

TEST REPORT NO: RU1136/5795

COPY NO: 2

ISSUE NO: 1

FCC ID: NE0-50-0780-800

# REPORT ON THE CERTIFICATION TESTING OF A Aerial Facilities Limited Cell Enhancer (NE0-50-0780-800) WITH RESPECT TO THE FCC RULES CFR 47, PART 90 Subpart S PRIVATE LAND MOBILE REPEATER

TEST DATE: 10<sup>th</sup> September 2004 – 13<sup>th</sup> September 2004

TESTED BY:		J CHARTERS
APPROVED BY:		P GREEN PRODUCT MANAGER EMC
DATE:	11 <sup>th</sup> October 2004	LINIO
Distribution:		

Copy Nos: 1. Aerial Facilities Limited

2. TCB: TRL Compliance Services Limited

3. TRL EMC

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LONG GREEN FORTHAMPTON GLOUCESTER GL19 4QH UNITED KINGDOM TELEPHONE +44 (0)1684 833818 FAX +44 (0)1684 833858 E-MAIL test@trlcompliance.com www.trlcompliance.com



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РНОТО	GRAPHS	Α	
PHO	DTOGRAPH No. 1: Test setup		
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APPLIC	ANT'S SUBMISSION OF DOCUMENTATION LIST	В	
Notes:			
1.	Component failure during test	YES NO	[ ] [X]
2.	If Yes, details of failure:		

The facilities used for the testing of the product contain in this report are FCC Listed.

3.



# CERTIFICATE OF CONFORMITY & COMPLIANCE

FCC IDENTITY:	NE0-50-0780-800		
PURPOSE OF TEST:	CERTIFICATION		
TEST SPECIFICATION:	FCC RULES CFR 47, Part 90 Subpart S		
TEST RESULT:	Compliant to Specification		
EQUIPMENT UNDER TEST:	Cell Enhancer		
EQUIPMENT TYPE:	Private Land Mobile Repeater		
MAXIMIUM GAIN	+101.68 dB		
MAXIMUM INPUT	Uplink -74 dBm, Downlink -63.4		
MAXIMUM OUTPUT	Uplink +27.68 dBm, Downlink +18.98		
ANTENNA TYPE:	Not applicable		
CHANNEL SPACING:	25 kHz		
NUMBER OF CHANNELS:	Channel No. Uplink 22 Downlink	22	
FREQUENCY GENERATION:	N/A		
MODULATION TYPE:	F3E		
POWER SOURCE(s):	+110 Vac		
TEST DATE(s):	10 <sup>th</sup> September 2004 – 13 <sup>th</sup> September 200	4	
ORDER No(s):	26773		
APPLICANT:	Aerial Facilities Limited		
ADDRESS:	Aerial House Latimer Park, Latimer Chesham Buckinghamshire HP5 1TU United Kingdom		
TESTED BY:		J CHARTERS	
APPROVED BY:		P GREEN PRODUCT	

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MANAGER EMC

# **APPLICANT'S SUMMARY**

Cell Enhancer

EQUIPMENT UNDER TEST (EUT):

EQUIPMENT TYPE:	Private Land Mobile Repeater		
PURPOSE OF TEST:	CERTIFICATION		
TEST SPECIFICATION(s):	FCC RULES CFR	47, Part	90 Subpart S
TEST RESULT:	COMPLIANT	Yes No	[X] [ ]
APPLICANT'S CATEGORY:	MANUFACTURER IMPORTER DISTRIBUTOR TEST HOUSE AGENT		[X] [ ] [ ] [ ]
APPLICANT'S ORDER No(s):	26773		
APPLICANT'S CONTACT PERSON(s):	Mr Peter Bradfield		
E-mail address:	Peterb@aerial.co.uk		
APPLICANT:	Aerial Facilities Lin	nited	
ADDRESS:	Aerial House Latimer Park, Latin Chesham Buckinghamshire HP5 1TU United Kingdom	ner	
TEL:	+44 (0)149477702	)	
FAX:	+44 (0)1494777002	2	
MANUFACTURER:	Aerial Facilities Lin	nited	
EUT(s) COUNTRY OF ORIGIN:	United Kingdom		
TEST LABORATORY:	TRL EMC		
UKAS ACCREDITATION No: 0728			
TEST DATE(s)	10 <sup>th</sup> September 2004 – 13 <sup>th</sup> September 2004		
TEST REPORT No: RU1136/5795			

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# **EQUIPMENT TEST / EXAMINATIONS REQUIRED**

1.	TEST/EXAMINATION	RULE PART	APPLICABILITY	RESULT
	RF Power Output	90.205	Yes	Complies
	Audio Frequency Response	TIA EIA-603.3.2.6	N/A	N/A
	Audio Low-Pass Filter Response	TIA EIA-603.3.2.6	N/A	N/A
	Modulation Limiting	TIA EIA-603.3.2.6	N/A	N/A
	Occupied Bandwidth	90.210	Yes	Complies
	Spurious Emissions at Antenna Terminals	90.210	Yes	Complies
	Field Strength of Spurious Emissions	90.210	Yes	Complies
	Frequency Stability	90.213	N/A(note 1)	N/A
	Transient behaviour	90.214	N/A(note 2)	N/A

1 The EUT does not contain signal generation circuitry, therefore the test was not performed. 2 The EUT is not a keyed carrier system, therefore the test was not performed.

2.	Product Use:		Private Land Mobile Repeater			
3.	Emission Designator:		F3E			
4.	Temperatures:		Ambient (Tnom)	21°C		
5.	Supply Voltages:		Vnom	+110 Vac		
	Note: Vnom voltages are as stated above	e unless other	rwise shown on the te	est report page		
6.	Equipment Category:		Single channel Two channel Multi-channel	[ ] [ ] [X]		
7.	Channel spacing:		Narrowband Wideband	[X] [ ]	25 kHz	
8.	Test Location	TRL Complia	ance Services Up Holland Long Green	[X] [ ]		
9.	Modifications made during test program			No modification	ns were performe	ď

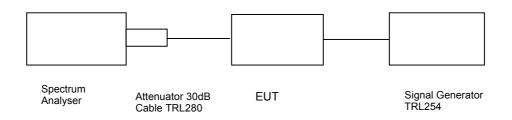
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#### **COMPLIANCE TESTS**

#### AMPLIFIER GAIN - CONDUCTED - PART 2.1046 - UPLINK

26°C Radio Laboratory =

Ambient temperature Relative humidity Supply voltage 44% = +110 Vac Channel number = See test results



Frequency MHz	Signal Generator input level dBm	Cable & Attenuator loss dB	Level at Spectrum Analyser dBm	Gain dB	Gain after 20dB input level increase dBm
810.0 MHz	-74	32.08	-5.9	100.18	113.08
817.0 MHz	-74	32.08	-4.4	101.68	113.80
824.0 MHz	-74	32.08	-6.5	99.58	114.82

# Notes:

- The level of the signal generator takes into consideration the loss from the cable.
   The signal generator input was increased by 20dBs and the level of the output signal remeasured

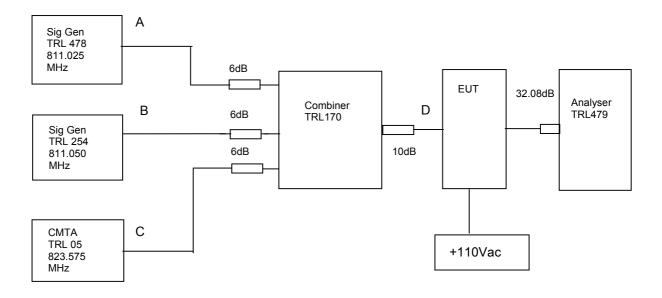
TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	x
ATTENUATOR	AFL	10-002530	8616	N/A	x
CABLE	ROSENBERGER	MICRO COAX	N/A	280	x
SIGNAL GENERATOR	MARCONI	2042	119562/021	254	х

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#### AMPLIFIER INTERMODULATION SPURIOUS EMISSIONS - CONDUCTED - PART 2.1053- UPLINK

Ambient temperature = 26°C Radio Laboratory

Relative humidity = 50% Supply voltage = +110 Vac

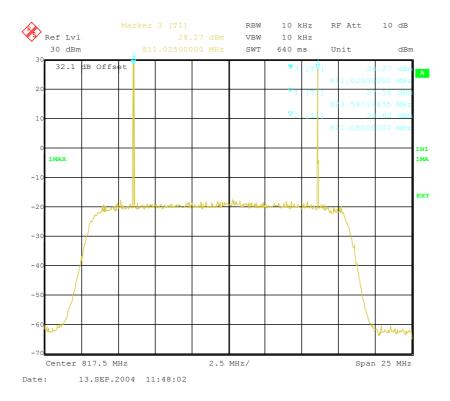


The intermodulation and spurious products were measured with the amplifier operating at maximum gain. A three tone test was conducted using the equipment as above. The input power level was adjusted so the level at point D was the maximum input of -74dBm. The cable and attenuator loss between the EUT and the spectrum analyser was 32.08dB. This loss was taken into account by adjusting the analysers level offset.

Sweep data is shown on the next page:

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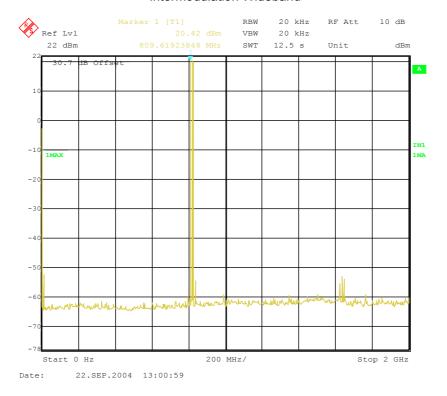
#### Intermodulation Inband



The above plot shows that all products (designated by ) are at least 40dB below the fundamentals.

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#### Intermodulation Wideband



The above plot shows that there are no products outside the bands.

# Test equipment used for intermodulation test

TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	X
SIGNAL GENERATOR	MARCONI	2042	119562/021	254	х
СМТА	ROHDE & SCHWARZ	CMTA52	894715/033	05	х
SIGNAL GENERATOR	ROHDE & SCHWARZ	SMR 20	834671/003	478	x
COMBINER	ELCOM	RC-4-50	N/A	170	х

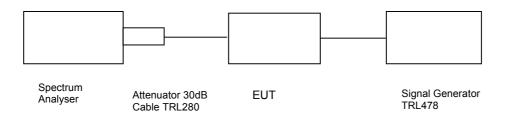
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#### TRANSMITTER TESTS

# AMPLIFER MODULATED CHANNEL TEST - CONDUCTED - Part 2.1049- UPLINK

Ambient temperature = 24°C Radio Laboratory

Relative humidity = 51% Supply voltage = +110 Vac Channel number = See test results



This test was performed to show that the amplifier does not alter the input signal in any way. The input signal was set to the maximum input level (-74dBm) and modulated with a 2500Hz tone. The plots show the signal measured at the signal generator and the signal measured at the output of the EUT.

Note: The cables and attenuators had the following losses.

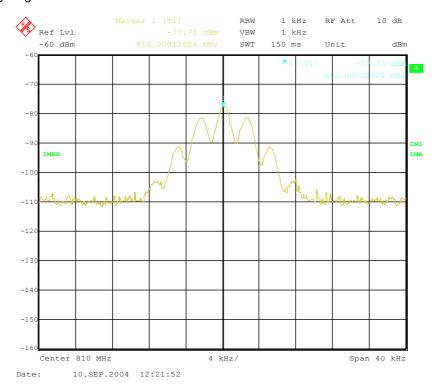
- 1. Cable TRL280 and attenuator 32.08dB
- 2. Cable between signal generator and EUT 1.72dB

The test equipment used for the Transmitter Modulated Channel tests is shown below:

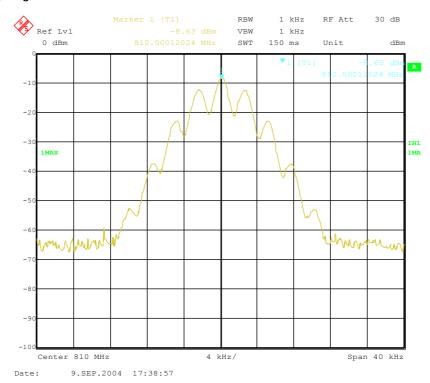
toot oquipo	The test equipment deed for the Transmitter Medalated Chairmer tests to chewn Science						
TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED		
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	x		
ATTENUATOR	AFL	10-002530	8616	N/A	x		
CABLE	ROSENBERGER	MICRO COAX	N/A	280	х		
SIGNAL GENERATOR	MARCONI	2042	119562/021	254	x		

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# 810.0 MHz Signal generator deviation set to 2.5kHz



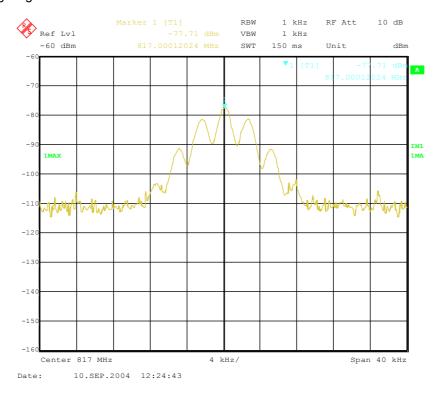
#### 810.0 MHz Signal generator and EUT deviation set to 2.5kHz



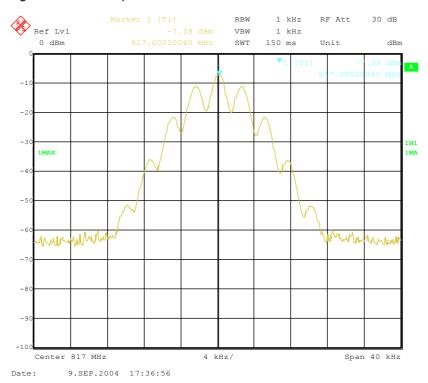
The above plots depicting the output waveshape show no measurable distortion visible. When compared to the input signal.

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# 817.0 MHz Signal generator deviation set to 2.5kHz



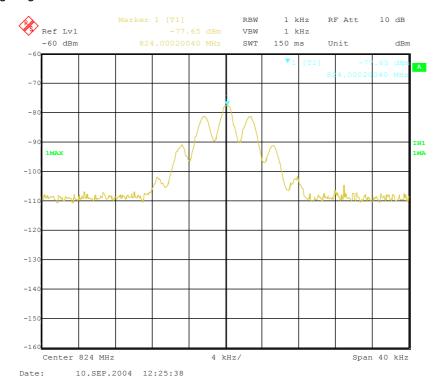
#### 817.0 MHz Signal generator and amplifier deviation set to 2.5kHz



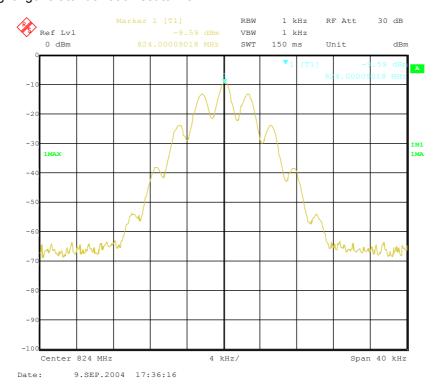
The above plots depicting the output waveshape show no measurable distortion visible. When compared to the input signal.

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# 824.0 MHz Signal generator deviation set to 2.5kHz



#### 824.0 MHz Signal generator deviation set to 2.5kHz



The above plots depicting the output waveshape show no measurable distortion visible. When compared to the input signal.

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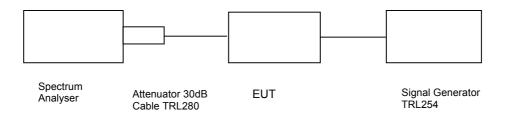
#### TRANSMITTER TESTS

#### AMPLIFIER SPURIOUS EMISSIONS - CONDUCTED - Part 2.1051- UPLINK

Ambient temperature 23°C Radio Laboratory

Relative humidity = 51% F3E Test Signal

Supply voltage = +110 Vac



The test was set up as per the diagram. The level at the input was adjusted to compensate for the loss of the interconnecting cable. The unit was tested operating at maximum power and on three test frequencies.

The Spurious limit was calculated as follows:

On any frequency removed from the assigned frequency by more that 250% of the authorised bandwidth

At least 43 + 10 log PdB

 $(10logP_{watts}) - (43+10log (P_{watts} * 1000)) = LIMIT = -13 dBm$ 

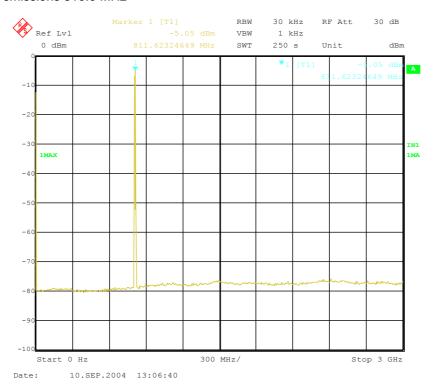
The test equipment used for the Transmitter Conducted Emissions:

TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	х
ATTENUATOR	AFL	10-002530	8616	N/A	х
CABLE	ROSENBERGER	MICRO COAX	N/A	280	x
SIGNAL GENERATOR	MARCONI	2042	119562/021	254	х
SPECTRUM ANALYSER	ANRITSU	MS2665C	MT26089	479	х

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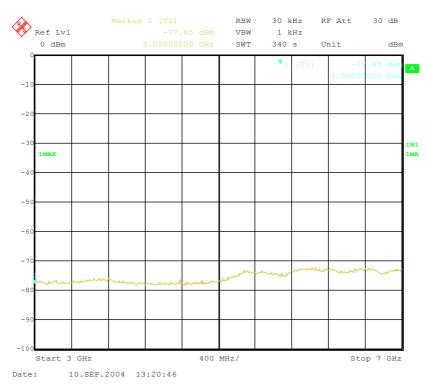
#### Conducted emissions 810.0 MHz

#### 0 - 3GHz

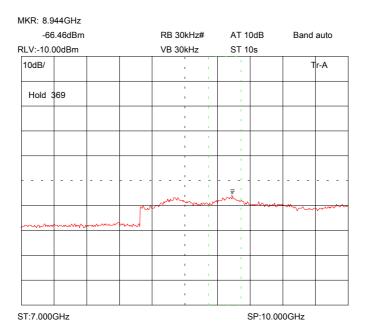


# Conducted emissions 810.0 MHz

#### 3 - 7GHz



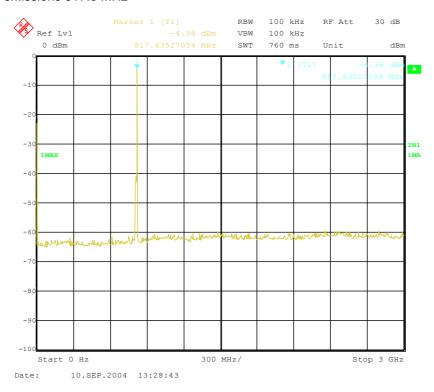
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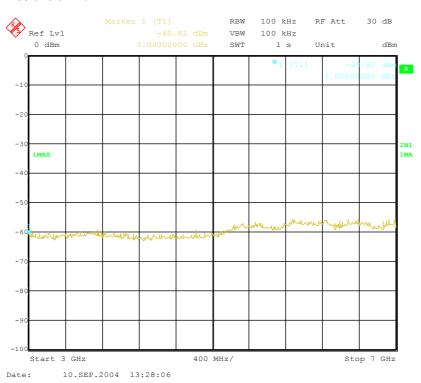
#### Conducted emissions 817.0 MHz

#### 0 - 3GHz

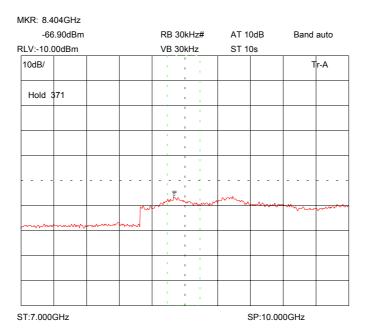


#### Conducted emissions 817.0 MHz

#### 3 - 7GHz



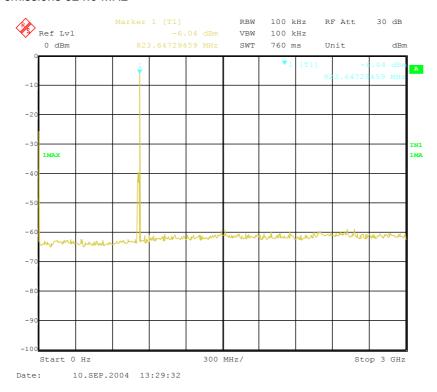
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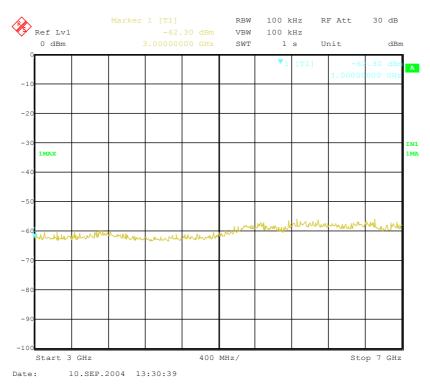
#### Conducted emissions 824.0 MHz

#### 0 - 3GHz

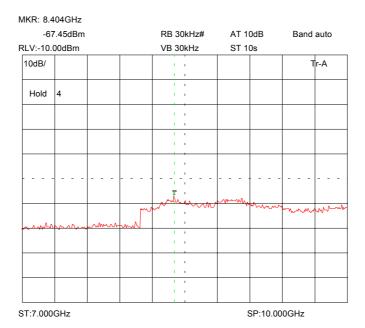


#### Conducted emissions 824.0 MHz

#### 3 - 7GHz



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#### TRANSMITTER TESTS

Spectrum

Analyser

#### AMPLIFIER SPURIOUS EMISSIONS - RADIATED - Part 2.1053- UPLINK

Ambient temperature 26°C Test Signal = F3E Relative humidity 44% OATS Conditions = Supply voltage +110 Vac Supply Frequency N/A Load 1 metre EUT

Horn

antenna

The test was set up as per the diagram. The level at the input was adjusted to compensate for the loss of the interconnecting cable. The unit was tested operating maximum power on three test frequencies with a 50 ohm load on the output. The unit was also tested with the signal generator replaced by another 50 ohm

The Spurious limit was calculated as follows:

On any frequency removed from the assigned frequency by more that 250% of the authorised bandwidth

At least 43 + 10 log PdB

load.

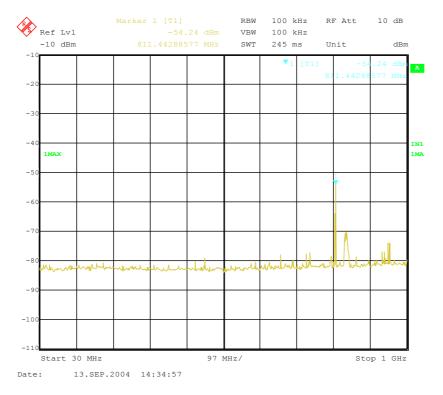
 $(10logP_{watts}) - (43+10log (P_{watts} * 1000)) = LIMIT = -13 dBm$ 

The test equipment used for the Transmitter Spurious Emissions:

TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	х
HORN	EMCO	3115	9010-3581	139	x
50Ω LOAD	RHODE & SCHWARZ	200.0019.55	300804/32	UH227	х
CABLE	ROSENBERGER	MICRO COAX	N/A	280	х
SIGNAL GENERATOR	MARCONI	2042	119388/021	254	х
SPECTRUM ANALYSER	ANRITSU	MS2665C	MT26089	479	х

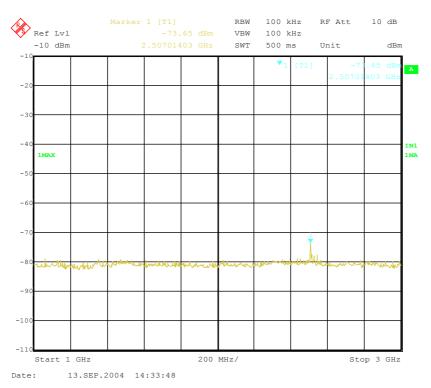
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Signal Generator TRL254



#### Radiated emissions 810.0 MHz

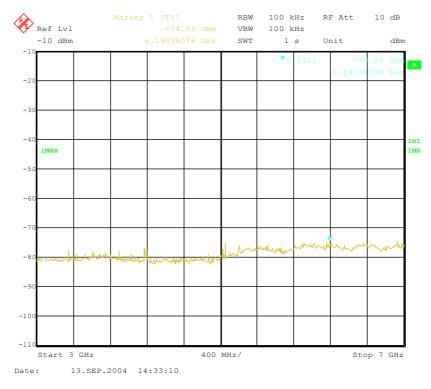
1-3GHz



The above test results show that there were no emissions within 20dBs of the –13dBm limit.

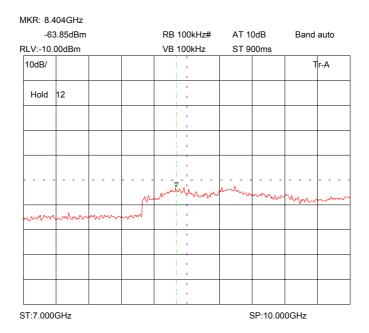
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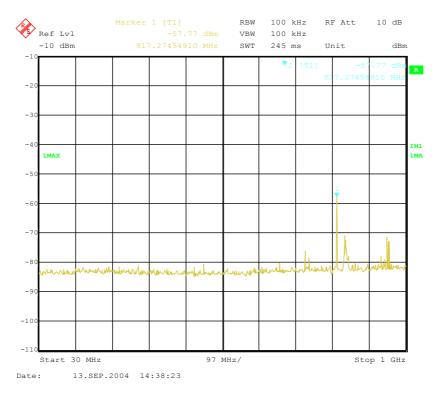
#### Radiated emissions 810.0 MHz

7-10GHz



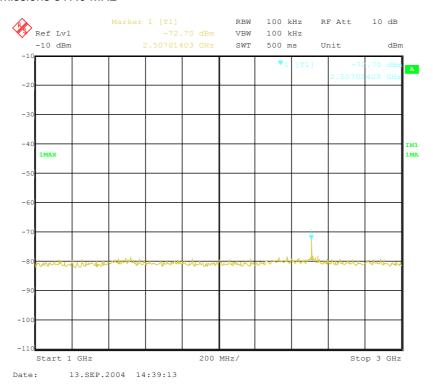
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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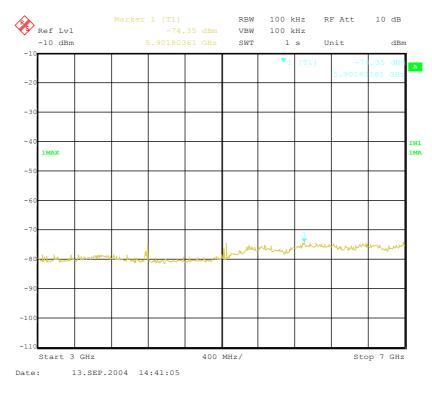
#### Radiated emissions 817.0 MHz

1-3GHz



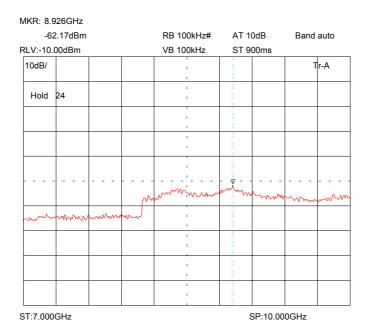
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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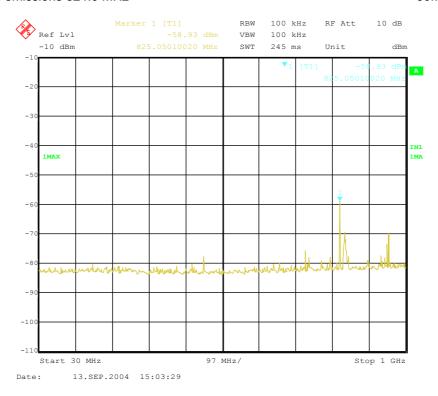
#### Radiated emissions 817.0 MHz

7-10GHz



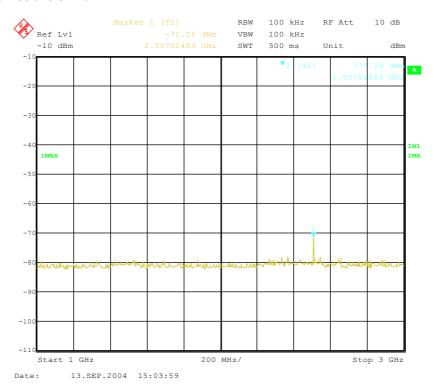
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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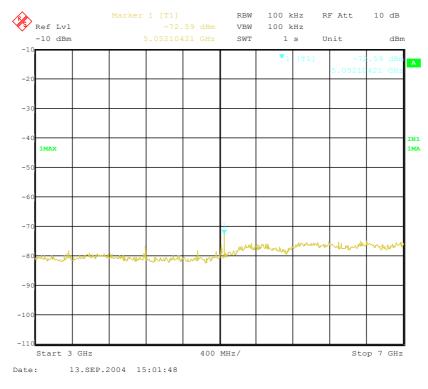
#### Radiated emissions 824.0 MHz

1-3GHz



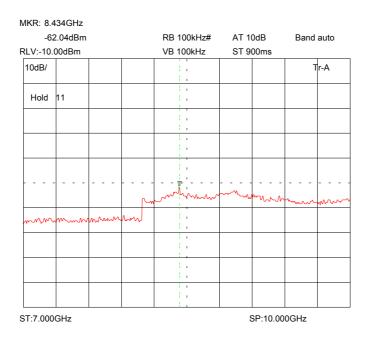
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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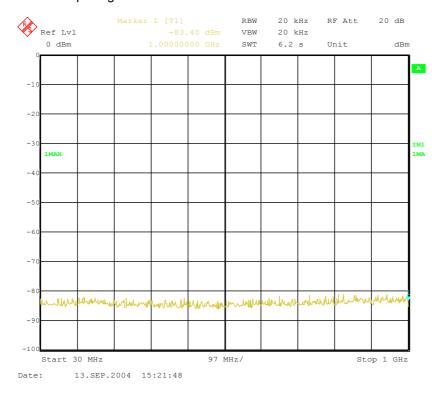
Radiated emissions 824.0 MHz

7-10GHz



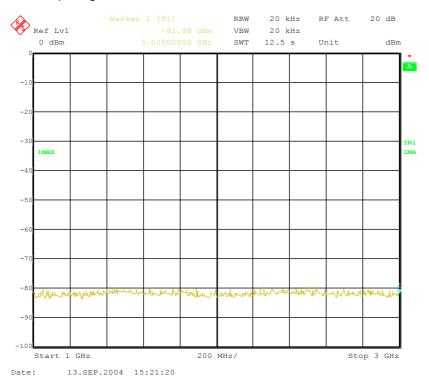
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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### Radiated emissions no input signal

1-3GHz



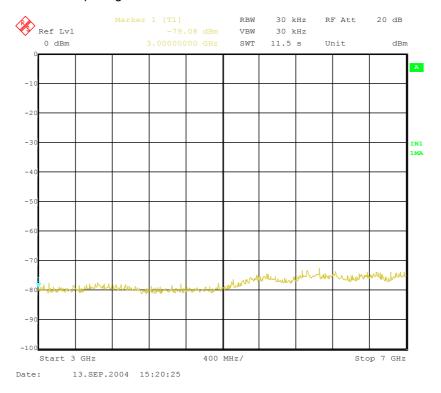
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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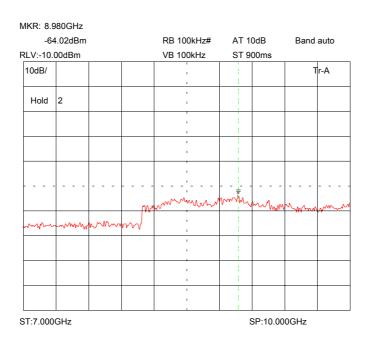
# Radiated emissions no input signal

#### 3 - 7GHz



# Radiated emissions no input signal

#### 7- 10 GHz



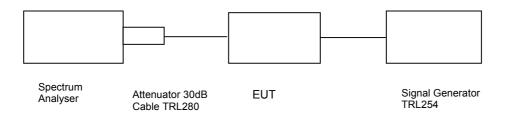
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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#### AMPLIFIER GAIN - CONDUCTED - PART 2.1046 - DOWNLINK

Ambient temperature = 26°C Radio Laboratory

Relative humidity = 44% Supply voltage = +110 Vac Channel number = See test results



Frequency MHz	Signal Generator input level dBm	Cable & Attenuator loss dB	Level at Spectrum Analyser dBm	Gain dB	Gain after 20dB input level increase dBm
856.025 MHz	-63.4	32.08	-13.7	81.78	61.78
862.050 MHz	-63.4	32.08	-13.7	81.78	61.78
868.575 MHz	-63.4	32.08	-13.1	82.38	62.38

#### Notes:

- 1. The level of the signal generator takes into consideration the loss from the cable.
- 2. The signal generator input was increased by 20dBs and the level of the output signal remeasured
- 3. The EUT's downlink path had 10dB's of internal attenuation switched in.

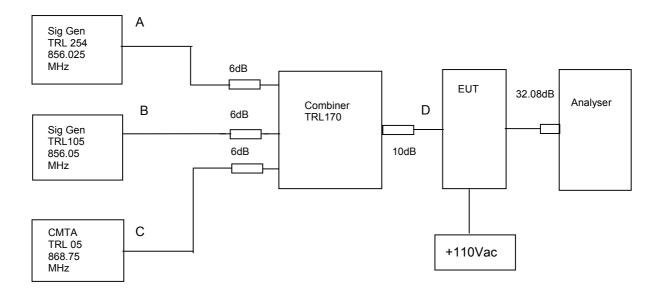
TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	х
ATTENUATOR	AFL	10-002530	8616	N/A	х
CABLE	ROSENBERGER	MICRO COAX	N/A	280	x
SIGNAL GENERATOR	MARCONI	2042	119388/021	254	х

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#### AMPLIFIER INTERMODULATION SPURIOUS EMISSIONS - CONDUCTED - PART 2.1053- DOWNLINK

Ambient temperature = 21°C Radio Laboratory

Relative humidity = 56% Supply voltage = +110 Vac

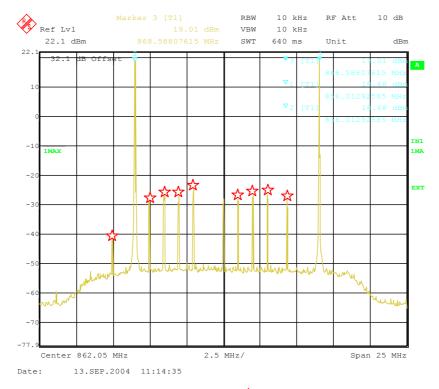


The intermodulation and spurious products were measured with the amplifier operating at maximum gain. A three tone test was conducted using the equipment as above. The input power level was adjusted so the level at point D was the maximum input of –63.4dBm. The cable and attenuators loss between the EUT and the spectrum analyser was 29.84 dB.

Sweep data is shown on the next page:

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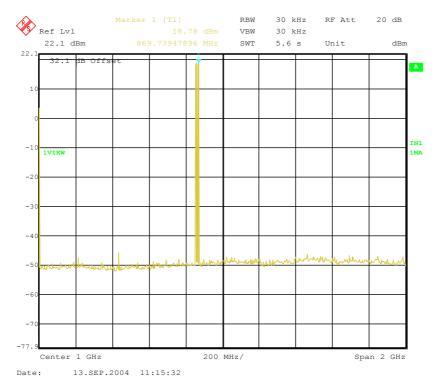
#### Intermodulation Inband



The above plot shows that all products (designated by ) are at least 40dB below the fundamentals.

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#### Intermodulation Wideband



The above plot shows that there are no products outside the bands.

# Test equipment used for intermodulation test

TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	x
SIGNAL GENERATOR	MARCON	2042	119562/021	254	х
SIGNAL GENERATOR	ROHDE & SCHWARZ	SMR 20	834671/003	478	х
SIGNAL GENERATOR	MARCONI	2023	112224/040	105	х
COMBINER	ELCOM	RC-4-50	N/A	170	x

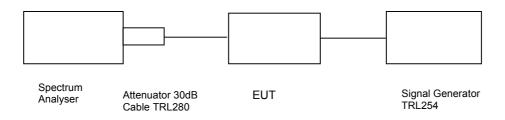
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#### TRANSMITTER TESTS

#### AMPLIFER MODULATED CHANNEL TEST - CONDUCTED - Part 2.1049- DOWNLINK

Ambient temperature = 21°C Radio Laboratory

Relative humidity = 53% Supply voltage = +110 Vac Channel number = See test results



This test was performed to show that the amplifier does not alter the input signal in any way. The input signal was set to the maximum input level (-63.4) and modulated with a 2500Hz tone. The plots show the signal measured at the signal generator and the signal measured at the output of the EUT.

Note: The cables and attenuators had the following losses.

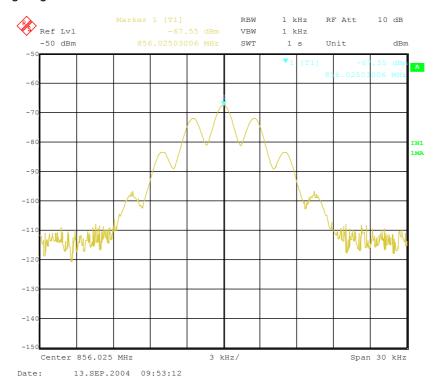
- 1. Cable TRL280 and 30dB attenuator = 32.08dB
- 2. Cable between signal generator and EUT = 1.72dB

The test equipment used for the Transmitter modulated channel tests is shown below:

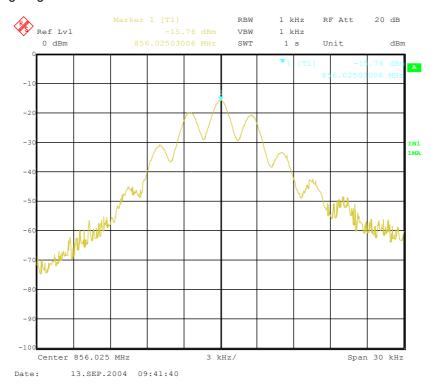
TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	х
ATTENUATOR	AFL	10-002530	8616	N/A	x
CABLE	ROSENBERGER	MICRO COAX	N/A	280	x
SIGNAL GENERATOR	MARCONI	2042	119388/021	254	х

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# 856.025 MHz Signal generator deviation set to 2.5kHz



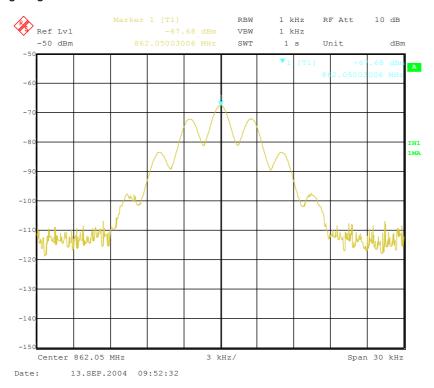
#### 856.025 MHz Signal generator and EUT deviation set to 2.5kHz



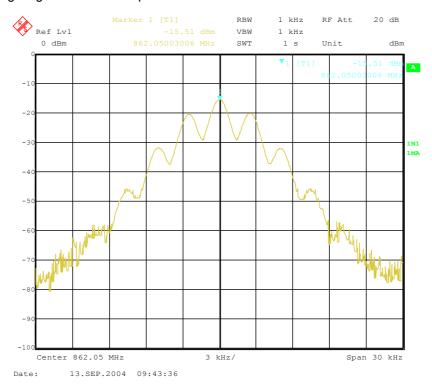
The above plots depicting the output wave shape show no measurable distortion visible. When compared to the input signal.

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# 862.050 MHz Signal generator deviation set to 2.5kHz



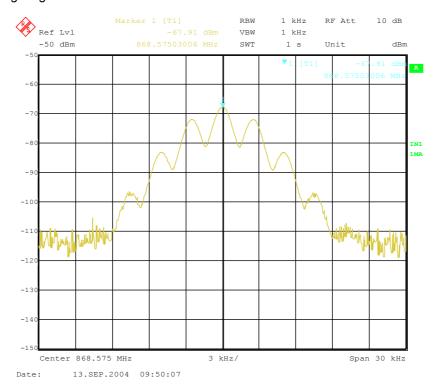
# 862.050 MHz Signal generator and amplifier deviation set to 2.5kHz



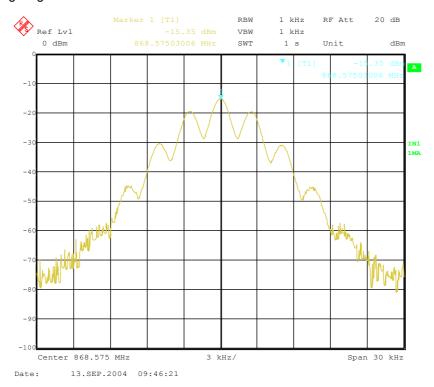
The above plots depicting the output wave shape show no measurable distortion visible. When compared to the input signal.

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# 868.575 MHz Signal generator deviation set to 2.5kHz



# 868.575 MHz Signal generator deviation set to 2.5kHz



The above plots depicting the output wave shape show no measurable distortion visible. When compared to the input signal.

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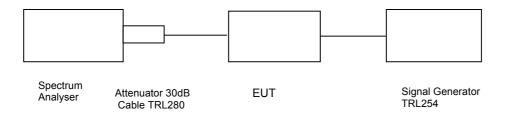
#### TRANSMITTER TESTS

#### AMPLIFIER SPURIOUS EMISSIONS - CONDUCTED - Part 2.1051- DOWNLINK

Ambient temperature = 26°C Radio Laboratory

Relative humidity = 48% Test Signal = F3E

Supply voltage = +110 Vac



The test was set up as per the diagram. The level at the input was adjusted to compensate for the loss of the interconnecting cable. The unit was tested operating at maximum power and on three test frequencies. The EUT's downlink path had 10dB's of internal attenuation switched in.

The Spurious limit was calculated as follows:

On any frequency removed from the assigned frequency by more that 250% of the authorised bandwidth

At least 43 + 10 log PdB

 $(10logP_{watts}) - (43+10log (P_{watts} * 1000)) = LIMIT = -13 dBm$ 

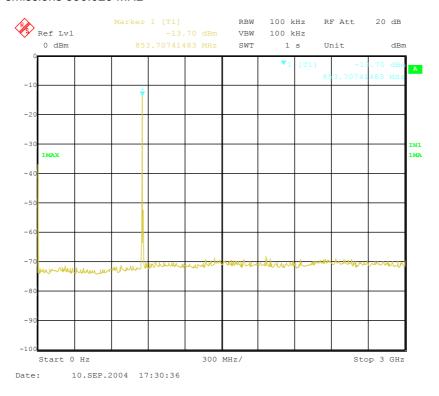
The test equipment used for the Transmitter Conducted Emissions:

TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	х
ATTENUATOR	AFL	10-002530	8616	N/A	х
CABLE	ROSENBERGER	MICRO COAX	N/A	280	x
SIGNAL GENERATOR	MARCONI	2042	119388/021	254	х
SPECTRUM ANALYSER	ANRITSU	MS2665C	MT26089	479	х

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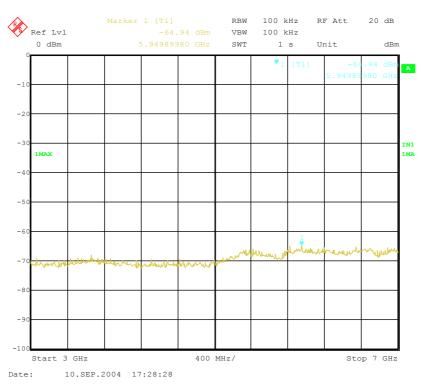
# Conducted emissions 856.025 MHz

# 0 - 3GHz

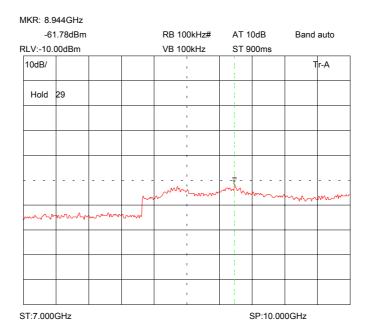


# Conducted emissions 856.025 MHz

# 3 - 7GHz



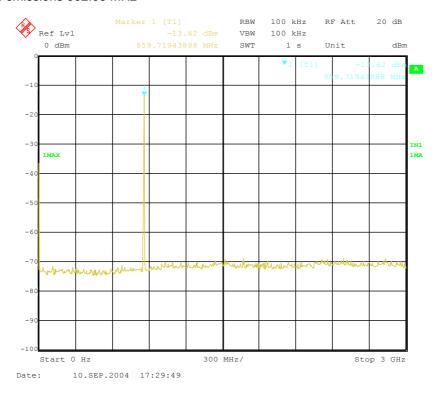
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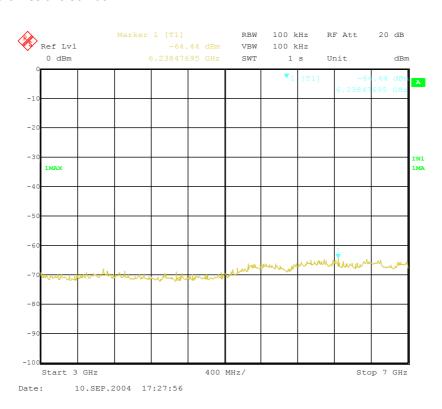
# Conducted emissions 862.05 MHz

# 0 - 3GHz

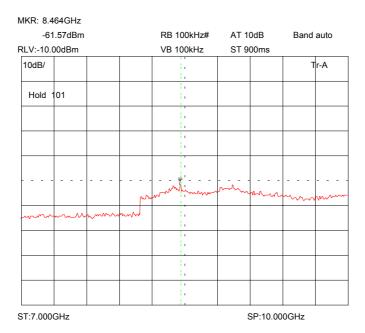


# Conducted emissions 862.05 MHz

# 3 - 7GHz



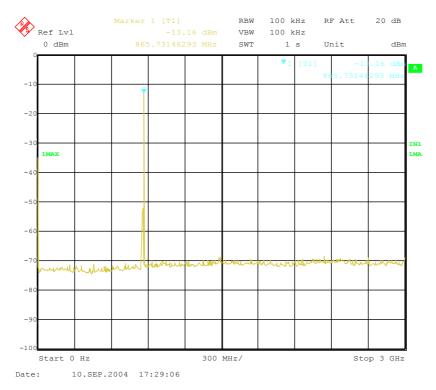
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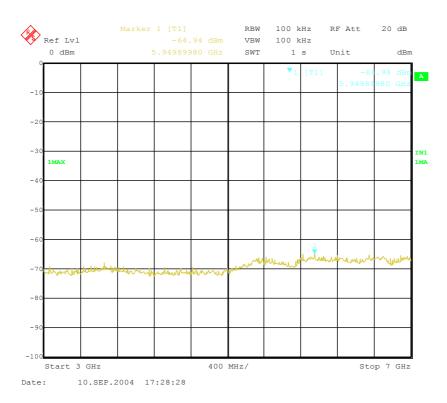
# Conducted emissions 868.575 MHz

# 0 - 3GHz

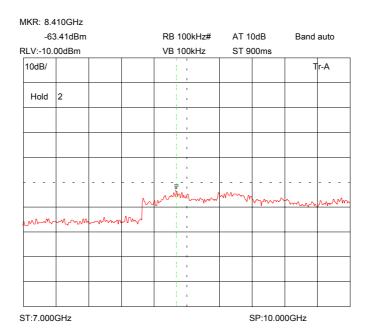


# Conducted emissions 868.575 MHz

#### 3 - 7GHz



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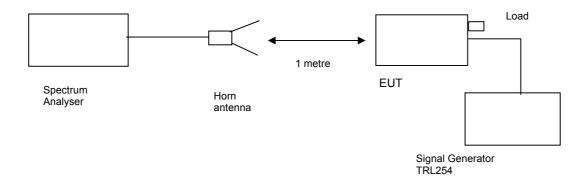
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#### TRANSMITTER TESTS

#### AMPLIFIER SPURIOUS EMISSIONS - RADIATED - Part 2.1053- DOWNLINK

Ambient temperature = 26°C Test Signal = F3E

Relative humidity = 44%
Conditions = OATS
Supply voltage = +110 Vac
Supply Frequency = N/A



The test was set up as per the diagram. The level at the input was adjusted to compensate for the loss of the interconnecting cable. The unit was tested operating maximum power on three test frequencies with a 50 ohm load on the output. The unit was also tested with the signal generator replaced by another 50ohm load.

The Spurious limit was calculated as follows:

On any frequency removed from the assigned frequency by more that 250% of the authorised bandwidth

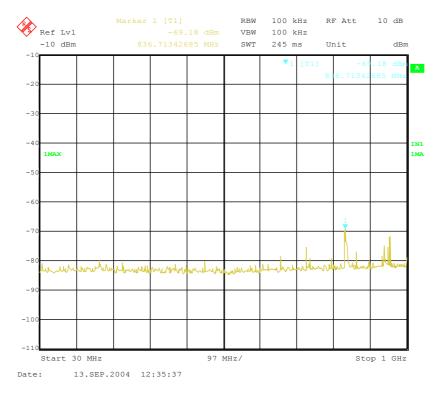
At least 43 + 10 log PdB

$$(10logP_{watts}) - (43+10log(P_{watts} * 1000)) = LIMIT = -13 dBm$$

The test equipment used for the Transmitter Spurious Emissions:

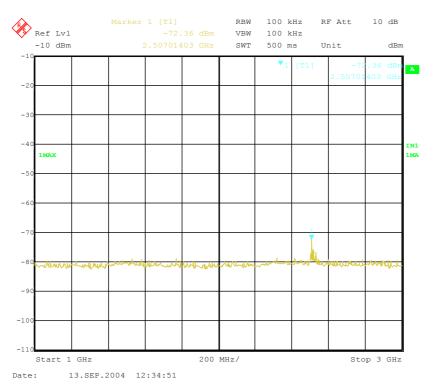
TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	ESIB 7	100 182	630	х
HORN	EMCO	3115	9010-3581	139	x
50Ω LOAD	RHODE & SCHWARZ	200.0019.55	300804/32	UH227	х
CABLE	ROSENBERGER	MICRO COAX	N/A	280	х
SIGNAL GENERATOR	MARCONI	2042	119388/021	254	х
SPECTRUM ANALYSER	ANRITSU	MS2665C	MT26089	479	х

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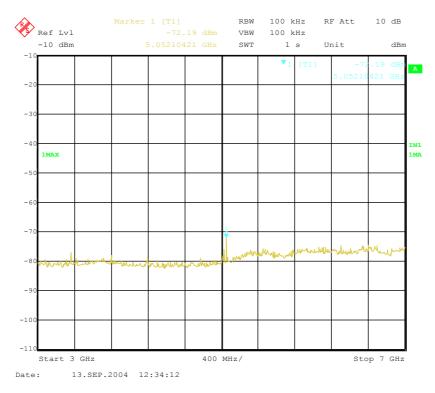
# Radiated emissions 856.025 MHz

1-3GHz



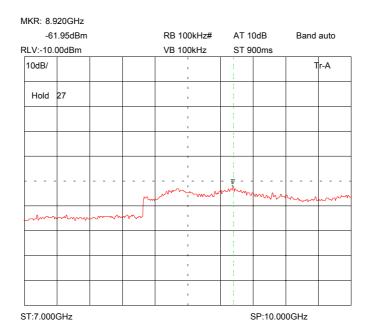
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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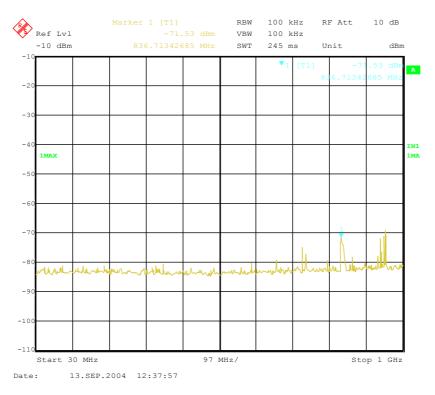
#### Radiated emissions 856.025 MHz

7-10GHz



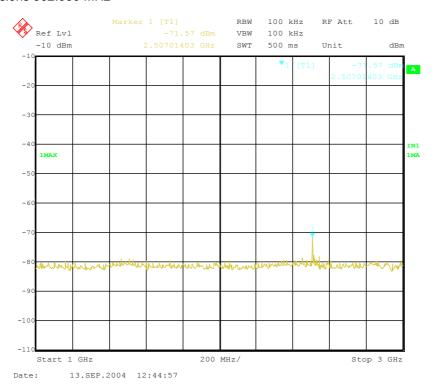
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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# Radiated emissions 862.050 MHz

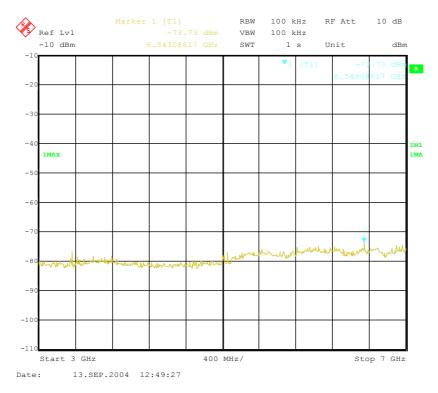
1-3GHz



The above test results show that there were no emissions within 20dBs of the -13dBm limit.

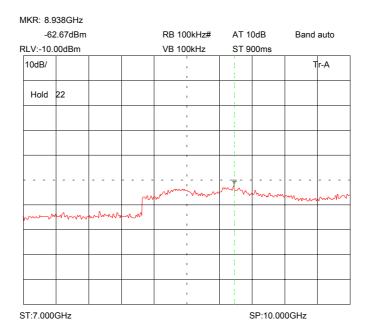
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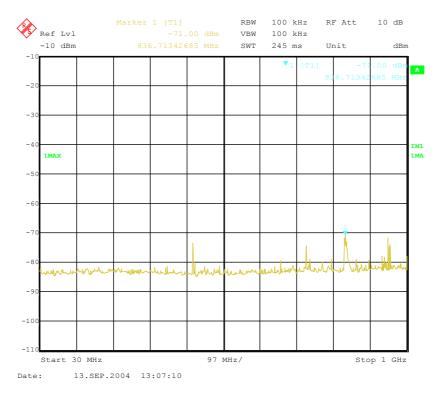
#### Radiated emissions 862.05 MHz

7-10GHz



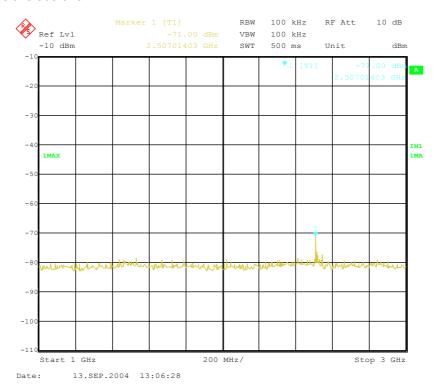
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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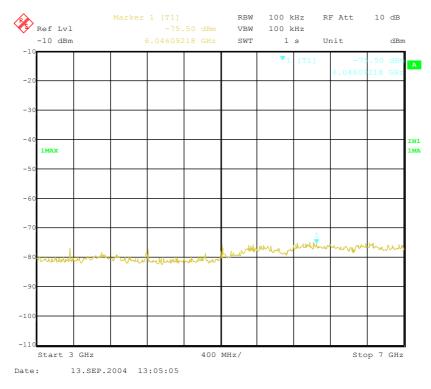
#### Radiated emissions 868.575 MHz

1-3GHz



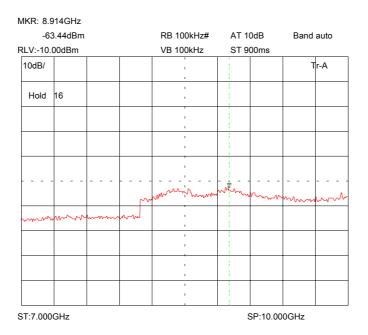
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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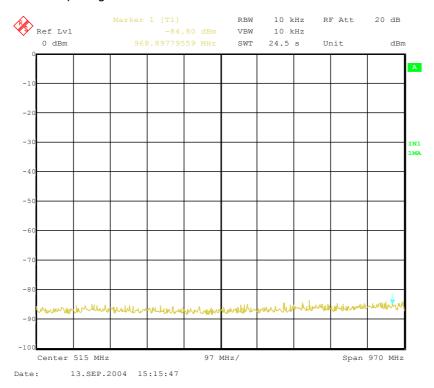
#### Radiated emissions 868.575 MHz

7-10GHz



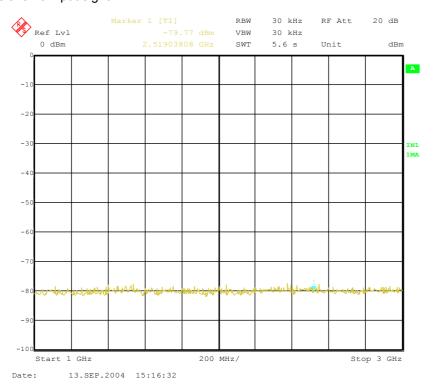
The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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# Radiated emissions no input signal

1-3GHz

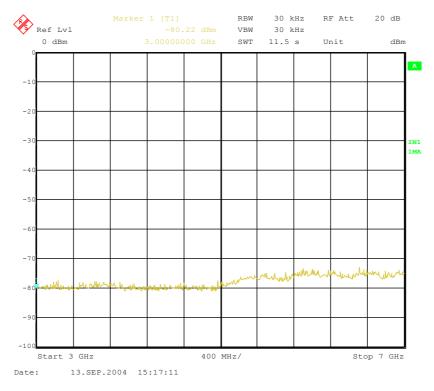


The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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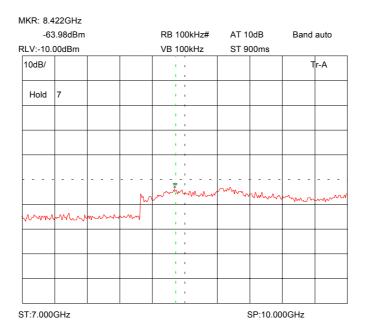
# Radiated emissions no input signal

# 3-7GHz



# Radiated emissions no input signal

#### 7-10GHz



The above test results show that there were no emissions within 20dBs of the -13dBm limit.

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# ANNEX A PHOTOGRAPHS

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# PHOTOGRAPH No. 1

# **TEST SETUP**



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# PHOTOGRAPH No. 2

# **TEST SETUP**



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# ANNEX B APPLICANT'S SUBMISSION OF DOCUMENTATION LIST

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# APPLICANT'S SUBMISSION OF DOCUMENTATION LIST

a.	TCB	-	APPLICATION FEE	[X] [X]
b.	AGENT'S LETTER OF AUTHORISATION	-		[X]
C.	MODEL(s) vs IDENTITY	-		[]
d.	ALTERNATIVE TRADE NAME DECLARATION(s)	-		[]
e.	LABELLING	- - -	PHOTOGRAPHS DECLARATION DRAWINGS	[ ] [ ] [ ]
f.	TECHNICAL DESCRIPTION	-		[X]
g.	BLOCK DIAGRAMS	- - -	Tx Rx PSU AUX	[X] [ ] [ ]
h.	CIRCUIT DIAGRAMS	- - -	Tx Rx PSU AUX	[] [] []
i.	COMPONENT LOCATION	- - -	Tx Rx PSU AUX	[] [] []
j.	PCB TRACK LAYOUT	- - -	Tx Rx PSU AUX	[] [] []
k.	BILL OF MATERIALS	- - -	Tx Rx PSU AUX	[] [] []
l.	USER INSTALLATION / OPERATING INSTRUCTIONS	-		[X]

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