Prüfbericht - Nr.: 17022903 001
Test Report No.:

Auftraggeber: *Client:*	Huawei Technologies Co., Ltd. Bantian, Longgang District, Shenzhen, Guangdong 518129, P.R. China
Gegenstand der Prüfung: *Test item:*	Access Router
Bezeichnung: *Identification:*	AR1220W AR1220W-S AR1220VW **Serien-Nr.:** *Serial No.:* n.a.
Wareneingangs-Nr.: *Receipt No.:*	163083244 **Eingangsdatum:** *Date of receipt:* 2011-09-07
Prüfort: *Testing location:*	Huawei Technologies Co., Ltd. Bantian, Longgang District, Shenzhen, Guangdong 518129, P.R. China FCC Registration No.: 97456 Industry Canada Test Site No.: 6369A-1
Prüfgrundlage: *Test specification:*	FCC CFR47 Part 15: Subpart C Section 15.247 FCC CFR47 Part 15: Subpart C Section 15.207 FCC CFR47 Part 15: Subpart C Section 15.209 RSS-210 Issue 8 December 2010 RSS-Gen Issue 3 December 2010
Prüfergebnis: *Test Result:*	**Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).** *The test item passed the test specification(s).*
Prüflaboratorium: *Testing Laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.

geprüft/ *tested by:*			**kontrolliert/** *reviewed by:*		
2011-10-19	Sam Lin/ Project Manager		2011-10-20	Shawn Peng/Manager	
Datum *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name/Stellung** *Name/Position*	**Unterschrift** *Signature*

Sonstiges/ *Other Aspects:*

The EUT contains Transmitter Module FCC ID: NKR-DNMA91 and IC ID: 4441A-DNMA91.
There is no change in Wi-Fi module except for different antenna, therefore only radiated emissions and conducted emissions should be retested and recorded in this report. For all other requirements of transmitter refer to the original test data of Wi-Fi module.

Abkürzungen:				*Abbreviations:*			
P(ass)	=	*entspricht Prüfgrundlage*		*P(ass)*	=	*passed*	
F(ail)	=	*entspricht nicht Prüfgrundlage*		*F(ail)*	=	*failed*	
N/A	=	*nicht anwendbar*		*N/A*	=	*not applicable*	
N/T	=	*nicht getestet*		*N/T*	=	*not tested*	

CONTENT

1. General Information

1.1 Applied Standard

Applied Rules:	47 CFR FCC Part 2, Subpart J (10-1-10 Edition) 47 CFR FCC Part 15, Subpart C (10-1-10 Edition) IC RSS-Gen (Issue 3, December 2010) IC RSS-210 (Issue 8, December 2010)
Test Method:	KDB 558074

1.2 Test Location

Test Location 1: Address:	Reliability Laboratory of Huawei Technologies Co., Ltd. Huawei Base, Bantian, Longgang District, Shenzhen 518129, P.R. China

1.3 Test Environment Condition

Ambient Temperature:	20.5 – 25 ℃
Ambient Relative Humidity:	50 – 66 %
Atmospheric Pressure:	Not applicable

1.4 Test Date

Date:	2011-07-01 to 2011-09-01

2. Test Summary

No.	Test Case	FCC Part No.	Result
1	Minimum 6dB bandwidth	15.247(a)(2)	Not test *
2	Maximum Peak Conducted Output Power	15.247(b)(3)	Not test *
3	Conducted Band Edge Compliance	15.247(d)	Not test *
4	Conducted RF Spurious	15.247(d)	Not test *
5	Conducted Power Spectral Density	15.247(e)	Not test *
6	Radiated Emissions in the Restricted Bands	15.247(d) 15.209	Pass
7	AC Power Line Conducted Emissions	15.207	Pass

No.	Test Case	IC Standard No.	Result
1	Minimum 6 dB Bandwidth	RSS-210, A8.2(a)	Not test *
2	Maximum Peak Conducted Output Power	RSS-210, A8.4(4)	Not test *
3	Conducted Band Edge Compliance	RSS-210, A8.5	Not test *
4	Conducted RF Spurious	RSS-210, A8.5	Not test *
5	Conducted Power Spectral Density	RSS-210, A8.2(b)	Not test *
6	Radiated Emissions in the Restricted Bands	RSS-210, A8.5 RSS-210, 2.2 RSS-Gen, 7.2.2 RSS-Gen, 7.2.5	Pass
7	Radiated Receiver Spurious Emissions	RSS-210, 2.3 RSS-Gen, 6.1	Not test *
8	AC Power Line Conducted Emissions	RSS-Gen, 7.2.4	Pass

* - Contains single transmitter module FCC ID:NKR-DNMA91 and IC ID:4441A-DNMA91.
Refer to the original test data of this signal transmitter module.

3. Description of the Equipment under Test (EUT)

3.1 General Description

The enterprise network access router AR V200R001C01 provides three models with WIFI: AR1220W, AR1220VW, and AR1220W-S. They have the same architecture, power supply module, adaptor and similar board, but different functions. AR1220W and AR1220W-S have the same board, but different functions. AR1220VW support voice card, but AR1220W and AR1220W-S don't support. They operate on the Versatile Routing Platform (VRP) operating system and IAS system developed by Huawei and adopts the hardware-based forwarding and non-blocking data switching technology. They feature carrier-class reliability, line-speed forwarding capability, perfect Quality of Service (QoS) mechanism, service processing capability, and good expansibility.

The test report is based on the report for the WLAN module installed within the product. The WLAN module was proved complying with relevant standard, see test report(s) issued by "Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory" with report number "RF110725C08" (for FCC) and "IC110725C08" (for IC) for the WLAN module with model number "DNMA-91". The present report provides additive measurements to prove that the whole product still complies with relevant standard.

3.2 EUT Identity

NOTE: Unless otherwise noted in the report, the functional boards installed in the units shall be selected from the below list, but not means all the functional boards listed below shall be installed in one unit.

3.2.1 Board

Board		
Board Name	Hardware Version	Description
AR01SRU1H	VER.C	AR1220VW Main Control Board
AR01SRU1B	VER.C	AR1220W and AR1220W-S Main Control Board
AR01DWA30A	VER.B	802.11 b/g/n 2*2 WIFI Daughter Card
DNMA-91	---	WLAN 802.11 b/g/n Mini-PCI Module; Wistron NeWeb Corp.
SL15593A	---	WLAN Antenna,2400-2500MHz,>2dBi,Vertical,Omni,5W,RP-SMA-J; Shenglu

3.2.2 Sub-Assembly

Sub-Assembly			
Sub-Assembly Name	Model	Manufacturer	Description
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3.3 Technical Description

3.3.1 Transmission / Receiving Characteristics

Characteristics	Description
TX/RX Operating Band	2400 MHz to 2483.5 MHz
IEEE 802.11 WLAN Mode Supported	802.11b: Supported 802.11g: Supported 802.11n : Supported
Channel Bandwidth	802.11b: 20 MHz 802.11g: 20 MHz 802.11n: 20 MHz, 40 MHz
TX Power Control (TPC)	Supported
Type of Modulation	802.11b: DSSS 802.11g: OFDM 802.11n: OFDM
Data Rate	802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n (SISO): MCS0 to MCS7 802.11n (MIMO): MCS0 to MCS15

3.3.2 Operating Channel Scheme

Operating Mode	Description
802.11b 802.11g 802.11n (20 MHz bandwidth)	fc = 2407 MHz + N * 5 MHz, where: fc = Operating Frequency in MHz, N = Channel Number with the range from 1 to 11
802.11n (40MHz bandwidth)	fc = 2407 MHz + N * 5 MHz, where: fc = Operating Frequency in MHz, N = Channel Number with the range from 3 to 9

3.3.3 Antenna Assembles Profiles

NOTE: When the EUT is put into service, the Antenna Gain should NOT exceed the value used in this table.

Characteristics	Description
Antenna Type	☐Integrated, ☒External
Frequency Range	2400 - 2500MHz
Antenna Ports	Ant 1, Ant 2
Smart Antenna Systems	SISO, 2*2 MIMO
Antenna Gain (see NOTE)	2.15 dBi
Remark	---

3.3.4 Power Supply

Specification	Description
Power Supply Type	Directly by Main line power
Input to EUT	AC Voltage Nominal: ~220V AC Voltage Range: ~100-240,50/60Hz,2A

3.3.5 Working Environment

Specification	Description
Temperature	-5 ℃ to +55 ℃
Relative Humidity	5% to 95%

4. General Test Conditions / Configurations

4.1 Test Sample

☐ The report applies to single model.
☒ The report applies to several models; the practical measurements are performed using the model AR1220VW.

4.2 Test Modes

NOTE: Typical working modes for each IEEE 802.11 mode are selected to perform tests.

Test Mode	Test Modes Description
11B	IEEE 802.11b with data rate of 1 Mbps
11G	IEEE 802.11g with data rate of 6 Mbps
11N_20M_SISO	IEEE 802.11n with data date of MCS0 and bandwidth of 20 MHz, using SISO mode
11N_20M_MIMO	IEEE 802.11n with data date of MCS0 and bandwidth of 20 MHz, using MIMO mode
11N_40M_SISO	IEEE 802.11n with data date of MCS0 and bandwidth of 40 MHz, using SISO mode
11N_40M_MIMO	IEEE 802.11n with data date of MCS0 and bandwidth of 40 MHz, using MIMO mode

4.3 Frequencies under Test

Test Mode	RF Channel		
	Lowest/Bottom (B)	Middle (M)	Highest/Top (T)
11B, 11G, 11N_20M_SISO, 11N_20M_MIMO	Ch No. 1 / 2412 MHz	Ch No. 6 / 2437 MHz	Ch No. 11 / 2462 MHz
11N_40M_SISO, 11N_40M_MIMO	Ch No. 3 / 2422 MHz	Ch No. 6 / 2437 MHz	Ch No. 9 / 2452 MHz

4.4 Test Environments

NOTE: The values used in the test report may be stringent than the declared.

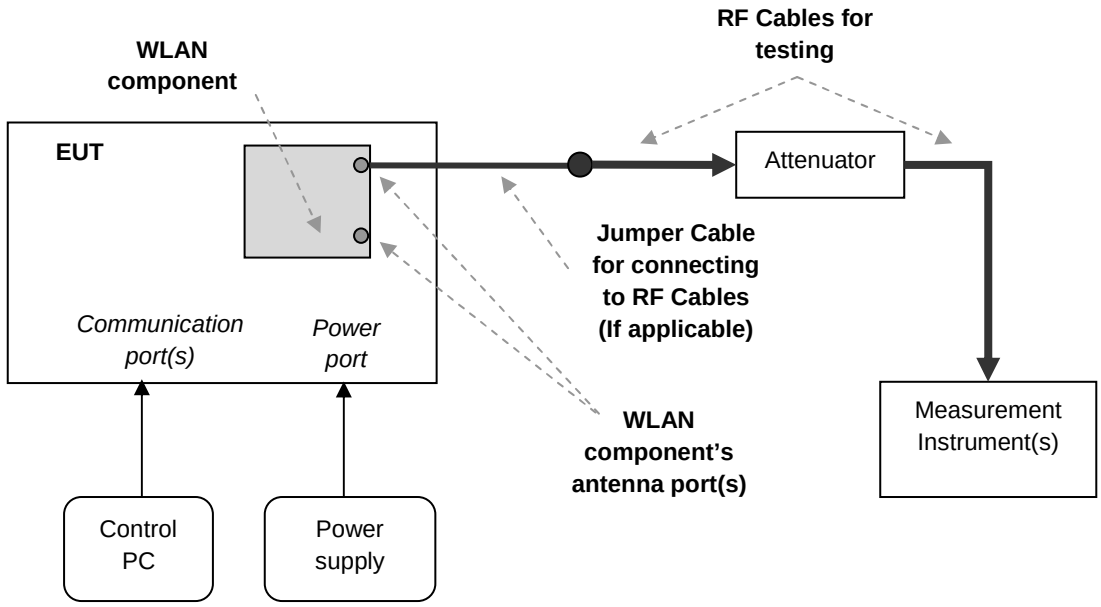
Environment Parameter	Selected Values During Tests		
	Temperature	Voltage	Relative Humidity
NTNV	Ambient	Rated	Ambient

4.5 Test Setups

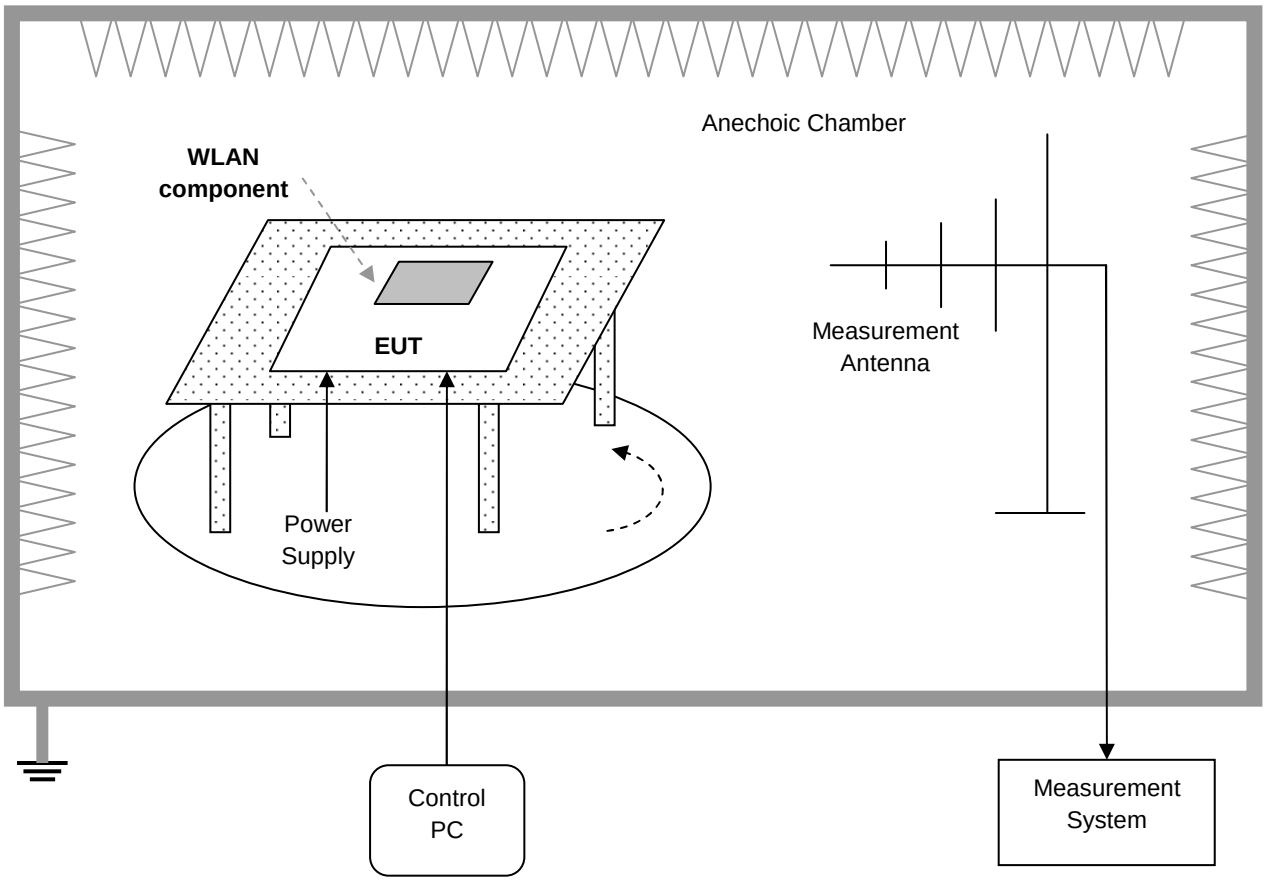
4.5.1 General Test Setup Configurations

Configuration	Description
Test Antenna Ports	Until declared, all Transmitter tests are performed at all antenna ports of the EUT; all Receiver tests are performed at all antenna ports.
Multiple RF Sources	Other non-WLAN RF source(s) (if applicable) of the EUT are disabled or shutdown during measurements for WLAN RF source, which is considered in the present report.

4.5.2 Test Setup 1



4.5.3 Test Setup 2



4.6 Test Conditions

Test Case	Test Conditions	
	Configuration	Description
Radiated Emissions in the Restricted Bands	Measurement Method	Test Setup 2
	Power Level	Highest
	Test Conditions	NTNV
	Smart Antenna Systems	Ant 1, Ant 2
	Test Modes	Worst case of 11B, 11G, 11N_20M_SISO, 11N_20M_MIMO, 11N_40M_SISO, 11N_40M_MIMO
	Test Frequency	Worst case of B, M, T

5. Test Results

5.1 FCC Requirements

5.1.1 Radiated Emissions in the Restricted Bands

According to FCC Part 15.247(d):
Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a).

According to FCC Part 15.209 and relevant rules:
The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance (m)	Detector
0.009 – 0.090	2400/F(kHz)	20*lg(2400/F(kHz))	300	Average
0.090 – 0.110	2400/F(kHz)	20*lg(2400/F(kHz))	300	Quasi-peak
0.110 – 0.490	2400/F(kHz)	20*lg(2400/F(kHz))	300	Average
0.490 – 1.705	24000/F(kHz)	20*lg(24000/F(kHz))	30	Quasi-peak
1.705 – 30.0	30	29.5	30	Quasi-peak
30 – 88	100	40	3	Quasi-peak
88 – 216	150	43.5	3	Quasi-peak
216 – 960	200	46	3	Quasi-peak
960 –1000	500	54	3	Quasi-peak
Above 1000	500	54	3	Average
Above 1000	---	74	3	Peak

All test results and plots refer to attached Appendix 1 for details.

5.1.2 AC Power Line Conducted Emissions

According to FCC Part 15.207 and relevant rules:
For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequencies ranges.

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 – 30	60	50
* Decreases with the logarithm of the frequency.		

All test results and plots refer to attached Appendix 1 for details.

5.2 IC Requirements

5.2.1 Radiated Emissions in the Restricted Bands

According to RSS-210 A8.5:
Attenuation below the general field strength limits specified in RSS-Gen is not required.

According to RSS-210 2.2:
Category I licence-exempt equipment is required to comply with the provisions in RSS-Gen with respect to emissions falling within restricted frequency bands. These restricted frequency bands are listed in RSS-Gen.

According to RSS-Gen 7.2.2:
Restricted bands, identified in Table 3 of RSS-Gen, are designated primarily for safety-of-life services (distress calling and certain aeronautical bands), certain satellite downlinks, radio astronomy and some government uses. Except where otherwise indicated, the following restrictions apply: (a) fundamental components of modulation of licence-exempt radio apparatus shall not fall within the restricted bands of Table 3 of RSS-Gen; (b) unwanted emissions falling into restricted bands of Table 3 of RSS-Gen shall comply with the limits specified in RSS-Gen; (c) unwanted emissions not falling within restricted frequency bands shall either comply with the limits specified in the applicable RSS, or with those specified in RSS-Gen.

According to RSS-Gen 7.2.5:
Spurious emissions from licence-exempt transmitters shall comply with the field strength limits shown below. Additionally, the level of any transmitter spurious emission shall not exceed the level of the transmitter's fundamental emission.

Frequency (MHz)	Field Strength (µV/m)	Magnetic H-Field (µA/m)	Measurement Distance (m)	Detector
0.009 – 0.090	2400/F(kHz)	2400/377F(kHz)	300	Average
0.090 – 0.110	2400/F(kHz)	2400/377F(kHz)	300	Quasi-peak
0.110 – 0.490	2400/F(kHz)	2400/377F(kHz)	300	Average
0.490 – 1.705	24000/F(kHz)	24000/377F(kHz)	30	Quasi-peak
1.705 – 30.0	30	---	30	Quasi-peak

Frequency (MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance (m)	Detector
30 – 88	100	40	3	Quasi-peak
88 – 216	150	43.5	3	Quasi-peak
216 – 960	200	46	3	Quasi-peak
960 –1000	500	54	3	Quasi-peak
Above 1000	500	54	3	Average

All test results and plots refer to attached Appendix 1 for details.

5.2.2 AC Power Line Conducted Emissions

According to RSS-Gen 7.2.4 and relevant rules:
Except when the requirements applicable to a given device state otherwise, for any radio apparatus equipped to operate from the public utility AC power supply, either directly or indirectly (such as with a battery charger), the radio frequency voltage of emissions conducted back onto the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in the table below. The more stringent limit applies at the frequency range boundaries. The conducted emissions shall be measured with a 50 ohm/50 microhenry line impedance stabilization network (LISN).

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 – 30	60	50
* Decreases with the logarithm of the frequency.		

All test results and plots refer to attached Appendix 1 for details.

6. Main Test Instruments

Equipment Name	Manufacturer	Model	Cal. Due
Radiated Emissions			
Chamber	Albatross Projects GmbH	10m	---
EMI Test receiver	R&S	ESU40	2012-05-12
Loop Antenna	Schwarzbeck	FMZB1516	2011-11-25
Broadband Antenna	SCHAFFNER	CBL 6112B	2011-12-10
Horn Antenna (1G-18G)	R&S	HF907	2012-05-13
Horn Antenna (18G-26.5G)	ETS-LINDGREN	3160-9	2011-12-13
Conducted Emissions			
EMI Test receiver	R&S	ESCI 3	2012-05-05
Artificial Mains Network	R&S	ENV4200	2012-05-13

Test Results of Radiated Emissions in the Restricted Bands

Result Table

NOTE 1: For range from 9 kHz to 30MHz was investigated and carried out on all operation modes, no any deviations were found.
NOTE 2: The whole testing range is from “30 MHz to 26.5 GHz (10th harmonics)” is divided into 4 parts according to the test site settings, which are:
- Part 1: Test range of “30 MHz to 1 GHz”,
- Part 2: Test range of “1 GHz to 3 GHz”,
- Part 3: Test range of “3 GHz to 18 GHz”.
- Part 4: Test range of “18 GHz to 26.5 GHz”.

NOTE 3: For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at all chains to get a final result. The result is the directly measured sum of each chain.

(Part 1) Test Range of "30 MHz to 1 GHz"

NOTE: For this range, only test results and plots under the WORST case of all Test Modes and Channels are reported.

Test Mode	RF Ch.	Ant.	Maximum Emissions
Worst of all	Worst of all	Worst of all	Not found obvious spikes, or see marked spikes on plots.

(Part 2) Test Range of "1 GHz to 3 GHz"

Test Mode	RF Ch.	Ant.	Maximum Emissions
Worst of all	Worst of all	Worst of all	Not found obvious spikes, or see marked spikes on plots.

(Part 3) Test Range of "3 GHz to 18 GHz"

Test Mode	RF Ch.	Ant.	Maximum Spurious Emissions
Worst of all	Worst of all	Worst of all	Not found obvious spikes, or see marked spikes on plots.

(Part 4) Test Range of "18 GHz to 26.5 GHz"

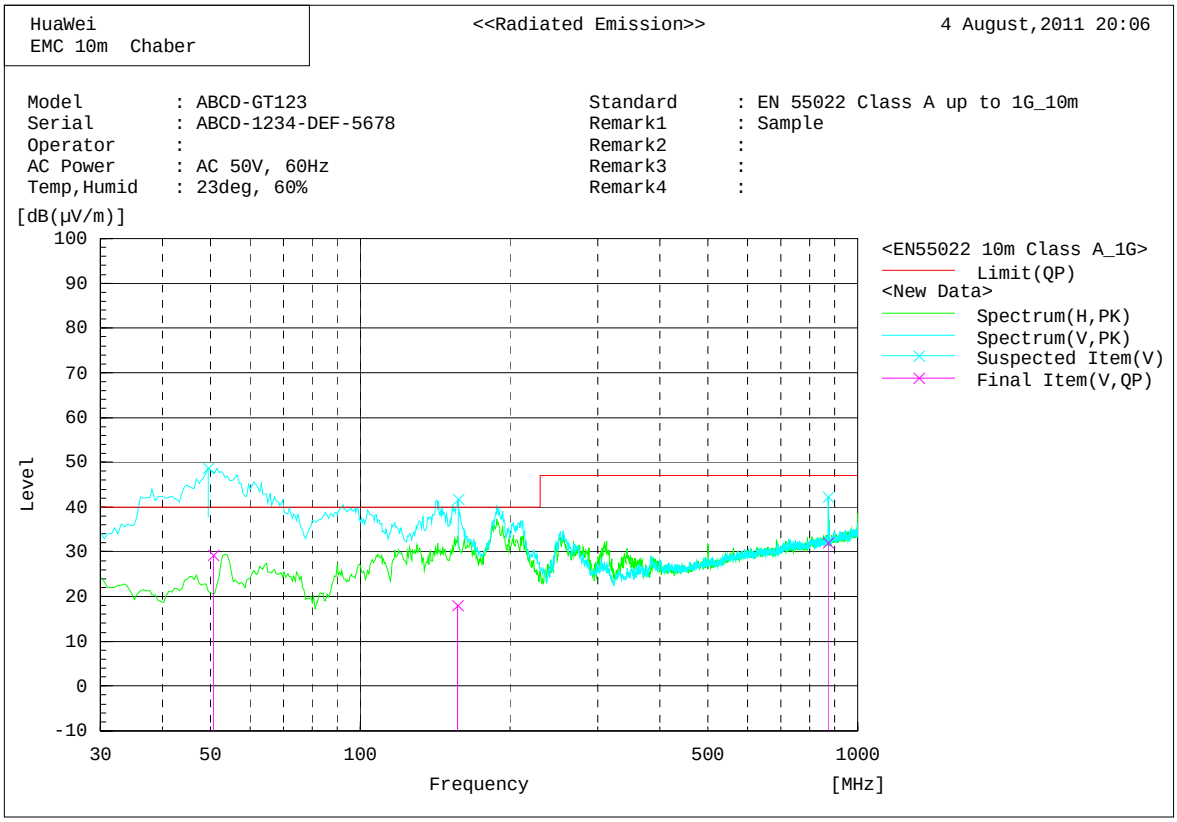
NOTE: For this range, only test results and plots under the WORST case of all Test Modes and Channels are reported.

Test Mode	RF Ch.	Ant.	Maximum Emissions
Worst of all	Worst of all	Worst of all	Not found obvious spikes, or see marked spikes on plots.

Test Plots

(Part 1) Test Range of "30 MHz to 1 GHz"

NOTE: The practical measurement was performed at 10 m, for which the limit lines derived from 3 m limits are:
30 MHz – 88 MHz: 29.5 dBµV/m;
88 MHz – 216 MHz: 33 dBµV/m;
216 MHz – 960 MHz: 35.5 dBµV/m;
960 MHz – 1 GHz: 43.5 dBµV/m.
The test result complies with the requirements.



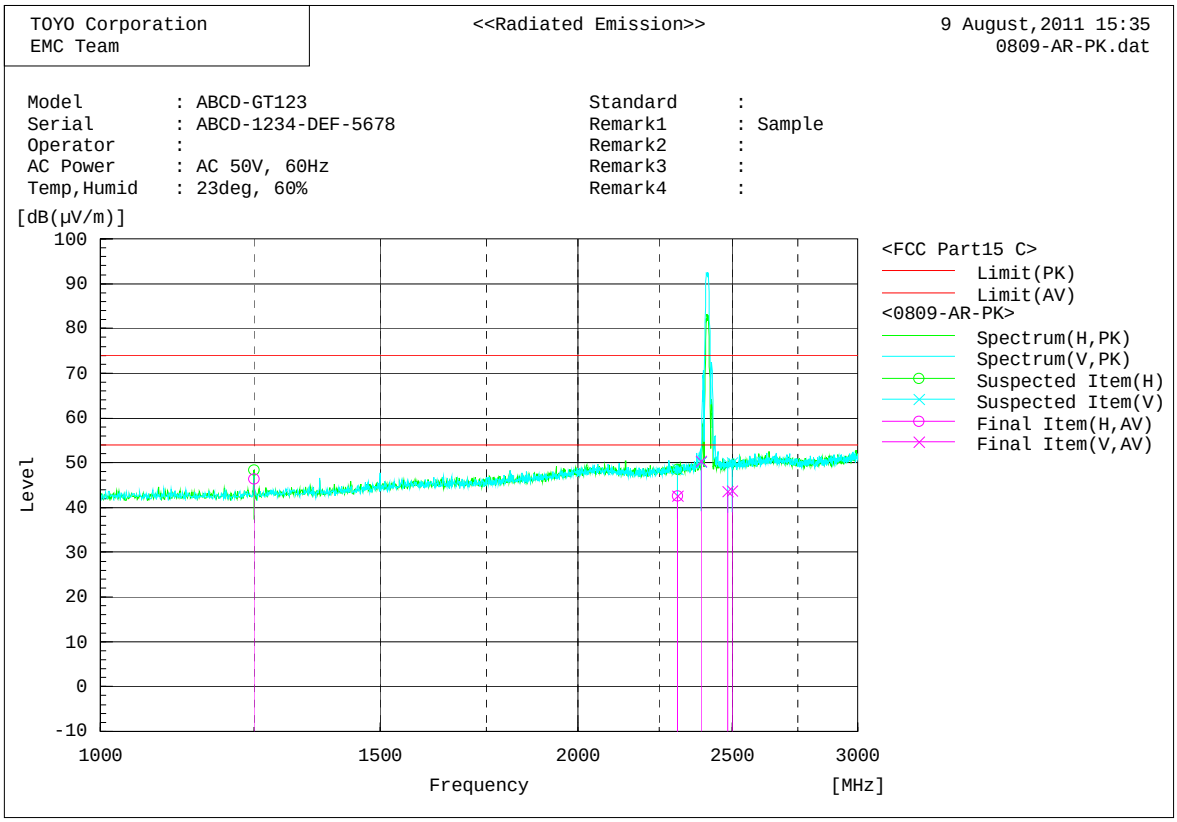
Final Result

No.	Frequency [MHz]	(P)	S.C	Reading QP [dB(µV)]	c.f [dB(1/m)]	Result QP [dB(µV/m)]	Limit QP [dB(µV/m)]	Margin QP [dB]	Height [cm]	Angle [°]	Remark
1	50.667	V	S	64.5	-35.2	29.3	40.0	10.7	101.0	147.0	
2	156.998	V	S	49.3	-31.3	18.0	40.0	22.0	100.0	208.0	
3	872.493	V	S	49.2	-17.1	32.1	47.0	14.9	125.0	91.0	

Frequency MHz	Level @ 10m dBµV/m	Calculated Net @ 3m dBµV/m	Limit @ 3m dBµV/m	Margin dB	Polarisation
50.667	29.3	39.7	40	-0.3	Vertical
156.998	18.0	28.5	43	-14.5	Vertical
872.493	32.1	42.6	46	-3.4	Vertical

(Part 2) Test Range of "1 GHz to 3 GHz"

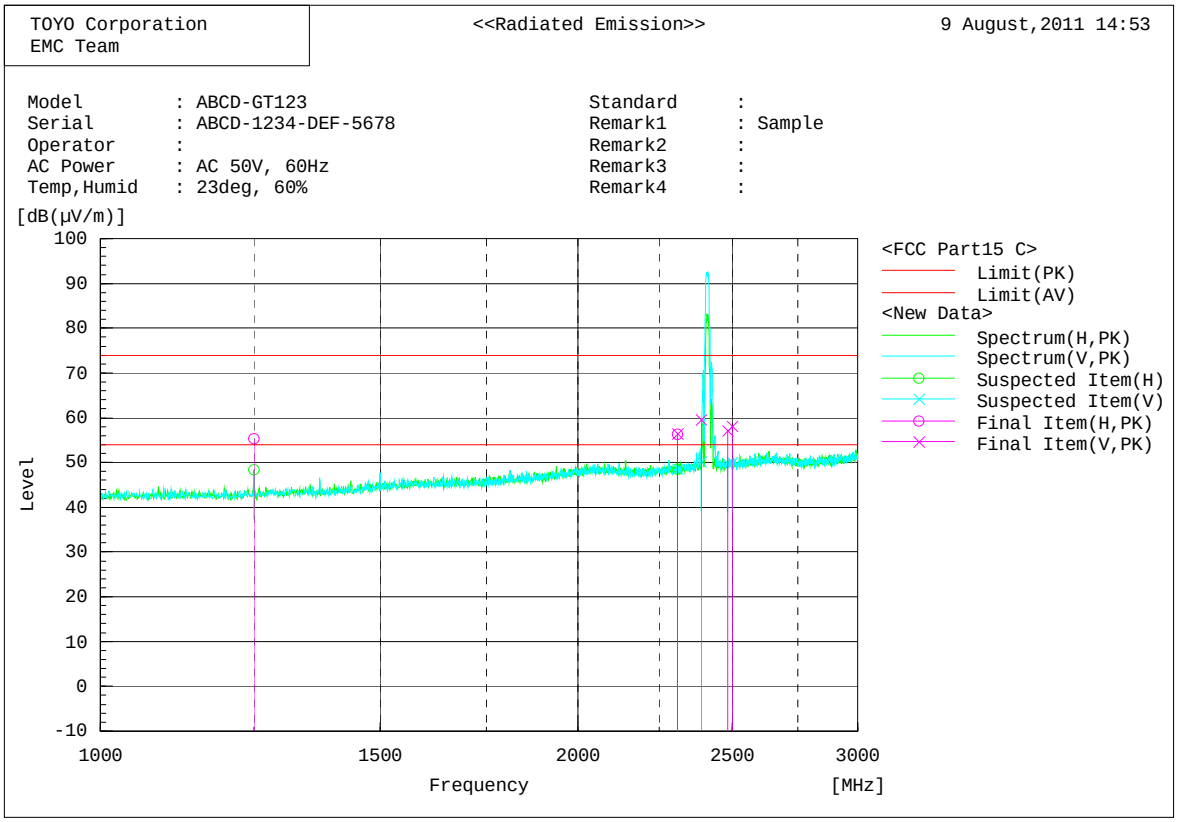
11B_Ch1_AV



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(µV)]	c.f [dB(1/m)]	Result AV [dB(µV/m)]	Limit AV [dB(µV/m)]	Margin AV [dB]	Height [cm]	Angle [°]	Remark
1	1249.935	H	37.9	8.5	46.4	54.0	7.6	100.0	274.0	
2	2310.858	V	28.0	14.6	42.6	54.0	11.4	138.0	22.0	
3	2310.152	H	28.0	14.6	42.6	54.0	11.4	156.0	241.0	
4	2390.864	V	35.5	14.9	50.4	54.0	3.6	100.0	321.0	
5	2484.418	V	27.7	15.8	43.5	54.0	10.5	100.0	110.0	
6	2500.920	V	27.8	15.9	43.7	54.0	10.3	263.0	133.0	

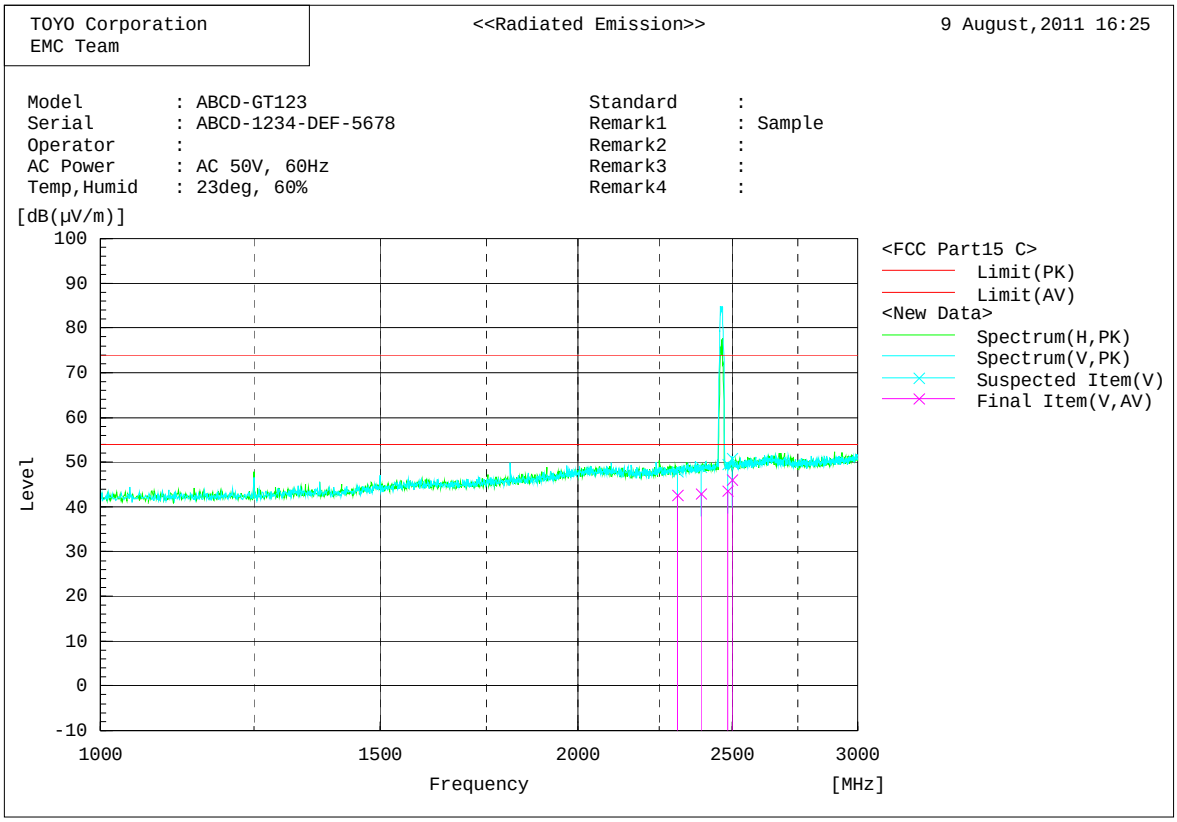
11B_Ch1_PK



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(µV)]	c.f [dB(1/m)]	Result PK [dB(µV/m)]	Limit PK [dB(µV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	1249.744	H	46.8	8.5	55.3	74.0	18.7	100.0	272.0	
2	2310.131	V	41.8	14.6	56.4	74.0	17.6	285.0	114.0	
3	2310.474	H	41.6	14.6	56.2	74.0	17.8	138.0	203.0	
4	2390.130	V	44.7	14.9	59.6	74.0	14.4	100.0	320.0	
5	2484.295	V	41.4	15.8	57.2	74.0	16.8	219.0	200.0	
6	2499.918	V	42.1	15.9	58.0	74.0	16.0	211.0	329.0	

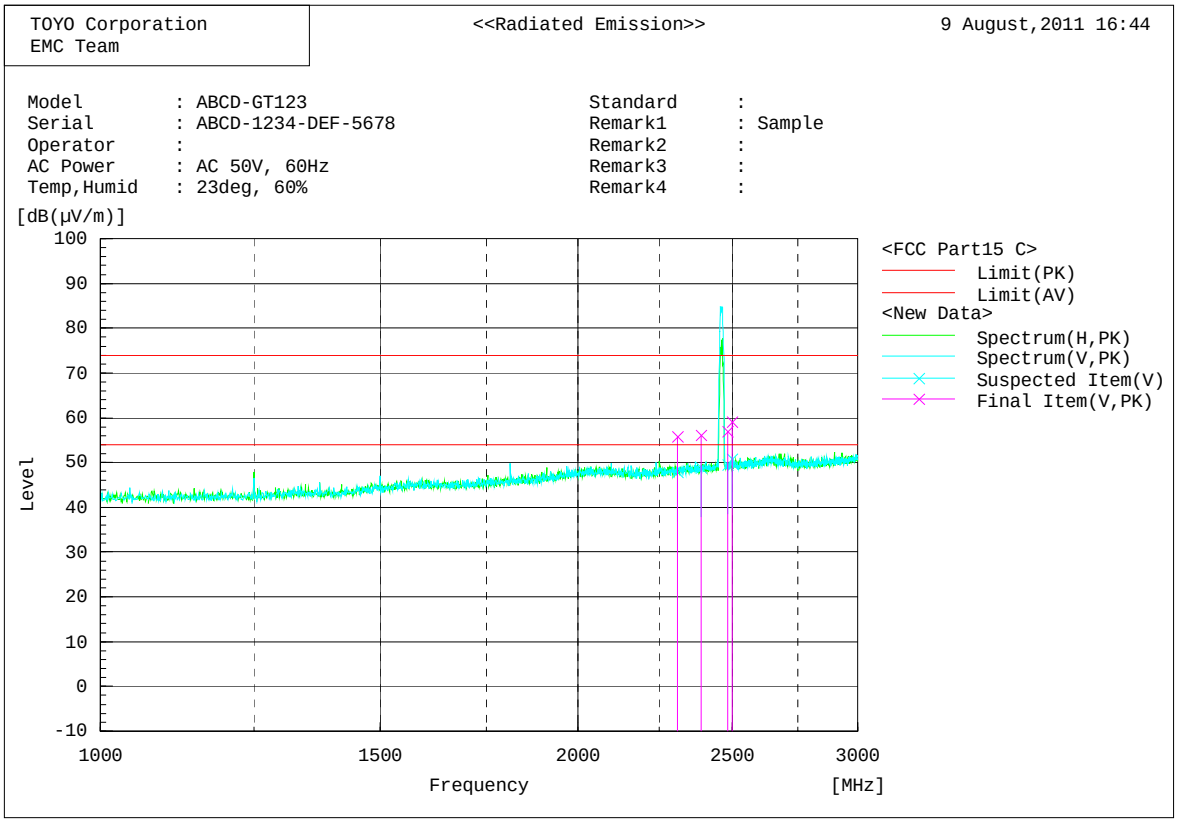
11B_Ch11_AV



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(µV)]	c.f [dB(1/m)]	Result AV [dB(µV/m)]	Limit AV [dB(µV/m)]	Margin AV [dB]	Height [cm]	Angle [°]	Remark
1	2309.967	V	28.1	14.6	42.7	54.0	11.3	237.0	10.0	
2	2390.244	V	28.1	14.9	43.0	54.0	11.0	204.0	218.0	
3	2483.480	V	27.7	15.8	43.5	54.0	10.5	240.0	10.0	
4	2500.246	V	30.2	15.9	46.1	54.0	7.9	134.0	327.0	

11B_Ch11_PK

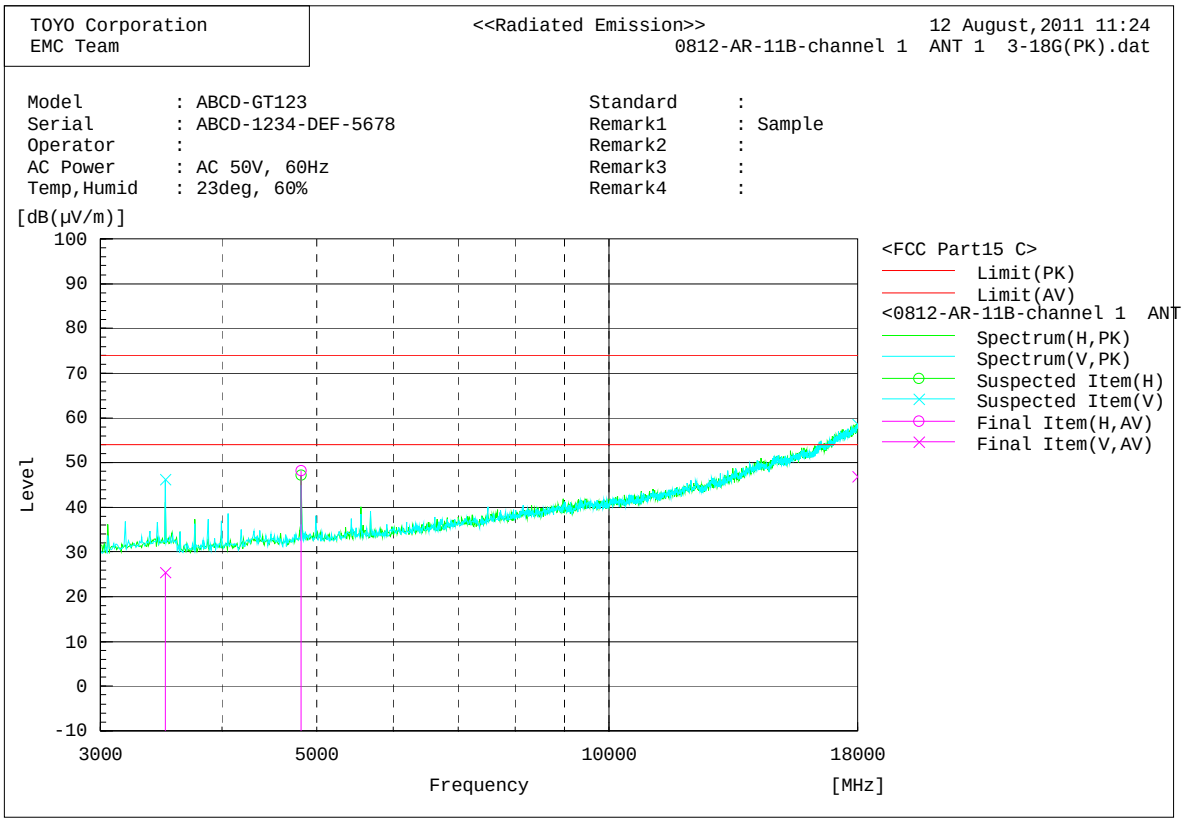


Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(µV)]	c.f [dB(1/m)]	Result PK [dB(µV/m)]	Limit PK [dB(µV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	2310.592	V	41.2	14.6	55.8	74.0	18.2	375.0	349.0	
2	2390.951	V	41.3	14.9	56.2	74.0	17.8	389.0	154.0	
3	2483.620	V	41.1	15.8	56.9	74.0	17.1	200.0	317.0	
4	2500.169	V	43.1	15.9	59.0	74.0	15.0	100.0	328.0	

(Part 3) Test Range of "3 GHz to 18 GHz"

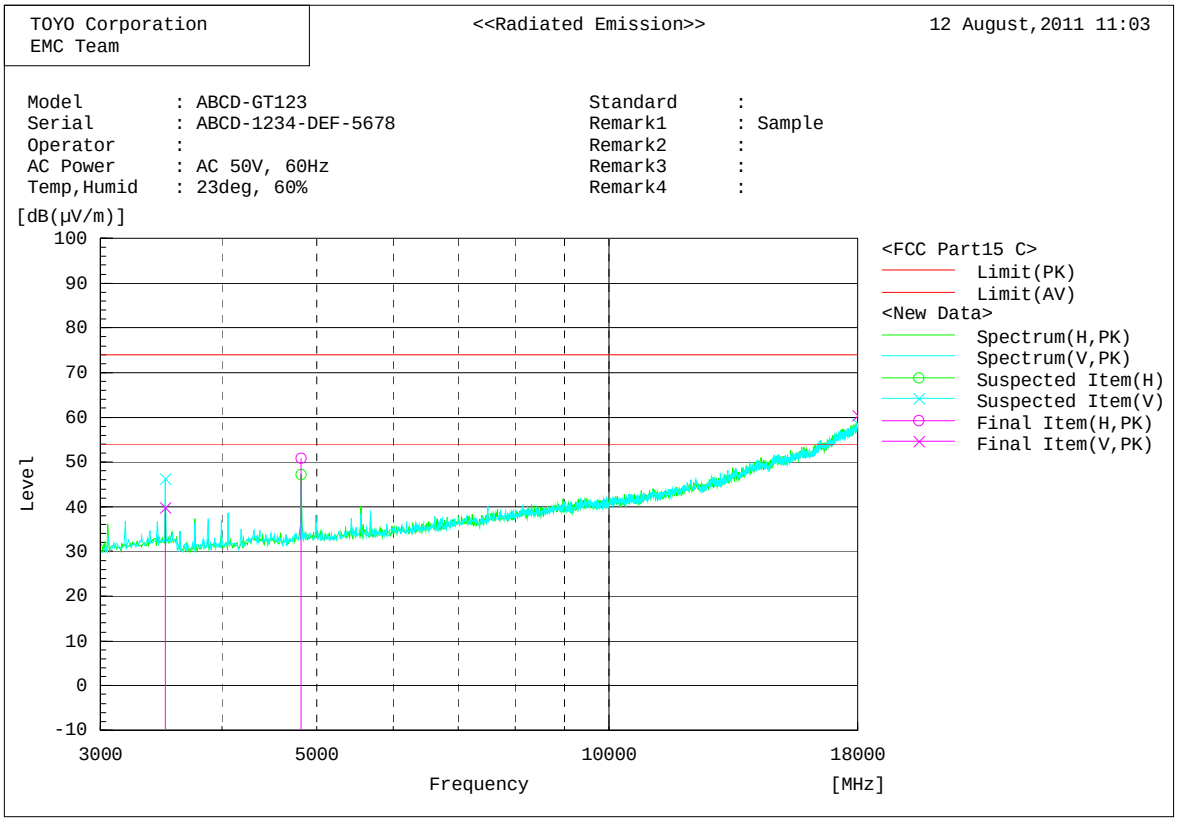
11B_Ch1_AV



Final Result

No.	Frequency [MHz]	(P)	S.C	Reading AV [dB(µV)]	c.f [dB(1/m)]	Result AV [dB(µV/m)]	Limit AV [dB(µV/m)]	Margin AV [dB]	Height [cm]	Angle [°]	Remark
1	3497.982	V	S	26.7	-1.2	25.5	54.0	28.5	261.0	349.0	
2	4823.928	H	S	45.4	2.9	48.3	54.0	5.7	100.0	44.0	
3	17999.700	V	S	17.0	29.8	46.8	54.0	7.2	259.0	256.0	

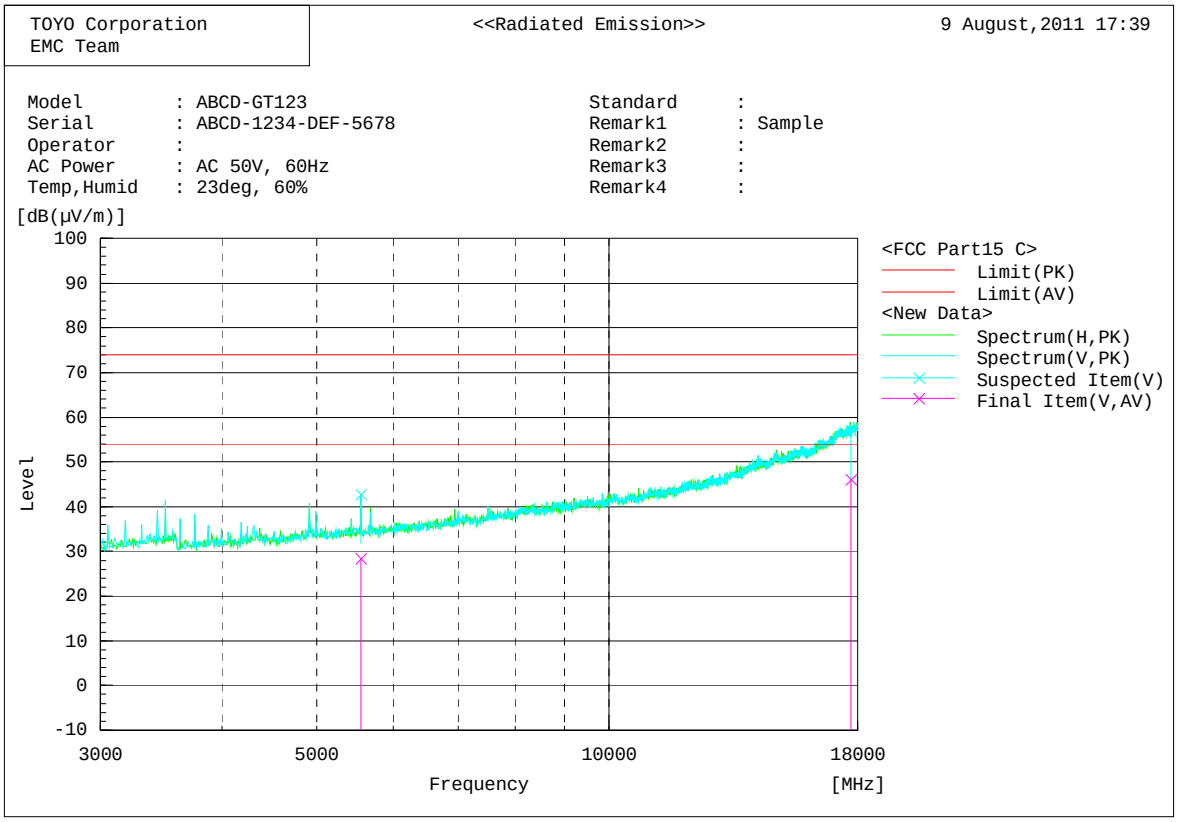
11B_Ch1_PK



Final Result

No.	Frequency [MHz]	(P)	S.C	Reading PK [dB(µV)]	c.f [dB(1/m)]	Result PK [dB(µV/m)]	Limit PK [dB(µV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	3497.738	V	S	41.0	-1.2	39.8	74.0	34.2	173.0	353.0	
2	4824.107	H	S	47.9	2.9	50.8	74.0	23.2	100.0	358.0	
3	17999.190	V	S	30.7	29.8	60.5	74.0	13.5	101.0	35.0	

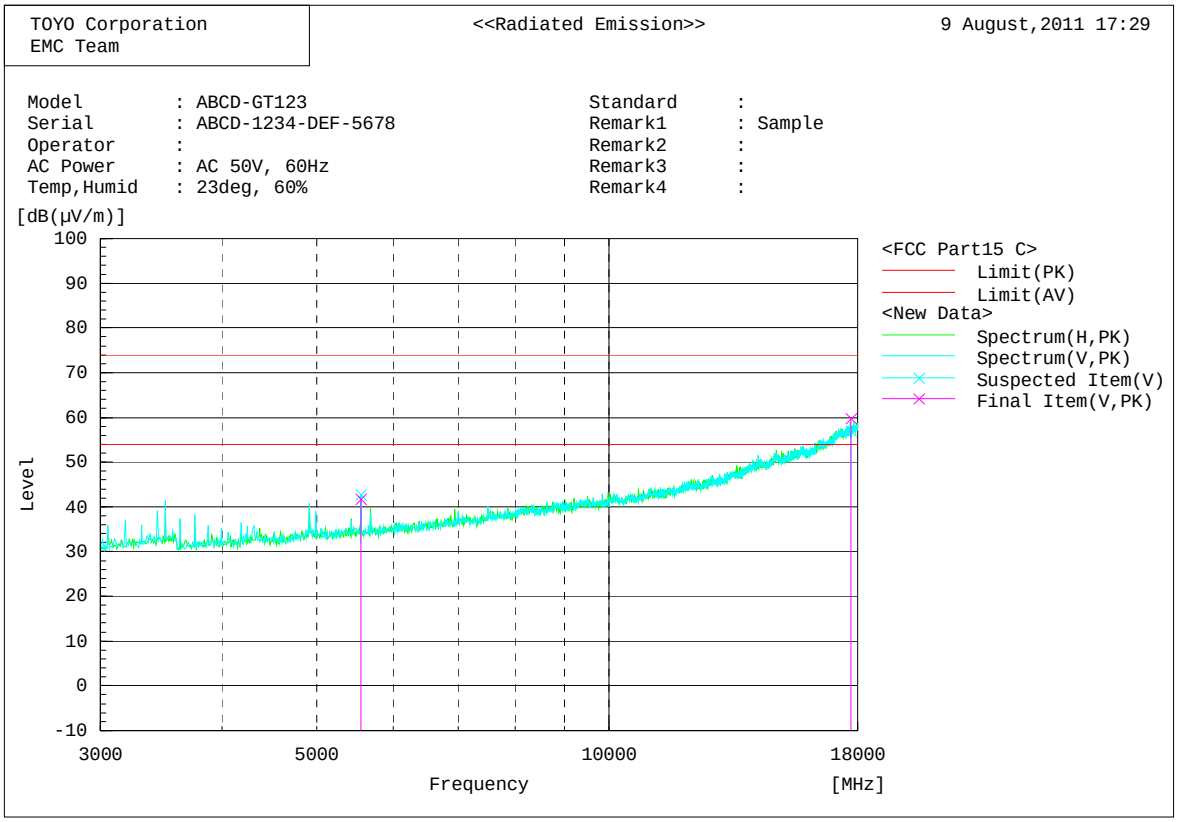
11B_Ch11_AV



Final Result

No.	Frequency [MHz]	(P)	Reading AV [dB(µV)]	c.f [dB(1/m)]	Result AV [dB(µV/m)]	Limit AV [dB(µV/m)]	Margin AV [dB]	Height [cm]	Angle [°]	Remark
1	5558.095	V	24.1	4.3	28.4	54.0	25.6	189.0	31.0	
2	17723.830	V	17.3	28.7	46.0	54.0	8.0	140.0	0.0	

11B_Ch11_PK



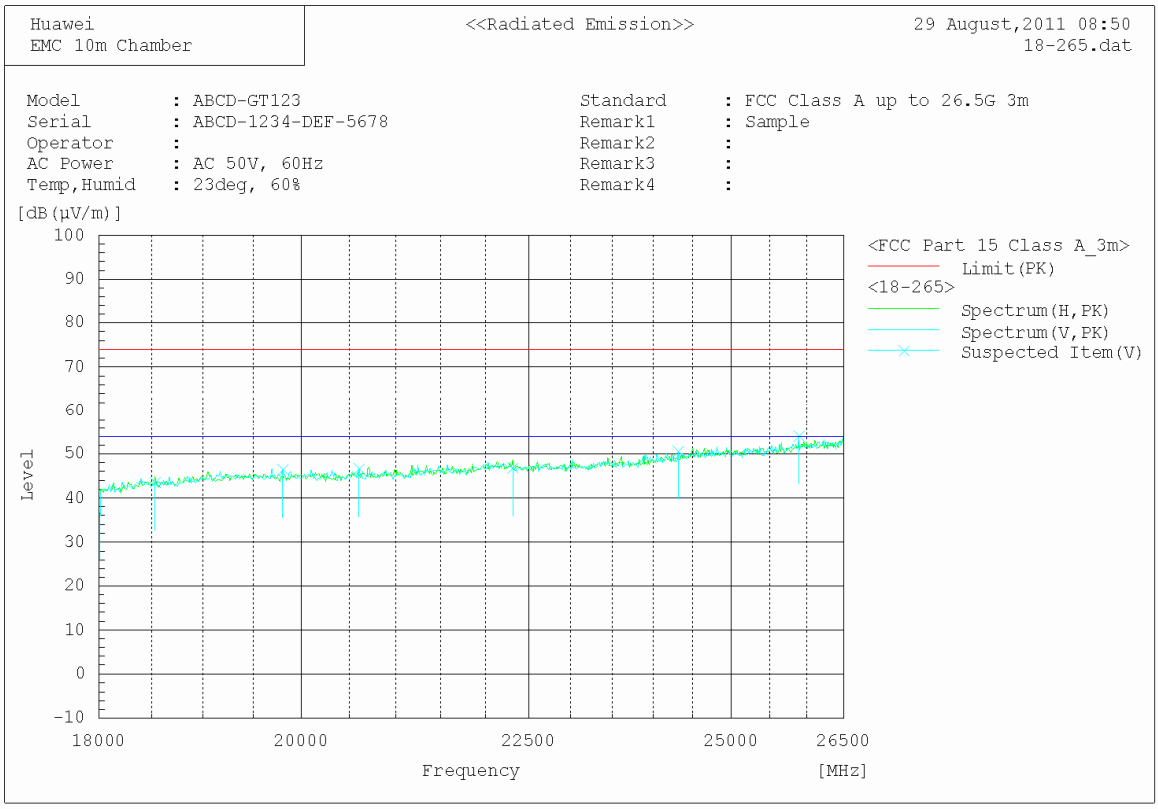
Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(µV)]	c.f [dB(1/m)]	Result PK [dB(µV/m)]	Limit PK [dB(µV/m)]	Margin PK [dB]	Height [cm]	Angle [°]	Remark
1	5557.922	V	37.5	4.3	41.8	74.0	32.2	144.0	356.0	
2	17722.760	V	31.0	28.7	59.7	74.0	14.3	137.0	317.0	

(Part 4) Test Range of "18 GHz to 26.5 GHz"

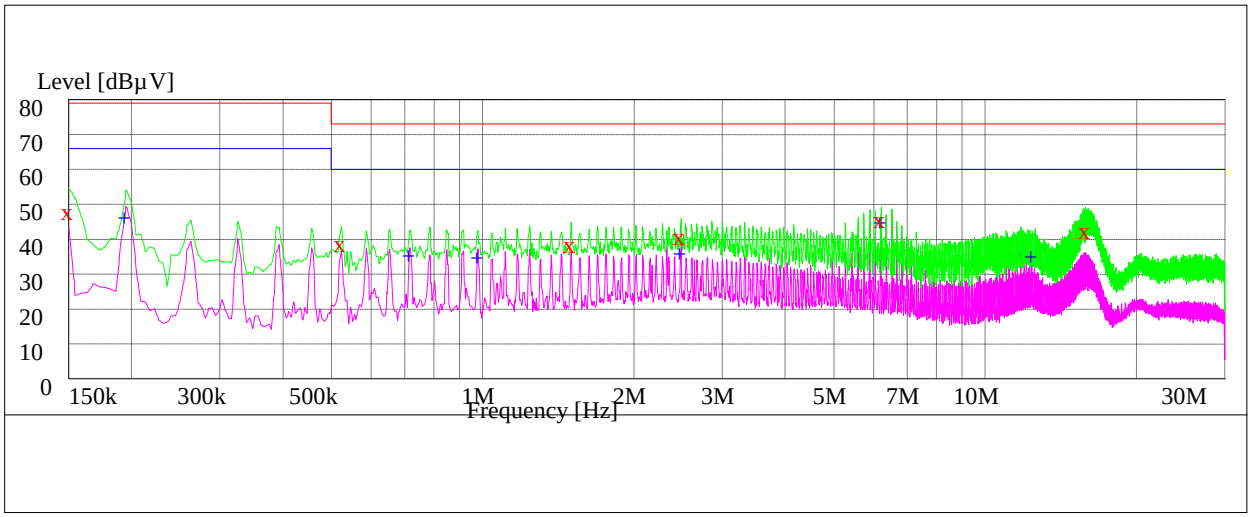
NOTE: There are no distinct spurious emissions in this range, though the higher frequencies have higher noise levels.

11B_Ch1



Frequency [MHz]	Reading [dB(uV)]	c.f [dB(l/m)]	Result PK [dB(uV/m)]	Limit PK [dB(uV/m)]	Margin PK [dB]	Limit AV [dB(uV/m)]	Margin AV [dB]
18531.25	22.5	21.1	43.6	74	30.4	54	10.4
19798.08	23.8	22.7	46.5	74	27.5	54	7.5
20601.76	23.8	23	46.8	74	27.2	54	7.2
22318.11	22.3	24.7	47	74	27.0	54	7
24320.51	24.1	26.6	50.7	74	23.3	54	3.3
25887.02	25.8	28.3	53.9	74	20.1	54	0.1

Test Results of Conducted Emissions



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.150000	50.10	9.9	79	28.9	N	GND
0.523500	41.00	9.9	73	32.0	N	GND
1.500000	40.60	9.9	73	32.4	N	GND
2.481000	42.90	10.1	73	30.1	N	GND
6.207000	47.80	10.3	73	25.2	N	GND
15.895500	44.70	10.5	73	28.3	N	GND

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.195000	48.40	9.9	66	17.6	N	GND
0.717000	37.40	9.9	60	22.6	N	GND
0.978000	36.90	9.8	60	23.1	N	GND
2.481000	38.20	10.1	60	21.8	N	GND
6.207000	46.80	10.3	60	13.2	N	GND
12.412500	37.20	10.4	60	22.8	N	GND