FCC 47 CFR PART 15 SUBPART B TEST REPORT

Report No.: T150303N04-D

DLP Touch Pico Projector

Model :Touchjet Pond, TP80

Brand Name: Touchjet, Bebona

Test Report Number:

T150303N04-D

Issued to:

Touchjet Private Limited
71 Ayer Rajah Crescent #06-01,Singapore

Issued by:

Compliance Certification Services Inc. Tainan Lab.

No.8, Jiucengling, Xinhua Dist., Tainan City 712, Taiwan (R.O.C.)

TEL: 886-6-5802201 FAX: 886-6-5802202

Issued Date: February 6, 2015



Note: This report shall not be reproduced except in full, without the written approval of Compliance Certification Services Inc. This document may be altered or revised by Compliance Certification Services Inc. personnel only, and shall be noted in the revision section of the document. The client should not use it to claim product endorsement by TAF, NIST or any government agencies. The test results in the report only apply to the tested sample.

Report No.: T150303N04-D

REVISION HISTORY

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	February 6, 2015	Initial Issue	ALL	Amzula Chen



TABLE OF CONTENTS

1	TEST RESULT CERTIFICATION	4
2	EUT DESCRIPTION	4
3	TEST METHODOLOGY	6
3.1.	DECISION OF FINAL TEST MODE	6
3.2.	EUT SYSTEM OPERATION	6
4	SETUP OF EQUIPMENT UNDER TEST	6
4.1.	DESCRIPTION OF SUPPORT UNITS	7
4.2.	CONFIGURATION OF SYSTEM UNDER TEST	7
5	FACILITIES AND ACCREDITATIONS	8
5.1.	FACILITIES	8
5.2.	ACCREDITATIONS	8
5.3.	MEASUREMENT UNCERTAINTY	9
6	EMISSION TEST	10
6.1.	CONDUCTED EMISSION MEASUREMENT	10
6.2.	RADIATED EMISSION MEASUREMENT	15
7	PHOTOGRAPHS OF THE TEST CONFIGURATION	25
	ENDIX 1 - PHOTOGRAPHS OF FUT	6

1 TEST RESULT CERTIFICATION

Product: DLP Touch Pico Projector

Model: Touchjet Pond, TP80

Brand Name: Touchjet, Bebona

Applicant: Touchjet Private Limited

71 Ayer Rajah Crescent #06-01, Singapore

Manufacturer: Nanjing Wanlida Technology Co.,Ltd.

Nanjing Wanlida Industrial Zone, Zhang Zhou, Fujian, China

Report No.: T150303N04-D

Tested: January 29~ February 6, 2015

EMISSION					
Standard	Item	Result	Remarks		
FCC 47 CFR Part 15 Subpart B	Conducted (Power Port)	PASS	Meet Class B limit		
•	Radiated (Below 1GHz)	PASS	Meet Class B limit		
	Radiated (Above 1GHz)	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:

Jeter Wu

Assistant Manager

Reviewed by:

Eric Huang

Assistant Section Manager

2 EUT DESCRIPTION

Product	DLP Touch Pico Projector	
Model	Touchjet Pond, TP80	
Brand Name	Touchjet, Bebona	
Applicant	Touchjet Private Limited	
Manufacturer	Nanjing Wanlida Technology Co.,Ltd.	
Housing material	Plastic	
Identify Number	T150303N04-D	
Received Date	January 29, 2015	
Adapter Manufacturer/Model No.	HUONIU/HNSC050030WX I/P:AC100-240V ,50/60Hz,0.45A Max O/P: DC5V,3.0A DC Power Cable: Unshielded, 1.00m (With a core)	
Power Rating	DC5V supplied by adapter	
EUT Max. Operating Frequency	1.5GHz	
OTG Cable	Shielded, 0.20m	

I/O PORT

I/O PORT TYPES	Q'TY	TESTED WITH
1. Micro USB Port	1	HDD
2. HDMI Port	1	PC
3. AUDIO OUT Port	1	Earphone
4. DC IN Port	1	Adapter

Model Differences

Model Name	Difference	Tested(Checked)
Touchjet Pond	The models are identical except for model name	\boxtimes
TP80	2. The models and the brands are mix use.	

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.

Report No.: T150303N04-D

The test configuration/ modes are as the following:

Conduction Modes (Power port):

1	Charge + HDMI IN
2	Charge + USB IN

Radiation Modes:

1	Charge + HDMI IN
2	Charge + USB IN
3	Battery + HDMI IN

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

Conduction Modes (Power port):

1 Cha	arge + HDMI IN
-------	----------------

Radiation Modes:

1
1

3.2. EUT SYSTEM OPERATION

- 1. According to the instructions of EUT to set up EUT with auxiliary equipments.
- 2. Make sure the EUT working normally during 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.

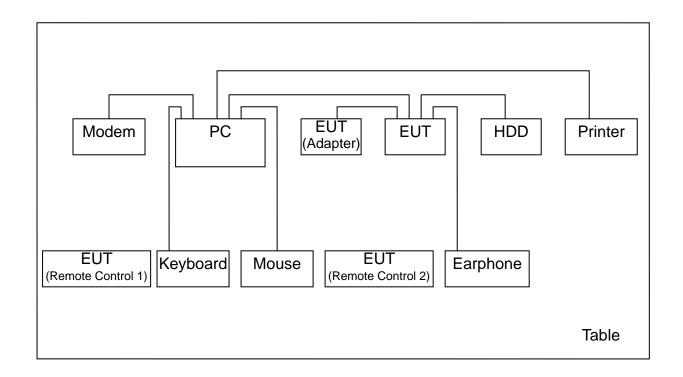
Report No.: T150303N04-D

Peripherals Devices:

No.	Equipment	Model No.	Serial No.	FCC ID	Brand	Data Cable	Power Cord
1	PC	Dcsmif	805CV2X	DoC	DELL	Unshielded 1.40m	Unshielded 1.80m
2	Keyboard	SK-8115	N/A	DoC	HP	Shielded 1.50m	N/A
3	Modem	DU-562M	DU562MSG.B1	DoC	D-LINK	Shielded 1.50m	N/A
4	Printer	DESKJET D1668	CN9CKCB2RG	DoC	HP	Shielded 1.20m	Unshielded 1.50m
5	Mouse	KB212-B	CN09RRC4475116809 96	DoC	DELL	Shielded 1.50m	N/A
6	Earphone	ST908	N/A	DoC	N/A	Shielded 1.50m	N/A
7	HDD	WX61A73916 39	WDBACY5000ASL-OP	DoC	WD	N/A	Unshielded 0.50m

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 CCS Taiwan Tainan Lab. at

Report No.: T150303N04-D

No.8, Jiucengling, Xinhua Dist., Tainan City 712, Taiwan (R.O.C.)

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

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

Canada Industry Canada

Germany TUV NORD

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:

Report No.: T150303N04-D

Measurement	Frequency	Uncertainty
Power Line Conducted Emission	9kHz~30MHz	±1.91dB
Conduction Emission	150kHz~30MHz	±2.6dB
	30 MHz ~200 MHz	±3.3456dB
	200 MHz ~1000 MHz	±2.6828dB
5 11 1 15 1 1 (6)	1 to 8GHz	±2.6485dB
Radiated Emission (3m)	8 to 18GHz	±2.6852dB
	18 to 26.5GHz	±2.6485dB
	26 to 40GHz	±3.0295dB

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 EMISSION TEST

6.1. CONDUCTED EMISSION MEASUREMENT

6.1.1. LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A	(dBuV)	Class B (dBuV)		
PREQUENCT (MIN2)	Quasi-peak	Quasi-peak Average		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	

Report No.: T150303N04-D

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 of 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.

6.1.2. TEST INSTRUMENTS

	Conducted Emission room #1								
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due					
LION	SCHWARZBECK	NNLK 8130	8130124	OCT 19, 2015					
L.I.S.N.	Rohde & Schwarz	ESH 3-Z5	893540/015	APR.13.2015					
TEST RECEIVER	Rohde & Schwarz ESCS 30		100348	DEC. 08, 2015					
BNC COAXIAL CABLE	ccs	BNC50	11	DEC. 04, 2015					
Test S/W	e-3 (5.04211c) R&S (2.27)								

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

6.1.3. TEST PROCEDURES

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.

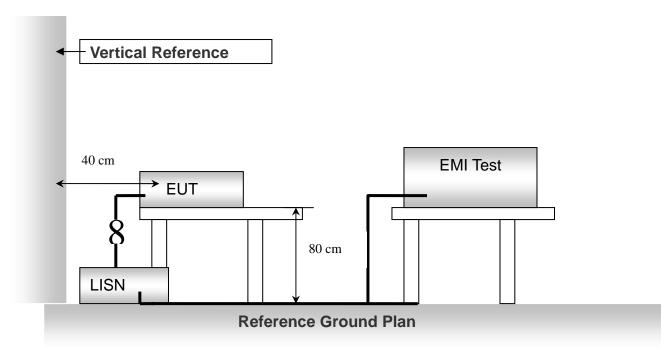
Report No.: T150303N04-D

- All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- The test equipment EUT received DC5V power from adapter, and adapter received 120VAC/60Hz main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded to the ground plane.
- 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.

6.1.4. TEST SETUP



Report No.: T150303N04-D

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

6.1.5. DATA SAMPLE

Frequency (MHz)		Average Reading (dBuV)		QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Margin	Remark (Pass/Fail)
X.XXXX	32.69	25.65	11.52	44.21	37.17	65.78	55.79	-21.57	-18.62	Pass

Factor = Insertion loss of LISN + Cable Loss

Result = Quasi-peak Reading/ Average Reading + Factor

Limit = Limit stated in standard

Margin = Result (dBuV) – Limit (dBuV)

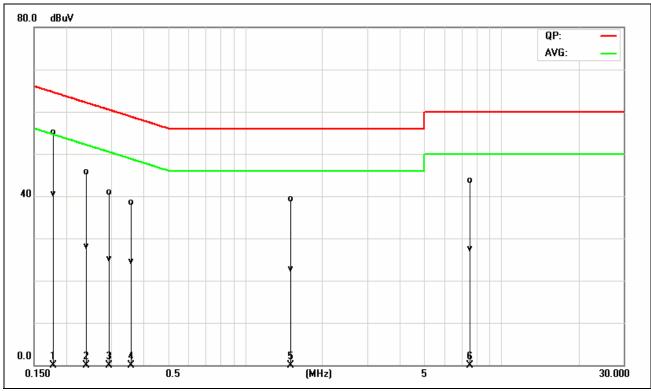
6.1.6. TEST RESULTS

Model No.	LI ALICHIAT PANA	Resolution Bandwidth	9 kHz
Environmental Conditions	26°C, 60%RH	Test Mode	Mode 1
Tested by	Darry Wu	Test Date	2015/01/31

Report No.: T150303N04-D

LINE

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



Frequency	QuasiPeak	Average	Correction		Average	QuasiPeak	Average	QuasiPeak		Remark
(MHz)	Reading (dBuV)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Result (dBuV)	Limit (dBuV)	Limit (dBuV)	Margin (dB)	Margin (dB)	(Pass/Fail)
0.1780	45.42	30.87	9.65	55.07	40.52	64.57	54.58	-9.50	-14.06	Pass
0.2380	36.08	18.41	9.69	45.77	28.10	62.16	52.17	-16.39	-24.07	Pass
0.2940	31.23	15.50	9.69	40.92	25.19	60.41	50.41	-19.49	-25.22	Pass
0.3580	28.91	14.82	9.68	38.59	24.50	58.77	48.77	-20.18	-24.27	Pass
1.4980	29.54	12.90	9.72	39.26	22.62	56.00	46.00	-16.74	-23.38	Pass
7.4980	33.85	17.70	9.80	43.65	27.50	60.00	50.00	-16.35	-22.50	Pass

Note: L1 = Line One (Live Line)



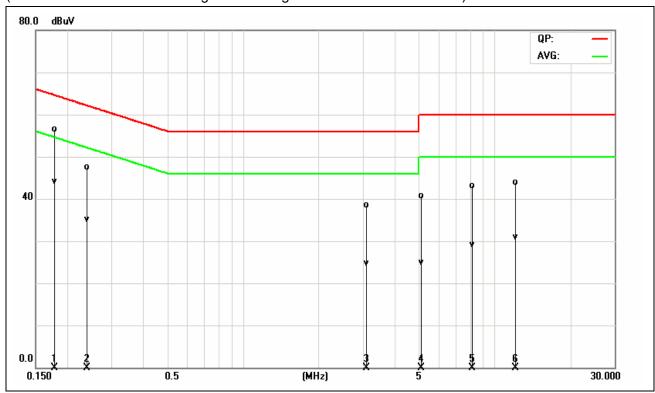
Compliance Certification Services Inc.

Model No.	Halichiat Pand	Resolution Bandwidth	9 kHz
Environmental Conditions	26°C, 60%RH	Test Mode	Mode 1
Tested by	Darry Wu	Test Date	2015/01/31

Report No.: T150303N04-D

NEUTRAL

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



Frequency	QuasiPeak	Average	Correction	QuasiPeak	Average		Average	QuasiPeak	Average	Remark
(MHz)	Reading	Reading	Factor	Result	Result	Limit	Limit	Margin	Margin	(Pass/Fail)
, ,	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	,,
0.1780	46.74	34.30	9.79	56.53	44.09	64.57	54.58	-8.04	-10.49	Pass
0.2380	37.81	25.34	9.78	47.59	35.12	62.16	52.17	-14.57	-17.05	Pass
3.0820	28.73	14.90	9.75	38.48	24.65	56.00	46.00	-17.52	-21.35	Pass
5.1100	30.99	15.15	9.78	40.77	24.93	60.00	50.00	-19.23	-25.07	Pass
8.1180	33.23	19.32	9.82	43.05	29.14	60.00	50.00	-16.95	-20.86	Pass
12.0700	34.12	21.13	9.81	43.93	30.94	60.00	50.00	-16.07	-19.06	Pass

Note: L1 = Line One (Live Line)

6.2. RADIATED EMISSION MEASUREMENT

6.2.1. 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	46.40	46.00
960 ~ 1000	49.50	54.00

Report No.: T150303N04-D

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	Class A (d	dBuV/m)	Class B (dBuV/m)		
(MHZ)	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.

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 in which the device operated 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

15.38 (b) (11)Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, "Information Technology Equipment – Radio Disturbance Characteristics – Limits and Methods of Measurement," 1997, IBR approved for § 15.109.

Below 1GHz

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

Above 1GHz

Frequency	Class A (dBu	V/m) (At 3m)	Class B (dBuV/m) (At 3m)		
(GHZ)	Average	Peak	Average	Peak	
1~3	56	76	50	70	
3~6	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.

According to CISPR22 clause 6.3, the measurement frequency range shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	
Less than 108	1000
108-500	2000
500-1000	5000
Above 1000	5 times of the highest frequency or 6GHz, whichever is less

6.2.2. TEST INSTRUMENTS

Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
TYPE N COAXIAL CABLE	SUHNER	CHA9513	6	JAN. 21, 2015	JAN. 20, 2016
BI-LOG Antenna	Sunol	JB1	A070506-2	AUG. 18, 2014	AUG. 17, 2015
LOOP ANTENNA	EMCO	6502	8905-2356	JUN. 11, 2015	JUN. 10, 2016
Pre-Amplifier	HP	8447F	2944A03817	DEC. 19,2014	DEC. 18, 2015
Pre-Amplifier	EMCI	EMC 012645	980097	DEC.05.2014	DEC.04.2015
EMI Receiver	R&S	ESVS10	833206/012	JUN. 30, 2014	JUN.29, 2015
Horn Antenna	Com-Power	AH-118	071032	DEC. 06, 2014	DEC. 05, 2015
3116 Double Ridge Antenna (40G)	ETS-LINDGREN	3116	00078900	FEB. 24, 2014	FEB. 23, 2015
Turn Table	Yo Chen	001		N.C.R.	N.C.R.
Antenna Tower	AR	TP1000A	309874	N.C.R.	N.C.R.
Controller	СТ	SC101		N.C.R.	N.C.R.
RF Swicth	E-INSTRUMENT TELH LTD	ERS-180A	EC1204141	N.C.R	N.C.R
Spectrum Analyzer	R&S	FSU	200789	JUL.02. 2014	JUL.01.2015
Spectrum Analyzer	R&S	FSEK 30	835253/002	SEP.29.2014	SEP.28.2015
Spectrum Analyzer	Agilent	E4446A	US44300399	MAR.01.2014	MAR.01.2015
Test S/W			e-3 (5.04303e)		

Report No.: T150303N04-D

Note:

- 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.

6.2.3. TEST PROCEDURE

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.

Report No.: T150303N04-D

- 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 DC5V power from adapter, and adapter received 120VAC/60Hz main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded to the ground plane.
- The 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.

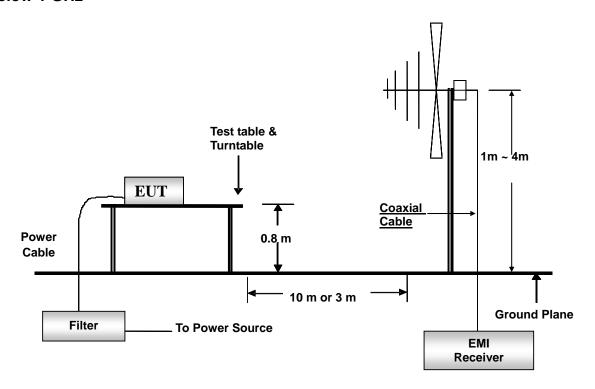
Procedure of Final Test

- 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 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.

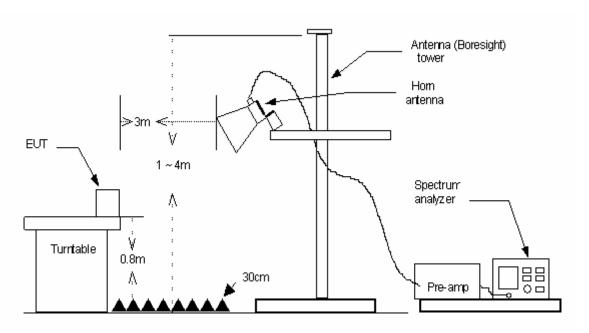


6.2.4. TEST SETUP

Below 1 GHz



Above 1 GHz



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

6.2.5. DATA SAMPLE

Below 1GHz

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

Report No.: T150303N04-D

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)

Peak = Peak Reading

Q.P. = Quasi-peak Reading

Above 1GHz

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
XXXX.XXXX	62.09	-11.42	50.67	74.00	-23.33	V	Peak
XXXX.XXXX	49.78	-11.42	38.36	54.00	-15.64	V	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)

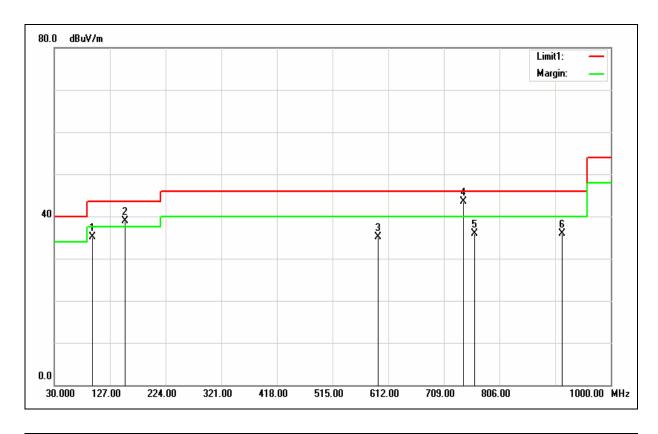
Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)

Report No.: T150303N04-D

6.2.6. **TEST RESULTS**

Below 1GHz

Model No.	Touchjet Pond	Test Mode	Mode 1
Environmental Conditions	22°C, 58% RH	Resolution Bandwidth	120 kHz
Antenna Pole	Vertical	Antenna Distance	3m
Detector Function	Quasi-peak.	Tested by	Darry Wu
Test Date	2015/01/31		



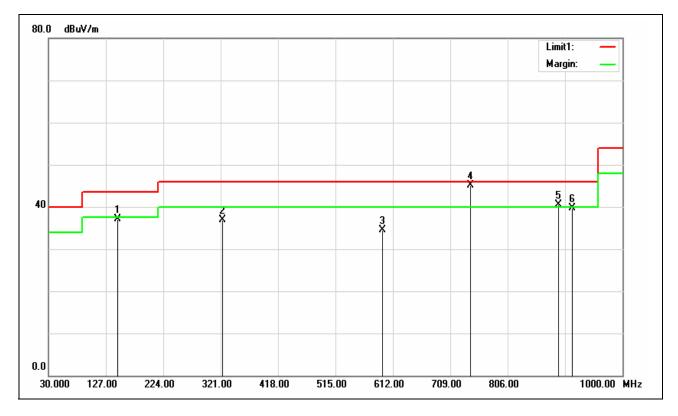
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
95.9600	49.97	-14.85	35.12	43.50	-8.38	QP
153.1900	50.82	-11.82	39.00	43.50	-4.50	QP
594.5400	41.07	-6.02	35.05	46.00	-10.95	QP
742.9500	47.08	-3.49	43.59	46.00	-2.41	QP
762.3500	39.38	-3.49	35.89	46.00	-10.11	QP
914.6400	38.02	-2.02	36.00	46.00	-10.00	QP

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



Report	<u>No.:</u>	<u>T150303N04-D</u>

Model No.	Touchjet Pond	Test Mode	Mode 1
Environmental Conditions	22°C, 58% RH	Resolution Bandwidth	120 kHz
Antenna Pole	Horizontal	Antenna Distance	3m
Detector Function	Quasi-peak.	Tested by	Darry Wu
Test Date	2015/01/31		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
146.4000	49.08	-11.89	37.19	43.50	-6.31	QP
323.9100	46.76	-9.82	36.94	46.00	-9.06	QP
594.5400	40.58	-6.02	34.56	46.00	-11.44	QP
742.9500	48.69	-3.49	45.20	46.00	-0.80	QP
891.3600	42.87	-2.37	40.50	46.00	-5.50	QP
914.6400	41.63	-2.02	39.61	46.00	-6.39	QP

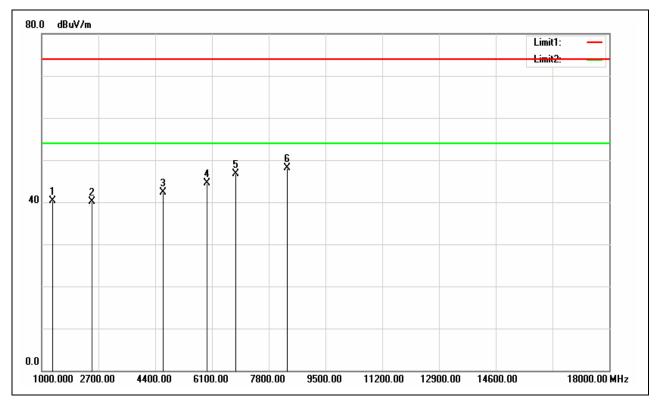
Note: 1. QP= Quasi-peak Reading.

2. The other emission levels were very low against the limit

Report No.: T150303N04-D

Above 1GHz

Model No.	Touchjet Pond	Test Mode	Mode 3
Environmental Conditions	24°C, 52% RH	Resolution Bandwidth	1MHz
Antenna Pole	Vertical	Antenna Distance	3m
Detector Function	Peak/AVG.	Tested by	Darry Wu
Test Date	2015/02/05		



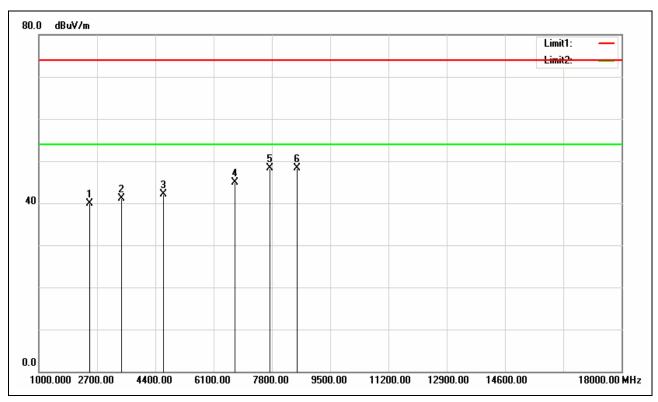
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1323.000	47.71	-7.34	40.37	74.00	-33.63	peak
2496.000	42.29	-2.28	40.01	74.00	-33.99	peak
4638.000	38.58	3.80	42.38	74.00	-31.62	peak
5947.000	38.38	6.06	44.44	74.00	-29.56	peak
6814.000	39.23	7.40	46.63	74.00	-27.37	peak
8361.000	38.63	9.45	48.08	74.00	-25.92	peak

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



Model No.	Touchjet Pond	Test Mode	Mode 3
Environmental Conditions	24°C, 52% RH	Resolution Bandwidth	1MHz
Antenna Pole	Horizontal	Antenna Distance	3m
Detector Function	Peak/AVG.	Tested by	Darry Wu
Test Date	2015/02/05		

Report No.: T150303N04-D



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2479.000	42.29	-2.37	39.92	74.00	-34.08	peak
3414.000	41.79	-0.66	41.13	74.00	-32.87	peak
4638.000	38.40	3.80	42.20	74.00	-31.80	peak
6729.000	37.65	7.26	44.91	74.00	-29.09	peak
7749.000	39.22	9.16	48.38	74.00	-25.62	peak
8531.000	38.96	9.36	48.32	74.00	-25.68	peak

Note: 1. Peak= Peak Reading; AVG=Average Reading.

2. The other emission levels were very low against the limit.



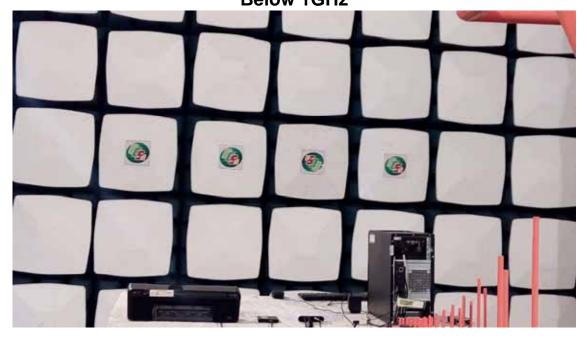
PHOTOGRAPHS OF THE TEST CONFIGURATION **CONDUCTED EMISSION TEST**

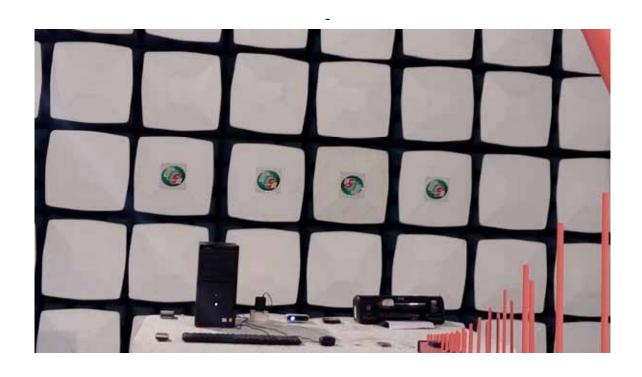






RADIATED EMISSION TEST Below 1GHz





Above 1GHz



