5G 850MHz EME Testing

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Agenda

1. Overview
2. Locations
3. EME Survey Results
4. Observations & Conclusions

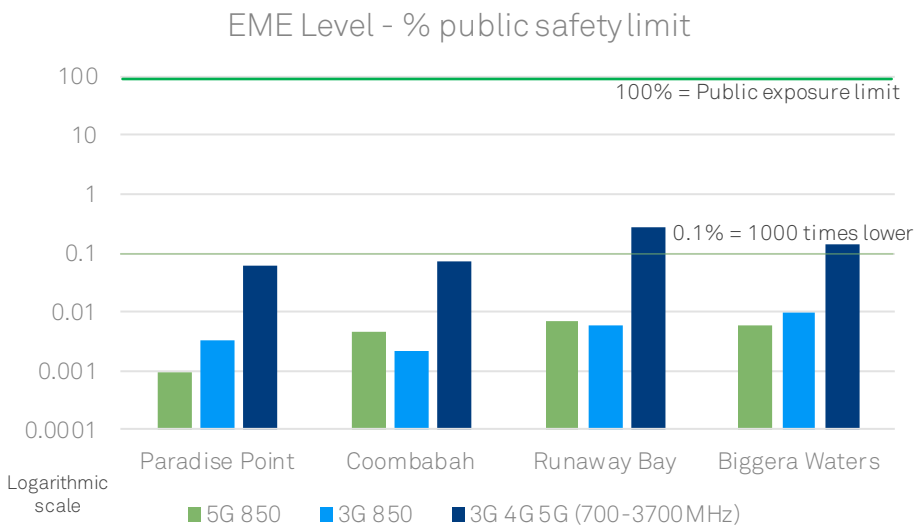
Overview

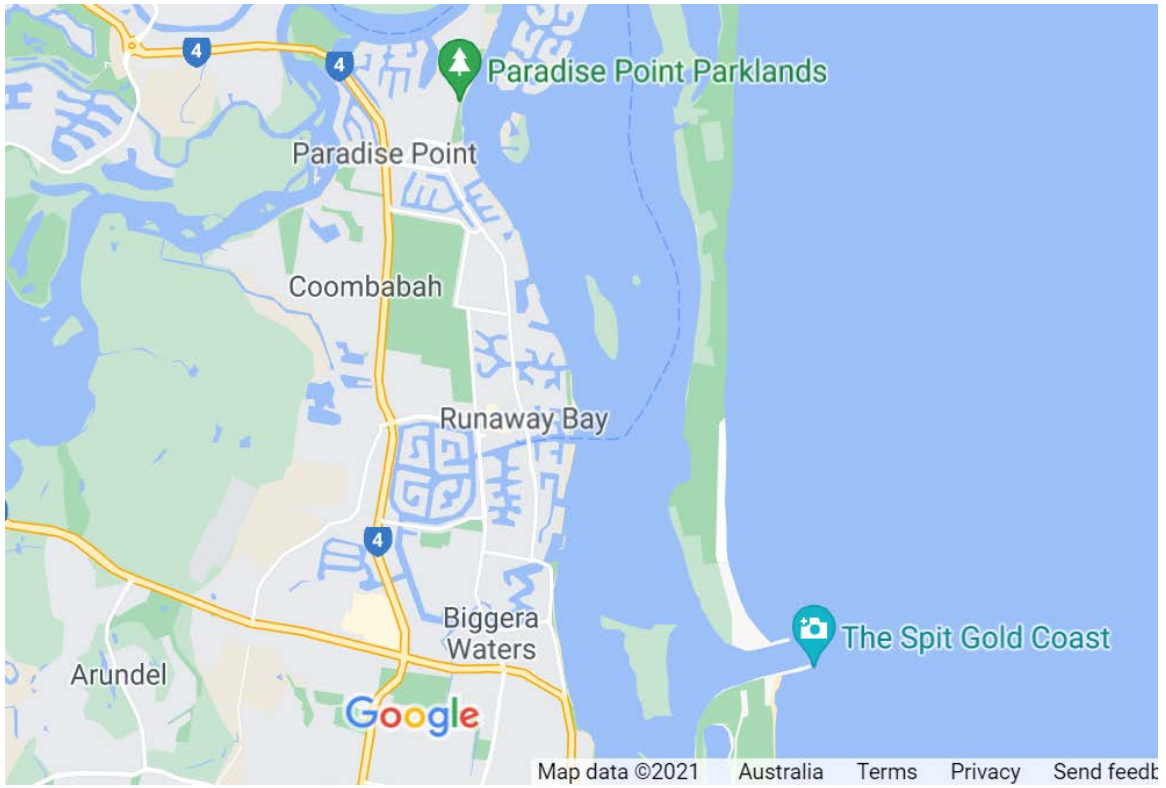
5G 850MHz – Telstra has extended the range of 5G using the 3G 850MHz low band.

EME Surveys - We tested 5G 850MHz on the Gold Coast at locations including parks, schools, kindergartens, residential streets, industrial factories and sports facilities.

Low EME - Our test results show that the 5G 850MHz network produced low EME levels <1% of the EME safety limit and similar to 3G.

5G 850MHz – Evaluation of Low Band EME





Test Locations - We tested 5G 850MHz in 4 towns on the Gold Coast at locations including parks, schools, kindergartens, residential streets, industrial factories and sports facilities.

Test Method – We ran a series of speed tests on 5G 850MHz and 3G 850MHz and measured their average EME levels. We also measured the background average EME levels across all mobile technologies from 700-3700MHz.

Key Observation - 5G 850MHz EME levels were low, well below the safety limits, ranged from 0.0009 to 0.0069%, and similar to 3G

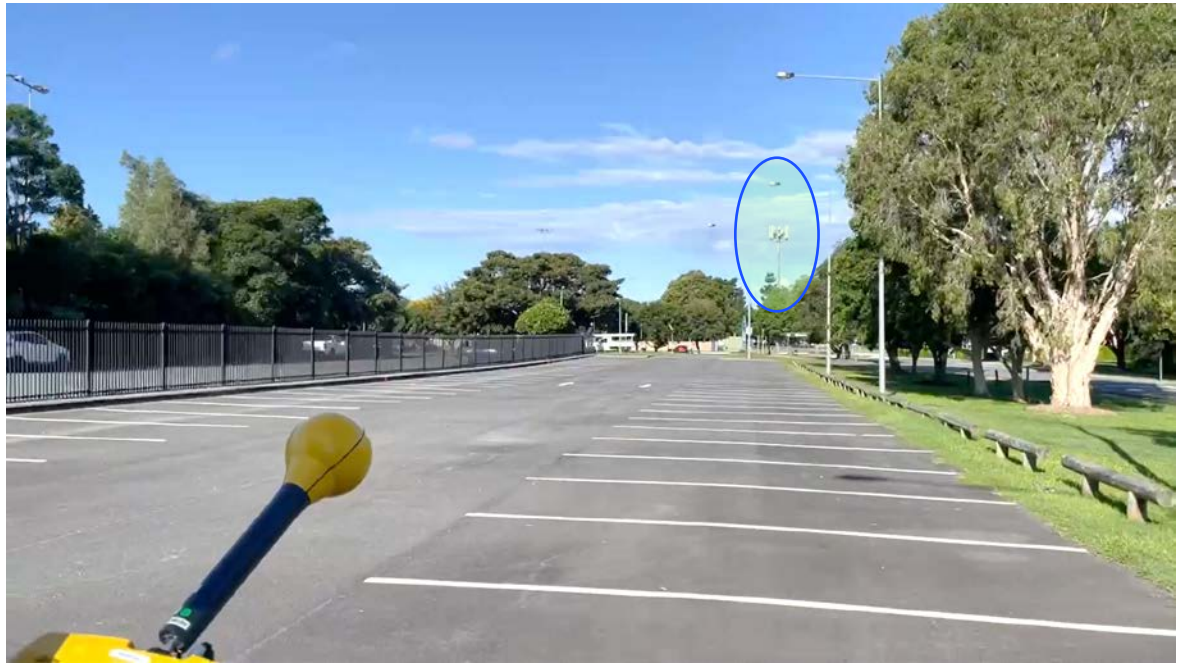
Runaway Bay 5G 850

Example EME measurement

Preschool & park

5G EME Level measured = 0.00023%

Runaway Bay 5G 850

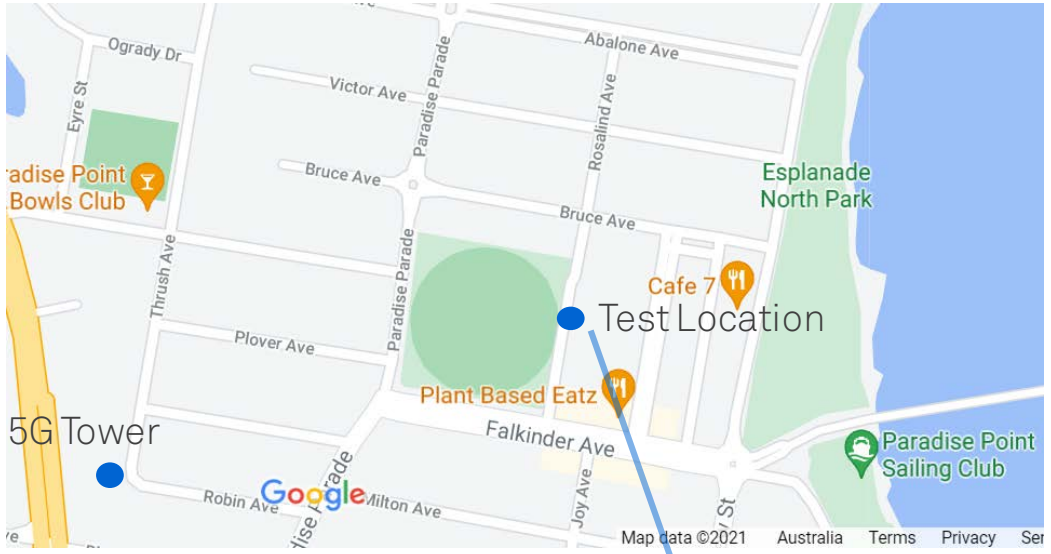


Playing fields

5G EME Level measured = 0.0069%

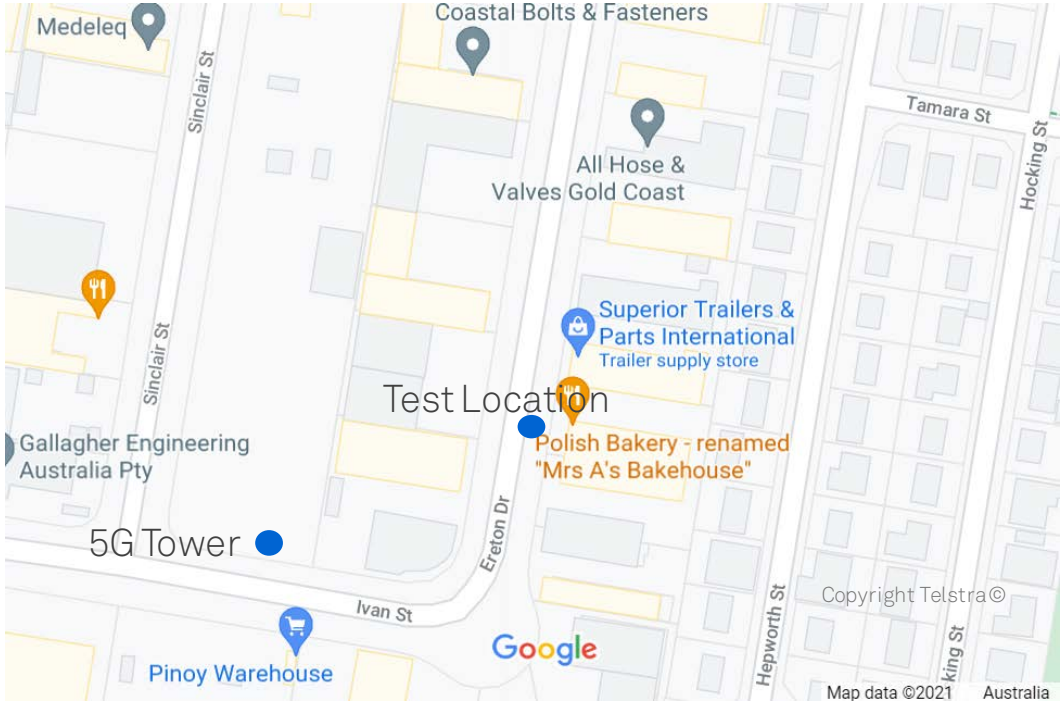
Paradise Point 5G 850

5G EME Level measured = 0.0009%



Sports Ground & Residential

Biggera Waters 5G 850



Industrial estate

5G EME Level measured = 0.0058%

Coombabah Exchange 5G 850

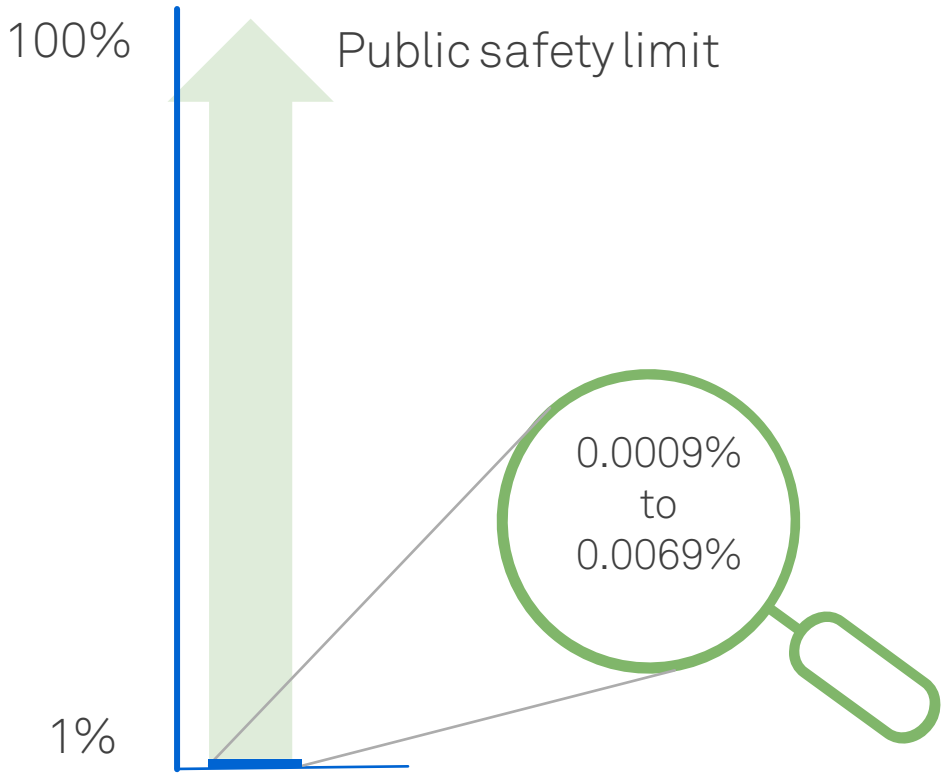
Residential and schools

5G EME Level measured = 0.0046%

Summary & Next Steps

Conclusion

- **5G is very efficient** – high data and low EME.
- **Low EME** - our testing results show the **typical EME levels** in the general environment from 5G 850MHz are very low, less than 1% of the EME safety limits, and ranged from **0.0009 to 0.0069 %** of the public safety limit.
- **3G comparison** - the 3G 850MHz EME levels were similar to the 5G EME levels at the same locations.



EME from 5G 850MHz sites we tested
Less than 1% of the public safety limit

Next Steps

1. Our testing will continue as we build more 5G 850MHz base stations
2. Focus on testing in areas of high usage & multiple devices
3. Continue sharing our test results

Thank you

Further information and questions?
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