Test Report:	4W07778
Applicant:	Tecnord S.r.l. Via Decorati al Valor Militare, 3 Baggiovara, MO, Italy 41040
Equipment Under Test: (EUT)	RC-TRS-TX, Low Power Transmitter
FCC ID:	RUE-RC-TRS-TX
In Accordance With:	**FCC Part 90**
Tested By:	Nemko Canada Inc. 303 River Road, R.R. 5 Ottawa, Ontario K1V 1H2
Authorized By:	 Kevin Carr, EMC Specialist.
Date:	6 February 2004
Total Number of Pages:	15

Table of Contents

Section 1. Summary of Test Results

General

All measurements are traceable to national standards.

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 90.217.

☒ New Submission ☒ Production Unit

☐ Class II Permissive Change ☐ Pre-Production Unit

T	N	B

Equipment Code

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE.
See " Summary of Test Data".

TESTED BY: _____ DATE: 6 February 2004
Glen Westwell, Wireless Technologist

Summary Of Test Data

Name Of Test	Para. No.	Result
RF Power Output	2.1046	Complies
Occupied Bandwidth	2.1049	N/A (1)
Spurious Emissions at Antenna Terminals	2.1051	N/A (2)
Field Strength of Spurious Emissions	2.1053	Complies
Frequency Stability	2.1055	Complies

Notes:

(1) This device falls under 90.217, Exemption from Technical Standards, Output power not exceeding 120mW.
(2) The device has an integral antenna.

Footnotes For N/A's:

Indoor Temperature: 24°C
Humidity: 2%

Outdoor Temperature: 10°C
Humidity: 64%

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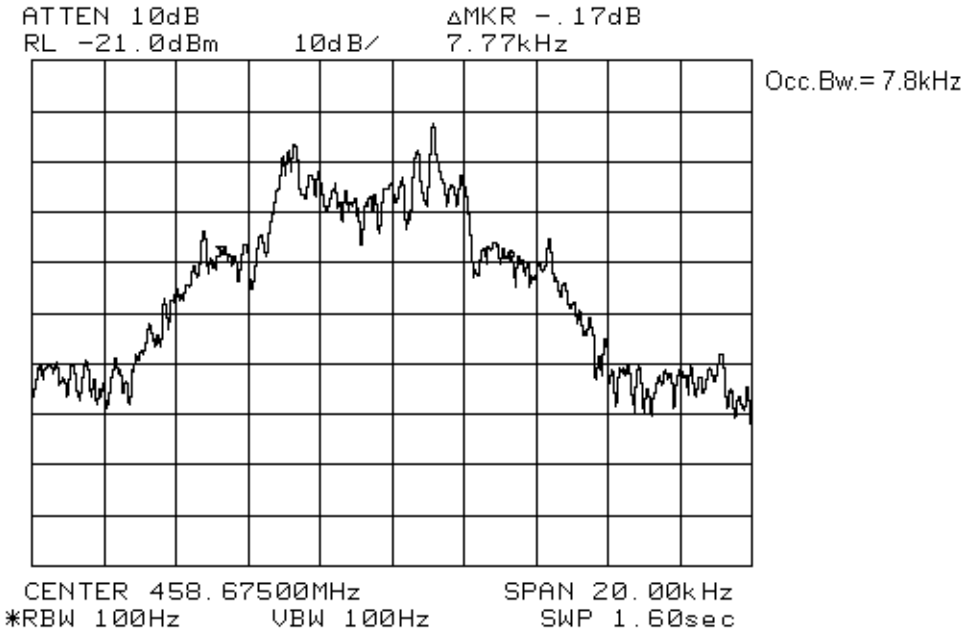
Section 2. General Equipment Specification

Manufacturer:	Technord
Model No.:	RC-TRS-TX, Low Power 458MHz Transmitter
Serial No.:	Sample#2
Date Received In Laboratory:	07 Jan. 2004
Nemko Identification No.:	#2
Supply Voltage Input:	5.5Vdc
Frequency Range of EUT:	458.525-458.775MHz
Frequency of EUT:	458.675MHz (fixed)
Channel Spacing:	25kHz
Emission Designator:	12K5F1D
Type(s) of Modulation:	FM (direct FSK)
RF Power Output (measured):	0.66mW

Note: This transmitter operates on a fixed frequency that is selectable via dip switches internal to the enclosure. The frequency selection table is contained in the operation guide.


ATTEN 10dB
RL -21.0dBm
10dB/
ΔMKR -.17dB
7.77kHz
Occ.Bw.= 7.8kHz
CENTER 458.67500MHz
SPAN 20.00kHz
*RBW 100Hz
VBW 100Hz
SWP 1.60sec

Section 3. RF Power Output

Para. No.: 2.1046

Test Performed By: Glen Westwell	**Date of Test: 19 Jan. 2004**

Minimum Standard: 120mW

Test Results: Complies

Measurement Data: 0.66mW

Frequency (MHz)	Pol.	Antenna	Receive Signal (dBuV)	Total Field Strength (dBuV)	Signal Substitution Power Level (dBm)
458.675	V	LP1	78.0	97.4	-1.8
458.675	H	LP1	75.7	95.1	-5.6

Receiver: HP8565E
Detector: Peak
RBW/VBW: 100kHz
Measurement Distance: Range A @ 3m.

Section 4. Field Strength of Spurious Emissions

Para. No.: 2.1053

Test Performed By: Glen Westwell	**Date of Test: 19 Jan. 2004**

Minimum Standard: -30dBc

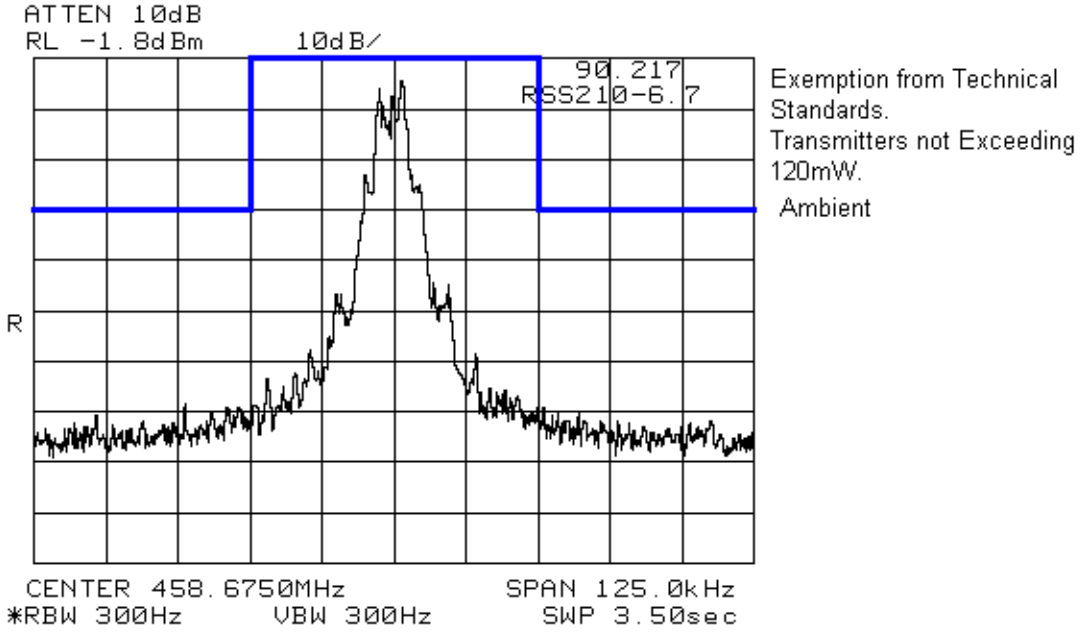
Test Results: Complies

Measurement Data:

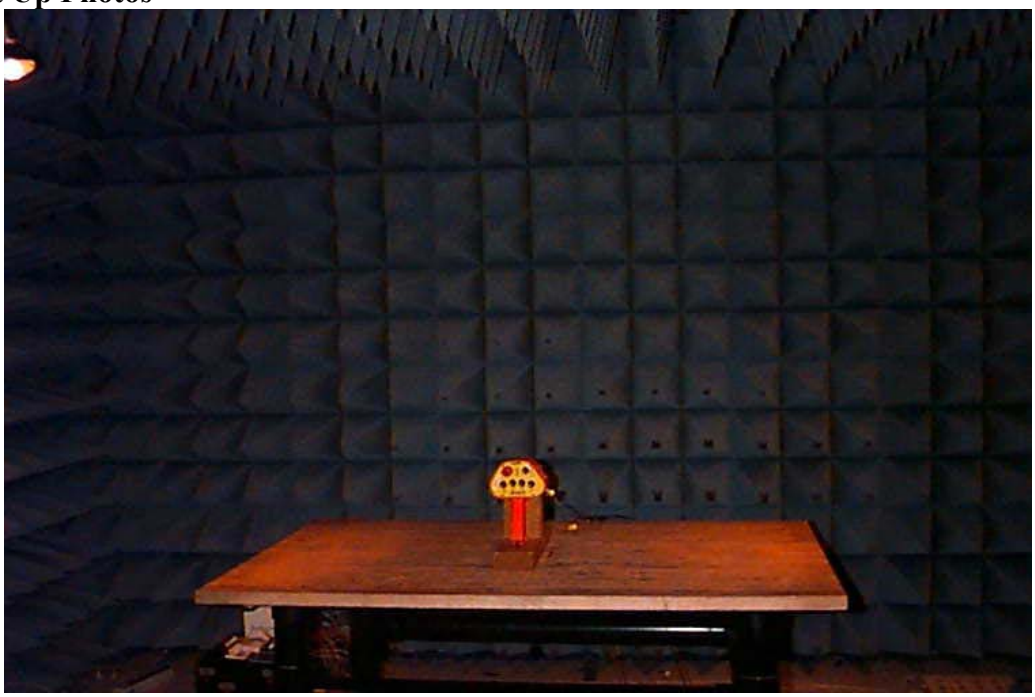
Frequency (MHz)	Pol.	Antenna	Receive Signal (dBuV)	Total Field Strength (dBuV)	Signal Substitution Power Level (dBm)	Limit (dBm)
88.4	V	BC1	33.0	42.0	-56.4	-31.8
88.4	H	BC1	32.2	42.4	-57.4	-31.8

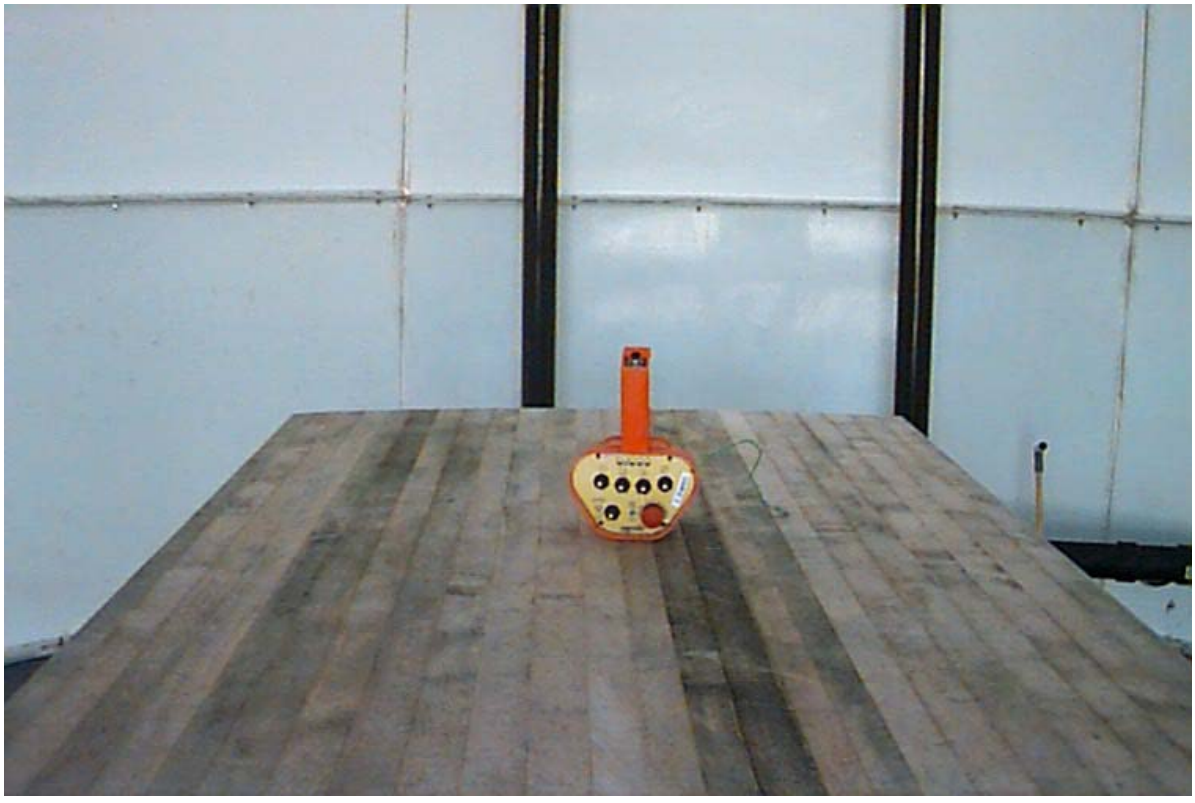
Receiver: HP8565E
Detector: Peak
RBW/VBW: 100kHz
Measurement Distance: Range A @ 3m.

All emissions were searched from 30MHz to5GHz.
The EUT was searched on 3 orthogonal axis, worst case data has been presented.
The DC supply was varied +/- 15% to verify worst case emissions.


ATTEN 10dB
RL -1.8dBm
10dB/
90.217
RSS210-6.7
Exemption from Technical Standards.
Transmitters not Exceeding 120mW.
Ambient
R
CENTER 458.6750MHz
SPAN 125.0kHz
*RBW 300Hz
VBW 300Hz
SWP 3.50sec

Test Set Up Photos





Section 5. Frequency Stability

Para. No.: 2.1055

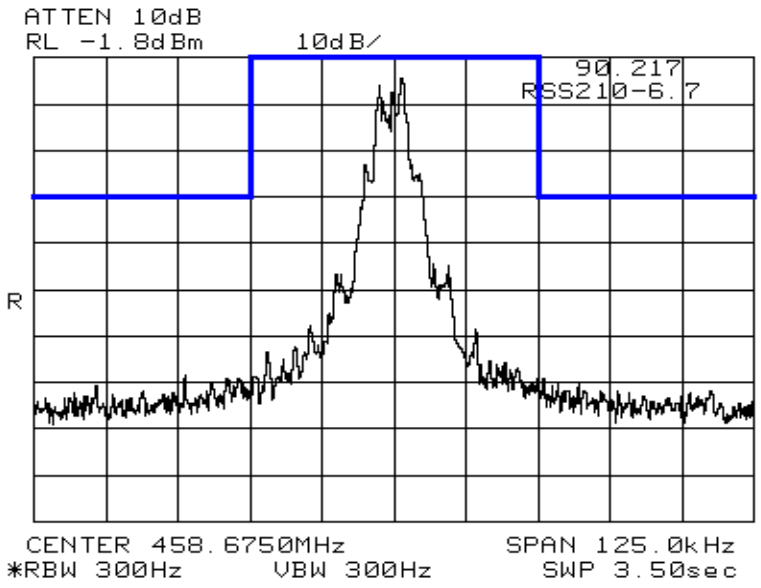
Test Performed By: Glen Westwell	**Date of Test: 19 Jan. 2004**

Minimum Standard: 90.217, +/-25kHz, -30dBc

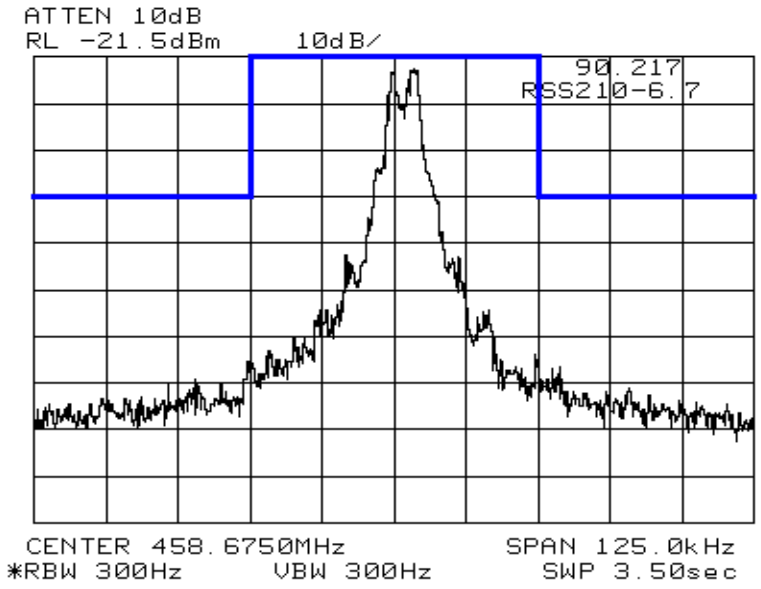
Test Results: Complies

Measurement Data: See attached plots.

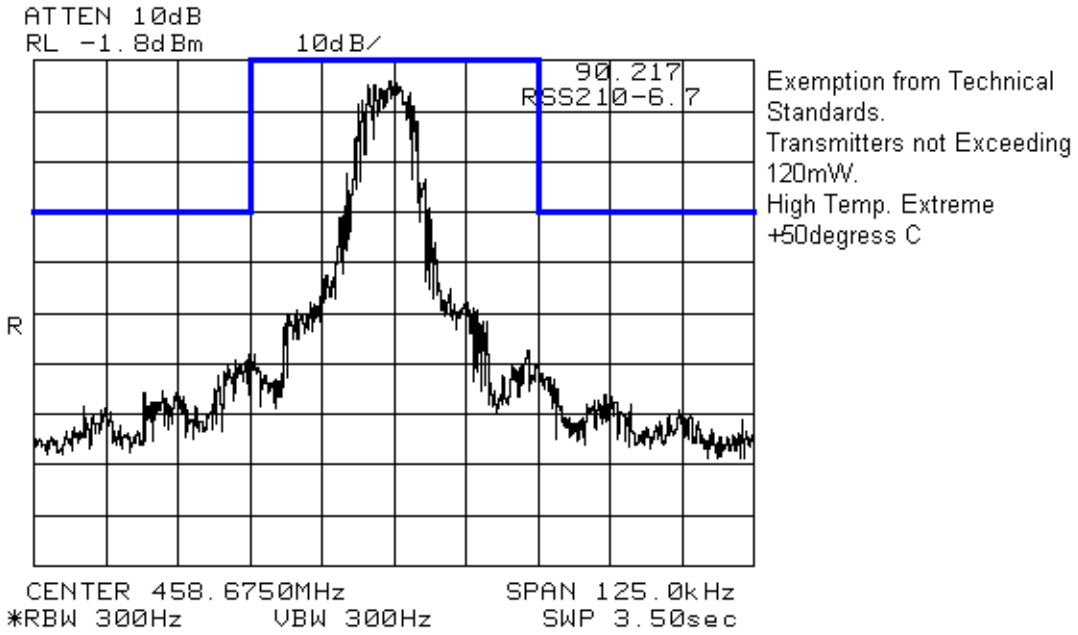
The EUT was measured over temperature extremes of –30°C to +50°C.
The DC supply was varied +/-15% to verify worst case deviation across the bandwidth.



Exemption from Technical Standards.
Transmitters not Exceeding 120mW.
Ambient



Exemption from Technical Standards.
Transmitters not Exceeding 120mW.
Low Temp. Extreme -30degress C


ATTEN 10dB
RL -1.8dBm
10dB/
90.217
RSS210-6.7
R
CENTER 458.6750MHz
SPAN 125.0kHz
*RBW 300Hz
VBW 300Hz
SWP 3.50sec
Exemption from Technical Standards.
Transmitters not Exceeding 120mW.
High Temp. Extreme +50degress C

Section 6. Test Equipment List

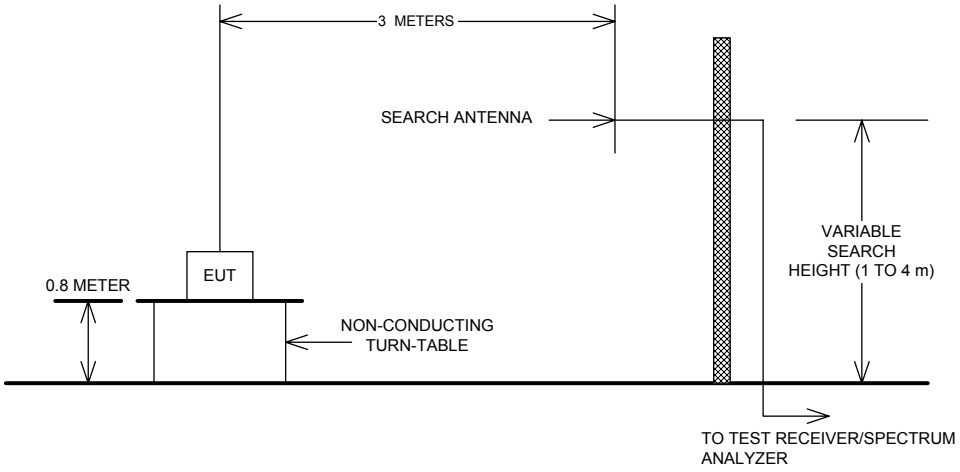
CAL CYCLE	EQUIPMENT	MANUFACTURER	MODEL	SERIAL	LAST CAL.	NEXT CAL.
1 Year	Spectrum Analyzer	Hewlett Packard	8565E	FA000981	03 Jul 03	03 Jul 04
1 Year	Horn Antenna	EMCO #1	3115	FA000649	18 Dec 03	18 Dec 04
1 Year	Climate Chamber	Thermotron	SM-16C	15649-S	COU	COU
1 Year	Log Periodic Antenna #1	EMCO	LPA-25	FA000477	Sept. 02/03	Sept. 02/04
1 Year	Biconical (1) Antenna	EMCO	3109	FA000805	April. 15/03	April. 15/04
1 Year	Receiver	Rohde & Schwarz	ESVS-30	FA001437	July. 24/03	July. 24/04
1 Year	Spectrum Analyzer	Hewlett-Packard	8566B	FA001309	June. 05/03	June. 05/04
1 Year	Spectrum Analyzer Display	Hewlett-Packard	85662A	FA001309	June. 05/03	June. 05/04
NCR	Bilog	Schaffner	CBL6112B	FA001504	NCR	NCR

Section 7. Block Diagrams

Para. No. 2.1053 - Field Strength of Spurious Radiation

Para.No. 2.1046 RF Power.

TIA/EIA-603



Para. No. 2.1055 - Frequency Stability