TEST REPORT

Application No.:	FYCR2207000266AT
Applicant:	PAX Technology Limited
Address of Applicant:	Room 2416, 24/F, Sun Hung Kai Centre, 30 Harbour, Hong Kong, China
Manufacturer:	PAX Computer Technology(Shenzhen) Co., Ltd.
Address of Manufacturer:	401 and 402, Building 3, Shenzhen Software Park, Nanshan District, Shenzhen City, Guangdong Province, P.R.C
Factory:	Guangzhou PAX Computer Technology Co., Ltd
Address of Factory:	No.2 Bldg, No.113 Jinyang Road, Hualong Town, Panyu, Guangzhou, Guangdong, China
Equipment Under Test (EUT):	
EUT Name:	Mobile Payment Terminal
Model No.:	D190
Trade Mark:	PAX
FCC ID:	V5PD190LBW
Standard(s) :	47 CFR Part 15, Subpart C 15.225
Date of Receipt:	2022-07-06
Date of Test:	2022-07-13 to 2022-08-22
Date of Issue:	2022-09-14
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		2022-09-14		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 15.225	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 15.225	ANSI C63.10 (2013) Section 6.9	47 CFR Part 15, Subpart C 15.215	Pass
Conducted Emissions at Mains Terminals (150kHz-30MHz)		ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
Emission Mask		ANSI C63.10 (2013) Section 6.4	47 CFR Part 15, Subpart C 15.225(a)&(b)&(C)	Pass
Frequency tolerance		ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart C 15.225(e)	Pass
Radiated Emissions (30MHz-1GHz)		ANSI C63.10 (2013) Section 6.4&6.5	47 CFR Part 15, Subpart C 15.225(d) & 15.209	Pass
Radiated Emissions (9kHz-30MHz)		ANSI C63.10 (2013) Section 6.4&6.5	47 CFR Part 15, Subpart C 15.225(d) & 15.209	Pass

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	DC3.7V by li-ion battery(1900mAh) Recharged by AC/DC power adapter Adapter M/N:GLH50D1000HW Adapter input: 100-240VAC, 50/60Hz, 0.40A Adapter output: DC5V/1A
Cable(s):	USB type C cable: 1m shielded cable without ferrite core
Operation Frequency:	13.56MHz
Modulation Type:	ASK
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
20dB Bandwidth	± 0.3%
Conducted Emissions at Mains Terminals (150kHz-30MHz)	± 2.1 dB (9kHz to 30MHz)
Emission Mask	± 0.3%
Frequency tolerance	± 5.4 x 10-8
Radiated Emissions (30MHz-1GHz)	± 5.6 dB (30MHz-1GHz)
Radiated Emissions (9kHz-30MHz)	± 2.7 dB (9kHz-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

20dB Bandwidth					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
MXA Signal Analyzer	Agilent	N9020A	SEM004-20	2022/7/12	2023/7/11

Conducted Emissions at Mains Terminals (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

Emission Mask					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
MXA Signal Analyzer	Agilent	N9020A	SEM004-20	2022/7/12	2023/7/11

Frequency tolerance					
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
Programmable DC Source	Chroma	62024P-80-60	SEM011-09	2022/7/12	2023/7/11

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
Trilog-Broadband Antenna	Schwarzbeck	VULB9168	SEM003-33	2021/9/25	2024/9/24
MXE EMI receiver	Agilent	N9038A	SEM004-05	2022/7/12	2023/7/11
Pre-amplifier	HP	8447D	SEM005-02	2022/7/12	2023/7/11

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
Pre-amplifier	HP	8447D	SEM005-02	2022/7/12	2023/7/11

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

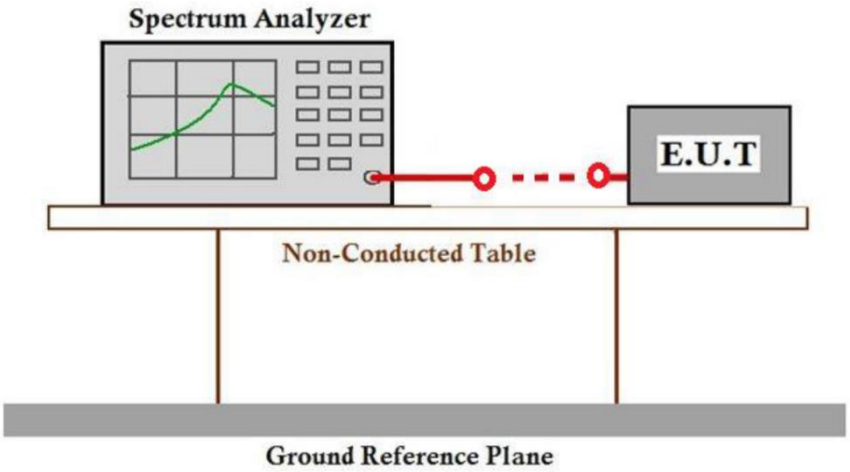
7.1.1 E.U.T. Operation

Operating Environment:
Temperature: 28.0 °C Humidity: 50.0 % RH Atmospheric Pressure: 1020 mbar

7.1.2 Test Mode Description

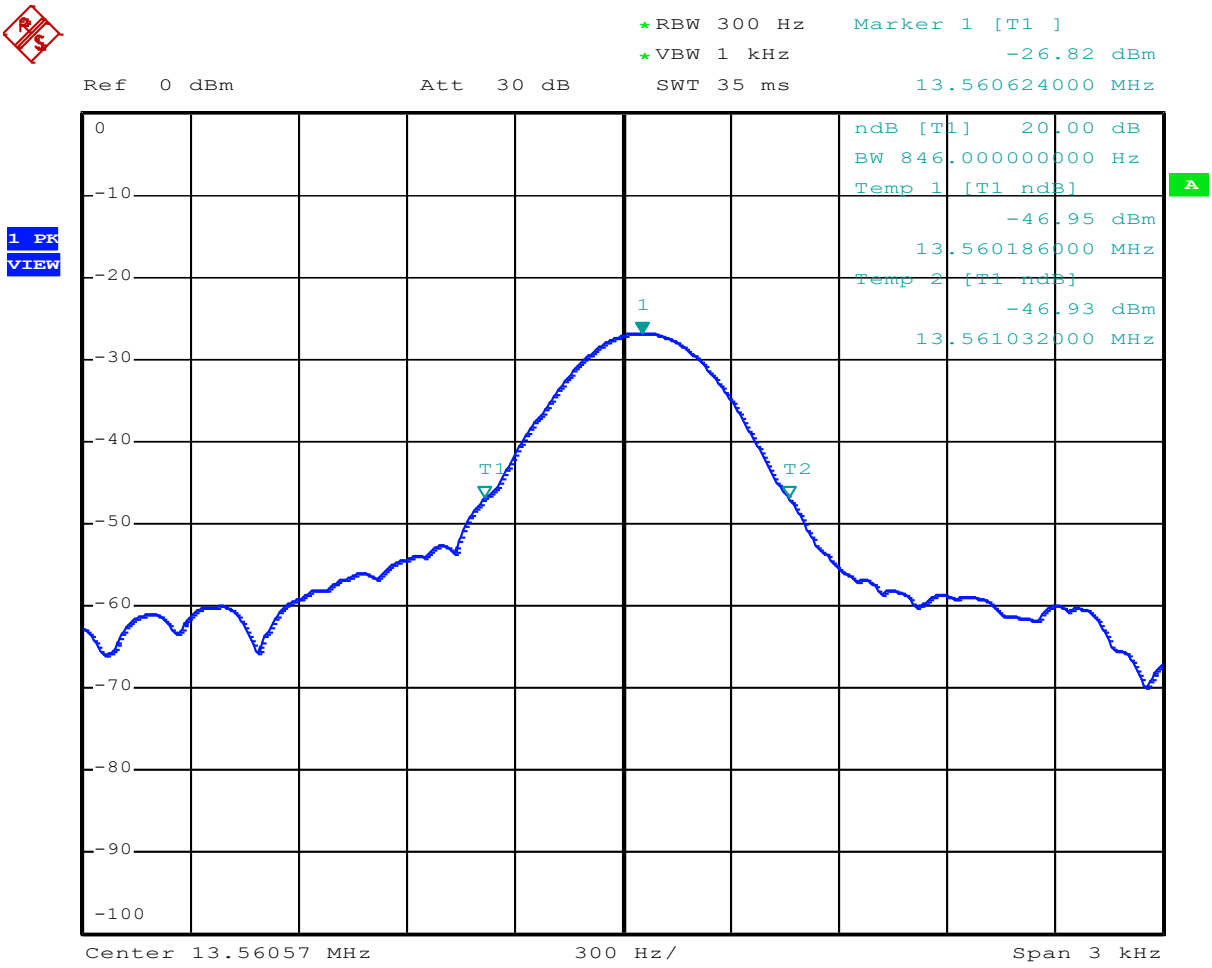
Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode with modulation

7.1.3 Test Setup Diagram



7.1.4 Measurement Procedure and Data

The useful radiated emission from the EUT was detected by the spectrum analyser with peak detector.



7.2 Conducted Emissions at Mains Terminals (150kHz-30MHz)

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

Limit:

Frequency range (MHz)	Limit (dBuV)	
	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.

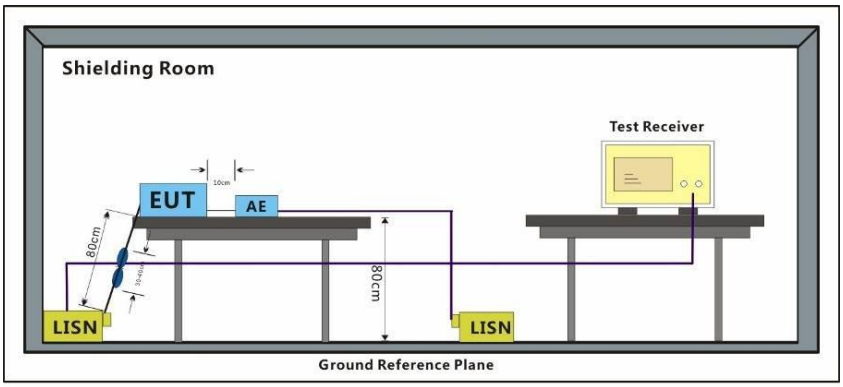
7.2.1 E.U.T. Operation

Operating Environment:
Temperature: 22.7 °C Humidity: 51.8 % RH Atmospheric Pressure: 1020 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode with modulation

7.2.3 Test Setup Diagram



7.2.4 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.

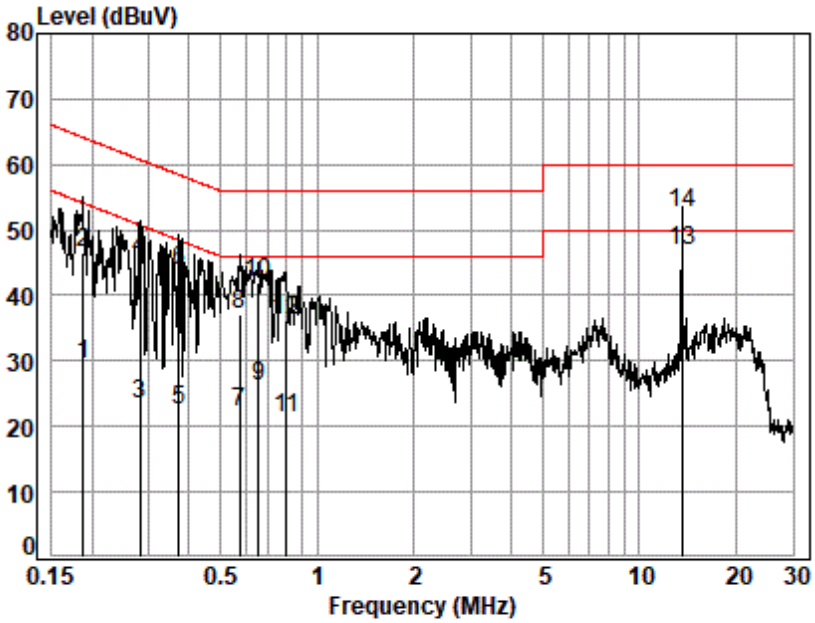
3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,

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

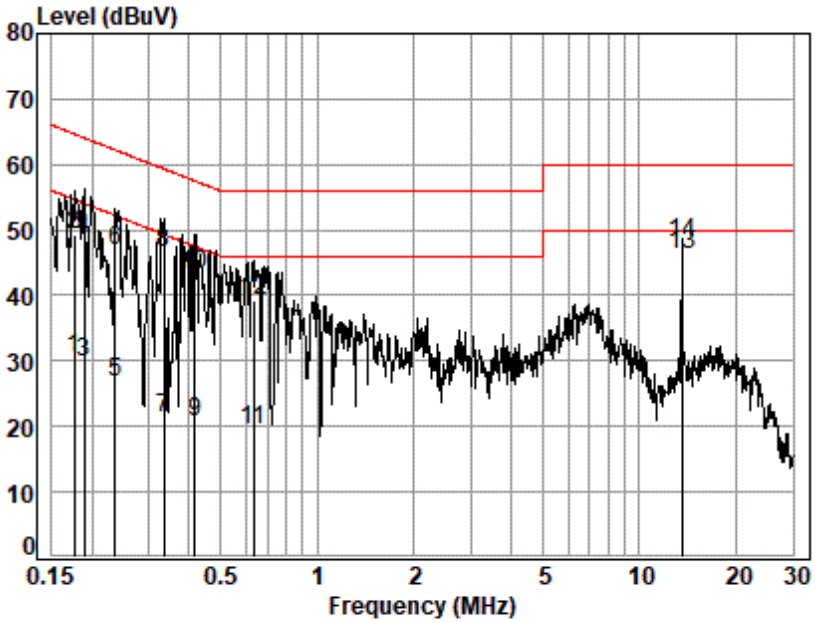
Test Mode: 07; Line: Live line



Site : Shielding Room
Condition: Line
Job No. : 00266AT
Test mode: 07

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1874	0.02	0.26	29.36	29.64	54.15	-24.51	Average
2	0.1874	0.02	0.26	46.19	46.47	64.15	-17.68	QP
3	0.2818	0.03	0.26	23.22	23.51	50.76	-27.25	Average
4	0.2818	0.03	0.26	45.31	45.60	60.76	-15.16	QP
5	0.3712	0.03	0.27	22.18	22.48	48.47	-25.99	Average
6	0.3712	0.03	0.27	43.50	43.80	58.47	-14.67	QP
7	0.5762	0.04	0.25	21.79	22.08	46.00	-23.92	Average
8	0.5762	0.04	0.25	36.82	37.11	56.00	-18.89	QP
9	0.6578	0.03	0.23	25.95	26.21	46.00	-19.79	Average
10	0.6578	0.03	0.23	41.73	41.99	56.00	-14.01	QP
11	0.8045	0.07	0.21	20.89	21.17	46.00	-24.83	Average
12	0.8045	0.07	0.21	35.82	36.10	56.00	-19.90	QP
13	13.5600	0.05	0.11	46.64	46.80	50.00	-3.20	Average
14	13.5600	0.05	0.11	52.54	52.70	60.00	-7.30	QP

Test Mode: 07; Line: Neutral Line



Site : Shielding Room
Condition: Neutral
Job No. : 00266AT
Test mode: 07

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1768	0.02	0.30	30.22	30.54	54.64	-24.10	Average
2	0.1768	0.02	0.30	48.98	49.30	64.64	-15.34	QP
3	0.1894	0.02	0.29	29.47	29.78	54.06	-24.28	Average
4	0.1894	0.02	0.29	48.29	48.60	64.06	-15.46	QP
5	0.2366	0.02	0.29	26.33	26.64	52.22	-25.58	Average
6	0.2366	0.02	0.29	46.68	46.99	62.22	-15.23	QP
7	0.3338	0.03	0.28	20.96	21.27	49.35	-28.08	Average
8	0.3338	0.03	0.28	46.17	46.48	59.35	-12.87	QP
9	0.4171	0.03	0.27	20.33	20.63	47.51	-26.88	Average
10	0.4171	0.03	0.27	42.97	43.27	57.51	-14.24	QP
11	0.6338	0.04	0.19	19.13	19.36	46.00	-26.64	Average
12	0.6338	0.04	0.19	38.94	39.17	56.00	-16.83	QP
13	13.5600	0.05	0.14	46.12	46.31	50.00	-3.69	Average
14	13.5600	0.05	0.14	47.80	47.99	60.00	-12.01	QP

7.3 Emission Mask

Test Requirement 47 CFR Part 15, Subpart C 15.225(a)&(b)&(C)

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

Test Distance: 3m

Limit:

(a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.

(b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.

(c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.

(d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

Below 30MHz

The limit at 30m test distance is below:

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

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 $\lambda/2\pi$ point

The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 84dBuV/m at 30 meters.

7.3.1 E.U.T. Operation

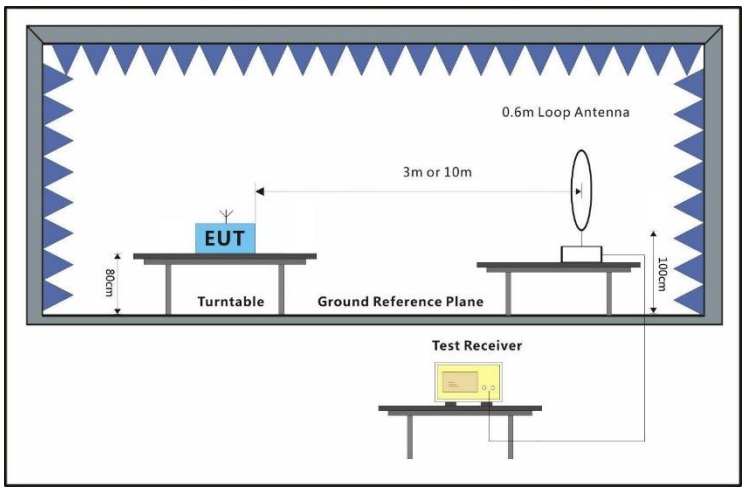
Operating Environment:

Temperature: 28.0 °C Humidity: 50.0 % RH Atmospheric Pressure: 1020 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode with modulation

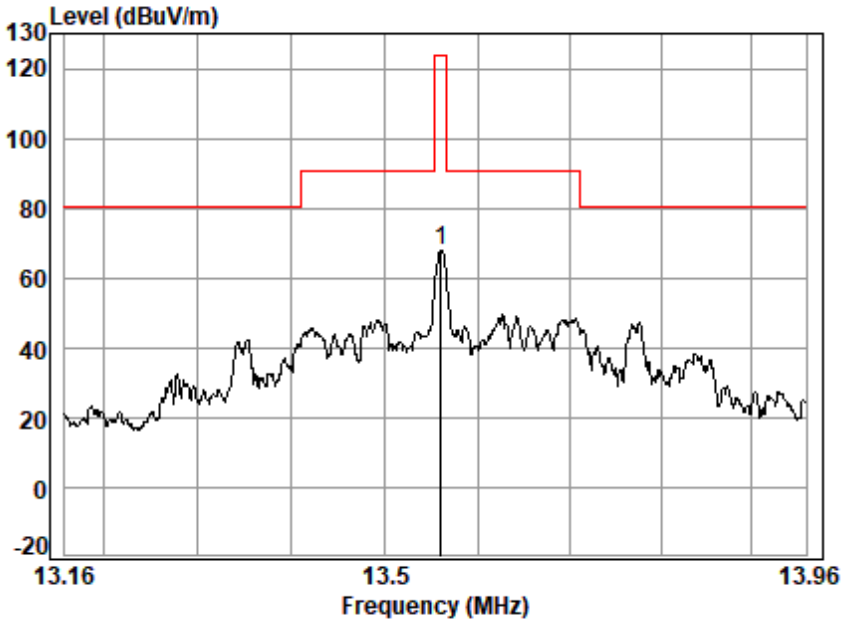
7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

For testing performed with the loop antenna, the bottom of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.

Test Mode: 07



Condition: 3m
Job No. : 00266AT
Test Mode: 07

	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	13.5605	0.60	8.65	32.06	90.86	68.05	124.00	-55.95	

7.4 Frequency tolerance

Test Requirement 47 CFR Part 15, Subpart C 15.225(e)

Test Method: ANSI C63.10 (2013) Section 6.8

Limit:

±0.01%

7.4.1 E.U.T. Operation

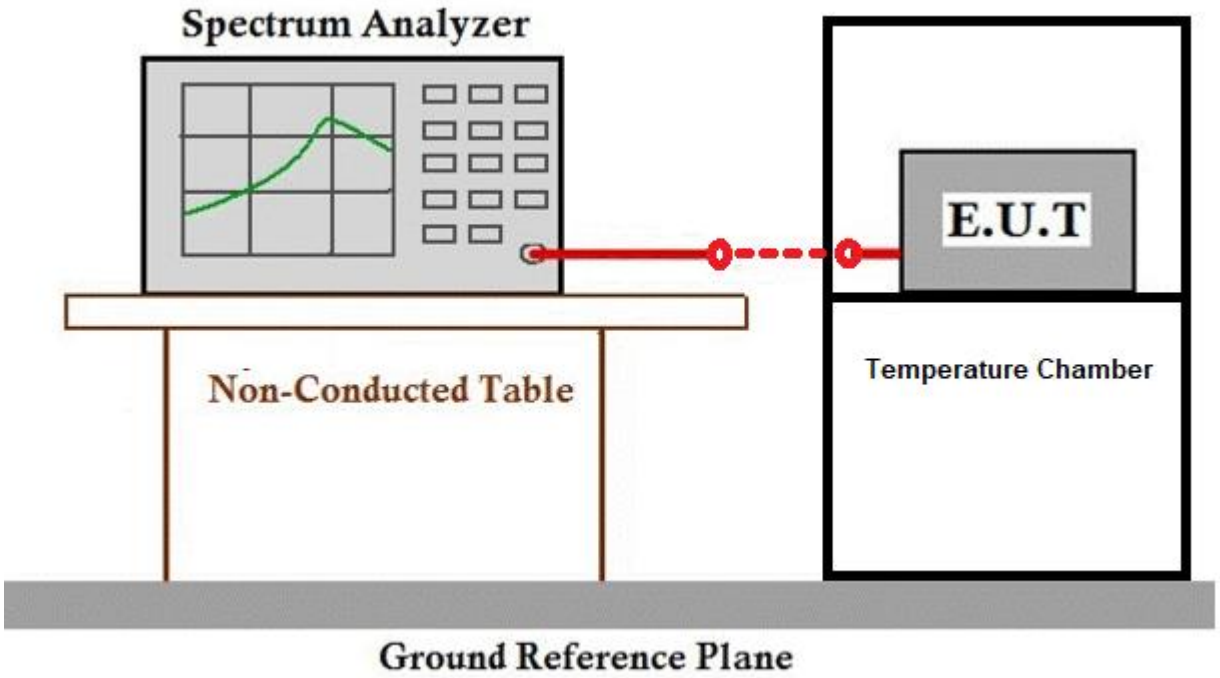
Operating Environment:

Temperature: 28.0 °C Humidity: 50.0 % RH Atmospheric Pressure: 1020 mbar

7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode with modulation
Pre-scan	10	Normal working; Charge the EUT

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

The EUT was placed in an environmental test chamber and powered such that control element received normal voltage and the transmitter provided maximum RF output.

Declared Frequency (MHz)	13.56MHz	@10 minutes

Temperature (°C)	Voltage(Vdc)	Measurement Frequency(MHz)	Frequency Tolerance (%)	Limit (%)	Result
50	3.7	13.560592	0.004366	±0.01	Pass
40		13.560596	0.004395		Pass
30		13.560592	0.004366		Pass
20		13.560595	0.004388		Pass
10		13.560597	0.004403		Pass
0		13.560599	0.004417		Pass
-10		13.560592	0.004366		Pass
-20		13.560594	0.004381		Pass
20	3.4	13.560597	0.004403		Pass
	4.2	13.560598	0.004410		Pass

7.5 Radiated Emissions (30MHz-1GHz)

Test Requirement 47 CFR Part 15, Subpart C 15.225(d) & 15.209
Test Method: ANSI C63.10 (2013) Section 6.4&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 except for the frequency bands above 1000 MHz. 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.		

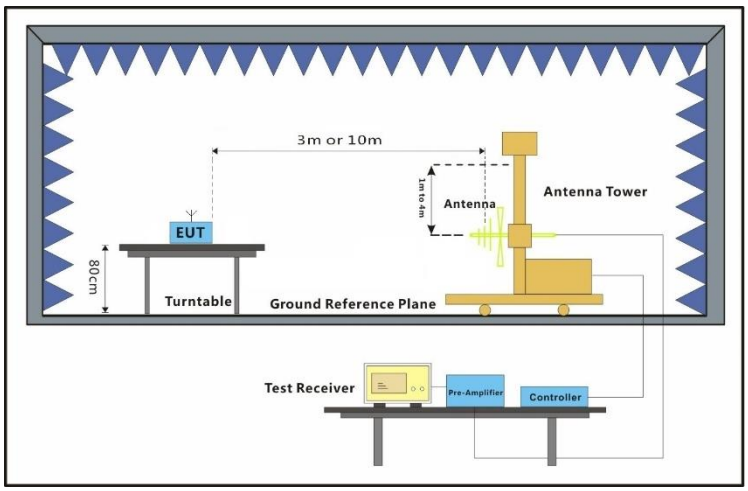
7.5.1 E.U.T. Operation

Operating Environment:
Temperature: 22.6 °C Humidity: 52.1 % RH Atmospheric Pressure: 1020 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode with modulation

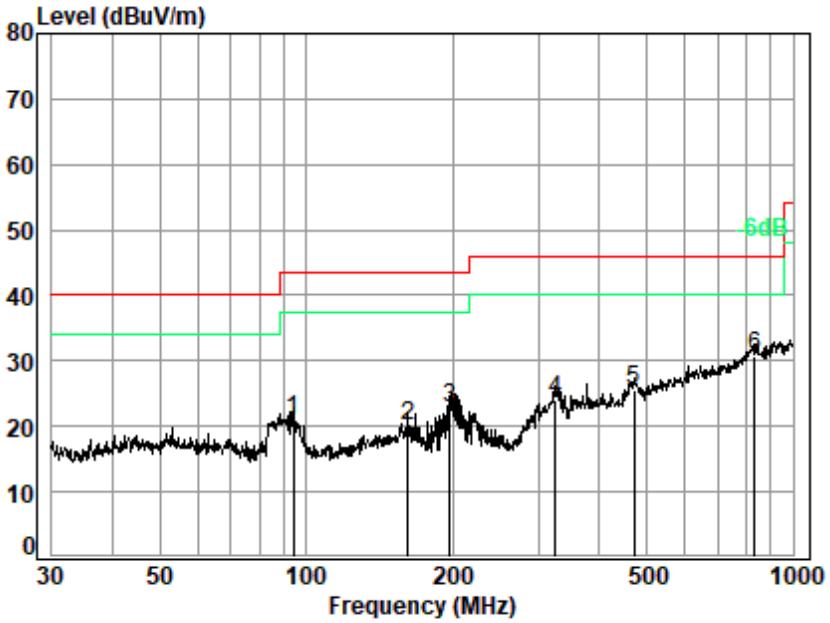
7.5.3 Test Setup Diagram



7.5.4 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 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 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. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

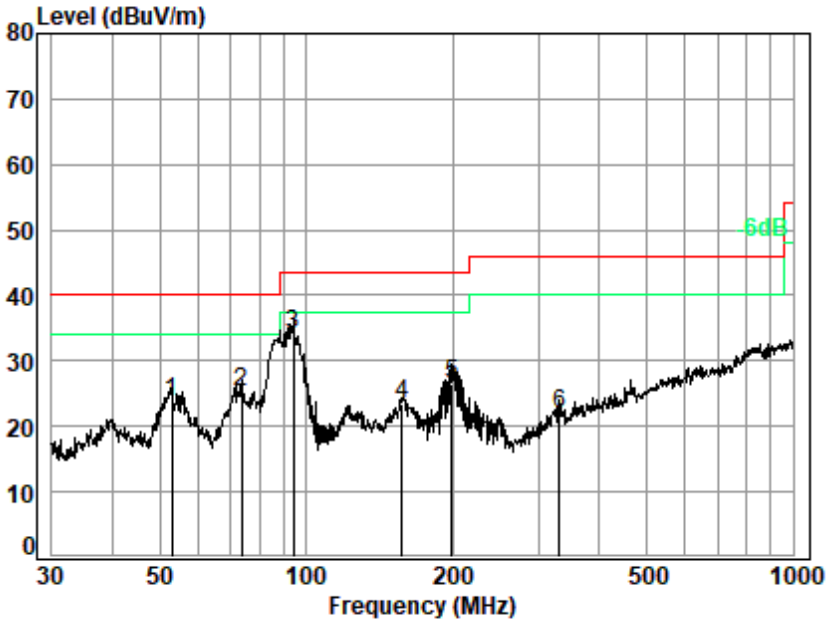
Test Mode: 07; Polarity: Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No : 00266AT
Mode : 07

	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	94.0979	0.74	13.93	25.31	31.54	20.90	43.50	-22.60	QP
2	162.0414	0.78	17.14	25.54	27.60	19.98	43.50	-23.52	QP
3	197.2001	0.69	15.21	25.56	32.35	22.69	43.50	-20.81	QP
4	325.5958	1.27	19.40	25.62	29.09	24.14	46.00	-21.86	QP
5	472.1761	1.43	21.93	25.69	27.78	25.45	46.00	-20.55	QP
6	833.3171	2.87	27.76	25.65	25.70	30.68	46.00	-15.32	QP

Test Mode: 07; Polarity: Vertical



Site : chamber
Condition: 3m VERTICAL
Job No : 00266AT
Mode : 07

	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	52.9453	0.23	17.28	24.89	31.20	23.82	40.00	-16.18	QP
2	73.6170	0.35	14.98	24.82	34.71	25.22	40.00	-14.78	QP
3	94.0979	0.74	13.93	25.31	44.86	34.22	43.50	-9.28	QP
4	157.5589	0.80	17.26	25.54	30.89	23.41	43.50	-20.09	QP
5	198.5880	0.70	15.16	25.56	36.06	26.36	43.50	-17.14	QP
6	331.3547	1.33	19.54	25.62	26.66	21.91	46.00	-24.09	QP

7.6 Radiated Emissions (9kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.225(d) & 15.209

Test Method: ANSI C63.10 (2013) Section 6.4&6.5

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength (microvolts/meter)	Limit (dBuV/m)	Detector	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	-	-	300
0.490-1.705	24000/F(kHz)	-	-	30
1.705-30	30	-	-	30

Below 30MHz

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.

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

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

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 $\lambda/2\pi$ point

7.6.1 E.U.T. Operation

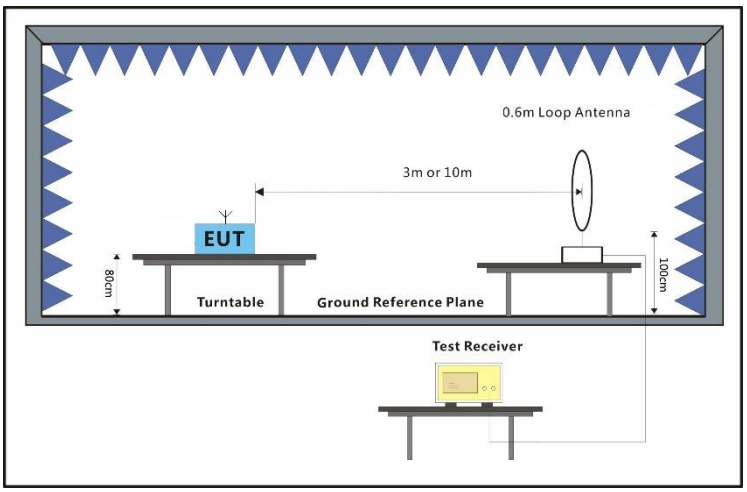
Operating Environment:

Temperature: 23.6 °C Humidity: 51.6 % RH Atmospheric Pressure: 1020 mbar

7.6.2 Test Mode Description

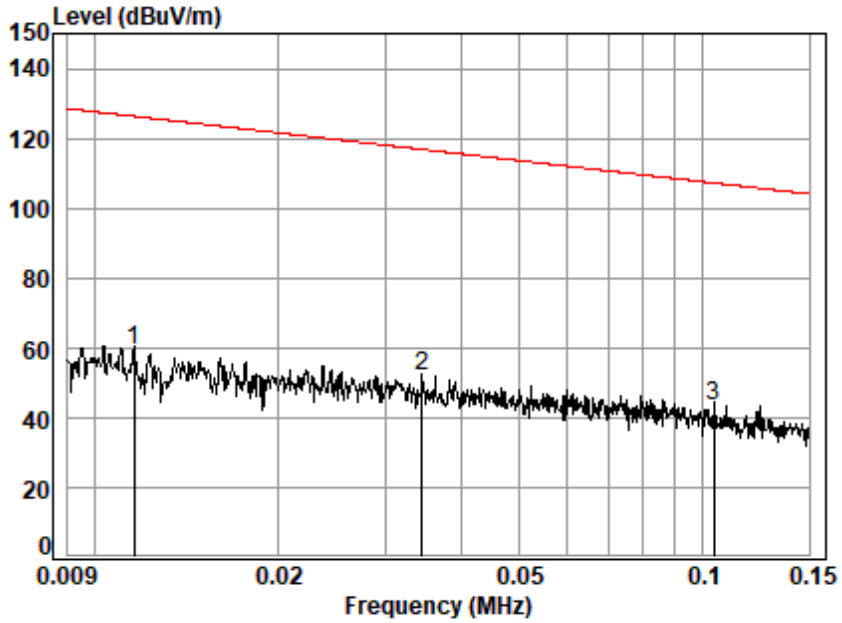
Pre-scan / Final test	Mode Code	Description
Final test	07	TX mode with modulation

7.6.3 Test Setup Diagram



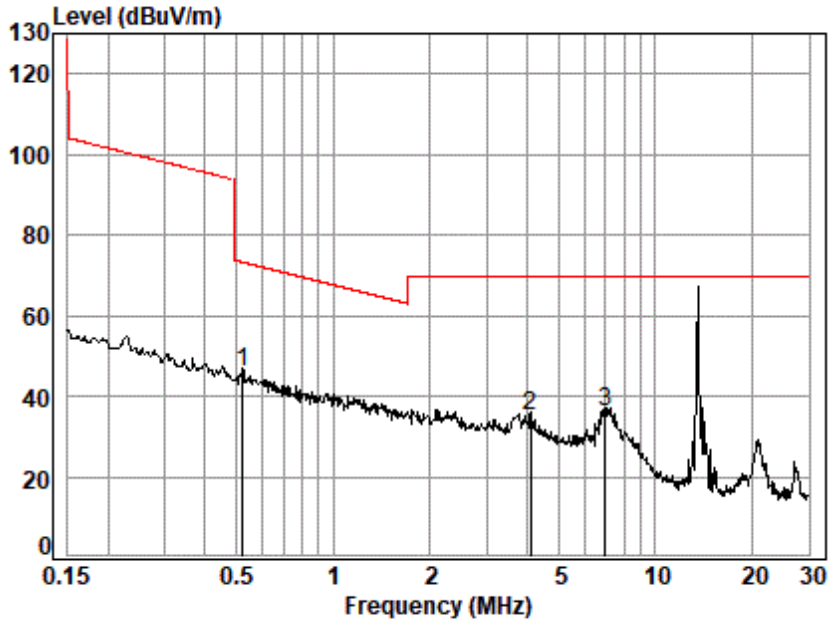
7.6.4 Measurement Procedure and Data

For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.



Condition: 3m
Job No. : 00266AT
Test Mode: 07

	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	0.0116	0.29	17.30	31.61	73.55	59.53	126.35	-66.82	Average
2	0.0345	0.31	11.72	31.71	71.39	51.71	116.84	-65.13	Average
3	0.1046	0.32	10.50	31.80	64.21	43.23	107.21	-63.98	Average



Condition: 3m
Job No. : 00266AT
Test Mode: 07

	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	0.5238	0.29	10.30	31.73	67.14	46.00	73.22	-27.22	QP
2	4.0920	0.52	10.23	31.88	56.05	34.92	69.54	-34.62	QP
3	6.9878	0.55	9.68	31.95	57.89	36.17	69.54	-33.37	QP

8 Test Setup Photo

Refer to Appendix – NFC Test Setup Photo for FYCR2207000266AT

9 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for FYCR2207000266AT

- End of the Report -