



**TRL Compliance**  
part of TRAC global

**REPORT ON THE CERTIFICATION TESTING OF A  
GOLF-TECH LIMITED  
POWERTEE  
WITH RESPECT TO  
THE FCC RULES CFR 47, PART 15.245 Sept 2007  
INTENTIONAL RADIATOR SPECIFICATION**



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TEST REPORT NO: RU1473/8679

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GOLF-TECH LIMITED  
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THE FCC RULES CFR 47, PART 15.245 Sept 2007  
INTENTIONAL RADIATOR SPECIFICATION**

TEST DATE: 3<sup>rd</sup> June – 14<sup>th</sup> July 2008

TESTED BY: D WINSTANLEY

APPROVED BY: J CHARTERS  
RADIO SECTION  
LEADER

DATE: 15<sup>th</sup> December 2008

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  2. FCC EVALUATION LABORATORIES
  3. TRL Compliance Ltd

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0728

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<b>Notes:</b>		
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.		



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**CERTIFICATE OF CONFORMITY & COMPLIANCE**

FCC IDENTITY: WX7PTUS001

PURPOSE OF TEST: Certification

TEST SPECIFICATION: FCC RULES CFR 47, Part 15.245 Sept 2007

TEST RESULT: Compliant to Specification

EQUIPMENT UNDER TEST: Powertee

ITU: EMISSION CODE: 654kN0N

EQUIPMENT TYPE: Field Disturbance Sensor

PRODUCT USE: Automated Golf Tee

CARRIER EMISSION: 552.07  $\mu$ V/m

ANTENNA TYPE: Integral

ALTERNATIVE ANTENNA: Not Applicable

BAND OF OPERATION: 10500 – 10550 MHz

CHANNEL SPACING: Not Applicable, Wideband

NUMBER OF CHANNELS: 1

FREQUENCY GENERATION: SAW Resonator ☐ Crystal ☐ Synthesiser ☒

MODULATION METHOD: Amplitude ☐ Digital ☒ Angle ☐

POWER SOURCE(s): +110Vac

TEST DATE(s): 3<sup>rd</sup> June – 14<sup>th</sup> July 2008

APPLICANT: Golf-Tech Limited

ADDRESS: Unit 5  
Woodside  
South Marston Park  
Swindon  
Wiltshire  
SN3 4WA

TESTED BY: \_\_\_\_\_ D WINSTANLEY

APPROVED BY: \_\_\_\_\_ J CHARTERS  
RADIO SECTION  
LEADER

## APPLICANT'S SUMMARY

EQUIPMENT UNDER TEST (EUT):	Powertee
EQUIPMENT TYPE:	Field Disturbance Sensor
PURPOSE OF TEST:	Certification
TEST SPECIFICATION(s):	FCC RULES CFR 47, Part 15.245 Sept 2007
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 CONTACT PERSON(s):	Mr Roy Fox
E-mail address:	<a href="mailto:roy.fox@powertee.co.uk">roy.fox@powertee.co.uk</a>
APPLICANT:	Golf-Tech Limited
ADDRESS:	Unit 5 Woodside South Marston Park Swindon Wiltshire SN3 4WA
TEL:	+44 (0) 1793 822566
FAX:	+44 (0) 1793 822466
EUT(s) COUNTRY OF ORIGIN:	United Kingdom
TEST LABORATORY:	TRL Compliance Ltd
UKAS ACCREDITATION No:	0728
TEST DATE(s)	3 <sup>rd</sup> June – 14 <sup>th</sup> July 2008
TEST REPORT No:	RU1473/8679

## EQUIPMENT TEST / EXAMINATIONS REQUIRED

1.	TEST/EXAMINATION	RULE PART	DETECTOR	APPLICABILITY
	Intentional Emission Frequency:	15.245(b)	Average	YES
	Intentional Emission Field Strength:	15.245(b)	Average	YES
	Intentional Emission Band Occupancy:	15.215 (c)	Peak	YES
	Intentional Emission ERP (mW):	N/A	-	NO
	Spurious Emissions – Conducted:	15.207	Quasi Peak Average	YES
	Spurious Emissions – Radiated <1000MHz:	15.209	Quasi Peak	YES
	Spurious Emissions – Radiated >1000MHz:	15.245 15.209	Average	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
	Extrapolation Factor	15.31(f)	-	YES

2. Product Use: Automated Golf Tee
3. Emission Designator: 654kN0N
4. Duty Cycle: 100%
5. Temperatures: Ambient (Tnom) 24°C
6. Supply Voltages: Vnom +110Vac
- Note: Vnom voltages are as stated above unless otherwise shown on the test report page
7. Equipment Category: Single channel ☒  
Two channel ☐  
Multi-channel ☐
8. Channel spacing: Narrowband ☐  
Wideband ☒

## TRANSMITTER TESTS

### TRANSMITTER SPURIOUS EMISSIONS – RADIATED – PART 15.209

Ambient temperature	=	17°C(<1GHz)	3m measurements <1GHz	[X]
Relative humidity	=	54% (<1GHz),	3m measurements <26.5GHz	[X]
Conditions	=	Open Area Test Site (OATS)	1m measurements <53GHz	[X]
Supply voltage	=	+110Vac	3m extrapolated from 1m	[X]

Bottom Channel	FREQ. (MHz)	MEAS Rx (dBμV)	CABLE LOSS (dB)	ANT FACT. (dB/m)	PRE AMP (dB)	FIELD ST'GH (dBμV/m)	EXTRAP FACT (dB)	FIELD ST'GH (μV/m)	LIMIT (μV/m)
0.009MHz - 0.49MHz									
0.49MHz - 1.705MHz									
1.705MHz - 30MHz									
30MHz - 88MHz	33.95	10.14	0.96	16.2	-	27.3	-		100
	36.20	11.33	0.97	15.1	-	27.4	-		100
	36.70	14.12	0.98	14.9	-	30.4	-		100
	38.75	11.21	0.99	13.5	-	25.7	-		100
	40.55	6.81	0.99	12.6	-	20.4	-		100
	42.40	8.68	1.02	11.6	-	21.3	-		100
	51.10	17.28	1.12	7.10	-	25.5	-		100
	53.25	18.15	1.15	6.30	-	25.6	-		100
	56.15	20.54	1.16	5.60	-	27.3	-		100
	57.85	25.55	1.15	5.40	-	32.1	-		100
	59.60	27.97	1.13	5.10	-	34.2	-		100
	62.00	20.95	1.15	5.10	-	27.2	-		100
	64.75	13.78	1.22	5.00	-	20.0	-		100
	73.40	13.45	1.25	5.90	-	20.6	-		100
	77.10	13.20	1.30	6.40	-	20.9	-		100
	79.90	14.29	1.31	7.00	-	22.6	-		100
	82.15	12.05	1.35	7.30	-	20.7	-		100
88MHz - 216MHz									
216MHz - 960MHz									
960MHz - 1GHz									
1GHz - 53GHz	21058.60	33.78	2.16	37.2	-	73.14	-		7500
Limits	Restricted Bands 15.205								
	0.009 MHz to 0.49 MHz			2400/f(kHz) μV/m @ 300m					
	0.49 MHz to 1.705 MHz			24000/f(kHz) μV/m @ 30m					
	1.705MHz to 30MHz			30μV/m @ 30m					
	30MHz to 88MHz			100μV/m @ 3m					
	88MHz to 216MHz			150μV/m @ 3m					
	216MHz to 960MHz			200μV/m @ 3m					
	960MHz to 1GHz			500μV/m @ 3m					
	1GHz to 53GHz			500μV/m @ 3m					
	Un-restricted Bands & Harmonics								
	Harmonics <17.7 GHz Unrestricted Bands			2500μV/m @ 3m					
	Harmonics > 17.7 GHz			7500μV/m @ 3m					
	All other Emissions			50 dBc @ 3m					

- Notes:**
- 1 Results quoted are extrapolated as indicated
  - 2 Emissions were searched to: (x) 1000MHz inclusive, as per Part 15.33a
  - 3 Extrapolation factor 9.5dB from 1m to 3m, as per Part 15.31f
  - 4 Measurements >26.5GHz @ 1m as per Part 15.31f(1)
  - 5 Receiver detector >1GHz = CISPR, Quasi-Peak, 120kHz bandwidth
  - 6 Receiver detector >1GHz = Peak Hold, 1MHz resolution bandwidth
  - 7 New batteries used for battery powered products.
  - 8 See Annex F for Emissions Graph(s)
  - 9 Only emissions within 20 dB of the limit are recorded.

- Test Method:**
- 1 As per Radio – Noise Emissions, ANSI C63.4: 2003
  - 2 Measuring distances as Notes 1 to 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.  
Horizontal and vertical polarisations, of the receive antenna.  
EUT orientation in three orthogonal planes.  
Maximum results recorded.

The test equipment used for the Transmitter Spurious Emissions – Radiated – Part 15.209 tests is shown below:

TYPE OF EQUIPMENT	MAKER/SUPPLIER	MODEL No	SERIAL No	TRL No	EQUIPMENT USED
HORN ANTENNA	EMCO	3115	9010 - 3580	138	<b>X</b>
HORN ANTENNA	FLANN	24240-20	124	265A	<b>X</b>
HORN ANTENNA	FLANN	20240-20	322	300	<b>X</b>
PRE AMPLIFIER	AGILENT	8449B	3008A016	572	<b>X</b>
RECEIVER	R & S	ESVS 10	841431/014	UH186	<b>X</b>
BILOG ANTENNA	YORK	CBL611/A	1618	UH191	<b>X</b>
SPECTRUM ANALYSER	R & S	FSU	200034	UH281	<b>X</b>



## TRANSMITTER TESTS

### TRANSMITTER INTENTIONAL EMISSION – RADIATED – Part 15.245 Sept 2007

Ambient temperature	=	24°C(<1GHz),	3m measurements @ fc	[X]
Relative humidity	=	58%(<1GHz),	10m measurements @ fc	[ ]
Conditions	=	Open Area Test Site (OATS)	30m measurements @ fc	[ ]
Supply voltage	=	+110Vac	30m extrapolated from 3m	[ ]
Channel number	=	1	30m extrapolated from 10m	[ ]

FREQ. (GHz)	MEASUREMENT Rx. READING (dBμV)	CABLE LOSS (dB)	ANT FACTOR (dB/m)	FIELD STRENGTH (dBμV/m)	FIELD STRENGTH (mV/m)
10.52905	75.12	1.6	38.12	114.84	552.07
Limit value @ fc			2500 (mV/m)		
Band occupancy @ -20 dBc			f lower	f higher	
			10.528943 MHz	10.529597 MHz	

See spectrum analyser plot – Annex E

**Notes:**

- 1 Results quoted are extrapolated as indicated
- 2 Receiver detector @ fc = Average 1MHz bandwidth
- 3 When battery powered the EUT was powered with new batteries

**Test Method:**

- 1 As per Radio – Noise Emissions, ANSI C63.4: 2003
- 2 Measuring distances 3m
- 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.  
Horizontal and vertical polarisations, of the receive antenna.  
EUT orientation in three orthogonal planes.  
Maximum results recorded

The test equipment used for the Transmitter Intentional Emission – Radiated – Part 15.245 Sept 2007 tests is shown overleaf:

TYPE OF EQUIPMENT	MAKER/SUPPLIER	MODEL No	SERIAL No	TRL No	EQUIPMENT USED
AE, DRG HORN, 1GHz - 18GHz	EMCO	3115	9010 - 3580	138	<b>X</b>
SPECTRUM ANALYSER	R & S	FSU	200034	UH281	<b>X</b>

## TRANSMITTER TESTS

### TRANSMITTER CONDUCTED EMISSIONS – AC POWER LINE Part 15.207

Ambient temperature = 20°C(<1GHz),  
Relative humidity = 73%(<1GHz),  
Conditions = Power Line Laboratory  
Supply voltage = 110V AC  
Supply Frequency = 60Hz

### SIGNIFICANT EMISSIONS

FREQUENCY (MHz)	MEASUREMENT RECEIVER READING (dBµV)	DETECTOR	CONDUCTOR (L or N)	LIMIT (dBµV)
0.205	49.60	Average	Neutral	53.41
0.275	43.37	Average	Neutral	50.97
0.310	32.85	Average	Neutral	49.97
1.805	37.77	Quasi Peak	Neutral	56.00
1.975	43.50	Quasi Peak	Neutral	56.00
2.000	36.66	Quasi Peak	Live	56.00
2.055	28.76	Average	Neutral	46.00
2.095	37.14	Quasi Peak	Live	56.00
2.170	38.24	Quasi Peak	Neutral	56.00
2.270	37.92	Quasi Peak	Live	56.00
2.325	28.32	Average	Neutral	46.00
2.360	37.31	Quasi Peak	Neutral	56.00
2.460	40.18	Quasi Peak	Live	56.00
2.660	42.45	Quasi Peak	Live	56.00
2.715	38.70	Quasi Peak	Neutral	56.00
2.805	47.30	Quasi Peak	Neutral	56.00
2.835	47.62	Quasi Peak	Live	56.00
2.910	48.92	Quasi Peak	Neutral	56.00
3.005	51.09	Quasi Peak	Live	56.00
3.105	48.66	Quasi Peak	Neutral	56.00
3.145	29.01	Average	Neutral	46.00
3.180	53.93	Quasi Peak	Neutral	56.00
3.205	49.26	Quasi Peak	Live	56.00
3.280	55.04	Quasi Peak	Neutral	56.00
3.410	50.15	Quasi Peak	Live	56.00
3.455	54.70	Quasi Peak	Neutral	56.00
3.570	50.82	Quasi Peak	Live	56.00
3.655	50.15	Quasi Peak	Neutral	56.00
3.750	51.37	Quasi Peak	Live	56.00
3.900	35.91	Average	Neutral	46.00

Results Continued Overleaf:

## TRANSMITTER TESTS

### TRANSMITTER CONDUCTED EMISSIONS – AC POWER LINE Part 15.207 - Continued

#### SIGNIFICANT EMISSIONS

FREQUENCY (MHz)	MEASUREMENT RECEIVER READING (dBµV)	DETECTOR	CONDUCTOR (L or N)	LIMIT (dBµV)
4.099	49.38	Quasi Peak	Neutral	56.00
4.155	47.85	Quasi Peak	Live	56.00
4.200	48.81	Quasi Peak	Neutral	56.00
4.395	48.11	Quasi Peak	Neutral	56.00
4.520	44.45	Quasi Peak	Live	56.00
4.570	44.11	Quasi Peak	Neutral	56.00
4.700	47.38	Quasi Peak	Live	56.00
4.765	49.79	Quasi Peak	Neutral	56.00
4.845	41.82	Quasi Peak	Neutral	56.00
4.970	41.15	Quasi Peak	Live	56.00
4.995	28.68	Average	Neutral	46.00
5.315	42.69	Quasi Peak	Neutral	60.00
5.590	41.65	Quasi Peak	Neutral	60.00
5.650	41.63	Quasi Peak	Live	60.00

**Notes:**

- 1 See attached plot annex G
- 2 EUT Tested with no tee movement and with tee continually loading ball.

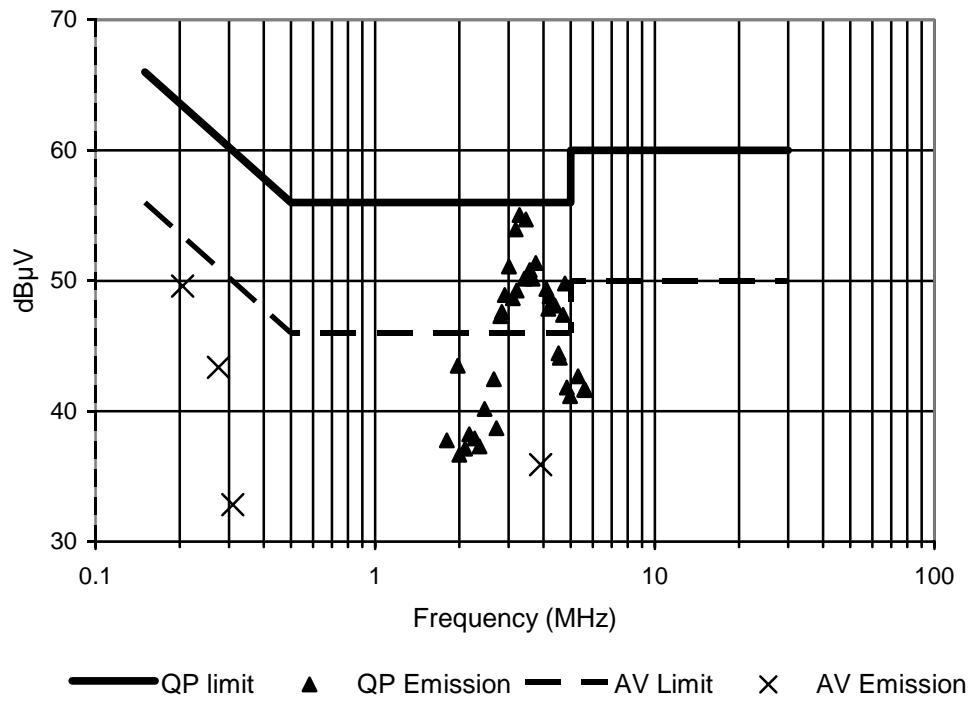
**Test Method:**

- 1 As per Radio – Noise Emissions, ANSI C63.4: 2003

The test equipment used for the Transmitter Conducted Emissions – AC Power Line Part 15.207 test was:

TYPE OF EQUIPMENT	MAKER/ SUPPLIER	MODEL No	SERIAL No	TRL No	ACTUAL EQUIPMENT USED
RECEIVER	ROHDE & SCHWARZ	ESHS 10	841429/012	UH187	<b>X</b>
LISN/AMN	ROHDE & SCHWARZ	ESH3-Z5	8407 31/015	UH195	<b>X</b>

# POWER LINE CONDUCTION EMISSIONS



**ANNEX A**  
**PHOTOGRAPHS**

PHOTOGRAPH No. 1

TEST SETUP



PHOTOGRAPH No. 2

CONTROL UNIT FRONT VIEW

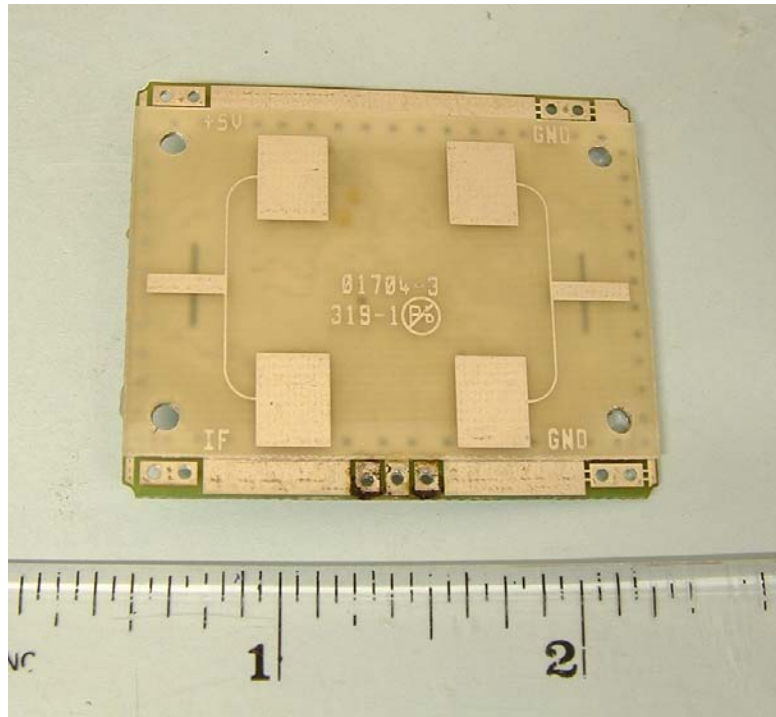


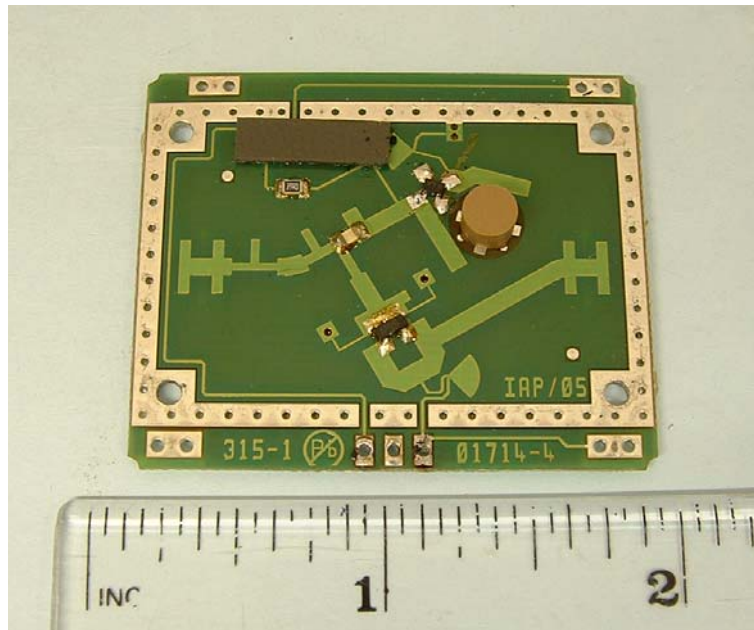
PHOTOGRAPH No. 3

CONTROL UNIT REAR VIEW









**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)	-		[ ]
e.	LABELLING	-	PHOTOGRAPHS	[X]
		-	DECLARATION	[ ]
		-	DRAWINGS	[ ]
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**  
**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%**

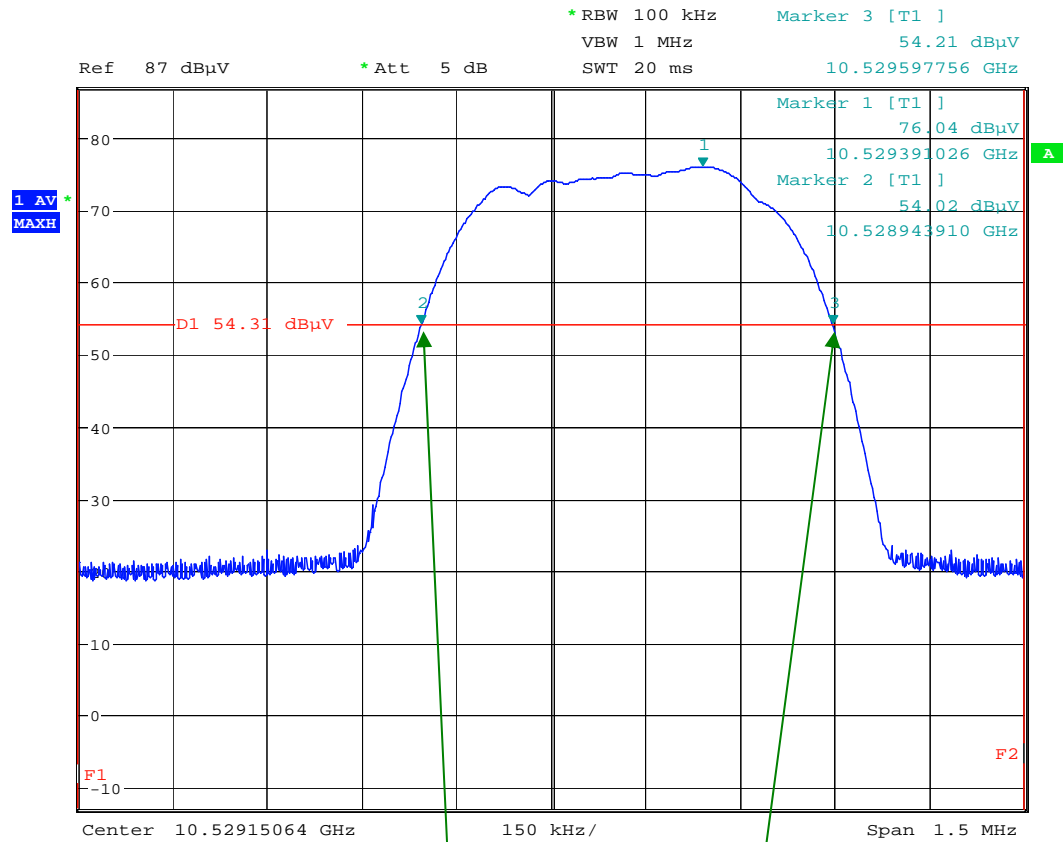
**ANNEX D**  
**TEST EQUIPMENT CALIBRATION**



TRL Number	Equipment Type	Manufacturer	Last Cal Calibration	Calibration Period	Due For Calibration
UH003	Receiver	R&S	24/07/2006	12	24/07/2007
UH06/07	IC OATS Submission	TRL	01/06/2007	24	01/06/2009
UH006	3m Range ERP CAL	TRL	08/12/2006	12	08/12/2007
UH028	Log Periodic Ant	Schwarbeck	30/05/2007	24	30/05/2009
UH029	Bicone Antenna	Schwarbeck	22/05/2007	24	22/05/2009
UH041	Multimeter	AVOmeter	04/01/2007	12	04/01/2008
UH122	Oscilloscope	Tektronix	07/06/2005	24	07/06/2007
UH132	Power meter	Marconi	10/01/2007	12	10/01/2008
UH162	ERP Cable Cal	TRL	02/01/2007	12	02/01/2008
UH191	Bilog Antenna	York	11/08/2006	24	11/08/2008
UH195	LISN	R&S	09/01/2007	12	09/01/2008
UH228	Power Sensor	Marconi	15/01/2007	12	15/01/2008
UH253	1m Cable N type	TRL	07/12/2006	12	07/12/2007
UH254	1m Cable N type	TRL	07/12/2006	12	07/12/2007
UH265	Notch filer	Telonic	11/01/2006	24	11/01/2008
UH269	1m Cable N type	TRL	07/12/2006	12	07/12/2007
UH270	1m Cable N type	TRL	07/12/2006	12	07/12/2007
UH271	1.5m Cable N type	TRL	07/12/2006	12	07/12/2007
UH272	1.5m Cable N type	TRL	07/12/2006	12	07/12/2007
UH273	2m Cable N type	TRL	07/12/2006	12	07/12/2007
UH274	2m Cable N type	TRL	07/12/2006	12	07/12/2007
UH281	Spectrum Analyser	R&S	24/07/2006	12	24/07/2007
UH340	Signal Generator	HP	29/06/2006	12	29/06/2007
L005	CMTA	R&S	10/01/2007	12	10/01/2008
L007	Loop Antenna	R&S	22/05/2007	24	22/05/2009
L138	1-18GHz Horn	EMCO	23/05/2007	24	23/05/2009
L139	1-18GHz Horn	EMCO	23/05/2007	24	23/05/2009
L176	Signal Generator	Marconi	01/03/2007	12	01/03/2008
L193	Bicone Antenna	Chase	12/10/2003	24	12/10/2005
L203	Log Periodic Ant	Chase	21/10/2003	24	21/10/2005
L343	CCIR Noise Filter	TRL	20/09/2006	12	20/09/2007
L426	Temperature Indicator	Fluke	09/01/2007	12	09/01/2008
L479	Analyser	Anritsu	09/01/2007	12	09/01/2008
L552	Signal Generator	Agilent	24/07/2006	12	24/07/2007
L572	Pre Amplifier	Agilent	Calibrate in use		

**ANNEX E**  
**BANDWIDTH PLOT**

## BANDWIDTH PLOT



Date: 10.JUL.2008 16:07:26

$f_{\text{Lower}}$

$f_{\text{Higher}}$

$f_{\text{Lower}}$  = 10.528943 GHz  
 $f_{\text{Higher}}$  = 10.529597 GHz  
 Occupied Bandwidth = 654 kHz

**ANNEX F**  
**EMISSIONS GRAPH(s)**

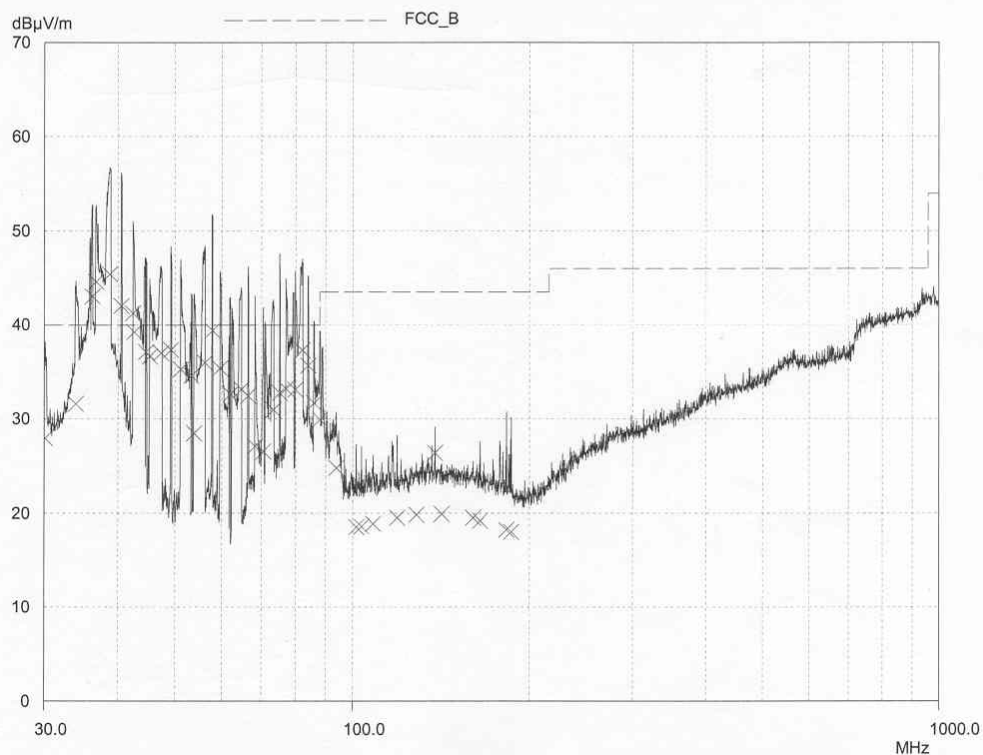
# TRL Compliance Ltd

03 Jun 2008 11:47

## Radiated E-Field Emissions

EUT: Power Tee  
 Manuf: Golf Tech  
 Op Cond: 3m Indoor Prescan MAC Chamber  
 Operator: D Winstanley  
 Test Spec: Part 15  
 Comment: EUT On, Auto Mode. Tee operating. Ambients Removed  
 RX Antenna Vertical.  
 Result File: GtecHor.dat : Ambients Removed

Scan Settings (1 Range)					Receiver Settings			
Frequencies								
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
30MHz	1000MHz	50kHz	120kHz	PK	50msec	Auto	ON	60dB
Transducer	No.	Start	Stop	Name				
3	21	30MHz	1000MHz	UH213PS				
	22	30MHz	1000MHz	UH191				
Final Measurement:								
		Detector:	X QP					
		Meas Time:	2sec					
		Subranges:	50					
		Acc Margin:	20 dB					



**ANNEX G**  
**AC POWERLINE CONDUCTION GRAPH(s)**

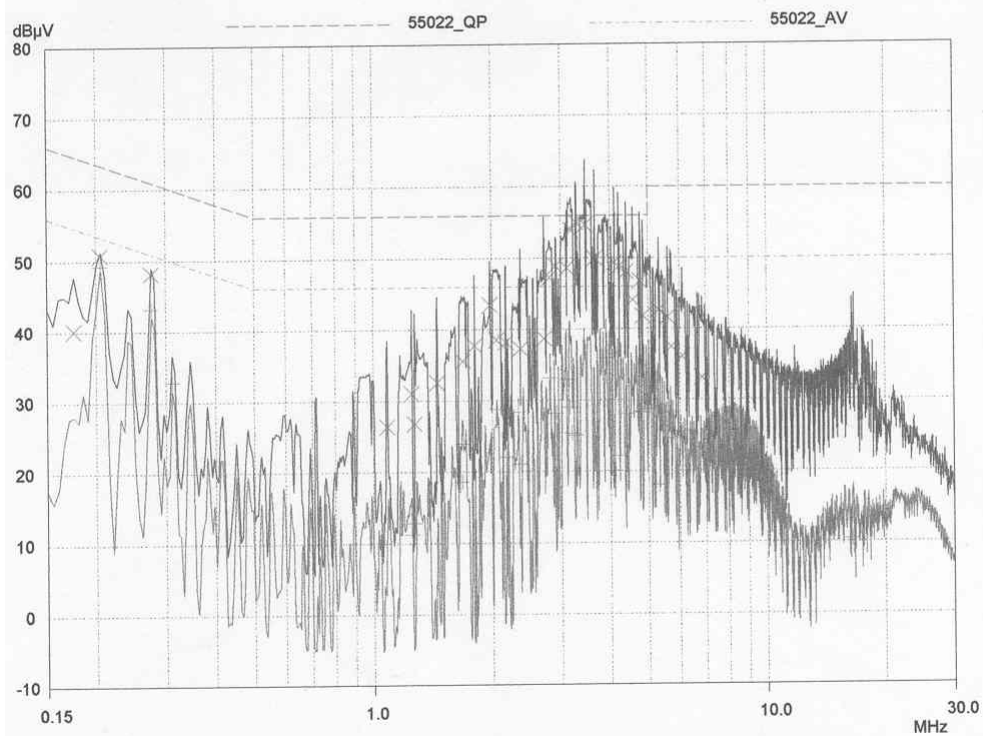
# Powerline Conduction

14 Jul 2008 15:32

## 150kHz - 30MHz

EUT: Power Tee  
 Manuf: Golf Tec  
 Op Cond: LISN UH195, cable UH21 & Receiver UH187  
 Operator: S Hodgkinson  
 Test Spec: EN55022 Class B (or Variant)  
 Comment: Neutral Line, 110V, 60Hz  
 Unit in permanent Tx mode. Golf ball delivery active.  
 Result File: plot3.dat : New Measurement

Scan Settings			(1 Range)		Receiver Settings					
			Frequencies		IF BW	Detector	M-Time	Atten	Preamp	OpRge
Start	Stop	Step			10kHz	PK+AV	50msec	Auto	OFF	60dB
150kHz	30MHz	5kHz								
Transducer	No.	Start	Stop		Name					
1	1	9kHz	30MHz		UH21					
	2	150kHz	30MHz		UH195					
Final Measurement:		Detectors:	X QP / + AV							
		Meas Time:	2sec							
		Subranges:	25							
		Acc Margin:	20 dB							



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