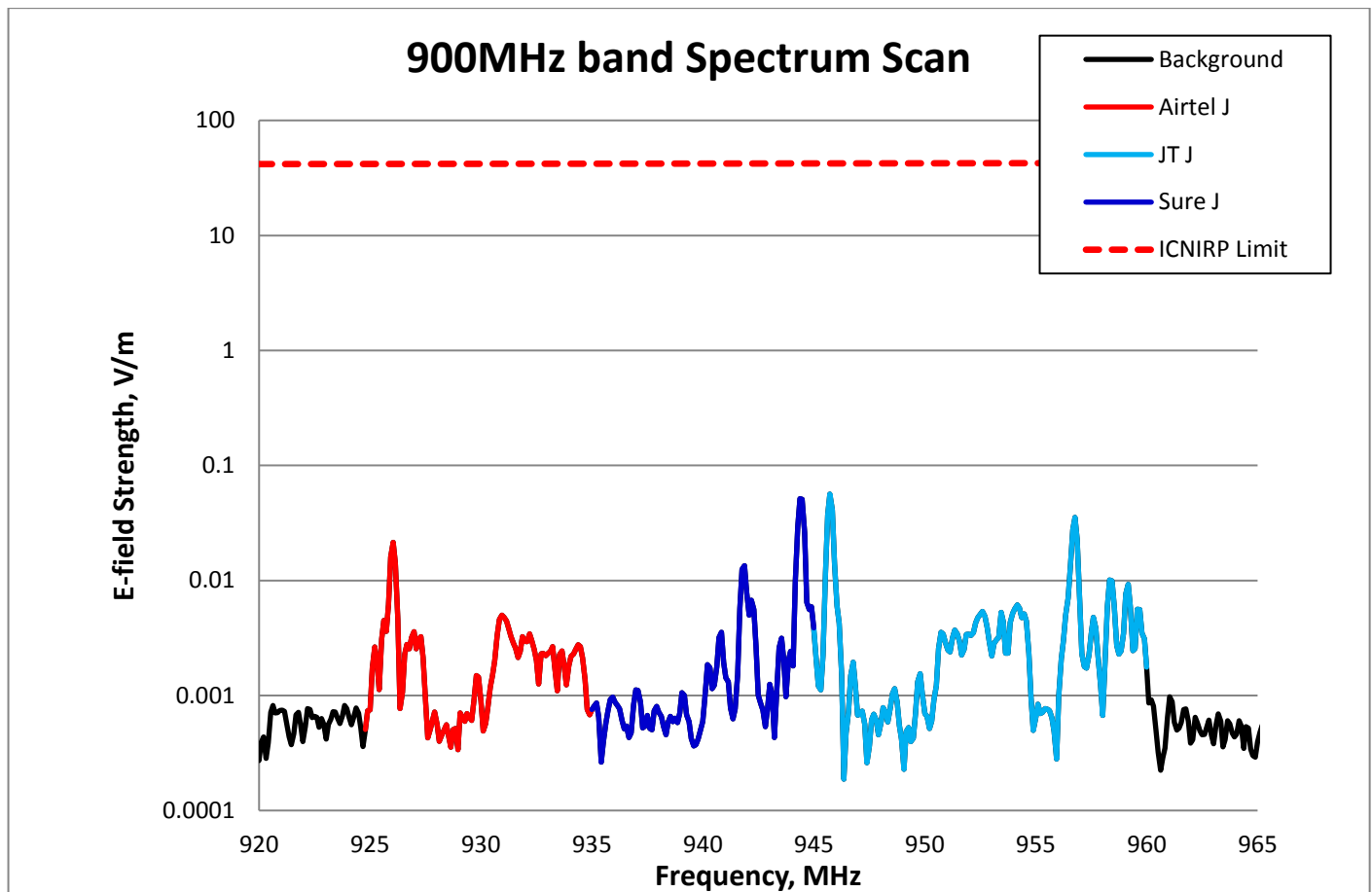


Figure 23 - 900MHz band Spectrum Scan

No field level recorded across the band was higher than 0.0564 V/m (JT J), which is 731 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 900MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Landside	Airtel J	900	0.02143	1925	3.86787E-07	1/ 2585400
	JT J		0.0564	731	2.90847E-06	1/ 343823
	Sure J		0.05143	802	2.05807E-06	1/ 485892
total band EQ					5.35333E-06	1/ 186800

Table 22– 900MHz band Exposure Quotient at Jersey Airport– Departures Landside

6.3 1800 MHz Band

The graph for the 1800 MHz activity around the site is shown below:

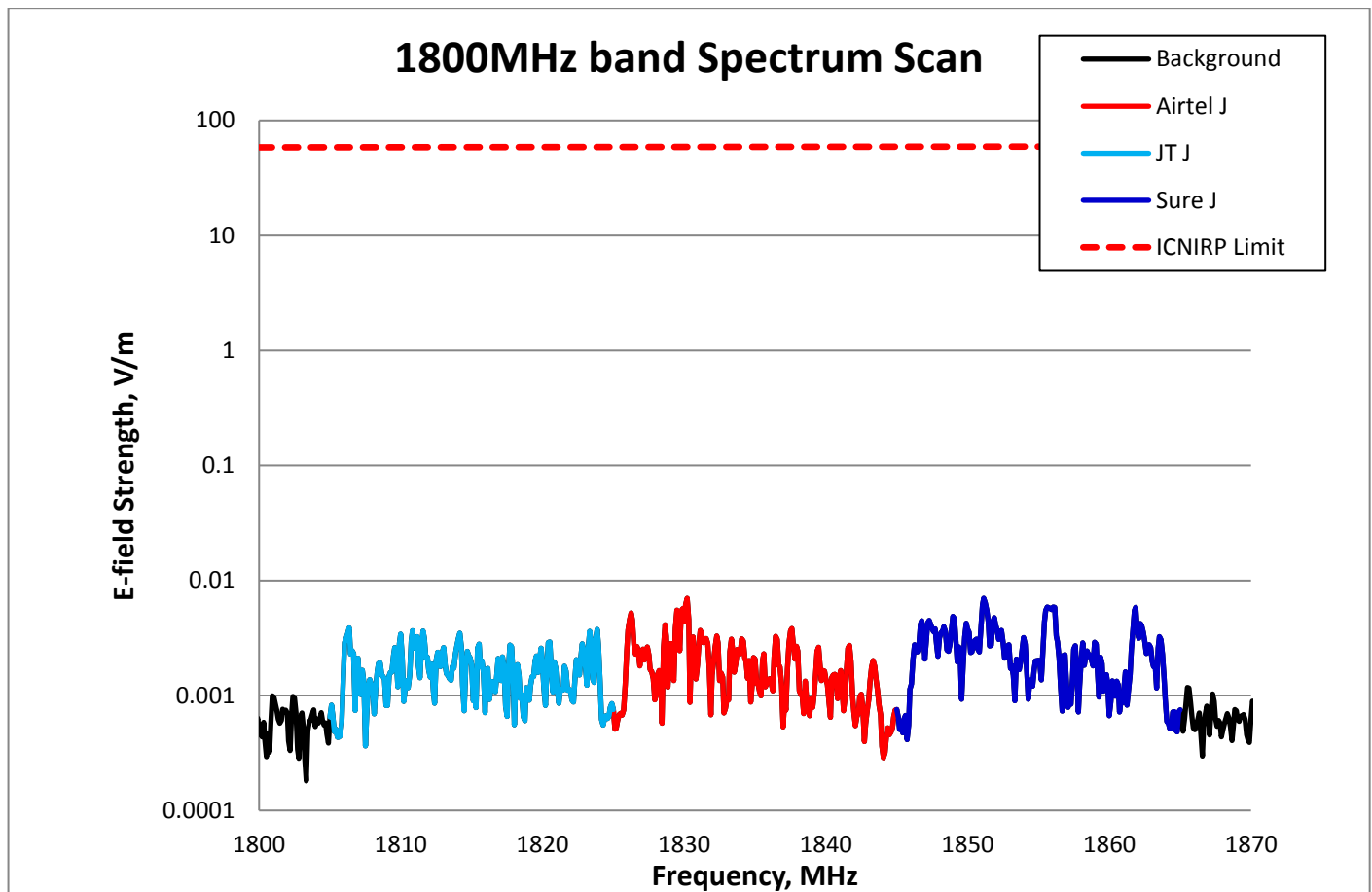


Figure 24 - 1800MHz Spectrum Scan

Marginal activity was recorded in the 1800MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 1800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Landside	Airtel J	1800	0.006993	8342	2.54097E-07	1/ 3935509
	JT J		0.00387	15074	1.76263E-07	1/ 5673335
	Sure J		0.007002	8331	4.19313E-07	1/ 2384855
total band EQ					8.49673E-07	1/ 1176924

Table 23 – 1800MHz band Exposure Quotient at Jersey Airport– Departures Landside

6.4 2100MHz Band

The graph for the UMTS activity around the site is shown below:

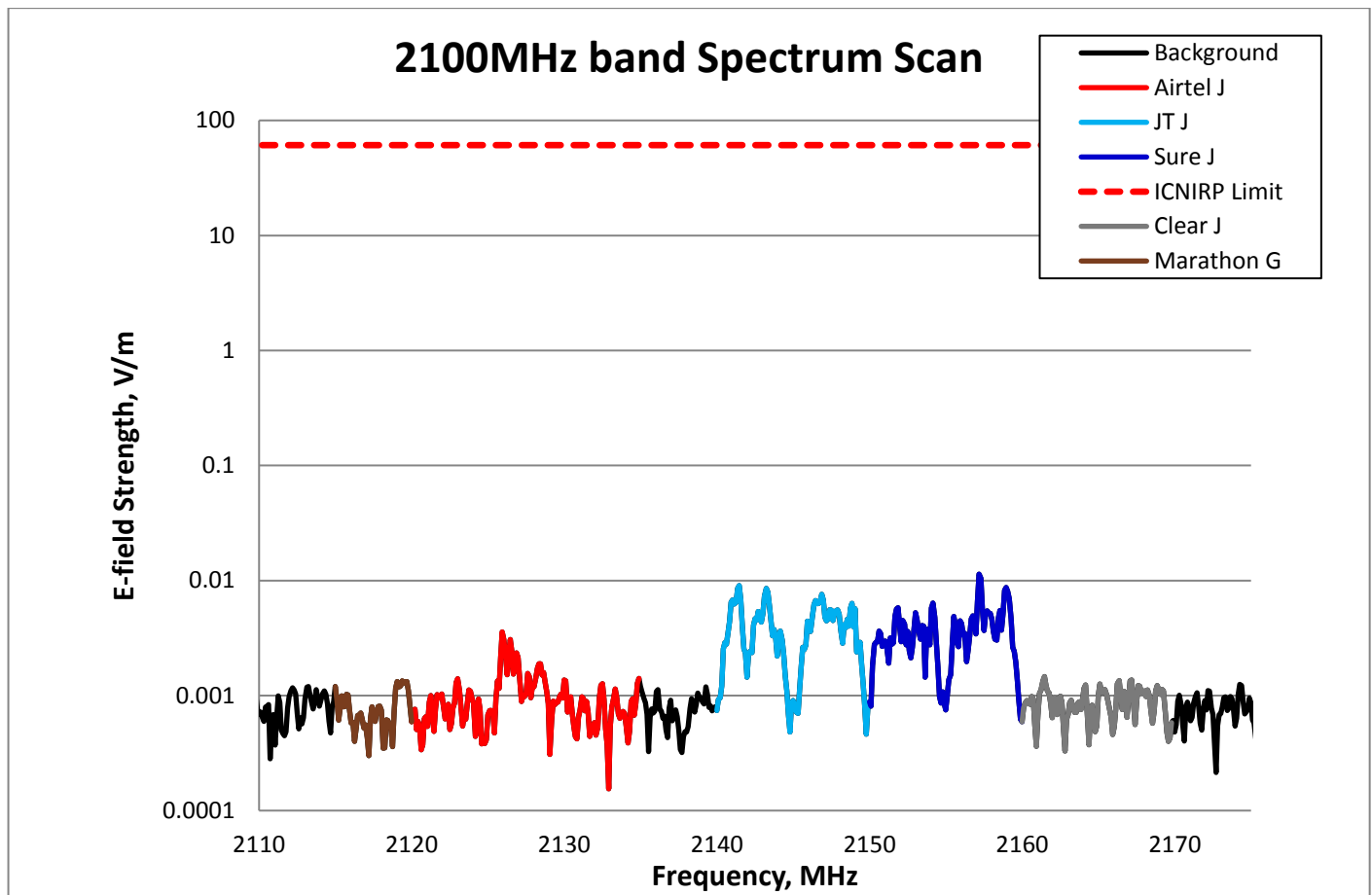


Figure 25 – 2100MHz band Spectrum Scan

No field level recorded across the band was higher than 0.01136 V/m (Sure J), which is 5370 times smaller than the ICNIRP Reference level. The Exposure Quotient results for the 2100MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Landside	Airtel J	2100	0.003575	17063	4.80291E-08	1/ 20820703
	Clear J		0.001459	41809	2.14115E-08	1/ 46703806
	JT J		0.009046	6743	5.04115E-07	1/ 1983674
	Marathon J		0.001344	45387	8.97708E-09	1/ 111394787
	Sure J		0.01136	5370	4.51033E-07	1/ 2217134
total band EQ					1.03357E-06	1/ 967524

Table 24 – 2100MHz band Exposure Quotient at Jersey Airport– Departures Landside

6.5 2600MHz band

The graph for the 2600MHz band activity around the site is shown below:

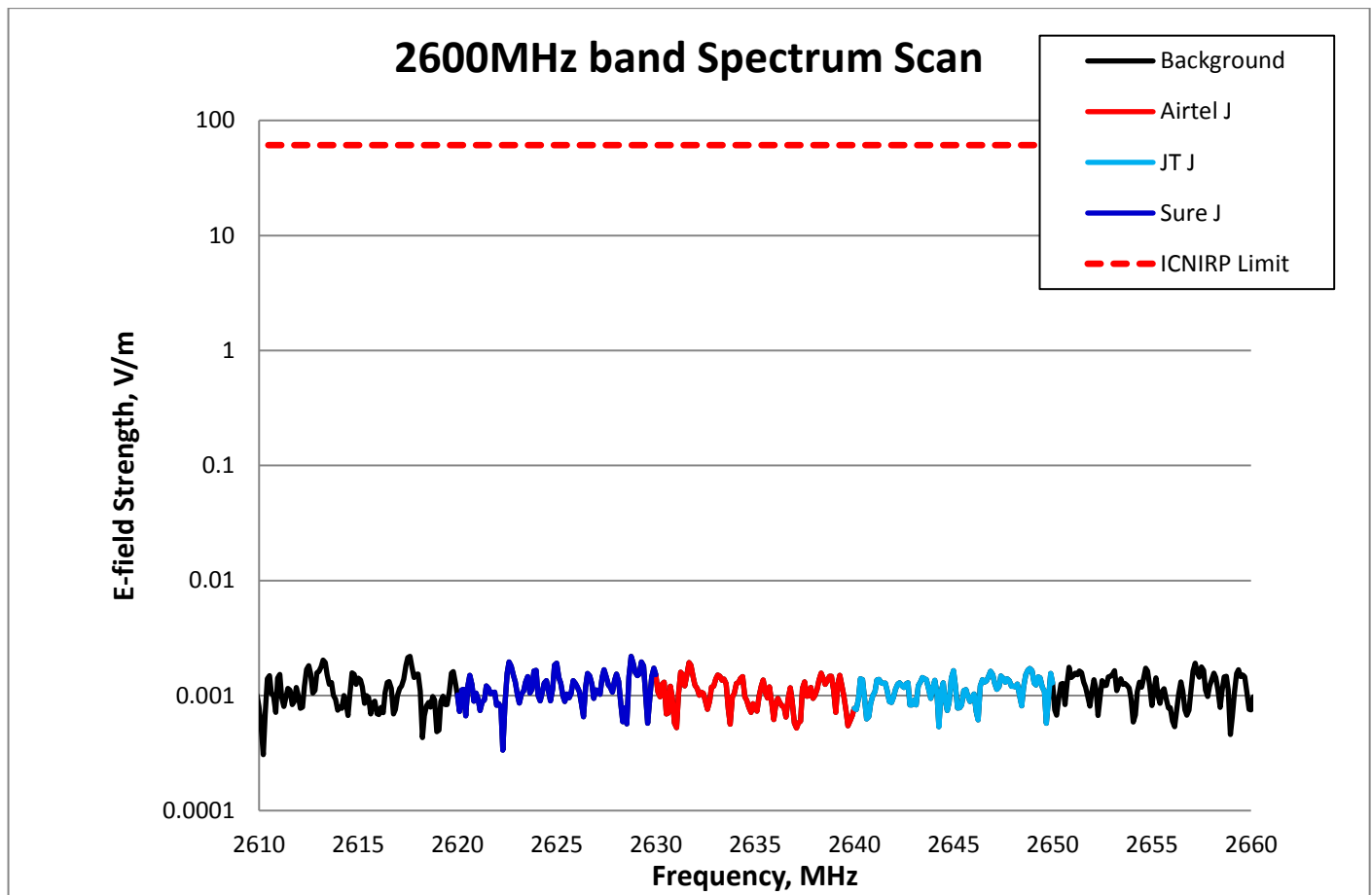


Figure 26 – 2600MHz band Spectrum Scan

No activity was recorded in the 2600MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 2600MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Departures Landside	Airtel J	2600	0.001934	31541	3.21728E-08	1/ 31082195
	JT J		0.001716	35548	3.64474E-08	1/ 27436813
	Sure J		0.002187	27892	4.06063E-08	1/ 24626716
	total band EQ			1.09226E-07	1/ 9155292	

Table 25 – 2600MHz band Exposure Quotient at Jersey Airport– Departures Landside

7. Survey Results – Arrivals Landside

7.1 800 MHz Band

The graph for the 800 MHz activity is shown below with the E-field strength levels measured at the site plotted on a logarithmic scale.

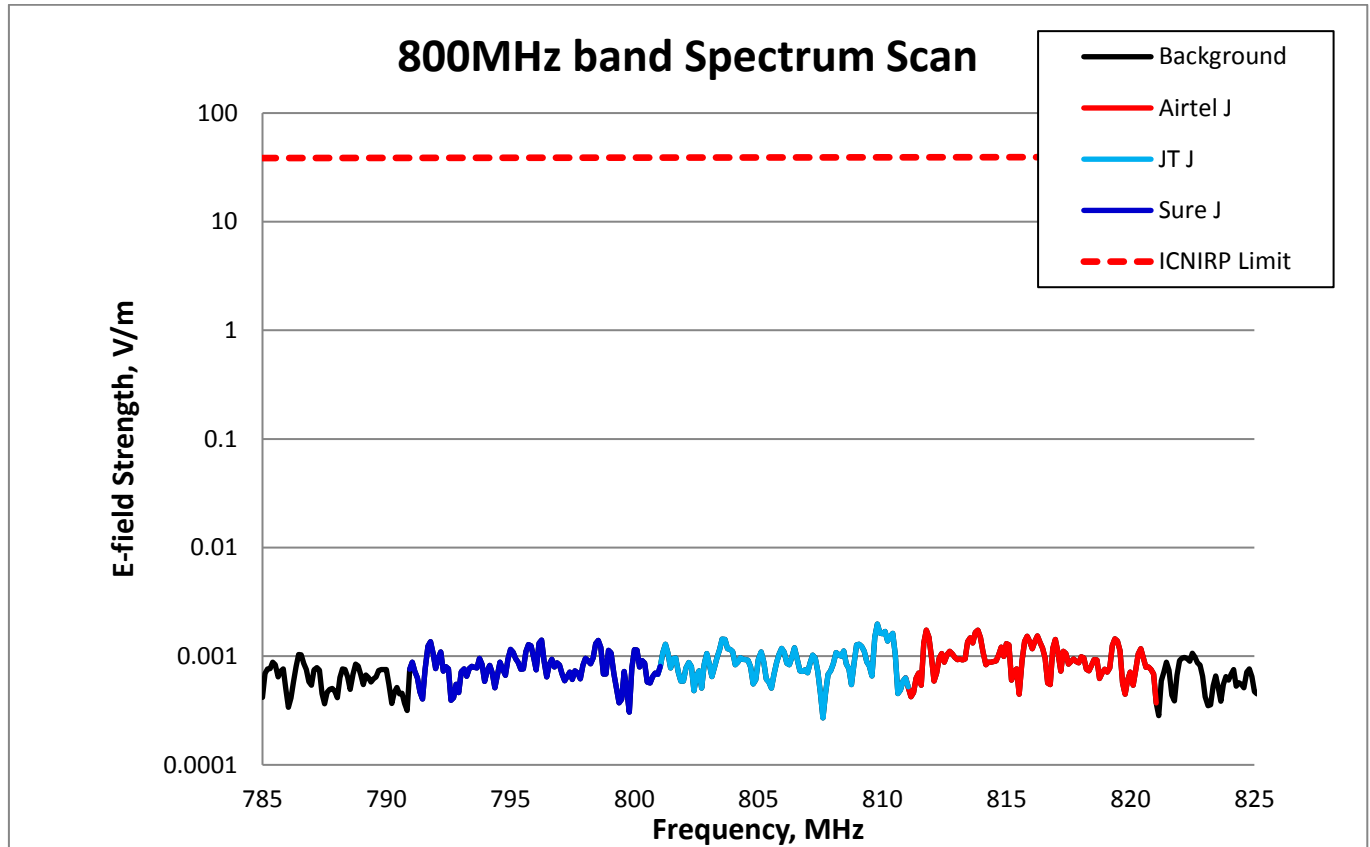


Figure 27 - 800MHz band Spectrum Scan

The red line on the scan represents the Airtel activity, the light blue is JT and the dark blue is Sure. ICNIRP's Reference Level for the General Public is also shown as the straight dashed line at the top of the graph. For clarity, each step on the vertical axis represents a 10-fold increase. The same scaling and colour scheme will be used throughout this report.

No activity was recorded in the 800MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Landside Arrivals	Airtel J	800	0.001741	22338	2.70708E-08	1/ 36940196
	JT J		0.001978	19662	2.46681E-08	1/ 40538159
	Sure J		0.001408	27621	1.88307E-08	1/ 53104859
total band EQ					7.05696E-08	1/ 14170414

Table 26– 800MHz band Exposure Quotient at Jersey Airport– Landside Arrivals

7.2 900 MHz Band

The graph for the 900 MHz activity is shown below:

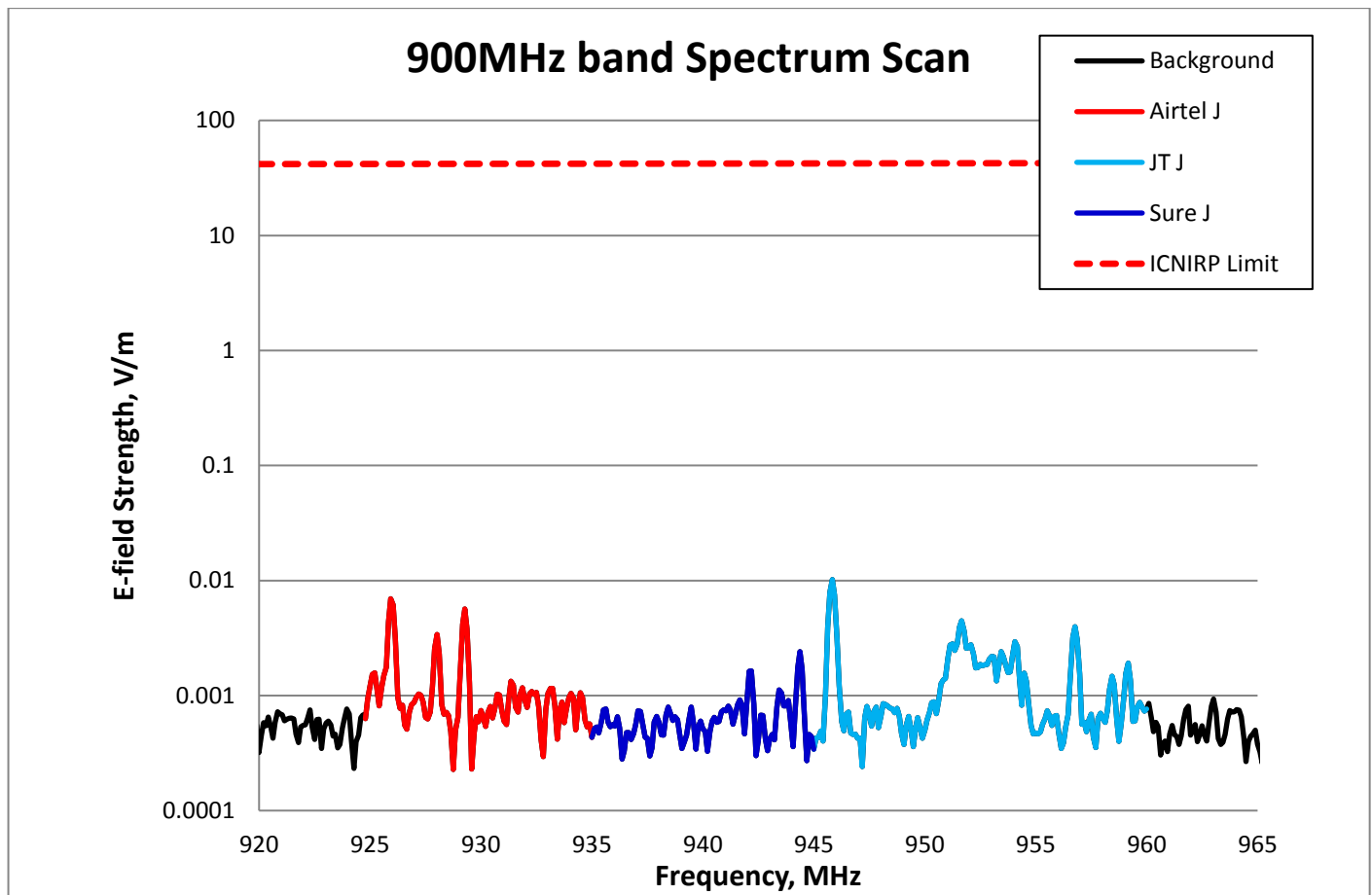


Figure 28 - 900MHz band Spectrum Scan

No field level recorded across the band was higher than 0.01019 V/m (JT J), which is 4048 times smaller than the ICNIRP Reference level.

The Exposure Quotient results for the 900MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Landside Arrivals	Airtel J	900	0.00693	5952	7.30061E-08	1/ 13697485
	JT J		0.01019	4048	1.4432E-07	1/ 6929058
	Sure J		0.002406	17145	1.36535E-08	1/ 73241540
total band EQ					2.30979E-07	1/ 4329392

Table 27– 900MHz band Exposure Quotient at Jersey Airport– Landside Arrivals

7.3 1800 MHz Band

The graph for the 1800 MHz activity around the site is shown below:

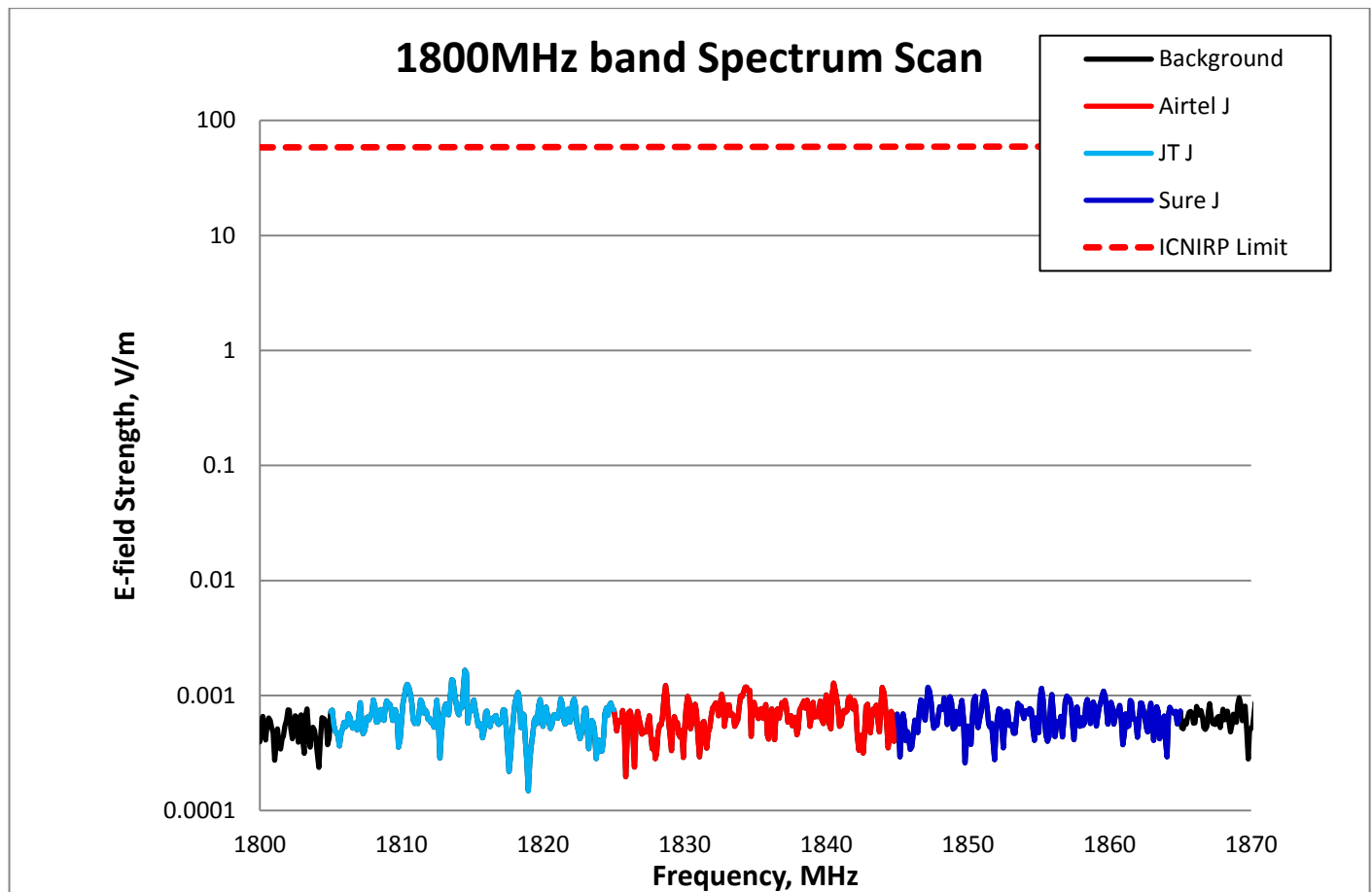


Figure 29 - 1800MHz Spectrum Scan

No activity was recorded in the 1800MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 1800MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Landside Arrivals	Airtel J	1800	0.001283	45469	2.58809E-08	1/ 38638465
	JT J		0.00166	35142	2.57822E-08	1/ 38786415
	Sure J		0.001178	49521	2.47535E-08	1/ 40398359
total band EQ					7.64166E-08	1/ 13086154

Table 28 – 1800MHz band Exposure Quotient at Jersey Airport– Landside Arrivals

7.4 2100MHz Band

The graph for the UMTS activity around the site is shown below:

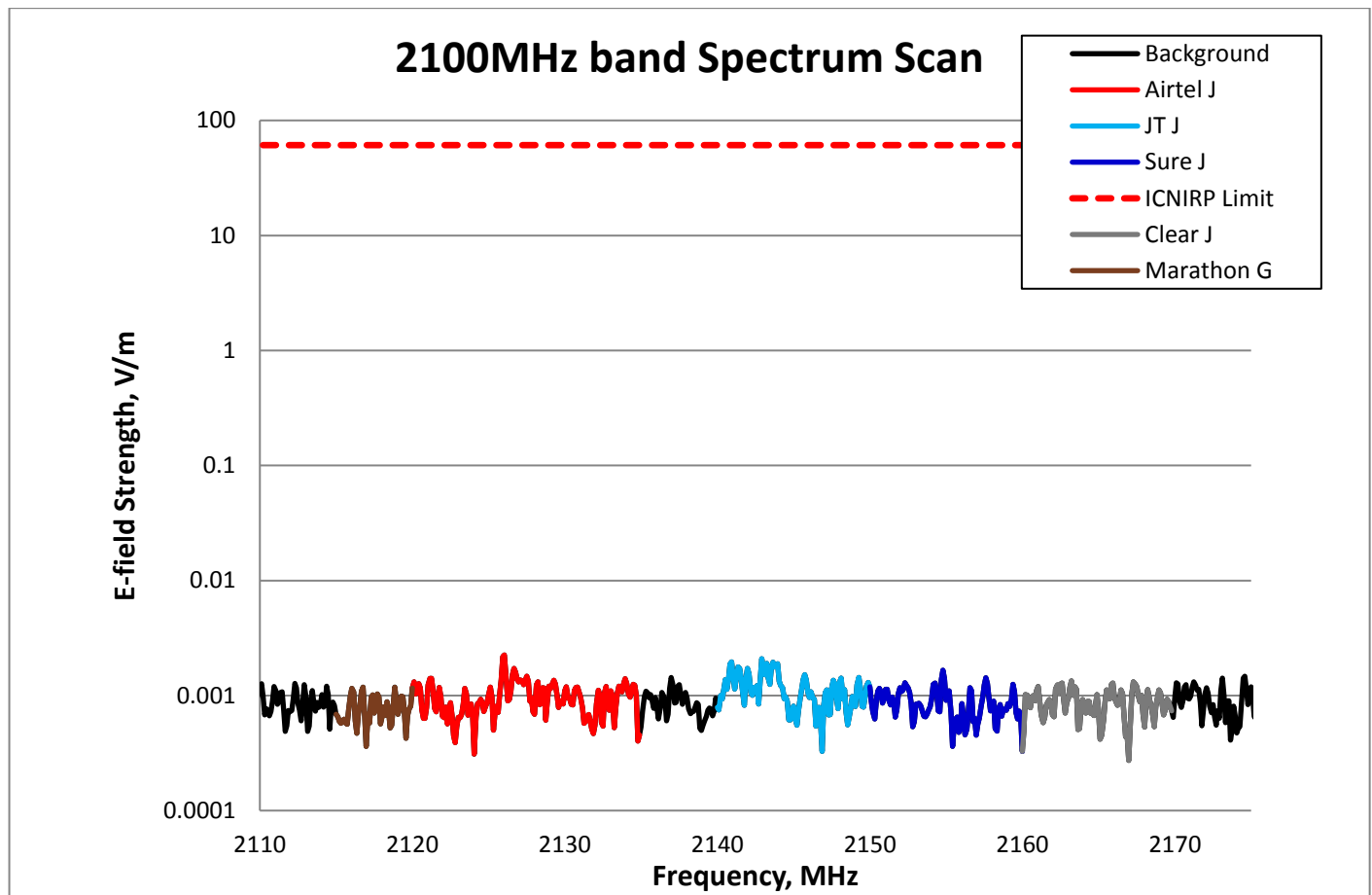


Figure 30 – 2100MHz band Spectrum Scan

No activity was recorded in the 2100MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 2100MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Landside Arrivals	Airtel J	2100	0.002251	27099	4.01641E-08	1/ 24897852
	Clear J		0.001342	45455	2.08296E-08	1/ 48008695
	JT J		0.00209	29187	3.75421E-08	1/ 26636755
	Marathon J		0.00118	51695	8.39615E-09	1/ 119102165
	Sure J		0.00166	36747	2.12249E-08	1/ 47114399
total band EQ					1.28157E-07	1/ 7802937

Table 29 – 2100MHz band Exposure Quotient at Jersey Airport– Landside Arrivals

7.5 2600MHz band

The graph for the 2600MHz band activity around the site is shown below:

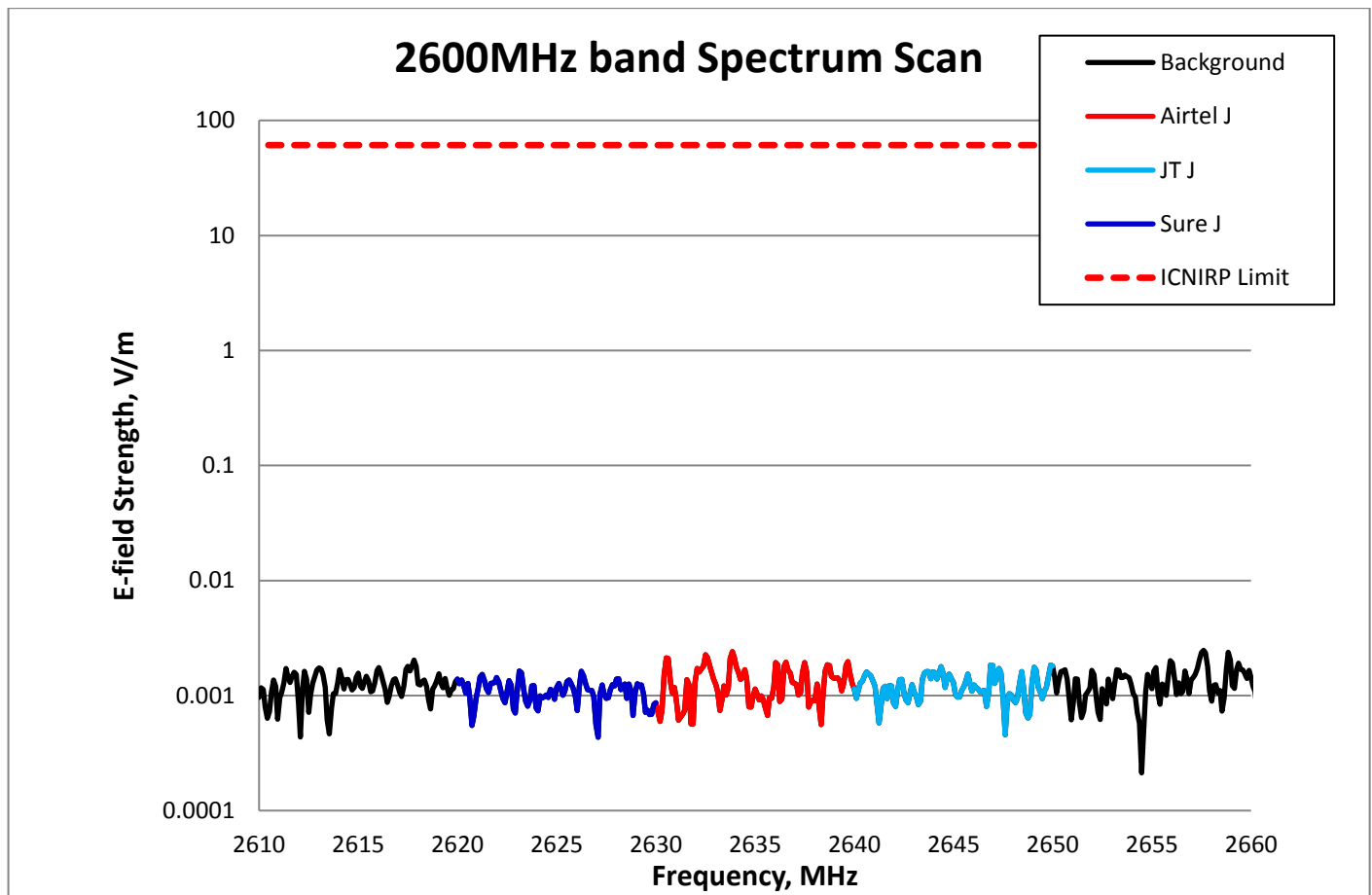


Figure 31 – 2600MHz band Spectrum Scan

No activity was recorded in the 2600MHz as no operator appears to transmit in this band at this location.

The Exposure Quotient results for the 2600MHz band are shown below:

Site Name	Operator	Band [MHz]	Max E-field Strength [V/m]	ICNIRP Limit Relative to Max E-field	Band Exposure Quotient	Band EQ Relative to ICNIRP
Landside Arrivals	Airtel J	2600	0.002408	25332	4.90277E-08	1/ 20396612
	JT J		0.001847	33027	4.12623E-08	1/ 24235211
	Sure J		0.001634	37332	3.27444E-08	1/ 30539539
	total band EQ			1.23034E-07	1/ 8127804	

Table 30 – 2600MHz band Exposure Quotient at Jersey Airport– Landside Arrivals

End