TEST REPORT

Application No.:	FYCR2209000350AT
Applicant:	Faytech Tech Co., Ltd.
Address of Applicant:	Flr 3, Bld D, Phase 2, Hongmen Industry Park, No.399, Jihua Road, Shuijing, District Longgang, Shenzhen, Guangdong, China
Manufacturer:	Faytech Tech Co., Ltd.
Address of Manufacturer:	Flr 3, Bld D, Phase 2, Hongmen Industry Park, No.399, Jihua Road, Shuijing, District Longgang, Shenzhen, Guangdong, China
Factory:	Faytech Tech Co., Ltd.
Address of Factory:	Flr 3, Bld D, Phase 2, Hongmen Industry Park, No.399, Jihua Road, Shuijing, District Longgang, Shenzhen, Guangdong, China
Equipment Under Test (EUT):	
EUT Name:	7" Capacitive Touchscreen PC
Model No.:	07N4200APLBMX
FCC ID:	2AWNG07N4200APLBMX
Standard(s) :	47 CFR Part 15, Subpart C
Date of Receipt:	2022-09-02
Date of Test:	2022-09-14 to 2022-10-08
Date of Issue:	2022-10-19
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Winkey Wang
EMC Technical Manager

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		2022-10-19		Original

Authorized for issue by:				
		Tree Zhan **Tree Zhan/Project Engineer**		
		Winkey Wang **Winkey Wang/Reviewer**		

2 Test Summary

Radio Spectrum Technical Requirement				
Item	**Standard**	**Method**	**Requirement**	**Result**
Antenna Requirement	47 CFR Part 15, Subpart C	N/A	47 CFR Part 15, Subpart C 15.203	Pass

Radio Spectrum Matter Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
20dB Bandwidth	47 CFR Part 15, Subpart C	ANSI C63.10 (2013) Section 6.5	47 CFR Part 15, Subpart C 15.209(c)	Pass
Field Strength of the Fundamental Signal (15.209(c))		ANSI C63.10 (2013) Section 6.9.2	47 CFR Part 15, Subpart C 15.215	Pass
Radiated Emissions (9kHz-30MHz)		ANSI C63.10 (2013) Section 6.4	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Emissions (30MHz-1GHz)		ANSI C63.10 (2013) Section 6.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Conducted Emissions at AC Mains Power Port (150kHz-30MHz)		ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	Switching Adapter: Model:FJ-SW202724004000 Input:100-240V 50/60Hz 3.0A Max Output:24V 4A
Cable(s):	AC cable:135cm unshielded DC cable:145cm unshielded with a ferrite core
Operation Frequency:	125KHz
Modulation Type:	ASK
Number of Channels:	1
Antenna Type:	Loop Antenna

Remark: The information in this section is provided by the applicant or manufacturer, CCS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
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The EUT has been tested as an independent unit.			

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at AC Mains Power Port (150kHz-30MHz)	± 2.1 dB (9kHz to 30MHz)
20dB Bandwidth	± 0.3%
Radiated Emissions (9kHz-30MHz)	± 2.7dB
Radiated Emissions (30MHz-1GHz)	± 5.6dB
Conducted Emissions at AC Mains Power Port (150kHz-30MHz)	± 2.1 dB (9kHz to 30MHz)

4.4 Test Location

All tests were performed at:

Compliance Certification Services（Kunshan）Inc. Shenzhen branch.

Fuyong lab. Xinlong TechnoPark,Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China

Tel: +86 755 8866 3988 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA (Certificate No. 6606.01)

Compliance Certification Services（Kunshan）Inc. Shenzhen branch is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6606.01.

• FCC –Designation Number: CN1322

Compliance Certification Services（Kunshan）Inc. Shenzhen branch has been recognized as an accredited testing laboratory.

Designation Number: CN1322. Test Firm Registration Number: 718073

• Innovation, Science and Economic Development Canada

Compliance Certification Services（Kunshan）Inc. Shenzhen branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0129.

IC#: 28189.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Field Strength of the Fundamental Signal (15.209(c))					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
3m Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2024/7/12
Loop Antenna	ETS-LINDGREN	6502	SEM003-36	2021/9/26	2024/9/25
MXE EMI receiver	Agilent	N9038A	SEM004-05	2022/7/12	2023/7/11
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A

20dB Bandwidth					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2022/7/12	2023/7/11
MXA Signal Analyzer	Agilent	N9020A	SEM004-20	2022/7/12	2023/7/11
Signal Generator	Agilent	N5173B	SEM006-05	2022/7/12	2023/7/11
ESG Vector Signal Generator	Agilent	E4438C	SEM006-15	2022/7/12	2023/7/11
Power Sensor	Erika Fiedler	U2021XA	SEM009-15	2022/7/12	2023/7/11
Power Sensor	Erika Fiedler	U2021XA	SEM009-16	2022/7/12	2023/7/11
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-08	2022/7/12	2023/7/11
Programmable DC Source	Chroma	62024P-80-60	SEM011-09	2022/7/12	2023/7/11
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	2022/7/12	2023/7/11
Electric and Magnetic Field Probe - Analyzer	Narda	EHP-200AC	SEM022-20	2022/4/2	2023/4/1
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A

Radiated Emissions (9kHz-30MHz)					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
3m Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2024/7/12
Loop Antenna	ETS-LINDGREN	6502	SEM003-36	2021/9/26	2024/9/25
MXE EMI receiver	Agilent	N9038A	SEM004-05	2022/7/12	2023/7/11
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A

Radiated Emissions (30MHz-1GHz)

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
3m Anechoic Chamber	CRT	N/A	SEM001-13	2021/7/13	2024/7/12
MXE EMI receiver	Agilent	N9038A	SEM004-05	2022/7/12	2023/7/11
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2021/7/11	2024/7/10
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	SEM003-32	2021/9/26	2024/9/25
Double-ridged waveguide horn	ETS-LINDGREN	3117	SEM003-34	2021/9/25	2024/9/24
Spectrum Analyzer	Rohde & Schwarz	101288	SEM004-08	2022/7/12	2023/7/11
Low Noise Amplifier	CLAVIIO	BDLNA-0118-352810	SEM005-05	2022/7/12	2023/7/11
Pre-amplifier	Rohde & Schwarz	CH14-H052	SEM005-17	2022/7/12	2023/7/11
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A

Conducted Emissions at AC Mains Power Port (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
Shielding Room	CRT	N/A	SEM001-14	2021/7/13	2024/7/12
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-01	2022/7/12	2023/7/11
Two-Line V-Network	Rohde & Schwarz	ENV216	SEM007-16	2022/7/12	2023/7/11
Two-Line V-Network	Rohde & Schwarz	ESH3-Z5	SEM007-22	2022/1/10	2023/1/9
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A

General used equipment					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-22	2022-07-12	2023-07-11
Humidity/ Temperature Indicator	Mingle	TH607	SEM002-23	2022-07-12	2023-07-11
Barometer	DUMAI	DYM3	SEM002-24	2022-07-12	2023-07-11

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement.

Antenna location: Refer to Internal photos

7 Radio Spectrum Matter Test Results

7.1 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.215

Test Method: ANSI C63.10 (2013) Section 6.9.2

Limit:

For report reference only

7.1.1 E.U.T. Operation

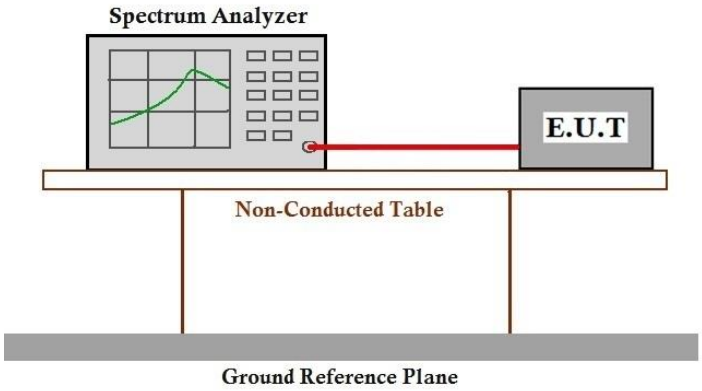
Operating Environment:

Temperature: 21.5 °C Humidity: 54.3 % RH Atmospheric Pressure: 1020 mbar

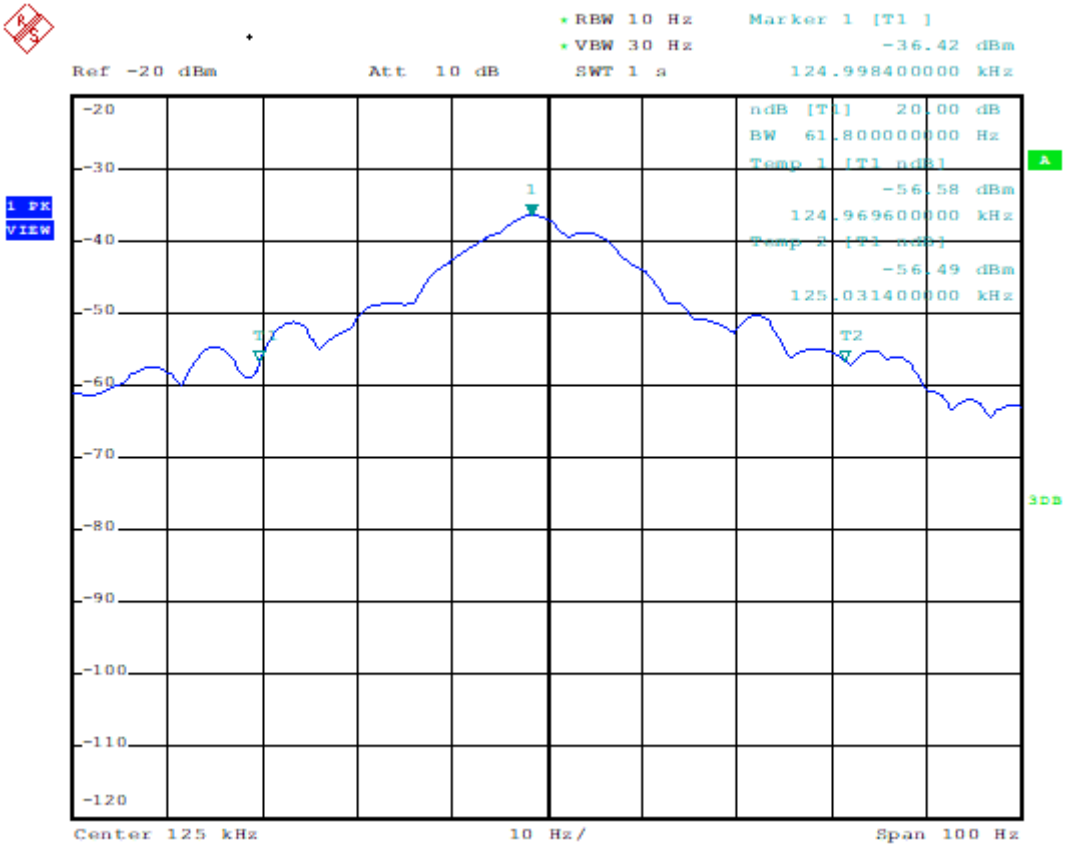
7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode with modulation(125KHz)

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data



7.2 Field Strength of the Fundamental Signal (15.209(c))

Test Requirement 47 CFR Part 15, Subpart C 15.209(c)

Test Method: ANSI C63.10 (2013) Section 6.4

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.		

If field strength is measured at only a single point, then that point shall be at the radial from the EUT that produces the maximum emission at the frequency being measured, as described in 5.4. If that point is closer to the EUT than λ/2π and the limit distance is greater than λ/2π, the measurement shall be extrapolated to the limit distance by conservatively presuming that the field strength decreases at a 40 dB/decade of distance rate to the λ/2π distance, and at a 20 dB/decade of distance rate beyond λ/2π. This shall be accomplished using Equation (2):

$$FS_{(10m)} = FS_{(30/300m)} + 40\log\{d_{(\text{near field})}/d_{(10m)}\} + 20\log\{d_{(30/300m)}/d_{(\text{near field})}\} \quad (2)$$

If the single point measured is at a distance greater than λ/2π, then extrapolation to the limit distance shall be calculated using Equation (3):

$$FS_{(10m)} = FS_{(30/300m)} + 20\log\{d_{(30/300m)}/d_{(10m)}\} \quad (3)$$

If both the single point and the limit distance are equal to or closer to the EUT than λ/2π, then extrapolation to the limit distance shall be calculated using Equation (4):

$$FS_{(10m)} = FS_{(30/300m)} + 40\log\{d_{(30/300m)}/d_{(10m)}\} \quad (4)$$

Remark:

$$d_{\text{near field}} = 47.77 / f_{MHz}$$

where f_{MHz} is the frequency of the emission being measured in MHz.

Below 30MHz

The test was performed at a 3m test site

The factor calculated by the following equation:

$$FS_{\text{limit}} = FS_{\text{max}} - 40\log\left(\frac{d_{\text{limit}}}{d_{\text{measure}}}\right)$$

where

FS_{limit}	is the calculation of field strength at the limit distance, expressed in dBμV/m
FS_{max}	is the measured field strength, expressed in dBμV/m
d_{measure}	is the distance of the measurement point from the EUT
d_{limit}	is the reference distance or the distance of the λ/2π point

7.2.1 E.U.T. Operation

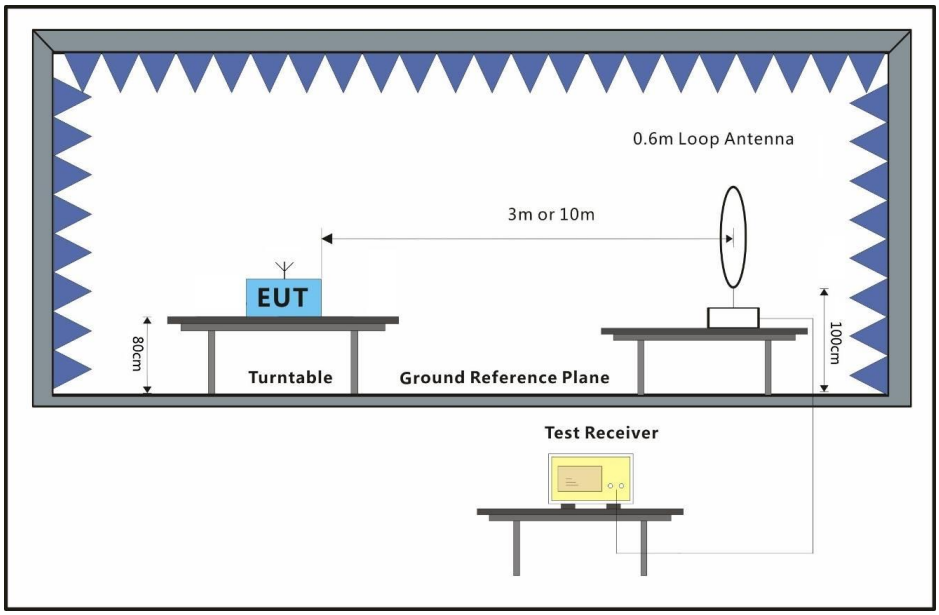
Operating Environment:

Temperature: 22.3 °C Humidity: 52.8 % RH Atmospheric Pressure: 1020 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode with modulation(125KHz)

7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Test data at a 3m test site as below：

Frequency (MHz)	Cable Loss (dB)	Ant Factor (dB)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)
0.1249	0.33	10.43	31.79	101.57	80.54	84.75	-4.21

7.3 Radiated Emissions (9kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2013) Section 6.4

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.		

If field strength is measured at only a single point, then that point shall be at the radial from the EUT that produces the maximum emission at the frequency being measured, as described in 5.4. If that point is closer to the EUT than λ/2π and the limit distance is greater than λ/2π, the measurement shall be extrapolated to the limit distance by conservatively presuming that the field strength decreases at a 40 dB/decade of distance rate to the λ/2π distance, and at a 20 dB/decade of distance rate beyond λ/2π. This shall be accomplished using Equation (2):

$$FS_{(10m)} = FS_{(30/300m)} + 40\log\{d_{(\text{near field})}/d_{(10m)}\} + 20\log\{d_{(30/300m)}/d_{(\text{near field})}\} \quad (2)$$

If the single point measured is at a distance greater than λ/2π, then extrapolation to the limit distance shall be calculated using Equation (3):

$$FS_{(10m)} = FS_{(30/300m)} + 20\log\{d_{(30/300m)}/d_{(10m)}\} \quad (3)$$

If both the single point and the limit distance are equal to or closer to the EUT than λ/2π, then extrapolation to the limit distance shall be calculated using Equation (4):

$$FS_{(10m)} = FS_{(30/300m)} + 40\log\{d_{(30/300m)}/d_{(10m)}\} \quad (4)$$

Remark:

$$d_{\text{near field}} = 47.77 / f_{MHz}$$

where f_{MHz} is the frequency of the emission being measured in MHz.

7.3.1 E.U.T. Operation

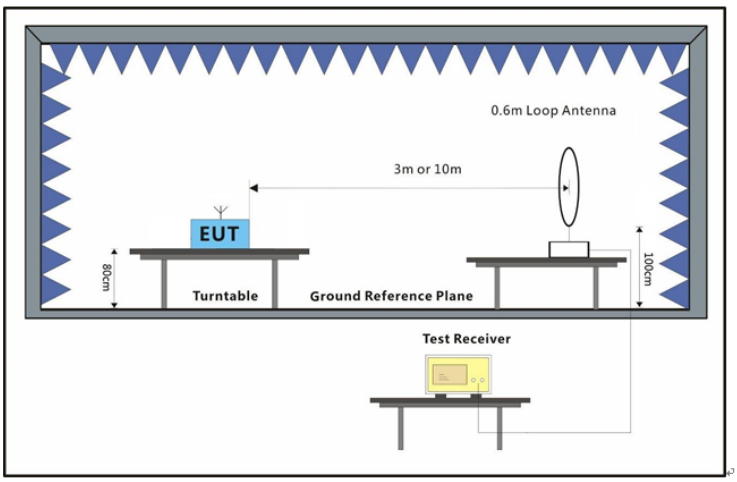
Operating Environment:

Temperature: 23.2 °C Humidity: 52.9 % RH Atmospheric Pressure: 1020 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode with modulation(125KHz)

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

a. All radiated emission measurements in terms of magnetic field strength shall be performed with a shielded loop antenna.

b. For all radiated emission measurements in terms of magnetic field strength, the loop antenna were placed such that:

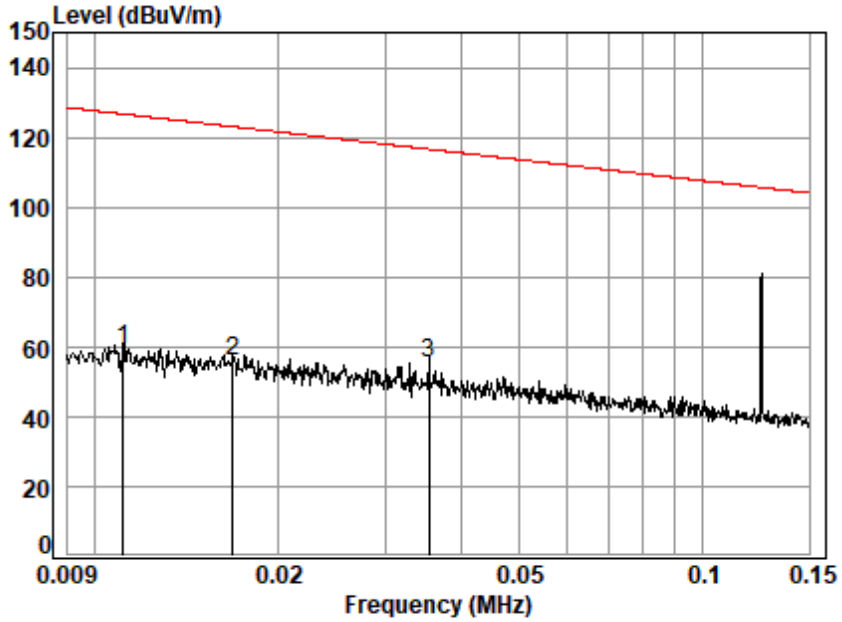
i. its centre shall be at 1.3 m height above the ground plane;

ii. the projection of its centre onto the ground plane shall be at the specified measurement distance from the projection on the ground plane of the closest point on the boundary of the equipment under test (EUT); and

iii. measurements shall be performed with the loop antenna placed vertically, in turn, in two polarizations (the measurement axis specified below is the line segment connecting the projections on the ground plane of the centre of the loop antenna and the centre of the EUT arrangement):

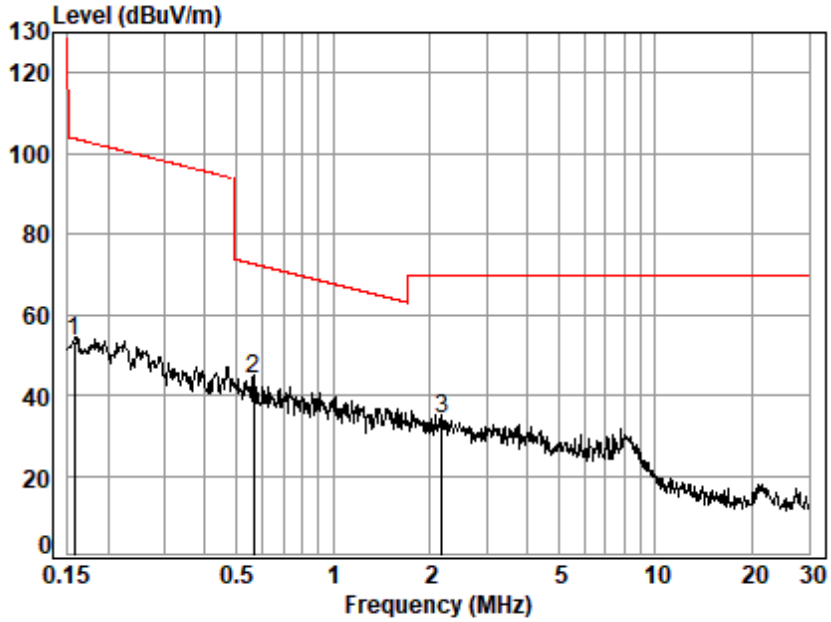
· coaxial (loop plane perpendicular to the ground plane and to the measurement axis); and

· coplanar (loop plane perpendicular to the ground plane and coplanar with the measurement axis).



Condition: 3m
Job No. : 00350AT
Test Mode: 01

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	0.0111	0.29	17.56	31.61	72.80	59.04	126.69	-67.65	Average
2	0.0169	0.30	14.78	31.65	72.71	56.14	123.07	-66.93	Average
3	0.0354	0.31	11.66	31.71	74.95	55.21	116.62	-61.41	Average



Condition: 3m
Job No. : 00350AT
Test Mode: 01

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	0.1573	0.33	10.40	31.78	74.57	53.52	103.67	-50.15	Average
2	0.5671	0.29	10.30	31.72	65.14	44.01	72.53	-28.52	QP
3	2.1783	0.41	10.31	31.80	55.07	33.99	69.54	-35.55	QP

7.4 Radiated Emissions (30MHz-1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2013) Section 6.5
Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector.		

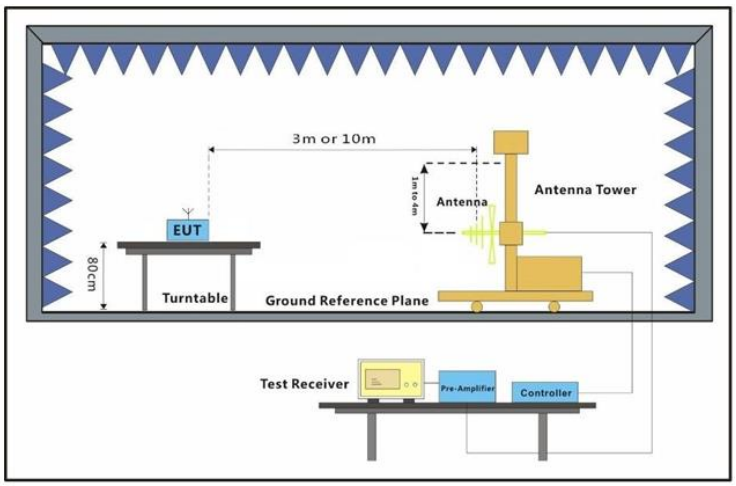
7.4.1 E.U.T. Operation

Operating Environment:
Temperature: 23.2 °C Humidity: 52.9 % RH Atmospheric Pressure: 1020 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode with modulation(125KHz)

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1GHz at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

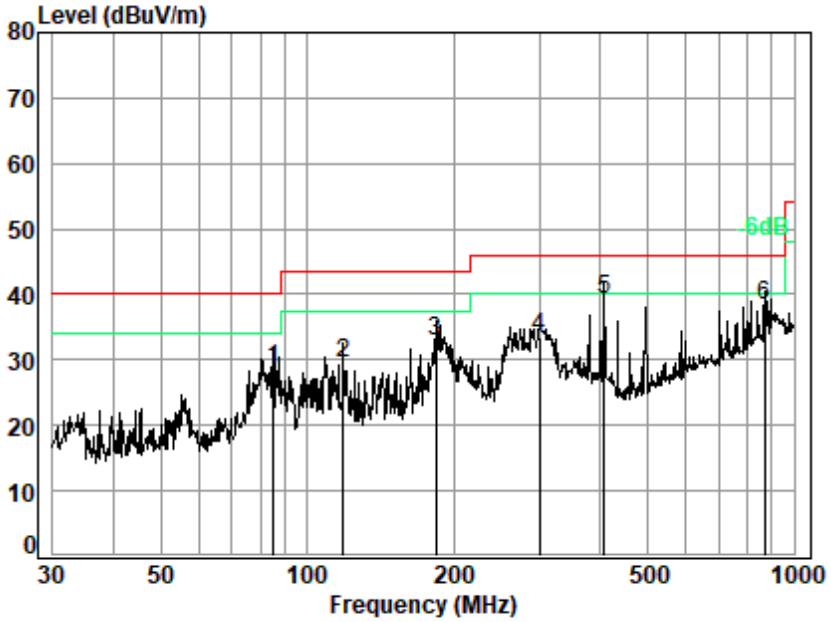
g. Test the EUT in the lowest channel,the middle channel,the Highest channel

h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode,And found the X axis positioning which it is worse case.

i. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Test Mode: 01; Polarity: Horizontal

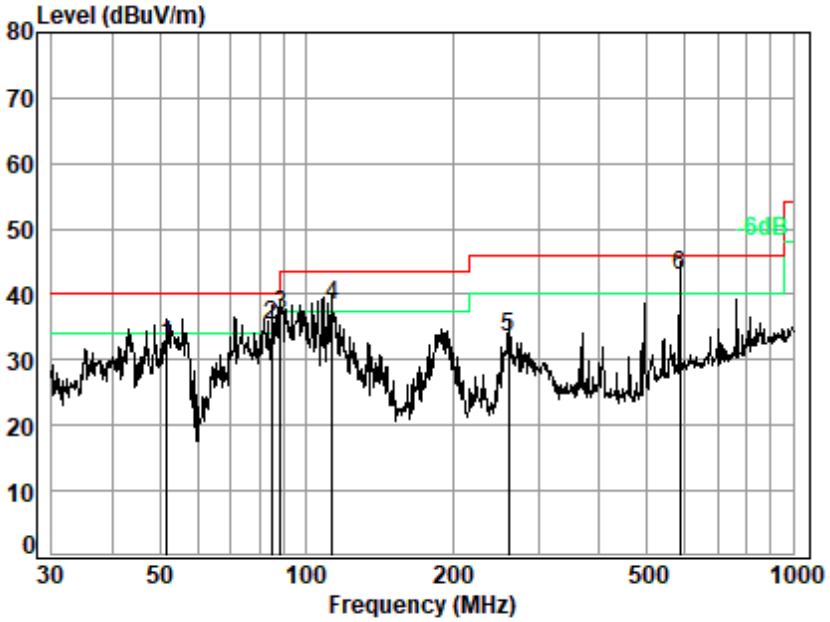


Site : chamber
Condition: 3m HORIZONTAL
Job No : 00350AT
Mode : 01

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	85.2981	0.59	13.84	25.74	39.86	28.55	40.00	-11.45	QP
2	118.6014	0.97	15.60	25.57	38.51	29.51	43.50	-13.99	QP
3	183.8440	0.67	15.91	25.49	41.85	32.94	43.50	-10.56	QP
4	299.3159	1.01	18.29	25.40	39.61	33.51	46.00	-12.49	QP
5	407.5145	1.65	20.86	25.46	42.07	39.12	46.00	-6.88	QP
6	869.1302	2.75	27.61	24.13	32.14	38.37	46.00	-7.63	QP

Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China 518103 t (86–755) 88663988 f (86–755) 26710594 www.sgsgroup.com.cn
中国·深圳·宝安区福永街道凤塘大道鑫龙科技园福永实验室 邮编: 518103 t (86–755) 88663988 f (86–755) 26710594 sgs.china@sgs.com

Test Mode: 01; Polarity: Vertical



Site : chamber
Condition: 3m VERTICAL
Job No : 00350AT
Mode : 01

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	51.8430	0.23	17.30	25.98	40.65	32.20	40.00	-7.80	QP
2	84.9995	0.59	13.88	25.75	46.64	35.36	40.00	-4.64	QP
3	88.3421	0.64	13.55	25.71	48.39	36.87	43.50	-6.63	QP
4	112.9196	0.95	15.28	25.58	47.60	38.25	43.50	-5.25	QP
5	260.1444	0.88	16.77	25.43	41.12	33.34	46.00	-12.66	QP
6	584.7895	2.15	24.04	25.07	41.73	42.85	46.00	-3.15	QP

7.5 Conducted Emissions at AC Mains Power Port (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207
Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

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.		

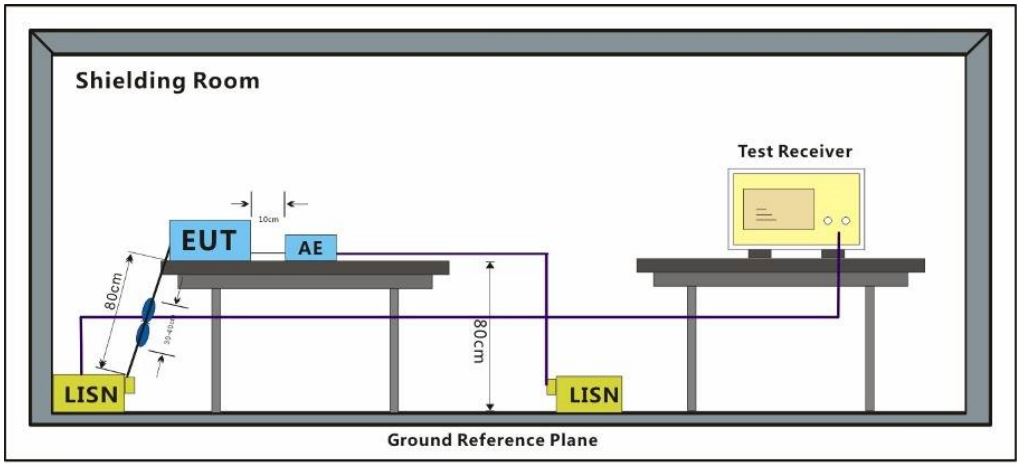
7.5.1 E.U.T. Operation

Operating Environment:
Temperature: 23.1 °C Humidity: 52.6 % RH Atmospheric Pressure: 1020 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode with modulation(125KHz)

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

1) The mains terminal disturbance voltage test was conducted in a shielded room.

2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

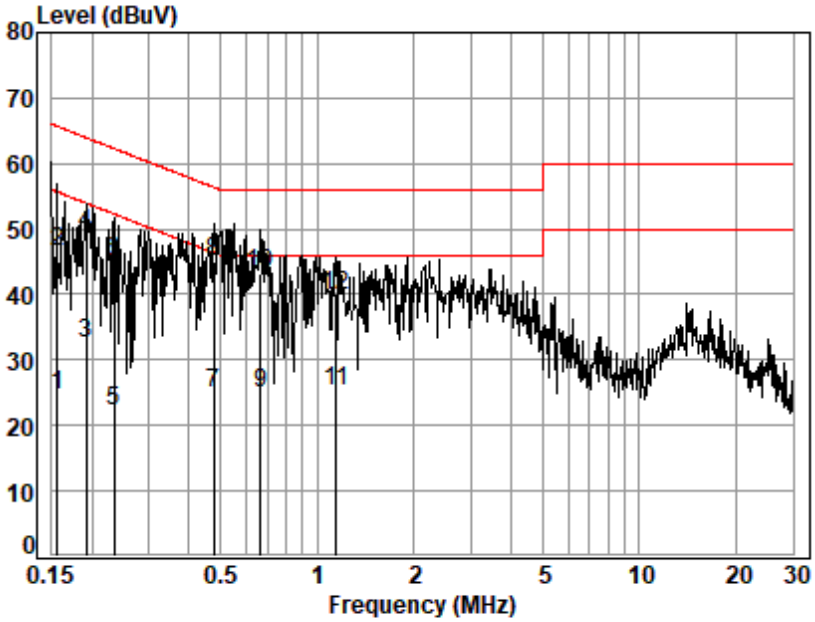
3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,

4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: Level=Read Level+ Cable Loss+ LISN Factor

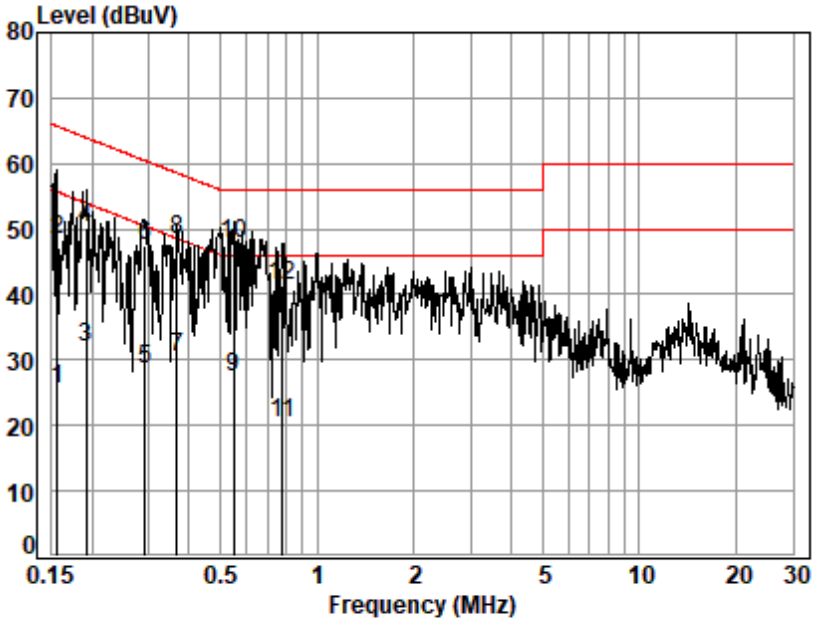
Test Mode: 01; Line: Live line



Site : Shielding Room
Condition: Line
Job No. : 00350AT
Test mode: 01

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1557	0.02	0.25	24.37	24.64	55.69	-31.05	Average
2	0.1557	0.02	0.25	46.41	46.68	65.69	-19.01	QP
3	0.1914	0.02	0.26	32.33	32.61	53.98	-21.37	Average
4	0.1914	0.02	0.26	49.04	49.32	63.98	-14.66	QP
5	0.2341	0.02	0.26	21.80	22.08	52.30	-30.22	Average
6	0.2341	0.02	0.26	44.65	44.93	62.30	-17.37	QP
7	0.4761	0.01	0.27	24.69	24.97	46.41	-21.44	Average
8	0.4761	0.01	0.27	44.84	45.12	56.41	-11.29	QP
9	0.6648	0.02	0.23	24.62	24.87	46.00	-21.13	Average
10	0.6648	0.02	0.23	42.85	43.10	56.00	-12.90	QP
11	1.1473	0.03	0.19	24.99	25.21	46.00	-20.79	Average
12	1.1473	0.03	0.19	39.78	40.00	56.00	-16.00	QP

Test Mode: 01; Line: Neutral Line



Site : Shielding Room
Condition: Neutral
Job No. : 00350AT
Test mode: 01

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1557	0.02	0.30	25.31	25.63	55.69	-30.06	Average
2	0.1557	0.02	0.30	48.07	48.39	65.69	-17.30	QP
3	0.1924	0.02	0.29	31.63	31.94	53.93	-21.99	Average
4	0.1924	0.02	0.29	49.75	50.06	63.93	-13.87	QP
5	0.2924	0.03	0.28	28.43	28.74	50.46	-21.72	Average
6	0.2924	0.03	0.28	47.11	47.42	60.46	-13.04	QP
7	0.3673	0.03	0.28	30.19	30.50	48.56	-18.06	Average
8	0.3673	0.03	0.28	48.18	48.49	58.56	-10.07	QP
9	0.5493	0.03	0.24	26.99	27.26	46.00	-18.74	Average
10	0.5493	0.03	0.24	47.38	47.65	56.00	-8.35	QP
11	0.7793	0.06	0.13	20.08	20.27	46.00	-25.73	Average
12	0.7793	0.06	0.13	41.05	41.24	56.00	-14.76	QP

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for FYCR2209000350AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for FYCR2209000350AT

- End of the Report -