FCC 47 CFR PART 15 SUBPART B TEST REPORT

For

15.6 Fanless Touch Panel

MODEL: xxxxxACP-5153xxx-xxxxxxxx (Where x maybe is 0-9, A-Z, a-z, -, blank)

Test Report Number: T140121D02-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: February 21, 2014







Report No.: T140121D02-F

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Revision History

Report No.: T140121D02-F

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	February 21, 2014	Initial Issue	ALL	Linda Wu

Draft

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1 TEST RESULT CERTIFICATION

Product: 15.6 " Fanless Touch Panel

Model: xxxxxACP-5153xxx-xxxxxxxx (Where x maybe is 0-9, A-Z, a-z, blank)

Report No.: T140121D02-F

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 10, 2014 ~ January 21, 2014

EMISSION									
Standard	Item	Result	Remarks						
FCC 47 CFR Part 15 Subpart B, ICES-003 Issue 5-2012	Conducted (Power Port)	PASS	Meet Class A limit						
ANSI C63.4-2009	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 App	olicable	Stanc	lard		
	Nor	ne				

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:	Reviewed by:			
Sam Hu Assistant Manager	Vesta Hsu Supervisor of report document dept.			

2 EUT DESCRIPTION

Product	15.6 " Fanless Touch Panel				
Brand Name	AAEON				
Model	xxxxxACP-5153xxx-xxxxxxxxx (Where x maybe is 0-9、A-Z、a-z、-、 blank)				
Applicant	AAEON Technology Inc.				
Housing material	Plastic w/ metal plate				
Identify Number	T140121D02				
Received Date	January 21, 2014				
EUT Power Rating	12VDC from AC Adaptor				
AC Power During Test	120VAC / 60Hz to AC Adaptor				
AC Adaptor Manufacturer	FSP GROUP INC.				
AC Adaptor Model Number	FSP084-DMAA1				
AC Adaptor Power Rating	I/P: 100-240VAC~, 1.3A, 50-60Hz O/P: 12.0VDC, 7.0A				
DC Power Cable Type	Unshielded, 1.0m (Non-detachable, with two cores)				
OSC/Clock Frequencies	25MHz; 32.768KHz; 27MHz; 14.318MHz; 12MHz(PER-T189)				

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Model Differences

Model Name	Differences	Tested (Check)
ACP-5153HTT-A1-1010	Original	
xxxxxACP-5153xxx-xxxxxxxx	1. Where x maybe is 0-9、A-Z、a-z、 - 、blank 2. For marketing purpose only.	

I/O PORT

	I/O PORT TYPES	Q'TY	TESTED WITH
1.	SIO Port	1	1
2.	DVI Port	1	1
3.	Earphone Port	1	1
4.	USB Port	6	6
5.	LAN Port	2	2

Note: Client consigns only one model sample to test (Model Number: ACP-5153HTT-A1-1010).

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.

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The test configuration modes are the following:

Conduction Mode:

Radiation Mode:

1	1366X768, VF=60Hz	Normal Mode		
'	1300X/00, VF=00HZ	Normal Mode / 1-9.3GHz		

Worst:

Conduction: Mode 1
Radiation: Mode 1

3.2. EUT SYSTEM OPERATION

- Windows 7 boots system.
- 2. Run Emctest.exe to activate all peripherals and display "H" pattern on monitor screen.
- 3. Run Winemc.exe and choose media player to play music.
- 4. Run Winemc.exe and choose "E:/ & F:/ & G:/ & H:/" to test EUT.
- 5. Press the start menu, select executive and type ping 192.168.1.1 –t (EUT), ping 192.168.0.10 –t (Server Notebook).
- 6. Press the start menu, select executive and type ping 192.168.1.2 –t (EUT), ping 192.168.0.20 –t (Server Notebook).

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.

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EUT Devices:

No.	Equipment	Model No.	Brand Name
1	CPU (1.86GHz)	Atom D2550	Intel
2	Memory (2GB)	K4B2G0846D	SEC
3	HDD (250GB)	MK2576GSX	Toshiba
4	Power Adapter	FSP084-DMAA1	FSP

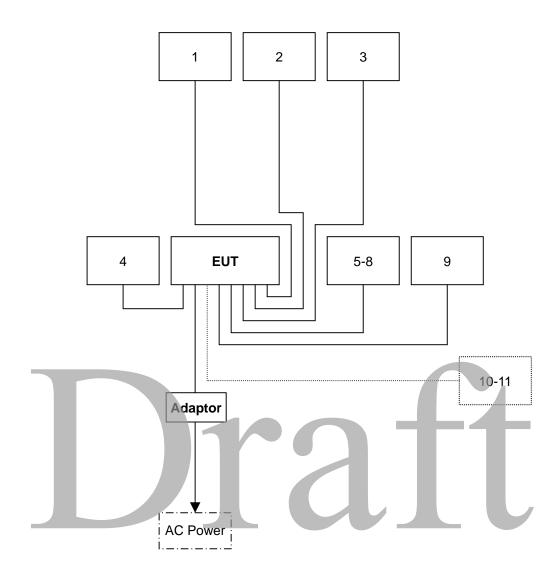
Peripherals Devices:

No.	Equipment	Model No.	Serial No.	FCC ID / BSMI ID	Brand Name	Data Cable	Power Cord
1	USB Mouse	M-UAE96	F93A90A5BU90L20	DOC BSMI: T41126	hp	Shielded, 1.8m	N/A
2	USB Keyboard	KU-0316	BC3870FVBWH079	DOC BSMI: R33001	hp	Shielded, 1.8m	N/A
3	Earphone	MIC-5	N/A	N/A	SCE	Unshielded, 1.8m	N/A
4	Monitor	LA2405WG	CN420403XZ	DOC BSMI: R33001	hp	Shielded, 1.8m with two cores	Unshielded, 1.8m
5-8	USB HDD	HD-EG5	N/A	BSMI: D33021	SONY	Shielded, 0.5m	N/A
9	Modem	AL-56ERM	OMERM04A0212	DOC	GALILEO	Shielded, 1.5m	Unshielded, 1.5m
10-11	Server Notebook	2210B	CNV7472KG5	DoC BSMI: R33001	hp	Unshielded, 1.8m	Unshielded, 1.8m

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.

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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
Norway Nemko
Japan VCCI
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	0.15MHz ~ 30MHz	± 1.56
	30MHz ~ 1000MHz	± 3.88
Radiated emissions	1000MHz ~ 18000MHz	± 3.23
Radiated emissions	18000MHz ~ 26000MHz	± 3.07
	26000MHz ~ 40000MHz	± 3.42

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

FREQUENCY (MHz)	Class A (dBuV)		Class B	(dBuV)
FREQUENCT (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

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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	Manufacturer Model Serial Number Calibration Du					
TEST RECEIVER	R&S	ESCI	101201	09/15/2014			
LISN (EUT)	SCHWARZBECK	NSLK 8127	8127527	12/12/2014			
LISN	SCHWARZBECK	NSLK 8127	8127526	12/12/2014			
BNC CABLE	EMCI	5Dr	BNC A7	04/21/2014			
Pulse Limiter	R&S	ESH3-Z2	C3010026-2	09/05/2014			
THERMO- HYGRO METER	WISEWIND	201A	No. 02	05/14/2014			
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.

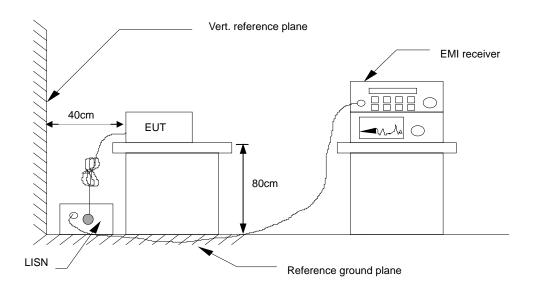
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- All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- The test equipment EUT installed by AC 120VAC/60Hz main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded 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



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

6.5. DATA SAMPLE

Freq.	Reading	Factor (dB)	Result	Limit	Margin	Detector	Line
(MHz)	(dBuV)		(dBuV)	(dBuV)	(dB)	(P/Q/A)	(L1/L2)
X.XX	42.95	0.55	43.50	73	-29.50	Q	L1

Freq. = Emission frequency in MHz

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

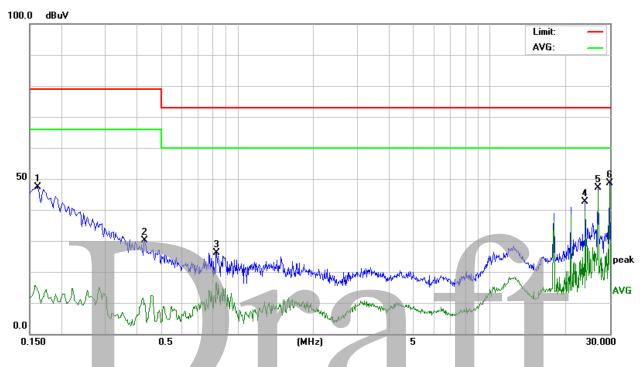
Calculation Formula

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

6.6. TEST RESULTS

Model No.	ACP-5153HTT-A1-1010	6dB Bandwidth	9 kHz
Environmental Conditions	18°C, 56% RH	Test Mode	Mode 1
Tested by	Andy Lin	Phase	L1
Standard	FCC CLASS A		

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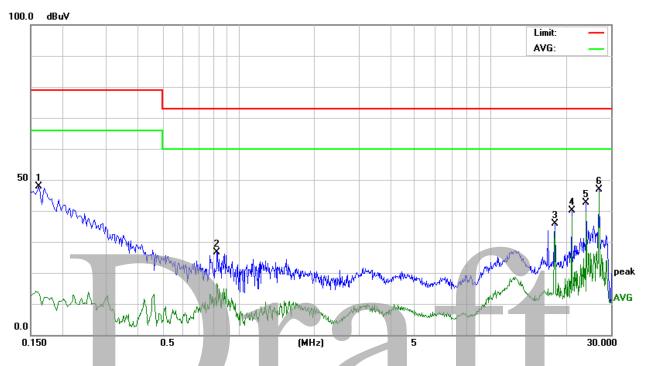
Conducted Emission Readings							
Frequency Range Investigated			gated		150 kHz to	30 MHz	
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1620	37.38	10.00	47.38	79.00	-31.62	Р	L1
0.4300	20.25	9.99	30.24	79.00	-48.76	Р	L1
0.8300	16.15	10.03	26.18	73.00	-46.82	Р	L1
23.9300	31.79	10.86	42.65	73.00	-30.35	Р	L1
26.9180	36.12	10.96	47.08	73.00	-25.92	Р	L1
29.9100	37.58	11.07	48.65	73.00	-24.35	Р	L1

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

2. The emission level was or more than 2dB below the Average limit, so no re-check anymore.

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Model No.	ACP-5153HTT-A1-1010	6dB Bandwidth	9 kHz
Environmental Conditions	18°C, 56% RH	Test Mode	Mode 1
Tested by	Andy Lin	Phase	L2
Standard	FCC CLASS A		



Conducted Emission Readings							
Frequency Range Investigated					150 kHz to	30 MHz	
Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector (P/Q/A)	Line (L1/L2)
0.1620	37.97	9.95	47.92	79.00	-31.08	Р	L2
0.8260	16.54	9.97	26.51	73.00	-46.49	Р	L2
17.9460	25.53	10.28	35.81	73.00	-37.19	Р	L2
20.9380	29.88	10.31	40.19	73.00	-32.81	Р	L2
23.9300	32.19	10.34	42.53	73.00	-30.47	Р	L2
26.9220	36.42	10.38	46.80	73.00	-26.20	Р	L2

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

2. The emission level was or more than 2dB below the Average limit, so no re-check anymore.

7 RADIATED EMISSION MEASUREMENT

7.1. LIMITS OF RADIATED EMISSION MEASUREMENT

Below 1GHz (for digital device)

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

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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 (dBu	ıV/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 # I										
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due						
MEASURE RECEIVER	R&S	ESCI	101299	09/26/2014						
ANTENNA	SUNOL	JB1	A100209-3	09/09/2014						
AMPLIFIER	SCHAFFNER	CPA9231A	3626	10/06/2014						
CABLE	EMCI	8Dr	N-TYPE #I5、I6	02/04/2015						
THERMO- HYGRO METER	WISEWIND	201A	No. 03	06/10/2014						
Test S/W		EZ-E	MC							
	Abo	ove 1GHz Used								
SPECTRUM ANALYZER (9kHz-30GHz)	R&S	FSP 30	100112	10/22/2014						
ANTENNA (1-18GHz)	ETS	3117 00139062		10/31/2014						
AMPLIFIER (1-26.5GHz)	HP	8449B	3008A01266	12/15/2014						
CABLE (1-40GHz)	HUBER +SUHNER	SUCOFLEX 102	33106/2	12/15/2014						
CABLE (1-40GHz)	HUBER +SUHNER	SUCOFLEX 102	33633/2	12/15/2014						
CABLE (1-26.5GHz)	HUBER +SUHNER	SUCOFLEX 104PEA	33960/4PEA	12/15/2014						
THERMO- HYGRO METER WISEWINI		201A	No. 02	05/14/2014						
Test S/W		EZ-E	:MC							

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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)

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Procedure of Preliminary Test

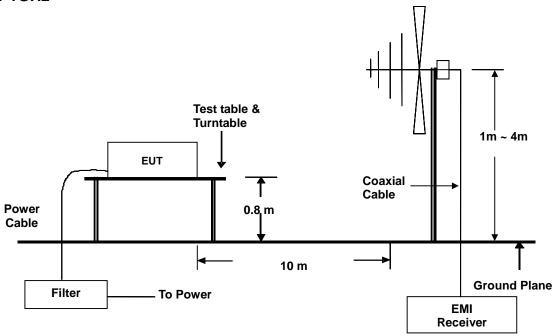
- The equipment was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane. When the EUT is a floor standing equipment, it is placed on the ground 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 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 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.

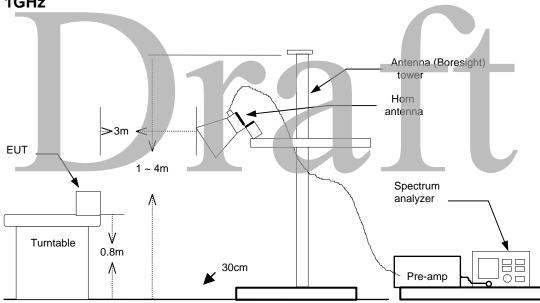
7.4. TEST SETUP

Below 1GHz



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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.	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	

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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

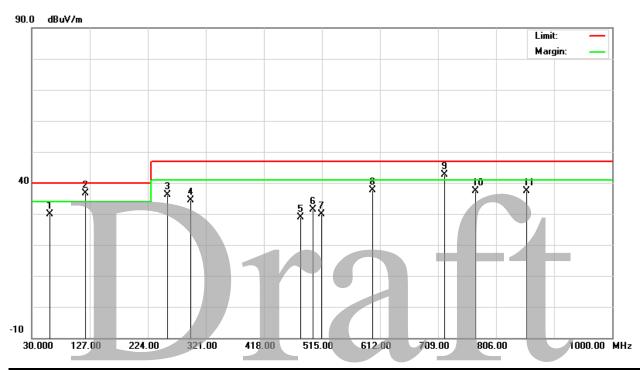
Margin (dB) = Result (dBuV/m) - Limit (dBuV/m)

7.6. TEST RESULTS

Below 1GHz

Model No.	ACP-5153HTT-A1-1010	Test Mode	Mode 1			
Environmental 21°C, 60% RH		6dB Bandwidth	120 kHz			
Antenna Pole	Vertical	Antenna Distance	10m			
Detector Function	Quasi-peak.	Quasi-peak. Tested by				
Standard	FCC CLASS A W/ CISPR 22 CLASS A LIMIT					

Report No.: T140121D02-F



	Radiated Emission Readings												
Freq	uency Ra	ange Inve	estigated			30 MF	Iz to 10	00 MHz	at 10m				
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Lin (dBu)		Margin (dB)	Height (cm)	Degree (°)	Detector (P/Q)	Pol. (H/V)			
60.0000	50.10	-20.11	29.99	40.	00	-10.01	100	223	Q	V			
120.0000	51.00	-14.46	36.54	40.	00	-3.46	100	153	Q	V			
257.1500	51.50	-15.44	36.06	47.	00	-10.94	100	214	Q	V			
296.2000	48.10	-13.68	34.42	47.	00	-12.58	100	60	Q	٧			
480.0000	37.70	-8.84	28.86	47.	00	-18.14	400	105	Q	٧			
500.0000	39.60	-8.22	31.38	47.	00	-15.62	400	333	Q	٧			
514.2000	38.00	-8.09	29.91	47.	00	-17.09	400	214	Q	٧			
600.0000	44.90	-7.30	37.60	47.	00	-9.40	400	75	Q	٧			
720.0000	47.10	-4.50	42.60	47.00		-4.40	400	109	Q	٧			
771.5000	41.20	-3.70	37.50	47.	00	-9.50	400	213	Q	٧			
857.1000	39.60	-2.19	37.41	47.	00	-9.59	400	152	Q	V			

Note: 1. 30MHz to 1000MHz test is Applicable CISPR 22 standard.

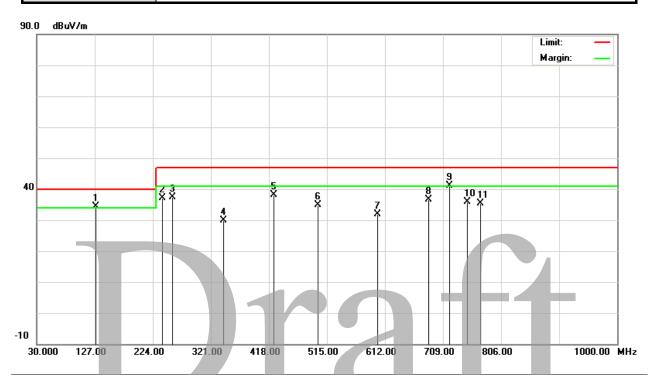
- 2. The other emission levels were very low against the limit.
- 3. P= Peak Reading; Q= Quasi-peak Reading.

Model No.

ACP-5153HTT-A1-1010	Test Mode	Mode 1

Report No.: T140121D02-F

Environmental
Conditions21°C, 60% RH6dB Bandwidth120 kHzAntenna PoleHorizontalAntenna Distance10mDetector FunctionQuasi-peak.Tested byJulon LiuStandardFCC CLASS A W/ CISPR 22 CLASS A LIMIT



	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)			
128.5700	48.70	-14.34	34.36	40.	00	-5.64	400	253	Q	Н			
240.0000	53.10	-15.93	37.17	47.	00	-9.83	400	161	Q	Н			
257.1000	52.70	-15.44	37.26	47.	00	-9.74	400	75	Q	Н			
342.0000	42.70	-12.76	29.94	47.	00	-17.06	400	103	Q	Н			
426.6000	48.70	-10.49	38.21	47.	00	-8.79	100	221	Q	Н			
500.0000	43.20	-8.22	34.98	47.	00	-12.02	100	72	Q	Н			
600.0000	39.20	-7.30	31.90	47.	00	-15.10	100	109	Q	Н			
685.0000	41.60	-5.05	36.55	47.	00	-10.45	100	114	Q	Н			
720.0000	45.70	-4.50	41.20	47.	00	-5.80	100	23	Q	Н			
750.0000	39.80	-4.04	35.76	47.	00	-11.24	100	0	Q	Н			
771.5000	39.20	-3.70	35.50	47.	00	-11.50	100	123	Q	Н			

Note: 1. 30MHz to 1000MHz test is Applicable CISPR 22 standard.

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

Above 1GHz

Model No.	ACP-5153HTT-A1-1010	Test Mode	Mode 1
Environmental Conditions	21°C, 61% RH	6dB Bandwidth	1 MHz
Antenna Pole	Vertical / Horizontal	Antenna Distance	3m
Highest frequency generated or used	1860MHz	Upper frequency	9300MHz
Detector Function	Peak and average.	Tested by	Andy Lin
Standard	FCC CLASS A		

Report No.: T140121D02-F

Radiated Emission Readings												
Frequ	uency Rang	ge Investig	ated		Above 1GH	Iz at 3m						
Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector (P/A)	Pol. (H/V)					
1125.000	62.58	-11.01	51.57	80.00	-28.43	Р	V					
1300.000	62.60	-10.16	52.44	80.00	-27.56	Р	V					
1490.000	59.98	-9.23	50.75	80.00	-29.25	Р	٧					
1955.000	58.32	-6.63	51.69	80.00	-28.31	Р	V					
2405.000	57.54	-5.11	52.43	80.00	-27.57	Р	V					
2990.000	56.50	-2.92	53.58	80.00	-26.42	P	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)
1100.000	60.72	-11.14	49.58	80.00	-30.42	Р	Н
1315.000	63.20	-10.09	53.11	80.00	-26.89	Р	Н
1495.000	60.64	-9.21	51.43	80.00	-28.57	Р	Н
1955.000	57.85	-6.63	51.22	80.00	-28.78	Р	Н
2460.000	58.35	-4.95	53.40	80.00	-26.60	Р	Н
3005.000	55.71	-2.86	52.85	80.00	-27.15	Р	Н

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

2. P= Peak Reading; A= Average Reading.

8 PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST





RADIATED EMISSION TEST

