



# FCC 47 CFR PART 15 SUBPART B TEST REPORT

for

**Wireless Stereo 900MHz Speaker System**

**MODEL: SP4590**

Test Report Number:  
SZ110506B08-EF

Issued for

**Uni-Art Precise Products Ltd**

**11-12/F, Yue Xiu Industrial Building,  
87 Hung To Road, Kowloon, Hong Kong**

Issued By:

Compliance Certification Services Inc.

Linkuo Laboratory

No.81-1, Lane 210, Bade 2nd Rd., Lujhu Township,  
Taoyuan County 33841, Taiwan(R.O.C.)

TEL: 886-3-324-0332

FAX: 886-3-324-5235

E-Mail: service@ccsrf.com

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**Revision History**

Rev.		Issue No		Revisions	Effect Page	Revised By
00		SZ110506B08-EF		Initial Issue	ALL	Ethan Huang



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## 1 TEST RESULT CERTIFICATION

<b>Product:</b>	Wireless Stereo 900MHz Speaker System
<b>Model:</b>	SP4590
<b>Brand:</b>	ARKON
<b>Applicant:</b>	<b>Uni-Art Precise Products Ltd</b> 11-12/F, Yue Xiu Industrial Building, 87 Hung To Road, Kowloon, Hong Kong
<b>Manufacturer:</b>	<b>Uni-Art Precise Products Ltd</b> 11-12/F, Yue Xiu Industrial Building, 87 Hung To Road, Kowloon, Hong Kong
<b>Tested:</b>	May 6~24, 2011
<b>Test Voltage:</b>	DC9V supplied by the adapter or 1.5Vx6 batteries

EMISSION			
Standard	Item	Result	Remarks
FCC 47 CFR Part 15 Subpart B ANSI C63.4: 2009	Conducted (Power Port)	PASS	Meet Class B limit
	Radiated	PASS	Meet Class B limit

*Note:* 1. The statements of test result on the above are decided by the request of test standard only; the measurement uncertainties are not factored into this compliance determination.  
2. The information of measurement uncertainty is available upon the customer's request.

Deviation from Applicable Standard
None

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

**Approved by:**

**Ethan Huang**  
**Section Manager**  
**Compliance Certification Service Inc.**

**Reviewed by:**

**Aven Zhou**  
**Supervisor of Report Dept.**  
**Compliance Certification Service Inc.**



## 2 EUT DESCRIPTION

<b>Product</b>	Wireless Stereo 900MHz Speaker System
<b>Brand Name</b>	ARKON
<b>Model</b>	SP4590
<b>Applicant</b>	Uni-Art Precise Products Ltd
<b>Housing material</b>	Plastic + Metal
<b>EUT Type</b>	<input type="checkbox"/> Engineering Sample, <input checked="" type="checkbox"/> Product Sample, <input type="checkbox"/> Mass Product Sample.
<b>Serial Number</b>	SZ110506B08-EF
<b>EUT Power Rating</b>	DC9V supplied by the adapter or 1.5Vx6 batteries
<b>Adapter Manufacturer/ Model No.</b>	STANDARD SUCCESS / SUV-012-090-120-A2 Input: 100-240V~50/60Hz 500mA Output: 9.0V-1200mA DC output cable: Unshielded, 1.82m
<b>Received Date</b>	May 6, 2011

### I/O Port EUT

I/O PORT TYPES	Q'TY	TESTED WITH
1). DC In Port	1	1



### 3 TEST METHODOLOGY

#### 3.1. DECISION OF FINAL TEST MODE

The EUT was tested together with the above additional components, and a configuration, which produced the worst emission levels, was selected and recorded in this report.

Pre-Test Mode		
Emission	Conducted Emission	<b>Mode 1:</b> Normal Link with adapter
	Radiated Emission	<b>Below 1GHz</b> <b>Mode 1:</b> Normal Link with adapter <b>Mode 2:</b> Normal Link with Batteries <b>Above 1GHz</b> <b>Mode 3:</b> Normal Link with adapter <b>Mode 4:</b> Normal Link with Batteries

After the preliminary scan, the following test mode was found to produce the highest emission level.

Final Test Mode		
Emission	Conducted Emission	<b>Mode 1:</b> Normal Link with adapter
	Radiated Emission	<b>Mode 1:</b> Normal Link with adapter <b>Mode 3:</b> Normal Link with adapter

Then, the above highest emission mode of the configuration of the EUT and cable was chosen for all final test items.

#### 3.2. EUT SYSTEM OPERATION

- 1 Setup the EUT and simulators as shown on 4.2.
- 2 Turn on the power of all equipment.
- 3 The EUT will receive the signal and play music.
- 4 Repeat the above procedure (3).

**Note:** Test program is self-repeating throughout the test.



## 4 SETUP OF EQUIPMENT UNDER TEST

### 4.1. DESCRIPTION OF SUPPORT UNITS

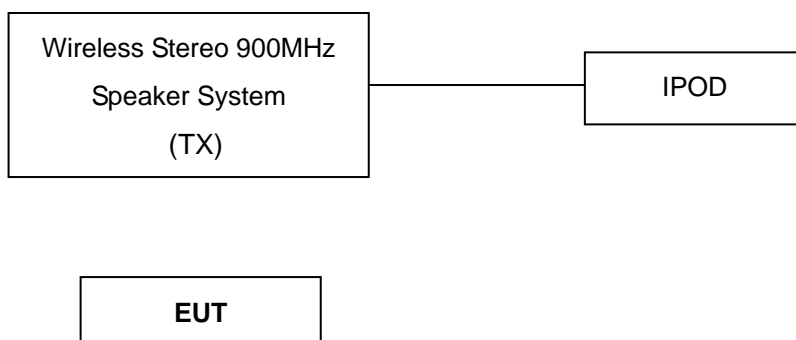
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Equipment	Model No.	Serial No.	FCC ID	Trade Name	Data Cable	Power Cord
1	IPOD	A1238	JQ8070LB YMV	FCC DoC	APPLE	Shielded 1.68m	N/A
2	Wireless Stereo 900MHz Speaker System (TX)	SP4590	N/A	MVASP409 1-001T	ARKON	Audio Cable: Shielded, 2.30m	Unshielded, 1.82m

**Note:** Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



## **4.2. CONFIGURATION OF SYSTEM UNDER TEST**







## 5 FACILITIES AND ACCREDITATIONS

### 5.1. FACILITIES

All measurement facilities used to collect the measurement data are located at **No.81-1, Lane 210, Bade 2nd Rd., Lujhu Township, Taoyuan County 33841, Taiwan(R.O.C.)**

The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-4, CISPR 16-1-5.

### 5.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

<b>Taiwan</b>	TAF
<b>USA</b>	A2LA

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

<b>Canada</b>	Industry Canada
<b>Norway</b>	Nemko
<b>Japan</b>	VCCI
<b>Taiwan</b>	BSMI
<b>USA</b>	FCC

Copies of granted accreditation certificates are available for downloading from our web site, <http://www.ccsrf.com>

### 5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz~30MHz	+/- 3.18dB
Radiated emissions	30MHz ~ 200MHz	+/- 3.79dB
	200MHz ~1000MHz	+/- 3.62dB
	Above 1000MHz	+/- 5.04dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Consistent with industry standard (e.g. CISPR 22: 2006, clause 11, Measurement Uncertainty) determining compliance with the limits shall be base on the results of the compliance measurement. Consequently the measure emissions being less than the maximum allowed emission result in this be a compliant test or passing test.

The acceptable measurement uncertainty value without requiring revision of the compliance statement is base on conducted and radiated emissions being less than  $U_{CISPR}$  which is 3.6dB and 5.2dB respectively. CCS values (called  $U_{Lab}$  in CISPR 16-4-2) is less than  $U_{CISPR}$  as shown in the table above. Therefore, MU need not be considered for compliance.



## 6 CONDUCTED EMISSION MEASUREMENT

### 6.1. LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

**NOTE:**

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases in line with the logarithm of the frequency in the range 0.15 to 0.50 MHz.
- (3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

### 6.2. TEST INSTRUMENTS

Conducted Emission Test Site					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
ESCI EMI TEST RECEIVE.ESCI	ROHDE&SCHWARZ	1166.5950 03	100783	03/21/2011	03/21/2012
LISN	FCC	FCC-LISN-50-50-2-M	01068	03/21/2011	03/21/2012
LISN	EMCO	3825/2	8901-1459	03/21/2011	03/21/2012
CDN	FCC	FCC-TILISN-T4	20182	03/21/2011	03/21/2012
CDN	FCC	FCC-TLISN-T8-02	20183	03/21/2011	03/21/2012
CDN	FCC	FCC-TLISN-T4-02	20382	03/21/2011	03/21/2012
CDN	FCC	FCC-TLISN-T4-02	20383	03/21/2011	03/21/2012
CDN	FCC	FCC-801-T8-RJ45	04030	03/21/2011	03/21/2012
Current Probe	STODDART AIRCRAFT	91550-1	345-73	03/21/2011	03/21/2012
Temp. / Humidity Meter	VICTOR	VC230	N/A	03/30/2011	03/30/2012

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.  
2. N.C.R = No Calibration Request.



### **6.3. TEST PROCEDURES** (please refer to measurement standard or CCS SOP PA-031)

#### **Procedure of Preliminary Test**

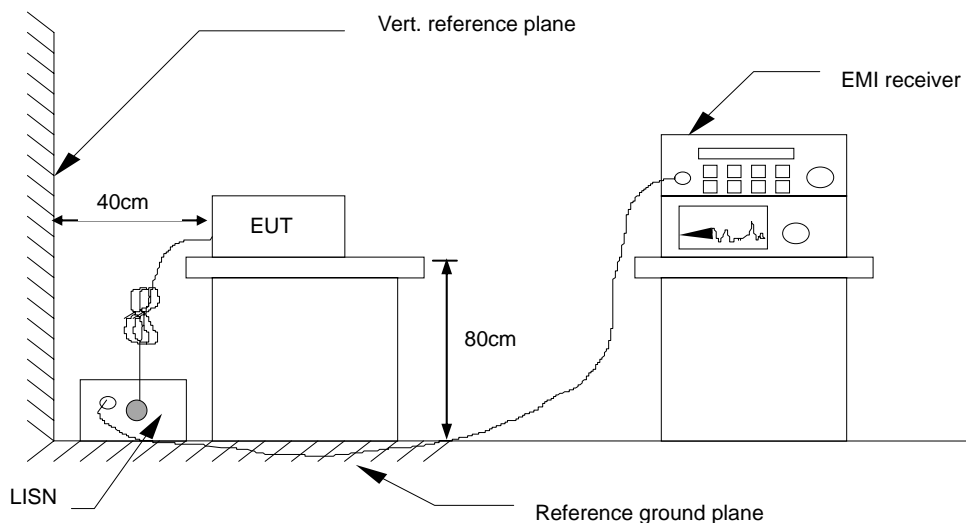
- The EUT and support equipment, if needed, were set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor standing equipment, it is placed on the ground plane, which has a 12 mm non-conductive covering to insulate the EUT from the ground plane.
- All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- The test equipment EUT received DC9V power from the adapter, and the adapter received 120VAC/60Hz main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded to the ground plane.
- The test program of the EUT was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.
- The Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- During the above scans, the emissions were maximized by cable manipulation.
- The test mode(s) described in Item 3.1 were scanned during the preliminary test.
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

#### **Procedure of Final Test**

- EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.
- A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.
- The test data of the worst-case condition(s) was recorded.



## 6.4. TEST SETUP



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

## 6.5. DATA SAMPLE:

Freq. (MHz)	Peak Level (dBuV)	Q.P. Level (dBuV)	AVG Level (dBuV)	Q.P. Limit (dBuV)	AVG Limit (dBuV)	Q.P. Margin (dB)	AVG Margin (dB)	Line (L1/L2)
XX.XX	55.14	52.88	42.11	61.87	51.87	-8.99	-9.76	L1

Frequency (MHz) = Emission frequency in MHz  
Reading (dBuV) = Uncorrected Analyzer/Receiver reading + Insertion loss of LISN, if it > 0.5 dB  
Correction Factor (dB) = LISN Factor + Cable Loss  
Result (dBuV) = Raw reading converted to dBuV and CF added  
Limit (dBuV) = Limit stated in standard  
Margin (dB) = Result (dBuV) – Limit (dBuV)

**6.6. TEST RESULTS**

<b>Model No.</b>	SP4590	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	26°C, 60% RH	<b>RBW,VBW</b>	9 KHz
<b>Tested by</b>	Sunday Hu		

(The chart below shows the highest readings taken from the final data.)

FREQ MHz	PEAK RAW dBuV	Q.P. RAW dBuV	AVG RAW dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.270	35.65	47.18	38.54	61.12	51.12	-13.94	-12.58	L1
0.346	35.01	46.54	31.34	59.06	49.06	-12.52	-17.72	L1
0.414	34.04	45.57	28.21	57.57	47.57	-12.00	-19.36	L1
0.622	33.66	45.19	28.79	56.00	46.00	-10.81	-17.21	L1
1.386	33.09	44.62	23.39	56.00	46.00	-11.38	-22.61	L1
7.078	36.66	48.46	26.15	60.00	50.00	-11.54	-23.85	L1
0.342	37.31	48.84	33.08	59.15	49.15	-10.31	-16.07	L2
0.614	36.57	48.10	25.05	56.00	46.00	-7.90	-20.95	L2
0.798	36.96	48.48	24.18	56.00	46.00	-7.52	-21.82	L2
1.594	35.65	47.19	24.00	56.00	46.00	-8.81	-22.00	L2
2.317	36.49	48.06	22.25	56.00	46.00	-7.94	-23.75	L2
7.246	38.60	50.41	27.79	60.00	50.00	-9.59	-22.21	L2

**Remark:**

1. The measuring frequencies range between 0.15 MHz and 30 MHz.
2. The emissions measured in the frequency range between 0.15 MHz and 30MHz were made with an instrument using Quasi-peak detector and Average detector.
3. "---" denotes the emission level was or more than 2dB below the Average limit, and no re-check was made.
4. The IF bandwidth of SPA between 0.15MHz and 30MHz was 10KHz. The IF bandwidth of Test Receiver between 0.15MHz and 30MHz was 9kHz.
5. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).



## 7 RADIATED EMISSION MEASUREMENT

### 7.1. LIMITS OF RADIATED EMISSION MEASUREMENT

Below 1GHz

FREQUENCY (MHz)	dBuV/m (At 10m)	dBuV/m (At 3m)
	Class A	Class B
30 ~ 88	39.00	40.00
88 ~ 216	43.50	43.50
216 ~ 960	46.00	46.00
960 ~ 1000	49.50	54.00

**NOTE:** (1) The lower limit shall apply at the transition frequencies.  
(2) Emission level (dBuV/m) = 20 log Emission level (uV/m).

Above 1GHz

Frequency (MHZ)	Class A (dBuV/m)		Class B (dBuV/m)	
	Average	Peak	Average	Peak
Above 1000	60	80	54	74

**Notes:** (1) The lower limit shall apply at the transition frequencies.  
(2) Emission level (dBuV/m) = 20 log Emission level (uV/m).  
(3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.



## 7.2. TEST INSTRUMENTS

### Below 1GHz

Radiated Emission Test Site 966(1)					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
Spectrum Analyzer	Aglient	E7402A	MY42000139	03/21/2011	03/21/2012
Amplifier	Mini-Circuits	ZFL-1000LN	SF696200343	03/21/2011	03/21/2012
Controller	CT	N/A	N/A	N.C.R	N.C.R
Antenna	EMCO	3142B	9910-11436	03/19/2011	03/19/2012
Turn Table	EMCO	2081-1.21	N/A	N.C.R	N.C.R
Absorbing clamp	SCHAFFNER	MDS21	3350	06/09/2010	06/09/2011

### Above 1GHz

Radiated Emission Test Site 966 (2)					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
PSA Series Spectrum Analyzer	Agilent	E4446A	US44300399	03/21/2011	03/21/2012
Amplifier	MITEQ	AM-1604-3000	1411843	03/21/2011	03/21/2012
Turn Table	EMCO	2081-1.21	N/A	N.C.R	N.C.R
Controller	CT	N/A	N/A	N.C.R	N.C.R
High Noise Amplifier	Agilent	8449B	3008A01838	06/18/2010	06/18/2011
Site NSA	C&C	N/A	N/A	N.C.R	N.C.R
Bilog Antenna	SCHAFFNER	CBL6143	5082	06/18/2010	06/18/2011
Horn Antenna	SCHWARZBECK	BBHA9120D	D286	03/19/2011	03/19/2012
Signal Generator	Anritsu	MG3694A	#050125	03/21/2011	03/21/2012
Horn Antenna	TRC	HA0301	N/A	03/19/2011	03/19/2012
Loop Antenna	A.R.A	PLA-1030/B	1029	03/19/2011	03/19/2012
Temp. / Humidity Meter	VICTOR	VC230	N/A	03/30/2011	03/30/2012
System Control	N/A	SC100	N/A	N.C.R	N.C.R

**NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. N.C.R = No Calibration Request.



### **7.3. TEST PROCEDURES** (please refer to measurement standard or CCS SOP PA-031)

#### **Procedure of Preliminary Test**

- The equipment was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane. When the EUT is a floor standing equipment, it is placed on the ground plane which has a non-conductive covering to insulate the EUT from the ground plane.
- Support equipment, if needed, was placed as per ANSI C63.4.
- All I/O cables were positioned to simulate typical usage as per ANSI C63.4.
- The test equipment EUT received DC9V power from the batteries or the adapter, and the adapter received 120VAC/60Hz power source from the outlet socket under the turntable. All support equipment power received from another socket under the turntable.
- The antenna was placed at 3/10 meter away from the EUT as stated in ANSI C63.4. The antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier would be used.
- The Analyzer / Receiver quickly scanned from 30MHz to 40GHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- The test mode(s) described in Item 3.1 were scanned during the preliminary test:
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

#### **Procedure of Final Test**

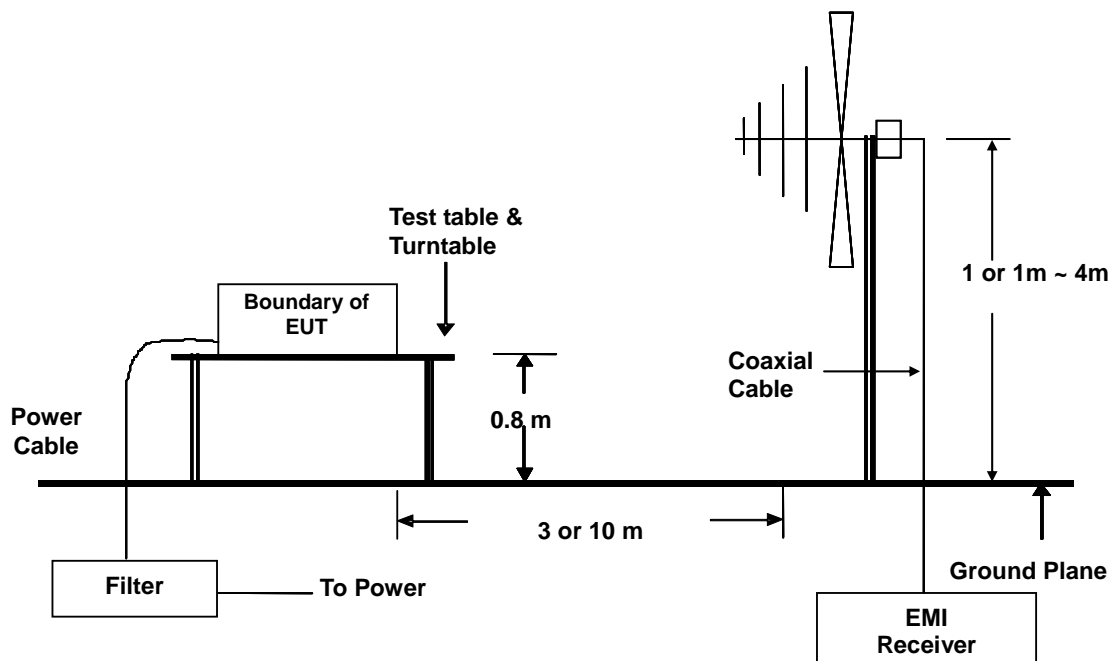
- EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.
- The Analyzer / Receiver scanned from 30MHz to 40GHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 or 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- Recording at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Q.P. reading is presented.
- The test data of the worst-case condition(s) was recorded.



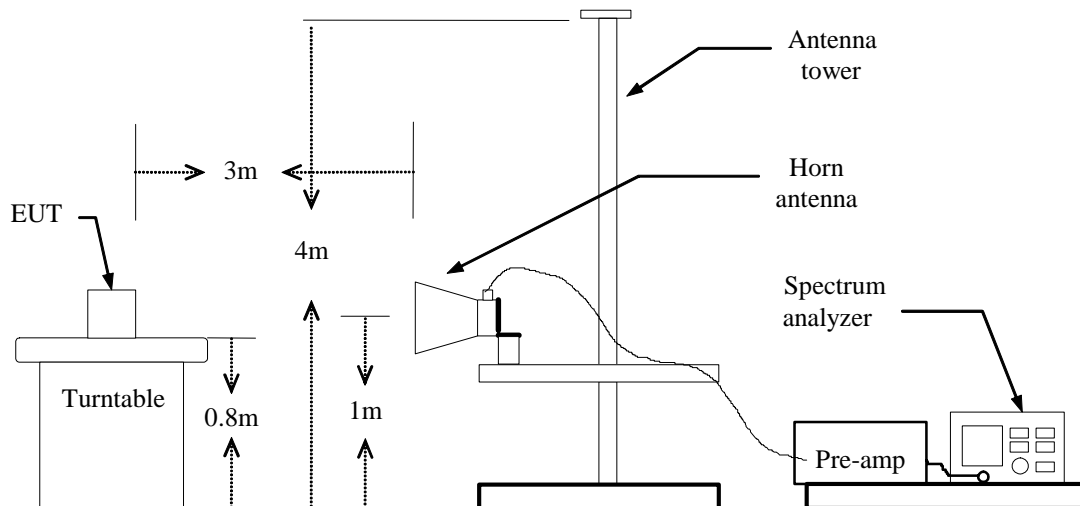


## 7.4. TEST SETUP

Below 1GHz



Above 1GHz



- For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

**7.5. DATA SAMPLE:****Below 1GHz**

Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector (P/Q)	Pol (H/V)
xx.xx	47.48	-10.31	37.17	40.00	-2.83	Q	V

Frequency (MHz) = Emission frequency in MHz  
 Reading (dBuV) = Uncorrected Analyzer / Receiver reading  
 Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain  
 Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)  
 Limit (dBuV/m) = Limit stated in standard  
 Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)  
 Q.P. = Quasi-Peak  
 P = Peak Reading  
 Q.P. = Quasi-peak Reading

**Above 1GHz**

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
xx.xx	V	47.80	---	-7.44	40.36	---	74.00	54.00	-33.64	P

Freq. = Emission frequency in MHz  
 Read = Uncorrected Analyzer / Receiver Reading  
 Corr. Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain  
 Emiss. Level (dBuV/m) = Raw reading converted to dBuV/m and C.F added  
 Limit (dBuV/m) = Limit stated in standard  
 Margin (dB) = Reading in reference to limit  
 P = Peak Reading  
 Q.P. = Quasi-peak Reading

**Calculation Formula**

Margin (dB) = Emiss. Level (dBuV/m) – Limits (dBuV/m)  
 Emission Level (dBuV/m) = Raw Data (dBuV) + Corr. Factor (dB)

**7.6. TEST RESULTS****Below 1GHz**

<b>Model No.</b>	SP4590	<b>Test Mode</b>	Mode 1
<b>Environmental Conditions</b>	26°C, 60% RH	<b>RBW,VBW</b>	120 kHz
<b>Antenna Pole</b>	Vertical / Horizontal	<b>Antenna Distance</b>	3m
<b>Detector Function:</b>	Peak/Quasi-peak	<b>Tested by</b>	Sunday Hu

(The chart below shows the highest readings taken from the final data.)

Frequency Range Investigated (30 MHz To 1000 MHz)							
Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector (P/Q)	Pol (H/V)
86.583	63.00	-25.55	37.45	40.00	-2.55	P	V
280.583	36.35	-19.38	16.97	46.00	-29.03	P	V
306.450	35.78	-18.60	17.18	46.00	-28.82	P	V
461.650	44.35	-14.72	29.63	46.00	-16.37	P	V
772.050	33.13	-10.51	22.62	46.00	-23.38	P	V
922.400	40.35	-9.14	31.21	46.00	-14.79	P	V
76.883	61.65	-25.82	35.83	40.00	-4.17	P	H
266.033	37.24	-19.63	17.61	46.00	-28.39	P	H
332.316	39.63	-17.70	21.93	46.00	-24.07	P	H
354.950	37.99	-16.91	21.08	46.00	-24.92	P	H
461.650	46.47	-14.72	31.75	46.00	-14.25	P	H
922.400	35.03	-9.14	25.89	46.00	-20.11	P	H

**REMARKS:** 1. P= Peak Reading; Q= Quasi-peak Reading  
2. The other emission levels were very low against the limit.

**Above 1GHz**

<b>Model No.</b>	SP4590	<b>Test Mode</b>	Mode 3
<b>Environmental Conditions</b>	26°C, 60% RH	<b>RBW,VBW</b>	1MHz, 1MHz
<b>Antenna Pole</b>	Vertical / Horizontal	<b>Antenna Distance</b>	3m
<b>Detector Function:</b>	Peak/AVG	<b>Tested by</b>	Sunday Hu

(The chart below shows the highest readings taken from the final data.)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1383.333	V	53.23	---	-10.36	42.87	---	74.00	54.00	-11.13	Peak
1825.000	V	49.20	---	-10.05	39.15	---	74.00	54.00	-14.85	Peak
2733.333	V	47.36	---	-7.75	39.61	---	74.00	54.00	-14.39	Peak
3516.666	V	46.18	---	-4.33	41.85	---	74.00	54.00	-12.15	Peak
4033.333	V	46.29	---	-3.46	42.83	---	74.00	54.00	-11.17	Peak
5116.666	V	45.16	---	0.34	45.50	---	74.00	54.00	-8.50	Peak
1383.333	H	51.70	---	-10.36	41.34	---	74.00	54.00	-12.66	Peak
1825.000	H	51.25	---	-10.05	41.20	---	74.00	54.00	-12.80	Peak
2683.333	H	47.89	---	-8.07	39.82	---	74.00	54.00	-14.18	Peak
3500.000	H	46.49	---	-4.43	42.06	---	74.00	54.00	-11.94	Peak
4025.000	H	45.47	---	-3.49	41.98	---	74.00	54.00	-12.02	Peak
4816.666	H	45.91	---	-0.60	45.31	---	74.00	54.00	-8.69	Peak

**REMARKS:** 1. P= Peak Reading; AVG= Average Reading.  
2. The other emission levels were very low against the limit.