

FCC ID: QVJSM110T
FleetLink M1 OBC, Model S-M1-10-T

Exhibit 2d

Engineering Report on
Peak Power Spectral Density (15.247(d))

Section D, Test: Peak Power Spectral Density (Transmitter)

FCC ID: QVJSM110T

Client: FleetMind Solutions

Product: FleetLink M1 OBC, Model S-M1-10-T

Test: Peak Power Spectral Density (Transmitter)

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Ref.: FCC Part 15.247 (d)/Industry Canada RSS 210, 6.2.2(o)(b)

Criteria: **FCC:** The power spectral density averaged over any one-second interval shall not be greater than 8.0 dBm in any 3 kHz bandwidth within the pass bands.
For a direct sequence system, it is defined as the peak power spectral density conducted from the intentional radiator to the antenna measured during any time interval of continuous transmission.

Industry Canada: The transmitter power spectral density (into the antenna) shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission or over 1.0 second if the transmission exceeds 1.0 second duration.

Set-up: See Figure d1

Condition: Conducted Test

Equipment: See Appendix A

Methodology: The Peak Power Spectral Density of the FleetLink M1 OBC was measured at the antenna port conducted from the transmitter using a spectrum analyser. Results obtained are presented in the report (Graphs d1 to d3 and tables d1). Testing was performed with the spectrum analyser settings as shown below.

Spectrum- Analyzer settings:

Res. Bandwidth:	3 kHz
Video Bandwidth:	3 kHz
Span:	30 kHz
Ref. Level:	20.0 dBm
Sweep:	10 seconds

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Block Diagram:

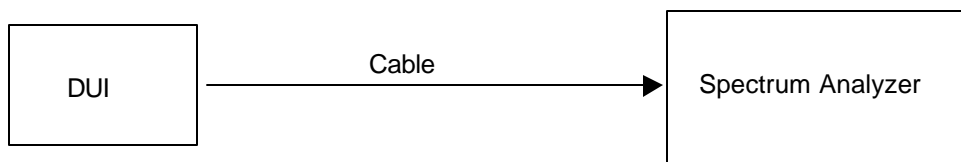


Figure d1

Test: Peak Power Spectral Density (Transmitter)
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Test Results: See Test Data, See Graphs d1 – d3

Power Spectral Density Test Data

Table d1: FleetLink M1 OBC

Channel #	Frequency (MHz)	Spectrum Analyser Reading (dBm/3kHz)	Cable Loss (dB)	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)	Pass/Fail
1	906.0	4.21	1.0	5.21	8.0	2.79	Pass
4	915.0	2.73	1.0	3.73	8.0	4.27	Pass
7	924.0	1.90	1.0	2.90	8.0	5.10	Pass

Conclusion: Pass

 Tested by: Yinghw Chen

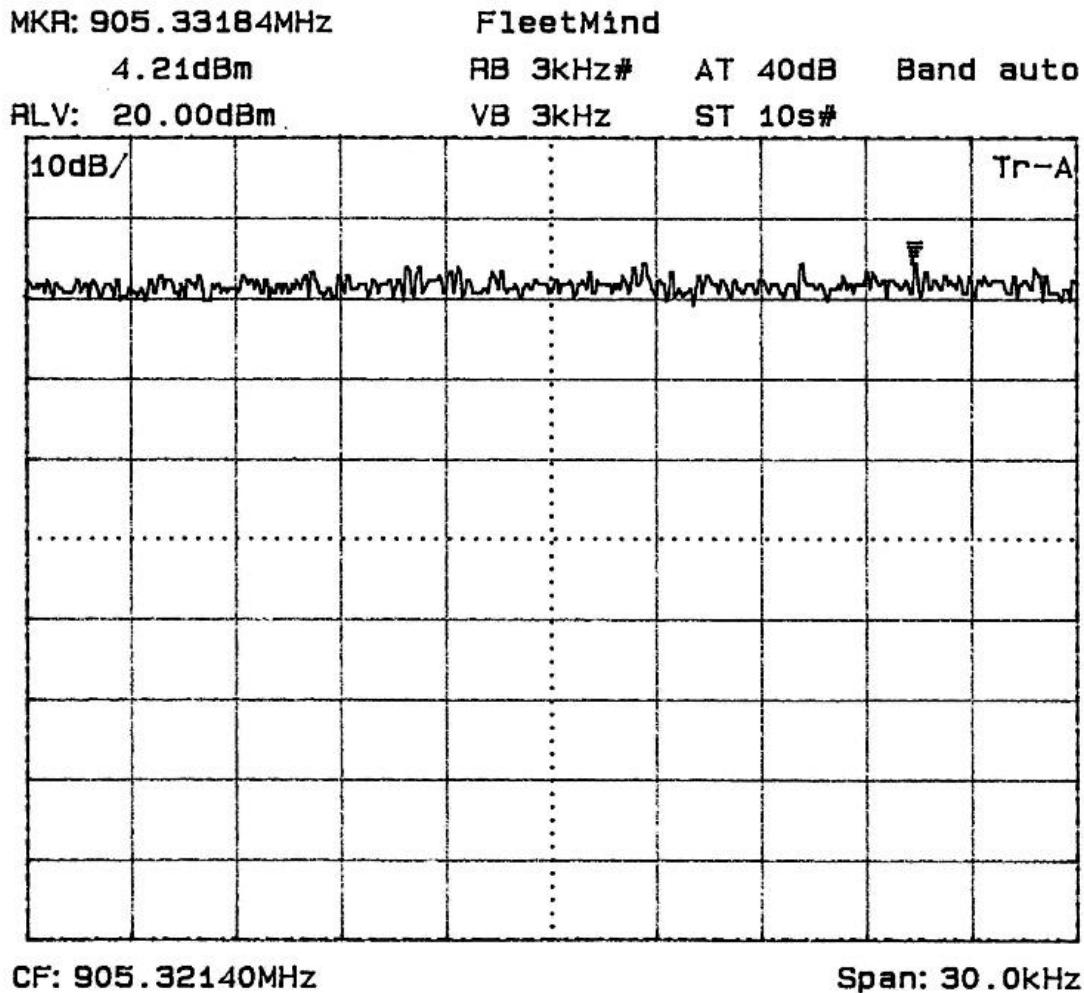
 Date: December 2002

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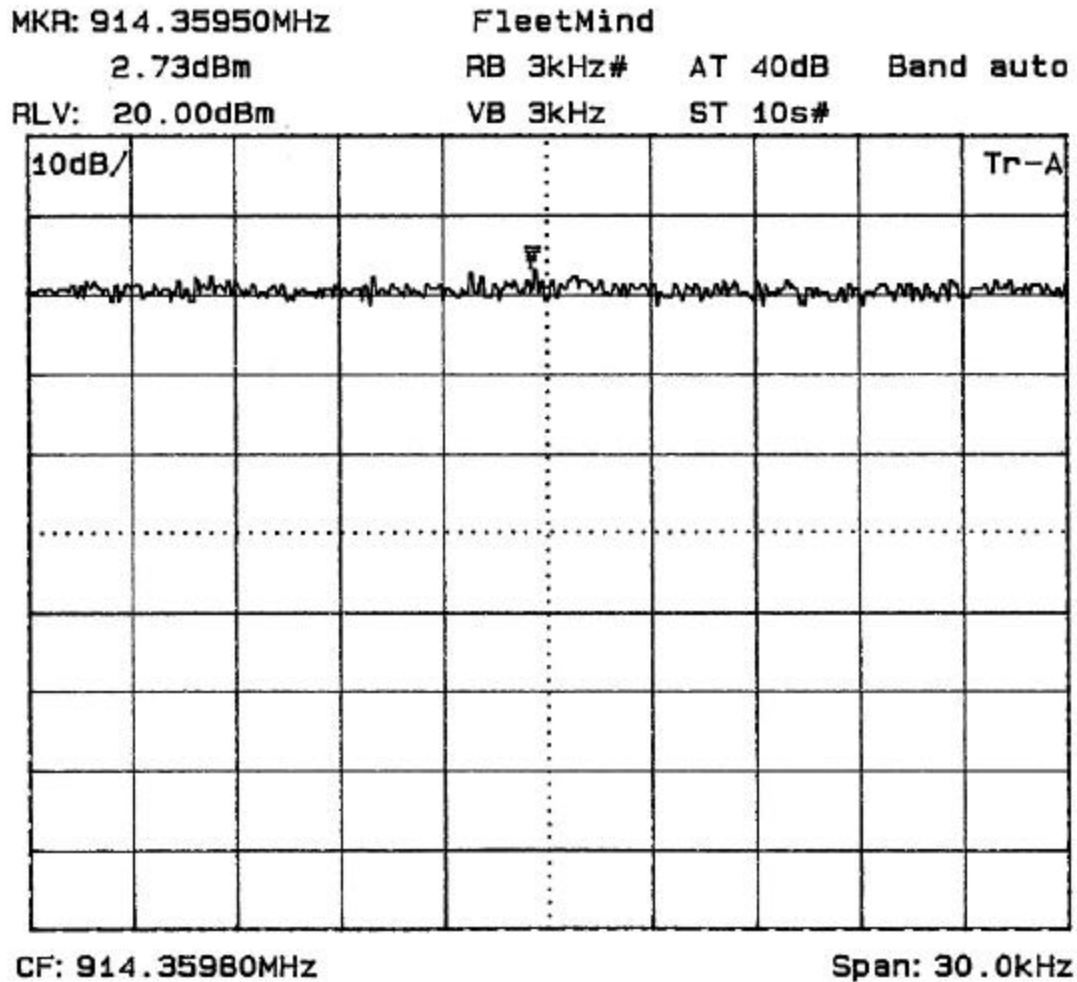
Graph d1
Peak Power Spectral Density
FLEETMIND FleetLink M1 OBC

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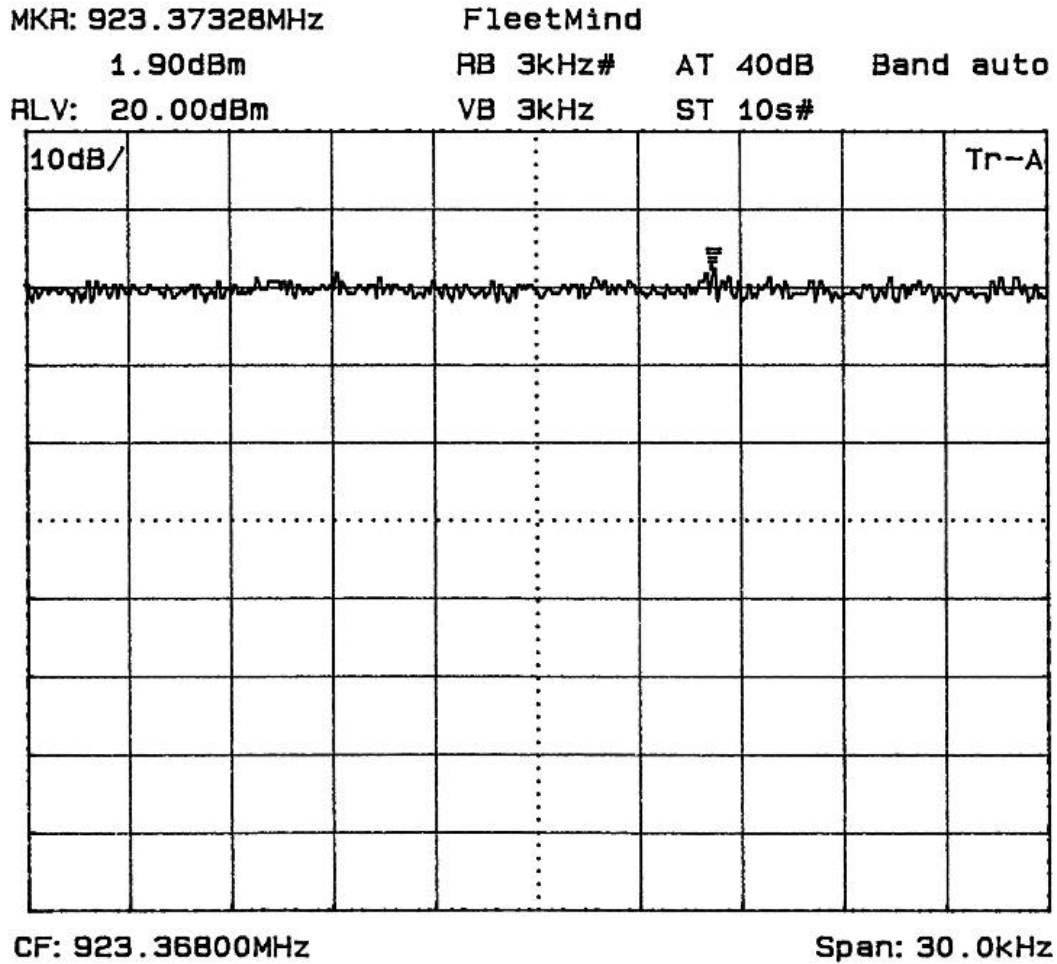
Graph d2
Peak Power Spectral Density
FLEETMIND FleetLink M1 OBC

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Graph d3
Peak Power Spectral Density
FLEETMIND FleetLink M1 OBC

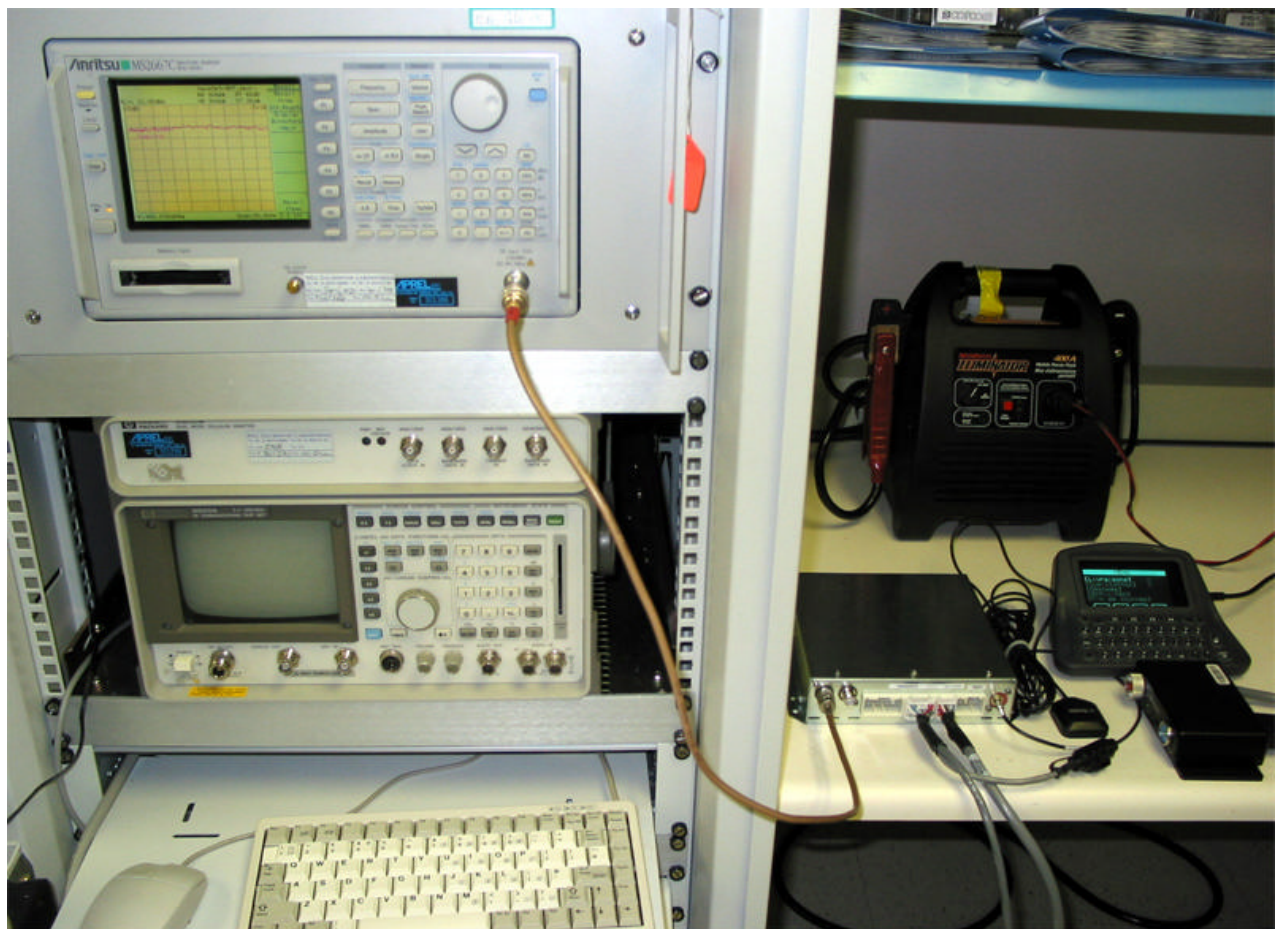
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Pictures of the testing set-up:



**FleetMind – FleetLink M1 OBC
Testing Peak Power Spectral Density - Conducted**