

**REPORT ON THE CERTIFICATION TESTING OF A
ROBONICA
ROBONI-I REMOTE CONTROL
WITH RESPECT TO
THE FCC RULES CFR 47, PART 15.247 JULY 2008
INTENTIONAL RADIATOR SPECIFICATION**

TEST REPORT NO: 8F2021WUS1
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FCC ID: XL7-REMOTE1

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ROBONICA
ROBONI-I REMOTE CONTROL
WITH RESPECT TO
THE FCC RULES CFR 47, PART 15.247 JULY 2008
INTENTIONAL RADIATOR SPECIFICATION**

TRaC
testing regulatory and compliance

TEST DATE: 14th – 17th July 2009

TESTED BY: _____ D WINSTANLEY

APPROVED BY: _____ J CHARTERS
RADIO PRODUCT
MANAGER

DATE: 29th July 2009

Distribution:

- Copy Nos:
1. ROBONICA
 2. FCC EVALUATION LABORATORIES
 3. TRaC Telecoms & Radio

THIS DOCUMENT MAY BE REPRODUCED ONLY IN ITS ENTIRETY AND WITHOUT CHANGE

The results herein relate only to the sample tested. Full results are contained in the relevant works order file.

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Notes:	
1. Component failure during test	YES [] NO [X]
2. If Yes, details of failure:	
3. The facilities used for the testing of the product contain in this report are FCC Listed.	
4. The contents of the attached applicants declarations and other supplied information are not covered by the scope of this laboratory's UKAS or FCC accreditations' and is provided in good faith.	

CERTIFICATE OF CONFORMITY & COMPLIANCE

FCC IDENTITY: XL7-REMOTE1

PURPOSE OF TEST: Certification

TEST SPECIFICATION: FCC RULES CFR 47, Part 15.247 July 2008

TEST RESULT: Compliant to Specification

EQUIPMENT UNDER TEST: Roboni-i Remote Control

EQUIPMENT PART No: 750-0002

ITU: EMISSION CODE: 1M55F1D

EQUIPMENT TYPE: Digital Spread Spectrum Device

CARRIER EMISSION: 0.00006 Watts

ANTENNA TYPE: Integral

GAIN ANTENNA: Unity Gain

FREQUENCY OF OPERATION: 2450.0 MHz

CHANNEL SPACING: N/A

NUMBER OF CHANNELS: 1

FREQUENCY GENERATION: SAW Resonator ☐ Crystal ☐ Synthesiser ☒

MODULATION METHOD: FHSS ☐ DSSS ☒ Other ☐

POWER SOURCE(s): +6Vdc

TEST DATE(s): 14th – 17th July 2009

ORDER No(s): PO-F0001

APPLICANT: Robonica

ADDRESS: P O Box 68009
Highveld
0169
South Africa

TESTED BY: _____ D WINSTANLEY

APPROVED BY: _____ J CHARTERS
RADIO
PRODUCT
MANAGER

APPLICANT'S SUMMARY

EQUIPMENT UNDER TEST (EUT):	Roboni-i Remote Control
EQUIPMENT TYPE:	Digital Spread Spectrum Device
PART NUMBER OF EUT:	750-0002
PURPOSE OF TEST:	Certification
TEST SPECIFICATION(s):	FCC RULES CFR 47, Part 15.247 July 2008
TEST RESULT:	COMPLIANT Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
APPLICANT'S CATEGORY:	MANUFACTURER <input checked="" type="checkbox"/> IMPORTER <input type="checkbox"/> DISTRIBUTOR <input type="checkbox"/> TEST HOUSE <input type="checkbox"/> AGENT <input type="checkbox"/>
APPLICANT'S ORDER No(s):	PO-F0001
APPLICANT'S CONTACT PERSON(s):	Mr Thys Nel
E-mail address:	thys.nel@robonica.com
APPLICANT:	Robonica
ADDRESS:	P O Box 68009 Highveld 0169 South Africa
TEL:	+27 (0)12 661-9707
FAX:	+27 (0)12 661-8984
EUT(s) COUNTRY OF ORIGIN:	South Africa
TEST LABORATORY:	TRaC Telecoms & Radio, Up Holland
UKAS ACCREDITATION No:	0971
TEST DATE(s):	14 th – 17 th July 2009
TEST REPORT No:	8F2021WUS1

EQUIPMENT TEST / EXAMINATIONS REQUIRED

1.	TEST/EXAMINATION	RULE PART	DETECTOR	APPLICABILITY
	Intentional Emission Frequency:	15.247	Peak	Yes
	Intentional Emission Field Strength:	-	-	No
	Intentional Emission Band Occupancy:	15.247(a)1	Peak	Yes
	Intentional Emission EIRP (mW):	15.247(b)1	Peak	Yes
	Spurious Emissions – Conducted:	15.207 15.107	Quasi Peak Average	Yes
	Spurious Emissions – Conducted:	15.247	Peak	Yes
	Spurious Emissions – Radiated <1000MHz:	15.209 ,15.247	Quasi Peak	Yes
	Spurious Emissions – Radiated >1000MHz:	15.247 15.209	Peak average	Yes
	Transmitter Carrier Frequency Separation:	15.247(a)(1)	Peak	Yes
	Transmitter Maximum Peak Power Output Power:	15.247(b)(1)	Peak	Yes
	Transmitter Band Edge Conducted Emissions:	15.247(c)	Peak	Yes
	Transmitter Band Edge Radiated Emission:	15.247(c)	Peak	Yes
	Extrapolation Factor:	15.31(f)	-	Yes
	Maximum Frequency of Search:	15.33	-	Yes
	Antenna Arrangements Integral:	15.203	-	Yes
	Antenna Arrangements External Connector:	15.204	-	Yes
	Restricted Bands:	15.205	-	Yes

2. Product Description : Digital Spread Spectrum Device

3. Temperatures: Ambient (Tnom) 18°C

4. Supply Voltages: Vnom +6Vdc

Note: Vnom voltages are as stated above unless otherwise shown on the test report page

5. Equipment Category: Single channel [X]
Multi-channel []

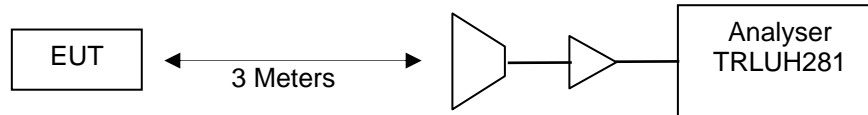
6. Channel spacing: Narrowband []
Wideband [X]

TRANSMITTER TESTS

TRANSMITTER 6dB BANDWIDTH – RADIATED - PART 15.247(A)(2)

Ambient temperature = 18°C
 Relative humidity = 54%
 Conditions = Radio Lab
 Supply voltage = +6Vdc

Diagram



Frequency	F _{lower}	F _{Higher}	Measured Bandwidth	Limit
2450 MHz	2449.286859 MHz	2450.833333 MHz	1546.474 kHz	>500 kHz

Notes: 1 For analyser plots see annex E.

Test Method: 1 The EUT was rotated to the direction of maximum radiation.
 2 The 6dB bandwidth was recorded with the EUT activity transmitting data.
 3 Radiated Measurement DTS Measurement 16th April 2007 Alternative Test Procedures

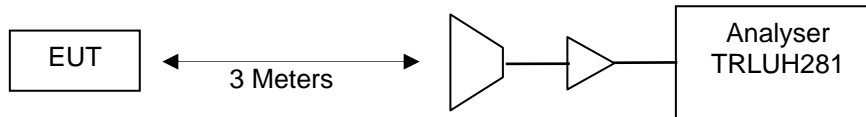
TYPE OF EQUIPMENT	MAKER/SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	FSU46	200034	UH281	X
HORN ANTENNA	EMCO	3115	9010-3580	138	X
PRE AMPLIFIER	HP	8449B	3008A016	572	X
CABLE	SUCCOFLEX	N/A	35226/4	UH291	X
CABLE	MEGAPHASE	TM26-3131 36	400559	UH293	X

TRANSMITTER TESTS

TRANSMITTER – MAXIMUM PEAK POWER – RADIATED – PART 15.247(B)(3)

Ambient temperature = 18°C
 Relative humidity = 54%
 Conditions = Radio Lab
 Supply voltage = +6Vdc

Diagram



Frequency MHz	Maximum Field Strength (V/m)	Antenna Gain (dBi)	Measurement Distance (meters)	Peak EIRP (Watts)	Limit (Watts)
2450.000	0.014	1	3	0.00006	1

Notes:
 1 Gain of antenna 1, maximum gain antenna supplied by manufacturer.
 2 Peak Power = $(E \times d)^2 / (30 \times G)$
 E = Maximum Field Strength (V/m)
 D = Measurement Distance
 G = Numeric gain of transmitting antenna over an Isotropic radiator

Test Method:
 1 The EUT was rotated to the direction of maximum radiation.
 2 The EUT was operated in transmit mode with modulation.
 3 The level on the analyser was recorded.
 4 The resolution bandwidth of the analyser was set to > than the 6dB bandwidth
 5 Radiated Measurement DTS Measurement 16th April 2007 Alternative Test Procedures

Test equipment used for Peak Power measurement:

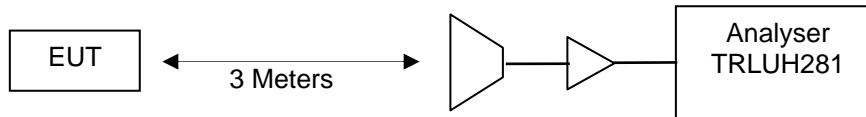
TYPE OF EQUIPMENT	MAKER/SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	FSU46	200034	UH281	X
HORN ANTENNA	EMCO	3115	9010-3580	138	X
PRE AMPLIFIER	HP	8449B	3008A016	572	X
CABLE	SUCCOFLEX	N/A	35226/4	UH291	X
CABLE	MEGAPHASE	TM26-3131 36	400559	UH293	X

TRANSMITTER TESTS

TRANSMITTER POWER SPECTRAL DENSITY – RADIATED - PART 15.247(E)

Ambient temperature = 18°C
 Relative humidity = 54%
 Conditions = Radio Lab
 Supply voltage = +6Vdc

Diagram



Frequency MHz	Maximum Field Strength (V/m)	Antenna Gain (dBi)	Measurement Distance (meters)	Power Spectral Density (dBm)	Limit (dBm)
2450.000	0.0041	1	3	-22.91	+8

Notes:

- 1 For analyser plots see annex F.
- 2 $\text{Peak Power} = (\text{Exd})^2 / (30 \times \text{G})$
 E = Maximum Field Strength (V/m)
 D = Measurement Distance
 G = Numeric gain of transmitting antenna over an Isotropic radiator

Test Method:

- 1 The EUT was rotated to direction of maximum emission.
- 2 The resolution bandwidth on the analyser was set to 3kHz and trace set to max hold.
- 3 The span is set to 3MHz
- 4 The sweep time is 1000 seconds (Span/3kHz).
- 5 Radiated Measurement DTS Measurement 16th April 2007 Alternative Test Procedures

Test equipment used for Peak Power measurement:

TYPE OF EQUIPMENT	MAKER/SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	FSU46	200034	UH281	X
HORN ANTENNA	EMCO	3115	9010-3580	138	X
PRE AMPLIFIER	HP	8449B	3008A016	572	X
CABLE	SUCCOFLEX	N/A	35226/4	UH291	X
CABLE	MEGAPHASE	TM26-3131 36	400559	UH293	X

TRANSMITTER TESTS

TRANSMITTER SPURIOUS EMISSIONS – RADIATED – Part 15.247(c) and 15.209

Ambient temperature	=	18°C	3m measurements <1GHz	[X]
Relative humidity	=	54%	3m measurements <10GHz	[X]
Conditions	=	Open Area Test Site (OATS)	1m measurements <25GHz	[X]
Supply voltage	=	+6Vdc		

	Emission Freq (MHz)	Meas Rx. (dBuV)	Cable loss (dB)	Ant. Factor (dB/m)	Pre Amp Gain (dB)	Field Strength (dBµV/m)	Extrap. Factor (dB)	Result (µV/m)	Limit (µV/m)
30MHz – 88MHz								Note 5	100
88MHz – 216MHz								Note 5	150
216MHz – 960MHz								Note 5	200
960MHz – 1GHz								Note 5	500
1GHz – 25GHz	4901.089	33.81	1.8	34.2	34.8	35.01	-	56.30	500
	7351.682	47.04	2.2	35.9	35.2	41.94	-	125.02	500
	12252.836	36.59	4.1	39.2	35.3	44.59	9.54	56.23	500
	14703.173	36.39	6.3	41.3	36.0	47.99	9.54	83.66	500

- Notes:**
- 1 Initial pre scans were performed see Annex G for plots.
 - 2 See annex H for radiated bandedge compliance plot.
 - 3 Emissions above 1GHz were measured with both a peak and average detectors.
 - 4 All emissions within 20dB of limit are recorded.
 - 5 Emissions not directly related to the transmitter are reported under receiver tests.

- Test Method:**
- 1 As per section 15.247.
 - 2 Measuring distances as Note 4 above.
 - 3 EUT 0.8 metre above ground plane.
 - 4 Emissions maximised by rotation of EUT, on an automatic turntable.
Raising and lowering the receiver antenna between 1m & 4m >30MHz.
Horizontal and vertical polarisations, of the receive antenna.
EUT orientation in three orthogonal planes. Maximum results recorded.

The test equipment used for the tests is shown overleaf:

TYPE OF EQUIPMENT	MAKER/SUPPLIER	MODEL No	SERIAL No	TRL No	EQUIPMENT USED
HORN ANTENNA	EMCO	3115	9010-3580	138	X
RECEIVER	ROHDE & SCHWARZ	ESVS 10	825892/003	UH04	X
RANGE 1	TRaC	3 METRE	N/A	UH06	X
BILOG ANTENNA	CHASE	CBL6111	1519	UH70	X
SPECTRUM ANALYSER	ROHDE & SCHWARZ	FSU	200034	UH281	X
PRE AMPLIFIER	WATKINS JOHNSON	6201-69	2740	UH372	X
PRE AMPLIFIER	AGILENT	8449B	3008A01610	572	X

TRANSMITTER TESTS

TRANSMITTER BAND EDGE EMISSIONS – RADIATED – Part 15.247(c)

Ambient temperature = 18°C
Relative humidity = 54%
Conditions = Radiated OATS
Supply voltage = +4.5Vdc

Test Result

Operating Frequency (MHz)	Bandedge	Result	Limit
2450.0 MHz	Lower	Compliant	-20 dBc
2450.0 MHz	Upper	Compliant	54 dBuV/m

See spectrum analyser scan plots – Annex J

Measure as compliant see analyser plots

Notes:

- 1 The EUT activity transmitting data.
- 2 See Annex H for analyser plot.

Test Method:

- 1 As per section 15.247
- 2 A plot covering the lowest channel and band edge was taken. A marker was set on the peak emission of the lowest channel. The delta marker function was then used to measure the highest out of band emissions. (If no peaks exist outside the band the level is taken at the band edge).
- 3 A plot covering the highest channel and band edge was taken. A marker was set on the peak emission of the highest channel. The delta marker function was then used to measure the highest out of band emissions. (If no peaks exist outside the band the level is taken at the band edge).

The test equipment used for the tests is shown below:

TYPE OF EQUIPMENT	MAKER/SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	FSU46	200034	UH281	X
HORN ANTENNA	EMCO	3115	9010-3580	138	X
PRE AMPLIFIER	HP	8449B	3008A016	572	X
CABLE	SUCCOFLEX	N/A	35226/4	UH291	X
CABLE	MEGAPHASE	TM26-3131 36	400559	UH293	X

RECEIVER TESTS

UNINTENTIONAL RADIATED EMISSIONS– Part 15.109

Ambient temperature = 18°C
 Relative humidity = 54%
 Conditions = Radiated OATS
 Supply voltage = +6Vdc

	Emission Freq (MHz)	Meas Rx. (dBuV)	Cable loss (dB)	Ant. Factor (dB/m)	Pre Amp Gain (dB)	Field Strength (dBµV/m)	Extrap. Factor (dB)	Result (µV/m)	Limit (µV/m)
30MHz – 88MHz								Note 4	100
88MHz – 216MHz								Note 4	150
216MHz – 960MHz								Note 4	200
960MHz – 1GHz								Note 4	500
1GHz – 25GHz	2448.102 4896.092	57.47 49.88	1.2 1.8	28.9 34.2	35.0 34.8	52.57 51.08	9.54 9.54	141.72 117.89	500 500

Notes:
 1 Emissions above 1GHz were measured with both a peak and average detectors.
 2 Measurements <1GHz were performed at 3 meters.
 3 Measurements >1GHz were initially performed at 1 metre.
 4 Only emissions with in 20dB of limit are recorded.
 5 Peak emissions recorded, peak emissions meet the average limit.

Test Method:
 1 The EUT was operating in a permanent receive mode.
 2 Measuring distances as Notes 3 to 5 above.
 3 EUT 0.8 metre above ground plane.
 4 Emissions maximised by rotation of EUT, on an automatic turntable.
 Raising and lowering the receiver antenna between 1m & 4m >30MHz.
 Horizontal and vertical polarisations, of the receive antenna.
 EUT orientation in three orthogonal planes. Maximum results recorded.

The test equipment used for the tests is shown below:

TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
SPECTRUM ANALYSER	RHODE & SCHWARZ	FSU46	200034	UH281	X
HORN ANTENNA	EMCO	3115	9010-3580	138	X
PRE AMPLIFIER	HP	8449B	3008A016	572	X
CABLE	SUCCOFLEX	N/A	35226/4	UH291	X
CABLE	MEGAPHASE	TM26-3131 36	400559	UH293	X

ANNEX A
PHOTOGRAPHS

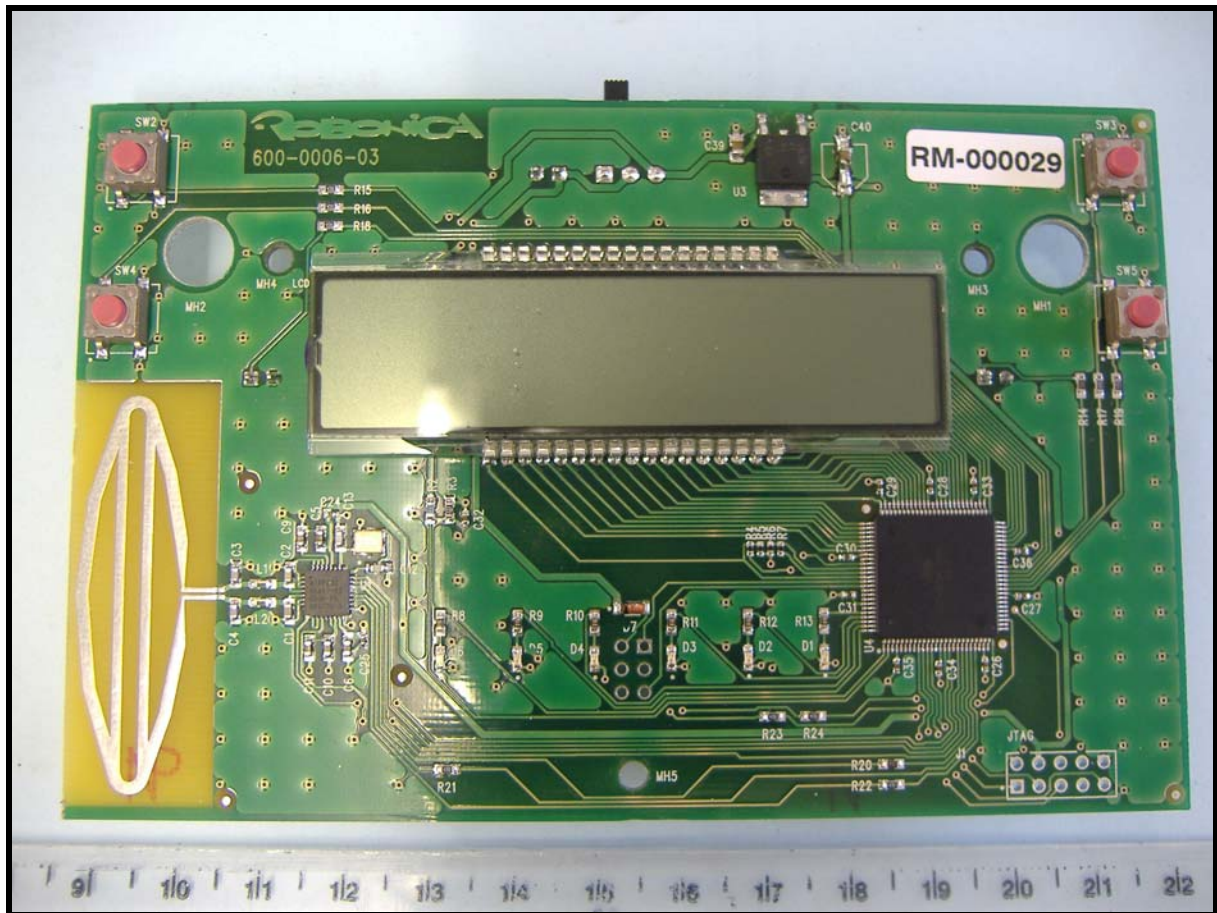






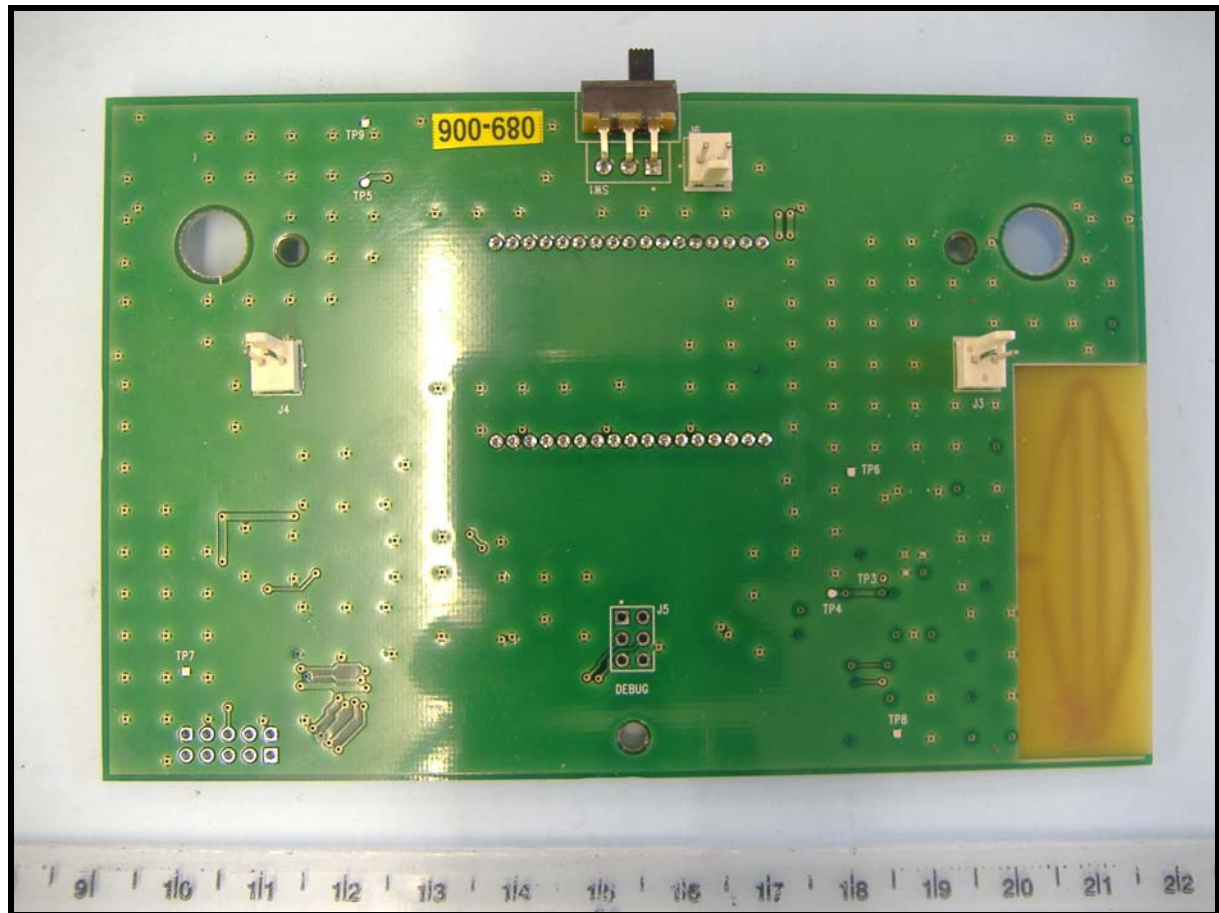
PHOTOGRAPH No. 4

PCB COMPONENT SIDE



PHOTOGRAPH No. 5

PCB TRACK SIDE



ANNEX B
APPLICANT'S SUBMISSION OF DOCUMENTATION LIST

APPLICANT'S SUBMISSION OF DOCUMENTATION LIST

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

ANNEX C
EQUIPMENT CALIBRATION DETAILS

TRL Number	Equipment Type	Manufacturer	Last Cal Calibration	Calibration Period	Due For Calibration
UH06/07	IC OATS Submission	TRL	02/07/2009	24	02/07/2011
UH06/07	NSA Calibration	TRL	19/06/2009	12	19/06/2010
UH281	Spectrum Analyser	R&S	28/10/2008	12	28/10/2009
UH291	K-Type Cable	Succoflex	15/07/2009	12	15/07/2010
UH293	K-Type Cable	Megaphase	15/07/2009	12	15/07/2010
UH330	K type transition	Maury M'wave	12/06/2008	24	12/06/2010
UH340	Signal Generator	HP	03/06/2009	12	03/06/2010
UH378	3M Cable	TRaC	15/07/2009	12	15/07/2010
UH379	High Pass Filter	Axell	15/07/2009	12	15/07/2010
L005	CMTA	R&S	29/10/2008	12	29/10/2009
L007	Loop Antenna	R&S	22/05/2007	27	22/08/2009
L138	1-18GHz Horn	EMCO	23/05/2007	27	23/08/2009
L139	1-18GHz Horn	EMCO	23/05/2007	27	23/08/2009
L176	Signal Generator	Marconi	23/06/2009	12	23/06/2010
L426	Temperature Indicator	Fluke	21/01/2009	12	21/01/2010
L479	Analyser	Anritsu	22/09/2008	12	22/09/2009
L527	3M Cable	TRaC	15/07/2009	12	15/07/2010
L572	Pre Amp	Agilent	15/07/2009	12	15/07/2010
L664	3M Cable	TRaC	15/07/2009	12	15/07/2010

ANNEX K
MEASUREMENT UNCERTAINTY

Radio Testing – General Uncertainty Schedule

All statements of uncertainty are expanded standard uncertainty using a coverage factor of 1.96 to give a 95% confidence where no required test level exists.

[1] Adjacent Channel Power

Uncertainty in test result = **1.86dB**

[2] Carrier Power

Uncertainty in test result (Equipment - TRLUH120) = **2.18dB**

Uncertainty in test result (Equipment – TRL05) = **1.08dB**

Uncertainty in test result (Equipment – TRL479) = **2.48dB**

[3] Effective Radiated Power

Uncertainty in test result = **4.71dB**

[4] Spurious Emissions

Uncertainty in test result = **4.75dB**

[5] Maximum frequency error

Uncertainty in test result (Equipment - TRLUH120) = **119ppm**

Uncertainty in test result (Equipment – TRL05) = **0.113ppm**

Uncertainty in test result (Equipment – TRL479) = **0.265ppm**

[6] Radiated Emissions, field strength OATS 14kHz-18GHz Electric Field

Uncertainty in test result (14kHz – 30MHz) = **4.8dB**, Uncertainty in test result (30MHz – 1GHz) = **4.6dB**,

Uncertainty in test result (1GHz-18GHz) = **4.7dB**

[7] Frequency deviation

Uncertainty in test result = **3.2%**

[8] Magnetic Field Emissions

Uncertainty in test result = **2.3dB**

[9] Conducted Spurious

Uncertainty in test result (Equipment TRL479) Up to 8.1GHz = **3.31dB**

Uncertainty in test result (Equipment TRL479) 8.1GHz – 15.3GHz = **4.43dB**

Uncertainty in test result (Equipment TRL479) 15.3GHz – 21GHz = **5.34dB**

Uncertainty in test result (Equipment TRLUH120) Up to 26GHz = **3.14dB**

[10] Channel Bandwidth

Uncertainty in test result = **15.5%**

[11] Amplitude and Time Measurement – Oscilloscope

Uncertainty in overall test level = **2.1dB**, Uncertainty in time measurement = **0.59%**, Uncertainty in Amplitude measurement = **0.82%**

[11] Power Line Conduction

Uncertainty in test result = **3.4dB**

[12] Spectrum Mask Measurements

Uncertainty in test result = **2.59% (frequency)**
Uncertainty in test result = **1.32dB (amplitude)**

[13] Adjacent Sub Band Selectivity

Uncertainty in test result = **1.24dB**

[14] Receiver Blocking – Listen Mode, Radiated

Uncertainty in test result = **3.42dB**

[15] Receiver Blocking – Talk Mode, Radiated

Uncertainty in test result = **3.36dB**

[16] Receiver Blocking – Talk Mode, Conducted

Uncertainty in test result = **1.24dB**

[17] Receiver Threshold

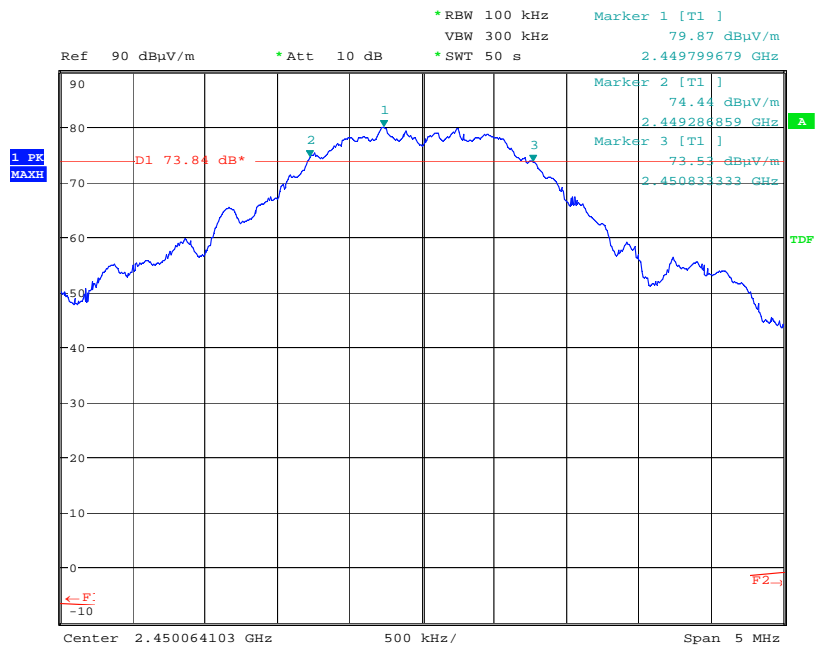
Uncertainty in test result = **3.23dB**

[18] Transmission Time Measurement

Uncertainty in test result = **7.98%**

ANNEX E
6dB BANDWIDTH

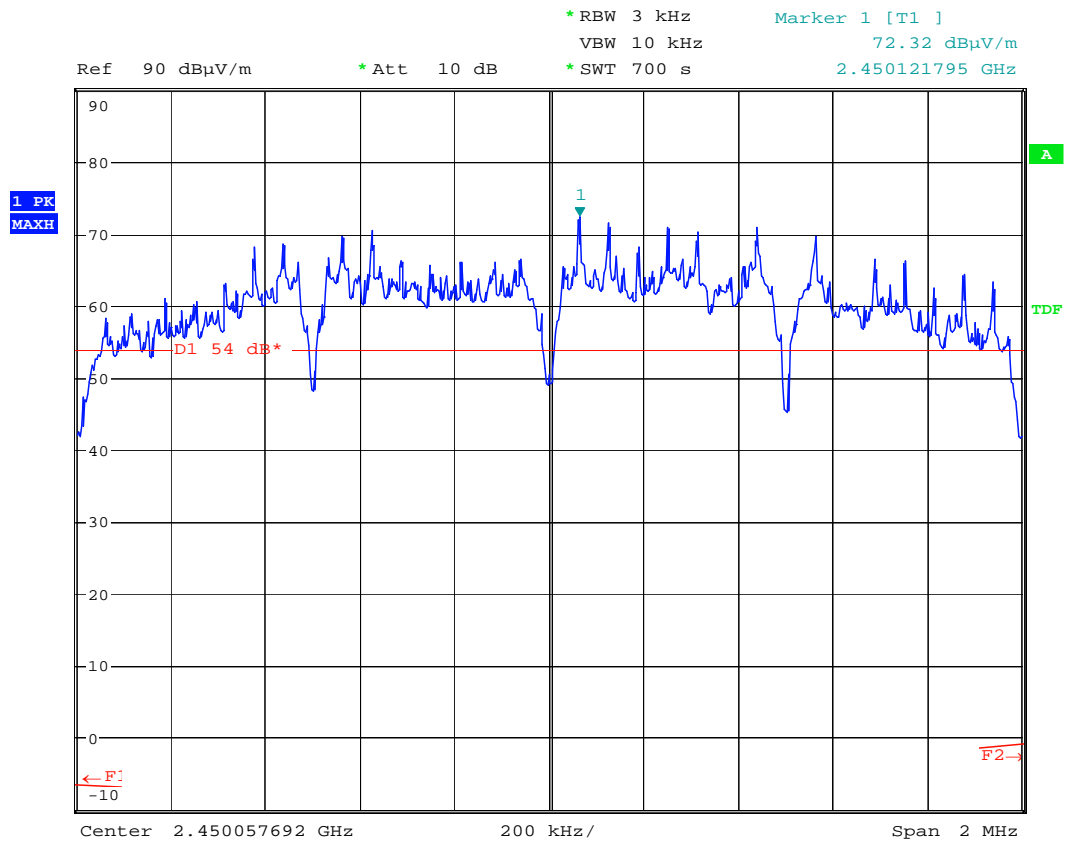
6dB BANDWIDTH



Date: 15.JUL.2009 15:50:03

ANNEX F
POWER SPECTRAL DENSITY

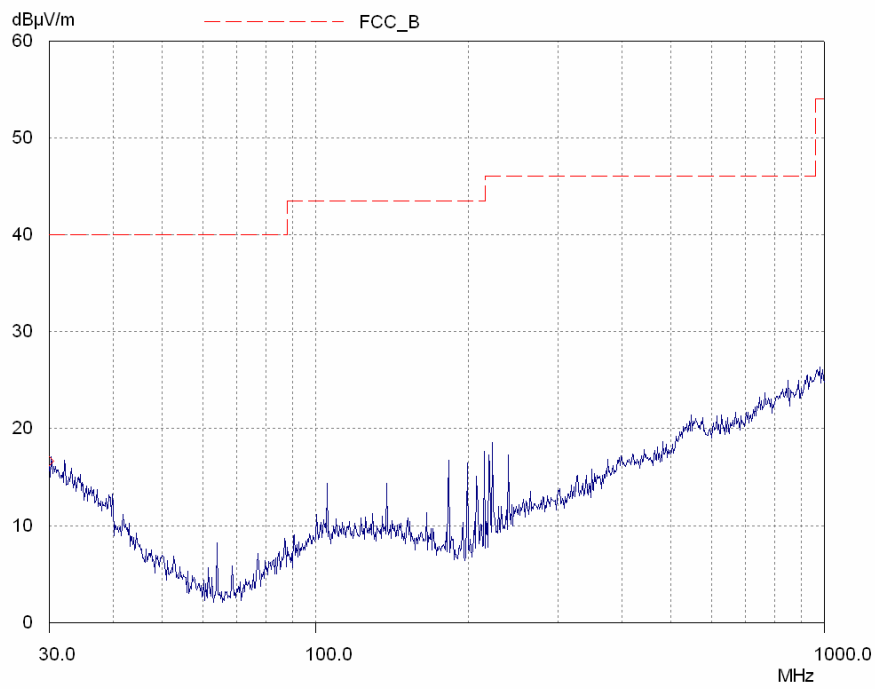
POWER SPECTRAL DENSITY



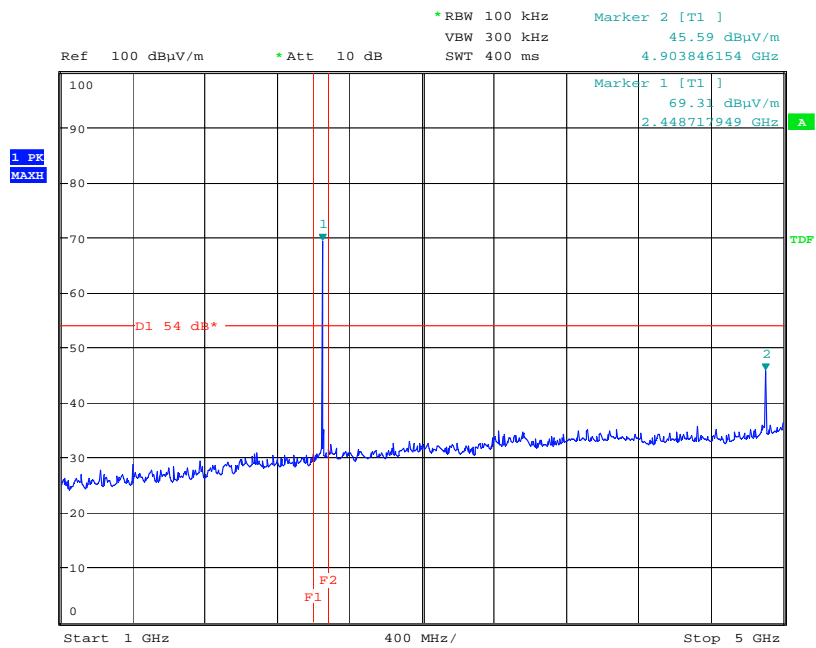
Date: 15.JUL.2009 16:20:30

ANNEX G

INTENTIONAL RADIATED EMISSIONS

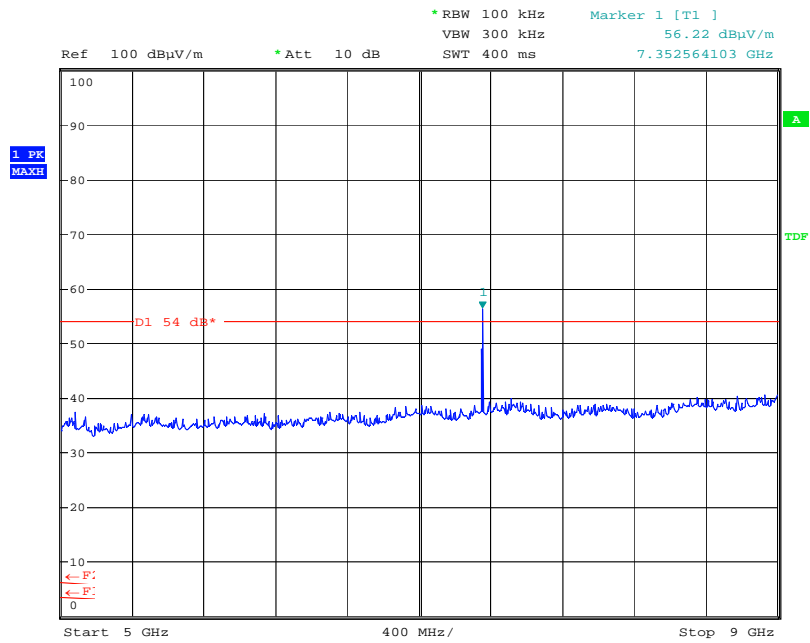


30 MHz – 1 GHz



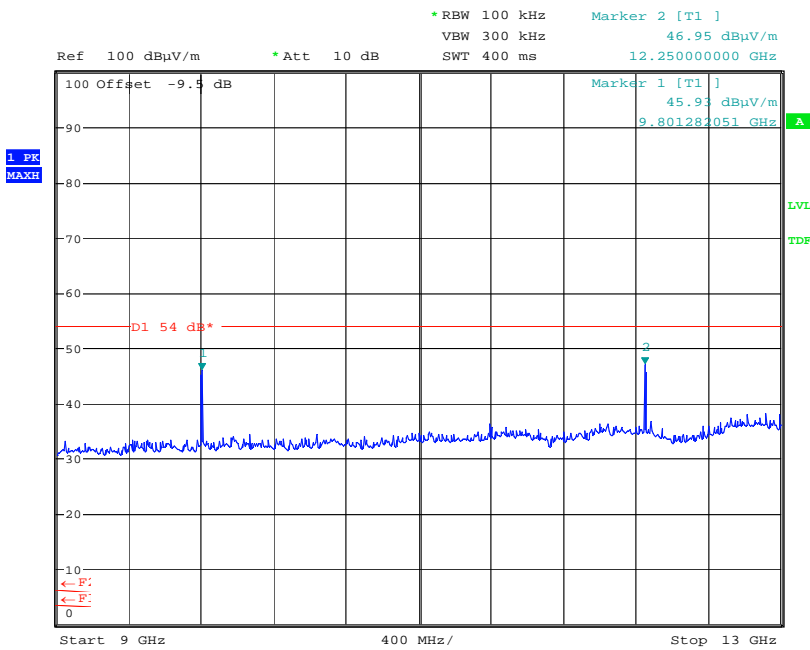
Date: 15.JUL.2009 15:31:59

1 GHz – 5 GHz



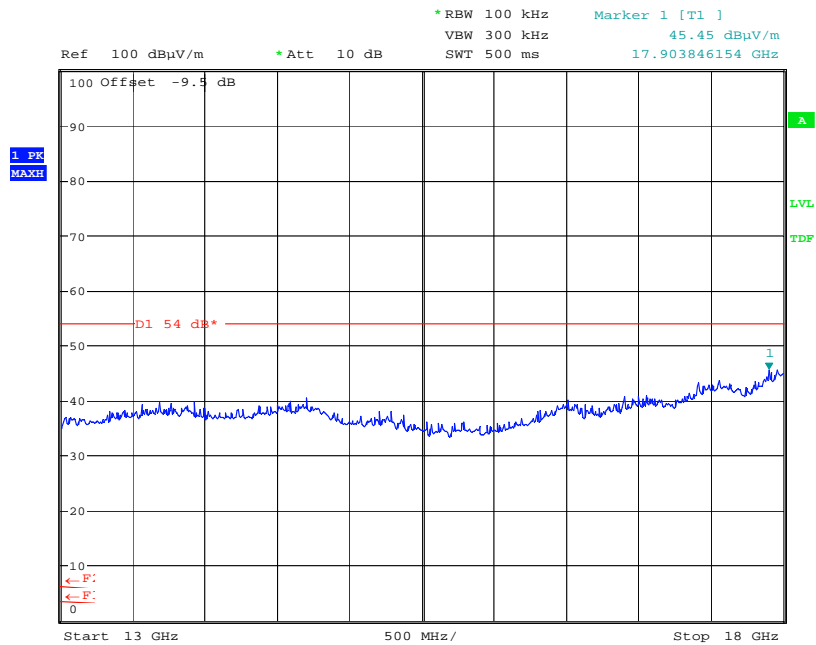
Date: 15.JUL.2009 15:32:30

5 GHz –9 GHz



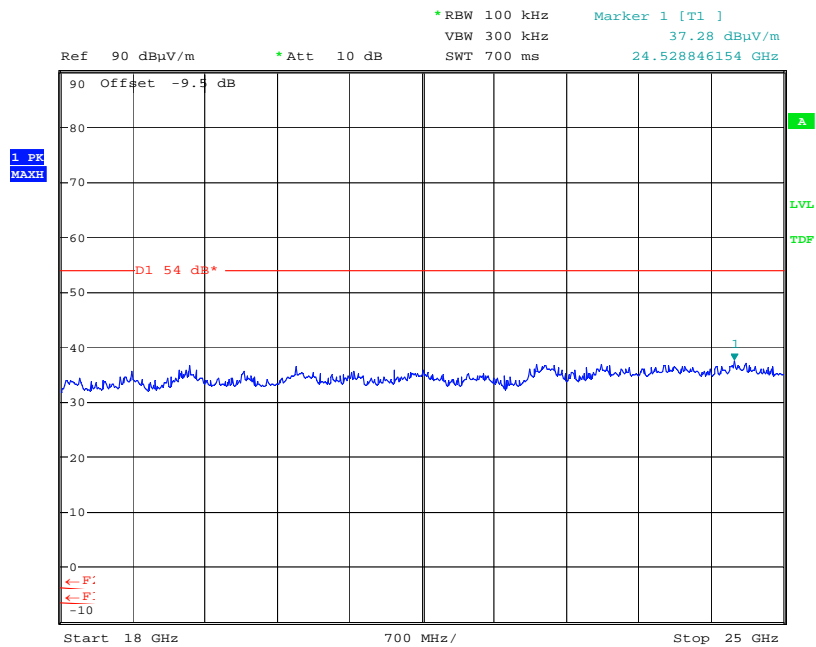
Date: 15.JUL.2009 15:18:24

9 GHz – 13 GHz



Date: 15.JUL.2009 15:19:13

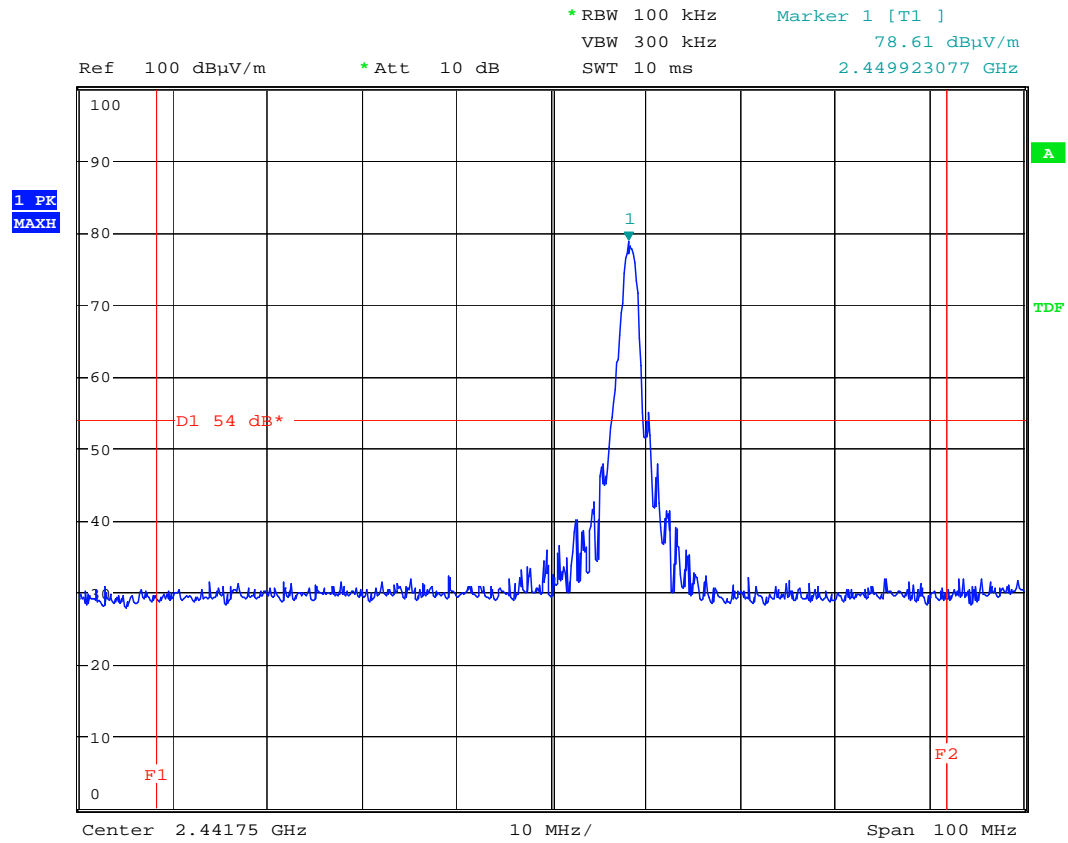
13 GHz – 18 GHz



Date: 15.JUL.2009 15:05:16

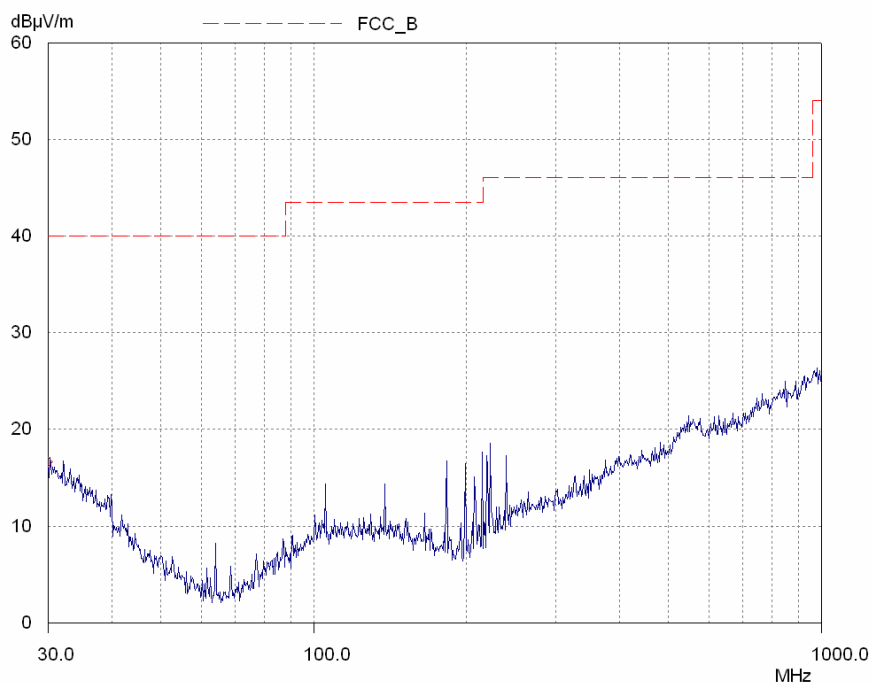
18 GHz – 25 GHz

ANNEX H
RADIATED BANDEDGE COMPLIANCE

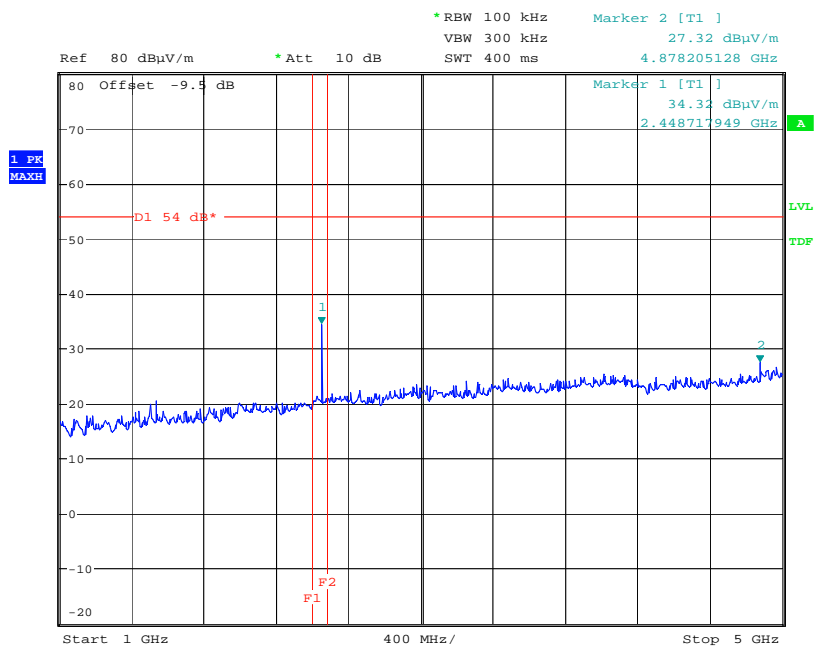


Date: 15.JUL.2009 15:54:00

ANNEX I
UNINTENTIONAL RADIATED EMISSIONS

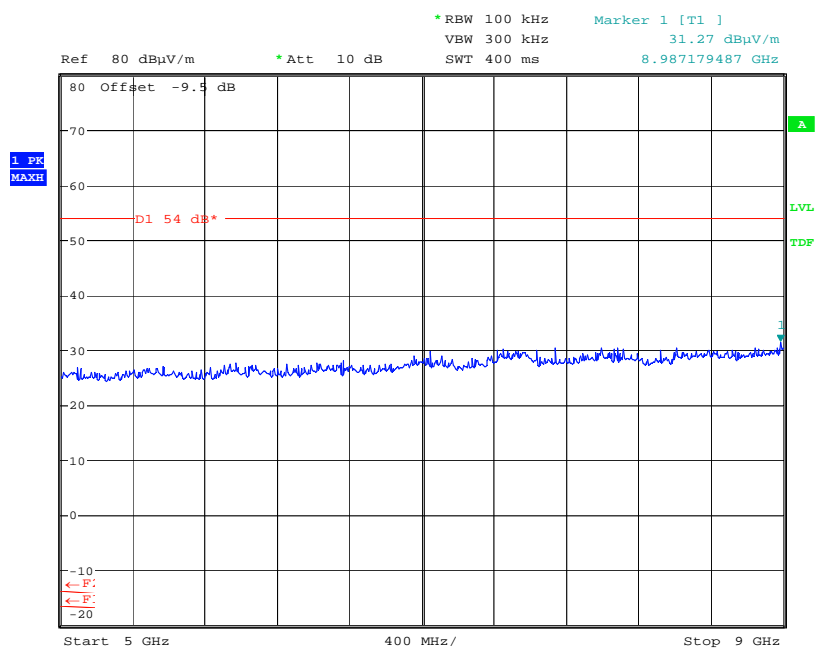


30 MHz – 1 GHz



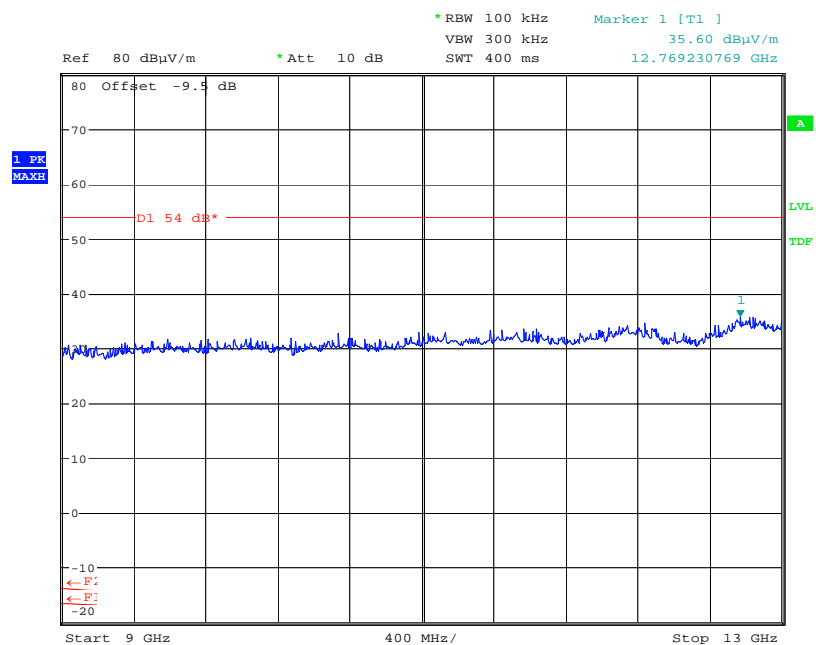
Date: 15.JUL.2009 15:09:13

1 GHz – 5 GHz



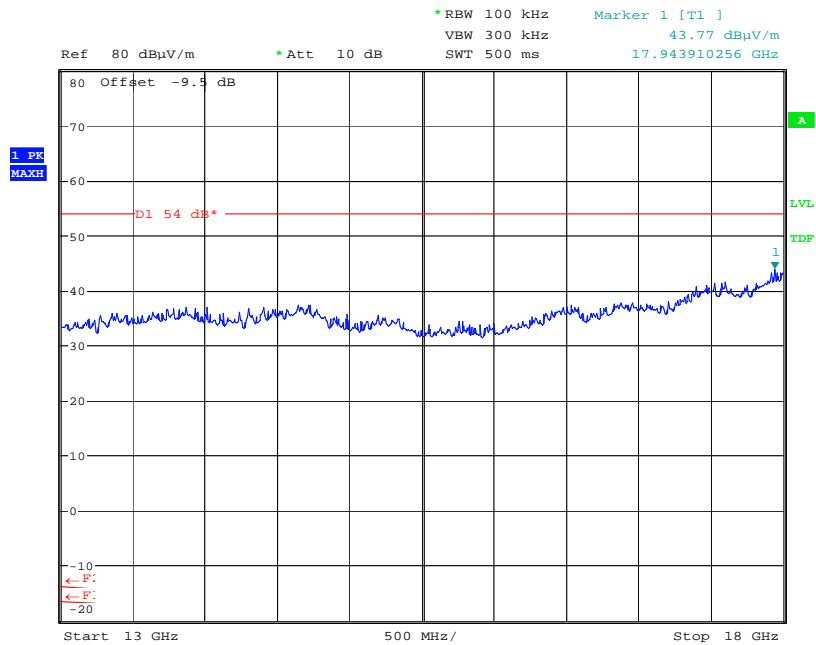
Date: 15.JUL.2009 15:10:09

5 GHz – 9 GHz



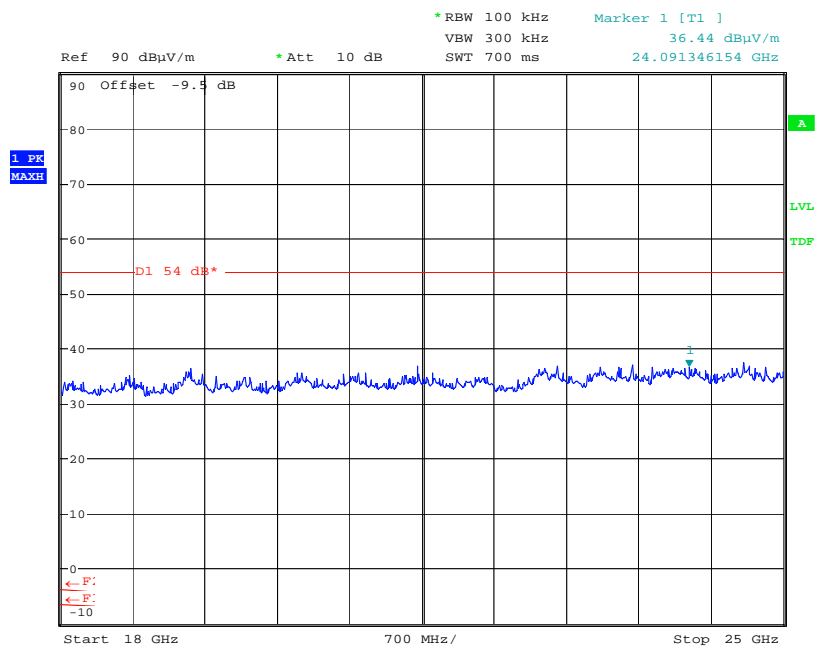
Date: 15.JUL.2009 15:10:29

9 GHz – 13 GHz



Date: 15.JUL.2009 15:10:43

13 GHz – 18 GHz



Date: 15.JUL.2009 15:06:10

18 GHz – 25 GHz