

Pages : 7
Annexes : 0
Total no. of sheets : 7

**The Laboratory of the Norwegian Post
and Telecommunications Authority**

Office address: Gåsevikveien 8, Kjeller
Postal address: P.O.Box 96, N-2027 Kjeller
Telephone: +47 22 82 49 00
Facsimile: +47 22 82 49 90
E-mail: comlab@npt.no
<http://www.npt.no/comlab>
Enterprise no: NO 974 446 871

Exempt from public disclosure
cf. Section 5a of the Freedom of Information Act.

Test report : 00/08216/8

Item tested : F1 DSC

Type of equipment : Maritime VHF

Client : McMurdo Ltd.

Tested according to :
EN 301 025-1

Date of issue : 2002.02.06

Authorised by : 
Kjell Haga
Head of Section


Geir Antonsen
Technical Supervisor

The results detailed in this test report are only valid for the particular sample/s tested with configuration as implemented during the test procedure.

This test report shall not be reproduced except in full without the written approval of Comlab.

CONTENTS

1	GENERAL INFORMATION	3
1.1	Test Laboratory	3
1.2	Client Information	3
1.3	Manufacturer (if other than client)	3
2	TEST INFORMATION	4
2.1	Test Item	4
2.2	Test Environment	4
2.2.1	Normal Test Conditions	4
2.3	Test Period	4
2.4	Standards and Regulations	4
2.5	Test Engineer/s	4
2.6	Additional information	4
2.6.1	Test Methods	4
2.6.2	Selection Criteria	4
2.6.3	Test Equipment	4
3	TEST REPORT SUMMARY	5
3.1	Abbreviations	5
3.2	List of measurements	5
4	OTHER COMMENTS	5
5	EMISSION MEASUREMENTS	6
5.1	Cabinet Radiation Transmitter operating EN 301 025-1	6
6	TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS	7

1 GENERAL INFORMATION

1.1 Test Laboratory

Name : Comlab
Address : Gåsevikveien 8, P.O. Box 96
N-2007 Kjeller, Norway
Telephone : +47 22 82 49 00
Telefax : +47 22 82 49 90
Test service manager : Kjell Haga

Comlab is granted accreditation by Norwegian Accreditation under the registration number P031.

1.2 Client Information

Name : McMurdo Ltd.
Address : Silver Point
Airport Service Road
Portsmouth
PO3 5BP
United Kingdom

Telephone : + 44 2392623900
Telefax : + 44 2392623997

Contact:

Name : Steffen Kirknes

Address : Norbit AS
Stiklestadveien 1, N-7041 Trondheim
P.O.B. 1858, N-7440 Trondheim
Norway

Telephone : + 47 73 98 25 50
Telefax : + 47 73 98 25 51

1.3 Manufacturer (if other than client)

Name : -
Address : -
Telephone : -
Telefax : -

2 TEST INFORMATION

2.1 Test Item

Name : F1 DSC
Model/version : Standard
Serial number : 4
Software identity and version : -

2.2 Test Environment

2.2.1 Normal Test Conditions

Temperature : 21,2 - 21,3 °C
Relative humidity : 23,7 - 28, %
Normal test voltage : 13,2 V dc

The values are the limits registered during the test period.

2.3 Test Period

Test item received : Week 02/02
Test period : 100102 - 290102

2.4 Standards and Regulations

EN 301 025-1 (V.1-1-2, 2000-08)

2.5 Test Engineer/s

Knut Risting Hanssen

2.6 Additional information

2.6.1 Test Methods

Relevant standards.

2.6.2 Selection Criteria

According to clients wish.

2.6.3 Test Equipment

List of used test equipment, see page no. 7

3 TEST REPORT SUMMARY

3.1 Abbreviations

- P** Passed, the equipment fulfils the requirement
F Failed, the equipment does not fulfil the requirement
I Inconclusive, the test does not give a conclusive verdict
NA Not applicable, the requirement is not applicable
NT Not tested, the test is not performed even though the requirement is relevant

3.2 List of measurements

Standard		Measurement	Result (Pass/Fail)
EN 301 025-1	5.1	Cabinet Radiation.... Transmitter operating	P

Result

Tested equipment complies with the requirements of relevant standards.

4 OTHER COMMENTS

Measurement conditions:

Cabinet radiation tests are performed in a 10 m semi - anechoic chamber.

5 EMISSION MEASUREMENTS

5.1 Cabinet Radiation Transmitter operating Clause 8.9

EN 301 025-1

Power level 20W and 0,8 W (low power) Ch. 16.

Spurious Emission Level			
Frequency MHz	Polariz. V/H	BW kHz	Level μ W
30-2000	V/H	15	< 0,025
Measurement Uncertainty : +2,1dB / -2,5dB, (25-1000 MHz) +1,6 dB / -1,8 dB (1-8 GHz)			

Reference antenna: Up to 1 GHz: dipole. Above 1GHz: isotropic.
 Bandwidth (kHz) refers to the bandwidth of the measuring receiver.

A prescan has been performed in order to detect possible spurious emissions (30 - 2000 MHz)

Limits Clause 8.9.3

Frequency	Level
30 MHz - 2 GHz	< 0,25 μ W

Test Equipment Used: LR 0061, LR 0282, LR 0302, LR 1062, LR 1178, LR 1230, LR 1237, LR 1260,
 LR 1295, LR 1330, LR 1333, LR 1334, LR LR 1347, LR LR 1352, LR 1354.

6 TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment and ancillaries such as cables are identified (numbered) by the Test Laboratory.

C	No	Instrument/Ancillary	Manufacturer	Type
LR	1354	Amplifier	Amp.Res.	500W100A
LR	1260	Antenna Biconical	R&S	HK 116
LR	0061	Attenuator	Bird	8321
LR	1333	Antenna Dipole	R&S	HZ-13 633,0840,00
LR	1334	Antenna Dipole	R&S	HZ-13 633,0840,00
LR	1178	Antenna Horn	EMCO	3161-01
LR	1330	Antenna Horn	EMCO	3115
LR	0282	Antenna Log-periodic	R&S	HL 023A1
LR	1237	EMI-Receiver	R&S	ESN
LR	0302	Multimeter, Digital	Fluke	77
LR	1347	Power Meter RF	R&S	NRVD 857.8008.02
LR	1352	Probe Field	Amp.Res.	FP4000
LR	1062	Power Supply, program.	HP	HP6032A
LR	1230	Generator, RF	R&S	SMT03
LR	1295	Pinwriter	R&S	PDN