FCC DoC TEST REPORT

for

SubCompact Board

MODEL: xGENE-APL6x (x-where x may be any combination of alphanumeric characters or "-" or blank)

Test Report Number: T180118D17-F

Issued to:

AAEON Technology Inc.

5F, No.135, Lane 235, Pao Chiao Rd, Hsin-Tien Dist., New Taipei City, Taiwan, R.O.C

Issued by:

Compliance Certification Services Inc.

Xindian Lab. No.163-1, Jhongsheng Rd., Xindian Dist., New Taipei City, 23151 Taiwan. TEL: 886-2-22170894

FAX: 886-2-22171029

Issued Date: January 23, 2018



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Revision History

Rev.	lssue Date	Revisions	Effect Page	Revised By
00	January 23, 2018	Initial Issue	ALL	Linda Wu

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1 TEST RESULT CERTIFICATION

Product:	SubCompact Board
Model:	xGENE-APL6x (x-where x may be any combination of alphanumeric characters or "-" or blank)
Brand:	AAEON
Applicant:	AAEON Technology Inc. 5F, No.135, Lane 235, Pao Chiao Rd, Hsin-Tien Dist., New Taipei City, Taiwan, R.O.C
Manufacturer:	AAEON Technology Inc. 5F, No.135, Lane 235, Pao Chiao Rd, Hsin-Tien Dist., New Taipei City, Taiwan, R.O.C
Tested:	January 20, 2018

EMISSION					
Standard	Item	Result	Remarks		
FCC 47 CFR Part 15 Subpart B, ICES-003 Issue 6-2016	Conducted (Power Port)	PASS	Meet Class A limit		
ANSI C63.4-2014	Radiated	PASS	Meet Class A 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:

Sam Hu Assistant Manager

Reviewed by:

Eva Fan / Supervisor of report document dept.

2 EUT DESCRIPTION

Product	SubCompact Board		
Brand Name	AAEON		
Model	xGENE-APL6x (x-where x may be any combination of alphanumeric characters or "-" or blank)		
Applicant	AAEON Technology Inc.		
Housing material	N/A		
Identify Number	T180118D17		
Received Date	January 18, 2018		
EUT Power Rating	3.3VDC/ ±5VDC/ ±12VDC from Host PC Power Supply		
AC Power During Test	120VAC / 60Hz & 230VAC / 60Hz to Host PC Power Supply		

Model Differences

Model Name	Difference	Tested (Checked)
GENE-APL6	Original	\boxtimes
xGENE-APL6x	 x-where x may be any combination of alphanumeric characters or "-" or blank. For marketing purpose only. 	

I/O PORT

I/O PORT TYPES	Q'TY	TESTED WITH
1. COM Port	4	4
2. DIO Port	1	1
3. VGA Port	1	1
4. USB Port	4	4
5. LAN Port	2	2

Note: Client consigns only one model sample to test (Model Number: GENE-APL6).

3 TEST METHODOLOGY

3.1. DECISION OF FINAL TEST MODE

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

The test configuration modes are as the following:

Conduction Modes:

1		120VAC, 60Hz
2	VGA Mode 1920X1200, VF=60Hz	230VAC, 60Hz

Radiation Modes:

1	VGA Mode 1920X1200, VF=60Hz	120VAC, 60Hz	
•	VGA Mode 1920X1200, VF=60Hz / 1-5.5GHz		
2	VGA Mode 1920X1200, VF=60Hz	230VAC, 60Hz	

Worst:

Conduction: Mode 2 Radiation: Mode 1

3.2. EUT SYSTEM OPERATION

- 1. Windows 10 boots system.
- 2. Run Emctest.exe to activate all peripherals and display "H" pattern on monitor screen.
- 3. Run Winemc.exe and choose "E:/ & F:/" to test EUT.
- 4. Press the start menu, select executive and type ping 192.168.0.6&2 –t (EUT), ping 192.168.0.60&1 –t (Server PC).

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.

Host PC Devices:

No.	Equipment	Model No.	Brand Name
1	CPU (1.10GHz)	Intel® Pentium CPU N4200	Intel
2	Memory (DDR3L 1600, 8GB)	SEC 449 BYK0 K4B4G0846D	Transcend
3	AC Power Supply	ENH-0620	Enhance

Peripherals Devices:

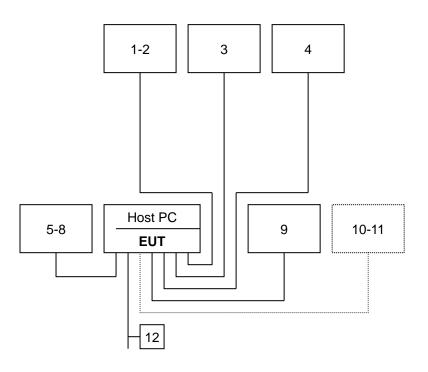
No.	Equipment	Model No.	Serial No.	FCC ID / BSMI ID	Brand Name	Data Cable	Power Cord
1-2	USB HDD	HD-EG5	N/A	DOC BSMI: D33021	SONY	Shielded, 0.5m	N/A
3	USB Mouse	M-U0026	810-002181	DOC BSMI: T41126	Logitech	Shielded, 1.8m	N/A
4	USB Keyboard	Y-U0011	N/A	DOC BSMI: T51160	Logitech	Shielded, 1.8m	N/A
5-8	Modem	AL-56ERM	0MERM04A0212	DOC	GALILEO	Shielded, 1.8m	Unshielded, 1.8m with a core
9	Monitor	PA248Q	G5LMQS071275	BSMI: R31018	ASUS	Shielded, 1.8m with two cores	Unshielded, 1.8m
10-11	Server PC	T3500	N/A	DOC BSMI: R33002	DELL	Unshielded, 20m	Unshielded, 1.8m
12	DIO Cable	N/A	N/A	N/A	N/A	Shielded, 1.8m	N/A

Note:

1) All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2) 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 CCSrf Taiwan Xindian Lab. at No.163-1, Jhongsheng Rd., Xindian Dist., New Taipei City, 23151 Taiwan.

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

5.2. ACCREDITATIONS

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

Taiwan	TAF
USA	A2LA

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

Canada	Industry Canada
Japan	VCCI
Taiwan	BSMI
USA	FCC

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

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 0.15MHz ~ 30MHz		± 1.07
	30MHz ~ 1000MHz	± 4.82
Dedicted omissions	1000MHz ~ 18000MHz	± 4.17
Radiated emissions	18000MHz ~ 26000MHz	± 2.18
	26000MHz ~ 40000MHz	± 2.64

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: 2005, 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

			Class B	(dBuV)
FREQUENCY (MHz)	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 room # A								
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due				
BNC Cable	EMEC	EMG178	BNC#A9	03/27/2018				
EMI Test Receiver	R&S	ESCI	101201	08/22/2018				
LISN	Schwarzbeck	NNLK 8129	8129-286	08/15/2018				
LISN(EUT)	Schwarzbeck	NSLK 8127	8127527	08/15/2018				
Pulse Limiter	R&S	ESH3Z2	C3010026-2	08/17/2018				
Thermo-Hygro Meter	Wisewind	201A	No. 02	05/08/2018				
Test S/W	EZ-EMC							

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)

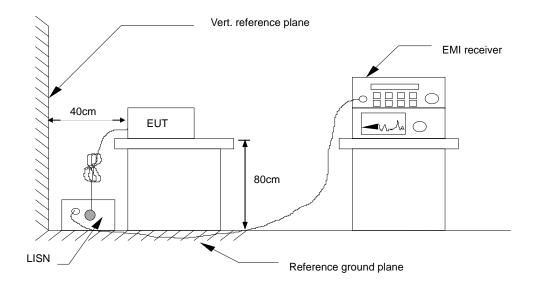
Procedure of Preliminary Test

- 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 installed by AC main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded to the ground plane.
- All support equipment power by from a second LISN.
- 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

	req.	Reading	Factor	Result	Limit	Margin	Detector	Line
	IHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	(P/Q/A)	(L1/L2)
×	x.xx	42.95	0.55	43.50	73	-29.50	Q	L1

Reading = Uncorrected Analyzer/Receiver reading

- Factor = Insertion loss of LISN + Cable Loss + Pulse Limit
- Result = Reading + Factor
- Limit = Limit stated in standard
- Margin = Reading in reference to limit
- P = Peak Reading
- Q = Quasi-peak Reading
- A = Average Reading
- L1 = Hot side
- L2 = Neutral side

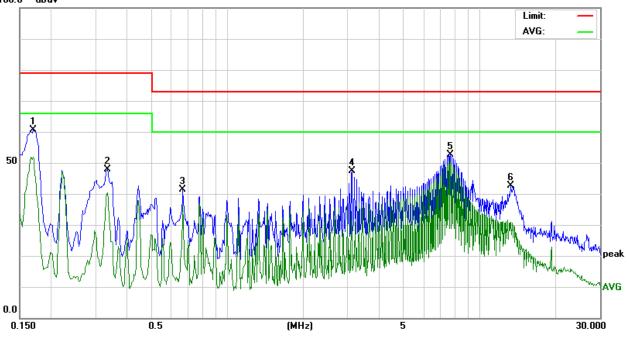
Calculation Formula

Margin (dB) = Result (dBuV) – Limit (dBuV)

6.6. TEST RESULTS

Model No.	GENE-APL6	6dB Bandwidth	9 kHz
Environmental Conditions	25ºC, 58% RH	Test Mode	Mode 2
Tested by	Bonny Tsai	Phase	L1
Standard	FCC CLASS A		

100.0 dBuV

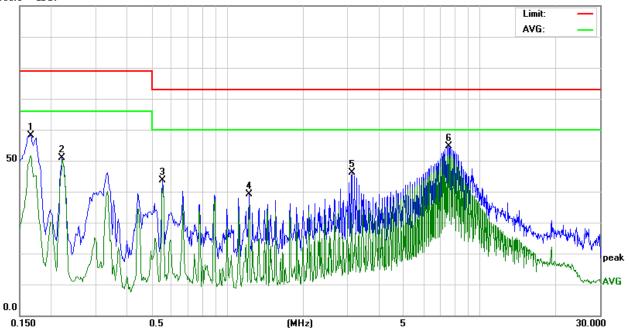


	Conducted Emission Readings						
Frequ	uency Rang	je Investig	gated		150 kHz to	30 MHz	
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1694	50.62	10.02	60.64	79.00	-18.36	Р	L1
0.3338	37.89	10.03	47.92	79.00	-31.08	Р	L1
0.6648	31.22	10.06	41.28	73.00	-31.72	Р	L1
3.1066	37.06	10.26	47.32	73.00	-25.68	Р	L1
7.6464	42.21	10.46	52.67	73.00	-20.33	Р	L1
13.2667	32.04	10.69	42.73	73.00	-30.27	Р	L1

Note: 1. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

Model No.	GENE-APL6	6dB Bandwidth	9 kHz
Environmental Conditions	25°C, 58% RH	Test Mode	Mode 2
Tested by	Bonny Tsai	Phase	L2
Standard	FCC CLASS A		

100.0 dBuV



Conducted Emission Readings							
Frequ	lency Rang	je Investig	gated		150 kHz to	30 MHz	
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1659	48.22	10.02	58.24	79.00	-20.76	Р	L2
0.2208	40.94	10.03	50.97	79.00	-28.03	Р	L2
0.5523	33.61	10.05	43.66	73.00	-29.34	Р	L2
1.2162	28.94	10.12	39.06	73.00	-33.94	Р	L2
3.1066	35.89	10.26	46.15	73.00	-26.85	Р	L2
7.5258	44.06	10.46	54.52	73.00	-18.48	Р	L2

Note: 1. L1 = Line One (Live Line) / L2 = Line Two (Neutral Line).

7 RADIATED EMISSION MEASUREMENT

7.1. LIMITS OF RADIATED EMISSION MEASUREMENT

Below 1GHz (for digital device)

	dBuV/m (At 10m)			
FREQUENCY (MHz)	Class A	Class B		
30 ~ 230	40	30		
230 ~ 1000	47	37		

Limit tables for non-digital device:

Class A Radiated Emission limit at 10m (for others)

Frequency (MHZ)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	90	39
88 - 216	150	43.5
216 – 960	210	46.4
Above 960	300	49.5

Class B Radiated Emission limit at 3m (for others)

Frequency (MHZ)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	100	40
88 - 216	150	43.5
216 – 960	200	46
Above 960	500	54

Above 1GHz(for all device)

Frequency	Class A (dBu	V/m) (At 10m)	Class B (dBuV/m) (At 3m)			
(MHZ)	Average	Peak	Average	Peak		
Above 1000	49.5	69.5	54	74		

NOTE: (1) The lower limit shall apply at the transition frequencies.

(2) Emission level (dBuV/m) = 20 log Emission level (uV/m).

(3) The measurement above 1GHz is at close-in distances 3m,and determine the limit L2 corresponding to the close-in distance d2 by applying the following relation: L2 = L1 (d1/d2), where L1 is the specified limit in microvolts per metre (uV/m) at the distance d1 (10m), L2 is the new limit for distance d2 (3m).

So the new Class A limit above 1GHz at 3m is as following table:

Frequency	Class A (dBuV/m) (At 3m)					
(MHZ)	Average	Peak				
Above 1000	60	80				

According to FCC Part 15.33 (b), for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5 th harmonic of the highest frequency or 40GHz, whichever is lower

7.2. TEST INSTRUMENTS

Open Area Test Site # H									
Name of Equipment Manufacturer Model Serial Number Calibration									
Bilog Antenna	Teseq	CBL 6112D	36995	06/27/2018					
Cable	EMEC	CFD400NL-LW	N-Type#H11	08/17/2018					
EMI Test Receiver	R&S	ESCI	101340	03/28/2018					
Pre-Amplifier	HP	8447D	1937A01554	09/28/2018					
Thermo-Hygro Meter	Thermo-Hygro Meter Wisewind 201A No.								
Test S/W	Test S/W EZ-EMC								
	Α	bove 1GHz Used							
Horn Antenna	ETS	3117	139062	09/24/2018					
K-Type Cable x 1m (1-40GHz)	Rosnol	K1K50-UP0264- K1k50-1M	160215-1	12/03/2018					
Microflex Cable x 7m (1-18GHz)	Rosnol	A1K50-EW0630- A1k50-700CM	SD-R028	12/03/2018					
Pre-Amplifier	HP	8449B	3008A01266	12/03/2018					
Signal Analyzer	Agilent	N9010A	MY53440125	01/08/2019					
Thermo-Hygro Meter	Wisewind	N/A	SD-R027	10/01/2018					
Test S/W		EZ-I	EMC						

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 12 mm 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 EUT received AC 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 or 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

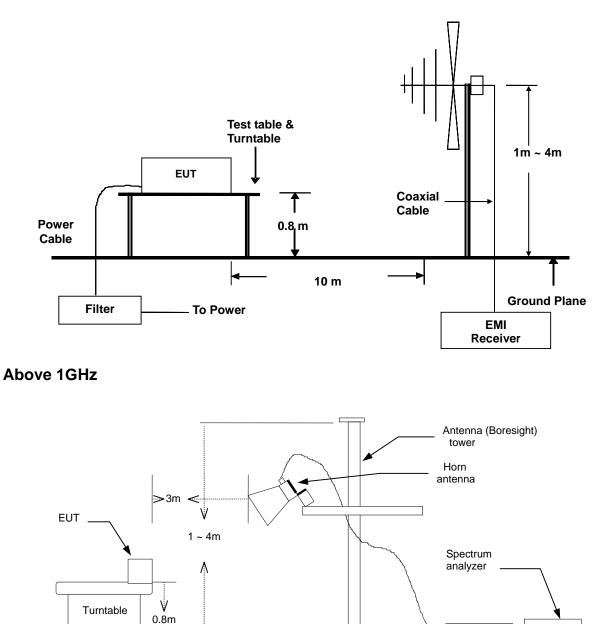
- EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.
- The Analyzer / Receiver scanned from 30MHz to 40GHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the 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. Below 1GHz the Q.P. reading and above 1GHz the Peak and Average reading are presented.
- The test data of the worst-case condition(s) was recorded.

 $\cap \square$

Pre-amp

7.4. TEST SETUP

Below 1GHz



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

30cm

Λ

7.5. DATA SAMPLE

Below 1GHz

Freq.	Reading	Factor	Result	Limit	Margin	Detector	Pol.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(P/Q)	(H/V)
x.xx	14.0	12.2	26.2	40	-13.8	Q	

Above 1GHz

Freq.	Reading	Factor	Result	Limit	Margin	Detector	Pol.
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(P/A)	(H/V)
x.xx	42.95	0.55	43.50	60	-16.50	А	

Freq. = Emission frequency in MHz

Reading = Uncorrected Analyzer/Receiver reading

- Factor = Antenna Factor + Cable Loss Amplifier Gain
- Result = Reading + Factor
- Limit = Limit stated in standard
- Margin = Reading in reference to limit
- P = Peak Reading
- Q = Quasi-peak Reading
- A = Average Reading
- H = Antenna Polarization: Horizontal

V = Antenna Polarization: Vertical

Calculation Formula

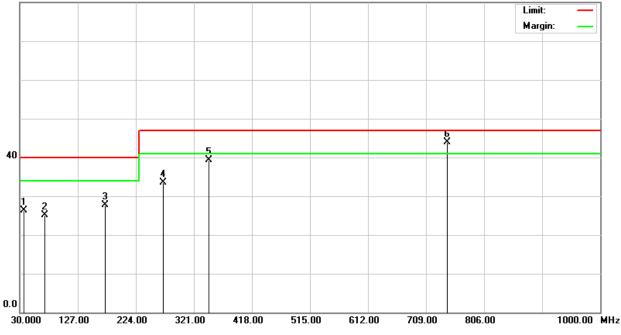
Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)

7.6. TEST RESULTS

Below 1GHz

Model No.	GENE-APL6	Test Mode	Mode 1				
Environmental Conditions	22ºC, 60% RH	6dB Bandwidth	120 kHz				
Antenna Pole	Vertical	Antenna Distance	10m				
Detector Function	Quasi-peak.	Tested by	Bonny Tsai				
Standard	FCC CLASS A W/ CISPR 22	FCC CLASS A W/ CISPR 22 CLASS A LIMIT					

80.0 dBuV/m

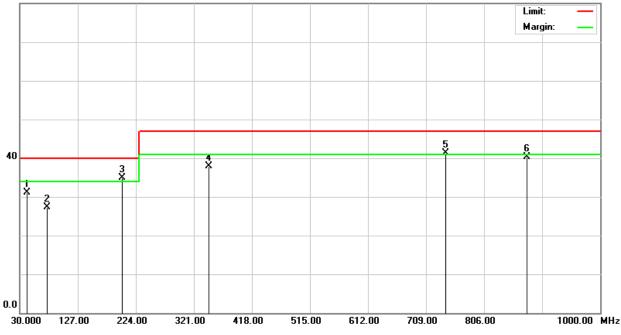


Radiated Emission Readings										
Frequency Range Investigated					30 MHz to 1000 MHz at 10m					
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)		Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
37.7000	32.10	-5.86	26.24	40.00		-13.76	100	125	Q	V
72.3000	39.40	-14.22	25.18	40.	00	-14.82	100	235	Q	V
172.6000	38.20	-10.59	27.61	40.	00	-12.39	100	156	Q	V
270.5200	40.20	-6.75	33.45	47.	00	-13.55	400	124	Q	V
346.2000	44.50	-5.28	39.22	47.00		-7.78	400	32	Q	V
744.2000	42.10	1.77	43.87	47.	00	-3.13	400	256	Q	V

Note: 1. 30MHz to 1000MHz test is Applicable CISPR 22 standard. 2. P= Peak Reading; Q= Quasi-peak Reading.

Model No.	GENE-APL6	Test Mode	Mode 1				
Environmental Conditions	22ºC, 60% RH	6dB Bandwidth	120 kHz				
Antenna Pole	Horizontal	Antenna Distance	10m				
Detector Function	Quasi-peak.	Tested by	Bonny Tsai				
Standard	FCC CLASS A W/ CISPR 22 (FCC CLASS A W/ CISPR 22 CLASS A LIMIT					

80.0 dBuV/m



Radiated Emission Readings										
Frequency Range Investigated						30 N	/IHz to 10	00 MHz a	t 10m	
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)		Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)
42.2000	39.40	-8.39	31.01	40.00		-8.99	400	132	Q	Н
75.3000	41.20	-13.99	27.21	40.	.00	-12.79	400	36	Q	Н
201.3000	45.30	-10.35	34.95	40.	.00	-5.05	400	254	Q	Н
346.2000	43.20	-5.28	37.92	47.	.00	-9.08	400	169	Q	Н
742.0100	39.60	1.72	41.32	47.00		-5.68	100	287	Q	Н
878.1200	37.20	3.12	40.32	47.	00	-6.68	100	75	Q	Н

Note: 1. 30MHz to 1000MHz test is Applicable CISPR 22 standard. 2. P= Peak Reading; Q= Quasi-peak Reading.

Above 1GHz

Model No.	GENE-APL6	Test Mode	Mode 1
Environmental Conditions	26ºC, 60% RH	6dB Bandwidth	1 MHz
Antenna Pole	Vertical / Horizontal	Antenna Distance	3m
Highest frequency generated or used	1100MHz	Upper frequency	5500MHz
Detector Function	Peak and average.	Tested by	Bonny Tsai
Standard	FCC CLASS A		

Radiated Emission Readings												
Frequency Range Investigated					Above 1GHz at 3m							
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Detector (P/A)	Pol. (H/V)				
2416.667	51.41	-2.17	49.24		80.00	-30.76	Р	V				
4286.667	45.91	0.27	46.18	3	80.00	-33.82	Р	V				
6185.000	44.94	2.64	47.58	3	80.00	-32.42	Р	V				
7290.000	45.79	3.60	49.39)	80.00	-30.61	Р	V				
9273.333	46.31	4.29	50.60)	80.00	-29.40	Р	V				
11115.000	46.18	6.50	52.68	3	80.00	-27.32	Р	V				

Radiated Emission Readings													
Frequency Range Investigated					Above 1GHz at 3m								
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Detector (P/A)	Pol. (H/V)					
2388.333	49.28	-2.21	47.07		80.00	-32.93	Р	Н					
5930.000	44.37	2.40	46.77		80.00	-33.23	Р	Н					
7290.000	45.18	3.60	48.78	3	80.00	-31.22	Р	Н					
10463.333	45.72	5.52	51.24	Ļ	80.00	-28.76	Р	Н					
14005.000	45.14	9.83	54.97	7	80.00	-25.03	Р	Н					
16555.000	45.92	11.91	57.83	3	80.00	-22.17	Р	Н					

Note: 1. P= Peak Reading; A= Average Reading.

8 PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST





RADIATED EMISSION TEST

