REPORT ON

Limited FCC CFR 47: Parts 15 B and C Testing in support of an
Application for Grant of Equipment Authorisation
of a Albert Hall Meetings Limited Clikapad Keypad

FCC ID: SMP CLIKAPAD

Report No OR613808/02 Issue 2 March 2005

TÜV PRODUCT SERVICE

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REPORT ON Limited FCC CFR 47: Parts 15 B and C Testing in support of an Application for Grant of Equipment Authorisation of a Albert Hall Meetings Limited Clikapad Keypad

FCC ID: SMP CLIKAPAD

Report No OR613808/02 Issue 2

March 2005

PREPARED FOR
Albert Hall Meetings Limited
Albert Hall
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Fleet
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DATED 1st March 2005

DISTRIBUTION

Albert Hall Meetings Limited	Copy 1
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ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47: Parts 15 B & C. The sample tested was found to comply with the requirements defined in the applied rules.

Test Engineers;

T Guy

UKAS TESTING 0141 Group

CONTENTS

SECTION 1

REPORT SUMMARY

Limited FCC CFR 47: Parts 15 B and C Testing in support of an
Application for Grant of Equipment Authorisation
of a Albert Hall Meetings Limited Clikapad Keypad

1.1 STATUS

EQUIPMENT UNDER TEST	Albert Hall Meetings Limited Clikapad Keypad
OBJECTIVE	To undertake measurements to determine the Equipment Under Test's (EUT's) compliance with the specification.
NAME AND ADDRESS OF CLIENT	Albert Hall Meetings Limited Albert Hall 161 Albert Street Fleet GU51 3RP
TYPE NUMBER	CLIKAPAD
SERIAL NUMBERS	000001047, 000001071, 000001093, 000001035
HARDWARE VERSION	0205-1
DECLARED VARIANTS	CLIKAPAD DETECTOR
TEST SPECIFICATION / ISSUE / DATE	FCC CFR 47: Part 15 B and C August 2002
NUMBER OF ITEMS TESTED	Four
SECURITY CLASSIFICATION OF EUT	Commercial In Confidence
INCOMING RELEASE DATE	Declaration of Build Status 16 February 2005
DISPOSAL REFERENCE NUMBER DATE	Held pending disposal Not Applicable Not Applicable
ORDER NUMBER DATE	PO20050062 31 January 2005
START OF TEST	2 February 2005
FINISH OF TEST	6 February 2005
RELATED DOCUMENTS	ANSI C63.4 2001. Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz. FCC Public Notice document (DA 00-705 released 30 March 2000)

1.2 INTRODUCTION

The information contained within this report is intended to show limited verification of compliance of the Albert Hall Meetings Limited Clikapad System to the requirements of FCC Specification Parts 15.109, 15.205, 15.209 and 15.249.

Testing was carried out in support of an application for Grant of Equipment Authorisation in the name of Albert Hall Meetings Limited.

This Test Report No OR613808/02 Issue 2 replaces Report No OR613808/02 Issue 1, which is issued to correct the omission of the limits for Part 15.109.

1.2.1 DECLARATION OF BUILD STATUS

MAIN EUT	
MANUFACTURING DESCRIPTION	Voting System Keypad
MANUFACTURER	AHM Ltd (Albert Hall Meetings Limited)
TYPE	CLIKAPAD
PART NUMBER	CLIKAPAD
SERIAL NUMBER	000001047, 000001071, 000001093, 000001035
HARDWARE VERSION	0205-1
TRANSMITTER OPERATING RANGE	2400-2524MHz (Restricted to 2406-2477MHz)
COUNTRY OF ORIGIN	UK
RECEIVER OPERATING RANGE	2400-2524MHz (Restricted to 2406-2477MHz)
ITU DESIGNATION OF EMISSION	1M00F1D
HIGHEST INTERNALLY GENERATED FREQUENCY	4MHz
POWER	1mW
FCC ID	SMP CLIKAPAD
INDUSTRY CANADA ID	5716A CLIKAPAD
TECHNICAL DESCRIPTION	A Keypad transceiver for operation in the 2.4-2.5GHz ISM Band. This unit is for use in a Voting System
BATTERY/POWER SUPPLY	
MANUFACTURING DESCRIPTION	Integral
MANUFACTURER	Maxell
TYPE	Lithium
PART NUMBER	CR2032
VOLTAGE	3V
COUNTRY OF ORIGIN	Japan

Signature

Date 16 February 2005
D of B S Serial No OR613808-02

BABT formally certifies that the manufacturer's declaration as reproduced in this report, is a true and accurate record of the original received from the applicant.

1.3 BRIEF SUMMARY OF RESULTS

A brief summary of the tests carried out is shown below.

Test	Spec Clause	Test Description	Result	Levels/Comments
2.1	15.109	Spurious Radiated Emissions Idle	Pass	Class A and Class B
2.2	15.205	Measurement at Band Edge	Pass	
2.3	15.249(a)	Maximum Field Strength, Carrier & Harmonics	Pass	
2.4	15.209, 15.249 (d)	Spurious Radiated Emissions, Transmit, 30MHz to 1GHz	Pass	
2.5	15.209, 15.249(d) & 15.209 (e)	Spurious Radiated Emissions, Transmit, 1 to 25GHz	Pass	

1.4 PRODUCT INFORMATION

1.4.1 Technical Description

The Equipment Under Test (EUT) was a Albert Hall Meetings Limited Clikapad Keypad, which offers 2.4GHz Short Range Device Functionality connectivity.

1.4.2 Modes of Operation

Modes of operation of the EUT during testing were as follows:

Applicable testing was carried out with the EUT transmitting at maximum power or receiving as detailed in Section 1.4.3 “Test Configuration”.

1.4.3 Test Configuration

1.4.3.1 Test Configuration – Transmit.

Keypad Transmitting on the following channels and frequencies*;*
Bottom Channel: 2.406GHz
Middle Channel: 2.442GHz
Top Channel: 2.478GHz
The Output Power level was set to Maximum

1.4.3.2 Test Configuration – Idle

Keypad in Idle on the following channels and frequencies*;*
Bottom Channel: 2.406GHz

1.5 TEST CONDITIONS

The EUT was set-up simulating a typical user installation on the Alternative Open Area Test Site identified in Appendices A and tested in accordance with the applicable specification.

For all tests, the Albert Hall Meetings Limited Clikapad Keypad was powered via its own internal battery.
The EUT is capable of transmitting using either 256kbps or 1Mbps data rates. For the purpose of this testing a comparison was made between the Maximum Peak Carrier Field Strengths of EUT's operating at 256kbps or 1Mbps data rates, the results are given below:

Carrier Frequency (GHz)	Serial No	Data Rate kbps	Measured (dBµV/m)
2.406	000001047	1000	94.5
2.406	000001040	256	93.0
2.442	000001071	1000	92.4
2.442	000001056	256	90.4
2.478	000001093	1000	89.9
2.478	000001081	256	89.5

As the measured Maximum Peak Carrier Field Strengths of EUT's operating at 1Mbps data rates were slightly higher or at least the same, then for the purposes of the testing carried out in this test report 1Mbps data rate was considered the "worst-case" and hence this was the data rate used for testing.

1.6 DEVIATIONS FROM THE STANDARD

Not Applicable

1.7 MODIFICATION RECORD

Not Applicable

SECTION 2

TEST DETAILS

Limited FCC CFR 47: Part 15 Testing in support of an
Application for Grant of Equipment Authorisation
Of a Albert Hall Meetings Limited Clikapad Keypad

2.1 SPURIOUS RADIATED EMISSIONS IDLE

2.1.1 Specification Reference

FCC CFR 47: Part 15 Subpart B, Section 15.109

2.1.2 Equipment Under Test

Albert Hall Meetings Limited Clikapad Keypad

2.1.3 Date of Test

6 February 2005

2.1.4 Test Equipment Used

The major items of test equipment used for the above tests are identified as “Section 2.1” within the Test Equipment Used table shown in Section 3.1.

2.1.5 Test Procedure

Test Performed in accordance with ANSI C63.4.

A preliminary profile of the Spurious Radiated Emissions was obtained by operating the EUT on a remotely controlled turntable within a semi-anechoic chamber. Measurements of emissions from the EUT were obtained with the Measurement Antenna in both Horizontal and Vertical Polarisations. The profiling produced a list of the worst-case emissions together with the EUT azimuth and antenna polarisation.

Using the information from the preliminary profiling of the EUT. The list of emissions was then confirmed or updated under Alternative Open Site conditions. Emission levels were maximised by adjusting the antenna height, antenna polarisation and turntable azimuth.

Emissions identified within the range 30MHz – 1GHz were then formally measured using a CISPR Quasi-Peak detector.

The measurements were performed at a 3m distance unless otherwise stated.

2.1 SPURIOUS RADIATED EMISSIONS IDLE - Continued

2.1.6 Test Results

Equipment Designation: Unintentional Radiator.

The EUT met the requirements of FCC CFR 47: Part 15 Subpart B, Section 15.109 for Spurious Radiated Emissions (30MHz – 1GHz) for both Class A and Class B limits.

EUT Idle Bottom Channel (2.406GHz) (Serial No 1035)

No emissions were detected in Idle mode within 20dB of the limit.

Class A Limits (Measurement Distance 10m)

Frequency Range MHz	Field Strength µV/m	Quasi Peak Field Strength dBµV/m
30-88	90	39.0
88-216	150	43.5
216-960	210	46.4
960-1000	300	49.5

Class B Limits (Measurement Distance 3m)

Frequency Range MHz	Field Strength µV/m	Quasi Peak Field Strength dBµV/m
30-88	100	40.0
88-216	150	43.5
216-960	200	40.0
960-1000	500	54.0

2.2 MEASUREMENT AT THE BAND EDGE (MARKER DELTA METHOD)

2.2.1 Specification Reference

FCC CFR 47: Part 15 Subpart C, Section 15.205

2.2.2 Equipment Under Test

Albert Hall Meetings Limited Clikapad Keypad

2.2.3 Date of Test

3 February 2005

2.2.4 Test Equipment Used

The major items of test equipment used for the above tests are identified as “Section 2.2” within the Test Equipment Used table shown in Section 3.1.

2.2.5 Test Procedure

Test Performed in accordance with FCC Public Notice document (DA 00-705 released 30 March 2000).

Test Performed in accordance with ANSI C63.4.

Measurements were obtained with the Measurement Antenna in both Horizontal and Vertical Polarisations together with the EUT azimuth and antenna polarisation.

The measurements were performed at a 3m distance unless otherwise stated.

2.2 MEASUREMENT AT THE BAND EDGE (MARKER DELTA METHOD) - continued

2.2.6 Test Results

The EUT met the requirements of FCC CFR 47: Part 15 Subpart C, Section 15.205 for Band Edge Measurements.

Measurements were made with the EUT transmitting on the Bottom Channel 2.406GHz.

Step 1

Bottom Channel Fundamental Field Strength Measurement.

Peak measurements performed utilising a Resolution Bandwidth and Video Bandwidth of 1MHz. Average measurements performed utilising a Resolution Bandwidth of 1MHz and Video Bandwidth of 10Hz.

Frequency	Antenna Polarisation	Height	Azimuth	Peak Field Strength	Average Field Strength
MHz	H/V	cm	deg	dBµV/m	dBµV/m
2406	H	119	185	94.5	37.7

Step 2

Determine Marker delta amplitude between 2406MHz (the fundamental) and 2390MHz (the Band Edge under investigation).

Using a span of 30MHz with Resolution Bandwidth and Video Bandwidth of 300kHz.

Marker Delta Amplitude = 46.9dB

Step 3

Subtracting the Marker Delta obtained from Step 2 from the 2406MHz Field Strength measurement from Step 1, gives following Result:

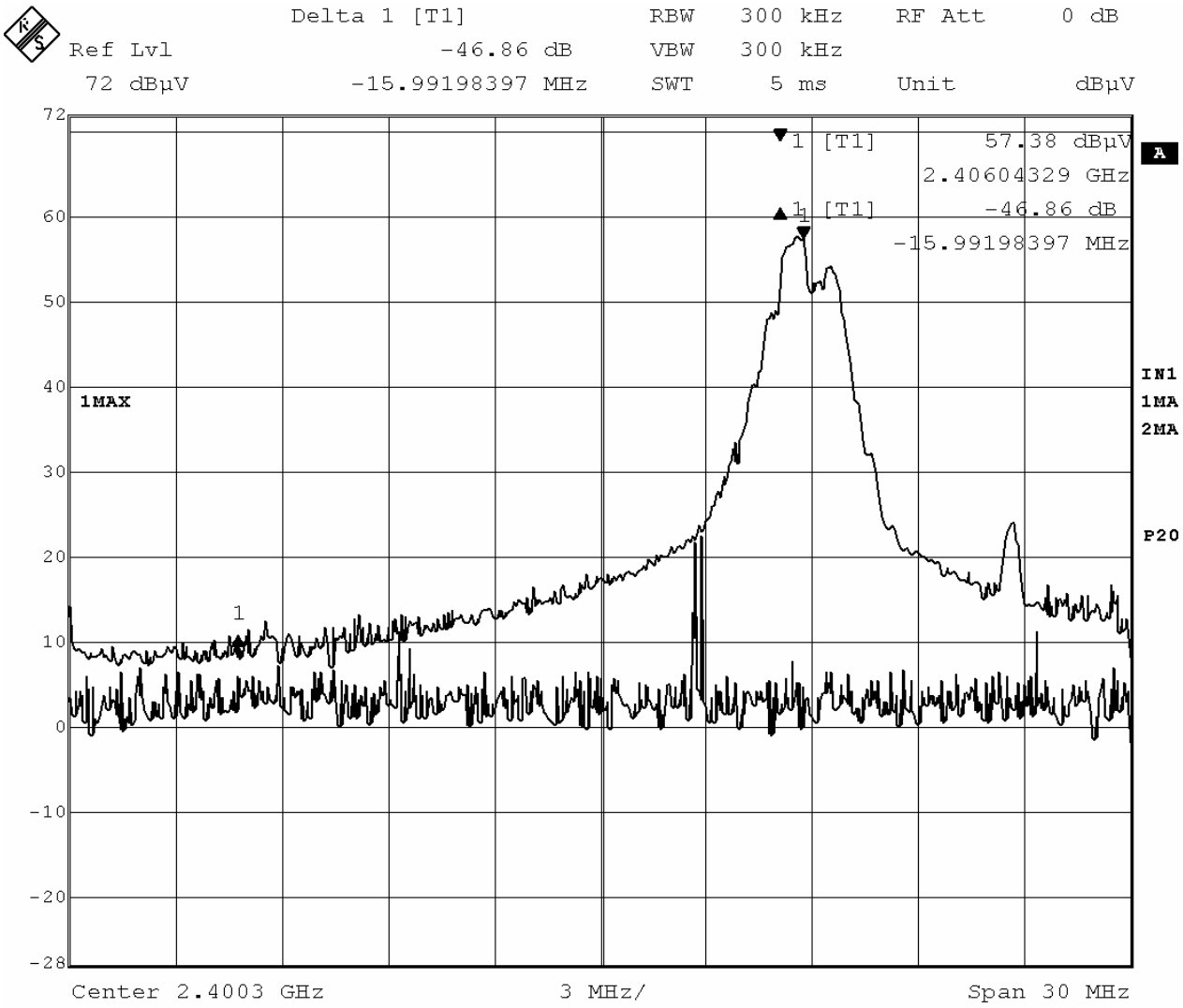
Peak of 47.6dBµV/m (Limit is 74.0dBµV/m)

Average of -9.2dBµV/m (Limit is 54.0dBµV/m)

2.2 MEASUREMENT AT THE BAND EDGE (MARKER DELTA METHOD) - continued

2.2.6 Test Results - continued

Plot for Bottom Channel 2406MHz



2.2 MEASUREMENT AT THE BAND EDGE (MARKER DELTA METHOD) - continued

2.2.6 Test Results - continued

The EUT met the requirements of FCC CFR 47: Part 15 Subpart C, Section 15.205 for Band Edge Measurements.

Measurements were made with the EUT transmitting on the Top Channel 2.478GHz.

Peak measurements performed utilising a Resolution Bandwidth and Video Bandwidth of 1MHz. Average measurements performed utilising a Resolution Bandwidth of 1MHz and Video Bandwidth of 10Hz.

Frequency	Antenna Polarisation	Height	Azimuth	Peak Field Strength	Average Field Strength
MHz	H/V	cm	deg	dBµV/m	dBµV/m
2478	H	115	196	89.9	38.3

Step 2

Determine Marker delta amplitude between 2478MHz (the fundamental) and 2483.5MHz (the Band Edge under investigation).

Using a span of 30MHz with Resolution Bandwidth and Video Bandwidth of 300kHz.

Marker Delta Amplitude = 39.5dB

Step 3

Subtracting the Marker Delta obtained from Step 2 from the 2478MHz Field Strength measurement from Step 1, gives following Result

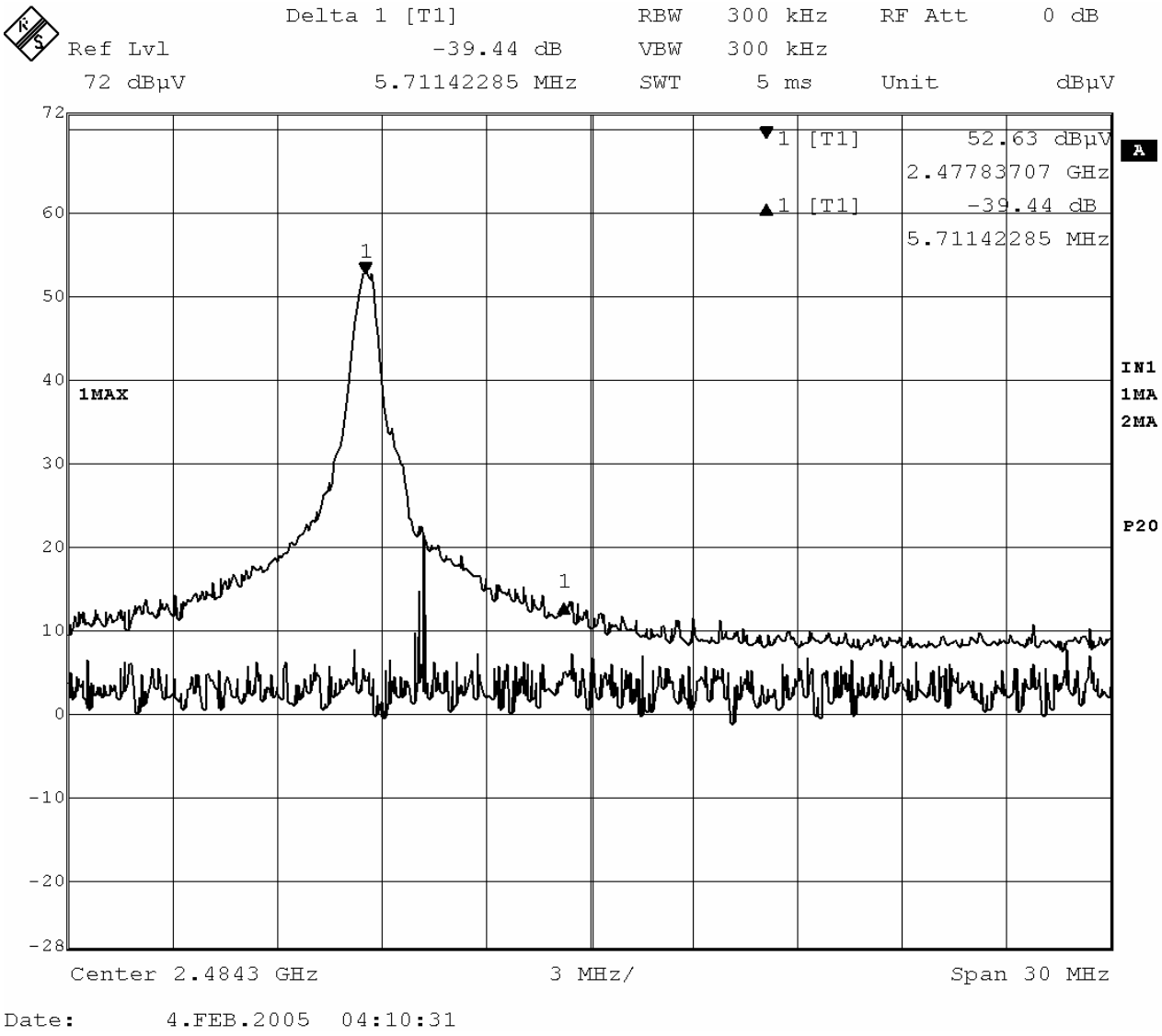
Peak of 50.4dBµV/m (Limit is 74.0dBµV/m)

Average of -1.2dBµV/m (Limit is 54.0dBµV/m)

2.2 MEASUREMENT AT THE BAND EDGE (MARKER DELTA METHOD) - continued

2.2.6 Test Results - continued

Plot for Top Channel 2478MHz



2.3 MAXIMUM FIELD STRENGTH OF CARRIER AND HARMONICS

2.3.1 Specification Reference

FCC CFR 47: Part 15 Subpart C, Section 15.249(a)

2.3.2 Equipment Under Test

Albert Hall Meetings Limited Clikapad Keypad

2.3.3 Date of Test

3 February 2005

2.3.4 Test Equipment Used

The major items of test equipment used for the above tests are identified as “Section 2.3” within the Test Equipment Used table shown in Section 3.1.

2.3.5 Test Procedure

Test Performed in accordance with ANSI C63.4.

The EUT contains an integral antenna and therefore the Maximum Peak Carrier Power was measured using the field strength method.

The Spectrum Analyser was tuned to the test frequency. The device Output Power setting was controlled as specified in the Product Information, Section 1.5 of this document. The device was then rotated through 360 degrees until the highest power level was observed in both horizontal and vertical polarisation. The device was then measured using Average and Peak Detectors.

2.3.6 Test Results

The EUT met the requirements of FCC CFR 47: Part 15 Section 249(a) for Maximum Carrier Field Strength.

Measurements were made with the EUT Transmitting.

EUT Tx on Bottom Channel (2.406GHz) (Serial No 1047)

Carrier Frequency (GHz)	Average Measured (mV/m)	Average Margin (mV/m)	Average Limit (mV/m)	Average Measured (dBµV/m)	Average Margin (dBµV/m)	Average Limit (dBµV/m)
2.406	0.076	49.924	50.0	37.7	56.3	94.0

2.3 MAXIMUM FIELD STRENGTH OF CARRIER AND HARMONICS - Continued

2.3.6 Test Results - Continued

EUT Tx on Middle Channel (2.442GHz) (Serial No 1071)

Carrier Frequency (GHz)	Average Measured (mV/m)	Average Margin (mV/m)	Average Limit (mV/m)	Average Measured (dBµV/m)	Average Margin (dBµV/m)	Average Limit (dBµV/m)
2.442	0.079	49.921	50.0	37.9	56.1	94.0

EUT Tx on Top Channel (2.478GHz) (Serial No 1093)

Carrier Frequency (gHz)	Average Measured (mV/m)	Average Margin (mV/m)	Average Limit (mV/m)	Average Measured (dBµV/m)	Average Margin (dBµV/m)	Average Limit (dBµV/m)
2.478	0.082	49.918	50.0	38.3	55.7	94.0

2.3 MAXIMUM FIELD STRENGTH OF CARRIER AND HARMONICS - Continued

The EUT met the requirements of FCC CFR 47: Part 15 Section 249(a) for Maximum Field Strength, Harmonics.

Measurements were made with the EUT Transmitting.

EUT Tx on Bottom Channel (2.406GHz) (Serial No 1047)

Frequency	Antenna		Turntable	Peak Field Strength	Peak Limit	Average Field Strength	Average Limit
	Pol	Height	Azimuth				
GHz	H/V	Cm	Deg	dBµV/m	dBµV/m	dBµV/m	dBµV/m
4.812	V	111	108	63.1	74.0	28.0	54.0
7.218	V	119	086	60.9	74.0	32.4	54.0
9.623	H	108	100	62.9	74.0	39.8	54.0

EUT Tx on Middle Channel (2.442GHz) (Serial No 1071)

Frequency	Antenna		Turntable	Peak Field Strength	Peak Limit	Average Field Strength	Average Limit
	Pol	Height	Azimuth				
GHz	H/V	Cm	Deg	dBµV/m	dBµV/m	dBµV/m	dBµV/m
4.884	H	100	209	67.3	74.0	28.7	54.0
7.326	V	100	111	60.6	74.0	33.0	54.0

EUT Tx on Top Channel (2.478GHz) (Serial No 1093)

Frequency	Antenna		Turntable	Peak Field Strength	Peak Limit	Average Field Strength	Average Limit
	Pol	Height	Azimuth				
GHz	H/V	cm	Deg	dBµV/m	dBµV/m	dBµV/m	dBµV/m
4.956	H	105	212	67.5	74.0	29.0	54.0
7.434	V	105	110	56.3	74.0	32.4	54.0

2.4 SPURIOUS RADIATED EMISSIONS 30MHz - 1GHz

2.4.1 Specification Reference

FCC CFR 47: Part 15 Subpart C, Section 15.209 and 15.249(d)

2.4.2 Equipment Under Test

Albert Hall Meetings Limited Clikapad Keypad

2.4.3 Date of Test

6 January 2005

2.4.4 Test Equipment Used

The major items of test equipment used for the above tests are identified as “Section 2.4” within the Test Equipment Used table shown in Section 3.1.

2.4.5 Test Procedure

Test Performed in accordance with ANSI C63.4.

A preliminary profile of the Spurious Radiated Emissions was obtained by operating the EUT on a remotely controlled turntable within a semi-anechoic chamber. Measurements of emissions from the EUT were obtained with the Measurement Antenna in both Horizontal and Vertical Polarisation’s. The profiling produced a list of the worst-case emissions together with the EUT azimuth and antenna polarisation.

Using the information from the preliminary profiling of the EUT. The list of emissions was then confirmed or updated under Alternative Open Site conditions. Emission levels were maximised by adjusting the antenna height, antenna polarisation and turntable azimuth.

Emissions identified within the range 30MHz – 1GHz were then formally measured using a CISPR Quasi-Peak detector.

The measurements were performed at a 3m distance unless otherwise stated.

2.4 SPURIOUS RADIATED EMISSIONS 30MHz - 1GHz - Continued

2.4.6 Test Results

Equipment Designation: Intentional Radiator.

The EUT met the requirements of FCC CFR 47: Part 15 Subpart C, Section 15.209 for Spurious Radiated Emissions (30MHz – 1GHz).

EUT Tx Bottom Channel (2.406GHz) (Serial No 1047)

No emissions above the noise floor were detected.

EUT Tx Middle Channel (2.442GHz) (Serial No 1071)

No emissions above the noise floor were detected.

EUT Tx Top Channel (2.478GHz) (Serial No 1093)

No emissions above the noise floor were detected.

2.5 SPURIOUS RADIATED EMISSIONS 1GHz – 25GHz

2.5.1 Specification Reference

FCC CFR 47: Part 15 Subpart C, Section 15.209, 15.249(d) and 15.249 (e)

2.5.2 Equipment Under Test

Albert Hall Meetings Limited Clikapad Keypad

2.5.3 Date of Test

6 February 2005

2.5.4 Test Equipment Used

The major items of test equipment used for the above tests are identified as “Section 2.5” within the Test Equipment Used table shown in Section 3.1.

2.5.5 Test Procedure

Test Performed in accordance with ANSI C63.4.

A preliminary profile of the Spurious Radiated Emissions was obtained by operating the EUT on a remotely controlled turntable within a semi-anechoic chamber. Measurements of emissions from the EUT were obtained with the Measurement Antenna in both Horizontal and Vertical Polarisations. The profiling produced a list of the worst-case emissions together with the EUT azimuth and antenna polarisation.

Using the information from the preliminary profiling of the EUT. The list of emissions was then confirmed or updated under Alternative Open Site conditions. Emission levels were maximised by adjusting the antenna height, antenna polarisation and turntable azimuth.

Emissions identified within the range 1GHz – 25GHz were then formally measured using Peak and Average Detectors, as appropriate.

The measurements were performed at a 3m distance unless otherwise stated.

2.5 SPURIOUS RADIATED EMISSIONS 1GHz – 25GHz - Continued

2.5.6 Test Results - Continued

1GHz - 25GHz Frequency Range

Equipment Designation: Intentional Radiator.

The EUT met the requirements of FCC CFR 47: Part 15 Subpart C, Section 15.249(a) for Spurious Radiated Emissions (1GHz –25GHz).

EUT Tx Bottom Channel (2.406GHz) (Serial No 1047)

Frequency	Antenna		Turntable	Peak Field Strength	Peak Limit	Average Field Strength	Average Limit
	Pol	Height	Azimuth				
GHz	H/V	cm	deg	dBµV/m	dBµV/m	dBµV/m	dBµV/m
2.333	H	120	200	64.2	74.0	35.0	54.0

EUT Tx Middle Channel (2.442GHz) (Serial No 1071)

No emissions above the noise floor were detected.

EUT Tx Top Channel (2.478GHz) (Serial No 1093)

No emissions above the noise floor were detected.

SECTION 3

TEST EQUIPMENT USED

AND MEASUREMENT UNCERTAINTY

3.1 TEST EQUIPMENT USED

Item	Instrument	Manufacturer	Type No	Serial No	EMC No	Cal. Due
Sections 2.1						
1	Spectrum Analyser	Hewlett Packard	8542E	3617A00165_00154	2286	09/12/2004
2	Bilog Antenna	Schaffner	CBL6143	-	2965	12/09/2005
3	Turntable Controller	No Data	HD 050	050/396	2528	-
4	Antenna Mast	EMCO	1051	-	2182	-
5	Screened Room 5	Siemens	EAC54300	NA	2533	-
Section 2.2 & 2.3						
6	Turntable Controller	No Data	HD 050	050/396	2528	-
7	EMI Test Receiver	Rohde & Schwarz	ESIB40	100142/040	2917	11/02/2005
8	Emco 3115 Drg Ant	Emco	3115	97015079	2397	07/07/2005
9	Antenna Mast	Emco	1051	-	2182	-
10	Screened Room 5	Siemens	EAC54300	NA	2533	-
Sections 2.4 & 2.5						
11	Turntable Controller	No Data	HD 050	050/396	2528	-
12	Screened Room 5	Siemens	EAC54300	NA	2533	-
13	Antenna Mast	EMCO	1051	-	2182	-
14	Low Noise Amplifier	Miteq Corp	AMF-3d-001080-18-13P	UNK	2457	-
15	Solid State Amplifier	Avanteck	AWT-18036	F13365 8452	1081	26/06/2005
16	Signal Amplifier	Avanteck	AMT-26177-33	6669	2072	25/06/2005
17	Drg Horn Antenna	Link Microtek Ltd	AM180HA-K-TU2	2007	2945	24/06/2005
18	10dB Attenuator	Marconi	6534/3	2954	1494	-
19	EMI Test Receiver	Rohde & Schwarz	ESIB40	100142/040	2917	11/02/2005
20	Drg Horn Antenna	Emco	3115	97015079	2397	07/07/2005
21	Signal Generator	Hewlett Packard	8673B	2147A00423	411	02/03/2005

3.2 MEASUREMENT UNCERTAINTY

For a 95% confidence level, the measurement uncertainties for defined systems are:-

IN THE FREQUENCY RANGE 30MHz TO 1000MHz		
TEST	**FREQUENCY**	**AMPLITUDE**
For Radiated Emissions, Quasi-Peak Measurements taken in Zero Span using the Hewlett Packard EMI Receiver and Bilog Antenna	$\pm 2 \times 10^{-7}$ x Centre Frequency	5.15dB calculated in accordance with CISPR 16-4
IN THE FREQUENCY RANGE 1GHz TO 10GHz		
TEST	**FREQUENCY**	**AMPLITUDE**
For Spurious Radiated Emissions measurements	$\pm 2 \times 10^{-7}$ x Centre Frequency	±6.3dB

SECTION 4

ACCREDITATION, DISCLAIMERS AND COPYRIGHT

4.1 ACCREDITATION, DISCLAIMERS AND COPYRIGHT

This report relates only to the actual item/items tested.

Our UKAS Accreditation does not cover opinions and interpretations and any expressed are outside the scope of our UKAS Accreditation.

Results of tests not covered by our UKAS Accreditation Schedule are marked NUA (Not UKAS Accredited).

APPENDIX A

TITCHFIELD FCC SITE COMPLIANCE LETTER

FEDERAL COMMUNICATIONS COMMISSION

Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046

October 18, 2002

Registration Number: 90987

TUV Product Service Ltd
Segensworth Road
Titchfield
Fareham, Hampshire, PO15 5RH
United Kingdom
Attention: Kevan Adsetts

Re: Measurement facility located at Titchfield
Anechoic chamber (3 meters) and 3 & 10 meter OATS
Date of Listing: October 18, 2002

Gentlemen:

Your request for registration of the subject measurement facility has been reviewed and found to be in compliance with the requirements of Section 2.948 of the FCC rules. The information has, therefore, been placed on file and the name of your organization added to the list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that the file must be updated for any changes made to the facility and the registration must be renewed at least every three years.

Measurement facilities that have indicated that they are available to the public to perform measurement services on a fee basis may be found on the FCC website www.fcc.gov under E-Filing, OET Equipment Authorization Electronic Filing, Test Firms.

Sincerely,

Thomas W Phillips
Electronics Engineer