FCC 47 CFR PART 15 SUBPART B TEST REPORT

for

900MHz Wireless Indoor/Outdoor Rock Speaker

Model: SP1190B

Brand: ARKON

Test Report Number:
SZ120426B01-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.10-1, Mingkeda Logistics Park, No.18, Huanguan South Rd.,
Guan Lan Town, Baoan District, Shenzhen, China
TEL: 86-755-28055000
FAX: 86-755-28055221
E-Mail: service@ccsrf.com
Issued Date: May 15, 2012

ACCREDITED
TESTING CERT #2861.01

Revision History

Rev.		Issue No		Revisions	Effect Page	Revised By
00		SZ120426B01-EF		Initial Issue	ALL	Sunny Wang

TABLE OF CONTENTS

1 TEST RESULT CERTIFICATION

Product:	900MHz Wireless Indoor/Outdoor Rock Speaker
Model:	SP1190B
Brand:	ARKON
Applicant:	**Uni-Art Precise Products Ltd** 11-12/F, Yue Xiu Industrial Building, 87 Hung To Road, Kowloon, Hong Kong
Manufacturer:	**Uni-Art Precise Products Ltd** 11-12/F, Yue Xiu Industrial Building, 87 Hung To Road, Kowloon, Hong Kong
Tested:	April 26~May 14, 2012
Test Voltage:	AC120V/60Hz

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:

Tom Gan.

Tom Gan
Supervisor of EMC Dept.
Compliance Certification Service Inc.

Reviewed by:

Aven zhou

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

2 EUT DESCRIPTION

Product	900MHz Wireless Indoor/Outdoor Rock Speaker
Model	SP1190B
Brand	ARKON
Applicant	Uni-Art Precise Products Ltd
Housing material	Plastic
EUT Type	☐ Engineering Sample, ☒ Product Sample, ☐ Mass Product Sample.
Serial Number	SZ120426B01-EF
EUT Power Rating	DC15V supplied by the adapter or 12V by the LEAD ACID rechargeable batteries
Adapter Manufacturer/ Model No.	DC15V supplied by the adapter or 12V by the LEAD ACID rechargeable batteries Adapter manufacturer/model name Yinli / YLS0151-T150100 Input: 100-240V~50/60Hz, 0.6A Output: 15.0V-1.00A DC output cable: Unshielded, 1.80m
Audio Cable(TX)	Unshielded 0.35m
Received Date	April 26, 2012
EUT Max. Operating Frequency	913MHz

I/O Port EUT

I/O PORT TYPES	Q'TY	TESTED WITH
1). DC In Port	1	1
2). Audio 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	**Mode 1:** Normal link with adapter
	Radiated Emission	**Mode 1:** Normal Link with adapter **Mode 2:** 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	**Mode 1**
	Radiated Emission	**Mode 1**

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 Run the program to test.

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

4 SETUP OF EQUIPMENT UNDER TEST

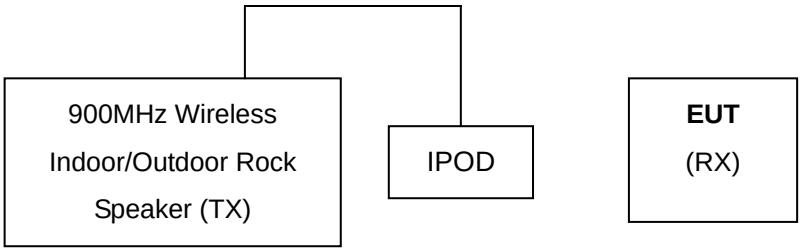
4.1. DESCRIPTION OF SUPPORT UNITS

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	Brand	Data Cable	Power Cord
1	IPOD	A1285	YM908BYU3QX	DoC	iPod	N/A	N/A
2	900MHz Wireless Indoor/Outdoor Rock Speaker (TX)	SP1190B	N/A	MVASP3991-001T	ARKON	Audio Cable: Shielded, 0.35m	Unshielded, 1.73m

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.10-1, Mingkeda Logistics Park, No.18, Huanguan South Rd., Guan Lan Town, Baoan District, Shenzhen, China**

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.

USA	A2LA
China	CNAS

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

Canada	Industry Canada
Norway	Nemko
Japan	VCCI(C-3478, R-3135, T-652)
Taiwan	BSMI
USA	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 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	ESCI	100783	03/17/2012	03/17/2013
LISN	SCHAFFNER	NNB42	2001/001	05/26/2011	05/26/2012
LISN	EMCO	3825/2	8901-1459	03/19/2012	03/19/2013
Temp. / Humidity Meter	VICTOR	HTC-1	2	03/20/2012	03/20/2013
Test S/W	FARAD	EZ-EMC/ CCS-3A1-CE			

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)

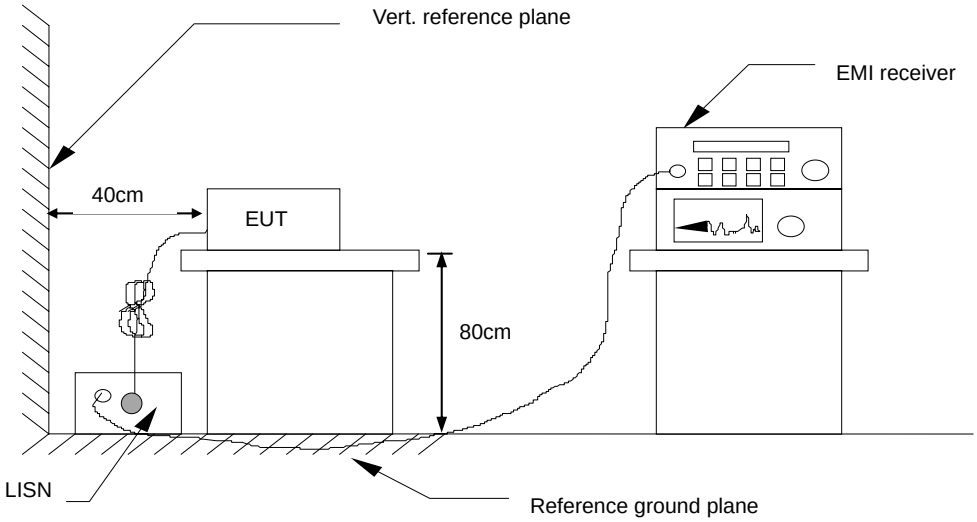
Procedure of Preliminary Test

- 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 DC power from the adapter, and the adapter received AC120V/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

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Line (L1/L2)
X.XXXX	32.69	25.65	11.52	44.21	37.17	65.78	55.79	-21.57	-18.62	L1

Factor = Insertion loss of LISN + Cable Loss
Result = Quasi-peak Reading/ Average Reading + Factor
Limit = Limit stated in standard
Margin = Result (dBuV) – Limit (dBuV)
L1 = Hot side
L2 = Neutral side

6.6. TEST RESULTS

Model No.	SP1190B	**RBW,VBW**	9 kHz
Environmental Conditions	22deg°C, 45% RH,	**Test Mode**	Mode 1
Tested by	Viking Yuan	**Line**	L1

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

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1900	43.74	32.82	11.52	55.26	44.34	64.03	54.04	-8.77	-9.70	Pass
0.2580	35.85	24.24	11.52	47.37	35.76	61.49	51.50	-14.12	-15.74	Pass
0.3820	27.29	22.01	11.51	38.80	33.52	58.23	48.24	-19.43	-14.72	Pass
3.3180	24.79	15.31	11.61	36.40	26.92	56.00	46.00	-19.60	-19.08	Pass
7.0260	24.31	12.64	11.80	36.11	24.44	60.00	50.00	-23.89	-25.56	Pass
26.7460	35.95	23.12	12.84	48.79	35.96	60.00	50.00	-11.21	-14.04	Pass

REMARKS: *L1 = Line One (Live Line)*

Model No.	SP1190B	**RBW,VBW**	9 kHz
Environmental Conditions	22deg°C, 45% RH	**Test Mode**	Mode 1
Tested by	Viking Yuan	**Line**	L2

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

Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
0.1900	42.32	32.13	11.52	53.84	43.65	64.03	54.04	-10.19	-10.39	Pass
0.2580	33.00	24.34	11.53	44.53	35.87	61.49	51.50	-16.96	-15.63	Pass
0.4460	29.18	24.59	11.54	40.72	36.13	56.95	46.95	-16.23	-10.82	Pass
3.3180	28.81	21.27	11.61	40.42	32.88	56.00	46.00	-15.58	-13.12	Pass
7.2100	28.05	18.78	11.81	39.86	30.59	60.00	50.00	-20.14	-19.41	Pass
27.9780	38.77	26.69	12.95	51.72	39.64	60.00	50.00	-8.28	-10.36	Pass

REMARKS: *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

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	03/19/2012	03/19/2013
Amplifier	MITEQ	AM-1604-3000	1123808	03/18/2012	03/18/2013
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	03/18/2012	03/18/2013
Horn Antenna	SCHWARZBECK	BBHA9120	D286	03/17/2012	03/17/2013
Temp. / Humidity Meter	VICTOR	VC230	N/A	03/19/2012	03/19/2013
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R
Test S/W	FARAD	LZ-RF / CCS-SZ-3A2			

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

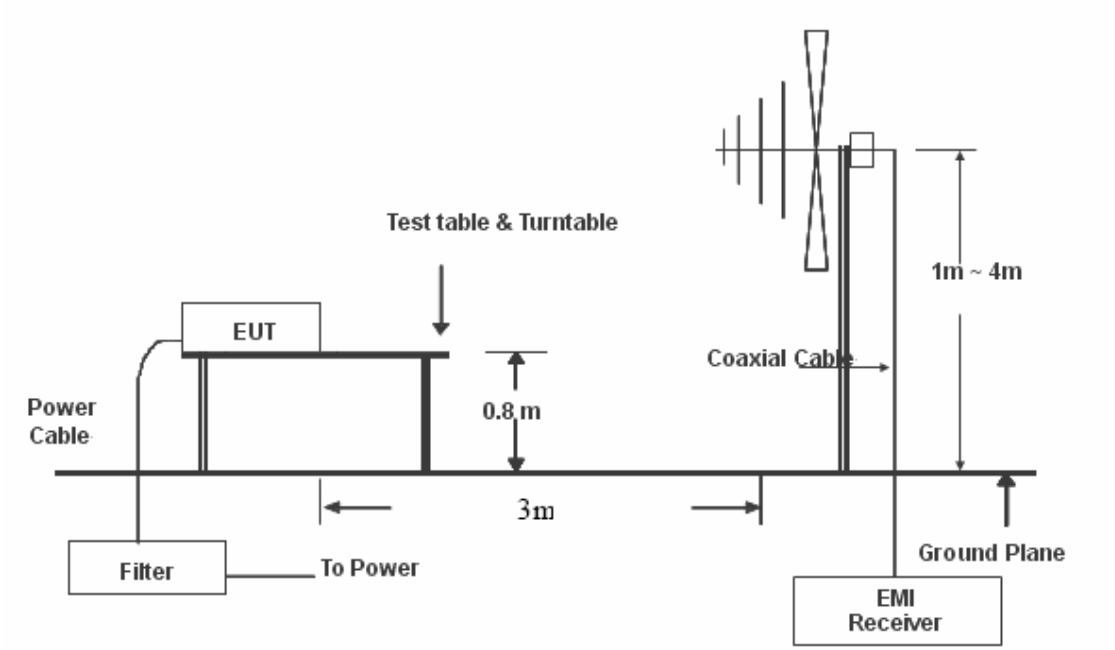
- The equipment was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane. When the EUT is a floor standing equipment, it is placed on the ground 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 DC power from the batteries or the adapter, and the adapter received AC120V/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 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 (For Below 1GHz) or 1 meter (For Above 1GHz) 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

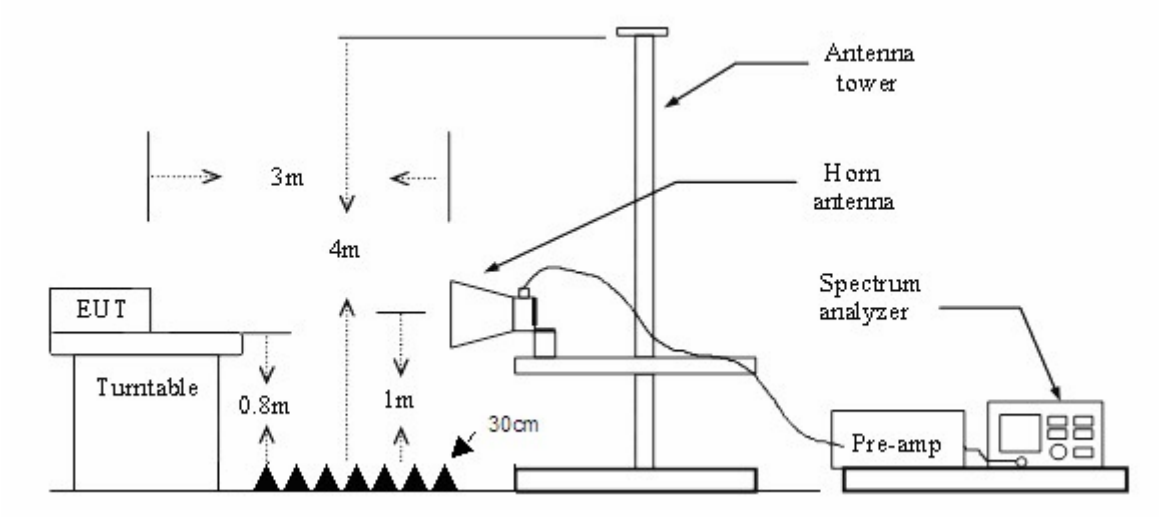
- EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.
- The Analyzer / Receiver scanned from 30MHz to 40GHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the 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. (For Below 1GHz) or Peak/Average (For Above 1GHz) 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

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
XXX.XXXX	53.54	-18.84	34.70	40.00	-5.30	QP

Frequency (MHz) = Emission frequency in MHz
Reading (dBuV) = Uncorrected Analyzer / Receiver reading
Correct 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 Reading

Above 1GHz

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
XXXX.XXXX	55.54	4.56	60.10	74.00	-13.90	Peak
XXXX.XXXX	29.66	4.56	34.22	54.00	-19.78	AVG

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)
Peak = Peak Reading
AVG = Average Reading

Calculation Formula

Margin (dB) = Result (dBuV/m) – Limits (dBuV/m)

Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)

7.6. TEST RESULTS

Below 1GHz

Model No.	SP1190B	**Test Mode**	Mode 1
Environmental Conditions	22°C, 45% RH	**RBW,VBW**	120 kHz
Antenna Pole	Vertical	**Antenna Distance**	3m
Detector Function	Quasi-peak	**Tested by**	Sunday Hu

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

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
353.3333	35.14	-16.98	18.16	46.00	-27.84	QP
464.8833	34.69	-14.58	20.11	46.00	-25.89	QP
571.5833	34.88	-12.52	22.36	46.00	-23.64	QP
645.9500	34.24	-12.09	22.15	46.00	-23.85	QP
736.4833	34.32	-10.94	23.38	46.00	-22.62	QP
903.0000	42.08	-9.11	32.97	46.00	-13.03	QP

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

Model No.	SP1190B	**Test Mode**	Mode 1
Environmental Conditions	22°C, 45% RH	**RBW,VBW**	120 kHz
Antenna Pole	Horizontal	**Antenna Distance**	3m
Detector Function	Quasi-peak	**Tested by**	Sunday Hu

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

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
280.5833	33.93	-19.38	14.55	46.00	-31.45	QP
385.6666	33.46	-16.06	17.40	46.00	-28.60	QP
479.4333	33.97	-13.93	20.04	46.00	-25.96	QP
557.0333	34.59	-12.72	21.87	46.00	-24.13	QP
744.5667	33.86	-10.86	23.00	46.00	-23.00	QP
903.0000	42.27	-9.11	33.16	46.00	-12.84	QP

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

Above 1GHz

Model No.	SP1190B	**Test Mode**	Mode 1
Environmental Conditions	24°C, 52% RH	**RBW,VBW**	1MHz
Antenna Pole	Vertical	**Antenna Distance**	3m
Detector Function:	Peak/AVG	**Tested by**	Sunday Hu

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

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1821.6667	57.63	-10.07	47.56	74.00	-26.44	Peak
2983.3333	46.16	-6.07	40.09	74.00	-33.91	Peak
3465.0000	46.45	-4.66	41.79	74.00	-32.21	Peak
4683.3333	44.20	-1.30	42.90	74.00	-31.10	Peak
5760.0000	44.63	2.37	47.00	74.00	-27.00	Peak
6808.3333	44.39	4.30	48.69	74.00	-25.31	Peak

REMARKS: *1. The other emission levels were very low against the limit.*

2. "--", means the average measurement was not performed when the measured peak data under the limit of average detection.

3. Peak= Peak Reading; AVG= Average Reading.

Model No.	SP1190B	**Test Mode**	Mode 1
Environmental Conditions	24°C, 52% RH	**RBW,VBW**	1MHz
Antenna Pole	Horizontal	**Antenna Distance**	3m
Detector Function:	Peak/AVG	**Tested by**	Sunday Hu

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

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1821.6667	50.03	-10.07	39.96	74.00	-34.04	Peak
2700.0000	48.30	-7.96	40.34	74.00	-33.66	Peak
3691.6667	45.27	-3.84	41.43	74.00	-32.57	Peak
4881.6667	44.43	-0.39	44.04	74.00	-29.96	Peak
5873.3333	44.04	2.71	46.75	74.00	-27.25	Peak
6270.0000	45.14	3.77	48.91	74.00	-25.09	Peak

REMARKS: *1. The other emission levels were very low against the limit.*

2. "--", means the average measurement was not performed when the measured peak data under the limit of average detection.

3. Peak= Peak Reading; AVG= Average Reading.